Glenair®

High-Reliability Power Connectors for Railway Applications

- *IRT Series Rectangular Multipole High Voltage*
- *ITS 901 Reverse Bayonet Multi Pole Medium Voltage*
- *ITS 500 Reverse Bayonet Single Pole High Voltage*
- *UJ Series Connection System*

United States ■ United Kingdom ■ Germany ■ France ■ Nordic ■ Italy ■ Spain ■ Japan

First Edition ■ May 2011

Now Arriving...

More Options Than Ever Before!

Glenair Series ITS
Reverse Bayonet Connectors

Glenair®

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High-Reliability Power Connectors for Railway Applications

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Glenair®

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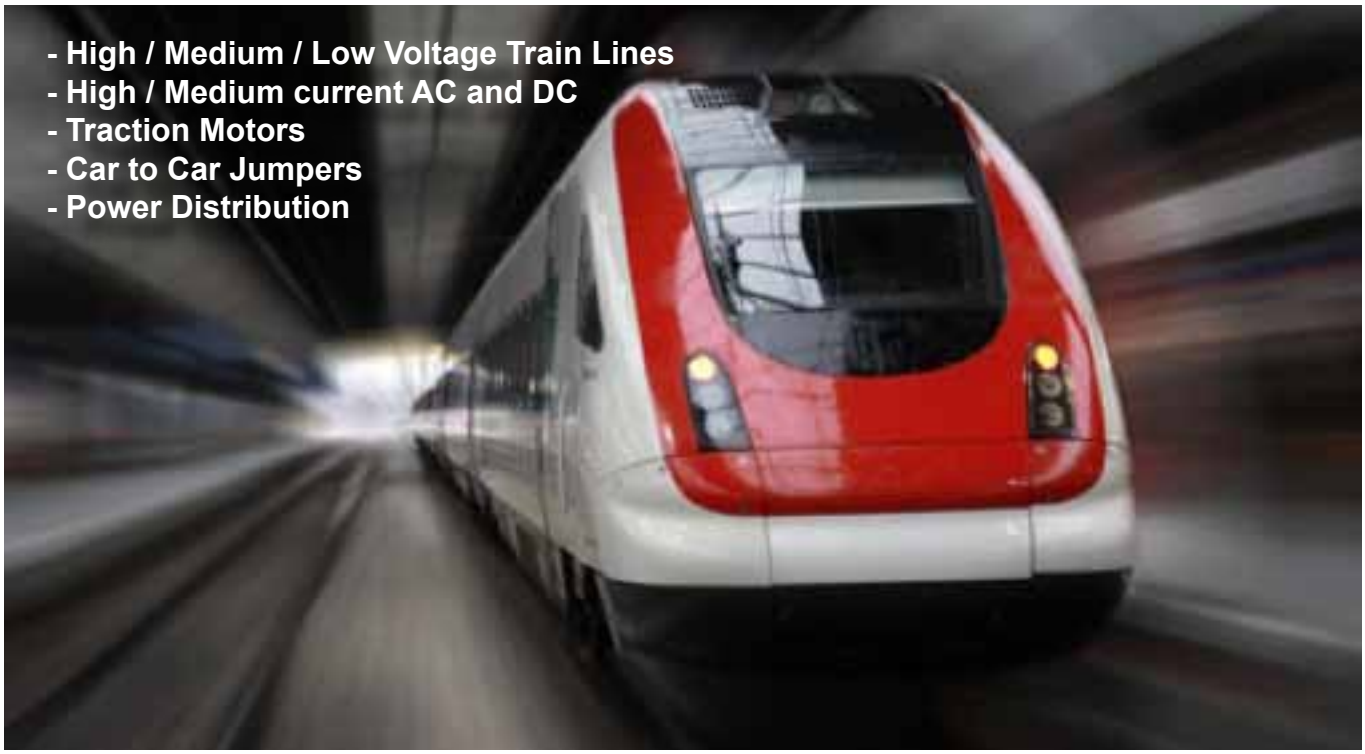
Glenair Power Connectors
Introduction



IRT Series Power Connectors

Connection of power cables in rolling stock is a critical application.
Beyond specific parameters like voltage, current, or watertight sealing, other application requirements must be considered: environment and operating conditions, robustness, handling, and other customer specifications.
The IRT connector series is one of the most popular connection systems used around the world, and is able to satisfy all of the common parameters from different railway authorities.
Glenair is able to develop customized connectors for specific applications, certifying the products according to your unique requirements.

Application
To select the right IRT interconnection system, consider the following parameters:

Electrical Data:
- Working Voltage
- Working Current and Max Current applicable
- Frequency
- Insulation Resistance

Mechanical Data:
- Mating Cycles requested
- Area were the connection is located

Enviromental Data:

- Working Temperature
- Shock and Vibration
- Water Ingress Protection
- Corrosion Resistance
- Applicable Specs

The Cable's choice is strictly related to the above data.
Square section, outer diameter of the conductor and the isolator are necessary to define contact characteristics and connector accessory specifications in order to guarantee watertightness and clamp strength.

