

VBS Catalogue 2010/2011



Connection and fastening systems

THINK CONNECTED.

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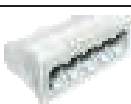
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Use the direct line to OBO Customer Service! On the Service Hotline +49 (0)2373 891 500, we are available every day from 7.30 a.m. to 5.00 p.m. for any questions about the OBO product range for electrical installations. The newly structured OBO Customer Services can offer you the full works:

- Competent contacts from your region
- All the information on the OBO product range
- Knowledgeable advice on special application topics
- Quick, direct access to all the technical data of the OBO products – we also want to provide the best in customer relations!

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OBO VBS seminars: First-hand knowledge

With a comprehensive programme of training courses and seminars on the subject of connection and fastening systems, OBO is able to support its customers with specialist knowledge from a single source. Alongside the basic theoretical principles, the programme also deals with practical implementation in everyday applications. Special calculation and application examples round off the comprehensive programme of knowledge transfer.

Invitations to tender, product information and datasheets

We can make life easier for you, with our comprehensive selection of materials designed for practical applications, which provide you with effective support with the planning and calculation of a project. These include:

- Invitations to tender
- Product information
- Information sheets
- Datasheets

These documents are continually updated and can be downloaded at no charge at any time from the Internet download area at www.obo.de.

Invitations to tender on the Internet at www.ausschreiben.de

More than 10,000 entries from the KTS, BSS, TBS, LFS, EGS and UFS ranges can be called up free of charge. Regular updates and expansions mean that you always have a comprehensive overview of the OBO products. All the current file formats – PDF, DOC, GAEB, HTML, TEXT, XML, ÖNORM – are available.

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Planning and mounting aid

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Surfaces and areas of use



Surfaces/areas of use

All the system components must show sufficient resistance against corrosion. Here, a distinction is made between different methods and materials, whose characteristics make them more or less suitable for specific areas of use. The different areas of use and the materials recommended for them are listed below. The table presents the area of use and the zinc reduction to be expected according to DIN EN ISO 12944.

Indoor use

For indoor areas, OBO can offer cable support systems with galvanisation or strip galvanisation. They are particularly suited to dry atmospheres without any impact from aggressive pollutants.

Electrogalvanisation

- Electrolytic galvanisation in accordance with DIN EN 12329
- Average coating thickness approx. 2.5–10 µm
- According to RoHS guidelines

Strip galvanisation

- Hot-dip galvanised according to the strip-galvanising method in accordance with DIN EN 10327 (formerly DIN EN 10147 and DIN EN 10142)
- Average coating thickness approx. 20 µm
- Joints in the metal are protected by cathodic corrosion protection up to a thickness of 2.0 mm



General planning aid, surfaces and areas of use



Outdoor use

For installations outdoors, in wet rooms and aggressive environments, OBO can offer articles made of hot-dip galvanised materials or rust-proof stainless steel.

Hot-dip galvanisation

- Hot galvanisation using the dipping method according to DIN EN ISO 1461
- Coating thickness to DIN EN ISO 1461 approx. 40–60 µm
- Any interfaces added at a later date must also be galvanised to protect against corrosion.

SS304 stainless steel

- OBO Code: V2A
- European material number: 1.4301
- American material designation: 304
- Welded components are additionally passivated.
- Unwelded components are rinsed and degreased.

Corrosion categories to DIN EN ISO 12944

Corrosion category	Typical environment, inside	Typical environment, outside	Corrosion load	Average zinc loss
C 1	Heated buildings with neutral atmospheres, e.g. offices, shops, schools, hotels	-	Insignificant	< 0.1 µm/a
C 2	Unheated buildings in which condensation can occur, e.g. warehouse, sports' halls	Atmosphere with low level of impurities, usually rural areas	Low	0.1 to 0.7 µm/a
C 3	Production facilities with a high level of humidity and some air impurities, e.g. plants for food production, laundries, breweries, dairies	City and industrial atmosphere, considerable impurities through sulphur dioxide, coastal areas with low salt load	Medium	0.7 to 2.1 µm/a
C 4	Chemical plants, swimming pools, boatsheds over seawater	Industrial areas and coastal areas with low salt load	Strong	2.1 to 4.2 µm/a
C 5-I	Buildings or areas with almost continuous condensation and with high levels of impurities	Industrial areas with high levels of humidity and aggressive atmosphere	Very strong (industry)	4.2 to 8.4 µm/a
C 5-M	Buildings or areas with almost continuous condensation and with high levels of impurities	Coastal or offshore areas with salt load	Very strong (sea)	> 4.2 to 8.4 µm/a



UV and weather resistance



Protected and unprotected installations outdoors

Outdoor installations should always be viewed particularly critically with regard to the mounting locations and the selection of the installation materials. It is important to include the environment conditions and influences in the product selection in advance.

UV and weather resistance for outdoor installations

Besides UV radiation, installations outdoors must also take other environmental influences into account. Here, it is necessary to determine the exact environmental conditions. Factors such as maximum temperatures, regularity of (extreme) temperature changes, humidity and the location of use/mounting (housing, industry, town, region, continent) all have their role to play here. The problem is that there is no standardised testing method for the resistance of installation materials under different environmental influences. Therefore outdoor installations near dumps, chemical or petrochemical plants, sewage plants, etc. must be given special attention before mounting.

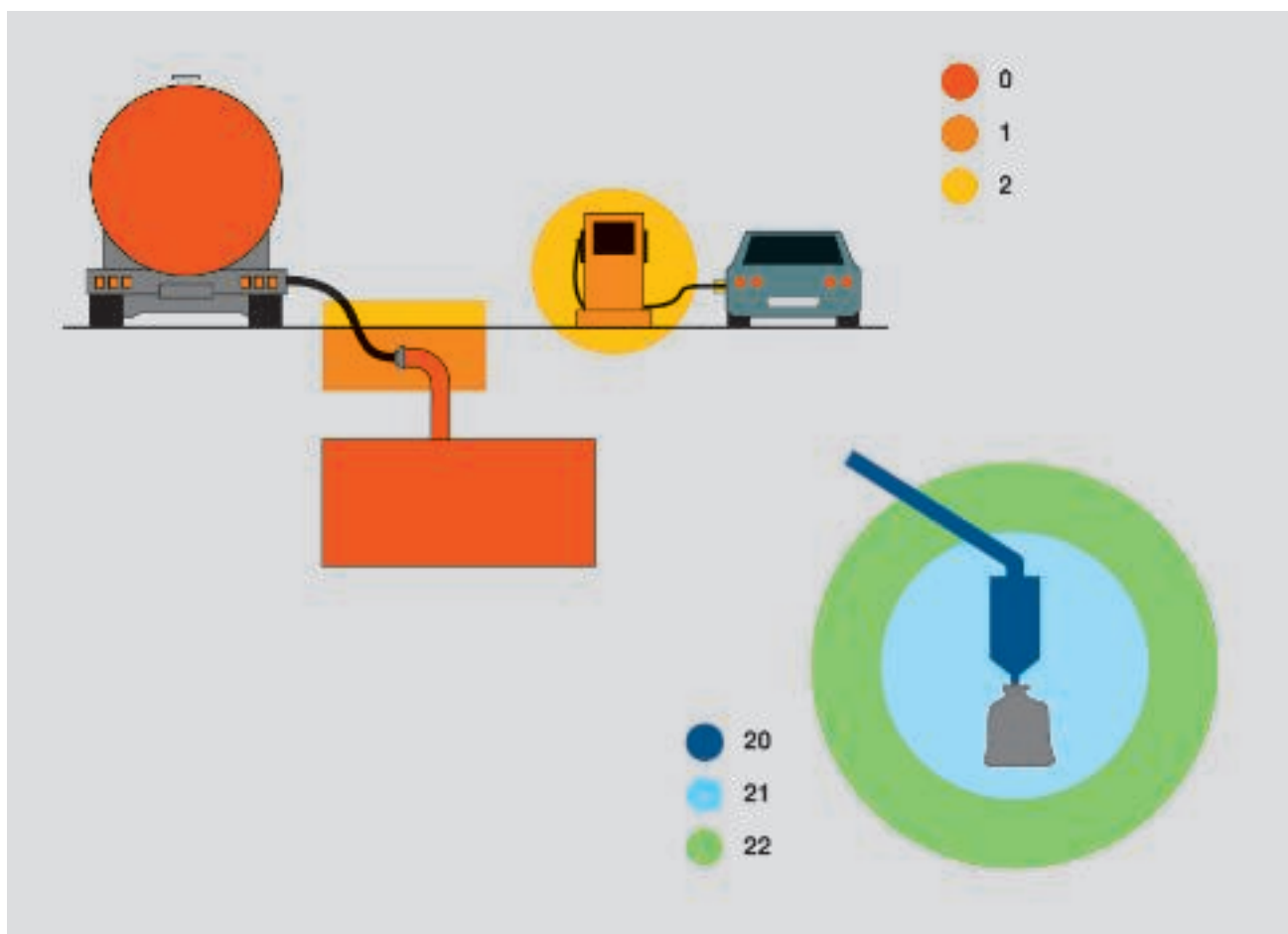
Explosion-protected products



Since 1 July 2003, only products and protection systems for use in accordance with the regulations in explosion-hazard areas may be used in the European Economic Area which correspond to the EC directive 94/9/EC. This directive is termed ATEX (explosive atmosphere). Explosive areas are divided into so-called zones. The division into zones is a method to analyse and classify environments in which explosive gas atmospheres or dust/air mixtures may occur. This can simplify the selection of devices that can be operated safely in these environments. The hazardous areas, which are created by combustible gases, are divided into the zones 0, 1 and 2. Hazardous areas, in which combustible dusts are created, are, in the same way, split into the zones 20, 21 und 22. The risk potential is highest in the zones 0 and 20 and the lowest in the zones 2 and 22.



Zone division for explosive areas



Zone allocation of device group II (applied)

Gas	Dust
Explosive gas atmosphere, zone division to DIN EN 60079-10	Explosive dust-air mixtures, zone division to DIN EN 61214-10
Zone 0	Zone 20
An area in which it can be expected that, under normal conditions, an explosive atmosphere of gas occurs continuously or for long periods of time.	An area in which it can be expected that, under normal conditions, an explosive atmosphere of dust/air occurs continuously or for long periods of time
Zone 1	Zone 21
An area in which it can be expected that, under normal conditions, an explosive atmosphere of gas occasionally occurs.	An area in which it can be expected that, under normal conditions, an explosive atmosphere of dust/air occasionally occurs
Zone 2	Zone 22
An area in which it can be expected that, under normal conditions, an explosive atmosphere of gas seldom or only briefly occurs.	An area in which it can be expected that, under normal conditions, an explosive atmosphere of dust/air seldom or only briefly occurs

Labelling of halogen-free materials



Halogen-free installation materials

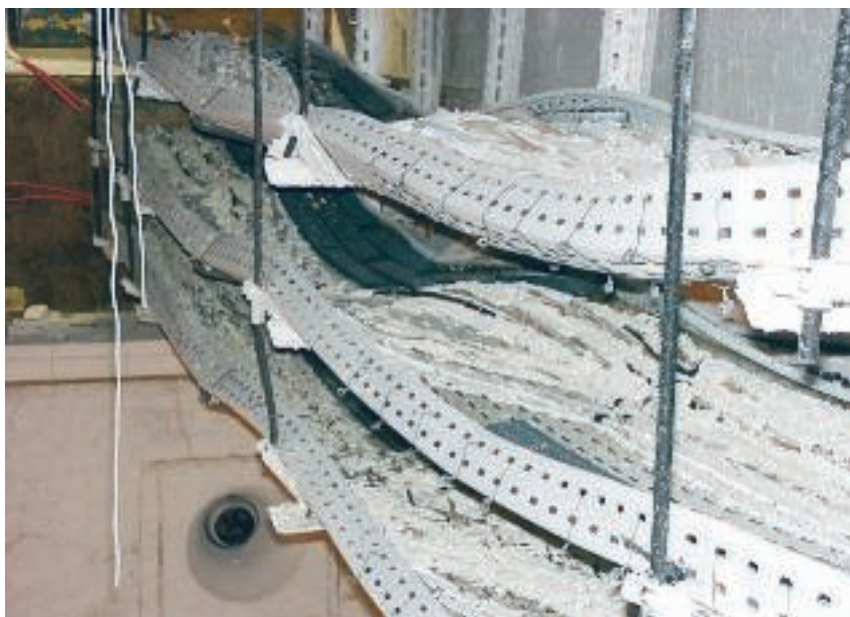
Events such as the fire at Düsseldorf Airport, in which people were killed by the extreme smoke development, have made us more sensitive, not just to the areas of function maintenance and fire protection systems, but also to standard installation materials. The result is the increasing demand for halogen-free plastics. Halogen-free installation should/must always be used in public areas (emergency routes, lifts, etc). The chemical composition of these halogen-free systems is designed in such a way that, in the case of fire, they produce less hazardous (toxic/corrosive) gases, which could combine with extinguishing agents to form hydrochloric acid. In the sense of the standard DIN VDE 0472, this means that materials are considered halogen-free when "the proportions of the halogens chlorine, bromine and iodine are $\leq 0.2\%$ for chlorine and $\leq 0.1\%$ for

fluorine". The DIN-VDE specification does not explicitly require halogen-free installation systems as yet, but OBO Bettermann can, nevertheless, offer a wide range of halogen-free articles. This means that, if there is a fire, the risk to people and property can be reduced to a minimum.





Function maintenance for electrical systems



Safety in case of fire

A lot of people, a lot of safety

Function maintenance is particularly important in buildings regularly frequented by large numbers of people. These include public buildings such as schools, hospitals, meeting places, civic buildings and underground stations, but also industrial plants, high-rise buildings, shopping centres and large car parks.

30 minutes: Function maintenance for an evacuation

The first 30 minutes after the start of a fire are decisive when clearing the affected building. During this time, function maintenance must be guaranteed for the following units:

- Safety lighting systems
- Lifts with fire control
- Fire alarm systems
- Alarm systems and systems to issue instructions to visitors and employees
- Fire extraction systems

90 minutes: Function maintenance for improved fire-fighting

To support fire-fighting operations, it is imperative that certain technical equipment is supplied with sufficient power even up to 90 minutes after a fire breaks out

in a building. This equipment includes:

- Systems to increase the pressure of the water for fighting the fire
- Mechanical smoke extraction and smoke protection pressure systems
- Fire brigade lifts, bed lifts in hospitals

Individual laying systems

With the individual laying systems, OBO Bettermann can offer a range of practical, flexible mounting options for electrical installations with function maintenance. The systems are suited to vertical and horizontal installation and are approved for the fire protection classes E30 and E90. Standardised supporting constructions as defined in the testing standard, DIN 4102 Part 12, include: The laying of cables with individual clips and the laying of cables with profile rails, clamp clips and a long trough.

Fire loads of installation systems

According to the valid MLAR, there is no longer a need to specify the fire loads for electrical installations in emergency and escape routes, as a fire load of 0 kWh is always required.

Function maintenance for electrical systems



Maintain the function!

To ensure that emergency and escape routes and important technical equipment such as emergency lighting, fire alarm systems and smoke exhaust systems remain usable in case of fire, it is absolutely essential to provide special protection for the power supply for these systems. The use of special cables and laying systems means that it is possible to maintain the power supply, even in the case of fire, thus guaranteeing the function maintenance. You can find detailed information on the subject of fire protection in the OBO BSS fire protection catalogue.

Standard support type, clamp clip, type 2056

Standard support construction consisting of clamp clip without long trough for individual laying or bundling cables. Brief information:

- Wall or ceiling mounting
- Vertical or horizontal mounting
- Rail mounting: max. 0.3 m
- Anchor spacing in the rail: max. 0.25 m
- Individual cable assignment: diameters of up to 100 mm possible
- Assignment with bunched cables: max. three cables with max. diameter 25 mm

Standard support type, clamp clip, type 732/733

Standard support construction consisting of spacer clips for individual laying or bundling cables. Brief information:

- Wall or ceiling mounting
- Vertical or horizontal mounting
- Mounting spacing: max. 0.3 m
- Individual cable assignment: diameters of up to 50 mm possible
- Assignment with bunched cables: max. three cables with max. diameter 25 mm

Cable tidy, cable-specific laying type

Cable-specific laying type with collective brackets for individual laying, mounting on wall or ceiling. Brief information:

Type 2031/M 15

- Mounting distance: max. 0.5 m
- Cable assignment: max. 1.1 kg/m

Type 2031/M 30

- Mounting distance: max. 0.5 m
- Cable assignment: max. 2.5 kg/m

Type 2031/M 70

- Mounting distance: max. 0.8 m
- Cable assignment: max. 6.0 kg/m

Pressure clip, cable-specific laying type

Cable-specific laying type for individual laying, mounting on the ceiling. Brief information:

Type 2033 M

- Mounting distance: max. 0.5 m

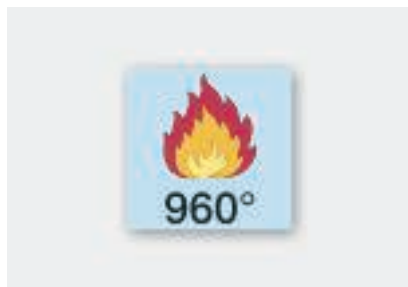
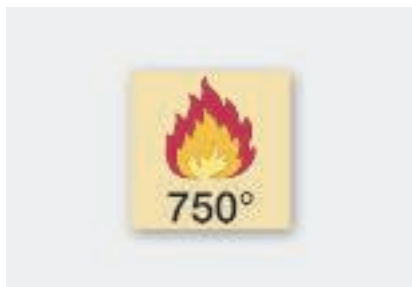
Type 2034 M

- Mounting distance: max. 0.5 m





Flame-resistance/fire-resistance



According to DIN EN 60695-2-11 (VDE 0471 Part 2-11), electrical connection materials must be subjected to a glow-wire test, in order to evaluate the fire risk of the end product. End products, in the sense of the standard, are electrical resources and modules and components. When the glow-wire test is being carried out, a glowing wire (for temperature, see Table 1 – Flame Resistance) is inserted into the component to be tested for a period of 30 seconds and then removed. After 30 seconds at the latest, the object, if it has caught light, must have extinguished again, in order to specify the flame resistances.

Types of installation systems

Types of bodies on test	Surface-mounted	Con-cealed	Flush-mounted	Cavity wall/furniture	Concrete structure	Installation duct
	Testing temperatures in °C					
Connection sockets	650	650	750	850	650	750
Accessory sockets and device connection sockets	750	650	-	850	650	750
Ceiling lights, connection sockets	750	650	-	850	650	750
Wall light connection sockets	750	650	-	850	650	750
Device connection sockets	750	650	-	850	650	750
Connection sleeves	750	-	-	-	-	750
Insulation sections, which support active parts	960	-	-	-	-	-
Cover for installation sockets	750	-	-	-	-	-



Useful information about test marks



VDE

VDE is the association for electrical, electronic and information technologies, their study and the technologies and applications based upon them. The VDE Testing and Certification Institute is a nationally and internationally accredited institute in the field of testing and certification of electro-technical devices, components and systems. These electrical products are tested for their safety, electromagnetic compatibility and additional product properties. Tests and certificates are important for consumer protection and for the marketing of our products. As a neutral and independent institution, the VDE Testing and Certification Institute is a global partner for the electrical engineering, electronics and information technology industries. All the relevant tests for the different product properties are anchored in the VDE institute.



Declarations of conformity

CE symbol:

Technical resources included in a legal ordinance, i.e. electrical resources, machines and safety components, must have a CE symbol, with which the manufacturer confirms that the safety requirements of the ordinances are fulfilled. In addition, there must also be a declaration of conformity and technical documentation. The CE symbol is not a mark of quality, but simply a declaration by the manufacturer that they have complied with the legal requirements and the codes of practice.



Useful information about protection ratings



IP protection rating

The IP protection rating specifies how far a component is protected against contact and foreign bodies and the ingress of water. The IP protection ratings are controlled by the standard DIN EN 60529 (VDE 0470 Part 1). The IP is always made up of two digits:

- The first digit designates the contact and foreign body protection. On the one hand, it specifies how far a housing prevents access to dangerous parts, by preventing or limiting the ingress of body parts or objects held by a person. On the other hand, it specifies how far the housing protects the installed resources against the ingress of solid foreign bodies.
- The second digit specifies the protection against water. It specifies how far the resource is protected against incoming water and the resulting damage.

Protection rating

First code digit	Against access to the dangerous parts	Against solid foreign bodies
0	Protected against access to dangerous parts with the back of the hand	Not protected
1	Protected against access to dangerous parts with a finger	Protected against solid foreign bodies of 50 mm diameter and larger
2	Protected against access to dangerous parts with a tool	Protected against solid foreign bodies of 12.5 mm diameter and larger
3	Protected against access to dangerous parts with a wire	Protected against solid foreign bodies of 2.5 mm diameter and larger
4	Protected against access to dangerous parts with a wire	Protected against solid foreign bodies of 1.0 mm diameter and larger
5	Protected against access to dangerous parts with a wire	Dust-protected
6	Protected against access to dangerous parts with a wire	Dust-proof



Useful information about protection ratings



Protection rating against the entry of water with a damaging impact

Second code digit	Short description	Definition
0	Not protected	-
1	Protected against water droplets	Droplets falling vertically may have no damaging impact.
2	Protected against water droplets when the housing is tilted to up to 15°	Droplets falling vertically may not have a damaging impact, if the housing is tilted to an angle of 15° on either side of the vertical.
3	Protected against spray water	Water being sprayed at an angle of 60° on both sides of the vertical may not have any damaging impact.
4	Protected against spray water	Water spraying the housing from any direction may not have any damaging impact.
5	Protected against water jets	Jets of water pointing at the housing from any direction may not have any damaging impact.
6	Protected against strong water jets	Strong jets of water pointing at the housing from any direction may not have any damaging impact.
7	Protected against the effects of being temporarily immersed in water	If the housing is sometimes underwater under standard pressure and time conditions, then water may not enter in such volumes as would have a damaging impact.
8	Protected against the effects of being continuously immersed in water	If the housing is continuously underwater, then water may not enter in such volumes as would have a damaging impact and this shall be subject to conditions to be agreed between the manufacturer and the user. However, the conditions are more difficult to fulfil than for number 7.



Useful information about protection ratings



Protection rating against mechanical loads

IK code

The IK code to DIN EN 50102 indicates the protection rating of housing against external mechanical loads. It is made up of the code letters IK and a two-digit number from 00 to 10. Each group of numbers stands for a load energy value in Joules (J). The IK code always applies to the complete housing, which guarantees the protection of resources against the damaging effects of mechanical loads. The housings are tested by knocking them with different testing hammers.

Protection classes according to VDE 0140

Protection classes of electrical resources

DIN VDE 0140 defines the protection classes as follows:

- Protection class I: Resources with protective conduction connection (protection measure through protective conductor connection on housing)
- Protection class II: Resources with protective insulation (protection measure through insulation)
- Protection class III: Resource with protective low voltage (SELV-PELV, protection through measured voltages max. 25/50 V AC and max. 60/120 V DC)

Empty plastic housings correspond to protection class II, housings made of metal/metal plating must be intended for the connection of a protection conductor and thus meet protection class I.

IK code	00	01	02	03	04	05	06	07	08	09	10
Stress energy value [J]	-	015	020	035	0.50	0.70	1	2	5	10	20



Labelling of electrical resources

Explanations from the standard

Electrical designations

When using junction boxes, connection sockets and connection terminals, the resources are assigned nominal values, as defined in VDE 0100 Part 200. In the designation, a distinction is made between the maximum approved voltage (nominal voltage), the maximum approved current (nominal current) and the maximum approved cross-section (nominal cross-section of the cables to be connected).

2,5
mm²

Nominal cross-section

Largest tested-approved cross-section of the cable to be connected.

16
A

Rated current

Largest approved current at the connection point.

660
V

Rated voltage

Greatest approved voltage at the connection point.

12

Number of poles

Number of connection points of the clamp connector.

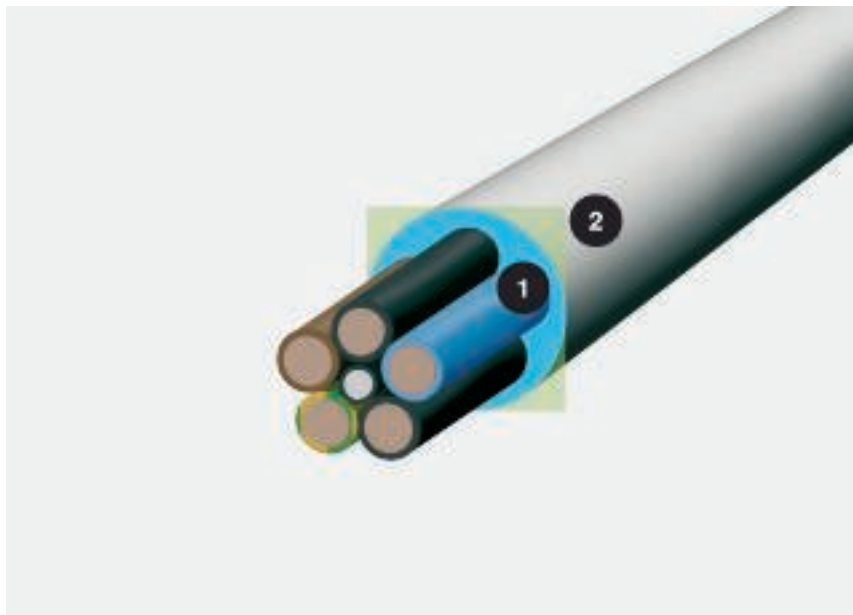
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Number of entries

Number of entries in an electrical connection box or connection socket.



Important information on the external dimension data



Cable diameter and space required; 1 = diameter in mm, 2 = space required in cm²

Cable sizes, outer diameters PG and metric sizes

The term "cable" means a jacketed electrical cable for the transmission of electrical energy and data. Cables are given according to their nominal cross-section. The external diameter and usable cross-section depend on their nominal cross-section and the number of individual wires combined in the cable. Fastening clips are given with their maximum span distance as a nominal size in mm. To determine the correct fastening clip for the component to be fastened, you can find the interplay between the PG sizes and the metric data in the table.

Calculation using the formula $(2r)^2$

The diameter says little about the actual space required by a cable. Calculate: $(2r)^2$. This value reflects the realistic space requirements, including the compartments.

Important information on the external dimension data

Cable diameter and space required

External diameter in mm	PG sizes	External diameter in mm	Metric sizes
12	PG 7	12.5	M 12
13	PG 7	12.5	M 12
15	PG 9	15.2	M 16
16			M 16
18	PG 11	18.6	M 16/M 20
19	PG 11	18.6	M 16/M 20
20	PG 13.5	20.4	M 20
21	PG 13.5	20.4	M 20/M 25
22	PG 16	22.5	M 20/M 25
23	PG 16	22.5	M 20/M 25
24			M 20/M 25
25			M 25
28	PG 21	28.3	M 25/M 32
32			M 32
37	PG 29	37	M 32/ M40
40			M 40
47	PG 36	47	M 40/M 50
50			M 50
54	PG 42	54	M 50/M 63
59	PG 48	59.3	M 50/M 63
63			M 63



Planning and mounting aid, junction box systems



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Condensation water in housings



Condensation water in closed housings

Condensation water in tightly closed housings, such as junction boxes, is a particular problem during regular and strong temperature deviations. Temperature changes (= change in humidity) outside the housing means that excess humidity in a very tightly closed junction box cannot escape and it condenses within the housing. This creates the impression that the housing is not tightly closed. If this humidity is not removed, then, in the worst case, it may cause damage to the electrical connection. Therefore, try to avoid installations in areas with extreme temperature variations.

OBO junction boxes have pre-marked openings, which can be opened to minimise and even prevent the formation of condensation water. The pre-marked 4 mm openings are located on the base of the housing. If the openings are opened, then the change in temperature and humidity inside and outside the housing should take place almost at the same time. According to DIN VDE 010-520 – Erection of heavy current systems for rated voltages of up to 1,000 V: "Measures must be taken to remove water, if water or water condensation can occur within cable systems." In the case of installation with high tightness requirements, alternative measurements may need to be taken.

Mounting of junction boxes



Mounting junction boxes on combustible constructions or materials

The VdS directive 2023 specifies that, on combustible substrates, electrical connections of cables carrying voltage may only be made with terminals in suitable electrical installation boxes according to DIN VDE 0606. The housing must be closed to the mounting surface and fulfil the requirements of DIN VDE 0606.

DIN VDE 0100-737: Protected and unprotected installation in damp and wet areas and rooms and outdoor systems

In damp and wet areas, such as in industrial kitchens, laundries, cold rooms, etc. electrical resources must have a protection rating of at least IP X1 (protected against water droplets).

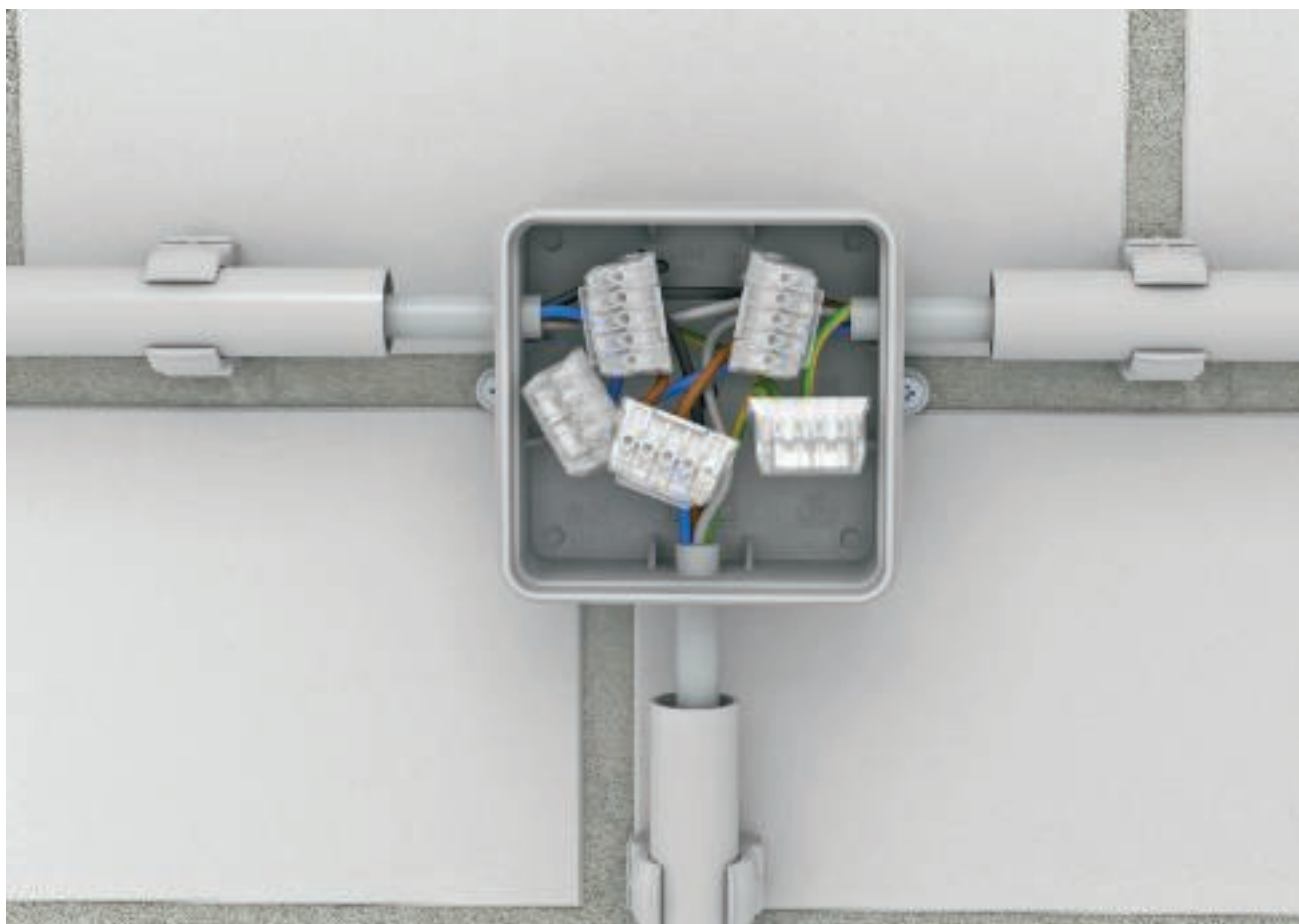
In areas, in which water jets can be expected, the resources must have a protection rating of at least IP X5. You can find the exact allocations in DIN EN 60529.

With unprotected installations outdoors (DIN VDE 0100-737), such as on railway platforms, crane systems, external walls of buildings, etc. the resources used must meet the protection rating IP X3. With

protected installations outdoors (DIN VDE 0100-737), such as in garage entrances, on buildings with an appropriate roof overhang, etc. resources must have at least the protection rating IP X1 (protected against water droplets).

Comment: With installations outdoors, pollutants in the surrounding atmosphere may limit the suitability of the selected articles.

Mounting aid, junction box, A series



The classic in installing wet-room junction boxes: The OBO A series made of halogen-free, thermoplastic material. Both internally and externally, the screwless, tight clamshell allows quick, safe mounting.

The A series junction boxes are available with and without terminal strips. For increased visual requirements, besides the standard colour, light grey (RAL 7035), the pure white (RAL 9010) variant and the colour red are available

for signal cables such as telecommunications cables or other signal state monitors. All the boxes are made of halogen-free material and are flame-resistant to VDE 0471/DIN IEC 695 Part 2-1, test temperature 750 °C

Mounting aid, junction box, A series



A series application, wall mounting

Complete mounting, A series with installation pipe and Quick clip.



Fastening the A series

The stable external fastenings mean that the junction box can be installed quickly and easily.



Cable entry, A series

The pre-marked cable entries can be opened with a knife or, using the supplied insertion point, directly penetrated with the cable.



Insertion point application

Place the insertion point on the end of the wire. Push the cable with the point through the pre-marked entries.



Cover mounting, A series

The covers can be placed on the bases without the need for tools.



Space for wiring work

The A-series junction boxes offer sufficient space for wiring with screw or screwless terminals.

Mounting aid, junction box, ECO series



The ECO-series junction boxes are made of a halogen-free, thermoplastic material. The junction boxes can be easily interconnected without the need for additional components. This reduces not just the time involved in mounting,

the absence of a second fastening saves you materials and therefore money.

The stability is guaranteed through the double-walled side-walls. The precise positioning ensures secure fitting at all times.

All fastening dimensions are shown clearly on the back. With the ECO series every installation becomes a simple, quick operation.

Mounting aid, junction box, ECO series



ECO series application, wall mounting

Complete mounting, ECO series with Quick pipe and Quick clip.



Fastening the ECO series

The cable boxes are fixed to the mounting substrate using the external fastenings.



ECO series application, wall mounting

The ECO junction boxes can be arranged quickly and easily. As there is no second fastening, you save both time and money. The individual supports always guarantee a firm fit.



ECO installation preparation

Safe and easy: The self-sealing cable entries can be cut from inside in two stages.



ECO series installation

During wiring work, the cover is simply attached to one side of the box. This means that it is always available and the ECO box can be closed in an instant.



Wiring of the junction boxes

The interconnection options mean that the ECO series is also suitable for larger cable volumes. Cross-wiring through the side walls is possible.

Mounting aid, junction box, B 9/T



The OBO B9/T junction box consists of two halogen-free, thermoplastic components, a soft one for the seal and a hard one for the housing. This two-component technology stands for perfect tightness and stability. The protection rating IP67 is thus achieved

when the membrane is directly penetrated with cables. A cable gland for strain relief can also be inserted in the threads pre-marked in side walls.

The smooth external walls allow an arrangement of multiple boxes without spaces – even with retro-

installation. All the fastenings dimensions are shown clearly on the back, allowing exact fastening.

The B9/T is a universal problem-solver, with virtually unlimited applications – even in permanently wet areas.



Mounting aid, junction box, B 9/T



B9T application, wall mounting
Complete B9T mounting with cable glands.



Fastening the B 9/T
The fastening holes in the floor area have a soft membrane, which fixes the fastening screws and maintains the protection rating.



Cable entry
The soft membrane of the B 9/T is just pushed through directly with the cable, without any additional tools.



Tightness of the cable entry
The membrane tightly seals the cable. The protection rating remains intact.



Installation with cone cable gland
Alternatively, cone cable glands with a short connection thread can be screwed into the B 9/T.



Installation with cone cable gland
The conical cable gland with short external thread is screwed into the available box thread. The soft membrane need not be removed.



Installation with V-TEC gland
Torsion-protected and with strain relief: V-TEC glands with a short thread offer a secure hold.



Installation with V-TEC gland
The V-TEC cable gland with short connection thread is simply screwed into the available box thread. The soft membrane need not be removed.



Earthing terminal
There is the option of mounting an earthing terminal in the junction box.



Cover mounting
The cover is placed on the base.



Cover mounting
The bolts are closed using a screwdriver.



Mounting aid, junction box, Variobox



The Variobox junction boxes, made of halogen-free, thermoplastic, are available in two sizes. The cables can be installed through plug-in seals, maintaining the protection rating of IP54. Alternative-

ly, there is the option of using cable glands with locknuts, in order to protect cables from tensile forces. At the same time, the cable glands can achieve the protection rating IP65. For decades,

the Variobox series has been part of the family of OBO junction boxes and is suitable for all kinds of locations.

Mounting aid, junction box, Variobox



Variobox series (VBX) application, wall mounting

Complete mounting of the VBX series.



Fastening the VBX series

The junction box is fastened to the mounting substrate using the internal fastening holes. The screw heads are covered with the supplied end caps.



Cable entries VBX 25

The openings of the VBX 25 can be opened easily and tidily using a supplied tool.



Plug-in seals

EDVS plug-in seals can be inserted in the openings.



Cable entries with plug-in seal

Open the plug-in seal according to the cable diameter. Then insert the cable into the junction box.



Cable gland

Cable glands can also be inserted instead of the plug-in seal. The cable gland is fastened in the opening with a locknut.



Earthing terminals

Earthing terminals of type VBX KL can be mounted in the VBX series.



Mounting on cable support systems

The junction boxes can be fastened to cable support systems using the mounting plate VBX MO.

Mounting aid, junction box, T series



The T series from OBO is made from a halogen-free, thermoplastic material in various coloured designs. The T series has openings in the side walls which are closed with 4 to 24 cable plug-in seals (depending on the size of

the T box). In addition, variants are available in UV-resistant or flame-resistant designs (for up to 960 °C) and with red signal covers. Cables can be installed directly in the junction box through plug-in seals. The plug-in seals

are flat and countersunk in the housing, meaning that they do not protrude over the edge. This means that the boxes can be arranged without gaps.



Mounting aid, junction box, T series



T 25 application

Installation with the round junction box T 25.



T 40 application

Installation with the smallest square junction box T 40.



T series cover with signal cable

Installation with a junction box T 60 with a red signal cover.



Floor/wall fastening

The junction boxes can be fastened through two to four break-out openings in the base. The openings can be reclosed using cover caps.



Corner dome, wall fastening

From box size T 60, the junction boxes can be mounted on the substrate through the corner domes for cover fastening.



Fastening on mounting plate

There are two to four fastening domes integrated in the base substrate for metal screws of 3.5 x 9.5 mm, in order to fasten the box, e.g. to a mounting plate.



Plug-in seals

Cables can be installed directly by pushing through without any aids.



Pipe push-in seals

When using pipes, the user can also use plug-in pipe seals. This allows the creation of a closed installation.



Insertion opening / cable gland insert

Cable glands of type V-TEC VM can be inserted in the insertion opening, in order to create mechanical resistance and strain relief.



Cover captivity

All the lids are fastened captively in the box interior with a holding strap on the base.



Cover lock

From size T 60, the cover is fastened to the base with sash locks and can be opened or closed by giving the lock a quarter-turn.



Cover seal / IP protection rating

Junction boxes of size T 60 or larger are fitted with a foamed cover seal. This creates the high protection rating of IP66.

Mounting aid, junction box, T series



Terminal block fastening

An earthing terminal can be attached to the central dome in the interior of the T 25 to T 100 junction boxes.



Hat rail fastening

Hat profile rails can be mounted in lengthwise, transverse or diagonal directions in the cable box bases of sizes T 60 to T 350.



Use of screwless terminals

Screwless terminals are used for wiring "on the fly" for cross-sections of up to 2.5 mm².



Cable entries for closed junction boxes

With the T boxes with closed side walls, stepped drills can be used to drill individual openings. The high protection rating can be maintained by using the EDK plug-in seals or V-TEC VM cable glands and locknuts.



Break-out openings in the base

There are break-out openings in the box base, through which cables coming directly out of the mounting substrate can be inserted in the junction box.



T series cover with signal cable

Junction boxes with covers in the red signal colour are available for labelling safety-relevant circuits.



Outdoor mounting of T series

The junction boxes of the T series with the UV addition, can also be used in external areas with direct sunlight penetration. Cables can be run through the plug-in seal without reducing the protection rating.



Outdoor mounting of T series with cable glands

Cable glands of type V-TEC VM can be used to provide strain relief of the cables and also protect them against twisting.



Condensation water

With tightly closing housings in external areas, it is important that any condensation water created is drained using the appropriate openings. This only applies to systems without increased foreign body or moisture protection.



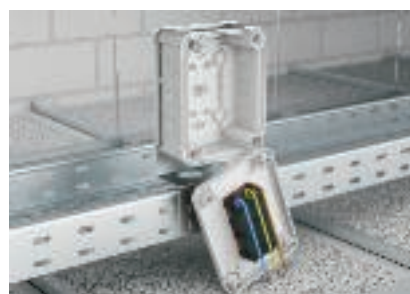
T series with strain relief entries

The strain relief entries mean that installation cables can be inserted directly in the T Box. The special ribs protect the cable against unintentional withdrawal.



T series with Wieland sockets

The Wieland sockets, type GS1 18-i3, locked in to the sides of the T-Box 100 WB, are pre-terminated and electrically connected. The sockets have different colour coding and can be used for different circuits.



T series with Modul 45 sockets

The T 100 MSD with pre-mounted and ready-wired sockets can be used in false ceilings for variable wiring.

Mounting aid, junction box, B series with thread



For decades, the B-series OBO junction boxes with threads have been a permanent component of the OBO Bettermann product range. They are made of Aminoplast. This plastic is hard and is highly

resistant, meaning that the junction boxes are very stiff and stable. The B series is particularly suitable for environments with extreme temperature deviations. The required cable openings can be

broken out at the appropriate points using a screwdriver. Cable glands can be screwed directly into the openings in the side walls. This automatically provides strain relief for cables.



Mounting aid, junction box, B series with thread



B series with thread application, wall mounting

Complete mounting and installation of B11 with screwed-in cone cable glands and pressure ISO clips.



Wall mounting B11M

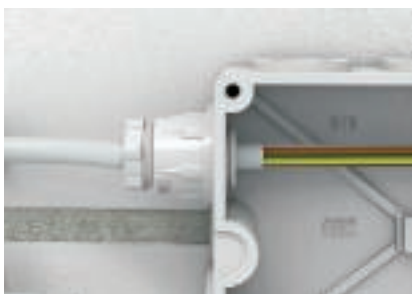
The junction boxes are mounted on the mounting substrate using the external fastening elements.

The break-out openings can be broken out using a screwdriver or another suitable tool.



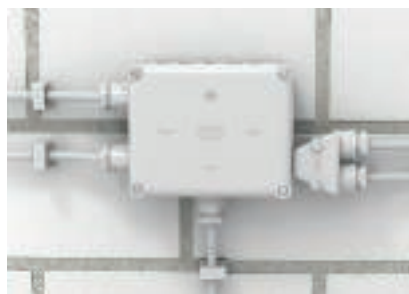
Mounting of cable gland

Cable glands can be screwed directly into the thread in the housing.



Cable installation

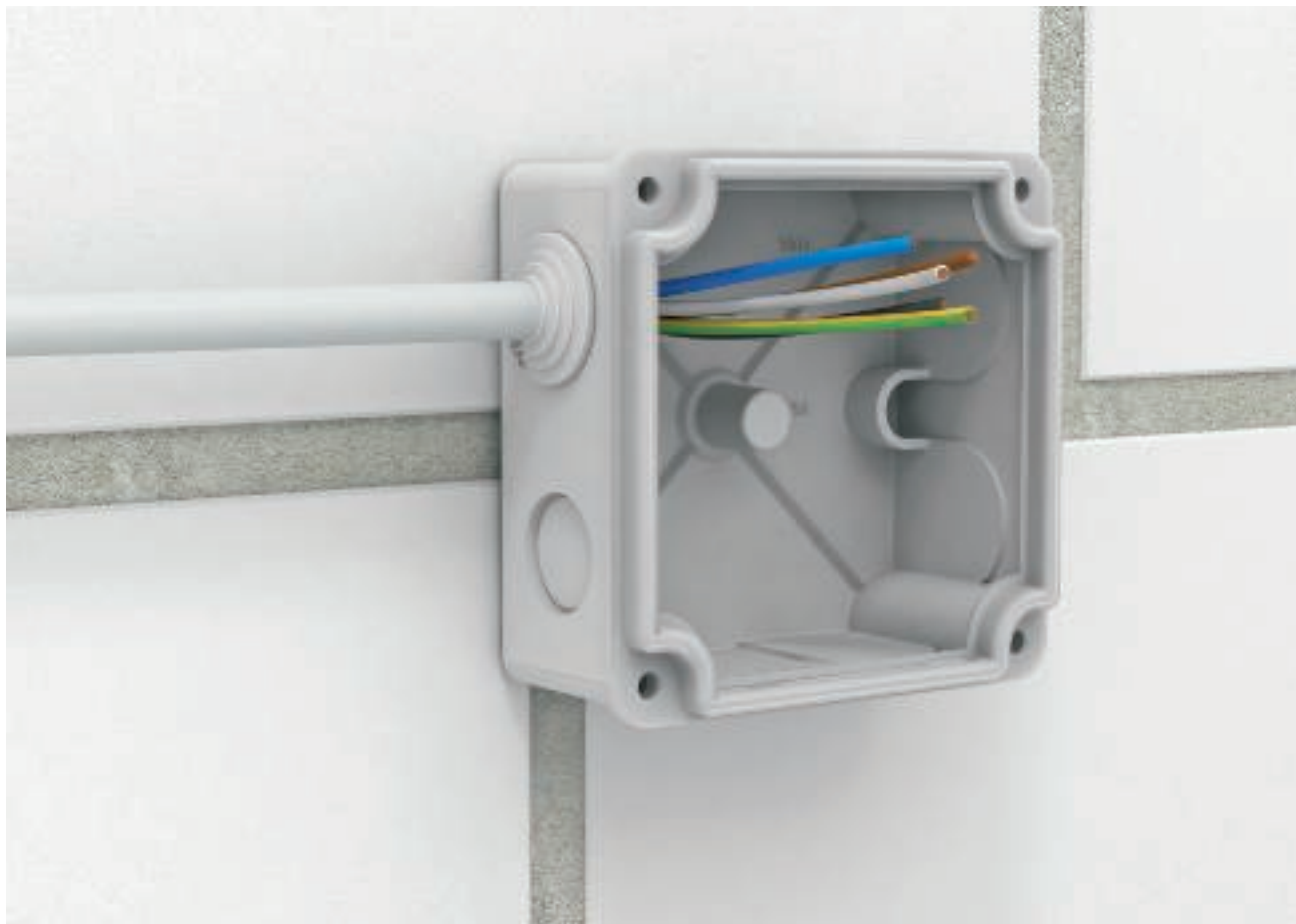
The cables are then be inserted into the junction box through the cable glands. The IP protection rating can thus be maintained.



Application with cone cable glands

All kinds of cable glands can be inserted in the break-out openings. Twin cable glands can be used to insert two cables through an opening.

Mounting aid, junction box, B series without thread



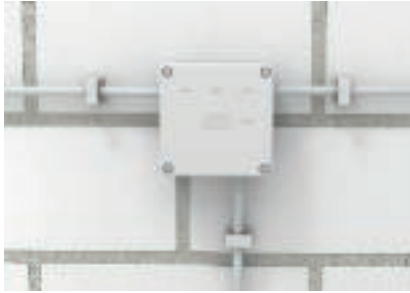
An additional classic amongst the OBO Duroplast junction boxes is the B series without a thread. They are made of Aminoplast. This plastic is hard and is highly resistant, meaning that the junction boxes are very stiff and sta-

ble. The B series is particularly suitable for environments with extreme temperature deviations. The required cable openings can be broken out at the appropriate points using a screwdriver. Cables can be easily inserted direct-

ly into the junction boxes using plug-in seals. Alternatively, cable glands can be inserted in the penetration hole and screwed tight inside using locknuts.

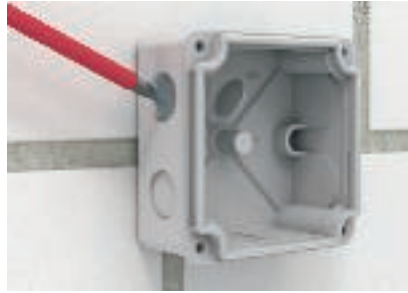


Mounting aid, junction box, B series without thread



B series application, wall mounting

Complete mounting and installation of B60M with plug-in seals and pressure ISO clips



B series application, wall mounting

The junction boxes are mounted on the mounting substrate using the external fastening elements.

The break-out openings can be broken out using a screwdriver or another suitable tool.



Cable entries

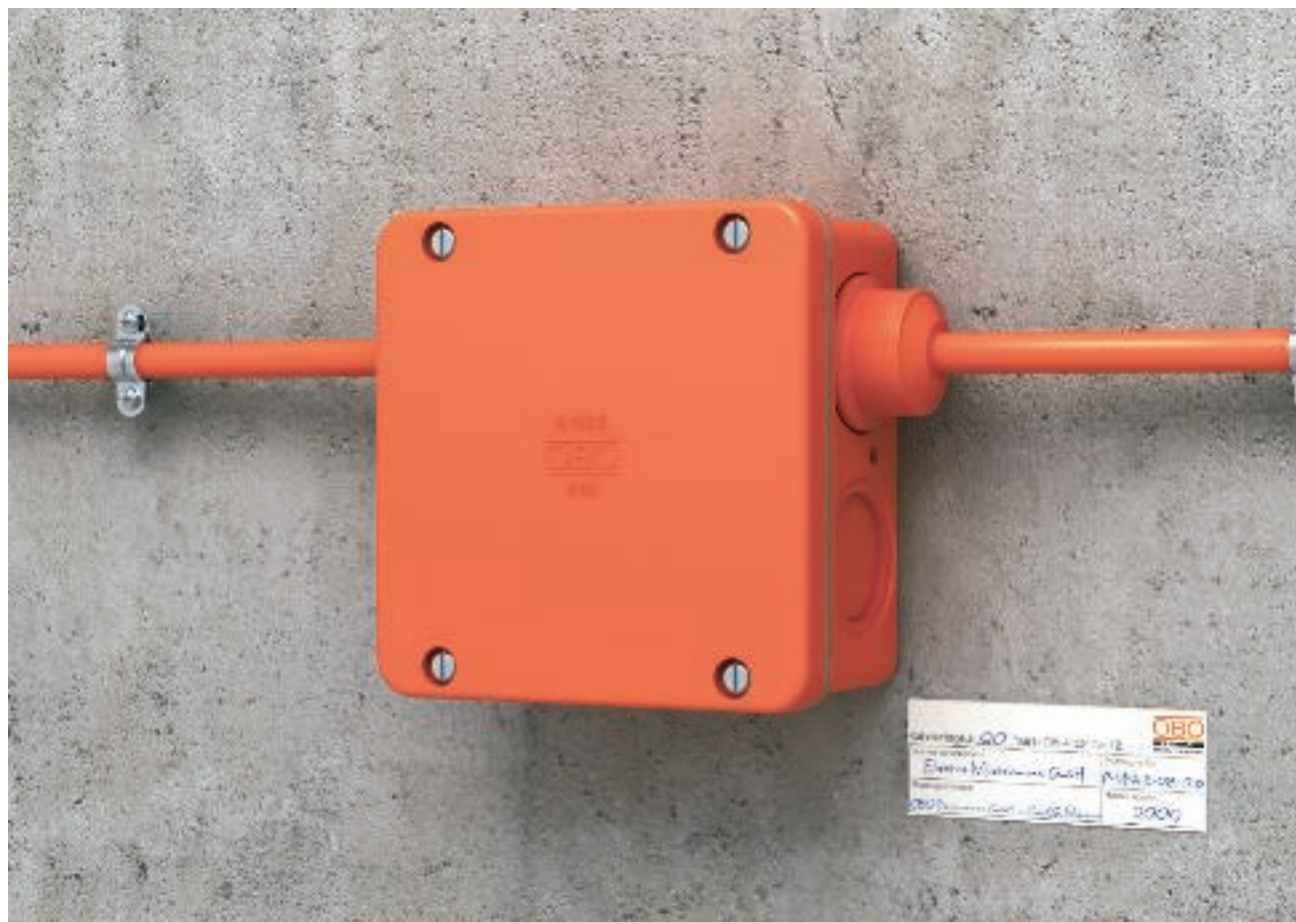
Plug-in seals or cable glands can be used to install cables.



Installation of a cable

Open the plug-in seals according to the diameter of the cable. The cable can then be inserted into the junction box.

Mounting aid, junction box, FireBox



There are ever higher requirements attached to the fire safety of installations in modern buildings. For these requirements to be fulfilled safely, OBO can offer the FireBox made of Duroplast to extend or branch defined function maintenance cables. With the FireBox series, OBO can complete its range for function maintenance

systems for safety-relevant systems.

The tested and approved types B 100 E, B 160 E and B 250 E will fulfil your requirements reliably and safely. Everything that is needed for assembly is included in the contents of the delivery: the cable junction boxes, four plug-in seals and the connecting unit with

two bolt ties.

A unique highlight of the OBO FireBox is the fully pre-assembled connecting unit that is built to withstand high temperatures. As always, OBO has all the solutions for your needs – and all from a single source.



Mounting aid, junction box, FireBox



FireBox B 160 E application, junction wall mounting

Complete mounting and installation of the B 160 E with wall identification plate.



FireBox B 100 E application, wall mounting

Complete mounting and installation of the B 100 E with wall identification plate.



FireBox B 250 E application, junction wall mounting

Complete mounting and installation of the B 250 E with wall identification plate.



Mounting preparations

Break out base openings.



Mounting preparations

Drawing.



Mounting preparations

Drill Ø 5 mm at least 60 mm deep; drilling spacing: B 100 E – 88 mm, B 160 E – 105 mm, B 250 E – 113 mm. Clean the drill holes out.



Mounting of terminal block

Combine the fire protection bolt tie with the sealing disks and the terminal block.



Mounting of terminal block

Screw the terminal block with the fire protection bolt tie directly into the substrate. Drive T30, tightening torque max. 3–8 Nm.



Installation preparation

Break out the plug-in seals.



Installation preparation

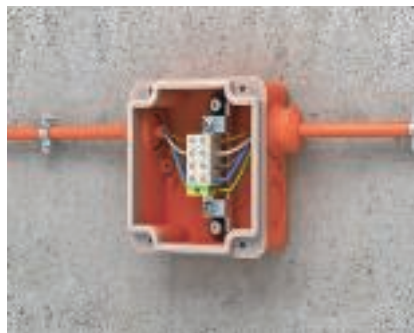
Install the plug-in seals.



Installation of a cable

Insert stripped cable ends.

Mounting aid, junction box, FireBox



Installation of a cable

Always place the protective conductor on the green-yellow PE terminal.
Avoid wire crossovers, clip distance in front of box max. 100 mm.



End of mounting

Screw on the cover.



Mounted junction box for function maintenance

Add the required cable system data to the identification plates according to DIN 4102 Part 12.





Mounting aid, Aquasit casting compound



Aquasit is a two-component casting compound in a cartridge for applications in areas with extremely high, continuous moisture. It can also be used for mechanical shock and vibrations. The cartridge is suitable for use in standard cartridge pistols. The unopened aluminium packaging

can be stored for up to a year at room temperature. After opening the cartridge, the material must be used within 24 hours.

Aquasit properties:

Protection rating: IP68 at 1,8 bar/1,000 h

Rated voltage: 400 V

Penetration resistance: >20

kv/mm to VDE 0291 Part 2

Operating temperature: -40 to +90 °C

Processing temperature: 0 to +40 °C

Halogen-free, silicon-free, isocyanate-free

Environmentally friendly and without the need to be labelled



Mounting aid, Aquasit casting compound



Preparations

During wall installations, to be able to fill with Aquasit, remove one plug-in seal in the top area of the box.



Add the Aquasit

Aquasit can be processed using a standard cartridge pistol. An emulsion tube must be placed on the Aquasit cartridge. This can be used to fill multiple cable boxes. After opening, the Aquasit must be used within 24 hours. The gel in the emulsion tube hardens after approx. 20–30 min.



Fully cast junction box

The plug-in seal can be inserted again after the junction box has been cast. The electrical system can be recommissioned immediately. The junction box is now protected against any kind of continuous moisture and fulfils the protection rating IP 68.



Pump shaft application

Electrical installations, which could be damaged by extreme or ongoing moisture, are protected against such damage using Aquasit.



Preparation for external installation

In the case of applications in the ground, e.g. for cable branches, Aquasit can protect the installation, when it becomes invisible at a later time. Cable glands should be attached to the junction box as strain relief.



Add the Aquasit

Aquasit can be processed using a standard cartridge pistol. An emulsion tube must be placed on the Aquasit cartridge. This can be used to fill multiple cable boxes. After opening, the Aquasit must be used within 24 hours. The gel in the emulsion tube hardens after approx. 20–30 min.



Filled junction box

It is sufficient to fill the junction box so that the terminals are completely covered.



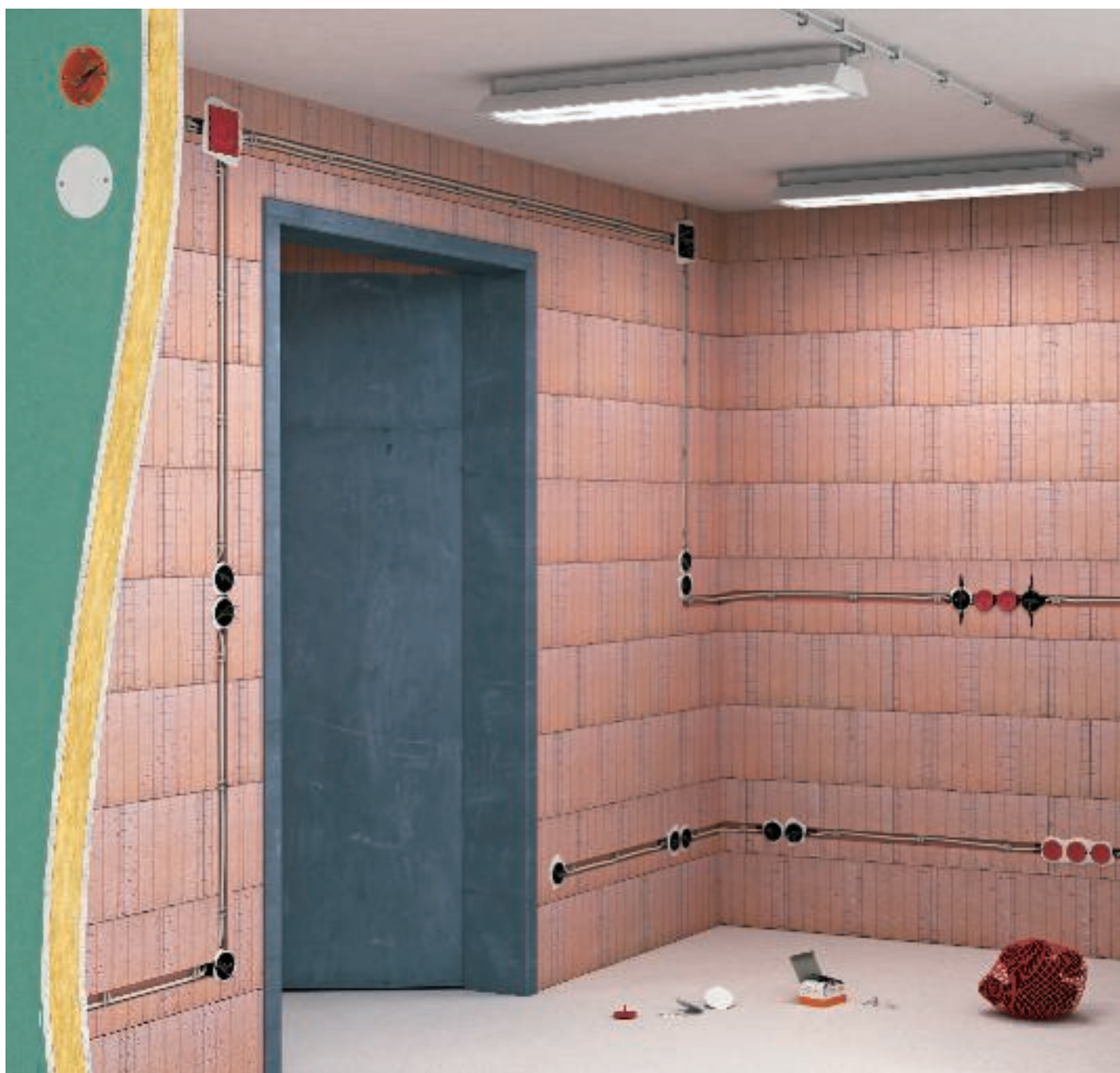
Electrical testing

When hardened, Aquasit is soft and elastic. This means that electrical connections can be inspected at any time. Aquasit is "self-healing", meaning that the holes of the inspection points close themselves, posing no risk to the protection rating. The compound can be easily removed and refilled later for retroinstallations.



Fully cast junction box

The junction box is cast and now fulfils the protection rating IP68.



Planning and mounting aid, concealed and cavity wall systems



Mounting aid, concealed systems	48
Mounting aid, cavity wall systems	50





Mounting aid, concealed systems



The ideal system for use in any kind of masonry. The products were developed according to the state of the art and are perfect-

ly matched. They can fulfil any practical requirements, thus allowing perfect installations in record time.

The system comprises a comprehensive range of accessories and can be used for any application.

Mounting aid, concealed systems



Accessory socket installation

Concealed devices and connection sockets can easily be plastered into masonry of all kind.



Accessory socket installation with nail straps

Concealed accessory socket with nail straps can be fastened in masonry using steel nails. The nail strap also prevents excessive penetration in the mounting opening.



Distributor box installation

Concealed connection boxes allow distributions to be created in the wall.



Combination of concealed sockets

The accessory sockets and the device connection sockets can be interconnected via their tunnel supports. The combination distance is 71 mm.



Surface equalisation rings

If the plaster on the wall is to be thicker, surface equalisation rings can be screwed to the accessory or connection sockets.



Signal cover

Before plastering, place the signal cover on the device or connection sockets. They prevent soiling of the socket interior and simplify finding the sockets again after plastering.



Sprung cover

With connection sockets, the sockets can be closed simply after installation using the sprung cover.



Universal cover

Universal covers are suitable for accessory sockets with 60 mm hole spacing, and connection sockets with 67 mm hole spacing.



Wall light connection sockets

Supply cables for wall lights must end in wall light connection sockets. These boxes offer space for three terminal strips and a cable reserve.



Device connection sockets

Device connection sockets allow the installation of an accessory and can offer additional space for at least three connection terminals.



Bending radii

The device connection boxes with increased box volume are suitable for maintaining bend radii in a concealed installation (e.g. for coaxial cables).



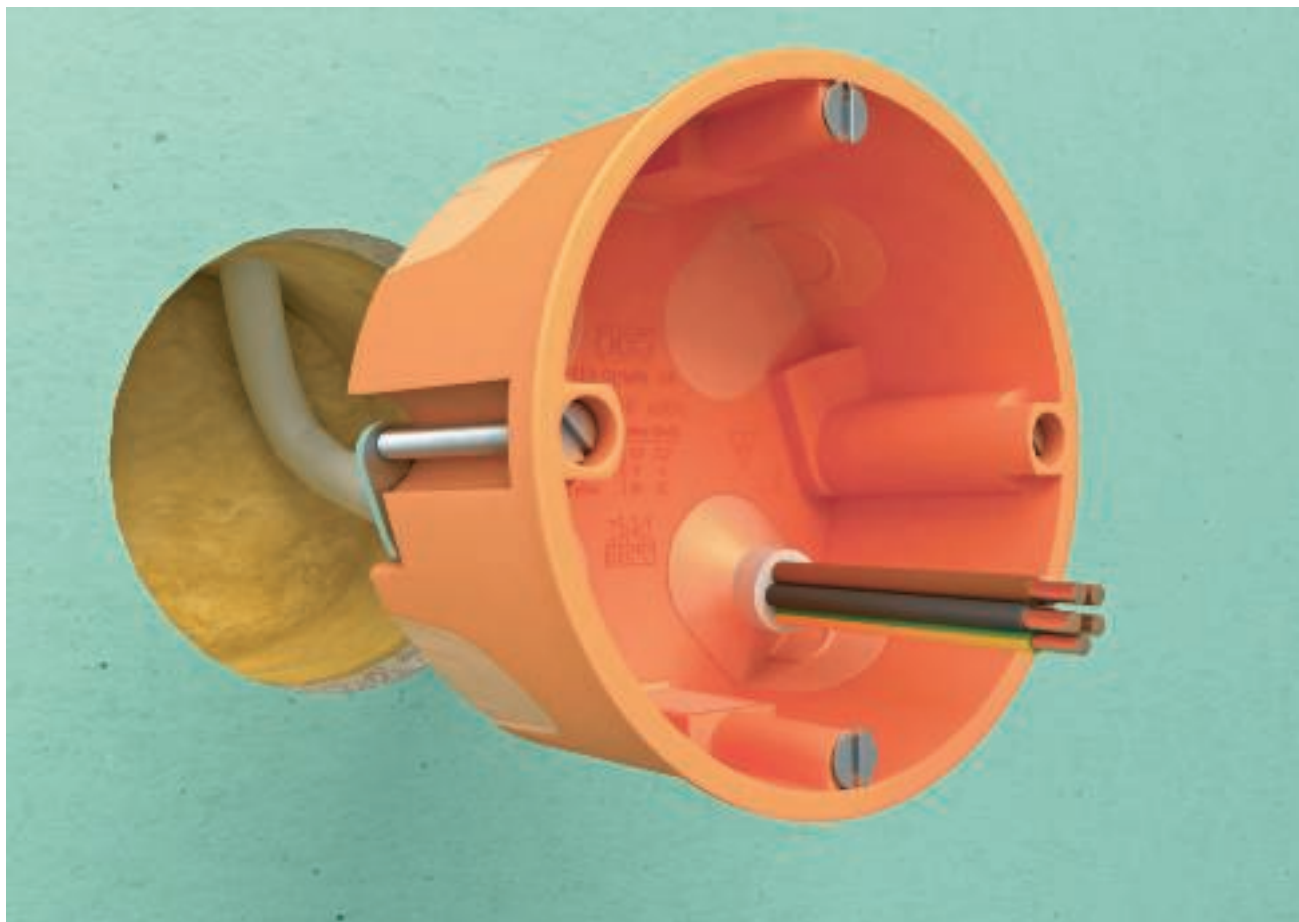
CEE concealed fitted plug

The CEE accessory socket 2392 and the cover plate 2393/UP allow the installation of CEE flanged sockets with 60 x 60 mm fastening dimension.





Mounting aid, cavity wall systems



The solution for stand-off wall systems, which can reliably solve main problems with such installations. The cavity wall system with a soft membrane entry is ab-

solutely wind-tight. OBO can offer you a system with perfectly matched products, with which you can create wind-tight installations in any buildings – from a de-

tached house to a large-scale construction project. The system is suitable for wall thicknesses from 7 mm to 35 mm.

Mounting aid, cavity wall systems



Installation at the room entrance
Switches and buttons are normally located at hand height directly next to the room entrance. Cavity wall accessory sockets are ideal to accept these device installation units.



Distributor box installation
Cavity wall distributor boxes allow distributions to be created in the wall.



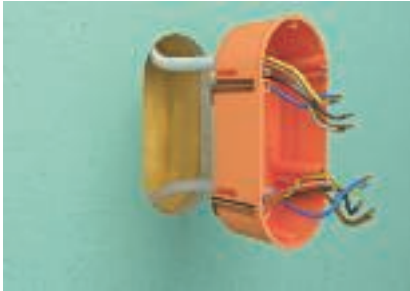
Preparation of mounting hole
Draw on the centre of the hole and cut out a drill hole of 68 mm using a circular band saw. With combination mounting, maintain the standardised hole spacing of 71 mm and create a second hole vertically or horizontally to the first one.



Mounting of accessory socket
Insert cables and/or pipes into the accessory socket in advance – these clamp themselves in the socket automatically. Then place the accessory sockets in the drill hole.



Preparation of mounting hole for double accessory sockets
When using the double accessory socket, two holes are drilled in advance at a spacing of 71 mm and a diameter of 68 mm. The rest is cut out with a knife.



Mounting of double accessory sockets
Insert cables and/or pipes into the accessory socket in advance – these clamp themselves in the socket automatically. Then place the accessory sockets in the drill hole.



Fastening the cavity wall sockets
Fix the accessory sockets in the drill hole using a screwdriver and the fastening screw. The small holding plates on the rear side of the sockets provide the necessary hold.



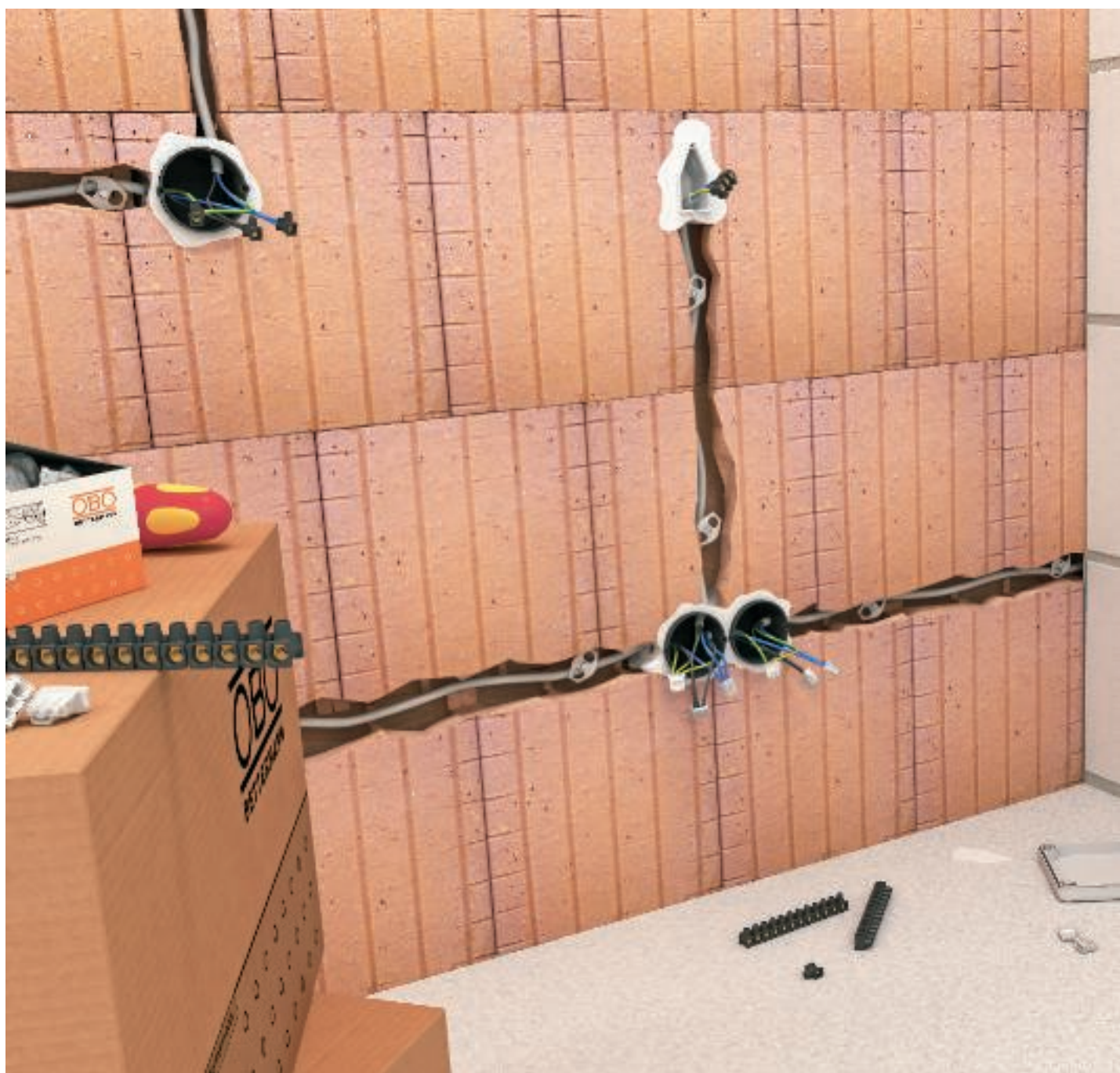
Mounting of installation units in cavity wall sockets
Now equip ready-placed accessory and connection sockets with device installation units.



Wind-proof installation
When using the wind-tight cavity wall accessory sockets, push the cables and/or pipes directly through the soft membrane entry.



Sealing of the input cables
The cables and/or pipes are tightly sealed by the sealing membrane. This means that no leakage air currents can escape from the devices.





Mounting aid, terminal systems



Electrical connections are made with screw-in and screwless terminals. In terminal strips and Dolü branch terminals, the cables are fixed in the terminal using a

screw. With screwless terminals, the contact and the holding force is applied to the wires using special spring mechanics. The transparent cover of the contact termi-

nals allows a visual check of the correct wire connection in the screwless terminals.

Mounting aid, terminal systems



Protective conductor terminal application
Neutral and protective conductor terminals can be snapped onto 35 mm hat profile rails in a transverse direction.



Neutral conductor terminal application
Neutral and protective conductor terminals can be snapped onto flat irons, 10 x 2.5 mm, in a lengthwise direction.



Dolü branch terminal application
With Dolü branch terminals, individual terminals can be twisted off to separate them. Coloured terminals are available for the different wire colours, meaning that continuously coloured wiring is not a problem.



Application in a concealed distributor box
With Dolü branch terminals (socket lamp-wire connectors), multiple cables can be screwed together in one terminal.



Application in junction box
Dolü branch terminals are also used for wiring within junction boxes.



Terminal strip application
Flexible and rigid cables can be interconnected in terminal strips.



Flexible fine-wire cables
The type 74/D means that it is possible to connect fine-wire cables without end sleeves. The wire protection clamp ensures full-surface contacts of the fine copper wires.



Terminal strip application
For luminaire connection, wire ends can be secured with terminal clips.



Terminal strips
Terminal strips are available in various versions with various current load capacities and connection cross-sections.



Terminal strip
Lamp-wire connectors of the .../CE series are available in both white and black.



Terminal strip
Terminal strips are soft and flexible.



Terminal strip
Individual terminals or terminal groups can be twisted off to separate them.





Mounting aid, terminal systems



Terminal strip

The terminal strips can be cut down to the correct number of poles.



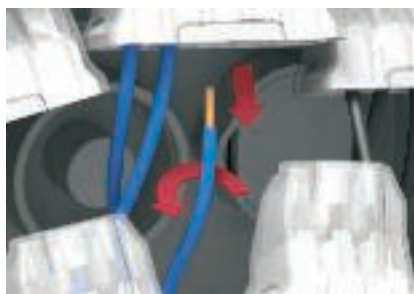
Packaging information, screwless terminal

The packaging of the screwless terminals has briefly sketched user information.



Shortening of wires

A mark on the screwless terminal shows the correct amount of insulation to be removed. This not only ensures the perfect fit of the wires, but also maximum touch protection. The correct fit of the wires can be checked through the transparent sight glass.



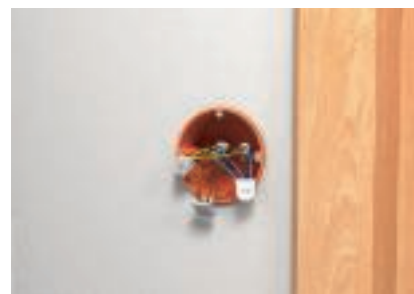
Slackening a wire

The individual wires sit tightly and firmly in the screwless terminals. They can be released by rotating and pulling them simultaneously.



Testing pin opening

Practical and safe: the rear testing pin opening allows safe measurement and testing of the wires with a testing pin or phase tester (max. Ø 2 mm).



Concealed and cavity wall screwless terminal application

Screwless terminals are used for "quick" wiring in cavity walls and concealed sockets.



Screwless terminals application in junction boxes

Screwless terminals are ideally suited to for wiring cables within junction boxes. Cross-sections of between 0.75 mm² and 2.5 mm² can be connected in a terminal type using the OBO screwless terminals.



Planning and mounting aid, cable fastening systems

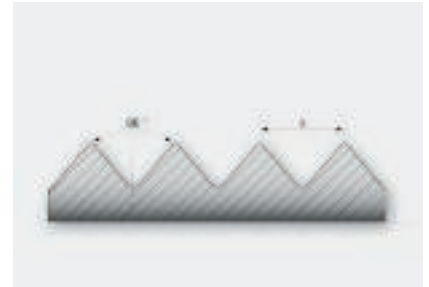
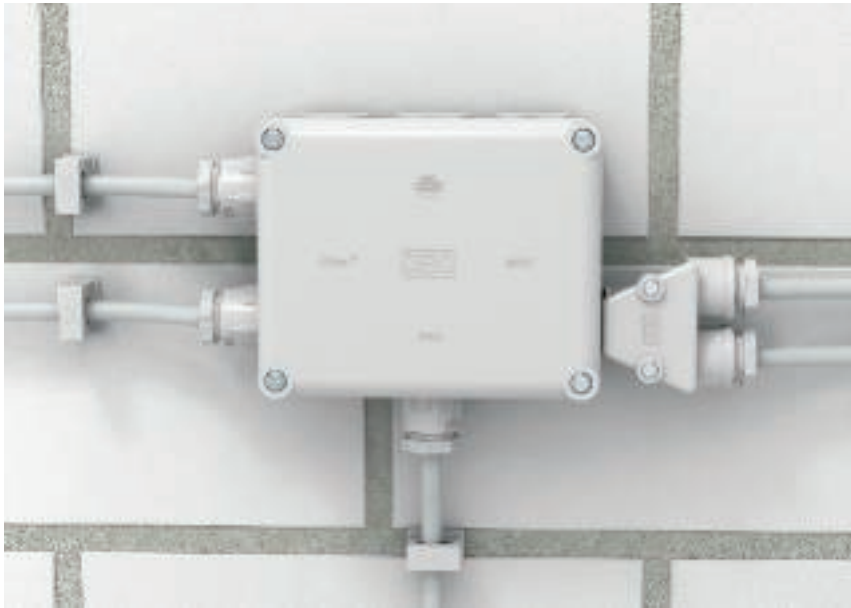


General planning aid	60
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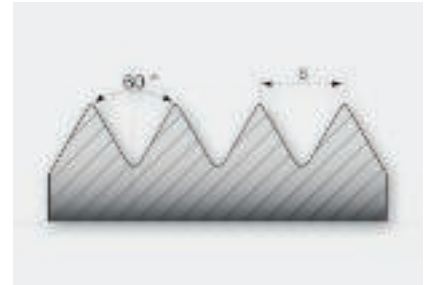




Useful information about cable glands



Thread increase Pg



Thread increase, metric

Cable glands are manufactured and tested according to DIN EN 50262. Amongst other things, this standard controls the retaining ability and strain relief of cables. The V-TEC cable glands from OBO Bettermann correspond to version "A". Table 2A of the standard specifies which withdrawal forces these cable glands must withstand. The V-TEC cable glands also fulfil the requirements of DIN EN 50262 with regard to the twist protection of cables (see Table 3).

To ensure the tested dust and moisture protection of the cable glands, continuous perforations should correspond to the mounting openings specified in the standard DIN EN 50262 according to Table 1. The on-site specialist must ensure that these parameters are complied with in order to handover a functioning system.

Useful information about cable glands

Table 1

Size of the penetration hole	mm	6	8	10	12	16	20	25	32	40	50	63	75
Thread of the cable gland	M	M6	M8	M10	M12	M16	M20	M25	M32	M40	M50	M63	M75
Diameter of the mounting hole (+0.2/−0.4)	mm	6.5	8.5	10.5	12.5	16.5	20.5	25.5	32.5	40.5	50.5	63.5	75.5

Table 3

Cable diameter	Torque Version A and B
mm	Nm
>4 to 8	0.10
>8 to 11	0.15
>11 to 16	0.35
>16 to 23	0.60
>23 to 31	0.80
>31 to 43	0.90
>43 to 55	1.00
>55	1.20

Table 2 A

Cable diameter	Retaining capacity	Strain relief, version A
mm	N	N
to 4	5	–
>4 to 8	10	30
>8 to 11	15	42
>11 to 16	20	55
>16 to 23	25	70
>23 to 31	30	80
>31 to 43	45	90
>43 to 55	55	100
>55	70	115



Useful information about cable glands



EMC cable glands

The guarantee of fault-free operation of electrical systems is one of the most important aims of an installation. The topic of EMC (electromagnetic compatibility) is a special subject in industrial systems. In particular, it is external influences, such as switching operations, surge voltages, the use of frequency converters and the like, which cause challenging requirements for the components used. Large cable lengths for power supplies or data transmission mean that some installation cables act like antennas and can thus receive electromagnetic fault signals. The actual payload signal can thus be superimposed, causing functional faults on system parts. To counteract this, it is important to create the installation in routing systems providing sufficient shielding, such as in closed cable support systems or metal line routing ducts and pipe systems. The use of cables with a braided shield can also have a positive impact when reducing fault signals.

Any efforts to make cable routing as secure as possible is destined for failure if no attention is paid to cable entries for EMC in control systems. To beat this weak point in the system, OBO Bettermann can now offer two versions of EMC cable glands.

The V-TEC VM EMV offers the user

the option to insert cables in control systems with shielding. The insulation is removed from the cable and the braided shield connected to the cable gland. Alternatively, the installation engineer can use the V-TEC VM EMV-K, which creates the contact between the braided shield and the gland by means of a contact spring. Both variants allow perfect, continuous contacting of the system.

Mounting aid, plastic cable glands



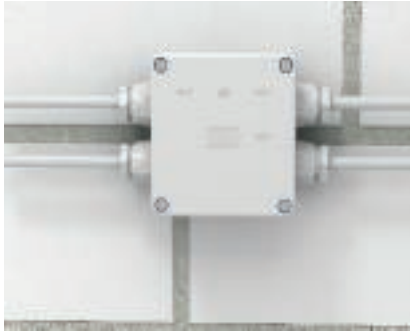
The quickest and most convenient way of providing strain relief and tightness with cable glands on junction boxes and housings is with the tried-and-trusted V-TEC VM cable glands from OBO. With the integrated sealing lip and the special OBO lamella technology,

protection class IP 68 is achieved. Strain relief and tightness have been tested to DIN EN 50262. The connecting threads of the cable glands are metric or Pg and are therefore suitable for universal use. Once screwed in place the fitting is there for ever,

as the optimum thread adjustment with the right pitch ensures permanent resistance to shaking. Applications: from private housing with junction boxes up to industrial applications in the distributor cabinet.



Mounting aid, plastic cable glands



Installation in housings without a thread

Cable glands can be installed in junction boxes or housings without a thread using a locknut.



Installation of cable glands

Any openings required on the junction box can be broken out. Then, push the cable glands through the opening and lock them tightly in the interior with a locknut.



Installation in housings with a thread

Cable glands can be screwed directly into junction boxes or housings with threads.



Installation of cable glands

Cable glands are screwed directly into the thread in the housing wall.



Installation of V-TEC VM cable glands

Cable glands of type V-TEC VM are used wherever strain relief for cables must be achieved in addition to the mechanical resistance.

Mounting aid, brass cable glands



Tough conditions are no problem for the brass V-TEC VM. Here too, the known V-TEC cap nut design of the cable glands ensures a secure hold of the cables. The protection class IP68 is achieved using separate sealing rings and their special OBO slot

technology. Strain relief and tightness have been tested to DIN EN 50262.

The connecting threads are metric or PG and are therefore suitable for universal use. Once screwed in place the fitting is there for ever, as the optimum

thread adjustment with the right pitch ensures permanent resistance to shaking.

Applications: From private housing with junction boxes up to industrial applications in the distributor cabinet.





Mounting aid, brass cable glands



Mounting of V-TEC MS on motor connection box

Brass V-TEC VM cable glands are used under tough conditions.



Cable entry with V-TEC MS on distributor systems

In industrial distributor systems, cables are inserted in the system using cap nut cable glands of type V-TEC MS.



Brass cable gland in LKM duct

Metal cable glands are also suitable for running cables out of a metal line routing duct (LKM).



Mounting of brass cable gland

The required openings are drilled in the side wall of the LKM. Then, push the cable glands through the opening and lock them tightly in the interior with a locknut.



Cone cable gland application

Cables can be inserted in switching systems and distributor cabinets using cone cable glands.

Mounting aid, EMV cable glands



Mounting preparation of V-TEC EMV cable gland

Remove the outer jacketing of the installation cable and expose the braided shield to a length of approx. 10–15 mm (depending on the cable diameter).



Pushing of the V-TEC VM EMV cable gland

Push the cap nut and the lamella insert with the ceiling ring onto the cable.



Preparation of braided shield

Bend the braided shield outwards at a right angle (90°). Then fold the braid twice in the direction of the external jacket (i.e. bend it through another 180°). Then attach the intermediate support up to the braided shield and turn it back and forth around the cable axis so that the braid is contacted across the full area.



Combination of the individual parts

Push in the lamella insert with the sealing ring into the intermediate support and lock into the twist protection.



Combination of the individual parts

The cap nut must now be screwed tight.



Complete installation of the V-TEC EMV cable gland

The cable shield is pressed all between the lamella insert and the intermediate support, ensuring perfect contacting.



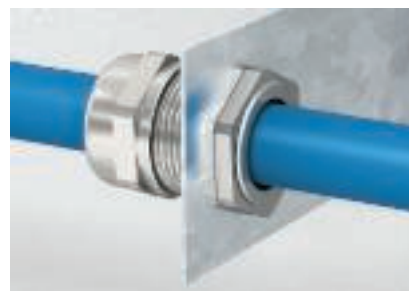
Mounting preparation of V-TEC VM EMV K cable gland

The cable jacketing is partially stripped, so that the braided shield is revealed to a length of approx. 10 mm.



Pushing of the V-TEC VM EMV-K cable gland

The cable is run through the cable gland from the cap nut side until the contact spring presses against the exposed braided shield. This creates the contact between the cable gland and the installation cable.



Complete installation of the V-TEC VM EMV-K cable gland

The principle of the contact spring within the cable gland allows interruption-free running of the braided screen up to the clamping point.





Planning and mounting aid, plastic cable and pipe fastening systems



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Information on cable fastening



Cable fastening

The standard DIN EN 61914 "Cable holders for electrical installations" specifies that cable holders "must be able to accept cables or cable bundles of the diameter specified by the manufacturer or responsible retailer, without tearing or breaking or shearing off the threads of bolts".

During the installation of cables, the current national and international standard must be taken into account, such as DIN VDE 0100 520. "Suitable agents and methods, which prevent damage or changes to the shape", must be used for fastening.

In addition, with masses of cables, DIN VDE 0298 requires the appropriate "load capacities of cables for fixed laying in and on buildings..." to be taken into account when selecting the fastening systems.

Besides these standardising aspects, the end customer/client can/must take specific laying specifications into account.

The fastening spacing for cables is given in DIN VDE 0100-520, June 2003. For example, cables laid horizontally require a spacing of 20x the cable diameter. However, a spacing of 80 cm should not be exceeded. With vertical laying, the clip spacings may be increased but should not exceed 1.5 m.

The table below shows the maximum fastening spacings for cables according to the cable diameter. The laying spacings given in the catalogue, e.g. for cable ties or Quick clips, are guide values and can only be treated as such.

Slits and recesses

DIN1053-1 specifies that slits and recesses may only be ground unless they were created in a walled composite. The slots and recesses may not affect the statics of the construction. Grinding is defined as the cutting of two grooves and the subsequent removal of the masonry in between. Mortising and knocking out slots and recesses is not permitted. Recesses and slots are also not permitted in chimney jambs.

External diameter of the cables	Maximum spacing for horizontal fastening	Maximum spacing for vertical fastening
mm	mm	mm
D ≤ 9	250	400
9 < D ≤ 15	300	400
15 < D ≤ 20	350	450
20 < D ≤ 40	400	550

Mounting aid, OBO Quick Family



With its Quick clips, starQuick clips and Multi-Quick clips, the OBO Quick Family can offer three designs of clip, which are availa-

ble for all different kinds of work, both to accept the OBO Quick pipe and to fasten cables. With the Quick Family, excellent electri-

cal installations can be created both in a way which saves time and guarantees security.





Mounting aid, OBO Quick Family



Wall mounting application

Routing variants with Quick clips and Quick pipe.



Ceiling mounting application

Installation pipes can be fastened to the ceiling or the wall using the Quick clips.



Mounting of the installation pipes

Electrical installation pipes can be pushed gently through the insertion slopes of the Quick clips.



Mounting preparations

Drawing of the installation path and creation of the mounting holes.



Ceiling mounting of the Quick clips

Mounting of the Quick clips with knock-in anchors or Angler anchors and Sprint screws.



Locked-in installation pipes

The Quick clips safely fix the installation pipe to the ceiling or the wall. The recommended fastening spacing between the clips is 50–60 cm.



Multi-Quick clips application

The Multi-Quick clips can cover spans of 16–32 mm or 15–37 mm using just three clip types. The teeth in the clips guarantee that the installation pipes are held in place securely.



Wall mounting with Multi-Quick clips

Multi-Quick clips are suitable for mounting installation pipes on walls, as the clips simply adjust themselves to the pipe diameter by simply pushing in the pipes.



starQuick clip application

The safety lock of the starQuick clips means that they are the ideal installation aid during pipe mounting, primarily under ceilings. The clip has two locking positions and can thus be used for different pipe diameters.

Mounting aid, OBO Quick Family



Ceiling mounting with starQuick® clips

The safety lock and the high load capacity of the starQuick® clip mean that the installation pipes can also be mounted under difficult conditions. The special material of the starQuick® clips makes them resistant to various chemical influences.



StarQuick for outdoor areas

StarQuick clips can be used in outdoor areas, as these clips are made from a UV- and weather-resistant material.



Arrangement of the clip family

The shared arrangement system allows the interconnection of various clip types.



Mounting aid, push-fit anchors



Save time and effort – with the highly flexible OBO plug-in anchor system.

The system is suitable for a wide range of applications: for full brick walls made of concrete, calcare-

ous sandstone, tiles and gas concrete and also for partition walls, for cables and for rigid and flexible electrical installation pipes. All you need is a drill hole with a diameter of 6 mm. Then you can simply

push the different push-fit anchors into the drill holes by hand – with the minimum of force. The products are manufactured from polyamide – and are, of course, halogen-free.

Mounting aid, push-fit anchors



Snap clip application
Draw the course and create the mounting holes.



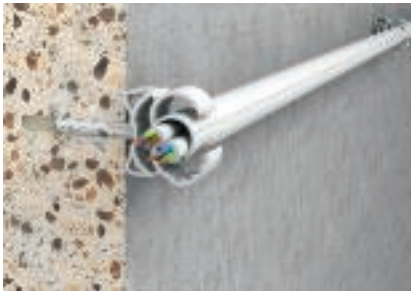
Mounting of Snap clip
Prefix the clip in the drill hole using the push-fit anchor. Then attach the pipe and push the pipe with the clip onto the mounting surface.



Complete installation, Snap clip
The side wings of the clip grip around the pipe and fix it to the wall.



Click-snap clip application
Draw on the exact position of the drill holes with a chalk line.



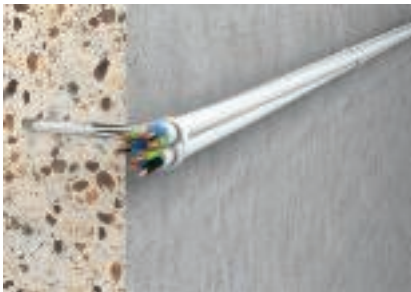
Mounting preparations
Push the Quick pipe into the snap push-fit anchor, insert the cables, close the Quick pipe – and you're done!



Complete mounting of the Click-snap clip
The installation pipe is held by the wings of the clip. The lock provides additional protection, so that the clip cannot open itself by mistake.



BKS clamp clip application
Drill the drill holes, run the BKS clip around the cable and push it into the drill hole.



Complete installation, BKS clamp clip
The cables are held simply and safely.



Application 910/STK
Create a drill hole and pass the cable tie through the wing of the push-fit anchor.



Fastening cables
Tie cables to be installed together using the cable tie.



Complete installation, 910/STK I
Fix the bundled cables in the drill hole with push-fit anchor.



Push-fit anchor application, type 1974
Draw the mounting line and create the drill holes.



Mounting aid, push-fit anchors



Complete installation, type 1974

Fix installation pipes or cables together with the push-fit anchor.



Double push-fit clip application, type 1974

Draw the mounting line and create the drill holes.



Complete installation, double push-fit anchor

Fix installation pipes or cables together with the push-fit anchor.



Push-fit anchor application with mushroom 910/STP

Draw and create the drill holes.



Complete installation, push-fit anchor with mushroom head 910/STP

Push the push-fit anchor through the mounting section and into the drill hole.

Mounting aid, fastening clips



Grip ISO clip application

The terminal base can be fastened with standard bolts in the slot. Alternatively, the base can be stuck onto the substrates using appropriate aids or screwed onto an M6 thread.



Complete installation with grip ISO clips

The cover is attached and the cable fixed using the clamping screw.



SOM clip application

The terminal base can be fastened with standard bolts or a 5 mm knock-in anchor.



Cable fixing

Cables are fixed using the plastic screws.



Complete installation, SOM clip

The design of this plastic clip means that it is primarily suitable for locations in which no metallic components may be used = corrosion protection!



Base clamp clip application

The clip can be screwed onto an M6 thread.



Mounting with OBO anchor

The installation can be prepared rapidly with the help of the OBO anchors and a flattener.



Screwing on of the base clamp clip

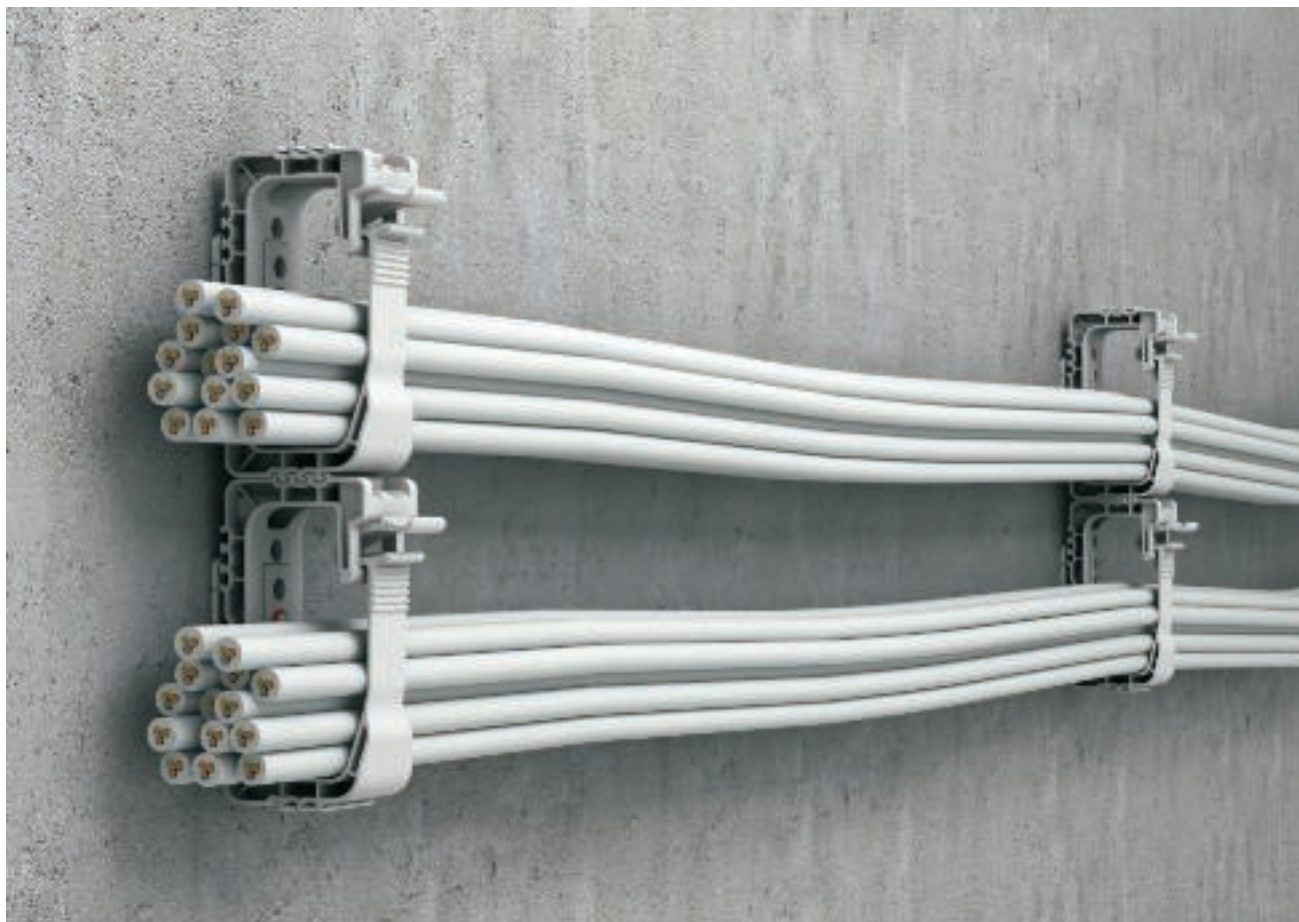
The base clamp clip is screwed onto the thread of the OBO anchor.



Complete installation, with base clamp clip

Pipes of different diameters can be inserted in the clip.

Mounting aid, Grip cable tidy



The new GRIP plastic grouped supports are suitable for mounting installation cables. Besides the known advantages of cable tidies, they have special features which considerably simplify mounting:

The separately moulded fastening element means that installation under the ceiling or on the wall are child's play. No matter wheth-

er it is with gas pressure nail guns, with knock-in anchors or the conventional method using bolts and anchors – the fastening options are wide-ranging. By locking the cable tidy on the fastening element there is no need for lengthy messing about with hammers and/or screwdrivers in the interior of the bracket.

In addition, the cable tidies can

be interconnected or arranged back to back. This saves additional drilling and the system can be expanded at any time.

In addition, the Grip cable tidies are available in a hardly flammable version.

The Grip cable tidies will support you in a proper and safe installation of installation cables, even under difficult circumstances.

Mounting aid, Grip cable tidy



Fastening with Sprint screw

Cable tidy fastened on a wooden beam.



Fastening with Sprint screw

The cable tidy can easily be fastened on other substrates. The fastening can be take place using gas pressure nail guns, OBO Sprint screws or knock-in anchors.



Mounting preparation, fastening with knock-in anchors

Create 6 mm drill hole.



Fastening with knock-in anchors

Push the knock-in anchor together with the fastening element into the drill hole and knock it in with a hammer.



Fastening with knock-in anchors

The knock-in anchor fastens the cable tidy to the wall.



Mounting on the wall with gas pressure nail gun

The fastening element of the bus holder can be placed on the head of a gas pressure nail gun and is automatically fixed using special lamella. Fastening takes place directly on the wall or ceiling using the gas pressure nail gun without additional aids.



Mounting under the ceiling with gas pressure nail gun

The fastening element of the cable tidy can be placed on the head of a gas pressure nail gun and is automatically fixed using special lamella. Fastening takes place directly on the wall or ceiling using the gas pressure nail gun without additional aids.



Mounting under the ceiling

The Grip cable tidy is fastened under the ceiling.



Fastening the cable tidy

Pull and twist the fastening element to separate it from the Grip cable tidy.



Mounting aid, Grip cable tidy



Fastening the cable tidy

Push the Grip cable tidy on the previously separated fastening element.



Complete mounting of the cable tidy

The Grip cable tidy noticeably engages as soon as the right position has been reached.



Arrangement above each other

The patented arrangement contour means that the OBO cable tidies can be interconnected.



Arrangement above each other

Multiple cable tidies can be interconnected. Depending on the load and fastening, do not arrange more than two OBO cable tidies next to each other.



Rear arrangement

The patented arrangement contour means that the OBO cable tidies can be connected back to back.



Rear arrangement

Two cable tidies can be connected back to back. In this case, it is sufficient to fasten one cable tidy.



Mounting on the wall

Fastening the Grip cable tidy on the wall.



Fastening the cable tidy

Separate the fastening element from the Grip cable tidy.



Fastening the cable tidy

Place the Grip cable tidies on the fastening element and lock it downwards.



Complete mounting of the cable tidy

Attached cable tidy, fastened to the wall.



Arrangement above each other

The patented arrangement contour means that the OBO cable tidies can be interconnected.

Mounting aid, Grip cable tidy



Arrangement above each other

Multiple cable tidies can be interconnected. Depending on the load and fastening, do not arrange more than two OBO cable tidies next to each other. Depending on the load, it is sufficient to fasten the top Grip.



Insertion of the installation cables

Cables can easily be mounted through the opening of the grip.



Complete installation with a cable tidy

The grip cable tidy can be closed without additional tools simply by pressing the locking contour.



Mounting aid, pressure clip



The quicker, the better – this also applies to installations in false ceilings.

OBO pressure clips simplify the routing of cables under the ceiling. OBO pressure clip is the per-

fect installation partner for areas in which every centimetre counts. Mounting is carried out simply using an M6 knock-in anchor. The striking surface on the top guarantees high striking accuracy in

the screw. After assembly, the cables are passed under the clips in a "lasso technique" hand movement – and that's all there is to it! The pressure clip is made of high-quality polyamide.

Mounting aid, pressure clip



Mounting preparation

Determine the exact position of the drill holes for the pressure clips using a chalk line and draw on the drill holes. Then drill the holes.



Fixing the pressure clips

Push the knock-in anchor through the fastening hole of the pressure clips and fix in the drill hole.



Fastening the pressure clips

No additional mounting tools are required when using an OBO knock-in anchor. The anchor can be knocked in directly using a hammer.



Installation of cables

Push the cables from the side under the hips of the pressure clips.



Complete mounting, pressure clip, type 2033

The pressure clips 2033 can accept a maximum of 16 cables of type NYM 3 x 1.5 mm². This is a guide value and may vary according to cable manufacturer.



Complete mounting, pressure clip, type 2034

The pressure clips 2034 can accept a maximum of 10 cables of type NYM 3 x 1.5 mm². This is a guide value and may vary according to cable manufacturer.

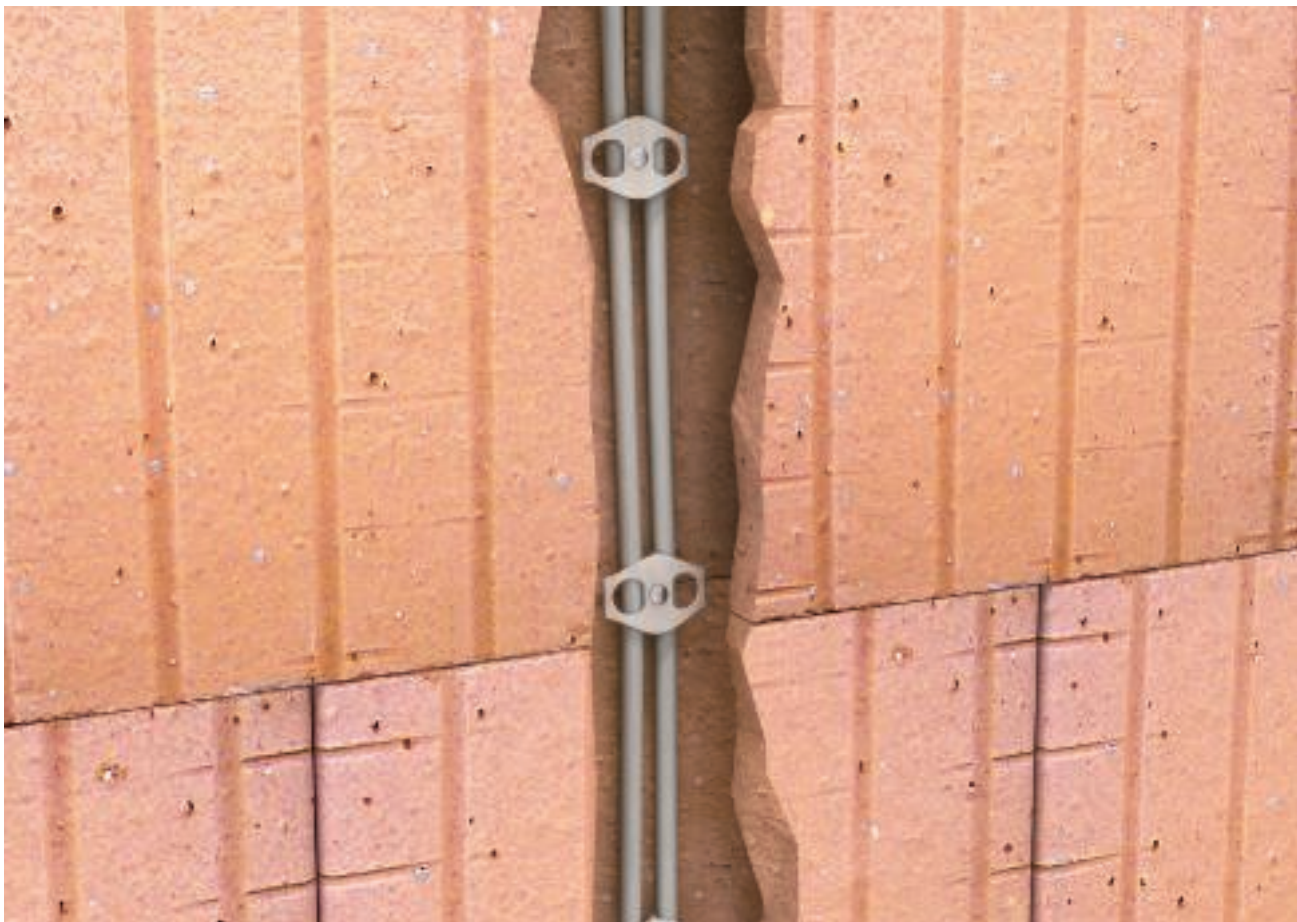


Spacer

Using the spacer 2033D, it is possible to increase the clamping height to 13 mm, meaning that cables with a large diameter can also be clamped. The cable weight and cable diameter reduce the carrying capacity of the pressure clips accordingly.



Mounting aid, clips



OBO makes various fastening systems available for fastening cables securely on different sub-

strates. Starting with the adhesive clip of ISO nail clips for fastening, e.g. on wooden beams, up to the

Nail-Fix for fixing in masonry slits, OBO can offer a wide range of clips for nail fastening.

Mounting aid, clips



Adhesive clip application
Adhesive clips are suitable for fastening installation cables on various substrates. The shape of the adhesive clip clamps it to the cable. This means that mounting is even possible in difficult locations.



Complete installation, adhesive clip
Adhesive clips are suitable for fastening various cable diameters, due to their variable clamping areas.



ISO nail clip application
Select the ISO nail clips according to the cable diameter and clamp them onto the cable.



Complete installation, ISO nail clip
ISO nail clips are suitable on visible masonry to fix telecommunications cables, for example.



Nail-Fix application
OBO Nail-Fix is suitable to fix installation cables in masonry slits or on masonry which will be plastered at a later time.



Fixing the Nail-Fix
The various nail lengths mean that the Nail-Fix can be used in many different substrates.



Complete installation, Nail-Fix
The Nail-Fix fixes the cables securely in the wall slot.





Planning and mounting aid, metal cable and pipe fastening systems



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Mounting aid, spacer fastening clip



Mounting with screw-in spacer clips. Spacer clips and screw-in spacer clips are available in various materials: in V2A stainless

steel, in electrogalvanised, hot-dip galvanised steel or in aluminium. Fastening can be take place with bolt ties or Angler anchors

and Sprint screws.

Depending on the design, the clips can be "shot" using a bolt-firing tool or nail device.

Mounting aid, spacer fastening clip



Wall mounting application

Cables can be run horizontally along the wall.



Ceiling mounting application

Cables can be mounted under the ceiling using spacer clips.



Vertical wall mounting application

Cables running vertically on the wall can also be fastened using spacer clips.



Function maintenance with screw-in spacer clips

The screw-in spacer clips of type 732 and 733 are tested and approved for routing to DIN 4102 Part 12. You can find the fastening spaces and approved cable types in the OBO BSS fire protection catalogue.



Pipe systems application

Screw-in spacer clips are suitable for routing steel armoured pipes on the wall or ceiling.



Pipe systems application for outdoor areas

When used in the open air, fastening clips with hot galvanised surfaces or ones made of stainless steel should be used to avoid corrosion.



Mounting preparations

Drawing of the exact position of the drill holes for the spacer clips with a chalk line.



Mounting of spacer clip 733

Mounting of the spacer clips with bolt ties or Sprint screws in an Angler anchors.



Mounting of single cable with spacer clip 733

The individual cables can be fastened perfectly.



Mounting of cable bundle with spacer clip 733

Spacer clips are also suitable for bundling multiple cables.



Vertical routing

Both individual cables and cable bundles can be fixed high up on the wall using spacer clips.



Mounted spacer clips 733

Mounted possible installation paths with spacer clips of type 733.



Mounting aid, spacer fastening clip



Wall mounting of cable bundle with spacer clip 732

Screw-in spacer clips are also suitable for bundling multiple cables.



Ceiling mounting of cable bundle with spacer clip 732

The screw-in spacer clip can be screwed directly onto the thread using the FNA bolt tie. This simplifies mounting under the ceiling.



Mounted spacer clips 732

Mounted possible installation paths with screw-in spacer clips of type 732.

Mounting aid, fastening clip



Fastening clip application, type 604

Cables or pipes can be installed using the single-lobe fastening, e.g. on the raw concrete floor.



Fastening with OBO anchor

The clip is fixed on the mounting substrate through the fastening hole using an OBO anchor.



Complete installation

The clip can offer a secure hold for cables or pipes.



Fastening clip application

Cables can be mounted flat on the wall or ceiling using single or double-lobe fastening clips.



Fastening clip application with reinforced steel pipes

One or two-lobe clips are also used to fasten pipes. This means that the pipe can be installed laying flat on the substrate.



Main cable fastening, building connection box

Heavy-duty cable clips of type 1594 are used to fasten the main VNB cable at the entrance to the building.



Mounting aid, pressure clip



Metal pressure clips ensure a high level of mechanical stability in installations above false ceilings or suspended fire protection ceilings in emergency and escape routes. The mechanical load capacity in case of fire was suc-

cessfully confirmed by a test to DIN 4102. The metallic pressure clips are approved as a cable-specific routing variant for electrical function maintenance to DIN 4102 Part 12. You can find detailed information on the use of

the brackets for function maintenance in the OBO BSS fire protection catalogue.

Clamping height 10 mm
Fastening hole Ø 6 mm

Mounting aid, pressure clip



Ceiling mounting area of application

Ceiling mounting with metal pressure clips, Type 2034 M.



Ceiling mounting area of application

Ceiling mounting with metal pressure clips, Type 2033 M.



Fire protection ceiling area of application

Maintain a minimum spacing when used above fire protection ceilings.

Distance "a" to the fire protection ceiling for pressure clips

Type 2033 M: at least 70 mm

Type 2034 M: at least 50 mm



Function maintenance with the pressure clips

The metallic pressure clips are tested and approved for cable-specific cable routing to DIN 4102 Part 12. You can find the fastening spaces and approved cable types in the OBO BSS fire protection catalogue.



Mounting preparations

Drawing of the exact position of the drill holes for the pressure clips with a chalk line.



Fixing the pressure clips

Push the fire protection bolt tie through the fastening hole of the pressure clips and fix in the drill hole.



Fastening the pressure clips

Turning of the bolt tie into the drill hole. Screwing-in can take place with a rechargeable screwdriver, hammer screwdriver and by hand.



Installation of cables

Push the cables from the side under the hips of the pressure clips.



Mounted pressure clips

Complete mounting and maximum assignment of the pressure clips.



Mounting aid, cable tidy



Cable tides are suitable for installations above false ceilings or suspended fire protection ceilings in emergency and escape routes. The mechanical load capacity in case of fire was successfully con-

firmed by a test to DIN 4102. The metallic cable tides are approved as a cable-specific routing variant for electrical function maintenance to DIN 4102 Part 12. You can find detailed in-

formation on the use of the retainer for function maintenance in the OBO BSS fire protection catalogue.

Mounting aid, cable tidy



Ceiling mounting application
Routing variant under the ceiling.



Wall mounting application
Routing variant on the wall.



Fire protection ceiling area of application
Maintain a minimum spacing when used above fire protection ceilings.
Distance "a" to the fire protection ceiling for collecting clamps:
For 60 cm fastening distance: a = min. 100 mm for cable sag of max. 30 mm
For 80 cm fastening distance: a = min. 250 mm for cable sag of max. 50 mm



Function maintenance with the collecting clamp
The metallic collecting clamps are tested and approved for cable-specific cable routing to DIN 4102 Part 12. You can find the fastening spaces and approved cable types in the OBO BSS fire protection catalogue.



Mounting preparations
Drawing of the exact position of the drill holes for the cable ties with a chalk line.



Ceiling mounting of the cable ties
Simultaneous mounting of the cable ties with bolt ties as push-through mounting.



Inserting the cables
Insert the cables in the cable ties. When cable assignment is complete, close the cable ties by hooking the opening flap into the appropriate opening.



Wall mounting of the cable ties
Simultaneous mounting of the bolt ties or Angler anchors and Sprint screws with cable ties as push-through mounting.



Inserting the cables
Insert the cables in the cable ties. When cable assignment is complete, close the cable ties by hooking the opening flap into the appropriate opening.





Mounting aid, cable tidy



Mounted cable ties

Cables can be retrofitted or removed at any time by opening and reclosing the cable ties.



Ceiling mounting of the collecting clamp, Grip 70

The collecting clamp 2031/M 70 is supplied with a fire protection bolt tie MMS 6 x 50. The collecting clamp is fastened to the ceiling using the bolt tie.



Cable installation, ceiling

Insert the cables in the collecting clamps. When cable routing has been completed, close the collecting clamps by hooking the opening flap into the appropriate opening.



Wall mounting of Grip 70 collecting clamp

Mounting of the screw-in anchors with collecting clamps with the push-through method.



Cable installation, wall

Insert the cables in the collecting clamps. When cable routing has been completed, close the collecting clamps by hooking the opening flap into the appropriate opening.



Mounted collecting clamp

Cables can be retro-installed or removed at any time by opening and reclosing the collecting clamps.



Planning and mounting aid, special cable and pipe fastening systems



Mounting aid, installation strip	100
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Mounting aids, Quick Wire system	104



Loads, installation strip

Assignment of different load types to the columns A, B and C

When two loads are combined, the value of the worst case applies.

In addition, the table values only apply under the following condi-

tions:

- The load of the installation strip 5055 may only be placed in the round holes.
- In the case of screw fastenings in the last hole, there must be a complete bar above the hole.
- Screw sizes appropriate to the

appropriate installation strip must be used (M5 for Size I, M6 for Size II, M8 for Size III).

- The screws must be tight. The user of smaller or loose screws causes a strong drop in the break load.

Minimum break load of perforated straps 5055 and 5062 for the different applications:

Type	Item no.	Minimum breaking loads N	Minimum breaking loads N						Minimum breaking loads N			
		A	B						C			
5055	1470124	2,150	1,850						1,650			
	1470175	3,050	2,000						1,800			
	1470264	6,750	6,750						3,300			
5055/L	1471120	1,150	1,400						1,200			
	1471171	2,200	1,500						1,300			
	1471260	5,350	2,800						2,400			
5055/ L PE	1473220	1,500	1,500						1,300			
	1473271	2,300	2,300						1,700			
	1473360	4,700	4,250						4,000			
5062	1475126	1,600	1,600						2,150			
	1475177	2,350	2,350						3,050			
	1475266	4,700	4,700						3,700			
5062/L	1475622	1,300	1,300						1,300			
	1475673	1,650	1,650						1,300			
	1475762	3,800	3,800						3,200			
Load			1	2	3	4	5	6	7	8	9	10
Minimum breaking load according to column			A	B	A	C	B	2xB	2xB	A	B	A

Loads, installation strip



Load 1: Smooth belt
Minimum breaking load according to column A



Load 2: Screwed to flat suspender
Minimum breaking load according to column B



Load 3: Screwed to flat suspender, belt end doubled, free end of belt inside
Minimum breaking load according to column A



Load 4: Screw under the ceiling with bolt and washer
Minimum breaking load according to column C



Load 5: Screwed under the ceiling with bolt, belt end doubled, free belt end down
Minimum breaking load according to column B



Load 6: Belt wound around flat eyelet and pipe or similar
Minimum breaking load according to column 2 x B



Load 7: Pipe or similar fastened to wall with belt
Minimum breaking load according to column 2 x B



Load 8: Pipe or similar suspended from belt
Minimum breaking load according to column A



Load 9: Belt end screwed to pipe clamp
Minimum breaking load according to column B



Load 10: Belt end screwed to pipe clamp, belt end doubled
Minimum breaking load according to column A

Mounting aid, cable and pipe fastening systems, special



Planning aid, cable and pipe fastening systems, special



The cable and pipe fastenings of the special system include cable ties, fastening straps and installation strips, with which cable and

pipe installations can be fastened to cable support systems such as cable or mesh cable trays or other mounting constructions. A

complete tensioning wire system to suspend and catch cable weights is also a component part of the special system.

Mounting aid, cable and pipe fastening systems, special



Pipe suspension with steel strip
Pipes can be suspended with installation strips. The installation strip consists of a metal core with plastic jacketing.



Cable fastening on suspended chain
Cables can be fixed to and run on a chain using cable ties.



Fixing within a cable tray
Bundles of cables in cable trays can be protected against slippage by fixing with cable ties.



Suspension with installation strip
The installation strip can be fastened to the ceiling in many different ways. Here, with a screw on a Rabitz coupler, type 2083.



Suspension with installation strip
The installation strip can be fastened to the ceiling in many different ways. Here, directly with a bolt and an anchor in a hole.



Suspension with installation strip
The installation strip can be fastened to the ceiling in many different ways. Here, it is directly suspended from a TS ceiling hook, type 2989, which can be screwed onto an M6 thread.



Suspension with installation strip
Pipes or other suspended components can be suspended using the installation strip fastened to the ceiling.



Steel wire tensioning cable systems
Steel wire tensioning ropes can be used to support cable weights.



Use of cable ties and ribbon clips
Pipes and cables can be fastened beneath cable trays using cable ties and ribbon clips.



Fastening with installation strip
Clips can be quickly bent into any shape using the installation strip, to fasten installation pipes for cable to the floor using OBO anchors, type 903/RB and flatteners.



Impu-Fix adhesive application
Ribbon conductors can be fastened with the Impu-Fix adhesive. Apply the adhesive to both sides with a brush and stick on the cable after drying. Fix the ribbon conductor using gentle knocks with a rubber mallet.



Mounting aid, Quick Wire



The new Quick Wire system means that it is possible to suspend mesh cable trays, cable pipes, etc. easily and with infinite

adjustment options. The different support cables and cable locks mean that the Quick Wire system is suitable for differ-

ent mounting situations. The cable locks allow toolless fine adjustment of the suspended mounting parts.

Mounting aid, Quick Wire



Mounting of steel cable with cable lock

Run the end of the steel cable through the cable lock and then loop it around the steel girder.



Mounting of steel cable with cable lock

Run the end of the cable back through the cable lock to fix it.



Fastening the mounting part

Run the other end of the cable through a second cable lock on one side.



Fastening the mounting part

Run the steel cable through the fastening elements of the mounting part and then fix it using the steel cable.



Complete installation

Toolless mounting means that simple adjustment is possible at any time.



Suspension of mesh cable tray with TLS system

Mesh cable trays with a total width of up to 400 mm can be suspended using the TLS Quick Wire system. Simply open the spring hook to insert cables.



Complete installation, mesh cable tray

The Quick Wire support cable system means that suspensions, for example of mesh cable trays, are no problem. The cable locks mean that the height of the system can be adjusted without tools.



Mounting of SLS system with gas pressure nail guns

The Quick Wire system SLS is suitable for mounting on concrete ceilings with gas pressure nail guns. Simply fasten the installation profile to the ceiling using the firing tool.



Mounting with gas pressure nail guns

The nail fixes the cable system beneath the ceiling.



Fastening the mounting part

Attach a cable lock to the end of the support cable.



Fastening the mounting part

Run the cable around the mounting part and then back through the cable lock. Mounting is complete.



Mounting of ZLS system on steel girder

The Quick Wire system, type ZLS, has a pressed eyelet on one end of the steel cable. Run the cable around the support.





Mounting aid, Quick Wire



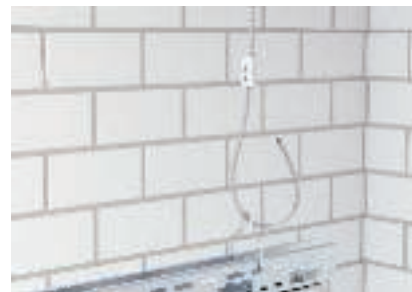
Mounting of ZLS system on steel girder

Run the end of the cable through the hole in the eyelet. This fixes the steel cable to the steel girder.



Fastening the mounting part

Attach a cable lock to the loose end of the cable. Run the cable through the opening of the cable lock. The insertion direction is indicated with arrows on the lock.



Mounting of luminaire support tray

To suspend luminaire support trays, for example, connect the cable to the suspension clamp and pass the end of the cable back through the lock.



Complete installation, luminaire support tray

The height of the luminaire support tray can be adjusted without tools using the cable lock.



Mounting with CLS system

The Quick Wire system, type CLS, has an FNA tie on one side for installation in concrete ceilings.



Fastening the mounting part

Attach a cable lock to the loose end of the cable. Then place the cable around the mounting part.



Complete installation

Run the end of the cable back through the cable lock to fix the mounting part.



Wire cable cutter application

Steel cables can be cut, splice-free, using the W-Cut wire rope cutter.



Planning and mounting aid, pipe systems



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Information on electrical installation pipes



Classification of pipe systems according to DIN EN 6138

The OBO Bettermann pipe systems are machined and tested according to DIN EN 60423 "External diameters of electrical installation pipes and thread for electrical installation pipes and their accessories" and DIN EN 61386 "Electrical installation pipe systems for electrical energy and information".

DIN EN 61386 classifies installation pipes using an 11-digit numeric code, which provides information on the pressure resistance, impact resistance or use temperatures.

You can find the first four digits in the product descriptions of the pipe systems. The table below provides an overview of the different meanings of the numbers.

The coding/classification **2323** for pipes has the following meaning, for example:
1st code digit = 2 : Light pressure

First digit		Second digit		Third digit		Fourth digit	
Pressure resistance		Impact resistance		Minimum use temperature		Maximum use temperature	
1	very light (125 N)	1	very light (0.5 kg/100 mm)	1	+ 5 °C	1	+ 60 °C
2	light (320 N)	2	light (1.0 kg/100 mm)	2	- 5 °C	2	+ 90 °C
3	medium (750 N)	3	medium (1.0 kg/300 mm)	3	- 15 °C	3	+105 °C
4	heavy (1,250 N)	4	heavy (2.0 kg/300 mm)	4	- 25 °C	4	+ 120 °C
5	very heavy (4,000 N)	5	very heavy (6.8 kg/300 mm)	5	- 45 °C	5	+ 150 °C
						6	+ 250 °C
						7	+ 400 °C

Mounting aid, pipe systems, metal



Besides the electrogalvanised and electrogalvanised pipes, the metal pipe system now includes systems with a black, powder-coated surface and systems made of rust-proof stainless

steel (V2A). The pipe systems and their accessories are available with and without connection threads. Fittings such as 90° pipe bends and pipe connection sleeves are also part of the port-

folio. Metal pipes are particularly suitable for applications with high mechanical loads, such as those in industry or in outdoor areas.



Mounting aid, pipe systems, metal



Metal pipe with thread application

Connection sleeves can be screwed onto metal pipes with threads.



Metal pipe without thread application

The product range contains metal pipes with and without threaded connections.



Fastening with metal clips

Metal pipes can be fastened to the wall with double-lobe metal clips, type 605.



Connection sleeve SMxx

Connection sleeves can be screwed onto metal pipes with threads.



Connection between pipes

Pipes can be interconnected and connected to 90° pipe bends using connection sleeves.



Connection between pipes

Interconnected pipes are combined into a closed unit.



Plug connection

Pipes without a threaded connection can be extended with plug-in sleeves. 90° pipe bends can also be connected with a pipe using a plug-in sleeve.



Plug connection between pipes

Plug-in sleeves allow the combination of interconnected pipes into a closed unit.



Cable installation

After fastening the metal pipes, the cables can be pulled directly into the electrical installation pipe.



Complete installation

After installation, we have a closed systems. The pulled-in cables are protected against mechanical loads.



Combination pipe connection sleeve application

Special combination connectors are available to connect Stapa pipes with and without threads.



Pipe end socket application

The cable protection sleeves prevent damage to the cables by any burring on the cutting edge, particularly in the case of shortened pipes. Simply plug the end socket onto the pipe.



Mounting aid, pipe systems, metal



Stap pipe with end socket
After attachment, the sleeve holds itself on the end of the pipe.



Pipe end socket application
Now pull cables through the pipe.



Mounting of control bend without thread
Push the reinforced steel pipes into the control bend.



Cover, control opening
To cover the control opening, fasten the cover plates to the bend using bolts.



Complete installation, check bend
The control bend allows, amongst other things, problem-free retroinstallation of additional cables.



Mounting of control T piece with thread
Screw the reinforced steel pipes into the control T piece.



Cover, control opening
To cover the control opening, fasten the cover plates to the T piece using bolts.



Complete installation, control T piece
The control T piece allows a branch in a pipe section.



Outdoor application, steel armoured pipes
Steel armoured pipes are particularly suited to external areas.



Mounting aid, pipe systems, plastic



The plastic pipe system contains the OBO Quick pipe as a duct pipe, in which cables can be inserted as in a duct. Turning into

the OBO Quick clip causes the OBO Quick pipe to close, surrounding the cables like a closed pipe. Fittings such as 90° bends,

T pieces and connection sleeves are available as accessories.



Mounting aid, pipe systems, plastic



Wall mounting application

Routing variants with Quick clips and Quick pipe on the wall.



Ceiling mounting application

Installation pipes can be fastened to the ceiling using the Quick clips.



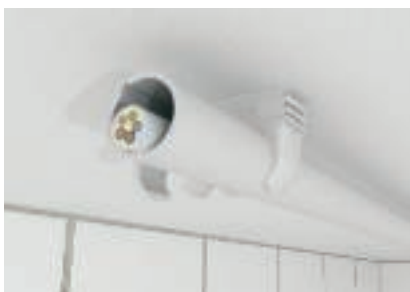
Cable routing in the Quick pipe

Insert the installation cable into the opened Quick pipe.



Closing the Quick pipe

Turn the Quick pipe in the Quick clip, thus closing the cover.



Fully connected Quick pipe

The closed pipe fixes the cable. The Quick pipe system is ideal for laying pre-terminated cables.



Mounting of the Quick pipe T piece

The T piece is a hood fitting and is placed on the pipe.



Complete mounting, T piece

Mounting is completed after locking on the front section. The T piece can be easily opened again using a screwdriver.



Mounting of Quick pipe bend

The bend is a hood fitting and is placed on the pipe.



Complete mounting, Quick pipe bend

Mounting is completed after locking on the front section. The bend can be easily opened again using a screwdriver.



Processing the Quick pipe

The Quick duct shears allow shortening of the Quick pipe into the required pieces, meaning that installation can commence.



Quick pipe mounting

Push the Quick pipe into the Quick clips, insert the cables and turn the Quick pipe to close it – and you're done!



Complete installation

Turning and closing the Quick pipe allows the creation of technically and visually perfect installations.







Mounting aid, beam clamps for knocking-in



Mounting aid, beam clamps



Beam clamps, with which constructions can be created beneath steel girders in steel skeletons. Beam clamps are available

for knocking onto or screwing on to the flange. With the knocking variant, the beam clamps grab the metal, whilst, with the screw-

on variant, the screw clamps the flange to the beam clamp.



Mounting aid, beam clamps



Opening of beam clamps

Beam clamps are attached to the flange and they then grab it.



Screwing on of beam clamps

Screw-in beam clamps are pushed onto the flange and the flange clamped using the bolt in the beam bracket.



Beam clamps for pipes

Use of screw-in beam clamps with directly fastened pipe seat.



Beam clamp mounting

Installation of strike beam clamp and suspension chain for luminaire installation.



Beam clamp mounting

Mounting with knock-in beam clamps with thread and screw-in spacer clip 732 for mounting installation pipes.



Beam clamp mounting

Installation of strike beam clamp and fastening of threaded rods with connection sleeve.



Beam clamp mounting

Installation of beam clamps and installation tube parallel to flange.



Beam clamp mounting

Installation of screw-in beam clamps and installation tube parallel to flange.



Beam clamp mounting

Installation of beam clamps and installation tube vertical to flange.



Beam clamp mounting with type 328

Movable fastening of two beam clamps and a profile rail.



Beam clamps, type 328

Movable fastening of two beam clamps and a profile rail. This allows mounting structures beneath steel girders.



Beam clamp installation

Beam clamps can be knocked onto the flange both in a horizontal and a vertical position.



Mounting aid, beam clamps



Beam clamp application, type 339

With beam clamps of type 339, profile rails can be variably fastened to steel girder using terminal strips.



Pipe clip application, type TKCI

The beam clamp as a pipe clip is used to route pipes or cables in steel girders.



Beam clamp application with hinge

Hinged beam clamps can be used for suspensions on sloping steel constructions. Fastening on the beam is achieved using terminal strips.



Visible rail terminal application

The visible rail terminal TKD and the locknut TKD-G allow easy fastening of constructions to ceiling profiles.





Planning and mounting aid, rail systems



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Information on profile and hat profile rails



The OBO hat/G support rails are machined according to DIN EN 60715. According to the standard IEC 60947-7-2, steel support rails are approved as a protective conductor bus bar (PE function), however not as a PEN function!



Load values of profile rails

Due to the fact that the mounting conditions for profile rails are very wide-ranging for everyday work, no overall load values can be specified.

Exact values are dependent on the load points and the mounting conditions of the rail. The statistical values given in the catalogue will help you to calculate and select the rails.

Article type	Material (material thickness)	Short-circuit resistant $I^2 t = E \text{ CU cable (mm}^2\text{)}$	Short-time withstand current 1 s
46277 GTP	Steel (1 mm)	10 mm ²	1.2 kA
46277 GTPL	Steel (1 mm)	10 mm ²	1.2 kA
2069	Steel (1 mm)	16 mm ²	1.92 kA
2069S	Steel (1 mm)	16 mm ²	1.90 kA
2069 GTP	Steel (1 mm)	16 mm ²	1.92 kA
2069 GTPL	Steel (1 mm)	16 mm ²	1.90 kA
2069/15 GTP	Steel (1 mm)	16 mm ²	1.92 kA
2069/15 GTPL	Steel (1 mm)	16 mm ²	1.90 kA
2069/15 GTP	Steel (1.5 mm)	35 mm ²	4.2 kA
2069/15 GTPL	Steel (1.5 mm)	35 mm ²	4.1 kA
2069/15 GTP	Steel (2.5 mm)	50 mm ²	5.9 kA
2069/15 GTPL	Steel (2.5 mm)	50 mm ²	5.8 kA
2064 GTP	Steel (1.5 mm)	35 mm ²	4.2 kA
2064 GTPL	Steel (1.5 mm)	35 mm ²	4.1 kA
(Values rounded)	Cross-sections calculated according to IEC 60439-1/EN 60439-1/VDE 0660-500 Table 3.	Relevant cross-section range similar to DIN VDE 0100-540 Table 54.3.	

Mounting aid, hat profile and support rail



The OBO rail system contains hat rails, support rails and profile rails with slot widths of 7.5 to 22 mm. Electrical components such as series terminals, contactors and fuses can be locked on and connected to hat and support rails.

When profile rails are used as mounting rails, small and larger mounting areas can be created, but classic fastening of U clamps is, of course, also possible. In this programme, you can find the right rail, both for cable

ladders and for simple wall mounting. By using the available accessory parts such as hammer-head and hook-head bolts, slide nuts or also series clips for cable fastening, you'll always find the right solution.



Mounting aid, hat profile and support rail



Hat profile rail application

Hat profile rails can be inserted in junction boxes, to accept series terminals for wiring.



Hat profile rail application

Hat profile rails are usually used in switching and distributor cabinets.



Series-mounted device on hat profile rails

Series devices (REG) or series terminals can be locked onto the hat profile rails. The hat profile and support rails can be used as a protective conductor bus bar but not as a PEN conductor.



Lightning current and surge arrester

The ProtectionSet, type PS-VA..., from the TBS transient and lightning protection range, can, for example, be installed on hat profile rails.



Hat profile rail application

Neutral and protective conductor terminals can be locked onto hat profile rails.



Shortening of hat profile rails

The hat profile and support rail cutting device, type HTS 35, allows the shortening of hat profile rails to almost any length without burring. The hat profile and support rail cutting device is equipped to handle the four most common profiles.

Mounting aid, profile rail



Overview of profile rail variations

A large range of profile rails are available: various materials, various material thicknesses, various profiles with appropriate slot widths, various hole patterns and the required accessories for each profile, comprising slide nuts, hammer-head bolts and U clamp clips.



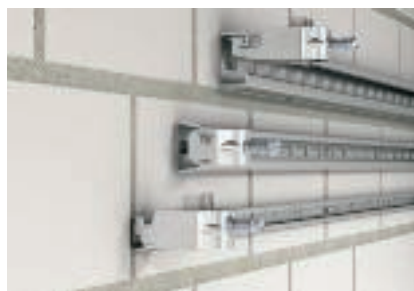
Protective cap application

The OBO product range contains orange protective caps for some of the profile rails, in order to minimise the risk of injury.



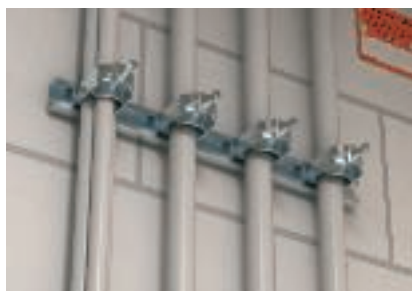
Use of hammer-head bolts

Hammer-head bolts and slide nuts allow fastening of additional components on profile rails. Hammer-head bolts and slide nuts are adjusted to the slot width of the profile rail and can be shifted within the profile rail.



Clamp clip mounting in profile rails

With the different base shapes, U clamp clips can be suspended in the appropriate slot widths of the profile rails.



Fastening the clamp clips

Clamp clips can be fastened to the profile rails to fix cables or pipes.



Series clip application

Cable weights can be supported beneath a switch and distributor cabinet using series clips of types 2049–2055. Series clips can be moved in the profile rail, cables are clamped between two clips.



Rung seat in steel girder

Direct fastening (clamping) of the rung seat, type SAA, with profile rail, type CPS 4, on steel girder.



Constructions beneath steel girders

Profile rail, type 1269, combined with two beam clamps, type 328. This allows structures to be created under steel girders.



Mounting of profile rail with clamping lug

Clamping lugs can be used to fasten profile rails under steel girders.



Mounting aid, profile rail accessories



Use of hammer-head bolt

Hammer-head bolts can be used in profile rails of the appropriate slot width. Its design means that the bolt can be inserted lengthwise in the profile rail. If the hammer-head bolt is turned around, it is flat against the profile rail and cannot fall out.



Use of slide nuts

A slide nut is inserted in the profile rail and then turned, in order that the side surfaces of the slide nut are touching the profile rails. An appropriate bolt can be screwed into the thread of the slide nut to fasten a component.



Use of hook-head bolt

Hook-head bolts are suitable for profile rails with eyelets. Their design means that the hook-head bolts can be suspended in the profile rail and will not fall out. They are ideal for overhead applications!



Use of hammer-head bolt with tensioning spring

For the MS 41 profile rails there are hammer-head bolts fitted with a tensioning spring and toothing. The tensioning spring fixes the hammer-head bolts on the rail, thus simplifying installation, in particular in overhead mounting.





Planning and mounting aid, U clamp clip systems



Mounting aid, U clamp clip systems

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Mounting aid, U clamp clip systems



Clamp clips allow cables and pipes to be fastened to profile rails. Clamp clips are available with three standard base shapes and can be hooked into the appropriate slot widths of the profile

rails. The component to be fastened is pressed onto the profile rail with the pressure trough of the clamp clip and held in place. Various versions of profile rails are available for mounting on angle

or flat irons and on round profiles. There are special versions of U clamp clips available for bundling multiple installation cables and fixing single-wire cables in rotary current systems.



Mounting aid, U clamp clip systems



Wall mounting application
Mounted clamp clips on the wall with individual filling, double and triple filling and bundling.



Ceiling mounting application
Mounted clamp clips on the ceiling with individual filling, double and triple filling and bundling.



Vertical wall mounting application
Mounted clamp clips vertical on the wall with individual filling, double and triple filling and bundling.



Mounting preparations
Drawing of the exact position of the drill holes for the profile rails with a chalk line.



Profile rail mounting
Mounting of the profile rails with bolt ties or Sprint screws and Angler anchors.



Ceiling mounting cables
Cable mounting on profile rails with clamp clips.



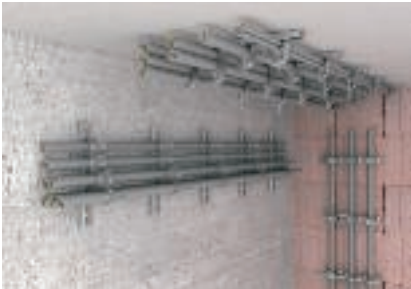
Ceiling mounting cables
Cable mounting on profile rails with clamp clips.



Wall mounting cables
Cable mounting on profile rails with clamp clips.



Wall mounting cables
Cable mounting on profile rails with clamp clips.



Mounted clamp clips
Complete cable installations and mounting with clamp clips on wall and ceiling.



Base shape variants
With the different base shapes, U clamp clips can be suspended in the appropriate slot widths of the profile rails.



Mounting on angle profile
Clamp clips of type 2056W fasten cables or pipes to angle profile with a hip length of 40 mm.



Mounting aid, U clamp clip systems



Mounting on flat iron

Clamp clips of type 2056F fasten cables or pipes to flat irons with a material thickness of 4–12 mm.



Clamp clip for screen connection

Cables with a metallic braided screen can be included in the earthing measure using the screen connection clamp clip.



Three single-wire clamp clip

The U clamp clips 2056/E and 2056U/E are suitable for system routing of single-wire cables in rotary current networks. The arrangement of the external cables remove the magnetic fields, meaning that no excessively high heating need be expected.



Bundle clip

Clamp clips of type 2056/B are particularly suitable for routing/fastening multiple installation cables in small areas.



Clamp clip for earthing strip

The U clamp clip 2056/BE is particularly suitable for running earthing strips of 30 mm width to profile rails.



Pipe fastening with clamp clips

Clamp clips are also suitable for fastening pipes.





Planning and mounting aid, screw-in and knock-in systems



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Information on screw-in and knock-in systems



With the friction closing method, the anchors/ties maintain their load through friction in the mounting substrate. Usually, push-through mounting is used here, in which the anchor/tie is pushed through the fastening hole of the mounting component and then both are fixed in the drill hole.



With fitting, the geometry of the anchor/tie adapts itself to the mounting substrate (drill hole). Here, pre-attachment mounting is used, in which the anchor/tie is first placed in the drill hole and the mounting part fastened separately afterwards.



The use of a mortar which fixes the anchor/tie in the mounting base is termed the material closing method.

Selection criteria for ties and anchors

When selecting the anchor/tie, factors such as the substrate and its characteristics, the mounting type and the load of the anchor have a role to play. Therefore, the following basic questions should be asked when selecting the anchor/tie:

- What is the mounting substrate?
- Are there edge or axis spacings to be taken into account?
- How thick is the mounting substrate? Can I maintain the required drill hole depths?
- Which mounting type is the right one for fastening the component?
- Is the anchor/tie required for cracked or uncracked concrete?
- Is it an application for function maintenance? Do the anchors/ties have the appropriate approval?
- Are there any corrosion protection requirements of the anchor/tie?

To provide the core statement for supporting constructions, it is possible to quote the Model Building Regulations of November 2002. Paragraph 3 states, amongst other things, that "Systems are to be arranged, erected, modified and maintained in such a way that public safety and order, and in particular life, health and natural requirements for life, are not endangered." Therefore, for applications, for example, in the field of cable support systems, only ap-

proved ties and anchors should be used.

Mounting aid, nails



Many different materials are used in the construction industry. As an installation engineer, you must install anchors, bolts, knock-in anchors, nails and bolt ties in all

kinds of wall materials. These different wall materials have different properties. Some substrates are hard, others soft, some are solid, whilst others have cavities. There-

fore, we have matched our fastening components to the different wall properties. We can offer the right fastening material for any substrate.

Mounting aid, nails



Heavy-duty anchor, type FH

Hook nails are used for fastening, for example fastening installation pipes.



Use of ribbon conductor

Impu steel needles and Siko steel nails are used to fix ribbon conductors.



Use of nails

Steel nails of type 362 can, for example, be easily driven into wooden substrates.



Sprint screw with angler straddling dowel

The Impu nail is placed in the separating retainers of the ribbon conductor.



Sprint screw with angler straddling dowel

The nail is knocked into the substrate using a hammer.



Knock-in anchor, type 910/SD

The vulcanised fibre disc ensures that no conductive connection is created between the individual wires through the nail head.



Siko nail application

The Siko nail is placed in the separating retainers of the ribbon conductor.



Siko nail application

The Siko nail is knocked into the substrate using a hammer.



Siko nail application

The plastic safety head ensures that no conductive connection is created between the individual wires through the nail head.



Hook nail application

Knock the hook nail into the mounting substrate. Care must be taken here that the pipe is not deformed too much. For this reason, fastening cables with hook nails is critical.



Hook nail application

Hook nails are suitable for fixing flexible installation pipes, e.g. in the screed.

Mounting aid, OBO knock-in anchor



Sprung hinged and tilting anchor application
OBO anchors 903 and 904 are simply knocked into the substrate without drilling. Special flatteners are available to knock the anchors in safely.



OBO anchor application, type 903/RB with fastening clip
Clips can be mounted on fixed substrates without drilling using the OBO anchors.

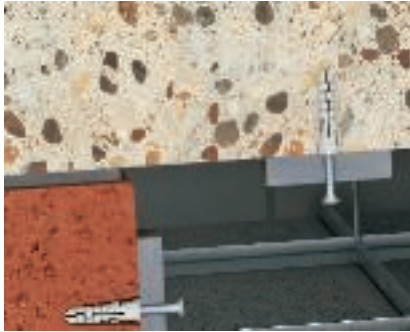


OBO anchor application, type 903 with M6 thread
The OBO anchors with a thread are suitable for mounting Quick clips, for example.



OBO anchor application, type 903/RB with installation strip
OBO anchors without threads, such as the 903/RB, are suitable for fastening installation strips, for example on raw concrete.

Mounting aid, anchor



Sprint screw with angler straddling dowel

Sprint screws 4759 and Angler straddling dowels 910/N can be used to fasten components. Used on walls or under ceilings.



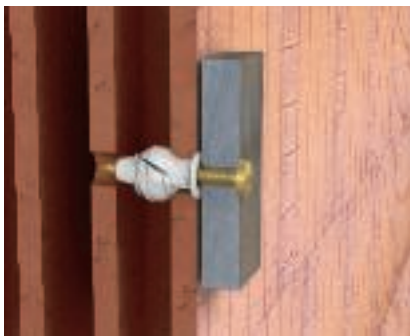
Knock-in anchor 910/SD

Mounting parts are fastened in concrete or full brick using the push-through method using knock-in anchors 910/SD.



Sprint screw with angler straddling dowel

Sprint screws 4759 and Angler straddling dowels 910/N can be used to fasten components to concrete walls.



Multipurpose anchors 910/MZ

Sprint screw 4759 in a multipurpose anchor 910/MZ, for use in hollow tiles. The multipurpose anchor locks into the cavity.



Heavy-duty anchor, type FH

Heavy-duty anchor, type FH, with M12 threaded connection for fastening components with large loads, load capacity 8.26 kN.



Tie bolt, type FAZ II

Tie bolt, type FAZ II, to fasten heavy-duty anchors in reinforced or non-reinforced normal concrete C20/25 to C50/60, suitable for push-through mounting, with connection thread M8, M10 or M12, load capacity 4.3 kN (M8), 7.6 kN (M10), 11.9 kN (M12). Suitable for function maintenance.



Angler anchor application with Sprint screw

Place the Angler anchor in the drill hole.



Angler anchor application with Sprint screw

Fasten the clip using a Sprint screw.



Angler anchor application with Sprint screw

The Angler anchor is ideally suited to fastening light to medium-duty mounting parts in concrete, calcareous sandstone or full brick.

Mounting aid, anchor



Knock-in anchor 910/SD application
Push the knock-in anchor 910/SD through the fastening hole of the mounting hole and into the drill hole.



Knock-in anchor 910/SD application
The spreading of the anchor means that the mounting part is fixed to the wall or under the ceiling.



Knock-in anchor 910/SD-Q application
Push the knock-in anchor 910/SD-Q into through the fastening hole of the Quick clip.



Knock-in anchor 910/SD-Q application
Using a screwdriver and a hammer, fix the knock-in anchor in the drill hole.



Knock-in anchor 910/SD-Q application
The spreading of the anchor means that the clip is fixed to the wall or under the ceiling.



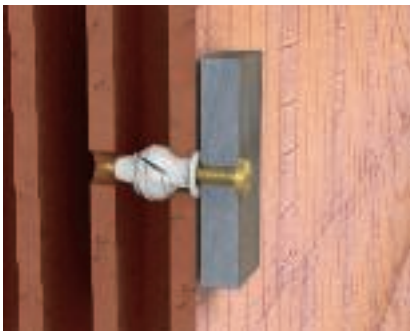
Metal spreading anchor MD application
In low-resistance porous concrete, knock in the metal spreading anchor directly.



Metal spreading anchor MD application
Fasten the mounting section using a Sprint or Golden Sprint screw.



Golden Sprint screw and multi-purpose anchor
The multipurpose anchors 910/MZ are suitable for hollow bricks, full brick and concrete.



Golden Sprint screw and multi-purpose anchor
The moulded fins (rotation locks) prevent it from turning in the drill hole. The plastic edge prevents the anchor from slipping through the drill hole. The anchor locks into the cavity of cavity bricks. In solid, full-surface substrates, the anchor is kept in the drill hole by the pressure.

Mounting aid, anchor



Sprung hinged and tilting anchors

Tilting or sprung hinged anchors are used for mounting on suspended ceilings or in cavity walls.



Sprung hinged and tilting anchors

The sprung hinged mechanism means that the anchor can be inserted in a relatively small drill hole in the ceiling.



Sprung hinged and tilting anchors

The spreading of the side wings creates a contact surface on the plate. Turning the thread moves the hook to the right position and locks it with the nut.



Gas concrete anchor application

Knock the anchor directly into the porous concrete (gas concrete resistance class G2). With a resistance class of G4 or greater, a 5 or 6 mm hole should be predrilled.



Gas concrete anchor application

Fasten the Quick clip in the anchor using a Sprint screw.

Mounting aid, bolts and screws



Ceiling hook application with multipurpose anchor
Push the multipurpose anchor into the drill hole and make it flush using a hammer.



Ceiling hook application with multipurpose anchor
Turn the ceiling hook into the anchor up to hand tightness.



Ceiling hook application with multipurpose anchor
Using a screwdriver, turn the hook into the anchor at least as far as the end of the thread.



Ceiling hook application with multipurpose anchor
The ceiling is now suitable to suspend luminaires using linked chains.



Bolt tie MMS-ST application
Drill a hole with a diameter of 5 mm.



Bolt tie MMS-ST application
Turn the tie in using a cordless screwdriver, drive screwdriver or by hand.



Bolt tie MMS-ST application
A ring eyelet can be screwed onto an M6 thread.



Bolt tie MMS-ST application
Using steel cables or cable locks, luminaires can be mounted to the mounted ring eyelet, for example.



GOLDEN SPRINT screw application
The GOLDEN SPRINT screws are ideally suited for fastening components together with angler or multipurpose anchors.



GOLDEN SPRINT screw application
When using plastic anchors, the Hostaflon-coated surface and the two-gang thread of the bolt reduce the screw-in time considerably.



GOLDEN SPRINT screw application
The GOLDEN SPRINT screws are available with Pozidrive or T-bit panheads.



Hexagonal wood screw, type 12400
Components can be fastened to wooden beams or supports using wood screws. The wood screws have a hexagonal head as their drive.

Mounting aid, bolts and screws



Fire protection bolt tie MMS

No plastic anchors are required for the use of a bolt tie. The bolt tie is screwed directly into the blown out hole.

Test marks

	AENOR, Producto Certificado, Spain
	STOWARZYSZENIE ELEKTRYKÓW POLSKICH, Poland
	CEBEC, Belgium
	DEMKO, Danmarks Elektriske Materielkontrol, Denmark
	ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV, Czech Republic
	ATEX certificate for explosive areas
	FIMKO, Finland
	KEMA-KEUR, Netherlands
	Indication of metric products
	NEMKO, Norway
	Underwriters Laboratories Inc., USA + CSA, Canada
	Österreichischer Verband für Elektrotechnik, Austria
	ISTITUTO ITALIANO DEL MARCHO DI QUALITÀ, Italy
	Underwriters Laboratories Inc., USA
	SEMKO An Inchcape Testing Services Company, Sweden
	Eidgenössisches Starkstrominspektorat, Switzerland
	Underwriters Laboratories Inc., USA
	Verband der Elektrotechnik, Elektronik, Informationstechnik e.V., Germany



Pictogram explanation

Surfaces

	Strip-galvanised
st	Strip-galvanised/plastic-coated
	Bright
	Hot-dip galvanised
	Electro-galvanised
EI	Electrogalvanised/plastic-coated
	Electrogalvanised, yellow passivated
	Electrogalvanised, transparently passivated
	Hot-dip galvanised
	Copper-plated
	Nickel-plated
	Galvanised, Deltatone 500
	Hot-dip galvanised/SOMY
	Zinc-aluminium coated, double-dip
	Zinc-aluminium coated, Galfan

Conformity symbol

	Communautés Européennes, EC declaration of conformity according to EC directives
	RoHS-conformant

Quality marks

	Halogen-free; without chlorine, fluorine and bromine
	Flame resistant 650 °C
	Flame resistant 750 °C
	Flame resistant 960 °C
	UV-RESISTANT

Nominal cross-section

	Nominal cross-section 1.5 mm²
	Nominal cross-section 1.5–2.5 mm²
	Nominal cross-section 2.5 mm²
	Nominal cross-section 2.5–4 mm²
	Nominal cross-section 4 mm²
	Nominal cross-section 4–6 mm²
	Nominal cross-section 6 mm²

Nominal cross-section

	Nominal cross-section 10 mm²
	Nominal cross-section 16 mm²

Nominal voltage

	Nominal voltage 400 V
	Nominal voltage 500 V
	Nominal voltage 660 V

Protection rating

	Protection rating IP 20
	Protection rating IP 30
	Protection rating IP 31
	Protection rating IP 54
	Protection rating IP 54
	Protection rating IP 55
	Protection rating IP 65
	Protection rating IP 66
	Protection rating IP 67
	Protection rating IP 68

Entries

	4 cable entries
	6 cable entries
	7 cable entries
	8 cable entries
	9 cable entries
	10 cable entries
	12 cable entries
	10 cable entries ECO
	12 cable entries ECO
	14 cable entries ECO
	16 cable entries
	18 cable entries ECO
	24 cable entries

Polarity

	3-pole
	5-pole



Pictogram explanation

Polarity

	7-pole
	8-pole
	10-pole
	12-pole

Clamp clip base shapes

	Cable clip for C-profile rail with slot width 11–12 mm
	Cable clip for C-profile rail with slot width 16–17 mm
	Clamp clip for C profile rail with slot width 18–22 mm

Slot widths

	Slot width 7.5 mm
	Slot width 11 mm
	Slot width 11–12 mm
	Slot width 12 mm
	Slot width 15 mm
	Slot width 16 mm
	Slot width 16.5 mm
	Slot width 16–17 mm
	Slot width 17 mm
	Slot width 18 mm
	Slot width 22 mm
	Slot width 35 mm

Diameter

	Diameter 60 mm
	Diameter 68 mm
	Diameter 70 mm
	Diameter 74 mm

Gland thread

	Thread metric
	Thread Pg

Screw heads

	Philips screw
	Torx screw
	Phillips screw

Screw heads

	PoziDrive

Entry size

	M20 entry
	M25 entry
	M32 entry
	M40 entry

Materials

	Flat steel
	Angular steel
	U steel
	

Firing devices

	Bolt-firing tool
	Nail device

BSS test marks/material class

	Function maintenance class E30
	Function maintenance class E90

KTS-side heights

	Cable tray, side height 35 mm
	Cable tray, side height 60 mm
	Cable tray, side height 85 mm
	Mesh cable tray, slant height 35 mm
	Mesh cable tray, slant height 55 mm

BSS function maintenance installation

	Escape route ceiling mounting with pressure clip
	OBO Grip, wall routing type
	OBO Grip, ceiling routing type
	Pressure clip, function maintenance, ceiling mounting

BSS-Anchor

	Fire protection anchor
	Fire protection bolt tie

Metals

	Aluminium
	Stainless steel, 1.4301



Pictogram explanation

Metals

VA	Stainless steel, 1.4310
VA	Stainless steel, 1.4401
VA	Stainless steel, 1.4404
VA	Stainless steel, 1.4571
CuZn 37	Brass
St	Steel
TG	Cast iron
Zn	Die-cast zinc

Plastics

UF	Duroplast, Aminoplast, type 131.5
MF	Duroplast, melamine resin, type 150
EVA	Ethylene vinyl acetate
FA	Fibre sealing material
NBR SBR	Mixture of nitrile and styrene-butadiene rubber
NBR	Nitrile rubber
PA	Polyamide
PA/ GF	Polyamide, fibreglass reinforced
PC	Polycarbonate
PE	Polyethylene
PBPT	Polybutylene terephthalate
PP	Polypropylene
PP/GF	Polypropylene, glass-fibre reinforced
PS	Polystyrene
PVC	Polyvinylchloride
TPE	Thermoplastic elastomer
ZELL PE	Cellular polyethylene



Metals

Alu — Aluminium

VA (1.4301) — Stainless steel, 1.4301

VA (1.4310) — Stainless steel, 1.4310

VA (1.4401) — Stainless steel, 1.4401

VA (1.4404) — Stainless steel, 1.4404

VA (1.4571) — Stainless steel, 1.4571

CuZn — Brass

TG — Cast iron

Electrogalvanised

St — Steel

Zn — Die-cast zinc



UF — Duroplast, Aminoplast, type 131.5

for boxes, glands and clips

Temperature resistance:

permanently up to 65 °C, briefly up to 90 °C and to about minus 40 °C.

Resistant to

Alcohol, ester, ether, benzene, petrol, mineral oils, greases, weak alkalis, water.

Conditionally resistant to

Weak acids

Strong acids, strong alkalis.

Low risk of stress cracks.

MF — Duroplast, melamine resin, type 150

For terminal blocks

Temperature resistance:

permanently up to 80 °C, briefly up to 110 °C and to about minus 40 °C.

Resistant to

Alcohol, ester, ether, benzene, petrol, mineral oils, greases, weak alkalis, water.

Conditionally resistant to

Weak acids.

Strong acids, strong alkalis.

Low risk of stress cracks.

EVA — Ethylene vinyl acetate

FA — Fibre sealing material

To DIN 28091, asbestos-free

Temperature resistance:

up to 300 °C.

NBR/SBR — Mixture of nitrile and styrene-butadiene rubber

NBR — Nitrile rubber

Temperature resistance:

permanently up to 120 °C, briefly up to 150 °C, and to about minus 30 °C.

Resistant to

Oils and petrol.

PA — Polyamide

Temperature resistance:

permanently up to approx. 90 °C, briefly up to about 130 °C and to about minus 40 °C*.

Chem. resistance generally as for polyethylene.

Resistant to

Petrol, benzene, diesel oil, acetone, solvents for paints and lacquers, oils and greases.

Bleach, most acids, chlorine.

Low in air-humid conditions; only with some aqueous salt solutions.

Highly desiccated parts (high temperature and extremely low air humidity) are highly sensitive to fuels and various solvents.

PA/GF — Polyamide, fibreglass reinforced

Temperature resistance:

permanently up to 100–110 °C, briefly up to 160 °C and to about minus 40 °C*.

Resistant to

Petrol, benzene, diesel oil, acetone, solvents for paints and lacquers, oils and greases.

Slightly susceptible to stress-cracking.

Bleach, most acids, chlorine.

Low in air-humid conditions; only with some aqueous salt solutions.

Highly desiccated parts (high temperature and extremely low air humidity) are highly sensitive to fuels and various solvents.

PC — Polycarbonate

Temperature resistance:

permanently up to approx. 110 °C (in water 60 °C), briefly up to 125 °C, and to below minus 35 °C.

Resistant to

Petrol, turpentine, most weak acids.

Acetone, benzene, chlorine, methylene chloride, most concentrated acids.

Relatively low.

Media which can cause tension cracking include benzene, aromatic hydrocarbons, methanol, butanol, acetone, terpentine.

PE — Polyethylene

Temperature resistance:

hard types permanently up to about 90 °C, briefly up to about 105 °C, soft types permanently up to about 80 °C, briefly up to about 100 °C and to about minus 40 °C*.

Resistant to

Alkalis and inorganic acids.

Conditionally resistant to

Acetone, organic acids, petrol, benzene, diesel oil, most oils.

Chlorine, hydrocarbons, oxidising acids.

Relatively high.

Stress cracks can be caused by, among other things, acetone, various alcohols, formic acid, ethanol, petrol, benzene, butyric acid, acetic acid, formaldehyde, various oils, petroleum, propanol, nitric acid, hydrochloric acid, sulphuric acid, soap solutions, turpentine, trichloroethylene, citric acid.

PBPT — Polybutylene terephthalate

Thermoplastic polyester

Temperature resistance:

permanently up to 120 °C, briefly up to 140 °C and to approx. minus 40 °C.

Resistant to

Petrol, diesel oil, most weak acids, oils and greases.

Conditionally resistant to

Acetone, ammonia, benzene.

Strong acids, chlorine, fluorine, bromine vapour, bleach, trichloroethylene, methylene chloride.

Low.

PP — Polypropylene

Temperature resistance:

permanently up to approx. 90 °C, briefly up to about 110 °C and to about minus 30 °C*.

Chem. resistance generally as for polyethylene.

Resistant to

Alkalis and inorganic acids.

Conditionally resistant to

Acetone, organic acids, petrol, benzene, diesel oil, most oils.

Chlorine, hydrocarbons, oxidising acids.

Low, only with some acids such as chromic acid, hydrofluoric acid and hydrochloric acid, as well as nitrogen oxide.

PP — Polypropylene, glass-fibre reinforced

Temperature resistance:

permanently up to approx. 90 °C, briefly up to approx. 110 °C and to approx. minus 30 °C*.

Chem. resistance generally as for polyethylene.

Resistant to

Alkalis and inorganic acids.

Conditionally resistant to

Acetone, organic acids, petrol, benzene, diesel oil, most oils.

Chlorine, hydrocarbons, oxidising acids.

Low, only with some acids such as chromic acid, hydrofluoric acid and hydrochloric acid, as well as nitrogen oxide.

PS — Polystyrene

Temperature resistance:

Because of its relatively high sensitivity to the effects of chemicals, its use is not recommended at temperatures above normal room temperature, about 25 °C.

Resistance to cold: to about minus 40 °C*.

Resistant to

Alkalis, most acids, alcohol.

Conditionally resistant to

Oils and greases.

Butyric acid, concentrated nitric acid, concentrated acetic acid, acetone, ether, petrol and benzene, solvents for paints and lacquers, chlorine, diesel fuel.

Relatively high.

Stress cracks can be caused by, amongst other things, acetone, ether, petrol, cyclohexane, heptane, methanol, propanol and the softeners used in some PVC cable mixes.



Plastics

PVC — Polyvinylchloride

Temperature resistance:

permanently up to 65 °C, briefly up to 75 °C and to about minus 30 °C.

Resistant to

Weak acids, alkalis, oils and greases, petrol.

Strong acids, benzene, acetone, iodine, toluene, trichloroethylene.

Low, only with some solvents such as benzene and acetone.

TPE — Thermoplastic elastomer

ZPE — Cellular polyethylene

*The minus values apply only for parts in the quiescent condition with no severe impact stress.

There is no plastic that is resistant to every chemical. The agents listed are only a small selection. Plastic parts are especially at risk in the presence of chemicals and high temperatures. Stress cracks may occur. If in doubt, please consult us and/or ask for a detailed chemical resistance table.

Stress crack formation: stress cracks may occur if plastic parts under tension are exposed to chemicals at the same time. Parts made of polystyrene and polyethylene are particularly susceptible. Stress cracks may even be caused by agents to which the plastic in question is resistant in the absence of stress. Typical examples of parts under constant stress when used as intended: grip clips, intermediate supports of cable glands, ribbon clips.



Chemical resistances of hard PVC

A = very good resistance
B = average resistance
C = not resistant

Medium	Temp. °C	Resistance
1.3-benzole disulphonic acid	20	A
1.3-butadiene	20	A
2.4-chlorobenzoyl chloride	20	A
2-amino-2.2-diphenylacetic acid	20	A
4-chlorine-2-nitroaniline	20	C
4-chlorobenzaldehyde-2-sulphonic acid	20	A
5-amino-2-hydroxybenzoic acid	20	A
Abietic acid	20	A
Acetaldehyde 100%	20	C
Acetaldehyde 40%	20	A
Acetaldehyde 40%	40	B
Acetaldehyde, acetic acid ratio 90:10	20	B
Acetanilide 100%	20	A
Acetates (ammonium-, Na- and others)	50	A
Acetic acid 10%	60	A
Acetic acid 100%	20	A
Acetic acid 100%	60	B
Acetic acid 25%	40	A
Acetic acid 25-70%	40	A
Acetic anhydride	20	C
Acetone	20	C
Acetophenone (methyl phenyl ketone)	20	C
Acetylacetone (2.4-pentanedione)	20	C
Acetylene 100%	20	B
Acetylsalicylic acid	20	A
Adipic acid	20	A
Adipic acid	60	B
Alcoholic drinks	< 40	A
Alizarin 100%	20	A
Alkanoic sulphonic acids	50	A
Allyl alcohol 100%	20	B
Allyl alcohol 100%	60	C
Allyl chloride	20	C
Aminobenzene (p-)	20	A
Aminobenzenesulphonic acid (m-, o-, p-)	20	A
Aminosalicic acid (p-)	20	A
Ammonia (vapours of all concentrations)	40	A
Ammonia (vapours of all concentrations)	60	B
Ammonia, anhydrous, liquid	< 60	B
Ammonium hydroxide	60	A
Aniline 100%	20	A
Aniline chloride, saturated solution	20	C
Apple juice	60	A
Ascorbic acid	20	A
Aspartic acid	20	A
Beer	60	A
Benzine, containing benzole	20	C
Benzine, free from aromatic hydrocarbons	60	A
Benzoic acid	40	A
Benzoic anhydride	30	A
Benzole	20	C
Benzophenone 100%	20	C
Benzosulphonic acid	60	A
Benzotrifluoride	20	C
Benzoylbenzoic acid	20	A
Benzyl chloride	20	C
Betene	20	A
Bleaching liquor, 12% active chlorine	40	A
Bleaching liquor, 12% active chlorine	60	B
Blood	40	A
Boiled oil	60	C
Borates (NA-)	20	A
Borax	40	A
Boric acid	20	A
Brewer's wort	20	A
Brine	60	A
Bromates (K-, Na-)	40	A
Bromic acid	20	A
Bromides (K-, Na- and others)	60	A
Bromine water	20	A
Bromine, gaseous, dry	20	A
Bromine, liquid	20	C
Bromobenzene	20	C
Bromochloromethane	20	C
Bromochloropropane	20	C
Bromoform 100%	20	C
Butane, gaseous, 30%	20	A
Butanediol over 60%	40	B
Butanediol over 60%	20	C
Butanediol to 10%	20	A
Butanol	60	A
Buttermilk	20	A
Butyl acetate	20	C
Butyl butyrate	20	C
Butyl chloride	20	C

A = very good resistance
B = average resistance
C = not resistant

Medium	Temp. °C	Resistance
Butyl glycolate	20	C
Butyl phenoles	20	C
Butyric acid 100%	20	C
Butyric acid 20%	20	A
Butyric acid 20%	60	C
Carbon dioxide	60	A
Carbon disulphide 100%	20	B
Carbon monoxide	60	A
Castor oil	60	A
Chlorates (K-, Na- and others)	20	A
Chlorates (K-, Na- and others)	60	B
Chlorates (K-, Na- and others)	60	A
Chloric acid to 20%	40	A
Chloric acid to 20%	60	B
Chlorides (ammonium-, Na- and others)	20	A
Chlorine cyanide	20	A
Chlorine water (saturated solution)	20	B
Chlorine, gaseous, dry 0.5%	20	A
Chlorine, gaseous, dry 100%	20	B
Chlorine, gaseous, moist 5%	20	B
Chlorine, liquid	20	C
Chloroacetaldehyde	20	C
Chloroacetic acid	20	A
Chloroacetones	20	C
Chloroacetylchloride	20	C
Chloroanilines	20	C
Chlorobenzaldehyde	20	C
Chlorobenzene	20	C
Chlorobenzotrifluoride	20	C
Chlorobenzoylchloride	20	C
Chlorocresoles	20	C
Chloroethylbenzene	20	C
Chloroform	20	C
Chloronaphthalines	20	C
Chloronitrobenzoic acid	20	A
Chromates (K-, Na- to 50%)	50	A
Chrome alum	60	A
Chromic acid	30	A
Chromic acid to 50%	40	A
Citrates (ammonium-, Na)	20	A
Citric acid	20	A
Citric acid	60	B
Cresol	20	C
Cumene	20	C
Cyanacetic acid	20	C
Cyanamide	20	A
Cyanides (K-, Na- to 50%)	60	A
Cyclohexanol	20	C
Cyclohexanone	20	C
Developer	40	A
Dextrose	50	A
Dibromomethylene	20	C
Dibutyl phthalate	20	C
Dibutylxalate	20	C
Dichloroethylene	20	C
Dichloropropylene	20	C
Dichromates (K-, Na-)	50	C
Diethyl ether	20	C
Diethylamine 100%	20	C
Diethylene glycol	60	C
Dimethylether	20	C
Di-n-butylether	20	C
Diethylphthalate	20	C
Dioxan	20	C
Diphenyl	20	C
Diphenylamine	20	C
Ethane	20	A
Ethanol	40	A
Ethanolamine	20	B
Ethyl acetate	20	C
Ethyl acrylate	20	C
Ethyl chloride	20	C
Ethylbenzene	20	C
Ethylene glycol	20	A
Fish oil	20	A
Fixing bath	60	A
Fluorides (ammonium-, K-, Na- and others)	60	A
Fluorine	20	B
Fluorine	60	C
Formaldehyde	60	A
Formamide 100%	20	C
Formiates (ammonium- and others)	20	A
Formic acid 100%	20	B
Formic acid 100%	60	C
Formic acid 50%	40	A
Furfural	20	C



Chemical resistances of hard PVC

A = very good resistance
B = average resistance
C = not resistant

Medium	Temp. °C	Resistance
Furfuryl alcohol	20	C
Gelatine	60	A
Gluconic acid	20	A
Glucose	60	A
Glutamic acid	20	A
Glycerine	60	A
Glycine	40	A
Glycol	60	A
Heptanes	20	A
Hexachloroethane	20	C
Hexacyanoferrates-II (Na-)	40	A
Hexacyanoferrates-III (K-)	40	A
Hexafluorosilicates (ammonium-, K- and others)	60	A
Hexafluorosilicic acid 32%	60	A
Hexamethylenetetramine (urotropine) 40% aqueous solution	60	A
Humic acids	20	A
Hydrazine, diluted solution 100%	20	C
Hydrazine, diluted solution 30%	20	A
Hydrobromic acid to 40%	60	A
Hydrochloric acid to 30%	20	A
Hydrochloric acid to 30%	60	B
Hydrochloric acid to 37%	20	A
Hydrochloric acid to 37%	40	B
Hydrofluoric acid to 40%	40	A
Hydrofluoric acid to 40%	60	B
Hydrogen bromide 100%	20	A
Hydrogen bromide 100%	60	B
Hydrogen chloride (gaseous, dry and moist)	40	A
Hydrogen cyanide	40	A
Hydrogen peroxide to 30%	60	A
Hydrogen peroxide to 90%	20	A
Hydrogen sulphide	60	A
Hydroxides (alkaline-earth metal)	60	A
Hydroxides (K-, Na-)	60	A
Hypochlorites (K-, Na- and others)	60	A
hypochlorous acid	60	A
Illuminating gas	20	A
Iodates (K-, Na- and others)	60	A
Iodides (K-, Na-)	60	A
Iodine	20	C
Isobutylphosphate	20	C
Lactic acid 10%	20	A
Lactic acid 10%	60	C
Lactic acid 100%	20	C
Lard	20	A
Linoleic acid	60	A
Linseed oil	60	A
Malic acid	20	A
Material characteristics		
Methanol 100%	40	A
Methanol 100%	60	B
Methyl bromide	20	C
Methyl chloride	20	C
Methyl methacrylate	20	C
Methylamine	20	B
Methylene dichloride	20	C
Milk	20	A
Mineral oils	60	C
N,N-diethyl aniline	20	C
Naphthalene	20	C
Nitrates (ammonium-, K-, Na- and others)	60	A
Nitric acid 25%	20	A
Nitric acid 25%	60	B
Nitric acid 50%	20	A
Nitric acid 50%	50	B
Nitric acid 95%	20	C
Nitrites (K-, Na- and others)	60	A
Nitrobenzene	20	C
Nitrogen oxide	20	C
Nitroglycerine	20	B
Nitrous acid to 50%	50	A
Nitrous acid to 98%	20	C
Oleic acid	60	A
Oxalates (ammonium-, K-, Na- and others)	60	A
Oxalic acid	40	A
Oxygen	60	A
Ozone 10%	30	A
Ozone 10%	60	B
Palmitic acid	20	A
Paraffin	40	A
Pentyl laurate	20	C
Pentylacetate	20	C

A = very good resistance
B = average resistance
C = not resistant

Medium	Temp. °C	Resistance
Pentylalcohol	60	A
Pentylchloride	20	C
Perbonate (K-)	60	A
Perchlorate	40	A
Perchloric acid 70%	20	A
Permanganate (K-) 6 to 15%	40	A
Permanganate (K-) 6 to 15%	60	B
Permanganate (K-) to 6%	60	A
Peroxymonosulphuric acid (Caro's acid)	20	A
Persulphate (Ammonium-, K-, Na- and others)	40	A
Petroleum	60	A
Phenol 1%	20	A
Phenol 90%	45	B
Phenylhydrazine	20	C
Phenylhydrazine chloride	20	B
Phenylhydrazine chloride	60	C
Phosgene, gaseous	20	A
Phosgene, gaseous	60	B
Phosgene, liquid	20	C
Phosphates (ammonium-, K-, Na- and others)	60	A
Phosphoric acid	40	A
Phosphoric acid	60	B
Phosphorus pentoxide	20	A
Propane	20	A
Propanol	60	A
Pyridine	20	A
Rhodanides (ammonium-, K-, Na- and others)	60	A
Salicylic acid	20	A
Silicates (K-)	20	A
Soap solution	40	A
Stearic acid	60	A
Sulphates (ammonium-, K-, Na- and others)	60	A
Sulphites (ammonium-, K-, Na- and others)	60	A
Sulphur dioxide, gaseous, dry and moist 100%	60	A
Sulphuric acid to 40%	20	C
Sulphuric acid to 50%	50	A
Sulphuric acid to 50%	60	A
Sulphuric acid to 80%	40	C
Sulphuric acid to 80%	60	B
Sulphuric acid to 96%	20	A
Sulphuric acid to 96%	60	B
Sulphuric acid, fuming (10% oleum)	20	C
Sulphurous acid	60	A
Tallow	60	A
Tan bark	20	A
Tar, free from aromatic hydrocarbons	20	A
Tartaric acid	60	A
Tetraethyl lead	60	A
Tetrafluoroboric acid	20	A
Tetrahydrofurane	20	C
Thickness	60	A
Toluene	20	A
Transformer oil	60	A
Trichloroethylene	20	C
Turpentine	20	A
Urea	60	C
Vegetable oils	40	A
Vinyl acetate	20	C
Viscose spinning solutions	60	A
Water	40	A
Water	60	B
Wine	40	A
Wine vinegar	50	A
Wood tar	20	C
Xylenes	20	C

Material properties of the hard PVC used	
Material description according to DIN 7748	PVC-U-E-D-080-04-28
Tensile strength according to DIN 53 455	min. 40 N/mm ²
Elongation at tear according to DIN 53 455	min. 65%
Puncture strength according to DIN 53 481	min. 20 KV/mm
Surface resistance according to DIN 53 482	min. 10 10
Thermoforming resistance according to DIN 53 460/B	min. 75 °C
Temperature resistance in the application max.	65 °C
Flammability	according to UL 94 Level V-0
Hot-wire test	according to DIN IEC 695 960 °C
Material classification	to DIN EN 4102, Class B1 and B2-tested

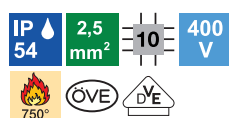




Junction box systems

	Thermoplast	A series	160
		Nipple	160
		Terminal strip	161
		ECO series	162
		Terminal strip	162
		B 9/T	163
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		T series, closed	168
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		Mounting plate, T series	170
		Terminal strip, T series	171
		T series, strain relief	172
		T 100 WB, Wieland socket	173
		T 100 NL S, Modul 45 sockets in cover	175
	Duroplast	B series, without thread	177
		Plug-in seal	178
		Terminal strip	178
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		Terminal strip	180
	FireBox	FireBox, with earthing terminal	181
		Plug-in seal	181
	Aquasit cold casting compound	Cartridge	182
		Cartridge pistol	182
		Cable connection sleeves	180

Thermoplastic cable junction box, A series



A 6

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
A 6	Without terminal strip	Light grey	50	10	3.500	2001 05 5

PP Polypropylene

/100 pc.

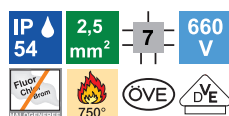
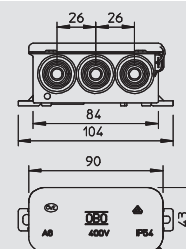
Protection rating IP54, nominal voltage 400 V, nominal cross-section 1,5 mm², 6 entries for cable diameter 7–17 mm and 4 entries for cable diameter 7–9 mm.

All the cable entries can be cut from inside with the knife.

Entry for electrical installation tubes up to 20 mm on the bottom side of the socket.

Captive cover.

Clear internal dimensions: 80 x 33 x 38 mm. Dimensions: 90 x 43 x 42.



A 8

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

A 8 5 1 terminal strip Light grey 150 10 6.500 **2000 02 4**

A 8 Without terminal strip Light grey 150 10 5.140 **2000 01 6**

A8 HF RW Without terminal strip Pure white 150 10 5.140 **2000 07 5**

A8 HF RO Without terminal strip Red 150 10 5.140 **2000 05 9**

PE Polyethylene

/100 pc.

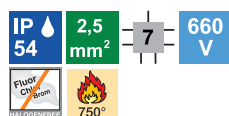
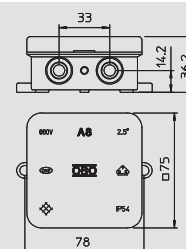
Protection rating IP54, nominal voltage 660 V, nominal cross-section 2,5 mm², 7 entries for cable diameter 8–14 mm.

Clamshell.

Dimensions: 75 x 75 x 36.2 mm.

Clear internal dimensions: 65 x 65 x 32 mm.

Per 10 sockets 1 penetration mandrel.



A 9

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

A 9 Without terminal strip Light grey 120 10 5.940 **2000 09 1**

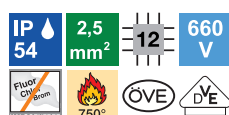
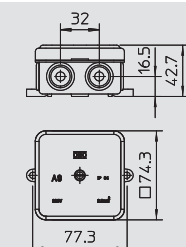
PE Polyethylene

/100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 2,5 mm², with 1 cover screw and holes for screwing to M6 threaded anchors in the base, 7 pre-assembled entry nipples for cable diameters 7–13 mm.

Dimensions: 74.3 x 74.3 x 42.7 mm.

Clear internal dimensions: 65 x 65 x 38 mm.



A 11

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

A 11 5 1 terminal strip Light grey 80 10 7.640 **2000 32 6**

A 11 Without terminal strip Light grey 80 10 6.200 **2000 34 2**

A11 HF RW Without terminal strip Pure white 80 10 6.200 **2000 18 0**

A11 HF RO Without terminal strip Red 80 10 6.200 **2000 16 4**

PE Polyethylene

/100 pc.

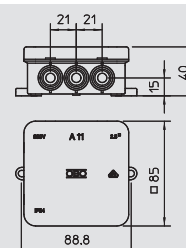
Protection rating IP54, nominal voltage 660 V, nominal cross section 2,5 mm², 12 entries for cable diameter 8–14 mm.

Clamshell.

Dimension: 85 x 85 x 40 mm.

Clear internal dimensions: 75 x 75 x 35 mm.

Two penetration pins for every 10 sockets.



Nipple cable diameter 7–13 mm, A series

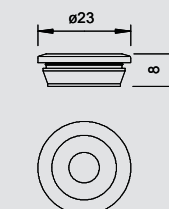
Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	

89 PG 11 7-13 Light grey 3,000 100 0.100 **2012 03 0**

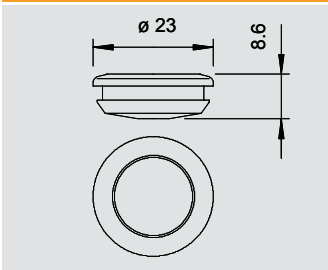
PE Polyethylene

/100 pc.

Closed nipple with perforation membrane for cable diameter 7–13 mm, required hole diameter 18.5–19 mm, wall thickness max. 1.8 mm.



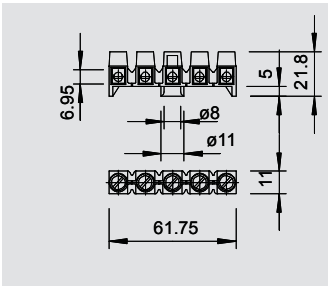
Thermoplastic cable junction box, A series



Nipple pipes ø 12–16 mm, A series

Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	
89 ROE 12-16	PG 13.5	12-16	Light grey	3,000	100	0.100	2012 04 9

PE Polyethylene /100 pc.
 Closed nipple with perforation membrane for pipes of Ø 12–16 mm, required hole diameter 18.5–19 mm, wall thickness max. 3 mm.



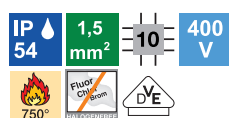
Terminal strip, A series

Type	Colour	No. of screw-less terminals	Nominal cross section mm²	Nominal voltage V	Box Qty.	Pack.	Weight	Item No.
					pcs	pcs	kg/100 pcs.	
689	Light grey	5	0.8-2.5	660	500	50	1.420	2017 34 2

PA Polyamide /100 pc.
 Terminal strip, nickel-plated brass, steel screws, galvanised and transparently passivated, nominal cross-section 0,8 - 2,5 mm², nominal voltage 660 V, 5-pole, with terminal sockets, max. connectable cross-sections per terminal: 4 x 2.5 mm², 5 x 1.5 mm² or 6 x 1 mm², unnecessary poles can be cut off and used as individual terminals.



Thermoplastic cable junction box, ECO series



ECO 10, 10 cable entries

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
ECO10	—	Light grey	40	10	2.420	2001 00 0
ECO10 RW	—	Pure white	40	10	2.420	2001 03 0

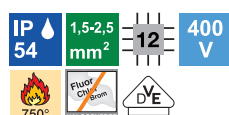
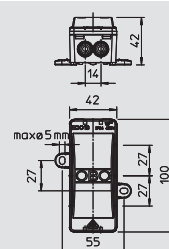
PP Polypropylene

/100 pc.

Protection rating IP54, nominal voltage 400 V, nominal cross-section 1,5 mm², 10 entries for cable diameter 8–12 mm.

Clear internal dimensions 89 x 30 x 28 (35) mm.

Clamshell; entries can be cut from the inside.



ECO 12, 12 cable entries

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
ECO12	—	Light grey	120	10	3.540	2001 00 6
ECO12 RW	—	Pure white	120	10	3.540	2001 03 3
ECO 12 5	1 terminal strip	Light grey	120	10	5.040	2001 00 7

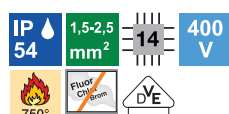
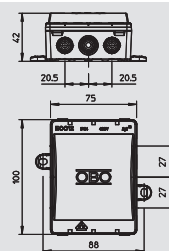
PP Polypropylene

/100 pc.

Protection rating IP54, nominal voltage 400 V, nominal cross-section 1,5 - 2,5 mm², 12 entries for cable diameter 8–12 mm.

Clear internal dimensions 89 x 64 x 28 (35) mm.

Clamshell; entries can be cut from the inside.



ECO 14, 14 cable entries

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
ECO14	—	Light grey	160	10	4.540	2001 01 2
ECO14 RW	—	Pure white	160	10	4.540	2001 03 6
ECO 14 5	1 terminal strip	Light grey	160	10	6.040	2001 01 3

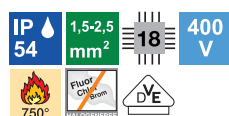
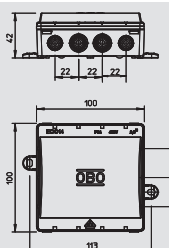
PP Polypropylene

/100 pc.

Protection rating IP54, nominal voltage 400 V, nominal cross-section 1,5 - 2,5 mm², 14 entries for cable diameter 8–12 mm.

Clear internal dimensions 89 x 92 x 28 (35) mm.

Clamshell; entries can be cut from the inside.



ECO 18, 18 cable entries

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
ECO18	—	Light grey	30	5	5.080	2001 01 8
ECO18 RW	—	Pure white	30	5	5.080	2001 03 9
ECO 18 5	1 terminal strip	Light grey	30	5	6.580	2001 01 9

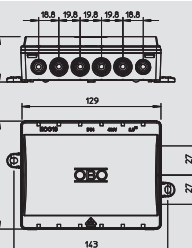
PP Polypropylene

/100 pc.

Protection rating IP54, nominal voltage 400 V, nominal cross-section 1,5 - 2,5 mm², 18 entries for cable diameter 8–12 mm.

Clear internal dimensions 89 x 124 x 28 (35) mm.

Clamshell; entries can be cut from the inside.



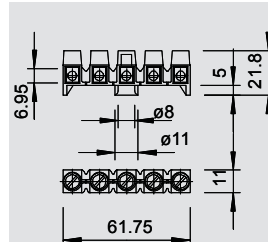
Terminal strip, ECO series

Type	Colour	No. of screwless terminals	Nominal cross-section mm²	Nominal voltage V	Box Qty.	Pack.	Weight	Item No.
					pcs	pcs	kg/100 pcs.	
689	Light grey	5	0.8-2.5	660	500	50	1.420	2017 34 2

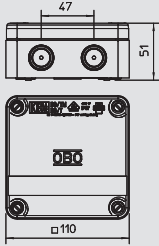
PA Polyamide

/100 pc.

Terminal strip, nickel-plated brass, steel screws, galvanised and transparently passivated, nominal cross-section 0,8 - 2,5 mm², nominal voltage 660 V, 5-pole, with terminal sockets, max. connectable cross-sections per terminal: 4 x 2,5 mm², 5 x 1,5 mm² or 6 x 1 mm², unnecessary poles can be cut off and used as individual terminals.



Thermoplastic junction box, B 9/T and VBX series



B 9/T junction box with perforation membrane

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 9 T M 5	1 terminal strip	Light grey	40	5	17.500	2001 84 5
B 9 T M	—	Light grey	40	5	13.100	2001 85 3
B 9 T M NL	3 cable glands	Light grey	40	5	17.100	2001 86 1
B 9 T M	—	Red grey	40	5	13.100	2001 88 8

PP Polypropylene

/100 pc.

The wet-room junction boxes comprise two halogen-free plastic components, 8 threaded entries (M20 x 1.5), 1 additional entry in base with perforation membrane (for cable diameter up to 15 mm).

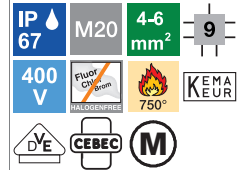
Where cable glands are used (giving additional strain relief) there is no need to remove the membrane (this saves time). Protection IP 67 with cable gland and for the perforation membrane.

Rated voltage 400 V; nominal cross-section 4 - 6 mm².

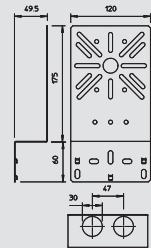
The cover is sealed with 4 pre-fitted rapid fastenings (180°). The fastening holes are additionally moulded with a soft plastic component for a bolt diameter of 5 mm (spacing 75 mm).

2 fastening bolt caps and 1 fastening bolt.

Clear internal dimensions: 98 x 98 x 40 mm.



Junction box systems

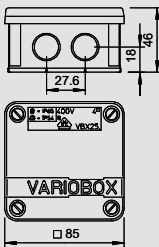


Mounting plate, B 9/T

Type	Height	Width	Pack.	Weight	Item No.
	mm	mm	pcs	kg/100 pcs.	
MP WI KL. FS	210	120	20	20.200	7084 76 5
MP WI KL. DD	210	120	20	20.200	7085 11 1

ST Steel **FS** Strip-galvanised **DD** Zinc-aluminium coated, double-dip /pc.

Curved mounting plate, for fastening on the side rail of the cable tray.



VBX 25 M, plug-in seal IP54

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
VBX 25 M 5	3 cable entries, 1 terminal strip	Light grey	80	5	10.200	2008 44 0
VBX 25 M	3 cable entries	Light grey	80	5	6.100	2008 07 6

PP Polypropylene

/100 pc.

Protection rating with plug-in seal IP54, with cable glands IP65, nominal voltage 400 V with 4 captive cover bolts, 4 fastening holes for bolts of 5 mm diameter inside the box (spacing: 45 mm).

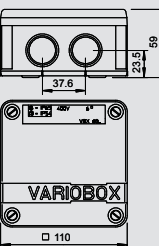
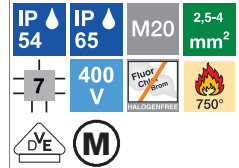
Nominal cross-section 2,5 - 4 mm².

7 entries M20.

Dimensions: 85 x 85 x 46 mm mm.

Clear internal dimensions: 78 x 78 x 30.5 mm.

Sealable.



VBX 60 M, plug-in seal IP54

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
VBX 60 M 5	3 cable entries, 1 terminal strip	Light grey	45	5	18.300	2008 56 4
VBX 60 M	3 cable entries	Light grey	45	5	10.600	2008 11 4

PP Polypropylene

/100 pc.

Protection rating with plug-in seal IP54, with cable glands IP65, nominal voltage 400 V with 4 captive lid screws, 4 fastening holes for screws of 5 mm diameter inside the box (spacing: 60 mm).

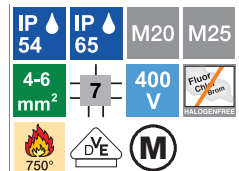
Nominal cross-section 4 - 6 mm²

7 entries M20 / M25.

Dimensions: 110 x 110 x 59 mm.

Clear internal dimensions: 102 x 102 x 40.5 mm

Sealable.



Thermoplastic junction box, B 9/T and VBX series



Plug-in seal, VBX series

Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	
EDVS M20 LGR	M 20	0-17	Light grey	1,200	100	0.125	2012 37 5
EDVS M25 LGR	M 25	0-22	Light grey	1,200	100	0.185	2012 38 3
EDVS M32 LGR	M 32	0-28	Light grey	600	50	0.295	2012 39 1

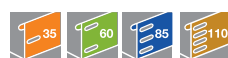
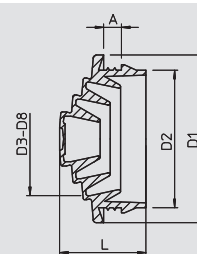
PE Polyethylene

/100 pc.

The push-in nipple can be cut back to suit the relevant cable diameter.

Important dimensions, plug-in seal

G	L	A	D1	D2	D3	D4	D5	D6	D7	D8
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M20	12.8	3.4	24.8	20.3	0-6	5-10	9-15	14-17	—	—
M25	14.5	4.3	29.5	25.3	0-6	5-10	9-15	14-20	19-22	—
M32	17.8	4.4	36.3	32.3	0-6	5-10	9-15	14-20	19-25	24-28



Mounting plate, VBX series

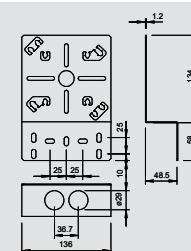
Type	Box Qty.	Pack.	Weight	Item No.
	pcs	pcs	kg/100 pcs.	
VBX MO	50	5	27.000	2008 97 1

ST Steel

FS Strip-galvanised

/pc.

The mounting plate can be screwed to cable tray systems. Type B9/T junction boxes can be mounted very easily by inserting the screw plug supplied into the centre hole on the mounting plate. VARIOBOX series junction boxes can be mounted by bending the fastening points up.



Terminal strip, B 9/T and VBX series

Type	Colour	No. of screwless terminals	Nominal cross section mm²	Nominal voltage V	Box Qty.	Pack.	Weight	Item No.
			mm²	V	pcs	pcs	kg/100 pcs.	
VBX KL25	Light grey	5	1-4	400	100	10	2.100	2009 10 2

PA Polyamide

/100 pc.

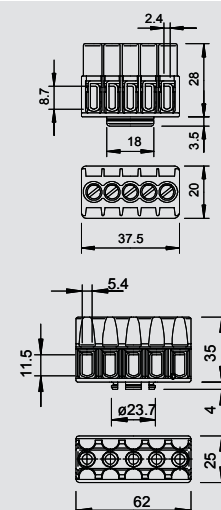
Terminals and screws of steel, galvanised and transparently passivated, nominal cross-section 1 - 4 mm², nominal voltage 400 V, five-pole, with socket terminals, max. connectable cross-sections per terminal max. 4 x 2.5 mm², 5 x 1.5 mm² or 6 x 1 mm².

Type	Colour	No. of screwless terminals	Nominal cross section mm²	Nominal voltage V	Box Qty.	Pack.	Weight	Item No.
			mm²	V	pcs	pcs	kg/100 pcs.	
VBX KL60	Light grey	5	1-6	400	120	10	4.380	2009 11 0

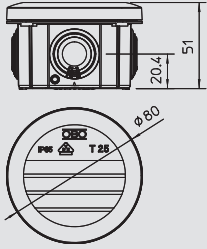
PA Polyamide

/100 pc.

Terminals and screws of steel, galvanised and transparently passivated, nominal cross-section 1 - 6 mm², nominal voltage 400 V, five-pole, with socket terminals, max. connectable cross-sections per terminal: 3 x 6 mm², 4 x 4mm² or 6 x 2.5 mm².



Thermoplastic junction box, T series



T 25, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 25	Standard	4 x M25	Light grey	125	5	4.190	2007 02 9
T 25 RW	—	4 x M25	Pure white	125	5	4.190	2007 50 9
T 25 F	960 °C flame-resistant	4 x M25	Light grey	125	5	4.190	2007 31 2
T 25 RO-LGR	With red lid.	4 x M25	Red grey	125	5	4.190	2007 62 2
T 25 UV RW	UV-resistant	4 x M25	Pure white	125	5	4.190	2007 40 8
T 25 KL	With terminal strip	4 x M25	Light grey	125	5	6.400	2007 43 0

PP Polypropylene

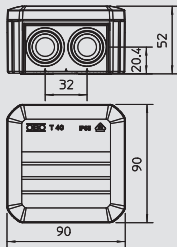
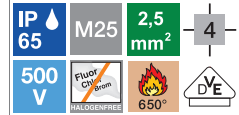
/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This plastic is soft, which means that it is malleable. This allows installation of cables either directly through the 4 x M25 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. In addition, cable glands can be inserted through the openings instead of the seals and locked with a locknut from inside.

The cable junction boxes can be screwed onto an M6 thread or mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: Ø63 x 45 mm.

Cover with labelling panel.



T 40, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 40	Standard	7 x M25	Light grey	80	5	6.700	2007 04 5
T 40 RW	—	7 x M25	Pure white	80	5	6.700	2007 51 7
T 40 F	960 °C flame-resistant	7 x M25	Light grey	80	5	6.700	2007 32 0
T 40 RO-LGR	With red lid	7 x M25	Red grey	80	5	6.700	2007 63 0
T 40 UV RW	UV-resistant	7 x M25	Pure white	80	5	6.700	2007 41 0
T 40 KL	With terminal strip	7 x M25	Light grey	80	5	8.900	2007 43 2

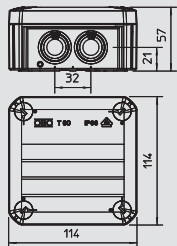
PP Polypropylene

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This allows installation of cables either directly through the 7 x M25 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. Alternatively, cable glands can be pushed through the openings instead of the seals and locked with a locknut from the inside.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Clear internal dimensions: 77 x 77 x 46 mm . Cover with labelling panel and lead-sealed.



T 60, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 60	Standard	7 x M25	Light grey	60	5	12.300	2007 06 1
T 60 RW	—	7 x M25	Pure white	60	5	12.300	2007 52 5
T 60 F	960 °C flame-resistant	7 x M25	Light grey	60	5	12.300	2007 33 9
T 60 RO-LGR	With red cover	7 x M25	Red grey	60	5	12.300	2007 63 8
T 60 UV RW	UV-resistant	7 x M25	Pure white	60	5	12.300	2007 41 2
T 60 KL	With terminal strip	7 x M25	Light grey	60	5	16.700	2007 43 4

PP Polypropylene

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This allows installation of cables either directly through the 7 x M25 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. Alternatively, cable glands can be pushed through the openings instead of the seals and locked with a locknut from the inside.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Clear internal dimensions: 100 x 100 x 48 mm. Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series



T 100, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
T 100	Standard	10 x M25	Light grey	40	1	16.270	2007 07 7
T 100 RW	—	10 x M25	Pure white	40	1	16.270	2007 53 3
T 100 M25-M32	Large entry	8 x M25 2 x M32	Light grey	40	1	16.300	2007 08 1
T 100 F	960 °C flame-resistant	10 x M25	Light grey	40	1	16.270	2007 34 7
T 100 RO-LGR	With red lid	10 x M25	Red grey	40	1	16.270	2007 64 4
T 100 UV RW	UV-resistant	10 x M25	Pure white	40	1	16.500	2007 41 4
T 100 KL	With terminal strip	10 x M25	Light grey	40	1	30.500	2007 43 6

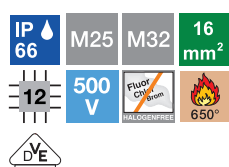
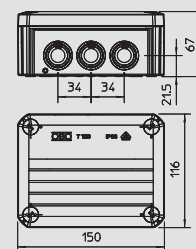
PP Polypropylene

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This allows installation of cables either directly through the 10 x M25 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. Alternatively, cable glands can be pushed through the openings instead of the seals and locked with a locknut from the inside.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 136 x 102 x 57 mm. Cover with labelling panel and lead-sealed.



T 160, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
T 160	Standard	7 x M25 5 x M32	Light grey	20	1	30.000	2007 09 3
T 160 RW	—	7 x M25 5 x M32	Pure white	20	1	30.000	2007 54 1
T 160 M32	Large entry	10 x M32	Light grey	20	1	30.000	2007 09 7
T 160 F	960 °C flame-resistant	7 x M25 5 x M32	Light grey	20	1	30.000	2007 35 5
T 160 RO-LGR	With red lid	7 x M25 5 x M32	Red grey	20	1	30.000	2007 64 9
T 160 UV RW	UV-resistant	7 x M25 5 x M32	Pure white	20	1	29.500	2007 41 6
T 160 KL	With terminal strip	7 x M25 5 x M32	Light grey	20	1	0.000	2007 44 0

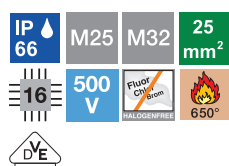
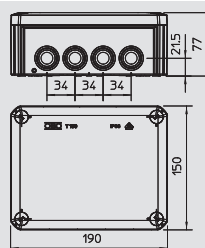
PP/GF Polypropylene, glass-fibre reinforced

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This allows installation of cables either directly through the 7x M25 + 5x M32 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. Alternatively, cable glands can be pushed through the openings instead of the seals and locked with a locknut from the inside.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 176 x 135 x 67 mm. Cover with labelling panel and lead-sealed.



T 250, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
T 250	Standard	9 x M25 7 x M32	Light grey	8	1	50.000	2007 10 9
T 250 RW	—	9 x M25 7 x M32	Pure white	8	1	50.000	2007 55 4
T 250 F	960 °C flame-resistant	9 x M25 7 x M32	Light grey	8	1	50.000	2007 36 3
T 250 RO-LGR	With red lid	9 x M25 7 x M32	Red grey	8	1	50.000	2007 65 7
T 250 UV RW	UV-resistant	9 x M25 7 x M32	Pure white	8	1	44.800	2007 41 8
T 250 KL	With terminal strip	9 x M25 7 x M32	Light grey	8	1	0.000	2007 44 4

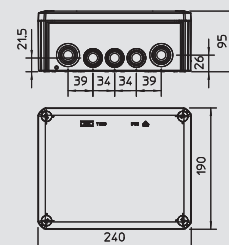
PP/GF Polypropylene, glass-fibre reinforced

/100 pc.

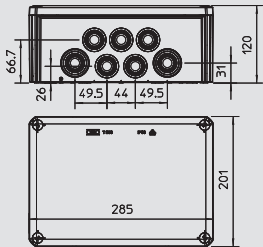
The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This allows installation of cables either directly through the 9x M25 + 7x M32 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. Alternatively, cable glands can be pushed through the openings instead of the seals and locked with a locknut from the inside.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 225 x 173 x 86 mm. Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series

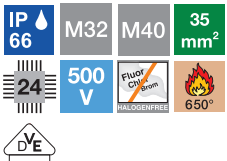


T 350, plug-in seal

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 350	Standard	16 x M32 8 x M40	Light grey	5	1	63.000	2007 12 5
T 350 RW	—	16 x M32 8 x M40	Pure white	5	1	63.000	2007 56 8
T 350 F	960 °C flame-resistant	16 x M32 8 x M40	Light grey	5	1	63.000	2007 37 1
T 350 RO-LGR	With red lid	16 x M32 8 x M40	Red grey	5	1	63.000	2007 66 5
T 350 UV RW	UV-resistant	16 x M32 8 x M40	Pure white	5	1	63.000	2007 42 0
T 350 KL	With terminal strip	16 x M32 8 x M40	Light grey	5	1	0.000	2007 44 8

PP/GF Polypropylene, glass-fibre reinforced /100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with plug-in seals made of ethylene vinyl acetate (EVA). This allows installation of cables either directly through the 16x M32 + 8x M40 seals, or the seals can be cut with a knife at the pre-marked points, in order to create an insertion opening for cables or pipes. Alternatively, cable glands can be pushed through the openings instead of the seals and locked with a locknut from the inside. The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5. Clear internal dimensions: 267 x 182 x 110 mm. Cover with labelling panel and lead-sealed.



Junction box systems



Thermoplastic junction box, T series



T 40, closed

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 40 OE	Closed	None	Light grey	80	5	6.300	2007 22 3

PP Polypropylene

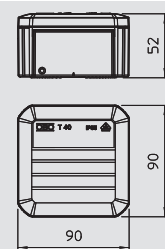
/100 pc.

The cable junction boxes are made of a thermoplastic polypropylene polymer with closed side walls. This means that openings can be made wherever they are required. These openings can be closed off with EDK plug-in seals to allow cable installation through the seal. In addition, cable glands can be inserted through the openings instead of the seals and locked with a locknut from inside.

The cable junction boxes can be screwed onto an M6 thread or mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 77 x 77 x 46 mm.

Cover with labelling panel.



T 60, closed

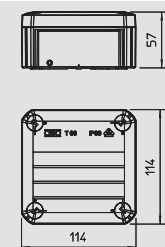
Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 60 OE	Closed	None	Light grey	60	5	12.000	2007 23 9

PP Polypropylene

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with closed side walls. This means that the required openings can be made wherever they are required. EDK plug-in seals or cable glands with locknuts can be inserted in these openings, to allow cable insertion. The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 100 x 100 x 46 mm. Cover with labelling panel and lead-sealed.



T 100, closed

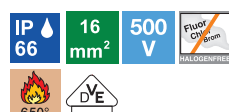
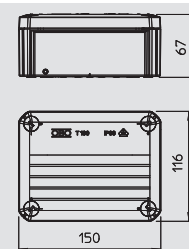
Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 OE	Closed	None	Light grey	40	1	16.200	2007 25 5

PP Polypropylene

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with closed side walls. This means that the required openings can be made wherever they are required. EDK plug-in seals or cable glands with locknuts can be inserted in these openings, to allow cable insertion. The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 136 x 102 x 57 mm. Cover with labelling panel and lead-sealed.



T 160, closed

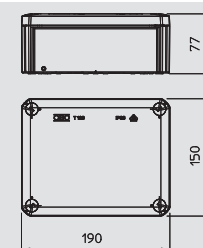
Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 160 OE	Closed	None	Light grey	20	1	30.000	2007 27 1

PP/GF Polypropylene, glass-fibre reinforced

/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with closed side walls. This means that the required openings can be made wherever they are required. EDK plug-in seals or cable glands with locknuts can be inserted in these openings, to allow cable insertion. The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 176 x 135 x 67 mm. Cover with labelling panel and lead-sealed.



T 250, closed

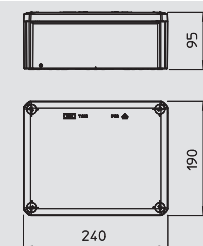
Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 250 OE	Closed	None	Light grey	8	1	48.300	2007 28 7

PP/GF Polypropylene, glass-fibre reinforced

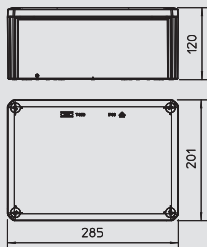
/100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with closed side walls. This means that the required openings can be made wherever they are required. EDK plug-in seals or cable glands with locknuts can be inserted in these openings, to allow cable insertion. The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.

Clear internal dimensions: 225 x 173 x 86 mm. Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series



T 350, closed

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 350 OE	Closed	None	Light grey	5	1	58.800	2007 30 3

PP/GF Polypropylene, glass-fibre reinforced /100 pc.

The junction boxes are made of a thermoplastic polypropylene polymer with closed side walls. This means that the required openings can be made wherever they are required. EDK plug-in seals or cable glands with locknuts can be inserted in these openings, to allow cable insertion. The junction boxes can be mounted on mounting plates in the openings on the floor using steel bolts 3.5 x 9.5.
Clear internal dimensions: 267 x 182 x 110 mm. Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series

M25 M32 M40 IP 66



Plug-in seal for cable, T series

Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	
EDK 25 LGR	M25	0-22	Light grey	1,000	100	0.175	2011 63 8
EDK 32 LGR	M32	0-27	Light grey	300	50	0.260	2011 64 6
EDK 40 LGR	M40	0-34	Light grey	300	25	0.425	2011 65 4
EDK 25 RW	M25	0-22	Pure white	1,000	100	0.175	2011 68 9
EDK 32 RW	M32	0-27	Pure white	300	50	0.260	2011 69 7
EDK 40 RW	M40	0-34	Pure white	300	25	0.425	2011 70 0

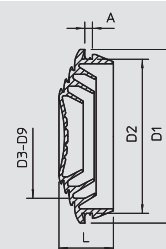
EVA Ethylene vinyl acetate

/100 pc.

The plug-in seal can be cut back to suit the relevant cable diameter.

Important dimensions, plug-in seal

G	L	A	D1	D2	D3	D4	D5	D6	D7	D8	D9
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M25	10.1	2.2	29.5	25.4	0-5	4-10	9-15	14.5-18	18.5-22	—	—
M32	11.4	2.2	36.4	32.3	0-5	4-10	9-15	14.5-18	18.5-22	24-27	—
M40	13.4	2.2	44.1	40.2	0-5	4-10	9-15	14.5-18	18.5-22	24-27	31-34



IP 55 M25 M32 M40



Plug-in seal for pipes, T series

Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	
EDR 25 16-20 LGR	M25	—	Light grey	50	50	0.520	2011 50 6
EDR 25 20-25 LGR	M25	—	Light grey	50	50	0.680	2011 51 4
EDR 32 20-25 LGR	M32	—	Light grey	50	50	1.020	2011 52 2
EDR 32 25-32 LGR	M32	—	Light grey	50	50	1.170	2011 53 0
EDR 40 25-32 LGR	M40	—	Light grey	25	25	1.950	2011 53 8
EDR 40 32-40 LGR	M40	—	Light grey	25	25	2.200	2011 54 6

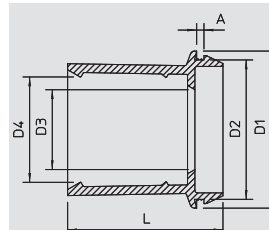
PVC Polyvinylchloride

/100 pc.

Plug-in seals are used to run pipes tight to the junction box.

Important dimensions, plug-in seal

G	L	A	D1	D2	D3	D4
mm	mm	mm	mm	mm	mm	mm
M25	30	2.2	29.5	25.3	15.0	18.4
M25	30	2.2	29.5	25.3	18.5	24.2
M32	36	2.2	36.4	32.3	18.5	24.2
M32	36	2.2	37	32.3	24	31.2
M40	49	2.2	44.4	40.3	24	31.2
M40	49	2.2	46	42.3	31	39.2



35 60 85 110



Mounting plate, T series

Type	Height	Width	Pack.	Weight	Item No.
	mm	mm	pcs	kg/100 pcs.	
MP WI KL. FS	210	120	20	20.200	7084 76 5
MP WI KL. DD	210	120	20	20.200	7085 11 1

ST Steel

FS Strip-galvanised

DD Zinc-aluminium coated, double-dip

/pc.

Curved mounting plate, for fastening on the side rail of the cable tray.

Type	Height	Width	Pack.	Weight	Item No.
	mm	mm	pcs	kg/100 pcs.	
MP UNI FS	115	170	40	13.300	7084 77 3

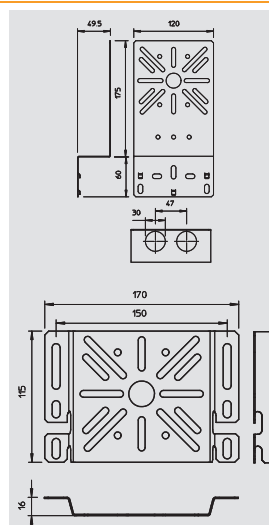
ST Steel

FS Strip-galvanised

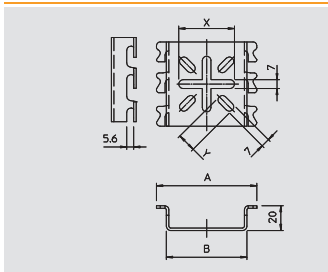
/pc.

Mounting plate, for fastening on the side rail of cable support systems.

35 60 85 110
35 55 105



Thermoplastic junction box, T series

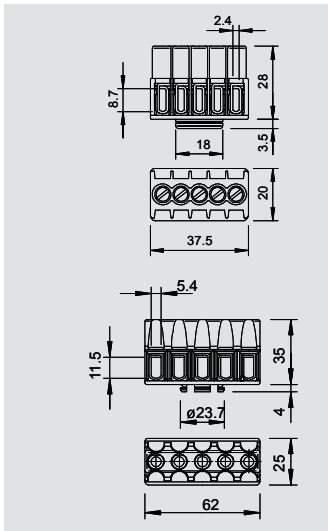


Mounting plate, T series

Type	Dimension A mm	Dimension B mm	Dimension X mm	Dimension y mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MPG 65 FT	81	65	45	15	30	9.200	6006 48 6

ST Steel **FT** Hot-dip galvanised /pc.

Mounting for screwless fastening on mesh cable trays.



Terminal strip, T series

Type	Colour	No. of screwless terminals	Nominal cross section mm²	Nominal voltage V	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
VBX KL25	Light grey	5	1-4	400	100	10	2.100	2009 10 2

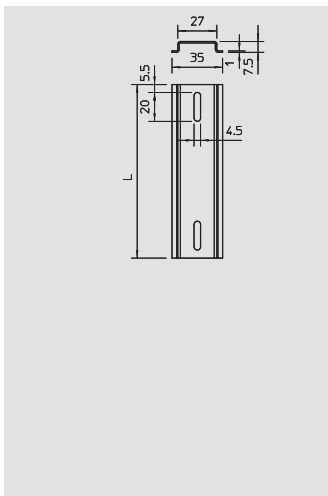
PA Polyamide /100 pc.

Terminals and screws of steel, galvanised and transparently passivated, nominal cross-section 1 - 4 mm², nominal voltage 400 V, five-pole, with socket terminals, max. connectable cross-sections per terminal max. 4 x 2.5 mm², 5 x 1.5 mm² or 6 x 1 mm².

Type	Colour	No. of screwless terminals	Nominal cross section mm²	Nominal voltage V	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
VBX KL60	Light grey	5	1-6	400	120	10	4.380	2009 11 0

PA Polyamide /100 pc.

Terminals and screws of steel, galvanised and transparently passivated, nominal cross-section 1 - 6 mm², nominal voltage 400 V, five-pole, with socket terminals, max. connectable cross-sections per terminal: 3 x 6 mm², 4 x 4mm² or 6 x 2.5 mm².



Hat profile rail, T series

Type	Version	Interface	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2069 T60 GTP	For T 60 lengthwise + T 60, T 100 crosswise	GTP	1	89	10	3.070	1115 38 0
2069 T100 GTP	For T 100 lengthwise + T 160 crosswise	GTP	1	118	10	4.070	1115 38 2
2069 T350 GTP	For T 350 lengthwise	GTP	1	245	10	8.450	1115 38 8
2069 T160 GTP	For T 160 lengthwise + T 250, T 350 crosswise	GTP	1	157	10	5.520	1115 38 4
2069 T250 GTP	For T 250 lengthwise	GTP	1	206	10	7.110	1115 38 6

ST Steel **GTP** Electro galvanised, transparently passivated /100 pc.

Hat profile rail 35 x 7.5 mm to DIN EN 60715 (formerly DIN EN 50022).

Static values:

A = cm²

Iy = cm⁴

Iz = cm⁴

Wy = cm³

Wz = cm³



Thermoplastic junction box, T series with strain relief



T 40 ZE, strain relief entry

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 40 ZE IP30	-	7	Light grey	80	5	5.600	2007 80 1

PP Polypropylene

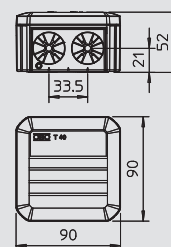
/pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with special strain relief entries. These entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Clear internal dimensions: 77 x 77 x 46 mm

Cover with labelling panel and lead-sealed.



T 60 ZE, strain relief entry

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 60 ZE IP30	-	7	Light grey	60	5	11.200	2007 80 3

PP Polypropylene

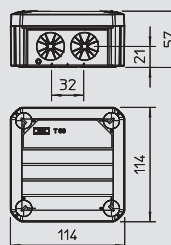
/pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with special strain relief entries. These entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Clear internal dimensions: 100 x 100 x 48 mm

Cover with labelling panel and lead-sealed.



T 100 ZE, strain relief entry

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 ZE IP30	-	10	Light grey	40	1	14.600	2007 80 5

PP Polypropylene

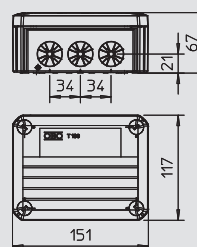
/pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with special strain relief entries. These entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Clear internal dimensions: 136 x 102 x 57 mm

Cover with labelling panel and lead-sealed.



T 100 WB, Wieland socket

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB	Wieland socket	4	Light grey	40	1	14.600	2007 80 7

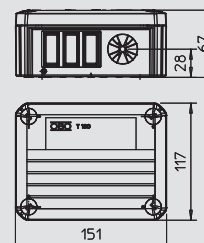
PP Polypropylene

/pc.

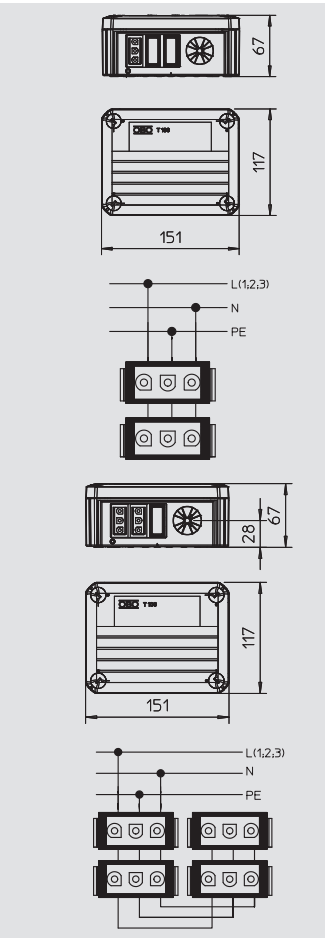
The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series with strain relief



T 100 WB, Wieland socket

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 2SW	Wieland socket 2 s	4	Light grey	40	1	20.500	2007 80 9

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.

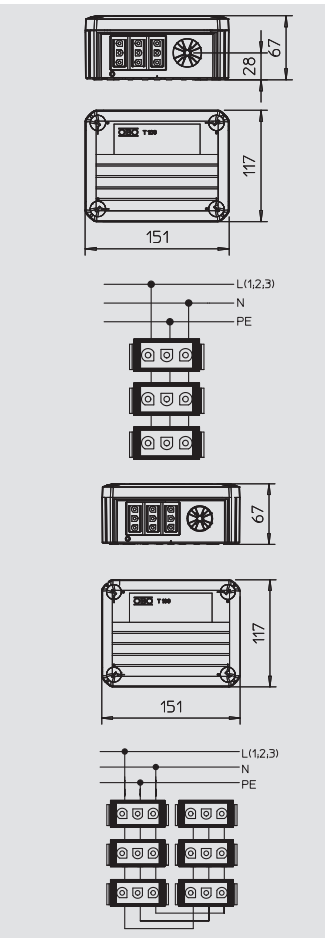
Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 4SW	Wieland socket 4 s	4	Light grey	40	1	25.400	2007 81 1

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.



T 100 WB, Wieland socket

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 3SW	Wieland socket 3 s	4	Light grey	40	1	22.300	2007 81 3

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 6SW	Wieland socket 6 s	4	Light grey	40	1	29.400	2007 82 2

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series with strain relief



T 100 WB, Wieland socket

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 1WS 1SW	Wieland socket 1w+1s	4	Light grey	40	1	21.600	2007 81 5

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.



Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 1WS 2SW	Wieland socket 1w+2s	4	Light grey	40	1	23.600	2007 81 7

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.

T 100 WB, Wieland socket

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 2WS 2SW	Wieland socket 2w+2s	4	Light grey	40	1	25.500	2007 81 9

PP Polypropylene /pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.



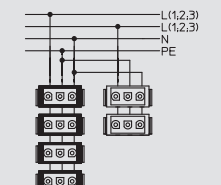
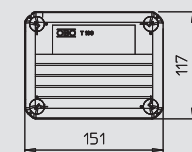
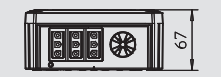
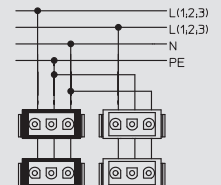
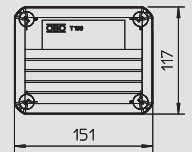
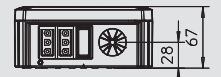
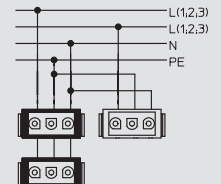
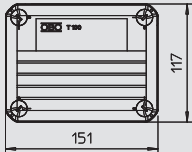
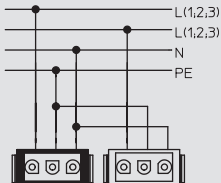
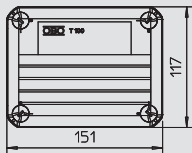
Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 WB 2WS 4SW	Wieland socket 2w+4s	4	Light grey	40	1	29.400	2007 82 0

PP Polypropylene /pc.

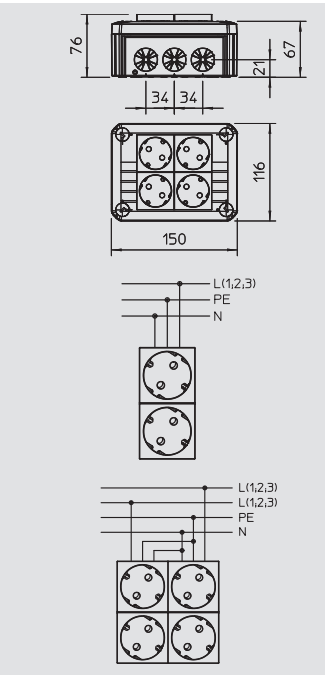
The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries and pre-terminated Wieland connection sockets, type GST-18-13 (s = black/w = white). The strain relief entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm.

The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5.

Cover with labelling panel and lead-sealed.



Thermoplastic junction box, T series with strain relief



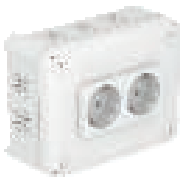
T 100 MSD, Modul 45 sockets in cover

Type	Version	Entries	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
T 100 2MSD WS	2 sockets, 33° white	10	Light grey	5	1	25.850	2007 82 1
T 100 2MSD RO	2 sockets, 33° red	10	Light grey	5	1	25.000	2007 82 3
T 100 4MSD WS	4 sockets, 33° white	10	Light grey	5	1	35.200	2007 82 5

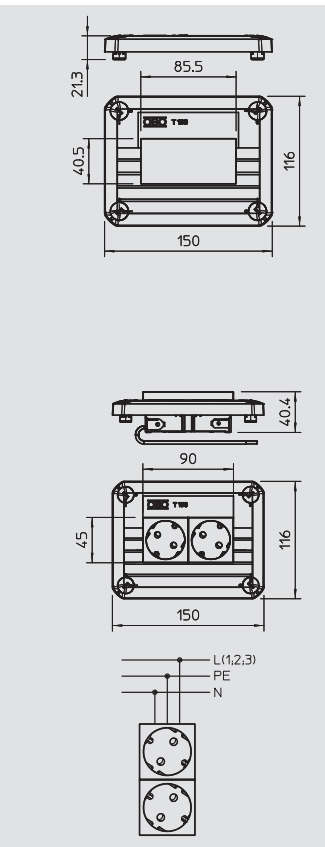
PP Polypropylene

/pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries. These entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Suitable for cable diameters of between 7 and 21 mm. Depending on the type, the cover contains two or four Modul 45 protective contact sockets in red or white. The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5. Cover can be lead-sealed, with labelling panel for double sockets.



Junction box systems



Cover T-100, Modul 45 sockets

Type	Version	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
T 100 D MSD2A	For 2 Modul 45 accessories	Light grey	8	1	6.200	2007 82 6

PP Polypropylene

/pc.

The junction boxes are made of a thermoplastic polypropylene polymer and are equipped with strain relief entries. These entries can be penetrated directly with the cables. The special structure of the opening means that the cables cannot be removed unintentionally. Depending on the type, the cover contains two or four Modul 45 protective contact sockets in red or white. The junction boxes can be mounted on mounting plates in the openings on the floor using steel screws 3.5 x 9.5. Cover can be lead-sealed, with labelling panel for double sockets.

Type	Version	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
T 100 D 2MSD RO	2 sockets, 33° white	Light grey	4	1	15.600	2007 82 4

PP Polypropylene

/pc.

Cover for T 100 propylene junction boxes. Depending on the type, opening for Modul 45 devices or with two or four Modul 45 protective contact sockets in white. Cover can be lead-sealed, with labelling panel for double sockets.



Thermoplastic junction box, T series with strain relief

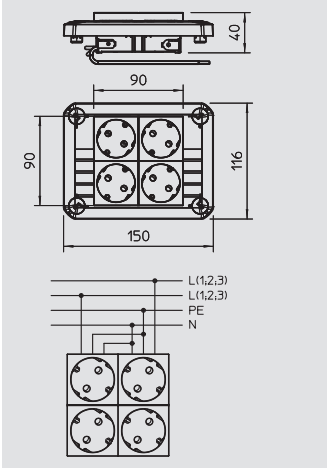


Cover T-100, Modul 45 sockets

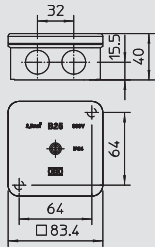
Type	Version	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
T 100 D MSD4A	4 sockets, 33° white	Light grey	4	1	24.900	2007 82 9

PP Polypropylene /pc.

Cover for T 100 propylene junction boxes. Depending on the type, opening for Modul 45 devices or with two or four Modul 45 protective contact sockets in white.
Cover can be lead-sealed, with labelling panel for double sockets.



Duroplast junction box, B series



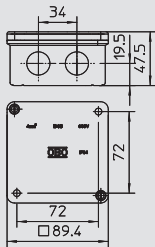
B 25 M, without thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 25 M 5	1 terminal strip	Light grey	80	5	13.100	2001 12 8
B 25 M	without terminal strip	Light grey	80	5	10.400	2001 13 6

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, rated voltage 660 V, nominal cross-section 2,5 mm², two fastening holes for bolts of up to 4.5 mm Ø in the interior of the box (seals and covers included), M6 fastening thread and adhesive area under the base, 1 cover bolt, 7 break-out entries Ø 21 mm (M 20), with 4 cable entries EDVS 20 for cable diameters 7.5–14 mm.
Clear internal dimensions: 73 x 73 x 35 mm.



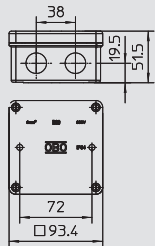
B 40 M, without thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 40 M 5	1 terminal strip	Light grey	80	5	16.500	2001 16 0
B 40 M	without terminal strip	Light grey	80	5	12.000	2001 17 9

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 4 mm², two fastening holes for bolts up to 4.5 mm Ø on the inside of the box, but outside the terminals. M6 fastening thread and adhesive area under the base. Two cover bolts, 7 break-out entries Ø 20 mm (M20), with 4 cable entries EDVS 20 for cable diameters 20–15 mm.
Clear internal dimensions: 78 x 78 x 43 mm.



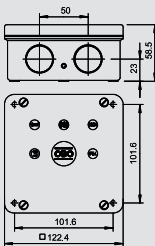
B 60 M, without thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 60 M 5	1 terminal strip	Light grey	80	5	18.300	2001 20 9
B 60	without terminal strip	Light grey	80	5	14.700	2001 21 7

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, rated voltage 660 V, nominal cross-section 6 mm², two fastening holes for bolts of up to 4.5 mm Ø in the interior of the box (seals and covers included), M6 fastening thread and adhesive area under the base, four cover bolts, 7 break-out entries Ø 20.5 mm (M 20), with 4 cable entries EDVS 20 for cable diameters 7.5–15 mm.
Clear internal dimensions: 83 x 83 x 47 mm.



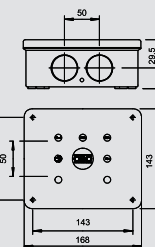
B 100 M, without thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 100 5	1 terminal strip	Light grey	30	5	38.000	2001 24 1
B 100	without terminal strip	Light grey	30	5	31.000	2001 26 8

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 10 mm², four fastening holes for bolts up to 5 mm Ø on the inside of the box, but outside the terminals. Four cover bolts, sealable with sealing caps supplied, 6 break-out entries Ø 25.5 mm (M25), with 4 push-in seals EDVS 25 for cable diameters 7.5–22 mm.
Clear internal dimensions: 108 x 108 x 51 mm.



B 160 M, without thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 160 5	1 Terminal strip	Light grey	10	1	70.000	2001 29 2
B 160	without terminal strip	Light grey	10	1	55.000	2001 30 6

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 16 mm², four fastening holes for bolts up to 5.5 mm Ø on the inside of the box, but outside the terminals. Four cover bolts, sealable with sealing caps supplied, 8 break-out entries Ø 32.5 mm (M 32), with 4 cable entries EDVS 32 for cable diameters 12–30 mm.
Clear internal dimensions: 150 x 125 x 61 mm.



Duroplast junction box, B series



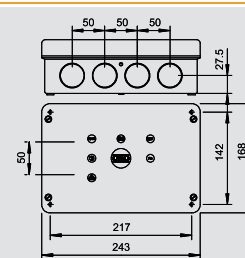
B 250 M, without thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
B 250 5	1 Terminal strip	Light grey	1	1	148.000	2001 33 0
B 250	without terminal strip	Light grey	1	1	85.000	2001 34 9

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 25 mm², four fastening holes for bolts up to 5.5 mm Ø on the inside of the box, but outside the terminals. Four cover bolts, sealable with sealing caps supplied, 12 break-out entries Ø 32.5 mm (M 32), with 4 push-in seals EDVS 32 for cable diameters 12–30 mm. Clear internal dimensions: 224 x 149 x 75 mm.



Plug-in seal, B series

Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	
EDVS M20 LGR	M 20	0-17	Light grey	1,200	100	0.125	2012 37 5
EDVS M25 LGR	M 25	0-22	Light grey	1,200	100	0.185	2012 38 3
EDVS M32 LGR	M 32	0-28	Light grey	600	50	0.295	2012 39 1

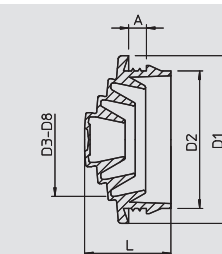
PE Polyethylene

/100 pc.

The push-in nipple can be cut back to suit the relevant cable diameter.

Important dimensions, plug-in seal

G	L	A	D1	D2	D3	D4	D5	D6	D7	D8
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M20	12.8	3.4	24.8	20.3	0-6	5-10	9-15	14-17	—	—
M25	14.5	4.3	29.5	25.3	0-6	5-10	9-15	14-20	19-22	—
M32	17.8	4.4	36.3	32.3	0-6	5-10	9-15	14-20	19-25	24-28



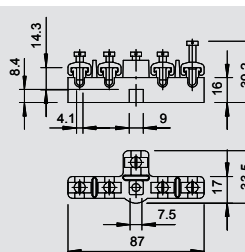
Terminal strip, B series

Type	Colour	No. of screwless terminals	Nominal cross section mm²	Nominal voltage V	Box Qty.	Pack.	Weight	Item No.
			mm²	V	pcs	pcs	kg/100 pcs.	
KL 100	—	5	4-10	660	60	5	7.000	2016 12 5

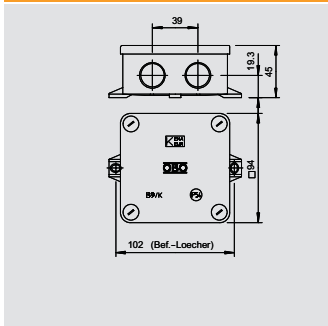
MF Duroplast, melamine resin, type 150

/100 pc.

Nickel-plated brass terminals, steel screws, galvanised and transparently passivated, nominal cross-section 4 - 10 mm², nominal voltage 660 V, 5-pole, with terminal sockets, max. connectable cross-sections per terminal: 3 x 10 mm², 4 x 6 mm² or 4 x 4 mm².



Duroplast junction box, B series



B 9/K M empty, with thread

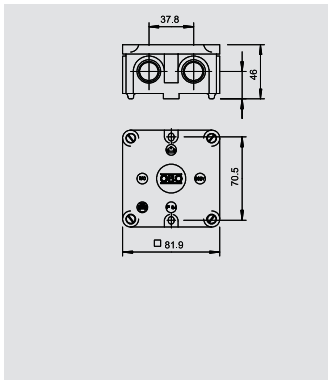
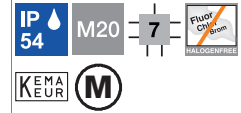
Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

B 9 K M	3 cable glands	Light grey	60	5	13.500	2001 94 2

UF Duroplast, Aminoplast, type 131.5 /100 pc.

Protection rating IP54, empty box for use with individual terminals, four plastic cover bolts, thus absolute corrosion-protection, two fastening bases for bolts of up to 5 mm Ø, 7 break-out entries with thread M20 x 1.5. 3 polyamide cable glands for cable diameters of 9–12 mm, type 106 M.

Clear internal dimensions: 84 x 84 x 34 mm.



B 9/B M, with thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

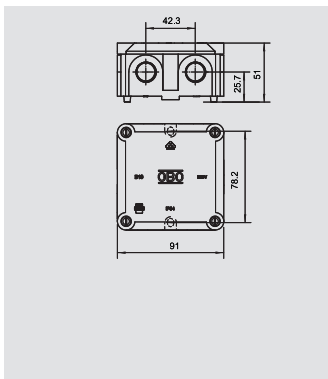
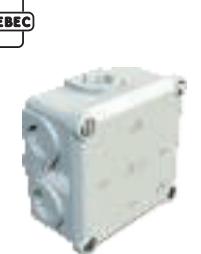
B 9 B M 5	1 terminal strip	Light grey	80	5	16.000	2001 61 6

B 9 B M	—	Light grey	80	5	9.960	2001 63 2

UF Duroplast, Aminoplast, type 131.5 /100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 2,5 mm², two fastening holes for bolts up to 5 mm Ø on the outside of the box, four cover bolts, 7 break-out entries with thread M20 x 1.5, primarily for cable glands with short connecting thread.

Clear internal dimensions: 73 x 73 x 35 mm.



B 10 M, with thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

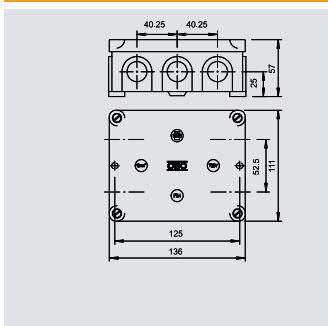
B 10 M 5	1 terminal strip	Light grey	80	5	22.480	2002 14 0

B 10 M	—	Light grey	80	5	17.360	2002 16 7

UF Duroplast, Aminoplast, type 131.5 /100 pc.

Protection rating IP54, rated voltage 660 V, nominal cross-section 2,5 - 4, in combination with the earthing terminal 700/6 M, the box has the nominal cross-section 4 mm², two fastening holes for bolts of up to 5 mm Ø on the outer side of the box. Four cover lids, 7 break-out entries with thread M20 x 1.5, primarily for cable glands with short connecting thread.

Clear internal dimensions: 80 x 80 x 39 mm.



B 11 M, with thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

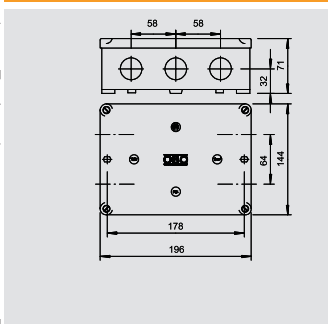
B 11 M 5	1 terminal strip	Light grey	24	1	39.700	2002 32 9

B 11 M	—	Light grey	24	1	32.200	2002 34 5

UF Duroplast, Aminoplast, type 131.5 /100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 10 mm², two fastening holes for bolts up to 6 mm Ø on the outside of the box, four cover bolts, 10 break-out entries with thread M20 x 1.5, primarily for cable glands with short connecting thread.

Clear internal dimensions: 125 x 100 x 44 mm.



B 12 M, with thread

Type	Accessories	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	

B 12 M 5	1 terminal strip	Light grey	12	1	96.700	2002 50 7

B 12 M	—	Light grey	12	1	65.500	2002 52 3

UF Duroplast, Aminoplast, type 131.5 /100 pc.

Protection rating IP54, nominal voltage 660 V, nominal cross-section 16 mm², two fastening holes for bolts up to 6 mm Ø on the outside of the box. Four cover bolts, 10 break-out entries with thread M25 x 1.5.

Clear internal dimensions: 178 x 126 x 57 mm.



Duroplast junction box, B series

4-6
mm² 5 VDE

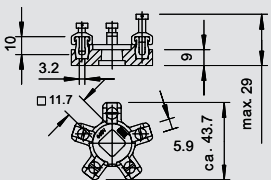


Terminal strip, B series

Type	Colour	No. of screwless terminals	Nominal cross section mm ²	Nominal voltage V	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
700 6	—	5	4-6	660	120	10	3.460	2017 29 6

MF Duroplast, melamine resin, type 150 /100 pc.

Nickel-plated brass terminals, steel screws, galvanised and transparently passivated, nominal cross-section 4 - 6 mm², nominal voltage 660 V, 5-pole, with terminal sockets, max. connectable cross-sections per terminal: 3 x 6 mm², 4 x 4 mm² 5 x 2.5 mm² or 8 x 1.5 mm².



IP 54 2,5 mm² 6 mm² Pg 660 V 5 Fluorocarbon VDE

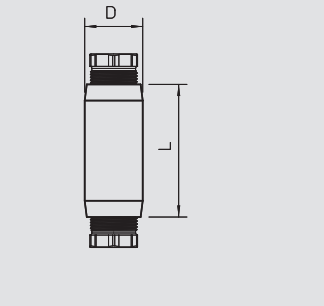


Cable connection sleeve

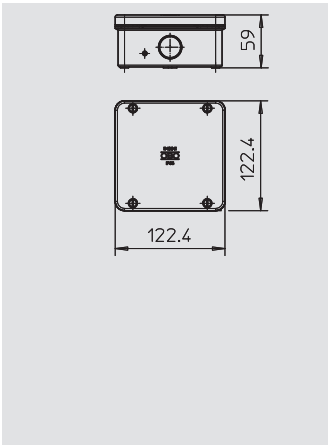
Type	Entries	Dimension D mm	Dimension L mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
117 5x2.5	Pg 16	28	64	Light grey	100	10	5.310	2022 02 8
117 5x6	Pg 21	33.5	82	Light grey	60	5	14.600	2022 06 0

PS Polystyrene /100 pc.

Protection rating IP54, nominal voltage 660 V. VDE specifications state that connection sleeves are only intended for local routing.



Duroplast junction box, FireBox



B 100 E, with earthing terminal

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
B 100 E POR	Pastel orange	10	1	39.700	2002 57 1

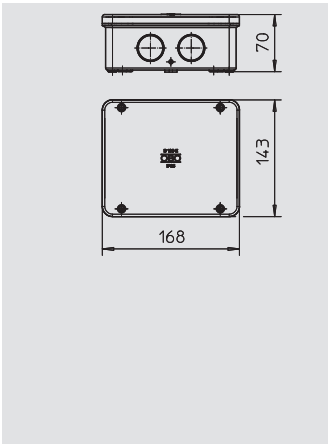
UF Duroplast, Aminoplast, type 131.5 /100 pc.

Approved for electrical function maintenance to DIN 4102 Part 12.
Function maintenance classes E30 to E90 according to AbP.

Important information: The general construction test certificates of the material testing institute MPA NRW, Erwitte, apply. Test certificate no. MPA-E-08-016.

The function maintenance cables of the following manufacturers are approved: Dätwyler, Eupen, Leoni Studer, Nexans, Prysmian. For details, see test certificate.

Dimensions: 122.4 x 122.4 x 58.5 mm.
Clear internal dimensions: 108 x 108 x 51 mm.



B 160 E, with earthing terminal

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
B 160 E POR	Pastel orange	10	1	65.800	2002 57 8

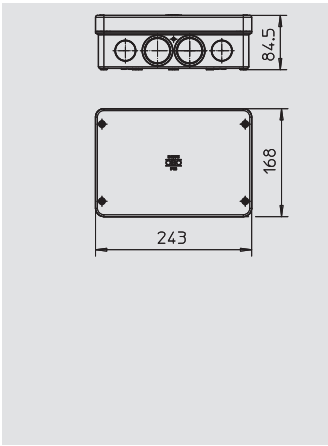
UF Duroplast, Aminoplast, type 131.5 /100 pc.

Approved for electrical function maintenance to DIN 4102 Part 12.
Function maintenance classes E30 to E90 according to AbP.

Important information: The general construction test certificates of the material testing institute MPA NRW, Erwitte, apply. Test certificate no. MPA-E-08-016.

The function maintenance cables of the following manufacturers are approved: Dätwyler, Eupen, Leoni Studer, Nexans, Prysmian. For details, see test certificate.

Dimensions: 168 x 143 x 70 mm.
Clear internal dimensions: 150 x 125 x 61 mm.



B 250 E, with earthing terminal

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
B 250 E POR	Pastel orange	6	1	111.000	2002 58 5

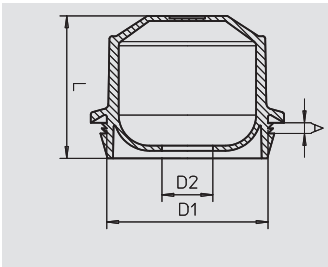
UF Duroplast, Aminoplast, type 131.5 /100 pc.

Approved for electrical function maintenance to DIN 4102 Part 12.
Function maintenance classes E30 to E90 according to AbP.

Important information: The general construction test certificates of the material testing institute MPA NRW, Erwitte, apply. Test certificate no. MPA-E-08-016.

The function maintenance cables of the following manufacturers are approved: Dätwyler, Eupen, Leoni Studer, Nexans, Prysmian. For details, see test certificate.

Dimensions: 243 x 168 x 82.5 mm.
Clear internal dimensions: 224 x 149 x 75 mm.



Plug-in seal

Type	Size	For Ø	Colour	Box Qty.	Pack.	Weight	Item No.
		mm		pcs	pcs	kg/100 pcs.	
EDFB M32	M32	8-23	Pastel orange	600	50	0.730	2012 70 9
EDFB M40	M40	11-30	Pastel orange	300	25	0.970	2012 73 3

TPE Thermoplastic elastomer /100 pc.

Plug-in seal for the junction box, type FireBox.



Aquasit cold casting compound



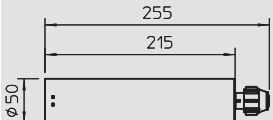
Aquasit cartridge

Type	Contents	Pack.	Weight	Item No.
	I	pcs	kg/100 pcs.	
KVM	0.25	1	42.000	2363 01 0

/pc.

Aquasit is a two-component casting compound in a cartridge for applications in areas with extremely high, continuous moisture. It can also be used for mechanical shock and vibrations. The cartridge is suitable for use in standard cartridge pistols. The unopened aluminium packaging can be stored for up to a year at room temperature. After opening the cartridge, the material must be used within 24 hours.

Aquasit properties:
Protection rating: IP68 at 1,8 bar/1,000 h
Rated voltage: 400 V
Penetration resistance: >20 kv/mm to VDE 0291 Part 2
Operating temperature: -40 to +90 °C
Processing temperature: 0 to +40 °C
Halogen-free, silicon-free, isocyanite-free.
Environmentally friendly and without the need to be labelled.

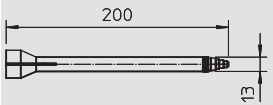


AQUASIT mixer pipe

Type	Pack.	Weight	Item No.
	PU	kg/100 PUs	
KVM-M	1	17.000	2363 01 5

/VPE

10 mixer pipes in the set.
Simple, automatic mixing of OBO AQUASIT when pressing out the compound from the cartridge.

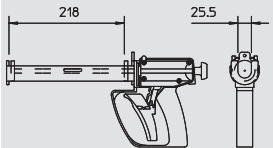


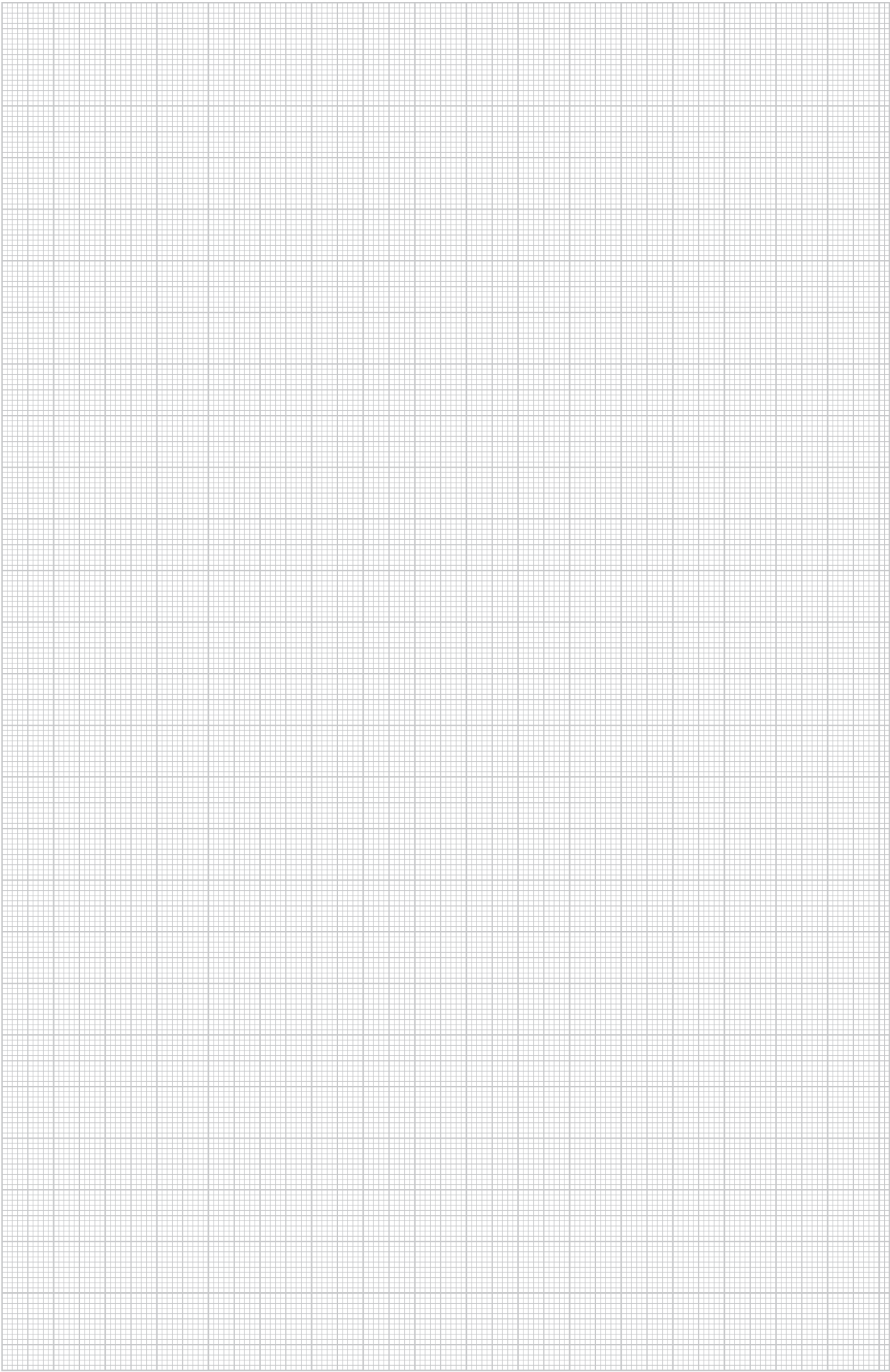
Aquasit cartridge pistol

Type	Pack.	Weight	Item No.
	pcs	kg/100 pcs.	
KVM-P	2	100.000	2363 01 9

/pc.

High-quality 1-K cartridge for use with the AQUASIT cold casting compound. The cartridge pistol can also be used with normal 300 mm cartridges.







Concealed and cavity wall systems

	Concealed	Concealed accessory socket	186
		Concealed accessory/connection socket	186
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Concealed systems



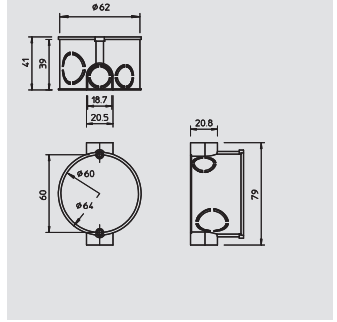
Concealed accessory socket

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UG 60 D	Concealed	Black	300	25	1.490	2003 01 5

PS Polystyrene

/100 pc.

Accessory socket with torsion-resistant guaranteed standard combination spacing of 71 mm (to DIN 49 073-1) through snap-lock coupling. 7 break-out openings for cables and pipes Ø 20 mm and Ø 25 mm. Combinable for spreading and screw fastening, low-laying plaster holders, device screw spacing 60 mm, for screw fastening with self-tapping screws 3.2 mm, with two screw domes without screws, protection rating IP20.



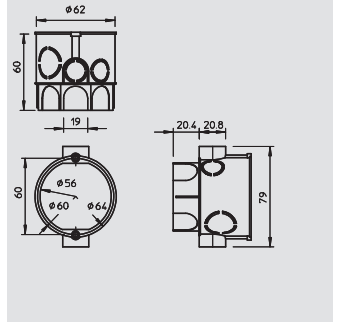
Concealed accessory/connection socket

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UG 60 VD	Concealed	Black	200	25	1.800	2003 01 9

PS Polystyrene

/100 pc.

Accessory/connection socket with torsion-resistant guaranteed standard combination spacing of 71 mm (to DIN 49 073-1) through snap-lock coupling. 13 break-out openings for cables and pipes Ø 20 mm and Ø 25 mm. Combinable for spreading and screw fastening, low-laying plaster holders, device screw spacing 60 mm, for screw fastening with self-tapping screws 3.2 mm, with two screw domes without screws, protection rating IP20.



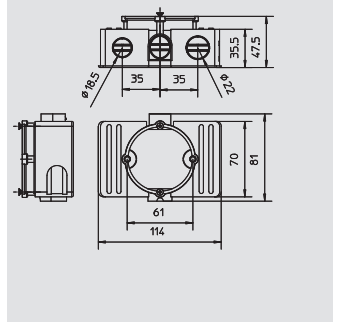
Concealed accessory/connection socket

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UG 60 VK	Concealed	Black	100	10	4.600	2003 02 3

PS Polystyrene

/100 pc.

Accessory/connection socket with increased socket volume on both sides of device installation opening to accept connection terminals. Torsion-resistant guaranteed standard combination spacing of 71 mm (to DIN 49 073-1) through snap-lock coupling. 8 break-out openings for cables and pipes to Ø 21 mm, low-laying plaster holders, device screw spacing 60 mm, for screw fastening with self-tapping screws 3.2 mm, with four screw domes and two device screws, protection rating IP20.



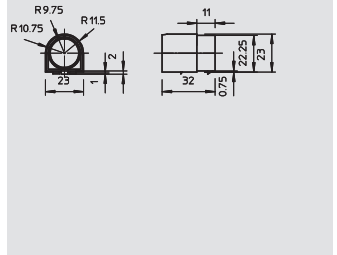
Expansion support for concealed accessory sockets

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UG AS	Concealed	Black	500	25	0.290	2003 21 2

PS Polystyrene

/100 pc.

Expansion support suitable for all sockets with tunnel support. Suitable for the combination of heavy and weak current devices and telecommunications equipment using separated covers, combination spacing 90 mm.



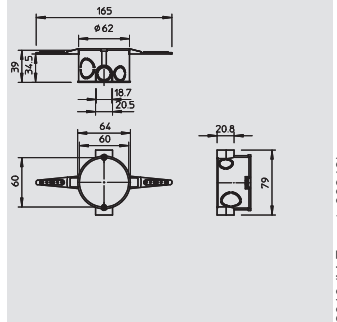
Concealed accessory socket with nail strap

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UG 60 D NL	Concealed	Black	100	100	2.100	2003 03 1

PS Polystyrene

/100 pc.

Accessory socket with nail straps. These are used as a mounting aid to prefix the sockets, nail diameter max. 3 mm, plaster thickness min. 8 mm. Torsion-resistant guaranteed standard combination spacing of 71 mm (to DIN 49 073-1) through snap-lock coupling, 7 break-out openings for cables and pipes Ø 20 mm and Ø 25 mm. Combinable for spreading and screw fastening, low-laying plaster holders, device screw spacing 60 mm, for screw fastening with self-tapping screws 3.2 mm, with two screw domes without screws, protection rating IP20.



Concealed accessory/connection socket with nail strap

Type	Colour	Height mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UG 60 VD NL	Black	62	100	100	2.480	2003 03 5
PS Polystyrene						/100 pc.

Accessory/connection socket with nail straps. These are used as a mounting aid to prefix the sockets. Nail diameter max. 3 mm, plaster thickness min. 8 mm, with increased socket volume to accept connection terminals. Torsion-resistant guaranteed standard combination spacing of 71 mm (to DIN 49 073-1) through snap-lock coupling. 13 break-out openings for cables and pipes Ø 20 mm and Ø 25 mm. Combinable for spreading and screw fastening, low-laying plaster holders, device screw spacing 60 mm, for screw fastening with self-tapping screws 3.2 mm, with two screw domes without screws, protection rating IP20.



Concealed connection socket

Type	Colour	Height mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UV 70 D	Black	36	250	25	1.875	2003 04 3
PS Polystyrene						/100 pc.

Connection socket for connecting six terminals 1.5 mm² or five terminals 2.5 mm². 9 break-out openings for cables and pipes to Ø 21 mm, in conjunction with the cover and cover bolts, the connection sockets achieve the VDE test mark to 0606 and are flame-resistant to VDE 0471/DIN 695 Part 2-1, testing temperature 750 °C, protection rating IP20.



Concealed connection socket with nail strap

Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UV 70 D NL	Concealed	Black	100	100	2.250	2003 04 7
PS Polystyrene						/100 pc.

Connection socket with nail straps. These are used as a mounting aid to prefix the sockets. Nail diameter max. 3 mm, plaster thickness min. 8 mm. Connection socket for connecting six terminals 1.5 mm² or five terminals 2.5 mm². 9 break-out openings for cables and pipes to Ø 21 mm, in conjunction with cover and cover bolts, the connection sockets achieve the VDE test mark to 0606 and are flame-resistant to VDE 0471/DIN 695 Part 2-1, testing temperature 750 °C, protection rating IP20.



Concealed accessory socket without support

Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UG 60 DOS	Concealed	Black	250	25	1.530	2003 05 8
PS Polystyrene						/100 pc.

Accessory socket without support is suitable for use in facing masonry, 3 Break-out openings for cables and pipes Ø 19 mm combinable for spreading and screw fastening, low-laying plaster holders, device screw spacing 60 mm, for screw fastening with self-tapping screws 3.2 mm, with two screw domes without screws, protection rating IP20.



Concealed connection box

Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UV 80 K	Concealed	Black	50	50	4.500	2003 11 2
UV 100 K	Concealed	Black	100	100	6.400	2003 11 8
UV 150 K	Concealed	Black	30	30	15.667	2003 12 4
UV 200 K	Concealed	Black	10	10	35.714	2003 13 0
UV 250 K	Concealed	Black	10	10	52.000	2003 13 6
PS Polystyrene						/100 pc.

Connection box for connecting terminals, with cover and cover bolts (15 mm), cover edge is flush, surface is roughened, in conjunction with cover and cover bolts, the connection sockets achieve the VDE test mark to VDE 060 and are flame-resistant to VDE 0471/DIN 695 Part 2-1, testing temperature 750 °C, protection rating IP20.

Important dimensions, connection box

Type	A	B	H	L	s
	mm	mm	mm	mm	mm
UV80K	102	97	45	85	1.5
UV100K	130	114	45	107	1.5
UV150K	200	170	65	150	1.75
UV200K	260	210	65	200	2.0
UV250K	328	260	65	250	2.5



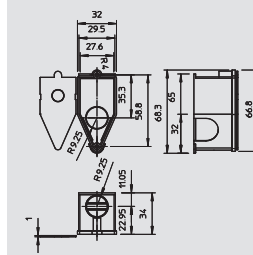
Concealed systems



Wall light connection socket

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UWA	Concealed	Cream	250	25	1.120	2003 08 2
PS	Polystyrene					/100 pc.

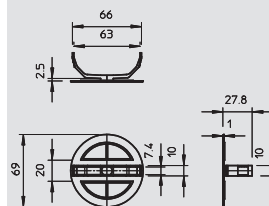
Wall light connection socket with internal cover, compartment for three connection terminals, use according to VDE 0100, 3 break-out openings for cables and pipes Ø 18.7 mm, do not use as connection socket, protection rating IP20.



Sprung cover, 60 mm

Type	Colour	Ø	Box Qty.	Pack.	Weight	Item No.
		max.	pcs	pcs	kg/100 pcs.	
UG 60 FD	White	69	25	25	0.810	2003 22 3
PS	Polystyrene					/100 pc.

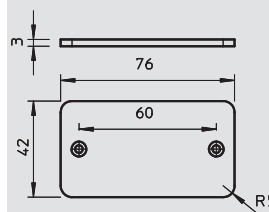
Sprung cover with centrally moulded, elastic spreading spring, for sockets with Ø 60 mm, cover edge is flush, surface is roughened.



Wall light socket cover

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UW AD	Concealed	White	250	10	0.600	2003 21 8
PS	Polystyrene					/100 pc.

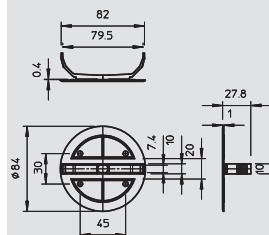
Wall light socket cover for flush closure of the wall outlet socket, surface is roughened, cover bolts can be lowered. Delivery including two 15 mm bolts.



Sprung cover, 70 mm

Type	Colour	Ø	Box Qty.	Pack.	Weight	Item No.
		max.	pcs	pcs	kg/100 pcs.	
UV 70 FD	White	84	25	25	1.200	2003 22 7
PS	Polystyrene					/100 pc.

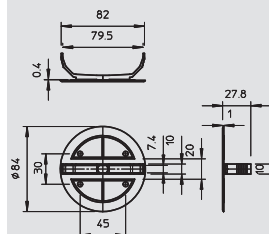
Sprung cover with centrally moulded, elastic spreading spring, for sockets with Ø 70 mm, cover edge is flush, surface is roughened.



Sprung cover, 80 mm

Type	Colour	Ø	Box Qty.	Pack.	Weight	Item No.
		max.	pcs	pcs	kg/100 pcs.	
UV 80 FD	White	95	25	25	1.500	2004 63 4
PS	Polystyrene					/100 pc.

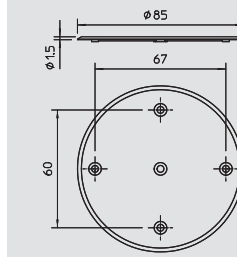
Sprung cover with centrally moulded, elastic spreading spring, for sockets with Ø 80 mm, cover edge is flush, surface is roughened.

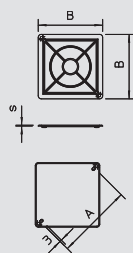


Universal cover

Type	Colour	Ø	Box Qty.	Pack.	Weight	Item No.
		max.	pcs	pcs	kg/100 pcs.	
UG UD	White	84	400	20	1.070	2003 23 6
PS	Polystyrene					/100 pc.

Universal cover for all socket types, cover with central fastening for connection sockets, bolt hole spacing 60 mm for accessory sockets and device connection sockets, bolt hole spacing 67 mm for connection sockets, cover edge is flush, surface is roughened, lowerable cover bolts.





Box cover

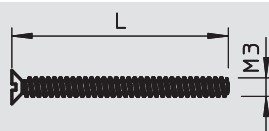


Type	Installation type	Dimension A mm	Dimension B mm	Dimension s mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UV 80 D	Concealed	102	97	1.5	White	250	10	1.270	2003 24 0
UV 100 D	Concealed	130	114	1.5	White	240	10	2.000	2003 24 4
UV 150 D	Concealed	200	170	1.75	White	150	5	4.850	2003 24 8
UV 200 D	Concealed	260	210	2	White	50	5	9.500	2003 25 2
UV 250 D	Concealed	328	260	2.5	White	25	5	17.190	2003 25 6

PS Polystyrene

/100 pc.

Box cover suitable for the connection sockets, type UV...K, cover edge is flush, surface is roughened, cover bolts can be lowered.



Device bolt



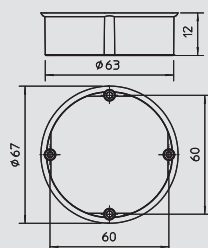
Type	Dimension L mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
U 15 GS	15	3,000	100	0.060	2003 26 5
U 20 GS	20	2,500	100	0.090	2004 67 6
U 25 GS	25	2,000	100	0.092	2003 26 9
U 30 GS	30	2,000	100	0.108	2004 68 0
U 35 GS	35	1,500	100	0.124	2003 27 3
U 40 GS	40	1,000	100	0.140	2003 27 7

ST Steel

G Electrogalvanised

/100 pc.

Bolts suitable for different types of device and lid fastening, with self-tapping thread Ø 3.2 mm.



Surface equalisation ring, 12 mm, accessory socket

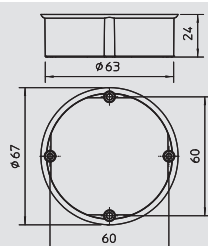


Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UG 60 PA 12	Concealed	Red	250	25	0.700	2003 28 7

PS Polystyrene

/100 pc.

Compensation ring to screw onto deeply concealed accessory sockets and accessory connection sockets, can be combined, when they are screwed on at a 90° offset. Compensation heights selectable by combining the different types, with two device/cover screws 15 mm and two fastening screws, protection rating IP20.



Surface equalisation ring, 24 mm, accessory socket

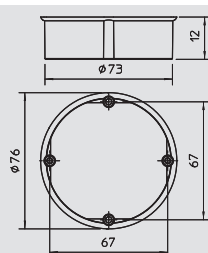


Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UG 60 PA 24	Concealed	Red	250	25	1.100	2003 29 5

PS Polystyrene

/100 pc.

Compensation ring to screw onto deeply concealed accessory sockets and accessory connection sockets, can be combined, when they are screwed on at a 90° offset. Compensation heights selectable by combining the different types, with two device/cover screws 15 mm and two fastening screws, protection rating IP20.



Surface equalisation ring, 12 mm, connection sockets

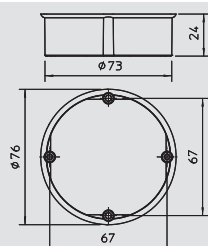


Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UV 70 PA 12	Concealed	Red	100	25	1.150	2003 29 1

PS Polystyrene

/100 pc.

Compensation ring to screw onto deeply concealed connection sockets, can be combined, when they are screwed on at a 90° offset. Compensation heights selectable through combination of the various types, with 2 device/cover screws 15 mm and 2 fastening screws, protection rating IP20.



Surface equalisation ring, 24 mm, connection sockets



Type	Installation type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
UV 70 PA 24	Concealed	Red	100	25	1.850	2003 29 9

PS Polystyrene

/100 pc.

Compensation ring to screw onto deeply concealed connection sockets, can be combined, when they are screwed on at a 90° offset. Compensation heights selectable through combination of the various types, with 2 device/cover screws 15 mm and 2 fastening screws, protection rating IP20.



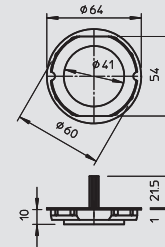
Concealed systems



Signal cover 60 mm, accessory sockets

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UG 60 SD	Concealed	Red	50	50	0.550	2003 31 7
PE Polyethylene						/100 pc.

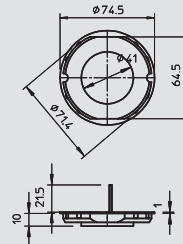
Signal covers protect the interior, the screw domes and screw heads on plastering. The marking bristles allow simple location of the sockets and boxes after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.



Signal cover, 70 mm, connection sockets

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UV 70 SD	Concealed	Red	25	25	0.680	2003 32 1
PE Polyethylene						/100 pc.

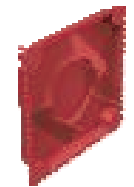
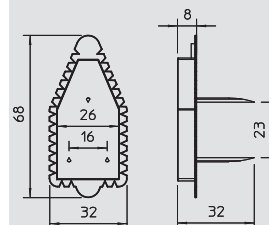
Signal covers protect the interior, the screw domes and screw heads on plastering. The marking bristles allow simple location of the sockets and boxes after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.



Signal cover, wall luminaire socket

Type	Installation type	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
UW ASD	Concealed	Red	100	100	0.200	2003 32 5
PE Polyethylene						/100 pc.

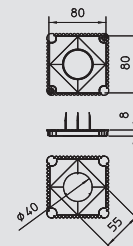
Signal covers protect the interior, the screw domes and screw heads on plastering. The marking bristles allow simple location of the sockets and boxes after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.



Signal cover 80 mm, connection socket

Type	Installation type	Colour	Length	Width	Box Qty.	Pack.	Weight	Item No.
			mm	mm	pcs	pcs	kg/100 pcs.	
UV 80 KSD	Concealed	Red	80	80	50	50	1.300	2003 33 3
PE Polyethylene								/100 pc.

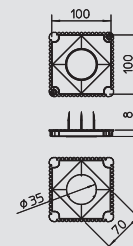
Signal covers protect the interior, the screw domes and screw heads on plastering. The marking bristles allow simple location of the sockets and boxes after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.



Signal cover 100 mm, connection socket

Type	Installation type	Colour	Length	Width	Box Qty.	Pack.	Weight	Item No.
			mm	mm	pcs	pcs	kg/100 pcs.	
UV 100 KSD	Concealed	Red	100	100	50	50	1.700	2003 33 7
PE Polyethylene								/100 pc.

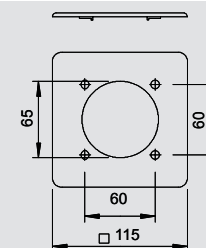
Signal covers protect the interior, the screw domes and screw heads on plastering. The marking bristles allow simple location of the sockets and boxes after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.

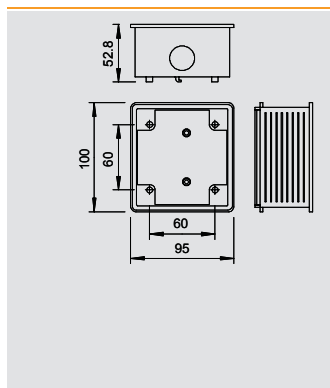


CEE cover plate for fitted plug

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
2393 UP	Light grey	5	4.300	6024 10 6
PA Polyamide				/pc.

The cover plate, together with the concealed installation box, allows tidy wall closure. The underfloor box is placed on the floor connectors and fastened in the centre with a bolt.





CEE installation box

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
2392	Light grey	5	10.500	6024 00 9
PA/GF	Polyamide, fibreglass reinforced			/pc.

Underfloor box for mounting CEE sockets in WDK trunking. Also suitable as concealed installation box for CEE sockets.

Concealed installation box for installing CEE sockets. The underfloor box can also be used for installing WDK trunking.

Straight version, 16 and 32 A, with 60 x 60 mm hole spacing.

Supplied complete with one strain relief clip.

1 plug-in seal ED 16.

1 screw plug VS 16 and 4 cylinder bolts M5 x 18 to fasten the socket.



Modul 45 concealed systems



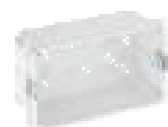
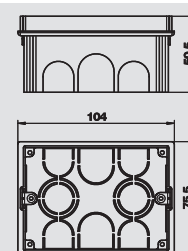
Concealed accessory socket Modul 45, single

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
UG-UPM1	Natural	1	3.200	6119 94 0

/pc.

Concealed accessory socket, rectangular, to accept support plates, type TG-UPM1, for Modul 45 devices of up to 1.5x module width = 67.5 mm, with breakable openings for cables and pipes.

Note: Always plaster the concealed accessory socket together with the appropriate plaster cover.



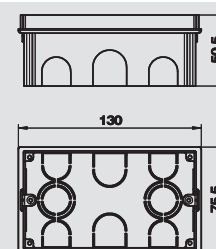
Concealed accessory socket Modul 45, double

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
UG-UPM2	Natural	1	4.550	6119 94 1

/pc.

Concealed accessory socket, rectangular, to accept support plates, type TG-UPM2, for Modul 45 devices of up to 2x module width = 90 mm, with breakable openings for cables and pipes.

Note: Always plaster the concealed accessory socket together with the appropriate plaster cover.



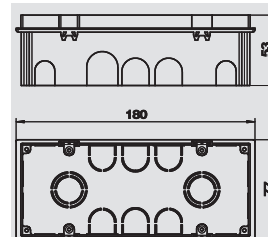
Concealed accessory socket Modul 45, triple

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
UG-UPM3	Natural	1	6.220	6119 94 3

/pc.

Concealed accessory socket, rectangular, to accept support plates, type TG-UPM3, for Modul 45 devices of up to 3x module width = 135 mm, with breakable openings for cables and pipes.

Note: Always plaster the concealed accessory socket together with the appropriate plaster cover.

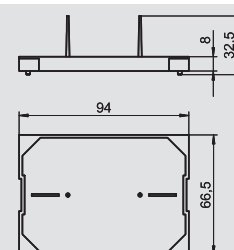


Signal cover for Modul 45 accessory socket, single

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
PD-UPM1	Red	1	0.550	6119 94 5

/pc.

The signal cover for the concealed accessory socket UG-UPM1 protects the interior, the bolt domes and bolt heads on plastering. The marking bristles allow simple location of the sockets after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.

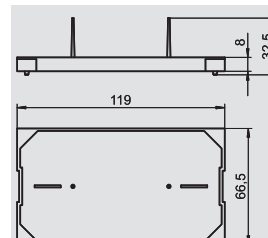


Signal cover for Modul 45 accessory socket, double

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
PD-UPM2	Red	1	0.098	6119 94 6

/pc.

The signal cover for the concealed accessory socket UG-UPM2 protects the interior, the bolt domes and bolt heads on plastering. The marking bristles allow simple location of the sockets after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.

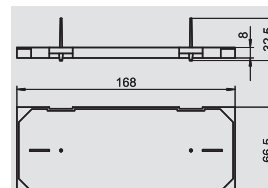


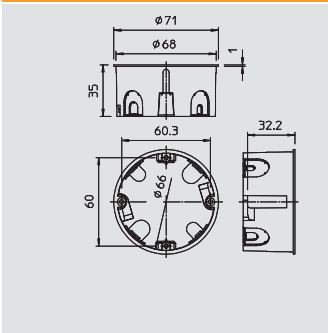
Signal cover for Modul 45 accessory socket, triple

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
PD-UPM3	Red	1	1.300	6119 94 7

/pc.

The signal cover for the concealed accessory socket UG-UPM3 protects the interior, the bolt domes and bolt heads on plastering. The marking bristles allow simple location of the sockets after plastering. The signal covers can be used several times. After plastering, simply push the cover into the socket and remove the signal cover.



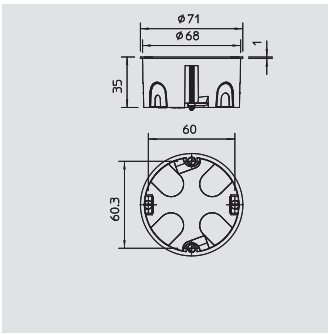


Cavity wall accessory socket

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HG 60-35	Orange	68	35	68	250	25	1.811	2003 42 6

PP Polypropylene /100 pc.

Cavity wall accessory socket. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, option for continuous wiring using connection support for combinations between accessory sockets and accessory connection sockets, 8 break-out openings for NYM cables, data cables and pipes Ø 20 mm, accessory sockets can also be used as connection sockets to VDE 0606-1 with double bolt fastening and screw-on cover, protection rating IP30.

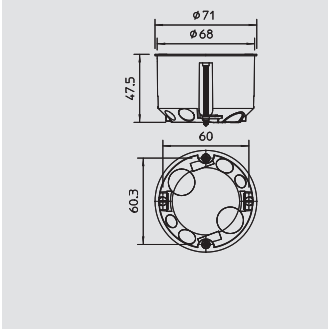


Cavity wall accessory socket, wind-proof

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HG 60-35 MW	Orange	68	35	68	250	25	1.275	2003 60 3

PP Polypropylene /100 pc.

Cavity wall accessory socket, wind-tight version through soft entry membrane. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, option for continuous wiring using connection support for combinations between accessory sockets and accessory connection sockets, 8 wind-proof insertion membrane for NYM cables, data cables and pipes Ø 20 mm, accessory sockets can also be used as connection sockets to VDE 0606-1 with double bolt fastening and screw-on cover, protection rating IP30.

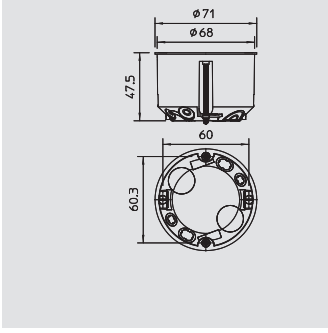


Cavity wall accessory socket

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HG 60	Orange	68	47	68	250	25	2.240	2003 41 4

PP Polypropylene /100 pc.

Cavity wall accessory socket. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, option for continuous wiring using connection support for combinations between accessory sockets and accessory connection sockets, 8 break-out openings for NYM cables, data cables and pipes Ø 20 mm, accessory sockets can also be used as connection sockets to VDE 0606-1 with double bolt fastening and screw-on cover, protection rating IP30.

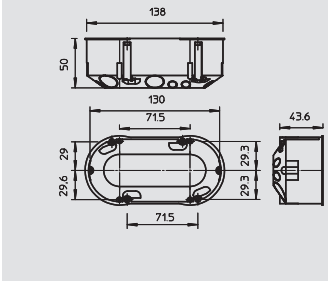


Cavity wall accessory socket, wind-proof

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HG 60 MW	Orange	68	47	68	250	25	1.489	2003 61 1

PP Polypropylene /100 pc.

Cavity wall accessory socket, wind-tight version through soft entry membrane. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, option for continuous wiring using connection support for combinations between accessory sockets and accessory connection sockets, 8 wind-proof insertion membrane for NYM cables, data cables and pipes Ø 20 mm, accessory sockets can also be used as connection sockets to VDE 0606-1 with double bolt fastening and screw-on cover, protection rating IP30.



Cavity wall, double accessory socket

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
HG 60 2	Orange	100	10	4.850	2003 42 2

PP Polypropylene /100 pc.

Double accessory socket, for two service units or one double service unit, with four device bolts. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, 14 break-out openings for NYM cables, data cables and pipes Ø 20 mm, protection rating IP30.



Cavity wall systems



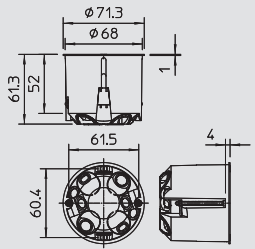
Cavity wall accessory/connection socket

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HV 60	Orange	68	61	68	200	25	2.740	2003 44 2

PP Polypropylene

/100 pc.

Cavity wall accessory/connection socket. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, option for continuous wiring using connection support for combinations between accessory sockets and accessory connection sockets, 8 break-out openings for NYM cables, data cables and pipes Ø 20 mm, accessory sockets can also be used as connection sockets to VDE 0606-1 with double bolts fastening and screw-on cover, protection rating IP30.



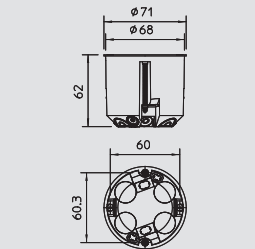
Cavity wall accessory/connection socket, wind-proof

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HV 60 MW	Orange	68	61	68	200	25	1.850	2003 61 9

PP Polypropylene

/100 pc.

Cavity wall accessory/connection socket, wind-tight version through soft entry membrane. Dimensions to DIN 49073-1, for plate thickness 7–35 mm. Standard combination spacing 71 mm, option for continuous wiring using connection support for combinations between accessory sockets and accessory connection sockets, 8 wind-proof insertion membrane for NYM cables, data cables and pipes Ø 20 mm, accessory sockets can also be used as connection sockets to VDE 0806-1 with double bolt fastening and screw-on cover, protection rating IP30.



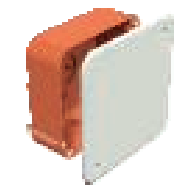
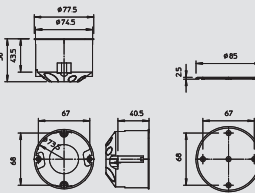
Cavity wall connection socket with cover

Type	Colour	Milling hole Ø	Height	Ø	Box Qty.	Pack.	Weight	Item No.
		mm	mm	max.	pcs	pcs	kg/100 pcs.	
HV 70 D	Orange	74	50	74	100	10	3.650	2003 43 0

PP Polypropylene

/100 pc.

Cavity wall connection socket with cover, dimensions to DIN 49073-1, for plate thickness 7–35 mm. 8 break-out openings for NYM cables, data cables and pipes Ø 20 mm, protection rating IP30.



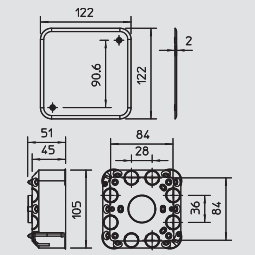
Cavity wall connection box

Type	Colour	Height	Length	Width	Box Qty.	Pack.	Weight	Item No.
		mm	mm	mm	pcs	pcs	kg/100 pcs.	
HV 100 KD	Orange	50	105	105	25	25	6.300	2003 44 9

PP Polypropylene

/100 pc.

Cavity wall connection box, 20 break-out openings for NYM cables, data cables and pipes Ø 20 mm, with cover and cover bolt, with white cover and cover bolts (flame-resistant to VDE 0471/DIN 695 Part 2-1, testing temperature 750 °C), for plate thickness 7–35 mm. Suitable for installation of standard rails (hat and support rails) for series terminals, protection rating IP30.



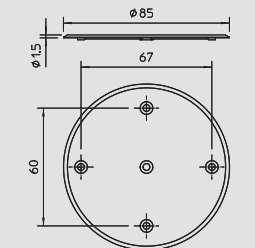
Universal cover

Type	Colour	Ø	Box Qty.	Pack.	Weight	Item No.
		max.	pcs	pcs	kg/100 pcs.	
UG UD	White	84	400	20	1.070	2003 23 6

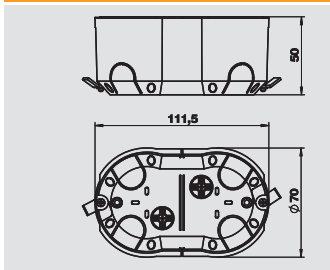
PS Polystyrene

/100 pc.

Universal cover for all socket types, cover with central fastening for connection sockets, bolt hole spacing 60 mm for accessory sockets and device connection sockets, bolt hole spacing 67 mm for connection sockets, cover edge is flush, surface is roughened, lowerable cover bolts.



Modul 45 cavity wall systems

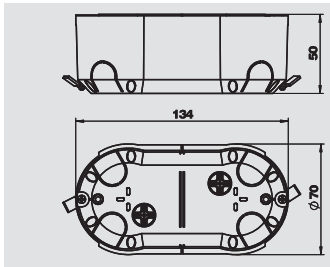


Modul 45 cavity wall accessory socket, single

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
HG-UPM1	Blue	1	3.300	6119 95 0

/pc.

Cavity wall accessory socket, oval, to accept support plates, type TG-UPM1, for Modul 45 devices of up to 1.5x module width = 67.5 mm, drill hole diameter 68 mm, hole spacing 45 mm.

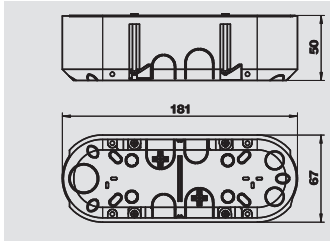
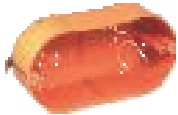


Modul 45 cavity wall accessory socket, double

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
HG-UPM2	Blue	1	4.600	6119 95 1

/pc.

Cavity wall accessory socket, oval, to accept support plates, type TG-UPM2, for Modul 45 devices of up to 2x module width = 90 mm, drill hole diameter 68 mm, hole spacing 68 mm.



Modul 45 cavity wall accessory socket, triple

Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
HG-UPM3	Blue	1	6.300	6119 95 2

/pc.

Cavity wall accessory socket, oval, to accept support plates, type TG-UPM3, for Modul 45 devices of up to 3x module width = 135 mm, drill hole diameter 68 mm, hole spacing 112 mm.





Terminal systems

	Terminal strip	Neutral and protective conductor terminal	198
		Dolü branch terminals	198
		Terminal strips	199
	Screwless terminals	Screwless terminals	201



Terminal strips

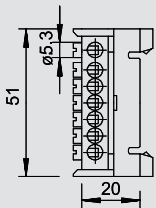


Neutral and protective conductor terminals, 7-pole

Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
60 N 7x16 BL	Blue	100	10	2.900	2054 00 0
60 S 7x16 GBGN	Yellow green	100	10	2.900	2054 01 9

PA Polyamide /100 pc.

With 7 terminals to 16 mm².
Clamping rail, nickel-plated brass, steel screws, electrogalvanised and transparently passivated, for snapping onto 35 mm hat rails to DIN EN 50022 (transverse) or flat rails 10 x 2–2.5 mm (lengthwise).

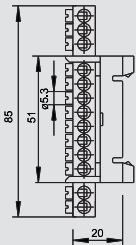


Neutral and protective conductor terminals, 12-pole

Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
60 N 12x16 BL	Blue	200	10	4.200	2054 08 6
60 S 12x16 GBGN	Yellow green	200	10	4.200	2054 09 4

PA Polyamide /100 pc.

With 12 terminals to 16 mm².
Clamping rail, nickel-plated brass, steel screws, electrogalvanised and transparently passivated, for snapping onto 35 mm hat rails to DIN EN 50022 (transverse) or flat rails 10 x 2–2.5 mm (lengthwise).



Dolü branch terminals, open on both sides

Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
70 VDE Sorted*		400	10	2.500	2055 02 3

PA Polyamide /100 pc.

* Sorted in colours black, brown, blue and yellow-green.
Terminals made of brass, screws of steel, galvanised and transparently passivated, 12-pole, strip separable into individual terminals, open on both sides.
Captive upwards screw.
Nominal cross-section 2,5 mm².
Nominal voltage 380 V.
Nominal current 16 A.
Max. connectable cross-sections per terminal: 4 x 2.5 mm², 5 x 1.5 mm² or 6 x 1 mm².

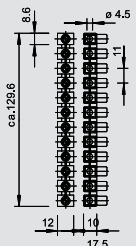


Dolü branch terminals, open on one side

Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
70 S Sorted*		180	10	2.600	2055 20 1

PA Polyamide /100 pc.

Terminals made of brass, screws of steel, galvanised and transparently passivated, 12-pole, strip separable into individual terminals, only open on one side.
Closed on one side, captive upwards screw.
Nominal cross-section 2,5 mm².
Nominal voltage 380 V.
Nominal current 20 A.
Max. connectable cross-sections per terminal: 4 x 2.5 mm², 5 x 1.5 mm² or 6 x 1 mm².
Delivery sorted by colour: 3 black, 2 blue, 3 yellow-green, 1 brown and 1 grey strip in each packaging unit.

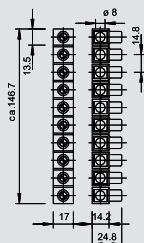


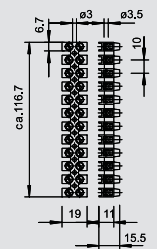
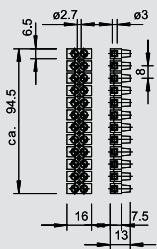
Dolü branch terminals, open on both sides

Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
71 Black	Black	120	10	7.030	2055 50 3

PA Polyamide /100 pc.

Terminals made of brass, screws of steel, galvanised and transparently passivated, 10-pole, strip separable into individual terminals, open on both sides.
Captive upwards screw.
Nominal cross-section 10 mm².
Nominal voltage 380 V.
Max. connectable cross-sections per terminal: 3 x 10 mm², 4 x 6 mm².





Terminal strips, polyamide

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
72 VDE	Transparent	500	10	2.050	2055 92 9

PA Polyamide /100 pc.

Brass terminals, steel screws, galvanised and blue passivated, 12-pole, individual terminals detachable.
Captive upwards screw.
Nominal cross-section 2,5 mm².
Nominal voltage 450 V.
Nominal current 24 A.
Max. attachment each side: 2.5 mm² single-wire or 1.5 mm² fine-wire with wire end sleeve.
Maximum approved ambient temperature to EN 60998: -5 to +85 °C.

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
74 VDE	Transparent	200	10	3.580	2056 14 3

PA Polyamide /100 pc.

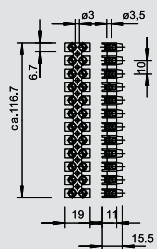
Tested to EN 60998.
Brass terminals, steel screws, electrogalvanised and blue passivated, 12pole, individual terminals detachable.
Captive upwards screw.
Nominal cross-section 4 mm².
Nominal voltage 450 V.
Nominal current 32 A.
Max. attachment each side: 4 mm² single-wire or 4 mm² fine-wire with wire end sleeve.
Maximum approved ambient temperature to EN 60998: -5 to +85 °C.



CEC



Terminal systems

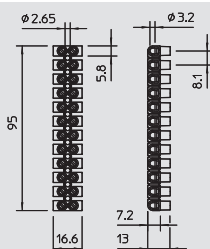


Terminal strips, polyamide wire protection clamp

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
74 D	Transparent	200	10	3.680	2056 17 8

PA Polyamide /100 pc.

With wire protection clamp.
Tested to EN 60998.
Brass terminals, steel screws, galvanised and blue passivated, 12-pole, individual terminals detachable.
Captive upwards screw.
Nominal cross-section 4 mm².
Nominal voltage 450 V.
Nominal current 32 A.
Max. attachment each side: 4 mm² single-wire or 4 mm² fine-wire without wire end sleeve.
Maximum approved ambient temperature to EN 60998: -5 to +85 °C.

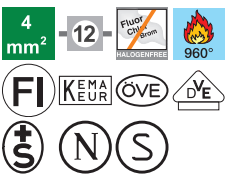


Terminal strips, polypropylene

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
72 CE WS	White	500	10	1.800	2056 07 0
72 CE SW	Black	500	10	1.800	2056 08 9

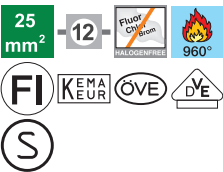
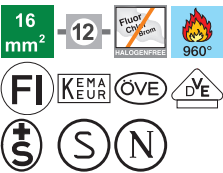
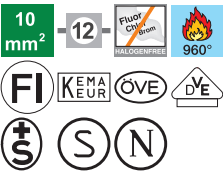
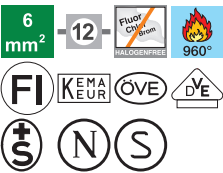
PP Polypropylene /100 pc.

Tested to EN 60998.
Steel terminals, steel screws, electrogalvanised, 12-pole, individual terminals detachable from strips using "twist'n'pull".
Captive upwards screw.
Max. approved ambient temperature to EN 60998: -5 to +80 °C.
Nominal cross-section 4 mm².
Nominal voltage 450 V.
Nominal current 32 A.
Max. attachment each side: 4 mm² single-wire or 4 mm² fine-wire without wire end sleeve.



Terminal strips

Terminal systems



Terminal strips, polypropylene

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
74 CE WS	White	200	10	2.600	2056 22 4
74 CE SW	Black	200	10	2.600	2056 23 2

PP Polypropylene /100 pc.

Tested to EN 60998.
Steel terminals, steel screws, electrogalvanised, 12-pole, individual terminals detachable from strips using "twist'n'pull".
Captive upwards screw.
Max. approved ambient temperature to EN 60998: -5 to +80 °C.
Nominal cross-section 6 mm².
Nominal voltage 450 V.
Nominal current 41 A.
Max. attachment each side: 6 mm² single-wire or 6 mm² fine-wire without wire end sleeve.

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
76 CE WS	White	100	10	4.300	2056 37 2
76 CE SW	Black	100	10	4.300	2056 38 0

PP Polypropylene /100 pc.

Tested to EN 60998.
Steel terminals, steel screws, electrogalvanised, 12-pole, individual terminals detachable from strips using "twist'n'pull".
Captive upwards screw.
Max. approved ambient temperature to EN 60998: -5 to +80 °C.
Nominal cross-section 10 mm².
Nominal voltage 450 V.
Nominal current 57 A.
Max. attachment each side: 10 mm² single-wire or 10 mm² fine-wire without wire end sleeve.

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
78 CE WS	White	100	10	7.500	2056 55 0
78 CE SW	Black	100	10	7.500	2056 56 9

PP Polypropylene /100 pc.

Tested to EN 60998.
Steel terminals, steel screws, electrogalvanised, 12-pole, individual terminals detachable from strips using "twist'n'pull".
Captive upwards screw.
Max. approved ambient temperature to EN 60998: -5 to +80 °C.
Nominal cross-section 16 mm².
Nominal voltage 450 V.
Nominal current 76 A.
Max. attachment each side: 16 mm² multi-wire or 16 mm² fine-wire without wire end sleeve.

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
79 CE WS	White	50	10	11.200	2056 57 7
79 CE SW	Black	50	10	11.200	2056 58 5

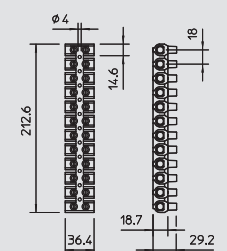
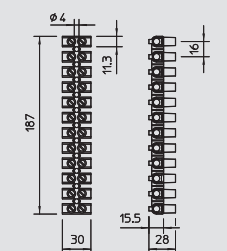
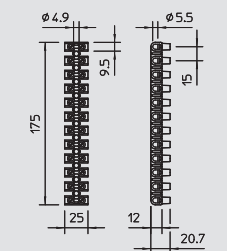
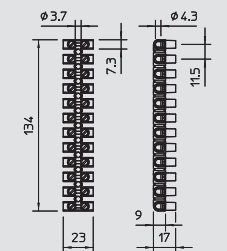
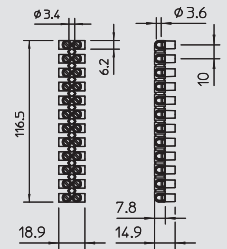
PP Polypropylene /100 pc.

Tested to EN 60998.
Brass terminals, steel screws, electrogalvanised and transparently passivated, 12-pole, individual terminals detachable from strips.
Captive upwards screw.
Max. approved ambient temperature to EN 60998: -5 to +80 °C.
Nominal cross-section 25 mm².
Nominal voltage 750 V.
Nominal current 101 A.
Max. attachment each side: 25 mm² multi-wire or 16 mm² fine-wire without wire end sleeve.

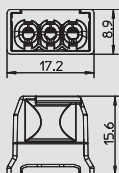
Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
80 CE WS	White	50	10	17.400	2056 59 0
80 CE SW	Black	50	10	17.400	2056 59 3

PP Polypropylene /100 pc.

Tested to EN 60998.
Brass terminals, steel screws, electrogalvanised, 12-pole, individual terminals detachable from strips.
Captive upwards screw.
Max. approved ambient temperature to EN 60998: -5 to +80 °C.
Nominal cross-section 35 mm².
Nominal voltage 750 V.
Nominal current 125 A.
Max. attachment each side: 35 mm² multi-wire or 25 mm² fine-wire without wire end sleeve.



Screwless terminals

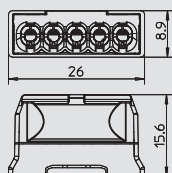


Screwless terminals, 3-pole

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
61 325 LGR	Light grey	2,000	100	0.135	2054 48 5

PA Polyamide

Screwless terminal to connect single-strand cables.
Nominal cross-section:
3 x 0.5 mm² to 2.5 mm² single-wire cable.
3 x 1.5 mm² to 2.5 mm² rigid, multi-wire cable.
Rated voltage 450 V.
Rated current 24 A.
Stripping length: 8–9 mm.
Inspection opening: phase tester and testing pin (max. Ø 2 mm).

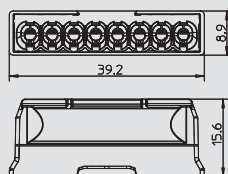


Screwless terminals, 5-pole

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
61 525 LGR	Light grey	2,000	100	0.300	2054 50 7

PA Polyamide

Screwless terminal to connect single-strand cables.
Nominal cross-section:
5 x 0.5 mm² to 2.5 mm² single-wire cable
5 x 1.5 mm² to 2.5 mm² rigid, multi-wire cable
Rated voltage 450 V.
Rated current 24 A.
Stripping length: 8–9 mm.
Inspection opening: phase tester and testing pin (max. Ø 2 mm).



Screwless terminals, 8-pole

Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
61 825 LGR	Light grey	1,000	50	0.490	2054 52 3

PA Polyamide

Screwless terminal to connect single-strand cables.
Nominal cross-section:
8 x 0.5 mm² to 2.5 mm² single-wire cable.
8 x 1.5 mm² to 2.5 mm² rigid, multi-wire cable.
Rated voltage 450 V.
Rated current 24 A.
Stripping length: 8–9 mm.
Inspection opening: phase tester and testing pin (max. Ø 2 mm).





Cable fastening systems, plastic

	Cap nut cable gland	Metric thread	204
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		Multiple sealing insert	210
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		Sealing plate	231

Cap nut cable gland

IP 68

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Cable gland, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC VM12 SGR	M12 x 1,5	Silver grey	500	50	0.318	2022 84 3
V-TEC VM16 SGR	M16 x 1,5	Silver grey	500	50	0.638	2022 84 5
V-TEC VM20 SGR	M20 x 1,5	Silver grey	600	50	0.861	2022 84 7
V-TEC VM25 SGR	M25 x 1,5	Silver grey	300	25	1.344	2022 84 9
V-TEC VM32 SGR	M32 x 1,5	Silver grey	240	20	2.230	2022 85 1
V-TEC VM40 SGR	M40 x 1,5	Silver grey	120	10	3.467	2022 85 3
V-TEC VM50 SGR	M50 x 1,5	Silver grey	60	5	5.466	2022 85 5
V-TEC VM63 SGR	M63 x 1,5	Silver grey	60	5	8.306	2022 85 7
V-TEC VM12 LGR	M12 x 1,5	Light grey	500	50	0.318	2022 86 2
V-TEC VM16 LGR	M16 x 1,5	Light grey	500	50	0.638	2022 86 4
V-TEC VM20 LGR	M20 x 1,5	Light grey	600	50	0.861	2022 86 6
V-TEC VM25 LGR	M25 x 1,5	Light grey	300	25	1.344	2022 86 8
V-TEC VM32 LGR	M32 x 1,5	Light grey	240	20	2.230	2022 87 0
V-TEC VM40 LGR	M40 x 1,5	Light grey	120	10	3.467	2022 87 2
V-TEC VM50 LGR	M50 x 1,5	Light grey	60	5	5.466	2022 87 4
V-TEC VM63 LGR	M63 x 1,5	Light grey	60	5	8.306	2022 87 6
V-TEC VM12 SW	M12 x 1,5	Black	500	50	0.318	2022 88 3
V-TEC VM16 SW	M16 x 1,5	Black	500	50	0.638	2022 88 5
V-TEC VM20 SW	M20 x 1,5	Black	600	50	0.861	2022 88 7
V-TEC VM25 SW	M25 x 1,5	Black	300	25	1.344	2022 88 9
V-TEC VM32 SW	M32 x 1,5	Black	240	20	2.230	2022 89 1
V-TEC VM40 SW	M40 x 1,5	Black	120	10	3.467	2022 89 3
V-TEC VM50 SW	M50 x 1,5	Black	60	5	5.466	2022 89 5
V-TEC VM63 SW	M63 x 1,5	Black	60	5	8.306	2022 89 7

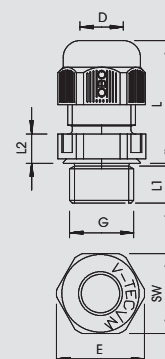
PA Polyamide

/100 pc.

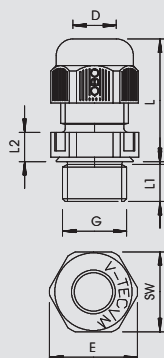
With metric connecting thread to IEC 423 robust cap-nut cable gland with large sealing area. Strain relief, wringing protection and tightness over the whole clamping area. Sealing ring of chloroprene/nitrile rubber. Moulded sealing on the intermediate support, so no connection thread sealing ring needed, tested to VDE DIN EN 50262, protection rating IP 68 at 5 bar/1 hr. Max. permitted ambient temperature -20 °C to +65 °C.

Important dimensions, V-TEC cable gland

G	D	SW	E	L min.	L max.	L1	L2
	mm	mm	mm	mm	mm	mm	mm
M12 x 1.5	3.5-7	15	16.5	18.5	23.5	8	5
M16 x 1.5	4.5-10	20	22	21.5	29	8	5
M20 x 1.5	6-13	24	27	23.5	30.5	10	6
M25 x 1.5	9-17	29	32	26	35	10	6
M32 x 1.5	15-21	36	41	29	40	11	6
M40 x 1.5	16-28	44	50	36	46	11	7
M50 x 1.5	23-35	54	60	43	52	12	8
M63 x 1.5	36-48	67	75	48	60	12	9



Cap nut cable gland



Cable gland, long metric thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC VM L12 SGR	M12 x 1,5	Silver grey	500	50	0.392	2022 92 1
V-TEC VM L16 SGR	M16 x 1,5	Silver grey	500	50	0.727	2022 92 4
V-TEC VM L20 SGR	M20 x 1,5	Silver grey	600	50	0.883	2022 92 6
V-TEC VM L25 SGR	M25 x 1,5	Silver grey	300	25	1.597	2022 92 8
V-TEC VM L32 SGR	M32 x 1,5	Silver grey	240	20	2.047	2022 93 0
V-TEC VM L40 SGR	M40x1,5	Silver grey	120	10	3.168	2022 93 3
V-TEC VM L50 SGR	M50x1,5	Silver grey	60	5	5.010	2022 93 5
V-TEC VM L63 SGR	M63x1,5	Silver grey	60	5	7.390	2022 93 7
V-TEC VM L12 LGR	M12 x 1,5	Light grey	500	50	0.392	2022 94 3
V-TEC VM L16 LGR	M16 x 1,5	Light grey	500	50	0.727	2022 94 5
V-TEC VM L20 LGR	M20 x 1,5	Light grey	600	50	0.883	2022 94 7
V-TEC VM L25 LGR	M25 x 1,5	Light grey	300	25	1.597	2022 94 9
V-TEC VM L32 LGR	M32 x 1,5	Light grey	240	20	2.047	2022 95 1
V-TEC VM L40 LGR	M40 x 1,5	Light grey	120	10	3.168	2022 95 3
V-TEC VM L50 LGR	M50 x 1,5	Light grey	60	5	5.010	2022 95 5
V-TEC VM L63 LGR	M63 x 1,5	Light grey	60	5	7.390	2022 95 7
V-TEC VM L12 SW	M12 x 1,5	Black	500	50	0.392	2022 96 4
V-TEC VM L16 SW	M16 x 1,5	Black	500	50	0.727	2022 96 6
V-TEC VM L20 SW	M20 x 1,5	Black	600	50	0.883	2022 96 8
V-TEC VM L25 SW	M25 x 1,5	Black	300	25	1.597	2022 97 0
V-TEC VM L32 SW	M32 x 1,5	Black	240	20	2.047	2022 97 2
V-TEC VM L40 SW	M40 x 1,5	Black	120	10	3.168	2022 97 4
V-TEC VM L50 SW	M50 x 1,5	Black	60	5	5.010	2022 97 6
V-TEC VM L63 SW	M63 x 1,5	Black	60	5	7.390	2022 97 8

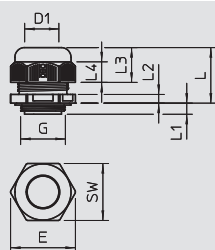
PA Polyamide

/100 pc.

With metric connecting thread to IEC 423 robust cap-nut cable gland with large sealing area. Strain relief, wringing protection and tightness over the whole clamping area. Sealing ring of chloroprene/nitrile rubber. Moulded sealing on the intermediate support, so no connection thread sealing ring needed, tested to VDE DIN EN 50262, protection rating IP 68 at 5 bar/1 hr. Max. permitted ambient temperature -20 °C to +65 °C.

Important dimensions, V-TEC cable gland

G	D	SW	E	L min.	L max.	L1	L2
mm	mm	mm	mm	mm	mm	mm	mm
M12 x 1.5	3.5-7	15	16.5	17.5	24	15	5
M16 x 1.5	4.5-10	20	22	20.5	29.5	15	5
M20 x 1.5	6-13	24	27	22.5	32.5	15	5
M25 x 1.5	9-17	29	32	25.5	36	15	6
M32 x 1.5	15-21	36	41	28	40	15	6
M40 x 1.5	16-28	44	50	32	46	18	7
M50 x 1.5	23-35	54	60	37.5	54.3	18	8
M63 x 1.5	36-48	68	75	41.5	60.3	18	9



Cable gland, short metric thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC M KA M20	M20x1,5	Light grey	600	50	0.970	2024 82 9

PA Polyamide

/100 pc.

With short metric connection thread to IEC 423, particularly suitable for junction boxes with metric connection thread. Robust cable gland with cap nut design for high tightness requirements. Strain relief, torsion protection and tightness over the entire clamping range. Sealing ring made of polychloroprene/acrylnitrilbutadiene rubber. Moulded shaped sealing lip on intermediate support, thus no connection thread sealing ring required, VDE-tested to DIN EN 50262, protection rating IP 68 at 5 bar 1 h. Temperature range -20 °C to +65 °C.

Important dimensions, V-TEC cable gland

G	D	SW	E	L min.	L max.	L1	L2	L3
mm	mm	mm	mm	mm	mm	mm	mm	mm
M20 x 1.5	6-13	24	27	23	30	7	5	18

Cap nut cable gland



Cable gland, PG thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC PG7 SGR	Pg 7	Silver grey	500	50	0.410	2022 60 5
V-TEC PG9 SGR	Pg 9	Silver grey	500	50	0.630	2022 61 3
V-TEC PG11 SGR	Pg 11	Silver grey	500	50	0.890	2022 62 1
V-TEC PG13.5 SGR	Pg 13,5	Silver grey	400	50	1.020	2022 64 8
V-TEC PG16 SGR	Pg 16	Silver grey	250	25	1.380	2022 65 6
V-TEC PG21 SGR	Pg 21	Silver grey	300	25	2.290	2022 66 4
V-TEC PG29 SGR	Pg 29	Silver grey	240	20	4.020	2022 67 2
V-TEC PG36 SGR	Pg 36	Silver grey	120	10	6.040	2022 68 0
V-TEC PG42 SGR	Pg 42	Silver grey	60	5	7.650	2022 69 9
V-TEC PG48 SGR	Pg 48	Silver grey	60	5	9.460	2022 70 2
V-TEC PG7 LGR	Pg 7	Light grey	500	50	0.410	2024 70 5
V-TEC PG9 LGR	Pg 9	Light grey	500	50	0.630	2024 71 3
V-TEC PG11 LGR	Pg 11	Light grey	500	50	0.890	2024 72 1
V-TEC PG13 LGR	Pg 13,5	Light grey	400	50	1.020	2024 74 8
V-TEC PG16 LGR	Pg 16	Light grey	250	25	1.380	2024 75 6
V-TEC PG21 LGR	Pg 21	Light grey	300	25	2.290	2024 76 4
V-TEC PG29 LGR	Pg 29	Light grey	240	20	4.020	2024 77 2
V-TEC PG36 LGR	Pg 36	Light grey	120	10	6.030	2024 78 0
V-TEC PG42 LGR	Pg 42	Light grey	60	5	7.650	2024 79 9
V-TEC PG48 LGR	Pg 48	Light grey	60	5	9.460	2024 80 2

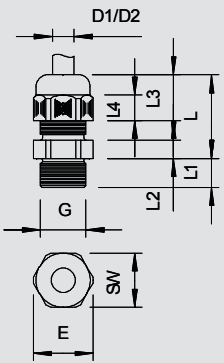
PA Polyamide /100 pc.

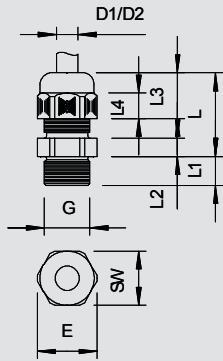
Robust cap-nut cable gland with PG connection thread according to IEC 40430 with large sealing area, as well as strain relief and torsion protection for high sealing demands. Sealing ring of chloroprene/nitrile rubber, moulded sealing, so no connection thread sealing ring needed. Tested to VDE 0619.

Protection IP 68 at 5 bar/1 h.

Important dimensions, V-TEC cable gland

G	D1	D2	SW	E	L min.	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	2.5-6.5	3-6.5	15	16.5	18	23	8	5	12.6
Pg 9	2.5-8	3.5-8	19	21	21	27	8	5	15.5
Pg 11	3.5-10	4.5-10	22	25	22	29	8	5	17
Pg 13.5	5-12	6-12	24	27	23	30	9	5	18
Pg 16	7-14	7-14	27	30	25	33	10	6	19
Pg 21	9-18	12-18	33	37.5	28	38	11	6	22
Pg 29	14-25	17-25	42	47.5	32	43	11	7	24.5
Pg 36	18-32	20-32	53	60	39	54	13	8	31
Pg 42	24-38	26-38	60	68.5	42	57	13	9	32.5
Pg 48	30-44	30-44	65	74	42	58	14	9	33





Cable gland, long PG thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC L PG7 SGR	Pg 7	Silver grey	500	50	0.410	2024 17 9
V-TEC L PG9 SGR	Pg 9	Silver grey	500	50	0.670	2024 18 7
V-TEC L PG11 SGR	Pg 11	Silver grey	500	50	0.930	2024 19 5
V-TEC L PG13 SGR	Pg 13,5	Silver grey	600	50	1.090	2024 20 9
V-TEC L PG16 SGR	Pg 16	Silver grey	250	25	1.490	2024 21 7
V-TEC L PG21 SGR	Pg 21	Silver grey	300	25	2.330	2024 22 5
V-TEC L PG29 SGR	Pg 29	Silver grey	240	20	3.860	2024 23 3
V-TEC L PG36 SGR	Pg 36	Silver grey	120	10	7.750	2024 24 1
V-TEC L PG7 LGR	Pg 7	Light grey	500	50	0.410	2024 28 4
V-TEC L PG9 LGR	Pg 9	Light grey	500	50	0.670	2024 29 2
V-TEC L PG11 LGR	Pg 11	Light grey	500	50	0.930	2024 30 6
V-TEC L PG13 LGR	Pg 13,5	Light grey	600	50	1.090	2024 31 4
V-TEC L PG16 LGR	Pg 16	Light grey	250	25	1.490	2024 32 2
V-TEC L PG21 LGR	Pg 21	Light grey	300	25	2.330	2024 33 0
V-TEC L PG29 LGR	Pg 29	Light grey	240	20	3.860	2024 34 9
V-TEC L PG36 LGR	Pg 36	Light grey	120	10	7.750	2024 35 7
V-TEC L PG42 LGR	Pg 42	Light grey	60	5	10.070	2024 36 5
V-TEC L PG48 LGR	Pg 48	Light grey	60	5	10.730	2024 37 3

PA Polyamide

/100 pc.

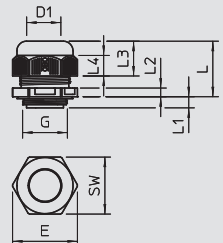
V-TEC L: with Pg connecting thread to DIN 40430
Robust cap-nut cable gland with large sealing area,
as well as strain relief and torsion protection for high sealing demands,
gasket of chloroprene/nitrile rubber,
moulded sealing, so no connection thread sealing ring needed,
tested to VDE 0619.

Protection rating IP 68 at 5 bar for 1 hr.