The cable chosen defines:

- Type of contact (cable's section – power conductor)
- Type of connector (working voltage – number of contacts)
- Type of clamp (external diameter of the connector – setting in the application)

A schematic of the basic characteristics of the Power connectors can be a useful guide in the passage from the wires to the connector.

Connector Series	Contacts Number				Cable Section
	1	2	3	4	
UJ Connectors	X	X	X		10 - 240 mmq (AWG8 - 444MCM)
ITS 500 Connectors	X	X	X		95 - 240 mmq (AWG3/0 - 535MCM)
ITS 901 Connectors		X	X	X	35 - 120 mmq (AWG4 - 262MCM)
IRT Connectors			X	X	35 - 185 mmq (AWG4 - 373MCM)

Glenair is here to help you choose catalog parts for your application, or to design a specific solution to your unique power connector application.

Glenair®

IRT Series
Rectangular Multi Pole Power Connector
Worldwide Applications

Los Angeles Metro: Transportation for a City in Motion

Los Angeles, California is the second most populous city in the United States, and is a world center of business, international trade, entertainment, culture, media, fashion, science, technology, and education. Los Angeles has been ranked the third richest city and fifth most powerful and influential city in the world, behind only New York City in the U.S.

With some 38 million residents living and working in L.A., The Los Angeles Metropolitan Transit Authority (Metro) has the formidable task of helping people get around the busy city. The Metro Rail System opened in 1990, and now comprises five lines, including two heavy rail subway lines and three light rail lines totalling 79.1 miles (127.3 km) of rail, 70 stations, and over 350,000 daily weekday boardings as of September 2010.

Metro's heavy gauge subway trains are A650's built by AnsaldoBreda in Italy. They utilize standard gauge track and are powered by third rail to General Electric tracion motors, and typically run in six-car consists.

A Metro Red Line train departing from the Wilshire/ Vermont Station

Whether you're commuting to work in Los Angeles' Downtown financial district, or enjoying L.A.'s thriving nightlife on a night out at Universal CityWalk, the Metro can take you there. Glenair connectors and interconnect systems are integral to the AnsaldoBreda A650 subway train that keeps Los Angeles in motion with modern style and efficiency.

A650s are equipped with a host of state-of-the-art features for safety, efficiency, and passenger comfort, including automatic train control, air conditioning, emergency intercoms, wheelchair spaces and emergency braking. Each A650 is equipped with 4 abreast style (club) seating, maps of the line, bike racks, P.A. and climate control. In the operators panel, there is a combined power handle for throttle and dynamic braking.

The Metro Los Angeles subway train cars are manufactured by AnsaldoBreda.

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IRT Series
Rectangular Multi Pole Power Connector
Technical Characteristics

The Glenair IRT series is a rectangular power connector for harsh environmental conditions.
Available with three, four and six contacts, typical for traction motor applications.
Suitable for single cables AWG 4 – 373MCM (35 to 185 mmq).
Working voltage up to 3000 Vcc.

Two mating systems offered:
- Screws, for light weight and reduced dimensions
- Lever system with secondary lock, easy to use in difficult positions.

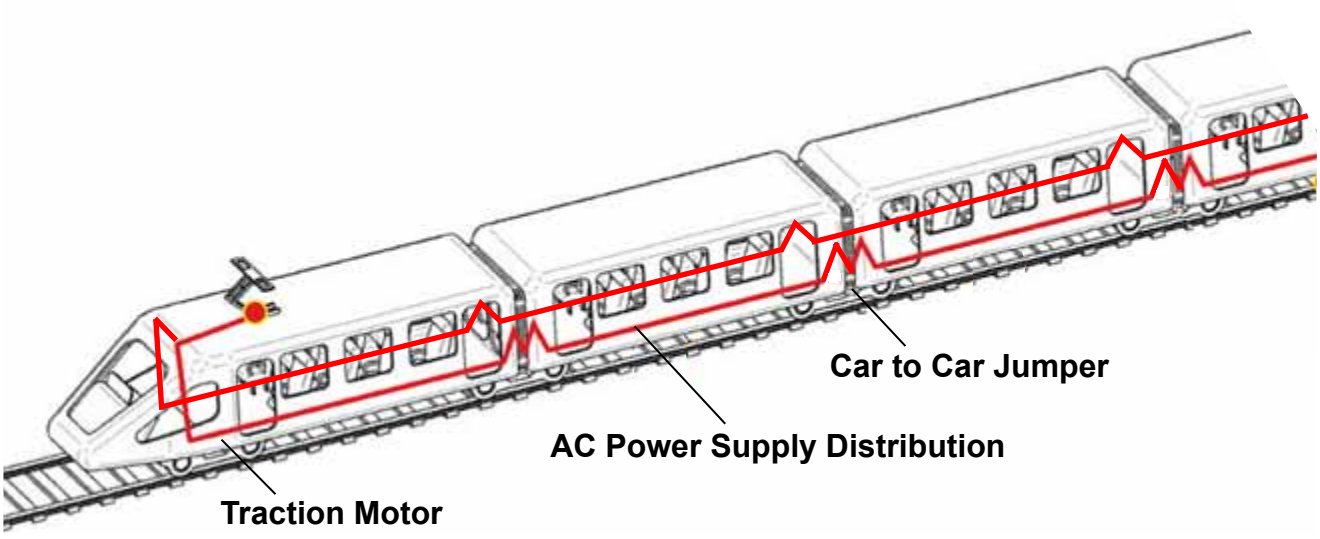
The IRT Series is suitable for separated power cables, with or without screen, ground body available with a copper plait (not supplied with the connector).

Available with three different cable backend styles:
- Metallic Gland
- Clamp with Strain Relief
- Screen EMC Gland

IRT series connectors meet the most important rail requirements and specifications.

Plug Connector

Receptacle Connector

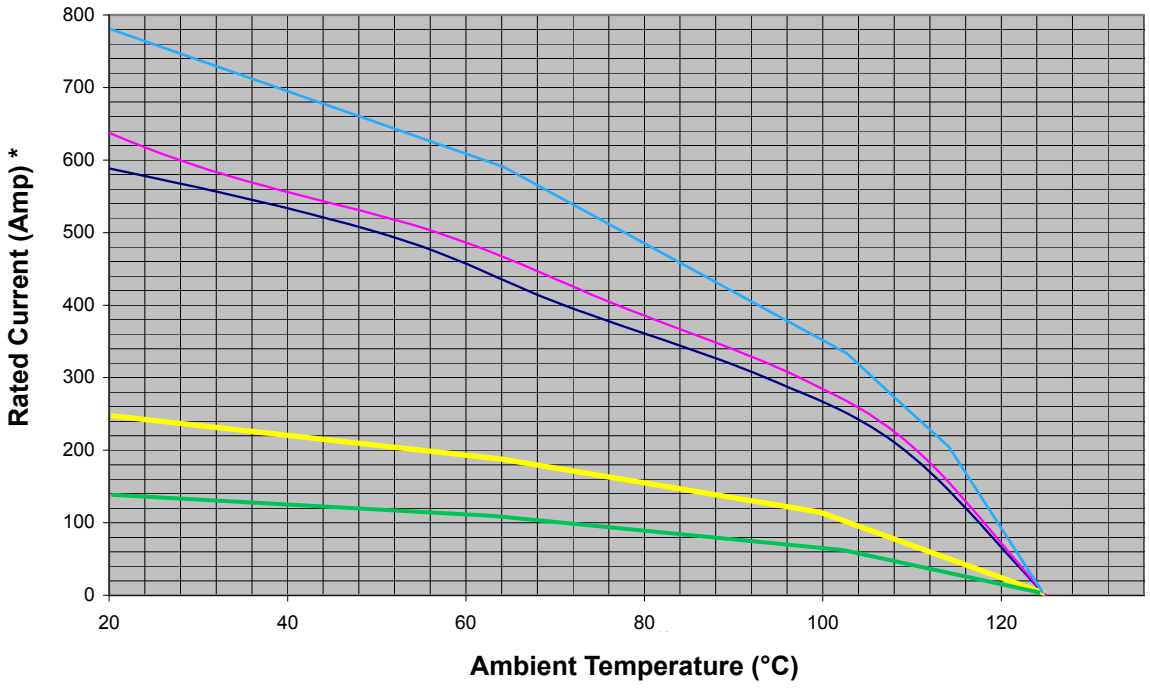


IRT Series
Rectangular Multi Pole Power Connector
Technical Characteristics

Procedures Table

Description	Procedure
Electrical Characteristics	CEI EN 50124 and CEI EN 60077
Environmental Conditions	CEI EN 50125
Water Protection	CEI EN 60529
Shock and Vibration	CEI EN 61373
Corrosion Protection	VG 95210 - 2
Fire Protection	UNI CEI 1170 - 3
Mating Cycles	VG96929