Important dimensions, V-TEC cable gland

G	D1	D2	SW	E	L min.	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	2.5-6.5	3-6.5	15	16.5	18	23	15	5	12.6
Pg 9	2.5-8	3.5-8	19	21	21	27	15	5	15.5
Pg 11	3.5-10	4.5-10	22	25	22	29	15	5	17
Pg 13.5	5-12	6-12	24	27	23	30	15	5	18
Pg 16	7-14	7-14	27	30	25	33	15	6	19
Pg 21	9-18	12-18	33	37.5	28	38	15	6	22
Pg 29	14-25	17-25	42	47.5	32	43	15	7	24.5
Pg 36	18-32	20-32	53	60	39	54	18	8	31

Cable gland, short PG thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC KA PG16LGR	Pg 16	Light grey	250	25	1.200	2024 86 1

PA Polyamide

/100 pc.

With short PG connection thread to DIN 40430, particularly suitable for junction boxes with PG connection thread. Robust cable gland with cap nut design for high tightness requirements.
Strain relief, torsion protection and tightness over the entire clamping range. Sealing ring made of polychloroprene/acrylnitrilbutadiene rubber. Moulded shaped sealing lip on intermediate support, thus no connection thread sealing ring required, VDE-tested to DIN EN 50262, protection rating IP 68 at 5 bar 1 h. Temperature range -20 °C to +65 °C.

Important dimensions, V-TEC cable gland

G	D	SW	E	L min.	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg16	7-14	27	30	25	33	7	6	18

Cap nut cable gland



Cable gland, EX area, PG thread

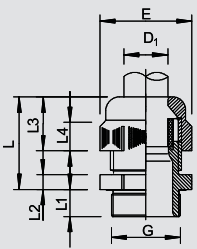
Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
VTEC EX PG7 SW	Pg 7	Black	600	50	0.410	2050 00 5
VTEC EX PG9 SW	Pg 9	Black	500	50	0.630	2050 01 3
VTEC EX PG11 SW	Pg 11	Black	500	50	0.890	2050 02 1
VTEC EX PG13.5SW	Pg 13,5	Black	400	50	1.020	2050 04 8
VTEC EX PG16 SW	Pg 16	Black	250	25	1.380	2050 05 6
VTEC EX PG21 SW	Pg 21	Black	300	25	2.290	2050 06 4
VTEC EX PG29 SW	Pg 29	Black	240	20	4.020	2050 07 2
VTEC EX PG36 SW	Pg 36	Black	120	10	6.030	2050 08 0
VTEC EX PG42 SW	Pg 42	Black	60	5	7.650	2050 09 9
VTEC EX PG48 SW	Pg 48	Black	60	5	9.460	2050 10 2

PA Polyamide /100 pc.

Cable gland with EG design type approval certificate for products and protection systems for use in accordance with the regulations in explosion-hazard area. Directive 94/9/EC. EC design type approval certificate number: PTB 99 ATEX 3112X and ... 3113X. With PG connection thread according to IEC 423. Robust cap-nut cable gland with large sealing area, as well as strain relief and torsion protection for high sealing demands. Sealing ring of chloroprene/nitrile rubber, moulded sealing, so no connection thread sealing ring needed, VDE-tested. Protection rating IP 68 at 5 bar.

Important dimensions, V-TEC cable gland

G	D1	SW	E	L min.	L max.	L1	L2	L3
mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	3.5-6.5	15	16.5	18	23	8	5	12.6
Pg 9	5-8	19	21	21	27	8	5	17
Pg 11	4.5-10	22	25	22	29	8	5	17
Pg 13.5	6.5-12	24	27	23	30	9	5	18
Pg 16	7-14	27	30	25	33	10	6	19
Pg 21	12-18	33	37.5	28	38	11	6	22
Pg 29	17-25	42	47.5	32	43	11	7	24.5
Pg 36	21-32	53	60	39	54	13	8	31
Pg 42	24-38	60	68.5	42	57	13	9	32.5
Pg 48	30-44	65	74	42	58	14	9	33



Cable gland, EX area, long PG thread

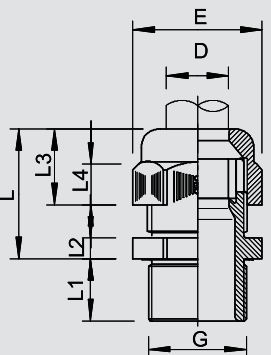
Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
VTEC EXL PG9 SW	Pg 9	Black	500	50	0.670	2050 14 5
VTEC EXL PG11 SW	Pg 11	Black	500	50	0.930	2050 15 3
VTEC EXL PG13 SW	Pg 13,5	Black	400	50	1.090	2050 16 1
VTEC EXL PG16 SW	Pg 16	Black	250	25	1.490	2050 18 8
VTEC EXL PG21 SW	Pg 21	Black	300	25	2.330	2050 19 6

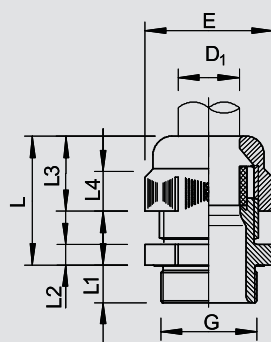
PA Polyamide /100 pc.

Cable gland with EG design type approval certificate for products and protection systems for use in accordance with the regulations in explosion-hazard area. Directive 94/9/EC EC design type approval certificate number: PTB 99 ATEX 3112X and ... 3113X. Robust cap-nut cable gland with large sealing area, as well as strain relief and torsion protection for high sealing demands. Sealing ring of chloroprene/nitrile rubber, moulded sealing, so no connecting sealing ring needed. Tested to VDE standards Protection IP 68 at 5 bar.

Important dimensions, V-TEC cable gland

G	D1	SW	E	L min.	L max.	L1	L2	L3
mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	5-8	19	21	21	27	15	5	15.5
Pg 11	4.5-10	22	25	22	29	15	5	17
Pg 13.5	6.5-12	24	27	23	30	15	5	18
Pg 16	7-14	27	30	25	33	15	6	19
Pg 21	12-18	33	37.5	28	38	15	6	22





Cable gland, EX area, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
VTEC EX M12 SW	M12 x 1,5	Black	600	50	0.360	2050 30 7
VTEC EX M16 SW	M16 x 1,5	Black	500	50	0.630	2050 31 5
VTEC EX M20 SW	M20 x 1,5	Black	400	50	1.000	2050 32 3
VTEC EX M25 SW	M25 x 1,5	Black	300	25	2.350	2050 33 1
VTEC EX M32 SW	M32 x 1,5	Black	240	20	3.900	2050 35 8
VTEC EX M40 SW	M40 x 1,5	Black	120	10	7.500	2050 36 6
VTEC EX M50 SW	M50 x 1,5	Black	60	5	9.200	2050 37 4
VTEC EX M63 SW	M63 x 1,5	Black	60	5	9.460	2050 38 2

PA Polyamide

/100 pc.

Cable gland with EG design type approval certificate for products and protection systems for use in accordance with the regulations in explosion-hazard area. Directive 94/9/EC.

EC design type approval certificate number: PTB 99 ATEX 3112X and ... 3113X.

With metric connecting thread to IEC 423.

Robust cap-nut cable gland with large sealing area, strain relief and torsion protection for high sealing requirements.

Sealing ring of chloroprene/nitrile rubber, moulded sealing, so no connection thread sealing ring needed. Tested to VDE standards.

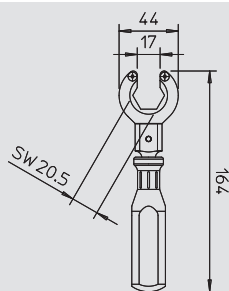
Protection IP 68 at 5 bar.

Important dimensions, V-TEC cable gland

G	D1	SW	E	L min.	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
M12 x 1.5	3.5-6.5	15	16.5	18	23	8	5	12.6
M16 x 1.5	5-8	19	21	21	27	8	5	15.5
M20 x 1.5	7-12	24	27	23	30	9	5	18
M25 x 1.5	12-18	33	37.5	28	38	11	6	22
M32 x 1.5	17-25	42	47.5	32	43	11	7	24.5
M40 x 1.5	21-32	53	60	39	54	13	8	31
M50 x 1.5	24-37	60	68.5	42	57	13	9	32.5
M63 x 1.5	30-44	65	74	42	58	14	9	33



Cable fastening systems, plastic



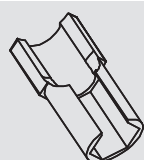
Ground ratchet

Type	Pack.	Weight	Item No.
	pcs	kg/100 pcs.	
V-TEC RA	1	11.000	3010 20 1

/pc.

Professional cable gland ratchet, including grip, also to tighten and slacken previously mounted cable glands. The special principle gives this system time-saving and slip-free tightening, without annoying removal and re-gripping during screwing. Even cable glands, which are mounted very closely to each other and may be in the second or third row, can be reached without any problems. If necessary, the supplied grip can be replaced with an appropriate standard torque wrench.

Load capacity to max. 20 Nm.

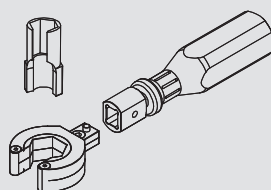


Socket spanner attachment

Type	Size	SW	Pack.	Weight	Item No.
		mm	pcs	kg/100 pcs.	
V-TEC ST15	M12	15	1	3.500	3010 23 6
V-TEC ST20	M16	20	1	3.700	3010 24 4
V-TEC ST24	M20	24	1	6.600	3010 25 2
V-TEC ST29	M25	29	1	8.500	3010 26 0

/pc.

Socket spanner attachment opened at the side with side for ground ratchet, V-TEC GR.



Ratchet set

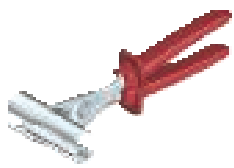
Type	Accessories	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
V-TEC RA SET	1 ground ratchet 1 grip for ground ratchet 4 socket spanner attachments	1	71.600	3010 27 5

/pc.

Set consisting of a ground ratchet, type V-TEC RA, a grip for ground ratchet, type V-TEC GR, and four socket spanner attachments in sizes WAF 15, WAF 20, WAF 24 and WAF 29.



Cap nut cable gland

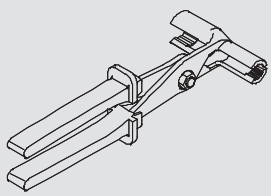


Special tongs for cable glands

Type	Box Qty.	Pack.	Weight	Item No.
	pcs	pcs	kg/100 pcs.	
186	25	1	47.000	3010 10 4

/pc.

Universal tool for easy tightening of all glands up to size PG 21 or M25 x 1.5, also usable with glands very close to one another.
Small opening PG 7–PG 11.
Large opening PG 13.5–PG 21.



M

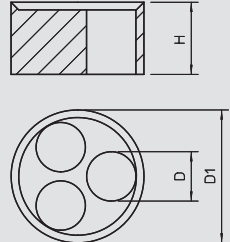


Multiple sealing insert, metric

Type	Size	Dimension D	Dimension H	Dimension D1	Number of drill holes	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm		pcs	pcs	kg/100 pcs.	
107 C VM 20 2x4	M20	4	8.1	15.1	2	750	50	0.130	2029 67 2
107 C VM 20 4x5	M20	5	8.1	15.1	4	750	50	0.080	2029 67 5
107 C VM 20 2x6	M20	6	8.1	15.1	2	750	50	0.100	2029 67 7
107 C VM 25 5x4	M25	4	10	19.8	5	500	50	0.180	2029 67 9
107 C VM 25 3x6	M25	6	10	19.8	3	500	50	0.210	2029 68 2
107 C VM 25 2x6	M25	6	10	19.8	2	500	50	0.260	2029 68 5
107 C VM 25 3x7	M25	7	10	19.8	3	500	50	0.180	2029 68 8
107 C VM 25 2x8	M25	8	10	19.8	2	500	50	0.200	2029 69 0
107 C VM 32 2x8	M32	8	13.4	25.1	2	500	25	0.530	2029 69 3
107 C VM 32 4x8	M32	8	13.4	25.1	4	500	25	0.400	2029 69 6

NBR-SBR Mixture of nitrile and styrene-butadiene rubber /100 pc.

Use to insert multiple thin cables in the V-TEC VM cable glands, is replaced with the simple sealing ring of the cable gland.



Pg

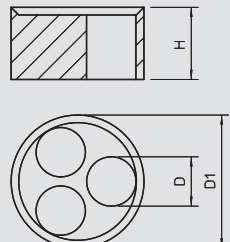


Multiple sealing insert, PG

Type	Size	Dimension D	Dimension H	Dimension D1	Number of drill holes	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm		pcs	pcs	kg/100 pcs.	
107 C V 16 5x4	Pg 16	4	9.5	17.5	5	750	50	0.205	2029 61 8
107 C V 16 3x5	Pg 16	5	9.5	17.5	3	750	50	0.210	2029 62 6
107 C V 16 2x6	Pg 16	6	9.5	17.5	2	750	50	0.210	2029 63 4
107 C V 16 3x6	Pg 16	6.5	9.5	17.5	3	750	50	0.155	2029 64 2
107 C V 21 3x7	Pg 21	7	12	23.3	3	500	25	0.450	2029 65 0
107 C V 21 2x8	Pg 21	8	12	23.3	2	500	25	0.340	2029 66 9

NBR-SBR Mixture of nitrile and styrene-butadiene rubber /100 pc.

Use to insert multiple thin cables in the V-TEC cable glands, is replaced with the simple sealing ring of the cable gland.



M

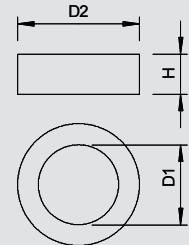


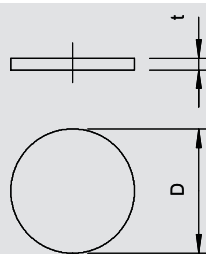
Reducing seal insert, metric

Type	Size	Sealing range D	Dimension D1	Dimension D2	Dimension H	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107CR VM 12	M12	2-5	5	8.9	7.2	1,300	50	0.050	2029 56 0
107CR VM 16	M16	2.5-7	7	12.7	8.1	1,300	50	0.115	2029 56 3
107CR VM 20	M20	4-9	9	16	9.3	1,200	50	0.205	2029 56 6
107CR VM 25	M25	6-13	13	20.7	10.5	1,200	50	0.340	2029 56 9
107CR VM 32	M32	11-16	16	25.7	12.3	350	25	0.625	2029 57 2
107CR VM 40	M40	12-23	23	33.7	15	300	25	1.140	2029 57 5
107CR VM 50	M50	18-29	29	41.7	18.5	250	25	2.080	2029 57 8
107CR VM 63	M63	29-40	40	54.8	20.2	150	25	3.560	2029 58 1

NBR-SBR Mixture of nitrile and styrene-butadiene rubber /100 pc.

Reduces the sealing area D of the cable gland V-TEC VM and V-TEC VM L.





Dust protection plate, metric

M



Type	Size	Dimension D	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 S VTEC M12	M12	12	1.5	12,000	100	0.001	2028 87 0
107 S VTEC M16	M16	16	1.5	10,000	100	0.002	2028 87 3
107 S VTEC M20	M20	20	1.5	12,000	100	0.004	2028 87 5
107 S VTEC M25	M25	25	1.5	1,500	100	0.008	2028 87 7
107 S VTEC M32	M32	32	1.5	1,000	100	0.012	2028 88 0
107 S VTEC M40	M40	40	1.5	1,200	100	0.022	2028 88 3
107 S VTEC M50	M50	50	1.5	1,000	100	0.040	2028 88 5
107 S VTEC M63	M63	63	1.5	1,000	100	0.063	2028 88 7

ZPE Cellular polyethylene

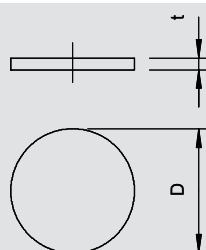
/100 pc.

Cellular polyethylene.

Small protective disk to protect the V-TEC VM and V-TEC VM MS cable glands against dust before the cable is installed.

Application: the disks are pre-mounted between the cap nut and the seal. They do not need to be removed when the cable is installed, but are simply passed through to the interior with the cable.

Note: the disks do not provide any mechanical protection.



Dust protection plate, PG

Pg



Type	Size	Dimension D	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 S VTEC PG7	Pg 7	11	1.5	12,000	100	0.001	2028 89 1
107 S VTEC PG9	Pg 9	14	1.5	12,000	100	0.002	2028 90 5
107 S VTEC PG11	Pg 11	16.5	1.5	12,000	100	0.003	2028 91 3
107 S VTEC PG13	Pg 13,5	18.5	2	10,000	100	0.004	2028 92 1
107 S VTEC PG16	Pg 16	21	2	8,000	100	0.006	2028 94 8
107 S VTEC PG21	Pg 21	26.5	2	12,000	100	0.010	2028 95 6
107 S VTEC PG29	Pg 29	34.5	2	1,000	100	0.015	2028 96 4
107 S VTEC PG36	Pg 36	44	3	1,200	100	0.035	2028 97 2
107 S VTEC PG42	Pg 42	50	3	1,200	100	0.050	2028 98 0
107 S VTEC PG48	Pg 48	56	3	1,200	100	0.060	2028 99 9

ZPE Cellular polyethylene

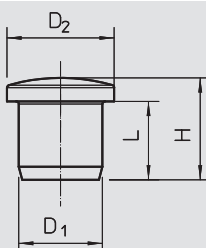
/100 pc.

Cellular polyethylene.

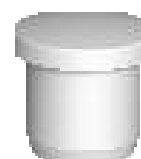
Small protective disk to protect the V-TEC and V-TEC MS cable glands against dust before the cable is installed.

Application: the disks are pre-mounted between the cap nut and the seal. They do not need to be removed when the cable is installed, but are simply passed through to the interior with the cable.

Note: the disks do not provide any mechanical protection.



Screw plug, metric and PG



Type	Size	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
107VS VM 5 PA	M12 / Pg9	Light grey	600	50	0.041	2029 51 1
107VS VM 9 PA	M16 / Pg13,5	Light grey	750	50	0.090	2029 51 4
107VS VM 12 PA	M20 / Pg16	Light grey	500	50	0.130	2029 51 7
107VS VM 16 PA	M25 / Pg21	Light grey	500	50	0.190	2029 52 0
107VS VM 20 PA	M32 / Pg29	Light grey	300	25	0.250	2029 52 3

PA Polyamide

/100 pc.

Screw plug for dust-proof and waterproof closure of installed but (as yet) unfilled V-TEC... Cable glands.

Important dimensions, screw plug

G	D1	L	H	D2
	mm	mm	mm	mm
For M12	5.5	9	12.5	10
For M16	9.5	12	16	13.5
For M20	12	12	16.5	16.5
For M25	16	15	19.5	20.5
For M32	20	17	21.5	24.5

Cone cable gland, polyamide



Cable gland, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 M 12 PA	M12 x 1,5	Light grey	1.000	50	0.420	2035 41 3
106 M 16 PA	M16 x 1,5	Light grey	600	50	0.610	2035 42 1
106 M 20 PA	M20 x 1,5	Light grey	600	50	1.060	2035 44 8
106 M 25 PA	M25 x 1,5	Light grey	600	50	2.330	2035 45 6
106 M 32 PA	M32 x 1,5	Light grey	120	10	3.830	2035 46 4
106 M 40 PA	M40 x 1,5	Light grey	80	10	7.800	2035 47 2
106 M 50 PA	M50 x 1,5	Light grey	60	5	16.400	2035 48 0
106 M 63 PA	M63 x 1,5	Light grey	60	5	18.900	2035 49 9

PA Polyamide

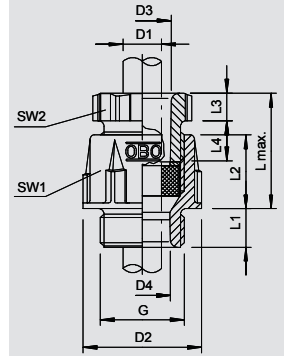
/100 pc.

Standard cable gland, shape A, to DIN 46320 with simple NR/SBR sealing ring and metric connection thread to IEC 423.

Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M12 x 1,5	3,5-6,5	16,5	7	7	15	13	8	13	5	8,5	23
M16 x 1,5	4,5-7	21,5	10,2	10	19	16	8	14	5	9	25
M20 x 1,5	9-13	25	11,3	13	24	21	8	15	5	10	27
M25 x 1,5	10-14	27	13,4	16	27	23	9	16	5	10,8	28
M32 x 1,5	18-25	30	15,8	26	42	40	10	16,5	6	12	30
M40 x 1,5	25-33	37,5	21,2	33	53	50	11	19	7	17	38
M50 x 1,5	30-38	47,5	30	40,5	60	55	11	20,5	8	18	42
M63 x 1,5	37-44	58	38	45,5	65	60	12	24	8	17	43



Cable gland, PG thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 VDE PG9 PA	Pg 9	Light grey	600	50	0.610	2036 51 7
106 VDE PG11 PA	Pg 11	Light grey	500	50	0.870	2036 53 3
106 VDE PG13 PA	Pg 13,5	Light grey	600	50	1.060	2036 57 6
106 VDE PG16 PA	Pg 16	Light grey	600	50	1.370	2036 59 2
106 VDE PG21 PA	Pg 21	Light grey	600	50	2.330	2036 61 4
106 VDE PG29 PA	Pg 29	Light grey	120	10	3.830	2036 63 0
106 VDE PG36 PA	Pg 36	Light grey	80	10	7.800	2036 65 7

PA Polyamide

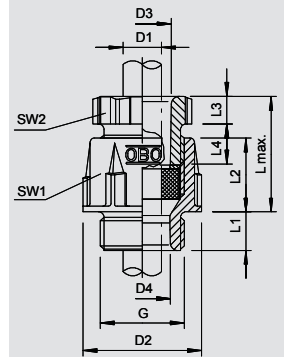
/100 pc.

Standard cable gland, shape A, to DIN 46320 with simple NR/SBR sealing ring PG connection thread to DIN 40430.

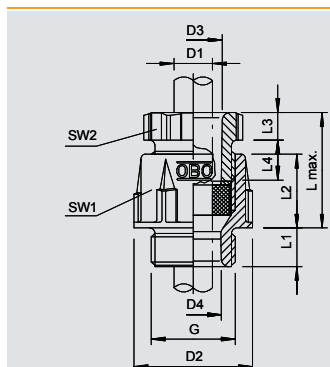
Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	4,5-7	21,5	10,2	10,2	19	16	8	14	5	9	25
Pg 11	5,5-10	25	11,3	11,5	22	19	8	15	5	10	27
Pg 13,5	9-13	27	13,4	13,5	24	21	9	16	5	10,8	28
Pg 16	10-14	30	15,8	16,5	27	23	10	16,5	6	12	30
Pg 21	14-18	37,5	21,2	21	33	30	11	19	7	17	38
Pg 29	18-25	47,5	30	27,5	42	40	11	20,5	8	18	42
Pg 36	25-33	58	38	34,5	53	50	12	24	8	17	43



Cable gland, polystyrene



Cable gland, metric thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 M12 PS	M12 x 1,5	Light grey	900	50	0.400	2035 31 6
106 M16 PS	M16 x 1,5	Light grey	600	50	0.560	2035 32 4
106 M 20 PS	M20 x 1,5	Light grey	600	50	0.900	2035 33 2
106 M 25 PS	M25 x 1,5	Light grey	600	50	2.110	2035 34 0
106 M 32 PS	M32 x 1,5	Light grey	120	10	3.700	2035 35 9
106 M 40 PS	M40 x 1,5	Light grey	80	10	6.240	2035 36 7
106 M 50 PS	M50 x 1,5	Light grey	50	5	8.500	2035 37 5
106 M 63 PS	M63 x 1,5	Light grey	50	5	9.630	2035 38 3

PS Polystyrene

/100 pc.

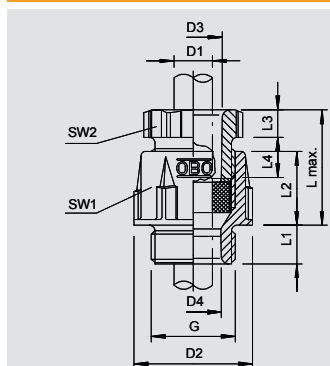
Standard cable gland, shape A, to DIN 46320 with simple NR/SBR sealing ring with metric connection thread to IEC 423.

Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M12 x 1,5	3,5-6,5	16,5	7	7	15	13	8	13	5	8,5	23
M16 x 1,5	4,5-7	21,5	10,2	10	19	16	8	14	5	9	25
M20 x 1,5	9-13	27	13,4	13,5	24	21	9	16	5	10,8	28
M25 x 1,5	10-14	30	15,8	16	27	23	10	16,5	6	12	30
M32 x 1,5	18-25	47,5	30,3	26	42	40	11	20,5	8	18	42
M40 x 1,5	25-33	58	38,4	33	53	50	12	24	8	17	43
M50 x 1,5	30-38	65	44,5	40,5	60	55	13	27	9	18,5	48
M63 x 1,5	37-44	70	50	45,5	65	60	14	27	9	18,5	48



Cable gland, PG thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 PG7	Pg 7	Light grey	900	50	0.400	2036 06 1
106 PG9	Pg 9	Light grey	600	50	0.560	2036 09 6
106 PG11	Pg 11	Light grey	500	50	0.800	2036 11 8
106 PG13,5	Pg 13,5	Light grey	600	50	0.900	2036 13 4
106 PG16	Pg 16	Light grey	600	50	1.230	2036 16 9
106 PG21	Pg 21	Light grey	600	50	2.120	2036 21 5
106 PG29	Pg 29	Light grey	120	10	3.700	2036 29 0
106 PG36	Pg 36	Light grey	80	10	6.240	2036 36 3
106 PG42	Pg 42	Light grey	50	5	8.500	2036 42 8
106 PG48	Pg 48	Light grey	50	5	9.630	2036 48 7

PS Polystyrene

/100 pc.

Standard cable gland, shape A, to DIN 46320 with simple NR/SBR sealing ring PG connection thread to DIN 40430.

Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	3,5-6,5	16,5	7	7	15	13	8	13	5	8,5	23
Pg 9	4,5-7	21,5	10,2	10,2	19	16	8	14	5	9	25
Pg 11	5,5-10	25	11,3	11,5	22	19	8	15	5	10	27
Pg 13,5	9-13	27	13,4	13,5	24	21	9	16	5	10,8	28
Pg 16	10-14	30	15,8	16,5	27	23	10	16,5	6	12	30
Pg 21	14-18	37,5	21,2	21	33	30	11	19	7	17	38
Pg 29	18-25	47,5	30	27,5	42	40	11	20,5	8	18	42
Pg 36	25-33	58	38	34,5	53	50	12	24	8	17	43
Pg 42	30-38	65	44,5	40,5	60	55	13	27	9	18,5	48
Pg 48	37-44	70	50	45,5	65	60	14	27	9	18,5	48



Cable fastening systems, plastic



Cable gland, polystyrene



Cable gland, short thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 K M20 PS	M20x1,5	Light grey	600	50	0.960	2038 07 2

PS Polystyrene /100 pc.

Cable gland, shape A, to DIN 46320, however with shorter connection thread, particularly suitable for junction box with metric connection thread with simple NR/SBR sealing ring. Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L2	L3	L4	L max.
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M20 x 1.5	9-13	27	13.4	14	24	21	16	5	10.8	26

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 K PG16 PS	Pg 16	Light grey	250	25	1.170	2038 04 8

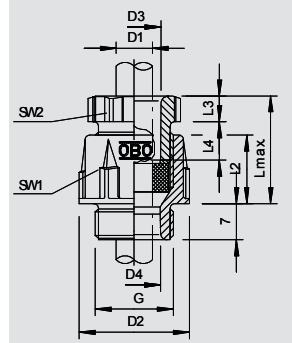
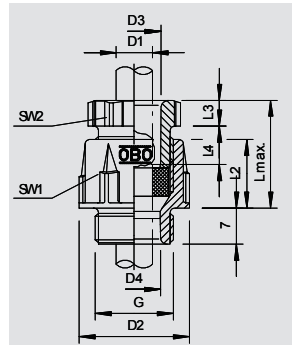
PS Polystyrene /100 pc.

Cable gland, shape A, to DIN 46320, however with shorter connection thread, particularly suitable for junction box with PG thread with simple NR/SBR sealing ring. Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L2	L3	L4	L max.
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 16	10-14	30	15.8	15.5	27	23	16.5	6	12	27



Cable gland, long PG thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 L PG9 PS	Pg 9	Light grey	600	50	0.670	2039 02 8
106 L PG11 PS	Pg 11	Light grey	500	50	0.730	2039 04 4
106 L PG13.5 PS	Pg 13,5	Light grey	600	50	1.050	2039 06 0
106 L PG16 PS	Pg 16	Light grey	250	25	1.430	2039 08 7
106 L PG21 PS	Pg 21	Light grey	300	25	2.580	2039 10 9
106 L PG29 PS	Pg 29	Light grey	180	15	4.160	2039 12 5

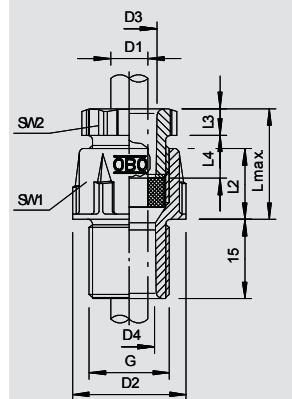
PS Polystyrene /100 pc.

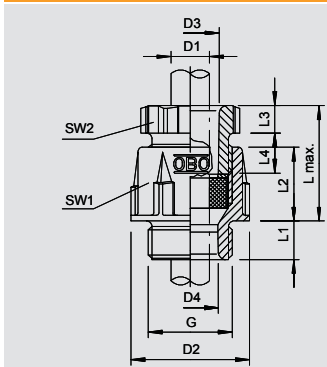
Cable gland, shape A, to DIN 46320 with long PG connection thread to DIN 40430, (preferably for use with locknut), with simple NR/SBR sealing ring. Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L2	L3	L4	L max.
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	4.5-7	21.5	10.2	10	19	16	14	5	9	32
Pg 11	5.5-10	25	11.3	12	22	19	15	5	10	34
Pg 13.5	9-13	27	13.4	14	24	21	16	5	10.8	34
Pg 16	10-14	30	15.8	16	27	23	16.5	6	12	35
Pg 21	14-18	37.5	21.2	21	33	30	19	7	17	42
Pg 29	18-25	47.5	30.3	27.5	42	40	20.5	8	18	46





Cable gland, metric cutting ring

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 B M16 PS	M16 x 1,5	Light grey	600	50	0.560	2035 51 0
106 B M20 PS	M20 x 1,5	Light grey	600	50	0.900	2035 51 2
106 B M25 PS	M25 x 1,5	Light grey	600	50	2.110	2035 51 4
106 B M32 PS	M32 x 1,5	Light grey	120	10	3.700	2035 51 6
106 B M40 PS	M40 x 1,5	Light grey	80	10	6.240	2035 51 8
106 B M50 PS	M50 x 1,5	Light grey	50	5	8.500	2035 52 0
106 B M63 PS	M63 x 1,5	Light grey	50	5	9.630	2035 52 2

PS Polystyrene

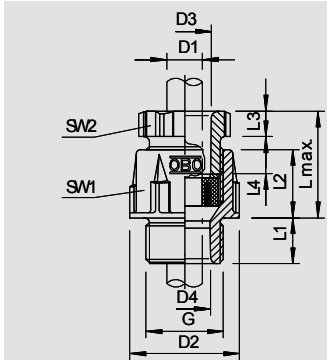
/100 pc.

Cable gland, shape A, to DIN 46320 with NR/SBR cutting ring, giving an extended sealing area, with metric connection thread to IEC 423. Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
M16 x 1.5	5-10	21.5	10.2	10.2	19	16	8	14	5	9	25
M20 x 1.5	7.5-13	27	13.4	13.5	24	21	9	16	5	10.8	28
M25 x 1.5	7.5-15	30	15.8	16.5	27	23	10	16.5	6	12	30
M32 x 1.5	18-27	47.5	30	27.5	42	40	11	20.5	8	18	42
M40 x 1.5	24-34	58	38	34.5	53	50	12	24	8	17	43
M50 x 1.5	30-40	65	45	40.5	60	55	13	27	9	18.5	48
M63 x 1.5	36-45	70	50	45.5	65	60	14	27	9	18.5	48



Cable gland, PG cutting ring

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 B PG9 PS	Pg 9	Light grey	600	50	0.700	2036 08 8
106 B PG11 PS	Pg 11	Light grey	500	50	0.980	2036 12 6
106 B PG13.5 PS	Pg 13.5	Light grey	600	50	1.050	2036 14 2
106 B PG16 PS	Pg 16	Light grey	600	50	1.590	2036 15 0
106 B PG21 PS	Pg 21	Light grey	600	50	2.590	2036 22 3
106 B PG29 PS	Pg 29	Light grey	120	10	5.490	2036 30 4
106 B PG36 PS	Pg 36	Light grey	160	10	10.240	2036 37 1
106 B PG42 PS	Pg 42	Light grey	50	5	18.510	2036 43 6
106 B PG48 PS	Pg 48	Light grey	50	5	21.130	2036 49 5

PS Polystyrene

/100 pc.

Cable gland, shape A, to DIN 46320.

With PG connection thread to DIN 40430.

With NR/SBR cutting ring, giving an extended sealing area.

Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Important dimensions, cone cable gland

G	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	5-10	21.5	10.2	10.2	19	16	8	14	5	9	25
Pg 11	7.5-11.5	25	11.3	11.5	22	19	8	15	5	10	27
Pg 13.5	7.5-13	27	13.4	13.5	24	21	9	16	5	10.8	28
Pg 16	7.5-15	30	15.8	16.5	27	23	10	16.5	6	12	30
Pg 21	10-20	37.5	21.2	21	33	30	11	19	7	17	38
Pg 29	18-27	47.5	30	27.5	42	40	11	20.5	8	18	42
Pg 36	24-34	58	38	34.5	53	50	12	24	8	17	43
Pg 42	30-40	65	44.5	40.5	60	55	13	27	9	18.5	48
Pg 48	36-45	70	50	45.5	65	60	14	27	9	18.5	48



Cable gland, polystyrene



Reducing cone cable gland, PG thread

Type	External thread	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
106 R PG13-9 PS	Pg 13,5	Light grey	500	50	0.600	2040 04 2
106 R PG13-11 PS	Pg 13,5	Light grey	500	50	0.740	2040 06 9
106 R PG16-11 PS	Pg 16	Light grey	300	25	0.770	2040 08 5
106 R PG16-13 PS	Pg 16	Light grey	300	25	1.030	2040 10 7

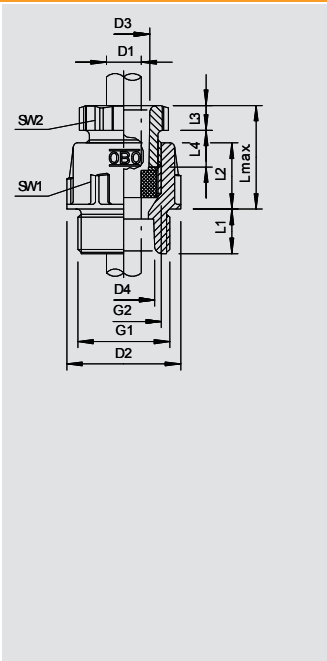
PS Polystyrene /100 pc.

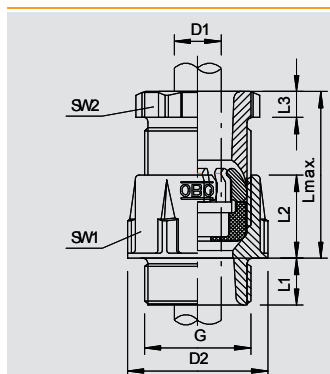
The reducing cable glands are used anywhere in which, with a PG thread, smaller cable diameters must be sealed.
Dimensions according to DIN 46320.
PG connection thread to DIN 40430.
With simple NR/SBR sealing ring.
Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Shock-resistant

Important dimensions, reducing cone cable gland

G1	G2	D1	D2	D3	D4	SW1	SW2	L1	L2	L3	L4	L max.
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 13.5	Pg 9	4.5-7	25.5	102	10	19	16	9	14.5	5	9	26
Pg 13.5	Pg 11	5-10	25.5	113	12	22	19	9	15	5	10	27
Pg 16	Pg 11	5-10	28	113	12	22	19	11	15.5	5	10	28
Pg 16	Pg 13.5	9-13	28	13.4	14	24	21	11	16.5	5	10.8	29.5





Cable gland, PG strain relief

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 Z PG9 PC	Pg 9	Light grey	300	50	0.630	2023 50 4
106 Z PG11 PC	Pg 11	Light grey	500	50	0.860	2023 51 2
106 Z PG13.5 PC	Pg 13,5	Light grey	600	50	1.100	2023 52 0
106 Z PG16 PC	Pg 16	Light grey	250	25	1.420	2023 53 9
106 Z PG21 PC	Pg 21	Light grey	300	25	2.500	2023 54 7

PC Polycarbonate

/100 pc.

Cable gland with external dimensions to DIN 46320, however with integrated centrally acted strain relief.

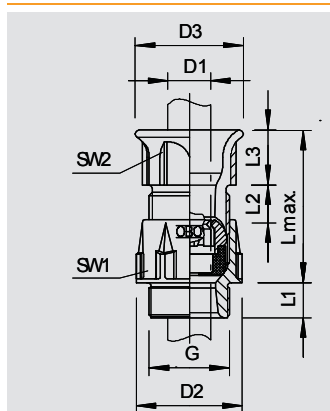
PG connection thread to DIN 40430.

Sealing ring made of chloroprene rubber with double-action sealing function.

Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Important dimensions, cone cable gland

G	D1	D2	SW1	SW2	L1	L2	L3	L max.
mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	5-8	21.5	19	16	8	14	5	25
Pg 11	6-10	25	22	19	8	15	5	27
Pg 13.5	8-12	27	24	21	9	16	5	28
Pg 16	10-14	30	27	33	10	16.5	6	30
Pg 21	13-18	37.5	33	30	11	19	7	38



Cable gland, PG bend protection

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
106 ZB PG9 PC	Pg 9	Light grey	500	50	0.730	2023 70 9
106 ZB PG11 PC	Pg 11	Light grey	600	50	0.960	2023 71 7
106 ZB PG13.5 PC	Pg 13,5	Light grey	600	50	1.190	2023 72 5
106 ZB PG16 PC	Pg 16	Light grey	250	25	1.610	2023 73 3
106 ZB PG21 PC	Pg 21	Light grey	300	25	2.600	2023 74 1
106 ZB PG29 PC	Pg 29	Light grey	240	15	4.500	2023 76 8

PC Polycarbonate

/100 pc.

Cable gland with integrated centrally acted strain relief and bend protection trumpet.

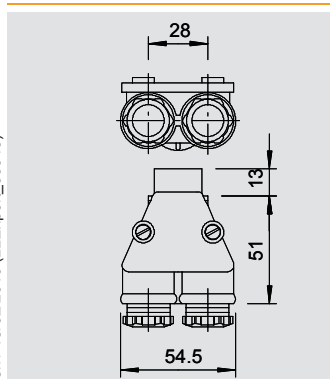
Sealing ring made of chloroprene rubber with double-action sealing function.

PG connection thread to DIN 40430.

Protection rating: with connection thread sealing ring IP65, without connection thread sealing ring IP54.

Important dimensions, cone cable gland

G	D1	D2	D3	SW1	SW2	L1	L2	L3	L max.
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	5-8	21.5	23.5	19	16	8	14	10.2	30
Pg 11	6-10	25	26	22	19	8	15	13	35
Pg 13.5	8-12	27	27.5	24	21	9	16	14	37
Pg 16	10-14	30	32	27	23	10	16.5	16	40
Pg 21	10-14	30	32	27	23	10	16.5	16	40
Pg 29	17-24	47.5	49	42	40	11	20.5	20	54



Twin gland, PG thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
113 PG13.5 LGR	Pg 13,5	Light grey	60	5	4.670	2024 13 6
113 PG16 LGR	Pg 16	Light grey	60	5	4.360	2024 16 0

UF Duroplast, Aminoplast, type 131.5

/100 pc.

Protection rating IP54, with removable polystyrene cover, as well as two polyethylene connection thread sealing rings.



Cable gland, special



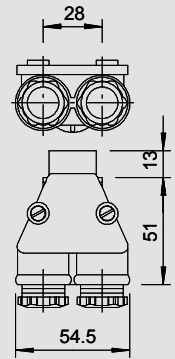
Twin gland, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
113 M20 LGR	M 20 x 1,5	Light grey	60	5	4.670	2024 06 3

UF Duroplast, Aminoplast, type 131.5 /100 pc.

Protection rating IP54, with removable polystyrene cover, as well as two polyethylene connection thread sealing rings.

With connection thread M20 x 1.5, two half glands PG 13.5 for cable diameters 6.5–10.5 mm.



Flat cable threaded connection, metric thread

Type	Thread	Flat cables/ thickness mm	Flat cables/ width mm	Colour	Box Qty.	Pack.	Weight	Item No.
					pcs	pcs	kg/100 pcs.	
106 FL M20 8 19	M20	6-8	17-19	Stone grey	600	50	1.350	2013 00 2

PE Polyethylene /100 pc.

Flat-cable entry, choke-nipple design with metric connecting thread to IEC 432, protection rating IP 31, with pre-mounted support sealing ring 107/F.

Important dimensions, flat cable threaded connection

G	D	L1	L2	SW
	mm	mm	mm	mm
M20	32.5	12	30	27

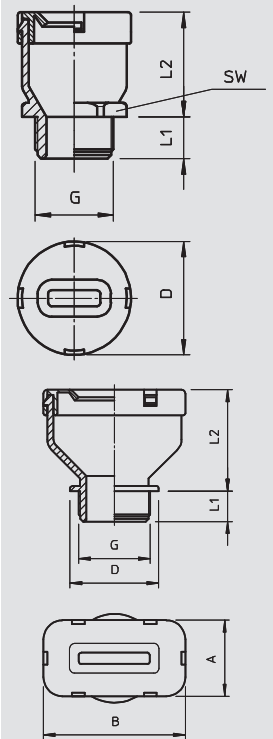
Type	Thread	Flat cables/ thickness mm	Flat cables/ width mm	Colour	Box Qty.	Pack.	Weight	Item No.
					pcs	pcs	kg/100 pcs.	
106 FL M25 6 30	M25	4-6	27-30	Stone grey	200	25	2.630	2013 00 6
106 FL M25 8 33	M25	6-8	30-33	Stone grey	200	25	2.630	2013 00 7
106 FL M25 9 22	M25	7-9	19-22	Stone grey	200	25	2.630	2013 00 8
106 FL M25 9 39	M25	7-9	36-39	Stone grey	200	25	2.630	2013 00 9
106 FL M25 10 29	M25	8-10	26-29	Stone grey	200	25	2.630	2013 01 0
106 FL M25 10 31	M25	8.5-10.5	28.5-31.5	Stone grey	200	25	2.630	2013 01 1
106 FL M25 12 35	M25	9-12	31-35	Stone grey	200	25	2.630	2013 01 2
106 FL M25 14 40	M25	11-14	37-40	Stone grey	200	25	2.680	2013 01 3
106 FL M32 6 30	M32	4-6	27-30	Stone grey	180	15	3.450	2013 01 5
106 FL M32 8 33	M32	6-8	30-33	Stone grey	180	15	3.450	2013 01 6
106 FL M32 9 22	M32	7-9	19-22	Stone grey	180	15	3.450	2013 01 7
106 FL M32 9 39	M32	7-9	36-39	Stone grey	180	15	3.450	2013 01 8
106 FL M32 10 29	M32	8-10	26-29	Stone grey	180	15	3.450	2013 01 9
106 FL M32 10 31	M32	8.5-10.5	28.5-31.5	Stone grey	180	15	3.450	2013 02 0
106 FL M32 12 35	M32	9-12	31-35	Stone grey	180	15	3.450	2013 02 1
106 FL M32 14 40	M32	11-14	37-40	Stone grey	180	15	3.500	2013 02 2
106 FL M40 6 30	M40	4-6	27-30	Stone grey	180	15	3.450	2013 02 5
106 FL M40 8 33	M40	6-8	30-33	Stone grey	180	15	3.450	2013 02 6
106 FL M40 9 22	M40	7-9	19-22	Stone grey	180	15	3.450	2013 02 7
106 FL M40 9 39	M40	7-9	36-39	Stone grey	180	15	3.450	2013 02 8
106 FL M40 10 29	M40	8-10	26-29	Stone grey	180	15	3.450	2013 02 9
10 6FL M40 10 31	M40	8.5-10.5	28.5-31.5	Stone grey	180	15	3.450	2013 03 0
106 FL M40 12 35	M40	9-12	31-35	Stone grey	180	15	3.450	2013 03 1
106 FL M40 14 40	M40	11-14	37-40	Stone grey	180	15	3.500	2013 03 2

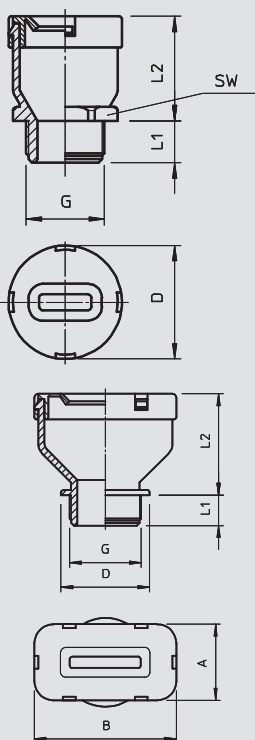
PE Polyethylene /100 pc.

Flat-cable entry, choke-nipple design with metric connecting thread to IEC 432, protection rating IP31, with pre-mounted support sealing ring 107/F.

Important dimensions, flat cable threaded connection

G	D	L1	L2	A	B
	mm	mm	mm	mm	mm
M25	35	12	40	30	56
M32	46	13	46	30	56
M40	46	13	46	30	56





Flat cable threaded connection, PG thread

Type	Thread	Flat cables/ thickness mm	Flat cables/ width mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
106 FL 16 8 19	Pg 16	6-8	17-19	Stone grey	600	50	1.350	2012 75 8

PE Polyethylene /100 pc.

Flat-cable entry, choke-nipple design with PG connecting thread to DIN 40430, protection rating IP31, with pre-mounted support sealing ring 107/F.

Important dimensions, flat cable threaded connection

G	D	L1	L2	SW
mm	mm	mm	mm	mm
PG16	32.5	12	30	27

Type	Thread	Flat cables/ thickness mm	Flat cables/ width mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
106 FL 21 6 30	Pg 21	4-6	27-30	Stone grey	200	25	2.630	2012 85 5
106 FL 21 8 33	Pg 21	6-8	30-33	Stone grey	200	25	2.630	2012 78 2
106 FL 21 9 22	Pg 21	7-9	19-22	Stone grey	200	25	2.630	2012 82 0
106 FL 21 9 39	Pg 21	7-9	36-39	Stone grey	200	25	2.630	2012 80 4
106 FL 21 10 29	Pg 21	8-10	26-29	Stone grey	200	25	2.630	2012 83 9
106 FL 21 10 31	Pg 21	8.5-10.5	28.5-31.5	Stone grey	200	25	2.630	2012 87 1
106 FL 21 12 35	Pg 21	9-12	31-35	Stone grey	200	25	2.630	2012 84 7
106 FL 21 14 40	Pg 21	11-14	37-40	Stone grey	200	25	2.680	2012 92 8
106 FL 29 14 40	Pg 29	11-14	37-40	Stone grey	180	15	3.500	2012 77 4

PE Polyethylene /100 pc.

Flat-cable entry, choke-nipple design with PG connecting thread to DIN 40430, protection rating IP31, with pre-mounted support sealing ring 107/F.

Important dimensions, flat cable threaded connection

G	D	L1	L2	A	B
mm	mm	mm	mm	mm	mm
PG21	35	12	40	30	56
PG29	46	13	46	30	56

IP 30 Pg



IP 30 Pg



Locknuts, polyamide



Locknut, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
116 M12 SGR PA	M12x1,5	Silver grey	2,000	100	0.100	2048 75 2
116 M16 SGR PA	M16x1,5	Silver grey	1,000	100	0.160	2048 76 0
116 M20 SGR PA	M20x1,5	Silver grey	1,200	100	0.250	2048 77 9
116 M25 SGR PA	M25x1,5	Silver grey	1,000	100	0.350	2048 78 7
116 M32 SGR PA	M32x1,5	Silver grey	500	50	0.610	2048 79 5
116 M40 SGR PA	M40x1,5	Silver grey	250	25	0.466	2048 80 9
116 M50 SGR PA	M50x1,5	Silver grey	250	25	1.756	2048 81 7
116 M63 SGR PA	M63x1,5	Silver grey	200	25	1.830	2048 82 5
116 M12 LGR PA	M12x1,5	Light grey	2,000	100	0.100	2048 90 6
116 M16 LGR PA	M16x1,5	Light grey	1,000	100	0.160	2048 91 4
116 M20 LGR PA	M20x1,5	Light grey	1,200	100	0.250	2048 92 2
116 M25 LGR PA	M25x1,5	Light grey	1,000	100	0.350	2048 93 0
116 M32 LGR PA	M32x1,5	Light grey	500	50	0.610	2048 94 9
116 M40 LGR PA	M40x1,5	Light grey	250	25	1.683	2048 95 7
116 M50 LGR PA	M50x1,5	Light grey	250	25	0.890	2048 96 5
116 M63 LGR PA	M63x1,5	Light grey	200	25	1.830	2048 97 3
116 M12 SW PA	M12x1,5	Black	2,000	100	0.100	2049 06 6
116 M16 SW PA	M16x1,5	Black	1,000	100	0.160	2049 07 4
116 M20 SW PA	M20x1,5	Black	1,200	100	0.250	2049 08 2
116 M25 SW PA	M25x1,5	Black	1,000	100	0.350	2049 09 0
116 M32 SW PA	M32x1,5	Black	500	50	0.610	2049 10 4
116 M40 SW PA	M40x1,5	Black	250	25	1.683	2049 11 2
116 M50 SW PA	M50x1,5	Black	250	25	1.756	2049 12 0
116 M63 SW PA	M63x1,5	Black	200	25	1.830	2049 13 9

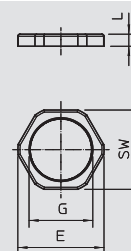
PA Polyamide

/100 pc.

Locknut DIN 46319, with metric thread IEC 423.

Important dimensions, locknut

G	SW	E	L
	mm	mm	mm
M12 x 1.5	17	19	5
M16 x 1.5	22	25	5
M20 x 1.5	26	29	6
M25 x 1.5	32	36	6.5
M32 x 1.5	41	46	7
M40 x 1.5	50	56	7.5
M50 x 1.5	60	68	8
M63 x 1.5	75	83	8.5



Locknut, PG thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
116 VDE PG7 PA	Pg 7	Light grey	2,000	100	0.093	2048 07 8
116 VDE PG 9 PA	Pg 9	Light grey	2,400	100	0.169	2048 09 4
116 VDE PG11 PA	Pg 11	Light grey	2,400	100	0.184	2048 11 6
116 VDE PG13.5PA	Pg 13,5	Light grey	2,000	100	0.256	2048 13 2
116 VDE PG16 PA	Pg 16	Light grey	2,000	100	0.325	2048 16 7
116 VDE PG21 PA	Pg 21	Light grey	1,200	100	0.466	2048 22 1
116 VDE PG29 PA	Pg 29	Light grey	500	50	1.100	2048 29 9
116 VDE PG36 PA	Pg 36	Light grey	250	25	1.683	2048 36 1
116 VDE PG42 PA	Pg 42	Light grey	250	25	1.756	2048 42 6
116 VDE PG48 PA	Pg 48	Light grey	200	25	1.830	2048 48 5

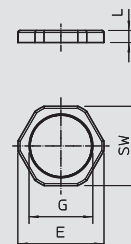
PA Polyamide

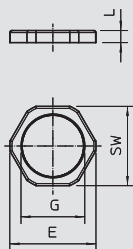
/100 pc.

Locknut DIN 46320, with PG thread DIN 40430.

Important dimensions, locknut

G	SW	E	L
	mm	mm	mm
Pg 7	19	21	5
Pg 9	22	24	5
Pg 11	24	26	5
Pg 13.5	27	29	6
Pg 16	30	33	6
Pg 21	36	39	7
Pg 29	46	50	7
Pg 36	60	66	8
Pg 42	65	73	8
Pg 48	70	78	8





Locknut, metric thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
116 M12 LGR PS	M12 x 1,5	Light grey	2,000	100	0.100	2049 50 3
116 M16 LGR PS	M16 x 1,5	Light grey	1,000	100	0.160	2049 51 1
116 M20 LGR PS	M20 x 1,5	Light grey	1,200	100	0.250	2049 53 8
116 M25 LGR PS	M25 x 1,5	Light grey	1,000	100	0.350	2049 54 6
116 M32 LGR PS	M32 x 1,5	Light grey	500	50	0.610	2049 55 4
116 M40 LGR PS	M40 x 1,5	Light grey	250	25	1.683	2049 56 2
116 M50 LGR PS	M50 x 1,5	Light grey	250	25	0.652	2049 57 0
116 M63 LGR PS	M63 x 1,5	Light grey	200	25	1.830	2049 58 9

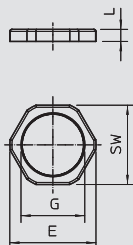
PS Polystyrene

/100 pc.

Locknut DIN 46319, with metric thread IEC 423.

Important dimensions, locknut

G	SW	E	L
	mm	mm	mm
M12 x 1.5	17	19	5
M16 x 1.5	22	25	5
M20 x 1.5	26	29	6
M25 x 1.5	32	36	6.5
M32 x 1.5	41	46	7
M40 x 1.5	50	56	7.5
M50 x 1.5	60	68	8
M63 x 1.5	75	83	8.5



Locknut, PG thread



Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
116 PG 7	Pg 7	Light grey	2,000	100	0.077	2043 07 6
116 PG 9	Pg 9	Light grey	2,400	100	0.114	2043 09 2
116 PG11	Pg 11	Light grey	2,400	100	0.151	2043 11 4
116 PG13.5	Pg 13,5	Light grey	2,000	100	0.211	2043 13 0
116 PG16	Pg 16	Light grey	2,000	100	0.283	2043 16 5
116 PG21	Pg 21	Light grey	1,200	100	0.343	2043 21 1
116 PG29	Pg 29	Light grey	500	50	0.664	2043 29 7
116 PG36	Pg 36	Light grey	250	25	1.380	2043 35 1
116 PG42	Pg 42	Light grey	250	25	1.440	2043 42 4
116 PG48	Pg 48	Light grey	200	25	1.500	2043 48 3

PS Polystyrene

/100 pc.

Locknut DIN 46320, with PG thread DIN 40430.

Important dimensions, locknut

G	SW	E	L
	mm	mm	mm
Pg 7	19	21	5
Pg 9	22	24	5
Pg 11	24	26	5
Pg 13.5	27	29	6
Pg 16	30	33	6
Pg 21	36	39	7
Pg 29	46	50	7
Pg 36	60	66	8
Pg 42	65	73	8
Pg 48	70	78	8



Cable fastening system accessories



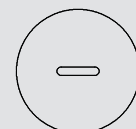
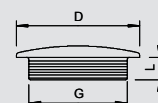
Screw plug, metric thread

Type	Thread	Dimension D mm	Dimension L mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
108 M12 PS	M12 x 1,5	15	6	Light grey	3,000	100	0.146	2033 00 3
108 M16 PS	M16 x 1,5	20	6	Light grey	1,800	100	0.161	2033 00 7
108 M20 PS	M20 x 1,5	24	6	Light grey	1,200	100	0.209	2033 01 1
108 M25 PS	M25 x 1,5	30	8	Light grey	1,000	100	0.355	2033 01 6
108 M32 PS	M32 x 1,5	37	8	Light grey	500	50	0.352	2033 02 1
108 M40 PS	M40 x 1,5	46	8	Light grey	300	25	1.280	2033 02 6
108 M50 PS	M50 x 1,5	56	10	Light grey	300	25	1.400	2033 03 2
108 M63 PS	M63 x 1,5	70	12	Light grey	300	25	1.850	2033 03 8

PS Polystyrene

/100 pc.

Screw plug in accordance with DIN 46320, with metric thread to IEC 423.



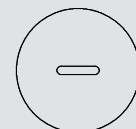
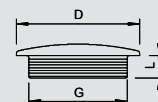
Screw plug, PG thread

Type	Thread	Dimension D mm	Dimension L mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
108 PG 7	Pg 7	14	6	Light grey	2,400	100	0.146	2033 07 0
108 PG 9	Pg 9	19	6	Light grey	1,800	100	0.161	2033 09 7
108 PG11	Pg 11	22	6	Light grey	2,000	100	0.178	2033 11 9
108 PG13.5	Pg 13,5	25	6.5	Light grey	1,200	100	0.209	2033 13 5
108 PG16	Pg 16	27	6.5	Light grey	1,000	100	0.235	2033 15 1
108 PG21	Pg 21	34	8	Light grey	1,200	100	0.355	2033 21 6
108 PG29	Pg 29	44	8	Light grey	600	50	0.786	2033 29 1
108 PG36	Pg 36	58	10	Light grey	200	25	1.280	2033 36 4
108 PG42	Pg 42	67	10	Light grey	300	25	1.400	2033 42 9
108 PG48	Pg 48	73	12	Light grey	300	25	1.850	2033 48 8

PS Polystyrene

/100 pc.

Screw plug in accordance with DIN 46320, with PG thread to DIN 40430.



Pressure screw, PG thread

Type	Thread	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
107 E PG7 PS	Pg 7	Light grey	1,800	100	0.115	2025 07 8
107 E PG9 PS	Pg 9	Light grey	1,800	100	0.170	2025 09 4
107 E PG11 PS	Pg 11	Light grey	1,200	100	0.180	2025 11 6
107 E PG13.5 PS	Pg 13,5	Light grey	1,200	100	0.330	2025 13 2
107 E PG16 PS	Pg 16	Light grey	1,000	100	0.400	2025 16 7
107 E PG21 PS	Pg 21	Light grey	600	50	0.700	2025 21 3
107 E PG29 PS	Pg 29	Light grey	250	25	1.300	2025 29 9
107 E PG36 PS	Pg 36	Light grey	300	25	2.510	2025 36 1
107 E PG42 PS	Pg 42	Light grey	100	10	4.540	2025 42 6
107 E PG48 PS	Pg 48	Light grey	100	10	5.580	2025 48 5

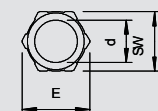
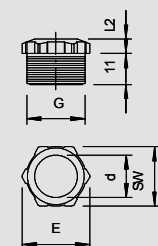
PS Polystyrene

/100 pc.

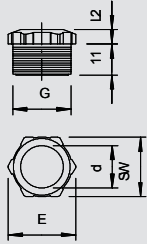
Pressure screw (Part 1) to DIN 46320, with Pg thread DIN 40430.

Important dimensions, pressure screw

G	D	SW	E	L1	L2
mm	mm	mm	mm	mm	mm
Pg 7	7	13	14.7	8.5	5
Pg 9	10.2	16	18	9	5
Pg 11	11.3	19	21.5	10	5
Pg 13.5	13.4	21	23.8	10.5	5
Pg 16	15.8	23	26	12	6
Pg 21	21.2	30	34	17	7
Pg 29	30	40	45	18	8
Pg 36	38.2	50	56.5	17	8
Pg 42	44.5	55	62	18.5	9
Pg 48	50	60	68	18.5	9



Cable fastening system accessories



Pressure screw, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
107 E PG11 PA	Pg 11	Light grey	1,200	100	0.230	2025 53 1
107 E PG13.5 PA	Pg 13,5	Light grey	1,200	100	0.350	2025 56 6
107 E PG21 PA	Pg 21	Light grey	600	50	0.780	2025 60 4
107 E PG36 PA	Pg 36	Light grey	300	25	2.830	2025 64 7

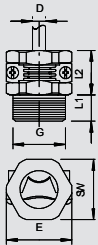
PA Polyamide

/100 pc.

Pressure screw, Part 1, to DIN 46320, fibre-glass reinforced.

Important dimensions, pressure screw

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
Pg 11	11.3	19	21.5	10	5
Pg 13.5	13.4	21	23.8	10.5	5
Pg 21	21.2	30	34	17	7
Pg 36	38.2	50	56.5	17	8



Pressure screw PG strain relief

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
107 Z PG 9 PA	Pg 9	Light grey	1,000	100	0.400	2023 09 1
107 Z PG11 PA	Pg 11	Light grey	800	100	0.600	2023 11 3
107 Z PG13.5 PA	Pg 13,5	Light grey	1,200	100	0.680	2023 12 1
107 Z PG16 PA	Pg 16	Light grey	500	50	0.900	2023 16 4
107 Z PG21 PA	Pg 21	Light grey	250	25	1.800	2023 21 0
107 Z PG29 PA	Pg 29	Light grey	200	25	3.000	2023 29 6

PA Polyamide

/100 pc.

Pressure screw with transverse clip strain relief, electrogalvanised steel screws, PG thread to DIN 40430.

Important dimensions, pressure screw

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
Pg 9	3.5–11.3	19	21	8.5	14.5
Pg 11	4–13.3	21	23	9	16
Pg 13.5	4.1–14.3	23	25	10	17
Pg 16	5–16.2	25	27	10	19
Pg 21	5.9–21.2	32	35	12.5	23.5
Pg 29	7.1–29	42	45	16	30



Cable fastening systems, plastic



Cable fastening system accessories



Reduction, metric thread

Type	External thread	Internal thread	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
107 R M20-12 PA	M20	M12	Light grey	1,200	100	0.500	2030 61 6
107 R M20-16 PA	M20	M16	Light grey	1,200	100	0.700	2030 61 9
107 R M25-12 PA	M25	M12	Light grey	1,200	100	0.850	2030 62 4
107 R M25-16 PA	M25	M16	Light grey	1,200	100	0.850	2030 62 6
107 R M25-20 PA	M25	M20	Light grey	1,200	100	0.650	2030 62 8
107 R M32-12 PA	M32	M12	Light grey	600	50	1.200	2030 63 2
107 R M32-16 PA	M32	M16	Light grey	600	50	1.100	2030 63 4
107 R M32-20 PA	M32	M20	Light grey	600	50	1.050	2030 63 7
107 R M32-25 PA	M32	M25	Light grey	600	50	1.000	2030 64 0
107 R M40-16 PA	M40	M16	Light grey	600	50	2.000	2030 64 3
107 R M40-20 PA	M40	M20	Light grey	600	50	1.850	2030 64 6
107 R M40-25 PA	M40	M25	Light grey	600	50	1.950	2030 64 9
107 R M40-32 PA	M40	M32	Light grey	600	50	1.400	2030 65 2
107 R M50-20 PA	M50	M20	Light grey	300	25	2.300	2030 65 5
107 R M50-25 PA	M50	M25	Light grey	300	25	2.250	2030 65 9
107 R M50-32 PA	M50	M32	Light grey	300	25	2.200	2030 66 1
107 R M50-40 PA	M50	M40	Light grey	300	25	2.050	2030 66 4
107 R M63-25 PA	M63	M25	Light grey	300	25	3.050	2030 66 7
107 R M63-32 PA	M63	M32	Light grey	300	25	3.070	2030 67 0
107 R M63-40 PA	M63	M40	Light grey	300	25	3.100	2030 67 3
107 R M63-50 PA	M63	M50	Light grey	300	25	3.000	2030 67 5

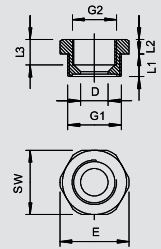
PA Polyamide

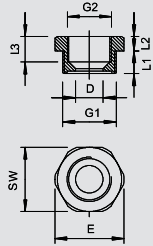
/100 pc.

Reduction, with metric internal and external thread.

Important dimensions, reduction

G1	G2	SW	E	L1	L3
		mm	mm	mm	mm
M20	M12	24	26.6	8	12
M20	M16	24	26.6	8	12
M25	M12	32	32	8	14
M25	M16	32	32	8	14
M25	M20	32	32	8	14
M32	M12	36	40	10	16
M32	M16	36	40	10	16
M32	M20	36	40	10	16
M32	M25	36	40	10	16
M40	M16	46	50.5	10	16
M40	M20	46	50.5	10	16
M40	M25	46	50.5	10	16
M40	M32	46	50.5	10	16
M50	M20	55	60	12	18
M50	M25	55	60	12	18
M50	M32	55	60	12	18
M50	M40	55	60	12	18
M63	M25	68	75	12	18
M63	M32	68	75	12	18
M63	M40	68	75	12	18
M63	M50	68	75	12	18





Reduction, PG thread

Type	External thread	Internal thread	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
107 R PG11- 7 PA	Pg 11	Pg 7	Light grey	500	50	0.400	2030 70 5
107 R PG13- 9 PA	Pg 13,5	Pg 9	Light grey	1,200	50	0.450	2030 71 3
107 R PG16- 9 PA	Pg 16	Pg 9	Light grey	1,000	50	0.600	2030 74 8
107 R PG16-11 PA	Pg 16	Pg 11	Light grey	1,000	50	0.480	2030 75 6
107 R PG21-11 PA	Pg 21	Pg 11	Light grey	1,000	50	0.910	2030 76 4
107 R PG21-13 PA	Pg 21	Pg 13,5	Light grey	500	50	0.800	2030 77 2
107 R PG21-16 PA	Pg 21	Pg 16	Light grey	500	50	0.650	2030 78 0
107 R PG29-16 PA	Pg 29	Pg 16	Light grey	600	50	1.460	2030 79 9
107 R PG29-21 PA	Pg 29	Pg 21	Light grey	250	25	1.500	2030 80 2
107 R PG36-21 PA	Pg 36	Pg 21	Light grey	300	25	2.350	2030 82 9
107 R PG36-29 PA	Pg 36	Pg 29	Light grey	300	25	2.200	2030 81 0
107 R PG42-29 PA	Pg 42	Pg 29	Light grey	300	25	2.350	2030 83 7

PA Polyamide

/100 pc.

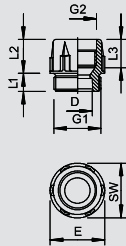
Reduction, Pg internal and external thread to DIN 40430.

Important dimensions, reduction

G1	G2	D	SW	E	L1	L2	L3
		mm	mm	mm	mm	mm	mm
Pg 11	Pg 7	7.5	22	24	8	6	9.5
Pg 13.5	Pg 9	9.5	24	26	8.5	6	9.5
Pg 16	Pg 9	9.5	27	29	9.5	6	11.5
Pg 16	Pg 11	11.5	27	29	9.5	6	11
Pg 21	Pg 11	11.5	32	35.5	10.5	5	11
Pg 21	Pg 13.5	13.5	32	35.5	10.5	5	11
Pg 21	Pg 16	16.5	32	35.5	10.5	5	11
Pg 29	Pg 16	16.5	40	43	12	6	12.5
Pg 29	Pg 21	21.5	39	43	12.5	6	13.5
Pg 36	Pg 21	21	50	54	13	6	13.5
Pg 36	Pg 29	28.5	50	54	18	6	18
Pg 42	Pg 29	27.5	55	59	16	6	17



Cable fastening systems, plastic



Reducer connections, PG thread

Type	External thread	Internal thread	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
107 RZ PG 9-7	Pg 9	Pg 7	Light grey	1,000	100	0.400	2031 30 2
107 RZ PG11-9	Pg 11	Pg 9	Light grey	800	100	0.380	2031 32 9
107 RZ PG13-11	Pg 13,5	Pg 11	Light grey	800	100	0.480	2031 34 5
107 RZ PG16-13	Pg 16	Pg 13,5	Light grey	500	50	0.620	2031 38 8
107 RZ PG21-16	Pg 21	Pg 16	Light grey	600	50	0.780	2031 41 8
107 RZ PG29-21	Pg 29	Pg 21	Light grey	300	25	1.380	2031 44 2

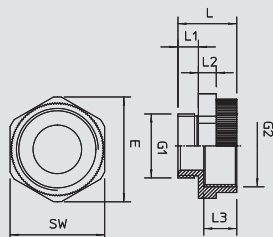
PA Polyamide

/100 pc.

Reducer connections, PG internal and external thread to DIN 40430.

Important dimensions, reducer connections

G1	G2	D	SW	E	L1	L2	L3
		mm	mm	mm	mm	mm	mm
Pg 9	Pg 7	7.5	19	21	7.5	12.5	10
Pg 11	Pg 9	10	19	23	9	14	11.7
Pg 13.5	Pg 11	12	19	25	9	14.5	11.7
Pg 16	Pg 13.5	14	24	28	11	16.5	12.9
Pg 21	Pg 16	15.5	27	34	11	17	13.5
Pg 29	Pg 21	21	33	44	12	21	17.4



Intermediate expansion support, metric thread

Type	External thread	Internal thread	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
107 E M 12-16 PA	M12	M16	Light grey	500	50	0.300	2031 45 0
107 E M 16-20 PA	M16	M20	Light grey	600	50	0.380	2031 45 1
107 E M 20-25 PA	M20	M25	Light grey	500	50	0.630	2031 45 2
107 E M 25-32 PA	M25	M32	Light grey	400	50	0.970	2031 45 3
107 E M 21-40 PA	M32	M40	Light grey	200	25	1.300	2031 45 4

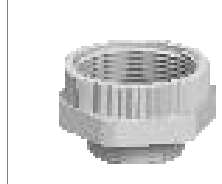
PA Polyamide

/100 pc.

Intermediate expansion support, metric internal and external thread.

Important dimensions, intermediate expansion support

G1	G2	SW	E	L	L1	L2	L3	D
		mm	mm	mm	mm	mm	mm	mm
M12	M16	20	22	20.6	8	5	11.2	7.2
M16	M20	24	26.6	20.6	8	5	11	11.3
M20	M25	30	33	21	8	6	10.8	15
M25	M32	37	41	22.7	8	7	12.5	19
M32	M40	45	49.5	25	10	7	12.5	26.4



Cable fastening system accessories



Intermediate expansion support, PG thread

Type	External thread	Internal thread	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
107 EZ PG9-11 PA	Pg 9	Pg 11	Light grey	800	100	0.400	2030 89 6
107 EZ PG11-13PA	Pg 11	Pg 13,5	Light grey	800	100	0.420	2030 93 4
107 EZ PG13-16PA	Pg 13,5	Pg 16	Light grey	1.200	100	0.620	2030 95 0
107 EZ PG16-21PA	Pg 16	Pg 21	Light grey	600	50	0.940	2030 97 7
107 EZ PG21-29PA	Pg 21	Pg 29	Light grey	400	50	1.650	2030 99 3
107 EP PG29-36PA	Pg 29	Pg 36	Light grey	200	25	2.600	2030 98 5

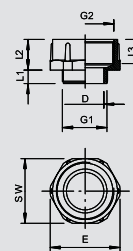
PA Polyamide

/100 pc.

Intermediate expansion support, Pg internal and external thread to DIN 40430.

Important dimensions, intermediate expansion support

G1	G2	D	SW	E	L1	L2	L3
		mm	mm	mm	mm	mm	mm
Pg 9	Pg 11	10	22	25	9	16	11.5
Pg 11	Pg 13.5	13.5	24	26	8	15	12
Pg 13.5	Pg 16	15	27	29.5	9	16.5	13.5
Pg 16	Pg 21	16	32	35.5	9	20	14.5
Pg 21	Pg 29	22	42	45.5	10	22	16.5
Pg 29	Pg 36	30.5	53	57	11	25	20



Adapter M-PG

Type	External thread	Internal thread	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
107 ADA M12-PG9	M12	PG9	Light grey	300	20	0.280	2031 45 6
107 ADA M16-PG9	M16	PG9	Light grey	200	20	0.400	2031 45 7
107 ADA M20-PG11	M20	PG11	Light grey	200	20	0.550	2031 45 8
107 ADA M20-PG13	M20	PG13,5	Light grey	200	20	0.470	2031 45 9
107 ADA M25-PG16	M25	PG16	Light grey	240	20	0.870	2031 46 0
107 ADA M32-PG29	M32	PG29	Light grey	120	10	1.540	2031 46 1
107 ADA M40-PG29	M40	PG29	Light grey	100	10	1.870	2031 46 2
107 ADA M50-PG36	M50	PG36	Light grey	50	5	2.980	2031 46 3

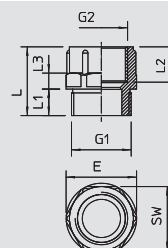
PA Polyamide

/100 pc.

Adapter for converting a metric threaded drill hole to a Pg threaded drill hole.

Important dimensions, adapter

G1	G2	SW	E	L	L1	L2	L3	D
		mm	mm	mm	mm	mm	mm	mm
M12	PG 9	19	21	24.2	11.4	10	5	8
M16	PG 9	19	21	25.6	11	10	6	9.8
M20	PG11	22	24.8	26.6	10.8	11.8	6	13.4
M20	PG13.5	24	26.1	26.2	10.8	13.3	7	15
M25	PG16	27	29.6	28.8	10.6	14	7	17
M32	PG29	42	45.5	33	11	17.2	7	26.4
M40	PG29	42	45.5	33.7	10.5	18	8	33
M50	PG36	53	56.5	36.7	11	21	8.5	43



Adapter PG-M

Type	External thread	Internal thread	Colour	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
107 ADA PG7-M12	PG7	M12	Light grey	300	20	0.194	2031 46 5
107 ADA PG9-M12	PG9	M12	Light grey	300	20	0.370	2031 46 6
107 ADA PG11-M16	PG11	M16	Light grey	240	20	0.410	2031 46 7
107 ADA PG13-M20	PG13,5	M20	Light grey	240	20	0.416	2031 46 8
107 ADA PG16-M25	PG16	M20	Light grey	200	20	0.630	2031 46 9
107 ADA PG21-M25	PG21	M25	Light grey	100	10	0.940	2031 47 0
107 ADA PG29-M32	PG29	M32	Light grey	120	10	1.610	2031 47 1

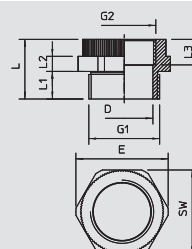
PA Polyamide

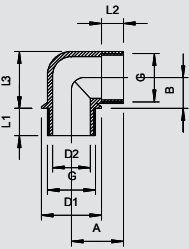
/100 pc.

Adapter for converting a Pg threaded drill hole to a metric threaded drill hole.

Important dimensions, adapter

G1	G2	SW	E	L	L1	L2	L3	D
		mm	mm	mm	mm	mm	mm	mm
PG 7	M12	15	16.5	20.3	7.9	5	10.4	7.7
PG 9	M12	19	21	20	-	5	10	10.5
PG11	M16	22	24.5	20.3	8	5	10	13.6
PG13.5	M20	24	26.7	21.3	9.1	5	10	15.2
PG16	M20	27	30	22	10	6	10	17.6
PG21	M25	33	36.5	23.6	10.9	6	10	22.7
PG29	M32	42	46.7	25.5	11.2	7	10.4	30.8





90° elbow socket, PG thread

Type	External thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
107 W PG 9 PA	Pg 9	Light grey	600	50	0.390	2029 90 1
107 W PG11 PA	Pg 11	Light grey	500	50	0.620	2029 92 8
107 W PG13.5 PA	Pg 13,5	Light grey	600	50	0.750	2029 93 6
107 W PG16 PA	Pg 16	Light grey	600	50	0.950	2029 94 4
107 W PG21 PA	Pg 21	Light grey	300	25	1.470	2029 95 2

PA Polyamide

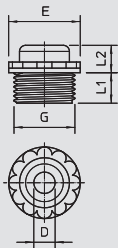
/100 pc.

Elbow socket with PG internal and external thread to DIN 40430.

The elbow socket can be turned into an angular gland with two steel pressure rings 107/D, a sealing ring 107/A or 107/B and a pressure screws 107/E.

Important dimensions, 90° elbow socket

G	D1	D2	A	B	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm
Pg 9	19.5	11.5	18.5	10.5	11	9	19
Pg 11	23.5	15	20	12	11	9.5	22
Pg 13.5	25.5	16	22	13	11.5	10	24
Pg 16	27.5	18.5	24	15	11.5	11	27
Pg 21	34	24	28	18	13	13	33



Screw-in nipple, metric thread

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
90 M12 OF	M12 x 1,5	Light grey	3,000	100	0.170	2032 00 7
90 M16 OF	M16 x 1,5	Light grey	2,600	100	0.192	2032 01 1
90 M20 OF	M20 x 1,5	Light grey	1,600	100	0.268	2032 01 5
90 M25 OF	M25 x 1,5	Light grey	500	50	0.513	2032 01 9
90 M32 OF	M32 x 1,5	Light grey	250	25	0.694	2032 02 3
90 M40 OF	M40 x 1,5	Light grey	120	10	0.875	2032 03 1

PE Polyethylene

/100 pc.

With opening.

Grip seal to screw into metric thread end to IEC 423.

With self-sealing cone at the end of the thread, therefore no connection thread sealing ring required.

Protection rating achievable with careful mounting: IP54.

With open cable entry.

Important dimensions, screw-in nipple

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
M12 x 1.5	4	15	17	8	6
M16 x 1.5	4	18	20	8	6
M20 x 1.5	7	22	24	10	6
M25 x 1.5	7	30	32	12	6
M32 x 1.5	15	36	39	14	8
M40 x 1.5	22	44	48	16	8

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
90 M12 GE	M12 x 1,5	Light grey	3,000	100	0.170	2032 37 8
90 M16 GE	M16 x 1,5	Light grey	2,600	100	0.192	2032 38 0
90 M20 GE	M20 x 1,5	Light grey	1,600	100	0.268	2032 38 2
90 M25 GE	M25 x 1,5	Light grey	500	50	0.513	2032 38 4
90 M32 GE	M32 x 1,5	Light grey	250	25	0.694	2032 38 6
90 M40 GE	M40 x 1,5	Light grey	120	10	0.875	2032 38 8

PE Polyethylene

/100 pc.

With perforation membranes, the opening D is pre-marked, but closed.

Grip seal to screw into metric thread to IEC 423.

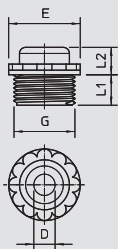
With self-sealing cone at the end of the thread, therefore no connection thread sealing ring required.

Protection rating achievable with careful mounting: IP54.

With perforation membranes, the opening D is pre-marked, but closed.

Important dimensions, screw-in nipple

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
M12 x 1.5	4	15	17	8	6
M16 x 1.5	4	18	20	8	6
M20 x 1.5	7	22	24	10	6
M25 x 1.5	7	30	32	12	6
M32 x 1.5	15	36	39	14	8
M40 x 1.5	22	44	48	16	8



Cable fastening system accessories



Screw-in nipple, PG thread with opening

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
90 PG 9 OF	Pg 9	Light grey	2,700	100	0.192	2032 09 0
90 PG11 OF	Pg 11	Light grey	2,700	100	0.200	2032 11 2
90 PG13.5 OF	Pg 13,5	Light grey	1,800	100	0.268	2032 13 9
90 PG16 OF	Pg 16	Light grey	1,800	100	0.291	2032 16 3
90 PG21 OF	Pg 21	Light grey	900	50	0.513	2032 20 1

PE Polyethylene

/100 pc.

With opening.

Grip seal to screw into PG thread end to DIN 40430.

With self-sealing cone at the end of the thread, therefore no connection thread sealing ring required.

Protection rating achievable with careful mounting: IP54.

With open cable entry.

Important dimensions, screw-in nipple

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
Pg 9	4	17	19	9.5	6
Pg 11	5	19	21	9.5	6
Pg 13.5	7	22	24	9.5	6
Pg 16	7	24	26	9.5	6
Pg 21	9	30	33	11.5	6



Screw-in nipple, PG thread with perforation membrane

Type	Thread	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
90 PG 9 DSMB	Pg 9	Light grey	2,700	100	0.192	2032 50 3
90 PG11 DSMB	Pg 11	Light grey	2,700	100	0.200	2032 51 1
90 PG13.5 DSMB	Pg 13,5	Light grey	1,800	100	0.268	2032 53 8
90 PG16 DSMB	Pg 16	Light grey	1,800	100	0.325	2032 54 6
90 PG21 DSMB	Pg 21	Light grey	500	50	0.513	2032 55 4
90 PG29 DSMB	Pg 29	Light grey	300	25	0.694	2032 56 2

PE Polyethylene

/100 pc.

With perforation membranes, the opening D is pre-marked, but closed.

Grip seal to screw into PG thread to DIN 40430.

With self-sealing cone at the end of the thread, therefore no connection thread sealing ring required.

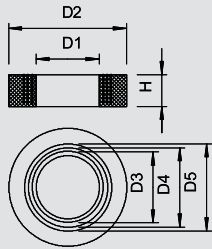
Protection rating achievable with careful mounting: IP54.

With perforation membranes, the opening D is pre-marked, but closed.

Important dimensions, screw-in nipple

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
Pg 9	4	17	19	9.5	6
Pg 11	5	19	21	9.5	6
Pg 13.5	7	22	24	9.5	6
Pg 16	7	24	26	9.5	6
Pg 21	9	30	33	11.5	6
Pg 29	15	37	40	11.5	6





Cutting ring

Pg



Type	Size	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
107 B PG9	Pg 9	100	0.240	2029 10 3
107 B PG11	Pg 11	100	0.230	2029 11 1
107 B PG13.5	Pg 13,5	100	0.230	2029 13 8
107 B PG16	Pg 16	100	0.320	2029 16 2
107 B PG21	Pg 21	100	0.590	2029 21 9
107 B PG29	Pg 29	100	1.160	2029 29 4
107 B PG36	Pg 36	50	1.940	2029 36 7
107 B PG42	Pg 42	50	2.710	2029 42 1
107 B PG48	Pg 48	50	3.490	2029 48 0

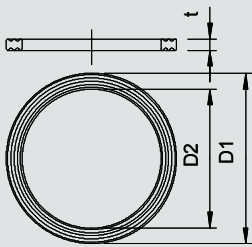
NBR-SBR Mixture of nitrile and styrene-butadiene rubber

/100 pc.

Rubber cutting ring (cuttable sealing ring) to DIN 46320 for cone cable gland.

Important dimensions, cutting ring

G	D1	D2	D3	D4	D5	H	M
	mm	mm	mm	mm	mm	mm	
Pg 9	5	13.3	7.5	10	0	5.5	M16
Pg 11	7.5	16.5	10	12.5	0	6	-
Pg 13.5	7.5	18.3	10	12.5	0	6	M20
Pg 16	7.5	20.4	10	12.5	15	7	M25
Pg 21	10	25.9	13	16	19	8	-
Pg 29	18	34.7	21	24	27	9.5	M32
Pg 36	24	44.7	27	30	33	12	M40
Pg 42	30	51.7	33	36	39	14	M50
Pg 48	36	56.9	39	42	45	14	M63



Connection thread sealing ring, metric

M

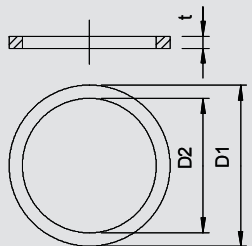


Type	Size	Dimen- sion D1	Dimen- sion D2	Dimen- sion t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 F M12 PE	M12	16.3	12	1	12,000	100	0.017	2030 00 4
107 F M16 PE	M16	20.9	16	1.1	2,600	100	0.018	2030 00 8
107 F M20 PE	M20	25.1	20	1.1	1,500	100	0.030	2030 01 2
107 F M25 PE	M25	31.3	25	1.4	1,200	100	0.060	2030 01 6
107 F M32 PE	M32	37.6	32	1.7	1,200	100	0.105	2030 02 0
107 F M40 PE	M40	49.1	40	1.7	1,000	100	0.200	2030 02 4
107 F M50 PE	M50	60.1	50	2	1,200	100	0.250	2030 02 8
107 F M63 PE	M63	73.8	63	2	1,200	100	0.290	2030 03 2

PE Polyethylene

/100 pc.

Connection thread sealing ring, suitable for all plastic cable glands with metric connection thread to DIN EN 60423 or ISO 68, the internal diameter of the sealing rings are designed so that they can be capively pre-mounted.



Type	Size	Dimen- sion D1	Dimen- sion D2	Dimen- sion t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
170 M16	M16	19.9	16	2	10,000	100	0.040	2088 42 8
170 M20	M20	24	20	2	12,000	100	0.066	2088 43 6
170 M25	M25	30	25	3	1,800	100	0.170	2088 44 4
170 M32	M32	38	32	3	1,200	100	0.270	2088 45 2
170 M40	M40	47	40	3	600	50	0.330	2088 46 0
170 M50	M50	57	50	3	600	50	0.440	2088 47 9

FA Fibre sealing material

/100 pc.

Asbestos-free material.

Connection thread sealing ring, Part 9, to DIN 46320, suitable for all brass cable glands with metric connection thread to DIN EN 60423 or ISO 68.
Colour: green, graphited on one side.

M



Cable fastening system accessories



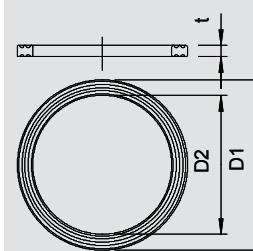
Connection thread sealing ring, PG

Type	Size	Dimension D1	Dimension D2	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 F PG7 PE	Pg 7	16.5	12.1	1.6	2,600	100	0.017	2030 07 1
107 F PG9 PE	Pg 9	19	14.7	1.6	2,600	100	0.018	2030 09 8
107 F PG11 PE	Pg 11	23	18	1.8	1,500	100	0.029	2030 10 1
107 F PG13.5 PE	Pg 13.5	25	19.8	1.8	1,500	100	0.030	2030 13 6
107 F PG16 PE	Pg 16	27	21.8	1.8	1,000	100	0.038	2030 16 0
107 F PG21 PE	Pg 21	34	27.5	2.2	1,000	100	0.060	2030 21 7
107 F PG29 PE	Pg 29	44	36.2	2.2	1,200	100	0.105	2030 29 2
107 F PG36 PE	Pg 36	55.5	46.2	2.7	1,000	100	0.200	2030 36 5
107 F PG42 PE	Pg 42	63.5	53.2	3.2	1,200	100	0.250	2030 41 1
107 F PG48 PE	Pg 48	69.5	58.5	3.2	1,200	100	0.290	2030 48 9

PE Polyethylene

/100 pc.

Connection thread sealing ring, in accordance with Part 9 to DIN 46320, however, dimensions may, according to material or function, deviate, suitable for all plastic cable glands with PG connection thread to DIN EN 40430, the internal diameter of the sealing rings are designed so that they can be captively pre-mounted.



M



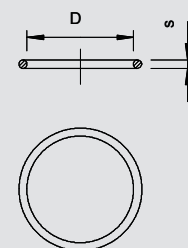
O sealing ring for metric connection thread

Type	Size	Dimension D	Dimension S	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
171 M12	M12	10	1.5	12,000	100	0.007	2088 70 3
171 M16	M16	13	1.5	12,000	100	0.008	2088 71 1
171 M20	M20	18	1.5	12,000	100	0.011	2088 73 8
171 M25	M25	22	1.5	10,000	100	0.012	2088 74 6
171 M32	M32	29	2	12,000	100	0.035	2088 75 4
171 M40	M40	36	2	500	50	0.045	2088 76 2
171 M50	M50	46	2	500	50	0.052	2088 77 0
171 M63	M63	59	2	250	25	0.056	2088 78 9

NBR Nitrile rubber

/100 pc.

O sealing rings, suitable as connection thread sealing rings for all plastic and brass cable glands with metric connection thread to DIN EN 60423 or ISO 68. The rings can be captively pre-mounted.



Pg



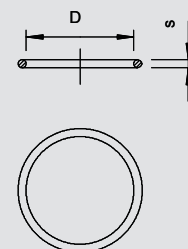
O sealing ring for PG connection thread

Type	Size	Dimension D	Dimension S	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
171 PG 9	Pg 9	13	1.5	12,000	100	0.008	2088 81 9
171 PG11	Pg 11	16	1.5	12,000	100	0.010	2088 82 7
171 PG13.5	Pg 13.5	18	1.5	12,000	100	0.011	2088 83 5
171 PG16	Pg 16	20	1.5	10,000	100	0.012	2088 84 3
171 PG21	Pg 21	25	2	12,000	100	0.027	2088 85 1
171 PG29	Pg 29	33	2	12,000	100	0.035	2088 87 8
171 PG36	Pg 36	43	2	750	50	0.045	2088 88 6
171 PG42	Pg 42	50	2	500	50	0.052	2088 89 4

NBR Nitrile rubber

/100 pc.

O sealing rings, suitable as connection thread sealing rings for all plastic and brass cable glands with Pg connection thread to DIN EN 60423 or ISO 68. The rings can be captively pre-mounted.



M



Dust protection plate, metric

Type	Size	Dimension D	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 S VTEC M12	M12	12	1.5	12,000	100	0.001	2028 87 0
107 S VTEC M16	M16	16	1.5	10,000	100	0.002	2028 87 3
107 S VTEC M20	M20	20	1.5	12,000	100	0.004	2028 87 5
107 S VTEC M25	M25	25	1.5	1,500	100	0.008	2028 87 7
107 S VTEC M32	M32	32	1.5	1,000	100	0.012	2028 88 0
107 S VTEC M40	M40	40	1.5	1,200	100	0.022	2028 88 3
107 S VTEC M50	M50	50	1.5	1,000	100	0.040	2028 88 5
107 S VTEC M63	M63	63	1.5	1,000	100	0.063	2028 88 7

ZPE Cellular polyethylene

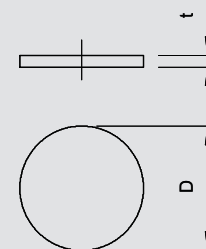
/100 pc.

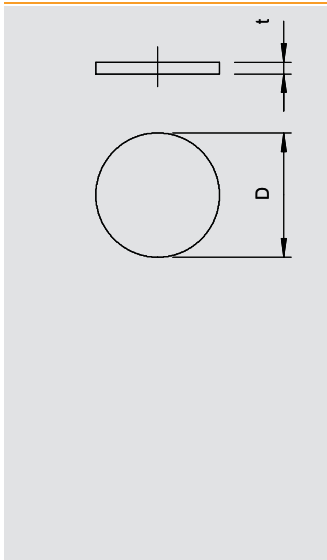
Cellular polyethylene.

Small protective disk to protect the V-TEC VM and V-TEC VM MS cable glands against dust before the cable is installed.

Application: the disks are pre-mounted between the cap nut and the seal. They do not need to be removed when the cable is installed, but are simply passed through to the interior with the cable.

Note: the disks do not provide any mechanical protection.





Dust protection plate, PG

Pg



Type	Size mm	Dimension D mm	Dimension t mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
107 S VTEC PG7	Pg 7	11	1.5	12,000	100	0.001	2028 89 1
107 S VTEC PG9	Pg 9	14	1.5	12,000	100	0.002	2028 90 5
107 S VTEC PG11	Pg 11	16.5	1.5	12,000	100	0.003	2028 91 3
107 S VTEC PG13	Pg 13,5	18.5	2	10,000	100	0.004	2028 92 1
107 S VTEC PG16	Pg 16	21	2	8,000	100	0.006	2028 94 8
107 S VTEC PG21	Pg 21	26.5	2	12,000	100	0.010	2028 95 6
107 S VTEC PG29	Pg 29	34.5	2	1,000	100	0.015	2028 96 4
107 S VTEC PG36	Pg 36	44	3	1,200	100	0.035	2028 97 2
107 S VTEC PG42	Pg 42	50	3	1,200	100	0.050	2028 98 0
107 S VTEC PG48	Pg 48	56	3	1,200	100	0.060	2028 99 9

ZPE Cellular polyethylene

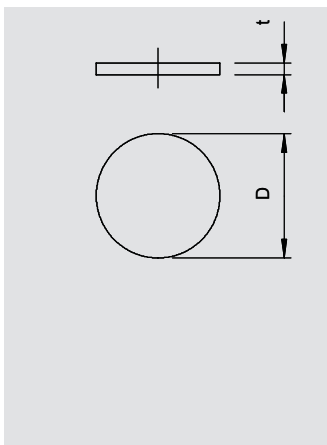
/100 pc.

Cellular polyethylene.

Small protective disk to protect the V-TEC and V-TEC MS cable glands against dust before the cable is installed.

Application: the disks are pre-mounted between the cap nut and the seal. They do not need to be removed when the cable is installed, but are simply passed through to the interior with the cable.

Note: the disks do not provide any mechanical protection.



Sealing plate, PG

Pg



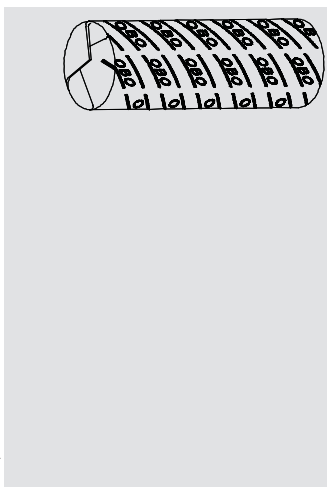
Type	Size mm	Dimension D mm	Dimension t mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
107 V PG 7 PVC	Pg 7	11	0.5	12,000	100	0.013	2029 70 7
107 V PG 9 PVC	Pg 9	13.5	0.5	12,000	100	0.020	2029 71 5
107 V PG11 PVC	Pg 11	16.5	0.5	10,000	100	0.030	2029 72 3
107 V PG13.5 PVC	Pg 13,5	18.5	0.5	10,000	100	0.038	2029 73 1
107 V PG16 PVC	Pg 16	20.5	0.5	8,000	100	0.048	2029 75 8
107 V PG21 PVC	Pg 21	26	0.5	12,000	100	0.075	2029 76 6
107 V PG29 PVC	Pg 29	35	1	1,000	100	0.135	2029 77 4

PVC Polyvinylchloride

/100 pc.

The sealing plate offers both mechanical protection and the maintenance of the protection rating of plastic and metal cable glands to DIN 46320 before cable installation.

Application: the discs are placed between the pressure screw and the pressure ring. If the safe maintenance of IP65 is required, we recommend placing the discs between the pressure ring and the sealing ring. To mount the cable, remove the discs – they can be reused.



Electrical insulating and sealing compound



Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
115 GR-GN	Natural	90	10	11.020	2340 03 8

/100 pc.

In rods.

Permanently elastic, fibre-free sealing kit on a polymer and a mineral basis to fill cavities in installations, e.g. cable glands or similar components, to prevent the entry of dirt and water,

Colour: Light grey

Characteristics of the sealing kit:

- Halogen, acid and silicone-free
- Can also be processed at low temperatures
- Permanent heat resistance to +80 °C
- Corrosion-resistant
- Low water consumption
- Good insulation properties
- Puncture strength 16 kV/mm to VDE 0291 Part 2
- Can be stored almost indefinitely



Cable fastening systems, brass

	Cap nut cable gland	Metric thread	234
		PG thread	235
		EMC metric EMC spring contact, metric	236 236
	Cone cable gland	Metric thread	237
		PG thread	237
		Cutting ring	239
		Small sealing ring Large sealing ring	241 242
		Strain relief	243
	Locknuts	Metric thread PG thread	244 244
	Cable gland system accessories	Screw plug Pressure screw Expansion piece Reduction Adapter Cutting ring Pressure ring O sealing ring Dust protection plate Sealing plate	245 245 246 247 249 250 251 252 252 253

Cap nut cable gland



Cable gland, metric thread

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC VM12 MS	M12 x 1,5	Nickel-plated	500	50	1.200	2086 01 8
V-TEC VM16 MS	M16 x 1,5	Nickel-plated	600	50	1.640	2086 02 4
V-TEC VM20 MS	M20 x 1,5	Nickel-plated	250	25	3.140	2086 03 0
V-TEC VM25 MS	M25 x 1,5	Nickel-plated	300	25	4.260	2086 03 6
V-TEC VM32 MS	M32 x 1,5	Nickel-plated	160	20	7.160	2086 04 2
V-TEC VM40 MS	M40 x 1,5	Nickel-plated	60	5	12.240	2086 04 8
V-TEC VM50 MS	M50 x 1,5	Nickel-plated	45	5	22.700	2086 05 4
V-TEC VM63 MS	M63 x 1,5	Nickel-plated	40	5	30.300	2086 06 0

CuZn Brass

N Nickel-plated

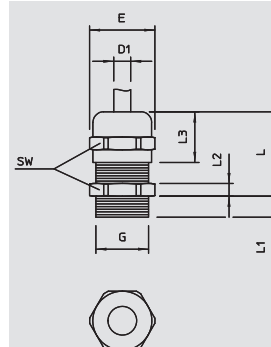
/100 pc.

With metric connecting thread to IEC 423 robust cap-nut cable gland with large sealing area. Strain relief, wringing protection and tightness over the whole clamping area. Neoprene sealing ring. Polyamide terminal insert. With pre-mounted sealing ring on connection thread, VDE-tested to DIN EN 50262, protection rating IP 68 at 5 bar for 1 hr.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D1	SW	E	L max.	L1
	mm	mm	mm	mm	mm
M12 x 1.5	3-6	14	15.5	20	5
M16 x 1.5	5-9	17	19	24	5
M20 x 1.5	9-13	22	24	27	6
M25 x 1.5	11-16	27	30	29.5	7
M32 x 1.5	14-21	34	36	30	8
M40 x 1.5	19-27	43	46	33	8
M50 x 1.5	24-35	55	60	38.5	9
M63 x 1.5	32-42	65	70	44.5	10



Cable gland, long metric thread

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC VM LM12 MS	M12 x 1,5	Nickel-plated	500	50	1.300	2086 11 1
V-TEC VM LM16 MS	M16 x 1,5	Nickel-plated	600	50	1.940	2086 11 7
V-TEC VM LM20 MS	M20 x 1,5	Nickel-plated	300	25	3.360	2086 12 3
V-TEC VM LM25 MS	M25 x 1,5	Nickel-plated	250	25	4.800	2086 12 9
V-TEC VM LM32 MS	M32 x 1,5	Nickel-plated	120	10	7.840	2086 13 5
V-TEC VM LM40 MS	M40 x 1,5	Nickel-plated	60	5	13.400	2086 14 1
V-TEC VM LM50 MS	M50 x 1,5	Nickel-plated	45	5	24.000	2086 14 7
V-TEC VM LM63 MS	M63 x 1,5	Nickel-plated	40	5	32.100	2086 15 3

CuZn Brass

N Nickel-plated

/100 pc.

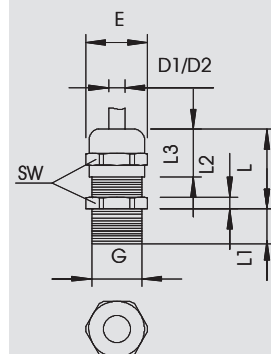
With metric connecting thread to IEC 423 robust cap-nut cable gland with large sealing area. Strain relief, wringing protection and tightness over the whole clamping area. For thicker housing wall thicknesses in conjunction with locknuts. Neoprene sealing ring. Polyamide terminal insert. With pre-mounted sealing ring on connection thread, VDE-tested to DIN EN 50262, protection rating IP 68 at 5 bar for 1 hr.

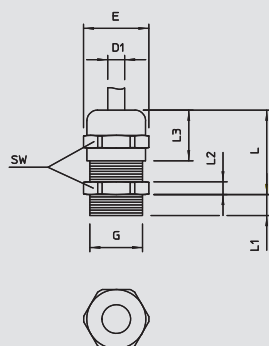
With long connection thread.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D1	SW	E	L max.	L1
	mm	mm	mm	mm	mm
M12 x 1.5	3-6	14	15.5	20	10
M16 x 1.5	5-9	17	19	24	10
M20 x 1.5	9-13	22	24	27	10
M25 x 1.5	11-16	27	30	29.5	11
M32 x 1.5	14-21	34	36	30	13
M40 x 1.5	19-27	43	46	33	13
M50 x 1.5	24-35	55	60	38.5	14
M63 x 1.5	32-42	65	70	44.5	14





Cable gland, PG thread



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC PG7 MS	Pg 7	Nickel-plated	500	50	1.000	2085 60 7
V-TEC PG9 MS	Pg 9	Nickel-plated	600	50	1.600	2085 61 5
V-TEC PG11 MS	Pg 11	Nickel-plated	600	50	2.300	2085 62 3
V-TEC PG13 MS	Pg 13,5	Nickel-plated	500	50	2.800	2085 63 1
V-TEC PG16 MS	Pg 16	Nickel-plated	300	25	3.400	2085 65 8
V-TEC PG21 MS	Pg 21	Nickel-plated	200	25	6.000	2085 66 6
V-TEC PG29 MS	Pg 29	Nickel-plated	120	20	13.000	2085 67 4
V-TEC PG36 MS	Pg 36	Nickel-plated	60	10	21.000	2085 68 2
V-TEC PG42 MS	Pg 42	Nickel-plated	15	5	23.500	2085 69 0
V-TEC PG48 MS	Pg 48	Nickel-plated	40	5	31.500	2085 70 4

CuZn Brass **N** Nickel-plated /100 pc.

Cable gland of cap-nut design with large sealing area, and strain relief and torsion protection for high sealing demands with Pg connection thread to DIN 40430, polyamide terminal insert, sealing ring of chloroprene/nitrile rubber, with pre-mounted O ring on the connection thread.

Protection rating IP 68 at 5 bar: 1 hr, tested to VDE 0619.

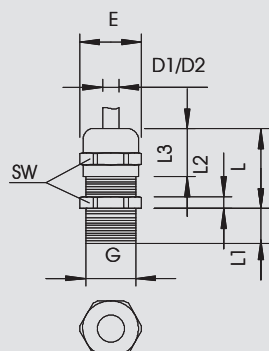
"Normal" connection thread length, according to DIN 46320.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D1	D2	SW	E	L max.	L1	L2	L3
mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	2,5-6,5	3-6,5	14	15,5	20	5	3	12
Pg 9	2,5-8	3,5-8	17	18,9	22	6	3	14
Pg 11	3,5-10	4,5-10	20	22,2	24	6	3	15
Pg 13,5	5-12	6-12	22	24,4	25	6,5	3,5	15
Pg 16	7-14	7-14	24	26,7	27	6,5	4	17
Pg 21	9-18	12-18	30	33,5	33	7	4,5	20
Pg 29	14-25	17-25	40	43,5	39	8	5	23,5
Pg 36	18-32	20-32	50	54	49	9	5,5	29
Pg 42	24-38	26-38	57	61	52	10	6	31
Pg 48	30-44	30-44	64	69	52,5	10	6,5	31

Cable gland, long PG thread



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC L PG7 MS	Pg 7	Nickel-plated	600	50	1.130	2085 72 0
V-TEC L PG9 MS	Pg 9	Nickel-plated	600	50	1.740	2085 73 9
V-TEC L PG11 MS	Pg 11	Nickel-plated	600	50	2.550	2085 74 7
V-TEC L PG13 MS	Pg 13,5	Nickel-plated	200	50	3.030	2085 75 5
V-TEC L PG16 MS	Pg 16	Nickel-plated	300	25	3.660	2085 76 3
V-TEC L PG21 MS	Pg 21	Nickel-plated	200	25	6.580	2085 77 1
V-TEC L PG29 MS	Pg 29	Nickel-plated	100	10	13.660	2085 79 8
V-TEC L PG48 MS	Pg 48	Nickel-plated	40	5	37.900	2085 83 6

CuZn Brass **N** Nickel-plated /100 pc.

Cable gland of cap-nut design with large sealing area, and strain relief and torsion protection for high sealing demands with long Pg connection thread to DIN 40430, for thicker housing wall thicknesses in connection with locknut.

Polyamide terminal insert.

Sealing ring of chloroprene/nitrile rubber.

O ring pre-mounted on connection thread.

Protection rating IP 68 at 5 bar: 1 hr.

Tested to VDE 0619.

With long connection thread.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D1	D2	SW	E	L max.	L1	L2	L3
mm	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	2,5-6,5	3-6,5	14	15,5	20	10	3	12
Pg 9	2,5-8	3,5-8	17	18,9	22	10	3	14
Pg 11	3,5-10	4,5-10	20	22,2	24	10	3	15
Pg 13,5	5-12	6-12	22	24,4	25	10	3,5	16
Pg 16	7-14	7-14	24	26,7	27	10	4	17
Pg 21	9-18	12-18	30	33,5	33	12	4,5	20
Pg 29	14-25	17-25	40	43,5	39	12	5	23
Pg 48	30-44	30-44	64	69	52,5	15	6,5	31

Cap nut cable gland



Cable gland, EMV, metric

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC VM12 EMV	M12 x 1,5	Nickel-plated	500	50	1.362	2086 20 3
V-TEC VM16 EMV	M16 x 1,5	Nickel-plated	600	50	1.849	2086 20 7
V-TEC VM20 EMV	M20 x 1,5	Nickel-plated	250	25	3.473	2086 21 1
V-TEC VM25 EMV	M25 x 1,5	Nickel-plated	250	25	5.280	2086 21 5
V-TEC VM32 EMV	M32 x 1,5	Nickel-plated	160	20	7.470	2086 21 9
V-TEC VM40 EMV	M40 x 1,5	Nickel-plated	60	5	12.880	2086 22 3
V-TEC VM50 EMV	M50 x 1,5	Nickel-plated	45	5	26.165	2086 22 7
V-TEC VM63 EMV	M63 x 1,5	Nickel-plated	45	5	33.990	2086 23 1

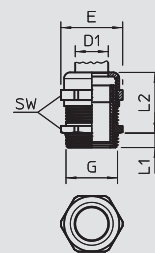
CuZn Brass N Nickel-plated /100 pc.

With metric connecting thread to IEC 423 robust EMV cap-nut cable gland with large sealing area. Strain relief, wringing protection and tightness over the whole clamping area. Neoprene sealing ring. Polyamide terminal insert. With pre-mounted O sealing ring on connection thread, VDE-tested to DIN EN 50262, protection rating IP 68 at 5 bar for 1 hr.

* Prices according to DEL notation.

Important dimensions, EMV brass cable gland

G	D1	SW	E	L max.	L1
mm	mm	mm	mm	mm	mm
M12 x 1.5	3-6	14	15.5	25	5
M16 x 1.5	5-9	17	19	30	5
M20 x 1.5	9-13	22	24	33.5	6
M25 x 1.5	11-16	17	30	36.5	7
M32 x 1.5	14-21	34	36	38	8
M40 x 1.5	19-27	43	46	49.5	8
M50 x 1.5	24-35	55	60	49.5	9
M63 x 1.5	32-42	65	70	52.5	10



Cable gland, EMV spring contact, metric

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
V-TEC VM16 EMV-K	M16x1,5	Nickel-plated	600	50	2.044	2086 16 5
V-TEC VM20 EMV-K	M20x1,5	Nickel-plated	250	25	3.564	2086 16 9
V-TEC VM25 EMV-K	M25x1,5	Nickel-plated	250	25	5.918	2086 17 3
V-TEC VM32 EMV-K	M32x1,5	Nickel-plated	160	20	9.880	2086 17 7
V-TEC VM40 EMV-K	M40x1,5	Nickel-plated	60	5	17.200	2086 18 1
V-TEC VM50 EMV-K	M50x1,5	Nickel-plated	45	5	13.735	2086 18 5
V-TEC VM63 EMV-K	M63x1,5	Nickel-plated	45	5	16.780	2086 18 9

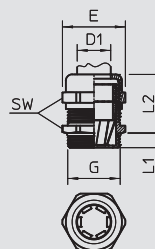
CuZn Brass N Nickel-plated /100 pc.

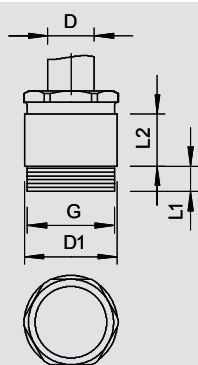
With metric connecting thread to IEC 423 robust EMV cap-nut cable gland with large sealing area. The contacting between the gland and braided shield is made using a contact spring. Strain relief, wringing protection and tightness over the whole clamping area. Neoprene sealing ring. Polyamide terminal insert. With pre-mounted O sealing ring on connection thread, VDE-tested to DIN EN 50262, protection rating IP 68 at 5 bar for 1 hr.

* Prices according to DEL notation.

Important dimensions, EMV brass cable gland

G	D1	SW	E	L max.	L1
mm	mm	mm	mm	mm	mm
M16 x 1.5	5-9	17	19	30	5
M20 x 1.5	9-13	22	24	33.5	6
M25 x 1.5	11-16	27	30	36.5	7
M32 x 1.5	14-21	34	36	38	8
M40 x 1.5	19-27	43	46	41	8
M50 x 1.5	24-35	55	60	49.5	9
M63 x 1.5	38-48	65	65	52.5	10





Cable gland, metric thread

IP 54 IP 65 M



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
160 MS M12	M12 x 1,5	Nickel-plated	1,600	50	1.060	2079 80 1
160 MS M16	M16 x 1,5	Nickel-plated	1,500	50	1.810	2079 82 8
160 MS M20	M20 x 1,5	Nickel-plated	600	50	2.530	2079 83 6
160 MS M25	M25 x 1,5	Nickel-plated	300	25	3.390	2079 84 4
160 MS M32	M32 x 1,5	Nickel-plated	250	25	5.000	2079 85 2
160 MS M40	M40 x 1,5	Nickel-plated	120	10	8.720	2079 86 0
160 MS M50	M50 x 1,5	Nickel-plated	80	10	15.800	2079 87 9
160 MS M63	M63 x 1,5	Nickel-plated	50	5	21.600	2079 88 7

CuZn Brass **N** Nickel-plated /100 pc.

Cable gland with round intermediate support, shape C5, to DIN 46320 with metric connection thread to DIN EN 60423 and ISO 68. Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With simple sealing ring, with small nominal diameter.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	D1	SW	E	L1	L2
	mm	mm	mm	mm	mm	mm
M12 x 1.5	5-7	14	13	14.3	7	10
M16 x 1.5	6-8	17	15	16.6	7	10.5
M20 x 1.5	8-10	22	20	22.2	7	12.5
M25 x 1.5	8-10	26	22	24.2	7	12.5
M32 x 1.5	17-19	34	28	31.2	8.5	15
M40 x 1.5	24-26	41	37	41	8.5	16.5
M50 x 1.5	31-33	54	47	50.5	9.5	19.5
M63 x 1.5	37-39	64	—	59	10.5	16.5

Cable gland, PG thread

IP 54 IP 65 Pg



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
160 MS PG 7	Pg 7	Nickel-plated	1,600	50	0.770	2080 07 9
160 MS PG 9	Pg 9	Nickel-plated	1,500	50	1.270	2080 09 5
160 MS PG 11	Pg 11	Nickel-plated	600	25	1.820	2080 11 7
160 MS PG 13.5	Pg 13,5	Nickel-plated	600	50	2.240	2080 13 3
160 MS PG 16	Pg 16	Nickel-plated	450	25	2.850	2080 16 8
160 MS PG 21	Pg 21	Nickel-plated	250	25	4.320	2080 21 4
160 MS PG 29	Pg 29	Nickel-plated	200	10	7.610	2080 28 1
160 MS PG 36	Pg 36	Nickel-plated	120	10	14.400	2080 36 2
160 MS PG 42	Pg 42	Nickel-plated	50	5	20.100	2080 42 7
160 MS PG 48	Pg 48	Nickel-plated	50	5	28.650	2080 48 6

CuZn Brass **N** Nickel-plated /100 pc.

Cable gland with round intermediate support, shape C5, to DIN 46320 with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

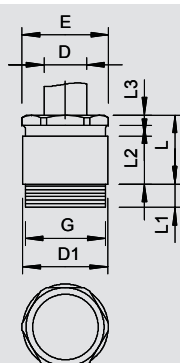
With simple sealing ring, with small nominal diameter.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	D1	SW	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	5-7	14	13	14.3	15	5	10	2.5
Pg 9	6-8	17	15	16.6	16	6	10.5	2.5
Pg 11	8-10	20	18	20	17	6	11	3
Pg 13.5	8-10	22	20	22.2	18	6.5	12.5	3
Pg 16	8-10	24	22	24.4	19	6.5	13.5	3
Pg 21	17-19	30	28	31.2	22	7	15	3.5
Pg 29	24-26	39	37	41	24	8	16.5	4
Pg 36	31-33	50	47	50.5	29	9	19.5	4.5
Pg 42	37-39	57	54	59.5	33	10	22	6
Pg 48	43-45	64	60	65	34	10	23	6



Cone cable gland

IP 54 IP 65 Pg



Cable gland, long PG thread

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
160 L MS PG 7	Pg 7	Nickel-plated	900	50	1.060	2081 07 5
160 L MS PG 9	Pg 9	Nickel-plated	1,200	50	1.810	2081 09 1
160 L MS PG11	Pg 11	Nickel-plated	500	50	2.200	2081 11 3
160 L MS PG13.5	Pg 13,5	Nickel-plated	500	50	2.530	2081 14 8
160 L MS PG16	Pg 16	Nickel-plated	300	25	3.390	2081 16 4
160 L MS PG21	Pg 21	Nickel-plated	250	25	5.000	2081 21 0

CuZn Brass

N Nickel-plated

/100 pc.

Cable gland with round intermediate support, shape C5, to DIN 46320 with 15 mm long Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

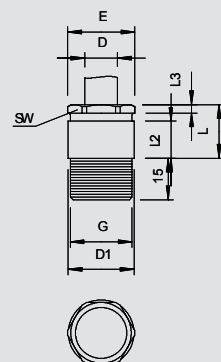
NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	D1	SW	E	L max.	L2	L3
	mm	mm	mm	mm	mm	mm	mm
Pg 7	5-7	14	13	14.3	15	10	2.5
Pg 9	6-8	17	15	16.6	16	10.5	2.5
Pg 11	8-10	20	18	20	17	11	3
Pg 13.5	8-10	22	20	22.2	18	12.5	3
Pg 16	8-10	24	22	24.4	19	13.5	3
Pg 21	17-19	30	28	31.2	22	15	3.5



IP 54 IP 65 Pg



Cable gland, large sealing ring, PG

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
160 G MS PG 9	Pg 9	Nickel-plated	1,500	50	1.060	2080 70 2
160 G MS PG11	Pg 11	Nickel-plated	600	25	1.690	2080 72 9
160 G MS PG13.5	Pg 13,5	Nickel-plated	600	50	2.350	2080 74 5
160 G MS PG16	Pg 16	Nickel-plated	450	25	2.700	2080 76 1
160 G MS PG21	Pg 21	Nickel-plated	250	25	4.560	2080 79 6

CuZn Brass

N Nickel-plated

/100 pc.

Cable gland with round intermediate support, shape C5, to DIN 46320 with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

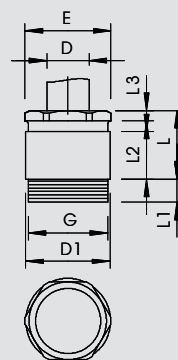
Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

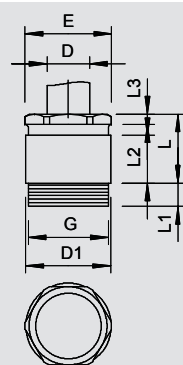
With simple, large sealing ring, with larger internal diameter.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	D1	SW	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	8-9.5	17	15	14.3	16	6	10.5	2.5
Pg 11	8-9.5	20	18	16.6	17	6	11	3
Pg 13.5	10-11.5	22	20	22.2	18	6.5	12.5	3
Pg 16	13-15	24	22	24.4	19	6.5	13.5	3
Pg 21	19.5-20.5	30	28	31.2	22	7	15	3.5





Cable gland, M cutting ring

IP 54 IP 65 M



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
161 MS M16	M16 x 1,5	Nickel-plated	1.500	50	1.814	2079 90 5
161 MS M20	M20 x 1,5	Nickel-plated	600	50	2.526	2079 90 9
161 MS M25	M25 x 1,5	Nickel-plated	300	25	3.388	2079 91 3
161 MS M32	M32 x 1,5	Nickel-plated	200	25	5.004	2079 91 7
161 MS M40	M40 x 1,5	Nickel-plated	200	10	8.720	2079 92 1
161 MS M50	M50 x 1,5	Nickel-plated	80	10	15.800	2079 92 5
161 MS M63	M63x1,5	Nickel-plated	50	5	21.600	2079 92 9

CuZn Brass N Nickel-plated /100 pc.

Cable gland with round intermediate support, shape C5, to DIN 46320 with metric connection thread to DIN EN 60423 and ISO 68. Pressure rings made of electrogalvanised and transparently passivated steel, NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With cutting ring.

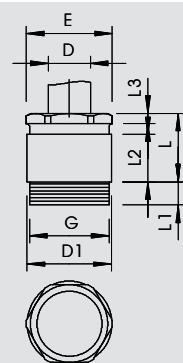
* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	D1	SW	E	L1	L2
	mm	mm	mm	mm	mm	mm
M16 x 1.5	5-9.5	17	15	16.6	7	17
M20 x 1.5	7.5-13.5	22	20	22.2	7	19
M25 x 1.5	7.5-15.5	26	22	24.4	8	20
M32 x 1.5	10-20.5	34	28	31.2	8.5	23.5
M40 x 1.5	18-29	41	37	41	8.5	25.5
M50 x 1.5	24-37	54	47	50.5	9.5	31
M63 x 1.5	30-42	64	54	59	10.5	35

Cable gland, PG cutting ring

IP 54 IP 65 Pg



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
161 MS PG11	Pg 11	Nickel-plated	600	50	1.910	2080 50 8
161 MS PG13.5	Pg 13,5	Nickel-plated	600	50	2.580	2080 52 4
161 MS PG16	Pg 16	Nickel-plated	450	25	3.010	2080 54 0
161 MS PG21	Pg 21	Nickel-plated	250	25	5.150	2080 56 7
161 MS PG29	Pg 29	Nickel-plated	200	10	8.960	2080 58 3
161 MS PG36	Pg 36	Nickel-plated	120	10	16.240	2080 60 5

CuZn Brass N Nickel-plated /100 pc.

Cable gland with round intermediate support, shape C5, to DIN 46320 with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With cutting ring.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	D1	SW	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 11	7.5-11.5	20	18	20	17	6	11	3
Pg 13.5	7.5-11.5	22	20	22.2	18	6.5	12.5	3
Pg 16	7.5-13.5	24	22	24.4	19	6.5	13.5	3
Pg 21	10-20.5	30	28	31.2	22	7	15	3.5
Pg 29	18-29	39	37	41	24	8	16.5	4
Pg 36	24-37	50	47	50.5	29	9	19.5	4.5

Cone cable gland



Cable gland, M cutting ring

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
162 MS M16	M16 x 1,5	Nickel-plated	1,500	50	1.814	2083 71 2
162 MS M20	M20 x 1,5	Nickel-plated	450	25	2.520	2083 71 6
162 MS M25	M25 x 1,5	Nickel-plated	250	25	3.388	2083 72 0
162 MS M32	M32 x 1,5	Nickel-plated	200	10	5.004	2083 72 4
162 MS M40	M40 x 1,5	Nickel-plated	120	10	8.720	2083 72 8
162 MS M50	M50 x 1,5	Nickel-plated	50	5	15.800	2083 73 2
162 MS M63	M63 x 1,5	Nickel-plated	50	5	21.600	2083 73 6

CuZn Brass

N Nickel-plated

/100 pc.

Cable gland with hexagonal intermediate support, shape C4, to DIN 46320 with metric connection thread to DIN EN 60423 and ISO 68. Pressure rings made of electrogalvanised and transparently passivated steel. NR/SBR sealing ring.

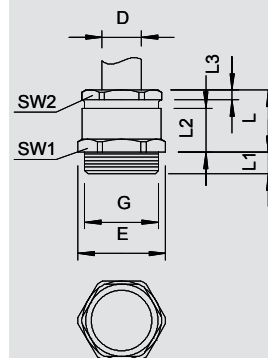
Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With cutting ring.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L1	L2
	mm	mm	mm	mm	mm	mm
M16 x 1.5	5-9.5	17	15	18.9	7	16
M20 x 1.5	7.5-13.5	22	20	24.4	7	18
M25 x 1.5	10-20.5	32	28	35.5	8	22
M32 x 1.5	18-29	40	37	43.5	8.5	24
M40 x 1.5	24-31	50	47	54	8.5	29
M50 x 1.5	30-42	58	54	62.1	9.5	33
M63 x 1.5	36-47	65	60	69	10	10



Cable gland, PG cutting ring

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
162 MS PG 9	Pg 9	Nickel-plated	1,500	50	1.250	2082 51 9
162 MS PG11	Pg 11	Nickel-plated	600	50	1.960	2082 50 0
162 MS PG13.5	Pg 13.5	Nickel-plated	600	50	2.630	2082 52 7
162 MS PG16	Pg 16	Nickel-plated	450	25	3.190	2082 54 3
162 MS PG21	Pg 21	Nickel-plated	250	25	5.240	2082 57 8
162 MS PG29	Pg 29	Nickel-plated	200	10	9.260	2082 59 4
162 MS PG36	Pg 36	Nickel-plated	80	10	16.490	2082 61 6

CuZn Brass

N Nickel-plated

/100 pc.

Cable gland with hexagonal intermediate support, shape C4, to DIN 46320 with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

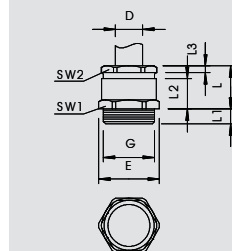
Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

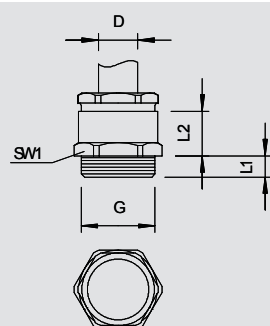
With cutting ring.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	5-9.5	17	15	18.9	16	6	10.5	2.5
Pg 11	7.5-11.5	20	18	22.2	17	6	11	3
Pg 13.5	7.5-13.5	22	20	24.4	18	6.5	12.5	3
Pg 16	7.5-15.5	24	22	26.7	19	6.5	13.5	3
Pg 21	10-20.5	30	28	33.5	22	7	15	3.5
Pg 29	18-29	40	37	43.5	24	8	16.5	4
Pg 36	24-37	50	47	54	29	9	19.5	4.5





Cable gland, small sealing ring, M

IP 54 IP 65 M



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
163 MS M12	M12 x 1,5	Nickel-plated	1,600	50	0.850	2083 61 2
163 MS M16	M16 x 1,5	Nickel-plated	1,500	50	1.160	2083 62 0
163 MS M20	M20 x 1,5	Nickel-plated	450	25	2.210	2083 63 9
163 MS M25	M25 x 1,5	Nickel-plated	250	25	4.550	2083 64 7
163 MS M32	M32 x 1,5	Nickel-plated	200	10	8.210	2083 65 5
163 MS M40	M40 x 1,5	Nickel-plated	120	10	14.230	2083 66 3
163 MS M50	M50 x 1,5	Nickel-plated	50	5	20.540	2083 67 1
163 MS M63	M63 x 1,5	Nickel-plated	50	5	30.000	2083 69 8

CuZn Brass N Nickel-plated /100 pc.

Cable gland with hexagonal intermediate support, shape C4, to DIN 46320 with metric connection thread to DIN EN 60423 and ISO 68. Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

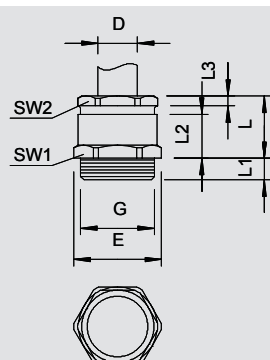
Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With simple sealing ring, with small internal diameter.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L1	L2
	mm	mm	mm	mm	mm	mm
M12 x 1.5	5-7	14	13	15.5	7	10
M16 x 1.5	6-8	17	15	18.9	7	10.5
M20 x 1.5	8-10	22	20	24.4	7	12.5
M25 x 1.5	17-19	34	28	35.5	8	15
M32 x 1.5	24-26	42	37	43.5	8.5	16.5
M40 x 1.5	31-33	52	47	54	8.5	19.5
M50 x 1.5	37-39	57	54	62.1	10.5	23
M63 x 1.5	43-45	65	60	69	10.5	23



Cable gland, small sealing ring, PG

IP 54 IP 65 Pg



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
163 MS PG 7	Pg 7	Nickel-plated	1,600	50	0.850	2082 07 1
163 MS PG 9	Pg 9	Nickel-plated	1,500	50	1.160	2082 09 8
163 MS PG11	Pg 11	Nickel-plated	500	25	1.690	2082 10 1
163 MS PG13.5	Pg 13,5	Nickel-plated	450	25	2.210	2082 13 6
163 MS PG16	Pg 16	Nickel-plated	450	25	2.960	2082 16 0
163 MS PG21	Pg 21	Nickel-plated	250	25	4.550	2082 21 7
163 MS PG29	Pg 29	Nickel-plated	200	10	8.210	2082 29 2
163 MS PG36	Pg 36	Nickel-plated	120	10	14.230	2082 36 5
163 MS PG42	Pg 42	Nickel-plated	50	5	20.540	2082 41 1
163 MS PG48	Pg 48	Nickel-plated	50	5	30.050	2082 48 9

CuZn Brass N Nickel-plated /100 pc.

Cable gland with hexagonal intermediate support, shape C4, to DIN 46320 with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With simple sealing ring, with small internal diameter.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	5-7	14	13	15.5	15	5	10	2.5
Pg 9	6-8	17	15	18.9	16	6	10.5	2.5
Pg 11	8-10	20	18	22.2	17	6	11	3
Pg 13.5	8-10	22	20	24.4	18	6.5	12	3
Pg 16	8-10	24	22	26.7	19	6.5	13.5	3
Pg 21	17-19	30	28	33.5	22	7	15	3.5
Pg 29	24-26	40	37	43.5	24	8	16.5	4
Pg 36	31-33	50	47	54	29	9	19.5	4.5
Pg 42	37-39	57	54	61	33	10	22	6
Pg 48	43-45	64	60	69	34	10	23	6

Cone cable gland

IP 54 IP 65 Pg



Cable gland, long PG thread

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
163 L MS PG 9	Pg 9	Nickel-plated	1,200	50	1.420	2083 09 4
163 L MS PG11	Pg 11	Nickel-plated	500	50	2.100	2083 11 6
163 L MS PG13	Pg 13,5	Nickel-plated	500	50	2.580	2083 13 2
163 L MS PG16	Pg 16	Nickel-plated	300	25	3.010	2083 16 7
163 L MS PG21	Pg 21	Nickel-plated	250	25	5.310	2083 21 3
163 L MS PG29	Pg 29	Nickel-plated	200	10	10.120	2083 29 9

CuZn Brass N Nickel-plated /100 pc.

Cable gland with hexagonal intermediate support, shape C4, to DIN 46320 with 15 mm long Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

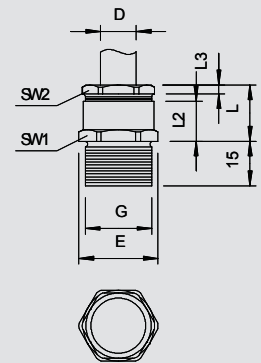
NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L max.	L2	L3
	mm	mm	mm	mm	mm	mm	mm
Pg 9	6-8	17	15	18.9	16	10.5	2.5
Pg 11	8-10	20	18	22.2	17	11	3
Pg 13.5	8-10	22	20	24.4	18	12.5	3
Pg 16	8-10	24	22	26.7	19	13.5	3
Pg 21	17-19	30	28	33.5	22	15	3.5
Pg 29	24-26	40	37	43.5	24	16.5	4



IP 54 IP 65 Pg



Cable gland, large sealing ring, PG

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
163 G MS PG 9	Pg 9	Nickel-plated	1,500	50	1.250	2082 70 5
163 G MS PG11	Pg 11	Nickel-plated	600	25	1.740	2082 71 3
163 G MS PG13.5	Pg 13,5	Nickel-plated	450	25	2.400	2082 72 1
163 G MS PG16	Pg 16	Nickel-plated	450	25	2.880	2082 74 8

CuZn Brass N Nickel-plated /100 pc.

Cable gland with hexagonal intermediate support, shape C4, to DIN 46320 with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

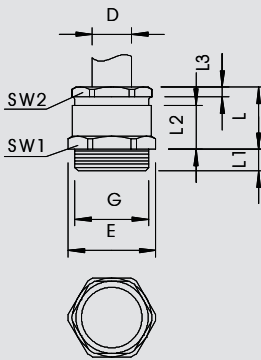
Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

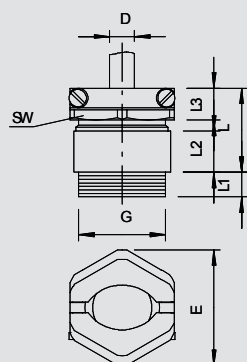
With simple sealing ring, with larger internal diameter.

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 9	8-9.5	17	15	18.9	16	6	10.5	2.5
Pg 11	10-11.5	20	18	22.2	17	6	11	3
Pg 13.5	11-13	22	20	24.4	18	6.5	12.5	3
Pg 16	13-15	24	22	26.7	19	6.5	13.5	3





Cable gland, PG strain relief

IP 54 IP 65 Pg



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
158 MS PG 9	Pg 9	Nickel-plated	600	50	2.300	2045 09 5
158 MS PG11	Pg 11	Nickel-plated	200	50	3.200	2045 11 7
158 MS PG13.5	Pg 13,5	Nickel-plated	200	50	4.690	2045 13 3
158 MS PG16	Pg 16	Nickel-plated	250	25	5.480	2045 16 8
158 MS PG21	Pg 21	Nickel-plated	100	25	7.274	2045 21 4
158 MS PG29	Pg 29	Nickel-plated	100	10	11.480	2045 28 1
158 MS PG36	Pg 36	Nickel-plated	50	5	21.780	2045 36 2

CuZn Brass N Nickel-plated /100 pc.

Cable gland with centrally acting transverse clip strain relief in the pressure screw, bend protection of movable cables through strongly rounded pressure screw with Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

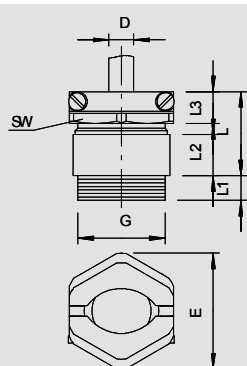
Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With round intermediate support (similar to shape C 5 to DIN 46320).

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm
Pg 9	6-8	19	20.5	24	6	10.5	10.6
Pg 11	8-10	22	24	25	6	11	11.3
Pg 13.5	8-10	24	27	26	6.5	12.5	11.3
Pg 16	8-10	26	29	28	6.5	13.5	11.8
Pg 21	17-19	33	37	32	7	15	13.3
Pg 29	24-26	42	46	34	8	16.5	13.8
Pg 36	31-33	52	57	40	9	19.5	15.8



Cable gland, PG strain relief

IP 54 IP 65 Pg



Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
159 MS PG 7	Pg 7	Nickel-plated	900	50	1.960	2046 07 5
159 MS PG 9	Pg 9	Nickel-plated	600	50	2.460	2046 09 1
159 MS PG11	Pg 11	Nickel-plated	200	50	3.250	2046 11 3
159 MS PG13.5	Pg 13,5	Nickel-plated	200	50	3.830	2046 12 1
159 MS PG16	Pg 16	Nickel-plated	250	25	5.700	2046 16 4
159 MS PG21	Pg 21	Nickel-plated	100	25	7.590	2046 21 0
159 MS PG29	Pg 29	Nickel-plated	100	10	14.970	2046 29 6
159 MS PG36	Pg 36	Nickel-plated	50	5	22.030	2046 36 9
159 MS PG42	Pg 42	Nickel-plated	15	5	41.070	2046 42 3
159 MS PG48	Pg 48	Nickel-plated	40	4	46.250	2046 48 2

CuZn Brass N Nickel-plated /100 pc.

Cable gland with centrally acting transverse clip strain relief in the pressure screw, bend protection of movable cables through strongly rounded pressure screw.

With Pg connection thread to DIN 40430.

Pressure rings made of electrogalvanised and transparently passivated steel.

NR/SBR sealing ring.

Protection rating: with connection thread sealing ring IP 65, without connection thread sealing ring IP 54.

With hexagonal intermediate support (similar to shape C 4 to DIN 46320).

* Prices according to DEL notation.

Important dimensions, brass cable gland

G	D	SW1	SW2	E	L max.	L1	L2	L3
	mm	mm	mm	mm	mm	mm	mm	mm
Pg 7	5-7	14	16	17.5	22	5	10	9.3
Pg 9	6-8	17	19	20.5	24	6	10.5	10.6
Pg 11	8-10	20	22	24.5	25	6	11	11.3
Pg 13.5	8-10	22	24	27	26	6.5	12.5	11.3
Pg 16	8-10	24	26	29	28	6.5	13.5	11.8
Pg 21	17-19	30	33	37	32	7	15	13.3
Pg 29	24-26	40	42	46.5	34	8	16.5	13.8
Pg 36	31-33	50	52	57	40	9	19.5	15.8
Pg 42	37-39	57	59	65	43	10	22	16.3
Pg 48	43-45	64	64	70	44	10	23	16.3

Locknuts

M



Locknut, metric thread

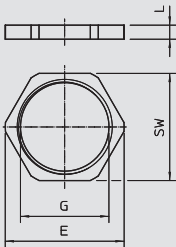
Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
169 MS M12	M12 x 1,5	Nickel-plated	2,600	100	0.220	2091 60 7
169 MS M16	M16 x 1,5	Nickel-plated	4,800	100	0.310	2091 61 5
169 MS M20	M20 x 1,5	Nickel-plated	3,200	100	0.580	2091 62 3
169 MS M25	M25 x 1,5	Nickel-plated	1,800	100	0.880	2091 63 1
169 MS M32	M32 x 1,5	Nickel-plated	1,200	100	1.120	2091 65 8
169 MS M40	M40 x 1,5	Nickel-plated	600	50	1.920	2091 66 6
169 MS M50	M50 x 1,5	Nickel-plated	500	50	3.070	2091 67 4
169 MS M63	M63 x 1,5	Nickel-plated	250	25	5.720	2091 68 2

CuZn Brass **N** Nickel-plated /100 pc.

Locknuts DIN 46319 with metric thread IEC 423.
* Price according to DEL notation.

Important dimensions, brass locknut

G	SW	E	L
	mm	mm	mm
M12 x 1.5	15	16.6	3
M16 x 1.5	20	22.1	3
M20 x 1.5	24	25.6	3.5
M25 x 1.5	30	33.2	4
M32 x 1.5	35	38.7	4
M40 x 1.5	45	49.8	4.5
M50 x 1.5	55	66.4	5.5
M63 x 1.5	70	77.6	6



Pg

Locknut, PG thread

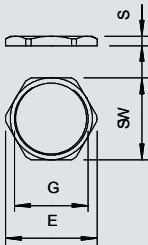
Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
169 MS PG 7	Pg 7	Nickel-plated	3,000	100	0.180	2091 07 0
169 MS PG 9	Pg 9	Nickel-plated	3,000	100	0.260	2091 09 7
169 MS PG11	Pg 11	Nickel-plated	3,000	100	0.290	2091 11 9
169 MS PG13.5	Pg 13,5	Nickel-plated	2,000	100	0.364	2091 13 5
169 MS PG16	Pg 16	Nickel-plated	2,000	100	0.460	2091 15 1
169 MS PG21	Pg 21	Nickel-plated	1,600	100	0.720	2091 21 6
169 MS PG29	Pg 29	Nickel-plated	1,000	100	1.320	2091 29 1
169 MS PG36	Pg 36	Nickel-plated	500	50	2.100	2091 36 4
169 MS PG42	Pg 42	Nickel-plated	500	50	3.260	2091 42 9
169 MS PG48	Pg 48	Nickel-plated	250	25	3.270	2091 48 8

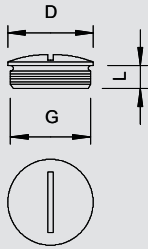
CuZn Brass **N** Nickel-plated /100 pc.

Locknut, Part M to DIN 46320 with Pg thread to DIN 40430.
* Price according to DEL notation.

Important dimensions, brass locknut

G	SW	E	L
	mm	mm	mm
Pg 7	15	16.6	2.8
Pg 9	18	20	2.8
Pg 11	21	23.5	3
Pg 13.5	23	25.5	3
Pg 16	26	29	3
Pg 21	32	35.5	3.5
Pg 29	41	45	4
Pg 36	51	56	5
Pg 42	60	65	5
Pg 48	64	69	5.5





Screw plug, metric thread

M

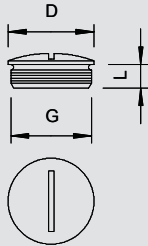
Type	Thread	Dimension D mm	Dimension L mm	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
168 MS M12	M12 x 1,5	16	5	Nickel-plated	3,000	100	0.390	2090 51 1
168 MS M16	M16 x 1,5	20	6	Nickel-plated	2,000	100	0.640	2090 53 8
168 MS M20	M20 x 1,5	22	6.5	Nickel-plated	1,000	100	0.930	2090 54 6
168 MS M25	M25 x 1,5	28	7	Nickel-plated	500	50	1.850	2090 55 4
168 MS M32	M32 x 1,5	35	8	Nickel-plated	200	50	2.810	2090 56 2
168 MS M40	M40 x 1,5	45	8	Nickel-plated	100	50	5.290	2090 57 0
168 MS M50	M50 x 1,5	55	9	Nickel-plated	100	25	6.310	2090 58 9
168 MS M63	M63 x 1,5	68	10	Nickel-plated	50	25	12.570	2090 59 7

CuZn Brass

N Nickel-plated

/100 pc.

Screw plug in accordance with DIN 46320, with metric thread to DIN EN 60423 or ISO 68.
* Prices according to DEL notation.



Screw plug, PG thread

Pg

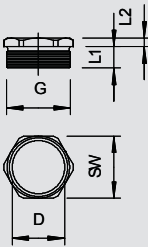
Type	Thread	Dimension D mm	Dimension L mm	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
168 MS PG 7	Pg 7	14	5	Nickel-plated	3,000	100	0.410	2090 07 4
168 MS PG 9	Pg 9	17	6	Nickel-plated	2,000	100	0.530	2090 09 0
168 MS PG11	Pg 11	20	6	Nickel-plated	1,000	100	0.840	2090 11 2
168 MS PG13	Pg 13,5	22	6.5	Nickel-plated	1,000	100	0.930	2090 13 9
168 MS PG16	Pg 16	24	6.5	Nickel-plated	1,000	100	1.300	2090 16 3
168 MS PG21	Pg 21	30	7	Nickel-plated	500	50	2.420	2090 20 1
168 MS PG29	Pg 29	39	8	Nickel-plated	200	50	4.310	2090 29 5
168 MS PG36	Pg 36	50	9	Nickel-plated	100	50	7.800	2090 36 8
168 MS PG42	Pg 42	57	10	Nickel-plated	100	25	11.710	2090 42 2
168 MS PG48	Pg 48	64	10	Nickel-plated	50	25	15.260	2090 48 1

CuZn Brass

N Nickel-plated

/100 pc.

Screw plug in accordance with DIN 46320, with Pg thread to DIN EN 40430.
* Prices according to DEL notation.



Pressure screw, PG thread

Pg

Type	Thread	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
164 MS PG11	Pg 11	Nickel-plated	3,000	100	0.590	2084 11 2
164 MS PG13	Pg 13,5	Nickel-plated	1,200	100	0.770	2084 13 9
164 MS PG16	Pg 16	Nickel-plated	1,200	100	0.910	2084 16 3
164 MS PG21	Pg 21	Nickel-plated	600	50	1.560	2084 20 1
164 MS PG29	Pg 29	Nickel-plated	450	25	3.130	2084 29 5
164 MS PG36	Pg 36	Nickel-plated	300	25	4.520	2084 36 8
164 MS PG42	Pg 42	Nickel-plated	120	10	6.930	2084 42 2
164 MS PG48	Pg 48	Nickel-plated	120	10	10.050	2084 48 1

CuZn Brass

N Nickel-plated

/100 pc.

Pressure screw (Part 3) in accordance with DIN 46320, with Pg thread to DIN EN 40430.
* Prices according to DEL notation.

Important dimensions, brass pressure screw

G	D	SW	E	L1	L2
mm	mm	mm	mm	mm	mm
Pg 11	15	18	20	6	3
Pg 13.5	17	20	22.2	7.5	3
Pg 16	18.5	22	24.4	7.5	3
Pg 21	24	28	31.2	8	3.5
Pg 29	32	37	41	8	4
Pg 36	42	47	50.5	9.5	4.5
Pg 42	48	54	59	10	6
Pg 48	52.5	60	65	11.5	6



Cable fastening system accessories

Pg



Pressure screw PG strain relief

Type	Thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
157 MS PG 7	Pg 7	Nickel-plated	1,000	100	1.200	2013 06 1
157 MS PG 9	Pg 9	Nickel-plated	1,200	100	1.500	2013 09 6
157 MS PG11	Pg 11	Nickel-plated	1,000	100	2.100	2013 11 8
157 MS PG13.5	Pg 13.5	Nickel-plated	1,000	100	2.200	2013 13 4
157 MS PG16	Pg 16	Nickel-plated	300	50	3.400	2013 16 9
157 MS PG21	Pg 21	Nickel-plated	200	50	4.500	2013 21 5
157 MS PG29	Pg 29	Nickel-plated	100	25	6.800	2013 29 0
157 MS PG36	Pg 36	Nickel-plated	100	10	12.000	2013 36 3

CuZn Brass

N Nickel-plated

/100 pc.

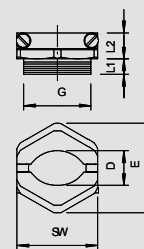
Pressure screw with centrally acting transverse clip strain relief, rust-proof stainless steel screws.

With bend protection and strain relief.

* Prices according to DEL notation.

Important dimensions, brass pressure screw

G	D	SW	E	L1	L2
	mm	mm	mm	mm	mm
Pg 7	6-7.5	16	17.5	5.5	9.3
Pg 9	7-9.5	19	20.5	6	10.6
Pg 11	8.5-11.5	22	24	6	11.3
Pg 13.5	10-13.5	24	27	6.5	11.3
Pg 16	11-15.5	26	30	6.5	11.8
Pg 21	14-20.5	33	38	7.5	13.3
Pg 29	20-29	42	46.5	8	13.8
Pg 36	26-36	52	57	9.5	15.8



M



Expansion piece, metric thread

Type	External thread	Internal thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
165 ADA M12-16	M12	M16	Nickel-plated	600	50	1.030	2088 28 0
165 ADA M16-20	M16	M20	Nickel-plated	500	50	1.430	2088 28 1
165 ADA M20-25	M20	M25	Nickel-plated	600	50	2.090	2088 28 2
165 ADA M25-32	M25	M32	Nickel-plated	400	50	2.710	2088 28 3
165 ADA M32-40	M32	M40	Nickel-plated	200	25	5.180	2088 28 4
165 ADA M40-50	M40	M50	Nickel-plated	100	10	10.150	2088 28 5
165 ADA M 50-63	M50	M63	Nickel-plated	60	5	13.060	2088 28 6

CuZn Brass

N Nickel-plated

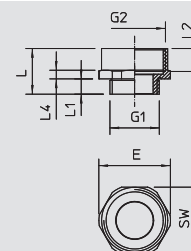
/100 pc.

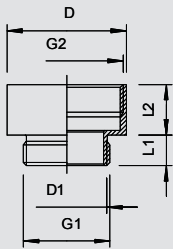
The areas of application for brass cable glands range from junction boxes as a distribution/connection box up to large industrial applications for safe floor routing to switchgear cabinets with a control and distribution function. For high mechanical requirements, OBO can offer the entire family of extensions (Part K) to DIN 46320.

* Prices according to DEL notation.

Important dimensions, expansion

G1	G2	SW	E	L	L1	L2	D
		mm	mm	mm	mm	mm	mm
M12	M16	18	20	16	5	7	8
M16	M20	22	24.5	16.7	5	8	12
M20	M25	27	29	18.5	6.4	9	15
M25	M32	34	35.8	20.7	7.4	8	20.8
M32	M40	42	45.5	23.8	8	10	26
M40	M50	52	58	30.5	8.2	12.5	33.8
M50	M63	65	69.9	33	9.2	16	43.4





Expansion piece, PG thread

Pg



Type	External thread	Internal thread	Thread length mm	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
165 MS EZ PG7-9	Pg 7	Pg 9	5	Nickel-plated	1,000	100	0.690	2088 02 9
165 MS EZPG9-11	Pg 9	Pg 11	6	Nickel-plated	1,200	100	0.860	2088 04 5
165 MS EZPG9-13	Pg 9	Pg 13,5	6	Nickel-plated	1,000	100	1.110	2088 06 1
165 MS EZPG11-13	Pg 11	Pg 13,5	6	Nickel-plated	1,000	100	1.137	2088 09 6
165 MS EZPG11-16	Pg 11	Pg 16	6	Nickel-plated	1,000	100	1.520	2088 12 6
165 MS EZPG13-16	Pg 13,5	Pg 16	6,5	Nickel-plated	1,000	100	1.594	2088 14 2
165 MS EZPG13-21	Pg 13,5	Pg 21	6,5	Nickel-plated	500	50	2.170	2088 16 9
165 MS EZPG16-21	Pg 16	Pg 21	6,5	Nickel-plated	500	50	2.150	2088 18 5
165 MS EZPG21-29	Pg 21	Pg 29	7	Nickel-plated	400	50	3.530	2088 20 7
165 MS EZPG29-36	Pg 29	Pg 36	8	Nickel-plated	50	25	7.110	2088 22 3
165 MS EZPG36-42	Pg 36	Pg 42	9	Nickel-plated	50	25	8.750	2088 25 8
165 MS EZPG42-48	Pg 42	Pg 48	10	Nickel-plated	80	10	14.560	2088 27 4

CuZn Brass

N Nickel-plated

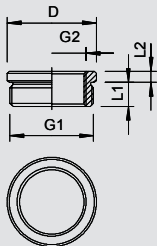
/100 pc.

The areas of application for brass cable glands range from junction boxes as a distribution/connection box up to large industrial applications for safe floor routing to switchgear cabinets with a control and distribution function. For high mechanical requirements, OBO can offer the entire family of extensions (Part K) to DIN 46320.

* Prices according to DEL notation.

Important dimensions, expansion

G1	G2	D	D1	L1	L2
		mm	mm	mm	mm
Pg 7	Pg 9	17	10	5	10
Pg 9	Pg 11	20	12,5	6	10,5
Pg 9	Pg 13,5	22	12,5	6	11,5
Pg 11	Pg 13,5	22	15	6	11,5
Pg 11	Pg 16	24	15	6	12,5
Pg 13,5	Pg 16	24	17	6,5	12,5
Pg 13,5	Pg 21	30	17	6,5	14,5
Pg 16	Pg 21	30	18,5	6,5	14,5
Pg 21	Pg 29	39	24	7	16
Pg 29	Pg 36	50	32	8	19,5
Pg 36	Pg 42	57	42	9	22
Pg 42	Pg 48	64	48	10	23



Reduction, metric thread

M



Type	External thread	Internal thread	Thread length mm	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
167 R MS M16-12	M16	M12	6	Nickel-plated	2,100	50	0.880	2089 50 5
167 R MS M20-12	M20	M12	6,5	Nickel-plated	1,000	50	1.340	2089 51 3
167 R MS M20-16	M20	M16	6,5	Nickel-plated	1,000	50	1.480	2089 52 1
167 R MS M25-16	M25	M16	7	Nickel-plated	500	50	3.220	2089 54 8
167 R MS M25-20	M25	M20	7	Nickel-plated	500	50	2.700	2089 55 6
167 R MS M32-20	M32	M20	8	Nickel-plated	200	50	6.120	2089 56 4
167 R MS M32-25	M32	M25	8	Nickel-plated	200	50	4.500	2089 57 2
167 R MS M40-25	M40	M25	6	Nickel-plated	100	25	9.960	2089 58 0
167 R MS M40-32	M40	M32	9	Nickel-plated	100	25	6.840	2089 59 9
167 R MS M50-32	M50	M32	10	Nickel-plated	100	25	16.300	2089 60 2
167 R MS M50-40	M50	M40	10	Nickel-plated	100	25	10.250	2089 61 0
167 R MS M63-40	M63	M40	10	Nickel-plated	40	10	30.080	2089 62 9
167 R MS M63-50	M63	M50	10	Nickel-plated	40	10	10.090	2089 63 7

CuZn Brass

N Nickel-plated

/100 pc.

Reduction (Part H) in accordance with DIN 46320, with metric thread to DIN EN 60423 or ISO 68.

* Prices according to DEL notation.

Important dimensions, brass reduction

G1	G2	D	L1	L2
		mm	mm	mm
M16	M12	20	6	8,5
M20	M12	24	6,5	9
M20	M16	24	6,5	9
M25	M16	30	7	10
M25	M20	30	7	10
M32	M20	39	8	11,5
M32	M25	39	8	11,5
M40	M25	50	6	12,5
M40	M32	50	9	12,5
M50	M32	57	10	14
M50	M40	57	10	14
M63	M40	64	10	14
M63	M50	64	10	14

Cable fastening system accessories

Pg



Reduction, PG thread

Type	External thread	Internal thread	Thread length mm	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
167 R MS PG9-7	Pg 9	Pg 7	6	Nickel-plated	1,800	50	0.430	2089 02 5
167 R MS PG11-7	Pg 11	Pg 7	6	Nickel-plated	2,100	50	1.030	2089 04 1
167 R MS PG11-9	Pg 11	Pg 9	6	Nickel-plated	1,800	50	0.650	2089 07 6
167 R MS PG13-7	Pg 13,5	Pg 7	6,5	Nickel-plated	1,000	50	1.520	2089 09 2
167 R MS PG13-9	Pg 13,5	Pg 9	6,5	Nickel-plated	1,000	50	1.120	2089 11 4
167 R MS PG13-11	Pg 13,5	Pg 11	6,5	Nickel-plated	2,100	50	0.470	2089 13 0
167 R MS PG16-9	Pg 16	Pg 9	6,5	Nickel-plated	1,000	50	1.730	2089 15 7
167 R MS PG16-11	Pg 16	Pg 11	6,5	Nickel-plated	1,000	50	1.050	2089 17 3
167 R MS PG16-13	Pg 16	Pg 13,5	6,5	Nickel-plated	900	50	0.656	2089 20 3
167 R MS PG21-11	Pg 21	Pg 11	7	Nickel-plated	500	50	2.960	2089 23 8
167 R MS PG21-13	Pg 21	Pg 13,5	7	Nickel-plated	500	50	2.520	2089 25 4
167 R MS PG21-16	Pg 21	Pg 16	7	Nickel-plated	600	50	1.964	2089 27 0
167 R MS PG29-16	Pg 29	Pg 16	8	Nickel-plated	200	50	6.560	2089 29 7
167 R MS PG29-21	Pg 29	Pg 21	8	Nickel-plated	200	50	4.273	2089 31 9
167 R MS PG36-21	Pg 36	Pg 21	9	Nickel-plated	100	25	11.660	2089 33 5
167 R MS PG36-29	Pg 36	Pg 29	9	Nickel-plated	100	25	6.980	2089 35 1
167 R MS PG42-29	Pg 42	Pg 29	10	Nickel-plated	100	25	14.540	2089 38 6
167 R MS PG42-36	Pg 42	Pg 36	10	Nickel-plated	100	25	6.750	2089 40 8
167 R MS PG48-36	Pg 48	Pg 36	10	Nickel-plated	50	25	12.840	2089 42 4
167 R MS PG48-42	Pg 48	Pg 42	10	Nickel-plated	50	25	6.230	2089 44 0

CuZn Brass

N Nickel-plated

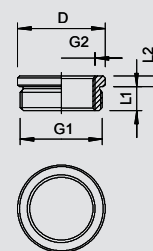
/100 pc.

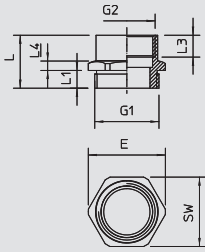
Reduction (Part H) to DIN 46320, with Pg thread to DIN 40430, as a transition from a PG thread hole to a smaller cable gland.

* Prices according to DEL notation.

Important dimensions, brass reduction

G1	G2	D	L1	L2
		mm	mm	mm
Pg 9	Pg 7	17	6	2.5
Pg 11	Pg 7	20	6	2.5
Pg 11	Pg 9	20	6	2.5
Pg 13.5	Pg 7	22	6.5	2.5
Pg 13.5	Pg 9	22	6.5	2.5
Pg 13.5	Pg 11	22	6.5	2.5
Pg 16	Pg 9	24	6.5	3
Pg 16	Pg 11	24	6.5	3
Pg 16	Pg 13.5	24	6.5	3
Pg 21	Pg 11	30	7	3
Pg 21	Pg 13.5	30	7	3
Pg 21	Pg 16	30	7	3
Pg 29	Pg 16	39	8	3.5
Pg 29	Pg 21	39	8	3.5
Pg 36	Pg 21	50	9	3.5
Pg 36	Pg 29	50	9	3.5
Pg 42	Pg 29	57	10	4
Pg 42	Pg 36	57	10	4
Pg 48	Pg 36	64	10	4
Pg 48	Pg 42	64	10	4





Adapter expansion M - PG

M Pg



Type	External thread	Internal thread	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
165 ADA M12-PG7	M12	PG7	Nickel-plated	240	20	0.590	2088 30 1
165 ADA M16-PG9	M16	PG9	Nickel-plated	300	20	9.110	2088 31 2
165 ADA M16-PG11	M16	PG11	Nickel-plated	300	20	2.220	2088 30 2
165 ADA M20-PG11	M20	PG11	Nickel-plated	200	20	1.760	2088 31 6
165 ADA M20-PG13	M20	PG13,5	Nickel-plated	200	20	1.320	2088 30 3
165 ADA M20-PG16	M20	PG16	Nickel-plated	200	20	1.650	2088 31 8
165 ADA M25-PG16	M25	PG16	Nickel-plated	200	20	2.540	2088 30 4
165 ADA M25-PG21	M25	PG21	Nickel-plated	200	20	2.330	2088 32 4
165 ADA M32-PG29	M32	PG29	Nickel-plated	100	10	4.850	2088 33 0
165 ADA M40-PG29	M40	PG29	Nickel-plated	120	10	7.150	2088 30 6
165 ADA M40-PG36	M40	PG36	Nickel-plated	100	10	8.150	2088 33 6
165 ADA M50-PG29	M50	PG42	Nickel-plated	100	10	10.110	2088 30 7
165 ADA M63-PG48	M63	PG48	Nickel-plated	48	4	20.080	2088 34 8

CuZn Brass

N Nickel-plated

/100 pc.

Adapter for converting a metric threaded drill hole to a Pg threaded drill hole.

Important dimensions, adapter

G1	G2	SW	E	L	L1	L3	D
		mm	mm	mm	mm	mm	mm
M12	PG 7	14	15.5	16	6	9	8
M16	PG 9	-	-	-	-	-	-
M16	PG11	22	24.5	16	6	7.9	12.5
M20	PG11	22	24.5	17.6	6.5	10.2	15
M20	PG13.5	22	24.5	19	6.5	11.5	16
M20	PG16	14.9	23.9	19.6	6	9	11.5
M25	PG16	27	30	20.5	7	12.5	18.3
M25	PG21	30	33.5	22.2	7	13.5	20.5
M32	PG29	40	44	24.4	8	15	27.5
M40	PG29	43	46.2	24.4	8	15	31.8
M40	PG36	33	50	27.5	8	15	18
M50	PG42	57	60.8	31	9	20	44
M63	PG48	65	69.8	33	10	21	52.2

Adapter reduction M - PG

M Pg



Type	External thread	Internal thread	Surface finish	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
165 ADA M16-PG7	M16	PG7	Nickel-plated	240	20	5.130	2088 31 0
165 ADA M20-PG9	M20	PG9	Nickel-plated	240	20	1.100	2088 31 4
165 ADA M25-PG11	M25	PG11	Nickel-plated	300	20	1.940	2088 32 0
165 ADA M25-PG13	M25	PG13,5	Nickel-plated	300	20	1.610	2088 32 2
165 ADA M32-PG16	M32	PG16	Nickel-plated	150	10	3.790	2088 32 8
165 ADA M32-PG21	M32	PG21	Nickel-plated	150	10	1.730	2088 30 5
165 ADA M40-PG21	M40	PG21	Nickel-plated	120	10	6.980	2088 33 4
165 ADA M50-PG29	M50	PG29	Nickel-plated	60	5	11.220	2088 34 0
165 ADA M63-PG36	M63	PG36	Nickel-plated	60	5	16.950	2088 34 4
165 ADA M63-PG42	M63	PG42	Nickel-plated	60	5	10.460	2088 34 6

CuZn Brass

N Nickel-plated

/100 pc.

Adapter for reducing a metric threaded drill hole to a smaller Pg threaded drill hole.

Important dimensions, adapter

G1	G2	SW	E	L	L1
		mm	mm	mm	mm
M16	PG 7	17	19	8	5
M20	PG 9	22	24.5	9	6
M25	PG11	27	30	10	7
M25	PG13.5	27	30	10	7
M32	PG16	34	36	11	8
M32	PG21	34	36	11	8
M40	PG21	43	46	12	8
M50	PG29	55	60	13	9
M63	PG36	65	69	14.2	10
M63	PG42	65	70	14.2	10

Cable fastening system accessories

M Pg



Adapter expansion PG - M

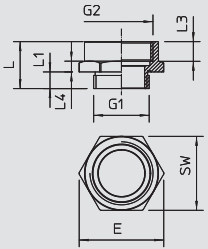
Type	External thread	Internal thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
165 ADA PG7-M12	PG7	M12	Nickel-plated	240	20	0.700	2088 29 0
165 ADA PG9-M12	PG9	M16	Nickel-plated	300	20	1.160	2088 29 1
165 ADA PG11-M16	PG11	M16	Nickel-plated	300	20	1.000	2088 29 2
165 ADA PG13-M20	PG13,5	M20	Nickel-plated	200	20	2.040	2088 29 3
165 ADA PG16-M20	PG16	M20	Nickel-plated	200	20	3.080	2088 29 4
165 ADA PG16-M25	PG16	M25	Nickel-plated	200	20	3.320	2088 29 5
165 ADA PG21-M25	PG21	M25	Nickel-plated	100	10	4.490	2088 29 6
165 ADA PG21-M32	PG21	M32	Nickel-plated	100	10	4.310	2088 29 7
165 ADA PG29-M40	PG29	M40	Nickel-plated	100	10	4.830	2088 29 8
165 ADA PG36-M50	PG36	M50	Nickel-plated	50	5	9.250	2088 29 9

CuZn Brass **N** Nickel-plated /100 pc.

Adapter for converting a Pg threaded drill hole to a larger metric threaded drill hole.

Important dimensions, adapter

G1	G2	SW	E	L	L1	L3	D
		mm	mm	mm	mm	mm	mm
PG 7	M12	14	15	15	5	7.5	9
PG 9	M16	19	21	16	6	7.5	12
PG11	M16	20	22	17	6	10	12
PG13.5	M20	24	26	17.5	6.5	8.5	16
PG16	M20	27	29	17.5	6.5	8.3	18.4
PG16	M25	30	33.5	18.5	6.6	9.5	18.4
PG21	M25	32	35.5	19	7	10	23
PG21	M32	36	39	20	7	10.5	22.7
PG29	M40	43	46	21	8	10.8	32
PG36	M50	55	60	23	9	10.5	42



M Pg



Adapter reduction PG - M

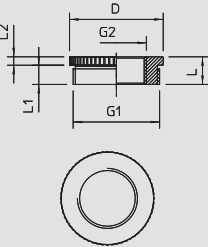
Type	External thread	Internal thread	Surface finish	Box Qty.	Pack.	Weight	Item No.
				pcs	pcs	kg/100 pcs.	
165 ADA PG29-M25	PG29	M25	Nickel-plated	200	20	5.730	2088 28 9

CuZn Brass **N** Nickel-plated /100 pc.

Adapter for converting a Pg threaded drill hole to a metric threaded drill hole.

Important dimensions, adapter

G1	G2	SW	E	L	L1	D
		mm	mm	mm	mm	mm
PG29	M25	-	-	11.5	8	39



Pg



Cutting ring

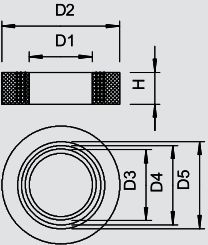
Type	Size	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
107 B PG9	Pg 9	100	0.240	2029 10 3
107 B PG11	Pg 11	100	0.230	2029 11 1
107 B PG13.5	Pg 13,5	100	0.230	2029 13 8
107 B PG16	Pg 16	100	0.320	2029 16 2
107 B PG21	Pg 21	100	0.590	2029 21 9
107 B PG29	Pg 29	100	1.160	2029 29 4
107 B PG36	Pg 36	50	1.940	2029 36 7
107 B PG42	Pg 42	50	2.710	2029 42 1
107 B PG48	Pg 48	50	3.490	2029 48 0

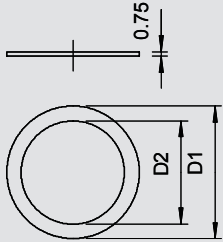
NBR-SBR Mixture of nitrile and styrene-butadiene rubber /100 pc.

Rubber cutting ring (cuttable sealing ring) to DIN 46320 for cone cable gland.

Important dimensions, cutting ring

G	D1	D2	D3	D4	D5	H	M
	mm	mm	mm	mm	mm	mm	
Pg 9	5	13.3	7.5	10	0	5.5	M16
Pg 11	7.5	16.5	10	12.5	0	6	-
Pg 13.5	7.5	18.3	10	12.5	0	6	M20
Pg 16	7.5	20.4	10	12.5	15	7	M25
Pg 21	10	25.9	13	16	19	8	-
Pg 29	18	34.7	21	24	27	9.5	M32
Pg 36	24	44.7	27	30	33	12	M40
Pg 42	30	51.7	33	36	39	14	M50
Pg 48	36	56.9	39	42	45	14	M63



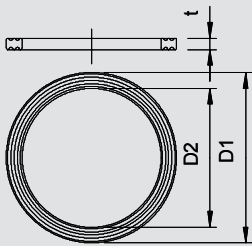


Pressure ring, PG thread

Type	Size	Dimension D1	Dimension D2	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 D PG7 GTP	Pg 7	11	8	12,000	100	0.020	2027 07 0
107 D PG9 GTP	Pg 9	13.5	10	10,000	100	0.038	2027 09 7
107 D PG11 GTP	Pg 11	16.5	12	10,000	100	0.061	2027 11 9
107 D PG13.5 GTP	Pg 13.5	18.5	14	12,000	100	0.066	2027 13 5
107 D PG16 GTP	Pg 16	20.5	16	12,000	100	0.074	2027 15 1
107 D PG21 GTP	Pg 21	26	21	5,000	50	0.100	2027 21 6
107 D PG29 GTP	Pg 29	35	30	2,500	25	0.140	2027 29 1

ST Steel **GTP** Electrogalvanised, transparently passivated /100 pc.
Pressure ring, Part 7, to DIN 46320, suitable for plastic and brass glands to DIN 46320.

Pg



Connection thread sealing ring, metric

Type	Size	Dimension D1	Dimension D2	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 F M12 PE	M12	16.3	12	1	12,000	100	0.017	2030 00 4
107 F M16 PE	M16	20.9	16	1.1	2,600	100	0.018	2030 00 8
107 F M20 PE	M20	25.1	20	1.1	1,500	100	0.030	2030 01 2
107 F M25 PE	M25	31.3	25	1.4	1,200	100	0.060	2030 01 6
107 F M32 PE	M32	37.6	32	1.7	1,200	100	0.105	2030 02 0
107 F M40 PE	M40	49.1	40	1.7	1,000	100	0.200	2030 02 4
107 F M50 PE	M50	60.1	50	2	1,200	100	0.250	2030 02 8
107 F M63 PE	M63	73.8	63	2	1,200	100	0.290	2030 03 2

PE Polyethylene /100 pc.

Connection thread sealing ring, suitable for all plastic cable glands with metric connection thread to DIN EN 60423 or ISO 68, the internal diameter of the sealing rings are designed so that they can be captively pre-mounted.

Type	Size	Dimension D1	Dimension D2	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
170 M16	M16	19.9	16	2	10,000	100	0.040	2088 42 8
170 M20	M20	24	20	2	12,000	100	0.066	2088 43 6
170 M25	M25	30	25	3	1,800	100	0.170	2088 44 4
170 M32	M32	38	32	3	1,200	100	0.270	2088 45 2
170 M40	M40	47	40	3	600	50	0.330	2088 46 0
170 M50	M50	57	50	3	600	50	0.440	2088 47 9

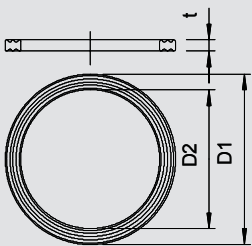
FA Fibre sealing material /100 pc.

Asbestos-free material.
Connection thread sealing ring, Part 9, to DIN 46320, suitable for all brass cable glands with metric connection thread to DIN EN 60423 or ISO 68.
Colour: green, graphited on one side.

M



M



Connection thread sealing ring, PG

Type	Size	Dimension D1	Dimension D2	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 F PG7 PE	Pg 7	16.5	12.1	1.6	2,600	100	0.017	2030 07 1
107 F PG9 PE	Pg 9	19	14.7	1.6	2,600	100	0.018	2030 09 8
107 F PG11 PE	Pg 11	23	18	1.8	1,500	100	0.029	2030 10 1
107 F PG13.5 PE	Pg 13.5	25	19.8	1.8	1,500	100	0.030	2030 13 6
107 F PG16 PE	Pg 16	27	21.8	1.8	1,000	100	0.038	2030 16 0
107 F PG21 PE	Pg 21	34	27.5	2.2	1,000	100	0.060	2030 21 7
107 F PG29 PE	Pg 29	44	36.2	2.2	1,200	100	0.105	2030 29 2
107 F PG36 PE	Pg 36	55.5	46.2	2.7	1,000	100	0.200	2030 36 5
107 F PG42 PE	Pg 42	63.5	53.2	3.2	1,200	100	0.250	2030 41 1
107 F PG48 PE	Pg 48	69.5	58.5	3.2	1,200	100	0.290	2030 48 9

PE Polyethylene /100 pc.

Connection thread sealing ring, in accordance with Part 9 to DIN 46320, however, dimensions may, according to material or function, deviate, suitable for all plastic cable glands with PG connection thread to DIN EN 40430, the internal diameter of the sealing rings are designed so that they can be captively pre-mounted.

Pg



Cable fastening system accessories

M



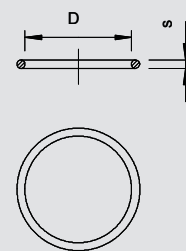
O sealing ring for metric connection thread

Type	Size	Dimension D	Dimension S	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
171 M12	M12	10	1.5	12,000	100	0.007	2088 70 3
171 M16	M16	13	1.5	12,000	100	0.008	2088 71 1
171 M20	M20	18	1.5	12,000	100	0.011	2088 73 8
171 M25	M25	22	1.5	10,000	100	0.012	2088 74 6
171 M32	M32	29	2	12,000	100	0.035	2088 75 4
171 M40	M40	36	2	500	50	0.045	2088 76 2
171 M50	M50	46	2	500	50	0.052	2088 77 0
171 M63	M63	59	2	250	25	0.056	2088 78 9

NBR Nitrile rubber

/100 pc.

O sealing rings, suitable as connection thread sealing rings for all plastic and brass cable glands with metric connection thread to DIN EN 60423 or ISO 68. The rings can be captively pre-mounted.



Pg



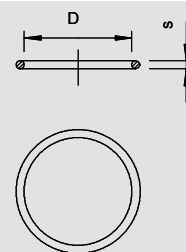
O sealing ring for PG connection thread

Type	Size	Dimension D	Dimension S	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
171 PG 9	Pg 9	13	1.5	12,000	100	0.008	2088 81 9
171 PG11	Pg 11	16	1.5	12,000	100	0.010	2088 82 7
171 PG13.5	Pg 13,5	18	1.5	12,000	100	0.011	2088 83 5
171 PG16	Pg 16	20	1.5	10,000	100	0.012	2088 84 3
171 PG21	Pg 21	25	2	12,000	100	0.027	2088 85 1
171 PG29	Pg 29	33	2	12,000	100	0.035	2088 87 8
171 PG36	Pg 36	43	2	750	50	0.045	2088 88 6
171 PG42	Pg 42	50	2	500	50	0.052	2088 89 4

NBR Nitrile rubber

/100 pc.

O sealing rings, suitable as connection thread sealing rings for all plastic and brass cable glands with Pg connection thread to DIN EN 60423 or ISO 68. The rings can be captively pre-mounted.



M



Dust protection plate, metric

Type	Size	Dimension D	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 S VTEC M12	M12	12	1.5	12,000	100	0.001	2028 87 0
107 S VTEC M16	M16	16	1.5	10,000	100	0.002	2028 87 3
107 S VTEC M20	M20	20	1.5	12,000	100	0.004	2028 87 5
107 S VTEC M25	M25	25	1.5	1,500	100	0.008	2028 87 7
107 S VTEC M32	M32	32	1.5	1,000	100	0.012	2028 88 0
107 S VTEC M40	M40	40	1.5	1,200	100	0.022	2028 88 3
107 S VTEC M50	M50	50	1.5	1,000	100	0.040	2028 88 5
107 S VTEC M63	M63	63	1.5	1,000	100	0.063	2028 88 7

ZPE Cellular polyethylene

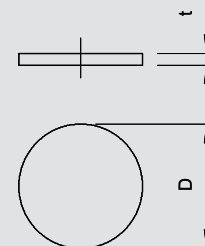
/100 pc.

Cellular polyethylene.

Small protective disk to protect the V-TEC VM and V-TEC VM MS cable glands against dust before the cable is installed.

Application: the disks are pre-mounted between the cap nut and the seal. They do not need to be removed when the cable is installed, but are simply passed through to the interior with the cable.

Note: the disks do not provide any mechanical protection.



Pg



Dust protection plate, PG

Type	Size	Dimension D	Dimension t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 S VTEC PG7	Pg 7	11	1.5	12,000	100	0.001	2028 89 1
107 S VTEC PG9	Pg 9	14	1.5	12,000	100	0.002	2028 90 5
107 S VTEC PG11	Pg 11	16.5	1.5	12,000	100	0.003	2028 91 3
107 S VTEC PG13	Pg 13,5	18.5	2	10,000	100	0.004	2028 92 1
107 S VTEC PG16	Pg 16	21	2	8,000	100	0.006	2028 94 8
107 S VTEC PG21	Pg 21	26.5	2	12,000	100	0.010	2028 95 6
107 S VTEC PG29	Pg 29	34.5	2	1,000	100	0.015	2028 96 4
107 S VTEC PG36	Pg 36	44	3	1,200	100	0.035	2028 97 2
107 S VTEC PG42	Pg 42	50	3	1,200	100	0.050	2028 98 0
107 S VTEC PG48	Pg 48	56	3	1,200	100	0.060	2028 99 9

ZPE Cellular polyethylene

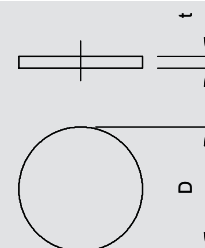
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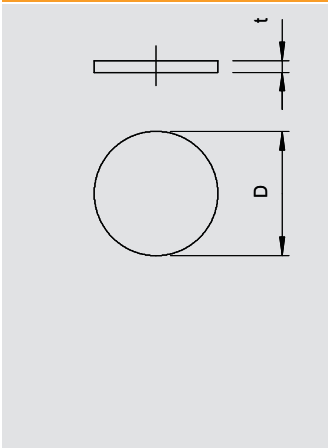
Cellular polyethylene.

Small protective disk to protect the V-TEC and V-TEC MS cable glands against dust before the cable is installed.

Application: the disks are pre-mounted between the cap nut and the seal. They do not need to be removed when the cable is installed, but are simply passed through to the interior with the cable.

Note: the disks do not provide any mechanical protection.





					Sealing plate, PG		
Type	Size	Dimen- sion D	Dimen- sion t	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
107 V PG 7 PVC	Pg 7	11	0.5	12,000	100	0.013	2029 70 7
107 V PG 9 PVC	Pg 9	13.5	0.5	12,000	100	0.020	2029 71 5
107 V PG11 PVC	Pg 11	16.5	0.5	10,000	100	0.030	2029 72 3
107 V PG13.5 PVC	Pg 13,5	18.5	0.5	10,000	100	0.038	2029 73 1
107 V PG16 PVC	Pg 16	20.5	0.5	8,000	100	0.048	2029 75 8
107 V PG21 PVC	Pg 21	26	0.5	12,000	100	0.075	2029 76 6
107 V PG29 PVC	Pg 29	35	1	1,000	100	0.135	2029 77 4

PVC Polyvinylchloride /100 pc.

The sealing plate offers both mechanical protection and the maintenance of the protection rating of plastic and metal cable glands to DIN 46320 before cable installation.

Application: the discs are placed between the pressure screw and the pressure ring. If the safe maintenance of IP65 is required, we recommend placing the discs between the pressure ring and the sealing ring. To mount the cable, remove the discs – they can be reused.





Cable/pipe fastening systems, plastic

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OBO Quick Family



Quick clip

Type	Nominal size	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
2955 M16	M16	Light grey	1,200	100	0.252	2149 00 4
2955 M20	M20	Light grey	1,200	100	0.325	2149 01 0
2955 M25	M25	Light grey	1,200	100	0.433	2149 01 6
2955 M32	M32	Light grey	600	50	0.630	2149 02 2
2955 M40	M40	Light grey	600	50	0.835	2149 02 8
2955 M50	M50	Light grey	300	25	1.454	2149 03 4
2955 M63	M63	Light grey	240	20	2.203	2149 04 0
2955 M16 SW	M16	Jet black	1,200	100	0.252	2149 55 9
2955 M20 SW	M20	Jet black	1,200	100	0.325	2149 56 3
2955 M25 SW	M25	Jet black	1,200	100	0.433	2149 56 7
2955 M32 SW	M32	Jet black	600	50	0.630	2149 57 1
2955 M40 SW	M40	Jet black	600	50	0.835	2149 57 5
2955 M50 SW	M50	Jet black	300	25	1.454	2149 57 9
2955 M63 SW	M63	Jet black	240	20	2.203	2149 58 3

PP Polypropylene

/100 pc.

OBO Quick clip, type 2955/...: for all metric steel armoured pipes, as well as light-duty and heavy-duty metric insulation pipes. Suitable for mounting the OBO Quick pipe.

Pipe centring aids allow optimum attachment of the pipe and automatically turn the clip into the correct position.

Universal fastening option; can be arranged with the OBO Multi-quick and starQuick clip.

Slot for side alignment during mounting with wood screw or knock-in anchor.

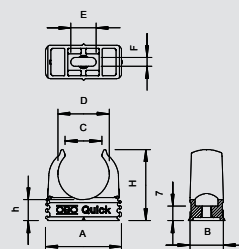
Sizes M16-M32 can be screwed onto M6 thread.

Recommended fastening spacing 50-60 cm.

For max. extraction values F at a room temperature of 20 °C, see the table.

Important dimensions, Quick clip

G	A	B	C	D	E	F	H	h	F (20 °C)
	mm	mm	mm	mm	mm	mm	mm	mm	N
M16	25.3	16	11.5	15.5	7	4.2	25	10	75
M20	30.3	16	14	19.4	9	4.2	29.5	10	90
M25	36.3	16	17.5	24.3	12	4.2	34	10	100
M32	46.3	16	22.4	31.4	12	4.2	42	11	120
M40	57.3	16	26	39.2	11	4.6	51	12	140
M50	70.3	18	32	49	12	6	63	14	165
M63	87.3	20	43	61.5	12	6	74.5	15	230



Quick clip, flame-resistant

Type	Nominal size	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
2955 F M16 STGR	M16	Stone grey	1,200	100	0.252	2149 30 3
2955 F M20 STGR	M20	Stone grey	1,200	100	0.325	2149 30 9
2955 F M25 STGR	M25	Stone grey	1,200	100	0.433	2149 31 5
2955 F M32 STGR	M32	Stone grey	600	50	0.630	2149 32 1
2955 F M40 STGR	M40	Stone grey	600	50	0.835	2149 32 7
2955 F M50 STGR	M50	Stone grey	300	25	1.454	2149 33 3
2955 F M63 STGR	M63	Stone grey	240	20	2.203	2149 33 9
2955 F M16 RW	M16	Pure white	1,200	100	0.252	2149 35 1
2955 F M20 RW	M20	Pure white	1,200	100	0.325	2149 35 7
2955 F M25 RW	M25	Pure white	1,200	100	0.433	2149 36 3
2955 F M32 RW	M32	Pure white	600	50	0.630	2149 36 9
2955 F M40 RW	M40	Pure white	600	50	0.835	2149 37 5
2955 F M50 RW	M50	Pure white	300	25	1.454	2149 38 1

PP Polypropylene

/100 pc.

OBO Quick clip, type 2955F/...: flame-resistant version for all metric steel armoured pipes, as well as light-duty and heavy-duty metric insulation pipes. Suitable for mounting the OBO Quick pipe.

Pipe centring aids allow optimum attachment of the pipe and automatically turn the clip into the correct position.

Universal fastening option; can be arranged with the OBO Multi-quick and starQuick clip.

Slot for side alignment during mounting with wood screw or knock-in anchor.

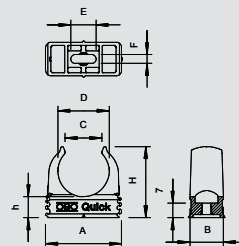
Size M16-M32 can be screwed onto M6 thread.

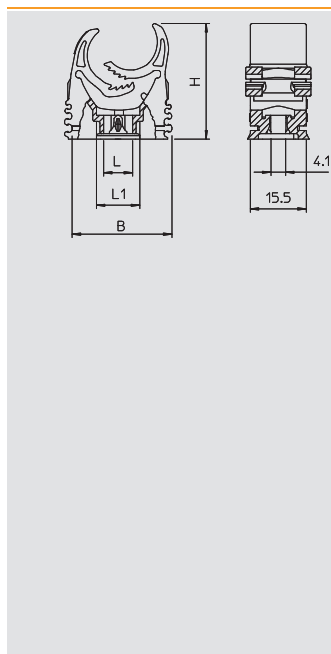
Recommended fastening spacing 50-60 cm.

For max. extraction values F at a room temperature of 20 °C, see the table.

Important dimensions, Quick clip

G	A	B	C	D	E	F	H	h	F (20 °C)
	mm	mm	mm	mm	mm	mm	mm	mm	N
M16	25.3	16	11.5	15.5	7	4.2	25	10	75
M20	30.3	16	14	19.4	9	4.2	29.5	10	90
M25	36.3	16	17.5	24.3	12	4.2	34	10	100
M32	46.3	16	22.4	31.4	12	4.2	42	11	120
M40	57.3	16	26	39.2	11	4.6	51	12	140
M50	70.3	18	32	49	12	6	63	14	165
M63	87.3	20	43	61.5	12	6	74.5	15	230





Multi-Quick clip

Type	Clamping range D mm	Pull-out value N	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
M-Quick 15-19LGR	15-19	40	Light grey	1,200	100	0.545	2153 10 6
M-Quick 18-22LGR	18.5-22.5	50	Light grey	1,200	100	0.750	2153 11 4
M-Quick 25-28LGR	25-28.5	60	Light grey	600	50	1.120	2153 13 0
M-Quick 31-37LGR	31-37	65	Light grey	300	25	1.780	2153 15 7

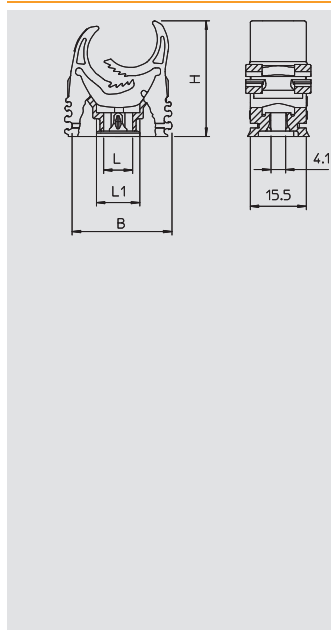
PA Polyamide

/100 pc.

Pg and metric.
Simple fastening.
Secure locking.
Radial arrangement.
Simplified storage.
Clamping ranges from 15–37 mm.
Universally applicable.
Fastening in rails, types 2060 and 2061.

Important dimensions, Multi-Quick clip

D	B	H	L	L1
mm	mm	mm	mm	mm
15–19	27.5	32	8	12
18.5–22.5	33	37	9	13
25–28.5	43	46	12	16
31–37	55	58	14	18



Multi-Quick clip, metric

Type	Clamping range D mm	Pull-out value N	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
M-Quick M20 LGR	16-20	40	Light grey	1,200	100	0.600	2153 71 8
M-Quick M25 LGR	20-25	50	Light grey	600	50	0.930	2153 72 6
M-Quick M32 LGR	25-32	60	Light grey	600	50	1.400	2153 73 4
M-Quick M20 SW	16-20	40	Jet black	1,200	100	0.600	2153 78 5
M-Quick M25 SW	20-25	50	Jet black	600	50	0.930	2153 78 7
M-Quick M32 SW	25-32	60	Jet black	600	50	1.400	2153 78 9

PA Polyamide

/100 pc.

Multi-quick metric.
Simple fastening.
Secure locking.
Radial arrangement.
Simplified storage.
Universally applicable.

Important dimensions, Multi-Quick clip

D	B	H	L	L1
mm	mm	mm	mm	mm
16–20	29	34	8	12
20–25	36	42	9	13
25–32	46	52	13	17



OBO Quick Family



starQuick clip

Type	Size	Clamping range D mm	Breaking load kN	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
SQ-10 LGR	10	9.5-12	0.5	Light grey	1,200	100	0.560	2146 05 3
SQ-12 LGR	12-14	11.5-15	0.55	Light grey	1,200	100	0.540	2146 06 1
SQ-15 LGR	15-16	14-16.5	0.6	Light grey	1,200	100	0.580	2146 09 6
SQ-17 LGR	17-19	16-20	0.7	Light grey	800	100	0.640	2146 11 8
SQ-20 LGR	20-23	19.5-23.5	0.8	Light grey	600	50	0.670	2146 13 4
SQ-25 LGR	25-28	24-28	0.85	Light grey	600	50	0.970	2146 20 7
SQ-28 LGR	28-32	27.5-32	0.9	Light grey	400	50	1.070	2146 21 5
SQ-32 LGR	32-35	31.2-35.8	1	Light grey	400	50	1.230	2146 25 8
SQ-36 LGR	35-40	35-40.1	1.1	Light grey	300	25	1.510	2146 29 0
SQ-40 LGR	40-44	39.3-44.5	1.2	Light grey	200	25	1.710	2146 32 0
SQ-47 LGR	45-50	44-50	1.2	Light grey	200	25	1.980	2146 36 3
SQ-51 LGR	50-54	48-55	1.4	Light grey	180	15	2.250	2146 44 4
SQ-59 LGR	59-65	58.5-65	1.5	Light grey	180	15	3.300	2146 48 7

PA Polyamide

/100 pc.

Can be arranged next to each other to size SQ-28.

Break load: with bolt DIN 96; diameter 4.5 mm, minimum break load at 20°.

starQuick clip Type SQ... a comprehensive programme of quality clips ideal for the use in outside areas such as parking garages, under bridges and on the exterior of steel structures. Climate conditions have no chance: the starQuick clips are made from UV weather-resistant polyamide.

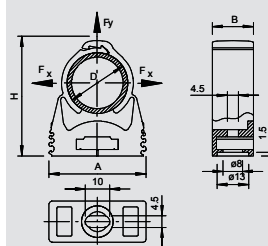
The starQuick clips are available in 13 different sizes with a clamping range of 10–65 mm, allowing a problem-free installation on different pipe systems. starQuick is suitable for plastic and metal pipes, as well as electrical and sanitary installations. The clips can be installed on the wall and ceiling. Mounting is amazingly fast and uncomplicated, without the use of tools. Mounting of multiple pipes is also really easy:

- By arranging the single clips.
- By using the double bracket, allowing a firm hold and spacing by heavy loads.
- A rail system allows for an open spacing and numbering of the clips.

starQuick is reliable and can support heavy loads. A patented safety system guarantees that the pipes stay where they are. The pipe is secure in the all around closed clip.

Important dimensions, starQuick clip

G	A	B	D	H	Fx	Fy
mm	mm	mm	mm	mm	N	N
10	29	17	9.5–12	31.6	500	500
12–14	29	17	11.5–15	34.5	550	550
15–16	29	17	14–16.5	35.7	600	600
17–19	29	17	16–20	39.8	700	700
20–23	29	17	19.5–23.5	49.5	800	800
25–28	40	17	24–28	49.5	850	850
28–32	40	17	27.5–32	52.8	900	900
32–35	43	17	31.2–35.8	65.8	1000	1000
35–40	47	17	35–40.1	65.8	1,100	1,100
40–44	52	17	39.3–44.5	69.5	1,200	1,200
45–50	57	17	44–50	75.5	1,200	1,200
50–54	63	17	48–55	81	1,400	1,400
59–65	74	20	58.5–65	94.3	1,500	1,500



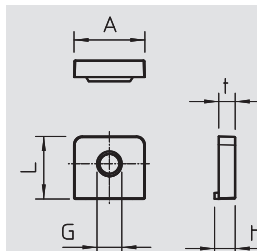
starQuick nut

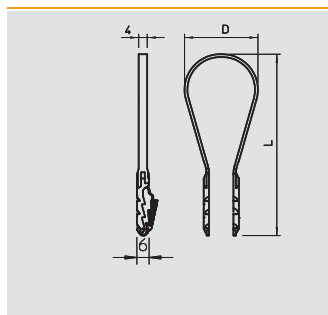
Type	Thread	Dimension L mm	Dimension h mm	Dimension t mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
SQ M6	M6	15	5	4	Light grey	12,000	100	0.070	2146 50 9
SQ M8	M8	15	5	4	Light grey	12,000	100	0.070	2146 51 1

PC Polycarbonate

/100 pc.

The starQuick nut was developed especially for the starQuick clip. Simply push into the intended opening of the starQuick. The starQuick nut is captive in the clip. Suitable for M6/M8 threads.





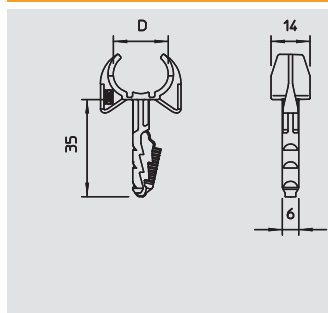
BKS clamp clip

Type	Clamping range D mm	Dimension L mm	Dimension D mm	Pull-out value N	Colour	Pack. pcs	Weight kg/100 pcs.	Item No.
1973 3-13 LGR	3-13	52	13	500	Light grey	100	0.110	2148 80 3
1973 8-28 LGR	8-28	70	27	500	Light grey	100	0.145	2148 84 6
1973 20-40 LGR	20-40	89	36	500	Light grey	100	0.160	2148 86 2

PA Polyamide

/100 pc.

For cables, flexible pipes and all kinds of insulating and armoured steel pipes, suitable for concrete, calcareous limestone and full brick. Use in gas concrete masonry is possible, but reduced load capacities must be expected.



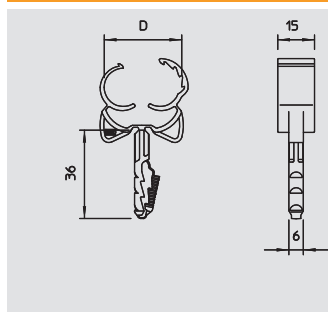
Snap clip

Type	Clamping range D mm	Bore hole depth mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1975 12-15	12-15	40	Light grey	1,300	100	0.240	2148 02 1
1975 16-19	16-19	40	Light grey	1,200	100	0.360	2148 04 8
1975 19-22	19-22.5	40	Light grey	1,200	100	0.520	2148 05 6

PA Polyamide

/100 pc.

With moulded-on push-fit plug for rapid mounting in concrete walls and masonry. Push plug into hole until the clip makes contact with the surface. When the pipe is pressed into the clip, the arms of the clip grip it.



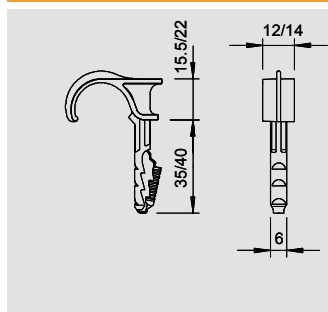
Click-snap clip

Type	Clamping range D mm	Breaking load for concrete B25	Colour	Pack. pcs	Weight kg/100 pcs.	Item No.
1976 12-15	12-15.5	190 N	Light grey	100	0.245	2148 50 1
1976 16-21	16-21.5	500 N	Light grey	100	0.470	2148 52 8
1976 22-28	22.5-28.5	500 N	Light grey	100	0.820	2148 53 6

PA Polyamide

/100 pc.

With moulded-on push-fit plug for rapid mounting in concrete walls and masonry. Push plug into hole until the clip makes contact with the surface. When the pipe is pressed into the clip, the arms of the clip grip it.



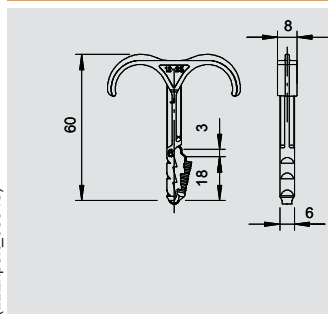
Single push-fit clip

Type	Clamping range D mm	Bore hole Ø mm	Bore hole depth mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1974 16-23	16-23	6	40	Light grey	1,200	100	0.260	2197 80 4
1974 22-30	22-30	6	40	Light grey	1,200	100	0.440	2197 81 2

PA Polyamide

/100 pc.

These push-fit clips are used when installing cables and pipes on walls and ceilings and when running flexible pipes on concrete and in the screed. The single push-fit clips can be used instead of nail clips in concrete and aerated concrete. The advantage of the push-fit clips is that they only have to be pushed into the drilled hole. Anchors and bolts are not needed.



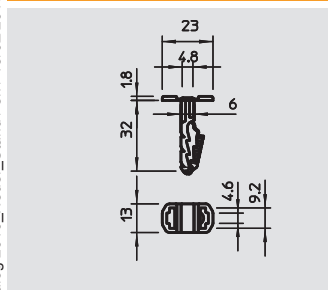
Double push-fit clip

Type	Clamping range D mm	Bore hole Ø mm	Bore hole depth mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1974 2X4-12	4-12	6	40	Light grey	1,200	100	0.130	2197 85 5
1974 2X12-25	12-25	6	40	Light grey	1,200	100	0.290	2197 86 3

PA Polyamide

/100 pc.

These push-fit clips are used when installing cables and pipes on walls and ceilings and when running flexible pipes on concrete and in the screed. The double push-fit clips can be used instead of nail clips in concrete and aerated concrete. The advantage of the push-fit clips is that they only have to be pushed into the drilled hole. Anchors and bolts are not needed.



Push-fit anchors for cable ties

Type	Bore hole depth mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
910 STK 6x30	35	Light grey	1,200	100	0.125	2351 60 9

PA Polyamide

/100 pc.

The push-fit anchor can accept a cable tie (type 550 or 555) up to 9 mm wide, which can be used to install several cables and pipes. Suitable for concrete, lime sand and brickwork as solid brick. Use in gas concrete masonry is possible, but reduced load capacities must be expected.



Push-fit anchors

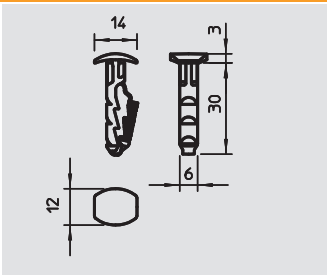


Push-fit anchors with mushroom head

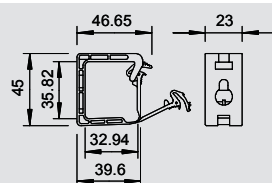
Type	Dowel Ø	Length	Bore hole depth	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
910 STP 6x30	6	30	35	4,000	100	0.100	2351 41 2

PA Polyamide /100 pc.

The push-fit anchor allows simple mounting, e.g. of labelling panels or small WDK ducts. Suitable for concrete, lime sandstone and brickwork as solid brick. Use in gas concrete masonry is possible, but reduced load capacities must be expected.



GRIP 10



Type	No. of conductors NYM 3 x 1.5	Colour	Pack. pcs	Weight kg/100 pcs.	Item No.
2031 10	10	Light grey	1	0.000	2205 39 8
2031 F 10	10	Stone grey	1	0.000	2205 40 0

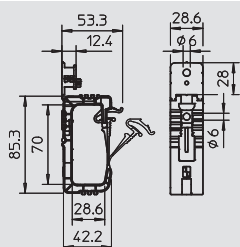
PP Polypropylene

/100 pc.

Light grey version: standard version for general use, suitable for wall and ceiling mounting.
Fastening holes 6 mm Ø. Recommended fastening spacing when full: 50–60 cm.



GRIP 20



Type	No. of conductors NYM 3 x 1.5	Colour	Pack. pcs	Weight kg/100 pcs.	Item No.
2031 20	15	Light grey	1	0.000	2205 40 4
2031 20 SP	15	Light grey	1	0.000	2205 40 8
2031 F 20	15	Stone grey	1	0.000	2205 41 2

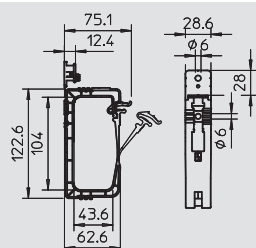
PP Polypropylene

/100 pc.

Cable tidy for general use, suitable for wall and ceiling mounting. The moulded fastening element can be fastened using knock-in anchors or a gas pressure nail gun.
Fastening holes 6 mm Ø, recommended fastening spacing when full: 50–60 cm.
Stone grey version: flame-resistant version, specially for use in suspended ceilings, flame-resistant to DIN VDE 0471/DIN IEC 695 Part 2-1, test temperature 960 °C.



GRIP 40



Type	No. of conductors NYM 3 x 1.5	Colour	Pack. pcs	Weight kg/100 pcs.	Item No.
2031 40	30	Light grey	25	0.000	2205 41 6
2031 40 SP	30	Light grey	50	0.000	2205 42 0
2031 F 40	30	Stone grey	25	0.000	2205 42 3

PP Polypropylene

/100 pc.

/pc.

Cable tidy for general use, suitable for wall and ceiling mounting. The moulded fastening element can be fastened using knock-in anchors or a gas pressure nail gun.
Fastening holes 6 mm Ø, recommended fastening spacing when full: 50–60 cm.
Stone grey version: flame-resistant version, specially for use in suspended ceilings, flame-resistant to DIN VDE 0471/DIN IEC 695 Part 2-1, test temperature 960 °C.



Pressure clip



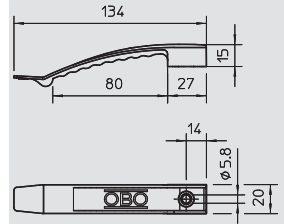
Pressure clip, for 8 cables

Type	No. of conductors NYM 3 x 1.5	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2032	8	Light grey	400	50	0.835	2205 01 7
2032 SP	8	Light grey	100	100	0.835	2204 97 5
2032 F	8	Stone grey	400	50	1.412	2204 90 8

PA Polyamide **PBPT** Polybutylene terephthalate

/100 pc.

Standard version for general use, e.g. on intermediate ceilings and partition walls.
Clamping height 9 mm – with spacer 13 mm.
Fastening hole: 6 mm Ø.



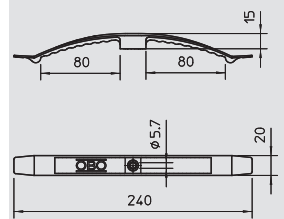
Pressure clip, for 16 cables

Type	No. of conductors NYM 3 x 1.5	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2033	16	Light grey	25	25	1.924	2205 03 3
2033 SP	16	Light grey	100	100	1.924	2204 98 3
2033 F	16	Stone grey	25	25	2.062	2204 91 6

PA Polyamide **PBPT** Polybutylene terephthalate

/100 pc.

Standard version for general use, e.g. on intermediate ceilings and partition walls.
Clamping height 9 mm – with spacer 13 mm.
Fastening hole: 6 mm Ø.



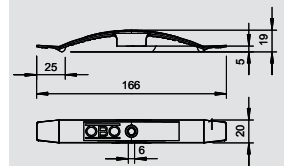
Pressure clip, for 10 cables

Type	No. of conductors NYM 3 x 1.5	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2034	10	Light grey	400	50	0.808	2205 04 1
2034 SP	10	Light grey	100	100	0.808	2204 99 1
2034 F	10	Stone grey	400	50	1.185	2204 92 4

PA Polyamide **PBPT** Polybutylene terephthalate

/100 pc.

Standard version for general use, e.g. on intermediate ceilings and partition walls.
Clamping height 9 mm – with spacer 13 mm.
Fastening hole: 6 mm Ø.



Pressure clip with knock-in anchor

Type	No. of conductors NYM 3 x 1.5	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2032 SD	8	Light grey	50	50	1.660	2204 80 0
2032 SD SP	8	Light grey	100	100	1.660	2204 85 1

PA Polyamide

/100 pc.

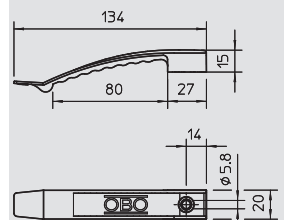
With pre-mounted knock-in anchor, 6 mm Ø.
Required drill hole depth 50 mm.
Clamping height 9 mm – with spacer 13 mm.
Fastening hole 6 mm Ø.

Type	No. of conductors NYM 3 x 1.5	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2033 SD	16	Light grey	25	25	2.440	2204 81 9
2033 SD SP	16	Light grey	100	100	2.440	2204 87 8

PA Polyamide

/100 pc.

With pre-mounted knock-in anchor, 6 mm Ø.
Required drill hole depth 50 mm.
Clamping height 9 mm – with spacer 13 mm.
Fastening hole 6 mm Ø.



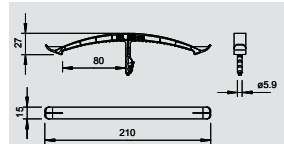
Pressure clip with push-fit anchor

Type	No. of conductors NYM 3 x 1.5	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2033 STD	16	Light grey	25	25	1.200	2204 54 1

PA Polyamide

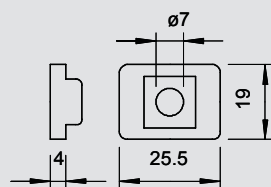
/100 pc.

With moulded push fit plug, 6 mm Ø.



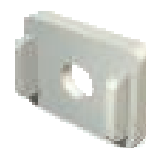
Pressure clip

Spacer

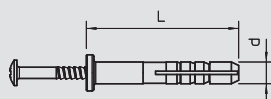


Type	Colour	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
2033 D 25x19	Light grey	2,400	100	0.215	2205 09 2
PS Polystyrene					/100 pc.

To increase the clamping height of pressure clips from 10 to 13 mm for thicker cables, impact-resistant polystyrene.



Knock-in anchor



Type	Dowel Ø	Length	Pull-out force	Pack.	Weight	Item No.
	mm	mm	N min/concrete	pcs	kg/100 pcs.	
910 SD 6X35	6	35	260	100	0.310	2351 05 6
910 SD 6X40	6	40	260	100	0.555	2351 06 4

PA Polyamide /100 pc.

Knock-in anchor: steel, electrogalvanised and transparently passivated.



Fastening clip



Series pressure clip

Type	Clamping range D mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2037 3-7 LGR	3-7	Light grey	1,000	100	0.257	2250 07 1
2037 6-13 LGR	6-13	Light grey	1,200	100	0.370	2250 13 6
2037 12-20 LGR	12-20	Light grey	500	50	0.640	2250 20 9
2037 16-24 LGR	16-24	Light grey	600	50	0.840	2250 24 1
2037 18-30 LGR	18-30	Light grey	300	25	1.232	2250 30 6
2037 27-43 LGR	27-43	Light grey	300	25	1.810	2250 43 8

PA Polyamide

/100 pc.

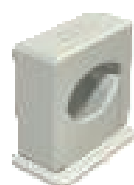
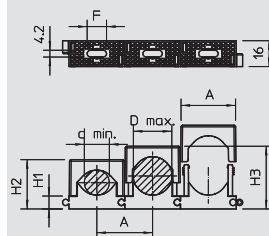
Universal clip for the single fastening of cables and pipes, all sizes can be seamlessly expanded among each other, with adhesive foot, slot and for screwing to M6 thread.

To stick the polyamide clips to masonry and concrete, use Impu-Fix ribbon conductor quick adhesive, type 509.

*Sizes 3-7 are not suitable for nail guns.

Important dimensions, series pressure clip

D	A	H1	H2	H3	d min.	D max.	F
mm	mm	mm	mm	mm	mm	mm	mm
3-7	14.5	7.5	15.5	19.5	3	7	6
6-13	20	8.5	20	27	6	13	13
12-20	28	8.5	26	34	12	20	14
16-24	34.5	8.5	31	39	16	24	12
18-30	40	9	34	46	18	30	12
27-43	55	10.5	46	62	27	43	15



Pressure ISO clip, single

Type	Clamping range D mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3050 LGR	6-16	Light grey	800	100	0.484	2101 01 7
3051 LGR	14-24	Light grey	600	50	0.876	2101 03 3
3052 LGR	24-34	Light grey	300	25	1.564	2101 06 8

PS Polystyrene

/100 pc.

With adhesive base, slot and for screwing to M6 thread.

Use the Impu-Fix ribbon conductor quick adhesive, type 509, to stick the polystyrene clips to masonry and concrete.

Important dimensions, pressure ISO clip

D	a1	b1	a	b	c	d	e
mm	mm	mm	mm	mm	mm	mm	mm
6-16	13	4	28	18	22.5	25	34
14-24	21	4.2	34	20	32	33	43
24-34	16	4.2	45	24	43	43	57

Type	Clamping range D mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3050 2 6-16	6-16	Light grey	250	25	1.044	2115 01 8

PS Polystyrene

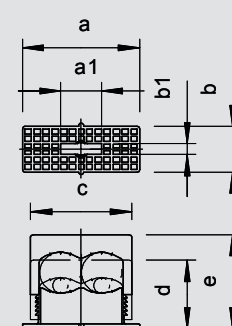
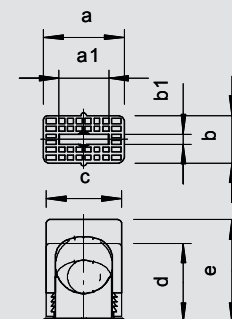
/100 pc.

For two cables, with adhesive base, slot and for screwing to M6 thread.

Use the Impu-Fix ribbon conductor quick adhesive, type 509, to stick the polystyrene clips to masonry and concrete.

Important dimensions, pressure ISO clip

D	a1	b1	a	b	c	d	e
mm	mm	mm	mm	mm	mm	mm	mm
6-16	26	3.8	46	18	40	26	35



Pressure ISO clip, double

Type	Clamping range D mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3050 2 6-16	6-16	Light grey	250	25	1.044	2115 01 8

PS Polystyrene

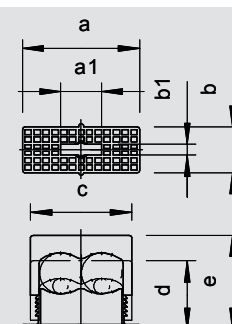
/100 pc.

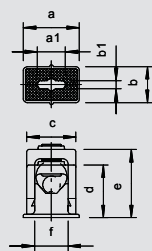
For two cables, with adhesive base, slot and for screwing to M6 thread.

Use the Impu-Fix ribbon conductor quick adhesive, type 509, to stick the polystyrene clips to masonry and concrete.

Important dimensions, pressure ISO clip

D	a1	b1	a	b	c	d	e
mm	mm	mm	mm	mm	mm	mm	mm
6-16	26	3.8	46	18	40	26	35





Grip ISO clip, single

Type	Clamping range D	Colour	Box Qty.	Pack.	Weight	Item No.
	mm		pcs	pcs	kg/100 pcs.	
3040 LGR	6-16	Light grey	1,200	100	0.744	2105 01 2
3041 LGR	16-24	Light grey	600	50	1.348	2105 03 9
3042 LGR	24-34	Light grey	300	25	2.488	2105 05 5

PS Polystyrene

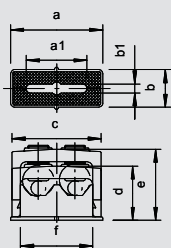
/100 pc.

Solid cable fastening through clamping screws, with adhesive base, slot and for screwing to M6 thread.

Use the Impu-Fix ribbon conductor quick adhesive, type 509, to stick the polystyrene clips to masonry and concrete.

Important dimensions, grip ISO clip

D	a1	b1	a	b	c	d	e	f
mm	mm	mm	mm	mm	mm	mm	mm	mm
6-16	13.5	4	28	18	24.5	28	35	20
16-24	20	4.2	35	22	37	36	44	31
24-34	14	4.2	50	22	48	49	59	40



Grip ISO clip, double

Type	Clamping range D	Colour	Box Qty.	Pack.	Weight	Item No.
	mm		pcs	pcs	kg/100 pcs.	
3040 2	6-16	Light grey	250	25	1.184	2107 01 5
3041 2	16-24	Light grey	300	25	2.292	2107 03 1

PS Polystyrene

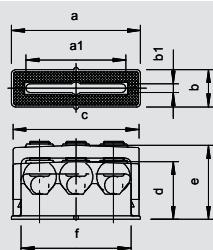
/100 pc.

Solid cable fastening through clamping screws, with adhesive base, slot and for screwing to M6 thread.

Use the Impu-Fix ribbon conductor quick adhesive, type 509, to stick the polystyrene clips to masonry and concrete.

Important dimensions, grip ISO clip

D	a1	b1	a	b	c	d	e	f
mm	mm	mm	mm	mm	mm	mm	mm	mm
6-16	29	4.2	44	18	43	28	35	38
16-24	46	4.5	63	22	61	37	46	55



Grip ISO clip, triple

Type	Clamping range D	Colour	Box Qty.	Pack.	Weight	Item No.
	mm		pcs	pcs	kg/100 pcs.	
3040 3	6-16	Light grey	200	25	1.752	2109 01 8

PS Polystyrene

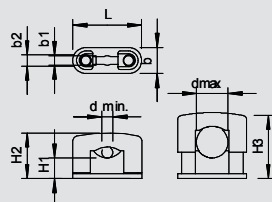
/100 pc.

Solid cable fastening through clamping screws, with adhesive base, slot and for screwing to M6 thread.

Use the Impu-Fix ribbon conductor quick adhesive, type 509, to stick the polystyrene clips to masonry and concrete.

Important dimensions, grip ISO clip

D	a1	b1	a	b	c	d	e	f
mm	mm	mm	mm	mm	mm	mm	mm	mm
6-16	48	4	62	18	61	31	38	55



SOM clip, single

Type	Clamping range D	Bolt	Colour	Box Qty.	Pack.	Weight	Item No.
	mm			pcs	pcs	kg/100 pcs.	
3079 LGR	5-14	M5 x 14	Light grey	500	50	0.524	2124 14 9
3080 LGR	6-17	M6 x 18	Light grey	600	50	0.926	2124 17 3
3081 LGR	15-25	M8 x 23	Light grey	300	25	1.860	2124 25 4
3082 LGR	24-34	M8 x 23	Light grey	300	25	2.544	2124 34 3

PS Polystyrene

/100 pc.

With plastic screws, so corrosion-protected, with slot for fastening with wood screws or 5 mm knock-in anchors.

Important dimensions, SOM clip

D	L	d min.	d max.	H1	H2	H3	b	b1	b2
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
5-14	31	5	14	10.5	20	29	12	4.2	5
6-17	37	6	17	11	24.5	35.5	14	4	5.2
15-25	51	14	25	11.5	33	44	17	5	—
24-34	62	22	34	11	40	52	18	5.2	—



Fastening clip



SOM clip, double

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3080 2 LGR	6-17	M6 x 18	Light grey	300	25	1.228	2124 49 1

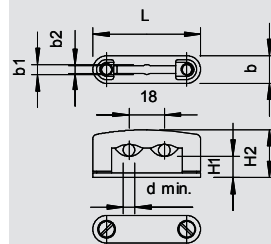
PS Polystyrene

/100 pc.

With plastic screws, so corrosion-protected, with slot for fastening with wood screws or 5 mm knock-in anchors.

Important dimensions, SOM clip

D	L	d min.	d max.	H1	H2	H3	b	b1	b2
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
6-17	55	6	17	11	24.5	35.5	14	4	5.2



SOM clip, hardly flammable

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3083 LGR	32-45	M8 x 40	Light grey	240	20	5.840	2124 45 9

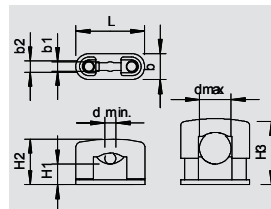
UF Duroplast, Aminoplast, type 131.5

/100 pc.

With plastic screws, so corrosion-protected, with slot for fastening with wood screws or 5 mm knock-in anchors.
Hardly inflammable.

Important dimensions, SOM clip

D	L	d min.	d max.	H1	H2	H3	b	b1	b2
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
32-45	77	32	45	12	54	57	21	6.5	—



ISO base clip

Type	Clamping range D mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2960 11 M6 LGR	9-11	Light grey	600	50	0.465	2130 11 4
2960 12 M6 LGR	12-13	Light grey	600	50	0.480	2130 12 2
2960 15 M6 LGR	15-17	Light grey	500	50	0.510	2130 15 7
2960 18 M6 LGR	16.5-18	Light grey	600	50	0.791	2130 18 1
2960 22 M6 LGR	20.5-22	Light grey	600	50	0.951	2130 21 1
2960 25 M6 LGR	22.5-25	Light grey	250	25	1.221	2130 25 4
2960 28 M6 LGR	25.5-28	Light grey	300	25	1.341	2130 28 9
2960 35 M6 LGR	31.5-35	Light grey	300	25	1.761	2130 35 1
2960 40 M6 LGR	36.5-40	Light grey	240	20	2.918	2130 40 8
2960 43 M6 LGR	40.5-43	Light grey	240	20	3.098	2130 43 2
2960 47 M6 LGR	45.5-47	Light grey	180	15	4.235	2130 47 5
2960 54 M6 LGR	50.5-54	Light grey	180	15	4.280	2130 54 8

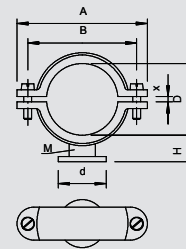
PS Polystyrene

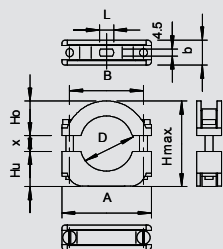
/100 pc.

Can be screwed onto M6 thread.

Important dimensions, ISO base clip

D	A	B	x	H	d	M
mm	mm	mm	mm	mm	mm	
9-11	35	25	2.2	11.6	17	M6
12-13	35	25	1	10	17	M6
15-17	38	28	2	12	20	M6
16.5-18	46	34	2	12	20	M6
20.5-22	50	38	2	14	21	M6
22.5-25	55	43	3	16	23	M6
25.5-28	58	46	3	17.5	24	M6
31.5-35	66	54	4	23	34	M6
36.5-40	80	66	4	23	34	M6
40.5-43	80	66	3	21	34	M6
45.5-47	98	82	2	22.5	36	M6
50.5-54	98	82	4	20	36	M6





Lightning ISO clip



Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3015 12 LGR	6-12	M4 x 22	Light grey	600	50	1.600	2157 12 8
3015 17 LGR	10-17	M4 x 25	Light grey	500	50	1.742	2157 17 9
3015 24 LGR	17-24	M4 x 30	Light grey	600	50	2.542	2157 24 1
3015 34 LGR	24-34	M5 x 35	Light grey	300	25	3.388	2157 34 9

PS Polystyrene

/100 pc.

Lightning ISO clips: plastic clip with metal insert, therefore also suitable for heavy-duty applications; metal parts made of electrogalvanised steel.

3015 with 4.5 mm slot.

*Sizes 6-12 and 10-17 not suitable for bolt-firing device.

Important dimensions, lightning ISO clip

D	A	B	H max.	Ho	Hu	L	b	M
mm	mm	mm	mm	mm	mm	mm	mm	
6-12	34	24	30	9.5	13.5	7.5	14	M4 x 22
10-17	38	28	36.5	12	14	7.5	14	M4 x 25
17-24	47.5	37	43	16	18	10	15	M4 x 30
24-34	57	47	54.5	22	22	9	16	M5 x 35

Lightning ISO clip, screw-on



Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3019 M6 LGR	6-12	M4 x 22	Light grey	600	50	1.564	2158 12 4
3020 LGR	10-17	M4 x 25	Light grey	500	50	1.588	2158 17 5
3021 LGR	17-24	M4 x 30	Light grey	250	25	2.632	2158 24 8
3022 LGR	24-34	M5 x 35	Light grey	300	25	4.176	2158 34 5

PS Polystyrene

/100 pc.

Lightning ISO clips: plastic clip with metal insert, therefore also suitable for heavy-duty applications; metal parts made of electrogalvanised steel.

Can be screwed onto M6 thread.

*Sizes 6-12 and 10-17 not suitable for bolt-firing device.

Important dimensions, lightning ISO clip

D	A	b	B	H max.	Ho	Hu	x	M
mm	mm	mm	mm	mm	mm	mm		
6-12	34	14	24	32.5	9.5	13.5	9.5	M4 x 22
10-17	38	14	28	36	12	14	10	M4 x 25
17-24	47.5	15	37	44	16	18	10	M4 x 30
24-34	57	16	47	56	22	22	12	M5 x 35

Base clamp clip, single



Type	Size	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2962 6 LGR	6	Light grey	1,200	100	0.101	2140 06 3
2962 8 LGR	8	Light grey	2,000	100	0.153	2140 07 1
2962 10 LGR	10	Light grey	2,400	100	0.174	2140 10 1
2962 12 LGR	12	Light grey	1,200	100	0.235	2140 12 8
2962 15 LGR	14-15	Light grey	1,000	100	0.356	2140 15 2
2962 18 LGR	16-18	Light grey	1,200	100	0.452	2140 18 7
2962 22 LGR	19-22	Light grey	500	50	0.550	2140 23 3
2962 28 LGR	25-28	Light grey	250	25	1.114	2140 28 4
2962 35 LGR	32-35	Light grey	300	25	1.480	2140 35 7
2962 42 LGR	40-42	Light grey	300	25	1.880	2140 41 1

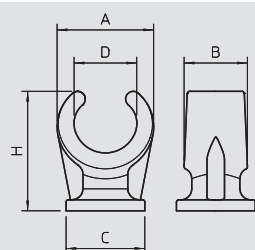
PP Polypropylene

/100 pc.

Can be screwed onto M6 thread.

Important dimensions, base clamp clip

D	A	B	C	H
mm	mm	mm	mm	mm
6	11.5	10	13.5	17
8	14	11	14	19
10	16.5	12	15	20.5
12	19	13	16	23
14-15	22	14.5	18	28
16-18	24.5	15.5	20	30
19-22	29.2	17	22	34
25-28	38.8	20	25	41
32-35	47	22	29	51
40-42	54	23	32	58





Fastening clip



Base clamp clip, double

Type	Size	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2962 2X10	10 + 10	Light grey	1,000	100	0.348	2140 60 8
2962 2x15	14/15 + 14/15	Light grey	600	50	0.738	2140 65 9
2962 2x16	15/16 + 15/16	Light grey	600	50	0.982	2140 68 3
2962 2x22	18/22 + 18/22	Light grey	300	25	1.408	2140 72 1

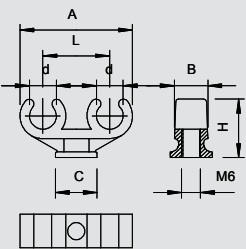
PP Polypropylene

/100 pc.

Can be screwed onto M6 thread.

Important dimensions, base clamp clip

d	A	B	C	L	H
mm	mm	mm	mm	mm	mm
10 + 10	40.5	12	Ø 15	24	21
14/15 + 14/15	52	14.5	18 x 30	30	28
15/16 + 15/16	57.5	15.5	20 x 33	33	30
18/22 + 18/22	67	17	22 x 38	38	34



Fastening clip

Type	For cable Ø mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
255 3.2 LGR	3.2	Light grey	9,000	100	0.043	2222 03 5
255 5.2 LGR	5.2	Light grey	9,000	100	0.054	2222 05 1
255 6.5 LGR	6.5	Light grey	7,500	100	0.052	2222 07 8
255 8 LGR	8	Light grey	5,000	100	0.073	2222 08 6
255 9.5 LGR	9.5	Light grey	5,000	100	0.081	2222 09 4
255 11 LGR	11	Light grey	4,000	100	0.096	2222 11 6
255 12.5 LGR	12.5	Light grey	3,000	100	0.115	2222 12 4
255 14 LGR	14	Light grey	3,000	100	0.137	2222 14 0
255 16 LGR	16	Light grey	2,700	100	0.157	2222 16 7
255 17.5 LGR	17.5	Light grey	2,700	100	0.163	2222 17 5

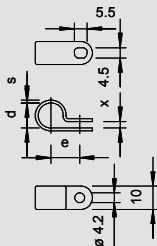
PA Polyamide

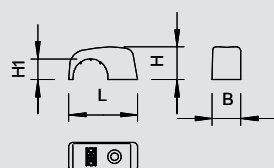
/100 pc.

Fastening clip for secure all-round fixing of cables.

Important dimensions, fastening clip

Ø	d	e	s	x
mm	mm	mm	mm	mm
3.2	3	8.5	1	1.8
5.2	5	9.5	1	1.8
6.5	6.3	10	1	2.2
8	7.8	10	1.2	2.2
9.5	9.3	11	1.2	2.2
11	10.8	13	1.2	2.8
12.5	12.3	14	1.2	2.8
14	13.8	15	1.5	3.2
16	15.8	16	1.5	3.2
17.5	17.2	17	1.5	3.2





ISO nail clip

Type	For cable Ø mm	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
4028	2-4	Light grey	10,000	100	0.025	2215 04 7
4029	4-7	Light grey	9,000	100	0.041	2215 07 1
4030	7-11	Light grey	5,000	100	0.050	2215 10 1
4031 10-14	10-14	Light grey	3,000	100	0.104	2215 14 4
4031 14-17	14-17	Light grey	2,700	100	0.223	2215 17 9
4032	16-20	Light grey	1,800	100	0.275	2215 20 9

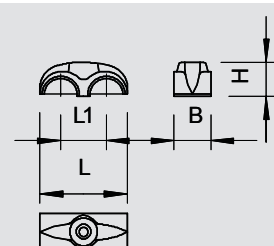
PP Polypropylene

/100 pc.

"Standard" nail clips, suitable for steel nails 2 mm.

Important dimensions, ISO nail clip

D	B	L	H	H1
mm	mm	mm	mm	mm
2-4	7	14.5	4.5	1.5
4-7	7.2	15	7	3.7
7-11	8.3	20	9.5	6
10-14	10	27	12.5	7.6
14-17	11	33	15.8	11
16-20	12	37	17.5	12



Double ISO nail clip

Type	For cable Ø mm	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
3030 2	7-11	Light grey	5,000	100	0.102	2213 11 7

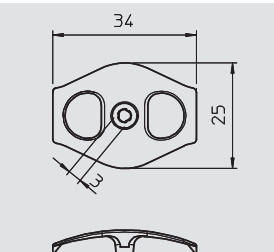
PS Polystyrene

/100 pc.

Nail clips to fasten two cables.

Important dimensions, double ISO nail clip

D	B	L	L1	H
mm	mm	mm	mm	mm
7-11	9	27	14	10.5



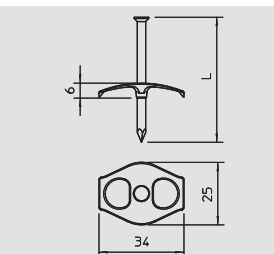
Nail-Fix, without nail

Type	For nail Ø x l mm	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
1996 O	3,0 - 3,5	Transparent	3,000	100	0.055	2222 80 9

PP Polypropylene

/100 pc.

Without nails for refitting Ø 3 mm and 3.5 mm steel nails to fix cables in masonry slots and on masonry for one or two cables NYM 3 x 1.5/2.5 mm² or one or two cables NYM 5 x 1.5/2.5 mm².



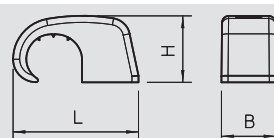
Nail-Fix

Type	For nail Ø x l mm	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
1996 40	3 x 40	Transparent	1,200	100	0.180	2222 83 3
1996 50	3,5 x 50	Transparent	1,200	100	0.450	2222 84 1
1996 60	3,5 x 60	Transparent	1,200	100	0.550	2222 86 8
1996 70	3,5 x 70	Transparent	1,200	100	0.210	2222 87 6

PP Polypropylene

/100 pc.

With pre-mounted, galvanised steel nail Ø 3 mm or 3.5 mm to fix cables in masonry slots and on masonry for one or two cables NYM 3 x 1.5/2.5 mm² or one or two cables NYM 5 x 1.5/2.5 mm².



Adhesive clip, no nail

Type	For nail Ø x l mm	For cable Ø mm	Colour	Dimension L mm	Dimension B mm	Dimension H mm	Box Qty.	Pack.	Weight	Item No.
				mm	mm	mm	pcs	pcs	kg/100 pcs.	
4039	2	4-7	Light grey	14.4	7.2	7.1	9,000	100	0.041	2215 30 6
4039 SP	2	4-7	Light grey	14.4	7.2	7.1	10,000	200	0.041	2214 87 3
4040	2	7-12	Light grey	19.1	8.3	10.1	5,000	100	0.076	2215 31 4
4040 SP	2	7-12	Light grey	19.1	8.3	10.1	6,000	200	0.076	2214 88 1
4041	2	10-14	Light grey	26	10	13.3	3,000	100	0.134	2215 34 9
4042	2	14-17	Light grey	32	12	17.8	1,800	100	0.239	2215 32 2
4043	2	17-21	Light grey	38	14	21.6	1,200	100	0.336	2215 33 0
4044	2	21-25	Light grey	45	15	26.7	600	50	0.290	2215 35 7

PP Polypropylene

/100 pc.

Adhesive clip, for clamping to the cable, suitable for steel nails 2 mm.



Nail clip



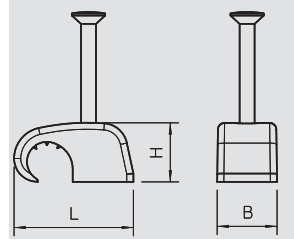
Adhesive clip

Type	For nail Ø x l mm	For cable Ø mm	Colour	Dimension L mm	Dimension B mm	Dimension H mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2025 18 LGR	2 x 18	4-7	Light grey	14.5	7.2	7.1	7,500	100	0.074	2228 61 0
2025 25 LGR	2 x 25	4-7	Light grey	14.5	7.2	7.1	7,500	100	0.087	2228 62 9
2026 18 LGR	2 x 18	7-12	Light grey	19.1	8.3	10.1	5,000	100	0.100	2228 71 8
2026 25 LGR	2 x 25	7-12	Light grey	19.1	8.3	10.1	5,000	100	0.113	2228 72 6
2026 25 LGR SP	2 x 25	7-12	Light grey	19.1	8.3	10.1	2,400	200	0.113	2228 43 2
2026 35 LGR	2 x 35	7-12	Light grey	19.1	8.3	10.1	4,000	100	0.136	2228 73 4
2026 35 LGR SP	2 x 35	7-12	Light grey	19.1	8.3	10.1	2,400	200	0.136	2228 44 0
2026 45 LGR	2 x 45	7-12	Light grey	19.1	8.3	10.1	3,000	100	0.158	2228 75 0
2027 25 LGR	2 x 25	10-14	Light grey	26	10	13.3	2,700	100	0.167	2228 82 3
2027 30 LGR	2 x 30	10-14	Light grey	26	10	13.3	2,700	100	0.181	2228 83 1
2027 40 LGR	2 x 40	10-14	Light grey	26	10	13.3	2,700	100	0.203	2228 85 8
2028 40 LGR	2 x 40	13.5-17	Light grey	32	12	17.8	1,000	100	0.295	2228 90 4
2025 18 RW	2,0 x 18	4-7	Pure white	14.5	7.2	7.1	7,500	100	0.074	2228 68 6
2025 25 RW	2,0 x 25	4-7	Pure white	14.5	7.2	7.1	7,500	100	0.101	2228 68 8
2026 18 RW	2,0 x 18	7-12	Pure white	19.1	8.3	10.1	5,000	100	0.100	2228 42 0
2026 25 RW	2,0 x 25	7-12	Pure white	19.1	8.3	10.1	5,000	100	0.138	2228 42 2

PP Polypropylene

/100 pc.

Adhesive clip, for clamping to the cable.



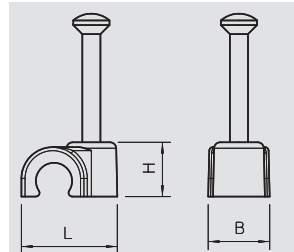
ISO nail clip

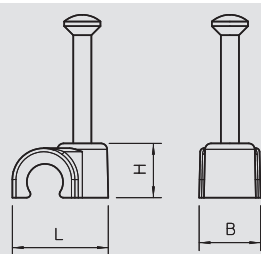
Type	For cable Ø mm	For nail Ø x l mm	Dimension L mm	Dimension B mm	Dimension H mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2004 18 LGR	4	2,0 x 18	9.6	6	6.1	Light grey	18,000	200	0.060	2227 22 3
2004 25 LGR	4	2,0 x 25	9.6	6	6.1	Light grey	15,000	200	0.075	2227 23 1
2005 18 LGR	5	2,0 x 18	10.8	7.1	7.1	Light grey	9,000	100	0.067	2227 34 7
2005 25 LGR	5	2,0 x 25	10.8	7.1	7.1	Light grey	9,000	100	0.080	2227 33 9
2006 25 LGR	6	2,0 x 25	12.5	8	8.1	Light grey	7,500	100	0.091	2227 42 8
2006 35 LGR	6	2,0 x 35	12.5	8	8.1	Light grey	5,000	100	0.114	2227 43 6
2007 25 LGR	7	2,0 x 25	13.7	8	9.4	Light grey	7,500	100	0.098	2227 51 7
2007 35 LGR	7	2,0 x 35	13.7	8	9.4	Light grey	5,000	100	0.119	2227 52 5
2008 25 LGR	8	2,0 x 25	15	8	10.6	Light grey	5,000	100	0.108	2227 61 4
2008 35 LGR	8	2,0 x 35	15	8	10.6	Light grey	5,000	100	0.134	2227 62 2
2008 45 LGR	8	2,0 x 45	15	8	10.6	Light grey	4,000	100	0.159	2227 63 0
2009 25 LGR	9	2,0 x 25	16.1	8	11.6	Light grey	5,000	100	0.110	2227 71 1
2009 35 LGR	9	2,0 x 35	16.1	8	11.6	Light grey	4,000	100	0.132	2227 73 8
2009 35 LGR SP	9	2,0 x 35	16.1	8	11.6	Light grey	2,400	200	0.132	2227 76 2
2009 45 LGR	9	2,0 x 45	16.1	8	11.6	Light grey	3,000	100	0.154	2227 74 6
2009 45 LGR SP	9	2,0 x 45	16.1	8	11.6	Light grey	2,400	200	0.154	2227 79 7
2010 25 LGR	10	2,0 x 25	17.7	8	12.7	Light grey	5,000	100	0.172	2227 80 0
2010 35 LGR	10	2,0 x 35	17.7	8	12.7	Light grey	4,000	100	0.147	2227 81 9
2010 45 LGR	10	2,0 x 45	17.7	8	12.7	Light grey	3,000	100	0.168	2227 82 7
2011 35 LGR	11	2,0 x 35	19	9	14	Light grey	3,000	100	0.247	2227 91 6
2011 45 LGR	11	2,0 x 45	19	9	14	Light grey	3,000	100	0.265	2227 92 4
2012 35 LGR	12	2,0 x 35	19.8	9	14.8	Light grey	3,000	100	0.168	2228 02 5
2012 45 LGR	12	2,0 x 45	19.8	9	14.8	Light grey	3,000	100	0.188	2228 03 3
2014 40 LGR	14	2,5 x 40	24	11	18	Light grey	1,500	50	0.466	2228 11 4
2014 50 LGR	14	2,5 x 50	24	11	18	Light grey	1,500	50	0.536	2228 12 2
2016 40 LGR	16	2,5 x 40	26	12	20	Light grey	1,500	50	0.402	2228 21 1
2016 50 LGR	16	2,5 x 50	26	12	20	Light grey	1,500	50	0.526	2228 23 8
2018 40 LGR	18	2,5 x 40	28	13	22	Light grey	1,000	25	0.548	2228 30 0
2018 50 LGR	18	2,5 x 50	28	13	22	Light grey	750	25	0.700	2228 31 9
2020 40 LGR	20	2,5 x 40	31	14	24.5	Light grey	750	25	0.740	2228 40 8
2020 50 LGR	20	2,5 x 50	31	14	24.5	Light grey	750	25	0.780	2228 41 6

PP Polypropylene

/100 pc.

ISO nail clip, short design.





ISO nail clip



Type	For cable Ø mm	For nail Ø x l mm	Dimension L mm	Dimension B mm	Dimension H mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2004 18 RW	4	2,0 x 18	9.6	6	6.1	Pure white	18,000	200	0.060	2225 22 0
2004 25 RW	4	2,0 x 25	9.6	6	6.1	Pure white	15,000	200	0.075	2225 23 9
2005 18 RW	5	2,0 x 18	10.8	7.1	7.1	Pure white	9,000	100	0.067	2225 37 9
2005 25 RW	5	2,0 x 25	10.8	7.1	7.1	Pure white	9,000	100	0.080	2225 34 4
2006 18 RW	6	2,0 x 18	12.5	8	8.1	Pure white	7,500	100	0.074	2225 40 9
2006 25 RW	6	2,0 x 25	12.5	8	8.1	Pure white	7,500	100	0.091	2225 41 7
2006 35 RW	6	2,0 x 35	12.5	8	8.1	Pure white	5,000	100	0.114	2225 42 5
2007 18 RW	7	2,0 x 18	13.7	8	9.4	Pure white	7,500	100	0.081	2225 50 6
2007 25 RW	7	2,0 x 25	13.7	8	9.4	Pure white	7,500	100	0.098	2225 51 4
2007 35 RW	7	2,0 x 35	13.7	8	9.4	Pure white	5,000	100	0.119	2225 52 2
2008 25 RW	8	2,0 x 25	15	8	10.6	Pure white	5,000	100	0.108	2225 61 1
2008 35 RW	8	2,0 x 35	15	8	10.6	Pure white	5,000	100	0.134	2225 63 8
2009 20 RW	9	2,0 x 20	16.1	8	11.6	Pure white	5,000	100	0.103	2225 70 0
2009 25 RW	9	2,0 x 25	16.1	8	11.6	Pure white	5,000	100	0.110	2225 71 9
2009 35 RW	9	2,0 x 35	16.1	8	11.6	Pure white	4,000	100	0.134	2225 72 7
2010 25 RW	10	2,0 x 25	17.7	8	12.7	Pure white	5,000	100	0.127	2225 80 8
2010 35 RW	10	2,0 x 35	17.7	8	12.7	Pure white	4,000	100	0.147	2225 81 6
2011 25 RW	11	2,0 x 25	19	9	14	Pure white	4,000	100	0.140	2225 90 5
2011 35 RW	11	2,0 x 35	19	9	14	Pure white	3,000	100	0.247	2225 91 3
2012 25 RW	12	2,0 x 25	19.8	9	14.8	Pure white	4,000	100	0.146	2226 01 4
2012 35 RW	12	2,0 x 35	19.8	9	14.8	Pure white	3,000	100	0.168	2226 02 2
2014 30 RW	14	2,5 x 30	24	11	18	Pure white	1,500	50	0.432	2226 10 3
2014 40 RW	14	2,5 x 40	24	11	18	Pure white	1,500	50	0.466	2226 11 1
2016 40 RW	16	2,5 x 40	26	12	20	Pure white	1,500	50	0.490	2226 21 9
2016 50 RW	16	2,5 x 50	26	12	20	Pure white	1,500	50	0.526	2226 22 7
2018 40 RW	18	2,5 x 40	28	13	22	Pure white	1,000	25	0.548	2226 30 8
2020 40 RW	20	2,5 x 40	31	14	24.5	Pure white	750	25	0.740	2226 40 5

PP Polypropylene

/100 pc.

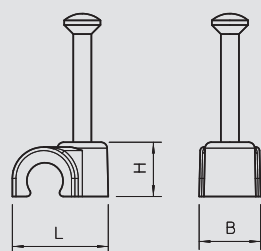
ISO nail clip, short design.

Type	For cable Ø mm	For nail Ø x l mm	Dimension L mm	Dimension B mm	Dimension H mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2007 25 SW	7	2,0 x 25	13.7	8	9.4	Jet black	7,500	100	0.098	2232 14 6
2008 25 SW	8	2,0 x 25	15	8	10.6	Jet black	5,000	100	0.108	2232 17 0
2009 25 SW	9	2,0 x 25	16.1	8	11.6	Jet black	5,000	100	0.162	2232 21 9
2010 25 SW	10	2,0 x 25	17.7	8	12.7	Jet black	5,000	100	0.172	2232 23 5
2012 35 SW	12	2,0 x 35	19.8	9	14.8	Jet black	3,000	100	0.168	2232 31 6

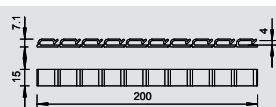
PP Polypropylene

/100 pc.

ISO nail clip, short design.



Cable clip



Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
507	Light grey	100	100	1.200	2327 10 4

PS Polystyrene

/100 pc.

Self-adhesive





Cable/pipe fastening systems, metal

	Cable tidy	GRIP "M" 15	275
		GRIP "M" 30	275
		GRIP "M" 70	275
	Pressure clip	For 16 cables	274
		For 10 cables	274
	Fastening clip	Cable and pipe spacer clip	276
		Screw-in spacer clips	279
		Post crosspiece	282
		Fastening clip	283
		Heavy-duty cable clip	286
		Strain relief clip	288





Pressure clip

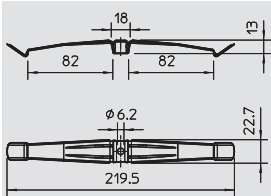


Pressure clip, for 16 cables

Type	No. of conductors NYM 3 x 1.5	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2033 M	16	25	25	2.310	2204 00 0

V2A Stainless steel, 1.4310 /100 pc.

Metal pressure clip for high mechanical stability, even in case of fire. Halogen-free, fireproof, therefore approved for mounting above fire protection ceilings. Also approved as a cable-specific variant for electrical function maintenance to DIN 4102 Part 12. You can find detailed information on the subject of fire protection in the OBO BSS fire protection catalogue.
Clamping height 10 mm.
Fastening hole Ø 6 mm.

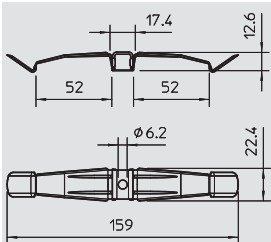


Pressure clip, for 10 cables

Type	No. of conductors NYM 3 x 1.5	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2034 M	10	50	50	1.860	2204 01 0

V2A Stainless steel, 1.4310 /100 pc.

Metal pressure clip for high mechanical stability, even in case of fire. Halogen-free, fireproof, therefore approved for mounting above fire protection ceilings. Also approved as a cable-specific variant for electrical function maintenance to DIN 4102 Part 12. You can find detailed information on the subject of fire protection in the OBO BSS fire protection catalogue.
Clamping height 10 mm.
Fastening hole Ø 6 mm.

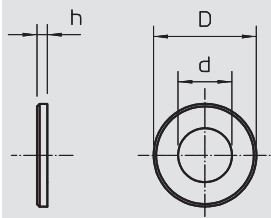


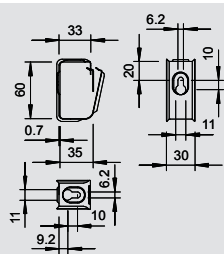
Spacer

Type	Dimen- sion D mm	Dimen- sion d mm	Dimen- sion h mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2033 D 15x3 G	15	6.4	3	3,000	50	0.340	2205 09 7

ST Steel G Electrogalvanised /100 pc.

To increase the clamping height of pressure clips from 10 to 13 mm for large cable cross-sections.



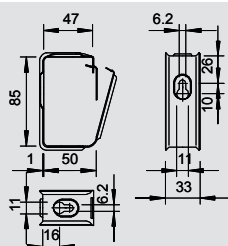


GRIP "M" 15



Type	No. of conductors NYM 3 x 1.5	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2031 M 15 FS	15	50	50	3.700	2207 02 8
ST Steel	FS Strip-galvanised	/100 pc.			

Metal cable tidy for high mechanical stability, even in case of fire. Halogen-free, fireproof, therefore approved for mounting above fire protection ceilings. Also approved as a cable-specific variant for electrical function maintenance to DIN 4102 Part 12. You can find detailed information on the subject of fire protection in the OBO BSS fire protection catalogue.

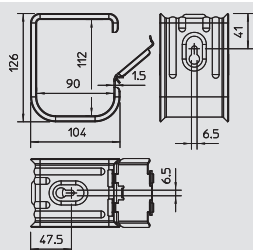


GRIP "M" 30



Type	No. of conductors NYM 3 x 1.5	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2031 M 30 FS	30	25	25	6.200	2207 03 6
ST Steel	FS Strip-galvanised	/100 pc.			

Metal cable tidy for high mechanical stability, even in case of fire. Halogen-free, fireproof, therefore approved for mounting above fire protection ceilings. Also approved as a cable-specific variant for electrical function maintenance to DIN 4102 Part 12. You can find detailed information on the subject of fire protection in the OBO BSS fire protection catalogue.



GRIP "M" 70



Type	No. of conductors NYM 3 x 1.5	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2031 M 70 FS	70	10	10	34.500	2207 06 0
ST Steel	FS Strip-galvanised	/100 pc.			

Metal cable ties for high mechanical stability, also in case of fire. Halogen-free, fire load-free. Also approved as a cable-specific variant for electrical function maintenance to DIN 4102 Part 12.

Fire protection bolt tie MMS 6 x 50 included in scope of supply.

Including fire protection bolt tie MMS 6 type MMS 6 x 50.



Spacer fastening clip



Cable and pipe spacer clip

Type	Clamping range D mm	Size	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
732 6 GTP	5-6	-	M5 x 10	1,200	100	1.160	1360 05 1
732 8 GTP	7-8	-	M5 x 10	1,200	100	1.310	1360 08 6
732 10 GTP	9-10	-	M5 x 12	1,000	100	1.360	1360 10 8
732 12 GTP	10.5-12	M12	M5 x 12	1,000	100	1.460	1360 12 4
732 14 GTP	12.5-14	PG7	M5 x 12	1,000	100	1.480	1360 14 0
732 15 GTP	13.5-15	PG9	M5 x 12	1,000	100	1.530	1360 15 9
732 16 GTP	14.5-16	M16	M5 x 12	1,000	100	1.590	1360 16 7
732 18 GTP	16.5-18	PG11	M5 x 12	1,000	100	1.620	1360 18 3
732 20 GTP	18.5-20	M20	M5 x 12	600	50	1.730	1360 20 5
732 22 GTP	20-22	PG13,5	M5 x 12	500	50	1.780	1360 22 1
732 24 GTP	22-24	PG16	M5 x 12	500	50	1.840	1360 24 8
732 26 GTP	24-26	M25	M5 x 12	500	50	1.920	1360 26 4
732 28 GTP	26-28	PG21	M5 x 12	500	50	2.840	1360 28 0
732 30 GTP	28-30	PG21	M5 x 12	400	50	3.040	1360 30 2
732 33 GTP	31-33	M32	M5 x 12	250	25	3.120	1360 33 7
732 35 GTP	33-35	-	M5 x 12	250	25	3.280	1360 35 3
732 38 GTP	36-38	PG29	M5 x 12	250	25	3.490	1360 38 8
732 40 GTP	38-40	M40	M5 x 12	250	25	3.600	1360 39 6
732 42 GTP	40-42	M40	M5 x 12	250	25	3.840	1360 42 6
732 45 GTP	43-45	-	M5 x 12	250	25	3.990	1360 45 0
732 48 GTP	46-48	PG36	M5 x 12	250	25	4.040	1360 48 5
732 50 GTP	48-50	M50	M5 x 14	200	25	4.160	1360 50 7
732 60 GTP	58-60	PG48	M5 x 14	200	25	4.960	1360 60 4
732 63 GTP	61-63	M63	M5 x 14	200	25	5.000	1360 63 9

ST Steel

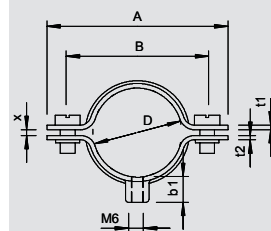
GTP Electrogalvanised, transparently passivated

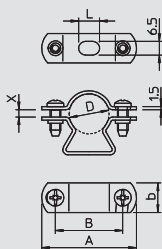
/100 pc.

With M6 thread.

Important dimensions, cable and pipe spacer clip

D	A	B	x	b1	t1	t2	M
mm	mm	mm	mm	mm	mm	mm	
5-6	35	23	1	15	1	1.25	M5 x 10
7-8	34	22	1	18	1	1.25	M5 x 10
9-10	36	24	1	18	1	1.25	M5 x 12
10.5-12	38	26	1.5	18	1	1.25	M5 x 12
12.5-14	40	28	1.5	18	1	1.25	M5 x 12
13.5-15	41	29	1.5	18	1	1.25	M5 x 12
14.5-16	42	30	1.5	18	1	1.25	M5 x 12
16.5-18	44	32	1.5	18	1	1.25	M5 x 12
18.5-20	46	34	1.5	18	1	1.25	M5 x 12
20-22	48	36	2	18	1	1.25	M5 x 12
22-24	50	38	2	18	1	1.25	M5 x 12
24-26	52	40	2	18	1	1.25	M5 x 12
26-28	59	45	2	18	1.5	1.5	M5 x 12
28-30	61	47	2	18	1.5	1.5	M5 x 12
31-33	64	50	2	18	1.5	1.5	M5 x 12
33-35	66	52	2	18	1.5	1.5	M5 x 12
36-38	69	55	2	18	1.5	1.5	M5 x 12
38-40	71	57	2	18	1.5	1.5	M5 x 12
40-42	73	59	2	18	1.5	1.5	M5 x 12
43-45	76	62	2	18	1.5	1.5	M5 x 12
46-48	79	65	2	18	1.5	1.5	M5 x 12
48-50	81	67	2	18	1.5	1.5	M5 x 14
58-60	91	77	2	18	1.5	1.5	M5 x 14
61-63	94	80	2	18	1.5	1.5	M5 x 14





Cable and pipe spacer clip



Type	Clamping range D mm	Hole size mm	Material thickness mm	Size	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
733 13 G	11-13	6,5 x 10	1.5	M12	M5 x 12	600	50	2.310	1361 13 9
733 16 G	14-16	6,5 x 10	1.5	M16	M5 x 14	500	50	2.430	1361 16 3
733 19 G	17-19	6,5 x 10	1.5	Pg11	M5 x 14	500	50	2.500	1361 19 8
733 21 G	19-21	6,5 x 10	1.5	M20	M5 x 14	500	50	2.730	1361 20 1
733 23 G	21-23	6,5 x 10	1.5	Pg16	M5 x 14	500	50	2.870	1361 23 6
733 29 G	24-29	6,5 x 10	1.5	M25	M5 x 18	450	50	3.480	1361 29 5
733 38 G	30-38	6,5 x 10	1.5	M32	M5 x 18	250	25	4.040	1361 38 4
733 48 G	39-48	6,5 x 10	1.5	M40	M5 x 18	300	25	4.810	1361 48 1
733 54 G	48-54	6,5 x 14	1.5	M50	M5 x 18	300	25	5.800	1361 51 1
733 61 G	53-61	6,5 x 14	1.5	Pg48	M5 x 18	240	20	6.370	1361 61 9
733 63 G	63	8 x 18	2	M63	M5 x 18	160	20	6.940	1361 63 5

ST Steel

G Electrogalvanised

/100 pc.

Bolt material: steel.

* Size M16 not suitable for nail device.

* Sizes M16 to PG16 not suitable for bolt-firing tool and nail device.

Important dimensions, cable and pipe spacer clip

D	A	B	L	b	x
mm	mm	mm	mm	mm	mm
11-13	39	26	10	14	2.5
14-16	43	30	10	14	3
17-19	45	32	10	14	3.5
19-21	50	37	10	14	2
21-23	52	39	10	14	2.5
24-29	58	42	10	16	7
30-38	70	54	10	16	10
39-48	80	64	14	16	12.5
48-54	86	68	14	18	7.5
53-61	96	78	14	18	10
63	101	83	18	16	3

Type	Clamping range D mm	Hole size mm	Material thickness mm	Size	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
733 16 VA	14-16	6,5 x 10	1.5	M16	M5 x 12	500	50	2.430	1362 01 1
733 19 VA	17-19	6,5 x 10	1.5	Pg11	M5 x 16	500	50	2.800	1362 03 8
733 21 VA	19-21	6,5 x 10	1.5	M20	M5 x 16	500	50	2.740	1362 04 6
733 23 VA	21-23	6,5 x 10	1.5	Pg16	M5 x 16	500	50	2.800	1362 05 4
733 29 VA	24-29	6,5 x 10	1.5	M25	M5 x 16	450	50	3.475	1362 06 2
733 38 VA	30-38	6,5 x 10	1.5	M32	M5 x 18	250	25	4.500	1362 07 0
733 48 VA	39-48	6,5 x 10	1.5	M40	M5 x 18	300	25	5.200	1362 08 9
733 54 VA	48-54	6,5 x 14	1.5	M50	M5 x 18	300	25	5.800	1362 09 7
733 61 VA	53-61	6,5 x 14	1.5	Pg48	M5 x 18	240	20	6.800	1362 10 0
733 63 VA	63	8 x 18	2	M63	M5 x 18	160	20	6.940	1362 12 7

V2A Stainless steel, 1.4301

/100 pc.

Bolt material: VA

* Size M16 not suitable for nail device.

* Sizes M16 to PG16 not suitable for bolt-firing tool and nail device.

Important dimensions, cable and pipe spacer clip

D	A	B	L	b	x
mm	mm	mm	mm	mm	mm
14-16	43	30	10	14	3
17-19	45	32	10	14	3.5
19-21	50	37	10	14	2
21-23	52	39	10	14	2.5
24-29	58	42	10	16	7
30-38	70	54	10	16	10
39-48	80	64	14	16	12.5
48-54	86	68	14	18	7.5
53-61	96	78	14	18	10
63	101	83	18	16	3



Spacer fastening clip



Cable and pipe spacer clip

Type	Clamping range D mm	Hole size mm	Material thickness mm	Size	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
733 16 ALU	14-16	6,5 x 10	1.5	M16	M5 x 12	500	50	0.980	1362 52 6
733 19 ALU	17-19	6,5 x 10	1.5	Pg 11	M5 x 16	500	50	1.020	1362 53 4
733 21 ALU	19-21	6,5 x 10	1.5	M20	M5 x 16	500	50	1.100	1362 54 2
733 29 ALU	24-29	6,5 x 10	1.5	M25	M5 x 16	450	50	1.390	1362 56 9
733 38 ALU	30-38	6,5 x 10	1.5	M32	M5 x 18	250	25	1.620	1362 57 7
733 48 ALU	39-48	6,5 x 10	1.5	M40	M5 x 18	300	25	1.950	1362 58 5
733 54 ALU	48-54	6,5 x 14	1.5	M50	M5 x 18	300	25	2.320	1362 59 3
733 63 ALU	63	8 x 18	2	M63	M5 x 18	160	20	2.990	1362 61 5

Al Aluminium

/100 pc.

Bolt material: VA

* Size M16 not suitable for nail device.

* Sizes M16 to PG16 not suitable for bolt-firing tool and nail device.

Important dimensions, cable and pipe spacer clip

D	A	B	L	b	x
mm	mm	mm	mm	mm	mm
14-16	43	30	10	14	3
17-19	45	32	10	14	3.5
19-21	50	37	10	14	2
24-29	58	42	10	16	7
30-38	70	54	10	16	10
39-48	80	64	14	16	12.5
48-54	86	68	14	18	7.5
63	101	83	18	16	3

Type	Clamping range D mm	Hole size mm	Material thickness mm	Size	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
733 13 FT	11-13	6,5 x 10	1.5	M 12	M5 x 12	600	50	2.310	1361 09 1
733 16 FT	14-16	6,5 x 10	1.5	M 16	M5 x 14	500	50	2.430	1361 09 4
733 19 FT	17-19	6,5 x 10	1.5	Pg 11	M5 x 14	500	50	2.500	1361 09 7
733 21 FT	19-21	6,5 x 10	1.5	M 20	M5 x 14	500	50	2.730	1361 10 0
733 23 FT	21-23	6,5 x 10	1.5	Pg 16	M5 x 14	500	50	2.870	1361 10 3
733 29 FT	24-29	6,5 x 10	1.5	M 25	M5 x 18	450	50	3.480	1361 10 6
733 38 FT	30-38	6,5 x 10	1.5	M 32	M5 x 18	250	25	4.040	1361 10 9
733 48 FT	39-48	6,5 x 10	1.5	M 40	M5 x 18	300	25	4.810	1361 11 2
733 54 FT	48-54	6,5 x 10	1.5	M 50	M5 x 18	300	25	5.400	1361 11 7
733 61 FT	53-61	6,5 x 10	1.5	Pg 48	M5 x 18	240	20	6.100	1361 11 5
733 63 FT	63	6,5 x 10	2	M63	M5 x 18	160	20	7.250	1361 11 8

ST Steel

FT Hot-dip galvanised

/100 pc.

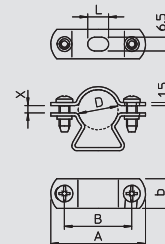
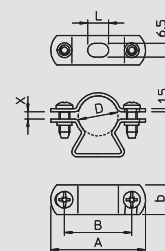
Bolt material: steel.

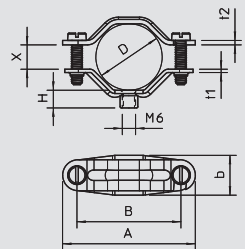
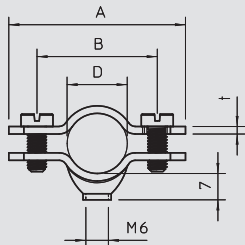
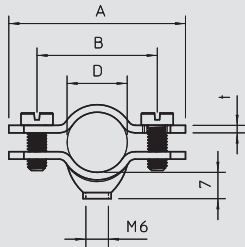
* Size M16 not suitable for nail device.

* Sizes M16 to PG16 not suitable for bolt-firing tool and nail device.

Important dimensions, cable and pipe spacer clip

D	A	B	L	b	x
mm	mm	mm	mm	mm	mm
11-13	39	26	10	14	2.5
14-16	43	30	10	14	3
17-19	45	32	10	14	3.5
19-21	50	37	10	14	2
21-23	52	39	10	14	2.5
24-29	58	42	10	16	7
30-38	70	54	10	16	10
39-48	80	64	14	16	12.5
48-54	86	68	14	18	7.5
53-61	96	78	14	18	10
63	101	83	18	16	3





Screw-in spacer clip

Type	Clamping range D mm	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
731 W 12 G	8-12	M5 x 12	600	50	2.470	1366 12 2
731 W 16 G	12-16	M5 x 12	500	50	2.816	1366 16 5
731 W 20 G	16-20	M5 x 14	500	50	3.124	1366 20 3
731 W 25 G	20-25	M5 x 14	500	50	3.480	1366 25 4
731 W 30 G	25-30	M5 x 14	250	25	4.060	1366 30 0
731 W 35 G	30-35	M5 x 18	250	25	4.344	1366 35 1

ST Steel **G** Electrogalvanised /100 pc.

With M6 thread.

Important dimensions, screw-in spacer clip

D	A	B	t
mm	mm	mm	mm
8-12	43	28	12
12-16	47	32	14
16-20	51	36	14
20-25	58	43	14
25-30	64	49	14
30-35	65	50	18

Type	Clamping range D mm	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
731 W 12 CU	8-12	M5 x 12	600	50	2.470	1366 62 9
731 W 16 CU	12-16	M5 x 14	500	50	2.816	1366 66 1

ST Steel **CU** Copper-plated /100 pc.

With M6 thread.

Important dimensions, screw-in spacer clip

D	A	B	t
mm	mm	mm	mm
8-12	43	28	12
12-16	47	32	14

Type	Clamping range D mm	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2070 M6 G	12-20	M5 x 14	500	50	2.300	1380 02 8
2071 M6 G	20-30	M5 x 20	600	50	3.310	1380 22 2
2072 M6 G	30-44	M5 x 22	300	25	5.990	1380 42 7
2073 M6 G	44-60	M6 x 25	240	20	9.660	1380 72 9

ST Steel **G** Electrogalvanised /100 pc.

With M6 thread.

Universal clip with large tensioning area.

Important dimensions, screw-in spacer clip

D	A	B	b	t1	t2	H	x	M
mm	mm	mm	mm	mm	mm	mm	mm	
12-20	48	35	14	1.5	1.5	9	9	M5 x 14
20-30	60	47	14	1.5	2	7.5	11	M5 x 20
30-44	79	64	16	2	2	8	15	M5 x 22
44-60	102	86	18	2	2	8	18	M6 x 25





Spacer fastening clip



Screw-in spacer clip

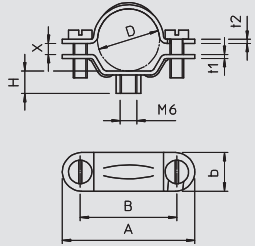
Type	Clamping range D mm	Size	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2900 13-16 G	13.5-16	M 16	M5 x 14	500	50	2.280	1383 09 4
2900 16-19 G	16.5-19	Pg 11	M5 x 14	500	50	2.320	1383 11 6
2900 18-21 G	18-21	M 20	M5 x 14	500	50	2.340	1383 13 2
2900 19-23 G	19-23	Pg 16	M5 x 14	500	50	2.400	1383 16 7
2900 24-29 G	24-29	M 25	M5 x 14	400	50	3.320	1383 21 3
2900 33-38 G	30-34	M 32	M5 x 14	400	50	4.950	1383 31 0
2900 30-34 G	33-38	Pg 29	M5 x 14	300	25	5.830	1383 29 9
2900 39-42 G	39-42	M 40	M5 x 16	300	25	5.490	1383 41 8
2900 43-48 G	43-48	Pg 36	M5 x 14	240	20	6.330	1383 36 1
2900 49-55 G	49-55	M 50	M6 x 15	240	20	9.300	1383 42 6
2900 54-60 G	54-60	Pg 48	M6 x 15	240	20	8.970	1383 48 5
2900 61-64 G	61-64	M 63	M6 x 16	240	20	8.090	1383 50 7

ST Steel G Electrogalvanised /100 pc.

With M6 thread.

Important dimensions, screw-in spacer clip

G	D	A	B	b	t1	t2	H	x	M
	mm	mm	mm	mm	mm	mm	mm	mm	
M16	13.5-16	48	35	14	1.5	1.5	9	2.2	M5 x 14
Pg 11	16.5-19	48	35	14	1.5	1.5	9	2.6	M5 x 14
M20	18-21	48	35	14	1.5	1.5	9	2.9	M5 x 14
Pg 16	19-23	48	35	14	1.5	1.5	9	4	M5 x 14
M25	24-29	60	47	14	1.5	2	7.5	4.6	M5 x 14
M32	30-34	68	54	16	2	2	8	5	M5 x 14
Pg 29	33-38	79	64	16	2	2	8	5	M5 x 14
M40	39-42	79	64	16	2	2	8	5	M5 x 16
Pg 36	43-48	79	64	16	2	2	8	5	M5 x 14
M50	49-55	102	86	18	2	2	8	5.5	M6 x 15
Pg 48	54-60	102	86	18	2	2	8	6.3	M6 x 15
M63	61-64	106.5	90.5	18	2	2	6.5	6	M6 x 16



Screw-in spacer clip, heavy-duty version M6

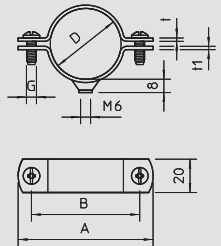
Type	Clamping range D mm	Size	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2900 W 13.5 FT	12.5-13.5	1/4"	300	25	2.860	1385 00 3
2900 W 17 FT	16-17	3/8"	300	25	4.912	1385 01 1
2900 W 21.5 FT	19-21.5	1/2"	250	25	5.104	1385 03 8
2900 W 27 FT	24.5-27	3/4"	250	25	5.600	1385 05 4
2900 W 33.5 FT	30.5-33.5	1"	200	25	6.144	1385 06 2
2900 W 42.5 FT	39.5-42.5	1 1/4"	175	25	7.644	1385 08 9
2900 W 48.5 FT	45.5-48.5	1 1/2"	175	25	8.872	1385 11 9
2900 W 54 FT	51-54	1 3/4"	180	20	10.400	1385 12 7
2900 W 60 FT	56-60	2"	135	15	11.720	1385 13 5

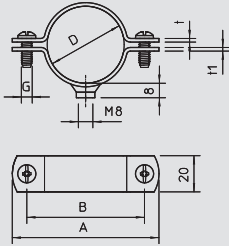
ST Steel FT Hot-dip galvanised /100 pc.

Can be screwed onto M6 thread.

Important dimensions, screw-in spacer clip

D	A	B	t	t1	G
mm	mm	mm	mm	mm	
12.5-13.5	48	32	2	2	M6 x 16
16.0-17.0	52	36	2	2	M6 x 16
19.0-21.5	56	40	2	2	M6 x 16
24.5-27.0	62	46	2	2	M6 x 16
30.5-33.5	70	54	2	2	M6 x 16
39.5-42.5	81	65	2	2	M6 x 18
45.5-48.5	88	72	2	2.5	M6 x 18
51.0-54.0	96	80	2.5	2.5	M6 x 18
56.0-60.0	105	89	2.5	2.5	M6 x 18





Screw-in spacer clip, heavy-duty version M8

Type	Clamping range D mm	Size	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2900 W 17 FT	16-17	3/8"	300	25	5.040	1387 01 4
2900 W 21.5 FT	19-21.5	1/2"	250	25	5.768	1387 03 0
2900 W 27 FT	24.5-27	3/4"	250	25	6.144	1387 05 7
2900 W 33.5 FT	30.5-33.5	1"	200	25	6.864	1387 06 5
2900 W 42.5 FT	39.5-42.5	1 1/4"	175	25	9.000	1387 08 1
2900 W 48.5 FT	45.5-48.5	1 1/2"	175	25	9.284	1387 11 1
2900 W 60 FT	56-60	2"	135	15	11.346	1387 13 8
2900 W 75.5 FT	71.5-75.5	2 1/2"	50	50	21.000	1387 15 4
2900 W 88 FT	83-88	3"	50	50	23.800	1387 17 0

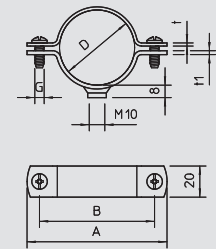
ST Steel FT Hot-dip galvanised

/100 pc.

Can be screwed onto M8 thread.

Important dimensions, screw-in spacer clip

D	A	B	t	t1	G
mm	mm	mm	mm	mm	
16.0-17.0	52	36	2	2.5	M6 x 16
19.0-21.5	56	40	2	2.5	M6 x 16
24.5-27.0	62	46	2	2.5	M6 x 16
30.5-33.5	70	54	2	2.5	M6 x 16
39.5-42.5	81	65	2	2.5	M6 x 18
45.5-48.5	88	72	2	2.5	M6 x 18
56.0-60.0	105	89	2.5	2.5	M6 x 18
71.5-75.5	125	105	3	3	M6 x 20
83.0-88.0	138	118	3	3	M6 x 20



Screw-in spacer clip, heavy-duty version M10

Type	Clamping range D mm	Size	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2900 W 21.5 FT	19-21.5	1/2"	250	25	5.768	1388 03 7
2900 W 27 FT	24.5-27	3/4"	250	25	6.144	1388 05 3
2900 W 33.5 FT	30.5-33.5	1"	200	25	6.864	1388 06 1
2900 W 48.5 FT	45.5-48.5	1 1/2"	175	25	9.284	1388 11 8
2900 W 60 FT	56-60	2"	135	15	11.346	1388 13 4
2900 W 75 FT SO	71.5-75.5	2 1/2"	50	50	22.160	1388 37 1
2900 W 88 FT SO	83-88	3"	50	50	24.450	1388 39 8
2900 W 139 FT SO	130-140	5"	25	25	32.500	1388 42 8

ST Steel FT Hot-dip galvanised

/100 pc.

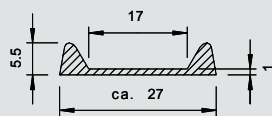
Can be screwed onto M10 thread.

Important dimensions, screw-in spacer clip

D	A	B	t	t1	G
mm	mm	mm	mm	mm	
19.0-21.5	56	40	2	2.5	M6 x 16
24.5-27.0	62	46	2	2.5	M6 x 16
30.5-33.5	70	54	2	2.5	M6 x 16
45.5-48.5	88	72	2	2.5	M6 x 18
56.0-60.0	105	89	2.5	2.5	M6 x 18
71.5-75.5	125	105	3	3	M6 x 20
83.0-88.0	138	118	3	3	M6 x 20
130-140	190	170	3	3	M6 x 25



Inlay strip



Type	Pack. m	Weight kg/100 m	Item No.
2985 SW	25	6.000	2357 05 4

/100 m

For clips of up to 25 mm material width.

Inlay strip for pipe clamps and screw-in spacer clips to created fixed points.





Spacer fastening clip



Post crosspiece

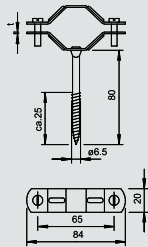
Type	Clamping range D mm	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1060 26-45 FT	26-45	M5 x 30	100	100	10.500	1310 61 5
1060 45-68 FT	45-68	M6 x 35	100	100	14.300	1310 65 8

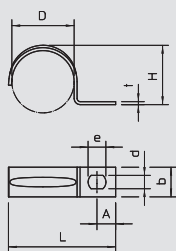
ST Steel FT Hot-dip galvanised /100 pc.

With wood screw thread 6.5 x 80 mm (thread length approx. 25 mm).
Screws made of electrogalvanised steel.

Important dimensions, post crosspiece

D	A	B	b	t	M
mm	mm	mm	mm	mm	
26-45	84	65	20	1.5	M5 x 30
45-68	115	95	20	1.5	M6 x 35





Fastening clip, light-duty



Type	For Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
604 3 G	3	12,000	100	0.052	1003 03 8
604 4 G	4	12,000	100	0.067	1003 04 6
604 5 G	5	5,000	100	0.084	1003 05 4
604 6 G	6	5,000	100	0.099	1003 06 2
604 7 G	7	5,000	100	0.120	1003 07 0
604 8 G	8	5,000	100	0.123	1003 08 9
604 9 G	9	5,000	100	0.139	1003 09 7
604 10 G	10	4,800	100	0.150	1003 10 0
604 11 G	11	4,800	100	0.270	1003 11 9
604 12 G	12	5,000	100	0.240	1003 12 7
604 13 G	13	5,000	100	0.280	1003 13 5
604 16 G	16	3,900	100	0.348	1003 17 8
604 19 G	19	1,800	100	0.411	1003 19 4
604 20 G	20	1,800	100	0.431	1003 20 8
604 21 G	21	3,000	100	0.447	1003 21 6
604 23 G	23	2,400	100	0.490	1003 23 2
604 25 G	25	1,000	100	0.560	1003 25 9
604 28 G	28	1,000	100	0.874	1003 28 3
604 32 G	32	800	100	1.420	1003 32 1
604 35 G	35	800	100	1.355	1003 35 6
604 37 G	37	800	100	1.567	1003 37 2
604 40 G	40	1,200	100	1.860	1003 40 2
604 47 G	47	500	50	2.484	1003 46 1

ST Steel

G Electrogalvanised

/100 pc.

Single-lobe fastening clip for cables and pipes.

* Sizes 3 and 4 not suitable for nail device.

* Sizes 3 to 21 not suitable for bolt-firing tool.

Important dimensions, fastening clip

D	L	H	b	t	d	e	A
mm	mm	mm	mm	mm	mm	mm	mm
3	12	2.4	7	0.7	4.5	6	4
4	14	3.3	7	0.7	4.5	6	4
5	16.5	4.5	7	0.7	4.5	6	5
6	17.5	5.2	8	0.7	4.5	6	5
7	19.5	6.5	8	0.7	4.5	6	5
8	21	7	8	0.7	4.5	6	5.5
9	21.5	8	8	0.7	4.5	6	5.75
10	22	9	8	0.7	4.5	6	5
11	24	10	10	1	4.5	6	5.5
12	27	11	10	0.7	4.5	6	6.5
13	27	11.5	10	1	4.5	6	6
16	31	14.5	10	1	4.5	6	6.5
19	33	17	10	1	4.5	6	6.5
20	35	18	10	1	4.5	6	6.3
21	36	19	10	1	4.5	6	6.3
23	39	21.5	10	1	4.5	6	7
25	41.3	23	15	1	4.5	6	7
28	45	24.8	15	1	4.5	6	7
32	48.8	30	15	1.5	5.5	7	8
35	54	30	14	1.5	5.5	7	8.75
37	56	34	14	1.5	5.5	7	7.5
40	63	38	14	1.5	5.5	7	10.5
47	69	43.8	14	1.5	5.5	7	10



Fastening clip



Fastening clip, medium-duty 5–18 mm

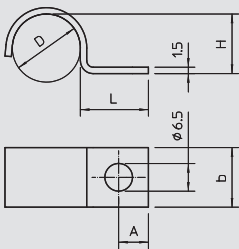
Type	For Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
1015 5 G	5	3,000	100	0.325	1009 02 8
1015 6 G	6	2,400	100	0.385	1009 03 6
1015 7 G	7	2,000	100	0.418	1009 04 4
1015 8 G	8	2,000	100	0.428	1009 05 2
1015 9 G	9	2,000	100	0.468	1009 06 0
1015 10 G	10	2,000	100	0.560	1009 07 9
1015 11 G	11	1,800	100	0.632	1009 08 7
1015 12 G	12	1,000	100	0.672	1009 10 9
1015 13 G	13	1,800	100	0.683	1009 11 7
1015 14 G	14	1,200	100	0.710	1009 16 8
1015 15 G	15	1,200	100	0.744	1009 18 4
1015 16 G	16	1,200	100	0.753	1009 19 2
1015 17 G	17	1,200	100	0.764	1009 20 6
1015 18 G	18	1,200	100	0.835	1009 21 4

ST Steel G Electrogalvanised /100 pc.

Single-lobe fastening clip for cables and pipes.
Beading from size 20.

Important dimensions, fastening clip

D	L	H	b	A
mm	mm	mm	mm	mm
5	16	4	12	7
6	16	5	12	7
7	16	6	12	7
8	16	7	12	7
9	16	8	12	7
10	16	9	12	7
11	16	10	14	7
12	16	11	14	7
13	16	12	14	7
14	16	12.5	14	7
15	16	13.5	14	7
16	16	14	14	7
17	16	15	14	7
18	16	16	14	7



Fastening clip, medium-duty 20–28 mm

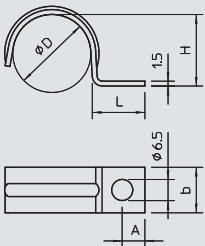
Type	For Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
1015 20 G	20	1,200	100	0.921	1009 23 0
1015 25 G	25	1,000	100	1.150	1009 42 7
1015 28 G	28	1,000	100	1.250	1009 36 2

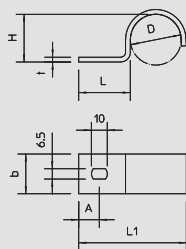
ST Steel G Electrogalvanised /100 pc.

Single-lobe fastening clip for cables and pipes.
Beading from size 20.

Important dimensions, fastening clip

D	L	H	b	A
mm	mm	mm	mm	mm
20	16	18	14	7
25	16	22.5	14	7
28	16	25	14	7





Fastening clip, heavy-duty



Type	For Ø	Size	Box Qty.	Pack.	Weight	Item No.
	mm		pcs	pcs	kg/100 pcs.	
822 6 FT	6	—	1,000	100	0.885	1014 00 5
822 10 FT	10	—	1,200	100	1.075	1014 01 3
822 12 FT	12	M12	400	100	1.450	1014 02 1
822 14 FT	14	—	400	100	1.600	1014 04 8
822 16 FT	15,2	M16	400	100	1.733	1014 09 9
822 18 FT	18,6	PG11	400	100	1.946	1014 11 0
822 20 FT	20	M20	600	100	2.125	1014 13 7
822 22.5 FT	22,5	PG16	500	50	2.338	1014 16 1
822 25 FT	25	M25	500	50	2.400	1014 50 1
822 28.3 FT	28,3	PG21	200	50	4.420	1014 21 8
822 32 FT	32	M32	100	100	5.490	1014 52 8
822 37 FT	37	PG29	100	100	7.100	1014 29 3
822 40 FT	40	M40	100	100	6.590	1014 53 6
822 47 FT	47	PG36	100	100	8.500	1014 36 6
822 50 FT	50	M50	100	100	7.690	1014 54 4
822 63 FT	63	M63	100	100	9.260	1014 55 2

ST Steel

FT Hot-dip galvanised

/100 pc.

Single-lobe fastening clip for cables and pipes.

Important dimensions, fastening clip

D	L	L1	H	b	t	A
mm	mm	mm	mm	mm	mm	mm
6	23.5	32	5	20	2	10
10	23.5	36	9	20	2	10
12	23.5	38.5	11	20	2	10
14	23.5	40.5	13	20	2	10
15.2	23.5	42	14	20	2	10
18.6	23.5	45	17	20	2	10
20	23.5	48	19.5	20	2	10
22.5	23.5	49	21	20	2	11
25	25.5	53	23.5	20	2	11
28.3	27	60	26.5	20	3	11
32	32.5	68	30	25	3	13
37	30	70	35	25	3	13
40	32.5	76	38	25	3	13
47	30	81	45	25	3	13
50	32.5	86	47	25	3	15
63	33.5	100	60	25	3	15

Fastening clip, plant standard



Type	For Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
WN 7855 A 2	2	4,000	100	0.039	1043 01 3
WN 7855 A 2.5	2.5	4,000	100	0.041	1043 02 1
WN 7855 A 4	4	4,000	100	0.062	1043 06 4
WN 7855 A 4.5	4.5	4,000	100	0.079	1043 07 2
WN 7855 A 5	5	4,000	100	0.090	1043 08 0
WN 7855 A 6	6	4,000	100	0.097	1043 10 2
WN 7855 A 7	7	4,000	100	0.120	1043 12 9
WN 7855 A 8	8	4,000	100	0.159	1043 14 5
WN 7855 A 9	9	4,000	100	0.168	1043 16 1
WN 7855 A 10	10	4,000	100	0.170	1043 19 6
WN 7855 A 12	12	2,000	100	0.530	1043 22 6
WN 7855 A 14	14	2,000	100	0.579	1043 24 2

ST Steel

GTP Electrogalvanised, transparently passivated

/100 pc.

Dimensions to Siemens standard SN 78550, shape A, with strongly rounded edges, thus particularly suitable for sensitive cables.

* Sizes 2 to 10 not suitable for bolt-firing tool and nail device.

Important dimensions, fastening clip

D	L	H	b	t	d	A
mm	mm	mm	mm	mm	mm	mm
2	8.5	1.5	6	0.8	3.2	3
2.5	5.25	2	6	0.8	3.2	3
4	7.5	3.5	6	0.8	3.2	3
4.5	8.25	4	6	1	3.2	3
5	8	4.5	6	1	3.2	3
6	7.5	5.5	6	1	3.2	3
7	10	6	8	1	3.2	4
8	9.5	7	8	1	3.2	4
9	9	8	8	1	3.2	4
10	8.5	9	8	1	3.2	4
12	13.5	10	12	1.5	4.3	4.5
14	12.5	12	12	1.5	4.3	4.5



Fastening clip



Fastening clip, plant standard

Type	For Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
WN 7855 B 3	3	5,000	100	0.080	1044 04 4
WN 7855 B 4	4	5,000	100	0.082	1044 06 0
WN 7855 B 4.5	4.5	5,000	100	0.097	1044 07 9
WN 7855 B 5	5	5,000	100	0.118	1044 08 7
WN 7855 B 6	6	5,000	100	0.128	1044 10 9
WN 7855 B 7	7	4,800	100	0.200	1044 12 5
WN 7855 B 8	8	4,800	100	0.218	1044 14 1
WN 7855 B 9	9	2,400	100	0.222	1044 17 6
WN 7855 B 10	10	2,400	100	0.223	1044 19 2
WN 7855 B 12	12	1,800	100	0.675	1044 21 4
WN 7855 B 14	14	1,200	100	0.733	1044 23 0
WN 7855 B 16	16	1,200	100	0.742	1044 25 7

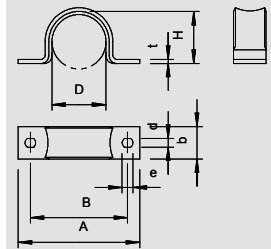
ST Steel **GTP** Electrogalvanised, transparently passivated /100 pc.

Dimensions to Siemens standard SN 78550, shape B, with strongly rounded edges, thus particularly suitable for sensitive cables.

* Sizes 3 to 10 not suitable for nail device.

Important dimensions, fastening clip

D	A	B	H	b	t	d	e
mm	mm	mm	mm	mm	mm	mm	mm
3	21	14	2.5	6	0.8	3.2	4
4	21	14	3.5	6	1	3.2	4
4.5	24	16	4	6	1	3.2	4
5	24	16	4.5	6	1	3.2	4
6	24	16	5.5	6	1	3.2	4
7	28	20	6	8	1	3.2	4
8	28	20	7	8	1	3.2	4
9	28	20	8	8	1	3.2	4
10	28	20	9	8	1	3.2	4
12	39	30	10	12	1.5	4.3	5
14	39	30	12	12	1.5	4.3	5
16	39	30	14	12	1.5	4.3	5



Heavy-duty cable clip

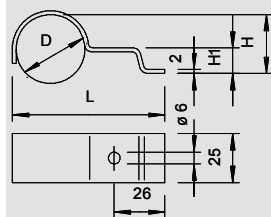
Type	For cable Ø	Hole size	Material thickness	Colour	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm		pcs	pcs	kg/100 pcs.	
1594 22 G	22	6	2	Stone grey	200	100	3.300	1310 92 5

ST Steel **G** Electrogalvanised /100 pc.

For earthing cable fastening to house connection boxes. Levanisit coated.

Important dimensions, cable clip

D	L	H	H1
mm	mm	mm	mm
22	65	18	11



Fastening clip, medium-duty

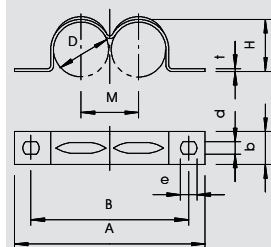
Type	For Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
604 2X16	2 x 16	1,000	100	0.744	1004 16 6
604 2X19	2 x 19	1,000	100	0.845	1004 19 0
604 2X21	2 x 21	1,000	100	0.935	1004 21 2
604 2X28	2 x 28	600	50	1.456	1004 29 8

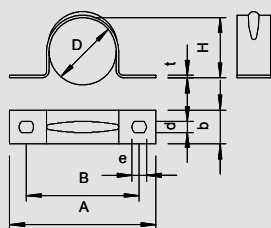
ST Steel **G** Electrogalvanised /100 pc.

Two lobe fastening clips for cables and pipes.

Important dimensions, fastening clip

D	A	B	M	b	t	d	H	e
mm	mm	mm	mm	mm	mm	mm	mm	mm
16	60.5	48.5	16.5	12	1	4.5	14.5	6
19	66	54	19.5	12	1	4.5	17	6
21	69.5	57.5	22	12	1	4.5	18.3	6
28	91	79	29	14	1	4.5	26	6





Fastening clip, medium-duty



Type	For Ø	Hole size	Material thickness	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
605 7 G	7	4,5 x 6	1	4,800	100	0.183	1018 07 8
605 8 G	8	4,5 x 6	1	5,000	100	0.203	1018 08 6
605 9 G	9	4,5 x 6	1	5,000	100	0.246	1018 09 4
605 10 G	10	4,5 x 6	1	1,800	100	0.432	1018 10 8
605 11 G	11	4,5 x 6	1	1,800	100	0.462	1018 11 6
605 12 G	12	4,5 x 6	1	2,000	100	0.485	1018 12 4
605 13 G	13	4,5 x 6	1	2,400	100	0.532	1018 13 2
605 14 G	14	4,5 x 6	1	2,400	100	0.560	1018 14 0
605 15 G	15	4,5 x 6	1	2,000	100	0.584	1018 15 9
605 16 G	16	4,5 x 6	1	1,200	100	0.585	1018 16 7
605 17 G	17	4,5 x 6	1	1,500	100	0.604	1018 17 5
605 18 G	18	4,5 x 6	1	1,200	100	0.640	1018 18 3
605 19 G	19	4,5 x 6	1	1,200	100	0.671	1018 19 1
605 20 G	20	4,5 x 6	1	1,000	100	0.664	1018 20 5
605 21 G	21	4,5 x 6	1	1,000	100	0.678	1018 21 3
605 23 G	23	4,5 x 6	1	1,000	100	0.826	1018 22 1
605 25 G	25	4,5 x 6	1	1,200	100	0.960	1018 25 6
605 26 G	26	4,5 x 6	1	1,000	100	0.975	1018 26 4
605 28 G	28	4,5 x 6	1	1,200	100	1.067	1018 28 0
605 30 G	30	4,5 x 6	1	1,200	100	1.150	1018 30 2
605 32 G	32	4,5 x 6	1	1,200	100	1.260	1018 33 7
605 35 G	35	5,5 x 7	1	1,200	100	1.921	1018 35 3
605 37 G	37	5,5 x 7	1	1,200	100	2.007	1018 36 1
605 40 G	40	5,5 x 7	1.5	600	50	1.900	1018 39 6
605 43 G	43	5,5 x 7	1.5	600	50	2.324	1018 43 4
605 47 G	47	5,5 x 7	1.5	600	50	2.366	1018 47 7
605 50 G	50	5,5 x 7	1.5	300	25	2.770	1018 50 7
605 55 G	55	5,5 x 7	1.5	300	25	3.840	1018 55 8
605 60 G	60	5,5 x 7	1.5	300	25	3.800	1018 60 4
605 63 G	63	5,5 x 7	1.5	300	25	3.670	1018 63 9

ST Steel

G Electrogalvanised

/100 pc.

Two lobe fastening clips for cables and pipes.
 * Sizes 7 to 12 not suitable for bolt-firing tool.

Important dimensions, fastening clip

D	A	B	H	b	t	d	e
mm	mm	mm	mm	mm	mm	mm	mm
7	32	21	6	10	1	4.5	6
8	33	22	7	10	1	4.5	6
9	34	23	8	10	1	4.5	6
10	37	25	9	12	1	4.5	6
11	38	26	10	12	1	4.5	6
12	39	27	11	12	1	4.5	6
13	41	29	12	12	1	4.5	6
14	42	30	13	12	1	4.5	6
15	43	31	13.5	12	1	4.5	6
16	44	32	14.5	12	1	4.5	6
17	45	33	15.5	12	1	4.5	6
18	46	34	16.5	12	1	4.5	5
19	47	35	17.5	12	1	4.5	6
20	49	37	18.5	12	1	4.5	6
21	50	38	19.5	12	1	4.5	6
23	52	40	21	12	1	4.5	6
25	58	44	23	14	1	4.5	6
26	59	45	24	14	1	4.5	6
28	61	47	26	14	1	4.5	6
30	63	49	28	14	1	4.5	6
33	66	52	30	14	1	4.5	6
35	70	56	32	14	1.5	5.5	7
37	72	58	34	14	1.5	5.5	7
40	75	61	37	14	1.5	5.5	7
43	78	64	40	14	1.5	5.5	7
47	82	68	44	14	1.5	5.5	7
50	88	74	46	16	1.5	5.5	7
55	94	78	51	16	1.5	5.5	7
60	99	83	56	16	1.5	5.5	7
63	112	98	59	16	1.5	5.5	7





Fastening clip



Fastening clip, medium-duty

Type	For Ø	Hole size	Material thickness	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
605 16 ALU	16	4,5 x 6	1	2,000	100	0.218	1017 79 9
605 20 ALU	20	4,5 x 6	1	1,200	100	0.228	1017 83 7
605 25 ALU	25	4,5 x 6	1	1,000	100	0.330	1017 86 1
605 32 ALU	32	4,5 x 6	1	1,200	100	0.433	1017 92 6
605 40 ALU	40	5,5 x 7	1	600	50	0.650	1017 95 0
605 50 ALU	50	5,5 x 7	1.5	300	25	0.952	1017 98 0
605 63 ALU	63	5,5 x 7	1.5	300	25	1.260	1017 99 7

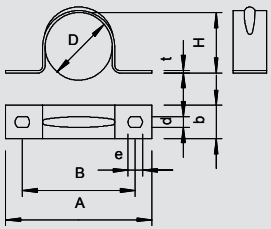
Al Aluminium

/100 pc.

Two lobe fastening clips for cables and pipes.

Important dimensions, fastening clip

D	A	B	H	b	t	d	e
mm	mm	mm	mm	mm	mm	mm	mm
16	44	32	14.5	12	1	4.5	6
20	49	37	18.5	12	1	4.5	6
25	58	44	23	14	1	4.5	6
32	95	71	29	25	1	4.5	6
40	75	61	37	14	1.5	5.5	7
50	110	86	46	25	1.5	5.5	7
63	120	96	59	25	1.5	5.5	7



Fastening clip, heavy-duty

Type	For Ø	Hole size	Material thickness	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
823 16 FT	16	6,5 x 10	2	500	50	2.260	1015 09 5
823 18.3 FT	18.6	6,5 x 10	2	500	50	2.446	1015 11 7
823 20 FT	20	6,5 x 10	2	500	50	2.662	1015 13 3
823 22.5 FT	22.5	6,5 x 10	2	400	50	2.988	1015 16 8
823 25 FT	25	6,5 x 10	3	250	25	6.770	1015 49 4
823 28.3 FT	28.3	6,5 x 10	3	250	25	5.208	1015 21 4
823 32 FT	32	6,5 x 10	3	100	100	7.469	1015 49 6
823 37 FT	37	6,5 x 10	3	100	100	8.700	1015 30 3
823 40 FT	40	6,5 x 10	3	100	100	8.460	1015 49 8
823 47 FT	47	6,5 x 10	3	100	100	10.120	1015 36 2
823 54 FT	54	6,5 x 10	3	100	100	10.760	1015 42 7
823 59.3 FT	59.3	6,5 x 10	3	100	100	11.800	1015 48 6
823 50 FT	50	6,5 x 10	3	100	100	9.808	1015 50 0
823 63 FT	63	6,5 x 10	3	100	100	11.553	1015 50 8

ST Steel

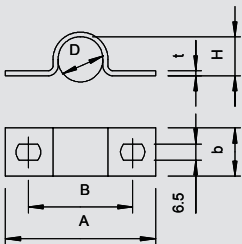
FT Hot-dip galvanised

/100 pc.

Two lobe fastening clips for cables and pipes.

Important dimensions, fastening clip

D	A	B	H	b	t	e
mm	mm	mm	mm	mm	mm	mm
15.2	59	40	13	20	2	10
18.6	62	43	16	20	2	10
20.4	64	45	18	20	2	10
22.5	67	48	20	20	2	10
25	79	60	23.5	25	3	10
28.3	75	56	25.5	20	3	10
32	95	71	29	25	3	10
37	93	69	34	25	3	10
40	100	76	36	25	3	10
47	103	79	43	25	3	10
54	110	86	50	25	3	10
59.3	116	92	55	25	3	10
50	110	86	46	25	3	10
63	120	96	59	25	3	10



Strain relief clip

Type	For cable Ø	Box Qty.	Pack.	Weight	Item No.
	mm	pcs	pcs	kg/100 pcs.	
7901 5 G	5	4,000	100	0.063	1435 01 9
7901 6.5 G	6.5	4,000	100	0.115	1435 02 7

ST Steel

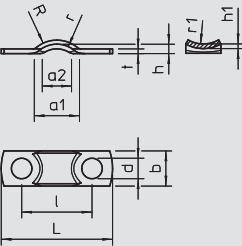
G Electrogalvanised

/100 pc.

Fastening clip for strain relief of cables.

Important dimensions, strain relief clip

R	h	L	l	b	t	d	a1	a2	r	r1	h1
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
5	1.6	19	12	6	0.8	3.5	6.5	4	4	5	0.8
6.5	1.6	23	16	7	1	3.2	8	4	8	5	1.2





Strain relief clip

Type	For cable Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
7902 6 G	6.5	4,000	100	0.096	1436 01 5
7902 8 G	8	5,000	100	0.159	1436 02 3

ST Steel G Electrogalvanised

/100 pc.

Fastening clip for strain relief of cables.

Important dimensions, strain relief clip

R	h	L	l	b	t	d	a
mm	mm	mm	mm	mm	mm	mm	mm
6.5	2.5	25	18	6	1	3.5	11
8	4.5	30	23	8	1	4	12

Type	For cable Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
7903 6 G	6	4,000	100	0.105	1437 00 3
7903 8 G	8	4,000	100	0.130	1437 01 1
7903 9 G	9	4,000	100	0.274	1437 03 8

ST Steel G Electrogalvanised

/100 pc.

Fastening clip for strain relief of cables.

Important dimensions, strain relief clip

R	h	L	l	b	t	d	h1	h1
mm	mm	mm	mm	mm	mm	mm	mm	mm
6	1.5	23	16.5	6	1	2.5	0.5	
8	3.5	27	20	7	1	3.6	0.8	
9	4	31	23	8	1.5	4.5	1	

Type	For cable Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
7904 6 G	6	4,800	100	0.185	1438 01 8

ST Steel G Electrogalvanised

/100 pc.

Fastening clip for strain relief of cables.

Important dimensions, strain relief clip

h	a	L	l	d	f	b	t	h1
mm	mm	mm	mm	mm	mm	mm	mm	mm
6	7.5	27.5	19	4	3.5	8	1	1.5

Type	For cable Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
7905 5 G	5	3,600	100	0.054	1439 01 4

ST Steel G Electrogalvanised

/100 pc.

Fastening clip for strain relief of cables.

Important dimensions, strain relief clip

h	a	a1	L	l	b	t	d
mm	mm	mm	mm	mm	mm	mm	mm
2	7	5.5	20	14	5	0.8	3.5

Type	For cable Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
7908 11 G	11	2,400	100	0.433	1442 01 5

ST Steel G Electrogalvanised

/100 pc.

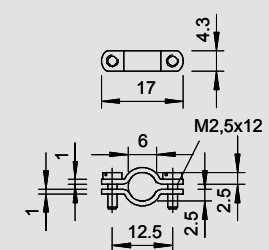
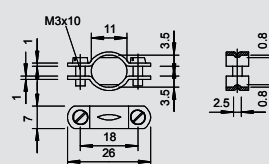
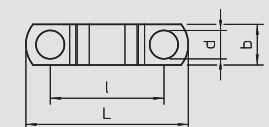
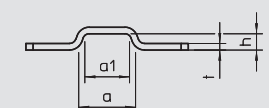
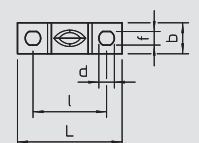
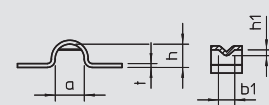
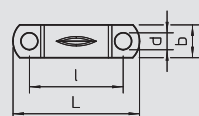
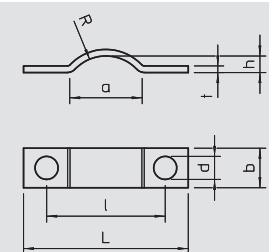
Fastening clip for strain relief of cables.

Type	For cable Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
7909 6 G	6	4,000	100	0.198	1443 01 1

ST Steel G Electrogalvanised

/100 pc.

Fastening clip for strain relief of cables.



Special cable/pipe fastening systems

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Fastening strip



Cable ties

Type	Dimension mm	Max. bundle Ø mm	Minimum breaking load kN	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
555 2.4x75 WS	2.4 x 75	15	0.08	White	1,000	100	0.050	2332 02 7
555 2.5x100 WS	2.5 x 100	18	0.08	White	1,000	100	0.065	2332 05 1
555 2.5x165 WS	2.5 x 165	40	0.08	White	1,000	100	0.080	2332 09 4
555 2.5x200 WS	2.5 x 200	50	0.08	White	1,000	100	0.100	2332 10 8
555 3.6x150 WS	3.6 x 140	35	0.18	White	1,000	100	0.125	2332 17 5
555 3.6x200 WS	3.6 x 200	50	0.18	White	1,000	100	0.150	2332 18 3
555 3.6x290 WS	3.6 x 290	76	0.18	White	1,000	100	0.175	2332 21 3
555 4.8x200 WS	4.8 x 200	47	0.22	White	1,000	100	0.200	2332 33 7
555 4.8x310 WS	4.8 x 300	76	0.22	White	1,000	100	0.250	2332 36 1
555 4.8x370 WS	4.8 x 370	102	0.22	White	1,000	100	0.300	2332 38 8
555 7.6x200 WS	7.6 x 200	50	0.55	White	1,000	100	0.350	2332 50 7
555 7.6x300 WS	7.6 x 300	76	0.55	White	1,000	100	0.450	2332 55 8
555 7.6x380 WS	7.6 x 380	102	0.55	White	1,000	100	0.500	2332 57 4
555 2.5x100 SW	2.5 x 100	18	0.08	Black	1,000	100	0.065	2332 62 0
555 3.6x150 SW	3.6 x 140	35	0.18	Black	1,000	100	0.125	2332 65 5
555 3.6x200 SW	3.6 x 200	50	0.18	Black	1,000	100	0.150	2332 66 3
555 4.8x200 SW	4.8 x 200	47	0.22	Black	1,000	100	0.200	2332 69 8
555 4.8x310 SW	4.8 x 300	76	0.22	Black	1,000	100	0.250	2332 70 1
555 4.8x370 SW	4.8 x 370	102	0.22	Black	1,000	100	0.300	2332 72 8
555 7.6x380 SW	7.6 x 380	102	0.55	Black	1,000	100	0.500	2332 75 2

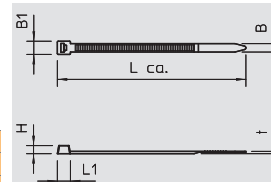
PA Polyamide

/100 pc.

For quick fixing.

Important dimensions, cable tie

G	L	B	B1	t	H	L1
mm	mm	mm	mm	mm	mm	mm
2.4 x 75	78	2.4	4.4	1	2.9	4.4
2.5 x 100	102	2.5	4.5	1.1	3.3	4.4
2.5 x 165	166	2.5	4.5	1.1	3.7	4.4
2.5 x 200	202	2.5	4.5	1.1	3.7	4.4
3.6 x 140	142	3.6	6	1.2	3.8	6.5
3.6 x 200	201	3.6	6.2	1.2	4.4	5.8
3.6 x 290	294	3.6	6	1.2	4.5	6
4.8 x 200	200	4.8	7.5	1.3	4.6	7.2
4.8 x 300	300	4.8	8.5	1.6	5.7	7.7
4.8 x 370	366	4.8	8.5	1.6	5.7	7.7
7.6 x 200	200	7.6	11.6	1.8	7.2	11
7.6 x 300	300	7.6	11.8	1.8	6.9	11
7.6 x 380	376	7.6	12	1.8	6.4	11



Ribbon clip

Type	Dimension mm	Max. bundle Ø mm	Minimum breaking load kN	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
550 6X180 SW	6 x 180	45	0.25	Black	1,500	100	0.180	2330 05 9
550 6X290 SW	6 x 290	78	0.25	Black	1,200	100	0.300	2330 07 5
550 6X360 SW	6 x 360	100	0.25	Black	2,200	100	0.380	2330 09 1
550 9X180 SW	9 x 180	40	0.35	Black	1,000	100	0.270	2330 22 9

PA Polyamide

/100 pc.

Design E, single lock, UV and weather-resistant.

Important dimensions, ribbon clip

B x L	L	B	B1	t	H	L1
mm	mm	mm	mm	mm	mm	mm
6 x 180	180	6	10	1.2	5	20
6 x 290	290	6	10	1.7	5	20
6 x 360	360	6	10	1.7	5	20
9 x 180	180	9	14	1.4	6	24

Type	Dimension mm	Max. bundle Ø mm	Minimum breaking load kN	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
550 9X265 SW	9 x 260	65	0.51	Black	2,200	100	0.420	2330 24 5
550 9X360 SW	9 x 360	93	0.51	Black	2,200	100	0.560	2330 29 6
550 9X510 SW	9 x 510	140	0.55	Black	100	100	0.930	2330 32 6
550 9X760 SW	9 x 760	220	0.55	Black	100	100	1.350	2330 34 2

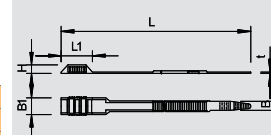
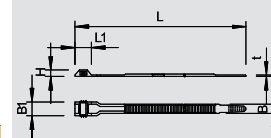
PA Polyamide

/100 pc.

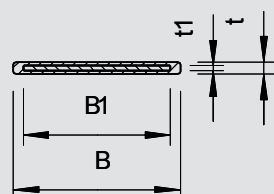
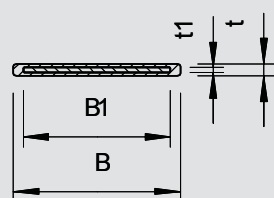
Design D, double lock, UV and weather-resistant.

Important dimensions, ribbon clip

B x L	L	B	B1	t	H	L1
mm	mm	mm	mm	mm	mm	mm
9 x 260	260	9	15	1.4	7	39
9 x 360	360	9	15	1.4	7	39
9 x 510	510	9	15	2	7.2	39
9 x 760	760	9	15	2	7.2	40



Tightening strap



Type	Dimension mm	Minimum breaking load kN	Colour	Box Qty. m	Pack. m	Weight kg/100 m	Item No.
574 G STGR	17 x 1.0	1,350	Stone grey	250	25	5.880	6490 01 8

ST Steel **G** Electrogalvanised /100 m

Galvanised tightening strap and with plastic covering for fastening on cable trays and ladders.

Important dimensions, tightening strap

B	t	B1	t1
mm	mm	mm	mm
17	1	15.5	0.3

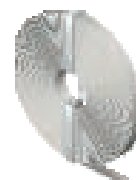
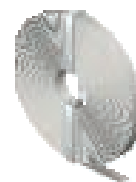
Type	Dimension mm	Minimum breaking load kN	Colour	Box Qty. m	Pack. m	Weight kg/100 m	Item No.
574 03 BA	17 x 1.0	2,250	Blue anthracite	250	25	6.950	6490 03 4
574 05 GNBG	16.5 x 1.2	3,500	Green beige	250	25	6.950	6490 05 0

V2A Stainless steel, 1.4310 /100 m

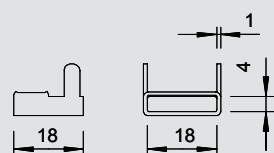
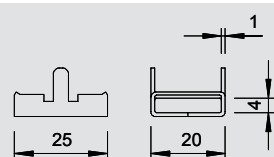
Tightening strap made of rustproof steel and with plastic covering for fastening on cable trays and ladders.

Important dimensions, tightening strap

B	t	B1	t1
mm	mm	mm	mm
17	1	15.5	0.3
16.5	1.2	14.5	0.5



Tightening strap lock



Type	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
192	1,200	100	1.006	6490 90 5

ST Steel **DD** Zinc-aluminium coated, double-dip /100 pc.

Tightening strap lock for mounting under the ceiling.

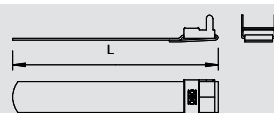
Type	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
197 VA4301	1,800	100	0.560	6490 96 4

V2A Stainless steel, 1.4301 /100 pc.

Tightening strap lock for single-sided locking of tightening strap in problematic areas.



Tightening strap in fixed lengths



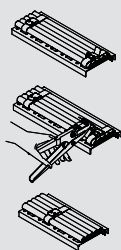
Type	Dimension mm	Length mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
574 03 30 BA	17 x 1.0	300	Blue anthracite	500	25	2.700	6490 10 7
574 03 45 BA	17 x 1.0	450	Blue anthracite	250	25	3.600	6490 12 3
574 05 55 GNBG	16.5 x 1.2	550	Green beige	250	25	5.800	6490 15 8
574 05 65 GNBG	16.5 x 1.2	650	Green beige	250	25	6.600	6490 17 4

V2A Stainless steel, 1.4310 /100 pc.

Tightening strap, 574/03/VA and 574/05/VA, completely preterminated with tightening strap lock.



Spring chuck



Type	Pack. pcs	Weight kg/100 pcs.	Item No.
575	1	29.700	6498 01 9

ST Steel /pc.

For tightening strap 574/...

Mounting of the tightening strap:

1. Cut the strap to the right length, push it through the lock and turn it over.
2. Loop the strap around the cable, push the loose end through the lock.
3. Tighten the end of the strap with the pliers.
4. Turn the end of the taut strap with the pliers. Remove the pliers.
5. Complete turnover the turned end of the strap with the hammer, secure the end of the strap by hitting the two standing lobes of the lock.

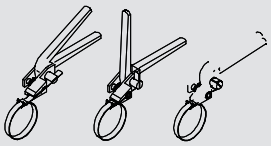


Fastening strip



Spring chuck

Type	Pack.	Weight	Item No.
	pcs	kg/100 pcs.	
576	1	132.000	6498 02 7
ST Steel			/pc.
For tightening strap 574/...			



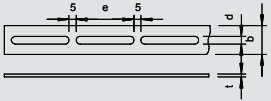
Slotted steel strap, rods

Type	Dimension	Per bundle	Weight	Item No.
	mm	m	kg/100 m	
5050 20X3 3M FT	20 x 3	60	36.800	1465 76 7
5050 25X3 3MFT	25 x 3	60	48.900	1465 77 5
5050 30X3 3M FT	30 x 3	60	64.000	1465 79 1
5050 SB30x3 FT	30 x 3	60	54.000	1466 26 7
5050 30X4 3M FT	30 x 4	30	71.600	1465 80 5
5050 40X4 3M FT	40 x 4	30	103.800	1465 82 1
ST Steel FT Hot-dip galvanised			/100 m	

Perforated slotted steel strap in strips.
Length: 3,000 mm.

Important dimensions, slotted steel strap

b x t	d	e
mm	mm	mm
20 x 3	6.5	40
25 x 3	6.5	40
30 x 3	6.5	40
30 x 3	8.5	40
30 x 4	8.5	60
40 x 4	8.5	70



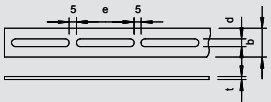
Slotted steel strap, rings

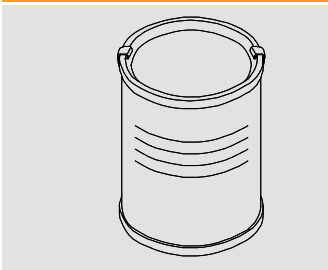
Type	Dimension	Normal ring	Weight	Item No.
	mm	ca. m	kg/100 m	
5050 25X3 FT	25 x 3	120	48.900	1465 10 4
5050 30X3 FT	30 x 3	120	64.000	1465 14 7
5050 30X4 FT	30 x 4	100	71.600	1465 16 3
5050 40X4 FT	40 x 4	80	103.000	1465 19 8
5050 20x1.5 BK	20 x 1.5	200	18.200	1465 60 0
ST Steel Bright FT Hot-dip galvanised			/100 m	

In rings.

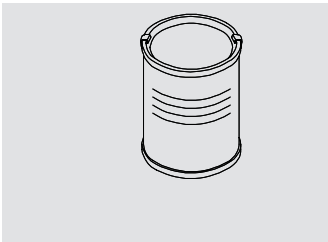
Important dimensions, slotted steel strap

b x t	d	e
mm	mm	mm
25 x 3	6.5	40
30 x 3	6.5	40
30 x 4	8.5	60
40 x 4	8.5	70

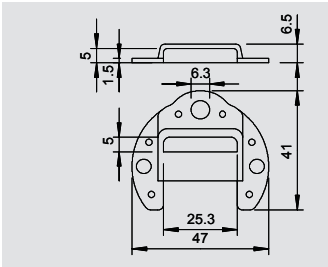




		Solvent mixture		
Type	Contents	Pack.	Weight	Item No.
	l	pcs	kg/100 pcs.	
508	1	1	105.000	2341 10 7
				/pc.
Thinning. Solvent mixture to create an optimum processing consistency of Impu-Fix ribbon conductor quick adhesive and to clean the working material.				



		Impu-Fix ribbon conductor quick adhesive		
Type	Contents	Pack.	Weight	Item No.
	kg	pcs	kg/100 pcs.	
509	0.65	1	70.000	2341 01 8
				/pc.
Impu-Fix ribbon conductor bonding agent to stick clips and ribbon conductors to masonry and concrete.				



		Ceiling outlet		
Type	Colour	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
510	Light grey	100	0.290	2236 02 8
PS Polystyrene				/100 pc.
To fasten ribbon conductors.				



Tensioning wire range

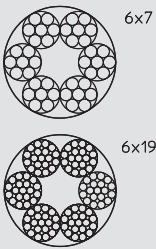


Steel wire tensioning rope

Type	Cable diameter mm	Breaking load kN	In rings m	Weight kg/100 m	Item No.
957 2 G	2	2.35	50	1.430	5303 20 2
957 3 G	3	5.29	50	3.220	5303 20 6
957 4 G	4	9.41	50	5.720	5303 21 4
957 5 G	5	14.7	50	8.940	5303 22 2
957 6 G	6	21.1	50	12.900	5303 23 0
957 8 G	8	34.8	50	22.900	5303 25 7
957 10 G	10	54.4	50	35.700	5303 26 5

ST Steel G Electrogalvanised /100 m

Steel wire tensioning rope, galvanised with fibre inlay (hemp core).
Cable Ø 2–6 mm: Round flexible cable 6 x 7 to DIN 3055.
Cable Ø 8–10 mm: Round flexible cable 6 x 19 to DIN 3060.
Minimum break load 1,770 N/mm².

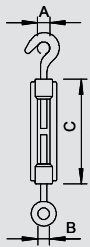


Tension jack

Type	Thread	Dimension A mm	Dimension B mm	Dimension C mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
945 M6 G	M6	9	8.5	110	2.25	5	13.050	5300 03 7
945 M10 G	M10	14	13.5	125	7	5	33.650	5300 05 3
945 M12 G	M12	16	15.5	125	7.5	5	53.000	5300 06 1
945 M16 G	M16	22	19	170	12	5	84.000	5300 08 8

ST Steel G Electrogalvanised /100 pc.

With hook and eye, to DIN 1480.

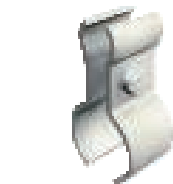
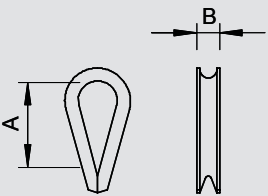


Cable eye stiffener

Type	For rope-Ø mm	Dimension A mm	Dimension B mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
946 3 G	3	21.5	4	1,250	25	0.345	5301 03 3
946 4 G	4	26.5	5.5	750	25	0.409	5301 04 1
946 5 G	5	28.5	6.5	600	25	0.501	5301 00 9
946 6 G	6	30	8	500	25	0.756	5301 06 8
946 8 G	8	35	10	360	10	1.228	5301 08 4
946 10 FT	10	43	12.5	200	10	2.322	5301 10 6

ST Steel G Electrogalvanised FT Hot-dip galvanised /100 pc.

Cable eye stiffener to DIN 65457.



Tensioning wire clip, metal

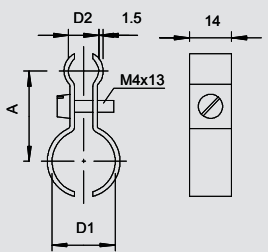
Type	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1020 11-16 G	M4 x 13	1,200	100	1.549	1404 16 4
1020 14-18 G	M4 x 13	1,000	100	1.651	1404 18 0
1020 18-28 G	M4 x 13	600	100	2.136	1404 28 8

ST Steel G Electrogalvanised /100 pc.