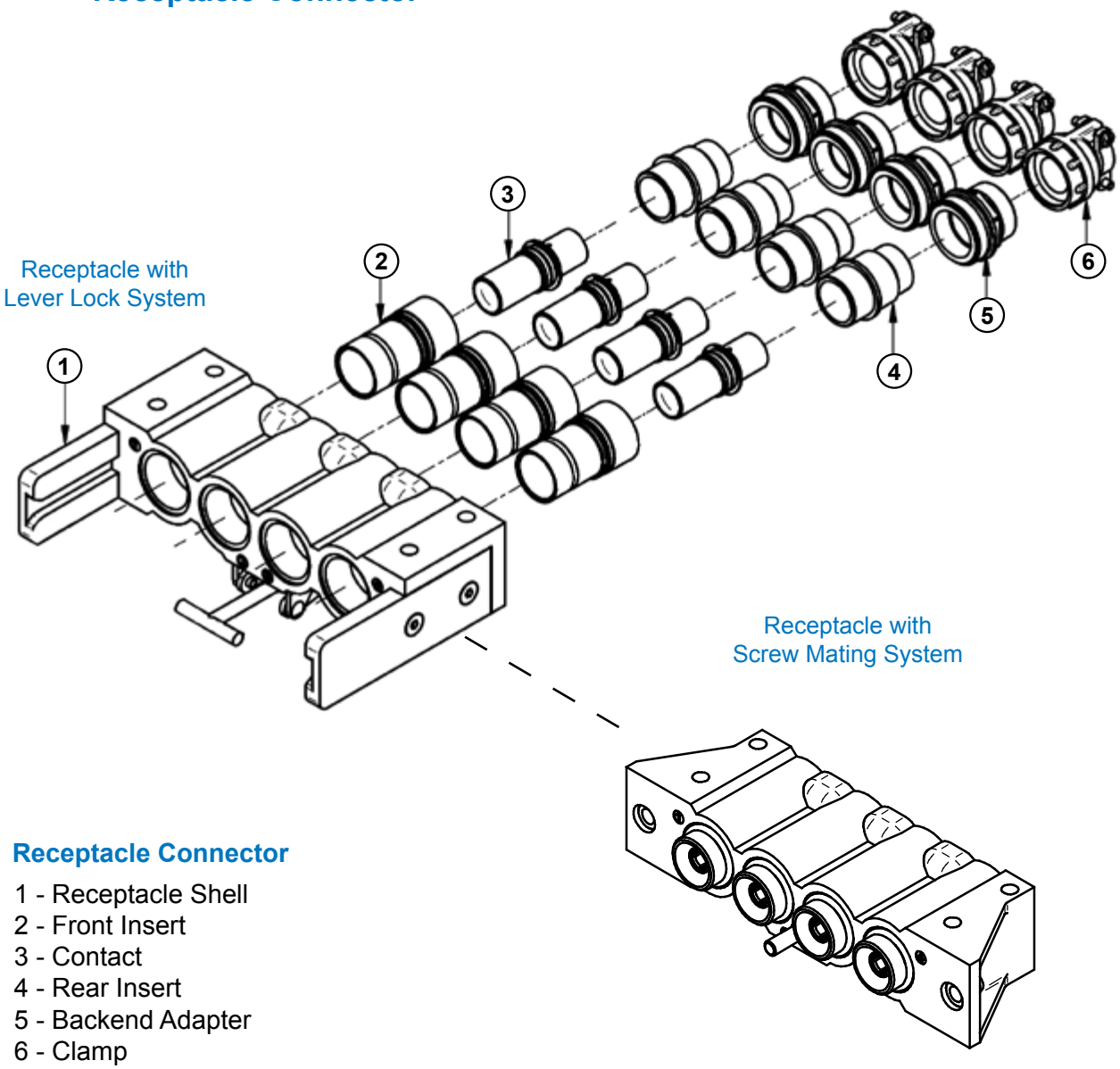
Rated Current Graphic



* According with Cables Section

IRT Series Components Exploded View

Receptacle Connector



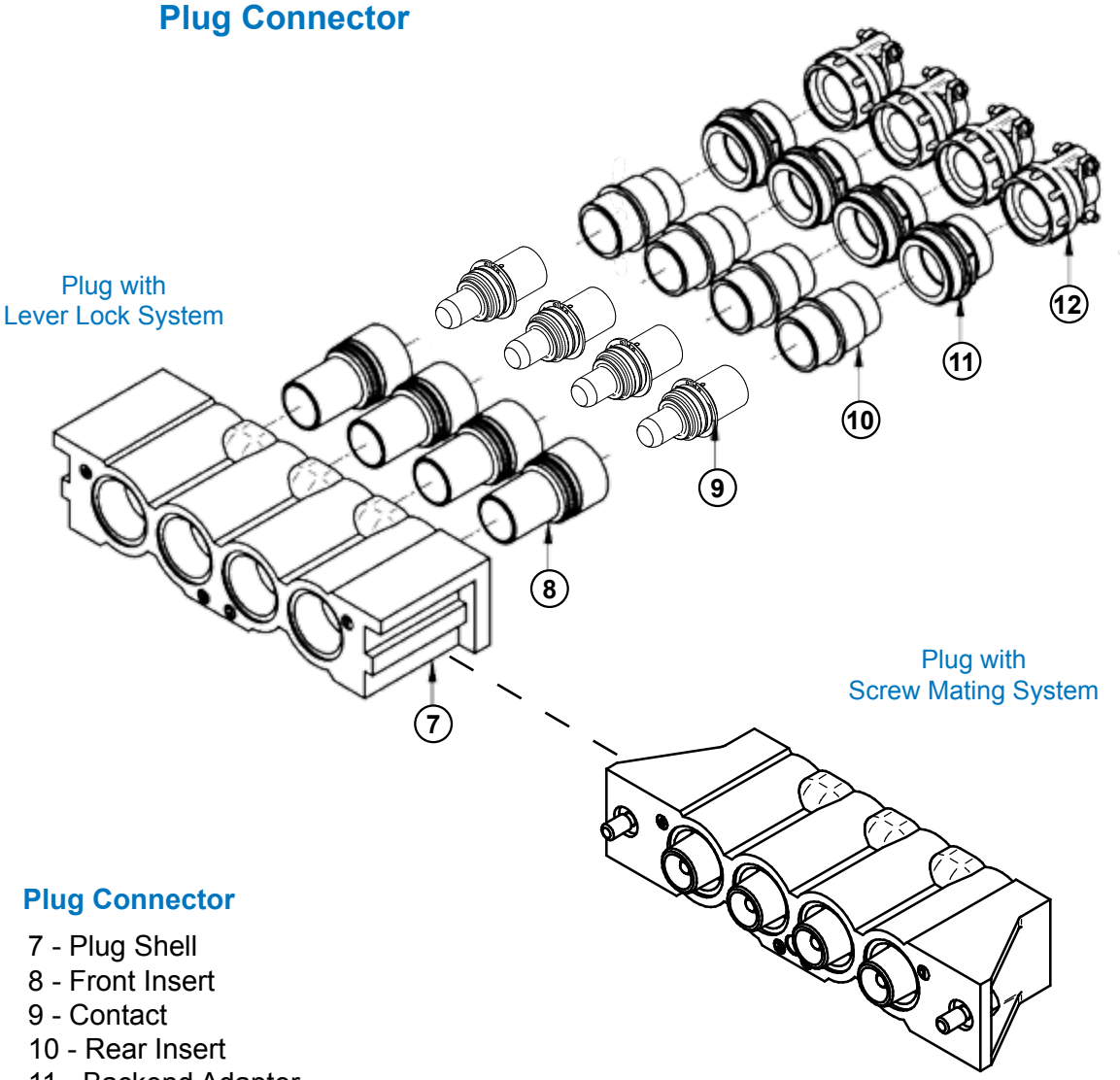
Receptacle Connector

1 - Receptacle Shell
2 - Front Insert
3 - Contact
4 - Rear Insert
5 - Backend Adapter
6 - Clamp

IRT Series
Rectangular Multi Pole Power Connector
Components Exploded View

IRT Series Components Exploded View

Plug Connector



Plug Connector

7 - Plug Shell
8 - Front Insert
9 - Contact
10 - Rear Insert
11 - Backend Adapter
12 - Clamp

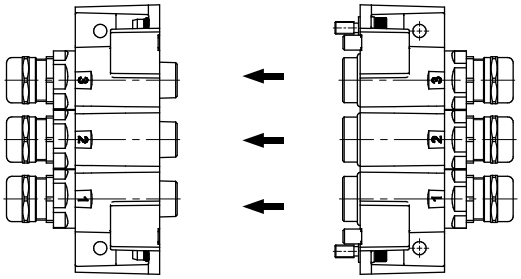
IRT Series
Rectangular Multi Pole Power Connector
Mating and Unmating System