To fasten cables to tensioning cables.

Important dimensions, tensioning wire clip

D1	D2	A
mm	mm	mm
11–16	4–9	22
14–18	4–9	26
19–28	4–9	34



Tensioning wire clip, polystyrene

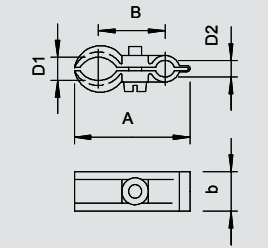
Type	Clamping range D mm	For rope-Ø mm	Bolt	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
4024 9-16	9-16	3-8	M4 x 13	1,200	100	0.545	2305 15 1
4024 16-23	16-23	5-10	M5 x 20	500	50	0.930	2305 23 2

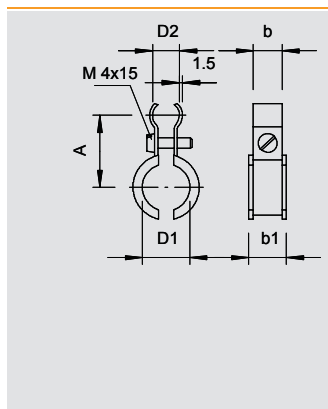
PS Polystyrene /100 pc.

Bolt, steel, electrogalvanised, light grey.

Important dimensions, tensioning wire clip

D1	D2	A	B	b	M
mm	mm	mm	mm	mm	
9–16	3–8	41	24	14	M4 x 13
16–23	5–10	55	31.5	15	M5 x 20





Fix ISO tensioning wire clip



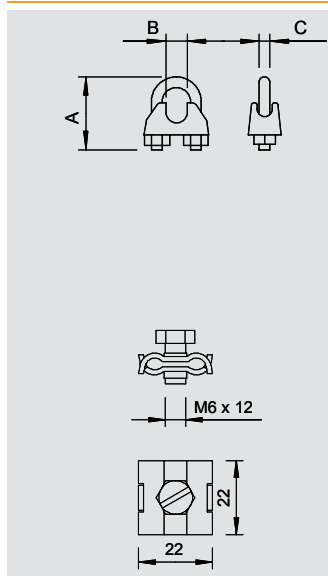
Type	Clamping range D	For rope-Ø	Bolt	Box Qty.	Pack.	Weight	Item No.
	mm	mm		pcs	pcs	kg/100 pcs.	
4021 K 6-13	6-13	4-9	M4 x 15	1,000	100	1.295	2307 61 8
4021 K 9-16	9-16	4-9	M4 x 15	1,200	100	1.457	2307 63 4

ST Steel **FS** Strip-galvanised /100 pc.

Metal clip with plastic insert, steel, electrogalvanised, polyethylene inserts.

Important dimensions, tensioning wire clip

D1	D2	A	b	b1
mm	mm	mm	mm	mm
6-13	4-9	21.5	11.5	16
9-16	4-9	26	14	18.3



Wire cable clamp

Type	For rope-Ø	Dimension A	Dimension B	Dimension C	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
947 3 F	3	20	4	4	1,000	25	1.061	5302 02 1
947 5 F	5	24	6	5	900	25	1.404	5302 05 6
947 6 F	6	28	8	5	750	25	1.704	5302 06 4
947 8 F	8	34	9	6	360	10	3.104	5302 08 0
947 10 F	10	42	11	8	200	10	6.500	5302 10 2

TG Cast iron **F** Hot-dip galvanised /100 pc.

Wire cable clamp for fastening steel wire tensioning ropes.

Type	For rope-Ø	Bolt	Box Qty.	Pack.	Weight	Item No.
	mm		pcs	pcs	kg/100 pcs.	
261 3-6 G	3-6	M6 x 12	600	100	1.498	5305 01 2

ST Steel **G** Electrogalvanised /100 pc.

Wire cable clamp for fastening steel wire tensioning ropes.



Perforated installation strip



Perforated installation strip

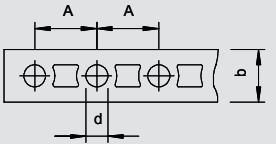
Type	Dimension mm	Per roll m	Weight kg/100 pcs.	Item No.
5055 I FS	12 x 1	10	73.000	1470 12 4
5055 II FS	17 x 1	10	106.000	1470 17 5
5055 III FS	26 x 1.2	10	204.500	1470 26 4
5055 L I 12	12 x 0.75	10	59.000	1471 12 0
5055 L II 17	17 x 0.75	10	84.200	1471 17 1
5055 L III 26	26 x 1	10	172.300	1471 26 0

ST Steel FS Strip-galvanised /pc.

Perforated steel strap, in practical uncoiling box.

Important dimensions, installation strip

Dimension mm	d mm	A mm	b mm
12 x 1	5	14.4	12
17 x 1	8.5	20	17
26 x 1.2	8.5	25	26
12 x 0.75	5	14.4	12
17 x 0.75	7	20	17
26 x 1	8.5	25	26



Perforated installation strip, ridged

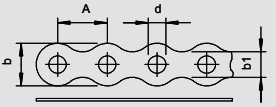
Type	Dimension mm	Per roll m	Weight kg/100 pcs.	Item No.
5062 I FS	12 x 1	10	69.000	1475 12 6
5062 II FS	17 x 1	10	98.500	1475 17 7
5062 III FS	26 x 1.2	10	183.000	1475 26 6
5062 L I 12	12 x 0.75	10	57.000	1475 62 2
5062 L II 17	17 x 0.75	10	73.000	1475 67 3
5062 L III 26	26 x 1	10	153.000	1475 76 2

ST Steel FS Strip-galvanised /pc.

Perforated strap with wavy edges, in practical uncoiling box.

Important dimensions, installation strip

Dimension mm	d mm	A mm	b mm	b1 mm
12 x 1	5	14	12	7.4
17 x 1	7	20	17	10.4
26 x 1.2	9	25	26	17.2
12 x 0.75	5	14	12	7.4
17 x 0.75	7	20	17	10.4
26 x 1	9	25	26	17.2



Perforated installation strip, plastic-coated

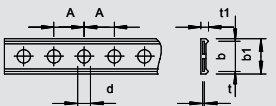
Type	Dimension mm	Per roll m	Weight kg/100 pcs.	Item No.
5055 L PE I 14	13 x 3	10	70.000	1473 22 0
5055 L PE II 19	19 x 3	10	100.500	1473 27 1
5055 L PE III 28	28 x 3.7	10	167.500	1473 36 0

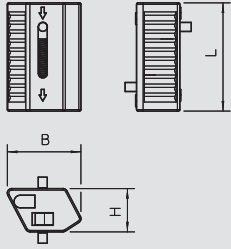
ST Steel FS Strip-galvanised /pc.

Perforated steel strap with PE plastic jacketing.

Important dimensions, installation strip

Dimension mm	d mm	A mm	b mm	b1 mm	t mm	t1 mm
12 x 0.75	5.2	12	12	14	0.75	3
17 x 0.75	6.5	15	17	19	0.75	3
26 x 1	8.5	20	26	28	1	3.7





Cable lock

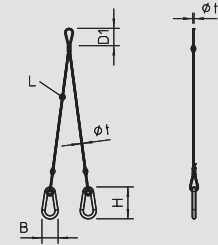


Type	For rope-Ø mm	Dimen- sion L mm	Dimen- sion B mm	Dimen- sion H mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
944 RZS 2 G	2-2.5	26.6	17.1	12.5	375	25	2.130	5300 01 5
944 RZS 3 G	2.5-3.5	36.4	24.3	14.9	250	25	5.120	5300 01 9

Zn Die-cast zinc

/100 pc.

Cable lock for the flexible and easily readjustable suspension with steel wire tensioning rope, type 957. The system allows suspensions in different angles.



Support system

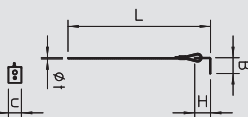
Type	Cable dia- meter mm	Dimen- sion L mm	Dimen- sion B mm	Dimen- sion H mm	Dimen- sion D1 mm	Support load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
944 TLS 230mm	2	230	26	51.5	28	0.6	100	10	4.320	5300 21 0
944 TLS 300mm	2	300	26	51.5	28	0.6	100	10	4.580	5300 21 2
944 TLS 460mm	2	460	26	51.5	28	0.6	100	10	5.110	5300 21 4

ST Steel

G Electrogalvanised

/100 pc.

Support cable system for suspending mesh cable tray systems or similar. The sprung hook means that the cable system be released from the mesh cable tray, in order to insert cables. The system can be mounted without tools.



Support cables, closable

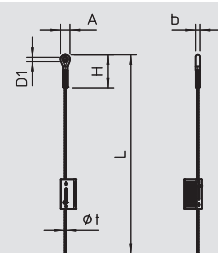
Type	Cable dia- meter mm	Dimen- sion L mm	Dimen- sion B mm	Dimen- sion H mm	Dimen- sion C mm	Support load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
944 SLS 1000mm	2	1,000	27	27	22	0.6	100	10	5.110	5300 22 0
944 SLS 3000mm	2	3,000	27	27	22	0.6	100	10	8.510	5300 22 4
944 SLS 5000mm	2	5,000	27	27	22	0.6	100	10	11.910	5300 22 8

ST Steel

G Electrogalvanised

/100 pc.

Support cable system for suspension on concrete ceilings. Suitable for fastening with gas pressure nail guns. The set consists of the cable system and the cable locks, type 944.



Support cables, steel girder and round profiles

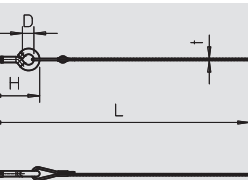
Type	Cable dia- meter mm	Dimen- sion L mm	Dimen- sion A mm	Dimen- sion H mm	Dimen- sion D1 mm	Dimen- sion b mm	Support load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
944 ZLS 1000mm	2	1,000	10	40	5	5.4	0.6	100	10	0.500	5300 24 0
944 ZLS 3000mm	2	3,000	10	40	5	5.4	0.6	100	10	8.320	5300 24 4
944 ZLS 5000mm	2	5,000	10	40	5	5.4	0.6	100	10	11.460	5300 24 8
944 ZLS 10000mm	2	10,000	10	40	5	5.4	0.6	50	10	19.000	5300 25 2

ST Steel

G Electrogalvanised

/100 pc.

Support cable system for suspension on steel girders or round profiles. The set consists of the cable system and the cable locks, type 944. The system can be mounted without tools.



Support cables, pre-mounted FNA tie

Type	Cable dia- meter mm	Dimen- sion L mm	Dimen- sion H mm	Dimen- sion D1 mm	Dimen- sion t mm	Support load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
944 CLS 1000mm	2	1,000	53	10	2	0.6	100	10	5.860	5300 27 0
944 CLS 3000mm	2	3,000	53	10	2	0.6	100	10	9.030	5300 27 4
944 CLS 5000mm	2	5,000	53	10	2	0.6	100	10	10.000	5300 27 8
944 CLS 10000mm	2	10,000	53	10	2	0.6	50	10	15.000	5300 28 2

ST Steel

G Electrogalvanised

/100 pc.

Support cable system for suspension on concrete ceilings with the help of the pre-mounted FNA tie. The set consists of the cable system and the cable locks, type 944. The system can be mounted without tools.



Type	Pack. pcs	Weight kg/100 pcs.	Item No.
W-Cut	1	28.200	5303 76 7

Wire cable cutter

/pc.

For exact, splice-free cutting of steel ropes and the Quick Wire cable systems. Suitable for steel ropes of up to 4.5 mm.



Pipe systems

	Metal pipe	With thread	302
		Without thread	304
	Pipe bend	With thread	303
		Without thread	304
	System accessories	Control T piece	307
		Control bend	307
		Connection sleeve with thread	305
		Connection sleeve without thread	306
		End sockets	308
	Quick pipe system	Quick pipe	309
		Quick pipe system accessories, T piece	310
		Quick pipe system accessories, bend	309



Steel armoured pipes

M IP 54



Metal pipe, with threaded ends

Type	Dimen- sion M	Dimen- sion L	Dimen- sion I	Dimen- sion t	Coding	Pack. m	Weight kg/100 m	Item No.
SM16 FT	M16x1,5	3,000	13	1.25	—	51	43.800	2047 33 6
SM20 FT	M20x1,5	3,000	14	1.25	—	51	57.800	2047 33 9
SM25 FT	M25x1,5	3,000	19	1.25	—	30	73.200	2047 34 2
SM32 FT	M32x1,5	3,000	19	1.35	—	21	102.000	2047 34 5
SM40 FT	M40x1,5	3,000	19	1.35	—	15	128.700	2047 34 8
SM50 FT	M50x1,5	3,000	24	1.45	—	15	173.600	2047 35 1
SM63 FT	M63x1,5	3,000	27	1.85	—	9	264.300	2047 35 4

ST Steel **FT** Hot-dip galvanised /100 m

Electrical installation pipe with threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

One connection sleeve is already screwed onto each pipe.

Type	Dimen- sion M	Dimen- sion L	Dimen- sion I	Dimen- sion t	Pack. m	Weight kg/100 m	Item No.
SM16 G	M16x1,5	3,000	13	1.25	51	43.800	2047 33 5
SM20 G	M20x1,5	3,000	14	1.25	51	57.800	2047 33 8
SM25 G	M25x1,5	3,000	19	1.25	30	73.200	2047 34 1
SM32 G	M32x1,5	3,000	19	1.35	21	102.000	2047 34 4
SM40 G	M40x1,5	3,000	19	1.35	15	128.700	2047 34 7
SM50 G	M50x1,5	3,000	24	1.45	15	173.600	2047 35 0
SM63 G	M63x1,5	3,000	27	1.85	9	264.300	2047 35 3

ST Steel **G** Electrogalvanised /100 m

Electrical installation pipe with threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

One connection sleeve is already screwed onto each pipe.

Type	Dimen- sion M	Dimen- sion L	Dimen- sion I	Dimen- sion t	Colour	Pack. m	Weight kg/100 m	Item No.
SM16 SW	M16x1,5	3,000	13	1.25	Jet black	51	45.500	2047 52 8
SM20 SW	M20x1,5	3,000	14	1.25	Jet black	51	57.800	2047 52 9
SM25 SW	M25x1,5	3,000	19	1.25	Jet black	30	73.200	2047 53 0
SM32 SW	M32x1,5	3,000	19	1.35	Jet black	21	105.600	2047 53 1
SM40 SW	M40x1,5	3,000	19	1.35	Jet black	15	133.300	2047 53 2
SM50 SW	M50x1,6	3,000	24	1.45	Jet black	15	173.600	2047 53 3
SM63 SW	M63x1,5	3,000	27	1.85	Jet black	9	279.000	2047 53 4

ST Steel **FSK** Strip-galvanised/plastic-coated /100 m

Electrical installation pipe with black powder coating with threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

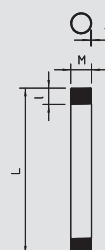
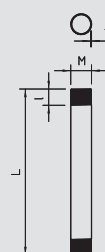
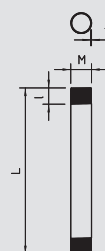
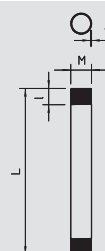
One connection sleeve is already screwed onto each pipe.

Type	Dimen- sion M	Dimen- sion L	Dimen- sion I	Dimen- sion t	Pack. m	Weight kg/100 m	Item No.
SM16 VA	M16x1,5	3,000	13	1.5	51	53.600	2047 65 7
SM20 VA	M20x1,5	3,000	14	1.5	51	68.400	2047 65 8
SM25 VA	M25x1,5	3,000	19	1.5	30	86.900	2047 66 0
SM32 VA	M32x1,5	3,000	19	1.5	21	112.800	2047 66 1
SM40 VA	M40x1,5	3,000	19	1.5	15	142.400	2047 66 2

V2A Stainless steel, 1.4301 /100 m

Stainless steel electrical installation pipe with threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

One connection sleeve is already screwed onto each pipe.



M IP 54

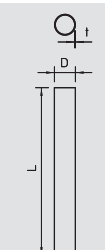


Metal pipe, without thread

Type	Dimen- sion D	Dimen- sion L	Dimen- sion t	Pack. m	Weight kg/100 m	Item No.
S16 FT	16	3,000	0.95	51	35.300	2047 30 6
S20 FT	20	3,000	0.95	51	44.600	2047 30 9
S25 FT	25	3,000	1.05	30	62.000	2047 31 2
S32 FT	32	3,000	1.15	21	87.500	2047 31 5
S40 FT	40	3,000	1.25	15	119.500	2047 31 8
S50 FT	50	3,000	1.25	15	150.300	2047 32 1
S63 FT	63	3,000	1.35	9	212.700	2047 32 4

ST Steel **FT** Hot-dip galvanised /100 m

Electrical installation pipe without threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.





Metal pipe, without thread

Type	Dimension D mm	Dimension L mm	Dimension t mm	Pack. m	Weight kg/100 m	Item No.
S16 G	16	3,000	0.95	51	35.300	2047 30 5
S20 G	20	3,000	0.95	51	44.600	2047 30 8
S25 G	25	3,000	1.05	30	62.000	2047 31 1
S32 G	32	3,000	1.15	21	87.500	2047 31 4
S40 G	40	3,000	1.25	15	119.500	2047 31 7
S50 G	50	3,000	1.25	15	150.300	2047 32 0
S63 G	63	3,000	1.35	9	212.700	2047 32 3

ST Steel **G** Electrogalvanised /100 m

Electrical installation pipe without threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

Type	Dimension D mm	Dimension L mm	Dimension t mm	Colour	Pack. m	Weight kg/100 m	Item No.
S16 SW	16	3,000	0.95	Jet black	51	33.700	2047 52 0
S20 SW	20	3,000	0.95	Jet black	51	42.600	2047 52 1
S25 SW	25	3,000	1.05	Jet black	30	62.000	2047 52 2
S32 SW	32	3,000	1.15	Jet black	21	87.500	2047 52 3
S40 SW	40	3,000	1.25	Jet black	15	119.500	2047 52 4
S50 SW	50	3,000	1.25	Jet black	15	150.300	2047 52 5
S63 SW	63	3,000	1.35	Jet black	9	234.900	2047 52 6

ST Steel **FSK** Strip-galvanised/plastic-coated /100 m

Electrical installation pipe with black powder coating without threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

Type	Dimension D mm	Dimension L mm	Dimension t mm	Pack. m	Weight kg/100 m	Item No.
S16 VA	16	3,000	1	51	37.000	2047 65 0
S20 VA	20	3,000	1	51	46.900	2047 65 1
S25 VA	25	3,000	1	30	59.200	2047 65 2
S32 VA	32	3,000	1.25	21	94.800	2047 65 3
S40 VA	40	3,000	1.25	15	119.500	2047 65 4

V2A Stainless steel, 1.4301 /100 m

Stainless steel electrical installation pipe without threaded ends to EN 61386 (Code: 5557) for mechanical protection of cables.

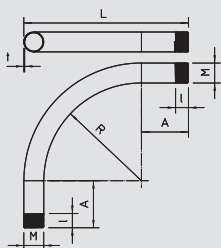
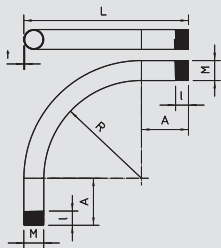
M **IP 54**



M **IP 54**



M **IP 54**



Metal pipe bend, with threaded ends

Type	Dimension M	Dimension L mm	Dimension I mm	Dimension A mm	Dimension R mm	Dimension t mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SBM16 FT	M16x1,5	178	13	65	97	1.25	10	8.000	2047 50 1
SBM20 FT	M20x1,5	183	14	53	110	1.25	25	10.500	2047 50 2
SBM25 FT	M25x1,5	207	17	59	123	1.25	25	25.000	2047 50 3
SBM32 FT	M32x1,5	245	19	69	144	1.35	25	42.000	2047 50 4
SBM40 FT	M40x1,5	288	19	83	165	1.35	10	65.000	2047 50 5
SBM50 FT	M50x1,5	346	24	106	190	1.45	5	122.000	2047 50 6
SBM63 FT	M63x1,5	467	27	175	229	1.85	5	209.000	2047 50 7

ST Steel **FT** Hot-dip galvanised /pc.

Accessory part: 90° bend for electrical installation pipes with threaded ends to EN 61386 (Code: 5557).

One connection sleeve is already screwed onto each pipe bend.

Type	Dimension M	Dimension L mm	Dimension I mm	Dimension A mm	Dimension R mm	Dimension t mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SBM16 G	M16x1,5	178	13	65	97	1.25	10	8.000	2047 44 0
SBM20 G	M20x1,5	183	14	53	110	1.25	25	10.500	2047 44 1
SBM25 G	M25x1,5	207	17	59	123	1.25	25	25.000	2047 44 2
SBM32 G	M32x1,5	245	19	69	144	1.35	25	42.000	2047 44 3
SBM40 G	M40x1,5	288	19	83	165	1.35	10	65.000	2047 44 4
SBM50 G	M50x1,5	346	24	106	190	1.45	5	122.000	2047 44 5
SBM63 G	M63x1,5	467	27	175	229	1.85	5	209.000	2047 44 6

ST Steel **G** Electrogalvanised /pc.

Accessory part: 90° bend for electrical installation pipes with threaded ends to EN 61386 (Code: 5557).

One connection sleeve is already screwed onto each pipe bend.

M **IP 54**



M **IP 54**



Pipe systems



Steel armoured pipes

M IP 54



Metal pipe bend, with threaded ends

Type	Dimension M	Dimension L	Dimension I	Dimension A	Dimension R	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm	mm		pcs	kg/100 pcs.	
SBM16 SW	M16x1,5	178	13	65	97	1.25	Jet black	10	13.400	2047 56 0
SBM20 SW	20	183	14	53	110	1.25	Jet black	25	17.100	2047 56 1
SBM25 SW	M25x1,5	207	17	59	123	1.25	Jet black	25	24.200	2047 56 2
SBM32 SW	M32x1,5	288	19	83	144	1.35	Jet black	25	41.200	2047 56 3
SBM40 SW	M50x1,5	288	19	83	165	1.35	Jet black	10	60.900	2047 56 4
SBM50 SW	M50x1,5	346	24	106	190	1.45	Jet black	5	95.500	2047 56 5
SBM63 SW	M63x1,5	467	27	175	229	1.85	Jet black	5	211.800	2047 56 6

ST Steel

FSK Strip-galvanised/plastic-coated

/pc.

Accessory part: Black, powder-coated 90° bend for electrical installation pipes with threaded ends to EN 61386 (Code: 5557).

One connection sleeve is already screwed onto each pipe bend.

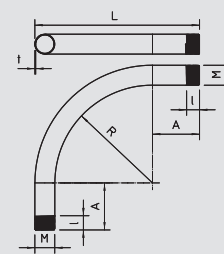
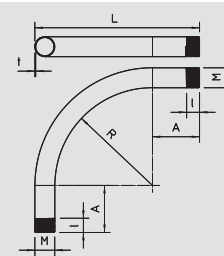
Type	Dimension M	Dimension L	Dimension I	Dimension A	Dimension R	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm	mm	pcs	kg/100 pcs.	
SBM16 VA	M16x1,5	178	13	65	97	1.5	10	8.000	2047 69 0
SBM20 VA	M20x1,5	183	14	53	110	1.5	25	10.500	2047 69 2
SBM25 VA	M25x1,5	207	17	59	123	1.5	25	25.000	2047 69 3
SBM32 VA	M40x1,5	245	19	69	144	1.5	25	42.000	2047 69 4
SBM40 VA	M40x1,5	288	19	83	165	1.5	10	65.000	2047 69 5

V2A Stainless steel, 1.4301

/pc.

Accessory part: 90° bend, stainless steel, for electrical installation pipes with threaded ends to EN 61386 (Code: 5557).

One connection sleeve is already screwed onto each pipe bend.



M IP 54



Metal pipe bend, without thread

Type	Dimension D	Dimension L	Dimension A	Dimension R	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm	pcs	kg/100 pcs.	
SB16 FT	16	178	65	97	0.95	10	7.000	2047 48 5
SB20 FT	20	183	53	110	0.95	25	9.400	2047 48 6
SB25 FT	25	207	59	123	1.05	25	24.500	2047 48 7
SB32 FT	32	245	69	144	1.15	25	41.500	2047 48 8
SB40 FT	40	288	83	165	1.25	10	64.500	2047 48 9
SB50 FT	50	346	106	190	1.45	5	121.500	2047 49 0
SB63 FT	63	467	175	229	1.35	5	208.000	2047 49 1

ST Steel

FT Hot-dip galvanised

/pc.

Accessory part: 90° bend for electrical installation pipes without threaded ends to EN 61386 (Code: 5557).

Type	Dimension D	Dimension L	Dimension A	Dimension R	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm	pcs	kg/100 pcs.	
SB16 G	16	178	65	97	0.95	10	7.000	2047 41 0
SB20 G	20	183	53	110	0.95	25	9.400	2047 41 1
SB25 G	25	207	59	123	1.05	25	24.500	2047 41 2
SB32 G	32	245	69	144	1.15	25	41.500	2047 41 3
SB40 G	40	288	83	165	1.25	10	64.500	2047 41 4
SB50 G	50	346	106	190	1.45	5	121.500	2047 41 5
SB63 G	63	467	175	229	1.35	5	208.000	2047 41 6

ST Steel

G Electrogalvanised

/pc.

Accessory part: 90° bend for electrical installation pipes without threaded ends to EN 61386 (Code: 5557).

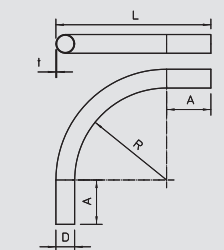
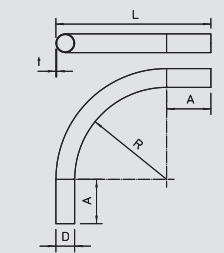
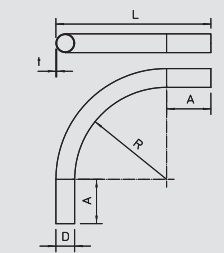
Type	Dimension D	Dimension L	Dimension A	Dimension R	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm		pcs	kg/100 pcs.	
SB16 SW	16	178	65	97	1.25	Jet black	10	9.900	2047 55 2
SB20 SW	20	183	53	110	1.25	Jet black	25	12.600	2047 55 3
SB25 SW	25	207	59	123	1.25	Jet black	25	20.500	2047 55 4
SB32 SW	32	245	69	144	1.35	Jet black	25	34.100	2047 55 5
SB40 SW	40	288	83	165	1.35	Jet black	10	54.600	2047 55 6
SB50 SW	50	346	106	190	1.45	Jet black	5	121.500	2047 55 7
SB63 SW	63	467	175	229	1.85	Jet black	5	208.000	2047 55 8

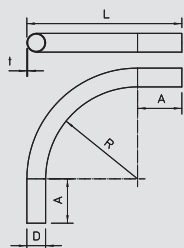
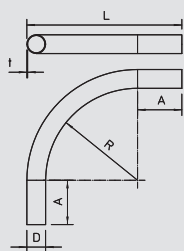
ST Steel

FSK Strip-galvanised/plastic-coated

/pc.

Accessory part: Black, powder-coated 90° bend for electrical installation pipes without threaded ends to EN 61386 (Code: 5557).





Metal pipe bend, without thread

Type	Dimension D	Dimension L	Dimension A	Dimension R	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm	pcs	kg/100 pcs.	
SB16 VA	16	178	65	97	1.5	10	10.900	2047 68 2
SB20 VA	20	183	53	110	1.5	25	13.800	2047 68 3
SB25 VA	25	207	59	123	1.5	25	19.500	2047 68 4
SB32 VA	32	245	69	165	1.5	25	37.000	2047 68 5
SB40 VA	40	288	83	165	1.5	10	54.600	2047 68 6

V2A Stainless steel, 1.4301

/pc.

Accessory part: 90° bend, stainless steel, for electrical installation pipes without threaded ends to EN 61386 (Code: 5557).

Type	Dimension D	Dimension L	Dimension A	Dimension R	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm	mm	mm		pcs	kg/100 pcs.	
SB16 RO	16	178	65	97	0.95	Red	10	7.000	2047 42 5
SB20 RO	20	183	53	110	0.95	Red	25	9.400	2047 42 6
SB25 RO	25	207	59	123	1.05	Red	25	24.500	2047 42 7
SB32 RO	32	245	69	144	1.15	Red	25	41.500	2047 42 8
SB40 RO	40	288	83	165	1.25	Red	10	64.500	2047 42 9
SB50 RO	50	346	106	190	1.45	Red	5	121.500	2047 43 0
SB63 RO	63	467	175	229	1.35	Red	5	208.000	2047 43 1

ST Steel

G/K Galvanised/plastic-coated

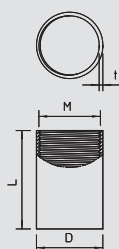
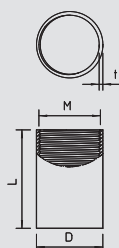
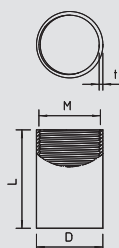
/pc.

Accessory part: 90° bend for electrical installation pipes without threaded ends to EN 61386 (Code: 5557).

M IP 54



M IP 54



Metal pipe connection sleeve, with threaded ends

Type	Dimension M	Dimension L	Dimension D	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	kg/100 pcs.	
SVM16 FT	M16x1,5	32	18.1	1.55	50	2.500	2047 47 0
SVM20 FT	M20x1,5	34	22.1	1.55	50	3.500	2047 47 1
SVM25 FT	M25x1,5	40	27.1	1.55	50	4.500	2047 47 2
SVM32 FT	M32x1,5	44	34.1	1.55	25	5.500	2047 47 3
SVM40 FT	M40x1,5	50	43.3	2.25	25	18.000	2047 47 4
SVM50 FT	M50x1,5	54	53.6	2.5	10	28.000	2047 47 5
SVM63 FT	M63x1,5	65	66.6	2.5	5	32.000	2047 47 6

ST Steel

FT Hot-dip galvanised

/pc.

Accessory part: Pipe connection sleeve with thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.

Type	Dimension M	Dimension L	Dimension D	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	kg/100 pcs.	
SVM16 G	M16x1,5	32	18.1	1.55	50	2.500	2047 39 5
SVM20 G	M20x1,5	34	22.1	1.55	50	3.500	2047 39 6
SVM25 G	M25x1,5	40	27.1	1.55	50	4.500	2047 39 7
SVM32 G	M32x1,5	44	34.1	1.55	25	5.500	2047 39 8
SVM40 G	M40x1,5	50	43.3	2.25	25	18.000	2047 39 9
SVM50 G	M50x1,5	54	53.6	2.5	10	25.000	2047 40 0
SVM63 G	M63x1,5	65	66.6	2.5	5	32.000	2047 40 1

ST Steel

G Electrogalvanised

/pc.

Accessory part: Pipe connection sleeve with thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.

Type	Dimension M	Dimension L	Dimension D	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm	mm		pcs	kg/100 pcs.	
SVM16 SW	M16x1,5	32	18.1	1.55	Jet black	50	2.000	2047 54 4
SVM20 SW	M20x1,5	32	22.1	1.55	Jet black	50	2.700	2047 54 5
SVM25 SW	M20x1,5	40	27.1	1.55	Jet black	50	3.900	2047 54 6
SVM32 SW	M32x1,5	44	33.1	1.55	Jet black	25	5.600	2047 54 7
SVM40 SW	M40x1,5	50	43.3	2.25	Jet black	25	8.000	2047 54 8
SVM50 SW	M50x1,5	54	53.6	2.5	Jet black	10	10.700	2047 54 9
SVM63 SW	M63x1,5	65	66.6	2.5	Jet black	5	26.100	2047 55 0

ST Steel

G/K Galvanised/plastic-coated

/pc.

Accessory part: Black, powder coated pipe connection sleeve with thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.

M IP 54



M IP 54



M IP 54



Pipe systems



Steel armoured pipes

M IP 54



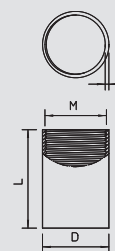
Metal pipe connection sleeve, with threaded ends

Type	Dimension M	Dimension L	Dimension D	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	kg/100 pcs.	
SVM16 VA	M16x1,5	32	18.1	1.5	50	2.000	2047 67 3
SVM20 VA	M20x1,5	40	27.1	1.5	50	2.600	2047 67 4
SVM25 VA	M25x1,5	40	27.1	1.5	50	3.800	2047 67 6
SVM32 VA	M32x1,5	44	33.1	1.5	25	5.300	2047 67 7
SVM40 VA	M40x1,5	50	43.3	1.5	25	7.700	2047 67 8

V2A Stainless steel, 1.4301

/pc.

Accessory part: Stainless steel pipe connection sleeve with thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.



M IP 54



Metal pipe connection sleeve, without thread

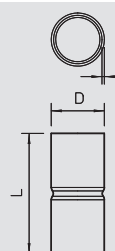
Type	Dimension D	Dimension L	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	pcs	kg/100 pcs.	
SV16 FT	18.6	50	1.05	50	2.200	2047 45 5
SV20 FT	22.6	54	1.05	50	3.000	2047 45 6
SV25 FT	28.3	64	1.25	50	3.200	2047 45 7
SV32 FT	35	74	1.25	25	4.800	2047 45 8
SV40 FT	44	95	1.25	25	15.000	2047 45 9
SV50 FT	54	110	1.55	10	25.000	2047 46 0
SV63 FT	67	116	1.55	5	29.500	2047 46 1

ST Steel

FT Hot-dip galvanised

/pc.

Accessory part: Pipe connection sleeve without thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.



M IP 54



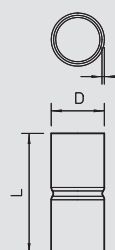
Type	Dimension D	Dimension L	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	pcs	kg/100 pcs.	
SV16 G	18.6	50	1.05	50	2.200	2047 36 5
SV20 G	22.6	54	1.05	50	3.000	2047 36 6
SV25 G	28.3	64	1.25	50	3.200	2047 36 7
SV32 G	35	74	1.25	25	4.800	2047 36 8
SV40 G	44	95	1.25	25	15.000	2047 36 9
SV50 G	54	110	1.55	10	25.000	2047 37 0
SV63 G	67	116	1.55	5	29.500	2047 37 1

ST Steel

G Electrogalvanised

/pc.

Accessory part: Pipe connection sleeve without thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.



M IP 54



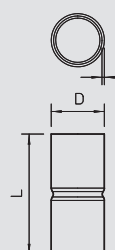
Type	Dimension D	Dimension L	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm		pcs	kg/100 pcs.	
SV16 RO	18.6	50	1.05	Red	50	2.200	2047 38 0
SV20 RO	22.6	54	1.05	Red	50	3.000	2047 38 1
SV25 RO	28.3	64	1.25	Red	50	3.200	2047 38 2
SV32 RO	35	74	1.25	Red	25	4.800	2047 38 3
SV40 RO	44	95	1.25	Red	25	15.000	2047 38 4
SV50 RO	54	110	1.55	Red	10	25.000	2047 38 5
SV63 RO	67	116	1.55	Red	5	29.500	2047 38 6

ST Steel

G/K Galvanised/plastic-coated

/pc.

Accessory part: Pipe connection sleeve without thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.



M IP 54



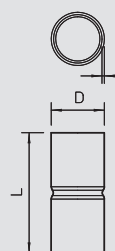
Type	Dimension D	Dimension L	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm		pcs	kg/100 pcs.	
SV16 SW	18.6	50	1.1	Jet black	50	2.300	2047 53 6
SV20 SW	22.6	54	1.1	Jet black	50	3.000	2047 53 7
SV25 SW	28.3	64	1.25	Jet black	50	4.400	2047 53 8
SV32 SW	35	74	1.25	Jet black	25	7.700	2047 53 9
SV40 SW	44	95	1.25	Jet black	25	12.300	2047 54 0
SV50 SW	54	110	1.55	Jet black	10	22.100	2047 54 1
SV63 SW	67	116	1.55	Jet black	5	29.000	2047 54 2

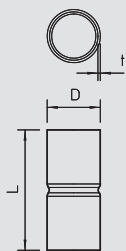
ST Steel

G/K Galvanised/plastic-coated

/pc.

Accessory part: Black, powder-coated pipe connection sleeve without thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.





Metal pipe connection sleeve, without thread

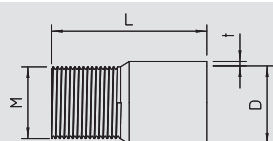
Type	Dimension D	Dimension L	Dimension t	Pack.	Weight	Item No.
	mm	mm	mm	pcs	kg/100 pcs.	
SV16 VA	18.6	50	1.05	50	2.100	2047 66 5
SV20 VA	22.6	54	1.05	50	2.800	2047 66 6
SV25 VA	28.3	64	1.25	50	5.300	2047 66 8
SV32 VA	35	74	1.25	25	9.200	2047 66 9
SV40 VA	44	95	1.25	25	12.200	2047 67 0

V2A Stainless steel, 1.4301

/pc.

Accessory part: Stainless steel pipe connection sleeve without thread to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends.

M **IP 54**



Combination pipe connection sleeves

Type	Dimension M	Dimension D	Dimension L	Dimension t	Colour	Pack.	Weight	Item No.
	mm	mm	mm	mm		pcs	kg/100 pcs.	
SVK16 SW	M16x1,5	20	43	1.55	Jet black	50	3.000	2047 56 8
SVK20 SW	M20x1,5	23	46	1.55	Jet black	50	3.900	2047 56 9
SVK25 SW	M25x1,5	28	54	1.55	Jet black	50	5.700	2047 57 0
SVK32 SW	M32x1,5	36	62.5	1.55	Jet black	25	8.200	2047 57 1
SVK40 SW	M40x1,5	44	78	1.55	Jet black	25	12.700	2047 57 2
SVK50 SW	M50x1,5	55	86.5	1.55	Jet black	10	17.300	2047 57 3
SVK63 SW	M63x1,5	68	95	1.55	Jet black	5	30.900	2047 57 4

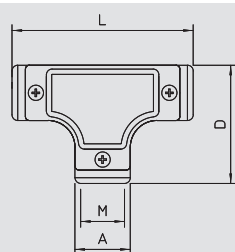
ST Steel

G/K Galvanised/plastic-coated

/pc.

Accessory part: Black, powder coated pipe connection sleeve with thread on one side to EN 61386 (Code: 5557) to connect electrical installation pipes and 90° bends with and without threaded ends.

M **IP 54**



Control T pieces

Type	Dimension M	Dimension L	Dimension A	Dimension D	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
SKTM16 G	M16x1,5	72	20	45	10	10	14.200	2047 40 4
SKTM20 G	M20x1,5	79	23	50	15	15	22.800	2047 40 5
SKTM25 G	M25x1,5	95	29	62	10	10	27.000	2047 40 6
SKTM32 G	M32x1,5	97	37	67	10	10	34.400	2047 40 7
SKTM40 G	M40x1,5	137	45	90	4	4	74.200	2047 40 8
SKTM50 G	M63x1,5	186	56	110	2	2	121.400	2047 40 9

Zn Die-cast zinc

G Electrogalvanised

/pc.

Cast iron 90° T piece with internal thread to EN 61386 (Code: 5557) for mounting in pipe sections for junction.

Cover made of galvanised steel, removable for easier cable routing.

Type	Dimension L	Dimension D	Dimension L	Dimension A	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
SKT16 G	16	45	72	20	10	10	14.200	2047 38 8
SKT20 G	20	50	79	23	15	15	22.800	2047 38 9
SKT25 G	25	62	95	29	10	10	27.000	2047 39 0
SKT32 G	32	67	97	37	10	10	34.400	2047 39 1
SKT40 G	40	90	137	45	4	4	74.200	2047 39 2
SKT50 G	50	110	186	56	2	2	121.400	2047 39 3

Zn Die-cast zinc

G Electrogalvanised

/pc.

Cast iron 90° T piece to EN 61386 (Code: 5557) for mounting in pipe sections for junction. Cover made of galvanised steel, removable for easier cable routing.

M **IP 54**



M **IP 54**



Steel armoured pipes



Stapa pipe end bush, metric thread

Type	Size	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
129 M16	M16	Light grey	1,000	100	0.235	2047 81 0
129 M20	M20	Light grey	1,200	100	0.326	2047 82 9
129 M25	M25	Light grey	600	50	0.614	2047 83 7
129 M32	M32	Light grey	600	50	1.070	2047 85 3
129 M40	M40	Light grey	50	50	1.444	2047 86 1
129 M50	M50	Light grey	25	25	2.176	2047 88 8
129 M63	M63	Light grey	25	25	2.808	2047 89 6
129 M16 SW	M16	Black	1,000	100	0.235	2047 93 4
129 M20 SW	M20	Black	1,200	100	0.326	2047 94 2
129 M25 SW	M25	Black	600	50	0.614	2047 95 0
129 M32 SW	M32	Black	600	50	1.070	2047 96 9
129 M40 SW	M40	Black	50	50	1.444	2047 97 7
129 M50 SW	M50	Black	25	25	2.176	2047 98 5
129 M64 SW	M63	Black	25	25	2.808	2047 99 3

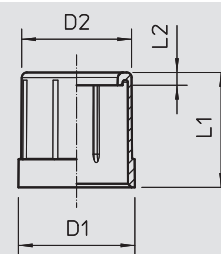
PE Polyethylene

/100 pc.

Cable protection connector for attachment to electrical installation pipes to DIN EN 60423 or IEC 423 and other pipes of the same external diameters.

Important dimensions, steel armoured pipe bush

G	D1	D2	L1	L2
	mm	mm	mm	mm
M16	19.4	12.5	18	2
M20	23.4	16	22.5	2.5
M25	28.4	21	27.5	2.5
M32	35.4	27.5	34	3
M40	43.4	35	41	3
M50	53.4	44.5	48	3
M63	66.4	55	59	4



Stapa pipe end bush, PG thread

Type	Size	Colour	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
129 PG 9	Pg 9	Light grey	1,200	100	0.235	2044 09 9
129 PG11	Pg 11	Light grey	1,000	100	0.276	2044 11 0
129 PG13.5	Pg 13,5	Light grey	1,200	100	0.326	2044 13 7
129 PG16	Pg 16	Light grey	1,200	100	0.400	2044 16 1
129 PG21	Pg 21	Light grey	600	50	0.614	2044 21 8
129 PG29	Pg 29	Light grey	50	50	1.070	2044 29 3
129 PG36	Pg 36	Light grey	50	50	1.444	2044 36 6
129 PG42	Pg 42	Light grey	25	25	2.176	2044 42 0
129 PG48	Pg 48	Light grey	25	25	2.808	2044 47 1
129 PG16 SW	Pg 16	Black	1,200	100	0.400	2044 66 8
129 PG21 SW	Pg 21	Black	600	50	0.614	2044 71 4
129 PG29 SW	Pg 29	Black	50	50	1.070	2044 78 1
129 PG36 SW	Pg 36	Black	50	50	1.444	2044 86 2

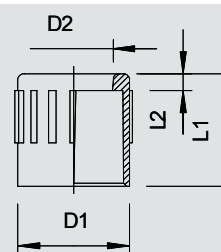
PE Polyethylene

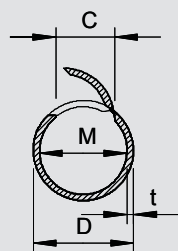
/100 pc.

Cable protection connector for attachment to steel armoured pipes to DIN 49020 and medium-duty and heavy-duty insulation pipes to DIN 49016.

Important dimensions, steel armoured pipe bush

G	D1	D2	L1	L2
	mm	mm	mm	mm
Pg 9	18.3	12	20	4
Pg 11	21.7	15	22	4
Pg 13.5	23.5	16	24	4
Pg 16	25.6	18	26	4
Pg 21	31.6	24	30	4
Pg 29	40.3	32.5	38	4
Pg 36	50.8	40	44	4
Pg 42	58.2	46	50	4
Pg 48	63.9	50	56	4





Quick pipe



Type	Size	Colour	Length mm	Pack. m	Weight kg/100 m	Item No.
2953 M16 LGR	M16	Light grey	2,000	50	7.000	2153 90 4
2953 M20 LGR	M20	Light grey	2,000	40	11.500	2153 91 2
2953 M25 LGR	M25	Light grey	2,000	30	16.000	2153 92 0
2953 M32 LGR	M32	Light grey	2,000	20	21.500	2153 93 9
2953 M16 RW	M16	Pure white	2,000	50	7.700	2153 96 0
2953 M20 RW	M20	Pure white	2,000	40	11.500	2153 96 3
2953 M25 RW	M25	Pure white	2,000	30	16.000	2153 96 6
2953 M32 RW	M32	Pure white	2,000	20	21.500	2153 96 9

PVC Polyvinylchloride

/100 m

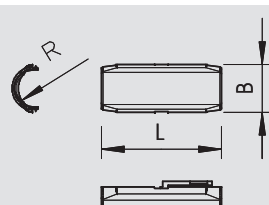
Smallest shipped quantity is shipping box.

The Quick pipe combines the advantages of a cable duct and an installation pipe into an intelligent system. It allows tidy and safe surface-mounted installation of all kinds of cables – even in a pipe. Quick pipe is available in four metric sizes: M16, M20, M25 and M32. The stock length is 2 m. The system is VDE-tested and achieves a protection rating of IP44. The fittings are a component part of the system.

Important dimensions, Quick pipe

G	D	M	C	t
	mm	mm	mm	mm
M16	15.6	13.2	8.2	1.2
M20	20	17	10	1.5
M25	25	21.8	13.6	1.6
M32	32	28.6	17	1.6

Quick pipe connecting sleeve



Type	Size	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2953 M M16 LGR	M16	Light grey	150	10	0.910	2153 82 9
2953 M M20 LGR	M20	Light grey	100	10	1.020	2153 83 1
2953 M M25 LGR	M25	Light grey	120	10	1.130	2153 83 3
2953 M M32 LGR	M32	Light grey	100	10	1.250	2153 83 5
2953 M M16 RW	M16	Pure white	150	10	0.910	2153 97 1
2953 M M20 RW	M20	Pure white	100	10	1.020	2153 97 3
2953 M M25 RW	M25	Pure white	120	10	1.130	2153 97 5
2953 M M32 RW	M32	Pure white	100	10	1.250	2153 97 7

PVC Polyvinylchloride

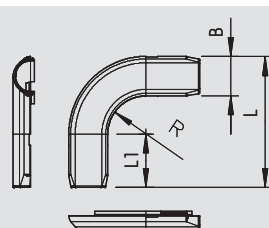
/pc.

Connection sleeves are tested to VDE 0604 (system consists of: Quick pipe + fittings + 2955 F/...).

Important dimensions, connection sleeve

G	R	B	L
	mm	mm	mm
M16	8	20.4	52
M20	10	25.5	65
M25	12.5	31.2	72
M32	16	38.7	80

90° Quick pipe bend



Type	Size	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2953 B M16 LGR	M16	Light grey	60	5	1.810	2153 86 4
2953 B M20 LGR	M20	Light grey	50	5	1.900	2153 86 6
2953 B M25 LGR	M25	Light grey	50	5	2.020	2153 86 8
2953 B M32 LGR	M32	Light grey	60	5	2.140	2153 87 0
2953 B M16 RW	M16	Pure white	60	5	1.810	2153 98 0
2953 B M20 RW	M20	Pure white	50	5	1.900	2153 98 2
2953 B M25 RW	M25	Pure white	50	5	2.020	2153 98 4
2953 B M32 RW	M32	Pure white	60	5	2.140	2153 98 6

PVC Polyvinylchloride

/pc.

90° bends are tested to VDE 0604 (system consists of: Quick pipe + fittings + 2955 F/...).

Important dimensions, 90° bend

G	B	L	L1	R
	mm	mm	mm	mm
M16	20.4	68.4	28	20
M20	25.5	82.5	35	22
M25	31.2	91.2	38	22
M32	38.7	102.7	42	22



Quick pipe system



Quick pipe T piece

Type	Size	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2953 T M16 LGR	M16	Light grey	60	5	2.210	2153 87 2
2953 T M20 LGR	M20	Light grey	50	5	2.320	2153 87 4
2953 T M25 LGR	M25	Light grey	50	5	2.440	2153 87 6
2953 T M32 LGR	M32	Light grey	50	5	2.560	2153 87 8
2953 T M16 RW	M16	Pure white	60	5	2.210	2153 99 2
2953 T M20 RW	M20	Pure white	50	5	2.320	2153 99 4
2953 T M25 RW	M25	Pure white	50	5	2.440	2153 99 6
2953 T M32 RW	M32	Pure white	50	5	2.560	2153 99 8

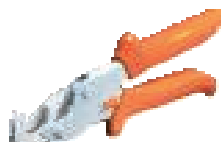
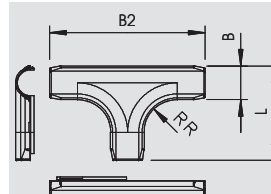
PVC Polyvinylchloride

/pc.

T pieces are tested to VDE 0604 (system consists of: Quick pipe + fittings + 2955 F/...).

Important dimensions, T piece

G	L	B	B2	R
mm	mm	mm	mm	mm
M16	57.4	20.4	94.4	20
M20	67.5	25.5	109.5	22
M25	77.2	31.2	123.2	22
M32	86.7	38.7	134.7	22

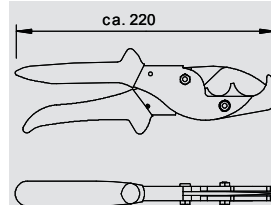


Quick duct shears

Type	Pack. pcs	Weight kg/100 pcs.	Item No.
SQ 1632	1	40.000	2153 57 2

/pc.

For exact, burr-free cutting of the Quick ducts and Quick pipe of Ø 16–32 mm.



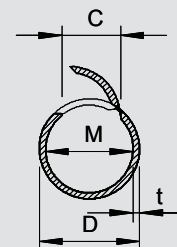
Set made of Quick clip and Quick pipe

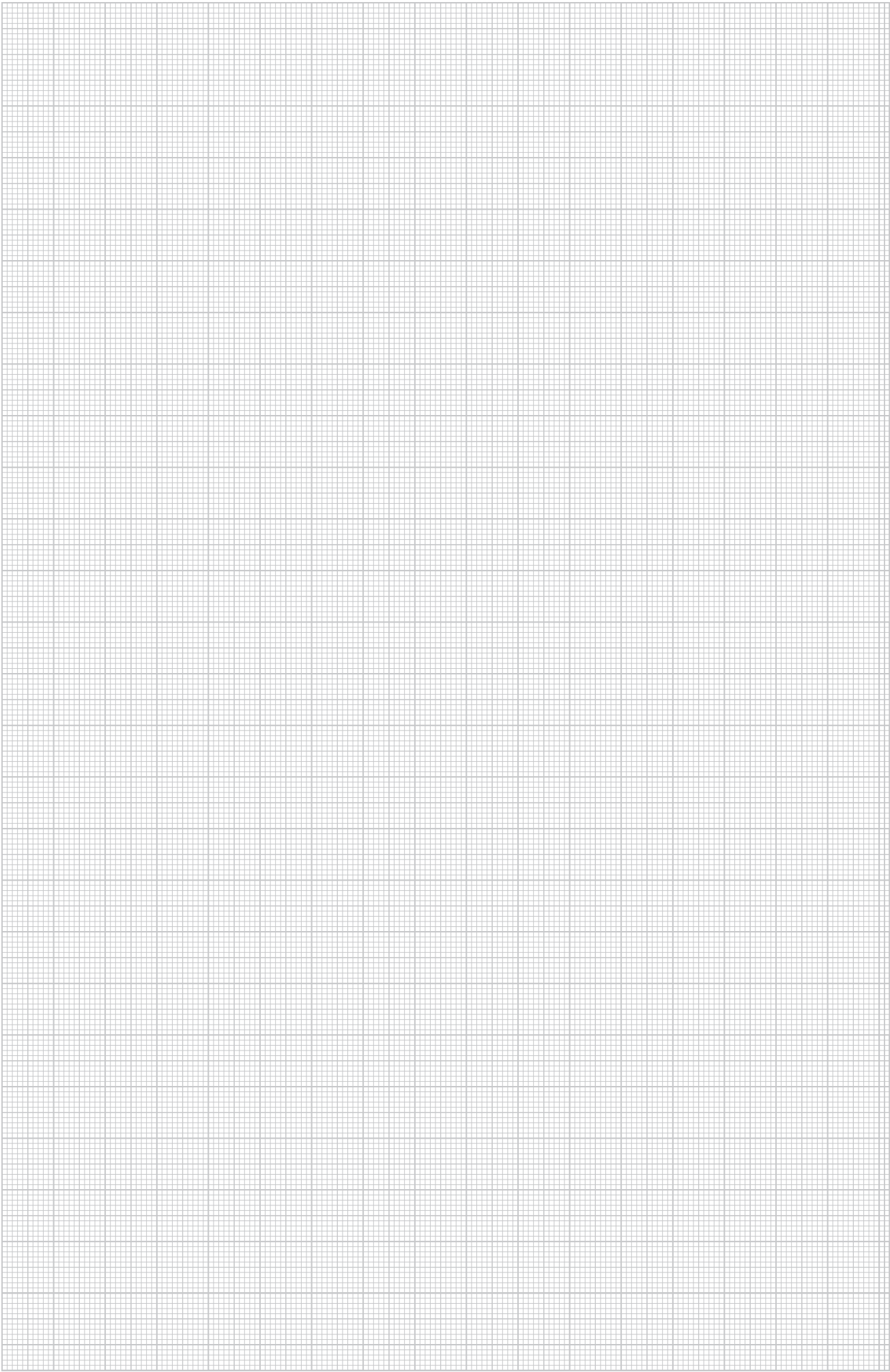
Type	Size	Colour	Set consisting of	Pack. pcs	Weight kg/100 pcs.	Item No.
2954 M16 LGR	M16	Light grey	50 m Quick pipe and 156x OBO Quick clip	1	444.000	2154 50 1
2954 M20 LGR	M20	Light grey	40 m Quick pipe and 120x OBO Quick clip	1	508.000	2154 52 8
2954 M25 LGR	M25	Light grey	30 m Quick pipe and 96x OBO Quick clip	1	517.000	2154 53 6
2954 M32 LGR	M32	Light grey	20 m Quick pipe and 60x OBO Quick clip	1	479.000	2154 54 4

PVC Polyvinylchloride

/pc.

The Quick pipe combines the advantages of a cable duct and an installation pipe into an intelligent system. It allows tidy and safe surface-mounted installation of all kinds of cables – even in a pipe. Quick pipe is available in four metric sizes: M16, M20, M25 and M32. The stock length is 2 m. The system is VDE-tested and achieves a protection rating of IP 44. The fittings are a component part of the system.







Beam clamp systems

	Beam clamps for knocking-in	Gland hole	314
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		Suspension chain	321
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Beam clamps for knocking in



Beam clamp, gland hole

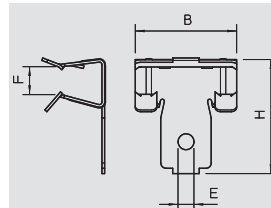
Type	Flange thickness mm	Dimension B mm	Dimension H mm	Dimension E mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TK 6-0	2-6	33.3	30	6.5	0.9	100	1.350	1481 01 9
TK 13-0	5-13	33.3	37	7	0.9	100	1.550	1481 02 9
TK 19-0	14-19	33.3	43	7	0.9	100	2.490	1481 04 5

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With drill hole to accept S hooks or bolt with nut.



Beam clamp, with female thread

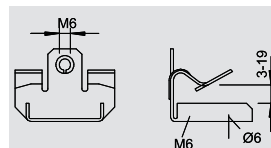
Type	Flange thickness mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKI 7-6	3-6.5	0.45	100	2.350	1483 57 9
TKI 13-6	7-13	0.45	100	2.350	1483 58 7
TKI 19-6	14-19	0.45	100	3.050	1483 59 5

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With female thread M6.



Beam clamp, with threaded bolt

Type	Flange thickness mm	Dimension B mm	Dimension H mm	Thread	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TK-G 4	2-4	28	28	M6 x 9	0.45	100	0.900	1481 10 2
TK-G 9	5-9	38	32	M6 x 9	0.45	100	1.600	1481 10 8
TK-G 16	10-16	38	42	M6 x 9	0.45	100	1.830	1481 11 4
TK-G 20	17-20	38	49	M6 x 9	0.45	100	2.000	1481 12 0

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With M6 x 9 mm threaded rod for fastening clips or other components.

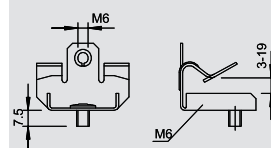
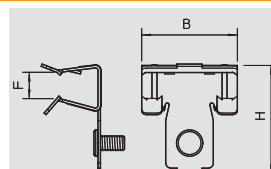
Type	Flange thickness mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKG 7-6	3-6.5	0.45	100	2.400	1483 44 7
TKG 13-6	7-13	0.45	100	2.400	1483 45 5
TKG 19-6	14-19	0.45	100	3.100	1483 46 3

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With threaded bolt M6 x 7.5 mm.



Beam clamp, with cable tie

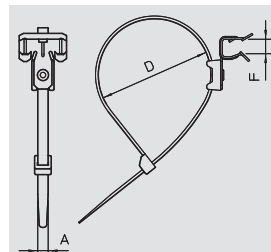
Type	Flange thickness mm	Cable strip length mm	Max. D Ø	Dimension A mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKK 6-240	2-6	240	70	7.6	0.8	100	2.200	1481 40 1
TKK 6-365	2-6	365	110	7.6	0.8	100	1.300	1481 42 8
TKK13-240	5-13	240	70	7.6	0.8	100	1.900	1481 45 2
TKK13-365	5-13	365	110	7.6	0.8	100	2.000	1481 46 0
TKK19-240	14-19	240	70	7.6	0.8	100	2.300	1481 53 3
TKK19-365	14-19	365	110	7.6	0.8	100	2.400	1481 54 1

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With cable ties to fix cable bundles.



Beam clamp, for installation strip

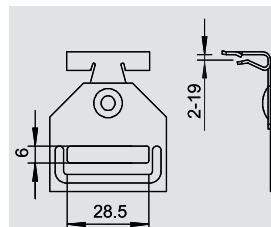
Type	Flange thickness mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKR 6	2-6	0.9	100	1.800	1481 70 3
TKR 9	5-9	0.9	100	2.400	1481 71 1
TKR 19	14-19	0.9	100	3.400	1481 74 6

ST Steel

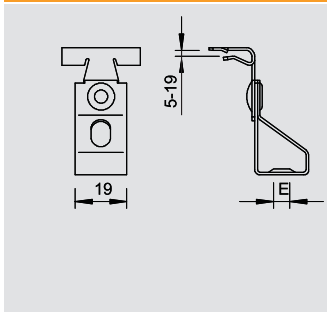
ZD Galvanised, Deltatone 500

/100 pc.

With seat for installation strip.



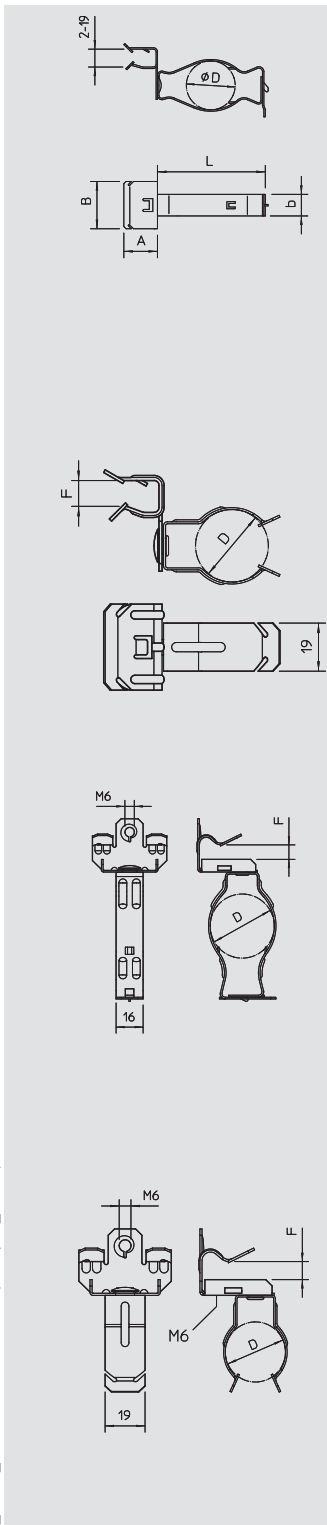
Beam clamps for knocking in



Beam clamp, for threaded rod

Type	Flange thickness mm	For threaded rod	Dimension E mm	Dimension A mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKR 13-6	5-13	M6	6	52	0.9	100	3.040	1482 06 8
TKR 13-8	5-13	M8	8	52	0.9	100	3.040	1482 07 6
TKR 13-10	5-13	M10	10	52	0.9	100	3.040	1482 08 4
TKR 19-6	14-19	M6	6	59	0.9	100	3.180	1482 11 4
TKR 19-8	14-19	M8	8	59	0.9	100	3.180	1482 12 2

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
With rotating seat for threaded rod.



Beam clamp, for pipes

Type	Flange thickness mm	Clamping range D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKS 6-25	2-6	18-25	0.45	100	2.490	1483 01 3
TKS 6-32	2-6	28-32	0.45	100	3.180	1483 02 1
TKS 6-37	2-6	35-37	0.45	100	3.450	1483 04 8
TKS 6-42	2-6	37-42	0.45	100	3.900	1483 05 6
TKS 13-25	5-13	18-25	0.45	100	2.720	1483 10 2
TKS 13-32	5-13	28-32	0.45	50	3.080	1483 11 0
TKS 13-37	5-13	35-37	0.45	50	3.540	1483 12 9
TKS 13-42	5-13	37-42	0.45	50	4.600	1483 13 7
TKS 19-25	14-19	18-25	0.45	50	4.500	1483 30 7
TKS 19-32	14-19	28-32	0.45	50	4.700	1483 31 5
TKS 19-37	14-19	35-37	0.45	50	4.850	1483 32 3

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
With rotating clip to accept pipes, lockable.

Type	Flange thickness mm	Clamping range D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKC 6-20	2-6	17-20	0.11	100	2.220	1482 40 8
TKC 6-25	2-6	23-25	0.11	100	2.720	1482 41 6
TKC 13-20	5-13	17-20	0.11	100	1.500	1482 46 7
TKC 13-25	5-13	23-25	0.11	100	1.770	1482 47 5
TKC 13-32	5-13	25-32	0.11	100	1.900	1482 48 3
TKC 19-20	14-19	17-20	0.11	50	1.770	1482 60 2
TKC 19-25	14-19	23-25	0.11	50	1.810	1482 61 0
TKC 19-32	14-19	25-32	0.11	50	2.130	1482 62 9

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
With rotating clip to accept pipes.

Type	Flange thickness mm	Clamping range D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKSU 7-25	3-6.5	18-25	0.11	50	3.700	1484 30 3
TKSU 7-32	3-6.5	28-32	0.11	50	4.050	1484 31 1
TKSU 7-37	3-6.5	35-37	0.11	50	4.400	1484 33 8
TKSU 7-42	3-6.5	37-42	0.11	25	4.800	1484 34 6
TKSU 13-25	7-13	18-25	0.11	50	4.150	1484 40 0
TKSU 13-32	7-13	28-32	0.11	50	4.450	1484 41 9
TKSU 13-37	7-13	35-37	0.11	50	4.750	1484 42 7
TKSU 13-42	7-13	37-42	0.11	25	5.520	1484 43 5
TKSU 19-25	14-19	18-25	0.11	50	4.550	1484 50 8
TKSU 19-32	14-19	28-32	0.11	50	4.900	1484 51 6
TKSU 19-37	14-19	35-37	0.11	25	5.450	1484 52 4

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
With rotating clip to accept pipes, lockable.

Type	Flange thickness mm	Clamping range D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKCU 7-20	3-6.5	17-20	0.11	50	3.760	1484 00 1
TKCU 7-25	3-6.5	23-25	0.11	50	3.900	1484 02 8
TKCU 7-32	3-6.5	25-32	0.11	50	4.350	1484 03 6
TKCU 13-20	7-13	17-20	0.11	50	4.220	1484 07 9
TKCU 13-25	7-13	23-25	0.11	50	4.350	1484 08 7
TKCU 13-32	7-13	25-32	0.11	50	4.800	1484 09 5
TKCU 19-20	14-19	17-20	0.11	50	4.450	1484 13 3
TKCU 19-25	14-19	23-25	0.11	50	4.550	1484 14 1
TKCU 19-32	14-19	25-32	0.11	50	5.350	1484 16 8

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
With rotating clip to accept pipes.



Beam clamps for knocking in



Beam clamp, for pipes

Type	Flange thickness mm	Dimension D mm	Dimension B mm	Cable Ø mm	Pack. pcs	Weight kg/100 pcs.	Item No.
TKCI 5-7	1.5-5	5.5-7	13.5	5.5-7	100	0.300	1487 00 0
TKCI 5-9	1.5-5	8-9.5	13.5	8-9.5	100	0.300	1487 01 9
TKCI 5-11	1.5-5	9.5-11	13.5	9.5-11	100	0.400	1487 02 7
TKCI 5-14	1.5-5	12-14	13.5	12-14	100	0.400	1487 03 5
TKCI 5-18	1.5-5	13-18	13.5	13-18	100	0.600	1487 04 3
TKCI 5-24	1.5-5	19-24	13.5	19-24	100	0.500	1487 05 1
TKCI 5-32	1.5-5	25-32	13.5	25-32	100	0.700	1487 07 8
TKCI 7-7	5-7	5.5-7	13.5	5.5-7	100	0.400	1487 20 5
TKCI 7-9	5-7	8-9.5	13.5	8-9.5	100	0.400	1487 21 3
TKCI 7-11	5-7	9.5-11	13.5	9.5-11	100	0.400	1487 22 1
TKCI 7-14	5-7	12-14	13.5	12-14	100	0.400	1487 24 8
TKCI 7-18	5-7	13-18	13.5	13-18	100	0.400	1487 25 6
TKCI 7-24	5-7	19-24	13.5	19-24	100	0.500	1487 26 4
TKCI 7-32	5-7	25-32	13.5	25-32	100	0.700	1487 27 2
TKCI 12-7	8.5-12.5	5.5-7	13.5	5.5-7	100	0.400	1487 41 8
TKCI 12-9	8.5-12.5	8-9.5	13.5	8-9.5	100	0.400	1487 42 6
TKCI 12-11	8.5-12.5	9.5-11	13.5	9.5-11	100	0.400	1487 43 4
TKCI 12-14	8.5-12.5	12-14	13.5	12-14	100	0.400	1487 44 2
TKCI 12-18	8.5-12.5	13-18	13.5	13-18	100	0.500	1487 45 0
TKCI 12-24	8.5-12.5	19-24	13.5	19-24	100	0.600	1487 46 9
TKCI 12-32	8.5-12.5	25-32	13.5	25-32	100	0.700	1487 47 7

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With internal pipe clip.



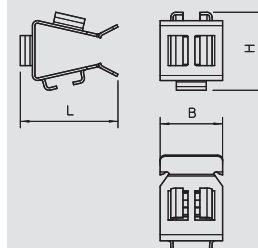
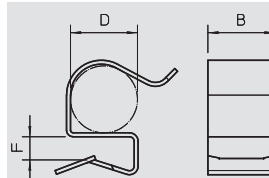
Type	Flange thickness mm	Dimension L mm	Dimension B mm	Dimension H mm	Pack. pcs	Weight kg/100 pcs.	Item No.
TKCI-A	12-20	37	25	32	50	1.700	1487 49 6

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

Beam clamp adapter for flange thicknesses of 12 to 20 mm, with three seats for the beam clamps TKCI 5.



Beam clamp, with strap

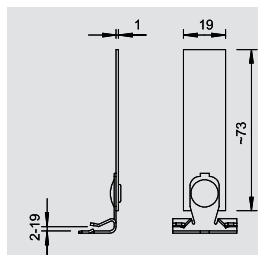
Type	Flange thickness mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKB 6	2-6	0.8	100	2.100	1481 20 7
TKB 13	5-13	0.8	100	2.800	1481 21 5
TKB 19	14-19	0.8	50	3.200	1481 23 1

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

With flexible strap to fix individual cables or bundles.



Profile suspensions

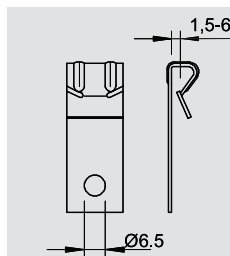
Type	Flange thickness mm	Dimension H mm	Dimension L mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKL 4	1.5-4	52	10	0.72	100	0.860	1485 10 5
TKL 6	4-6	54	12	0.72	100	1.090	1485 11 3

ST Steel

ZD Galvanised, Deltatone 500

/100 pc.

Profile suspension with drill hole to accept S hooks.



Beam clip

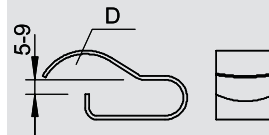
Type	Flange thickness mm	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
TC 7-10 ZD	5-7	3-10	100	0.750	1487 70 1
TC 9-20 ZD	8-9	7-20	100	0.880	1487 72 8

ST Steel

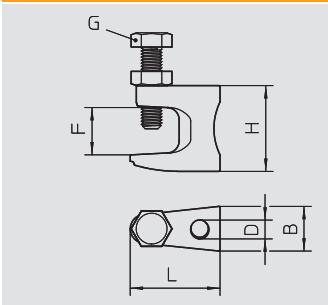
ZD Galvanised, Deltatone 500

/100 pc.

With internal pipe clip.



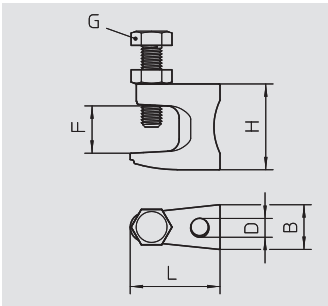
Beam clamps for screwing in



Screw-in beam clamp, with gland hole

Type	Flange thickness mm	Dimension H mm	Dimension B mm	Dimension L mm	Dimension G mm	Dimension D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
FL 1 TG	0-18	35	19	38	M8	9	1.2	50	8.500	1488 01 5
FL 2 TG	0-20	42	21	44	M10	11	2.5	50	14.000	1488 02 3
FL 3 TG	0-26	54	23.5	58	M10	13	3.5	25	18.000	1488 03 1

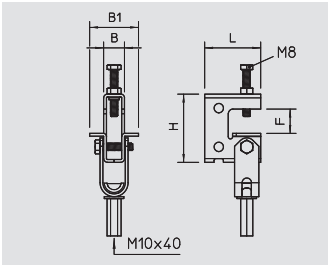
TG Cast iron
With gland hole. /100 pc.



Screw-in beam clamp, with thread

Type	Flange thickness mm	Dimension H mm	Dimension B mm	Dimension L mm	Dimension G mm	For threaded rod	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
FL1-G M8 TG	0-18	35	19	38	M8	M8	1.2	50	8.500	1488 07 4
FL2-G M10 TG	0-20	42	21	44	M10	M10	2.5	50	14.000	1488 08 2
FL3-G M12 TG	0-26	54	23.5	58	M10	M12	3.5	25	18.000	1488 09 0

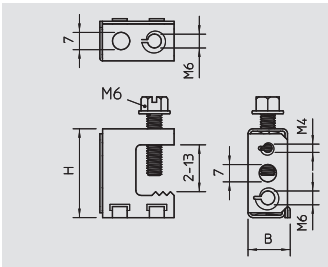
TG Cast iron
With thread. /100 pc.



Screw-in beam clamp, with hinge

Type	Flange thickness mm	For threaded rod	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TK FL G	0-24	M10	0.9-2.8	10	34.000	1488 11 1

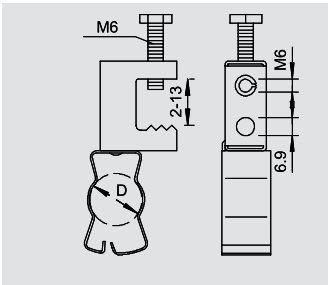
ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
Two-hinge beam clamp for fastening on beams without welding and drilling. The maximum load is dependent on the load direction.



Screw-in beam clamp, universal

Type	Flange thickness mm	Breaking load kN	Dimension B mm	Dimension H mm	Pack. pcs	Weight kg/100 pcs.	Item No.
TK 213	2-13	1.35	15.8	35	100	2.720	1484 70 2

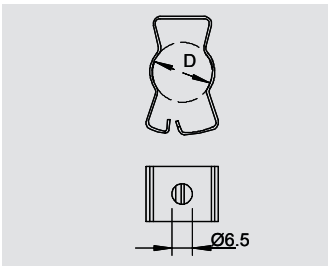
ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
Various fastening options (horizontal and vertical).



Screw-in beam clamp, for pipes

Type	Flange thickness mm	Clamping range D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
TKS 213-25	2-13	18-25	0.45	50	3.990	1484 81 8
TKS 213-32	2-13	28-32	0.45	50	4.170	1484 82 6
TKS 213-37	2-13	35-37	0.45	50	6.300	1484 83 4
TKS 213-42	2-13	37-42	0.45	50	7.300	1484 84 2

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
With rotating clip to accept pipes and cables, lockable.



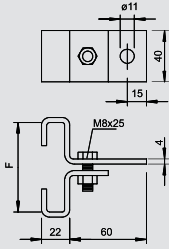
Pipe clamp

Type	Clamping range D mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
S 25 ZD	18-25	0.45	100	1.420	1486 30 6
S 32 ZD	28-32	0.45	100	1.550	1486 31 4
S 37 ZD	35-37	0.45	100	2.180	1486 32 2

ST Steel **ZD** Galvanised, Deltatone 500 /100 pc.
To accept pipes and cables, lockable.



Special support bracket systems



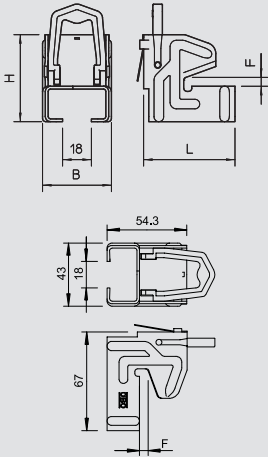
Beam clamp

Type	Flange thickness mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
325 70 FT	70	10	25	25	27.900	5327 07 5
325 80 FT	80	10	25	25	32.000	5327 08 3
325 100 FT	100	9	25	25	33.500	5327 10 5
325 130 FT	130	8	25	25	36.500	5327 12 1
325 140 FT	140	7	25	25	40.000	5327 14 8

ST Steel **FT** Hot-dip galvanised

/100 pc.

The two brackets are clamped to the flange.
For individual component suspension.



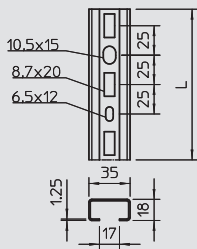
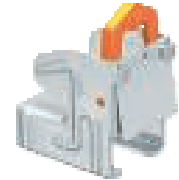
Beam clamp, Profile 1268

Type	Flange thickness mm	Dimension L mm	Dimension B mm	Dimension H mm	Pack. pcs	Weight kg/100 pcs.	Item No.
328 1	5-11	57	39.5	54.3	50	10.800	1408 01 1
328 2	10-19	67	39.5	54.3	50	12.500	1408 04 6

ST Steel **ZD** Galvanised, Deltatone 500

/100 pc.

Screwless rustproof coated beam clamp, with blocking spring, suitable for profile rail, type 1268 SL and 1268 S/SL. For rapid fastening on steel profiles during the mounting of cable tracks, clamp clips, luminaire suspensions, etc. A complete system consists of two beam clamps and a piece of C profile rail of any length, as well as two protective caps.



Profile rail, 1.25 mm

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
1268 L 150 FS	Perforated	FS	35 x 18	1.25	150	25	10.730	1104 24 1
1268 L 200 FS	Perforated	FS	35 x 18	1.25	200	25	14.300	1104 26 8
1268 L 300 FS	Perforated	FS	35 x 18	1.25	300	25	21.450	1104 28 4
1268 L 400 FS	Perforated	FS	35 x 18	1.25	400	10	28.550	1104 29 2
1268 L 500 FS	Perforated	FS	35 x 18	1.25	500	10	35.750	1104 30 6
1268 L 600 FS	Perforated	FS	35 x 18	1.25	600	10	42.900	1104 31 0
1268 L 700 FS	Perforated	FS	35 x 18	1.25	700	10	50.050	1104 31 5
1268 L 800 FS	Perforated	FS	35 x 18	1.25	800	10	57.200	1104 32 0
1268 L 900 FS	Perforated	FS	35 x 18	1.25	900	10	64.350	1104 32 5
1268 L 1M FS	Perforated	FS	35 x 18	1.25	1,000	10	71.500	1104 49 7
1268 L 2M FS	Perforated	FS	35 x 18	1.25	2,000	20	71.500	1104 50 0

ST Steel **FS** Strip-galvanised

/100 m

/100 pc.

Light-duty profile rail, perforated, slot width 17 mm.

Static values:

A = 0,876 cm²

I_y = 0,406 cm⁴

I_z = 1,807 cm⁴

W_y = 0,413 cm³

W_z = 1,033 cm³





Special support bracket systems



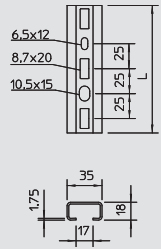
Profile rail, 1.75 mm

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
1268 SL 150 FS	Perforated	FS	35 x 18	1.75	150	25	15.000	1104 34 9
1268 SL 200 FS	Perforated	FS	35 x 18	1.75	200	25	20.000	1104 35 7
1268 SL 300 FS	Perforated	FS	35 x 18	1.75	300	25	30.000	1104 37 3
1268 SL 400 FS	Perforated	FS	35 x 18	1.75	400	10	40.000	1104 39 1
1268 SL 500 FS	Perforated	FS	35 x 18	1.75	500	10	50.000	1104 40 3
1268 SL 600 FS	Perforated	FS	35 x 18	1.75	600	10	60.000	1104 41 1
1268 SL 800 FS	Perforated	FS	35 x 18	1.75	800	10	80.000	1104 42 7
1268 SL 900 FS	Perforated	FS	35 x 18	1.75	900	10	90.000	1104 43 5
1268 SL 1M FS	Perforated	FS	35 x 18	1.75	1,000	10	100.000	1104 44 5
1268 SL 2M FS	Perforated	FS	35 x 18	1.75	2,000	20	100.000	1104 45 4

ST Steel **FS** Strip-galvanised /100 m
/100 pc.

Profile rail, perforated, slot width 17 mm.

Static values:
 $A = 1,172 \text{ cm}^2$
 $I_y = 0,515 \text{ cm}^4$
 $I_z = 0,526 \text{ cm}^4$
 $W_y = 2,333 \text{ cm}^3$
 $W_z = 1,333 \text{ cm}^3$

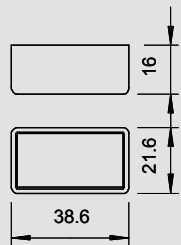


Protective cap

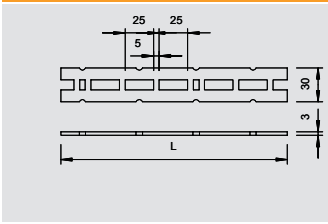
Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1268 SK OR	Pastel orange	800	50	0.420	1124 50 2

PE Polyethylene /100 pc.

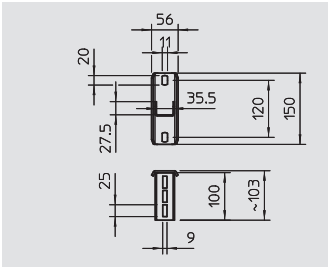
Protective cap for profile rail types 1268 and 1268 S.



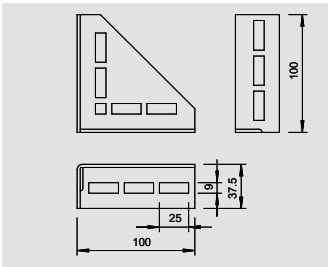
Self-build profile system



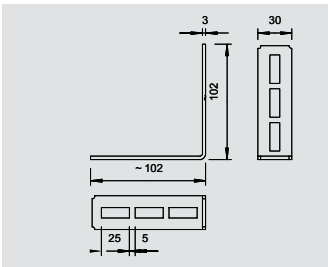
Self-build profile			
Type	Length	Weight	Item No.
	mm	kg/100 m	
1268 SP 3M FT	3,000	55.000	6350 20 8
ST Steel	FT Hot-dip galvanised	/m	
Flat iron with slots for individual mounting.			



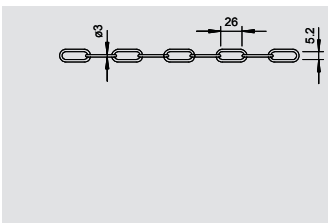
Head plate			
Type	Pack.	Weight	Item No.
	pcs	kg/100 pcs.	
1268 KP FT	25	42.000	6350 05 4
ST Steel	FT Hot-dip galvanised	/pc.	
For wall and ceiling fastening of individual mountings.			



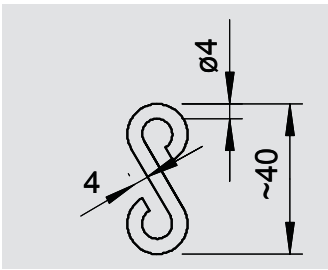
Triangular node		
Type	Weight	Item No.
	kg/100 pcs.	
1268 KD FT	22.000	6350 10 0
ST Steel	FT Hot-dip galvanised	/pc.
For stable corner fastening of individual mountings.		



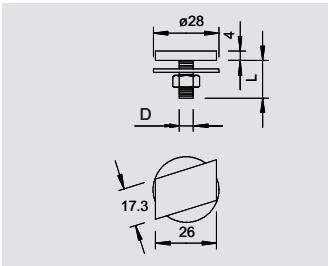
90° installation profile			
Type	Pack.	Weight	Item No.
	pcs	kg/100 pcs.	
1268 W 90 G	25	11.000	6350 15 1
ST Steel	G	Electrogalvanised	/pc.
For stable 90° angle fastening of individual mountings.			



Suspension chain					
Type	Breaking load	Box Qty.	Pack.	Weight	Item No.
	kN	m	m	kg/100 m	
K-C30 G	0.7	25	25	10.000	1488 20 1
ST Steel		G Electrogalvanised	/100 m		
To suspend luminaire supports or other components.					



					S hook
Type	Breaking load	Box Qty.	Pack.	Weight	Item No.
	kN	pcs	pcs	kg/100 pcs.	
SH 40 G	0.5	1,200	100	0.800	1488 25 2
ST Steel		G Electrogalvanised	/100 pc.		
Connecting book of support clamps and suspension chains.					



Hammer head bolt									
Type	Thread	Dimension L mm	Dimension D mm	Washer Ø mm	Grade	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
5026 M6X20 G	M6	20	6	28	4.6	300	50	2.870	1151 70 3
5026 M8X25 G	M8	25	8	28	4.6	300	50	3.320	1151 71 1
ST Steel	G	Electrogalvanised							/100 pc.
Hammer-head bolt with washer and nut for profile rails with slot width 16–17 mm.									



Self-build profile system

16-17



Slide nut

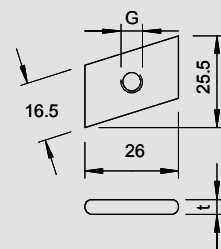
Type	Thread	Dimension G mm	Dimension t mm	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
5019 M6 OS G	M6	6	4	No bolt	1,200	100	1.150	1144 10 3
5019 M8 OS G	M8	8	5	No bolt	600	100	1.450	1144 11 1
5019 M10 OS G	M10	10	6	No bolt	600	100	1.650	1144 13 8

ST Steel

G Electrogalvanised

/100 pc.

Slide nut for profile rails with a slot width of 16–17 mm.



Washer, large external diameter

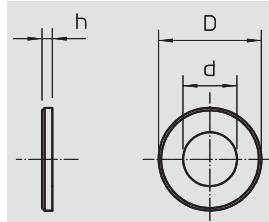
Type	Thread	Dimension d mm	Dimension D mm	Dimension h mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
967 M6 G	M6	6.5	28	2.5	1,000	100	1.150	3402 20 7
967 M8 G	M8	8.5	28	2.5	1,400	100	1.100	3402 21 5
967 M10 G	M10	11	28	2.5	1,400	100	1.020	3402 22 3

ST Steel

G Electrogalvanised

/100 pc.

Washer of large outer diameter for universal use.



Washer, DIN 125 Shape A

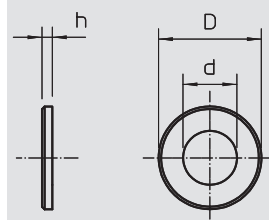
Type	Thread	Dimension d mm	Dimension D mm	Dimension h mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
966 M6 G	M6	6.4	12	1.6	12,000	100	0.114	3402 06 1
966 M8 G	M8	8.4	16	1.6	5,000	100	0.214	3402 08 8
966 M10 G	M10	10.5	20	2	3,000	100	0.408	3402 09 6

ST Steel

G Electrogalvanised

/100 pc.

Washer according to DIN 125, shape A, for universal use.



Hexagonal nut

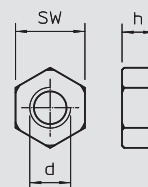
Type	Thread	SW mm	Dimension h mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
DIN 934 M6 G	M6	10	5.2	6	2,600	100	0.225	3400 06 9
DIN 934 M8 G	M8	13	6.8	8	2,400	100	0.474	3400 08 5
DIN 934 M10 G	M10	17	8.4	10	1,000	100	1.084	3400 10 7

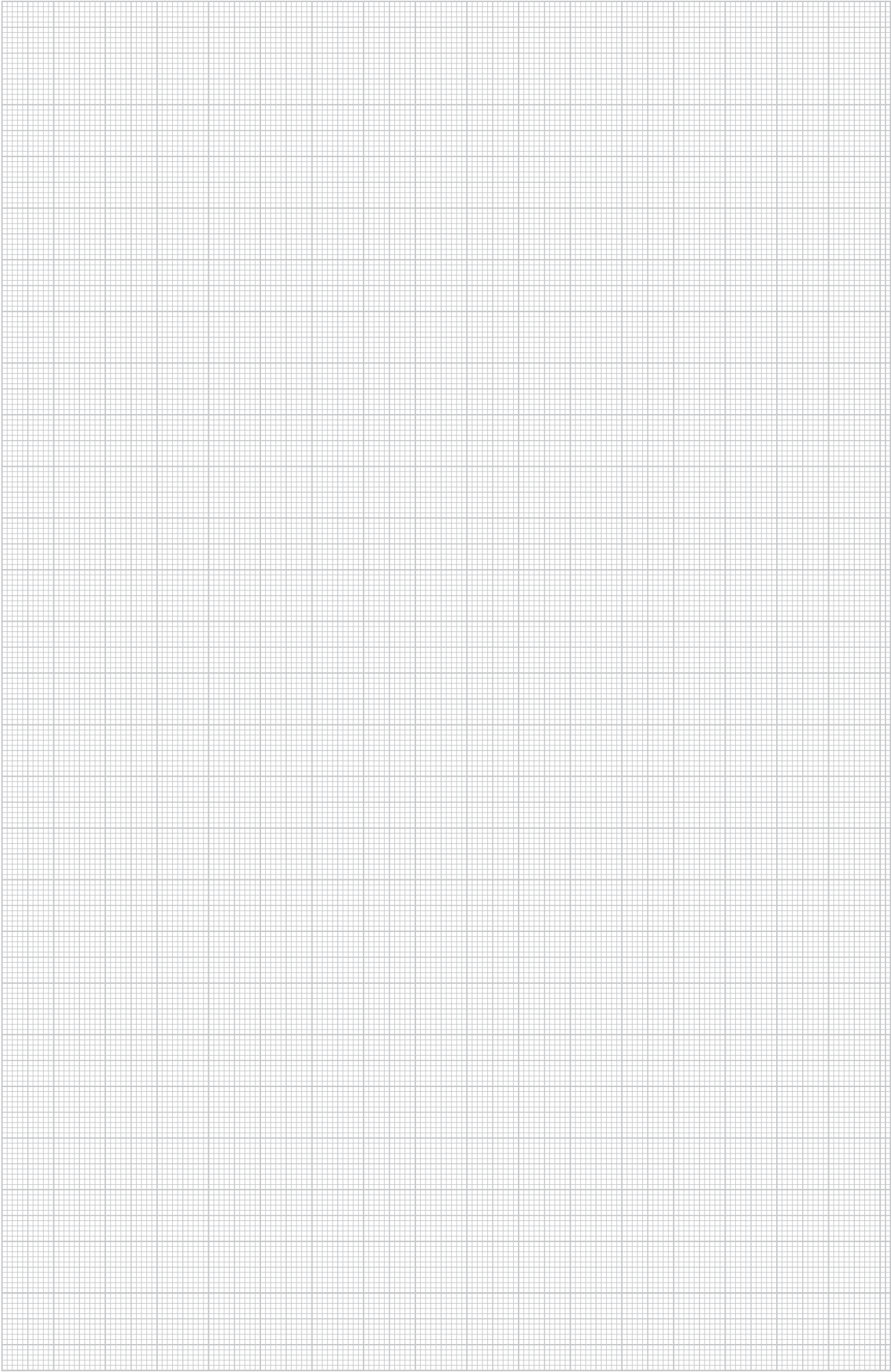
ST Steel

G Electrogalvanised

/100 pc.

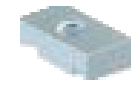
Hexagonal nut to DIN 934 with metric thread.







Rail systems

	Profile rails	Slot width 7.5 mm	326
		Slot width 11 mm	326
		Slot width 12 mm	327
		Slot width 16 mm	328
		Slot width 16.5 mm	329
		Slot width 17 mm	330
		Slot width 18 mm	331
		Slot width 22 mm	332
	Mounting rail	Slot width 22 mm Mounting rail, MS 21 Mounting rail, MS 41	334 334 335
	System accessories	Slide nuts	338
		Hammer-head bolts	340
		Hook-head bolts	341
		Series clip	341
	Mounting systems	Connection plates Fastening clip Installation profile	344 345 345
	Hat profile rail	Hat profile rail Beam rail	347 348

Profile rail



Profile rail, slot 7.5 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2059 2M FS	Unperforated	FS	14 x 7,5	0.75	2,000	50	18.050	1103 12 1

ST Steel **FS** Strip-galvanised

/100 m

Profile rail with 7.5 mm slot width.

Static values:

$A = \text{cm}^2$

$I_y = \text{cm}^4$

$I_z = \text{cm}^4$

$W_y = \text{cm}^3$

$W_z = \text{cm}^3$



Profile rail, slot 11 mm, dividable

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2060 2M AB BK	Perforated	—	20 x 8	0.75	2,000	50	20.000	1106 02 3
2060 2M AB FS	Perforated	FS	20 x 8	0.75	2,000	20	21.100	1106 12 0

ST Steel **FS** Strip-galvanised Bright

/100 m

Profile rail with 11 mm slot width.

Static values:

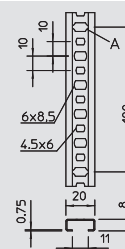
$A = \text{cm}^2$

$I_y = \text{cm}^4$

$I_z = \text{cm}^4$

$W_y = \text{cm}^3$

$W_z = \text{cm}^3$



Profile rail, slot 11 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2060 L 2M FS	Perforated	FS	20 x 8	0.8	2,000	50	20.000	1106 62 7

ST Steel **FS** Strip-galvanised

/100 m

Profile rail with 11 mm slot width.

Static values:

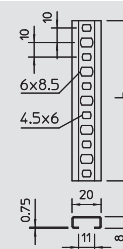
$A = 0,24 \text{ cm}^2$

$I_y = 0,0218 \text{ cm}^4$

$I_z = 0,1673 \text{ cm}^4$

$W_y = 0,051 \text{ cm}^3$

$W_z = 0,1673 \text{ cm}^3$



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2060 2M FS	Unperforated	FS	20 x 8	0.75	2,000	50	20.000	1105 12 4

ST Steel **FS** Strip-galvanised

/100 m

Profile rail with 11 mm slot width.

Static values:

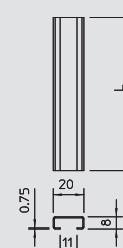
$A = 0,303 \text{ cm}^2$

$I_y = 0,0275 \text{ cm}^4$

$I_z = 0,1711 \text{ cm}^4$

$W_y = 0,055 \text{ cm}^3$

$W_z = 0,1711 \text{ cm}^3$



Profile rail, slot 11 mm

Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2060 L 2M VA	Perforated	Bright	20 x 8	0.75	2,000	20	21.400	1106 62 8

V2A Stainless steel, 1.4301 Bright

/100 m

Profile rail with 11 mm slot width.

Static values:

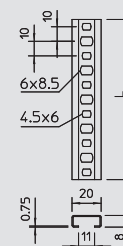
$A = 0,24 \text{ cm}^2$

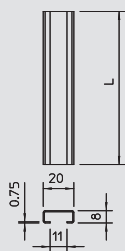
$I_y = 0,0218 \text{ cm}^4$

$I_z = 0,1673 \text{ cm}^4$

$W_y = 0,051 \text{ cm}^3$

$W_z = 0,1673 \text{ cm}^3$





Profile rail, slot 11 mm



Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2060 2M VA	Unperforated	Bright	20 x 8	0.75	2,000	20	23.550	1105 12 5

V2A Stainless steel, 1.4301 Bright /100 m

Profile rail with 11 mm slot width.

Static values:

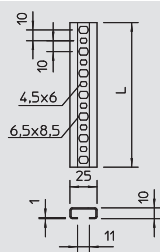
A = 0,303 cm²

I_y = 0,0275 cm⁴

I_z = 0,1711 cm⁴

W_y = 0,051 cm³

W_z = 0,1673 cm³



Profile rail, slot 11 mm



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2061 L 2M FS	Perforated	FS	25 x 10	1	2,000	50	36.800	1108 12 3

ST Steel **FS** Strip-galvanised /100 m

Profile rail with 11 mm slot width.

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2061 2M FS	Unperforated	FS	25 x 10	1	2,000	50	36.000	1107 12 7

ST Steel **FS** Strip-galvanised /100 m

Profile rail with 11 mm slot width.

Static values:

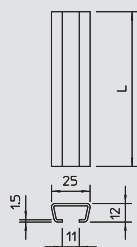
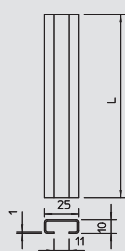
A = 0,524 cm²

I_y = 0,0772 cm⁴

I_z = 0,4408 cm⁴

W_y = 0,1299 cm³

W_z = 0,3526 cm³



Profile rail, slot 11 mm



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2066 2M F	Unperforated	F	25 x 12	1.5	2,000	20	65.000	1117 02 5
2066 2M FS	Unperforated	FS	25 x 12	1.5	2,000	20	58.300	1117 03 3
2066 2M VA	Unperforated	FS	25 x 12	1.5	2,000	20	58.300	1117 06 8

ST Steel **V2A** Stainless steel, 1.4301 **FS** Strip-galvanised **F** Hot-dip galvanised /100 m

Profile rail, unperforated, slot width 11 mm.

Static values:

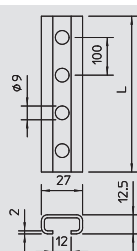
A = cm²

I_y = 0,1389 cm⁴

I_z = 0,5908 cm⁴

W_y = 0,1867 cm³

W_z = 0,4726 cm³



Profile rail, slot 12 mm



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2062 L 2M FT	Perforated	FT	27 x 12,5	2	2,000	20	89.500	1109 52 9

ST Steel **FT** Hot-dip galvanised /100 m

Profile rail with 12 mm slot width.

Static values:

A = 0,887 cm²

I_y = 0,1659 cm⁴

I_z = 0,9683 cm⁴

W_y = 0,2534 cm³

W_z = 0,7173 cm³



Profile rail



Profile rail, slot 12 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2062 2M FT	Unperforated	FT	27 x 12,5	2	2,000	20	90.000	1109 02 2
2062 2M BK	Unperforated	—	27 x 12,5	—	2,000	20	90.000	1109 01 4

ST Steel **Bright** **FT** Hot-dip galvanised /100 m

Profile rail with 12 mm slot width.

Static values:

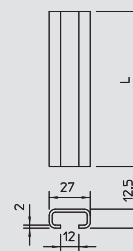
$A = 1,077 \text{ cm}^2$

$I_y = 0,2048 \text{ cm}^4$

$I_z = 0,9826 \text{ cm}^4$

$W_y = 0,2761 \text{ cm}^3$

$W_z = 0,7278 \text{ cm}^3$



Profile rail, slot 16 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
C30 2M FS	Unperforated	FS	30 x 15	1.5	2,000	20	74.200	1110 00 4

ST Steel **FS** Strip-galvanised /100 m

Profile rail with 16 mm slot width.

Static values:

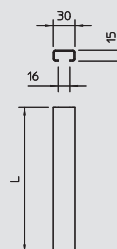
$A = 0,9621 \text{ cm}^2$

$I_y = 0,2878 \text{ cm}^4$

$I_z = 1,2301 \text{ cm}^4$

$W_y = 0,3138 \text{ cm}^3$

$W_z = 0,8201 \text{ cm}^3$



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
C30 L 2M FS	Perforated	FS	30 x 15	1.5	2,000	20	70.200	1110 00 2
C30 L 200 FT	Perforated	FT	30 x 15	1.5	200	25	14.040	1109 78 2
C30 L 300 FT	Perforated	FT	30 x 15	1.5	300	25	21.060	1109 79 0
C30 L 400 FT	Perforated	FT	30 x 15	1.5	400	10	28.080	1109 80 4
C30 L 500 FT	Perforated	FT	30 x 15	1.5	500	10	35.100	1109 81 2
C30 L 600 FT	Perforated	FT	30 x 15	1.5	600	10	42.120	1109 82 0
C30 L 700 FT	Perforated	FT	30 x 15	1.5	700	10	49.140	1109 83 9
C30 L 800 FT	Perforated	FT	30 x 15	1.5	800	10	56.160	1109 84 7
C30 L 900 FT	Perforated	FT	30 x 15	1.5	900	10	63.180	1109 85 5

ST Steel **FS** Strip-galvanised **FT** Hot-dip galvanised /100 m

/100 pc.

Profile rail, perforated, slot width 16 mm.

Static values:

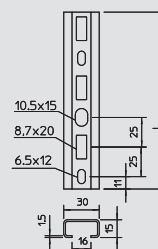
$A = 0,804 \text{ cm}^2$

$I_y = 0,2392 \text{ cm}^4$

$I_z = 1,2156 \text{ cm}^4$

$W_y = 0,2919 \text{ cm}^3$

$W_z = 0,8104 \text{ cm}^3$



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
C30 L 1M FT	Perforated	FT	30 x 15	1.5	1,000	10	70.200	1109 86 3
C30 L 2M FT	Perforated	FT	30 x 15	1.5	2,000	20	70.200	1109 87 1

ST Steel **FT** Hot-dip galvanised /100 m

Profile rail, perforated, slot width 16 mm.

Static values:

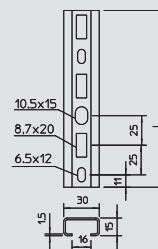
$A = 0,804 \text{ cm}^2$

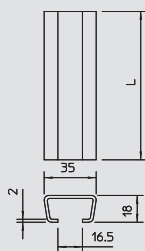
$I_y = 0,2392 \text{ cm}^4$

$I_z = 1,2156 \text{ cm}^4$

$W_y = 0,2919 \text{ cm}^3$

$W_z = 0,8104 \text{ cm}^3$





Profile rail, slot 16.5 mm



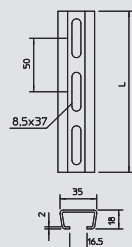
Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2063 2M BK	Unperforated	—	35 x 18	2	2,000	20	116.000	1112 02 3
2063 2M FS	Unperforated	FS	35 x 18	2	2,000	20	116.000	1112 12 0
2063 2M FT	Unperforated	FT	35 x 18	2	2,000	20	121.350	1112 22 8

ST Steel FS Strip-galvanised Bright FT Hot-dip galvanised /100 m

Profile rail, unperforated, slot width 16.5 mm.

Static values:

A = 1,48 cm²
 I_y = 0,6036 cm⁴
 I_z = 2,3252 cm⁴
 W_y = 0,54 cm³
 W_z = 1,328 cm³



Profile rail, slot 16.5 mm



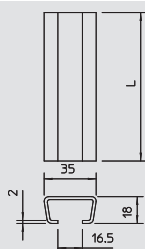
Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2063 L 2M FS	Perforated	FS	35 x 18	2	2,000	20	108.000	1112 70 8
2063 L 2M FT	Perforated	FT	35 x 18	2	2,000	20	110.000	1112 75 9

ST Steel FS Strip-galvanised FT Hot-dip galvanised /100 m

Profile rail, perforated, slot width 16.5 mm.

Static values:

A = 1,31 cm²
 I_y = 0,5377 cm⁴
 I_z = 2,3149 cm⁴
 W_y = 0,516 cm³
 W_z = 1,322 cm³



Profile rail, slot 16.5 mm



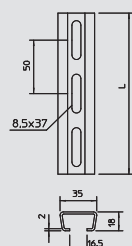
Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2063 2M VA	Perforated	Bright	35 x 18	2	2,000	20	116.000	1110 00 5

V2A Stainless steel, 1.4301 Bright /100 m

Profile rail with 16.5 mm slot width.

Static values:

A = 1,48 cm²
 I_y = 0,6036 cm⁴
 I_z = 2,3252 cm⁴
 W_y = 0,54 cm³
 W_z = 1,328 cm³



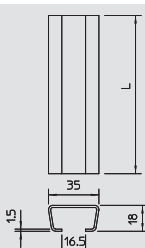
Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2063 L 2M VA	Unperforated	Bright	35 x 18	2	2,000	20	108.000	1112 70 9

V2A Stainless steel, 1.4301 Bright /100 m

Profile rail with 16.5 mm slot width.

Static values:

A = 1,31 cm²
 I_y = 0,5377 cm⁴
 I_z = 2,3149 cm⁴
 W_y = 0,516 cm³
 W_z = 1,322 cm³



Profile rail, slot 16.5 mm



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2068 2M BK	Unperforated	—	35 x 18	1.5	2,000	20	90.000	1118 02 1
2068 2M FT	Unperforated	FT	35 x 18	1.5	2,000	20	89.400	1118 12 9
2068 2M FS	Unperforated	FS	35 x 18	1.5	2,000	20	90.000	1118 22 6

ST Steel FS Strip-galvanised Bright FT Hot-dip galvanised /100 m

Profile rail, unperforated, slot width 16.5 mm.

Static values:

A = 1,14 cm²
 I_y = 0,4945 cm⁴
 I_z = 0,8461 cm⁴
 W_y = 0,441 cm³
 W_z = 1,0549 cm³



Profile rail



Profile rail, slot 16.5 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
2068 L 2M FS	Perforated	FS	35 x 18	1.5	2,000	20	82.500	1119 64 8
2068 L 200 FT	Perforated	FT	35 x 18	1.5	200	25	17.800	1119 69 6
2068 L 300 FT	Perforated	FT	35 x 18	1.5	300	25	26.700	1119 69 3
2068 L 400 FT	Perforated	FT	35 x 18	1.5	400	10	35.600	1119 69 0
2068 L 500 FT	Perforated	FT	35 x 18	1.5	500	10	44.500	1119 68 7
2068 L 600 FT	Perforated	FT	35 x 18	1.5	600	10	53.400	1119 68 4
2068 L 700 FT	Perforated	FT	35 x 18	1.5	700	10	62.300	1119 68 1
2068 L 800 FT	Perforated	FT	35 x 18	1.5	800	10	71.200	1119 67 8
2068 L 900 FT	Perforated	FT	35 x 18	1.5	900	10	80.100	1119 67 5
2068 L 1M FT	Perforated	FT	35 x 18	1.5	1,000	10	89.000	1119 67 2
2068 L 2M FT	Perforated	FT	35 x 18	1.5	2,000	20	89.000	1119 65 6
2068 L 2M FTSOMY	Perforated	FT	35 x 18	1.5	2,000	20	80.000	1119 67 0

ST Steel FS Strip-galvanised FT Hot-dip galvanised FT Hot-dip gal-
vanised/SOMY /100 m
/100 pc.

Profile rail, perforated, slot width 16.5 mm.

Static values:

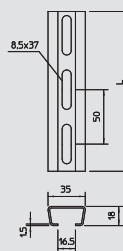
A = 1,01 cm²

I_y = 0,4418 cm⁴

I_z = 1,8384 cm⁴

W_y = 0,423 cm³

W_z = 1,0505 cm³



Profile rail, slot 16.5 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Bundle m	Weight kg/100 m	Item No.
2068 L 2M VA	Perforated	—	35 x 18	1.5	2,000	20	80.000	1119 70 2
2068 L 6M VA	Perforated	—	35 x 18	1.5	6,000	60	80.000	1119 72 9

V2A Stainless steel, 1.4301 /100 m

Profile rail, perforated, slot width 16.5 mm.

Static values:

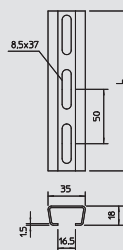
A = 1,01 cm²

I_y = 0,4418 cm⁴

I_z = 1,8384 cm⁴

W_y = 0,423 cm³

W_z = 1,0505 cm³



Profile rail, slot 17 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
1268 L 150 FS	Perforated	FS	35 x 18	1.25	150	25	10.730	1104 24 1
1268 L 200 FS	Perforated	FS	35 x 18	1.25	200	25	14.300	1104 26 8
1268 L 300 FS	Perforated	FS	35 x 18	1.25	300	25	21.450	1104 28 4
1268 L 400 FS	Perforated	FS	35 x 18	1.25	400	10	28.550	1104 29 2
1268 L 500 FS	Perforated	FS	35 x 18	1.25	500	10	35.750	1104 30 6
1268 L 600 FS	Perforated	FS	35 x 18	1.25	600	10	42.900	1104 31 0
1268 L 700 FS	Perforated	FS	35 x 18	1.25	700	10	50.050	1104 31 5
1268 L 800 FS	Perforated	FS	35 x 18	1.25	800	10	57.200	1104 32 0
1268 L 900 FS	Perforated	FS	35 x 18	1.25	900	10	64.350	1104 32 5
1268 L 1M FS	Perforated	FS	35 x 18	1.25	1,000	10	71.500	1104 49 7
1268 L 2M FS	Perforated	FS	35 x 18	1.25	2,000	20	71.500	1104 50 0

ST Steel FS Strip-galvanised /100 m
/100 pc.

Light-duty profile rail, perforated, slot width 17 mm.

Static values:

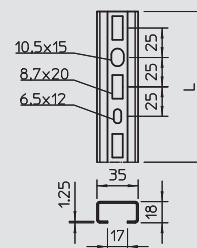
A = 0,876 cm²

I_y = 0,406 cm⁴

I_z = 1,807 cm⁴

W_y = 0,413 cm³

W_z = 1,033 cm³



Profile rail



Profile rail, slot 18 mm

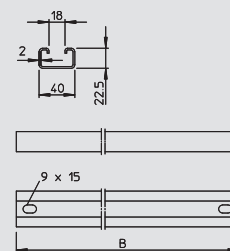
Type	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
CPS 4 SPR 492 FT	FT	40 x 22,5	2	—	10	81.500	6007 24 4
CPS 4 SPR 592 FT	FT	40 x 22,5	2	592	10	96.000	6007 25 2
CPS 4 SPR 692 FT	FT	40 x 22,5	2	692	10	113.000	6007 26 0
CPS 4 SPR 792 FT	FT	40 x 22,5	2	792	10	130.000	6007 27 9
CPS 4 SPR 892 FT	FT	40 x 22,5	2	892	10	145.000	6007 28 7
CPS 4 SPR 992 FT	FT	40 x 22,5	2	992	10	162.000	6007 29 5
CPS 4 SPR1092 FT	FT	40 x 22,5	2	1,092	10	178.000	6007 30 9
CPS 4 SPR1192 FT	FT	40 x 22,5	2	1,192	10	194.000	6007 31 7

ST Steel

FT Hot-dip galvanised

/pc.

CPS 4 rung for use in heavy-duty vertical ladders.



Profile rail, slot 18 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
CPS 4L 2M FT	perforated	FT	40 x 22,5	2	2,000	10	160.000	1121 97 9
CPS 4L 6M FT	perforated	FT	40 x 22,5	2	6,000	1	160.000	1121 89 8

ST Steel

FT Hot-dip galvanised

/100 m

Heavy-duty profile rail, perforated, slot width 18 mm.

Static values:

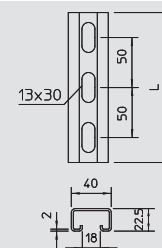
A = 0,7398 cm²

I_y = 1,1864 cm⁴

I_z = 4,4552 cm⁴

W_y = 1,0462 cm³

W_z = 2,2276 cm³



Profile rail, slot 18 mm

Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
CPS 4L 2M VA	Perforated	Bright	40 x 22,5	2	2,000	10	152.500	1121 96 0
CPS 4L 6M VA	Perforated	Bright	40 x 22,5	2	6,000	1	152.500	1121 90 1

V2A Stainless steel, 1.4301

/100 m

Heavy-duty profile rail, perforated, slot width 18 mm.

Static values:

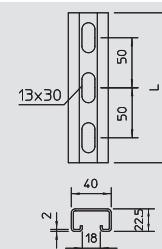
A = 0,7398 cm²

I_y = 1,1864 cm⁴

I_z = 4,4552 cm⁴

W_y = 1,0462 cm³

W_z = 2,2276 cm³



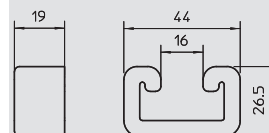
Protective cap, CPS 4

Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
CPS 4 SK OR	Pastel orange	300	25	0.932	1124 55 3

PE Polyethylene

/100 pc.

End cap for profile rail, types CPS 4 and MS 22.



Profile rail, slot 22 mm

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
CPS 5 L 200 FT	Perforated	FT	50 x 30	3	200	1	57.000	1121 39 1
CPS 5 L 300 FT	Perforated	FT	50 x 30	3	300	5	85.000	1121 24 3
CPS 5 L 400 FT	Perforated	FT	50 x 30	3	400	1	113.000	1121 27 8
CPS 5 L 500 FT	Perforated	FT	50 x 30	3	500	1	141.000	1121 40 5
CPS 5 L 600 FT	Perforated	FT	50 x 30	3	600	1	170.000	1121 29 4
CPS 5 L 700 FT	Perforated	FT	50 x 30	3	700	5	198.000	1121 33 2
CPS 5 L 800 FT	Perforated	FT	50 x 30	3	800	5	235.000	1121 30 8
CPS 5 L 900 FT	Perforated	FT	50 x 30	3	900	1	255.000	1121 33 6
CPS 5 L 1.5M FT	Perforated	FT	50 x 30	3	1,500	1	440.000	1121 36 3

ST Steel

FT Hot-dip galvanised

/pc.

Heavy-duty profile rail with continuous perforation, slot width 22 mm.

Static values:

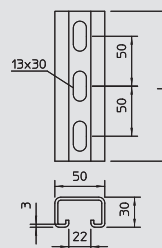
A = 3,8782 cm²

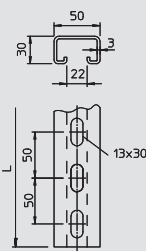
I_y = 8,1869 cm⁴

I_z = 15,9378 cm⁴

W_y = 3,9512 cm³

W_z = 6,3751 cm³





Profile rail, slot 22 mm



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
CPS 5 L 1M FT	Perforated	FT	50 x 30	3	1,000	1	282.500	1121 44 8
CPS 5 L 2M FT	Perforated	FT	50 x 30	3	2,000	2	282.500	1121 46 4
CPS 5 L 3M FT	Perforated	FT	50 x 30	3	3,000	1	282.500	1121 46 6
CPS 5 L 6M FT	Perforated	FT	50 x 30	3	6,000	6	282.500	1121 47 2

ST Steel **FT** Hot-dip galvanised

/100 m

Heavy-duty profile rail with continuous perforation, slot width 22 mm.

Static values:

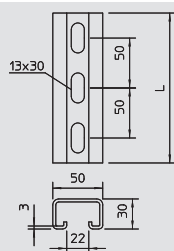
A = 3,8782 cm²

I_y = 8,1869 cm⁴

I_z = 15,9378 cm⁴

W_y = 3,9512 cm³

W_z = 6,3751 cm³



Profile rail, slot 22 mm



Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
CPS 5 L 2M VA	Perforated	Bright	50 x 30	3	2,000	2	282.500	1121 48 0
CPS 5 L 6M VA	Perforated	Bright	50 x 30	3	6,000	6	282.500	1121 49 9

V2A Stainless steel, 1.4301

/100 m

Heavy-duty profile rail with continuous perforation, slot width 22 mm.

Static values:

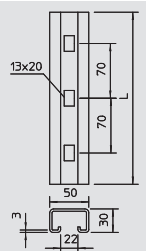
A = 3,8782 cm²

I_y = 8,1869 cm⁴

I_z = 15,9378 cm⁴

W_y = 3,9512 cm³

W_z = 6,3751 cm³



Profile rail, slot 22 mm



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
CPS 5 G 220 FT	Perforated	FT	50 x 30	3	220	1	69.000	6349 40 4
CPS 5 G 260 FT	Perforated	FT	50 x 30	3	260	1	81.500	6349 41 2
CPS 5 G 300 FT	Perforated	FT	50 x 30	3	300	1	94.000	6349 43 9
CPS 5 G 340 FT	Perforated	FT	50 x 30	3	340	1	107.000	6349 44 7
CPS 5 G 380 FT	Perforated	FT	50 x 30	3	380	1	119.000	6349 46 3

ST Steel **FT** Hot-dip galvanised

/pc.

Heavy-duty profile rail. In fixed lengths, with rectangular perforation and a slot width of 22 mm.

Static values:

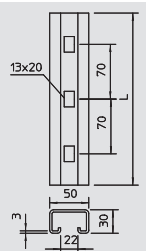
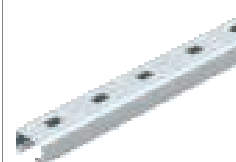
A = 3,8782 cm²

I_y = 8,1869 cm⁴

I_z = 15,9378 cm⁴

W_y = 3,9512 cm³

W_z = 6,3751 cm³



Profile rail, slot 22 mm



Type	Version	Surface finish	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
CPS 5 G 260 VA	Perforated	Bright	50 x 30	3	260	10	78.000	6349 81 1
CPS 5 G 340 VA	Perforated	Bright	50 x 30	3	340	8	102.000	6349 84 6
CPS 5 G 380 VA	Perforated	Bright	50 x 30	3	380	15	114.000	6349 85 4

V2A Stainless steel, 1.4301

/pc.

Heavy-duty profile rail. In fixed lengths, with rectangular perforation and a slot width of 22 mm.

Static values:

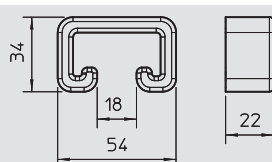
A = 3,8782 cm²

I_y = 8,1869 cm⁴

I_z = 15,9378 cm⁴

W_y = 3,9512 cm³

W_z = 6,3751 cm³



Protective cap, CPS 5



Type	Colour	Box Qty.	Pack. pcs	Weight kg/100 pcs.	Item No.
CPS 5 SK OR	Pastel orange	200	20	1.420	1124 56 1

PE Polyethylene

/100 pc.

End caps for profile rail, types CPS 5 and CPS 5G.



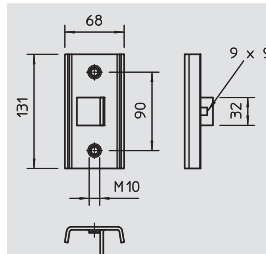
Profile rail



Rung seat for steel supports

Type	Pack.	Weight	Item No.
	pair	kg/100 pairs	
SAA CPS 4 FT	5	82.600	6007 49 8
ST Steel FT Hot-dip galvanised			/pair

Rung seat for fastening rungs of type CPS 4 in steel girders.



Mounting rail, MS 21

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 21 L 2M FS	Perforated	FS	41x21	2	2,000	1	201.488	1122 91 8
MS 21 L 3M FS	Perforated	FS	41x21	2	3,000	1	201.488	1122 92 0
MS 21 L 6M FS	Perforated	FS	41x21	2	6,000	1	201.488	1122 92 2

ST Steel **FS** Strip-galvanised /100 m

Heavy-duty profile/mounting rail with continuous perforation in base, slot width 22 mm.

Static values:

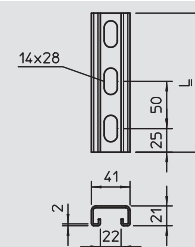
A = 1,64837 cm²

I_y = 0,952339 cm⁴

I_z = 4,5113 cm⁴

W_y = 0,888299 cm³

W_z = 2,20087 cm³



Mounting rail, MS 21

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MS 21 L 200 FT	Perforated	FT	41x21	2	200	1	40.300	1122 93 3
MS 21 L 300 FT	Perforated	FT	41x21	2	300	1	60.446	1122 93 4
MS 21 L 400 FT	Perforated	FT	41x21	2	400	1	80.595	1122 93 5
MS 21 L 500 FT	Perforated	FT	41x21	2	500	1	100.744	1122 93 6
MS 21 L 600 FT	Perforated	FT	41x21	2	600	1	120.890	1122 93 7
MS 21 L 700 FT	Perforated	FT	41x21	2	700	1	141.041	1122 93 8
MS 21 L 800 FT	Perforated	FT	41x21	2	800	1	161.190	1122 93 9
MS 21 L 900 FT	Perforated	FT	41x21	2	900	1	181.339	1122 94 0

ST Steel **FT** Hot-dip galvanised /100 pc.

Static values:

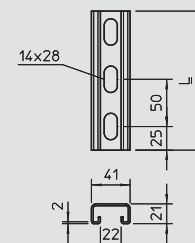
A = 1,64837 cm²

I_y = 0,952339 cm⁴

I_z = 4,5113 cm⁴

W_y = 0,888299 cm³

W_z = 2,20087 cm³



Mounting rail, MS 21

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 21 L 3M FT	Perforated	FT	41x21	2	3,000	1	201.488	1122 92 4
MS 21 L 6M FT	Perforated	FT	41x21	2	6,000	1	201.488	1122 92 6

ST Steel **FT** Hot-dip galvanised /100 m

Heavy-duty profile/mounting rail with continuous perforation in base, slot width 22 mm.

Static values:

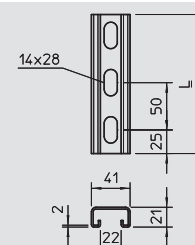
A = 1,64837 cm²

I_y = 0,952339 cm⁴

I_z = 4,5113 cm⁴

W_y = 0,888299 cm³

W_z = 2,20087 cm³



Mounting rail, MS 21

Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 21 L 3M V2A	Perforated	—	41x21	2	3,000	1	201.488	1122 92 8
MS 21 L 6M V2A	Perforated	—	41x21	2	6,000	1	201.488	1122 92 9

V2A Stainless steel, 1.4301 /100 m

Static values:

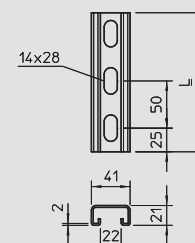
A = 1,64837 cm²

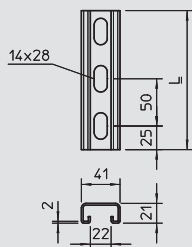
I_y = 0,952339 cm⁴

I_z = 4,5113 cm⁴

W_y = 0,888299 cm³

W_z = 2,20087 cm³





Mounting rail, MS 21



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 21 L 3M V4A	Perforated	—	41x21	2	3,000	1	201.488	1122 93 1
MS 21 L 6M V4A	Perforated	—	41x21	2	6,000	1	201.488	1122 93 2

V4A Stainless steel, 1.4404

/100 m

Static values:

A = 1,64837 cm²

I_y = 0,952339 cm⁴

I_z = 4,5113 cm⁴

W_y = 0,888299 cm³

W_z = 2,20087 cm³



Protective cap MS 21

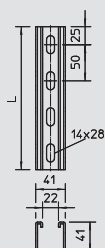


Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
MS 21 SK OR	Pastel orange	—	1	0.000	1122 90 2

PE Polyethylene

/100 pc.

Protective caps for profile rail, types MS 21.



Mounting rail, MS 41



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 L 1M 2 FS	Perforated	FS	41x41	2	1,000	1	201.488	1122 97 0
MS 41 L 3M 2 FS	Perforated	FS	41x41	2	3,000	1	201.488	1122 97 2
MS 41 L 6M 2 FS	Perforated	FS	41x41	2	6,000	1	201.488	1122 97 4

ST Steel

FS Strip-galvanised

/100 m

Heavy-duty profile/mounting rail with continuous perforation in base, slot width 22 mm.

Static values:

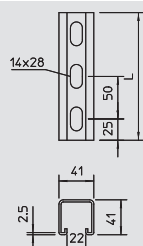
A = 2,44837 cm²

I_y = 5,17636 cm⁴

I_z = 7,556 cm⁴

W_y = 2,51257 cm³

W_z = 2,68608 cm³



Mounting rail, MS 41



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 L 1M FS	Perforated	FS	41x41	2.5	1,000	1	244.768	1122 90 8
MS 41 L 3M FS	Perforated	FS	41x41	2.5	3,000	1	244.768	1122 91 0
MS 41 L 6M FS	Perforated	FS	41x41	2.5	6,000	1	244.768	1122 91 2

ST Steel

FS Strip-galvanised

/100 m

Static values:

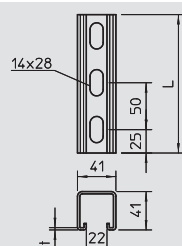
A = 2,96937 cm²

I_y = 6,05302 cm⁴

I_z = 9,01392 cm⁴

W_y = 2,91256 cm³

W_z = 4,39726 cm³



Mounting rail, MS 41



Type	Version	Interface	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 LS 1M 2 FS	Perforated	FS	41x41	2	1,000	1	183.888	1123 00 8
MS 41 LS 3M 2 FS	Perforated	FS	41x41	2	3,000	1	183.888	1123 01 0
MS 41 LS 6M 2 FS	Perforated	FS	41x41	2	6,000	1	183.888	1123 01 2

ST Steel

FS Strip-galvanised

/100 m

Heavy-duty profile/mounting rail with continuous, three-sided perforation, slot width 22 mm.

Static values:

A = 2,44837 cm²

I_y = 5,17636 cm⁴

I_z = 7,556 cm⁴

W_y = 2,51257 cm³

W_z = 2,68608 cm³



Profile rail



Mounting rail, MS 41

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 LS 1M FS	Perforated	FS	41x41	2.5	1,000	1	222.770	1122 48 1
MS 41 LS 3M FS	Perforated	FS	41x41	2.5	3,000	1	222.770	1122 91 4
MS 41 LS 6M FS	Perforated	FS	41x41	2.5	6,000	1	222.770	1122 91 6

ST Steel

FS Strip-galvanised

/100 m

Static values:

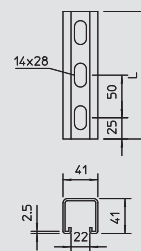
$A = 2,96937 \text{ cm}^2$

$I_y = 6,05302 \text{ cm}^4$

$I_z = 9,01392 \text{ cm}^4$

$W_y = 2,91256 \text{ cm}^3$

$W_z = 4,39726 \text{ cm}^3$



Mounting rail, MS 41

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MS 41 L 200 FT	Perforated	FT	41x41	2.5	200	6	49.200	1122 50 9
MS 41 L 300 FT	Perforated	FT	41x41	2.5	300	6	73.800	1122 51 7
MS 41 L 400 FT	Perforated	FT	41x41	2.5	400	6	98.400	1122 52 5
MS 41 L 500 FT	Perforated	FT	41x41	2.5	500	6	123.000	1122 53 3
MS 41 L 600 FT	Perforated	FT	41x41	2.5	600	6	147.600	1122 54 1
MS 41 L 700 FT	Perforated	FT	41x41	2.5	700	6	172.200	1122 56 8
MS 41 L 800 FT	Perforated	FT	41x41	2.5	800	6	196.800	1122 57 6
MS 41 L 900 FT	Perforated	FT	41x41	2.5	900	6	221.400	1122 58 4

ST Steel

FT Hot-dip galvanised

/100 pc.

Heavy-duty profile/mounting rail with continuous perforation in base, slot width 22 mm.

Static values:

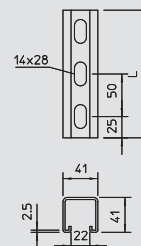
$A = 2,96937 \text{ cm}^2$

$I_y = 6,05302 \text{ cm}^4$

$I_z = 9,01392 \text{ cm}^4$

$W_y = 2,91256 \text{ cm}^3$

$W_z = 4,39726 \text{ cm}^3$



Mounting rail, MS 41

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 L 1M FT	Perforated	FT	41x41	2.5	1,000	6	246.000	1122 60 6
MS 41 L 3M FT	Perforated	FT	41x41	2.5	3,000	3	246.000	1122 62 2
MS 41 L 6M FT	Perforated	FT	41x41	2.5	6,000	6	246.000	1122 65 7
MS 41 L 1M 2 FT	Perforated	FT	41x41	2	1,000	1	201.488	1122 96 2
MS 41 L 3M 2 FT	Perforated	FT	41x41	2	3,000	1	201.488	1122 96 4
MS 41 L 6M 2 FT	Perforated	FT	41x41	2	6,000	1	201.488	1122 96 6

ST Steel

FT Hot-dip galvanised

/100 m

Heavy-duty profile/mounting rail with continuous perforation in base, slot width 22 mm.

Static values:

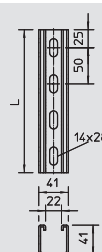
$A = 2,96937 \text{ cm}^2$

$I_y = 6,05302 \text{ cm}^4$

$I_z = 9,01392 \text{ cm}^4$

$W_y = 2,91256 \text{ cm}^3$

$W_z = 4,39726 \text{ cm}^3$



Mounting rail, MS 41

Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 LS 3M FT	Perforated	FT	41x41	2.5	3,000	3	235.000	1122 48 3
MS 41 LS 6M FT	Perforated	FT	41x41	2.5	6,000	6	235.000	1122 48 7
MS 41 LS 1M 2 FT	Perforated	FT	41x41	2	1,000	1	183.888	1123 00 1
MS 41 LS 3M 2 FT	Perforated	FT	41x41	2	3,000	1	183.888	1123 00 3
MS 41 LS 6M 2 FT	Perforated	FT	41x41	2	6,000	1	183.888	1123 00 5
MS 41 LS 1M FT	Perforated	FT	41x41	2.5	1,000	1	222.770	1122 47 9

ST Steel

FT Hot-dip galvanised

/100 m

Heavy-duty profile/mounting rail with continuous, three-sided perforation, slot width 22 mm.

Static values:

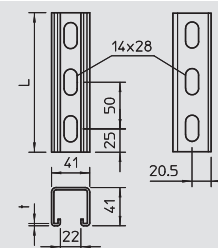
$A = 2,00837 \text{ cm}^2$

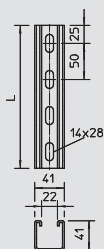
$I_y = 5,13192 \text{ cm}^4$

$I_z = 5,88143 \text{ cm}^4$

$W_y = 2,4875 \text{ cm}^3$

$W_z = 2,8774 \text{ cm}^3$





Mounting rail, MS 41



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 L 1M 2 V2A	—	—	41x41	2	1,000	1	201.488	1122 97 8
MS 41 L 3M 2 V2A	—	—	41x41	2	3,000	1	201.488	1122 98 0
MS 41 L 6M 2 V2A	—	—	41x41	2	6,000	1	201.488	1122 98 2

V2A Stainless steel, 1.4301

/100 m

Static values:

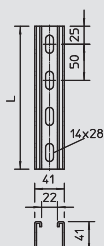
A = 2,44837 cm²

I_y = 5,17636 cm⁴

I_z = 7,556 cm⁴

W_y = 2,51257 cm³

W_z = 2,68608 cm³



Mounting rail, MS 41



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 LS1M 2 V2A	—	—	41x41	2	1,000	1	183.888	1123 01 4
MS 41 LS3M 2 V2A	—	—	41x41	2	3,000	1	183.888	1123 01 6
MS 41 LS6M 2 V2A	—	—	41x41	2	6,000	1	183.888	1123 01 8

V2A Stainless steel, 1.4301

/100 m

Static values:

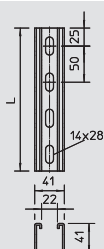
A = 2,00837 cm²

I_y = 5,13192 cm⁴

I_z = 5,88143 cm⁴

W_y = 2,4875 cm³

W_z = 2,8774 cm³



Mounting rail, MS 41



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 L 1M 2 V4A	—	—	41x41	2	1,000	1	201.488	1122 98 8
MS 41 L 3M 2 V4A	—	—	41x41	2	3,000	1	201.488	1122 99 0
MS 41 L 6M 2 V4A	—	—	41x41	2	6,000	1	201.488	1122 99 2

V4A Stainless steel, 1.4404

/100 m

Static values:

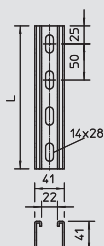
A = 2,44837 cm²

I_y = 5,17636 cm⁴

I_z = 7,556 cm⁴

W_y = 2,51257 cm³

W_z = 2,68608 cm³



Mounting rail, MS 41



Type	Version	Inter- face	Dimension b x h mm	Material thickness mm	Length mm	Pack. m	Weight kg/100 m	Item No.
MS 41 LS1M 2 V4A	—	—	41x41	2	1,000	1	183.888	1123 02 1
MS 41 LS3M 2 V4A	—	—	41x41	2	3,000	1	183.888	1123 02 3
MS 41 LS6M 2 V4A	—	—	41x41	2	6,000	1	183.888	1123 02 5

V4A Stainless steel, 1.4404

/100 m

Static values:

A = 2,00837 cm²

I_y = 5,13192 cm⁴

I_z = 5,88143 cm⁴

W_y = 2,4875 cm³

W_z = 2,8774 cm³



Protective cap MS 41



Type	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
MS 41 SK OR	Pastel orange	—	1	0.000	1122 90 0

PE Polyethylene

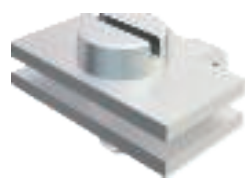
/100 pc.

Protective caps for profile rail, types MS 41.

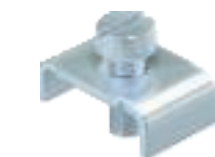


Profile rails, system accessory

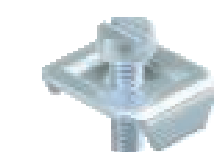
11-12



11-12



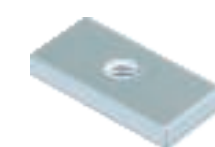
11-12



11-12



11-12



11-12



11-12



Slide nut, 11–12 mm slot width

Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2065 N M4 G	M4	With bolt M4 x 8	3,000	100	0.407	1133 02 0

ST Steel **G** Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 11–12 mm.

Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
T4012G M5x13 G	M5	With bolt M5 x 13	2,000	100	0.721	1134 04 3
T4012G O.S. M5 G	M5	No bolt	2,000	100	0.461	1134 25 6

ST Steel **G** Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 11–12 mm.

Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
T4012N M4x10 G	M4	With bolt M4 x 10	3,600	100	0.371	1134 02 7
T4012N M4x8 G	M4	With bolt M4 x 8	3,600	100	0.375	1134 30 2

ST Steel **G** Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 11–12 mm.

Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
T4012 M4x10 G	M4	With bolt M4 x 10	2,400	100	0.741	1134 05 1
T4012 O.S. M4 G	M4	No bolt	4,000	100	0.245	1134 26 4

ST Steel **G** Electrogalvanised /100 pc.

Slide nut for profile rail 2060 with 11 mm slot width.

Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
4014 G	M4	No bolt	4,000	100	0.463	1137 22 0

ST Steel **G** Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 11–12 mm.

Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
4014 N M.S. G	M4	With bolt M4 x 8	4,000	100	0.320	1137 01 8
4014 N G	M4	No bolt	4,000	100	0.320	1137 21 2

ST Steel **G** Electrogalvanised /100 pc.

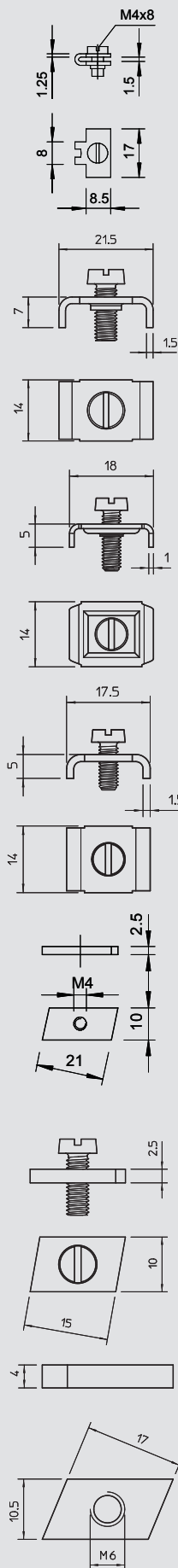
Slide nut for profile rails with a slot width of 11–12 mm.

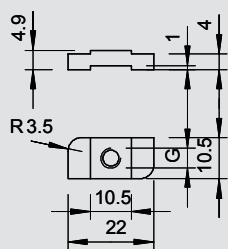
Type	Thread	Version	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
5015 M5 OS G	M5	No bolt	2,600	100	0.464	1141 05 8
5015 M6 OS G	M6	No bolt	2,600	100	0.441	1141 06 6
5015 M6 OS VA	M6	No bolt	2,600	100	0.440	1141 10 4

ST Steel **V2A** Stainless steel, 1.4301 **G** Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 11–12 mm.

For NS rung, mountable from above.





Slide nut, 11–12 mm slot width

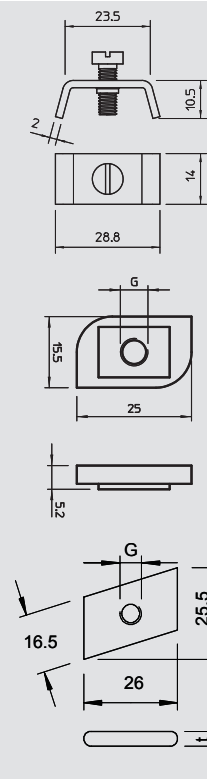


Type	Thread	Version	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
5016 M5 OS G	M5	No bolt	2,400	100	0.622	1142 05 4
5016 M6 OS G	M6	No bolt	2,400	100	0.608	1142 06 2

ST Steel **G** Electrogalvanised

/100 pc.

Slide nut for profile rails with a slot width of 11–12 mm.
Mounted from top.



Slide nut, 16–17 mm slot width



Type	Thread	Version	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
T5012 M5x13 G	M5	With bolt M5 x 13	1,000	100	1.151	1140 01 9
T5012 O.S. M5 G	M5	No bolt	1,000	100	0.903	1140 21 3

ST Steel **G** Electrogalvanised

/100 pc.

Slide nut for profile rails with a slot width of 16–17 mm.



Type	Thread	Version	Box Qty.	Pack.	Weight	Item No.
			pcs	pcs	kg/100 pcs.	
5017 M6 OS G	M6	No bolt	1,000	100	0.985	1143 06 9
5017 M6 OS VA	M6	No bolt	1,000	100	0.985	1143 12 3
5017 M8 OS VA	M8	No bolt	600	100	1.432	1143 12 5
5017 M10 OS VA	M10	No bolt	600	100	1.310	1143 12 7

ST Steel **V4A** Stainless steel, 1.4571 **G** Electrogalvanised

/100 pc.

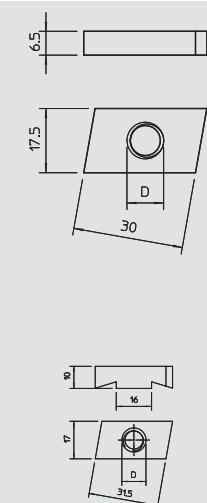
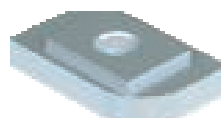
Slide nut for profile rails with a slot width of 16–17 mm.
For VS rung, mountable from above.

Type	Thread	Dimension G	Dimension t	Version	Box Qty.	Pack.	Weight	Item No.
		mm	mm		pcs	pcs	kg/100 pcs.	
5019 M6 OS G	M6	6	4	No bolt	1,200	100	1.150	1144 10 3
5019 M8 OS G	M8	8	5	No bolt	600	100	1.450	1144 11 1
5019 M10 OS G	M10	10	6	No bolt	600	100	1.650	1144 13 8

ST Steel **G** Electrogalvanised

/100 pc.

Slide nut for profile rails with a slot width of 16–17 mm.



Slide nut, 18 mm slot width



Type	Thread	Dimension D	Recommended load capacity	Box Qty.	Pack.	Weight	Item No.
		mm	kN	pcs	pcs	kg/100 pcs.	
GMH18 M6 G	M6	6	1.94	500	50	2.400	1146 50 5
GMH18 M8 G	M8	8	3.57	500	50	2.300	1146 51 3
GMH18 M10 G	M10	10	5.7	500	50	2.300	1146 52 1
GMH18 M6 VA	M6	6	1.94	500	50	2.400	1146 55 6
GMH18 M8 VA	M8	8	3.57	500	50	2.300	1146 55 8
GMH18 M10 VA	M10	10	5.7	500	50	2.300	1146 56 0
GMH18 M12 VA	M12	12	8.32	500	50	2.000	1146 56 2

ST Steel **V4A** Stainless steel, 1.4401 **G** Electrogalvanised

/100 pc.

Slide nut for profile rails with a slot width of 18 mm.

Type	Thread	Dimension D	Recommended load capacity	Box Qty.	Pack.	Weight	Item No.
		mm	kN	pcs	pcs	kg/100 pcs.	
HGMH18 M6 G	M6	6	1.94	300	50	3.600	1146 71 8
HGMH18 M8 G	M8	8	3.57	300	50	2.300	1146 72 6
HGMH18 M10 G	M10	10	5.7	300	50	2.300	1146 73 4
HGMH18 M12 G	M12	12	8.32	300	50	2.000	1146 74 2

ST Steel **G** Electrogalvanised

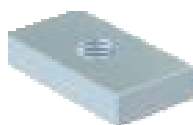
/100 pc.

Slide nut for profile rails with a slot width of 18 mm.



Profile rails, system accessory

22



Slide nut, 22 mm slot width

Type	Thread	Dimension D	Recommended load capacity	Box Qty.	Pack.	Weight	Item No.
		mm	kN	pcs	pcs	kg/100 pcs.	
GMH22 M6 G	M6	6	1.94	300	50	4.500	1146 60 2
GMH22 M8 G	M8	8	3.57	300	50	4.300	1146 61 0
GMH22 M10 G	M10	10	5.7	300	50	4.300	1146 62 9
GMH22 M12 G	M12	12	8.32	300	50	4.200	1146 63 7
GMH22 M6 VA	M6	6	1.94	300	50	4.500	1146 64 6
GMH22 M8 VA	M8	8	3.57	300	50	4.300	1146 64 8
GMH22 M10 VA	M10	10	5.7	300	50	4.300	1146 65 0
GMH22 M12 VA	M12	12	8.32	300	50	4.200	1146 65 2

ST Steel V4A Stainless steel, 1.4401 G Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 22 mm.

Type	Thread	Dimension D	Recommended load capacity	Box Qty.	Pack.	Weight	Item No.
		mm	kN	pcs	pcs	kg/100 pcs.	
HGMH22 M8 G	M8	8	3.57	300	50	4.300	1146 80 7
HGMH22 M10 G	M10	10	5.7	300	50	4.200	1146 81 5
HGMH22 M12 G	M12	12	8.32	200	50	4.100	1146 82 3

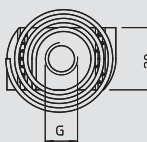
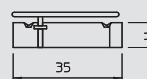
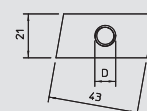
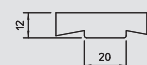
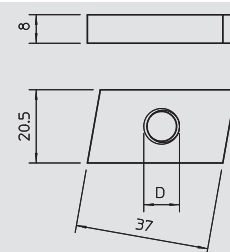
ST Steel G Electrogalvanised /100 pc.

Slide nut for profile rails with a slot width of 22 mm.

Type	Thread	Dimension H	Box Qty.	Pack.	Weight	Item No.
		mm	pcs	pcs	kg/100 pcs.	
GMF22 M6 G	M6	6	300	50	4.300	1146 45 1
GMF22 M8 G	M8	6	300	50	4.200	1146 45 5
GMF22 M10 G	M10	8	200	50	4.100	1146 45 9
GMF22 M12 G	M12	9.5	200	50	3.900	1146 46 3

ST Steel G Electrogalvanised /100 pc.

Slide nut for profile rail MS 41, with tensioning spring and tothing, fixing by 90° rotation.



22



22



11-12



Hammer-head bolt, 11–12 mm slot width

Type	Thread	Dimension L	Dimension D	Washer Ø	Grade	Box Qty.	Pack.	Weight	Item No.
		mm	mm	mm		pcs	pcs	kg/100 pcs.	
5020 M6X20 FT	M6	20	6	12	4.6	500	50	1.260	1149 00 8
5020 M6X25 FT	M6	25	6	12	4.6	500	50	1.340	1149 01 6
5020 M8X25 FT	M8	25	8	16	4.6	300	50	2.026	1149 21 0
5020 M10x40 FT	M10	40	10	20	4.6	300	50	3.950	1149 45 8

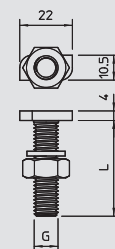
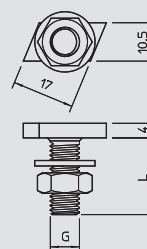
ST Steel FT Hot-dip galvanised /100 pc.

Hammer-head bolt with washer and nut for profile rails with slot width 11–12 mm.

Type	Thread	Dimension L	Dimension D	Washer Ø	Grade	Box Qty.	Pack.	Weight	Item No.
		mm	mm	mm		pcs	pcs	kg/100 pcs.	
5021 M6X25 FT	M6	25	6	12	4.6	500	50	1.496	1150 01 4
5021 M8X20 FT	M8	20	8	16	4.6	500	50	1.912	1150 20 0
5021 M8X25 FT	M8	25	8	16	4.6	500	50	2.112	1150 21 9
5021 M8X40 FT	M8	40	8	16	4.6	300	50	2.540	1150 24 3
5021 M10x40 FT	M10	40	10	20	4.6	300	50	4.094	1150 45 6

ST Steel FT Hot-dip galvanised /100 pc.

Hammer-head bolt with washer and nut for profile rails with slot width 11–12 mm.



11-12



16-17

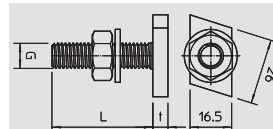


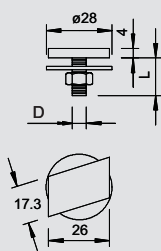
Hammer-head bolt, 16–17 mm slot width

Type	Thread	Dimension L	Dimension D	Dimension t	Washer Ø	Grade	Box Qty.	Pack.	Weight	Item No.
		mm	mm	mm	mm		pcs	pcs	kg/100 pcs.	
5022 M6X25 F	M6	25	6	5	12	4.6	500	50	1.960	1151 01 0
5022 M6X30 F	M6	30	6	5	12	4.6	500	50	1.992	1151 02 9
5022 M8X25 F	M8	25	8	5	16	4.6	300	50	2.120	1151 21 5
5022 M8X30 F	M8	30	8	5	16	4.6	300	50	2.990	1151 22 3
5022 M8X40 F	M8	40	8	5	16	4.6	200	50	3.600	1151 25 8
5022 M10x25 F	M10	25	10	6	20	4.6	300	50	4.360	1151 40 1
5022 M10x30 F	M10	30	10	6	20	4.6	200	50	4.580	1151 42 8
5022 M10x40 F	M10	40	10	6	20	4.6	200	50	5.070	1151 44 4
5022 M12x30 G	M12	30	12	6	24	4.6	250	25	6.130	1151 62 2
5022 M12x40 G	M12	40	12	6	24	4.6	150	25	6.900	1151 64 9

ST Steel F Hot-dip galvanised G Electrogalvanised /100 pc.

Hammer-head bolt with washer and nut for profile rails with slot width 16–17 mm.





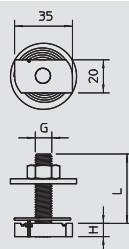
Hammer-head bolt, 16–17 mm slot width

16-17

Type	Thread	Dimension L mm	Dimension D mm	Washer Ø mm	Grade	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
5026 M6X20 G	M6	20	6	28	4.6	300	50	2.870	1151 70 3
5026 M8X25 G	M8	25	8	28	4.6	300	50	3.320	1151 71 1

ST Steel G Electrogalvanised /100 pc.

Hammer-head bolt with washer and nut for profile rails with slot width 16–17 mm.



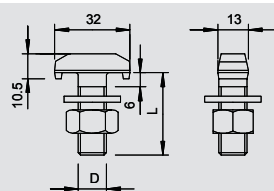
Hammer-head bolt, for MS 41

22

Type	Thread	Dimension L mm	Dimension D mm	Washer Ø mm	Grade	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
HKF22 M8x30 G	M8	30	6	40	4.6	100	25	9.100	1148 95 0
HKF22 M8x50 G	M8	50	6	40	4.6	100	25	9.600	1148 95 5
HKF22 M10x30 G	M10	30	8	40	4.6	100	25	10.300	1148 96 1
HKF22 M10x50 G	M10	50	8	40	4.6	100	25	11.500	1148 96 6
HKF22 M12x30 G	M12	30	9.5	40	4.6	100	25	11.800	1148 97 2

ST Steel G Electrogalvanised /100 pc.

Hammer-head bolt for profile rail MS 41, with tensioning spring and tothing, fixing by 90° rotation.



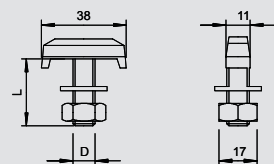
Hook-head bolt, 18 mm slot width

18

Type	Thread	Dimension L mm	Dimension D mm	Washer Ø mm	Grade	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
5023 M10x30 G	M10	30	10	20	5.6	300	50	4.130	1153 41 2
5023 M10x35 G	M10	35	10	20	5.6	200	50	4.690	1153 42 0
5023 M10x40 G	M10	40	10	20	5.6	250	25	4.970	1153 43 9
5023 M12x30 G	M12	30	12	24	5.6	150	25	6.450	1153 61 7
5023 M12x35 G	M12	35	12	24	5.6	150	25	6.800	1153 62 5
5023 M12x40 G	M12	40	12	24	5.6	150	25	7.200	1153 63 3
5023 M12x50 G	M12	50	12	24	5.6	150	25	7.840	1153 64 1

ST Steel G Electrogalvanised /100 pc.

Hook-head bolt with washer and nut for profile rails with slot width 18 mm.



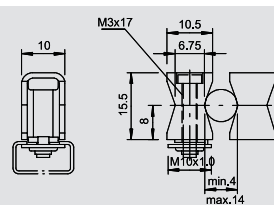
Hook-head bolt, 22 mm slot width

22

Type	Thread	Dimension L mm	Dimension D mm	Washer Ø mm	Grade	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
5024 M6x30 FT	M6	30	6	16	5.6	500	50	0.500	1154 40 3
5024 M10x30 G	M10	30	10	20	5.6	200	50	5.540	1154 41 9
5024 M10x35 G	M10	35	10	20	5.6	200	50	5.710	1154 42 7
5024 M10x40 G	M10	40	10	20	5.6	250	25	5.980	1154 43 5
5024 M12x30 G	M12	30	12	24	5.6	150	25	7.610	1154 60 5
5024 M12x35 G	M12	35	12	24	5.6	150	25	7.944	1154 61 3
5024 M12x40 G	M12	40	12	24	5.6	150	25	8.160	1154 62 1
5024 M12x50 G	M12	50	12	24	5.6	150	25	8.836	1154 64 8

ST Steel G Electrogalvanised FT Hot-dip galvanised /100 pc.

Hook-head bolt with washer and nut for profile rails with slot width 22 mm.



Series clip, slot 7.5 mm

7,5

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2049 4-14 LGR	4-14	M3 x 17	Light grey	2,000	100	0.240	2254 01 8

PS Polystyrene /100 pc.

Also suitable for C rails of 7.5 mm slot width; polystyrene clip element, impact resistant, halogen-free, light grey RAL 7035; metal parts: electrogalvanised steel.



Profile rails, system accessory



Series clip, slot 11–12 mm

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2050 5-25 LGR	5-25	M4 x 27	Light grey	1,000	100	0.660	2254 02 6

PS Polystyrene

/100 pc.

Also suitable for rails of 11 - 12 mm slot width; polystyrene clip element, impact resistant, halogen-free, light grey RAL 7035; metal parts: electrogalvanised steel.

Important dimensions, series clip

D	B	B1	H	H1
mm	mm	mm	mm	mm
5-25	14	8.5	23	12.5

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2051 8-36 LGR	8-36	M4 x 37.5	Light grey	800	100	0.970	2254 03 4

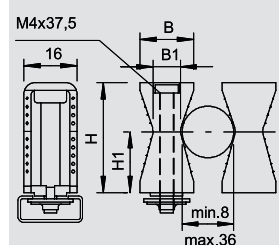
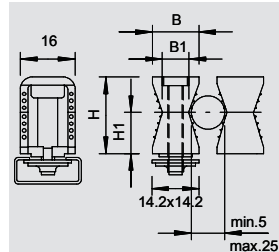
PS Polystyrene

/100 pc.

Also suitable for rails of 11 - 12 mm slot width; polystyrene clip element, impact resistant, halogen-free, light grey RAL 7035; metal parts: electrogalvanised steel.

Important dimensions, series clip

D	B	B1	H	H1
mm	mm	mm	mm	mm
8-36	16.5	8.5	34	19



Series clip, slot 16–17 mm

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2054 14-48 LGR	14-48	M8 x 55	Light grey	300	25	5.120	2255 01 4
2055 24-72 LGR	24-72	M8 x 75	Light grey	240	20	7.970	2255 02 2

PA Polyamide

/100 pc.

Heavy-duty version, also suitable for rails of 16 - 17 mm slot width; polyamide clip element, light grey RAL 7035; Metal parts: electrogalvanised steel.

Important dimensions, series clip

D	B	B1	H	H1
mm	mm	mm	mm	mm
14-48	26	13	48	24
24-72	38	15	70	35

Type	Clamping range D mm	Bolt	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2054 14-48 PA	14-48	M8 x 55	Light grey	300	25	4.300	2255 40 5

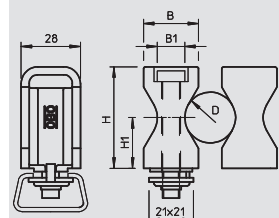
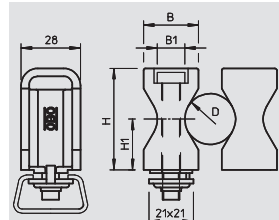
PA Polyamide

/100 pc.

Heavy-duty version, also suitable for rails of 16 - 17 mm slot width; polyamide clip element, light grey RAL 7035; Metal parts: electrogalvanised steel.

Important dimensions, series clip

D	B	B1	H	H1
mm	mm	mm	mm	mm
14-48	26	13	48	24



Impact clip, slot 11–12 mm

Type	Clamping range D mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2047 5-25 LGR	5-25	Light grey	1,000	100	0.389	2251 25 6

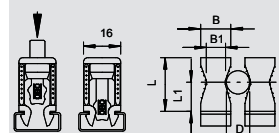
PS Polystyrene

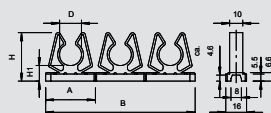
/100 pc.

Series clip without metallic parts, thus protected against corrosion; Use: lock the clip in the profile rail and fix it by hitting it with a hammer.