IRT Series Size 1 and 2

STEP 1

Receptacle Connector

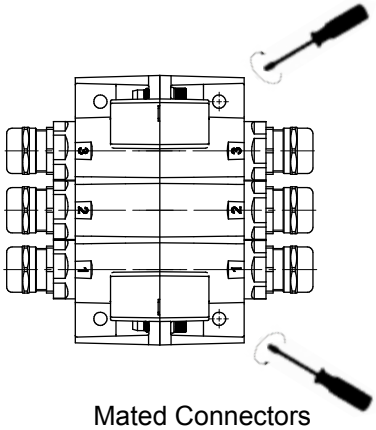
Plug Connector



Screw Lock System

STEP 2

Locked by screws



Mated Connectors

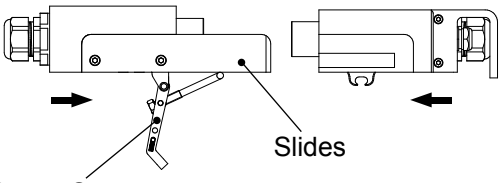
Locked by screws

IRT Series Size 3 and 5

STEP 1

Receptacle Connector

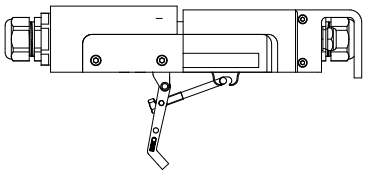
Plug Connector



Slides

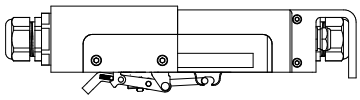
Lever System with Secondary Lock

STEP 2



Lever System Junction

STEP 3



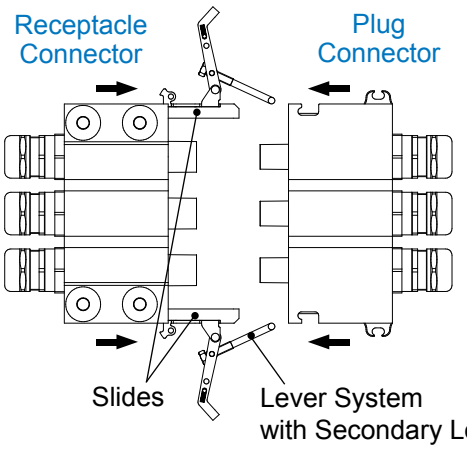
Lever System Closed

IRT Series Size 4

STEP 1

Receptacle Connector

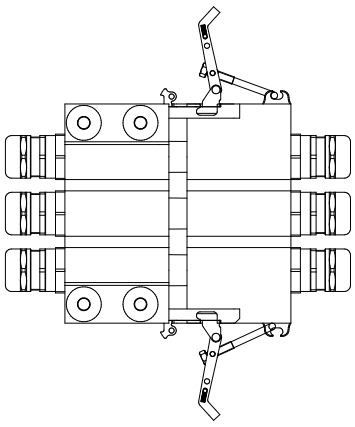
Plug Connector



Slides

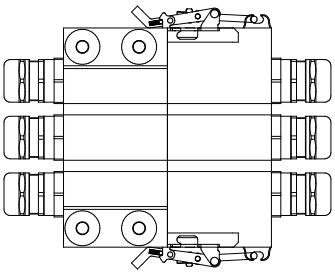
Lever System with Secondary Lock

STEP 2



Lever System Junction

STEP 3



Lever System Closed

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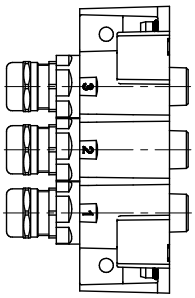
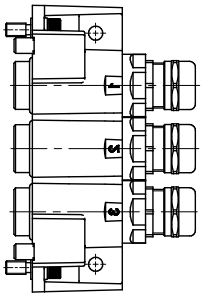
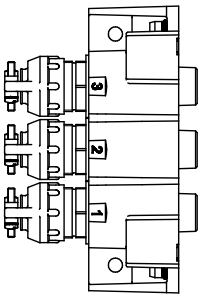
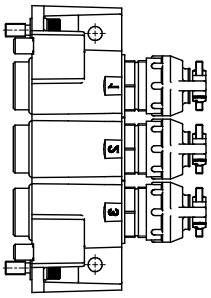
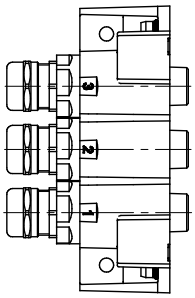
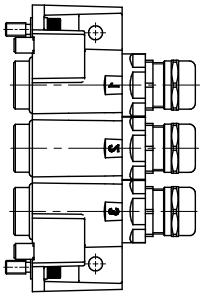
IRT Series
Rectangular Multi Pole Power Connector
Available Configurations

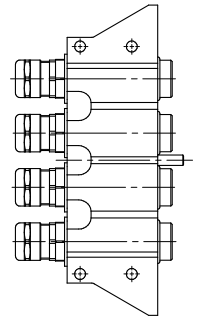
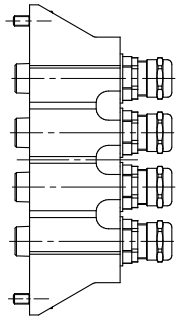
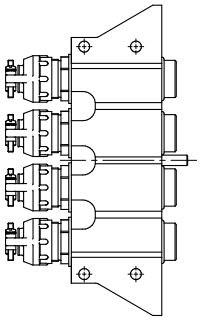
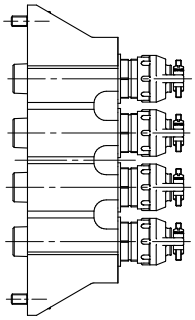
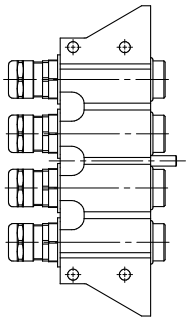
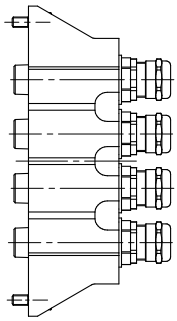
IRT Size 01

Number of Contacts: 3
Contact Type: AWG 4 - 4/0 (35-120 mmq)
Mating System: Screw

Receptacle		Plug
Part Number: IRT01R-31PMXX Weight: 1.07 Kg Page: 14		 Part Number: IRT01P-31SMXX Weight: 1.07 Kg Page: 16
Part Number: IRT01R-31PEXX Weight: 0.97 Kg Page: 18		 Part Number: IRT01P-31SEXX Weight: 0.97 Kg Page: 20
Part Number: IRT01R-31PSXX Weight: 1.07 Kg Page: 22		 Part Number: IRT01P-31SSXX Weight: 1.07 Kg Page: 24

IRT Size 02

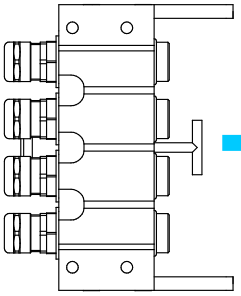
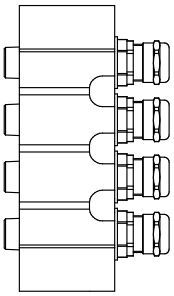
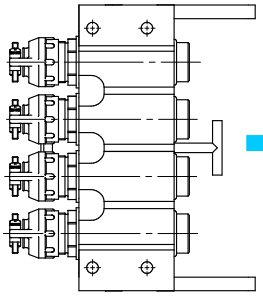
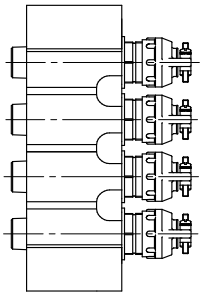
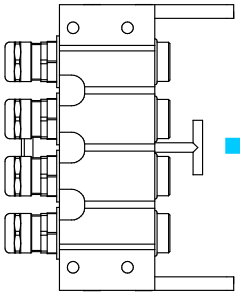
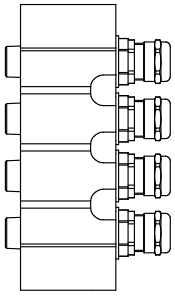
Number of Contacts: 4
Contact Type: AWG 4 - 4/0 (35-120 mmq)
Mating System: Screw

Receptacle		Plug
Part Number: IRT02R-41PMXX Weight: 1.75 Kg Page: 26		 Part Number: IRT02P-41SMXX Weight: 1.75 Kg Page: 28
Part Number: IRT02R-41PEXX Weight: 1.65 Kg Page: 30		 Part Number: IRT02P-41SEXX Weight: 1.65 Kg Page: 32
Part Number: IRT02R-41PSXX Weight: 1.75 Kg Page: 34		 Part Number: IRT02P-41SSXX Weight: 1.75 Kg Page: 36

IRT Series
Rectangular Multi Pole Power Connector
Available Configurations

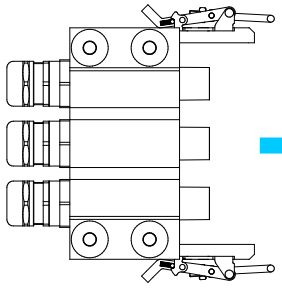
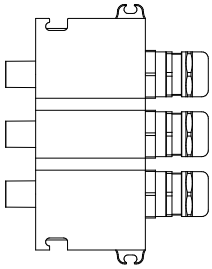
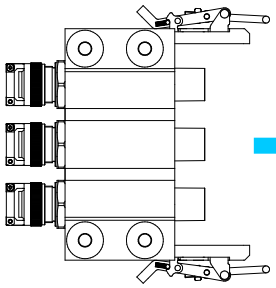
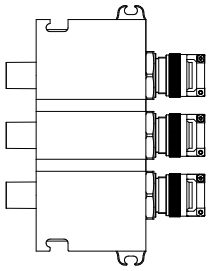
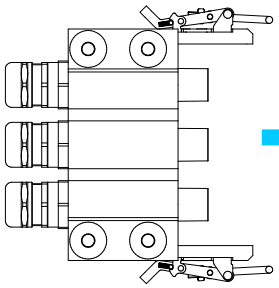
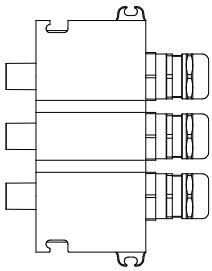
IRT Size 03

Number of Contacts : 4
Contact Type : AWG 4 - 4/0 (35-120 mmq)
Mating System: Lever with Secondary Lock

Receptacle		Plug
Part Number: IRT03R-41PMXX Weight: 1.9 Kg Page: 38		 Part Number: IRT03P-41SMXX Weight: 1.7 Kg Page: 40
Part Number: IRT03R-41PEXX Weight: 1.8 Kg Page: 42		 Part Number: IRT03P-41SEXX Weight: 1.6 Kg Page: 44
Part Number: IRT03R-41PSXX Weight: 1.9 Kg Page: 46		 Part Number: IRT03P-41SSXX Weight: 1.7 Kg Page: 48