Important dimensions, impact clip

D	A	B	B1	L	L1
mm	mm	mm	mm	mm	mm
5-25	16	13	8	23	12.5





Series terminal clip, slot 11–12 mm

Type	Clamping range D mm	Colour	Number of clips per strip	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2036 4-7 LGR	4-7	Light grey	4	300	25	0.160	2259 07 9
2036 10-15 LGR	10-15	Light grey	4	250	25	1.700	2259 14 1
2036 18-23 LGR	18-23	Light grey	3	200	25	2.400	2259 23 0
2036 22-28 LGR	22-28	Light grey	1	250	25	1.050	2259 28 1

PE Polyethylene

/100 pc.

Individually separable, for pushing into profile rails.

Important dimensions, series terminal clip

D	A	B	H	H1
mm	mm	mm	mm	mm
4-7	12.75	51	18.5	11
10-15	25	100	26.5	9.5
18-23	38.5	115.5	37	12
22-28	51	51	44.5	13.5



Rail mounting system, MS 41

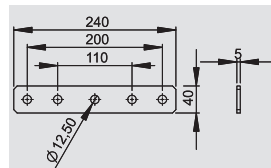


Connection plate with 5 holes

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 5 FT	With continuous perforation 12.5 mm	10	10	0.000	1124 65 1
GMS 5 FS	With continuous perforation 12.5 mm	10	10	35.000	1124 61 1

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with five holes for straight connection of profile rails 41 x 41 mm and 41 x 21 mm.

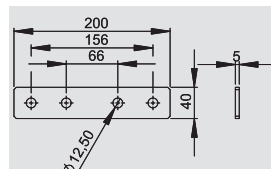


Connection plate with 4 holes

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 4 FT	With continuous perforation 12.5 mm	10	10	0.000	1124 64 9
GMS 4 FS	With continuous perforation 12.5 mm	10	10	29.000	1124 60 9

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with four holes for straight connection of profile rails 41 x 41 mm and 41 x 21 mm.

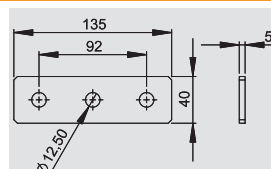


Connection plate with 3 holes

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 3 FT	With continuous perforation 12.5 mm	10	10	0.000	1124 64 7
GMS 3 FS	With continuous perforation 12.5 mm	10	10	20.000	1124 60 7

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with three holes for straight connection of profile rails 41 x 41 mm and 41 x 21 mm.

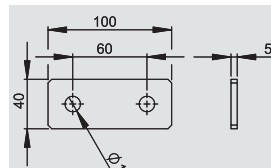


Connection plate with 2 holes

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 2 FT	With continuous perforation 12.5 mm	10	10	0.000	1124 64 5
GMS 2 FS	With continuous perforation 12.5 mm	10	10	5.000	1124 60 5

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with two holes for straight connection of profile rails 41 x 41 mm and 41 x 21 mm.

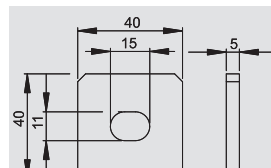


Connection plate with 1 hole

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 1 FT	With 15 x 11 mm slot	10	10	0.000	1124 64 3
GMS 1 FS	With 15 x 11 mm slot	10	10	6.000	1124 60 3

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with lengthwise slot, for example for mounting threaded rods to profile rails 41 x 41 mm and 41 x 21 mm.

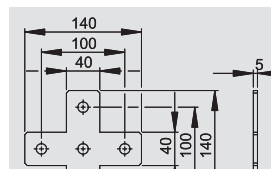


Connection plate, X-shaped

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS X FS	—	10	10	39.000	1124 61 7
GMS X FT	—	10	10	0.000	1124 65 7

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with five holes for cross connection of profile rails 41 x 41 mm and 41 x 21 mm.

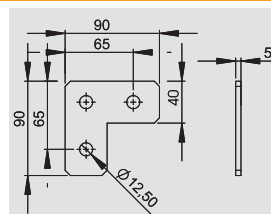


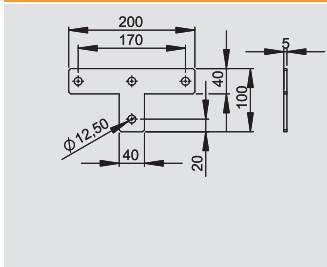
Connection plate, L-shaped

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L FS	—	10	10	20.000	1124 61 3
GMS L FT	—	10	10	0.000	1124 65 3

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Connection plate with three holes for angled connection of profile rails 41 x 41 mm and 41 x 21 mm.

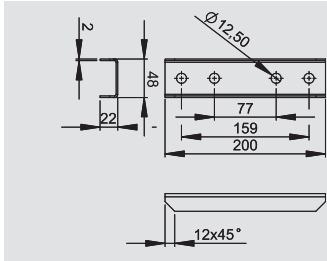




Connection plate, T-shaped

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS T FS	—	10	10	40.000	1124 61 5
GMS T FT	—	10	10	0.000	1124 65 5

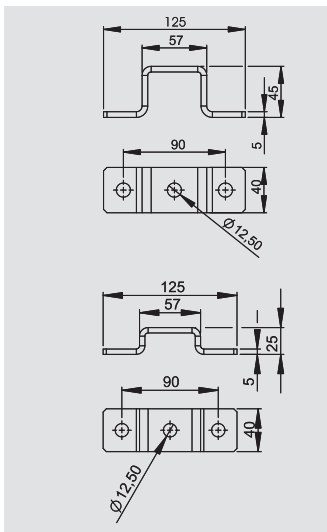
ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Connection plate with four holes for T-shaped connection of profile rails 41 x 41 mm and 41 x 21 mm.



Connectors

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GVMS FT	With continuous perforation 12.5 mm	10	10	0.000	1124 64 1
GVMS FS	With continuous perforation 12.5 mm	10	10	38.000	1124 60 1

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Connector gripping from outside with four holes for straight connection of profile rails 41 x 41 mm and 41 x 21 mm.



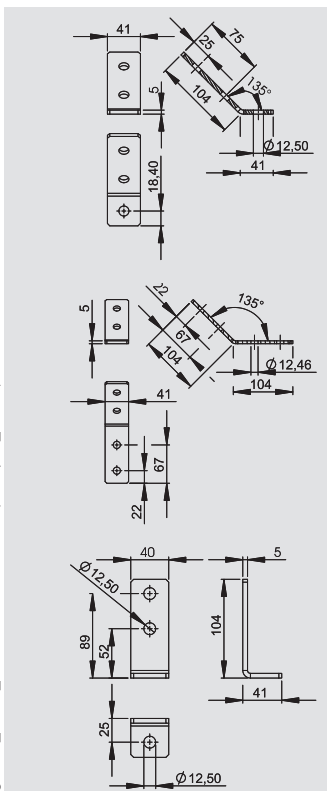
Omega clip

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 4141 FS	With continuous perforation 12.5 mm	10	10	29.000	1124 63 3
GMS 4141 FT	With continuous perforation 12.5 mm	10	10	0.000	1124 67 3

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Fastening clip with 3 holes for cross-wise connection of profile rails 41 x 41 mm.

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS 4121 FS	With continuous perforation 12.5 mm	10	10	21.000	1124 63 1
GMS 4121 FT	With continuous perforation 12.5 mm	10	10	0.000	1124 67 1

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Fastening clip with 3 holes for cross-wise connection of profile rails 41 x 21 mm.



Installation profile

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L 45 FS	45° bracket	10	10	20.000	1124 62 7
GMS L 45 FT	45° bracket	10	10	0.000	1124 66 7

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Installation profile with three holes to connect profile rails 41 x 41 mm and 41 x 21 mm at an angle of 45°.

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L 45 FS	45° bracket	10	10	30.000	1124 62 9
GMS L 45 FT	45° bracket	10	10	0.000	1124 66 9

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Installation profile with four holes to connect profile rails 41 x 41 mm and 41 x 21 mm at an angle of 45°.

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L 90 FS	90° bracket	10	10	20.000	1124 62 1
GMS L 90 FT	90° bracket	10	10	0.000	1124 66 1

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.
Installation profile with three holes to connect profile rails 41 x 41 mm and 41 x 21 mm at an angle of 90°.



Rail mounting system, MS 41



Installation profile

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L 90 FS	90° bracket	10	10	5.000	1124 61 9
GMS L 90 FT	90° bracket	10	10	0.000	1124 65 9

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

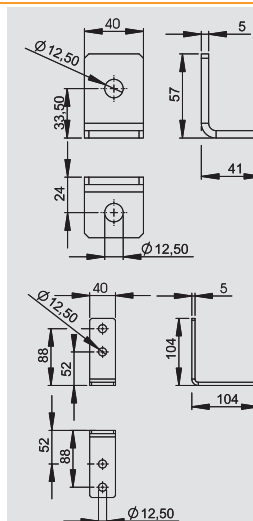
Installation profile with two holes to connect profile rails 41 x 41 mm and 41 x 21 mm at an angle of 90°.



Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L 90 FS	90° bracket	10	10	24.000	1124 62 3
GMS L 90 FT	90° bracket	10	10	0.000	1124 66 3

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Installation profile with two holes to connect profile rails 41 x 41 mm and 41 x 21 mm at an angle of 90°.

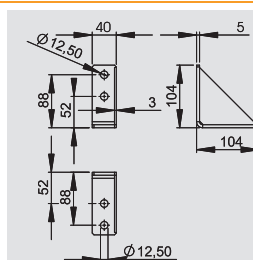


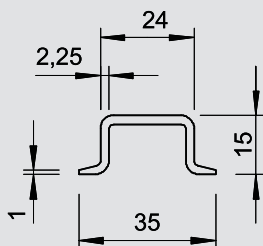
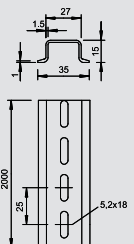
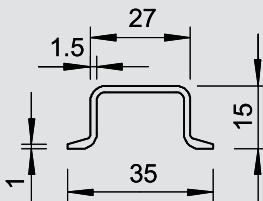
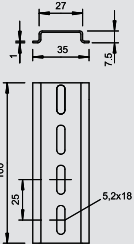
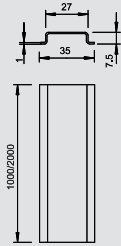
Triangular node

Type	Version	Box Qty.	Pack.	Weight	Item No.
		pcs	pcs	kg/100 pcs.	
GMS L 90 FT	90° bracket	10	10	0.000	1124 66 5
GMS L 90 FS	90° bracket	10	10	42.000	1124 62 5

ST Steel **G** Electrogalvanised **FT** Hot-dip galvanised /pc.

Reinforced mounting bracket with four holes to connect profile rails 41 x 41 mm and 41 x 21 mm at an angle of 90°.





Hat profile rail

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2069 2M BK	Unperforated	—	1	2,000	50	34.000	1115 61 8
2069 3M BK	Unperforated	—	1	3,000	—	34.400	1115 85 5
2069 1M FS	Unperforated	FS	1	1,000	25	34.000	1115 67 7
2069 2M FS	Unperforated	FS	1	2,000	50	34.000	1115 62 6
2069 1M GTP	Unperforated	GTP	1	1,000	25	34.000	1115 68 5
2069 2M GTP	Unperforated	GTP	1	2,000	50	34.000	1115 65 0

ST Steel FS Strip-galvanised Bright GTP Electrogalvanised, transparently passivated /100 m

Hat profile rail 35 x 7.5 mm to DIN EN 60715 (formerly DIN EN 50022).

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2069 2M GTPL	Perforated	GTP	1	2,000	50	33.000	1115 66 9
2069 L 2M FS	Perforated	FS	1	2,000	—	34.000	1115 80 4

ST Steel FS Strip-galvanised GTP Electrogalvanised, transparently passivated /100 m

Hat profile rail 35 x 7.5 mm to DIN EN 60715 (formerly DIN EN 50022).

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2069 15 1.5 GTP	Unperforated	GTP	1.5	2,000	20	66.000	1115 42 1

ST Steel GTP Electrogalvanised, transparently passivated /100 m

Hat profile rail 35 x 15 mm similar to DIN EN 60715 (formerly DIN EN 50022), but with material thickness 1.5 mm.

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2069 15 1.5 GTPL	Perforated	GTP	1.5	2,000	20	66.000	1115 45 6

ST Steel GTP Electrogalvanised, transparently passivated /100 m

Hat profile rail 35 x 15 mm similar to DIN EN 60715 (formerly DIN EN 50022), but with material thickness 1.5 mm.

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2069 15 2.2 GTP	Unperforated	GTP	2.25	2,000	20	97.000	1115 55 3

ST Steel GTP Electrogalvanised, transparently passivated /100 m

Hat profile rail 35 x 15 mm to DIN EN 60715 (formerly DIN EN 50022).

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³



Hat profile and support rail



Hat profile rail

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2069 15 2.2 GTPL	Perforated	GTP	2.25	2,000	20	97.000	1115 59 6

ST Steel **GTP** Electrogalvanised, transparently passivated /100 m

Hat profile rail 35 x 15 mm to DIN EN 60715 (formerly DIN EN 50022).

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
46277 GTP	Unperforated	GTP	1	2,000	50	12.400	1115 33 2
46277 GTPL	Perforated	GTP	1	2,000	50	12.400	1115 35 9

ST Steel **GTP** Electrogalvanised, transparently passivated /100 m

Hat profile rail 15 x 5 mm to DIN EN 60715 (formerly DIN EN 50045).

Static values:

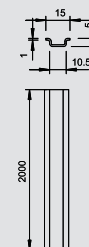
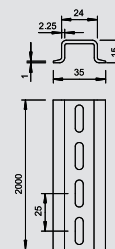
A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³



Support rail

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2064 GTP 2M	Unperforated	GTP	1.5	2,000	20	70.000	1115 05 7

ST Steel **GTP** Electrogalvanised, transparently passivated /100 m

G rail G32 to DIN EN 60715 (previously DIN EN 50035).

Static values:

A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

Type	Version	Inter- face	Material thickness	Length	Bundle	Weight	Item No.
			mm	mm	m	kg/100 m	
2064 GTPL 2M	Perforated	GTP	1.5	2,000	20	69.000	1115 06 5

ST Steel **GTP** Electrogalvanised, transparently passivated /100 m

G rail G32 to DIN EN 60715 (previously DIN EN 50035).

Static values:

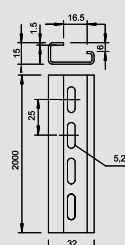
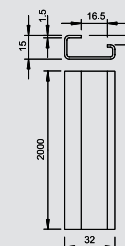
A = cm²

I_y = cm⁴

I_z = cm⁴

W_y = cm³

W_z = cm³

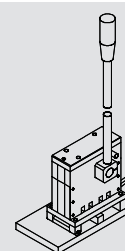


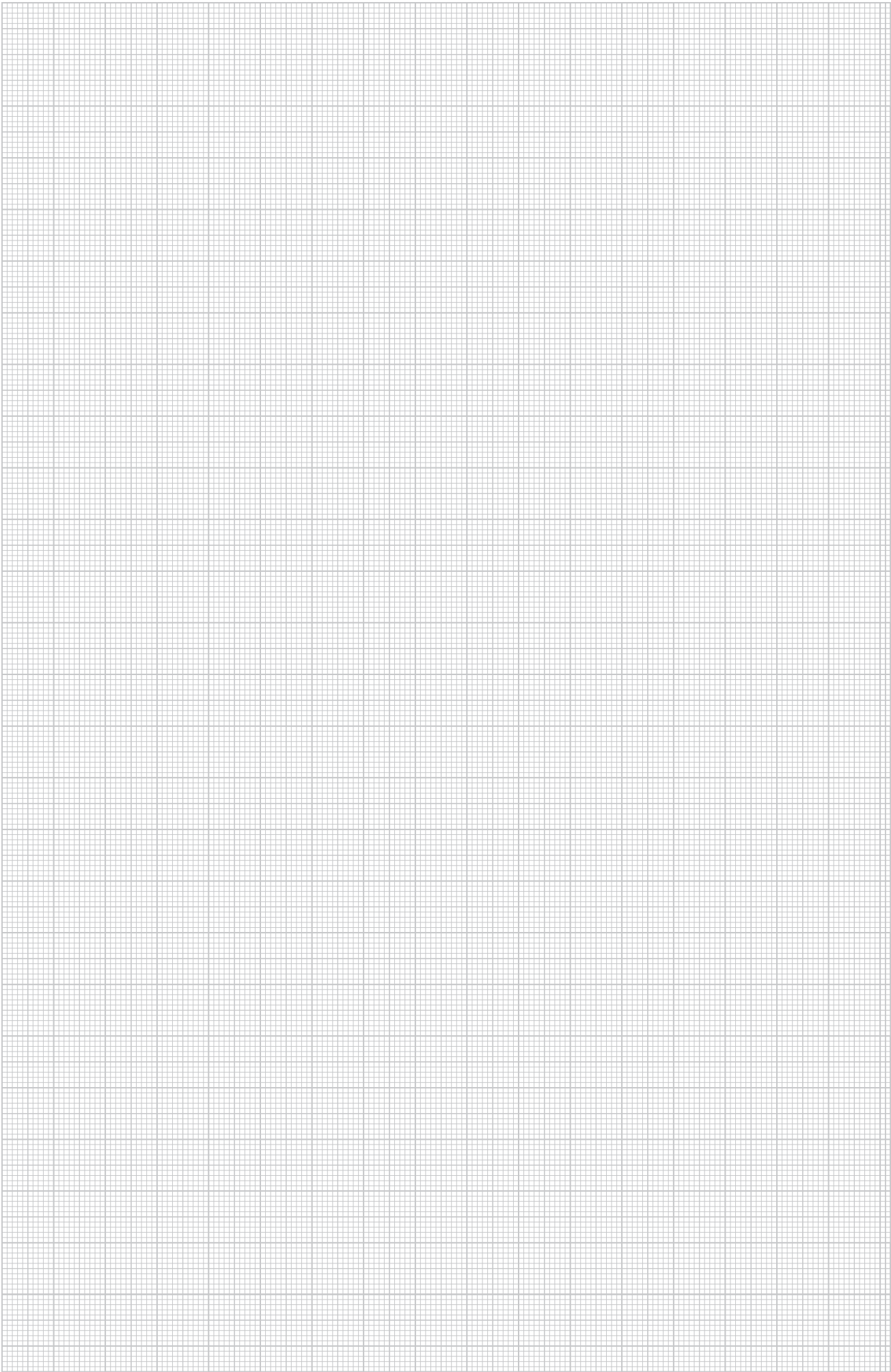
Hat and support rail cutting device

Type	Pack.	Weight	Item No.
	pcs	kg/100 pcs.	
HTS 35	1	2000.000	1125 03 6

/pc.

With the HTS 35 hat and support rail cutting device, you can cut the four most common hat and support rail profiles (types 2069..., 46277... and 2064...) to fit and without burring in accordance with DIN 50022 and DIN 50035.







BBS clamp clip systems

	Clamp clips, N base	With plastic pressure trough	352
		With metal pressure trough	354
		With screen connection	354
	Clamp clips, hammer-head base	With plastic pressure trough	355
		With metal pressure trough	359
		Fastening earthing strips	361
		Fastening pipes	361
	Clamp clips, U base	With plastic pressure trough	362
		With metal pressure trough	364
	Fastening to flat steel	With plastic pressure trough	365
		With metal pressure trough	367
	Fastening to angular steel	With plastic pressure trough	368
	Clamp clip, special application	Fastening to round profiles / pipes	370
		Hammer-head base, 3x single-wire connection	370
		U base, 3x single-wire connection	371
		Bundle clip	371
	Clamp clips, system accessories	Counter-trough	372
		Double trough	373

Clamp clips, N base



Clamp clip, single, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056N 12 FT	8-12	100	2.500	1163 12 4
2056N 16 FT	12-16	100	2.750	1163 16 7
2056N 22 FT	16-22	100	3.100	1163 22 1
2056N 28 FT	22-28	100	4.600	1163 28 0
2056N 34 FT	28-34	100	5.900	1163 34 5
2056N 40 FT	34-40	100	6.300	1163 39 6
2056N 46 FT	40-46	100	7.650	1163 46 9
2056N 52 FT	46-52	100	8.750	1163 52 3
2056N 58 FT	52-58	100	11.000	1163 58 2
2056N 64 FT	58-64	100	12.100	1163 64 7
2056N 70 FT	64-70	50	13.550	1163 70 1

ST Steel FT Hot-dip galvanised /100 pc.

Suitable for all C profile rails with slot width 11–12 mm; at least 6.5 mm clear internal height and at least 18.5 mm clear internal width.

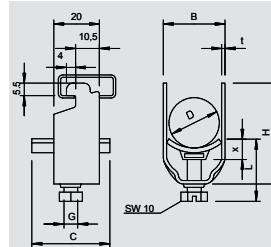
Clip and bolt made of hot-dip galvanised steel.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	34	34
12–16	20	20	34	M6	1.5	5	38	34
16–22	20	27	34	M6	1.5	5	44	34
22–28	20	33	34	M6	2	5	51	34
28–34	20	39	34	M8	2	5.5	59	37.5
34–40	20	45	34	M8	2	5.5	66	37.5
40–46	20	51	40	M8	2	5.5	72	37.5
46–52	20	57	40	M8	2	6.5	79	37.5
52–58	23	64	40	M8	2.5	6.5	86	45.5
58–64	23	70	40	M8	2.5	6.5	92	45.5
64–70	23	76	40	M8	2.5	6.5	99	45.5



Clamp clip, double, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056N 2 12 FT	8-12	50	3.500	1164 12 0
2056N 2 16 FT	12-16	50	3.850	1164 16 3
2056N 2 22 FT	16-22	50	4.650	1164 22 8
2056N 2 28 FT	22-28	50	7.500	1164 28 7
2056N 2 34 FT	28-34	50	10.050	1164 34 1
2056N 2 40 FT	34-40	50	10.050	1164 40 6
2056N 2 46 FT	40-46	50	11.050	1164 46 5
2056N 2 52 FT	46-52	50	12.400	1164 51 1
2056N 2 58 FT	52-58	50	15.600	1164 58 9

ST Steel FT Hot-dip galvanised /100 pc.

Suitable for all C profile rails with slot width 11–12 mm; at least 6.5 mm clear internal height and at least 18.5 mm clear internal width.

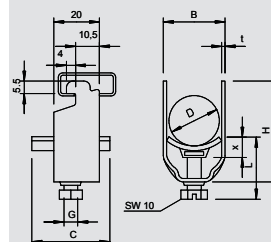
Clip and bolt made of hot-dip galvanised steel.

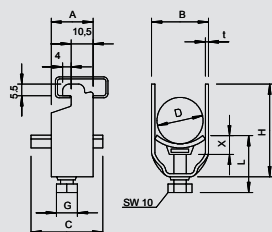
Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	49	47
12–16	20	20	34	M6	1.5	5	57	47
16–22	20	27	34	M6	1.5	5	70	59
22–28	20	33	34	M6	2	5	84	47
28–34	20	39	34	M8	2	5.5	97	56.5
34–40	20	45	34	M8	2	5.5	110	56.5
40–46	20	51	40	M8	2	5.5	124	56.5
46–52	20	57	40	M8	2	6.5	137	57.5
52–58	23	64	40	M8	2.5	6.5	150	57.5





Clamp clip, single, plastic pressure trough

Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056N 12 VA	8-12	100	2.700	1166 01 8
2056N 16 VA	12-16	100	3.800	1166 02 6
2056N 22 VA	16-22	100	4.400	1166 03 4
2056N 28 VA	22-28	100	6.500	1166 04 2
2056N 34 VA	28-34	100	8.000	1166 05 0
2056N 40 VA	34-40	100	8.300	1166 06 9
2056N 46 VA	40-46	100	11.700	1166 07 7
2056N 52 VA	46-52	100	11.150	1166 08 5
2056N 58 VA	52-58	100	15.200	1166 09 3
2056N 64 VA	58-64	100	15.250	1166 10 7

V2A Stainless steel, 1.4301

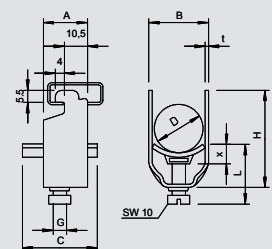
/100 pc.

Suitable for all C profile rails with slot width 11–12 mm; at least 6.5 mm clear internal height and at least 18.5 mm clear internal width; stainless steel clip and bolt, polypropylene pressure trough, halogen-free, light grey RAL 7035.

(VA pressure troughs on request).

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	34	34
12–16	20	20	34	M6	1.5	5	38	34
16–22	20	27	34	M6	1.5	5	44	34
22–28	20	33	34	M6	2	5	51	34
28–34	20	39	34	M8	2	5.5	59	37.5
34–40	20	45	34	M8	2	5.5	66	37.5
40–46	20	51	40	M8	2	5.5	72	37.5
46–52	20	57	34	M8	2	6.5	79	38.5
52–58	23	64	40	M8	2.5	6.5	86	45.5
58–64	23	70	40	M8	2.5	6.5	92	45.5



Clamp clip, single, plastic pressure trough

Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056N 12 ALU	8-12	100	0.900	1183 60 5
2056N 16 ALU	12-16	100	1.050	1183 61 3
2056N 22 ALU	16-22	100	1.200	1183 62 1
2056N 28 ALU	22-28	100	1.700	1183 64 8
2056N 34 ALU	28-34	100	2.200	1183 65 6
2056N 40 ALU	34-40	100	2.350	1183 66 4
2056N 46 ALU	40-46	100	2.850	1183 67 2
2056N 52 ALU	46-52	100	3.300	1183 68 0
2056N 58 ALU	52-58	100	4.100	1183 69 9

Al Aluminium

/100 pc.

Suitable for all profile rails with slot width 11–12 mm; at least 6.5 mm clear internal height and at least 18.5 mm clear internal width; aluminium ALMg3 clip and bolt, polypropylene pressure trough, halogen-free, light grey RAL 7035.

(Metal pressure troughs on request).

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–16	20	16	34	M6	1.5	5	34	34
12–16	20	20	34	M6	1.5	5	38	34
16–22	20	27	34	M6	1.5	5	44	34
22–28	20	33	34	M6	2	5	51	34
28–34	20	39	34	M8	2	5.5	59	37.5
34–40	20	45	34	M8	2	5.5	66	37.5
40–46	20	51	40	M8	2	5.5	72	37.5
46–52	20	57	40	M8	2	6.5	79	38.5
52–58	23	64	40	M8	2.5	6.5	86	45.5



Clamp clips, N base



Clamp clip, single, metal pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056N M 12 FT	8-12	100	2.450	1155 40 7
2056N M 16 FT	12-16	100	2.800	1155 41 5
2056N M 22 FT	16-22	100	3.150	1155 42 3
2056N M 28 FT	22-28	100	4.900	1155 43 1
2056N M 34 FT	28-34	100	6.400	1155 45 8
2056N M 40 FT	34-40	100	7.000	1155 46 6
2056N M 46 FT	40-46	100	8.500	1155 47 4
2056N M 52 FT	46-52	100	9.150	1155 48 2
2056N M 58 FT	52-58	100	12.100	1155 49 0

ST Steel

FT Hot-dip galvanised

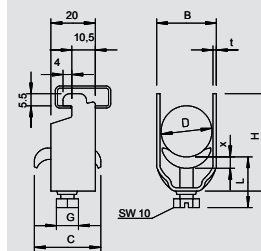
/100 pc.

Suitable for all C profile rails with slot width 11–12 mm; at least 6.5 mm clear internal height and at least 18.5 mm clear internal width; metal troughs have strongly rounded edges on all sides, so that there is no risk of cable damage.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	20	16	30	M6	1.5	3.5	34	32.5
12–16	20	20	30	M6	1.5	3.5	38	32.5
16–22	20	27	30	M6	1.5	4.5	44	33.5
22–28	20	33	30	M6	2	4.5	51	33.5
28–34	20	39	35	M8	2	4.5	59	37
34–40	20	45	35	M8	2	5	66	37
40–46	20	51	35	M8	2	5	72	37
46–52	20	57	35	M8	2	5	79	37
52–58	23	64	35	M8	2.5	5	86	37



Cable clip, screen connection

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056N SAS 8 VA	4-8	100	2.900	1167 00 6
2056N SAS 12 VA	8-12	100	3.700	1167 01 4
2056N SAS 16 VA	12-16	100	4.200	1167 02 2
2056N SAS 22 VA	16-22	100	4.850	1167 03 0
2056N SAS 28 VA	22-28	100	6.600	1167 04 9

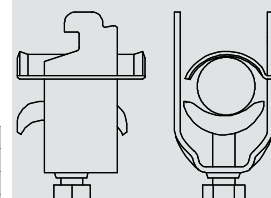
V2A Stainless steel, 1.4301

/100 pc.

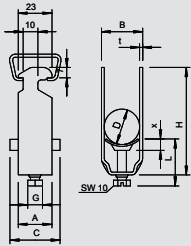
For electrical connection of the braided shield of stripped cables. Delivery complete with counter-trough; pressure trough and VA counter-trough. A cable screen for protection against electromagnetic influences, can also contribute towards equipotential bonding as both ends are connected to the reference potential.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
4–8	20	12	28	M6	1.5	3.25	30	32.5
8–12	20	16	34	M6	1.5	5	34	34
12–16	20	20	34	M6	1.5	5	38	34
16–22	20	27	34	M6	1.5	5	44	34
22–28	20	33	34	M6	2	5	51	34



Clamp clips, hammer-head base



Clamp clip, single, plastic pressure trough



Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 12 FT	8-12	100	3.540	1160 12 5
2056 16 FT	12-16	100	3.820	1160 16 8
2056 22 FT	16-22	100	4.508	1160 22 2
2056 28 FT	22-28	100	6.240	1160 28 1
2056 34 FT	28-34	100	7.680	1160 34 6
2056 40 FT	34-40	100	8.260	1160 40 0
2056 46 FT	40-46	100	10.900	1160 45 1
2056 52 FT	46-52	100	11.900	1160 52 4
2056 58 FT	52-58	100	14.300	1160 58 3
2056 64 FT	58-64	100	15.600	1160 64 8
2056 70 FT	64-70	50	18.200	1160 70 2
2056 76 FT	70-76	25	20.600	1160 76 1
2056 82 FT	76-82	25	22.000	1160 82 6
2056 90 FT	82-90	25	26.200	1160 90 7
2056 100 FT	90-100	25	27.800	1160 99 0

ST Steel FT Hot-dip galvanised /100 pc.

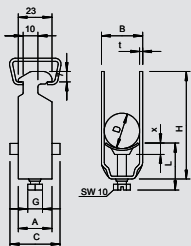
Suitable for all C profile rails with slot width 16–17 mm.

Hot-dip galvanised steel clip and bolt, polypropylene pressure trough, halogen-free, colour light - grey RAL 7035.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8-12	23	16	34	M6	1.2	5	40	34
12-16	23	20	34	M6	1.5	5	44	34
16-22	23	27	34	M6	1.5	5	50	34
22-28	23	33	34	M6	2	5	58	34
28-34	23	33	34	M8	2	5	58	34
34-40	23	45	34	M8	2	5.5	72	37.5
40-46	23	51	40	M8	2	5.5	79	44.5
46-52	23	57	40	M8	2	5.5	79	44.5
52-58	23	64	40	M8	2.5	6.5	93	45.5
58-64	23	70	40	M8	2.5	6.5	99	45.5
64-70	25	76	40	M8	2.5	6.5	106	45.5
70-76	25	82	40	M8	2.5	6.5	114	45.5
76-82	25	88	40	M8	2.5	6.5	121	45.5
82-90	25	97	40	M8	3	6.5	130	57.5
90-100	25	107	40	M8	3	6.5	140	57.5



Clamp clip, double, plastic pressure trough



Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 2 12 FT	8-12	50	4.100	1161 12 1
2056 2 16 FT	12-16	50	4.650	1161 16 4
2056 2 22 FT	16-22	50	5.150	1161 22 9
2056 2 28 FT	22-28	50	7.700	1161 28 8
2056 2 34 FT	28-34	50	10.200	1161 34 2
2056 2 40 FT	34-40	50	11.450	1161 40 7
2056 2 46 FT	40-46	50	14.950	1161 46 6
2056 2 52 FT	46-52	50	16.700	1161 52 0
2056 2 58 FT	52-58	50	21.400	1161 57 1
2056 2 64 FT	58-64	50	24.250	1161 64 4

ST Steel FT Hot-dip galvanised /100 pc.

Suitable for all C profile rails with slot width 16–17 mm.

Hot-dip galvanised steel clip and bolt, polypropylene pressure trough, halogen-free, colour light - grey RAL 7035.

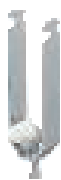
Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8-12	23	16	34	M6	1.5	5	52	34
12-16	23	20	34	M6	1.5	5	61	34
16-22	23	27	34	M6	1.5	5	73	47
22-28	23	33	34	M6	2	5	87	47
28-34	23	39	34	M8	2	5.5	101	44.5
34-40	23	45	34	M8	2	5.5	114	44.5
40-46	23	51	34	M8	2	5.5	129	44.5
46-52	23	57	34	M8	2	6.5	142	45.5
52-58	23	64	34	M8	2.5	6.5	154	45.5
58-64	23	70	40	M8	2.5	6.5	167	45.5



Clamp clips, hammer-head base



Clamp clip, triple, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 3 12 FT	8-12	50	4.900	1162 12 8
2056 3 16 FT	12-16	50	6.200	1162 16 0
2056 3 22 FT	16-22	50	7.100	1162 22 5
2056 3 28 FT	22-28	50	10.650	1162 28 4
2056 3 34 FT	28-34	50	13.100	1162 34 9
2056 3 40 FT	34-40	50	14.350	1162 40 3
2056 3 46 FT	40-46	50	19.800	1162 46 2

ST Steel **FT** Hot-dip galvanised /100 pc.

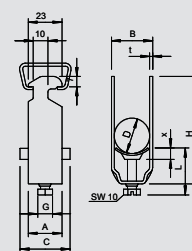
Suitable for all C profile rails with slot width 16–17 mm.

Hot-dip galvanised steel clip and bolt, polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	34	M6	1.2	5	70	47
12–16	23	20	34	M6	1.5	5	82	47
16–22	23	27	34	M6	1.5	5	101	47
22–28	23	33	34	M6	2	5	121	47
28–34	23	39	34	M8	2	5.5	142	56.5
34–40	23	45	34	M8	2	5.5	162	56.5
40–46	23	51	40	M8	2	5.5	184	56.5



Clamp clip, single, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 12 ALU	8-12	100	0.750	1183 20 6
2056 16 ALU	12-16	100	0.900	1183 21 4
2056 22 ALU	16-22	100	1.050	1183 22 2
2056 28 ALU	22-28	100	1.500	1183 23 0
2056 34 ALU	28-34	100	2.300	1183 24 9
2056 40 ALU	34-40	100	2.700	1183 25 7
2056 46 ALU	40-46	100	3.600	1183 26 5
2056 52 ALU	46-52	100	3.900	1183 27 3
2056 58 ALU	52-58	100	4.200	1183 28 1
2056 64 ALU	58-64	100	4.500	1183 30 3
2056 70 ALU	64-70	50	5.400	1183 31 1
2056 76 ALU	70-76	25	5.850	1183 33 8

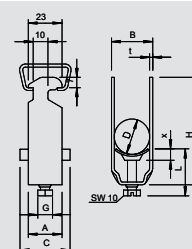
AL Aluminium /100 pc.

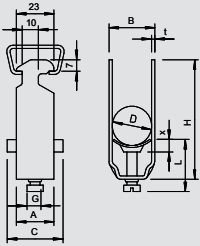
Suitable for all C profile rails with 16–17 mm slot width; aluminium ALMg 3 clamp and bolt, polypropylene pressure sleeve, halogen-free, colour light grey RAL 7035.

(Metal pressure troughs on request.)

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	40	34
12–16	23	20	34	M6	1.5	5	44	34
16–22	23	27	34	M6	1.5	5	50	34
22–28	23	33	34	M6	2	5	58	34
28–34	23	39	34	M8	2	5.5	66	37.5
34–40	23	45	34	M8	2	5.5	72	37.5
40–46	23	51	40	M8	2	5.5	79	44.5
46–52	23	57	40	M8	2	6.5	86	45.5
52–58	23	64	40	M8	2.5	6.5	93	45.5
58–64	23	70	40	M8	2.5	6.5	99	45.5
64–70	25	76	40	M8	2.5	6.5	106	45.5
70–76	25	82	40	M8	2.5	6.5	114	45.5





Clamp clip, double, plastic pressure trough



Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056 2 12 ALU	8-12	50	1.000	1183 38 9
2056 2 16 ALU	12-16	50	1.250	1183 39 7
2056 2 22 ALU	16-22	50	1.500	1183 40 0
2056 2 28 ALU	22-28	50	2.000	1183 41 9
2056 2 34 ALU	28-34	50	3.200	1183 42 7
2056 2 40 ALU	34-40	50	3.750	1183 43 5
2056 2 46 ALU	40-46	50	4.850	1183 44 3
2056 2 52 ALU	46-52	50	5.300	1183 45 1
2056 2 58 ALU	52-58	50	6.000	1183 47 8

Al Aluminium

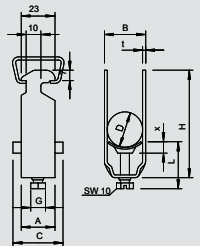
/100 pc.

Suitable for all C profile rails with 16–17 mm slot width; aluminium ALMg 3 clamp and bolt, polypropylene pressure sleeve, halogen-free, colour light grey RAL 7035.

(Metal pressure troughs on request.)

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	52	34
12–16	23	20	34	M6	1.5	5	61	34
16–22	23	27	34	M6	1.5	5	73	47
22–28	23	33	34	M6	2	5	87	47
28–34	23	39	34	M8	2	5.5	101	44.5
34–40	23	45	34	M8	2	5.5	114	44.5
40–46	23	51	40	M8	2	5.5	129	44.5
46–52	23	57	40	M8	2	6.5	142	45.5
52–58	23	64	40	M8	2.5	6.5	93	45.5



Clamp clip, triple, plastic pressure trough



Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056 3 22 ALU	16-22	50	2.050	1183 52 4
2056 3 28 ALU	22-28	50	2.900	1183 53 2
2056 3 34 ALU	28-34	50	4.200	1183 54 0

Al Aluminium

/100 pc.

Suitable for all C profile rails with 16–17 mm slot width; aluminium ALMg 3 clamp and bolt, polypropylene pressure sleeve, halogen-free, colour light grey RAL 7035.

(Metal pressure troughs on request.)

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
16–22	23	27	34	M6	1.5	5	101	34
22–28	23	33	34	M6	2	5	121	47
28–34	23	39	34	M8	2	5.5	142	56.5



Clamp clips, hammer-head base



Clamp clip, single, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 12 VA	8-12	100	3.300	1159 51 8
2056 16 VA	12-16	100	3.600	1159 52 6
2056 22 VA	16-22	100	4.200	1159 53 4
2056 28 VA	22-28	100	6.500	1159 54 2
2056 34 VA	28-34	100	7.400	1159 55 0
2056 40 VA	34-40	100	8.000	1159 56 9
2056 46 VA	40-46	100	10.900	1159 57 7
2056 52 VA	46-52	100	11.400	1159 58 5
2056 58 VA	52-58	100	14.500	1159 59 3
2056 64 VA	58-64	100	15.600	1159 60 7
2056 70 VA	64-70	50	18.200	1159 61 5
2056 76 VA	70-76	25	20.800	1159 62 3

V2A Stainless steel, 1.4301

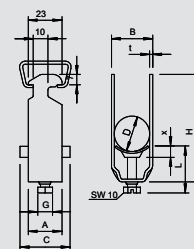
/100 pc.

Suitable for all C profile rails with slot width 16–17 mm.

Stainless steel clip and bolt, polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	40	34
12–16	23	20	34	M6	1.5	5	44	34
16–22	23	27	34	M6	1.5	5	50	34
22–28	23	33	34	M6	2	5	58	34
28–34	23	39	34	M8	2	5.5	66	37.5
34–40	23	45	34	M8	2	5.5	72	37.5
40–46	23	51	34	M8	2	5.5	79	44.5
46–52	23	57	40	M8	2	6.5	86	45.5
52–58	23	64	40	M8	2.5	6.5	93	45.5
58–64	23	70	40	M8	2.5	6.5	99	45.5
64–70	25	76	40	M8	2.5	6.5	106	45.5
70–76	25	82	40	M8	2.5	6.5	114	45.5



Clamp clip, double, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 2 22 VA	16-22	50	5.150	1161 82 2
2056 2 28 VA	22-28	50	7.700	1161 83 0
2056 2 34 VA	28-34	50	10.200	1161 84 9
2056 2 40 VA	34-40	50	11.450	1161 85 7
2056 2 46 VA	40-46	50	14.950	1161 86 5
2056 2 52 VA	46-52	50	16.700	1161 87 3
2056 2 58 VA	52-58	50	21.400	1161 88 1
2056 2 64 VA	58-64	50	24.250	1161 90 3

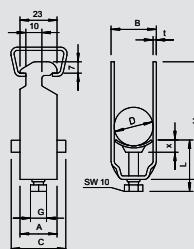
V2A Stainless steel, 1.4301

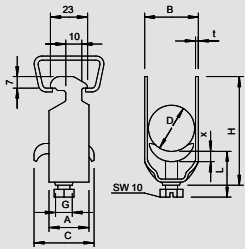
/100 pc.

Suitable for all C profile rails with slot width 16–17 mm; stainless steel clip and bolt, polypropylene pressure trough, halogen-free, light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm
16–22	23	27	34	M6	1.5	5	73	47
22–28	23	33	34	M6	2	5	87	47
28–34	23	39	34	M8	2	5.5	101	44.5
34–40	23	45	34	M8	2	5.5	114	44.5
40–46	23	51	40	M8	2	5.5	129	44.5
46–52	23	57	40	M8	2	6.5	142	45.5
52–58	23	64	40	M8	2.5	6.5	154	45.5
58–64	23	70	40	M8	2.5	6.5	167	45.5





Clamp clip, single, metal pressure trough



Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 M 12 FT	8-12	100	3.200	1156 00 4
2056 M 16 FT	12-16	100	3.500	1156 01 2
2056 M 22 FT	16-22	100	4.400	1156 02 0
2056 M 28 FT	22-28	100	6.100	1156 03 9
2056 M 34 FT	28-34	100	7.700	1156 04 7
2056 M 40 FT	34-40	100	8.600	1156 05 5
2056 M 46 FT	40-46	100	9.600	1156 06 3
2056 M 52 FT	46-52	100	10.400	1156 07 1
2056 M 58 FT	52-58	100	13.100	1156 09 8
2056 M 64 FT	58-64	100	14.500	1156 10 1
2056 M 70 FT	64-70	50	16.100	1156 12 8
2056 M 76 FT	70-76	25	18.300	1156 13 6
2056 M 82 FT	76-82	25	19.100	1156 14 4
2056 M 90 FT	82-90	25	23.300	1156 15 2
2056 M 100 FT	90-100	25	25.400	1156 16 0

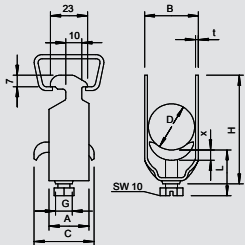
ST Steel FT Hot-dip galvanised /100 pc.

Suitable for all C profile rails with slot width 16–17 mm.
Clip, bolt and pressure trough made of hot-dip galvanised steel.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	30	M6	1.5	3.5	40	32.5
12–16	23	20	30	M6	1.5	3.5	44	32.5
16–22	23	27	30	M6	1.5	4.5	50	46.5
22–28	23	33	30	M6	2	4.5	58	46.5
28–34	23	39	35	M8	2	5	66	44
34–40	23	45	35	M8	2	5	72	44
40–46	23	51	35	M8	2	5	79	44
46–52	23	57	35	M8	2	5	86	44
52–58	23	64	35	M8	2.5	5	93	44
58–64	23	70	35	M8	2.5	5	99	56
64–70	25	76	35	M8	2.5	5	106	56
70–76	25	82	40	M8	2.5	5	114	56
76–82	25	88	40	M8	2.5	5	121	56
82–90	25	97	40	M8	3	5	130	56
90–100	25	107	40	M8	3	5	140	56



Clamp clip, double, metal pressure trough



Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 M2 12 FT	8-12	50	3.980	1156 17 9
2056 M2 16 FT	12-16	50	4.750	1156 18 7
2056 M2 22 FT	16-22	50	6.900	1156 19 5
2056 M2 28 FT	22-28	50	7.800	1156 20 9

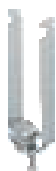
ST Steel FT Hot-dip galvanised /100 pc.

Suitable for all C profile rails with slot width 16–17 mm.
Clip, bolt and pressure trough made of hot-dip galvanised steel.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	52	34
12–16	23	20	34	M6	1.5	5	61	34
16–22	23	27	34	M6	1.5	5	73	47
22–28	23	33	34	M6	2	5	87	47

Clamp clips, hammer-head base



Clamp clip, triple, metal pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 M3 12 FT	8-12	50	4.050	1156 24 1
2056 M3 16 FT	12-16	50	5.800	1156 26 8
2056 M3 22 FT	16-22	50	6.500	1156 27 6
2056 M3 28 FT	22-28	50	9.500	1156 28 4

ST Steel

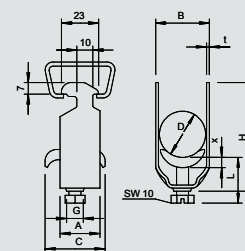
FT Hot-dip galvanised

/100 pc.

Suitable for all C profile rails with slot width 16–17 mm.
Clip, bolt and pressure trough made of hot-dip galvanised steel.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	34	M6	1.2	5	70	47
12–16	23	20	34	M6	1.5	5	82	47
16–22	23	27	34	M6	1.5	5	101	47
22–28	23	33	34	M6	2	5	121	47



Clamp clip, single, metal pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 M 12 VA	8-12	50	3.200	1159 71 2
2056 M 16 VA	12-16	50	3.500	1159 71 6
2056 M 22 VA	16-22	50	4.400	1159 72 2
2056 M 28 VA	22-28	50	6.100	1159 72 8
2056 M 34 VA	28-34	50	7.700	1159 73 4
2056 M 40 VA	34-40	25	8.600	1159 74 0
2056 M 46 VA	40-46	25	9.600	1159 74 6
2056 M 52 VA	46-52	25	10.400	1159 75 2
2056 M 58 VA	52-58	15	13.100	1159 75 8
2056 M 64 VA	58-64	15	14.500	1159 76 4
2056 M 70 VA	64-70	15	16.100	1159 77 0
2056 M 76 VA	70-76	10	18.300	1159 77 6

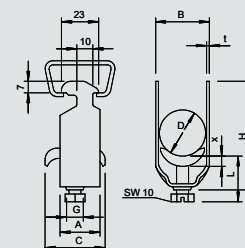
V2A Stainless steel, 1.4301

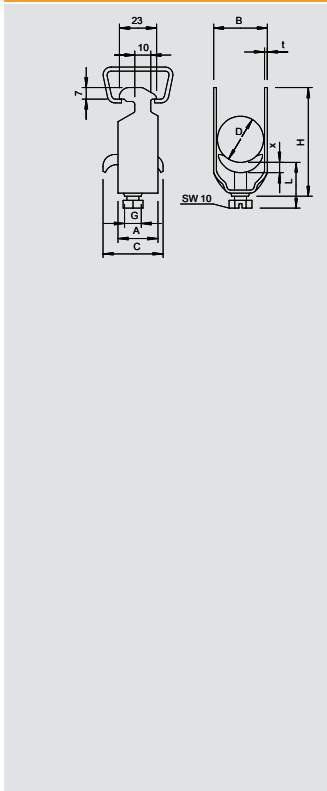
/100 pc.

Suitable for all C profile rails with slot width 16–17 mm.
Clip, bolt and pressure trough all made of rust-proof stainless steel.

Important clamp clip dimensions

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	30	M6	1.5	3.5	44	32.5
12–16	23	20	30	M6	1.5	3.5	44	32.5
16–22	23	27	30	M6	1.5	4.5	60	46.5
22–28	23	33	30	M6	2	4.5	58	46.5
28–34	23	39	35	M8	2	5	66	44
34–40	23	45	35	M8	2	5	72	44
40–46	23	51	35	M8	2	5	79	44
46–52	23	57	35	M8	2	5	86	44
52–58	23	64	35	M8	2.5	5	93	44
58–64	23	70	35	M8	2.5	5	99	56
64–70	25	76	35	M8	2.5	5	106	56
70–76	25	82	40	M8	2.5	5	114	56





Clamp clip, double, metal pressure trough

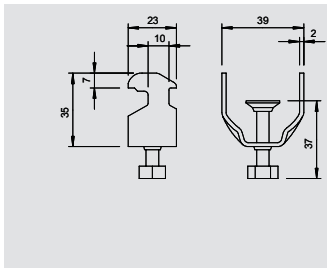
Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056 M2 12 VA	8-12	50	3.980	1161 91 2
2056 M2 16 VA	12-16	50	4.750	1161 91 6
2056 M2 22 VA	16-22	50	6.900	1161 92 2
2056 M2 28 VA	22-28	50	7.800	1161 92 8
2056 M2 34 VA	28-34	50	10.030	1161 93 4
2056 M2 40 VA	34-40	25	11.205	1161 94 0
2056 M2 46 VA	40-46	25	13.300	1161 94 6
2056 M2 52 VA	46-52	25	14.400	1161 95 2
2056 M2 58 VA	52-58	25	18.550	1161 95 8
2056 M2 64 VA	58-64	15	20.010	1161 96 4

V2A Stainless steel, 1.4301 /100 pc.

Suitable for all C profile rails with slot width 16–17 mm.
Clip, bolt and pressure trough all made of rust-proof stainless steel.

Important clamp clip dimensions

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	52	34
12–16	23	20	34	M6	1.5	5	61	34
16–22	23	27	34	M6	1.5	5	73	47
20–28	23	33	34	M6	2	5	87	47
28–34	23	39	33	M8	2	5	101	45
34–40	23	45	33	M8	2	5	114	45
40–46	23	51	33	M8	2	5	129	47
46–52	23	57	33	M8	2.5	5	142	47
52–58	23	64	33	M8	2.5	5	154	47
58–64	23	70	33	M8	2.5	5	167	47

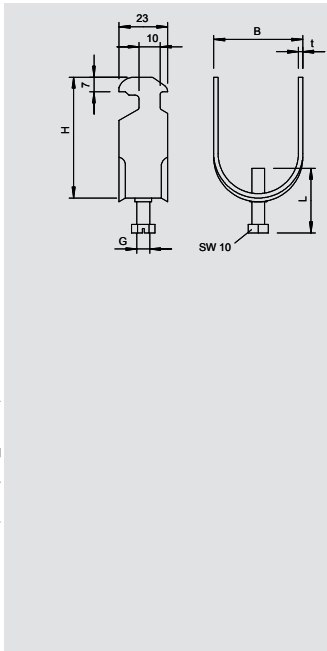


Clamp clip, fastening earthing strips

Type	for rail with slot width mm	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
2056 BE FT	16-17	100	4.700	1174 05 3

ST Steel **FT** Hot-dip galvanised /100 pc.

To fasten earthing strips with widths of up to 30 mm to profile rails, suitable for all C profile rails with 16–17 mm slot width.



Clamp clip, fastening pipes

Type	Size	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
2057 M16 FT	M16	100	3.500	1193 70 8
2057 M20 FT	M20	100	4.400	1193 71 6
2057 M25 FT	M25	100	6.100	1193 72 4
2057 M32 FT	M32	100	7.700	1193 73 2
2057 M40 FT	M40	100	8.600	1193 74 0
2057 M50 FT	M50	100	10.400	1193 75 9
2057 M63 FT	M63	100	14.500	1193 76 7

ST Steel **FT** Hot-dip galvanised /100 pc.

To fasten metric steel armoured pipes to profile rails, also suitable for all C profile rails with 16–17 mm slot width.

Important dimensions, clamp clip

Size	B	H	t	G	L
	mm	mm	mm		mm
M16	20	44	1.5	M6	34
M20	27	50	1.5	M6	34
M25	33	58	2	M6	34
M32	39	66	2	M8	36
M40	45	72	2	M8	36
M50	57	86	2	M8	39
M63	70	99	2.5	M8	39



Clamp clips, U base



Clamp clip, single, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056U 12 FT	8-12	100	3.150	1175 12 2
2056U 16 FT	12-16	100	3.600	1175 16 5
2056U 22 FT	16-22	100	4.200	1175 21 1
2056U 28 FT	22-28	100	5.800	1175 28 9
2056U 34 FT	28-34	100	7.500	1175 34 3
2056U 40 FT	34-40	100	8.100	1175 40 8
2056U 46 FT	40-46	100	10.000	1175 46 7
2056U 52 FT	46-52	100	11.200	1175 52 1
2056U 58 FT	52-58	100	13.400	1175 58 0
2056U 64 FT	58-64	100	14.300	1175 64 5
2056U 70 FT	64-70	50	15.250	1175 69 6
2056U 76 FT	70-76	25	20.600	1175 76 9
2056U 82 FT	76-82	25	22.000	1175 82 3
2056U 90 FT	82-90	25	26.200	1175 90 4
2056U 100 FT	90-100	25	30.000	1175 99 8

ST Steel

FT Hot-dip galvanised

/100 pc.

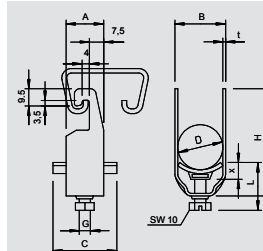
Suitable for all C profile rails with slot width 18 mm. Also suitable for flat, angular and U irons of 4–12 mm material thickness.

Clip and bolt made of hot-dip galvanised steel.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	42	34
12–16	20	20	34	M6	1.5	5	46	34
16–22	20	27	34	M6	1.5	5	53	34
22–28	20	33	34	M6	2	5	59	34
28–34	20	39	34	M8	2	5.5	67	37.5
34–40	20	45	34	M8	2	5.5	73	37.5
40–46	20	51	40	M8	2	5.5	79	37.5
46–52	20	57	40	M8	2	6.5	85	38.5
52–58	23	64	40	M8	2.5	6.5	91	38.5
58–64	23	70	40	M8	2.5	6.5	97	38.5
64–70	23	76	40	M8	2.5	6.5	103	38.5
70–76	25	82	40	M8	2.5	6.5	110	45.5
76–82	25	88	40	M8	2.5	6.5	116	45.5
82–90	25	97	40	M8	3	6.5	125	45.5
90–100	25	107	40	M8	3	6.5	135	45.5



Clamp clip, double, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056U 2 12 FT	8-12	50	2.850	1176 12 9
2056U 2 16 FT	12-16	50	3.050	1176 16 1
2056U 2 22 FT	16-22	50	4.950	1176 22 6
2056U 2 28 FT	22-28	50	6.940	1176 28 5
2056U 2 34 FT	28-34	50	9.500	1176 33 1
2056U 2 40 FT	34-40	50	11.350	1176 40 4
2056U 2 46 FT	40-46	50	11.350	1176 46 3
2056U 2 52 FT	46-52	50	15.050	1176 52 8
2056U 2 58 FT	52-58	50	19.800	1176 58 7

ST Steel

FT Hot-dip galvanised

/100 pc.

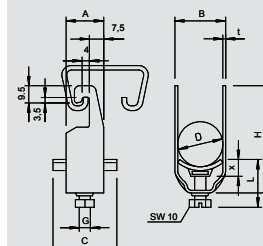
Suitable for all C profile rails with slot width 18 mm. Also suitable for flat, angular and U irons of 4–12 mm material thickness.

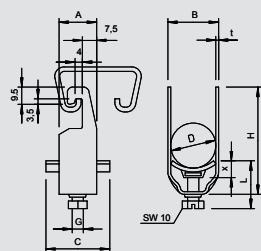
Clip and bolt made of hot-dip galvanised steel.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	56	34
12–16	20	20	34	M6	1.5	5	64	34
16–22	20	27	34	M6	1.5	5	77	47
22–28	20	33	34	M6	2	5	89	47
28–34	20	39	34	M8	2	5.5	103	44.5
34–40	20	45	34	M8	2	5.5	115	44.5
40–46	20	51	40	M8	2	5.5	128	44.5
46–52	20	57	40	M8	2	6.5	140	45.5
52–58	20	64	40	M8	2.5	6.5	152	45.5





Clamp clip, triple, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056U 3 12 FT	8-12	50	4.750	1177 12 5
2056U 3 16 FT	12-16	50	4.850	1177 16 8
2056U 3 22 FT	16-22	50	6.600	1177 22 2
2056U 3 28 FT	22-28	50	10.500	1177 28 1
2056U 3 34 FT	28-34	50	13.250	1177 34 6
2056U 3 40 FT	34-40	50	14.400	1177 40 0
2056U 3 46 FT	40-46	50	18.950	1177 45 1

ST Steel FT Hot-dip galvanised /100 pc.

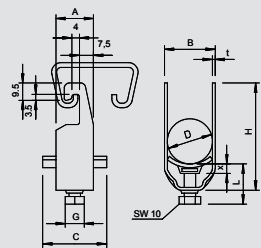
Suitable for all C profile rails with slot width 18 mm. Also suitable for flat, angular and U irons of 4–12 mm material thickness.

Clip and bolt made of hot-dip galvanised steel.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	70	47
12–16	20	20	34	M6	1.5	5	82	47
16–22	20	27	34	M6	1.5	5	101	47
22–28	20	33	34	M6	2	5	119	47
28–34	20	39	34	M6	2	5.5	139	44.5
34–40	20	45	34	M8	2	5.5	157	44.5
40–46	20	51	40	M8	2	5.5	177	56.5



Clamp clip, single, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056U 12 VA	8-12	100	3.000	1178 50 4
2056U 16 VA	12-16	100	3.200	1178 51 2
2056U 22 VA	16-22	100	3.800	1178 52 0
2056U 28 VA	22-28	100	5.350	1178 53 9
2056U 34 VA	28-34	100	7.200	1178 54 7
2056U 40 VA	34-40	100	8.100	1178 55 5
2056U 46 VA	40-46	100	9.900	1178 56 3
2056U 52 VA	46-52	100	11.200	1178 57 1
2056U 58 VA	52-58	100	13.400	1178 59 8
2056U 64 VA	58-64	100	14.300	1178 60 1
2056U 70 VA	64-70	50	20.500	1178 62 8
2056U 76 VA	70-76	25	19.100	1178 63 6

V2A Stainless steel, 1.4301 /100 pc.

Suitable for all C profile rails with slot width 18 mm. Also suitable for flat, angular and U irons of 4–12 mm material thickness.

Stainless steel clip and bolt.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	42	34
12–16	20	20	34	M6	1.5	5	46	34
16–22	20	27	34	M6	1.5	5	53	34
22–28	20	33	34	M6	2	5	59	34
28–34	20	39	34	M8	2	5.5	67	37.5
34–40	20	45	34	M8	2	5.5	73	37.5
40–46	20	51	40	M8	2	5.5	79	37.5
46–52	20	57	40	M8	2	6.5	85	38.5
52–58	23	64	40	M8	2.5	6.5	91	38.5
58–64	23	70	40	M8	2.5	6.5	97	38.5
64–70	23	76	40	M8	2.5	6.5	103	38.5
70–76	25	82	40	M8	2.5	6.5	110	45.5



Clamp clips, U base



Clamp clip, single, plastic pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056U 12 ALU	8-12	100	1.100	1184 40 7
2056U 16 ALU	12-16	100	1.200	1184 41 5
2056U 22 ALU	16-22	100	1.350	1184 42 3
2056U 28 ALU	22-28	100	1.950	1184 43 1
2056U 34 ALU	28-34	100	2.550	1184 45 8
2056U 40 ALU	34-40	100	2.800	1184 46 6
2056U 46 ALU	40-46	100	3.600	1184 47 4
2056U 52 ALU	46-52	100	3.950	1184 48 2
2056U 58 ALU	52-58	100	4.900	1184 49 0
2056U 64 ALU	58-64	100	5.250	1184 50 4
2056U 70 ALU	64-70	50	5.600	1184 53 9
2056U 76 ALU	70-76	25	7.050	1184 51 2

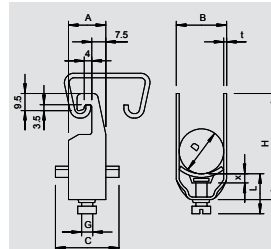
Al Aluminium

/100 pc.

Suitable for all C profile rails with slot width 18 mm. Also suitable for flat, bracket and U irons of 4–12 mm material thickness. Aluminium ALMg3 U clamp and bolt, polypropylene pressure sleeve, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	20	16	34	M6	1.5	5	42	34
12–16	20	20	34	M6	1.5	5	46	34
16–22	20	27	34	M6	1.5	5	53	34
22–28	20	33	34	M6	2	5	59	34
28–34	20	39	34	M8	2	5.5	67	37.5
34–40	20	45	34	M8	2	5.5	73	37.5
40–46	20	51	40	M8	2	5.5	79	37.5
46–52	20	57	40	M8	2	6.5	85	38.5
52–58	23	64	40	M8	2.5	6.5	91	38.5
58–64	23	70	40	M8	2.5	6.5	97	38.5
64–70	23	76	40	M8	2.5	6.5	103	38.5
70–76	23	82	40	M8	2.5	6.5	110	45.5



Clamp clip, single, metal pressure trough

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056U M 12 FT	8-12	100	3.300	1158 00 7
2056U M 16 FT	12-16	100	3.520	1158 01 5
2056U M 22 FT	16-22	100	3.960	1158 02 3
2056U M 28 FT	22-28	100	5.890	1158 03 1
2056U M 34 FT	28-34	100	7.650	1158 05 8
2056U M 40 FT	34-40	100	8.360	1158 06 6
2056U M 46 FT	40-46	100	10.890	1158 07 4
2056U M 52 FT	46-52	100	11.660	1158 08 2
2056U M 58 FT	52-58	100	14.740	1158 09 0
2056U M 64 FT	58-64	100	15.730	1158 10 4
2056U M 70 FT	64-70	50	18.200	1158 11 2
2056U M 76 FT	70-76	25	20.600	1158 12 0

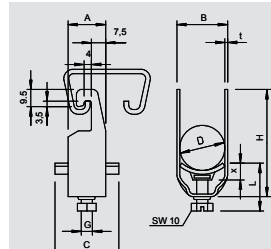
ST Steel

FT Hot-dip galvanised

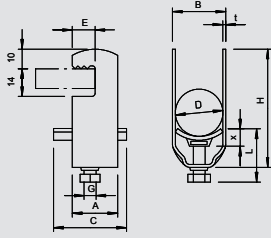
/100 pc.

Suitable for all C profile rails with slot width 18 mm. Also suitable for flat, angular and U irons of 4–12 mm material thickness.

Clip, bolt and pressure trough made of hot-dip galvanised steel.



Clamp clips, fastening to flat iron



Clamp clip, single, plastic pressure trough



Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056F 12 FT	8-12	100	3.700	1169 12 2
2056F 16 FT	12-16	100	3.900	1169 16 5
2056F 22 FT	16-22	100	4.500	1169 21 1
2056F 28 FT	22-28	100	6.000	1169 28 9
2056F 34 FT	28-34	100	8.000	1169 34 3
2056F 40 FT	34-40	100	8.500	1169 40 8
2056F 46 FT	40-46	100	10.600	1169 46 7
2056F 52 FT	46-52	100	11.700	1169 52 1
2056F 58 FT	52-58	100	13.050	1169 58 0
2056F 64 FT	58-64	100	14.800	1169 64 5
2056F 70 FT	64-70	50	17.700	1169 69 6
2056F 76 FT	70-76	25	20.600	1169 76 9
2056F 82 FT	76-82	25	22.000	1169 82 3
2056F 90 FT	82-90	25	26.200	1169 90 4

ST Steel **FT** Hot-dip galvanised /100 pc.

Suitable for flat, bracket and U irons of 4–12 mm material thickness.

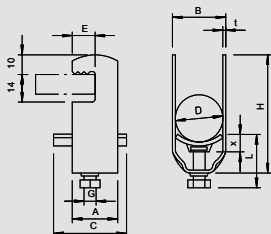
Clip and bolt made of hot-dip galvanised steel.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	43	34
12–16	23	20	34	M6	1.5	5	47	34
16–22	23	27	34	M6	1.5	5	54	34
22–28	23	33	34	M6	2	5	60	34
28–34	23	39	13	M8	2	5.5	68	37.5
34–40	23	45	34	M8	2	5.5	74	37.5
40–46	25	51	40	M8	2	5.5	80	37.5
46–52	25	57	40	M8	2	6.5	86	38.5
52–58	25	64	40	M8	2.5	6.5	92	38.5
58–64	25	70	40	M8	2.5	6.5	98	38.5
64–70	25	76	40	M8	2.5	6.5	104	38.5
70–76	25	82	40	M8	2.5	6.5	111	45.5
76–82	25	88	40	M8	2.5	6.5	117	45.5
82–90	25	97	40	M8	3	6.5	126	45.5



Clamp clip, double, plastic pressure trough



Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056F 2 12 FT	8-12	50	4.250	1170 12 0
2056F 2 16 FT	12-16	50	4.550	1170 16 3
2056F 2 22 FT	16-22	50	5.200	1170 22 8
2056F 2 28 FT	22-28	50	7.900	1170 28 7
2056F 2 34 FT	28-34	50	9.900	1170 34 1
2056F 2 40 FT	34-40	50	11.200	1170 40 6
2056F 2 46 FT	40-46	50	12.000	1170 46 5
2056F 2 52 FT	46-52	50	16.600	1170 51 1

ST Steel **FT** Hot-dip galvanised /100 pc.

Suitable for flat, bracket and U irons of 4–12 mm material thickness.

Clip and bolt made of hot-dip galvanised steel.

Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Version with welding and/or locknuts for use under difficult circumstances and for shake protection on request.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8–12	23	16	34	M6	1.5	5	57	34
12–16	23	20	34	M6	1.5	5	65	34
16–22	23	27	34	M6	1.5	5	54	34
22–28	23	33	34	M6	2	5	90	47
28–34	23	39	34	M8	2	5.5	68	37.5
34–40	23	45	13	M8	2	5.5	74	37.5
40–46	25	51	40	M8	2	5.5	37.5	128
46–52	25	57	40	M8	2	6.5	86	38.5



Clamp clips, fastening to flat iron



Clamp clip, single, plastic pressure trough

Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056F 12 VA	8-12	100	3.700	1185 00 4
2056F 16 VA	12-16	100	3.900	1185 01 2
2056F 22 VA	16-22	100	4.500	1185 02 0
2056F 28 VA	22-28	100	6.000	1185 03 9
2056F 34 VA	28-34	100	8.000	1185 04 7
2056F 40 VA	34-40	100	8.500	1185 05 5
2056F 46 VA	40-46	100	10.600	1185 06 3
2056F 52 VA	46-52	100	11.700	1185 07 1
2056F 58 VA	52-58	100	13.050	1185 09 8
2056F 64 VA	58-64	100	14.800	1185 10 1

V2A Stainless steel, 1.4301

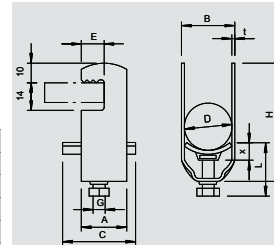
/100 pc.

For flat, angular and U irons of 4–12 mm thickness; rust-proof stainless steel clip and bolt, polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

(VA pressure trough on request.)

Important dimensions, clamp clip

D	A	B	C	E	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	34	13	M6	1.5	5	43	34
12–16	23	20	34	13	M6	1.5	5	47	34
16–22	23	27	34	13	M6	1.5	5	54	34
22–28	23	33	34	13	M6	2	5	60	34
28–34	23	39	34	13	M8	2	5.5	68	37.5
34–40	23	45	34	13	M8	2	5.5	74	37.5
40–46	25	51	40	13	M8	2	5.5	80	37.5
46–52	25	57	40	13	M8	2	6.5	86	38.5
52–58	25	64	40	13	M8	2.5	6.5	92	38.5
58–64	25	70	40	13	M8	2.5	6.5	98	38.5



Clamp clip, single, plastic pressure trough

Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056F 12 ALU	8-12	100	1.200	1184 70 9
2056F 16 ALU	12-16	100	1.250	1184 71 7
2056F 22 ALU	16-22	100	1.450	1184 72 5
2056F 28 ALU	22-28	100	2.050	1184 73 3
2056F 34 ALU	28-34	100	2.650	1184 74 1
2056F 40 ALU	34-40	100	2.850	1184 76 8
2056F 46ALU	40-46	100	3.650	1184 77 6

Al Aluminium

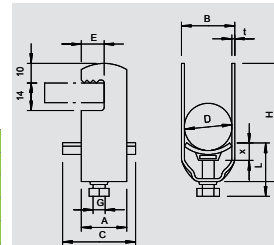
/100 pc.

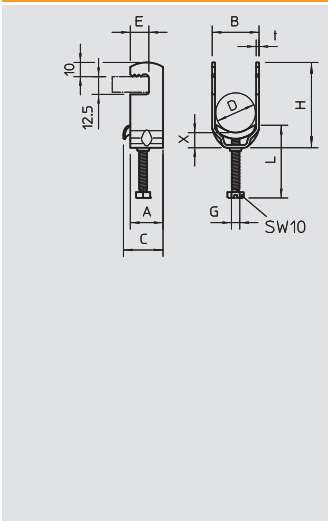
For flat, angular and U irons of 4–12 mm thickness; aluminium ALMg3 clip and bolt, polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

(Metal pressure trough on request.)

Important dimensions, clamp clip

D	A	B	C	E	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	34	13	M6	1.5	5	43	34
12–16	23	20	34	13	M6	1.5	5	47	34
16–22	23	27	34	13	M6	1.5	5	54	34
22–28	23	33	34	13	M6	2	5	60	34
28–34	23	39	34	13	M8	2	5.5	68	37.5
34–40	23	45	34	13	M6	2	5.5	74	37.5
40–46	25	51	40	13	M6	2	5.5	80	37.5





Clamp clip, single, metal pressure trough



Type	Clamping range D mm	Pack.	Weight	Item No.
		pcs	kg/100 pcs.	
2056F M 12 FT	8-12	100	3.700	1156 80 2
2056F M 16 FT	12-16	100	3.900	1156 81 0
2056F M 22 FT	16-22	100	4.550	1156 82 9
2056F M 28 FT	22-28	100	6.000	1156 83 7

ST Steel FT Hot-dip galvanised /100 pc.

Also suitable for all C profile rails with slot width 16–17 mm; metal troughs have strongly rounded edges on all sides, so that there is no risk of cable damage.

Important clamp clip dimensions

D	A	B	C	E	G	t	x	H	L
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
8–12	23	16	28	13	M6	1.5	3.25	43	26
12–16	23	20	28	13	M6	1.5	3.5	47	26
16–22	23	27	28	13	M6	1.5	4	54	38
22–28	23	33	28	13	M6	2	4	60	38



Clamp clips, fastening to angular steel



Clamp clip, single, plastic pressure trough

Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056W 12 FT	8-12	100	4.450	1180 12 6
2056W 16 FT	12-16	100	4.890	1180 16 9
2056W 22 FT	16-22	100	5.700	1180 22 3
2056W 28 FT	22-28	100	7.800	1180 28 2
2056W 34 FT	28-34	100	9.400	1180 34 7
2056W 40 FT	34-40	100	10.000	1180 40 1
2056W 46 FT	40-46	100	12.800	1180 46 0
2056W 52 FT	46-52	100	13.600	1180 52 5
2056W 58 FT	52-58	50	17.100	1180 58 4
2056W 64 FT	58-64	50	18.600	1180 64 9
2056W 70 FT	64-70	50	18.500	1180 68 1
2056W 76 FT	70-76	25	20.600	1180 76 2
2056W 82 FT	76-82	25	22.000	1180 82 7
2056W 90 FT	82-90	25	26.200	1180 90 8

ST Steel

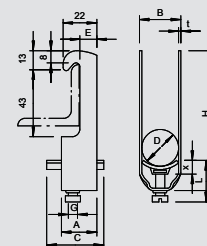
FT Hot-dip galvanised

/100 pc.

Suitable for angular steel of 40 mm limb length.
Clip and bolt made of hot-dip galvanised steel.
Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8-12	23	16	34	M6	1.5	5	74	27
12-16	23	20	34	M6	1.5	5	78	27
16-22	23	27	34	M6	1.5	5	85	27
22-28	23	33	34	M6	2	5	91	27
28-34	23	39	34	M8	2	5.5	99	31.5
34-40	23	45	34	M8	2	5.5	105	31.5
40-46	25	51	40	M8	2	5.5	111	31.5
46-52	25	57	40	M8	2	6.5	117	32.5
52-58	25	64	40	M8	2.5	6.5	123	32.5
58-64	25	70	40	M8	2.5	6.5	130	32.5
64-70	25	76	40	M8	2.5	6.5	136	32.5
70-76	25	82	40	M8	2.5	6.5	143	38.5
76-82	25	88	40	M8	2.5	6.5	149	38.5
82-90	25	97	40	M8	3	6.5	158	38.5



Clamp clip, double, plastic pressure trough

Type	Clamping range D	Pack.	Weight	Item No.
	mm	pcs	kg/100 pcs.	
2056W 2 12 FT	8-12	50	5.150	1181 12 2
2056W 2 16 FT	12-16	50	5.700	1181 16 5
2056W 2 22 FT	16-22	50	7.050	1181 21 1
2056W 2 28 FT	22-28	50	10.350	1181 28 9
2056W 2 34 FT	28-34	50	11.600	1181 34 3
2056W 2 40 FT	34-40	50	12.700	1181 40 8
2056W 2 46 FT	40-46	50	16.750	1181 46 7
2056W 2 52 FT	46-52	50	18.200	1181 52 1
2056W 2 58 FT	52-58	50	23.000	1181 58 0

ST Steel

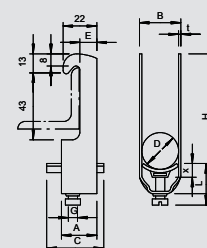
FT Hot-dip galvanised

/100 pc.

Suitable for angular steel of 40 mm limb length.
Clip and bolt made of hot-dip galvanised steel.
Polypropylene pressure trough, halogen-free, colour light grey RAL 7035.

Important dimensions, clamp clip

D	A	B	C	G	t	x	H	L
mm	mm	mm	mm		mm	mm	mm	mm
8-12	23	16	34	M6	1.5	5	88	34
12-16	23	20	34	M6	1.5	5	96	34
16-22	23	27	34	M6	1.5	5	109	34
22-28	23	33	34	M6	2	5	121	34
28-34	23	39	34	M8	2	5.5	135	37.5
34-40	23	45	34	M8	2	5.5	147	37.5
40-46	25	51	40	M8	2	5.5	160	37.5
46-52	25	57	40	M8	2	6.5	172	38.5
52-58	25	64	40	M8	2.5	6.5	185	38.5



BBS clamp clip systems

/100 pc./100 pc.

001 VBS Katalog 2010_Neuer_Stand / en / 15/02/2010 (LLEExport_00943)

Clamp clips, special application



Clamp clip, round profiles/pipes

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056R M 22 FS	16-22	100	5.240	1158 41 0
2056R M 28 FS	22-28	100	7.413	1158 41 4
2056R M 34 FS	28-34	100	8.805	1158 41 8
2056R M 40 FS	34-40	100	9.785	1158 42 2

ST Steel

FS Strip-galvanised

/100 pc.

Suitable for all round profile irons or pipes of diameters to 22 mm; clip, pressure trough and bolt made of steel, hot-dip galvanised; the metal troughs have strongly rounded edges on all sides, so that no damage to the cables need be feared.

Important dimensions, clamp clip

D	B	C	G	t	H	L
mm	mm	mm	mm	mm	mm	mm
16-22	27	28	M6	1.5	64	26
22-28	33	28	M6	2.0	71	30
28-34	39	33	M6	2.0	78	33
34-40	45	33	M6	2.0	87	33

Type

Clamping range D

Pack.

Weight

Item No.

Type	Clamping range D mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056RS M 16 FT	12-16	100	4.000	1158 30 5
2056RS M 22 FT	16-22	100	5.200	1158 30 9
2056RS M 28 FT	22-28	100	7.500	1158 31 3
2056RS M 34 FT	28-34	100	9.000	1158 31 7
2056RS M 40 FT	34-40	100	10.000	1158 32 1
2056RS M 46 FT	40-46	100	10.900	1158 32 5
2056RS M 52 FT	46-52	100	12.200	1158 32 9
2056RS M 58 FT	52-58	100	15.000	1158 33 3
2056RS M 64 FT	58-64	100	16.500	1158 33 7

ST Steel

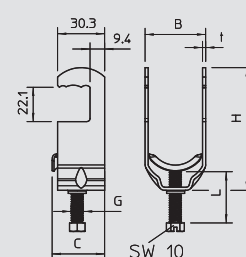
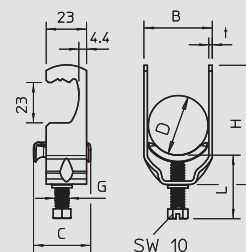
FT Hot-dip galvanised

/100 pc.

Suitable for all round profile irons or pipes of diameters to 22 mm; clip, pressure trough and bolt made of steel, hot-dip galvanised; the metal troughs have strongly rounded edges on all sides, so that no damage to the cables need be feared.

Important dimensions, clamp clip

D	B	C	G	t	H	L
mm	mm	mm	mm	mm	mm	mm
12-16	20	28	M6	1.5	57	26
16-22	27	28	M6	1.5	69	30
22-28	33	28	M6	2.0	73	38
28-34	39	33	M8	2.0	79	33
34-40	45	33	M8	2.0	86	33
40-46	51	33	M8	2.0	92	33
46-52	57	33	M8	2.0	97	33
52-58	64	33	M8	2.5	103	33
58-64	70	33	M8	2.5	112	33



Clamp clip, hammer-head base, 3x single-wire connection

Type	Cable Ø mm	Pack. pcs	Weight kg/100 pcs.	Item No.
2056 E 31 FT	28-31	25	19.500	1174 60 6
2056 E 37 FT	34-37	25	24.600	1174 61 4
2056 E 44 FT	40-44	25	28.300	1174 63 0

ST Steel

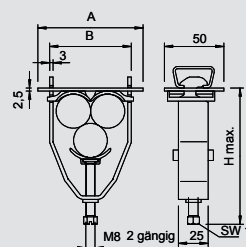
FT Hot-dip galvanised

/100 pc.

Clip element, bolt and lock plate made of hot-dip galvanised steel, pressure and counter-trough made of polypropylene, halogen-free, light grey RAL 7035. Delivered complete with lock plate and counter-troughs.

Important dimensions, clamp clip

D	A	B	H
mm	mm	mm	mm
28-31	83	69	107
34-37	95	81	118
40-44	109	95	143



Clamp clips, system accessories



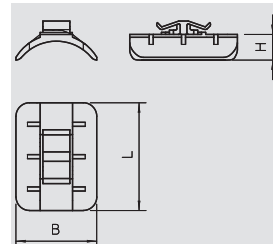
Counter-trough, plastic 16–17 mm slot width

Type	Clamping range D mm	Dimension L mm	Dimension B mm	Dimension H mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2058 12 LGR	8-12	34	12	5.4	Light grey	2,700	100	0.177	1195 12 3
2058 16 LGR	12-16	34	15.5	6	Light grey	2,700	100	0.189	1195 16 6
2058 22 LGR	16-22	34	20	6.7	Light grey	2,700	100	0.187	1195 22 0
2058 28 LGR	22-28	34	25	8.1	Light grey	1,800	100	0.244	1195 27 1
2058 34 LGR	28-34	34	30	9.5	Light grey	1,200	100	0.303	1195 34 4
2058 40 LGR	34-40	34	35	10.8	Light grey	1,200	100	0.325	1195 40 9
2058 46 LGR	40-46	40	40	12.2	Light grey	1,200	100	0.409	1195 46 8
2058 52 LGR	46-52	40	42	11	Light grey	1,200	100	0.442	1195 52 2
2058 58 LGR	52-58	40	45	11.5	Light grey	1,200	100	0.486	1195 58 1
2058 64 LGR	58-64	40	48	11.8	Light grey	500	50	0.540	1195 64 6
2058 70 LGR	64-70	40	50	11.5	Light grey	500	50	0.550	1195 70 0

PP Polypropylene

/100 pc.

Area of use of rails with slot width 16–17 mm. Counter-trough is clamped into the slot width as protection between the cable and rail.



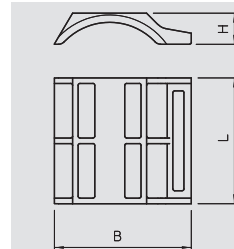
Counter-trough, plastic, universal

Type	Clamping range D mm	Dimension L mm	Dimension B mm	Dimension H mm	Colour	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2058FW 12 LGR	8-12	34	16.5	5	Light grey	2,700	100	0.156	1197 12 6
2058FW 16 LGR	12-16	34	20	5	Light grey	2,700	100	0.183	1197 16 9
2058FW 22 LGR	16-22	34	25.5	5.8	Light grey	2,700	100	0.200	1197 22 3
2058FW 28 LGR	22-28	34	31.5	7.2	Light grey	1,800	100	0.233	1197 28 2
2058FW 34 LGR	28-34	34	37	8.4	Light grey	1,200	100	0.360	1197 34 7
2058FW 40 LGR	34-40	34	42.5	9.7	Light grey	1,200	100	0.410	1197 40 1
2058FW 46 LGR	40-46	40	48	11	Light grey	1,200	100	0.540	1197 46 0
2058FW 52 LGR	46-52	40	51.5	9.8	Light grey	1,600	100	0.576	1197 52 5
2058FW 58 LGR	52-58	40	57	10.6	Light grey	1,600	100	0.603	1197 58 4
2058FW 64 LGR	58-64	40	61.2	10.4	Light grey	600	50	0.680	1197 64 9
2058FW 70 LGR	64-70	40	67.2	10.4	Light grey	400	50	0.764	1197 70 3
2058FW 76 LGR	70-76	40	71.4	11	Light grey	500	25	0.924	1197 76 2
2058FW 82 LGR	76-82	40	75.6	11	Light grey	500	25	0.998	1197 82 7
2058FW 90 LGR	82-90	40	82.6	12	Light grey	500	25	1.070	1197 90 8
2058FW 100 LGR	90-100	40	89.5	12	Light grey	500	25	1.150	1197 99 1

PP Polypropylene

/100 pc.

Irrespective of the rail, universally applicable by pushing onto a limb of the U clamp clip.



Counter-trough, metal, universal

Type	Clamping range D mm	Dimension L mm	Dimension B mm	Dimension H mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2058FW M 12 FT	8-12	35	17.5	6.5	1,000	100	0.940	1199 84 6
2058FW M 16 FT	12-16	35	21.5	7.7	1,200	100	1.100	1199 85 4
2058FW M 22 FT	16-22	35	28	8.8	1,200	100	1.200	1199 86 2
2058FW M 28 FT	22-28	35	34	10.4	1,000	100	1.400	1199 87 0
2058FW M 34 FT	28-34	35	40	13.5	400	100	2.160	1199 88 9
2058FW M 40 FT	34-40	35	46	15.1	200	100	2.490	1199 89 7
2058FW M 46 FT	40-46	35	52	17.2	200	100	3.270	1199 90 0
2058FW M 52 FT	46-52	35	58	19.2	200	50	3.460	1199 91 9
2058FW M 58 FT	52-58	35	60	13.5	200	50	3.620	1199 92 7
2058FW M 64 FT	58-64	35	70	22.4	300	50	4.280	1199 93 5
2058FW M 70 FT	64-70	35	76	24.5	200	50	4.590	1199 94 3

ST Steel

FT Hot-dip galvanised

/100 pc.

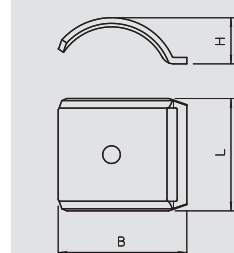
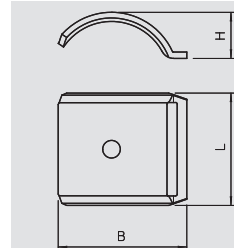
Irrespective of the rail, universally applicable by pushing onto a limb of the U clamp clip.

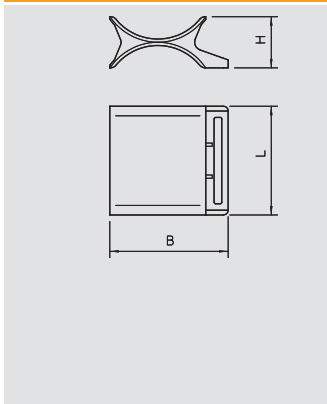
Type	Clamping range D mm	Dimension L mm	Dimension B mm	Dimension H mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2058FW M 8 VA	4-8	35	13	2.25	1,500	100	0.130	1197 09 6
2058FW M 12 VA	8-12	35	17.5	6.5	1,200	100	0.160	1197 13 4
2058FW M 16 VA	12-16	35	21.5	7.7	1,000	100	0.180	1197 17 7
2058FW M 22 VA	16-22	35	28	8.8	1,200	100	0.200	1197 23 1
2058FW M 28 VA	22-28	35	34	10.4	1,000	100	0.233	1197 29 0

V2A Stainless steel, 1.4301

/100 pc.

Irrespective of the rail, universally applicable by pushing onto a limb of the U clamp clip.





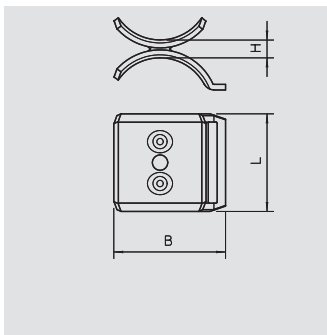
Double trough, plastic

Type	Clamping range D	Dimension L	Dimension B	Dimension H	Colour	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm		pcs	pcs	kg/100 pcs.	
2058 2 12 LGR	8-12	34	16.5	7	Light grey	2,000	50	0.170	1196 11 1
2058 2 16 LGR	12-16	34	20	9	Light grey	1,350	50	0.225	1196 16 2
2058 2 22 LGR	16-22	34	25.5	11	Light grey	1,350	50	0.287	1196 22 7
2058 2 28 LGR	22-28	34	31.5	14	Light grey	900	50	0.382	1196 28 6
2058 2 34 LGR	28-34	34	37	16	Light grey	600	50	0.470	1196 34 0
2058 2 40 LGR	34-40	34	42	18	Light grey	600	50	0.700	1196 40 5
2058 2 46 LGR	40-46	40	47.5	20	Light grey	800	50	0.886	1196 46 4
2058 2 52 LGR	46-52	40	53	22	Light grey	600	50	1.112	1196 52 9
2058 2 58 LGR	52-58	40	58	24	Light grey	600	50	1.156	1196 58 8

PP Polypropylene

/100 pc.

Double trough as intermediate layer between two or three cables within a U clamp clip.



Double trough, metal

Type	Clamping range D	Dimension L	Dimension B	Dimension H	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	mm	pcs	pcs	kg/100 pcs.	
2058 M2 12 FT	8-12	35	17.6	5.4	600	100	1.360	1199 70 6
2058 M2 16 FT	12-16	35	21.5	5.4	600	50	1.800	1199 71 4
2058 M2 22 FT	16-22	35	28	5.4	500	50	2.300	1199 72 2
2058 M2 28 FT	22-28	35	34	5.4	600	50	3.100	1199 73 0
2058 M2 34 FT	28-34	35	40	6.4	300	50	3.760	1199 74 9
2058 M2 40 FT	34-40	35	46	6.4	100	50	5.600	1199 75 7

ST Steel

FT Hot-dip galvanised

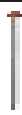
/100 pc.

Double trough as intermediate layer between two or three cables within a U clamp clip.





Screw-in and knock-in systems

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Nails

Steel nail

Type	Dimension L mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
362 16 BK	16	2	20,000	100	0.044	3353 16 8
362 18 BK	18	2	20,000	100	0.049	3353 18 4
362 23 BK	23	2	20,000	100	0.061	3353 23 0
362 30 BK	30	2	20,000	100	0.080	3353 30 3
362 40 BK	40	2	10,000	100	0.103	3353 40 0
362 50 BK	50	2	10,000	100	0.128	3353 50 8
362 60 BK	60	2	8,000	100	0.150	3353 60 5

ST Steel **Bright** /100 pc.

Hardened steel, blue tempered, with bead head.

Type	Dimension L mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
362 Z 16 G	16	2	20,000	100	0.044	3354 16 4
362 Z 18 G	18	2	20,000	100	0.049	3354 18 0
362 Z 23 G	23	2	20,000	100	0.061	3354 23 7
362 Z 30 G	30	2	20,000	100	0.078	3354 29 6
362 Z 40 G	40	2	10,000	100	0.103	3354 40 7
362 Z 50 G	50	2	10,000	100	0.128	3354 50 4
362 Z 60 G	60	2	8,000	100	0.150	3354 60 1

ST Steel **G** Electrogalvanised /100 pc.

Hardened steel, electrogalvanised, with bead head.

Type	Dimension L mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
1996 N 25	25	3	10,000	100	0.120	3369 00 3
1996 N 40	40	3	4,000	100	0.220	3369 00 5
1996 N 60	60	3.5	1,000	100	0.400	3369 02 1

ST Steel **G** Electrogalvanised /100 pc.

Hardened steel with bead head.



Impu steel needle

Type	Dimension L mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
500 12	12	2	20,000	100	0.040	3360 12 1
500 16	16	2	20,000	100	0.046	3360 16 4
500 18	18	2	20,000	100	0.055	3360 18 0
500 23	23	2	10,000	100	0.062	3360 23 7
500 30	30	2	10,000	100	0.081	3360 29 6
500 40	40	2	12,000	100	0.108	3360 40 7
500 50	50	2	9,000	100	0.128	3360 50 4
500 60	60	2	9,000	100	0.150	3360 60 1

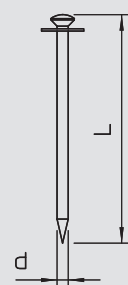
ST Steel **Bright** /100 pc.

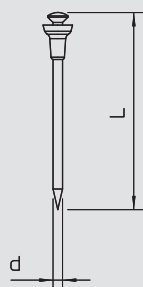
Hardened steel, blue tempered, with vulcanised fibre disc.

Type	Dimension L mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
500 Z 12	12	2	20,000	100	0.040	3361 12 8
500 Z 16	16	2	20,000	100	0.046	3361 16 0
500 Z 18	18	2	20,000	100	0.058	3361 18 7
500 Z 23	23	2	10,000	100	0.068	3361 23 3
500 Z 30	30	2	10,000	100	0.085	3361 30 6
500 Z 40	40	2	12,000	100	0.108	3361 40 3
500 Z 50	50	2	9,000	100	0.128	3361 50 0
500 Z 60	60	2	9,000	100	0.150	3361 60 8

ST Steel **G** Electrogalvanised /100 pc.

Hardened steel, electrogalvanised, with vulcanised fibre disc.



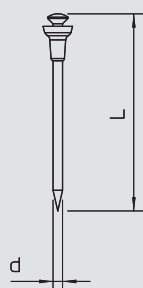


Siko nail

Type	Dimension L	Dimension d	Box Qty.	Pack.	Weight	Item No.
	mm	mm	pcs	pcs	kg/100 pcs.	
511 12	12	2	20,000	100	0.042	3366 11 1
511 16	16	2	20,000	100	0.049	3366 16 2
511 18	18	2	20,000	100	0.052	3366 18 9
511 23	23	2	10,000	100	0.064	3366 23 5
511 30	30	2	10,000	100	0.081	3366 30 8
511 40	40	2	12,000	100	0.104	3366 40 5
511 50	50	2	8,000	100	0.134	3366 50 2
511 60	60	2	9,000	100	0.154	3366 59 6

ST Steel Bright /100 pc.

Hardened steel, blue tempered, with polyethylene safety head.



Type	Dimension L	Dimension d	Box Qty.	Pack.	Weight	Item No.
	mm	mm	pcs	pcs	kg/100 pcs.	
511 Z 12	12	2	20,000	100	0.042	3367 12 6
511 Z 16	16	2	20,000	100	0.049	3367 16 9
511 Z 18	18	2	20,000	100	0.052	3367 18 5
511 Z 23	23	2	10,000	100	0.064	3367 23 1
511 Z 30	30	2	10,000	100	0.081	3367 30 4
511 Z 40	40	2	12,000	100	0.104	3367 40 1
511 Z 50	50	2	8,000	100	0.134	3367 50 9

ST Steel **G** Electrogalvanised /100 pc.

Hardened steel, electrogalvanised, with polyethylene safety head.



Hook nail

Type	Dimension L	Dimension d	Dimension B	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
1101 3x40	40	3	18	4,000	250	0.290	3341 04 6
1101 3x50	50	3	18	4,000	250	0.344	3341 05 4
1101 3x60	60	3	18	3,000	250	0.404	3341 06 2
1101 3x70	70	3	18	3,000	250	0.466	3341 07 0
1101 3.4x50	50	3.4	18	3,000	250	0.451	3341 49 6
1101 3.4x60	60	3.4	18	3,000	250	0.548	3341 60 7
1101 3.4x70	70	3.4	18	3,000	250	0.672	3341 70 4
1101 3.4x80	80	3.4	18	2,500	250	0.682	3341 80 1
1101 3.4x90	90	3.4	18	2,500	250	0.757	3341 90 9
1101 3.4x100	100	3.4	18	2,000	250	0.820	3341 99 2

ST Steel Bright /100 pc.

Hardened steel, blue tempered, with 18 mm hook on the head.



Type	Dimension L	Dimension d	Dimension B	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
1101 Z 40 G	40	3	18	4,000	250	0.288	3342 04 2
1101 Z 50 G	50	3	18	4,000	250	0.360	3342 05 0
1101 Z 60 G	60	3	18	3,000	250	0.404	3342 06 9
1101 Z 70 G	70	3	18	3,000	250	0.474	3342 07 7
1101 Z 3.4x50 G	50	3.4	18	3,000	250	0.464	3342 50 6
1101 Z 3.4x60 G	60	3.4	18	3,000	250	0.548	3342 60 3
1101 Z 3.4x70 G	70	3.4	18	3,000	250	0.600	3342 70 0
1101 Z 3.4x80 G	80	3.4	18	2,500	250	0.674	3342 80 8

ST Steel **G** Electrogalvanised /100 pc.

Steel, galvanised, with 18 mm hook on the head.

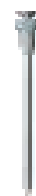


Steel wall hook

Type	Dimension L	Dimension d	Dimension B	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
716 3X50 BK	50	3	18	2,400	100	0.415	3347 05 2
716 3X60 BK	60	3	18	2,000	100	0.489	3347 06 0
716 3X70 BK	70	3	18	2,000	100	0.553	3347 07 9

ST Steel Bright /100 pc.

Steel, bright (St), hardened, blue tempered, made of square bar steel.



Knock-in anchor system



OBO anchor

Type	Shank length mm	Dimension L mm	Dimension D Ø mm	Dimension G mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
904 A 15 FS	15	22	3.35	M4	6,000	50	0.178	3116 15 8

ST Steel **G** Electrogalvanised /100 pc.

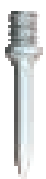
Hardened steel, electrogalvanised with M4 x 7 mm thread.



Type	Shank length mm	Dimension L mm	Dimension D Ø mm	Dimension G mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
904 B 15 FS	15	26	3.35	M4	5,000	50	0.200	3117 15 4
904 B 18 FS	18	29	3.35	M4	5,000	50	0.218	3117 18 9

ST Steel **G** Electrogalvanised /100 pc.

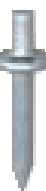
Hardened steel, electrogalvanised with M4 x 11 mm thread.



Type	Shank length mm	Dimension L mm	Dimension D Ø mm	Dimension G mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
903 15 G	15	23	4	M6	3,000	100	0.330	3100 15 4
903 18 G	18	26	4	M6	3,000	100	0.360	3100 18 9
903 25 G	25	33	4	M6	3,000	100	0.404	3100 25 1
903 30 G	30	38	4	M6	2,000	100	0.470	3100 30 8
903 40 G	40	48	4	M6	2,000	100	0.571	3100 40 5
903 55 G	55	63	4	M6	1,800	100	0.715	3100 55 3

ST Steel **G** Electrogalvanised /100 pc.

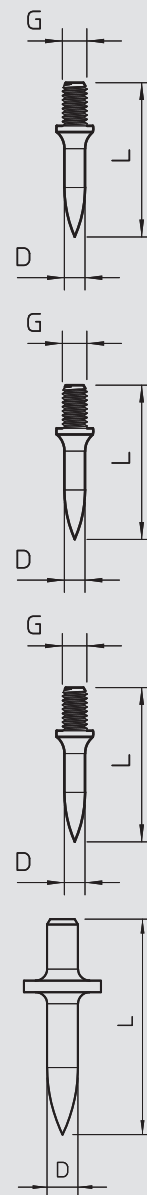
Hardened steel, electrogalvanised with M6 x 8 mm thread.



Type	Shank length mm	Dimension L mm	Dimension D Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
903 RB 15	15	21	4	6,000	200	0.295	3105 01 6
903 RB 18	18	24	4	4,000	200	0.348	3105 02 4
903 RB 22	22	30	4	4,000	200	0.325	3105 03 2

ST Steel /100 pc.

Hardened steel, shiny without thread.

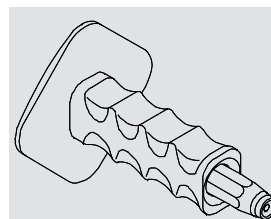


Flattener with hand protection

Type	Suitable for	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
915 RBS M4	903/RB anchors	12	1	50.000	3031 50 0

ST Steel /pc.

Flattener with hand protection for OBO anchors 903/RB Ø 4 mm and also for OBO anchors 904 with M4 thread.



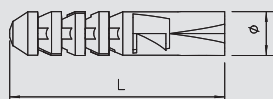
Flattener

Type	Dimension L mm	Dimension D mm	Suitable for	Size	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
915 S M6	135	14	Anchor 903	M6	120	20	17.000	3031 01 2

ST Steel /pc.

Flattener for OBO anchors 903 with M6 thread.





Angler straddling dowel

Type	Dowel Ø	Dimension L	Bore hole depth	Bore hole Ø	Wood screws	Pull-out force	Pack.	Weight	Item No.
	mm	mm	mm	mm	Ø mm	N min/concrete	pcs	kg/100 pcs.	
910 N 5x25 GRW	5	25	30	5	2,5-4	300	100	0.051	2349 04 3
910 N 6x30 GRW	6	30	35	6	3,5-5	550	100	0.052	2349 05 1
910 N 6x60 GRW	6	60	65	6	3,5-5	550	100	0.080	2349 07 8
910 N 8x40 GRW	8	40	45	8	4,5-6	800	100	0.140	2349 08 6
910 N 10x50 GRW	10	50	55	10	6-8	1,150	50	0.306	2349 10 8
910 N 12x60 GRW	12	60	65	12	8-10	1,900	25	0.459	2349 12 4

PA Polyamide /100 pc.

Required minimum screw length = anchor length + component thickness + 1 x screw Ø.
Withdrawal force applies to wood screws of the largest screw diameter, required safety values - must be taken into account.

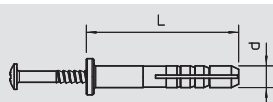


Multipurpose anchor

Type	Dowel Ø	Dimension L	Bore hole depth	Bore hole Ø	Wood screws	Pull-out force	Pack.	Weight	Item No.
	mm	mm	mm	mm	Ø mm	N min/concrete	pcs	kg/100 pcs.	
910 MZ 5x30	5	30	45	5	2,5-4	300	100	0.036	2347 52 3
910 MZ 6x35	6	35	50	6	4-5	400	100	0.063	2347 53 9
910 MZ 8x50	8	50	60	8	5-6	500	100	0.158	2347 54 7
910 MZ 10x60	10	60	70	10	6-8	1,000	50	0.276	2347 55 5
910 MZ 12x70	12	70	80	12	8-10	1,530	25	0.430	2347 57 0

PA Polyamide /100 pc.

Also suitable as a cavity anchor, with collars to prevent slipping (not for 12 mm anchor). Four tabs take up the torque.
Required minimum screw length = anchor length + component thickness + 1 x screw Ø.
Withdrawal force applies to wood screws of the largest screw diameter, required safety values - must be taken into account.



Knock-in anchor

Type	Dowel Ø	Length	Pull-out force	Pack.	Weight	Item No.
	mm	mm	N min/concrete	pcs	kg/100 pcs.	
910 SD 5X35	5	35	220	100	0.360	2351 02 1
910 SD 6X35	6	35	260	100	0.310	2351 05 6
910 SD 6X40	6	40	260	100	0.555	2351 06 4
910 SD 8X55	8	55	350	50	1.070	2351 09 9

PA Polyamide /100 pc.

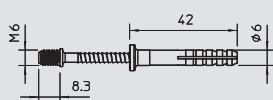
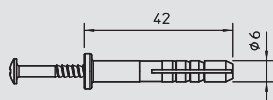
Knock-in anchor: steel, electrogalvanised and transparently passivated.

Type	Dowel Ø	Length	Pack.	Weight	Item No.
	mm	mm	pcs	kg/100 pcs.	
910 SD-Q 6x40	6	40	100	0.480	2351 21 8

PA Polyamide /100 pc.

Knock-in anchor for Quick clips type 2955.

Knock-in anchor: steel, tempered, electrogalvanised and transparently passivated.

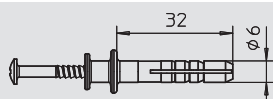


Type	Thread	Dowel Ø	Length	Pull-out force	Pack.	Weight	Item No.
		mm	mm	N min/concrete	pcs	kg/100 pcs.	
910 SDM M6	M6	6	40	260	100	0.480	2350 80 7

PA Polyamide /100 pc.

With M6 thread.

Knock-in anchor: steel, tempered, electrogalvanised and transparently passivated.



Double-flange anchor

Type	Dowel Ø	Length	Bore hole depth	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
910 DF 6x35	6	35	40	1,200	100	0.425	2347 40 7

PA Polyamide /100 pc.

Knock-in anchor: steel, tempered, electrogalvanised and transparently passivated.



Anchors



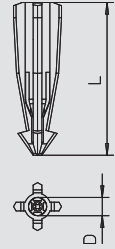
Gas concrete anchor

Type	Dimension D mm	Dimension L mm	Colour	Pack. pcs	Weight kg/100 pcs.	Item No.
910 GD 6x35	6	35	Light grey	100	0.100	2347 22 9
910 GD 8x50	8	50	Light grey	50	0.310	2347 26 1

PA Polyamide

/100 pc.

The anchor can be knocked directly into the porous concrete (gas concrete resistance class G2). With a resistance class of G4 or greater, a 5 or 6 mm hole should be predrilled.
Screw length: Component thickness + 40 mm (6 mm) / 55 mm (8 mm).



Plasterboard anchor

Type	Dimension D mm	Dimension L mm	For screw diameter Ø	Perm. load range, tension zone kN	Pack. pcs	Weight kg/100 pcs.	Item No.
910 GKDM 12x30	12	30	4.5	0.04	100	0.400	3483 21 4

Zn Die-cast zinc

/100 pc.

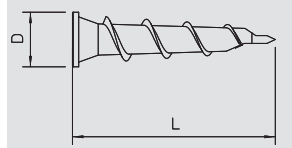
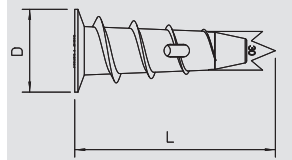
To fasten components to plasterboard or fibre composite plates.
Minimum plate thickness: 12 mm for Ø 4.5 Golden Sprint or Sprint screws.

Type	Dimension D mm	Dimension L mm	Perm. load range, tension zone kN	Pack. pcs	Weight kg/100 pcs.	Item No.
910 GKSM 6x25	7.5	26.4	0.04	100	0.160	3483 23 9

Zn Die-cast zinc

/100 pc.

To fasten components to plasterboard or fibre composite plates.
Min. plate thickness: 5 mm.



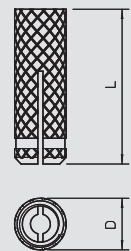
Brass spreading anchor

Type	Thread	Bore hole Ø mm	Bore hole depth mm	Length mm	Pull-out value N	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
865 M6x24	M6	8	32	24	6000	2,400	100	0.442	3483 06 1
865 M8x30	M8	11	41	30	7000	1,000	100	0.867	3483 08 8
865 M10x34	M10	—	53	34	9000	600	100	1.315	3483 09 6

CuZn Brass

/100 pc.

Areas of application: full brick, concrete, wood. Ideally suited for areas exposed to high temperatures.



Metal spreading anchor

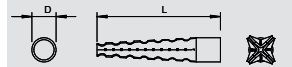
Type	Dimension D mm	Dimension L mm	Bore hole Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
MD 5 GTP	5	30	5-7	2,400	200	0.190	3484 60 2
MD 6 GTP	6	32	7-9	1,400	100	0.250	3484 62 9

ST Steel

GTP Electrogalvanised, transparently passivated

/100 pc.

Areas of application: gas concrete, lightweight concrete, Poroton, pumice, plaster, hollow brick and full brick. Can be knocked into porous concrete (gas concrete) of low resistance without drilling. Superbly suited for areas subjected to high temperatures.



Sprung hinged anchor

Type	Thread	Length mm	Bore hole Ø mm	Minimum cavity depth mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
450 M4x95 G	M4	95	14	35	0.2	500	50	1.750	3481 61 1

ST Steel

G Electrogalvanised

/100 pc.

With threaded rod, washer and hexagonal nut; brass axle.

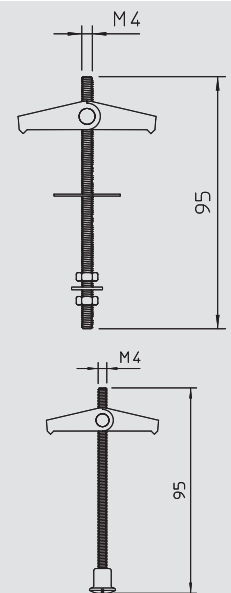
Type	Thread	Length mm	Minimum cavity depth mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
451 M4x95 G	M4	95	35	0.2	500	50	1.700	3481 66 2

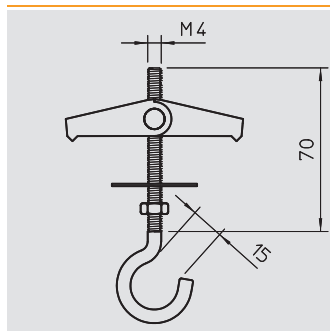
ST Steel

G Electrogalvanised

/100 pc.

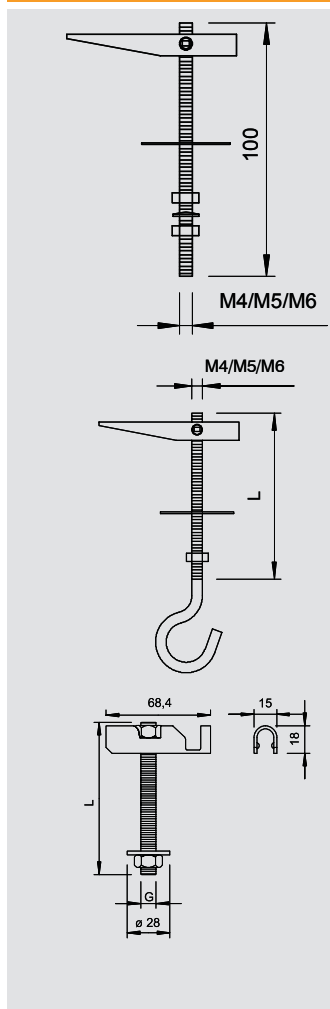
With threaded rod and slotted brass nut; brass axle.





Sprung hinged anchor

Type	Thread	Length mm	Bore hole Ø mm	Minimum cavity depth mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
452 M4x70 G	M4	70	14	35	0.4	500	50	1.950	3481 77 8
ST Steel G Electrogalvanised									/100 pc.
With ceiling hook, washer and hexagonal nut; brass axle.									

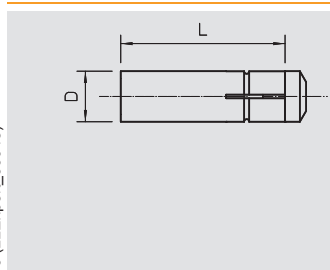


Tilting anchors

Type	Thread	Length mm	Bore hole Ø mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
458 M4x100 G	M4	100	13	0.5	400	50	3.310	3482 15 4
456 M5x100 G	M5	100	13	0.8	400	50	3.810	3482 10 3
453 M6x100 G	M6	100	16	1.3	300	50	5.250	3482 01 4
ST Steel		G Electrogalvanised		/100 pc.				
Two washers and two hexagonal nuts, with threaded shank.								

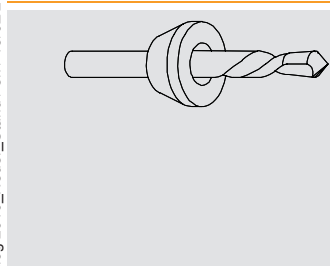
Type	Thread	Dimension L mm	Bore hole Ø mm	Hook Ø mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
457 M4x55 G	M4	55	13	14	0.25	400	50	3.250	3482 13 8
455 M5x65 G	M5	65	13	16	0.4	300	50	3.850	3482 05 7
455 M5x100 G	M5	100	13	16	0.4	300	50	4.250	3482 07 3
454 M6x100 G	M6	100	16	16	0.8	150	25	6.000	3482 03 0
ST Steel G Electrogalvanised									/100 pc.
One washer and one hexagonal nut, with ceiling hook. Note: Reckon with 5x safety for luminaire suspensions.									

Type	Thread	Dimension L mm	Bore hole Ø mm	Tensile load kN	Minimum cavity depth mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
KD 8 100	M8	100	22	2.4	75	25	25	11.200	3482 70 7
KD 10 100	M10	100	25	2.4	75	25	25	11.200	3482 75 8
KD 10 150	M10	150	25	2.4	75	25	25	13.500	3482 76 6
ST Steel G Electrogalvanised									/100 pc.
Including nut and large washer. The universal heavy-duty fastening for stressed concrete, hollow steel profiles, metal sheets and plates. Use: heating, ventilation and air conditioning technology, cooling systems, sprinkler systems, pipes, cable tracks, etc. * Dependent on the thickness of the ceiling profile.									



Impact tie

Type	Thread	Dimension D mm	Dimension L mm	Screw-in depth min.-max. mm	Perm. load range, tension zone kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
FZEA II 10X40 G	M8	10	40	11-17	1.5	500	100	1.550	3492 03 6
FZEA II 12X40 G	M10	12	40	13-19	1.5	500	100	2.075	3492 06 0
FZEA II 14X40 G	M12	14	40	15-21	1.5	250	50	2.750	3492 09 5
ST Steel G Electrogalvanised									/100 pc.
Undercut steel anchor with internal thread.									



Universal drill

Type	Bore hole Ø mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
FZUB 10X40	10	10	1	11.800	3492 33 8
FZUB 12X40	12	10	1	12.200	3492 36 2
FZUB 14X40	14	10	1	12.500	3492 39 7
ST Steel Bright					/pc.
The universal drill for SDS seats guarantees correct, approved mounting of the FZEA tie.					



Anchors



Impact mandrel

Type	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
FZED 10X40 G	5	5	10.500	3492 62 1
FZED 12X40 G	5	5	17.800	3492 66 4
FZED 14X40 G	5	5	25.000	3492 69 9

ST Steel **G** Electrogalvanised /pc.

The impact mandrel guarantees correct, approved mounting of the FZEA tie.

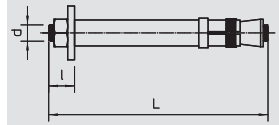


Heavy-duty anchor

Type	Thread	Dimension L mm	Dimension d mm	Clamping range mm	Perm. load range, tension zone kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
FH II 18X80	M12	120	18	10	9.91	10	10	20.000	3498 74 3

ST Steel **G** Electrogalvanised /100 pc.

Heavy-duty anchor for fastening components with large loads.

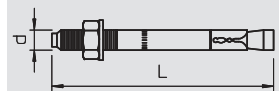


Bolt tie

Type	Thread	Dimension L mm	Dimension d mm	Clamping range mm	Perm. load range, tension zone kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
FAZ II 8 10 GS	M8	77	8	10	2.4	250	50	3.720	3498 50 6
FAZ II 10 10 GS	M10	95	10	10	4.3	50	50	7.680	3498 54 9
FAZ II 10 30	M10	115	10	30	4.3	25	25	7.520	3498 58 1
FAZ II 12 10	M12	110	12	10	7.6	20	20	10.400	3498 65 4

ST Steel **G** Electrogalvanised /100 pc.

Bolt tie for fastening high loads. Matches OBO mounting systems and wall support brackets and supports.

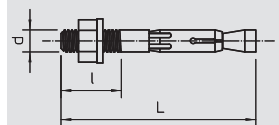


Bolt tie

Type	Thread	Dimension d mm	Dimension l mm	Bore hole depth mm	Dimension L mm	Pack. pcs	Weight kg/100 pcs.	Item No.
FNA II 6X30 M6/5	M6	6	13	40	53	100	1.400	3498 42 5

ST Steel **G** Electrogalvanised /100 pc.

Bolt tie with M6 thread. European technical approval for concrete. Fire resistance class to F120 according to fire protection testing report.



Bolt tie

Type	Dimension mm	Dimension L mm	Anchor length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MMS10X80	10 x 80	80	80	50	3.800	3498 12 3
MMS10X100	10 x 100	100	100	50	4.600	3498 15 8

ST Steel **G** Electrogalvanised /100 pc.

Fire protection bolt tie with hexagonal head for direct installation without additional anchors. Substrate: concrete or masonry. WAF 16. Drill hole 8 mm. Fire protection tested according to DIN 4102. Fire resistance class to F90.

Type	Dimension mm	Dimension L mm	Anchor length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MMS6X50	6 x 50	50	50	100	0.960	3498 10 7

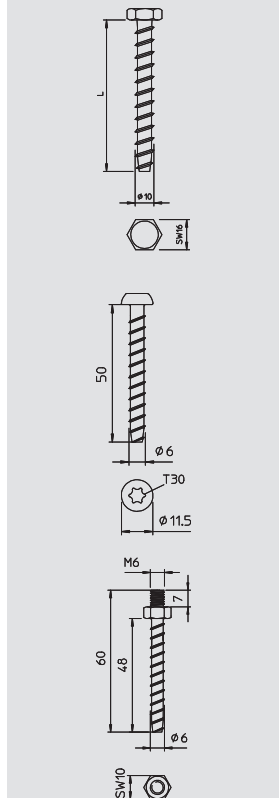
ST Steel **GC** Electrogalvanised, yellow-chromated /100 pc.

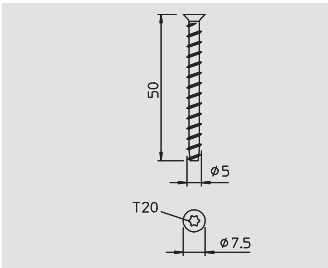
Fire protection bolt tie with pan head, drive T30, drill hole 5 mm. Fire protection tested according to DIN 4102. Fire resistance class to F90.

Type	Dimension mm	Dimension L mm	Anchor length mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MMS-ST6X60	6 x 60	60	60	100	1.400	3498 26 3

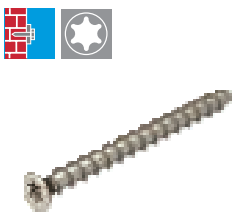
ST Steel **G** Electrogalvanised /100 pc.

Fire protection bolt tie with M6 thread and hexagonal head, WAF 10, drill hole 5 mm. Fire protection tested according to DIN 4102. Fire resistance class to F90.





							Bolt tie
Type	Dimension mm	Dimension L mm	Anchor length mm		Pack. pcs	Weight kg/100 pcs.	Item No.
HMS-KS5X50	5 x 50	50	50		200	0.460	3498 20 4
ST Steel	G Electrogalvanised		/100 pc.				
Fire protection bolt tie with conical countersunk head, drive T20, drill hole 4 mm. Fire protection tested according to DIN 4102. Fire resistance class to F90.							



Bolts and hooks



Screw-in anchor

Type	Thread length mm	Dimension D mm	Dimension L mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
985 M6 25	8	4.3	25	3,000	100	0.412	3133 02 8
985 M6 35	8	4.3	35	2,000	100	0.533	3133 03 6

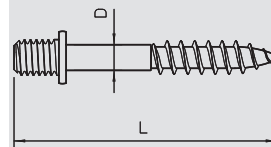
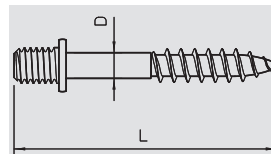
ST Steel **G** Electrogalvanised /100 pc.

With wood screw shank and M6 thread.

Type	Thread length mm	Dimension D mm	Dimension L mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
985 M8 35	10	5.2	35	1,200	100	1.288	3133 23 0

ST Steel **G** Electrogalvanised /100 pc.

With wood screw shank and M8 thread.

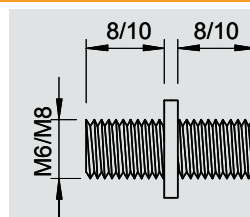


Double nipple

Type	Thread	Thread length mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
3100 M6 G	M6	8	3,000	100	0.355	3131 06 8
3100 M8 G	M8	10	2,000	100	0.680	3131 08 4

ST Steel **G** Electrogalvanised /100 pc.

Double nipple with metric thread.

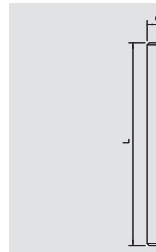


Threaded rod

Type	Thread	Dimension d mm	Dimension L mm	Breaking load kN	Pack. pcs	Weight kg/100 pcs.	Item No.
2078 M6 1M G	M6	6	1,000	8.04	100	18.300	3141 04 7
2078 M8 1M G	M8	8	1,000	14.6	50	30.000	3141 12 8
2078 M10 1M G	M10	10	1,000	23.2	25	49.000	3141 20 9
2078 M12 1M G	M12	12	1,000	33.7	20	70.000	3141 30 6
2078 M8 VA	M8	8	1,000	18.3	50	30.000	3141 31 0
2078 M10 VA	M10	10	1,000	29	25	49.000	3141 31 2
2078 M12 VA	M12	12	1,000	42.2	20	70.000	3141 31 4
2078 M8 2M G	M8	8	2,000	14.6	25	60.000	3141 13 6
2078 M10 2M G	M10	10	2,000	23.2	25	98.000	3141 14 0
2078 M12 2M G	M12	12	2,000	33.7	20	140.000	3141 14 4
2078 M8 3M G	M8	8	3,000	14.6	25	90.000	3141 13 8
2078 M10 3M G	M10	10	3,000	23.2	20	147.000	3141 23 3

ST Steel **V2A** Stainless steel, 1.4301 **G** Electrogalvanised /100 pc.

Threaded rod to DIN 976.

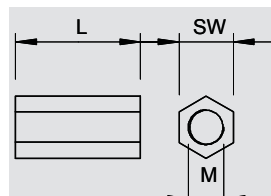


Spacer sleeve

Type	Thread	Dimension M mm	Dimension L mm	SW mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
965 M6X20 G	M6	6	20	10	1,000	100	0.900	3415 03 1
965 M6X25 G	M6	6	25	10	1,000	100	1.000	3415 06 6
965 M6X30 G	M6	6	30	10	1,000	100	1.200	3415 08 2
965 M6X40 G	M6	6	40	10	600	100	1.500	3415 10 4
965 M6X50 G	M6	6	50	10	600	100	2.000	3415 12 0
965 M8X20 G	M8	8	20	13	1,000	100	1.200	3415 14 7
965 M8X30 G	M8	8	30	13	600	100	1.800	3415 16 3

Zn Die-cast zinc **G** Electrogalvanised /100 pc.

Continuous internal thread.

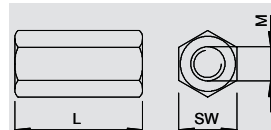


Connection sleeve

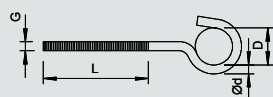
Type	Thread	Dimension M mm	Dimension L mm	SW mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
12005 M8 G	M8	8	30	13	600	50	2.000	6410 08 1
12005 M10 G	M10	10	40	17	200	50	6.000	6410 10 3
12005 M12 G	M12	12	40	19	150	25	7.000	6410 11 1
12005 M8 VA4301	M8	8	30	13	600	50	2.000	6410 15 4
12005 M10 VA4301	M10	10	40	17	200	50	6.000	6410 16 2
12005	M12	12	40	19	150	25	7.000	6410 17 0

ST Steel **V2A** Stainless steel, 1.4301 **G** Electrogalvanised /100 pc.

Connection sleeve with continuous internal thread.



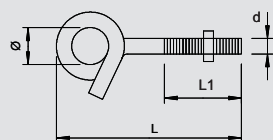
Ceiling hooks



Type	Thread	Length mm	Dimension L mm	Dimension D mm	Dimension d mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
867 M5X125 G	M5	125	90	16	4.3	0.4	1,000	100	1.730	3470 14 8
867 M6X 95 G	M6	95	55	16	5.2	0.8	1,000	100	2.095	3470 21 0
867 M6X125 G	M6	125	85	16	5.2	0.8	400	100	2.760	3470 23 7

ST Steel **G** Electrogalvanised /100 pc.

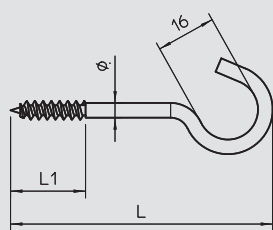
Ceiling hook with long metric thread.



Coiling hook with long elastic thread.											
Type	Thread	Dimension d mm	Dimension L mm	Dimension L1 mm	Dimension d Ø mm	Washer Ø mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
948 TG6	M6	6	70	46	13	28	1	150	25	5.000	3453 82 0

ST Steel **G** Electrogalvanised /100 pc.

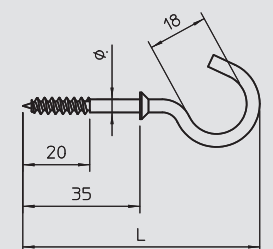
Tightly wound ceiling hook. Including two large washers and nuts.



Type	Material Ø mm	Dimension L mm	Dimension L1 mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
915 3.9x50 G	3.9	50	20	0.15	1,200	100	0.724	3450 05 8
915 3.9x60 G	3.9	60	20	0.15	1,200	100	0.800	3450 06 6
915 3.9x70 G	3.9	70	20	0.15	1,200	100	0.879	3450 07 4
915 3.9x80 G	3.9	80	20	0.15	1,200	100	0.913	3450 08 2
915 3.9x90 G	3.9	90	20	0.15	1,200	100	1.076	3450 09 0
915 3.9x100 G	3.9	100	20	0.15	1,000	100	1.187	3450 10 4
915 4.3x120 G	4.3	120	24	0.2	1,000	100	1.662	3450 12 0

ST Steel **G** Electrogalvanised /100 pc.

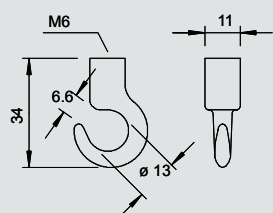
Ceiling hook with rolled wood screw thread.



Type	Material Ø mm	Length mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
917 3.9x70 G	3.9	70	0.25	1,200	100	0.965	3452 01 8

ST Steel **G** Electrogalvanised /100 pc.

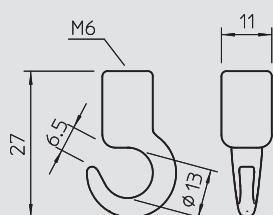
Ceiling hook with wood screw thread and Befle.



Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2081 M6 G	M6	1.35	600	100	1.257	3460 16 9

ST Steel **G** Electrogalvanised /100 pc.

Ceiling hook with metric internal thread.

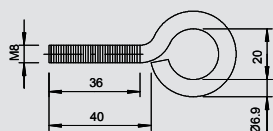


Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2081 K M6	M6	1.6	1,200	100	0.899	3460 06 1

ST Steel **G** Electrogalvanised /100 pc.

Ceiling hook with internal metric thread.

Frame eyelet

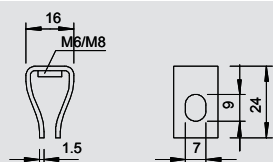


Type	Thread	Length mm	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
869 M8X40 G	M8	70	2	250	25	3.540	3472 08 6

ST Steel **G** Electrogalvanised /100 pc.

Frame eyelet M8 x 40mm.

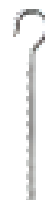
Rabitz coupler



Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2083 M6 G	M6	4.5	1,200	100	1.090	3462 06 4
2083 M8 G	M8	5.5	1,200	100	1.090	3462 08 0

ST Steel **G** Electrogalvanised /100 pc.

Rabitz coupler with metric thread.



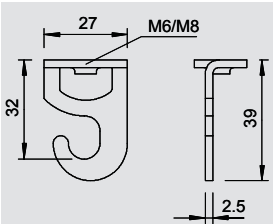
Bolts and hooks



TS ceiling hook

Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2989 M6 G	M6	1.5	900	50	2.540	3460 76 2
2989 M8 G	M8	1.5	900	50	2.540	3460 78 9
ST Steel	G Electrogalvanised		/100 pc.			

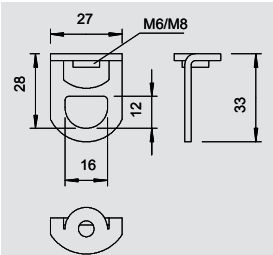
TS ceiling hook with metric thread.



TS suspension eyelet

Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2990 M6 G	M6	3.5	500	50	2.320	3462 86 2
2990 M8 G	M8	3.5	500	50	2.320	3462 88 9
ST Steel	G Electrogalvanised					/100 pc.

Suspension eyelet with interior thread.



Ring eyelet

Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2084 M6 G	M6	1.15	400	100	2.200	3463 56 7
2084 M8 G	M8	1.15	400	100	2.100	3463 58 3
Zn	Die-cast zinc		G	Electrogalvanised		/100 pc.

Important dimensions, ring eyelet

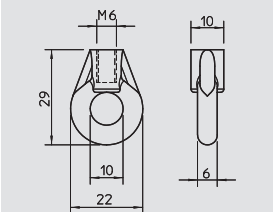
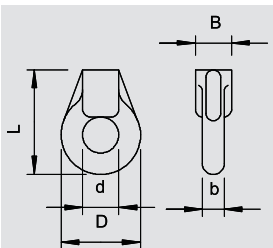
G	L	D	d	B	b
mm	mm	mm	mm	mm	mm
M6	37.8	28.6	15	12	6.8
M8	37.8	28.6	15	12	6.8



Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2084 K M6	M6	1.15	1,000	100	1.500	3463 06 0
Zn	Die-cast zinc	G	Electrogalvanised	/100 pc.		

Important dimensions, ring eyelet

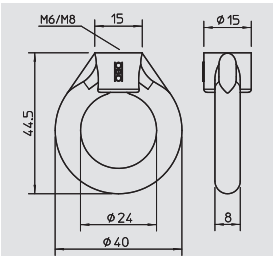
G	L	D	d	B	b
mm	mm	mm	mm	mm	mm
M6	29	22	10	10	6

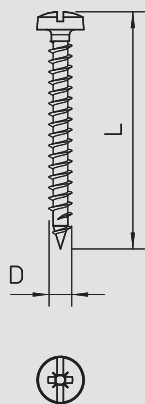


Suspension eyelet

Type	Thread	Breaking load kN	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
2085 M6 G	M6	1.1	200	50	3.900	3464 06 7
2085 M8 G	M8	1.1	200	50	3.700	3464 08 3
Zn Die-cast zinc	G Electrogalvanised			/100 pc.		

Suspension eyelet with metric thread.





GOLDEN SPRINT, with Philips screw



Type	Dimen- sion L	Dimen- sion D	Head Ø	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
4758 3.5x15	15	3.5	6.5	6,000	200	0.070	3195 00 7
4758 3.5x20	20	3.5	6.5	6,000	200	0.090	3195 01 5
4758 3.5x25	25	3.5	6.5	6,000	200	0.120	3195 02 3
4758 3.5x30	30	3.5	6.5	6,000	200	0.163	3195 03 1
4758 3.5x35	35	3.5	6.5	4,000	200	0.170	3195 05 8
4758 3.5x40	40	3.5	6.5	3,200	200	0.208	3195 06 6
4758 3.5x45	45	3.5	6.5	3,200	200	0.220	3195 07 4
4758 3.5x50	50	3.5	6.5	3,200	200	0.240	3195 08 2
4758 4X15	15	4	7.5	6,000	200	0.100	3195 20 1
4758 4X20	20	4	7.5	6,000	200	0.140	3195 22 8
4758 4X25	25	4	7.5	6,000	200	0.177	3195 23 6
4758 4X30	30	4	7.5	4,000	200	0.220	3195 24 4
4758 4X35	35	4	7.5	3,200	200	0.250	3195 25 2
4758 4X40	40	4	7.5	3,200	200	0.270	3195 26 0
4758 4X45	45	4	7.5	3,200	200	0.280	3195 27 9
4758 4X50	50	4	7.5	2,400	200	0.310	3195 28 7
4758 4.5x25	25	4.5	8.2	4,000	200	0.237	3195 42 2
4758 4.5x30	30	4.5	8.2	4,000	200	0.290	3195 43 0
4758 4.5x35	35	4.5	8.2	3,200	200	0.300	3195 44 9
4758 4.5x40	40	4.5	8.2	3,200	200	0.310	3195 45 7
4758 4.5x45	45	4.5	8.2	3,200	200	0.350	3195 46 5
4758 4.5x50	50	4.5	8.2	2,400	200	0.393	3195 47 3
4758 5X30	30	5	9.5	3,200	200	0.376	3195 63 5
4758 5X35	35	5	9.5	3,200	200	0.415	3195 64 3
4758 5X40	40	5	9.5	3,200	200	0.454	3195 65 1
4758 5X45	45	5	9.5	2,400	200	0.493	3195 67 8
4758 5X50	50	5	9.5	2,400	200	0.533	3195 68 6
4758 5X60	60	5	9.5	2,400	200	0.600	3195 69 4
4758 6X30	30	6	12	3,200	200	0.600	3195 91 0
4758 6X40	40	6	12	2,400	200	0.720	3195 92 9
4758 6X50	50	6	12	2,400	200	0.830	3195 93 7
4758 6X60	60	6	12	2,400	200	0.960	3195 94 5

ST Steel

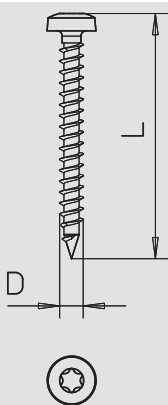
GGP Electrogalvanised, yellow passivated

/100 pc.

Hardened steel, electrogalvanised and yellow passivated, as well as Hostafion-coated, panhead with combined Philips and slotted head (Pozidrive size 2 except Ø 6 mm Pozidrive size 3).

The use of Sprint screws leads to considerably reduced screw-in times compared with standard screws. This noticeable advantage comes from the point with the first thread, which leads on to the double thread beyond.

Areas of use: wood, chipboard, Rigips panels, plastic anchors.



GOLDEN SPRINT, with Torx



Type	Dimen- sion L	Dimen- sion D	Head Ø	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
4758T 3.5x15	15	3.5	6.5	6,000	200	0.070	3198 01 6
4758T 3.5x20	20	3.5	6.5	6,000	200	0.110	3198 01 8
4758T 3.5x25	25	3.5	6.5	6,000	200	0.133	3198 02 0
4758T 3.5x30	30	3.5	6.5	6,000	200	0.163	3198 02 2
4758T 3.5x35	35	3.5	6.5	4,000	200	0.170	3198 02 4
4758T 3.5x40	40	3.5	6.5	3,200	200	0.208	3198 02 6
4758T 4.0x15	15	4	7.5	6,000	200	0.120	3198 03 0
4758T 4.0x20	20	4	7.5	6,000	200	0.159	3198 03 2
4758T 4.0x25	25	4	7.5	6,000	200	0.187	3198 03 4
4758T 4.0x30	30	4	7.5	4,000	200	0.214	3198 03 6
4758T 4.0x35	35	4	7.5	3,200	200	0.246	3198 03 8
4758T 4.0x40	40	4	7.5	3,200	200	0.265	3198 04 0
4758T 4.0x45	45	4	7.5	3,200	200	0.290	3198 04 2
4758T 4.0x50	50	4	7.5	2,400	200	0.323	3198 04 4
4758T 4.5x30	30	4.5	8.2	4,000	200	0.260	3198 05 4
4758T 4.5x35	35	4.5	8.2	3,200	200	0.300	3198 05 6
4758T 4.5x40	40	4.5	8.2	3,200	200	0.329	3198 05 8
4758T 4.5x45	45	4.5	8.2	3,200	200	0.355	3198 06 0
4758T 4.5x50	50	4.5	8.2	2,400	200	0.393	3198 06 2
4758T 5.0x30	30	5	9.5	3,200	200	0.370	3198 07 3
4758T 5.0x35	35	5	9.5	3,200	200	0.410	3198 07 5
4758T 5.0x40	40	5	9.5	3,200	200	0.450	3198 07 7
4758T 5.0x45	45	5	9.5	2,400	200	0.490	3198 07 9
4758T 5.0x50	50	5	9.5	2,400	200	0.530	3198 08 1

ST Steel

GGP Electrogalvanised, yellow passivated

/100 pc.

Hardened steel, electrogalvanised and yellow passivated, as well as Hostafion-coated, panhead with T bit (Allen head), sizes Ø 3 mm T10, Ø 3.5 mm T15, Ø 4 and 4.5 mm T20, Ø 5 mm T25.

The use of Sprint screws leads to considerably reduced screw-in times compared with standard screws. This noticeable advantage comes from the point with the first thread, which leads on to the double thread beyond.

Areas of use: wood, chipboard, Rigips panels, plastic anchors.

Bolts and hooks



Sprint screw, with Philips slot

Type	Dimen- sion L	Dimen- sion D	Head Ø	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
4759 3.5x25	25	3.5	6.5	6,000	200	0.105	3192 11 3
4759 3.5x30	30	3.5	6.5	6,000	200	0.120	3192 12 1
4759 3.5x35	35	3.5	6.5	4,000	200	0.140	3192 14 8
4759 3.5x40	40	3.5	6.5	3,200	200	0.160	3192 15 6
4759 3.5x45	45	3.5	6.5	3,200	200	0.180	3192 16 4
4759 3.5x50	50	3.5	6.5	3,200	200	0.205	3192 17 2
4759 4X25	25	4	7.5	6,000	200	0.153	3192 21 0
4759 4X30	30	4	7.5	4,000	200	0.167	3192 22 9
4759 4X35	35	4	7.5	3,200	200	0.192	3192 23 7
4759 4X40	40	4	7.5	3,200	200	0.210	3192 24 5
4759 4X45	45	4	7.5	3,200	200	0.236	3192 25 3
4759 4X50	50	4	7.5	2,400	200	0.262	3192 26 1
4759 4.5x30	30	4.5	8.3	4,000	200	0.237	3192 33 4
4759 4.5x35	35	4.5	8.3	3,200	200	0.270	3192 34 2
4759 4.5x40	40	4.5	8.3	3,200	200	0.300	3192 35 0
4759 4.5x45	45	4.5	8.3	3,200	200	0.320	3192 36 9
4759 4.5x50	50	4.5	8.3	2,400	200	0.363	3192 37 7
4759 5X30	30	5	9.2	3,200	200	0.304	3192 41 5
4759 5X35	35	5	9.2	3,200	200	0.356	3192 42 3
4759 5X40	40	5	9.2	3,200	200	0.380	3192 43 1
4759 5X45	45	5	9.2	2,400	200	0.430	3192 45 8
4759 5X50	50	5	9.2	2,400	200	0.480	3192 46 6
4759 6X40	40	6	11	2,400	200	0.570	3192 62 8
4759 6X50	50	6	11	2,400	200	0.680	3192 63 6
4759 6X60	60	6	11	2,400	200	0.790	3192 64 4

ST Steel

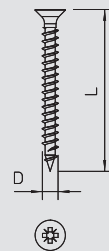
GGP Electrogalvanised, yellow passivated

/100 pc.

Hardened steel, electrogalvanised and yellow passivated, as well as Hostafon-coated, counter-sunk head with Philips head (Pozidrive size 2 except Ø 6 mm Pozidrive size 3).

The use of Sprint screws leads to considerably reduced screw-in times compared with standard screws. This noticeable benefit is achieved by the point with the first thread, which leads onto the double thread beyond.

Areas of use: wood, chipboard, Rigips panels, plastic anchors.



Sprint screw, with Torx

Type	Dimen- sion L	Dimen- sion D	Head Ø	Box Qty.	Pack.	Weight	Item No.
	mm	mm	mm	pcs	pcs	kg/100 pcs.	
4759T 3.0x15	15	3	5.6	6,000	200	0.048	3198 19 3
4759T 3.0x25	25	3	5.6	6,000	200	0.085	3198 19 7
4759T 3.0x30	30	3	5.6	6,000	200	0.097	3198 19 9
4759T 3.5x15	15	3.5	6.5	6,000	200	0.070	3198 21 9
4759T 3.5x20	20	3.5	6.5	6,000	200	0.094	3198 22 1
4759T 3.5x25	25	3.5	6.5	6,000	200	0.106	3198 22 3
4759T 3.5x30	30	3.5	6.5	6,000	200	0.126	3198 22 5
4759T 3.5x35	35	3.5	6.5	4,000	200	0.138	3198 22 7
4759T 3.5x40	40	3.5	6.5	3,200	200	0.163	3198 22 9
4759T 3.5x50	50	3.5	6.5	3,200	200	0.205	3198 23 1
4759T 4.0x15	15	4	7.5	6,000	200	0.120	3198 23 7
4759T 4.0x20	20	4	7.5	6,000	200	0.126	3198 23 9
4759T 4.0x25	25	4	7.5	6,000	200	0.151	3198 24 1
4759T 4.0x30	30	4	7.5	4,000	200	0.176	3198 24 3
4759T 4.0x35	35	4	7.5	3,200	200	0.197	3198 24 5
4759T 4.0x40	40	4	7.5	3,200	200	0.226	3198 24 7
4759T 4.0x45	45	4	7.5	3,200	200	0.244	3198 24 9
4759T 4.0x50	50	4	7.5	2,400	200	0.275	3198 25 1
4759T 4.5x30	30	4.5	8.2	4,000	200	0.214	3198 26 0
4759T 4.5x35	35	4.5	8.2	3,200	200	0.265	3198 26 2
4759T 4.5x40	40	4.5	8.2	3,200	200	0.271	3198 26 4
4759T 4.5x45	45	4.5	8.2	3,200	200	0.308	3198 26 6
4759T 4.5x50	50	4.5	8.2	2,400	200	0.340	3198 26 8
4759T 5.0x30	30	5	9.5	3,200	200	0.304	3198 27 6
4759T 5.0x35	35	5	9.5	3,200	200	0.330	3198 27 8
4759T 5.0x40	40	5	9.5	3,200	200	0.380	3198 28 0
4759T 5.0x45	45	5	9.5	2,400	200	0.430	3198 28 2
4759T 5.0x50	50	5	9.5	2,400	200	0.480	3198 28 4

ST Steel

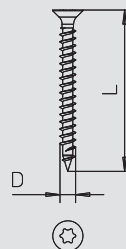
GGP Electrogalvanised, yellow passivated

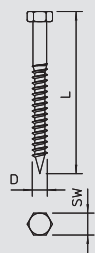
/100 pc.

Hardened steel, electrogalvanised and yellow passivated, as well as Hostafon-coated, counter-sunk head with T bit (Allen head), sizes Ø 3 mm T10, Ø 3.5 mm T15, Ø 4 and 4.5 mm T20, Ø 5 mm T25.

The use of Sprint screws leads to considerably reduced screw-in times compared with standard screws. This noticeable benefit is achieved by the point with the first thread, which leads onto the double thread.

Areas of use: wood, chipboard, Rigips panels, plastic anchors.





Hexagonal wood screw DIN 571

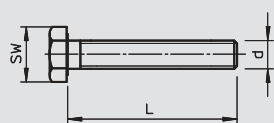
Type	Dimension L mm	Dimension D mm	SW mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
12400 6x40 G	40	6	10	1,200	50	0.825	3188 04 3
12400 6x50 G	50	6	10	1,000	50	0.960	3188 05 1
12400 6x60 G	60	6	10	1,000	50	1.120	3188 07 8
12400 6x80 G	80	6	10	900	50	1.375	3188 09 4
12400 8x40 G	40	8	13	300	50	1.560	3188 14 0
12400 8x50 G	50	8	13	300	50	1.820	3188 15 9
12400 8x60 G	60	8	13	600	50	2.100	3188 16 7
12400 8x70 G	70	8	13	600	50	2.360	3188 17 5
12400 8x80 G	80	8	13	600	50	2.650	3188 18 3
12400 8x100 G	100	8	13	300	50	3.200	3188 20 5
12400 10x60 G	60	10	17	300	25	3.650	3188 25 6
12400 10x70 G	70	10	17	250	25	4.050	3188 27 2
12400 10x80 G	80	10	17	300	25	4.510	3188 28 0
12400 10x100 G	100	10	17	250	25	5.400	3188 30 2
12400 12x70 G	70	12	19	240	20	5.750	3188 36 1
12400 12x80 G	80	12	19	240	20	6.430	3188 38 8

ST Steel

G Electrogalvanised

/100 pc.

Hexagonal screw to DIN 571 with wood thread. Suitable for anchors, type 910.



Hexagonal bolt ISO 4017

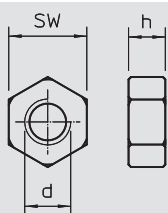
Type	Dimension mm	Dimension L mm	Dimension d mm	SW mm	Pack. pcs	Weight kg/100 pcs.	Item No.
342 M6X16 G	M6 x 16	16	6	10	100	0.494	3156 14 1
342 M6X20 G	M6 x 20	20	6	10	100	0.580	3156 20 6
342 M6X25 G	M6 x 25	25	6	10	100	0.665	3156 25 7
342 M6X30 G	M6 x 30	30	6	10	100	0.751	3156 30 3
342 M6X35 G	M6 x 35	35	6	10	100	0.837	3156 35 4
342 M6X40 G	M6 x 40	40	6	10	100	0.923	3156 40 0
342 M8X20 G	M8 x 20	20	8	13	100	1.230	3158 20 9
342 M8X25 G	M8 x 25	25	8	13	100	1.390	3158 24 1
342 M8X30 G	M8 x 30	30	8	13	100	1.550	3158 30 6
342 M8X40 G	M8 x 40	40	8	13	100	1.870	3158 40 3
342 M8X50 G	M8 x 50	50	8	13	100	2.180	3158 50 0
342 M10X20 G	M10 x 20	20	10	17	100	2.320	3160 20 3
342 M10X30 G	M10 x 30	30	10	17	100	2.820	3160 30 0
342 M10X40 G	M10 x 40	40	10	17	50	3.240	3160 40 8
342 M10X50 G	M10 x 50	50	10	17	50	3.820	3160 50 5
342 M10X60 G	M10 x 60	60	10	17	50	4.330	3160 60 2
342 M12X30 G	M12 x 30	30	12	19	50	4.020	3162 30 3
342 M12X40 G	M12 x 40	40	12	19	50	4.740	3162 40 0
342 M12X50 G	M12 x 50	50	12	19	50	5.450	3162 50 8

ST Steel

G Electrogalvanised

/100 pc.

Hexagonal bolt to ISO 4017 with metric thread



Hexagonal nut

Type	Thread	SW mm	Dimension h mm	Dimension d mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
DIN 934 M4 G	M4	7	3.2	4	10,000	100	0.081	3400 04 2
DIN 934 M5 G	M5	8	4.7	5	5,000	100	0.123	3400 05 0
DIN 934 M6 G	M6	10	5.2	6	2,600	100	0.225	3400 06 9
DIN 934 M8 G	M8	13	6.8	8	2,400	100	0.474	3400 08 5
DIN 934 M10 G	M10	17	8.4	10	1,000	100	1.084	3400 10 7
DIN 934 M12 G	M12	19	10.8	12	600	100	1.730	3400 12 3
DIN 934 M6 VA	M6	10	5.2	6	4,000	100	0.250	3397 06 8
DIN 934 M8 VA	M8	13	6.8	8	2,400	100	0.520	3397 08 4
DIN 934 M10 VA	M10	17	8.4	10	1,000	100	1.160	3397 10 6
DIN 934 M12 VA	M12	19	10.8	12	600	100	1.730	3397 11 4

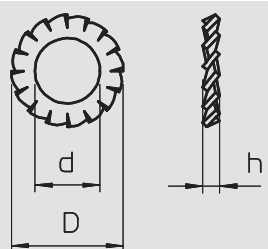
ST Steel

V2A Stainless steel, 1.4301

G Electrogalvanised

/100 pc.

Hexagonal nut to DIN 934 with metric thread.



Serrated washer

Type	Dimension d mm	Dimension D mm	Dimension h mm	Pack. pcs	Weight kg/100 pcs.	Item No.
DIN 6798 A M5 G	5.3	10	1.8	100	0.022	3404 05 6
DIN 6798 A M6 G	6.4	11	2.1	100	0.036	3404 06 4
DIN 6798 A M8 G	8.4	15	2.4	100	0.080	3404 08 0
DIN 6798 A M10 G	10.5	18	2.7	100	0.125	3404 10 2
DIN 6798 A M12 G	13	20.5	3	100	0.170	3404 12 9

ST Steel

G Electrogalvanised

/100 pc.

Serrated washer to DIN 6798, shape A.



Bolts and hooks



Lock washer

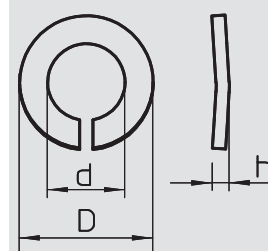
Type	Thread	Dimension d mm	Dimension D mm	Dimension h mm	Pack. pcs	Weight kg/100 pcs.	Item No.
DIN 128 A M6 G	M6	6.3	11.8	2.1	100	0.083	3405 06 0
DIN 128 A M8 G	M8	8.3	14.8	2.6	100	0.160	3405 08 7
DIN 128 A M10 G	M10	10.5	18.1	3	100	0.253	3405 10 9
DIN 128 A M12 G	M12	12.5	21.1	3.5	100	0.382	3405 12 5

ST Steel

G Electrogalvanised

/100 pc.

Lock washer according to DIN 128, shape A.



Washer

Type	Thread	Dimension d mm	Dimension D mm	Dimension h mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
966 M4 G	M4	4.3	9	0.8	10,000	100	0.031	3402 04 5
966 M6 G	M6	6.4	12	1.6	12,000	100	0.114	3402 06 1
966 M8 G	M8	8.4	16	1.6	5,000	100	0.214	3402 08 8
966 M10 G	M10	10.5	20	2	3,000	100	0.408	3402 09 6
966 M12 G	M12	13	24	2.5	2,400	100	0.627	3402 12 6
966 M6 VA	M6	6.4	12	1.6	10,000	100	0.114	3402 30 4
966 M8 VA	M8	8.4	16	1.6	5,000	100	0.214	3402 31 2
966 M10 VA	M10	10.5	20	2	3,000	100	0.408	3402 32 0
966 M12 VA	M12	13	24	2.5	2,400	100	0.627	3402 33 9

ST Steel

V2A Stainless steel, 1.4301

G Electrogalvanised

/100 pc.

Washer according to DIN 125, shape A, for universal use.

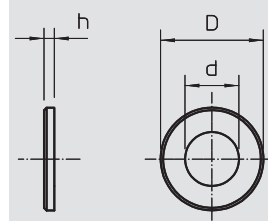
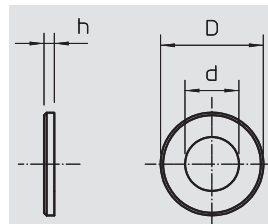
Type	Thread	Dimension d mm	Dimension D mm	Dimension h mm	Box Qty. pcs	Pack. pcs	Weight kg/100 pcs.	Item No.
967 M6 G	M6	6.5	28	2.5	1,000	100	1.150	3402 20 7
967 M8 G	M8	8.5	28	2.5	1,400	100	1.100	3402 21 5
967 M10 G	M10	11	28	2.5	1,400	100	1.020	3402 22 3

ST Steel

G Electrogalvanised

/100 pc.

Washer of large outer diameter for universal use.



Large washer

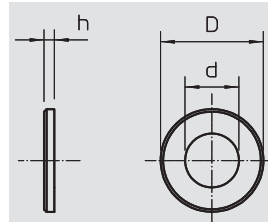
Type	Thread	Dimension d mm	Dimension D mm	Dimension h mm	Pack. pcs	Weight kg/100 pcs.	Item No.
964 M4 G	M4	4.3	15	1.2	100	0.156	3403 02 5
964 M5 G	M5	5.3	20	1.2	100	0.274	3403 04 1
964 M6 G	M6	6.4	25	1.2	100	0.415	3403 08 4
964 M6 G	M6	6.4	30	1.3	100	0.675	3403 09 2
964 M6 G	M6	6.4	20	1.5	100	0.262	3403 07 6
964 M8 G	M8	8.4	20	1.5	100	0.240	3403 12 2
964 M8 G	M8	8.4	25	1.2	100	0.370	3403 13 0
964 M10 G	M10	10.5	30	1.5	100	0.592	3403 16 5

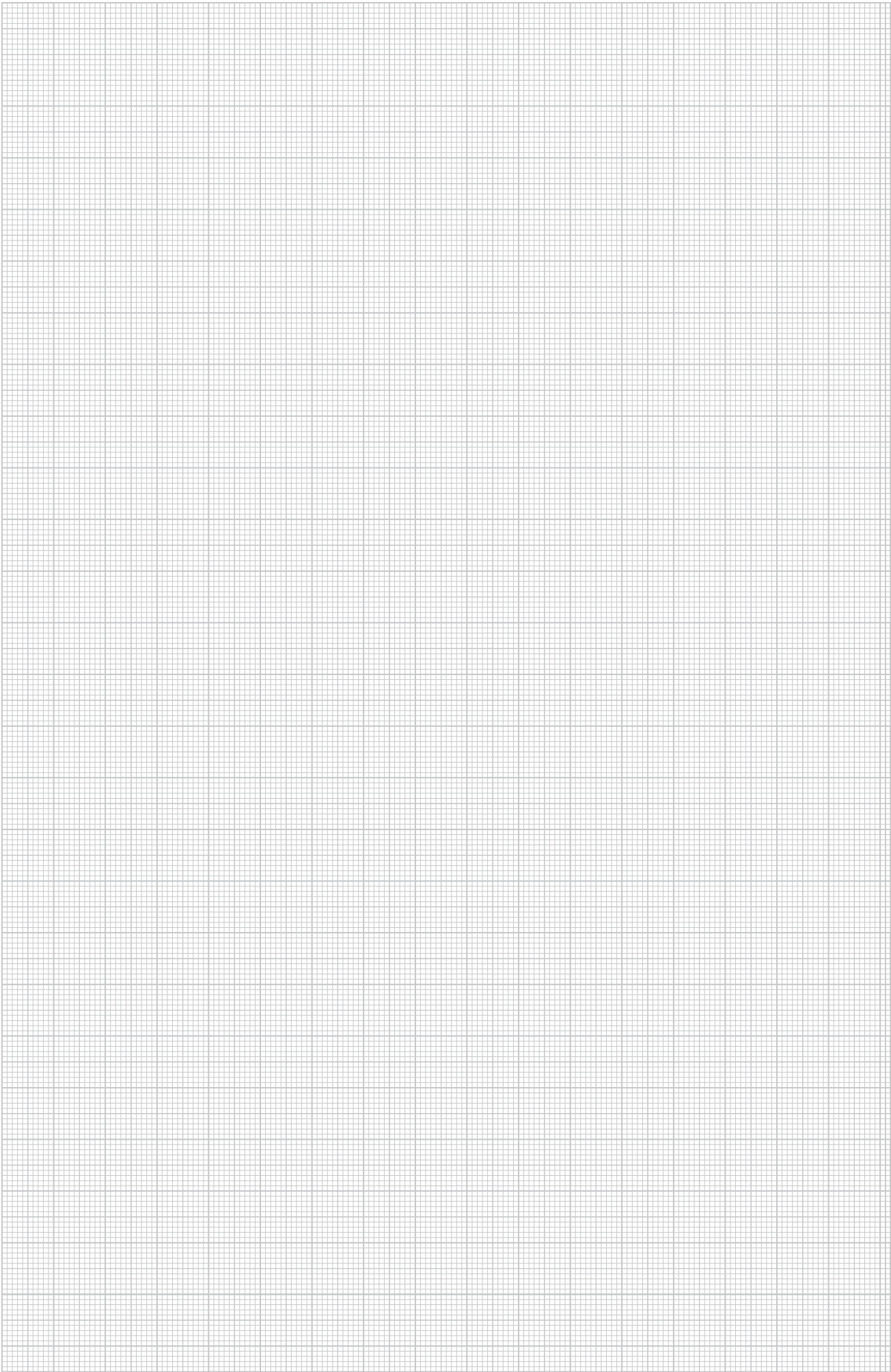
ST Steel

G Electrogalvanised

/100 pc.

Washer of particularly large outer diameter.







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Numeric directory

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

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5007456	1009 02 8		284	5017530	1018 35 3		287	5041894	1109 52 9		327	5672555	1121 27 8		332
5007517	1009 03 6		284	5017592	1018 36 1		287			/100 pc.		5672494	1121 29 4		332
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5008057	1009 18 4		284	5028451	1043 01 3		285			/100 m		5049210	1121 46 4		333
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5015253	1015 13 3		288	5037873	1103 12 1		326	5044895	1115 45 6		347	5487876	1122 62 2		336
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		/100 m				/pc.				/100 pc.				/100 pc.	
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5686286	1122 92 2		334	5486121	1124 66 5		346	5056171	1149 45 8		340	5498438	1158 03 1		364
5686293	1122 92 4		334	5486138	1124 66 7		345					5498490	1158 05 8		364
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5697787	1122 94 0		334	5052272	1134 25 6		338	5057796	1151 62 2		340	5358503	1158 33 3		370
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Numeric directory

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

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Numeric directory

Structure of the EAN number: Country code **40**

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5215592	2225 63 8		271	5221531	2250 30 6		264	5874454	2350 80 7		379	5256458	3158 40 3		389
5215714	2225 70 0		271	5221593	2250 43 8		264					5256519	3158 50 0		389
5215776	2225 71 9		271					5229452	2351 02 1		379				
5215837	2225 72 7		271	5221654	2251 25 6		342	5669197	2351 05 6		263	5256816	3160 20 3		389
5215899	2225 80 8		271					5229513	2351 06 4		263	5256939	3160 30 0		389
5215950	2225 81 6		271	5222071	2254 01 8		341	5229575	2351 09 9		379	5257059	3160 40 8		389
5216070	2225 90 5		271	5222132	2254 02 6		342	5229636	2351 21 8		379	5257110	3160 50 5		389
5216131	2225 91 3		271	5222194	2254 03 4		342	5242352	2351 41 2		260	5257172	3160 60 2		389
								5708971	2351 60 9		259				
5216254	2226 01 4		271	5222798	2255 01 4		342					5257592	3162 30 3		389
5216315	2226 02 2		271	5222859	2255 02 2		342			/100 m		5257714	3162 40 0		389
5216438	2226 10 3		271	5905592	2255 40 5		342	5230113	2357 05 4		281	5257776	3162 50 8		389
5216490	2226 11 1		271												
5216674	2226 21 9		271	5222972	2259 07 9		343			/pc.		5866718	3188 04 3		389
5216735	2226 22 7		271	5223092	2259 14 1		343	5577768	2363 01 0		182	5270195	3188 05 1		389
5216797	2226 30 8		271	5223214	2259 23 0		343			/VPE		5270256	3188 07 8		389
5216919	2226 40 5		271	5223276	2259 28 1		343	5686354	2363 01 5		182	5866770	3188 09 4		389
										/pc.		5866831	3188 14 0		389
5217275	2227 22 3		270	5224297	2305 15 1		296	5687771	2363 01 9		182	5866893	3188 15 9		389
5217336	2227 23 1		270	5224358	2305 23 2		296					5270317	3188 16 7		389
5217398	2227 33 9		270					5864974	3010 10 4		210	5270379	3188 17 5		389
5217459	2227 34 7		270	5224419	2307 61 8		297	5033912	3010 20 1		209	5866954	3188 18 3		389
5217572	2227 42 8		270	5224471	2307 63 4		297	5034032	3010 23 6		209	5867012	3188 20 5		389
5217633	2227 43 6		270					5034094	3010 24 4		209	5867074	3188 25 6		389
5217756	2227 51 7		270	5225911	2327 10 4		271	5034155	3010 25 2		209	5270430	3188 27 2		389
5217817	2227 52 5		270					5034216	3010 26 0		209	5270492	3188 28 0		389
5217930	2227 61 4		270	5454991	2330 05 9		292	5034278	3010 27 5		209	5867135	3188 30 2		389
5217992	2227 62 2		270	5455059	2330 07 5		292					5270553	3188 36 1		389
5218050	2227 63 0		270	5455110	2330 09 1		292	5241690	3031 01 2		378	5270614	3188 38 8		389
5218173	2227 71 1		270	5455417	2330 22 9		292	5851417	3031 50 0		378				
5218234	2227 73 8		270	5455479	2330 24 5		292					5271932	3192 11 3		388
5218296	2227 74 6		270	5455592	2330 29 6		292			/100 pc.		5271994	3192 12 1		388
5607694	2227 76 2		270	5455653	2330 32 6		292	5245773	3100 15 4		378	5272052	3192 14 8		388
5607878	2227 79 7		270	5455714	2330 34 2		292	5245834	3100 18 9		378	5272113	3192 15 6		388
5218357	2227 80 0		270					5245896	3100 25 1		378	5272175	3192 16 4		388
5218418	2227 81 9		270	5226994	2332 02 7		292	5245957	3100 30 8		378	5272236	3192 17 2		388
5218470	2227 82 7		270	5227052	2332 05 1		292	5246015	3100 40 5		378	5272298	3192 21 0		388
5218593	2227 91 6		270	5227113	2332 09 4		292	5246077	3100 55 3		378	5272359	3192 22 9		388
5218654	2227 92 4		270	5227175	2332 10 8		292					5272410	3192 23 7		388
				5227236	2332 17 5		292	5851059	3105 01 6		378	5272472	3192 24 5		388
5218777	2228 02 5		270	5227298	2332 18 3		292	5851110	3105 02 4		378	5272533	3192 25 3		388
5218838	2228 03 3		270	5227359	2332 21 3		292	5851172	3105 03 2		378	5272595	3192 26 1		388
5218951	2228 11 4		270	5227410	2332 33 7		292					5272717	3192 33 4		388
5219019	2228 12 2		270	5227472	2332 36 1		292	5247753	3116 15 8		378	5272779	3192 34 2		388
5219132	2228 21 1		270	5227533	2332 38 8		292					5272830	3192 35 0		388
5219194	2228 23 8		270	5227595	2332 50 7		292	5248170	3117 15 4		378	5272892	3192 36 9		388
5219255	2228 30 0		270	5227656	2332 55 8		292	5248231	3117 18 9		378	5272953	3192 37 7		388
5219316	2228 31 9		270	5227717	2332 57 4		292					5273011	3192 41 5		388
5219378	2228 40 8		270	5819851	2332 62 0		292	5250272	3131 06 8		384	5273073	3192 42 3		388
5219439	2228 41 6		270	5819912	2332 65 5		292	5250333	3131 08 4		384	5273134	3192 43 1		388
5496397	2228 42 0		270	5819974	2332 66 3		292					5273196	3192 45 8		388
5496458	2228 42 2		270	5820031	2332 69 8		292	5250395	3133 02 8		384	5273257	3192 46 6		388
5608110	2228 43 2		270	5820093	2332 70 1		292	5250456	3133 03 6		384	5682578	3192 62 8		388
5608172	2228 44 0		270	5820154	2332 72 8		292	5250579	3133 23 0		384	5682516	3192 63 6		388
5219552	2228 61 0		270	5820215	2332 75 2		292					5682455	3192 64 4		388
5219613	2228 62 9		270					5253211	3141 04 7		384				
5496519	2228 68 6		270	5228011	2340 03 8		231	5253334	3141 12 8		384	5274759	3195 00 7		387
5828556	2228 68 8		270					5119982	3141 13 6		384	5274810	3195 01 5		387
5219675	2228 71 8		270			/pc.		5374671	3141 13 8		384	5274872	3195 02 3		387
5219736	2228 72 6		270	5228073	2341 01 8		295	5123583	3141 14 0		384	5274933	3195 03 1		387
5219798	2228 73 4		270	5228196	2341 										

Numeric directory

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

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EAN-C.	Art. no.	Price	Page	EAN-C.	Art. no.	Price	Page	EAN-C.	Art. no.	Price	Page	EAN-C.	Art. no.	Price	Page
		/100 pc.				/100 pc.				/100 pc.				/100 pc.	
5275176	3195 08 2		387	5287537	3341 04 6		377	5297673	3397 06 8		389	5307334	3464 06 7		386
5275237	3195 20 1		387	5287599	3341 05 4		377	5297734	3397 08 4		389	5307396	3464 08 3		386
5275299	3195 22 8		387	5287650	3341 06 2		377	5297796	3397 10 6		389				
5275350	3195 23 6		387	5287711	3341 07 0		377	5297857	3397 11 4		389	5309253	3470 14 8		385
5275411	3195 24 4		387	5287773	3341 49 6		377					5309314	3470 21 0		385
5275473	3195 25 2		387	5287834	3341 60 7		377	5297970	3400 04 2		389	5309376	3470 23 7		385
5275534	3195 26 0		387	5287896	3341 70 4		377	5298038	3400 05 0		389				
5275596	3195 27 9		387	5287957	3341 80 1		377	5298090	3400 06 9		322	5309550	3472 08 6		385
5275657	3195 28 7		387	5288015	3341 90 9		377	5298151	3400 08 5		322				
5275718	3195 42 2		387	5288077	3341 99 2		377	5298212	3400 10 7		322	5442936	3481 61 1		380
5275770	3195 43 0		387					5298274	3400 12 3		389	5432852	3481 66 2		380
5275831	3195 44 9		387	5288138	3342 04 2		377					5432975	3481 77 8		381
5275893	3195 45 7		387	5288190	3342 05 0		377	5299899	3402 04 5		390				
5275954	3195 46 5		387	5288251	3342 06 9		377	5300014	3402 06 1		322	5310631	3482 01 4		381
5276012	3195 47 3		387	5288312	3342 07 7		377	5300076	3402 08 8		322	5310693	3482 03 0		381
5276074	3195 63 5		387	5288374	3342 50 6		377	5300137	3402 09 6		322	5310754	3482 05 7		381
5276135	3195 64 3		387	5288435	3342 60 3		377	5300199	3402 12 6		390	5310815	3482 07 3		381
5276197	3195 65 1		387	5288497	3342 70 0		377	5300311	3402 20 7		322	5310877	3482 10 3		381
5276258	3195 67 8		387	5288558	3342 80 8		377	5300373	3402 21 5		322	5310938	3482 13 8		381
5276319	3195 68 6		387					5300434	3402 22 3		322	5310990	3482 15 4		381
5321019	3195 69 4		387	5289272	3347 05 2		377	5300496	3402 30 4		390	5239475	3482 70 7		381
5682875	3195 91 0		387	5289333	3347 06 0		377	5300557	3402 31 2		390	5239352	3482 75 8		381
5682813	3195 92 9		387	5289395	3347 07 9		377	5300618	3402 32 0		390	5239291	3482 76 6		381
5682752	3195 93 7		387					5300670	3402 33 9		390				
5682691	3195 94 5		387									5311171	3483 06 1		380
				5291374	3353 16 8		376	5867913	3403 02 5		390	5311232	3483 08 8		380
5552017	3198 01 6		387	5291435	3353 18 4		376	5867975	3403 04 1		390	5311294	3483 09 6		380
5552079	3198 01 8		387	5291497	3353 23 0		376	5868033	3403 07 6		390	5418191	3483 21 4		380
5552130	3198 02 0		387	5291558	3353 30 3		376	5868095	3403 08 4		390	5418207	3483 23 9		380
5552192	3198 02 2		387	5291619	3353 40 0		376	5868156	3403 09 2		390				
5552253	3198 02 4		387	5291671	3353 50 8		376	5868217	3403 12 2		390	5683414	3484 60 2		380
5552314	3198 02 6		387	5291732	3353 60 5		376	5868279	3403 13 0		390	5683353	3484 62 9		380
5552376	3198 03 0		387					5868330	3403 16 5		390				
5552437	3198 03 2		387	5291916	3354 16 4		376					5454038	3492 03 6		381
5555438	3198 03 4		387	5291978	3354 18 0		376	5301578	3404 05 6		389	5454090	3492 06 0		381
5555551	3198 03 6		387	5292036	3354 23 7		376	5301639	3404 06 4		389	5454151	3492 09 5		381
5557111	3198 03 8		387	5292098	3354 29 6		376	5301691	3404 08 0		389			/pc.	
5557418	3198 04 0		387	5292159	3354 40 7		376	5301752	3404 10 2		389	5454397	3492 33 8		381
5558132	3198 04 2		387	5292210	3354 50 4		376	5301813	3404 12 9		389	5454458	3492 36 2		381
5558378	3198 04 4		387	5292272	3354 60 1		376					5454519	3492 39 7		381
5558491	3198 05 4		387					5302292	3405 06 0		390	5454212	3492 62 1		382
5558972	3198 05 6		387	5292999	3360 12 1		376	5302353	3405 08 7		390	5454274	3492 66 4		382
5559030	3198 05 8		387	5293118	3360 16 4		376	5302414	3405 10 9		390	5454335	3492 69 9		382
5560296	3198 06 0		387	5293170	3360 18 0		376	5302476	3405 12 5		390				
5560357	3198 06 2		387	5293231	3360 23 7		376							/100 pc.	
5628750	3198 07 3		387	5293293	3360 29 6		376					5963929	3498 10 7		382
5628873	3198 07 5		387	5293354	3360 40 7		376	5303558	3415 03 1		384	5963981	3498 12 3		382
5628996	3198 07 7		387	5293415	3360 50 4		376	5303619	3415 06 6		384	5964049	3498 15 8		382
5785835	3198 07 9		387	5293477	3360 60 1		376	5303671	3415 08 2		384	5964100	3498 20 4		383
5785897	3198 08 1		387					5303732	3415 10 4		384	5964162	3498 26 3		382
5797593	3198 19 3		388	5293651	3361 12 8		376	5303794	3415 12 0		384	5461890	3498 42 5		382
5797777	3198 19 7		388	5293774	3361 16 0		376	5303855	3415 14 7		384	5888437	3498 50 6		382
5797951	3198 19 9		388	5293835	3361 18 7		376	5303916	3415 16 3		384	5888499	3498 54 9		382
5560470	3198 21 9		388	5293897	3361 23 3		376					5888550	3498 58 1		382
5560531	3198 22 1		388	5293958	3361 30 6		376	5304333	3450 05 8		385	5888611	3498 65 4		382
5561132	3198 22 3		388	5294078	3361 40 3		376	5304395	3450 06 6		385	5489139	3498 74 3		382
5561378	3198 22 5		388	5294139	3361 50 0		376	5304456	3450 07 4		385				
5561439	3198 22 7		388	5294191	3361 60 8		376	5304517	3450 08 2		385	5464228	5300 01 5		299
5561552	3198 22 9		388					5304579	3450 09 0		385	5464266	5300 01 9		299
5561972	3198 23 1		388	5294313	3366 11 1		377	5304630	3450 10 4		385	5413530	5300 03 7		296
5785958	3198 23 7		388	5294436	3366 16 2		377	5304692	3450 12 0		385	5413592	5300 05 3		296
5562511	3198 23 9		388	5294498	3366 18 9		377					5413653	5300 06 1		296
5562573	3198 24 1		388	5294559	3366 23 5		377	5304753	3452 01 8		385	5413714	5300 08 8		296
5563112	3198 24 3		388	5294610	3366 30 8		377					5647287	5300 21 0		299
5786016	3198 24 5		388	5294733	3366 40 5		377	5513315	3453 82 0		385	5647317	5300 21 2		299
5786078	3198 24 7		388	5294795	3366 50 2		377					5647324	5300 21 4		299
5787457	3198 24 9		388	5294856	3366 59 6		377	5305958	3460 06 1		385	5647331	5300 22 0		299
5787877	3198 25 1		388					5306078	3460 16 9		385	5647348	5300 22 4		299
5790037	3198 26 0		388	5294917	3367 12 6		377	5306191	3460 76 2		386	5647355	5300 22 8		299
5791232	3198 26 2		388	5295037	3367 16 9		377	5306252	3460 78 9		386	5647362	5300 24 0		299
5791294	3198 26 4		388	5295099	3367 18 5		377					5647379	5300 24 4		299
5791539	3198 26 6		388	5295150	3367 23 1		377	5306498	3462 06 4		385	5647386	5300 24 8		299
5791713	3198 26 8		388	5295211	3367 30 4		377	5306559	3462 08 0		385	5647393	5300 25 2		299
5792192	3198 27 6		388	5295334	3367 40 1		377	5306979	3462 86 2		386	5647409	5300 27 0		299
5792253	3198 27 8		388	5295396	3367 50 9		377	5307037	3462 88 9		386	5647416	5300 27 4		299
5792437	3198 28 0		388									5647423	5300 27 8		299
5792499	3198 28 2		388	5545590	3369 00 3		376	5307150	3463 06 0		386	5647430	5300 28 2		299
5792550	3198 28 4		388	5545774	3369 00 5		376	5307211	3463 56 7		386				
				5545897	3369 02 1		376	5307273	3463 58 3		386	5413899	5301 00 9		296

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EAN-C.	Art. no.	Price	Page	EAN-C.	Art. no.	Price	Page								
5413950	5301 03 3	/100 pc.	296	6202218	6410 08 1	/100 pc.	384								
5414018	5301 04 1		296	6202270	6410 10 3		384								
5414070	5301 06 8		296	6202331	6410 11 1		384								
5414193	5301 08 4		296	6043569	6410 15 4		384								
5414315	5301 10 6		296	6043682	6410 16 2		384								
				6043804	6410 17 0		384								
5414551	5302 02 1		297			/100 m									
5414612	5302 05 6		297												
5414674	5302 06 4		297												
5414735	5302 08 0		297	6209354	6490 01 8		293								
5414797	5302 10 2		297	6209415	6490 03 4		293								
				6209477	6490 05 0		293								
5464273	5303 20 2	/100 m	296	6209538	6490 10 7	/100 pc.	293								
5414971	5303 20 6		296	6209590	6490 12 3		293								
5415039	5303 21 4		296	6209651	6490 15 8		293								
5415091	5303 22 2		296	6209712	6490 17 4		293								
5415152	5303 23 0		296	6209774	6490 90 5		293								
5415275	5303 25 7	/pc.	296	6209835	6490 96 4	/pc.	293								
5415336	5303 26 5		296												
5647447	5303 76 7		299	6209897	6498 01 9		293								
				6209958	6498 02 7		294								
5417132	5305 01 2		297												
5422594	5327 07 5	/100 pc.	319	6146833	7084 76 5		163								
5422655	5327 08 3		319	6146895	7084 77 3		170								
5422716	5327 10 5		319	5163305	7085 11 1		163								
5422778	5327 12 1		319												
5422839	5327 14 8		319												
6933259	6006 48 6	/pc.	171												
6006014	6007 24 4		332												
6006076	6007 25 2		332												
6006137	6007 26 0		332												
6006199	6007 27 9		332												
6006250	6007 28 7	/pair	332												
6006311	6007 29 5		332												
6006373	6007 30 9		332												
6006434	6007 31 7		332												
5439479	6007 49 8		334												
6027132	6024 00 9	/pc.	191												
6027439	6024 10 6		190												
5406075	6119 94 0		192												
5406082	6119 94 1		192												
5406112	6119 94 3		192												
5406266	6119 94 5		192												
5406297	6119 94 6		192												
5406303	6119 94 7		192												
5406310	6119 95 0		195												
5406327	6119 95 1		195												
5406334	6119 95 2		195												
6191710	6349 40 4		333												
6191772	6349 41 2		333												
6191833	6349 43 9		333												
6191895	6349 44 7		333												
6191956	6349 46 3		333												
6192076	6349 81 1		333												
6192199	6349 84 6		333												
6192250	6349 85 4		333												
6192311	6350 05 4		321												
6192373	6350 10 0	/m	321												
6192496	6350 15 1		321												
6192557	6350 20 8		321												

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Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
10 6FL M40 10 31	M40 8,5-10,5 / PE	5516491	2013 03 0		218	90 PG 9 OF	Pg 9 Light grey/ PE	5168973	2032 09 0		228
60 N 12x16 BL	Blue 200/ PA	5183310	2054 08 6		198	90 PG11 DSMB	Pg 11 Light grey/ PE	5169871	2032 51 1		228
60 N 7x16 BL	Blue 100/ PA	5183198	2054 00 0		198	90 PG11 OF	Pg 11 Light grey/ PE	5169031	2032 11 2		228
60 S 12x16 GBGN	Yellow green 200/ PA	5183372	2054 09 4		198	90 PG13.5 DSMB	Pg 13,5 Light grey/ PE	5169932	2032 53 8		228
60 S 7x16 GBGN	Yellow green 100/ PA	5183259	2054 01 9		198	90 PG13.5 OF	Pg 13,5 Light grey/ PE	5169093	2032 13 9		228
61 325 LGR	Light grey 2000/ PA	5879916	2054 48 5		201	90 PG16 DSMB	Pg 16 Light grey/ PE	5169994	2032 54 6		228
61 525 LGR	Light grey 2000/ PA	5825319	2054 50 7		201	90 PG16 OF	Pg 16 Light grey/ PE	5169154	2032 16 3		228
61 825 LGR	Light grey 1000/ PA	5477976	2054 52 3		201	90 PG21 DSMB	Pg 21 Light grey/ PE	5170051	2032 55 4		228
70 S	Sorted* 180/ PA	5183853	2055 20 1		198	90 PG21 OF	Pg 21 Light grey/ PE	5169215	2032 20 1		228
70 VDE	Sorted* 400/ PA	5183433	2055 02 3		198	90 PG29 DSMB	Pg 29 Light grey/ PE	5170112	2032 56 2		228
71	Black 120/ PA	5183914	2055 50 3		198	106 B M16 PS	M16 x 1,5 Light grey/ PS	5520276	2035 51 0		215
72 CE SW	Black 500/ PP	5879251	2056 08 9		199	106 B M20 PS	M20 x 1,5 Light grey/ PS	5520337	2035 51 2		215
72 CE WS	White 500/ PP	5702610	2056 07 0		199	106 B M25 PS	M25 x 1,5 Light grey/ PS	5520399	2035 51 4		215
72 VDE	Transparent 500/ PA	5432258	2055 92 9		199	106 B M32 PS	M32 x 1,5 Light grey/ PS	5520450	2035 51 6		215
74 CE SW	Black 200/ PP	5879312	2056 23 2		200	106 B M40 PS	M40 x 1,5 Light grey/ PS	5520511	2035 51 8		215
74 CE WS	White 200/ PP	5702559	2056 22 4		200	106 B M50 PS	M50 x 1,5 Light grey/ PS	5520573	2035 52 0		215
74 D	Transparent 200/ PA	5184393	2056 17 8		199	106 B M63 PS	M63 x 1,5 Light grey/ PS	5520634	2035 52 2		215
74 VDE	Transparent 200/ PA	5184331	2056 14 3		199	106 B PG11 PS	Pg 11 Light grey/ PS	5172338	2036 12 6		215
76 CE SW	Black 100/ PP	5879374	2056 38 0		200	106 B PG13.5 PS	Pg 13,5 Light grey/ PS	5172451	2036 14 2		215
76 CE WS	White 100/ PP	5702498	2056 37 2		200	106 B PG16 PS	Pg 16 Light grey/ PS	5172512	2036 15 0		215
78 CE SW	Black 100/ PP	5879435	2056 56 9		200	106 B PG21 PS	Pg 21 Light grey/ PS	5172697	2036 22 3		215
78 CE WS	White 100/ PP	5702436	2056 55 0		200	106 B PG29 PS	Pg 29 Light grey/ PS	5172819	2036 30 4		215
79 CE SW	Black 50/ PP	5879558	2056 58 5		200	106 B PG36 PS	Pg 36 Light grey/ PS	5172932	2036 37 1		215
79 CE WS	White 50/ PP	5879497	2056 57 7		200	106 B PG42 PS	Pg 42 Light grey/ PS	5173052	2036 43 6		215
80 CE SW	Black 50/ PP	5300106	2056 59 3		200	106 B PG48 PS	Pg 48 Light grey/ PS	5173175	2036 49 5		215
80 CE WS	White 50/ PP	5300069	2056 59 0		200	106 B PG9 PS	Pg 9 Light grey/ PS	5172154	2036 08 8		215
89	PG 11/ PE	5156079	2012 03 0		160	106 FL 16 8 19	Pg 16 6-8 / PE	5156734	2012 75 8		219
89 ROE 12-16	PG 13.5/ PE	5156130	2012 04 9		161	106 FL 21 10 29	Pg 21 8-10 / PE	5157090	2012 83 9		219
90 M12 GE	M12 x 1,5 Light grey/ PE	5481454	2032 37 8		227	106 FL 21 10 31	Pg 21 8,5-10,5 / PE	5157335	2012 87 1		219
90 M12 OF	M12 x 1,5 Light grey/ PE	5477556	2032 00 7		227	106 FL 21 12 35	Pg 21 9-12 / PE	5157151	2012 84 7		219
90 M16 GE	M16 x 1,5 Light grey/ PE	5481515	2032 38 0		227	106 FL 21 14 40	Pg 21 11-14 / PE	5157458	2012 92 8		219
90 M16 OF	M16 x 1,5 Light grey/ PE	5477617	2032 01 1		227	106 FL 21 6 30	Pg 21 4-6 / PE	5157212	2012 85 5		219
90 M20 GE	M20 x 1,5 Light grey/ PE	5481577	2032 38 2		227	106 FL 21 8 33	Pg 21 6-8 / PE	5156918	2012 78 2		219
90 M20 OF	M20 x 1,5 Light grey/ PE	5477730	2032 01 5		227	106 FL 21 9 22	Pg 21 7-9 / PE	5157038	2012 82 0		219
90 M25 GE	M25 x 1,5 Light grey/ PE	5481638	2032 38 4		227	106 FL 21 9 39	Pg 21 7-9 / PE	5156970	2012 80 4		219
90 M25 OF	M25 x 1,5 Light grey/ PE	5477792	2032 01 9		227	106 FL 29 14 40	Pg 29 11-14 / PE	5156857	2012 77 4		219
90 M32 GE	M32 x 1,5 Light grey/ PE	5481690	2032 38 6		227	106 FL M20 8 19	M20 6-8 / PE	5515173	2013 00 2		218
90 M32 OF	M32 x 1,5 Light grey/ PE	5477853	2032 02 3		227	106 FL M25 10 29	M25 8-10 / PE	5515470	2013 01 0		218
90 M40 GE	M40 x 1,5 Light grey/ PE	5481812	2032 38 8		227	106 FL M25 10 31	M25 8,5-10,5 / PE	5515531	2013 01 1		218
90 M40 OF	M40 x 1,5 Light grey/ PE	5477914	2032 03 1		227	106 FL M25 12 35	M25 9-12 / PE	5515593	2013 01 2		218
90 PG 9 DSMB	Pg 9 Light grey/ PE	5169819	2032 50 3		228	106 FL M25 14 40	M25 11-14 / PE	5515654	2013 01 3		218
						106 FL M25 6 30	M25 4-6 / PE	5515234	2013 00 6		218
						106 FL M25 8 33	M25 6-8 / PE	5515296	2013 00 7		218
						106 FL M25 9 22	M25 7-9 / PE	5515357	2013 00 8		218
						106 FL M25 9 39	M25 7-9 / PE	5515418	2013 00 9		218
						106 FL M32 10 29	M32 8-10 / PE	5515951	2013 01 9		218
						106 FL M32 10 31	M32 8,5-10,5 / PE	5516019	2013 02 0		218
						106 FL M32 12 35	M32 9-12 / PE	5516071	2013 02 1		218
						106 FL M32 14 40	M32 11-14 / PE	5516132	2013 02 2		218
						106 FL M32 6 30	M32 4-6 / PE	5515715	2013 01 5		218
						106 FL M32 8 33	M32 6-8 / PE	5515777	2013 01 6		218
						106 FL M32 9 22	M32 7-9 / PE	5515838	2013 01 7		218
						106 FL M32 9 39	M32 7-9 / PE	5515890	2013 01 8		218
						106 FL M40 10 29	M40 8-10 / PE	5516439	2013 02 9		218
						106 FL M40 12 35	M40 9-12 / PE	5516552	2013 03 1		218
						106 FL M40 14 40	M40 11-14 / PE	5516613	2013 03 2		218
						106 FL M40 6 30	M40 4-6 / PE	5516194	2013 02 5		218
						106 FL M40 8 33	M40 6-8 / PE	5516255	2013 02 6		218
						106 FL M40 9 22	M40 7-9 / PE	5516316	2013 02 7		218
						106 FL M40 9 39	M40 7-9 / PE	5516378	2013 02 8		218
						106 K M20 PS	M20x1,5 Light grey/ PS	5469636	2038 07 2		214

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
106 K PG16 PS	Pg 16 Light grey/ PS	5175216	2038 04 8		214	107 ADA M12-PG9	M12 PG9/ PA	5371946	2031 45 6		226
						107 ADA M16-PG9	M16 PG9/ PA	5371977	2031 45 7		226
106 L PG11 PS	Pg 11 Light grey/ PS	5175810	2039 04 4		214	107 ADA M20-PG11	M20 PG11/ PA	5371984	2031 45 8		226
106 L PG13.5 PS	Pg 13,5 Light grey/ PS	5175872	2039 06 0		214	107 ADA M20-PG13	M20 PG13,5/ PA	5371991	2031 45 9		226
106 L PG16 PS	Pg 16 Light grey/ PS	5175933	2039 08 7		214	107 ADA M25-PG16	M25 PG16/ PA	5372004	2031 46 0		226
106 L PG21 PS	Pg 21 Light grey/ PS	5175995	2039 10 9		214	107 ADA M32-PG29	M32 PG29/ PA	5372011	2031 46 1		226
106 L PG29 PS	Pg 29 Light grey/ PS	5176053	2039 12 5		214	107 ADA M40-PG29	M40 PG29/ PA	5372028	2031 46 2		226
106 L PG9 PS	Pg 9 Light grey/ PS	5175759	2039 02 8		214	107 ADA M50-PG36	M50 PG36/ PA	5372035	2031 46 3		226
						107 ADA PG11-M16	PG11 M16/ PA	5372066	2031 46 7		226
106 M 12 PA	M12 x 1,5 Light grey/ PA	5468134	2035 41 3		212	107 ADA PG13-M20	PG13,5 M20/ PA	5372073	2031 46 8		226
						107 ADA PG16-M25	PG16 M20/ PA	5372080	2031 46 9		226
106 M 16 PA	M16 x 1,5 Light grey/ PA	5468370	2035 42 1		212	107 ADA PG21-M25	PG21 M25/ PA	5372097	2031 47 0		226
						107 ADA PG29-M32	PG29 M32/ PA	5372103	2031 47 1		226
106 M 20 PA	M20 x 1,5 Light grey/ PA	5468431	2035 44 8		212	107 ADA PG7-M12	PG7 M12/ PA	5372042	2031 46 5		226
106 M 20 PS	M20 x 1,5 Light grey/ PS	5465256	2035 33 2		213	107 ADA PG9-M12	PG9 M12/ PA	5372059	2031 46 6		226
106 M 25 PA	M25 x 1,5 Light grey/ PA	5468493	2035 45 6		212	107 B PG11	Pg 11/ NBR-SBR	5167112	2029 11 1		229
106 M 25 PS	M25 x 1,5 Light grey/ PS	5465317	2035 34 0		213	107 B PG11	Pg 11/ NBR-SBR	5167112	2029 11 1		250
						107 B PG13.5	Pg 13,5/ NBR-SBR	5167174	2029 13 8		229
106 M 32 PA	M32 x 1,5 Light grey/ PA	5468554	2035 46 4		212	107 B PG13.5	Pg 13,5/ NBR-SBR	5167174	2029 13 8		250
106 M 32 PS	M32 x 1,5 Light grey/ PS	5467410	2035 35 9		213	107 B PG16	Pg 16/ NBR-SBR	5167235	2029 16 2		229
						107 B PG16	Pg 16/ NBR-SBR	5167235	2029 16 2		250
106 M 40 PA	M40 x 1,5 Light grey/ PA	5468615	2035 47 2		212	107 B PG21	Pg 21/ NBR-SBR	5167297	2029 21 9		229
106 M 40 PS	M40 x 1,5 Light grey/ PS	5467472	2035 36 7		213	107 B PG21	Pg 21/ NBR-SBR	5167297	2029 21 9		250
						107 B PG29	Pg 29/ NBR-SBR	5167358	2029 29 4		229
106 M 50 PA	M50 x 1,5 Light grey/ PA	5468677	2035 48 0		212	107 B PG29	Pg 29/ NBR-SBR	5167358	2029 29 4		250
106 M 50 PS	M50 x 1,5 Light grey/ PS	5467953	2035 37 5		213	107 B PG36	Pg 36/ NBR-SBR	5167419	2029 36 7		229
						107 B PG36	Pg 36/ NBR-SBR	5167419	2029 36 7		250
106 M 63 PA	M63 x 1,5 Light grey/ PA	5468738	2035 49 9		212	107 B PG42	Pg 42/ NBR-SBR	5167471	2029 42 1		229
106 M 63 PS	M63 x 1,5 Light grey/ PS	5468011	2035 38 3		213	107 B PG42	Pg 42/ NBR-SBR	5167471	2029 42 1		250
						107 B PG48	Pg 48/ NBR-SBR	5167532	2029 48 0		229
106 M12 PS	M12 x 1,5 Light grey/ PS	5464952	2035 31 6		213	107 B PG48	Pg 48/ NBR-SBR	5167532	2029 48 0		250
						107 B PG9	Pg 9/ NBR-SBR	5167051	2029 10 3		229
106 M16 PS	M16 x 1,5 Light grey/ PS	5465072	2035 32 4		213	107 B PG9	Pg 9/ NBR-SBR	5167051	2029 10 3		250
106 PG11	Pg 11 Light grey/ PS	5172277	2036 11 8		213	107 C V 16 2x6	Pg 16 6/ NBR-SBR	5824718	2029 63 4		210
						107 C V 16 3x5	Pg 16 5/ NBR-SBR	5824657	2029 62 6		210
106 PG13.5	Pg 13,5 Light grey/ PS	5172390	2036 13 4		213	107 C V 16 3x6	Pg 16 6,5/ NBR-SBR	5824770	2029 64 2		210
						107 C V 16 5x4	Pg 16 4/ NBR-SBR	5824596	2029 61 8		210
106 PG16	Pg 16 Light grey/ PS	5172574	2036 16 9		213	107 C V 21 2x8	Pg 21 8/ NBR-SBR	5824893	2029 66 9		210
						107 C V 21 3x7	Pg 21 7/ NBR-SBR	5824831	2029 65 0		210
106 PG21	Pg 21 Light grey/ PS	5172635	2036 21 5		213						
						107 C VM 20 2x4	M20 4/ NBR-SBR	5035831	2029 67 2		210
106 PG29	Pg 29 Light grey/ PS	5172758	2036 29 0		213	107 C VM 20 2x6	M20 6/ NBR-SBR	5035954	2029 67 7		210
						107 C VM 20 4x5	M20 5/ NBR-SBR	5035893	2029 67 5		210
106 PG36	Pg 36 Light grey/ PS	5172871	2036 36 3		213	107 C VM 25 2x6	M25 6/ NBR-SBR	5036135	2029 68 5		210
						107 C VM 25 2x8	M25 8/ NBR-SBR	5036258	2029 69 0		210
106 PG42	Pg 42 Light grey/ PS	5172994	2036 42 8		213	107 C VM 25 3x6	M25 6/ NBR-SBR	5036074	2029 68 2		210
						107 C VM 25 3x7	M25 7/ NBR-SBR	5036197	2029 68 8		210
106 PG48	Pg 48 Light grey/ PS	5173113	2036 48 7		213	107 C VM 25 5x4	M25 4/ NBR-SBR	5036012	2029 67 9		210
						107 C VM 32 2x8	M32 8/ NBR-SBR	5036319	2029 69 3		210
106 PG7	Pg 7 Light grey/ PS	5172093	2036 06 1		213	107 C VM 32 4x8	M32 8/ NBR-SBR	5036371	2029 69 6		210
106 PG9	Pg 9 Light grey/ PS	5172215	2036 09 6		213						
						107 D PG11 GTP	Pg 11 16,5/ St / GTP	5164890	2027 11 9		251
106 R PG13-11 PS	Pg 13,5 Light grey/ PS	5176954	2040 06 9		216	107 D PG13.5 GTP	Pg 13,5 18,5/ St / GTP	5164951	2027 13 5		251
106 R PG13-9 PS	Pg 13,5 Light grey/ PS	5176893	2040 04 2		216	107 D PG16 GTP	Pg 16 20,5/ St / GTP	5165019	2027 15 1		251
106 R PG16-11 PS	Pg 16 Light grey/ PS	5177012	2040 08 5		216	107 D PG21 GTP	Pg 21 26/ St / GTP	5165071	2027 21 6		251
106 R PG16-13 PS	Pg 16 Light grey/ PS	5177074	2040 10 7		216	107 D PG29 GTP	Pg 29 35/ St / GTP	5165132	2027 29 1		251
						107 D PG7 GTP	Pg 7 11/ St / GTP	5164777	2027 07 0		251
106 VDE PG11 PA	Pg 11 Light grey/ PA	5173359	2036 53 3		212	107 D PG9 GTP	Pg 9 13,5/ St / GTP	5164838	2027 09 7		251
106 VDE PG13 PA	Pg 13,5 Light grey/ PA	5173410	2036 57 6		212						
106 VDE PG16 PA	Pg 16 Light grey/ PA	5173472	2036 59 2		212	107 E M 12-16 PA	M12 M16/ PA	5371878	2031 45 0		225
106 VDE PG21 PA	Pg 21 Light grey/ PA	5173533	2036 61 4		212	107 E M 16-20 PA	M16 M20/ PA	5371885	2031 45 1		225
106 VDE PG29 PA	Pg 29 Light grey/ PA	5173595	2036 63 0		212	107 E M 20-25 PA	M20 M25/ PA	5371915	2031 45 2		225
106 VDE PG36 PA	Pg 36 Light grey/ PA	5173656	2036 65 7		212	107 E M 21-40 PA	M32 M40/ PA	5371939	2031 45 4		225
106 VDE PG9 PA	Pg 9 Light grey/ PA	5173298	2036 51 7		212	107 E M 25-32 PA	M25 M32/ PA	5371922	2031 45 3		225
106 Z PG11 PC	Pg 11 Light grey/ PC	5162070	2023 51 2		217	107 E PG11 PA	Pg 11 Light grey/ PA	5163695	2025 53 1		223
106 Z PG13.5 PC	Pg 13,5 Light grey/ PC	5162131	2023 52 0		217	107 E PG11 PS	Pg 11 Light grey/ PS	5163091	2025 11 6		222
106 Z PG16 PC	Pg 16 Light grey/ PC	5162193	2023 53 9		217	107 E PG13.5 PA	Pg 13,5 Light grey/ PA	5163756	2025 56 6		223
106 Z PG21 PC	Pg 21 Light grey/ PC	5162254	2023 54 7		217	107 E PG13.5 PS	Pg 13,5 Light grey/ PS	5163152	2025 13 2		222
106 Z PG9 PC	Pg 9 Light grey/ PC	5162018	2023 50 4		217	107 E PG16 PS	Pg 16 Light grey/ PS	5163213	2025 16 7		222
						107 E PG21 PA	Pg 21 Light grey/ PA	5163879	2025 60 4		223
106 ZB PG11 PC	Pg 11 Light grey/ PC	5162438	2023 71 7		217	107 E PG21 PS	Pg 21 Light grey/ PS	5163275	2025 21 3		222
106 ZB PG16 PC	Pg 16 Light grey/ PC	5162551	2023 73 3		217	107 E PG29 PS	Pg 29 Light grey/ PS	5163336	2025 29 9		222
106 ZB PG21 PC	Pg 21 Light grey/ PC	5162612	2023 74 1		217	107 E PG36 PA	Pg 36 Light grey/ PA	5163992	2025 64 7		223
106 ZB PG29 PC	Pg 29 Light grey/ PC	5162674	2023 76 8		217	107 E PG36 PS	Pg 36 Light grey/ PS	5163398	2025 36 1		222
106 ZB PG9 PC	Pg 9 Light grey/ PC	5162377	2023 70 9		217	107 E PG42 PS	Pg 42 Light grey/ PS	5163459	2025 42 6		222
						107 E PG48 PS	Pg 48 Light grey/ PS	5163510	2025 48 5		222
106ZB PG13.5 PC	Pg 13,5 Light grey/ PC	5162490	2023 72 5		217						

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

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				/100 pc.						/100 pc.	
107 E PG7 PS	Pg 7 Light grey/ PS	5162971	2025 07 8		222	107 R PG11- 7 PA	Pg 11 Pg 7/ PA	5824350	2030 70 5		225
107 E PG9 PS	Pg 9 Light grey/ PS	5163039	2025 09 4		222	107 R PG13- 9 PA	Pg 13,5 Pg 9/ PA	5434238	2030 71 3		225
						107 R PG16- 9 PA	Pg 16 Pg 9/ PA	5434351	2030 74 8		225
107 EP PG29-36PA	Pg 29 Pg 36/ PA	5825012	2030 98 5		226	107 R PG16-11 PA	Pg 16 Pg 11/ PA	5434412	2030 75 6		225
						107 R PG21-11 PA	Pg 21 Pg 11/ PA	5907510	2030 76 4		225
107 EZ PG11-13PA	Pg 11 Pg 13,5/ PA	5433934	2030 93 4		226	107 R PG21-13 PA	Pg 21 Pg 13,5/ PA	5434535	2030 77 2		225
107 EZ PG13-16PA	Pg 13,5 Pg 16/ PA	5433996	2030 95 0		226	107 R PG21-16 PA	Pg 21 Pg 16/ PA	5434597	2030 78 0		225
107 EZ PG16-21PA	Pg 16 Pg 21/ PA	5434054	2030 97 7		226	107 R PG29-16 PA	Pg 29 Pg 16/ PA	5824411	2030 79 9		225
107 EZ PG21-29PA	Pg 21 Pg 29/ PA	5434115	2030 99 3		226	107 R PG29-21 PA	Pg 29 Pg 21/ PA	5434658	2030 80 2		225
107 EZ PG9-11 PA	Pg 9 Pg 11/ PA	5433873	2030 89 6		226	107 R PG36-21 PA	Pg 36 Pg 21/ PA	5824473	2030 82 9		225
						107 R PG36-29 PA	Pg 36 Pg 29/ PA	5434719	2030 81 0		225
107 F M12 PE	M12 16,3/ PE	5374299	2030 00 4		229	107 R PG42-29 PA	Pg 42 Pg 29/ PA	5824534	2030 83 7		225
107 F M12 PE	M12 16,3/ PE	5374299	2030 00 4		251						
107 F M16 PE	M16 20,9/ PE	5374350	2030 00 8		229	107 RZ PG 9-7	Pg 9 Pg 7/ PA	5445753	2031 30 2		225
107 F M16 PE	M16 20,9/ PE	5374350	2030 00 8		251	107 RZ PG11-9	Pg 11 Pg 9/ PA	5445814	2031 32 9		225
						107 RZ PG13-11	Pg 13,5 Pg 11/ PA	5445937	2031 34 5		225
107 F M20 PE	M20 25,1/ PE	5375678	2030 01 2		229	107 RZ PG16-13	Pg 16 Pg 13,5/ PA	5446057	2031 38 8		225
107 F M20 PE	M20 25,1/ PE	5375678	2030 01 2		251	107 RZ PG21-16	Pg 21 Pg 16/ PA	5446118	2031 41 8		225
107 F M25 PE	M25 31,3/ PE	5375913	2030 01 6		229	107 RZ PG29-21	Pg 29 Pg 21/ PA	5446170	2031 44 2		225
107 F M25 PE	M25 31,3/ PE	5375913	2030 01 6		251						
						107 S VTEC M12	M12 12/ ZPE	5035299	2028 87 0		211
107 F M32 PE	M32 37,6/ PE	5376156	2030 02 0		229	107 S VTEC M12	M12 12/ ZPE	5035299	2028 87 0		230
107 F M32 PE	M32 37,6/ PE	5376156	2030 02 0		251	107 S VTEC M12	M12 12/ ZPE	5035299	2028 87 0		252
						107 S VTEC M16	M16 16/ ZPE	5035350	2028 87 3		211
107 F M40 PE	M40 49,1/ PE	5376514	2030 02 4		229	107 S VTEC M16	M16 16/ ZPE	5035350	2028 87 3		230
107 F M40 PE	M40 49,1/ PE	5376514	2030 02 4		251	107 S VTEC M16	M16 16/ ZPE	5035350	2028 87 3		252
						107 S VTEC M20	M20 20/ ZPE	5035411	2028 87 5		211
107 F M50 PE	M50 60,1/ PE	5376576	2030 02 8		229	107 S VTEC M20	M20 20/ ZPE	5035411	2028 87 5		230
107 F M50 PE	M50 60,1/ PE	5376576	2030 02 8		251	107 S VTEC M20	M20 20/ ZPE	5035411	2028 87 5		252
						107 S VTEC M25	M25 25/ ZPE	5035473	2028 87 7		211
107 F M63 PE	M63 73,8/ PE	5377290	2030 03 2		229	107 S VTEC M25	M25 25/ ZPE	5035473	2028 87 7		230
107 F M63 PE	M63 73,8/ PE	5377290	2030 03 2		251	107 S VTEC M25	M25 25/ ZPE	5035473	2028 87 7		252
						107 S VTEC M32	M32 32/ ZPE	5035534	2028 88 0		211
107 F PG11 PE	Pg 11 23/ PE	5168317	2030 10 1		230	107 S VTEC M32	M32 32/ ZPE	5035534	2028 88 0		230
107 F PG11 PE	Pg 11 23/ PE	5168317	2030 10 1		251	107 S VTEC M32	M32 32/ ZPE	5035534	2028 88 0		252
107 F PG13,5 PE	Pg 13,5 25/ PE	5168379	2030 13 6		230	107 S VTEC M40	M40 40/ ZPE	5035596	2028 88 3		211
107 F PG13,5 PE	Pg 13,5 25/ PE	5168379	2030 13 6		251	107 S VTEC M40	M40 40/ ZPE	5035596	2028 88 3		230
107 F PG16 PE	Pg 16 27/ PE	5168430	2030 16 0		230	107 S VTEC M40	M40 40/ ZPE	5035596	2028 88 3		252
107 F PG16 PE	Pg 16 27/ PE	5168430	2030 16 0		251	107 S VTEC M50	M50 50/ ZPE	5035718	2028 88 5		211
107 F PG21 PE	Pg 21 34/ PE	5168492	2030 21 7		230	107 S VTEC M50	M50 50/ ZPE	5035718	2028 88 5		230
107 F PG21 PE	Pg 21 34/ PE	5168492	2030 21 7		251	107 S VTEC M50	M50 50/ ZPE	5035718	2028 88 5		252
107 F PG29 PE	Pg 29 44/ PE	5168553	2030 29 2		230	107 S VTEC M63	M63 63/ ZPE	5035770	2028 88 7		211
107 F PG29 PE	Pg 29 44/ PE	5168553	2030 29 2		251	107 S VTEC M63	M63 63/ ZPE	5035770	2028 88 7		230
107 F PG36 PE	Pg 36 55,5/ PE	5168614	2030 36 5		230	107 S VTEC M63	M63 63/ ZPE	5035770	2028 88 7		252
107 F PG36 PE	Pg 36 55,5/ PE	5168614	2030 36 5		251	107 S VTEC PG11	Pg 11 16,5/ ZPE	5843672	2028 91 3		211
107 F PG42 PE	Pg 42 63,5/ PE	5168676	2030 41 1		230	107 S VTEC PG11	Pg 11 16,5/ ZPE	5843672	2028 91 3		231
107 F PG42 PE	Pg 42 63,5/ PE	5168676	2030 41 1		251	107 S VTEC PG11	Pg 11 16,5/ ZPE	5843672	2028 91 3		252
107 F PG48 PE	Pg 48 69,5/ PE	5168737	2030 48 9		230	107 S VTEC PG13	Pg 13,5 18,5/ ZPE	5843733	2028 92 1		211
107 F PG48 PE	Pg 48 69,5/ PE	5168737	2030 48 9		251	107 S VTEC PG13	Pg 13,5 18,5/ ZPE	5843733	2028 92 1		231
107 F PG7 PE	Pg 7 16,5/ PE	5168195	2030 07 1		230	107 S VTEC PG13	Pg 13,5 18,5/ ZPE	5843733	2028 92 1		252
107 F PG7 PE	Pg 7 16,5/ PE	5168195	2030 07 1		251	107 S VTEC PG16	Pg 16 21/ ZPE	5843795	2028 94 8		211
107 F PG9 PE	Pg 9 19/ PE	5168256	2030 09 8		230	107 S VTEC PG16	Pg 16 21/ ZPE	5843795	2028 94 8		231
107 F PG9 PE	Pg 9 19/ PE	5168256	2030 09 8		251	107 S VTEC PG16	Pg 16 21/ ZPE	5843795	2028 94 8		252
						107 S VTEC PG21	Pg 21 26,5/ ZPE	5843856	2028 95 6		211
107 R M20-12 PA	M20 M12/ PA	5377412	2030 61 6		224	107 S VTEC PG21	Pg 21 26,5/ ZPE	5843856	2028 95 6		231
107 R M20-16 PA	M20 M16/ PA	5383352	2030 61 9		224	107 S VTEC PG21	Pg 21 26,5/ ZPE	5843856	2028 95 6		252
107 R M25-12 PA	M25 M12/ PA	5384076	2030 62 4		224	107 S VTEC PG29	Pg 29 34,5/ ZPE	5843917	2028 96 4		211
107 R M25-16 PA	M25 M16/ PA	5389118	2030 62 6		224	107 S VTEC PG29	Pg 29 34,5/ ZPE	5843917	2028 96 4		231
107 R M25-20 PA	M25 M20/ PA	5389170	2030 62 8		224	107 S VTEC PG29	Pg 29 34,5/ ZPE	5843917	2028 96 4		252
						107 S VTEC PG36	Pg 36 44/ ZPE	5843979	2028 97 2		211
107 R M32-12 PA	M32 M12/ PA	5394518	2030 63 2		224	107 S VTEC PG36	Pg 36 44/ ZPE	5843979	2028 97 2		231
107 R M32-16 PA	M32 M16/ PA	5401711	2030 63 4		224	107 S VTEC PG36	Pg 36 44/ ZPE	5843979	2028 97 2		252
107 R M32-20 PA	M32 M20/ PA	5402497	2030 63 7		224	107 S VTEC PG42	Pg 42 50/ ZPE	5844037	2028 98 0		211
107 R M32-25 PA	M32 M25/ PA	5402558	2030 64 0		224	107 S VTEC PG42	Pg 42 50/ ZPE	5844037	2028 98 0		231
						107 S VTEC PG42	Pg 42 50/ ZPE	5844037	2028 98 0		252
107 R M40-16 PA	M40 M16/ PA	5402619	2030 64 3		224	107 S VTEC PG48	Pg 48 56/ ZPE	5844099	2028 99 9		211
107 R M40-20 PA	M40 M20/ PA	5402671	2030 64 6		224	107 S VTEC PG48	Pg 48 56/ ZPE	5844099	2028 99 9		231
107 R M40-25 PA	M40 M25/ PA	5402732	2030 64 9		224	107 S VTEC PG48	Pg 48 56/ ZPE	5844099	2028 99 9		252
107 R M40-32 PA	M40 M32/ PA	5402794	2030 65 2		224	107 S VTEC PG7	Pg 7 11/ ZPE	5843559	2028 89 1		211
						107 S VTEC PG7	Pg 7 11/ ZPE	5843559	2028 89 1		231
107 R M50-20 PA	M50 M20/ PA	5402978	2030 65 5		224	107 S VTEC PG7	Pg 7 11/ ZPE	5843559	2028 89 1		252
107 R M50-25 PA	M50 M25/ PA	5403517	2030 65 9		224	107 S VTEC PG9	Pg 9 14/ ZPE	5843610	2028 90 5		211
107 R M50-32 PA	M50 M32/ PA	5403999	2030 66 1		224	107 S VTEC PG9	Pg 9 14/ ZPE	5843610	2028 90 5		231
107 R M50-40 PA	M50 M40/ PA	5404118	2030 66 4		224	107 S VTEC PG9	Pg 9 14/ ZPE	5843610	2028 90 5		252
						107 V PG 7 PVC	Pg 7 11/ PVC	5167594	2029 70 7		231
107 R M63-25 PA	M63 M25/ PA	5405610	2030 66 7		224	107 V PG 7 PVC	Pg 7 11/ PVC	5167594	2029 70 7		253
107 R M63-32 PA	M63 M32/ PA	5405795	2030 67 0		224	107 V PG 9 PVC	Pg 9 13,5/ PVC	5167655	2029 71 5		231
107 R M63-40 PA	M63 M40/ PA	5405856	2030 67 3		224	107 V PG 9 PVC	Pg 9 13,5/ PVC	5167655	2029 71 5		253
107 R M63-50 PA	M63 M50/ PA	5407713	2030 67 5		224						

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
107 V PG11 PVC	Pg 11 16,5/ PVC	5167716	2029 72 3	/100 pc.	231	115 GR-GN	Natural 90	5228011	2340 03 8	/100 pc.	231
107 V PG11 PVC	Pg 11 16,5/ PVC	5167716	2029 72 3		253						
107 V PG13,5 PVC	Pg 13,5 18,5/ PVC	5167778	2029 73 1		231						
107 V PG13,5 PVC	Pg 13,5 18,5/ PVC	5167778	2029 73 1		253	116 M12 LGR PA	M12x1,5 Light grey/ PA	5874157	2048 90 6		220
107 V PG16 PVC	Pg 16 20,5/ PVC	5167839	2029 75 8		231	116 M12 LGR PS	M12 x 1,5 Light grey/ PS	5128656	2049 50 3		221
107 V PG16 PVC	Pg 16 20,5/ PVC	5167839	2029 75 8		253	116 M12 SGR PA	M12x1,5 Silver grey/ PA	5446477	2048 75 2		220
107 V PG21 PVC	Pg 21 26/ PVC	5167891	2029 76 6		231	116 M12 SW PA	M12x1,5 Black/ PA	5089179	2049 06 6		220
107 V PG21 PVC	Pg 21 26/ PVC	5167891	2029 76 6		253						
107 V PG29 PVC	Pg 29 35/ PVC	5167952	2029 77 4		231	116 M16 LGR PA	M16x1,5 Light grey/ PA	5874218	2048 91 4		220
107 V PG29 PVC	Pg 29 35/ PVC	5167952	2029 77 4		253	116 M16 LGR PS	M16 x 1,5 Light grey/ PS	5139331	2049 51 1		221
						116 M16 SGR PA	M16x1,5 Silver grey/ PA	5446538	2048 76 0		220
107 W PG 9 PA	Pg 9 Light grey/ PA	5445395	2029 90 1		227	116 M16 SW PA	M16x1,5 Black/ PA	5095354	2049 07 4		220
107 W PG11 PA	Pg 11 Light grey/ PA	5445456	2029 92 8		227						
107 W PG13,5 PA	Pg 13,5 Light grey/ PA	5445517	2029 93 6		227	116 M20 LGR PA	M20x1,5 Light grey/ PA	5944539	2048 92 2		220
107 W PG16 PA	Pg 16 Light grey/ PA	5445579	2029 94 4		227	116 M20 LGR PS	M20 x 1,5 Light grey/ PS	5153313	2049 53 8		221
107 W PG21 PA	Pg 21 Light grey/ PA	5445630	2029 95 2		227	116 M20 SGR PA	M20x1,5 Silver grey/ PA	5446590	2048 77 9		220
						116 M20 SW PA	M20x1,5 Black/ PA	5095415	2049 08 2		220
107 Z PG 9 PA	Pg 9 Light grey/ PA	5161653	2023 09 1		223						
107 Z PG11 PA	Pg 11 Light grey/ PA	5161714	2023 11 3		223	116 M25 LGR PA	M25x1,5 Light grey/ PA	5944591	2048 93 0		220
107 Z PG13,5 PA	Pg 13,5 Light grey/ PA	5161776	2023 12 1		223	116 M25 LGR PS	M25 x 1,5 Light grey/ PS	5155478	2049 54 6		221
107 Z PG16 PA	Pg 16 Light grey/ PA	5161837	2023 16 4		223	116 M25 SGR PA	M25x1,5 Silver grey/ PA	5446651	2048 78 7		220
107 Z PG21 PA	Pg 21 Light grey/ PA	5161899	2023 21 0		223	116 M25 SW PA	M25x1,5 Black/ PA	5095538	2049 09 0		220
107 Z PG29 PA	Pg 29 Light grey/ PA	5161950	2023 29 6		223						
107CR VM 12	M12/ NBR-SBR	5360582	2029 56 0		210	116 M32 LGR PA	M32x1,5 Light grey/ PA	5944652	2048 94 9		220
107CR VM 16	M16/ NBR-SBR	5360599	2029 56 3		210	116 M32 LGR PS	M32 x 1,5 Light grey/ PS	5161592	2049 55 4		221
107CR VM 20	M20/ NBR-SBR	5360605	2029 56 6		210	116 M32 SGR PA	M32x1,5 Silver grey/ PA	5446712	2048 79 5		220
107CR VM 25	M25/ NBR-SBR	5360636	2029 56 9		210	116 M32 SW PA	M32x1,5 Black/ PA	5095651	2049 10 4		220
107CR VM 32	M32/ NBR-SBR	5360643	2029 57 2		210						
107CR VM 40	M40/ NBR-SBR	5360650	2029 57 5		210	116 M40 LGR PA	M40x1,5 Light grey/ PA	5088998	2048 95 7		220
107CR VM 50	M50/ NBR-SBR	5360667	2029 57 8		210	116 M40 LGR PS	M40 x 1,5 Light grey/ PS	5228615	2049 56 2		221
107CR VM 63	M63/ NBR-SBR	5360698	2029 58 1		210	116 M40 SGR PA	M40x1,5 Silver grey/ PA	5088752	2048 80 9		220
						116 M40 SW PA	M40x1,5 Black/ PA	5095712	2049 11 2		220
107VS VM 12 PA M20 / Pg16	Light grey/ PA	5389972	2029 51 7		211	116 M50 LGR PA	M50x1,5 Light grey/ PA	5089056	2048 96 5		220
107VS VM 16 PA M25 / Pg21	Light grey/ PA	5389989	2029 52 0		211	116 M50 LGR PS	M50 x 1,5 Light grey/ PS	5232810	2049 57 0		221
107VS VM 20 PA M32 / Pg29	Light grey/ PA	5389996	2029 52 3		211	116 M50 SGR PA	M50x1,5 Silver grey/ PA	5088875	2048 81 7		220
107VS VM 5 PA M12 / Pg9	Light grey/ PA	5389934	2029 51 1		211	116 M50 SW PA	M50x1,5 Black/ PA	5096313	2049 12 0		220
107VS VM 9 PAM16 / Pg13,5	Light grey/ PA	5389941	2029 51 4		211						
108 M12 PS	M12 x 1,5 15/ PS	5409274	2033 00 3		222	116 M63 LGR PA	M63x1,5 Light grey/ PA	5089117	2048 97 3		220
						116 M63 LGR PS	M63 x 1,5 Light grey/ PS	5315018	2049 58 9		221
108 M16 PS	M16 x 1,5 20/ PS	5424031	2033 00 7		222	116 M63 SGR PA	M63x1,5 Silver grey/ PA	5088936	2048 82 5		220
						116 M63 SW PA	M63x1,5 Black/ PA	5127758	2049 13 9		220
108 M20 PS	M20 x 1,5 24/ PS	5426554	2033 01 1		222						
108 M25 PS	M25 x 1,5 30/ PS	5426615	2033 01 6		222	116 PG 7	Pg 7 Light grey/ PS	5178811	2043 07 6		221
108 M32 PS	M32 x 1,5 37/ PS	5431299	2033 02 1		222	116 PG 9	Pg 9 Light grey/ PS	5178873	2043 09 2		221
108 M40 PS	M40 x 1,5 46/ PS	5434177	2033 02 6		222	116 PG11	Pg 11 Light grey/ PS	5178934	2043 11 4		221
108 M50 PS	M50 x 1,5 56/ PS	5452478	2033 03 2		222	116 PG13,5	Pg 13,5 Light grey/ PS	5178996	2043 13 0		221
108 M63 PS	M63 x 1,5 70/ PS	5464778	2033 03 8		222	116 PG16	Pg 16 Light grey/ PS	5179054	2043 16 5		221
108 PG 7	Pg 7 14/ PS	5170235	2033 07 0		222	116 PG21	Pg 21 Light grey/ PS	5179115	2043 21 1		221
108 PG 9	Pg 9 19/ PS	5170297	2033 09 7		222	116 PG29	Pg 29 Light grey/ PS	5179177	2043 29 7		221
108 PG11	Pg 11 22/ PS	5170358	2033 11 9		222	116 PG36	Pg 36 Light grey/ PS	5179238	2043 35 1		221
108 PG13,5	Pg 13,5 25/ PS	5170419	2033 13 5		222	116 PG42	Pg 42 Light grey/ PS	5179290	2043 42 4		221
108 PG16	Pg 16 27/ PS	5170471	2033 15 1		222	116 PG48	Pg 48 Light grey/ PS	5179351	2043 48 3		221
108 PG21	Pg 21 34/ PS	5170532	2033 21 6		222	116 VDE PG 9 PA	Pg 9 Light grey/ PA	5182474	2048 09 4		220
108 PG29	Pg 29 44/ PS	5170594	2033 29 1		222	116 VDE PG11 PA	Pg 11 Light grey/ PA	5182535	2048 11 6		220
108 PG36	Pg 36 58/ PS	5170655	2033 36 4		222	116 VDE PG13,5 PA	Pg 13,5 Light grey/ PA	5182597	2048 13 2		220
108 PG42	Pg 42 67/ PS	5170716	2033 42 9		222	116 VDE PG16 PA	Pg 16 Light grey/ PA	5182658	2048 16 7		220
108 PG48	Pg 48 73/ PS	5170778	2033 48 8		222	116 VDE PG21 PA	Pg 21 Light grey/ PA	5182719	2048 22 1		220
						116 VDE PG29 PA	Pg 29 Light grey/ PA	5182771	2048 29 9		220
113 M20 LGR	M 20 x 1,5/ UF	5088639	2024 06 3		218	116 VDE PG36 PA	Pg 36 Light grey/ PA	5182832	2048 36 1		220
113 PG13,5 LGR	Pg 13,5/ UF	5162858	2024 13 6		217	116 VDE PG42 PA	Pg 42 Light grey/ PA	5182894	2048 42 6		220
113 PG16 LGR	Pg 16/ UF	5162919	2024 16 0		217	116 VDE PG48 PA	Pg 48 Light grey/ PA	5182955	2048 48 5		220
						116 VDE PG7 PA	Pg 7 Light grey/ PA	5182412	2048 07 8		220
						117 5x2,5	28/ PS	5159858	2022 02 8		180
						117 5x6	33,5/ PS	5159919	2022 06 0		180
						129 M16	M16 Light grey/ PE	5490753	2047 81 0		308

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
129 M16 SW	M16 Black/ PE	5468851	2047 93 4		308	160 G MS PG21	Pg 21/ CuZn / N	5186250	2080 79 6		238
129 M20	M20 Light grey/ PE	5490692	2047 82 9		308	160 L MS PG 7	Pg 7/ CuZn / N	5186373	2081 07 5		238
129 M20 SW	M20 Black/ PE	5468912	2047 94 2		308	160 L MS PG 9	Pg 9/ CuZn / N	5186434	2081 09 1		238
129 M25	M25 Light grey/ PE	5490630	2047 83 7		308	160 L MS PG11	Pg 11/ CuZn / N	5186496	2081 11 3		238
129 M25 SW	M25 Black/ PE	5468974	2047 95 0		308	160 L MS PG13.5	Pg 13,5/ CuZn / N	5186557	2081 14 8		238
129 M32	M32 Light grey/ PE	5487692	2047 85 3		308	160 L MS PG16	Pg 16/ CuZn / N	5186618	2081 16 4		238
129 M32 SW	M32 Black/ PE	5469155	2047 96 9		308	160 L MS PG21	Pg 21/ CuZn / N	5186670	2081 21 0		238
129 M40	M40 Light grey/ PE	5037699	2047 86 1		308	160 MS M12	M12 x 1,5/ CuZn / N	5478218	2079 80 1		237
129 M40 SW	M40 Black/ PE	5469216	2047 97 7		308	160 MS M16	M16 x 1,5/ CuZn / N	5478935	2079 82 8		237
129 M50	M50 Light grey/ PE	5037637	2047 88 8		308	160 MS M20	M20 x 1,5/ CuZn / N	5478997	2079 83 6		237
129 M50 SW	M50 Black/ PE	5469278	2047 98 5		308	160 MS M25	M25 x 1,5/ CuZn / N	5479055	2079 84 4		237
129 M63	M63 Light grey/ PE	5037576	2047 89 6		308	160 MS M32	M32 x 1,5/ CuZn / N	5479178	2079 85 2		237
129 M64 SW	M63 Black/ PE	5469339	2047 99 3		308	160 MS M40	M40 x 1,5/ CuZn / N	5479239	2079 86 0		237
129 PG 9	Pg 9 Light grey/ PE	5180074	2044 09 9		308	160 MS M50	M50 x 1,5/ CuZn / N	5479291	2079 87 9		237
129 PG11	Pg 11 Light grey/ PE	5180135	2044 11 0		308	160 MS M63	M63 x 1,5/ CuZn / N	5479352	2079 88 7		237
129 PG13.5	Pg 13,5 Light grey/ PE	5180197	2044 13 7		308	160 MS PG 7	Pg 7/ CuZn / N	5185055	2080 07 9		237
129 PG16	Pg 16 Light grey/ PE	5180258	2044 16 1		308	160 MS PG 9	Pg 9/ CuZn / N	5185116	2080 09 5		237
129 PG16 SW	Pg 16 Black/ PE	5180852	2044 66 8		308	160 MS PG11	Pg 11/ CuZn / N	5185178	2080 11 7		237
129 PG21	Pg 21 Light grey/ PE	5180319	2044 21 8		308	160 MS PG13.5	Pg 13,5/ CuZn / N	5185239	2080 13 3		237
129 PG21 SW	Pg 21 Black/ PE	5180913	2044 71 4		308	160 MS PG16	Pg 16/ CuZn / N	5185291	2080 16 8		237
129 PG29	Pg 29 Light grey/ PE	5180371	2044 29 3		308	160 MS PG21	Pg 21/ CuZn / N	5185352	2080 21 4		237
129 PG29 SW	Pg 29 Black/ PE	5180975	2044 78 1		308	160 MS PG29	Pg 29/ CuZn / N	5185413	2080 28 1		237
129 PG36	Pg 36 Light grey/ PE	5180432	2044 36 6		308	160 MS PG36	Pg 36/ CuZn / N	5185475	2080 36 2		237
129 PG36 SW	Pg 36 Black/ PE	5181033	2044 86 2		308	160 MS PG42	Pg 42/ CuZn / N	5185536	2080 42 7		237
129 PG42	Pg 42 Light grey/ PE	5180494	2044 42 0		308	160 MS PG48	Pg 48/ CuZn / N	5185598	2080 48 6		237
129 PG48	Pg 48 Light grey/ PE	5180555	2044 47 1		308	161 MS M16	M16 x 1,5/ CuZn / N	5204558	2079 90 5		239
157 MS PG 7	Pg 7/ CuZn / N	5157755	2013 06 1		246	161 MS M20	M20 x 1,5/ CuZn / N	5514930	2079 90 9		239
157 MS PG 9	Pg 9/ CuZn / N	5157816	2013 09 6		246	161 MS M25	M25 x 1,5/ CuZn / N	5514992	2079 91 3		239
157 MS PG11	Pg 11/ CuZn / N	5157878	2013 11 8		246	161 MS M32	M32 x 1,5/ CuZn / N	5203834	2079 91 7		239
157 MS PG13.5	Pg 13,5/ CuZn / N	5157939	2013 13 4		246	161 MS M40	M40 x 1,5/ CuZn / N	5517399	2079 92 1		239
157 MS PG16	Pg 16/ CuZn / N	5157991	2013 16 9		246	161 MS M50	M50 x 1,5/ CuZn / N	5517511	2079 92 5		239
157 MS PG21	Pg 21/ CuZn / N	5158059	2013 21 5		246	161 MS M63	M63x1,5/ CuZn / N	5517634	2079 92 9		239
157 MS PG29	Pg 29/ CuZn / N	5158110	2013 29 0		246	161 MS PG11	Pg 11/ CuZn / N	5185659	2080 50 8		239
157 MS PG36	Pg 36/ CuZn / N	5158172	2013 36 3		246	161 MS PG13.5	Pg 13,5/ CuZn / N	5185710	2080 52 4		239
158 MS PG 9	Pg 9/ CuZn / N	5181279	2045 09 5		243	161 MS PG16	Pg 16/ CuZn / N	5185772	2080 54 0		239
158 MS PG11	Pg 11/ CuZn / N	5181330	2045 11 7		243	161 MS PG21	Pg 21/ CuZn / N	5185833	2080 56 7		239
158 MS PG13.5	Pg 13,5/ CuZn / N	5181392	2045 13 3		243	161 MS PG29	Pg 29/ CuZn / N	5185895	2080 58 3		239
158 MS PG16	Pg 16/ CuZn / N	5181453	2045 16 8		243	161 MS PG36	Pg 36/ CuZn / N	5185956	2080 60 5		239
158 MS PG21	Pg 21/ CuZn / N	5181514	2045 21 4		243	162 MS M16	M16 x 1,5/ CuZn / N	5517696	2083 71 2		240
158 MS PG29	Pg 29/ CuZn / N	5181576	2045 28 1		243	162 MS M20	M20 x 1,5/ CuZn / N	5517757	2083 71 6		240
158 MS PG36	Pg 36/ CuZn / N	5181637	2045 36 2		243	162 MS M25	M25 x 1,5/ CuZn / N	5517818	2083 72 0		240
159 MS PG 7	Pg 7/ CuZn / N	5181811	2046 07 5		243	162 MS M32	M32 x 1,5/ CuZn / N	5517870	2083 72 4		240
159 MS PG 9	Pg 9/ CuZn / N	5181873	2046 09 1		243	162 MS M40	M40 x 1,5/ CuZn / N	5517931	2083 72 8		240
159 MS PG11	Pg 11/ CuZn / N	5181934	2046 11 3		243	162 MS M50	M50 x 1,5/ CuZn / N	5517993	2083 73 2		240
159 MS PG13.5	Pg 13,5/ CuZn / N	5181996	2046 12 1		243	162 MS M63	M63 x 1,5/ CuZn / N	5518051	2083 73 6		240
159 MS PG16	Pg 16/ CuZn / N	5182054	2046 16 4		243	162 MS PG 9	Pg 9/ CuZn / N	5582670	2082 51 9		240
159 MS PG21	Pg 21/ CuZn / N	5182115	2046 21 0		243	162 MS PG11	Pg 11/ CuZn / N	5187578	2082 50 0		240
159 MS PG29	Pg 29/ CuZn / N	5182177	2046 29 6		243	162 MS PG13.5	Pg 13,5/ CuZn / N	5187639	2082 52 7		240
159 MS PG36	Pg 36/ CuZn / N	5182238	2046 36 9		243	162 MS PG16	Pg 16/ CuZn / N	5187691	2082 54 3		240
159 MS PG42	Pg 42/ CuZn / N	5182290	2046 42 3		243	162 MS PG21	Pg 21/ CuZn / N	5187752	2082 57 8		240
159 MS PG48	Pg 48/ CuZn / N	5182351	2046 48 2		243	162 MS PG29	Pg 29/ CuZn / N	5187813	2082 59 4		240
160 G MS PG 9	Pg 9/ CuZn / N	5186014	2080 70 2		238	162 MS PG36	Pg 36/ CuZn / N	5187875	2082 61 6		240
160 G MS PG11	Pg 11/ CuZn / N	5186076	2080 72 9		238	163 G MS PG 9	Pg 9/ CuZn / N	5187936	2082 70 5		242
160 G MS PG13.5	Pg 13,5/ CuZn / N	5186137	2080 74 5		238	163 G MS PG11	Pg 11/ CuZn / N	5187998	2082 71 3		242
160 G MS PG16	Pg 16/ CuZn / N	5186199	2080 76 1		238	163 G MS PG13.5	Pg 13,5/ CuZn / N	5188056	2082 72 1		242
					238	163 G MS PG16	Pg 16/ CuZn / N	5188117	2082 74 8		242
					238	163 L MS PG 9	Pg 9/ CuZn / N	5188292	2083 09 4		242
					238	163 L MS PG11	Pg 11/ CuZn / N	5188353	2083 11 6		242
					238	163 L MS PG13	Pg 13,5/ CuZn / N	5188414	2083 13 2		242
					238	163 L MS PG16	Pg 16/ CuZn / N	5188476	2083 16 7		242
					238	163 L MS PG21	Pg 21/ CuZn / N	5188537	2083 21 3		242
					238	163 L MS PG29	Pg 29/ CuZn / N	5188599	2083 29 9		242
					238	163 MS M12	M12 x 1,5/ CuZn / N	5481331	2083 61 2		241
					238	163 MS M16	M16 x 1,5/ CuZn / N	5481393	2083 62 0		241
					238	163 MS M20	M20 x 1,5/ CuZn / N	5481874	2083 63 9		241
					238	163 MS M25	M25 x 1,5/ CuZn / N	5481997	2083 64 7		241
					238	163 MS M32	M32 x 1,5/ CuZn / N	5482055	2083 65 5		241
					238	163 MS M40	M40 x 1,5/ CuZn / N	5482116	2083 66 3		241
					238	163 MS M50	M50 x 1,5/ CuZn / N	5482178	2083 67 1		241
					238	163 MS M63	M63 x 1,5/ CuZn / N	5482239	2083 69 8		241

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
163 MS PG 7	Pg 7 / CuZn / N	5186977	2082 07 1		241	167 R MS M25-20	M25 M20 / CuZn / N	5475637	2089 55 6		247
163 MS PG 9	Pg 9 / CuZn / N	5187035	2082 09 8		241	167 R MS M32-20	M32 M20 / CuZn / N	5475699	2089 56 4		247
163 MS PG11	Pg 11 / CuZn / N	5187097	2082 10 1		241	167 R MS M32-25	M32 M25 / CuZn / N	5475750	2089 57 2		247
163 MS PG13.5	Pg 13,5 / CuZn / N	5187158	2082 13 6		241	167 R MS M40-25	M40 M25 / CuZn / N	5475811	2089 58 0		247
163 MS PG16	Pg 16 / CuZn / N	5187219	2082 16 0		241	167 R MS M40-32	M40 M32 / CuZn / N	5475873	2089 59 9		247
163 MS PG21	Pg 21 / CuZn / N	5187271	2082 21 7		241	167 R MS M50-32	M50 M32 / CuZn / N	5476412	2089 60 2		247
163 MS PG29	Pg 29 / CuZn / N	5187332	2082 29 2		241	167 R MS M50-40	M50 M40 / CuZn / N	5476474	2089 61 0		247
163 MS PG36	Pg 36 / CuZn / N	5187394	2082 36 5		241	167 R MS M63-40	M63 M40 / CuZn / N	5476535	2089 62 9		247
163 MS PG42	Pg 42 / CuZn / N	5187455	2082 41 1		241	167 R MS M63-50	M63 M50 / CuZn / N	5476597	2089 63 7		247
163 MS PG48	Pg 48 / CuZn / N	5187516	2082 48 9		241	167 R MS PG11-7	Pg 11 Pg 7 / CuZn / N	5192794	2089 04 1		248
						167 R MS PG11-9	Pg 11 Pg 9 / CuZn / N	5192855	2089 07 6		248
164 MS PG11	Pg 11 / CuZn / N	5188834	2084 11 2		245	167 R MS PG13-1P	Pg 13,5 Pg 11 / CuZn / N	5193036	2089 13 0		248
164 MS PG13	Pg 13,5 / CuZn / N	5188896	2084 13 9		245	167 R MS PG13-7	Pg 13,5 Pg 7 / CuZn / N	5192916	2089 09 2		248
164 MS PG16	Pg 16 / CuZn / N	5188957	2084 16 3		245	167 R MS PG13-9	Pg 13,5 Pg 9 / CuZn / N	5192978	2089 11 4		248
164 MS PG21	Pg 21 / CuZn / N	5189015	2084 20 1		245	167 R MS PG16-11	Pg 16 Pg 11 / CuZn / N	5193159	2089 17 3		248
164 MS PG29	Pg 29 / CuZn / N	5189077	2084 29 5		245	167 R MS PG16-13P	Pg 16 Pg 13,5 / CuZn / N	5193210	2089 20 3		248
164 MS PG36	Pg 36 / CuZn / N	5189138	2084 36 8		245	167 R MS PG16-9	Pg 16 Pg 9 / CuZn / N	5193098	2089 15 7		248
164 MS PG42	Pg 42 / CuZn / N	5189190	2084 42 2		245	167 R MS PG21-11	Pg 21 Pg 11 / CuZn / N	5193272	2089 23 8		248
164 MS PG48	Pg 48 / CuZn / N	5189251	2084 48 1		245	167 R MS PG21-13P	Pg 21 Pg 13,5 / CuZn / N	5193333	2089 25 4		248
						167 R MS PG21-13	Pg 21 Pg 16 / CuZn / N	5193395	2089 27 0		248
165 ADA M 50-63	M50 M63 / CuZn / N	5372219	2088 28 6		246	167 R MS PG29-16	Pg 29 Pg 16 / CuZn / N	5193456	2089 29 7		248
165 ADA M12-16	M12 M16 / CuZn / N	5372158	2088 28 0		246	167 R MS PG29-21	Pg 29 Pg 21 / CuZn / N	5193517	2089 31 9		248
165 ADA M12-PG7	M12 PG7 / CuZn / N	5372325	2088 30 1		249	167 R MS PG36-21	Pg 36 Pg 21 / CuZn / N	5193579	2089 33 5		248
165 ADA M16-20	M16 M20 / CuZn / N	5372165	2088 28 1		246	167 R MS PG36-29	Pg 36 Pg 29 / CuZn / N	5193630	2089 35 1		248
165 ADA M16-PG11	M16 PG11 / CuZn / N	5372332	2088 30 2		249	167 R MS PG42-29	Pg 42 Pg 29 / CuZn / N	5193692	2089 38 6		248
165 ADA M16-PG7	M16 PG7 / CuZn / N	5390923	2088 31 0		249	167 R MS PG42-36	Pg 42 Pg 36 / CuZn / N	5193753	2089 40 8		248
165 ADA M16-PG9	M16 PG9 / CuZn / N	5390930	2088 31 2		249	167 R MS PG48-36	Pg 48 Pg 36 / CuZn / N	5193814	2089 42 4		248
165 ADA M20-25	M20 M25 / CuZn / N	5372172	2088 28 2		246	167 R MS PG48-42	Pg 48 Pg 42 / CuZn / N	5193876	2089 44 0		248
165 ADA M20-PG11	M20 PG11 / CuZn / N	5390954	2088 31 6		249	167 R MS PG9-7	Pg 9 Pg 7 / CuZn / N	5192732	2089 02 5		248
165 ADA M20-PG13M20	PG13,5 / CuZn / N	5372349	2088 30 3		249						
165 ADA M20-PG16	M20 PG16 / CuZn / N	5390961	2088 31 8		249	168 MS M12	M12 x 1,5 16 / CuZn / N	5471738	2090 51 1		245
165 ADA M20-PG9	M20 PG9 / CuZn / N	5390947	2088 31 4		249	168 MS M16	M16 x 1,5 20 / CuZn / N	5471790	2090 53 8		245
165 ADA M25-32	M25 M32 / CuZn / N	5372189	2088 28 3		246	168 MS M20	M20 x 1,5 22 / CuZn / N	5472810	2090 54 6		245
165 ADA M25-PG11	M25 PG11 / CuZn / N	5391005	2088 32 0		249	168 MS M25	M25 x 1,5 28 / CuZn / N	5472933	2090 55 4		245
165 ADA M25-PG13M25	PG13,5 / CuZn / N	5391012	2088 32 2		249	168 MS M32	M32 x 1,5 35 / CuZn / N	5472995	2090 56 2		245
165 ADA M25-PG16	M25 PG16 / CuZn / N	5372356	2088 30 4		249	168 MS M40	M40 x 1,5 45 / CuZn / N	5473411	2090 57 0		245
165 ADA M25-PG21	M25 PG21 / CuZn / N	5391029	2088 32 4		249	168 MS M50	M50 x 1,5 55 / CuZn / N	5474012	2090 58 9		245
165 ADA M32-40	M32 M40 / CuZn / N	5372196	2088 28 4		246	168 MS M63	M63 x 1,5 68 / CuZn / N	5474074	2090 59 7		245
165 ADA M32-PG16	M32 PG16 / CuZn / N	5391067	2088 32 8		249						
165 ADA M32-PG21	M32 PG21 / CuZn / N	5372363	2088 30 5		249	168 MS PG 7	Pg 7 14 / CuZn / N	5193937	2090 07 4		245
165 ADA M32-PG29	M32 PG29 / CuZn / N	5391074	2088 33 0		249	168 MS PG 9	Pg 9 17 / CuZn / N	5193999	2090 09 0		245
165 ADA M40-50	M40 M50 / CuZn / N	5372202	2088 28 5		246	168 MS PG11	Pg 11 20 / CuZn / N	5194057	2090 11 2		245
165 ADA M40-PG21	M40 PG21 / CuZn / N	5391081	2088 33 4		249	168 MS PG13	Pg 13,5 22 / CuZn / N	5194118	2090 13 9		245
165 ADA M40-PG29	M40 PG29 / CuZn / N	5372400	2088 30 6		249	168 MS PG16	Pg 16 24 / CuZn / N	5194170	2090 16 3		245
165 ADA M40-PG36	M40 PG36 / CuZn / N	5391128	2088 33 6		249	168 MS PG21	Pg 21 30 / CuZn / N	5194231	2090 20 1		245
165 ADA M50-PG29	M50 PG29 / CuZn / N	5391135	2088 34 0		249	168 MS PG29	Pg 29 39 / CuZn / N	5194293	2090 29 5		245
165 ADA M50-PG29	M50 PG42 / CuZn / N	5372417	2088 30 7		249	168 MS PG36	Pg 36 50 / CuZn / N	5194354	2090 36 8		245
165 ADA M63-PG36	M63 PG36 / CuZn / N	5391142	2088 34 4		249	168 MS PG42	Pg 42 57 / CuZn / N	5194415	2090 42 2		245
165 ADA M63-PG42	M63 PG42 / CuZn / N	5391173	2088 34 6		249	168 MS PG48	Pg 48 64 / CuZn / N	5194477	2090 48 1		245
165 ADA M63-PG48	M63 PG48 / CuZn / N	5391180	2088 34 8		249						
165 ADA PG11-M16	PG11 M16 / CuZn / N	5372240	2088 29 2		250	169 MS M12	M12 x 1,5 / CuZn / N	5474135	2091 60 7		244
165 ADA PG13-M20PG13,5	M20 / CuZn / N	5372257	2088 29 3		250	169 MS M16	M16 x 1,5 / CuZn / N	5931690	2091 61 5		244
165 ADA PG16-M20	PG16 M20 / CuZn / N	5372264	2088 29 4		250	169 MS M20	M20 x 1,5 / CuZn / N	5931751	2091 62 3		244
165 ADA PG16-M25	PG16 M25 / CuZn / N	5372271	2088 29 5		250	169 MS M25	M25 x 1,5 / CuZn / N	5931812	2091 63 1		244
165 ADA PG21-M25	PG21 M25 / CuZn / N	5372288	2088 29 6		250	169 MS M32	M32 x 1,5 / CuZn / N	5931874	2091 65 8		244
165 ADA PG21-M32	PG21 M32 / CuZn / N	5372295	2088 29 7		250	169 MS M40	M40 x 1,5 / CuZn / N	5474197	2091 66 6		244
165 ADA PG29-M25	PG29 M25 / CuZn / N	5390916	2088 28 9		250	169 MS M50	M50 x 1,5 / CuZn / N	5474791	2091 67 4		244
165 ADA PG29-M40	PG29 M40 / CuZn / N	5372301	2088 28 8		250	169 MS M63	M63 x 1,5 / CuZn / N	5474852	2091 68 2		244
165 ADA PG36-M50	PG36 M50 / CuZn / N	5372318	2088 29 9		250						
165 ADA PG7-M12	PG7 M12 / CuZn / N	5372226	2088 29 0		250	169 MS PG 7	Pg 7 / CuZn / N	5194538	2091 07 0		244
165 ADA PG9-M12	PG9 M16 / CuZn / N	5372233	2088 29 1		250	169 MS PG 9	Pg 9 / CuZn / N	5194590	2091 09 7		244
						169 MS PG11	Pg 11 / CuZn / N	5194651	2091 11 9		244
165 MS EZ PG7-9	Pg 7 Pg 9 / CuZn / N	5190813	2088 02 9		247	169 MS PG13.5	Pg 13,5 / CuZn / N	5194712	2091 13 5		244
165 MS EZPG11-18g	11 Pg 13,5 / CuZn / N	5190998	2088 09 6		247	169 MS PG16	Pg 16 / CuZn / N	5194774	2091 15 1		244
165 MS EZPG11-16	Pg 11 Pg 16 / CuZn / N	5191056	2088 12 6		247	169 MS PG21	Pg 21 / CuZn / N	5194835	2091 21 6		244
165 MS EZPG13-18g	13,5 Pg 16 / CuZn / N	5191117	2088 14 2		247	169 MS PG29	Pg 29 / CuZn / N	5194897	2091 29 1		244
165 MS EZPG13-28g	13,5 Pg 21 / CuZn / N	5191179	2088 16 9		247	169 MS PG36	Pg 36 / CuZn / N	5194958	2091 36 4		244
165 MS EZPG16-21	Pg 16 Pg 21 / CuZn / N	5191230	2088 18 5		247	169 MS PG42	Pg 42 / CuZn / N	5195016	2091 42 9		244
165 MS EZPG21-29	Pg 21 Pg 29 / CuZn / N	5191292	2088 20 7		247	169 MS PG48	Pg 48 / CuZn / N	5195078	2091 48 8		244
165 MS EZPG29-36	Pg 29 Pg 36 / CuZn / N	5191353	2088 22 3		247						
165 MS EZPG36-42	Pg 36 Pg 42 / CuZn / N	5191414	2088 25 8		247	170 M16	M16 19,9 / FA	5469810	2088 42 8		229
165 MS EZPG42-48	Pg 42 Pg 48 / CuZn / N	5191476	2088 27 4		247	170 M16	M16 19,9 / FA	5469810	2088 42 8		251
165 MS EZPG9-11	Pg 9 Pg 11 / CuZn / N	5190875	2088 04 5		247						
165 MS EZPG9-13	Pg 9 Pg 13,5 / CuZn / N	5190936	2088 06 1		247	170 M20	M20 24 / FA	5469933	2088 43 6		229
						170 M20	M20 24 / FA	5469933	2088 43 6		251
167 R MS M16-12	M16 M12 / CuZn / N	5475392	2089 50 5		247						
167 R MS M20-12	M20 M12 / CuZn / N	5475453	2089 51 3		247	170 M25	M25 30 / FA	5469995	2088 44 4		229
167 R MS M20-16	M20 M16 / CuZn / N	5475514	2089 52 1		247	170 M25	M25 30 / FA	5469995	2088 44 4		251
167 R MS M25-16	M25 M16 / CuZn / N	5475576	2089 54 8		247						

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
170 M32	M32 38/ FA	5470052	2088 45 2	/100 pc.	229	261 3-6 G	3-6 M6 x 12/ St / G	5417132	5305 01 2	/100 pc.	297
170 M32	M32 38/ FA	5470052	2088 45 2		251	325 100 FT	100 9/ St / FT	5422716	5327 10 5		319
170 M40	M40 47/ FA	5470533	2088 46 0		229	325 130 FT	130 8/ St / FT	5422778	5327 12 1		319
170 M40	M40 47/ FA	5470533	2088 46 0		251	325 140 FT	140 7/ St / FT	5422839	5327 14 8		319
170 M50	M50 57/ FA	5470595	2088 47 9		229	325 70 FT	70 10/ St / FT	5422594	5327 07 5		319
170 M50	M50 57/ FA	5470595	2088 47 9		251	325 80 FT	80 10/ St / FT	5422655	5327 08 3		319
171 M12	M12 10/ NBR	5470953	2088 70 3		230	328 1	5-11 57/ St / ZD	5126799	1408 01 1		319
171 M12	M12 10/ NBR	5470953	2088 70 3		252	328 2	10-19 67/ St / ZD	5126850	1408 04 6		319
171 M16	M16 13/ NBR	5471011	2088 71 1		230	339 1	4-16 100/ St / G	5126973	1408 51 8	/100 pairs	318
171 M16	M16 13/ NBR	5471011	2088 71 1		252	339 2	6-34 40/ St / G	5127031	1408 53 4		318
171 M20	M20 18/ NBR	5471257	2088 73 8		230	342 M10X20 G	M10 x 20 20/ St / G	5256816	3160 20 3	/100 pc.	389
171 M20	M20 18/ NBR	5471257	2088 73 8		252	342 M10X30 G	M10 x 30 30/ St / G	5256939	3160 30 0		389
171 M25	M25 22/ NBR	5471318	2088 74 6		230	342 M10X40 G	M10 x 40 40/ St / G	5257059	3160 40 8		389
171 M25	M25 22/ NBR	5471318	2088 74 6		252	342 M10X50 G	M10 x 50 50/ St / G	5257110	3160 50 5		389
171 M32	M32 29/ NBR	5471370	2088 75 4		230	342 M10X60 G	M10 x 60 60/ St / G	5257172	3160 60 2		389
171 M32	M32 29/ NBR	5471370	2088 75 4		252	342 M12X30 G	M12 x 30 30/ St / G	5257592	3162 30 3		389
171 M40	M40 36/ NBR	5471554	2088 76 2		230	342 M12X40 G	M12 x 40 40/ St / G	5257714	3162 40 0		389
171 M40	M40 36/ NBR	5471554	2088 76 2		252	342 M12X50 G	M12 x 50 50/ St / G	5257776	3162 50 8		389
171 M50	M50 46/ NBR	5471615	2088 77 0		230	342 M6X16 G	M6 x 16 16/ St / G	5255437	3156 14 1		389
171 M50	M50 46/ NBR	5471615	2088 77 0		252	342 M6X20 G	M6 x 20 20/ St / G	5255499	3156 20 6		389
171 M63	M63 59/ NBR	5471677	2088 78 9		230	342 M6X25 G	M6 x 25 25/ St / G	5255550	3156 25 7		389
171 M63	M63 59/ NBR	5471677	2088 78 9		252	342 M6X30 G	M6 x 30 30/ St / G	5255611	3156 30 3		389
171 PG 9	Pg 9 13/ NBR	5192190	2088 81 9		230	342 M6X35 G	M6 x 35 35/ St / G	5255673	3156 35 4		389
171 PG 9	Pg 9 13/ NBR	5192190	2088 81 9		252	342 M6X40 G	M6 x 40 40/ St / G	5255734	3156 40 0		389
171 PG11	Pg 11 16/ NBR	5192251	2088 82 7		230	342 M8X20 G	M8 x 20 20/ St / G	5256212	3158 20 9		389
171 PG11	Pg 11 16/ NBR	5192251	2088 82 7		252	342 M8X25 G	M8 x 25 25/ St / G	5256274	3158 24 1		389
171 PG13.5	Pg 13,5 18/ NBR	5192312	2088 83 5	/pc.	230	342 M8X30 G	M8 x 30 30/ St / G	5256335	3158 30 6		389
171 PG13.5	Pg 13,5 18/ NBR	5192312	2088 83 5		252	342 M8X40 G	M8 x 40 40/ St / G	5256458	3158 40 3		389
171 PG16	Pg 16 20/ NBR	5192374	2088 84 3		230	342 M8X50 G	M8 x 50 50/ St / G	5256519	3158 50 0		389
171 PG16	Pg 16 20/ NBR	5192374	2088 84 3		252	362 16 BK	16 2/ St	5291374	3353 16 8		376
171 PG21	Pg 21 25/ NBR	5192435	2088 85 1		230	362 18 BK	18 2/ St	5291435	3353 18 4		376
171 PG21	Pg 21 25/ NBR	5192435	2088 85 1		252	362 23 BK	23 2/ St	5291497	3353 23 0		376
171 PG29	Pg 29 33/ NBR	5192497	2088 87 8		230	362 30 BK	30 2/ St	5291558	3353 30 3		376
171 PG29	Pg 29 33/ NBR	5192497	2088 87 8		252	362 40 BK	40 2/ St	5291619	3353 40 0		376
171 PG36	Pg 36 43/ NBR	5192558	2088 88 6		230	362 50 BK	50 2/ St	5291671	3353 50 8		376
171 PG36	Pg 36 43/ NBR	5192558	2088 88 6		252	362 60 BK	60 2/ St	5291732	3353 60 5		376
171 PG42	Pg 42 50/ NBR	5192619	2088 89 4		230	362 Z 16 G	16 2/ St / G	5291916	3354 16 4		376
171 PG42	Pg 42 50/ NBR	5192619	2088 89 4		252	362 Z 18 G	18 2/ St / G	5291978	3354 18 0		376
186	25	5864974	3010 10 4		210	362 Z 23 G	23 2/ St / G	5292036	3354 23 7		376
192	1200/ St / DD	6209774	6490 90 5		293	362 Z 30 G	30 2/ St / G	5292098	3354 29 6		376
197 VA4301	1800/ V2A	6209835	6490 96 4		293	362 Z 40 G	40 2/ St / G	5292159	3354 40 7		376
255 11 LGR	11 Light grey/ PA	5214335	2222 11 6	/100 pc.	268	362 Z 50 G	50 2/ St / G	5292210	3354 50 4		376
255 12.5 LGR	12,5 Light grey/ PA	5214397	2222 12 4		268	362 Z 60 G	60 2/ St / G	5292272	3354 60 1		376
255 14 LGR	14 Light grey/ PA	5214458	2222 14 0		268						
255 16 LGR	16 Light grey/ PA	5214519	2222 16 7		268						
255 17.5 LGR	17,5 Light grey/ PA	5214571	2222 17 5		268						
255 3.2 LGR	3,2 Light grey/ PA	5214038	2222 03 5		268						
255 5.2 LGR	5,2 Light grey/ PA	5214090	2222 05 1		268						
255 6.5 LGR	6,5 Light grey/ PA	5214151	2222 07 8		268						
255 8 LGR	8 Light grey/ PA	5214212	2222 08 6		268						
255 9.5 LGR	9,5 Light grey/ PA	5214274	2222 09 4		268						

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450 M4x95 G	M4 95/ St / G	5442936	3481 61 1	/100 pc.	380	511 Z 16	16 2/ St / G	5295037	3367 16 9	/100 pc.	377
451 M4x95 G	M4 95/ St / G	5432852	3481 66 2		380	511 Z 18	18 2/ St / G	5295099	3367 18 5		377
452 M4x70 G	M4 70/ St / G	5432975	3481 77 8		381	511 Z 23	23 2/ St / G	5295150	3367 23 1		377
453 M6x100 G	M6 100/ St / G	5310631	3482 01 4		381	511 Z 30	30 2/ St / G	5295211	3367 30 4		377
454 M6x100 G	M6 100/ St / G	5310693	3482 03 0		381	511 Z 40	40 2/ St / G	5295334	3367 40 1		377
455 M5x100 G	M5 100/ St / G	5310815	3482 07 3		381	511 Z 50	50 2/ St / G	5295396	3367 50 9		377
455 M5x65 G	M5 65/ St / G	5310754	3482 05 7		381	550 6X180 SW	6 x 180 45/ PA	5454991	2330 05 9		292
456 M5x100 G	M5 100/ St / G	5310877	3482 10 3		381	550 6X290 SW	6 x 290 78/ PA	5455059	2330 07 5		292
457 M4x55 G	M4 55/ St / G	5310938	3482 13 8		381	550 6X360 SW	6 x 360 100/ PA	5455110	2330 09 1		292
458 M4x100 G	M4 100/ St / G	5310990	3482 15 4		381	550 9X180 SW	9 x 180 40/ PA	5455417	2330 22 9		292
500 12	12 2/ St	5292999	3360 12 1	/pc.	376	550 9X265 SW	9 x 260 65/ PA	5455479	2330 24 5	/100 m	292
500 16	16 2/ St	5293118	3360 16 4		376	550 9X360 SW	9 x 360 93/ PA	5455592	2330 29 6		292
500 18	18 2/ St	5293170	3360 18 0		376	550 9X510 SW	9 x 510 140/ PA	5455653	2330 32 6		292
500 23	23 2/ St	5293231	3360 23 7		376	550 9X760 SW	9 x 760 220/ PA	5455714	2330 34 2		292
500 30	30 2/ St	5293293	3360 29 6		376	555 2.4x75 WS	2.4 x 75 15/ PA	5226994	2332 02 7		292
500 40	40 2/ St	5293354	3360 40 7		376	555 2.5x100 SW	2.5 x 100 18/ PA	5819851	2332 62 0		292
500 50	50 2/ St	5293415	3360 50 4		376	555 2.5x100 WS	2.5 x 100 18/ PA	5227052	2332 05 1		292
500 60	60 2/ St	5293477	3360 60 1		376	555 2.5x165 WS	2.5 x 165 40/ PA	5227113	2332 09 4		292
500 Z 12	12 2/ St / G	5293651	3361 12 8		376	555 2.5x200 WS	2.5 x 200 50/ PA	5227175	2332 10 8		292
500 Z 16	16 2/ St / G	5293774	3361 16 0		376	555 3.6x150 SW	3.6 x 140 35/ PA	5819912	2332 65 5		292
500 Z 18	18 2/ St / G	5293835	3361 18 7		376	555 3.6x150 WS	3.6 x 140 35/ PA	5227236	2332 17 5		292
500 Z 23	23 2/ St / G	5293897	3361 23 3		376	555 3.6x200 SW	3.6 x 200 50/ PA	5819974	2332 66 3		292
500 Z 30	30 2/ St / G	5293958	3361 30 6		376	555 3.6x200 WS	3.6 x 200 50/ PA	5227298	2332 18 3		292
500 Z 40	40 2/ St / G	5294078	3361 40 3		376	555 3.6x290 WS	3.6 x 290 76/ PA	5227359	2332 21 3		292
500 Z 50	50 2/ St / G	5294139	3361 50 0		376	555 4.8x200 SW	4.8 x 200 47/ PA	5820031	2332 69 8		292
500 Z 60	60 2/ St / G	5294191	3361 60 8		376	555 4.8x200 WS	4.8 x 200 47/ PA	5227410	2332 33 7		292
507	Light grey 100/ PS	5225911	2327 10 4		271	555 4.8x310 SW	4.8 x 300 76/ PA	5820093	2332 70 1		292
508		5228196	2341 10 7		295	555 4.8x310 WS	4.8 x 300 76/ PA	5227472	2332 36 1		292
509		5228073	2341 01 8		295	555 4.8x370 SW	4.8 x 370 102/ PA	5820154	2332 72 8		292
510	Light grey/ PS	5221173	2236 02 8		295	555 4.8x370 WS	4.8 x 370 102/ PA	5227533	2332 38 8		292
511 12	12 2/ St	5294313	3366 11 1		377	555 7.6x200 WS	7.6 x 200 50/ PA	5227595	2332 50 7		292
511 16	16 2/ St	5294436	3366 16 2		377	555 7.6x300 WS	7.6 x 300 76/ PA	5227656	2332 55 8		292
511 18	18 2/ St	5294498	3366 18 9		377	555 7.6x380 SW	7.6 x 380 102/ PA	5820215	2332 75 2		292
511 23	23 2/ St	5294559	3366 23 5		377	555 7.6x380 WS	7.6 x 380 102/ PA	5227717	2332 57 4		292
511 30	30 2/ St	5294610	3366 30 8		377	574 03 30 BA	17 x 1.0 300/ V2A	6209538	6490 10 7		293
511 40	40 2/ St	5294733	3366 40 5		377	574 03 45 BA	17 x 1.0 450/ V2A	6209590	6490 12 3		293
511 50	50 2/ St	5294795	3366 50 2		377	574 03 BA	17 x 1.0 2250/ V2A	6209415	6490 03 4		293
511 60	60 2/ St	5294856	3366 59 6		377	574 05 55 GNBG	16.5 x 1.2 550/ V2A	6209651	6490 15 8		293
511 Z 12	12 2/ St / G	5294917	3367 12 6		377	574 05 65 GNBG	16.5 x 1.2 650/ V2A	6209712	6490 17 4		293
						574 05 GNBG	16.5 x 1.2 3500/ V2A	6209477	6490 05 0		293
						574 G STGR	17 x 1.0 1350/ St / G	6209354	6490 01 8		293
						575	/ St	6209897	6498 01 9		293
						576	/ St	6209958	6498 02 7		294
						604 10 G	10 4800/ St / G	5001218	1003 10 0		283

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
604 11 G	11 4800/ St / G	5001270	1003 11 9		283	605 25 ALU	25 4,5 x 6/ Al	5449836	1017 86 1		288
604 12 G	12 5000/ St / G	5001331	1003 12 7		283	605 25 G	25 4,5 x 6/ St / G	5017233	1018 25 6		287
604 13 G	13 5000/ St / G	5001393	1003 13 5		283	605 26 G	26 4,5 x 6/ St / G	5017295	1018 26 4		287
604 16 G	16 3900/ St / G	5001454	1003 17 8		283	605 28 G	28 4,5 x 6/ St / G	5017356	1018 28 0		287
604 19 G	19 1800/ St / G	5001515	1003 19 4		283	605 30 G	30 4,5 x 6/ St / G	5017417	1018 30 2		287
604 20 G	20 1800/ St / G	5001577	1003 20 8		283	605 32 ALU	32 4,5 x 6/ Al	5590170	1017 92 6		288
604 21 G	21 3000/ St / G	5001638	1003 21 6		283	605 32 G	32 4,5 x 6/ St / G	5017479	1018 33 7		287
604 23 G	23 2400/ St / G	5001690	1003 23 2		283	605 35 G	35 5,5 x 7/ St / G	5017530	1018 35 3		287
604 25 G	25 1000/ St / G	5566892	1003 25 9		283	605 37 G	37 5,5 x 7/ St / G	5017592	1018 36 1		287
604 28 G	28 1000/ St / G	5001751	1003 28 3		283	605 40 ALU	40 5,5 x 7/ Al	5450016	1017 95 0		288
604 2X16	2 x 16 1000/ St / G	5002833	1004 16 6		286	605 40 G	40 5,5 x 7/ St / G	5017653	1018 39 6		287
604 2X19	2 x 19 1000/ St / G	5002895	1004 19 0		286	605 43 G	43 5,5 x 7/ St / G	5017714	1018 43 4		287
604 2X21	2 x 21 1000/ St / G	5003014	1004 21 2		286	605 47 G	47 5,5 x 7/ St / G	5017776	1018 47 7		287
604 2X28	2 x 28 600/ St / G	5003137	1004 29 8		286	605 50 ALU	50 5,5 x 7/ Al	5589938	1017 98 0		288
604 3 G	3 12000/ St / G	5000792	1003 03 8		283	605 50 G	50 5,5 x 7/ St / G	5568339	1018 50 7		287
604 32 G	32 800/ St / G	5566953	1003 32 1		283	605 55 G	55 5,5 x 7/ St / G	5017837	1018 55 8		287
604 35 G	35 800/ St / G	5001812	1003 35 6		283	605 60 G	60 5,5 x 7/ St / G	5017899	1018 60 4		287
604 37 G	37 800/ St / G	5001874	1003 37 2		283	605 63 ALU	63 5,5 x 7/ Al	5590057	1017 99 7		288
604 4 G	4 12000/ St / G	5000853	1003 04 6		283	605 63 G	63 5,5 x 7/ St / G	5568513	1018 63 9		287
604 40 G	40 1200/ St / G	5001935	1003 40 2		283	605 7 G	7 4,5 x 6/ St / G	5016274	1018 07 8		287
604 47 G	47 500/ St / G	5002055	1003 46 1		283	605 8 G	8 4,5 x 6/ St / G	5016335	1018 08 6		287
604 5 G	5 5000/ St / G	5000914	1003 05 4		283	605 9 G	9 4,5 x 6/ St / G	5016397	1018 09 4		287
604 6 G	6 5000/ St / G	5000976	1003 06 2		283	689	Light grey/ PA	5159377	2017 34 2		161
604 7 G	7 5000/ St / G	5001034	1003 07 0		283	689	Light grey/ PA	5159377	2017 34 2		162
604 8 G	8 5000/ St / G	5001096	1003 08 9		283	700 6	/ MF	5159254	2017 29 6		180
604 9 G	9 5000/ St / G	5001157	1003 09 7		283	716 3X50 BK	50 3/ St	5289272	3347 05 2		377
605 10 G	10 4,5 x 6/ St / G	5016458	1018 10 8		287	716 3X60 BK	60 3/ St	5289333	3347 06 0		377
605 11 G	11 4,5 x 6/ St / G	5016519	1018 11 6		287	716 3X70 BK	70 3/ St	5289395	3347 07 9		377
605 12 G	12 4,5 x 6/ St / G	5016571	1018 12 4		287	731 W 12 CU	8-12 M5 x 12/ St / Cu	5118275	1366 62 9		279
605 13 G	13 4,5 x 6/ St / G	5016632	1018 13 2		287	731 W 12 G	8-12 M5 x 12/ St / G	5117919	1366 12 2		279
605 14 G	14 4,5 x 6/ St / G	5016694	1018 14 0		287	731 W 16 CU	12-16 M5 x 14/ St / Cu	5118336	1366 66 1		279
605 15 G	15 4,5 x 6/ St / G	5016755	1018 15 9		287	731 W 16 G	12-16 M5 x 12/ St / G	5117971	1366 16 5		279
605 16 ALU	16 4,5 x 6/ Al	5449539	1017 79 9		288	731 W 20 G	16-20 M5 x 14/ St / G	5118039	1366 20 3		279
605 16 G	16 4,5 x 6/ St / G	5016816	1018 16 7		287	731 W 25 G	20-25 M5 x 14/ St / G	5118091	1366 25 4		279
605 17 G	17 4,5 x 6/ St / G	5016878	1018 17 5		287	731 W 30 G	25-30 M5 x 14/ St / G	5118152	1366 30 0		279
605 18 G	18 4,5 x 6/ St / G	5016939	1018 18 3		287	731 W 35 G	30-35 M5 x 18/ St / G	5118213	1366 35 1		279
605 19 G	19 4,5 x 6/ St / G	5016991	1018 19 1		287	732 10 GTP	9-10 -/ St / GTP	5114611	1360 10 8		276
605 20 ALU	20 4,5 x 6/ Al	5449652	1017 83 7		288	732 12 GTP	10,5-12 M12/ St / GTP	5114673	1360 12 4		276
605 20 G	20 4,5 x 6/ St / G	5017059	1018 20 5		287	732 14 GTP	12,5-14 PG7/ St / GTP	5114734	1360 14 0		276
605 21 G	21 4,5 x 6/ St / G	5017110	1018 21 3		287	732 15 GTP	13,5-15 PG9/ St / GTP	5114796	1360 15 9		276
605 23 G	23 4,5 x 6/ St / G	5017172	1018 22 1		287	732 16 GTP	14,5-16 M16/ St / GTP	5114857	1360 16 7		276
					287	732 18 GTP	16,5-18 PG11/ St / GTP	5114918	1360 18 3		276
					287	732 20 GTP	18,5-20 M20/ St / GTP	5114970	1360 20 5		276

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
732 22 GTP	20-22 PG13,5/ St / GTP	5115038	1360 22 1	/100 pc.	276	733 38 VA	30-38 6,5 x 10/ V2A	5117018	1362 07 0	/100 pc.	277
732 24 GTP	22-24 PG16/ St / GTP	5115090	1360 24 8		276	733 48 ALU	39-48 6,5 x 10/ Al	5450610	1362 58 5		278
732 26 GTP	24-26 M25/ St / GTP	5115151	1360 26 4		276	733 48 FT	39-48 6,5 x 10/ St / FT	5029885	1361 11 2		278
732 28 GTP	26-28 PG21/ St / GTP	5115212	1360 28 0		276	733 48 G	39-48 6,5 x 10/ St / G	5116356	1361 48 1		277
732 30 GTP	28-30 PG21/ St / GTP	5115274	1360 30 2		276	733 48 VA	39-48 6,5 x 10/ V2A	5117070	1362 08 9		277
732 33 GTP	31-33 M32/ St / GTP	5115335	1360 33 7		276	733 54 ALU	48-54 6,5 x 14/ Al	5450672	1362 59 3		278
732 35 GTP	33-35 -/ St / GTP	5115397	1360 35 3		276	733 54 FT	48-54 6,5 x 10/ St / FT	5615651	1361 11 7		278
732 38 GTP	36-38 PG29/ St / GTP	5115458	1360 38 8		276	733 54 G	48-54 6,5 x 14/ St / G	5116417	1361 51 1		277
732 40 GTP	38-40 M40/ St / GTP	5115519	1360 39 6		276	733 54 VA	48-54 6,5 x 14/ V2A	5117131	1362 09 7		277
732 42 GTP	40-42 M40/ St / GTP	5115571	1360 42 6		276	733 61 FT	53-61 6,5 x 10/ St / FT	5254348	1361 11 5		278
732 45 GTP	43-45 -/ St / GTP	5115632	1360 45 0		276	733 61 G	53-61 6,5 x 14/ St / G	5116479	1361 61 9		277
732 48 GTP	46-48 PG36/ St / GTP	5115694	1360 48 5		276	733 61 VA	53-61 6,5 x 14/ V2A	5117193	1362 10 0		277
732 50 GTP	48-50 M50/ St / GTP	5115755	1360 50 7		276	733 63 ALU	63-63 8 x 18/ Al	5590293	1362 61 5		278
732 6 GTP	5-6 -/ St / GTP	5114499	1360 05 1		276	733 63 FT	63-63 6,5 x 10/ St / FT	5254386	1361 11 8		278
732 60 GTP	58-60 PG48/ St / GTP	5115878	1360 60 4		276	733 63 G	63-63 8 x 18/ St / G	5116530	1361 63 5		277
732 63 GTP	61-63 M63/ St / GTP	5569114	1360 63 9		276	733 63 VA	63-63 8 x 18/ V2A	5117254	1362 12 7		277
732 8 GTP	7-8 -/ St / GTP	5114550	1360 08 6		276	822 10 FT	10/ St / FT	5013693	1014 01 3		285
733 13 FT	11-13 6,5 x 10/ St / FT	5029755	1361 09 1		278	822 12 FT	12 M12/ St / FT	5013754	1014 02 1		285
733 13 G	11-13 6,5 x 10/ St / G	5115939	1361 13 9		277	822 14 FT	14/ St / FT	5013815	1014 04 8		285
733 16 ALU	14-16 6,5 x 10/ Al	5450252	1362 52 6		278	822 16 FT	15,2 M16/ St / FT	5013877	1014 09 9		285
733 16 FT	14-16 6,5 x 10/ St / FT	5029762	1361 09 4		278	822 18 FT	18,6 PG11/ St / FT	5013938	1014 11 0		285
733 16 G	14-16 6,5 x 10/ St / G	5115991	1361 16 3		277	822 20 FT	20 M20/ St / FT	5013990	1014 13 7		285
733 16 VA	14-16 6,5 x 10/ V2A	5116714	1362 01 1		277	822 22.5 FT	22,5 PG16/ St / FT	5014058	1014 16 1		285
733 19 ALU	17-19 6,5 x 10/ Al	5450313	1362 53 4		278	822 25 FT	25 M25/ St / FT	5567011	1014 50 1		285
733 19 FT	17-19 6,5 x 10/ St / FT	5029809	1361 09 7		278	822 28.3 FT	28,3 PG21/ St / FT	5014119	1014 21 8		285
733 19 G	17-19 6,5 x 10/ St / G	5116059	1361 19 8		277	822 32 FT	32 M32/ St / FT	5567073	1014 52 8		285
733 19 VA	17-19 6,5 x 10/ V2A	5116776	1362 03 8		277	822 37 FT	37 PG29/ St / FT	5014171	1014 29 3		285
733 21 ALU	19-21 6,5 x 10/ Al	5450375	1362 54 2		278	822 40 FT	40 M40/ St / FT	5567134	1014 53 6		285
733 21 FT	19-21 6,5 x 10/ St / FT	5029816	1361 10 0		278	822 47 FT	47 PG36/ St / FT	5014232	1014 36 6		285
733 21 G	19-21 6,5 x 10/ St / G	5116110	1361 20 1		277	822 50 FT	50 M50/ St / FT	5567493	1014 54 4		285
733 21 VA	19-21 6,5 x 10/ V2A	5116837	1362 04 6		277	822 6 FT	6/ St / FT	5013631	1014 00 5		285
733 23 FT	21-23 6,5 x 10/ St / FT	5029823	1361 10 3		278	822 63 FT	63 M63/ St / FT	5567554	1014 55 2		285
733 23 G	21-23 6,5 x 10/ St / G	5116172	1361 23 6		277	823 16 FT	16 6,5 x 10/ St / FT	5015130	1015 09 5		288
733 23 VA	21-23 6,5 x 10/ V2A	5116899	1362 05 4		277	823 18.3 FT	18,6 6,5 x 10/ St / FT	5015192	1015 11 7		288
733 29 ALU	24-29 6,5 x 10/ Al	5450498	1362 56 9		278	823 20 FT	20 6,5 x 10/ St / FT	5015253	1015 13 3		288
733 29 FT	24-29 6,5 x 10/ St / FT	5029861	1361 10 6		278	823 22.5 FT	22,5 6,5 x 10/ St / FT	5015314	1015 16 8		288
733 29 G	24-29 6,5 x 10/ St / G	5116233	1361 29 5		277	823 25 FT	25 6,5 x 10/ St / FT	5567615	1015 49 4		288
733 29 VA	24-29 6,5 x 10/ V2A	5116950	1362 06 2		277	823 28.3 FT	28,3 6,5 x 10/ St / FT	5015376	1015 21 4		288
733 38 ALU	30-38 6,5 x 10/ Al	5450559	1362 57 7		278	823 32 FT	32 6,5 x 10/ St / FT	5567738	1015 49 6		288
733 38 FT	30-38 6,5 x 10/ St / FT	5029878	1361 10 9		278	823 37 FT	37 6,5 x 10/ St / FT	5015437	1015 30 3		288
733 38 G	30-38 6,5 x 10/ St / G	5116295	1361 38 4		277	823 40 FT	40 6,5 x 10/ St / FT	5567790	1015 49 8		288
						823 47 FT	47 6,5 x 10/ St / FT	5015499	1015 36 2		288
						823 50 FT	50 6,5 x 10/ St / FT	5567851	1015 50 0		288
						823 54 FT	54 6,5 x 10/ St / FT	5015550	1015 42 7		288

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
823 59.3 FT	59,3 6,5 x 10/ St / FT	5015611	1015 48 6	/100 pc.	288	910 SD-Q 6x40	6 40/ PA	5229636	2351 21 8	/100 pc.	379
823 63 FT	63 6,5 x 10/ St / FT	5567912	1015 50 8		288	910 STK 6x30	35/ PA	5708971	2351 60 9		259
865 M10x34	M10/ CuZn	5311294	3483 09 6		380	910 STP 6x30	6 30/ PA	5242352	2351 41 2		260
865 M6x24	M6 8/ CuZn	5311171	3483 06 1		380	915 3.9x100 G	3,9 100/ St / G	5304630	3450 10 4		385
865 M8x30	M8 11/ CuZn	5311232	3483 08 8		380	915 3.9x50 G	3,9 50/ St / G	5304333	3450 05 8		385
867 M5X125 G	M5 125/ St / G	5309253	3470 14 8		385	915 3.9x60 G	3,9 60/ St / G	5304395	3450 06 6		385
867 M6X 95 G	M6 95/ St / G	5309314	3470 21 0		385	915 3.9x70 G	3,9 70/ St / G	5304456	3450 07 4		385
867 M6X125 G	M6 125/ St / G	5309376	3470 23 7		385	915 3.9x80 G	3,9 80/ St / G	5304517	3450 08 2		385
869 M8X40 G	M8 70/ St / G	5309550	3472 08 6		385	915 3.9x90 G	3,9 90/ St / G	5304579	3450 09 0		385
903 15 G	15 23/ St / G	5245773	3100 15 4		378	915 4.3x120 G	4,3 120/ St / G	5304692	3450 12 0		385
903 18 G	18 26/ St / G	5245834	3100 18 9		378	915 RBS M4	12/ St	5851417	3031 50 0	/pc.	378
903 25 G	25 33/ St / G	5245896	3100 25 1		378	915 S M6	135 14/ St	5241690	3031 01 2		378
903 30 G	30 38/ St / G	5245957	3100 30 8		378	917 3.9x70 G	3,9 70/ St / G	5304753	3452 01 8	/100 pc.	385
903 40 G	40 48/ St / G	5246015	3100 40 5		378	944 CLS 10000mm	10000/ St / G	5647430	5300 28 2		299
903 55 G	55 63/ St / G	5246077	3100 55 3		378	944 CLS 1000mm	1000/ St / G	5647409	5300 27 0		299
903 RB 15	15 21/ St	5851059	3105 01 6		378	944 CLS 3000mm	3000/ St / G	5647416	5300 27 4		299
903 RB 18	18 24/ St	5851110	3105 02 4		378	944 CLS 5000mm	5000/ St / G	5647423	5300 27 8		299
903 RB 22	22 30/ St	5851172	3105 03 2		378	944 RZS 2 G	2-2,5 26,6/ Zn	5464228	5300 01 5		299
904 A 15 FS	15 22/ St / G	5247753	3116 15 8		378	944 RZS 3 G	2,5-3,5 36,4/ Zn	5464266	5300 01 9		299
904 B 15 FS	15 26/ St / G	5248170	3117 15 4		378	944 SLS 1000mm	1000/ St / G	5647331	5300 22 0		299
904 B 18 FS	18 29/ St / G	5248231	3117 18 9		378	944 SLS 3000mm	3000/ St / G	5647348	5300 22 4		299
910 DF 6x35	6 35/ PA	5448099	2347 40 7		379	944 SLS 5000mm	5000/ St / G	5647355	5300 22 8		299
910 GD 6x35	6 35/ PA	5828198	2347 22 9	/100 pc.	380	944 TLS 230mm	230/ St / G	5647287	5300 21 0		299
910 GD 8x50	8 50/ PA	5828259	2347 26 1		380	944 TLS 300mm	300/ St / G	5647317	5300 21 2		299
910 GKDM 12x30	12 30/ Zn	5418191	3483 21 4		380	944 TLS 460mm	460/ St / G	5647324	5300 21 4		299
910 GKSM 6x25	7,5 26,4/ Zn	5418207	3483 23 9		380	944 ZLS 10000mm	10000/ St / G	5647393	5300 25 2		299
910 MZ 10x60	10 60/ PA	5084990	2347 55 5		379	944 ZLS 1000mm	1000/ St / G	5647362	5300 24 0		299
910 MZ 12x70	12 70/ PA	5625667	2347 57 0		379	944 ZLS 3000mm	3000/ St / G	5647379	5300 24 4		299
910 MZ 5x30	5 30/ PA	5625650	2347 52 3		379	944 ZLS 5000mm	5000/ St / G	5647386	5300 24 8		299
910 MZ 6x35	6 35/ PA	5228738	2347 53 9		379	945 M10 G	M10 14/ St / G	5413592	5300 05 3		296
910 MZ 8x50	8 50/ PA	5084969	2347 54 7		379	945 M12 G	M12 16/ St / G	5413653	5300 06 1		296
910 N 10x50 GRW	10 50/ PA	5229155	2349 10 8		379	945 M16 G	M16 22/ St / G	5413714	5300 08 8		296
910 N 12x60 GRW	12 60/ PA	5229216	2349 12 4		379	945 M6 G	M6 9/ St / G	5413530	5300 03 7		296
910 N 5x25 GRW	5 25/ PA	5228851	2349 04 3	/100 m	379	946 10 FT	10 43/ St / FT	5414315	5301 10 6		296
910 N 6x30 GRW	6 30/ PA	5228912	2349 05 1		379	946 3 G	3 21,5/ St / G	5413950	5301 03 3		296
910 N 6x60 GRW	6 60/ PA	5228974	2349 07 8		379	946 4 G	4 26,5/ St / G	5414018	5301 04 1		296
910 N 8x40 GRW	8 40/ PA	5229032	2349 08 6		379	946 5 G	5 28,5/ St / G	5413899	5301 00 9		296
910 SD 5X35	5 35/ PA	5229452	2351 02 1		379	946 6 G	6 30/ St / G	5414070	5301 06 8		296
910 SD 6X35	6 35/ PA	5669197	2351 05 6		263	946 8 G	8 35/ St / G	5414193	5301 08 4		296
910 SD 6X35	6 35/ PA	5669197	2351 05 6		379	947 10 F	10 42/ TG / F	5414797	5302 10 2		297
910 SD 6X40	6 40/ PA	5229513	2351 06 4		263	947 3 F	3 20/ TG / F	5414551	5302 02 1		297
910 SD 6X40	6 40/ PA	5229513	2351 06 4		379	947 5 F	5 24/ TG / F	5414612	5302 05 6		297
910 SD 8X55	8 55/ PA	5229575	2351 09 9		379	947 6 F	6 28/ TG / F	5414674	5302 06 4		297
910 SDM M6	M6 6/ PA	5874454	2350 80 7		379	947 8 F	8 34/ TG / F	5414735	5302 08 0		297
						948 TG6	M6 6/ ST / G	5513315	3453 82 0		385
						957 10 G	54,4/ St / G	5415336	5303 26 5		296
						957 2 G	2,35/ St / G	5464273	5303 20 2		296

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
957 3 G	5,29/ St / G	5414971	5303 20 6	/100 m	296	1015 13 G	13 1800/ St / G	5007937	1009 11 7	/100 pc.	284
957 4 G	9,41/ St / G	5415039	5303 21 4		296	1015 14 G	14 1200/ St / G	5007999	1009 16 8		284
957 5 G	14,7/ St / G	5415091	5303 22 2		296	1015 15 G	15 1200/ St / G	5008057	1009 18 4		284
957 6 G	21,1/ St / G	5415152	5303 23 0		296	1015 16 G	16 1200/ St / G	5008118	1009 19 2		284
957 8 G	34,8/ St / G	5415275	5303 25 7		296	1015 17 G	17 1200/ St / G	5008170	1009 20 6		284
				/100 pc.		1015 18 G	18 1200/ St / G	5008231	1009 21 4		284
964 M10 G	M10 10,5/ ST / G	5868330	3403 16 5		390	1015 20 G	20 1200/ St / G	5008354	1009 23 0		284
964 M4 G	M4 4,3/ ST / G	5867913	3403 02 5		390	1015 25 G	25 1000/ St / G	5009078	1009 42 7		284
964 M5 G	M5 5,3/ ST / G	5867975	3403 04 1		390	1015 28 G	28 1000/ St / G	5008712	1009 36 2		284
964 M6 G	M6 6,4/ ST / G	5868095	3403 08 4		390	1015 5 G	5 3000/ St / G	5007456	1009 02 8		284
964 M6 G	M6 6,4/ ST / G	5868156	3403 09 2		390	1015 6 G	6 2400/ St / G	5007517	1009 03 6		284
964 M6 G	M6 6,4/ ST / G	5868033	3403 07 6		390	1015 7 G	7 2000/ St / G	5007579	1009 04 4		284
964 M8 G	M8 8,4/ ST / G	5868217	3403 12 2		390	1015 8 G	8 2000/ St / G	5007630	1009 05 2		284
964 M8 G	M8 8,4/ ST / G	5868279	3403 13 0		390	1015 9 G	9 2000/ St / G	5007692	1009 06 0		284
965 M6X20 G	M6 6/ Zn / G	5303558	3415 03 1		384	1020 11-16 G	M4 x 13 1200/ St / G	5125891	1404 16 4		296
965 M6X25 G	M6 6/ Zn / G	5303619	3415 06 6		384	1020 14-18 G	M4 x 13 1000/ St / G	5125952	1404 18 0		296
965 M6X30 G	M6 6/ Zn / G	5303671	3415 08 2		384	1020 18-28 G	M4 x 13 600/ St / G	5126010	1404 28 8		296
965 M6X40 G	M6 6/ Zn / G	5303732	3415 10 4		384	1060 26-45 FT	26-45 M5 x 30/ St / FT	5105978	1310 61 5		282
965 M6X50 G	M6 6/ Zn / G	5303794	3415 12 0		384	1060 45-68 FT	45-68 M6 x 35/ St / FT	5106036	1310 65 8		282
965 M8X20 G	M8 8/ Zn / G	5303855	3415 14 7		384	1101 3.4x100	100 3,4/ St	5288077	3341 99 2		377
965 M8X30 G	M8 8/ Zn / G	5303916	3415 16 3		384	1101 3.4x50	50 3,4/ St	5287773	3341 49 6		377
						1101 3.4x60	60 3,4/ St	5287834	3341 60 7		377
966 M10 G	M10 10,5/ ST / G	5300137	3402 09 6		322	1101 3.4x70	70 3,4/ St	5287896	3341 70 4		377
966 M10 G	M10 10,5/ ST / G	5300137	3402 09 6		390	1101 3.4x80	80 3,4/ St	5287957	3341 80 1		377
966 M10 VA	M10 10,5/ V2A	5300618	3402 32 0		390	1101 3.4x90	90 3,4/ St	5288015	3341 90 9		377
966 M12 G	M12 13/ ST / G	5300199	3402 12 6		390	1101 3x40	40 3/ St	5287537	3341 04 6		377
966 M12 VA	M12 13/ V2A	5300670	3402 33 9		390	1101 3x50	50 3/ St	5287599	3341 05 4		377
966 M4 G	M4 4,3/ ST / G	5299899	3402 04 5		390	1101 3x60	60 3/ St	5287650	3341 06 2		377
966 M6 G	M6 6,4/ ST / G	5300014	3402 06 1		322	1101 3x70	70 3/ St	5287711	3341 07 0		377
966 M6 G	M6 6,4/ ST / G	5300014	3402 06 1		390	1101 Z 40 G	40 3/ St / G	5288138	3342 04 2		377
966 M6 VA	M6 6,4/ V2A	5300496	3402 30 4		390	1101 Z 50 G	50 3/ St / G	5288190	3342 05 0		377
966 M8 G	M8 8,4/ ST / G	5300076	3402 08 8		322	1101 Z 60 G	60 3/ St / G	5288251	3342 06 9		377
966 M8 G	M8 8,4/ ST / G	5300076	3402 08 8		390	1101 Z 70 G	70 3/ St / G	5288312	3342 07 7		377
966 M8 VA	M8 8,4/ V2A	5300557	3402 31 2		390	1101 Z3.4x50 G	50 3,4/ St / G	5288374	3342 50 6		377
967 M10 G	M10 11/ ST / G	5300434	3402 22 3		322	1101 Z3.4x60 G	60 3,4/ St / G	5288435	3342 60 3		377
967 M10 G	M10 11/ ST / G	5300434	3402 22 3		390	1101 Z3.4x70 G	70 3,4/ St / G	5288497	3342 70 0		377
967 M6 G	M6 6,5/ ST / G	5300311	3402 20 7		322	1101 Z3.4x80 G	80 3,4/ St / G	5288558	3342 80 8		377
967 M6 G	M6 6,5/ ST / G	5300311	3402 20 7		390						
967 M8 G	M8 8,5/ ST / G	5300373	3402 21 5		322						
967 M8 G	M8 8,5/ ST / G	5300373	3402 21 5		390						
						1268 KD FT	/ St / FT	6192373	6350 10 0	/pc.	321
985 M6 25	8 4,3/ St / G	5250395	3133 02 8		384	1268 KP FT	/ St / FT	6192311	6350 05 4		321
985 M6 35	8 4,3/ St / G	5250456	3133 03 6		384						
985 M8 35	10 5,2/ St / G	5250579	3133 23 0		384					/100 pc.	
1015 10 G	10 2000/ St / G	5007753	1009 07 9		284	1268 L 150 FS	/ ST / FS	5038238	1104 24 1		319
						1268 L 150 FS	/ ST / FS	5038238	1104 24 1		330
1015 11 G	11 1800/ St / G	5007814	1009 08 7		284	1268 L 1M FS	/ ST / FS	5694458	1104 49 7	/100 m	319
						1268 L 1M FS	/ ST / FS	5694458	1104 49 7		330
1015 12 G	12 1000/ St / G	5007876	1009 10 9		284	1268 L 1M VA	/ V2A	5627074	1104 49 8		331

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
1268 L 200 FS	/ ST / FS	5038290	1104 26 8	/100 pc.	319	1974 2X4-12	4-12 6/ PA	5742630	2197 85 5	/100 pc.	259
1268 L 200 FS	/ ST / FS	5038290	1104 26 8		330						
1268 L 2M FS	/ ST / FS	5038771	1104 50 0	/100 m	319	1975 12-15	12-15 / PA	5844518	2148 02 1		259
1268 L 2M FS	/ ST / FS	5038771	1104 50 0		330	1975 16-19	16-19 / PA	5844570	2148 04 8		259
1268 L 2M VA	/ V2A	5627081	1104 50 1		331	1975 19-22	19-22,5 / PA	5844631	2148 05 6		259
1268 L 300 FS	/ ST / FS	5038351	1104 28 4	/100 pc.	319	1976 12-15	12-15,5 190 N / PA	5863779	2148 50 1		259
1268 L 300 FS	/ ST / FS	5038351	1104 28 4		330	1976 16-21	16-21,5 500 N / PA	5863830	2148 52 8		259
1268 L 400 FS	/ ST / FS	5836353	1104 29 2		319	1976 22-28	22,5-28,5 500 N / PA	5863892	2148 53 6		259
1268 L 400 FS	/ ST / FS	5836353	1104 29 2		330						
1268 L 500 FS	/ ST / FS	5038412	1104 30 6		319	1996 40	3 x 40 Transparent/ PP	5705796	2222 83 3		269
1268 L 500 FS	/ ST / FS	5038412	1104 30 6		330	1996 50	3,5 x 50 Transparent/ PP	5705734	2222 84 1		269
1268 L 600 FS	/ ST / FS	5036678	1104 31 0		319	1996 60	3,5 x 60 Transparent/ PP	5707837	2222 86 8		269
1268 L 600 FS	/ ST / FS	5036678	1104 31 0		330						
1268 L 700 FS	/ ST / FS	5036739	1104 31 5		319	1996 70	3,5 x 70 Transparent/ PP	5509837	2222 87 6		269
1268 L 700 FS	/ ST / FS	5036739	1104 31 5		330						
1268 L 800 FS	/ ST / FS	5036791	1104 32 0		319	1996 N 25	25 3/ St / G	5545590	3369 00 3		376
1268 L 800 FS	/ ST / FS	5036791	1104 32 0		330	1996 N 40	40 3/ St / G	5545774	3369 00 5		376
1268 L 900 FS	/ ST / FS	5036852	1104 32 5		319	1996 N 60	60 3,5/ St / G	5545897	3369 02 1		376
1268 L 900 FS	/ ST / FS	5036852	1104 32 5		330						
1268 SK OR	Pastel orange 800/ PE	5668114	1124 50 2		320	1996 O	3,0 - 3,5 Transparent/ PP	5698357	2222 80 9		269
1268 SK OR	Pastel orange 800/ PE	5668114	1124 50 2		331						
1268 SL 150 FS	/ ST / FS	5038474	1104 34 9		320	2004 18 LGR	4 2,0 x 18/ PP	5217275	2227 22 3		270
1268 SL 150 FS	/ ST / FS	5038474	1104 34 9		331	2004 18 RW	4 2,0 x 18/ PP	5214878	2225 22 0		271
1268 SL 1M FS	/ ST / FS	5052692	1104 44 5	/100 m	320	2004 25 LGR	4 2,0 x 25/ PP	5217336	2227 23 1		270
1268 SL 1M FS	/ ST / FS	5052692	1104 44 5		331	2004 25 RW	4 2,0 x 25/ PP	5214939	2225 23 9		271
1268 SL 200 FS	/ ST / FS	5038535	1104 35 7	/100 pc.	320	2005 18 LGR	5 2,0 x 18/ PP	5217459	2227 34 7		270
1268 SL 200 FS	/ ST / FS	5038535	1104 35 7		331	2005 18 RW	5 2,0 x 18/ PP	5215059	2225 37 9		271
1268 SL 2M FS	/ ST / FS	5038719	1104 45 4	/100 m	320	2005 25 LGR	5 2,0 x 25/ PP	5217398	2227 33 9		270
1268 SL 2M FS	/ ST / FS	5038719	1104 45 4		331	2005 25 RW	5 2,0 x 25/ PP	5214991	2225 34 4		271
1268 SL 300 FS	/ ST / FS	5038597	1104 37 3	/100 pc.	320	2006 18 RW	6 2,0 x 18/ PP	5215110	2225 40 9		271
1268 SL 300 FS	/ ST / FS	5038597	1104 37 3		331	2006 25 LGR	6 2,0 x 25/ PP	5217572	2227 42 8		270
1268 SL 400 FS	/ ST / FS	5052814	1104 39 1		320	2006 25 RW	6 2,0 x 25/ PP	5215172	2225 41 7		271
1268 SL 400 FS	/ ST / FS	5052814	1104 39 1		331						
1268 SL 500 FS	/ ST / FS	5038658	1104 40 3		320	2006 35 LGR	6 2,0 x 35/ PP	5217633	2227 43 6		270
1268 SL 500 FS	/ ST / FS	5038658	1104 40 3		331	2006 35 RW	6 2,0 x 35/ PP	5215233	2225 42 5		271
1268 SL 600 FS	/ ST / FS	5486190	1104 41 1		320						
1268 SL 600 FS	/ ST / FS	5486190	1104 41 1		331	2007 18 RW	7 2,0 x 18/ PP	5215295	2225 50 6		271
1268 SL 800 FS	/ ST / FS	5051732	1104 42 7		320						
1268 SL 800 FS	/ ST / FS	5051732	1104 42 7		331	2007 25 LGR	7 2,0 x 25/ PP	5217756	2227 51 7		270
1268 SL 900 FS	/ ST / FS	5052630	1104 43 5		320	2007 25 RW	7 2,0 x 25/ PP	5215356	2225 51 4		271
1268 SL 900 FS	/ ST / FS	5052630	1104 43 5		331	2007 25 SW	7 2,0 x 25/ PP	5336372	2232 14 6		271
				/m		2007 35 LGR	7 2,0 x 35/ PP	5217817	2227 52 5		270
1268 SP 3M FT	3000/ St / FT	6192557	6350 20 8	/pc.	321	2007 35 RW	7 2,0 x 35/ PP	5215417	2225 52 2		271
						2008 25 LGR	8 2,0 x 25/ PP	5217930	2227 61 4		270
1268 W 90 G	/ St / G	6192496	6350 15 1		321	2008 25 RW	8 2,0 x 25/ PP	5215530	2225 61 1		271
						2008 25 SW	8 2,0 x 25/ PP	5336310	2232 17 0		271
				/100 pc.		2008 35 LGR	8 2,0 x 35/ PP	5217992	2227 62 2		270
1594 22 G	22 6/ St / G	5106159	1310 92 5		286	2008 35 RW	8 2,0 x 35/ PP	5215592	2225 63 8		271
1973 20-40 LGR	20-40 89/ PA	5640035	2148 86 2		259	2008 45 LGR	8 2,0 x 45/ PP	5218050	2227 63 0		270
1973 3-13 LGR	3-13 52/ PA	5947899	2148 80 3		259	2009 20 RW	9 2,0 x 20/ PP	5215714	2225 70 0		271
1973 8-28 LGR	8-28 70/ PA	5877691	2148 84 6		259	2009 25 LGR	9 2,0 x 25/ PP	5218173	2227 71 1		270
1974 16-23	16-23 6/ PA	5742999	2197 80 4		259	2009 25 RW	9 2,0 x 25/ PP	5215776	2225 71 9		271
1974 22-30	22-30 6/ PA	5742937	2197 81 2		259	2009 25 SW	9 2,0 x 25/ PP	5336198	2232 21 9		271
1974 2X12-25	12-25 6/ PA	5742579	2197 86 3		259	2009 35 LGR	9 2,0 x 35/ PP	5218234	2227 73 8		270
						2009 35 LGR SP	9 2,0 x 35/ PP	5607694	2227 76 2		270
						2009 35 RW	9 2,0 x 35/ PP	5215837	2225 72 7		271
						2009 45 LGR	9 2,0 x 45/ PP	5218296	2227 74 6		270

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				/100 pc.						/100 pc.	
2009 45 LGR SP	9 2,0 x 45/ PP	5607878	2227 79 7		270	2031 20 SP	15 Light grey/ PP	5651642	2205 40 8		261
2010 25 LGR	10 2,0 x 25/ PP	5218357	2227 80 0		270					/pc.	
2010 25 RW	10 2,0 x 25/ PP	5215899	2225 80 8		271	2031 40	30 Light grey/ PP	5651666	2205 41 6		261
2010 25 SW	10 2,0 x 25/ PP	5336136	2232 23 5		271					/100 pc.	
2010 35 LGR	10 2,0 x 35/ PP	5218418	2227 81 9		270	2031 40 SP	30 Light grey/ PP	5651703	2205 42 0		261
2010 35 RW	10 2,0 x 35/ PP	5215950	2225 81 6		271						
2010 45 LGR	10 2,0 x 45/ PP	5218470	2227 82 7		270	2031 F 10	10 Stone grey/ PP	5726968	2205 40 0		261
2011 25 RW	11 2,0 x 25/ PP	5216070	2225 90 5		271						
2011 35 LGR	11 2,0 x 35/ PP	5218593	2227 91 6		270	2031 F 20	15 Stone grey/ PP	5651659	2205 41 2		261
2011 35 RW	11 2,0 x 35/ PP	5216131	2225 91 3		271					/pc.	
2011 45 LGR	11 2,0 x 45/ PP	5218654	2227 92 4		270	2031 F 40	30 Stone grey/ PP	5651710	2205 42 3		261
2012 25 RW	12 2,0 x 25/ PP	5216254	2226 01 4		271	2031 M 15 FS	15 50/ St / FS	5863953	2207 02 8	/100 pc.	275
2012 35 LGR	12 2,0 x 35/ PP	5218777	2228 02 5		270	2031 M 30 FS	30 25/ St / FS	5798798	2207 03 6		275
2012 35 RW	12 2,0 x 35/ PP	5216315	2226 02 2		271						
2012 35 SW	12 2,0 x 35/ PP	5335955	2232 31 6		271	2031 M 70 FS	70 10/ St / FS	5022497	2207 06 0		275
2012 45 LGR	12 2,0 x 45/ PP	5218838	2228 03 3		270	2032	8 Light grey/ PA	5211273	2205 01 7		262
2014 30 RW	14 2,5 x 30/ PP	5216438	2226 10 3		271	2032 F	8 Stone grey/ PBPT	5211099	2204 90 8		262
2014 40 LGR	14 2,5 x 40/ PP	5218951	2228 11 4		270	2032 SD	8 Light grey/ PA	5210917	2204 80 0		262
2014 40 RW	14 2,5 x 40/ PP	5216490	2226 11 1		271						
						2032 SD SP	8 Light grey/ PA	5597490	2204 85 1		262
2014 50 LGR	14 2,5 x 50/ PP	5219019	2228 12 2		270	2032 SP	8 Light grey/ PA	5597674	2204 97 5		262
2016 40 LGR	16 2,5 x 40/ PP	5219132	2228 21 1		270						
2016 40 RW	16 2,5 x 40/ PP	5216674	2226 21 9		271	2033	16 Light grey/ PA	5211334	2205 03 3		262
2016 50 LGR	16 2,5 x 50/ PP	5219194	2228 23 8		270	2033 D 15x3 G	15 6,4/ St / G	5044970	2205 09 7		274
2016 50 RW	16 2,5 x 50/ PP	5216735	2226 22 7		271						
						2033 D 25x19	Light grey 2400/ PS	5211457	2205 09 2		263
2018 40 LGR	18 2,5 x 40/ PP	5219255	2228 30 0		270	2033 F	16 Stone grey/ PBPT	5211150	2204 91 6		262
2018 40 RW	18 2,5 x 40/ PP	5216797	2226 30 8		271						
2018 50 LGR	18 2,5 x 50/ PP	5219316	2228 31 9		270	2033 M	16 25/ V2A	5036616	2204 00 0		274
2020 40 LGR	20 2,5 x 40/ PP	5219378	2228 40 8		270	2033 SD	16 Light grey/ PA	5210979	2204 81 9		262
2020 40 RW	20 2,5 x 40/ PP	5216919	2226 40 5		271						
						2033 SD SP	16 Light grey/ PA	5597551	2204 87 8		262
2020 50 LGR	20 2,5 x 50/ PP	5219439	2228 41 6		270	2033 SP	16 Light grey/ PA	5597735	2204 98 3		262
2025 18 LGR	2 x 18 4-7 / PP	5219552	2228 61 0		270	2033 STD	16 Light grey/ PA	5693253	2204 54 1		262
2025 18 RW	2,0 x 18 4-7 / PP	5496519	2228 68 6		270						
2025 25 LGR	2 x 25 4-7 / PP	5219613	2228 62 9		270	2034	10 Light grey/ PA	5211396	2205 04 1		262
2025 25 RW	2,0 x 25 4-7 / PP	5828556	2228 68 8		270	2034 F	10 Stone grey/ PBPT	5211211	2204 92 4		262
2026 18 LGR	2 x 18 7-12 / PP	5219675	2228 71 8		270	2034 M	10 50/ V2A	5210672	2204 01 0		274
2026 18 RW	2,0 x 18 7-12 / PP	5496397	2228 42 0		270						
2026 25 LGR	2 x 25 7-12 / PP	5219736	2228 72 6		270	2034 SP	10 Light grey/ PA	5597797	2204 99 1		262
2026 25 LGR SP	2 x 25 7-12 / PP	5608110	2228 43 2		270	2036 10-15 LGR	10-15 Light grey/ PE	5223092	2259 14 1		343
2026 25 RW	2,0 x 25 7-12 / PP	5496458	2228 42 2		270						
2026 35 LGR	2 x 35 7-12 / PP	5219798	2228 73 4		270	2036 18-23 LGR	18-23 Light grey/ PE	5223214	2259 23 0		343
2026 35 LGR SP	2 x 35 7-12 / PP	5608172	2228 44 0		270	2036 22-28 LGR	22-28 Light grey/ PE	5223276	2259 28 1		343
2026 45 LGR	2 x 45 7-12 / PP	5608837	2228 75 0		270	2036 4-7 LGR	4-7 Light grey/ PE	5222972	2259 07 9		343
2027 25 LGR	2 x 25 10-14 / PP	5219859	2228 82 3		270	2037 12-20 LGR	12-20 Light grey/ PA	5221418	2250 20 9		264
2027 30 LGR	2 x 30 10-14 / PP	5219910	2228 83 1		270	2037 16-24 LGR	16-24 Light grey/ PA	5221470	2250 24 1		264
2027 40 LGR	2 x 40 10-14 / PP	5219972	2228 85 8		270	2037 18-30 LGR	18-30 Light grey/ PA	5221531	2250 30 6		264
2028 40 LGR	2 x 40 13,5-17 / PP	5220039	2228 90 4		270	2037 27-43 LGR	27-43 Light grey/ PA	5221593	2250 43 8		264
2031 10	10 Light grey/ PP	5726951	2205 39 8		261	2037 3-7 LGR	3-7 Light grey/ PA	5221296	2250 07 1		264
						2037 6-13 LGR	6-13 Light grey/ PA	5221357	2250 13 6		264
2031 20	15 Light grey/ PP	5651635	2205 40 4		261	2047 5-25 LGR	5-25 Light grey/ PS	5221654	2251 25 6		342

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
2049 4-14 LGR	4-14 M3 x 17/ PS	5222071	2254 01 8		341	2056 40 ALU	34-40 / AI	5077596	1183 25 7		356
						2056 40 FT	34-40 / ST / FT	5064756	1160 40 0		355
2050 5-25 LGR	5-25 M4 x 27/ PS	5222132	2254 02 6		342	2056 40 VA	34-40 / V2A	5063919	1159 56 9		358
2051 8-36 LGR	8-36 M4 x 37.5/ PS	5222194	2254 03 4		342	2056 46 ALU	40-46 / AI	5077657	1183 26 5		356
						2056 46 FT	40-46 / ST / FT	5064817	1160 45 1		355
2054 14-48 LGR	14-48 M8 x 55/ PA	5222798	2255 01 4		342	2056 46 VA	40-46 / V2A	5063971	1159 57 7		358
2054 14-48 PA	14-48 M8 x 55/ PA	5905592	2255 40 5		342						
						2056 52 ALU	46-52 / AI	5077718	1183 27 3		356
2055 24-72 LGR	24-72 M8 x 75/ PA	5222859	2255 02 2		342	2056 52 FT	46-52 / ST / FT	5064879	1160 52 4		355
						2056 52 VA	46-52 / V2A	5064039	1159 58 5		358
2056 100 FT	90-100 / ST / FT	5065296	1160 99 0		355						
						2056 58 ALU	52-58 / AI	5077770	1183 28 1		356
2056 12 ALU	8-12 / AI	5077299	1183 20 6		356	2056 58 FT	52-58 / ST / FT	5064930	1160 58 3		355
2056 12 FT	8-12 / ST / FT	5064459	1160 12 5		355	2056 58 VA	52-58 / V2A	5064091	1159 59 3		358
2056 12 VA	8-12 / V2A	5063612	1159 51 8		358						
						2056 64 ALU	58-64 / AI	5077831	1183 30 3		356
2056 16 ALU	12-16 / AI	5077350	1183 21 4		356	2056 64 FT	58-64 / ST / FT	5064992	1160 64 8		355
2056 16 FT	12-16 / ST / FT	5064510	1160 16 8		355	2056 64 VA	58-64 / V2A	5064152	1159 60 7		358
2056 16 VA	12-16 / V2A	5063674	1159 52 6		358						
						2056 70 ALU	64-70 / AI	5435310	1183 31 1		356
2056 2 12 ALU	8-12 / AI	5435495	1183 38 9		357	2056 70 FT	64-70 / ST / FT	5065050	1160 70 2		355
2056 2 12 FT	8-12 / ST / FT	5065357	1161 12 1		355	2056 70 VA	64-70 / V2A	5064213	1159 61 5		358
2056 2 16 ALU	12-16 / AI	5435556	1183 39 7		357						
2056 2 16 FT	12-16 / ST / FT	5065418	1161 16 4		355	2056 76 ALU	70-76 / AI	5435372	1183 33 8		356
						2056 76 FT	70-76 / ST / FT	5065111	1160 76 1		355
2056 2 22 ALU	16-22 / AI	5435617	1183 40 0		357	2056 76 VA	70-76 / V2A	5064275	1159 62 3		358
2056 2 22 FT	16-22 / ST / FT	5065470	1161 22 9		355						
2056 2 22 VA	16-22 / V2A	5066071	1161 82 2		358	2056 82 FT	76-82 / ST / FT	5065173	1160 82 6		355
2056 2 28 ALU	22-28 / AI	5435679	1183 41 9		357						
2056 2 28 FT	22-28 / ST / FT	5065531	1161 28 8		355	2056 90 FT	82-90 / ST / FT	5065234	1160 90 7		355
2056 2 28 VA	22-28 / V2A	5066132	1161 83 0		358						
						2056 B 35 FT	35 x 50 35/ St / FT	5081258	1194 05 4		371
2056 2 34 ALU	28-34 / AI	5435730	1183 42 7		357						
2056 2 34 FT	28-34 / ST / FT	5065593	1161 34 2		355	2056 B 40 FT	40 x 100 40/ St / FT	5081197	1194 04 6		371
2056 2 34 VA	28-34 / V2A	5066194	1161 84 9		358						
						2056 B 80 FT	80 x 100 80/ St / FT	5081319	1194 08 9		371
2056 2 40 ALU	34-40 / AI	5435792	1183 43 5		357	2056 B 80 VA	80 x 100 80/ V2A	5476771	1194 37 2		371
2056 2 40 FT	34-40 / ST / FT	5065654	1161 40 7		355						
2056 2 40 VA	34-40 / V2A	5066255	1161 85 7		358	2056 BE FT	/ St / FT	5072492	1174 05 3		361
2056 2 46 ALU	40-46 / AI	5435853	1183 44 3		357						
2056 2 46 FT	40-46 / ST / FT	5065715	1161 46 6		355	2056 E 31 FT	28-31 / St / FT	5500353	1174 60 6		370
2056 2 46 VA	40-46 / V2A	5066316	1161 86 5		358	2056 E 37 FT	34-37 / St / FT	5500414	1174 61 4		370
2056 2 52 ALU	46-52 / AI	5435914	1183 45 1		357	2056 E 44 FT	40-44 / St / FT	5500476	1174 63 0		370
2056 2 52 FT	46-52 / ST / FT	5065777	1161 52 0		355						
2056 2 52 VA	46-52 / V2A	5066378	1161 87 3		358	2056 M 100 FT	90-100 / ST / FT	5063551	1156 16 0		359
2056 2 58 ALU	52-58 / AI	5435976	1183 47 8		357	2056 M 12 FT	8-12 / ST / FT	5062714	1156 00 4		359
2056 2 58 FT	52-58 / ST / FT	5065838	1161 57 1		355	2056 M 12 VA	8-12 / V2A	5668190	1159 71 2		360
2056 2 58 VA	52-58 / V2A	5066439	1161 88 1		358	2056 M 16 FT	12-16 / ST / FT	5062776	1156 01 2		359
						2056 M 16 VA	12-16 / V2A	5668206	1159 71 6		360
2056 2 64 FT	58-64 / ST / FT	5065890	1161 64 4		355						
2056 2 64 VA	58-64 / V2A	5066491	1161 90 3		358	2056 M 22 FT	16-22 / ST / FT	5062837	1156 02 0		359
						2056 M 22 VA	16-22 / V2A	5668213	1159 72 2		360
2056 22 ALU	16-22 / AI	5077411	1183 22 2		356	2056 M 28 FT	22-28 / ST / FT	5062899	1156 03 9		359
2056 22 FT	16-22 / ST / FT	5064572	1160 22 2		355	2056 M 28 VA	22-28 / V2A	5668220	1159 72 8		360
2056 22 VA	16-22 / V2A	5063735	1159 53 4		358						
						2056 M 34 FT	28-34 / ST / FT	5062950	1156 04 7		359
2056 28 ALU	22-28 / AI	5077473	1183 23 0		356	2056 M 34 VA	28-34 / V2A	5668268	1159 73 4		360
2056 28 FT	22-28 / ST / FT	5064633	1160 28 1		355						
2056 28 VA	22-28 / V2A	5063797	1159 54 2		358	2056 M 40 FT	34-40 / ST / FT	5063018	1156 05 5		359
						2056 M 40 VA	34-40 / V2A	5668275	1159 74 0		360
2056 3 12 FT	8-12 / ST / FT	5066972	1162 12 8		356	2056 M 46 FT	40-46 / ST / FT	5063070	1156 06 3		359
2056 3 16 FT	12-16 / ST / FT	5067030	1162 16 0		356	2056 M 46 VA	40-46 / V2A	5668282	1159 74 6		360
2056 3 22 ALU	16-22 / AI	5436218	1183 52 4		357	2056 M 52 FT	46-52 / ST / FT	5063131	1156 07 1		359
2056 3 22 FT	16-22 / ST / FT	5067092	1162 22 5		356	2056 M 52 VA	46-52 / V2A	5668299	1159 75 2		360
2056 3 28 ALU	22-28 / AI	5436270	1183 53 2		357	2056 M 58 FT	52-58 / ST / FT	5063193	1156 09 8		359
2056 3 28 FT	22-28 / ST / FT	5067153	1162 28 4		356	2056 M 58 VA	52-58 / V2A	5668305	1159 75 8		360
2056 3 34 ALU	28-34 / AI	5436331	1183 54 0		357	2056 M 64 FT	58-64 / ST / FT	5063254	1156 10 1		359
2056 3 34 FT	28-34 / ST / FT	5067214	1162 34 9		356	2056 M 64 VA	58-64 / V2A	5668312	1159 76 4		360
2056 3 40 FT	34-40 / ST / FT	5067276	1162 40 3		356	2056 M 70 FT	64-70 / ST / FT	5063315	1156 12 8		359
2056 3 46 FT	40-46 / ST / FT	5067337	1162 46 2		356	2056 M 70 VA	64-70 / V2A	5668329	1159 77 0		360
						2056 M 76 FT	70-76 / ST / FT	5063377	1156 13 6		359
2056 34 ALU	28-34 / AI	5077534	1183 24 9		356	2056 M 76 VA	70-76 / V2A	5668336	1159 77 6		360
2056 34 FT	28-34 / ST / FT	5064695	1160 34 6		355						
2056 34 VA	28-34 / V2A	5063858	1159 55 0		358	2056 M 82 FT	76-82 / ST / FT	5063438	1156 14 4		359
						2056 M 90 FT	82-90 / ST / FT	5063490	1156 15 2		359

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Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
2056 M2 12 FT	8-12 / St / FT	5494836	1156 17 9		359	2056N 12 FT	8-12 / ST / FT	5067399	1163 12 4		352
2056 M2 12 VA	8-12 / V2A	5668343	1161 91 2		361	2056N 12 VA	8-12 / V2A	5069256	1166 01 8		353
2056 M2 16 FT	12-16 / St / FT	5494898	1156 18 7		359						
2056 M2 16 VA	12-16 / V2A	5668381	1161 91 6		361	2056N 16 ALU	12-16 / AI	5436577	1183 61 3		353
2056 M2 22 FT	16-22 / St / FT	5494959	1156 19 5		359	2056N 16 FT	12-16 / ST / FT	5067450	1163 16 7		352
2056 M2 22 VA	16-22 / V2A	5668398	1161 92 2		361	2056N 16 VA	12-16 / V2A	5069317	1166 02 6		353
2056 M2 28 FT	22-28 / St / FT	5958703	1156 20 9		359						
2056 M2 28 VA	22-28 / V2A	5668404	1161 92 8		361	2056N 2 12 FT	8-12 / ST / FT	5068297	1164 12 0		352
2056 M2 34 VA	28-34 / V2A	5668442	1161 93 4		361	2056N 2 16 FT	12-16 / ST / FT	5068358	1164 16 3		352
2056 M2 40 VA	34-40 / V2A	5668459	1161 94 0		361	2056N 2 22 FT	16-22 / ST / FT	5068419	1164 22 8		352
2056 M2 46 VA	40-46 / V2A	5668466	1161 94 6		361	2056N 2 28 FT	22-28 / ST / FT	5068471	1164 28 7		352
2056 M2 52 VA	46-52 / V2A	5668503	1161 95 2		361	2056N 2 34 FT	28-34 / ST / FT	5068532	1164 34 1		352
2056 M2 58 VA	52-58 / V2A	5668510	1161 95 8		361	2056N 2 40 FT	34-40 / ST / FT	5068594	1164 40 6		352
2056 M2 64 VA	58-64 / V2A	5668527	1161 96 4		361	2056N 2 46 FT	40-46 / ST / FT	5068655	1164 46 5		352
						2056N 2 52 FT	46-52 / ST / FT	5068716	1164 51 1		352
2056 M3 12 FT	8-12 / St / FT	5958765	1156 24 1		360	2056N 2 58 FT	52-58 / ST / FT	5068778	1164 58 9		352
2056 M3 16 FT	12-16 / St / FT	5958826	1156 26 8		360						
2056 M3 22 FT	16-22 / St / FT	5958888	1156 27 6		360	2056N 22 ALU	16-22 / AI	5436638	1183 62 1		353
2056 M3 28 FT	22-28 / St / FT	5958949	1156 28 4		360	2056N 22 FT	16-22 / ST / FT	5067511	1163 22 1		352
						2056N 22 VA	16-22 / V2A	5069379	1166 03 4		353
2056F 12 ALU	8-12 / AI	5440239	1184 70 9		366						
2056F 12 FT	8-12 / ST / FT	5070634	1169 12 2		365	2056N 28 ALU	22-28 / AI	5436690	1183 64 8		353
2056F 12 VA	8-12 / V2A	5077893	1185 00 4		366	2056N 28 FT	22-28 / ST / FT	5067573	1163 28 0		352
						2056N 28 VA	22-28 / V2A	5069430	1166 04 2		353
2056F 16 ALU	12-16 / AI	5440291	1184 71 7		366						
2056F 16 FT	12-16 / ST / FT	5070696	1169 16 5		365	2056N 34 ALU	28-34 / AI	5436751	1183 65 6		353
2056F 16 VA	12-16 / V2A	5077954	1185 01 2		366	2056N 34 FT	28-34 / ST / FT	5067634	1163 34 5		352
						2056N 34 VA	28-34 / V2A	5069492	1166 05 0		353
2056F 2 12 FT	8-12 / ST / FT	5071532	1170 12 0		365						
2056F 2 16 FT	12-16 / ST / FT	5071594	1170 16 3		365	2056N 40 ALU	34-40 / AI	5436812	1183 66 4		353
2056F 2 22 FT	16-22 / ST / FT	5071655	1170 22 8		365	2056N 40 FT	34-40 / ST / FT	5067696	1163 39 6		352
2056F 2 28 FT	22-28 / ST / FT	5071716	1170 28 7		365	2056N 40 VA	34-40 / V2A	5069553	1166 06 9		353
2056F 2 34 FT	28-34 / ST / FT	5071778	1170 34 1		365						
2056F 2 40 FT	34-40 / ST / FT	5071839	1170 40 6		365	2056N 46 ALU	40-46 / AI	5436874	1183 67 2		353
2056F 2 46 FT	40-46 / ST / FT	5071891	1170 46 5		365	2056N 46 FT	40-46 / ST / FT	5067757	1163 46 9		352
2056F 2 52 FT	46-52 / ST / FT	5071952	1170 51 1		365	2056N 46 VA	40-46 / V2A	5069614	1166 07 7		353
2056F 22 ALU	16-22 / AI	5440352	1184 72 5		366	2056N 52 ALU	46-52 / AI	5436935	1183 68 0		353
2056F 22 FT	16-22 / ST / FT	5070757	1169 21 1		365	2056N 52 FT	46-52 / ST / FT	5067818	1163 52 3		352
2056F 22 VA	16-22 / V2A	5078012	1185 02 0		366	2056N 52 VA	46-52 / V2A	5069676	1166 08 5		353
2056F 28 ALU	22-28 / AI	5440413	1184 73 3		366	2056N 58 FT	52-58 / ST / FT	5067870	1163 58 2		352
2056F 28 FT	22-28 / ST / FT	5070818	1169 28 9		365	2056N 58 VA	52-58 / V2A	5069737	1166 09 3		353
2056F 28 VA	22-28 / V2A	5078074	1185 03 9		366	2056N 58ALU	52-58 / AI	5436997	1183 69 9		353
2056F 34 ALU	28-34 / AI	5440475	1184 74 1		366	2056N 64 FT	58-64 / ST / FT	5067931	1163 64 7		352
2056F 34 FT	28-34 / ST / FT	5070870	1169 34 3		365	2056N 64 VA	58-64 / V2A	5069799	1166 10 7		353
2056F 34 VA	28-34 / V2A	5078135	1185 04 7		366						
						2056N 70 FT	64-70 / ST / FT	5067993	1163 70 1		352
2056F 40 ALU	34-40 / AI	5440536	1184 76 8		366						
2056F 40 FT	34-40 / ST / FT	5070931	1169 40 8		365	2056N M 12 FT	8-12 / St / FT	5060857	1155 40 7		354
2056F 40 VA	34-40 / V2A	5078197	1185 05 5		366	2056N M 16 FT	12-16 / St / FT	5060918	1155 41 5		354
						2056N M 22 FT	16-22 / St / FT	5060970	1155 42 3		354
2056F 46 FT	40-46 / ST / FT	5070993	1169 46 7		365	2056N M 28 FT	22-28 / St / FT	5061038	1155 43 1		354
2056F 46 VA	40-46 / V2A	5078258	1185 06 3		366	2056N M 34 FT	28-34 / St / FT	5061090	1155 45 8		354
2056F 46ALU	40-46 / AI	5440598	1184 77 6		366	2056N M 40 FT	34-40 / St / FT	5061151	1155 46 6		354
						2056N M 46 FT	40-46 / St / FT	5061212	1155 47 4		354
2056F 52 FT	46-52 / ST / FT	5071051	1169 52 1		365	2056N M 52 FT	46-52 / St / FT	5061274	1155 48 2		354
2056F 52 VA	46-52 / V2A	5078319	1185 07 1		366	2056N M 58 FT	52-58 / St / FT	5061335	1155 49 0		354
2056F 58 FT	52-58 / ST / FT	5071112	1169 58 0		365	2056N SAS 12 VA	8-12 / V2A	5432432	1167 01 4		354
2056F 58 VA	52-58 / V2A	5078371	1185 09 8		366	2056N SAS 16 VA	12-16 / V2A	5432494	1167 02 2		354
						2056N SAS 22 VA	16-22 / V2A	5432555	1167 03 0		354
2056F 64 FT	58-64 / ST / FT	5071174	1169 64 5		365	2056N SAS 28 VA	22-28 / V2A	5432616	1167 04 9		354
2056F 64 VA	58-64 / V2A	5078432	1185 10 1		366	2056N SAS 8 VA	4-8 / V2A	5432371	1167 00 6		354
2056F 70 FT	64-70 / ST / FT	5071235	1169 69 6		365	2056R M 22 FS	16-22 / St / FS	5236597	1158 41 0		370
						2056R M 28 FS	22-28 / St / FS	5236603	1158 41 4		370
2056F 76 FT	70-76 / ST / FT	5071297	1169 76 9		365	2056R M 34 FS	28-34 / St / FS	5236610	1158 41 8		370
						2056R M 40 FS	34-40 / St / FS	5236627	1158 42 2		370
2056F 82 FT	76-82 / ST / FT	5071358	1169 82 3		365						
						2056RS M 16 FT	12-16 / St / FT	5358411	1158 30 5		370
2056F 90 FT	82-90 / ST / FT	5071419	1169 90 4		365	2056RS M 22 FT	16-22 / St / FT	5358428	1158 30 9		370
						2056RS M 28 FT	22-28 / St / FT	5358435	1158 31 3		370
2056F M 12 FT	8-12 / St / FT	5495192	1156 80 2		367	2056RS M 34 FT	28-34 / St / FT	5358442	1158 31 7		370
2056F M 16 FT	12-16 / St / FT	5495253	1156 81 0		367	2056RS M 40 FT	34-40 / St / FT	5358473	1158 32 1		370
2056F M 22 FT	16-22 / St / FT	5495314	1156 82 9		367	2056RS M 46 FT	40-46 / St / FT	5358480	1158 32 5		370
2056F M 28 FT	22-28 / St / FT	5495376	1156 83 7		367	2056RS M 52 FT	46-52 / St / FT	5358497	1158 32 9		370
						2056RS M 58 FT	52-58 / St / FT	5358503	1158 33 3		370
2056N 12 ALU	8-12 / AI	5436515	1183 60 5		353	2056RS M 64 FT	58-64 / St / FT	5358534	1158 33 7		370

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
				/100 pc.						/100 pc.	
2056U 100 FT	90-100 / ST / FT	5073574	1175 99 8		362	2056U M 58 FT	52-58 / St / FT	5498735	1158 09 0		364
						2056U M 64 FT	58-64 / St / FT	5498797	1158 10 4		364
2056U 12 ALU	8-12 / AI	5439035	1184 40 7		364	2056U M 70 FT	64-70 / St / FT	5498858	1158 11 2		364
2056U 12 FT	8-12 / ST / FT	5072737	1175 12 2		362	2056U M 76 FT	70-76 / St / FT	5498919	1158 12 0		364
2056U 12 VA	8-12 / V2A	5074595	1178 50 4		363						
						2056U-E28 FT	25-28 / St / FT	5451211	1174 50 9		371
2056U 16 ALU	12-16 / AI	5439097	1184 41 5		364						
2056U 16 FT	12-16 / ST / FT	5072799	1175 16 5		362	2056U-E31 FT	28-31 / St / FT	5072553	1174 54 1		371
2056U 16 VA	12-16 / V2A	5074656	1178 51 2		363	2056U-E34 FT	31-34 / St / FT	5451273	1174 51 7		371
						2056U-E37 FT	34-37 / St / FT	5072614	1174 56 8		371
2056U 2 12 FT	8-12 / ST / FT	5073635	1176 12 9		362						
2056U 2 16 FT	12-16 / ST / FT	5073697	1176 16 1		362	2056U-E40 FT	37-40 / St / FT	5451334	1174 52 5		371
2056U 2 22 FT	16-22 / ST / FT	5073758	1176 22 6		362	2056U-E44 FT	40-44 / St / FT	5072676	1174 57 6		371
2056U 2 28 FT	22-28 / ST / FT	5073819	1176 28 5		362						
2056U 2 34 FT	28-34 / ST / FT	5073871	1176 33 1		362	2056W 12 ALU	8-12 / AI	5437710	1184 00 8		369
2056U 2 40 FT	34-40 / ST / FT	5073932	1176 40 4		362	2056W 12 FT	8-12 / ST / FT	5075431	1180 12 6		368
2056U 2 46 FT	40-46 / ST / FT	5073994	1176 46 3		362						
2056U 2 52 FT	46-52 / ST / FT	5074052	1176 52 8		362	2056W 16 ALU	12-16 / AI	5437772	1184 01 6		369
2056U 2 58 FT	52-58 / ST / FT	5074113	1176 58 7		362	2056W 16 FT	12-16 / ST / FT	5075493	1180 16 9		368
2056U 22 ALU	16-22 / AI	5439158	1184 42 3		364	2056W 2 12 FT	8-12 / ST / FT	5076339	1181 12 2		368
2056U 22 FT	16-22 / ST / FT	5072850	1175 21 1		362	2056W 2 16 FT	12-16 / ST / FT	5076391	1181 16 5		368
2056U 22 VA	16-22 / V2A	5074717	1178 52 0		363	2056W 2 22 FT	16-22 / ST / FT	5076452	1181 21 1		368
						2056W 2 28 FT	22-28 / ST / FT	5076513	1181 28 9		368
2056U 28 ALU	22-28 / AI	5439219	1184 43 1		364	2056W 2 34 FT	28-34 / ST / FT	5076575	1181 34 3		368
2056U 28 FT	22-28 / ST / FT	5072911	1175 28 9		362	2056W 2 40 FT	34-40 / ST / FT	5076636	1181 40 8		368
2056U 28 VA	22-28 / V2A	5074779	1178 53 9		363	2056W 2 46 FT	40-46 / ST / FT	5076698	1181 46 7		368
						2056W 2 52 FT	46-52 / ST / FT	5076759	1181 52 1		368
2056U 3 12 FT	8-12 / ST / FT	5074175	1177 12 5		363	2056W 2 58 FT	52-58 / ST / FT	5076810	1181 58 0		368
2056U 3 16 FT	12-16 / ST / FT	5074236	1177 16 8		363						
2056U 3 22 FT	16-22 / ST / FT	5074298	1177 22 2		363	2056W 22 ALU	16-22 / AI	5446354	1184 02 4		369
2056U 3 28 FT	22-28 / ST / FT	5074359	1177 28 1		363	2056W 22 FT	16-22 / ST / FT	5075554	1180 22 3		368
2056U 3 34 FT	28-34 / ST / FT	5074410	1177 34 6		363	2056W 22 VA	16-22 / V2A	5079392	1185 43 8		369
2056U 3 40 FT	34-40 / ST / FT	5074472	1177 40 0		363						
2056U 3 46 FT	40-46 / ST / FT	5074533	1177 45 1		363	2056W 28 ALU	22-28 / AI	5437833	1184 03 2		369
						2056W 28 FT	22-28 / ST / FT	5075615	1180 28 2		368
2056U 34 ALU	28-34 / AI	5439271	1184 45 8		364	2056W 28 VA	22-28 / V2A	5079453	1185 44 6		369
2056U 34 FT	28-34 / ST / FT	5072973	1175 34 3		362						
2056U 34 VA	28-34 / V2A	5074830	1178 54 7		363	2056W 34 ALU	28-34 / AI	5437895	1184 04 0		369
						2056W 34 FT	28-34 / ST / FT	5075677	1180 34 7		368
2056U 40 ALU	34-40 / AI	5439332	1184 46 6		364	2056W 34 VA	28-34 / V2A	5079514	1185 45 4		369
2056U 40 FT	34-40 / ST / FT	5073031	1175 40 8		362						
2056U 40 VA	34-40 / V2A	5074892	1178 55 5		363	2056W 40 ALU	34-40 / AI	5437956	1184 05 9		369
						2056W 40 FT	34-40 / ST / FT	5075738	1180 40 1		368
2056U 46 ALU	40-46 / AI	5439394	1184 47 4		364	2056W 40 VA	34-40 / V2A	5079576	1185 46 2		369
2056U 46 FT	40-46 / ST / FT	5073093	1175 46 7		362						
2056U 46 VA	40-46 / V2A	5074953	1178 56 3		363	2056W 46 ALU	40-46 / AI	5438014	1184 06 7		369
						2056W 46 FT	40-46 / ST / FT	5075790	1180 46 0		368
2056U 52 ALU	46-52 / AI	5439455	1184 48 2		364	2056W 46 VA	40-46 / V2A	5079637	1185 47 0		369
2056U 52 FT	46-52 / ST / FT	5073154	1175 52 1		362						
2056U 52 VA	46-52 / V2A	5075011	1178 57 1		363	2056W 52 ALU	46-52 / AI	5438076	1184 07 5		369
						2056W 52 FT	46-52 / ST / FT	5075851	1180 52 5		368
2056U 58 ALU	52-58 / AI	5439516	1184 49 0		364	2056W 52 VA	46-52 / V2A	5079699	1185 48 9		369
2056U 58 FT	52-58 / ST / FT	5073215	1175 58 0		362						
2056U 58 VA	52-58 / V2A	5075073	1178 59 8		363	2056W 58 ALU	52-58 / AI	5438137	1184 08 3		369
						2056W 58 FT	52-58 / ST / FT	5075912	1180 58 4		368
2056U 64 ALU	58-64 / AI	5439578	1184 50 4		364	2056W 58 VA	52-58 / V2A	5079750	1185 49 7		369
2056U 64 FT	58-64 / ST / FT	5073277	1175 64 5		362						
2056U 64 VA	58-64 / V2A	5075134	1178 60 1		363	2056W 64 ALU	58-64 / AI	5438199	1184 09 1		369
						2056W 64 FT	58-64 / ST / FT	5075974	1180 64 9		368
2056U 70 ALU	64-70 / AI	5439752	1184 53 9		364						
2056U 70 FT	64-70 / ST / FT	5073338	1175 69 6		362	2056W 70 FT	64-70 / ST / FT	5076032	1180 68 1		368
2056U 70 VA	64-70 / V2A	5075196	1178 62 8		363						
						2056W 76 FT	70-76 / ST / FT	5076094	1180 76 2		368
2056U 76 ALU	70-76 / AI	5439639	1184 51 2		364						
2056U 76 FT	70-76 / ST / FT	5073390	1175 76 9		362	2056W 82 FT	76-82 / ST / FT	5076155	1180 82 7		368
2056U 76 VA	70-76 / V2A	5075257	1178 63 6		363						
						2056W 90 FT	82-90 / ST / FT	5076216	1180 90 8		368
2056U 82 FT	76-82 / ST / FT	5073451	1175 82 3		362						
2056U 90 FT	82-90 / ST / FT	5073512	1175 90 4		362	2057 M16 FT	M16/ St / FT	5033073	1193 70 8		361
2056U M 12 FT	8-12 / St / FT	5498254	1158 00 7		364	2057 M20 FT	M20/ St / FT	5033134	1193 71 6		361
2056U M 16 FT	12-16 / St / FT	5498315	1158 01 5		364						
2056U M 22 FT	16-22 / St / FT	5498377	1158 02 3		364	2057 M25 FT	M25/ St / FT	5033196	1193 72 4		361
2056U M 28 FT	22-28 / St / FT	5498438	1158 03 1		364						
2056U M 34 FT	28-34 / St / FT	5498490	1158 05 8		364	2057 M32 FT	M32/ St / FT	5033257	1193 73 2		361
2056U M 40 FT	34-40 / St / FT	5498551	1158 06 6		364						
2056U M 46 FT	40-46 / St / FT	5498612	1158 07 4		364	2057 M40 FT	M40/ St / FT	5033318	1193 74 0		361
2056U M 52 FT	46-52 / St / FT	5498674	1158 08 2		364						
						2057 M50 FT	M50/ St / FT	5033370	1193 75 9		361

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2057 M63 FT	M63/ St / FT	5033431	1193 76 7	/100 pc.	361	2058FW M 58 FT	52-58 35/ St / FT	5442516	1199 92 7	/100 pc.	372
2058 12 LGR	8-12 34/ PP	5081371	1195 12 3		372	2058FW M 64 FT	58-64 35/ St / FT	5442578	1199 93 5		372
2058 16 LGR	12-16 34/ PP	5081432	1195 16 6		372	2058FW M 70 FT	64-70 35/ St / FT	5442639	1199 94 3		372
2058 2 12 LGR	8-12 34/ PP	5082576	1196 11 1		373	2058FW M 8 VA	4-8 35/ V2A	5514039	1197 09 6		372
2058 2 16 LGR	12-16 34/ PP	5082637	1196 16 2		373	2059 2M FS	/ St / FS	5037873	1103 12 1	/100 m	326
2058 2 22 LGR	16-22 34/ PP	5082699	1196 22 7		373	2060 2M AB BK	/ St	5039617	1106 02 3		326
2058 2 28 LGR	22-28 34/ PP	5082750	1196 28 6		373	2060 2M AB FS	/ St / FS	5039730	1106 12 0		326
2058 2 34 LGR	28-34 34/ PP	5082811	1196 34 0		373	2060 2M FS	/ St / FS	5039433	1105 12 4		326
2058 2 40 LGR	34-40 34/ PP	5082873	1196 40 5		373	2060 2M VA	/ V2A	5627098	1105 12 5		327
2058 2 46 LGR	40-46 40/ PP	5082934	1196 46 4		373	2060 L 2M FS	/ St / FS	5040095	1106 62 7		326
2058 2 52 LGR	46-52 40/ PP	5082996	1196 52 9		373	2060 L 2M VA	/ V2A	5627104	1106 62 8		326
2058 2 58 LGR	52-58 40/ PP	5083054	1196 58 8		373	2061 2M FS	/ St / FS	5040453	1107 12 7		327
2058 22 LGR	16-22 34/ PP	5081494	1195 22 0		372	2061 L 2M FS	/ St / FS	5040811	1108 12 3		327
2058 28 LGR	22-28 34/ PP	5081555	1195 27 1		372	2062 2M BK	/ St	5041412	1109 01 4		328
2058 34 LGR	28-34 34/ PP	5081616	1195 34 4		372	2062 2M FT	/ St / FT	5041474	1109 02 2		328
2058 40 LGR	34-40 34/ PP	5081678	1195 40 9		372	2062 L 2M FT	/ St / FT	5041894	1109 52 9		327
2058 46 LGR	40-46 40/ PP	5081739	1195 46 8		372	2063 2M BK	/ ST	5043157	1112 02 3		329
2058 52 LGR	46-52 40/ PP	5081791	1195 52 2		372	2063 2M FS	/ ST / FS	5043270	1112 12 0		329
2058 58 LGR	52-58 40/ PP	5081852	1195 58 1		372	2063 2M FT	/ ST / FT	5043393	1112 22 8		329
2058 64 LGR	58-64 40/ PP	5081913	1195 64 6		372	2063 2M VA	/ V2A	5627111	1110 00 5		329
2058 70 LGR	64-70 40/ PP	5081975	1195 70 0		372	2063 L 2M FS	/ ST / FS	5632597	1112 70 8		329
2058 M2 12 FT	8-12 35/ St / FT	5441434	1199 70 6		373	2063 L 2M FT	/ ST / FT	5632535	1112 75 9		329
2058 M2 16 FT	12-16 35/ St / FT	5441496	1199 71 4		373	2063 L 2M VA	/ V2A	5627128	1112 70 9		329
2058 M2 22 FT	16-22 35/ St / FT	5441557	1199 72 2		373	2064 GTP 2M	/ ST / GTP	5044291	1115 05 7		348
2058 M2 28 FT	22-28 35/ St / FT	5441618	1199 73 0		373	2064 GTPL 2M	/ ST / GTP	5044352	1115 06 5		348
2058 M2 34 FT	28-34 35/ St / FT	5441670	1199 74 9		373	2065 N M4 G	M4/ St / G	5051497	1133 02 0	/100 pc.	338
2058 M2 40 FT	34-40 35/ St / FT	5441731	1199 75 7		373	2066 2M F	/ St / F	5046516	1117 02 5	/100 m	327
2058FW 100 LGR	90-100 40/ PP	5083955	1197 99 1		372	2066 2M FS	/ St / FS	5046578	1117 03 3		327
2058FW 12 LGR	8-12 34/ PP	5083115	1197 12 6		372	2066 2M VA	/ V2A / FS	5046639	1117 06 8		327
2058FW 16 LGR	12-16 34/ PP	5083177	1197 16 9		372	2068 2M BK	/ ST	5046936	1118 02 1		329
2058FW 22 LGR	16-22 34/ PP	5083238	1197 22 3		372	2068 2M FS	/ ST / FS	5047179	1118 22 6		329
2058FW 28 LGR	22-28 34/ PP	5083290	1197 28 2		372	2068 2M FT	/ ST / FT	5047056	1118 12 9		329
2058FW 34 LGR	28-34 34/ PP	5083351	1197 34 7		372	2068 L 1M FT	/ ST / FT	5053958	1119 67 2		330
2058FW 40 LGR	34-40 34/ PP	5083412	1197 40 1		372	2068 L 200 FT	/ ST / FT	5060673	1119 69 6	/100 pc.	330
2058FW 46 LGR	40-46 40/ PP	5083474	1197 46 0		372	2068 L 2M FS	/ St / FS	5864318	1119 64 8	/100 m	330
2058FW 52 LGR	46-52 40/ PP	5083535	1197 52 5		372	2068 L 2M FT	/ ST / FT	5047599	1119 65 6		330
2058FW 58 LGR	52-58 40/ PP	5083597	1197 58 4		372	2068 L 2M FTSOMY	/ St / FT	5204138	1119 67 0		330
2058FW 64 LGR	58-64 40/ PP	5083658	1197 64 9		372	2068 L 2M VA	/ V2A	5047650	1119 70 2		330
2058FW 70 LGR	64-70 40/ PP	5083719	1197 70 3		372	2068 L 300 FT	/ ST / FT	5060611	1119 69 3	/100 pc.	330
2058FW 76 LGR	70-76 40/ PP	5083771	1197 76 2		372	2068 L 400 FT	/ ST / FT	5060376	1119 69 0		330
2058FW 82 LGR	76-82 40/ PP	5083832	1197 82 7		372	2068 L 500 FT	/ ST / FT	5060253	1119 68 7		330
2058FW 90 LGR	82-90 40/ PP	5083894	1197 90 8		372	2068 L 600 FT	/ ST / FT	5059417	1119 68 4		330
2058FW M 12 FT	8-12 35/ St / FT	5442035	1199 84 6		372	2068 L 6M VA	/ V2A	5047711	1119 72 9	/100 m	330
2058FW M 12 VA	8-12 35/ V2A	5514091	1197 13 4		372	2068 L 700 FT	/ ST / FT	5059356	1119 68 1	/100 pc.	330
2058FW M 16 FT	12-16 35/ St / FT	5442097	1199 85 4		372	2068 L 800 FT	/ ST / FT	5059295	1119 67 8		330
2058FW M 16 VA	12-16 35/ V2A	5514152	1197 17 7		372	2068 L 900 FT	/ ST / FT	5056119	1119 67 5		330
2058FW M 22 FT	16-22 35/ St / FT	5442158	1199 86 2		372	2069 15 1.5 GTP	/ St / GTP	5044833	1115 42 1	/100 m	347
2058FW M 22 VA	16-22 35/ V2A	5514213	1197 23 1		372	2069 15 1.5 GTPL	/ St / GTP	5044895	1115 45 6		347
2058FW M 28 FT	22-28 35/ St / FT	5442219	1199 87 0		372	2069 15 2.2 GTP	/ St / GTP	5045076	1115 55 3		347
2058FW M 28 VA	22-28 35/ V2A	5514275	1197 29 0		372						
2058FW M 34 FT	28-34 35/ St / FT	5442271	1199 88 9		372						
2058FW M 40 FT	34-40 35/ St / FT	5442332	1199 89 7		372						
2058FW M 46 FT	40-46 35/ St / FT	5442394	1199 90 0		372						
2058FW M 52 FT	46-52 35/ St / FT	5442455	1199 91 9		372						

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
2069 15 2.2 GTPL	/ St / GTP	5045199	1115 59 6	/100 m	348	2900 16-19 G	16,5-19 Pg 11/ St / G	5121398	1383 11 6	/100 pc.	280
2069 1M FS	/ St / FS	5045557	1115 67 7		347	2900 18-21 G	18-21 M 20/ St / G	5121459	1383 13 2		280
2069 1M GTP	/ St / GTP	5045618	1115 68 5		347	2900 19-23 G	19-23 PG 16/ St / G	5121510	1383 16 7		280
2069 2M BK	/ St	5045250	1115 61 8		347	2900 24-29 G	24-29 M 25/ St / G	5121572	1383 21 3		280
2069 2M FS	/ St / FS	5045311	1115 62 6		347	2900 30-34 G	33-38 Pg 29/ St / G	5121633	1383 29 9		280
2069 2M GTP	/ St / GTP	5045434	1115 65 0		347	2900 33-38 G	30-34 M 32/ St / G	5569176	1383 31 0		280
2069 2M GTPL	/ ST / GTP	5045496	1115 66 9		347	2900 39-42 G	39-42 M 40/ St / G	5569237	1383 41 8		280
2069 3M BK	/ St	5871453	1115 85 5		347	2900 43-48 G	43-48 Pg 36/ St / G	5121695	1383 36 1		280
2069 L 2M FS	/ St / FS	5045977	1115 80 4	/100 pc.	347	2900 49-55 G	49-55 M 50/ St / G	5121756	1383 42 6		280
2069 T100 GTP	/ St / GTP	5440994	1115 38 2		171	2900 54-60 G	54-60 Pg 48/ St / G	5121817	1383 48 5		280
2069 T160 GTP	/ St / GTP	5441007	1115 38 4		171	2900 61-64 G	61-64 M 63/ St / G	5569299	1383 50 7		280
2069 T250 GTP	/ St / GTP	5441038	1115 38 6		171	2900 W 13.5 FT	12,5-13,5 1/4"/ St / FT	5122838	1385 00 3		280
2069 T350 GTP	/ St / GTP	5441045	1115 38 8		171	2900 W 139 FT SO	130-140 5"/ St / FT	5544937	1388 42 8		281
2069 T60 GTP	/ St / GTP	5440987	1115 38 0		171	2900 W 17 FT	16-17 3/8"/ St / FT	5123675	1387 01 4		281
2070 M6 G	12-20 M5 x 14/ St / G	5120735	1380 02 8		279	2900 W 17 FT	16-17 3/8"/ St / FT	5122890	1385 01 1		280
2071 M6 G	20-30 M5 x 20/ St / G	5120858	1380 22 2		279	2900 W 21.5 FT	19-21,5 1/2"/ St / FT	5124450	1388 03 7		281
2072 M6 G	30-44 M5 x 22/ St / G	5120971	1380 42 7		279	2900 W 21.5 FT	19-21,5 1/2"/ St / FT	5122951	1385 03 8		280
2073 M6 G	44-60 M6 x 25/ St / G	5121152	1380 72 9		279	2900 W 27 FT	24,5-27 3/4"/ St / FT	5124511	1388 05 3		281
2078 M10 1M G	M10 10/ St / G	5253396	3141 20 9		384	2900 W 27 FT	24,5-27 3/4"/ St / FT	5123798	1387 05 7		281
2078 M10 2M G	M10 10/ ST / G	5123583	3141 14 0		384	2900 W 27 FT	24,5-27 3/4"/ St / FT	5123019	1385 05 4		280
2078 M10 3M G	M10 10/ St / G	5895152	3141 23 3		384	2900 W 33.5 FT	30,5-33,5 1"/ St / FT	5124573	1388 06 1		281
2078 M10 VA	M10 10/ V2A	5023579	3141 31 2		384	2900 W 33.5 FT	30,5-33,5 1"/ St / FT	5123859	1387 06 5		281
2078 M12 1M G	M12 12/ St / G	5253457	3141 30 6		384	2900 W 33.5 FT	30,5-33,5 1"/ St / FT	5123071	1385 06 2		280
2078 M12 2M G	M12 12/ ST / G	5123644	3141 14 4		384	2900 W 42.5 FT	39,5-42,5 1 1/4"/ St / FT	5123910	1387 08 1		281
2078 M12 VA	M12 12/ V2A	5594437	3141 31 4		384	2900 W 42.5 FT	39,5-42,5 1 1/4"/ St / FT	5123132	1385 08 9		280
2078 M6 1M G	M6 6/ St / G	5253211	3141 04 7		384	2900 W 48.5 FT	45,5-48,5 1 1/2"/ St / FT	5124696	1388 11 8		281
2078 M8 1M G	M8 8/ St / G	5253334	3141 12 8		384	2900 W 48.5 FT	45,5-48,5 1 1/2"/ St / FT	5123972	1387 11 1		281
2078 M8 2M G	M8 8/ ST / G	5119982	3141 13 6		384	2900 W 48.5 FT	45,5-48,5 1 1/2"/ St / FT	5123194	1385 11 9		280
2078 M8 3M G	M8 8/ St / G	5374671	3141 13 8		384	2900 W 54 FT	51-54 1 3/4"/ St / FT	5123255	1385 12 7		280
2078 M8 VA	M8 8/ V2A	5023456	3141 31 0		384	2900 W 60 FT	56-60 2"/ St / FT	5124757	1388 13 4		281
2081 K M6	M6 1,6/ St / G	5305958	3460 06 1		385	2900 W 60 FT	56-60 2"/ St / FT	5124030	1387 13 8		281
2081 M6 G	M6 1,35/ St / G	5306078	3460 16 9		385	2900 W 60 FT	56-60 2"/ St / FT	5123316	1385 13 5		280
2083 M6 G	M6 4,5/ St / G	5306498	3462 06 4		385	2900 W 75 FT SO	71,5-75,5 2 1/2"/ St / FT	5544814	1388 37 1		281
2083 M8 G	M8 5,5/ St / G	5306559	3462 08 0		385	2900 W 75.5 FT	71,5-75,5 2 1/2"/ St / FT	5124092	1387 15 4		281
2084 K M6	M6 1,15/ Zn / G	5307150	3463 06 0		386	2900 W 88 FT	83-88 3"/ St / FT	5124153	1387 17 0		281
2084 M6 G	M6 1,15/ Zn / G	5307211	3463 56 7		386	2900 W 88 FT SO	83-88 3"/ St / FT	5544876	1388 39 8		281
2084 M8 G	M8 1,15/ Zn / G	5307273	3463 58 3		386	2953 B M16 LGR	M16 Light grey/ PVC	5510130	2153 86 4	/pc.	309
2085 M6 G	M6 1,1/ Zn / G	5307334	3464 06 7		386	2953 B M16 RW	M16 Pure white/ PVC	5538998	2153 98 0		309
2085 M8 G	M8 1,1/ Zn / G	5307396	3464 08 3		386	2953 B M20 LGR	M20 Light grey/ PVC	5469452	2153 86 6		309
2100 FT	/ ST / FT	5047773	1120 20 4	/100 m	331	2953 B M20 RW	M20 Pure white/ PVC	5539056	2153 98 2		309
2110 FT	/ ST / FT	5048732	1121 22 7		331	2953 B M25 LGR	M25 Light grey/ PVC	5510192	2153 86 8		309
2392	Light grey/ PA/GF	6027132	6024 00 9	/pc.	191	2953 B M25 RW	M25 Pure white/ PVC	5539117	2153 98 4		309
2393 UP	Light grey/ PA	6027439	6024 10 6		190	2953 B M32 LGR	M32 Light grey/ PVC	5510253	2153 87 0		309
2900 13-16 G	13,5-16 M 16/ St / G	5121336	1383 09 4	/100 pc.	280	2953 B M32 RW	M32 Pure white/ PVC	5539179	2153 98 6		309
						2953 M M16 LGR	M16 Light grey/ PVC	5509950	2153 82 9		309
						2953 M M16 RW	M16 Pure white/ PVC	5538752	2153 97 1		309
						2953 M M20 LGR	M20 Light grey/ PVC	5469391	2153 83 1		309
						2953 M M20 RW	M20 Pure white/ PVC	5538813	2153 97 3		309
						2953 M M25 LGR	M25 Light grey/ PVC	5510017	2153 83 3		309
						2953 M M25 RW	M25 Pure white/ PVC	5538875	2153 97 5		309
						2953 M M32 LGR	M32 Light grey/ PVC	5510079	2153 83 5		309
						2953 M M32 RW	M32 Pure white/ PVC	5538936	2153 97 7		309
						2953 M16 LGR	M16 Light grey/ PVC	5028093	2153 90 4	/100 m	309
						2953 M16 RW	M16 Pure white/ PVC	5538578	2153 96 0		309

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2953 M20 LGR	M20 Light grey/ PVC	5027799	2153 91 2	/100 m	309	2960 43 M6 LGR	40,5-43 Light grey/ PS	5197539	2130 43 2	/100 pc.	266
2953 M20 RW	M20 Pure white/ PVC	5538639	2153 96 3		309	2960 47 M6 LGR	45,5-47 Light grey/ PS	5197591	2130 47 5		266
2953 M25 LGR	M25 Light grey/ PVC	5025214	2153 92 0		309	2960 54 M6 LGR	50,5-54 Light grey/ PS	5197652	2130 54 8		266
2953 M25 RW	M25 Pure white/ PVC	5531739	2153 96 6		309	2962 10 LGR	10 Light grey/ PP	5199090	2140 10 1		267
2953 M32 LGR	M32 Light grey/ PVC	5025153	2153 93 9	/pc.	309	2962 12 LGR	12 Light grey/ PP	5199151	2140 12 8		267
2953 M32 RW	M32 Pure white/ PVC	5538691	2153 96 9		310	2962 15 LGR	14-15 Light grey/ PP	5199212	2140 15 2		267
2953 T M16 LGR	M16 Light grey/ PVC	5510314	2153 87 2		310	2962 18 LGR	16-18 Light grey/ PP	5199274	2140 18 7		267
2953 T M16 RW	M16 Pure white/ PVC	5539230	2153 99 2		310	2962 22 LGR	19-22 Light grey/ PP	5199335	2140 23 3		267
2953 T M20 LGR	M20 Light grey/ PVC	5469575	2153 87 4		310	2962 28 LGR	25-28 Light grey/ PP	5199397	2140 28 4		267
2953 T M20 RW	M20 Pure white/ PVC	5539292	2153 99 4		310	2962 2X10	10 + 10 Light grey/ PP	5199694	2140 60 8		268
2953 T M25 LGR	M25 Light grey/ PVC	5510376	2153 87 6		310	2962 2x15	14/15 + 14/15 Light grey/ PP	5199878	2140 65 9		268
2953 T M25 RW	M25 Pure white/ PVC	5539599	2153 99 6	/100 pc.	310	2962 2x16	15/16 + 15/16 Light grey/ PP	5199939	2140 68 3		268
2953 T M32 LGR	M32 Light grey/ PVC	5510437	2153 87 8		310	2962 2x22	18/22 + 18/22 Light grey/ PP	5199991	2140 72 1		268
2953 T M32 RW	M32 Pure white/ PVC	5539650	2153 99 8		310	2962 35 LGR	32-35 Light grey/ PP	5199458	2140 35 7		267
2954 M16 LGR	M16 Light grey/ PVC	5482895	2154 50 1		256	2962 42 LGR	40-42 Light grey/ PP	5199519	2140 41 1	/100 pc.	267
2954 M20 LGR	M20 Light grey/ PVC	5483014	2154 52 8		256	2962 6 LGR	6 Light grey/ PP	5198970	2140 06 3		267
2954 M25 LGR	M25 Light grey/ PVC	5483076	2154 53 6		256	2962 8 LGR	8 Light grey/ PP	5199038	2140 07 1		267
2954 M32 LGR	M32 Light grey/ PVC	5483137	2154 54 4		256	2985 SW		5230113	2357 05 4	/100 m	281
2955 F M16 RW	M16 Pure white/ PP	5585671	2149 35 1		256	2989 M6 G	M6 1,5/ St / G	5306191	3460 76 2		386
2955 F M16 STGR	M16 Stone grey/ PP	5584353	2149 30 3		256	2989 M8 G	M8 1,5/ St / G	5306252	3460 78 9		386
2955 F M20 RW	M20 Pure white/ PP	5586036	2149 35 7		256	2990 M6 G	M6 3,5/ ST / G	5306979	3462 86 2		386
2955 F M20 STGR	M20 Stone grey/ PP	5585251	2149 30 9		256	2990 M8 G	M8 3,5/ ST / G	5307037	3462 88 9	/100 pc.	386
2955 F M25 RW	M25 Pure white/ PP	5586159	2149 36 3		256	3015 12 LGR	6-12 M4 x 22/ PS	5206897	2157 12 8		267
2955 F M25 STGR	M25 Stone grey/ PP	5585312	2149 31 5		256	3015 17 LGR	10-17 M4 x 25/ PS	5206958	2157 17 9		267
2955 F M32 RW	M32 Pure white/ PP	5586395	2149 36 9		256	3015 24 LGR	17-24 M4 x 30/ PS	5207016	2157 24 1		267
2955 F M32 STGR	M32 Stone grey/ PP	5585435	2149 32 1		256	3015 34 LGR	24-34 M5 x 35/ PS	5207078	2157 34 9		267
2955 F M40 RW	M40 Pure white/ PP	5586456	2149 37 5		256	3019 M6 LGR	6-12 M4 x 22/ PS	5207139	2158 12 4		267
2955 F M40 STGR	M40 Stone grey/ PP	5585497	2149 32 7		256	3020 LGR	10-17 M4 x 25/ PS	5207191	2158 17 5		267
2955 F M50 RW	M50 Pure white/ PP	5587835	2149 38 1		256	3021 LGR	17-24 M4 x 30/ PS	5207252	2158 24 8		267
2955 F M50 STGR	M50 Stone grey/ PP	5585558	2149 33 3		256	3022 LGR	24-34 M5 x 35/ PS	5207313	2158 34 5		267
2955 F M63 STGR	M63 Stone grey/ PP	5585619	2149 33 9		256	3030 2	7-11 Light grey/ PS	5213017	2213 11 7		269
2955 M16	M16 Light grey/ PP	5583219	2149 00 4		256	3040 2	6-16 Light grey/ PS	5195610	2107 01 5		265
2955 M16 SW	M16 Jet black/ PP	5616276	2149 55 9		256	3040 3	6-16 Light grey/ PS	5195795	2109 01 8		265
2955 M20	M20 Light grey/ PP	5583936	2149 01 0		256	3040 LGR	6-16 Light grey/ PS	5195436	2105 01 2		265
2955 M20 SW	M20 Jet black/ PP	5616337	2149 56 3		256	3041 2	16-24 Light grey/ PS	5195672	2107 03 1		265
2955 M25	M25 Light grey/ PP	5583998	2149 01 6		256	3041 LGR	16-24 Light grey/ PS	5195498	2105 03 9		265
2955 M25 SW	M25 Jet black/ PP	5616399	2149 56 7		256	3042 LGR	24-34 Light grey/ PS	5195559	2105 05 5		265
2955 M32	M32 Light grey/ PP	5584056	2149 02 2		256	3050 2 6-16	6-16 Light grey/ PS	5196211	2115 01 8		264
2955 M32 SW	M32 Jet black/ PP	5616450	2149 57 1		256	3050 2 6-16	6-16 Light grey/ PS	5196211	2115 01 8		264
2955 M40	M40 Light grey/ PP	5584292	2149 02 8		256	3050 LGR	6-16 Light grey/ PS	5195252	2101 01 7		264
2955 M40 SW	M40 Jet black/ PP	5616511	2149 57 5		256	3051 LGR	14-24 Light grey/ PS	5195313	2101 03 3		264
2955 M50	M50 Light grey/ PP	5588191	2149 03 4		256						
2955 M50 SW	M50 Jet black/ PP	5616993	2149 57 9		256						
2955 M63	M63 Light grey/ PP	5588252	2149 04 0		256						
2955 M63 SW	M63 Jet black/ PP	5617051	2149 58 3		256						
2960 11 M6 LGR	9-11 Light grey/ PS	5196990	2130 11 4		266						
2960 12 M6 LGR	12-13 Light grey/ PS	5197058	2130 12 2		266						
2960 15 M6 LGR	15-17 Light grey/ PS	5197119	2130 15 7		266						
2960 18 M6 LGR	16,5-18 Light grey/ PS	5197171	2130 18 1		266						
2960 22 M6 LGR	20,5-22 Light grey/ PS	5197232	2130 21 1		266						
2960 25 M6 LGR	22,5-25 Light grey/ PS	5197294	2130 25 4		266						
2960 28 M6 LGR	25,5-28 Light grey/ PS	5197355	2130 28 9		266						
2960 35 M6 LGR	31,5-35 Light grey/ PS	5197416	2130 35 1		266						
2960 40 M6 LGR	36,5-40 Light grey/ PS	5197478	2130 40 8		266						

Type listing

Structure of the EAN number: Country code **40**

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						4758 4X35	35 4/ ST / GGP	5275473	3195 25 2		387
3079 LGR	5-14 M5 x 14/ PS	5196570	2124 14 9		265						
						4758 4X40	40 4/ ST / GGP	5275534	3195 26 0		387
3080 2 LGR	6-17 M6 x 18/ PS	5196877	2124 49 1		266	4758 4X45	45 4/ ST / GGP	5275596	3195 27 9		387
3080 LGR	6-17 M6 x 18/ PS	5196631	2124 17 3		265	4758 4X50	50 4/ ST / GGP	5275657	3195 28 7		387
3081 LGR	15-25 M8 x 23/ PS	5196693	2124 25 4		265	4758 5X30	30 5/ ST / GGP	5276074	3195 63 5		387
						4758 5X35	35 5/ ST / GGP	5276135	3195 64 3		387
3082 LGR	24-34 M8 x 23/ PS	5196754	2124 34 3		265						
						4758 5X40	40 5/ ST / GGP	5276197	3195 65 1		387
3083 LGR	32-45 M8 x 40/ UF	5196815	2124 45 9		266	4758 5X45	45 5/ ST / GGP	5276258	3195 67 8		387
3100 M6 G	M6 8/ St / G	5250272	3131 06 8		384	4758 5X50	50 5/ ST / GGP	5276319	3195 68 6		387
3100 M8 G	M8 10/ St / G	5250333	3131 08 4		384	4758 5X60	60 5/ ST / GGP	5321019	3195 69 4		387
4014 G	M4/ St / G	5052579	1137 22 0		338	4758 6X30	30 6/ ST / GGP	5682875	3195 91 0		387
4014 N G	M4/ St / G	5052517	1137 21 2		338	4758 6X40	40 6/ ST / GGP	5682813	3195 92 9		387
4014 N M.S. G	M4/ St / G	5052395	1137 01 8		338	4758 6X50	50 6/ ST / GGP	5682752	3195 93 7		387
4021 K 6-13	6-13 4-9 / St / FS	5224419	2307 61 8		297	4758 6X60	60 6/ ST / GGP	5682691	3195 94 5		387
4021 K 9-16	9-16 4-9 / St / FS	5224471	2307 63 4		297	4758T 3.5x15	15 3,5/ ST / GGP	5552017	3198 01 6		387
						4758T 3.5x20	20 3,5/ ST / GGP	5552079	3198 01 8		387
4024 16-23	16-23 5-10 / PS	5224358	2305 23 2		296	4758T 3.5x25	25 3,5/ ST / GGP	5552130	3198 02 0		387
						4758T 3.5x30	30 3,5/ ST / GGP	5552192	3198 02 2		387
4024 9-16	9-16 3-8 / PS	5224297	2305 15 1		296	4758T 3.5x35	35 3,5/ ST / GGP	5552253	3198 02 4		387
						4758T 3.5x40	40 3,5/ ST / GGP	5552314	3198 02 6		387
4028	2-4 Light grey/ PP	5213130	2215 04 7		269						
						4758T 4.0x15	15 4/ ST / GGP	5552376	3198 03 0		387
4029	4-7 Light grey/ PP	5213192	2215 07 1		269	4758T 4.0x20	20 4/ ST / GGP	5552437	3198 03 2		387
						4758T 4.0x25	25 4/ ST / GGP	5555438	3198 03 4		387
4030	7-11 Light grey/ PP	5213253	2215 10 1		269	4758T 4.0x30	30 4/ ST / GGP	5555551	3198 03 6		387
						4758T 4.0x35	35 4/ ST / GGP	5557111	3198 03 8		387
4031 10-14	10-14 Light grey/ PP	5213314	2215 14 4		269	4758T 4.0x40	40 4/ ST / GGP	5557418	3198 04 0		387
						4758T 4.0x45	45 4/ ST / GGP	5558132	3198 04 2		387
4031 14-17	14-17 Light grey/ PP	5213376	2215 17 9		269	4758T 4.0x50	50 4/ ST / GGP	5558378	3198 04 4		387
						4758T 4.5x30	30 4,5/ ST / GGP	5558491	3198 05 4		387
4032	16-20 Light grey/ PP	5213437	2215 20 9		269	4758T 4.5x35	35 4,5/ ST / GGP	5558972	3198 05 6		387
						4758T 4.5x40	40 4,5/ ST / GGP	5559030	3198 05 8		387
4039	2 4-7 / PP	5213550	2215 30 6		269	4758T 4.5x45	45 4,5/ ST / GGP	5560296	3198 06 0		387
						4758T 4.5x50	50 4,5/ ST / GGP	5560357	3198 06 2		387
4039 SP	2 4-7 / PP	5599777	2214 87 3		269						
						4758T 5.0x30	30 5/ ST / GGP	5628750	3198 07 3		387
4040	2 7-12 / PP	5213611	2215 31 4		269	4758T 5.0x35	35 5/ ST / GGP	5628873	3198 07 5		387
						4758T 5.0x40	40 5/ ST / GGP	5628996	3198 07 7		387
4040 SP	2 7-12 / PP	5599838	2214 88 1		269	4758T 5.0x45	45 5/ ST / GGP	5785835	3198 07 9		387
						4758T 5.0x50	50 5/ ST / GGP	5785897	3198 08 1		387
4041	2 10-14 / PP	5213796	2215 34 9		269						
						4759 3.5x25	25 3,5/ St / GGP	5271932	3192 11 3		388
4042	2 14-17 / PP	5213673	2215 32 2		269	4759 3.5x30	30 3,5/ St / GGP	5271994	3192 12 1		388
						4759 3.5x35	35 3,5/ St / GGP	5272052	3192 14 8		388
4043	2 17-21 / PP	5213734	2215 33 0		269	4759 3.5x40	40 3,5/ St / GGP	5272113	3192 15 6		388
						4759 3.5x45	45 3,5/ St / GGP	5272175	3192 16 4		388
4044	2 21-25 / PP	5213857	2215 35 7		269	4759 3.5x50	50 3,5/ St / GGP	5272236	3192 17 2		388
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4758 3.5x15	15 3,5/ ST / GGP	5274759	3195 00 7		387	4759 4.5x35	35 4,5/ St / GGP	5272779	3192 34 2		388
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4758 3.5x25	25 3,5/ ST / GGP	5274872	3195 02 3		387	4759 4.5x45	45 4,5/ St / GGP	5272892	3192 36 9		388
4758 3.5x30	30 3,5/ ST / GGP	5274933	3195 03 1		387	4759 4.5x50	50 4,5/ St / GGP	5272953	3192 37 7		388
4758 3.5x35	35 3,5/ ST / GGP	5274995	3195 05 8		387						
4758 3.5x40	40 3,5/ ST / GGP	5275053	3195 06 6		387	4759 4X25	25 4/ St / GGP	5272298	3192 21 0		388
4758 3.5x45	45 3,5/ ST / GGP	5275114	3195 07 4		387						
4758 3.5x50	50 3,5/ ST / GGP	5275176	3195 08 2		387	4759 4X30	30 4/ St / GGP	5272359	3192 22 9		388
4758 4.5x25	25 4,5/ ST / GGP	5275718	3195 42 2		387	4759 4X35	35 4/ St / GGP	5272410	3192 23 7		388
4758 4.5x30	30 4,5/ ST / GGP	5275770	3195 43 0		387						
4758 4.5x35	35 4,5/ ST / GGP	5275831	3195 44 9		387	4759 4X40	40 4/ St / GGP	5272472	3192 24 5		388
4758 4.5x40	40 4,5/ ST / GGP	5275893	3195 45 7		387	4759 4X45	45 4/ St / GGP	5272533	3192 25 3		388
4758 4.5x45	45 4,5/ ST / GGP	5275954	3195 46 5		387						
4758 4.5x50	50 4,5/ ST / GGP	5276012	3195 47 3		387	4759 4X50	50 4/ St / GGP	5272595	3192 26 1		388
4758 4X15	15 4/ ST / GGP	5275237	3195 20 1		387	4759 5X30	30 5/ St / GGP	5273011	3192 41 5		388
						4759 5X35	35 5/ St / GGP	5273073	3192 42 3		388
4758 4X20	20 4/ ST / GGP	5275299	3195 22 8		387						
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						5022 M10x40 F	M10 40/ ST / F	5057673	1151 44 4		340
4759 6X40	40 6/ St / GGP	5682578	3192 62 8		388						
						5022 M12x30 G	M12 30/ ST / G	5057796	1151 62 2		340
4759 6X50	50 6/ St / GGP	5682516	3192 63 6		388	5022 M12x40 G	M12 40/ ST / G	5057918	1151 64 9		340
4759 6X60	60 6/ St / GGP	5682455	3192 64 4		388	5022 M6X25 F	M6 25/ ST / F	5057017	1151 01 0		340
						5022 M6X30 F	M6 30/ ST / F	5057079	1151 02 9		340
4759T 3.0x15	15 3/ St / GGP	5797593	3198 19 3		388						
4759T 3.0x25	25 3/ St / GGP	5797777	3198 19 7		388	5022 M8X25 F	M8 25/ ST / F	5057253	1151 21 5		340
4759T 3.0x30	30 3/ St / GGP	5797951	3198 19 9		388	5022 M8X30 F	M8 30/ ST / F	5057314	1151 22 3		340
4759T 3.5x15	15 3,5/ St / GGP	5560470	3198 21 9		388	5022 M8X40 F	M8 40/ ST / F	5057437	1151 25 8		340
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4759T 3.5x25	25 3,5/ St / GGP	5561132	3198 22 3		388	5023 M10x30 G	M10 30/ ST / G	5058335	1153 41 2		341
4759T 3.5x30	30 3,5/ St / GGP	5561378	3198 22 5		388	5023 M10x35 G	M10 35/ ST / G	5058397	1153 42 0		341
4759T 3.5x35	35 3,5/ St / GGP	5561439	3198 22 7		388	5023 M10x40 G	M10 40/ ST / G	5058458	1153 43 9		341
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4759T 3.5x50	50 3,5/ St / GGP	5561972	3198 23 1		388	5023 M12x30 G	M12 30/ ST / G	5058755	1153 61 7		341
						5023 M12x35 G	M12 35/ ST / G	5058816	1153 62 5		341
4759T 4.0x15	15 4/ St / GGP	5785958	3198 23 7		388	5023 M12x40 G	M12 40/ ST / G	5058878	1153 63 3		341
4759T 4.0x20	20 4/ St / GGP	5562511	3198 23 9		388	5023 M12x50 G	M12 50/ ST / G	5058939	1153 64 1		341
4759T 4.0x25	25 4/ St / GGP	5562573	3198 24 1		388						
4759T 4.0x30	30 4/ St / GGP	5563112	3198 24 3		388	5024 M10x30 G	M10 30/ ST / G	5059714	1154 41 9		341
4759T 4.0x35	35 4/ St / GGP	5786016	3198 24 5		388	5024 M10x35 G	M10 35/ ST / G	5059776	1154 42 7		341
4759T 4.0x40	40 4/ St / GGP	5786078	3198 24 7		388	5024 M10x40 G	M10 40/ ST / G	5059837	1154 43 5		341
4759T 4.0x45	45 4/ St / GGP	5787457	3198 24 9		388						
4759T 4.0x50	50 4/ St / GGP	5787877	3198 25 1		388	5024 M12x30 G	M12 30/ ST / G	5060017	1154 60 5		341
4759T 4.5x30	30 4,5/ St / GGP	5790037	3198 26 0		388	5024 M12x35 G	M12 35/ ST / G	5060079	1154 61 3		341
4759T 4.5x35	35 4,5/ St / GGP	5791232	3198 26 2		388	5024 M12x40 G	M12 40/ ST / G	5060130	1154 62 1		341
4759T 4.5x40	40 4,5/ St / GGP	5791294	3198 26 4		388	5024 M12x50 G	M12 50/ ST / G	5060192	1154 64 8		341
4759T 4.5x45	45 4,5/ St / GGP	5791539	3198 26 6		388						
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4759T 5.0x35	35 5/ St / GGP	5792253	3198 27 8		388	5026 M6X20 G	M6 20/ ST / G	5057970	1151 70 3		341
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4759T 5.0x45	45 5/ St / GGP	5792499	3198 28 2		388	5026 M8X25 G	M8 25/ ST / G	5058038	1151 71 1		321
4759T 5.0x50	50 5/ St / GGP	5792550	3198 28 4		388	5026 M8X25 G	M8 25/ ST / G	5058038	1151 71 1		341
5015 M5 OS G	M5/ St / G	5053118	1141 05 8		338	5050 20x1.5 BK	20 x 1.5 200/ St	5549079	1465 60 0	/100 m	294
5015 M6 OS G	M6/ St / G	5053170	1141 06 6		338	5050 20X3 3M FT	20 x 3/ ST / FT	5137597	1465 76 7		294
5015 M6 OS VA	M6/ V2A	5053231	1141 10 4		338						
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5016 M5 OS G	M5/ St / G	5053293	1142 05 4		339	5050 25X3 FT	25 x 3 120/ St / FT	5136811	1465 10 4		294
5016 M6 OS G	M6/ St / G	5053354	1142 06 2		339	5050 30X3 3M FT	30 x 3/ ST / FT	5137719	1465 79 1		294
						5050 30X3 FT	30 x 3 120/ St / FT	5136934	1465 14 7		294
5017 M10 OS VA	M10/ V4A	5086017	1143 12 7		339	5050 30X4 3M FT	30 x 4/ ST / FT	5137771	1465 80 5		294
						5050 30X4 FT	30 x 4 100/ St / FT	5136996	1465 16 3		294
5017 M6 OS G	M6/ ST / G	5053415	1143 06 9		339						
5017 M6 OS VA	M6/ V4A	5119920	1143 12 3		339	5050 40X4 3M FT	40 x 4/ ST / FT	5137832	1465 82 1		294
						5050 40X4 FT	40 x 4 80/ St / FT	5137054	1465 19 8		294
5017 M8 OS VA	M8/ V4A	5085980	1143 12 5		339						
						5050 SB30x3 FT	30 x 3/ ST / FT	5137955	1466 26 7		294
5019 M10 OS G	M10 10/ ST / G	5053835	1144 13 8		322						
5019 M10 OS G	M10 10/ ST / G	5053835	1144 13 8		339						
						5055 I FS	12 x 1/ ST / FS	5138310	1470 12 4	/pc.	298
5019 M6 OS G	M6 6/ ST / G	5053712	1144 10 3		322						
5019 M6 OS G	M6 6/ ST / G	5053712	1144 10 3		339	5055 II FS	17 x 1/ ST / FS	5138372	1470 17 5		298
5019 M8 OS G	M8 8/ ST / G	5053774	1144 11 1		322	5055 III FS	26 x 1.2/ ST / FS	5138433	1470 26 4		298
5019 M8 OS G	M8 8/ ST / G	5053774	1144 11 1		339						
						5055 L I 12	12 x 0.75/ ST / FS	5138679	1471 12 0		298
5020 M10x40 FT	M10 40/ St / FT	5056171	1149 45 8		340	5055 L II 17	17 x 0.75/ ST / FS	5138730	1471 17 1		298
						5055 L III 26	26 x 1/ ST / FS	5138792	1471 26 0		298
5020 M6X20 FT	M6 20/ St / FT	5055457	1149 00 8		340						
5020 M6X25 FT	M6 25/ St / FT	5055518	1149 01 6		340	5055 L PE I 14	13 x 3/ ST / FS	5139393	1473 22 0		298
						5055 L PE II 19	19 x 3/ ST / FS	5139454	1473 27 1		298
5020 M8X25 FT	M8 25/ St / FT	5055754	1149 21 0		340	5055 L PE III 28	28 x 3.7/ ST / FS	5139515	1473 36 0		298
5021 M10x40 FT	M10 40/ St / FT	5056959	1150 45 6		340	5062 I FS	12 x 1/ ST / FS	5139935	1475 12 6		298
5021 M6X25 FT	M6 25/ St / FT	5056232	1150 01 4		340	5062 II FS	17 x 1/ St / FS	5139997	1475 17 7		298
5021 M8X20 FT	M8 20/ St / FT	5056478	1150 20 0		340	5062 III FS	26 x 1.2/ St / FS	5140054	1475 26 6		298
5021 M8X25 FT	M8 25/ St / FT	5056539	1150 21 9		340						
5021 M8X40 FT	M8 40/ St / FT	5056713	1150 24 3		340	5062 L I 12	12 x 0.75/ St / FS	5140115	1475 62 2		298
						5062 L II 17	17 x 0.75/ St / FS	5140177	1475 67 3		298
5022 M10x25 F	M10 25/ ST / F	5057499	1151 40 1		340	5062 L III 26	26 x 1/ St / FS	5140238	1475 76 2		298

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
7901 5 G	5 4000/ St / G	5134831	1435 01 9	/100 pc.	288	B 100	Light grey/ UF	5542537	2001 26 8	/100 pc.	177
7901 6.5 G	6,5 4000/ St / G	5134893	1435 02 7		288	B 100 5	Light grey/ UF	5117735	2001 24 1		177
7902 6 G	6,5 4000/ St / G	5134954	1436 01 5		289						
7902 8 G	8 5000/ St / G	5135012	1436 02 3		289	B 100 E POR	Pastel orange 10/ UF	5445791	2002 57 1		181
7903 6 G	6 4000/ St / G	5135074	1437 00 3		289	B 11 M	Light grey/ UF	5105435	2002 34 5		179
7903 8 G	8 4000/ St / G	5135135	1437 01 1		289	B 11 M 5	Light grey/ UF	5107590	2002 32 9		179
7903 9 G	9 4000/ St / G	5135197	1437 03 8		289	B 12 M	Light grey/ UF	5105312	2002 52 3		179
7904 6 G	6 4800/ St / G	5135258	1438 01 8		289	B 12 M 5	Light grey/ UF	5105374	2002 50 7		179
7905 5 G	5 3600/ St / G	5135319	1439 01 4		289	B 160	Light grey/ UF	5542414	2001 30 6		177
7908 11 G	11 2400/ St / G	5135555	1442 01 5		289	B 160 5	Light grey/ UF	5542476	2001 29 2		177
7909 6 G	6 4000/ St / G	5135616	1443 01 1		289	B 160 E POR	Pastel orange 10/ UF	5445807	2002 57 8		181
12005	M12 12/ V2A	6043804	6410 17 0		384	B 25 M	Light grey/ UF	5545415	2001 13 6		177
12005 M10 G	M10 10/ ST / G	6202270	6410 10 3		384	B 25 M 5	Light grey/ UF	5125655	2001 12 8		177
12005 M10 VA4301	M10 10/ V2A	6043682	6410 16 2		384	B 250	Light grey/ UF	5542292	2001 34 9		178
12005 M12 G	M12 12/ ST / G	6202331	6410 11 1		384	B 250 5	Light grey/ UF	5542353	2001 33 0		178
12005 M8 G	M8 8/ ST / G	6202218	6410 08 1		384	B 250 E POR	Pastel orange 6/ UF	5445845	2002 58 5		181
12005 M8 VA4301	M8 8/ V2A	6043569	6410 15 4		384	B 40 M	Light grey/ UF	5545170	2001 17 9		177
12400 10x100 G	100 10/ St / G	5867135	3188 30 2		389	B 40 M 5	Light grey/ UF	5545231	2001 16 0		177
12400 10x60 G	60 10/ St / G	5867074	3188 25 6		389	B 60	Light grey/ UF	5119838	2001 21 7		177
12400 10x70 G	70 10/ St / G	5270430	3188 27 2		389	B 60 M 5	Light grey/ UF	5545118	2001 20 9		177
12400 10x80 G	80 10/ St / G	5270492	3188 28 0		389	B 9 B M	Light grey/ UF	5536178	2001 63 2		179
12400 12x70 G	70 12/ St / G	5270553	3188 36 1		389	B 9 B M 5	Light grey/ UF	5536239	2001 61 6		179
12400 12x80 G	80 12/ St / G	5270614	3188 38 8		389	B 9 K M	Light grey/ UF	5536116	2001 94 2		179
12400 6x40 G	40 6/ St / G	5866718	3188 04 3	/100 m	389	B 9 T M	Light grey/ PP	5540076	2001 85 3	/100 m	163
12400 6x50 G	50 6/ St / G	5270195	3188 05 1		389	B 9 T M	Red grey/ PP	5110477	2001 88 8		163
12400 6x60 G	60 6/ St / G	5270256	3188 07 8		389	B 9 T M 5	Light grey/ PP	5541936	2001 84 5		163
12400 6x80 G	80 6/ St / G	5866770	3188 09 4		389	B 9 T M NL	Light grey/ PP	5539896	2001 86 1		163
12400 8x100 G	100 8/ St / G	5867012	3188 20 5		389	C30 2M FS	/ St / FS	5042075	1110 00 4		328
12400 8x40 G	40 8/ St / G	5866831	3188 14 0		389	C30 L 1M FT	/ ST / FT	5037934	1109 86 3		328
12400 8x50 G	50 8/ St / G	5866893	3188 15 9		389	C30 L 200 FT	/ ST / FT	5036975	1109 78 2		328
12400 8x60 G	60 8/ St / G	5270317	3188 16 7		389	C30 L 2M FS	/ ST / FS	5053897	1110 00 2		328
12400 8x70 G	70 8/ St / G	5270379	3188 17 5		389	C30 L 2M FT	/ ST / FT	5041771	1109 87 1		328
12400 8x80 G	80 8/ St / G	5866954	3188 18 3		389	C30 L 300 FT	/ ST / FT	5037033	1109 79 0		328
46277 GTP	/ St / GTP	5044598	1115 33 2		348	C30 L 400 FT	/ ST / FT	5037095	1109 80 4		328
46277 GTPL	/ St / GTP	5044659	1115 35 9		348	C30 L 500 FT	/ ST / FT	5037156	1109 81 2		328
A 11	Light grey/ PE	5152170	2000 34 2	/100 pc.	160	C30 L 600 FT	/ ST / FT	5037217	1109 82 0		328
A 11 5	Light grey/ PE	5152057	2000 32 6		160	C30 L 700 FT	/ ST / FT	5037279	1109 83 9		328
A 6	Light grey/ PP	5249795	2001 05 5		160	C30 L 800 FT	/ ST / FT	5037330	1109 84 7		328
A 8	Light grey/ PE	5151395	2000 01 6		160						
A 8 5	Light grey/ PE	5151456	2000 02 4		160						
A 9	Light grey/ PE	5151630	2000 09 1		160						
A11 HF RO	Red/ PE	5820390	2000 16 4		160						
A11 HF RW	Pure white/ PE	5707899	2000 18 0		160						
A8 HF RO	Red/ PE	5239598	2000 05 9		160						
A8 HF RW	Pure white/ PE	5313090	2000 07 5		160						
B 10 M	Light grey/ UF	5107651	2002 16 7		179						
B 10 M 5	Light grey/ UF	5107712	2002 14 0		179						

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
C30 L 900 FT	/ ST / FT	5037392	1109 85 5	/100 pc.	328	DIN 934 M5 G	M5 8/ ST / G	5298038	3400 05 0	/100 pc.	389
CPS 4 SK OR	Pastel orange 300/ PE	5668121	1124 55 3		332	DIN 934 M6 G	M6 10/ ST / G	5298090	3400 06 9		322
						DIN 934 M6 G	M6 10/ ST / G	5298090	3400 06 9		389
						DIN 934 M6 VA	M6 10/ V2A	5297673	3397 06 8		389
				/pc.		DIN 934 M8 G	M8 13/ ST / G	5298151	3400 08 5		322
						DIN 934 M8 G	M8 13/ ST / G	5298151	3400 08 5		389
						DIN 934 M8 VA	M8 13/ V2A	5297734	3397 08 4		389
CPS 4 SPR 492 FT	40 x 22,5/ ST / FT	6006014	6007 24 4		332	ECO 12 5	Light grey/ PP	5507192	2001 00 7		162
CPS 4 SPR 592 FT	40 x 22,5/ ST / FT	6006076	6007 25 2		332	ECO 14 5	Light grey/ PP	5507673	2001 01 3		162
CPS 4 SPR 692 FT	40 x 22,5/ ST / FT	6006137	6007 26 0		332	ECO 18 5	Light grey/ PP	5508458	2001 01 9		162
CPS 4 SPR 792 FT	40 x 22,5/ ST / FT	6006199	6007 27 9		332	ECO10	Light grey/ PP	5507079	2001 00 0		162
CPS 4 SPR 892 FT	40 x 22,5/ ST / FT	6006250	6007 28 7		332	ECO10 RW	Pure white/ PP	5532392	2001 03 0		162
CPS 4 SPR 992 FT	40 x 22,5/ ST / FT	6006311	6007 29 5		332	ECO12	Light grey/ PP	5507130	2001 00 6		162
CPS 4 SPR1092 FT	40 x 22,5/ ST / FT	6006373	6007 30 9		332	ECO12 RW	Pure white/ PP	5532453	2001 03 3		162
CPS 4 SPR1192 FT	40 x 22,5/ ST / FT	6006434	6007 31 7		332	ECO14	Light grey/ PP	5507253	2001 01 2		162
				/100 m		ECO14 RW	Pure white/ PP	5532514	2001 03 6		162
CPS 4L 2M FT	/ ST / FT	5050230	1121 97 9		332	ECO18	Light grey/ PP	5508212	2001 01 8		162
CPS 4L 2M VA	/ V2A	5050179	1121 96 0		332	ECO18 RW	Pure white/ PP	5532576	2001 03 9		162
						EDFB M32	M32/ TPE	5651727	2012 70 9		181
CPS 4L 6M FT	/ ST / FT	5049937	1121 89 8		332	EDFB M40	M40/ TPE	5651734	2012 73 3		181
CPS 4L 6M VA	/ V2A	5049999	1121 90 1		332	EDK 25 LGR	M25/ EVA	5246961	2011 63 8		170
				/pc.		EDK 25 RW	M25/ EVA	5303206	2011 68 9		170
CPS 5 G 220 FT	/ ST / FT	6191710	6349 40 4		333	EDK 32 LGR	M32/ EVA	5246978	2011 64 6		170
CPS 5 G 260 FT	/ ST / FT	6191772	6349 41 2		333	EDK 32 RW	M32/ EVA	5303213	2011 69 7		170
CPS 5 G 260 VA	/ V2A	6192076	6349 81 1		333	EDK 40 LGR	M40/ EVA	5246985	2011 65 4		170
CPS 5 G 300 FT	/ ST / FT	6191833	6349 43 9		333	EDK 40 RW	M40/ EVA	5303220	2011 70 0		170
CPS 5 G 340 FT	/ ST / FT	6191895	6349 44 7		333	EDR 25 16-20 LGR	M25/ PVC	5246909	2011 50 6		170
CPS 5 G 340 VA	/ V2A	6192199	6349 84 6		333	EDR 25 20-25 LGR	M25/ PVC	5246916	2011 51 4		170
CPS 5 G 380 FT	/ ST / FT	6191956	6349 46 3		333	EDR 32 20-25 LGR	M32/ PVC	5246923	2011 52 2		170
CPS 5 G 380 VA	/ V2A	6192250	6349 85 4		333	EDR 32 25-32 LGR	M32/ PVC	5246930	2011 53 0		170
						EDR 40 25-32 LGR	M40/ PVC	5246947	2011 53 8		170
CPS 5 L 1.5M FT	/ St / FT	5514572	1121 36 3		332	EDR 40 32-40 LGR	M40/ PVC	5246954	2011 54 6		170
CPS 5 L 1M FT	/ St / FT	5886211	1121 44 8	/100 m	333	EDVS M20 LGR	M 20/ PE	5105251	2012 37 5		164
				/pc.		EDVS M20 LGR	M 20/ PE	5105251	2012 37 5		178
CPS 5 L 200 FT	/ St / FT	5745037	1121 39 1		332	EDVS M25 LGR	M 25/ PE	5105190	2012 38 3		164
CPS 5 L 2M FT	/ St / FT	5049210	1121 46 4	/100 m	333	EDVS M25 LGR	M 25/ PE	5105190	2012 38 3		178
CPS 5 L 2M VA	/ V2A	5049272	1121 48 0		333	EDVS M32 LGR	M 32/ PE	5105138	2012 39 1		164
				/pc.		EDVS M32 LGR	M 32/ PE	5105138	2012 39 1		178
CPS 5 L 300 FT	/ St / FT	5672975	1121 24 3		332	FAZ II 10 10 GS	M10 95/ ST / G	5888499	3498 54 9		382
CPS 5 L 3M FT	/ St / FT	5419686	1121 46 6	/100 m	390	FAZ II 10 30	M10 115/ ST / G	5888550	3498 58 1		382
				/pc.		FAZ II 12 10	M12 110/ ST / G	5888611	3498 65 4		382
CPS 5 L 400 FT	/ St / FT	5672555	1121 27 8		332	FAZ II 8 10 GS	M8 77/ ST / G	5888437	3498 50 6		382
CPS 5 L 500 FT	/ St / FT	5886334	1121 40 5		332	FH II 18X80	M12 120/ ST / G	5489139	3498 74 3		382
CPS 5 L 600 FT	/ St / FT	5672494	1121 29 4	/100 m	332	FL 1 TG	0-18 35/ TG / G	5150855	1488 01 5		317
CPS 5 L 6M FT	/ St / FT	5462491	1121 47 2		333	FL 2 TG	0-20 42/ TG / G	5150916	1488 02 3		317
CPS 5 L 6M VA	/ V2A	5049333	1121 49 9		333	FL 3 TG	0-26 54/ TG / G	5150978	1488 03 1		317
				/pc.							
CPS 5 L 700 FT	/ St / FT	5672616	1121 33 2		332						
CPS 5 L 800 FT	/ St / FT	5882251	1121 30 8		332						
CPS 5 L 900 FT	/ St / FT	5068310	1121 33 6		332						
				/100 pc.							
CPS 5 SK OR	Pastel orange 200/ PE	5668138	1124 56 1		333						
DIN 128 A M10 G	M10 10,5/ ST / G	5302414	3405 10 9		390						
DIN 128 A M12 G	M12 12,5/ ST / G	5302476	3405 12 5		390						
DIN 128 A M6 G	M6 6,3/ ST / G	5302292	3405 06 0		390						
DIN 128 A M8 G	M8 8,3/ ST / G	5302353	3405 08 7		390						
DIN 6798 A M10 G	10,5 18-18 / ST / G	5301752	3404 10 2		389						
DIN 6798 A M12 G	13 20,5-20,5 / ST / G	5301813	3404 12 9		389						
DIN 6798 A M5 G	5,3 10/ ST / G	5301578	3404 05 6		389						
DIN 6798 A M6 G	6,4 11-11 / ST / G	5301639	3404 06 4		389						
DIN 6798 A M8 G	8,4 15-15 / ST / G	5301691	3404 08 0		389						
DIN 934 M10 G	M10 17/ ST / G	5298212	3400 10 7		322						
DIN 934 M10 G	M10 17/ ST / G	5298212	3400 10 7		389						
DIN 934 M10 VA	M10 17/ V2A	5297796	3397 10 6		389						
DIN 934 M12 G	M12 19/ ST / G	5298274	3400 12 3		389						
DIN 934 M12 VA	M12 19/ V2A	5297857	3397 11 4		389						
DIN 934 M4 G	M4 7/ ST / G	5297970	3400 04 2		389						

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
FL1-G M8 TG	0-18 35/ TG / G	5151036	1488 07 4	/100 pc.	317	GMS L 45 FS	10/ St / G	5485957	1124 62 7	/pc.	345
FL2-G M10 TG	0-20 42/ TG / G	5151098	1488 08 2		317	GMS L 45 FS	10/ St / G	5485964	1124 62 9		345
FL3-G M12 TG	0-26 54/ TG / G	5151159	1488 09 0		317	GMS L 45 FT	10/ St / FT	5486138	1124 66 7		345
						GMS L 45 FT	10/ St / FT	5486145	1124 66 9		345
						GMS L 90 FS	10/ St / G	5485926	1124 62 1		345
						GMS L 90 FS	10/ St / G	5485919	1124 61 9		346
FNA II 6X30 M6/5	M6 6/ ST / G	5461890	3498 42 5		382	GMS L 90 FS	10/ St / G	5485933	1124 62 3		346
						GMS L 90 FS	10/ St / G	5485940	1124 62 5		346
FZEA II 10X40 G	M8 10/ ST / G	5454038	3492 03 6		381	GMS L 90 FT	10/ St / FT	5486121	1124 66 5		346
FZEA II 12X40 G	M10 12/ ST / G	5454090	3492 06 0		381	GMS L 90 FT	10/ St / FT	5486107	1124 66 1		345
FZEA II 14X40 G	M12 14/ ST / G	5454151	3492 09 5	/pc.	381	GMS L 90 FT	10/ St / FT	5486091	1124 65 9	/pc.	346
						GMS L 90 FT	10/ St / FT	5486114	1124 66 3		346
FZED 10X40 G	5/ ST / G	5454212	3492 62 1		382	GMS L FS	10/ St / G	5485865	1124 61 3		344
FZED 12X40 G	5/ ST / G	5454274	3492 66 4		382	GMS L FT	10/ St / FT	5486060	1124 65 3		344
FZED 14X40 G	5/ ST / G	5454335	3492 69 9		382	GMS T FS	10/ St / G	5485872	1124 61 5		345
FZUB 10X40	10 10/ ST	5454397	3492 33 8		381	GMS T FT	10/ St / FT	5486077	1124 65 5		345
FZUB 12X40	12 10/ ST	5454458	3492 36 2		381	GMS X FS	10/ St / G	5485889	1124 61 7		344
FZUB 14X40	14 10/ ST	5454519	3492 39 7		381	GMS X FT	10/ St / FT	5486084	1124 65 7		344
GMF22 M10 G	M10 8/ ST / G	5445661	1146 45 9	/100 pc.	340	GVMS FS	10/ St / G	5485742	1124 60 1	/100 pc.	345
GMF22 M12 G	M12 9,5/ ST / G	5445678	1146 46 3		340	GVMS FT	10/ St / FT	5486008	1124 64 1		345
GMF22 M6 G	M6 6/ ST / G	5445616	1146 45 1		340						
GMF22 M8 G	M8 6/ ST / G	5445623	1146 45 5		340	HG 60	Orange 68/ PP	5032779	2003 41 4		193
GMH18 M10 G	M10 10-10 / ST / G	5054672	1146 52 1		339	HG 60 2	Orange 100/ PP	5032830	2003 42 2		193
GMH18 M10 VA	M10 10-10 / V4A	5084907	1146 56 0		339						
GMH18 M12 VA	M12 12-12 / V4A	5084167	1146 56 2		339	HG 60 MW	Orange 68/ PP	5246732	2003 61 1		193
GMH18 M6 G	M6 6-6 / ST / G	5054559	1146 50 5		339	HG 60-35	Orange 68/ PP	5051350	2003 42 6		193
GMH18 M6 VA	M6 6-6 / V4A	5084129	1146 55 6		339	HG 60-35 MW	Orange 68/ PP	5246725	2003 60 3		193
GMH18 M8 G	M8 8-8 / ST / G	5054610	1146 51 3		339						
GMH18 M8 VA	M8 8-8 / V4A	5084150	1146 55 8	/pc.	339	HGMH18 M10 G	M10 10-10 / ST / G	5055150	1146 73 4	/pc.	339
GMH22 M10 G	M10 10-10 / ST / G	5054917	1146 62 9		340	HGMH18 M12 G	M12 12-12 / ST / G	5055211	1146 74 2		339
GMH22 M10 VA	M10 10-10 / V4A	5084211	1146 65 0		340	HGMH18 M6 G	M6 6-6 / ST / G	5055037	1146 71 8		339
GMH22 M12 G	M12 12-12 / ST / G	5054979	1146 63 7		340	HGMH18 M8 G	M8 8-8 / ST / G	5055099	1146 72 6		339
GMH22 M12 VA	M12 12-12 / V4A	5084228	1146 65 2		340						
GMH22 M6 G	M6 6-6 / ST / G	5054795	1146 60 2		340	HGMH22 M10 G	M10 10-10 / ST / G	5055334	1146 81 5		340
GMH22 M6 VA	M6 6-6 / V4A	5084174	1146 64 6		340	HGMH22 M12 G	M12 12-12 / ST / G	5055396	1146 82 3		340
						HGMH22 M8 G	M8 8-8 / ST / G	5055273	1146 80 7		340
GMH22 M8 G	M8 8-8 / ST / G	5054856	1146 61 0		340						
GMH22 M8 VA	M8 8-8 / V4A	5084181	1146 64 8	/pc.	340	HG-UPM1	Blue	5406310	6119 95 0	/pc.	195
GMS 1 FS	10/ St / G	5485759	1124 60 3		344	HG-UPM2	Blue	5406327	6119 95 1		195
GMS 1 FT	10/ St / FT	5486015	1124 64 3		344	HG-UPM3	Blue	5406334	6119 95 2		195
GMS 2 FS	10/ St / G	5485766	1124 60 5		344						
GMS 2 FT	10/ St / FT	5486022	1124 64 5		344	HKF22 M10x30 G	M10 30/ St / G	5445739	1148 96 1		341
GMS 3 FS	10/ St / G	5485803	1124 60 7		344	HKF22 M10x50 G	M10 50/ St / G	5445746	1148 96 6		341
GMS 3 FT	10/ St / FT	5486039	1124 64 7		344	HKF22 M12x30 G	M12 30/ St / G	5445784	1148 97 2		341
GMS 4 FS	10/ St / G	5485810	1124 60 9		344	HKF22 M8x30 G	M8 30/ St / G	5445685	1148 95 0		341
GMS 4 FT	10/ St / FT	5486046	1124 64 9		344	HKF22 M8x50 G	M8 50/ St / G	5445722	1148 95 5		341
GMS 4121 FS	10/ St / G	5485971	1124 63 1		345	HMS-KS5X50	5 x 50 50/ ST / G	5964100	3498 20 4	/100 pc.	383
GMS 4121 FT	10/ St / FT	5486152	1124 67 1	/pc.	345						
GMS 4141 FS	10/ St / G	5485988	1124 63 3		345	HTS 35		5477259	1125 03 6		348
GMS 4141 FT	10/ St / FT	5486169	1124 67 3		345						
GMS 5 FS	10/ St / G	5485827	1124 61 1		344	HV 100 KD	Orange 50/ PP	5033011	2003 44 9		194
GMS 5 FT	10/ St / FT	5486053	1124 65 1		344	HV 60	Orange 68/ PP	5032953	2003 44 2		194
						HV 60 MW	Orange 68/ PP	5246749	2003 61 9		194

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
HV 70 D	Orange 74 / PP	5032892	2003 43 0	/100 pc.	194	MS 21 L 600 FT	/ ST / FT	5697725	1122 93 7	/100 pc.	334
K-C30 G	0,7 25 / St / G	5151210	1488 20 1	/100 m	321	MS 21 L 6M FS	/ St / FS	5686286	1122 92 2	/100 m	334
						MS 21 L 6M FT	/ St / FT	5686309	1122 92 6		334
KD 10 100	M10 100 / St / G	5239352	3482 75 8	/100 pc.	381	MS 21 L 6M V2A	/ V2A	5697565	1122 92 9		334
						MS 21 L 6M V4A	/ V4A	5697619	1122 93 2		335
KD 10 150	M10 150 / St / G	5239291	3482 76 6		381	MS 21 L 700 FT	/ ST / FT	5697732	1122 93 8	/100 pc.	334
						MS 21 L 800 FT	/ ST / FT	5697749	1122 93 9		334
KD 8 100	M8 100 / St / G	5239475	3482 70 7		381	MS 21 L 900 FT	/ ST / FT	5697787	1122 94 0		334
KL 100	/ MF	5158592	2016 12 5		178	MS 21 SK OR	Pastel orange / PE	5686217	1122 90 2		335
KVM		5577768	2363 01 0	/pc.	182					/100 m	
KVM-M		5686354	2363 01 5	/VPE	182	MS 41 L 1M 2 FS	/ ST / FS	5698142	1122 97 0		335
						MS 41 L 1M 2 FT	/ ST / FT	5698081	1122 96 2		336
						MS 41 L 1M 2 V2A	/ V2A	5698203	1122 97 8		337
KVM-P		5687771	2363 01 9	/pc.	182	MS 41 L 1M 2 V4A	/ V4A	5698265	1122 98 8		337
						MS 41 L 1M FS	/ ST / FS	5697503	1122 90 8		335
MD 5 GTP	5 30 / ST / GTP	5683414	3484 60 2	/100 pc.	380	MS 41 L 1M FT	/ St / FT	5487272	1122 60 6		336
MD 6 GTP	6 32 / ST / GTP	5683353	3484 62 9		380	MS 41 L 200 FT	/ St / FT	5484516	1122 50 9	/100 pc.	336
						MS 41 L 300 FT	/ St / FT	5485896	1122 51 7		336
MMS10X100	10 x 100 100 / ST / G	5964049	3498 15 8		382					/100 m	
MMS10X80	10 x 80 80 / ST / G	5963981	3498 12 3		382	MS 41 L 3M 2 FS	/ ST / FS	5698159	1122 97 2		335
						MS 41 L 3M 2 FT	/ ST / FT	5698098	1122 96 4		336
MMS6X50	6 x 50 50 / ST / GC	5963929	3498 10 7		382	MS 41 L 3M 2 V2A	/ V2A	5698210	1122 98 0		337
						MS 41 L 3M 2 V4A	/ V4A	5698272	1122 99 0		337
MMS-ST6X60	6 x 60 60 / St / G	5964162	3498 26 3		382	MS 41 L 3M FS	/ St / FS	5686224	1122 91 0		335
						MS 41 L 3M FT	/ St / FT	5487876	1122 62 2		336
MP UNI FS	115 170 / ST / FS	6146895	7084 77 3	/pc.	170	MS 41 L 400 FT	/ St / FT	5486251	1122 52 5	/100 pc.	336
						MS 41 L 500 FT	/ St / FT	5486794	1122 53 3		336
						MS 41 L 600 FT	/ St / FT	5486916	1122 54 1		336
MP WI KL. DD	210 120 / ST / DD	5163305	7085 11 1		163					/100 m	
MP WI KL. DD	210 120 / ST / DD	5163305	7085 11 1		170						
MP WI KL. FS	210 120 / ST / FS	6146833	7084 76 5		163	MS 41 L 6M 2 FS	/ ST / FS	5698166	1122 97 4		335
MP WI KL. FS	210 120 / ST / FS	6146833	7084 76 5		170	MS 41 L 6M 2 FT	/ ST / FT	5698104	1122 96 6		336
						MS 41 L 6M 2 V2A	/ V2A	5698227	1122 98 2		337
MPG 65 FT	81 65 / ST / FT	6933259	6006 48 6		171	MS 41 L 6M 2 V4A	/ V4A	5698289	1122 99 2		337
M-Quick 15-19LGR	15-19 / PA	5880936	2153 10 6	/100 pc.	257	MS 41 L 6M FS	/ St / FS	5686231	1122 91 2		335
M-Quick 18-22LGR	18,5-22,5 / PA	5880998	2153 11 4		257	MS 41 L 6M FT	/ St / FT	5488170	1122 65 7	/100 pc.	336
M-Quick 25-28LGR	25-28,5 / PA	5881056	2153 13 0		257	MS 41 L 700 FT	/ St / FT	5487036	1122 56 8		336
M-Quick 31-37LGR	31-37 / PA	5881117	2153 15 7		257	MS 41 L 800 FT	/ St / FT	5487098	1122 57 6		336
M-Quick M20 LGR	16-20 / PA	5742395	2153 71 8		257	MS 41 L 900 FT	/ St / FT	5487159	1122 58 4		336
M-Quick M20 SW	16-20 / PA	5505334	2153 78 5		257					/100 m	
M-Quick M25 LGR	20-25 / PA	5741732	2153 72 6		257						
M-Quick M25 SW	20-25 / PA	5505396	2153 78 7		257	MS 41 LS 1M 2 FS	/ ST / FS	5697923	1123 00 8		335
M-Quick M32 LGR	25-32 / PA	5741671	2153 73 4		257	MS 41 LS 1M 2 FT	/ ST / FT	5697862	1123 00 1		336
M-Quick M32 SW	25-32 / PA	5505457	2153 78 9		257	MS 41 LS 1M FS	/ ST / FS	5697978	1122 48 1		336
						MS 41 LS 1M FT	/ ST / FT	5697961	1122 47 9		336
MS 21 L 200 FT	/ ST / FT	5697626	1122 93 3		334	MS 41 LS 3M 2 FS	/ ST / FS	5698319	1123 01 0		335
						MS 41 LS 3M 2 FT	/ ST / FT	5697909	1123 00 3		336
MS 21 L 2M FS	/ St / FS	5686262	1122 91 8	/100 m	334	MS 41 LS 3M FS	/ St / FS	5686248	1122 91 4		336
						MS 41 LS 3M FT	/ St / FT	5050735	1122 48 3		336
MS 21 L 300 FT	/ ST / FT	5697664	1122 93 4	/100 pc.	334	MS 41 LS 6M 2 FS	/ ST / FS	5698326	1123 01 2		335
						MS 41 LS 6M 2 FT	/ ST / FT	5697916	1123 00 5		336
MS 21 L 3M FS	/ St / FS	5686279	1122 92 0	/100 m	334	MS 41 LS 6M FS	/ St / FS	5686255	1122 91 6		336
MS 21 L 3M FT	/ St / FT	5686293	1122 92 4		334	MS 41 LS 6M FT	/ St / FT	5050742	1122 48 7		336
MS 21 L 3M V2A	/ V2A	5697558	1122 92 8		334	MS 41 LS1M 2 V2A	/ V2A	5698333	1123 01 4		337
MS 21 L 3M V4A	/ V4A	5697602	1122 93 1	/100 pc.	335	MS 41 LS1M 2 V4A	/ V4A	5698395	1123 02 1		337
						MS 41 LS3M 2 V2A	/ V2A	5698340	1123 01 6		337
MS 21 L 400 FT	/ ST / FT	5697671	1122 93 5		334	MS 41 LS3M 2 V4A	/ V4A	5698401	1123 02 3		337
MS 21 L 500 FT	/ ST / FT	5697688	1122 93 6		334	MS 41 LS6M 2 V2A	/ V2A	5698388	1123 01 8		337
						MS 41 LS6M 2 V4A	/ V4A	5698432	1123 02 5		337

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
MS 41 SK OR	Pastel orange / PE	5686200	1122 90 0	/100 pc.	337	SB16 RO	16 178 / St / G/K	5153658	2047 42 5	/pc.	305
						SB16 SW	16 178 / St / FSK	5622000	2047 55 2		304
PD-UPM1	Red	5406266	6119 94 5	/pc.	192	SB16 VA	16 178 / V2A	5622543	2047 68 2		305
PD-UPM2	Red	5406297	6119 94 6		192	SB20 FT	20 183 / St / FT	5381198	2047 48 6		304
PD-UPM3	Red	5406303	6119 94 7		192	SB20 G	20 183 / St / G	5153429	2047 41 1		304
						SB20 RO	20 183 / St / G/K	5153665	2047 42 6		305
S 25 ZD	18-25 0,45 / St / ZD	5148210	1486 30 6	/100 pc.	317	SB20 SW	20 183 / St / FSK	5622017	2047 55 3		304
S 32 ZD	28-32 0,45 / St / ZD	5148272	1486 31 4		317	SB20 VA	20 183 / V2A	5622550	2047 68 3		305
S 37 ZD	35-37 0,45 / St / ZD	5148333	1486 32 2		317	SB25 FT	25 207 / St / FT	5381204	2047 48 7		304
						SB25 G	25 207 / St / G	5153467	2047 41 2		304
S16 FT	16 3000 / St / FT	5069270	2047 30 6	/100 m	302	SB25 RO	25 207 / St / G/K	5153702	2047 42 7		305
S16 G	16 3000 / St / G	5246275	2047 30 5		303	SB25 SW	25 207 / St / FSK	5622024	2047 55 4		304
S16 SW	16 3000 / St / FSK	5621720	2047 52 0		303	SB25 VA	25 207 / V2A	5622567	2047 68 4		305
S16 VA	16 3000 / V2A	5622246	2047 65 0		303	SB32 FT	32 245 / St / FT	5381211	2047 48 8		304
S20 FT	20 3000 / St / FT	5069287	2047 30 9		302	SB32 G	32 245 / St / G	5153474	2047 41 3		304
S20 G	20 3000 / St / G	5246282	2047 30 8		303	SB32 RO	32 245 / St / G/K	5153719	2047 42 8		305
S20 SW	20 3000 / St / FSK	5621737	2047 52 1		303	SB32 SW	32 245 / St / FSK	5622031	2047 55 5		304
S20 VA	20 3000 / V2A	5622253	2047 65 1		303	SB32 VA	32 245 / V2A	5622574	2047 68 5		305
S25 FT	25 3000 / St / FT	5069294	2047 31 2		302	SB40 FT	40 288 / St / FT	5381228	2047 48 9		304
S25 G	25 3000 / St / G	5246299	2047 31 1		303	SB40 G	40 288 / St / G	5153481	2047 41 4		304
S25 SW	25 3000 / St / FSK	5621744	2047 52 2		303	SB40 RO	40 288 / St / G/K	5153726	2047 42 9		305
S25 VA	25 3000 / V2A	5622260	2047 65 2		303	SB40 SW	40 288 / St / FSK	5622048	2047 55 6		304
S32 FT	32 3000 / St / FT	5069300	2047 31 5		302	SB40 VA	40 288 / V2A	5622581	2047 68 6		305
S32 G	32 3000 / St / G	5246305	2047 31 4		303	SB50 FT	50 346 / St / FT	5381235	2047 49 0		304
S32 SW	32 3000 / St / FSK	5621751	2047 52 3		303	SB50 G	50 346 / St / G	5153528	2047 41 5		304
S32 VA	32 3000 / V2A	5622291	2047 65 3		303	SB50 RO	50 346 / St / G/K	5153764	2047 43 0		305
S40 FT	40 3000 / St / FT	5069331	2047 31 8		302	SB50 SW	50 346 / St / FSK	5622055	2047 55 7		304
S40 G	40 3000 / St / G	5246312	2047 31 7		303	SB63 FT	63 467 / St / FT	5381242	2047 49 1		304
S40 SW	40 3000 / St / FSK	5621768	2047 52 4		303	SB63 G	63 467 / St / G	5153535	2047 41 6		304
S40 VA	40 3000 / V2A	5622307	2047 65 4		303	SB63 RO	63 467 / St / G/K	5153771	2047 43 1		305
S50 FT	50 3000 / St / FT	5069348	2047 32 1		302	SB63 SW	63 467 / St / FSK	5622062	2047 55 8		304
S50 G	50 3000 / St / G	5246329	2047 32 0		303	SBM16 FT	M16x1,5 178 / St / FT	5381259	2047 50 1		303
S50 SW	50 3000 / St / FSK	5621775	2047 52 5		303	SBM16 G	M16x1,5 178 / St / G	5153788	2047 44 0		303
S63 FT	63 3000 / St / FT	5069355	2047 32 4		302	SBM16 SW	M16x1,5 178 / St / FSK	5622079	2047 56 0		304
S63 G	63 3000 / St / G	5246336	2047 32 3		303	SBM16 VA	M16x1,5 178 / V2A	5622611	2047 69 0		304
S63 SW	63 3000 / St / FSK	5621782	2047 52 6		303	SBM20 FT	M20x1,5 183 / St / FT	5381266	2047 50 2		303
						SBM20 G	M20x1,5 183 / St / G	5153825	2047 44 1		303
SAA CPS 4 FT	/ St / FT	5439479	6007 49 8	/pair	334	SBM20 SW	20 183 / St / FSK	5622086	2047 56 1		304
						SBM20 VA	M20x1,5 183 / V2A	5622628	2047 69 2		304
SB16 FT	16 178 / St / FT	5381181	2047 48 5	/pc.	304	SBM25 FT	M25x1,5 207 / St / FT	5381273	2047 50 3		303
SB16 G	16 178 / St / G	5153412	2047 41 0		304	SBM25 G	M25x1,5 207 / St / G	5153832	2047 44 2		303

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
SBM25 SW	M25x1,5 207 / St / FSK	5622123	2047 56 2	/pc.	304	SM25 SW	M25x1,5 3000 / St / FSK	5621812	2047 53 0	/100 m	302
SBM25 VA	M25x1,5 207 / V2A	5622635	2047 69 3		304	SM25 VA	M25x1,5 3000 / V2A	5622352	2047 66 0		302
SBM32 FT	M32x1,5 245 / St / FT	5381280	2047 50 4		303	SM32 FT	M32x1,5 3000 / St / FT	5152934	2047 34 5		302
SBM32 G	M32x1,5 245 / St / G	5153849	2047 44 3		303	SM32 G	M32x1,5 3000 / St / G	5246381	2047 34 4		302
SBM32 SW	M32x1,5 288 / St / FSK	5622130	2047 56 3		304	SM32 SW	M32x1,5 3000 / St / FSK	5621829	2047 53 1		302
SBM32 VA	M40x1,5 245 / V2A	5622642	2047 69 4		304	SM32 VA	M32x1,5 3000 / V2A	5622369	2047 66 1		302
SBM40 FT	M40x1,5 288 / St / FT	5381297	2047 50 5		303	SM40 FT	M40x1,5 3000 / St / FT	5152941	2047 34 8		302
SBM40 G	M40x1,5 288 / St / G	5153887	2047 44 4		303	SM40 G	M40x1,5 3000 / St / G	5246398	2047 34 7		302
SBM40 SW	M50x1,5 288 / St / FSK	5622147	2047 56 4		304	SM40 SW	M40x1,5 3000 / St / FSK	5621836	2047 53 2		302
SBM40 VA	M40x1,5 288 / V2A	5622659	2047 69 5		304	SM40 VA	M40x1,5 3000 / V2A	5622376	2047 66 2		302
SBM50 FT	M50x1,5 346 / St / FT	5381303	2047 50 6		303	SM50 FT	M50x1,5 3000 / St / FT	5152972	2047 35 1		302
SBM50 G	M50x1,5 346 / St / G	5153894	2047 44 5		303	SM50 G	M50x1,5 3000 / St / G	5246404	2047 35 0		302
SBM50 SW	M50x1,5 346 / St / FSK	5622154	2047 56 5		304	SM50 SW	M50x1,6 3000 / St / FSK	5621843	2047 53 3		302
SBM63 FT	M63x1,5 467 / St / FT	5381334	2047 50 7		303	SM63 FT	M63x1,5 3000 / St / FT	5152989	2047 35 4		302
SBM63 G	M63x1,5 467 / St / G	5153900	2047 44 6		303	SM63 G	M63x1,5 3000 / St / G	5246411	2047 35 3		302
SBM63 SW	M63x1,5 467 / St / FSK	5622161	2047 56 6		304	SM63 SW	M63x1,5 3000 / St / FSK	5621850	2047 53 4		302
SH 40 G	0,5 1200 / St / G	5151272	1488 25 2	/100 pc.	321	SQ 1632	16	5028154	2153 57 2	/pc.	310
SKT16 G	16 45 / Zn / G	5622710	2047 38 8	/pc.	307	SQ M6	M6 15 / PC	5016069	2146 50 9	/100 pc.	258
SKT20 G	20 50 / Zn / G	5622727	2047 38 9		307	SQ M8	M8 15 / PC	5016113	2146 51 1		258
SKT25 G	25 62 / Zn / G	5622734	2047 39 0		307	SQ-10 LGR	10 9,5-12 / PA	5595359	2146 05 3		258
SKT32 G	32 67 / Zn / G	5622741	2047 39 1		307	SQ-12 LGR	12-14 11,5-15 / PA	5595410	2146 06 1		258
SKT40 G	40 90 / Zn / G	5622758	2047 39 2		307	SQ-15 LGR	15-16 14-16,5 / PA	5595472	2146 09 6		258
SKT50 G	50 110 / Zn / G	5622765	2047 39 3		307	SQ-17 LGR	17-19 16-20 / PA	5595533	2146 11 8		258
SKTM16 G	M16x1,5 72 / Zn / G	5622772	2047 40 4		307	SQ-20 LGR	20-23 19,5-23,5 / PA	5595656	2146 13 4		258
SKTM20 G	M20x1,5 79 / Zn / G	5622789	2047 40 5		307	SQ-25 LGR	25-28 24-28 / PA	5595717	2146 20 7		258
SKTM25 G	M25x1,5 95 / Zn / G	5622796	2047 40 6		307	SQ-28 LGR	28-32 27,5-32 / PA	5595779	2146 21 5		258
SKTM32 G	M32x1,5 97 / Zn / G	5622802	2047 40 7		307	SQ-32 LGR	32-35 31,2-35,8 / PA	5595830	2146 25 8		258
SKTM40 G	M40x1,5 137 / Zn / G	5622840	2047 40 8		307	SQ-36 LGR	35-40 35-40,1 / PA	5204275	2146 29 0		258
SKTM50 G	M63x1,5 186 / Zn / G	5622857	2047 40 9		307	SQ-40 LGR	40-44 39,3-44,5 / PA	5595892	2146 32 0		258
SM16 FT	M16x1,5 3000 / St / FT	5152880	2047 33 6	/100 m	302	SQ-47 LGR	45-50 44-50 / PA	5204398	2146 36 3	/pc.	258
SM16 G	M16x1,5 3000 / St / G	5246350	2047 33 5		302	SQ-51 LGR	50-54 48-55 / PA	5595953	2146 44 4		258
SM16 SW	M16x1,5 3000 / St / FSK	5621799	2047 52 8		302	SQ-59 LGR	59-65 58,5-65 / PA	5204510	2146 48 7		258
SM16 VA	M16x1,5 3000 / V2A	5622338	2047 65 7		302	SV16 FT	18,6 50 / St / FT	5380986	2047 45 5		306
SM20 FT	M20x1,5 3000 / St / FT	5152910	2047 33 9		302	SV16 G	18,6 50 / St / G	5152996	2047 36 5		306
SM20 G	M20x1,5 3000 / St / G	5246367	2047 33 8		302	SV16 RO	18,6 50 / St / G/K	5153122	2047 38 0		306
SM20 SW	M20x1,5 3000 / St / FSK	5621805	2047 52 9		302	SV16 SW	18,6 50 / St / G/K	5621867	2047 53 6		306
SM20 VA	M20x1,5 3000 / V2A	5622345	2047 65 8		302	SV16 VA	18,6 50 / V2A	5622406	2047 66 5		307
SM25 FT	M25x1,5 3000 / St / FT	5152927	2047 34 2		302	SV20 FT	22,6 54 / St / FT	5380993	2047 45 6		306
SM25 G	M25x1,5 3000 / St / G	5246374	2047 34 1		302	SV20 G	22,6 54 / St / G	5153009	2047 36 6		306

Type listing

Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
SV20 RO	22,6 54/ St / G/K	5153160	2047 38 1	/pc.	306	SVM25 FT	M25x1,5 40/ St / FT	5381112	2047 47 2	/pc.	305
SV20 SW	22,6 54/ St / G/K	5621874	2047 53 7		306	SVM25 G	M25x1,5 40/ St / G	5153306	2047 39 7		305
SV20 VA	22,6 54/ V2A	5622413	2047 66 6		307	SVM25 SW	M20x1,5 40/ St / G/K	5621959	2047 54 6		305
SV25 FT	28,3 64/ St / FT	5381006	2047 45 7		306	SVM25 VA	M25x1,5 40/ V2A	5622499	2047 67 6		306
SV25 G	28,3 64/ St / G	5153047	2047 36 7		306	SVM32 FT	M32x1,5 44/ St / FT	5381129	2047 47 3		305
SV25 RO	28,3 64/ St / G/K	5153177	2047 38 2		306	SVM32 G	M32x1,5 44/ St / G	5153344	2047 39 8		305
SV25 SW	28,3 64/ St / G/K	5621881	2047 53 8		306	SVM32 SW	M32x1,5 44/ St / G/K	5621966	2047 54 7		305
SV25 VA	28,3 64/ V2A	5622420	2047 66 8		307	SVM32 VA	M32x1,5 44/ V2A	5622505	2047 67 7		306
SV32 FT	35 74/ St / FT	5381037	2047 45 8		306	SVM40 FT	M40x1,5 50/ St / FT	5381150	2047 47 4		305
SV32 G	35 74/ St / G	5153054	2047 36 8		306	SVM40 G	M40x1,5 50/ St / G	5153351	2047 39 9		305
SV32 RO	35 74/ St / G/K	5153184	2047 38 3		306	SVM40 SW	M40x1,5 50/ St / G/K	5621973	2047 54 8		305
SV32 SW	35 74/ St / G/K	5621898	2047 53 9		306	SVM40 VA	M40x1,5 50/ V2A	5622512	2047 67 8		306
SV32 VA	35 74/ V2A	5622437	2047 66 9		307	SVM50 FT	M50x1,5 54/ St / FT	5381167	2047 47 5		305
SV40 FT	44 95/ St / FT	5381044	2047 45 9		306	SVM50 G	M50x1,5 54/ St / G	5153368	2047 40 0		305
SV40 G	44 95/ St / G	5153061	2047 36 9		306	SVM50 SW	M50x1,5 54/ St / G/K	5621980	2047 54 9		305
SV40 RO	44 95/ St / G/K	5153221	2047 38 4		306	SVM63 FT	M63x1,5 65/ St / FT	5381174	2047 47 6		305
SV40 SW	44 95/ St / G/K	5621904	2047 54 0		306	SVM63 G	M63x1,5 65/ St / G	5153405	2047 40 1		305
SV40 VA	44 95/ V2A	5622444	2047 67 0		307	SVM63 SW	M63x1,5 65/ St / G/K	5621997	2047 55 0		305
SV50 FT	54 110/ St / FT	5381051	2047 46 0		306	T 100	/ PP	5246794	2007 07 7	/100 pc.	166
SV50 G	54 110/ St / G	5153108	2047 37 0		306					/pc.	
SV50 RO	54 110/ St / G/K	5153238	2047 38 5		306	T 100 2MSD RO	/ PP	5615897	2007 82 3		175
SV50 SW	54 110/ St / G/K	5621911	2047 54 1		306	T 100 2MSD WS	/ PP	5615880	2007 82 1		175
SV63 FT	67 116/ St / FT	5381068	2047 46 1		306	T 100 4MSD WS	/ PP	5615903	2007 82 5		175
SV63 G	67 116/ St / G	5153115	2047 37 1		306	T 100 D 2MSD RO	Light grey/ PP	5654575	2007 82 4	/100 pc.	175
SV63 RO	67 116/ St / G/K	5153245	2047 38 6		306	T 100 D MSD2A	Light grey/ PP	5654582	2007 82 6		175
SV63 SW	67 116/ St / G/K	5621928	2047 54 2		306	T 100 D MSD4A	Light grey/ PP	5654643	2007 82 9		176
SVK16 SW	M16x1,5 20/ St / G/K	5622178	2047 56 8		307	T 100 F	/ PP	5286547	2007 34 7		166
SVK20 SW	M20x1,5 23/ St / G/K	5622185	2047 56 9		307	T 100 KL	/ PP	5441212	2007 43 6	/pc.	166
SVK25 SW	M25x1,5 28/ St / G/K	5622192	2047 57 0		307	T 100 M25-M32	/ PP	5470632	2007 08 1		166
SVK32 SW	M32x1,5 36/ St / G/K	5622208	2047 57 1		307	T 100 OE	/ PP	5246855	2007 25 5		168
SVK40 SW	M40x1,5 44/ St / G/K	5622215	2047 57 2		307	T 100 RO-LGR	/ PP	5303282	2007 64 4		166
SVK50 SW	M50x1,5 55/ St / G/K	5622222	2047 57 3		307	T 100 RW	/ PP	5286677	2007 53 3	/pc.	166
SVK63 SW	M63x1,5 68/ St / G/K	5622239	2047 57 4		307	T 100 UV RW	/ PP	5441106	2007 41 4		166
SVM16 FT	M16x1,5 32/ St / FT	5381099	2047 47 0		305	T 100 WB	/ PP	5615811	2007 80 7		172
SVM16 G	M16x1,5 32/ St / G	5153283	2047 39 5		305	T 100 WB 1WS 1SW	/ PP	5615859	2007 81 5		174
SVM16 SW	M16x1,5 32/ St / G/K	5621935	2047 54 4		305	T 100 WB 1WS 2SW	/ PP	5615866	2007 81 7	/100 pc.	174
SVM16 VA	M16x1,5 32/ V2A	5622475	2047 67 3		306	T 100 WB 2SW	/ PP	5615828	2007 80 9		173
SVM20 FT	M20x1,5 34/ St / FT	5381105	2047 47 1		305	T 100 WB 2WS 2SW	/ PP	5615873	2007 81 9		174
SVM20 G	M20x1,5 34/ St / G	5153290	2047 39 6		305	T 100 WB 2WS 4SW	/ PP	5654551	2007 82 0		174
SVM20 SW	M20x1,5 32/ St / G/K	5621942	2047 54 5		305	T 100 WB 3SW	/ PP	5615842	2007 81 3	/100 pc.	173
SVM20 VA	M20x1,5 40/ V2A	5622482	2047 67 4		306	T 100 WB 4SW	/ PP	5615835	2007 81 1		173
					305	T 100 WB 6SW	/ PP	5654568	2007 82 2		173
					305	T 100 ZE IP30	/ PP	5615781	2007 80 5		172
					306	T 160	/ PP/GF	5246800	2007 09 3	/100 pc.	166

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T 160 M32	/ PP/GF	5470649	2007 09 7		166	T 60 ZE IP30	/ PP	5615774	2007 80 3	/pc.	172
T 160 OE	/ PP/GF	5246862	2007 27 1		168						
T 160 RO-LGR	/ PP/GF	5303299	2007 64 9		166	T4012 M4x10 G	M4/ St / G	5052036	1134 05 1	/100 pc.	338
T 160 RW	/ PP/GF	5286684	2007 54 1		166	T4012 O.S. M4 G	M4/ St / G	5052333	1134 26 4		338
T 160 UV RW	/ PP/GF	5441113	2007 41 6		166	T4012G M5x13 G	M5/ St / G	5051978	1134 04 3	338	
T 25	/ PP	5246770	2007 02 9		165	T4012G O.S. M5 G	M5/ St / G	5052272	1134 25 6	338	
T 25 F	/ PP	5286486	2007 31 2		165	T4012N M4x10 G	M4/ St / G	5051855	1134 02 7	338	
T 25 KL	/ PP	5441168	2007 43 0		165	T4012N M4x8 G	M4/ St / G	5491712	1134 30 2	338	
T 25 RO-LGR	/ PP	5303237	2007 62 2		165	T5012 M5x13 G	M5/ ST / G	5052999	1140 01 9	339	
T 25 RW	/ PP	5286615	2007 50 9		165	T5012 O.S. M5 G	M5/ ST / G	5053057	1140 21 3	339	
T 25 UV RW	/ PP	5441052	2007 40 8		165	TC 7-10 ZD	5-7 3-10 / St / ZD	5150732	1487 70 1	316	
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T 250 F	/ PP/GF	5286561	2007 36 3		166	TK 13-0	5-13 33,3/ St / ZD	5140535	1481 02 9	314	
T 250 KL	/ PP/GF	5682196	2007 44 4		166	TK 19-0	14-19 33,3/ St / ZD	5140658	1481 04 5	314	
T 250 OE	/ PP/GF	5246879	2007 28 7		168	TK 213	2-13 1,35/ St / ZD	5145936	1484 70 2	317	
T 250 RO-LGR	/ PP/GF	5303305	2007 65 7		166	TK 6-0	2-6 33,3/ St / ZD	5140474	1481 01 0	314	
T 250 RW	/ PP/GF	5286721	2007 55 4		166	TK FL G	0-24 M10/ St / ZD	5407140	1488 11 1	317	
T 250 UV RW	/ PP/GF	5441120	2007 41 8		166	TK GS M10 M12	M10 - M12 26/ St / ZD	5407102	1486 69 8	318	
T 350	/ PP/GF	5246824	2007 12 5		167	TK GS M4 M8	M4 - M8 19/ St / ZD	5407096	1486 69 4	318	
T 350 F	/ PP/GF	5286608	2007 37 1		167	TKA	25 79/ St / ZD	5407089	1486 68 2	318	
T 350 KL	/ PP/GF	5682202	2007 44 8		167	TKB 13	5-13 0,8/ St / ZD	5140771	1481 21 5	316	
T 350 OE	/ PP/GF	5246886	2007 30 3		169	TKB 19	14-19 0,8/ St / ZD	5140894	1481 23 1	316	
T 350 RO-LGR	/ PP/GF	5303312	2007 66 5		167	TKB 6	2-6 0,8/ St / ZD	5140719	1481 20 7	316	
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T 40	/ PP	5246756	2007 04 5	165	TKC 13-32	5-13 25-32 / St / ZD	5142935	1482 48 3	315		
T 40 F	/ PP	5286493	2007 32 0	165	TKC 19-20	14-19 17-20 / St / ZD	5143178	1482 60 2	315		
T 40 KL	/ PP	5441175	2007 43 2	165	TKC 19-25	14-19 23-25 / St / ZD	5143239	1482 61 0	315		
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T 40 RO-LGR	/ PP	5303244	2007 63 0	165	TKC 6-20	2-6 17-20 / St / ZD	5142638	1482 40 8	315		
T 40 RW	/ PP	5286622	2007 51 7	165	TKC 6-25	2-6 23-25 / St / ZD	5142690	1482 41 6	315		
T 40 UV RW	/ PP	5441069	2007 41 0	165	TKCI 12- 7	8,5-12,5 5,5-7 / St / ZD	5150312	1487 41 8	316		
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					TKCI 12-11	8,5-12,5 9,5-11 / St / ZD	5150435	1487 43 4	316		
					TKCI 12-14	8,5-12,5 12-14 / St / ZD	5150497	1487 44 2	316		
					TKCI 12-18	8,5-12,5 13-18 / St / ZD	5150558	1487 45 0	316		
					TKCI 12-24	8,5-12,5 19-24 / St / ZD	5150619	1487 46 9	316		
					TKCI 12-32	8,5-12,5 25-32 / St / ZD	5150671	1487 47 7	316		
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T 60 OE	/ PP	5246848	2007 23 9		168	TKCI 5-24	1,5-5 19-24 / St / ZD	5149774	1487 05 1	316	
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TKCI 7-7	5-7 5,5-7 / St / ZD	5149897	1487 20 5		316	TKS 13-37	5-13 35-37 / St / ZD	5143710	1483 12 9		315
TKCI 7-9	5-7 8-9,5 / St / ZD	5149958	1487 21 3		316	TKS 13-42	5-13 37-42 / St / ZD	5143772	1483 13 7		315
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TKCU 19-25	14-19 23-25 / St / ZD	5145097	1484 14 1		315	TKS 213-37	2-13 35-37 / St / ZD	5146117	1484 83 4		317
TKCU 19-32	14-19 25-32 / St / ZD	5145158	1484 16 8		315	TKS 213-42	2-13 37-42 / St / ZD	5146179	1484 84 2		317
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TKK13-240	5-13 240 / St / ZD	5141075	1481 45 2		314	U 35 GS	35 1500 / St / G	5027676	2003 27 3		189
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						VTEC EX PG13.5SW	Pg 13,5 Black / PA	5830290	2050 04 8		208
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						VTEC EX PG7 SW	Pg 7 Black / PA	5622819	2050 00 5		208
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				/100 pc.		VTEC EXL PG11 SW	Pg 11 Black / PA	5601210	2050 15 3		208
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UV 80 D	Concealed 102 / PS	5024378	2003 24 0		189	V-TEC L PG21 SGR	Pg 21 Silver grey / PA	5843191	2024 22 5		207
UV 80 FD	White / PS	5291909	2004 63 4		188	V-TEC L PG29 LGR	Pg 29 Light grey / PA	5839897	2024 34 9		207
UV 80 K	Concealed Black / PS	5020479	2003 11 2		187	V-TEC L PG29 MS	Pg 29 / CuZn / N	5841098	2085 79 8		235
UV 80 KSD	Concealed Red / PE	5032656	2003 33 3		190	V-TEC L PG29 SGR	Pg 29 Silver grey / PA	5843252	2024 23 3		207
UW AD	Concealed White / PS	5024132	2003 21 8		188	V-TEC L PG36 LGR	Pg 36 Light grey / PA	5839958	2024 35 7		207
UW ASD	Concealed Red / PE	5032595	2003 32 5		190	V-TEC L PG36 SGR	Pg 36 Silver grey / PA	5843313	2024 24 1		207
UWA	Concealed Cream / PS	5022633	2003 08 2		188	V-TEC L PG42 LGR	Pg 42 Light grey / PA	5840015	2024 36 5		207
						V-TEC L PG48 LGR	Pg 48 Light grey / PA	5840077	2024 37 3		207
VBX 25 M	Light grey / PP	5128052	2008 07 6		163	V-TEC L PG48 MS	Pg 48 / CuZn / N	5841210	2085 83 6		235
VBX 25 M 5	Light grey / PP	5128953	2008 44 0		163	V-TEC L PG7 LGR	Pg 7 Light grey / PA	5839538	2024 28 4		207
VBX 60 M	Light grey / PP	5126379	2008 11 4		163	V-TEC L PG7 MS	Pg 7 / CuZn / N	5840732	2085 72 0		235
VBX 60 M 5	Light grey / PP	5126430	2008 56 4		163	V-TEC L PG7 SGR	Pg 7 Silver grey / PA	5842897	2024 17 9		207
VBX KL25	Light grey / PA	5448990	2009 10 2		164	V-TEC L PG9 LGR	Pg 9 Light grey / PA	5839590	2024 29 2		207
VBX KL25	Light grey / PA	5448990	2009 10 2		171	V-TEC L PG9 MS	Pg 9 / CuZn / N	5840794	2085 73 9		235
VBX KL60	Light grey / PA	5449058	2009 11 0		164	V-TEC L PG9 SGR	Pg 9 Silver grey / PA	5842958	2024 18 7		207
VBX KL60	Light grey / PA	5449058	2009 11 0		171	V-TEC M KA M20	M20x1,5 Light grey / PA	5502456	2024 82 9		205
				/pc.		V-TEC PG11 LGR	Pg 11 Light grey / PA	5446897	2024 72 1		206
VBX MO	50 / ST / FS	5456018	2008 97 1		164	V-TEC PG11 MS	Pg 11 / CuZn / N	5190035	2085 62 3		235
						V-TEC PG11 SGR	Pg 11 Silver grey / PA	5160816	2022 62 1		206
						V-TEC PG13 LGR	Pg 13,5 Light grey / PA	5446958	2024 74 8		206
VTEC EX M12 SW	M12 x 1,5 Black / PA	5596295	2050 30 7	/100 pc.	209	V-TEC PG13 MS	Pg 13,5 / CuZn / N	5190097	2085 63 1		235
VTEC EX M16 SW	M16 x 1,5 Black / PA	5594857	2050 31 5		209	V-TEC PG13.5 SGRPg	13,5 Silver grey / PA	5160878	2022 64 8		206
VTEC EX M20 SW	M20 x 1,5 Black / PA	5594734	2050 32 3		209	V-TEC PG16 LGR	Pg 16 Light grey / PA	5447016	2024 75 6		206
VTEC EX M25 SW	M25 x 1,5 Black / PA	5594673	2050 33 1		209						
VTEC EX M32 SW	M32 x 1,5 Black / PA	5594611	2050 35 8		209						
VTEC EX M40 SW	M40 x 1,5 Black / PA	5315131	2050 36 6		209	V-TEC PG16 MS	Pg 16 / CuZn / N	5190158	2085 65 8		235

Type listing

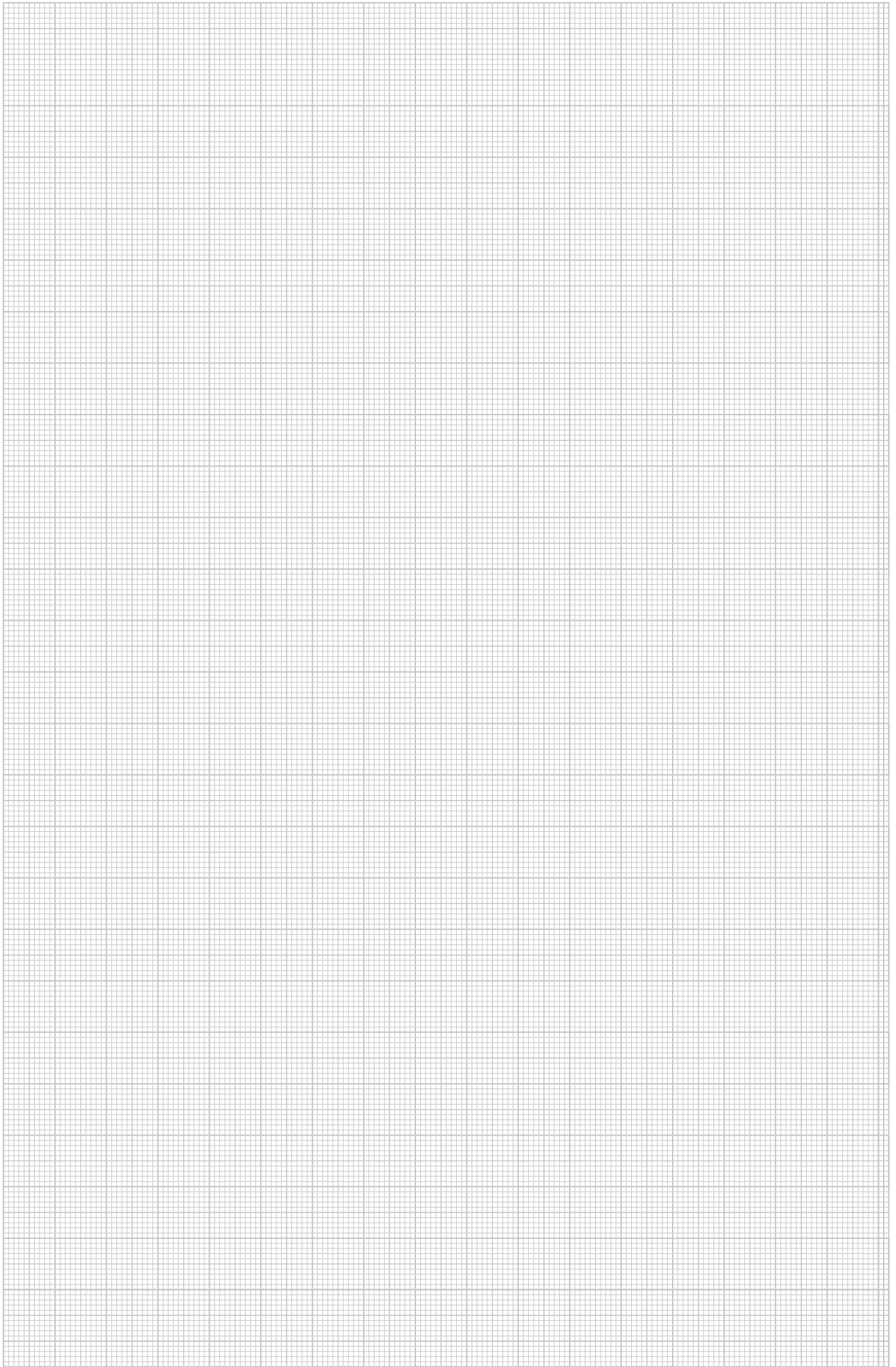
Structure of the EAN number: Country code **40**

Manufacturer code **1219** (for articles beginning with **0: 1010**)

Individual EAN-C **5647589**

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page	Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page
/100 pc.						/100 pc.					
V-TEC PG16 SGR	Pg 16 Silver grey/ PA	5160939	2022 65 6		206	V-TEC VM LM40 MS	M40 x 1,5/ CuZn / N	5810971	2086 14 1		234
V-TEC PG21 LGR	Pg 21 Light grey/ PA	5447078	2024 76 4		206	V-TEC VM LM50 MS	M50 x 1,5/ CuZn / N	5811152	2086 14 7		234
V-TEC PG21 MS	Pg 21/ CuZn / N	5448631	2085 66 6		235	V-TEC VM LM63 MS	M63 x 1,5/ CuZn / N	5811213	2086 15 3		234
						V-TEC VM12 EMV	M12 x 1,5/ CuZn / N	5655565	2086 20 3		236
V-TEC PG21 SGR	Pg 21 Silver grey/ PA	5160991	2022 66 4		206	V-TEC VM12 LGR	M12 x 1,5 Light grey/ PA	5533177	2022 86 2		204
V-TEC PG29 LGR	Pg 29 Light grey/ PA	5447139	2024 77 2		206	V-TEC VM12 MS	M12 x 1,5/ CuZn / N	5808992	2086 01 8		234
V-TEC PG29 MS	Pg 29/ CuZn / N	5448693	2085 67 4		235						
V-TEC PG29 SGR	Pg 29 Silver grey/ PA	5161059	2022 67 2		206	V-TEC VM12 SGRM12 x 1,5 Silver grey/ PA	5532637	2022 84 3		204	
V-TEC PG36 LGR	Pg 36 Light grey/ PA	5447191	2024 78 0		206	V-TEC VM12 SW	M12 x 1,5 Black/ PA	5534013	2022 88 3		204
V-TEC PG36 MS	Pg 36/ CuZn / N	5448754	2085 68 2		235	V-TEC VM16 EMV	M16 x 1,5/ CuZn / N	5655572	2086 20 7		236
						V-TEC VM16 EMV-K	M16x1,5/ CuZn / N	5655435	2086 16 5		236
V-TEC PG36 SGR	Pg 36 Silver grey/ PA	5161110	2022 68 0		206	V-TEC VM16 LGR	M16 x 1,5 Light grey/ PA	5533238	2022 86 4		204
V-TEC PG42 LGR	Pg 42 Light grey/ PA	5447252	2024 79 9		206	V-TEC VM16 MS	M16 x 1,5/ CuZn / N	5809234	2086 02 4		234
V-TEC PG42 MS	Pg 42/ CuZn / N	5448815	2085 69 0		235						
V-TEC PG42 SGR	Pg 42 Silver grey/ PA	5161172	2022 69 9		206	V-TEC VM16 SGRM16 x 1,5 Silver grey/ PA	5532699	2022 84 5		204	
V-TEC PG48 LGR	Pg 48 Light grey/ PA	5447313	2024 80 2		206	V-TEC VM16 SW	M16 x 1,5 Black/ PA	5535638	2022 88 5		204
V-TEC PG48 MS	Pg 48/ CuZn / N	5448877	2085 70 4		235	V-TEC VM20 EMV	M20 x 1,5/ CuZn / N	5655589	2086 21 1		236
						V-TEC VM20 EMV-K	M20x1,5/ CuZn / N	5655480	2086 16 9		236
V-TEC PG48 SGR	Pg 48 Silver grey/ PA	5161233	2022 70 2		206	V-TEC VM20 LGR	M20 x 1,5 Light grey/ PA	5533658	2022 86 6		204
V-TEC PG7 LGR	Pg 7 Light grey/ PA	5446774	2024 70 5		206	V-TEC VM20 MS	M20 x 1,5/ CuZn / N	5809418	2086 03 0		234
V-TEC PG7 MS	Pg 7/ CuZn / N	5189916	2085 60 7		235						
V-TEC PG7 SGR	Pg 7 Silver grey/ PA	5160694	2022 60 5		206	V-TEC VM20 SGRM20 x 1,5 Silver grey/ PA	5532750	2022 84 7		204	
V-TEC PG9 LGR	Pg 9 Light grey/ PA	5446835	2024 71 3		206	V-TEC VM20 SW	M20 x 1,5 Black/ PA	5535690	2022 88 7		204
V-TEC PG9 MS	Pg 9/ CuZn / N	5189978	2085 61 5		235	V-TEC VM25 EMV	M25 x 1,5/ CuZn / N	5655596	2086 21 5		236
						V-TEC VM25 EMV-K	M25x1,5/ CuZn / N	5655497	2086 17 3		236
V-TEC PG9 SGR	Pg 9 Silver grey/ PA	5160755	2022 61 3		206	V-TEC VM25 LGR	M25 x 1,5 Light grey/ PA	5533719	2022 86 8		204
V-TEC RA		5033912	3010 20 1	/pc.	209	V-TEC VM25 MS	M25 x 1,5/ CuZn / N	5809593	2086 03 6		234
		5034278	3010 27 5		209	V-TEC VM25 SGRM25 x 1,5 Silver grey/ PA	5532811	2022 84 9		204	
V-TEC RA SET					209	V-TEC VM25 SW	M25 x 1,5 Black/ PA	5535751	2022 88 9		204
V-TEC ST15	M12 15	5034032	3010 23 6		209	V-TEC VM32 EMV	M32 x1,5/ CuZn / N	5655602	2086 21 9		236
V-TEC ST20	M16 20	5034094	3010 24 4		209	V-TEC VM32 EMV-K	M32x1,5/ CuZn / N	5655503	2086 17 7		236
V-TEC ST24	M20 24	5034155	3010 25 2		209	V-TEC VM32 LGR	M32 x 1,5 Light grey/ PA	5533771	2022 87 0		204
V-TEC ST29	M25 29	5034216	3010 26 0		209						
/100 pc.						V-TEC VM32 MS	M32 x 1,5/ CuZn / N	5809777	2086 04 2		234
V-TEC VM L12 LGR	M12 x 1,5 Light grey/ PA	5004127	2022 94 3		205	V-TEC VM32 SGRM32 x 1,5 Silver grey/ PA	5532934	2022 85 1		204	
V-TEC VM L12 SGR	M12 x 1,5 Silver grey/ PA	5003786	2022 92 1		205	V-TEC VM32 SW	M32 x 1,5 Black/ PA	5538219	2022 89 1		204
V-TEC VM L12 SW	M12 x 1,5 Black/ PA	5004363	2022 96 4		205	V-TEC VM40 EMV	M40 x 1,5/ CuZn / N	5655619	2086 22 3		236
V-TEC VM L16 LGR	M16 x 1,5 Light grey/ PA	5004141	2022 94 5		205						
V-TEC VM L16 SGR	M16 x 1,5 Silver grey/ PA	5003823	2022 92 4		205	V-TEC VM40 EMV-K	M40x1,5/ CuZn / N	5655534	2086 18 1		236
V-TEC VM L16 SW	M16 x 1,5 Black/ PA	5004370	2022 96 6		205	V-TEC VM40 LGR	M40 x 1,5 Light grey/ PA	5533832	2022 87 2		204
V-TEC VM L20 LGR	M20 x 1,5 Light grey/ PA	5004158	2022 94 7		205						
V-TEC VM L20 SGR	M20 x 1,5 Silver grey/ PA	5003885	2022 92 6		205	V-TEC VM40 MS	M40 x 1,5/ CuZn / N	5809890	2086 04 8		234
V-TEC VM L20 SW	M20 x 1,5 Black/ PA	5004387	2022 96 8		205	V-TEC VM40 SGRM40 x 1,5 Silver grey/ PA	5532996	2022 85 3		204	
V-TEC VM L25 LGR	M25 x 1,5 Light grey/ PA	5004202	2022 94 9		205						
V-TEC VM L25 SGR	M25 x 1,5 Silver grey/ PA	5003908	2022 92 8		205	V-TEC VM40 SW	M40 x 1,5 Black/ PA	5538332	2022 89 3		204
V-TEC VM L25 SW	M25 x 1,5 Black/ PA	5004424	2022 97 0		205	V-TEC VM50 EMV	M50 x 1,5/ CuZn / N	5655626	2086 22 7		236
V-TEC VM L32 LGR	M32 x 1,5 Light grey/ PA	5004240	2022 95 1		205	V-TEC VM50 EMV-K	M50x1,5/ CuZn / N	5655541	2086 18 5		236
V-TEC VM L32 SGR	M32 x 1,5 Silver grey/ PA	5003946	2022 93 0		205	V-TEC VM50 LGR	M50 x 1,5 Light grey/ PA	5533894	2022 87 4		204
V-TEC VM L32 SW	M32 x 1,5 Black/ PA	5004486	2022 97 2		205						
V-TEC VM L40 LGR	M40 x 1,5 Light grey/ PA	5004257	2022 95 3		205	V-TEC VM50 MS	M50 x 1,5/ CuZn / N	5810070	2086 05 4		234
V-TEC VM L40 SGR	M40x1,5 Silver grey/ PA	5004004	2022 93 3		205	V-TEC VM50 SGRM50 x 1,5 Silver grey/ PA	5533054	2022 85 5		204	
V-TEC VM L40 SW	M40 x 1,5 Black/ PA	5004493	2022 97 4		205						
V-TEC VM L50 LGR	M50 x 1,5 Light grey/ PA	5004264	2022 95 5		205	V-TEC VM50 SW	M50 x 1,5 Black/ PA	5538455	2022 89 5		204
V-TEC VM L50 SGR	M50x1,5 Silver grey/ PA	5004028	2022 93 5		205	V-TEC VM63 EMV	M63 x 1,5/ CuZn / N	5655657	2086 23 1		236
V-TEC VM L50 SW	M50 x 1,5 Black/ PA	5004509	2022 97 6		205						
V-TEC VM L63 LGR	M63 x 1,5 Light grey/ PA	5004301	2022 95 7		205	V-TEC VM63 EMV-K	M63x1,5/ CuZn / N	5655558	2086 18 9		236
V-TEC VM L63 SGR	M63x1,5 Silver grey/ PA	5004066	2022 93 7		205	V-TEC VM63 LGR	M63 x 1,5 Light grey/ PA	5533955	2022 87 6		204
V-TEC VM L63 SW	M63 x 1,5 Black/ PA	5004547	2022 97 8		205						
V-TEC VM LM12 MS	M12 x 1,5/ CuZn / N	5810254	2086 11 1		234	V-TEC VM63 MS	M63 x 1,5/ CuZn / N	5810131	2086 06 0		234
V-TEC VM LM16 MS	M16 x 1,5/ CuZn / N	5810377	2086 11 7		234						
V-TEC VM LM20 MS	M20 x 1,5/ CuZn / N	5810438	2086 12 3		234						
V-TEC VM LM25 MS	M25 x 1,5/ CuZn / N	5810735	2086 12 9		234						
V-TEC VM LM32 MS	M32 x 1,5/ CuZn / N	5810858	2086 13 5		234						

Type	Dimensions/Colour/Div.	EAN-C.	Art. no.	Price	Page					
V-TEC VM63 SGRM63 x 1,5 Silver grey / PA		5533115	2022 85 7	/100 pc.	204					
V-TEC VM63 SW M63 x 1,5 Black / PA		5538516	2022 89 7		204					
W-Cut		5647447	5303 76 7	/pc.	299					
WN 7855 A 10	10 4000/ St / GTP	5029113	1043 19 6	/100 pc.	285					
WN 7855 A 12	12 2000/ St / GTP	5029175	1043 22 6		285					
WN 7855 A 14	14 2000/ St / GTP	5029236	1043 24 2		285					
WN 7855 A 2	2 4000/ St / GTP	5028451	1043 01 3		285					
WN 7855 A 2.5	2,5 4000/ St / GTP	5028512	1043 02 1		285					
WN 7855 A 4	4 4000/ St / GTP	5028697	1043 06 4		285					
WN 7855 A 4.5	4,5 4000/ St / GTP	5028758	1043 07 2		285					
WN 7855 A 5	5 4000/ St / GTP	5028819	1043 08 0		285					
WN 7855 A 6	6 4000/ St / GTP	5028871	1043 10 2		285					
WN 7855 A 7	7 4000/ St / GTP	5028932	1043 12 9		285					
WN 7855 A 8	8 4000/ St / GTP	5028994	1043 14 5		285					
WN 7855 A 9	9 4000/ St / GTP	5029052	1043 16 1		285					
WN 7855 B 10	10 2400/ St / GTP	5030133	1044 19 2		286					
WN 7855 B 12	12 1800/ St / GTP	5030195	1044 21 4		286					
WN 7855 B 14	14 1200/ St / GTP	5030256	1044 23 0		286					
WN 7855 B 16	16 1200/ St / GTP	5030317	1044 25 7		286					
WN 7855 B 3	3 5000/ St / GTP	5029595	1044 04 4		286					
WN 7855 B 4	4 5000/ St / GTP	5029717	1044 06 0		286					
WN 7855 B 4.5	4,5 5000/ St / GTP	5029779	1044 07 9		286					
WN 7855 B 5	5 5000/ St / GTP	5029830	1044 08 7		286					
WN 7855 B 6	6 5000/ St / GTP	5029892	1044 10 9		286					
WN 7855 B 7	7 4800/ St / GTP	5029953	1044 12 5		286					
WN 7855 B 8	8 4800/ St / GTP	5030010	1044 14 1		286					
WN 7855 B 9	9 2400/ St / GTP	5030072	1044 17 6		286					



Terms and conditions of sale and delivery

of OBO BETTERMANN GmbH & Co. KG, OBO BETTERMANN Projekt und Systemtechnik GmbH and OBO Befestigungselemente GmbH, Menden.

1. All our supplies and services shall be governed exclusively by the following terms and conditions, including our additional terms and conditions for cable tray business transactions. Any terms and conditions of business and purchasing of the customer shall be valid only if we have acknowledged them in writing. Our quotations are without engagement; they are mere invitations to submit contract offers. Any and all transactions and agreements, including those entered into by our employees and agents shall only be binding upon our written confirmation or invoicing. The foregoing provision shall also apply to any modifications of the agreed formal requirements.

2. The documents and data pertaining to the quotation, such as illustrations, brochures, drawings, dimensions, loading capacity values and weight details are approximate only, unless they are expressly stipulated to be binding.

Samples are non-binding samples for inspection. Any purchase according to sample will be subject to customary deviations and deviations resulting from normal production processes. The properties of the sample shall be no guaranteed quality of the purchase object unless expressly stated otherwise in the confirmation of order. Samples must be returned to us at the latest within four weeks in perfect condition. If they are not returned within this period in proper condition, we shall be entitled to charge the purchase price for the sample in accordance with our current price list. All information on our products, in particular the illustrations, drawings, weight, dimension and performance data included in our quotations and printed matter shall be regarded as approximate average values and shall not represent any quality guarantee.

With regard to products made according to customer drawings, samples and other instructions of the customer, we will not provide any warranty nor assume any liability for the due and proper functioning of the product or for any other defects if and to the extent they are based upon the customer's specifications. The customer shall indemnify us from any third party claims, including claims for product liability as may be asserted against us for damages resulting from the products unless we have caused such damages by intent or gross negligence. The customer shall warrant that the manufacture and supply of products made in accordance with his instructions will not infringe any proprietary rights of third parties. Should any proprietary rights be asserted against us, we shall be entitled, without any legal review of the third party claims, to withdraw from the contract after hearing the customer, unless the third party withdraws the claims asserted against us under its proprietary rights within eight days by written declaration. The customer shall compensate us for any damage sustained as a result of the assertion of proprietary rights. In case of withdrawal, the work we have carried out so far shall be remunerated. Further rights under the statutory provisions shall not be affected thereby.

Any moulds, tools and design data produced by us for the execution of the order shall be our exclusive property. Unless expressly agreed otherwise, the customer shall not have any claims thereto, even if he has contributed to the costs of producing any such moulds, tools and design data.

3. The packing, shipping route and means of transportation shall be left to our discretion in the absence of any other agreements. They shall be charged at their cost price. We will take back undamaged cases, when being returned carriage paid, at 2/3 of the amount invoiced. The one-way or pool pallets used for transport shall be either exchanged upon taking delivery or returned. The smallest packing units stocked and listed may not be broken up for rationalisation reasons. In case of orders for different quantities, the nearest packing unit will be supplied.

We reserve the right to deviate from the agreed delivery quantity, in particular in the case of custom-made products, to a customary extent or in conformity with national or international standards. In case of a demand for adhering to a precise quantity, an express reference is necessary and subject to confirmation.

Master and call orders shall oblige the customer to accept the total quantity on which the master/call order is based. Where no particular call orders are specified in the contract, the total quantity of the master call order must be called within twelve months. If the customer fails to adhere to call deadlines, we shall be entitled to deliver and charge the total quantity in full after four weeks from written notice with reference to the consequences of any failure to call. Our rights arising from any default of the customer shall not be affected thereby.

4. Unless otherwise agreed, our prices are quoted ex works and do not include packing and insurance. The value added tax at the rate applicable on the date of dispatch will be added to our prices. The purchaser shall ensure the correctness of his VAT identification number, which he must notify to us immediately without being asked. He shall undertake to inform both us and the competent domestic tax authority without delay of any change in his name, address and VAT identification number.

Delivery shall be franco domicile within Germany, i.e. carriage and packing prepaid, if the net order value is in excess of € 1,200. For small orders below € 100 (net excluding value added tax), we shall invoice a lower quantity surcharge of € 10 (net) per order. Upon transfer of our supplies and services to a carrier or forwarding agent, at the latest upon their leaving our warehouse or supply plant, the risk shall pass to the recipient, even in case of deliveries free place of destination.

5. Delivery periods and delivery deadlines shall be approximate only unless we have expressly stated in writing that they are binding. Delivery periods shall commence upon receipt of our confirmation of order, but not before clarification of all execution details, ex place of delivery. The customer shall only be entitled to withdraw from the contract after having granted a reasonable extension of time. We reserve the right to make partial deliveries. Claims for damages and reimbursement of expenses - for any reason whatsoever - shall be subject to the provisions set out in article 10.

In the event of any circumstances that are beyond our control within the scope of normal operating risks and obstruction or make impracticable any delivery, we shall be entitled to suspend delivery by the duration of such obstruction plus a reasonable start-up period or to withdraw from the contract for the part not yet fulfilled. The purchaser can demand a statement from us as to whether we wish to deliver within a reasonable period or withdraw. If we fail to make such a statement, the purchaser may withdraw. Our notice to the purchaser shall be deemed to be sufficient evidence that we have been prevented from delivering.

Delivery time is extended in case of such events as labour disputes, strikes and lockouts, orders from the authorities, difficulties with the procurement of materials, spoiled work or post-processing, shutdowns and staff shortage as well as shortage of means of transport, and general occurrence of unforeseen events beyond our scope of influence, by the length of duration of these events.

6. Payments shall be made upon receipt of invoice less a 3% cash discount for payment within 10 days or net after 30 days from date of invoice. Erection work and all paid labour work must be paid within 10 days without deduction of any cash discount. In case of non-cash payments, the date of the credit note will be deemed to be the date of receipt of payment. Payments received shall always be credited first against costs, then against interest and then against the earliest liability. Cheques and bills of exchange shall only be accepted as means of payment. Any payment by bill of exchange shall be subject to a prior separate and written agreement, whereby all bill costs shall be borne by the customer and no discount can be granted. The customer shall have no right to refuse performance and no right of retention - for any legal reason whatsoever - unless we have acknowledged his claim beforehand in writing or his claim has the force of law.

The customer shall only be entitled to set off claims which have the force of law, are undisputed or acknowledged by us in writing.

7. We shall retain title to the goods supplied by us until all our claims arising from our business transactions with the customer have been satisfied - current account clause - and all bills of exchange or cheques submitted for payment by the customer have been honoured.

Any treatment or processing of goods subject to our retention of title (reserved goods) shall be carried out for us as the manufacturer in accordance with § 950 BGB (German Civil Code) without any obligation on our part. If our reserved goods are to be regarded as the main item or the main item is owned by the customer, full title to the new item shall pass to us when it is created. In other cases, we shall acquire a co-ownership interest in the new item in the proportion of the sales value of our reserved goods to the other goods used for the new item at the time of processing, intermingling, joining or mixing. The customer shall take custody of our ownership or co-ownership interest free of charge; it shall be treated as reserved goods.

Before transfer of title, our goods shall be neither pledged nor assigned as collateral without our prior consent. In addition, any third party rights or pledges shall be notified to us immediately and we shall be given all details and provided all documents necessary for intervention; otherwise the customer must bear our loss. In the latter case, our total claims against the customer shall also be immediately payable.

The customer shall be entitled to sell or to use our reserved goods in the ordinary course of business subject to the condition that the relevant claims are transferred in accordance with article 8 below. This right shall lapse upon the customer's failure to promptly meet his payment obligations towards us or in the event of any cheque or bill protests or his suspension of payments. In such cases, we shall be entitled to take back the goods provisionally at

the customer's expense and to sell them at our duly exercised discretion after a corresponding reminder has been sent to the customer. We will then pass the due amount to the customer's credit.

8. If our goods are sold before payment of our claim, the customer shall be obliged to retain our title against his purchaser until the goods have been paid for in full by the purchaser. The claim arising against the purchaser from such resale as well as any other ancillary rights or security interests of the customer resulting from the sale and any claims for compensation in case of damage to or destruction of our reserved property, including the relevant insurance sum shall hereby be assigned to us. We hereby accept this assignment. Where our co-ownership interest is sold, the relevant claims shall be assigned in the amount corresponding to the value of our interest.

The customer shall, at our request, inform us of his purchasers, notify them of the assignment made and provide us with any and all documents required to assert our rights.

As long as the customer meets his contractual obligations without delay, he shall be authorised to collect the claims assigned. He shall keep the amounts collected on our behalf separately and remit them to us immediately as soon and as far as our claims become due. The authorisation shall lapse in case of any cheque or bill protest of the customer or his definite suspension of payments. The customer shall bear the costs incurred for any action taken against third parties and shall advance them upon request.

If the security provided to us by the retention of title and the anticipatory assignment should exceed the claims to be secured by more than 20%, we shall, at the customer's request, release paid supplies of our choice. Upon payment of all our claims by the customer, assigned claims shall pass to the customer.

9. Any complaints for obvious defects regarding the quantity or quality of our supplies and services that are identifiable upon careful inspection shall without delay, but at the latest within the period of limitation of eight days from arrival of the goods at the address of the customer or the person appointed by him, be notified in writing to us, not to our representatives. Slight deviations in dimensions and designs within the scope of defined technical tolerances shall not give rise to any right of complaint. Any rejected goods may only be returned to us with our prior written authorisation.

In case of justified complaints within the prescribed period, we shall, at our option, take remedial action by way of subsequent performance, by rectifying the defect, supplying non-defective goods or providing a credit note for the lower value calculated.

We shall be entitled to refuse subsequent performance in accordance with the statutory provisions. If we refuse subsequent performance, if any subsequent performance remains unsuccessful or if the customer cannot be reasonably expected to accept any subsequent performance, the latter shall be entitled to withdraw from the contract in compliance with the provisions of the following sentences. The customer shall only be entitled to withdraw from the contract - where a withdrawal is not excluded by law - upon the unsuccessful expiry of a reasonable period for subsequent performance set by him, unless this period was not required under the statutory provisions (§§ 281 para. 2, 323 para. 2, 440, 441 para. 1 BGB (German Civil Code)).

In case of his withdrawal, the customer shall be liable for any deterioration, destruction or loss of use resulting from any negligence or intent on his part. Any claims for damages or reimbursement of expenses of the customer shall be subject to the provisions set out in article 10.

In the case of any fraudulent concealment of a defect or in the case of any provision of a quality guarantee for the goods sold at the time of the passing of risk within the meaning of § 444 BGB (German Civil Code) (seller's declaration that the object sold has a specific property at the time of the passing of risk and that the seller, regardless of any fault on his part, intends to be answerable for any and all consequences resulting from its absence), the customer's rights shall be exclusively governed by the statutory provisions.

We shall - in addition to the statutory grounds for refusal - also be entitled to refuse subsequent performance if and as long as the customer fails to send us, at our request, the rejected goods or a sample thereof; the customer shall have no right of withdrawal for any such refusal. We may further refuse any subsequent performance if the goods concerned have been altered or modified without our consent unless the customer can prove that the defect was not caused by such alteration or modification.

The limitation period for any claims arising from defects shall be one year; in the case of goods which have been used in accordance with their intended purpose for a building and have caused its defectiveness, the limitation period shall be two years. The provisions of §§ 478, 479 BGB (German Civil Code) on recourse in the chain of suppliers shall not be affected thereby.

10. In the case of a pre-contractual, contractual or non-contractual breach of duty, including unsatisfactory delivery, tortious conduct and producer's liability, we shall only be liable for compensatory damages and reimbursement of expenses - subject to further contractual or statutory liability requirements - in the case of intent, gross negligence or slightly negligent breach of a material contractual duty (contractual duty the infringement of which jeopardises the fulfilment of the object of the contract). However - except in the case of intent - our liability shall be limited to the typical contractual damage that was foreseeable at the time the contract was entered into. The purchaser shall not be permitted to make a claim for expenses incurred in vain.

Except for any breach of material duties, our liability for slight negligence shall be excluded, but in any case be limited to the amount of the purchase price.

Any claim asserted by the customer or a third party for payment of a contractual penalty shall be excluded.

With regard to damages caused by delay, we shall only be liable for slight negligence up to the amount of 5% of the purchase price agreed with us.

The exclusions and limitations of liability set forth above shall not apply in the event that a guarantee is given with respect to the quality of the object sold within the meaning of § 444 BGB (German Civil Code) if a defect is fraudulently concealed or in the event of injury to life, physical injury or injury to health, or strict liability under the German Product Liability Act.

Any and all claims for damages against us, for any legal reason whatsoever, shall become statute-barred at the latest after one year from delivery of the goods to the customer, in the case of tortious liability from the time of knowledge, or grossly negligent ignorance, of the circumstances giving rise to the claim and the person liable to pay damages. This provision shall not apply in the case of liability for intent and in the event that a guarantee is given for the quality of the object sold, in the case of fraudulent concealment of a defect or in the event of injury to life, physical injury or injury to health, or strict liability under the German Product Liability Act. Any shorter limitation periods shall take precedence.

11. We shall be entitled to process and store any customer data obtained with regard to or in connection with the business relationship in accordance with the German Federal Data Protection Act, irrespective of whether such data is provided by the purchaser himself or by any third parties.

12. Place of performance for delivery and payment is Menden/Sauerland. The court of competent jurisdiction for any and all disputes, including disputes with regard to bills of exchange and cheques, is the Local Court (Amtsgericht) of Menden or, at our option, the District Court (Landgericht) of Arnsberg, irrespective of the value of the object in dispute. We shall, however, also be entitled to take legal proceedings against the customer at the place of his registered office.

German law shall be exclusively applicable. The application of international purchase laws is hereby excluded.

Should, for any reason whatsoever, individual provisions of our terms and conditions of sale and delivery be invalid, the validity and binding nature of the other provisions shall not be affected thereby. The customer agrees, that the invalid provision shall be replaced by a valid provision that comes as close as possible to the economic meaning of the invalid provision.

13. The prices of products made of brass and copper are subject to certain fluctuations that are based on the relevant DEL listings. The prices of our brass articles are based on a DEL listing of € 150 for Ms 58, those of our copper products on a DEL value for electrolyte copper of € 200.

In case of any increase or reduction in these prices by more than € 15, a five per cent surcharge or deduction shall be made for each 15 points. The calculation of any such surcharges or deductions shall be based on the DEL listing of the date of our receipt of the order.

Valid from August 2004



QR Code

With the QR Code you have direct access to our products on the Internet.

You can find further information on the QR Code at www.obo-bettermann.com.

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