IRT Size 04

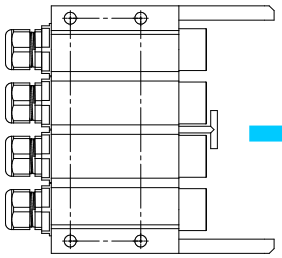
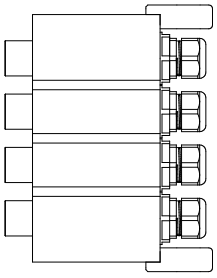
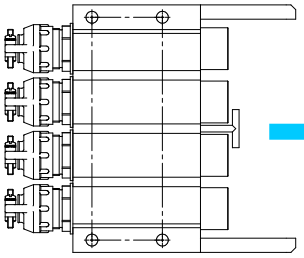
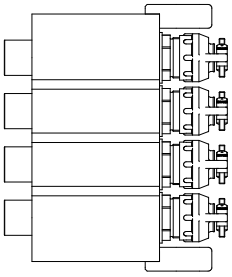
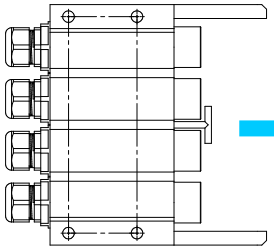
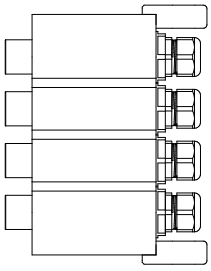
Number of Contacts: 3
Contact Type: AWG 4 - 4/0 (35-120 mmq)
Mating System: Double Lever System with Secondary Lock

Receptacle		Plug
Part Number: IRT04R-35PMXX Weight: 4.4 Kg Page: 50		 Part Number: IRT04P-35SMXX Weight: 3.4 Kg Page: 52
Part Number: IRT04R-35PEXX Weight: 4.1 Kg Page: 54		 Part Number: IRT04P-35SEXX Weight: 3.1 Kg Page: 56
Part Number: IRT04R-35PSXX Weight: 4.4 Kg Page: 58		 Part Number: IRT04P-35SSXX Weight: 3.4 Kg Page: 60

IRT Series
Rectangular Multi Pole Power Connector
Available Configurations

IRT Size 05

Number of Contacts: 4
Contact Type: AWG 4 - 373MCM (35-185 mmq)
Mating System: Lever with Secondary Lock

Receptacle		Plug
Part Number: IRT05R-45PMXX Weight: 6.0 Kg Page: 62		 Part Number: IRT05P-45SMXX Weight: 5.6 Kg Page: 64
Part Number: IRT05R-45PEXX Weight: 5.5 Kg Page: 66		 Part Number: IRT05P-45SEXX Weight: 5.1 Kg Page: 68
Part Number: IRT05R-45PSXX Weight: 6.0 Kg Page: 70		 Part Number: IRT05P-45SSXX Weight: 5.6 Kg Page: 72

How to Order - Part Number Breakdown

Series
IRT: *Rectangular Multi Pole Power Connector*

Shell Style
R - *Receptacle*
P - *Plug*

Contact Number
3 - *N.3 Contacts*
4 - *N.4 Contacts*

Contacts Gender
P: *Male*
S: *Female*

Modification Codes
Omitted: *for Standard Version*
B0: *Connector Less Contacts*

IRT	01	R	-	3	1	P	M	XX

Connector Shell Size
01: *3 Contacts AWG 4 - 4/0 (35-120 mmq). Screw Mating*
02: *4 Contacts AWG 4 - 4/0 (35-120 mmq). Screw Mating*
03: *4 Contacts AWG 4 - 4/0 (35-120 mmq). Lever Locking System*
04: *3 Contacts 1/0 - 4/0 (50-120 mmq). Double Lever Locking System*
05: *4 Contacts AWG 4 - 373MCM (35-185 mmq). Lever Locking System*

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : *All Same Contact type*
Example 3(1) - 1(2)
Different Contact Types

Backend
M: *Metallic Gland*
E: *Clamp with Strain Relief*
S: *Screen EMC Gland*

For different cable dimensions, please contact the factory.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 01 Connector
Assembly for Metallic Gland

IRT 01 R - 3 1 P M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
01 (3 Contacts Screw Matings)

Shell Style
R (Receptacle)

Number of Contacts
3

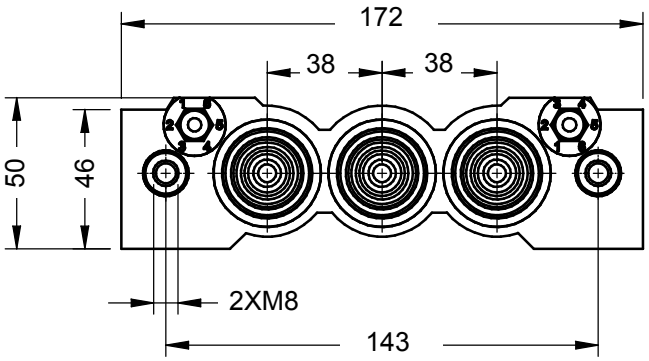
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

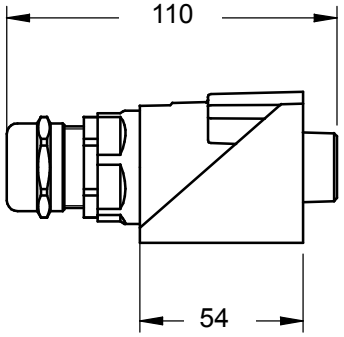
Backend
Metallic Gland (M)

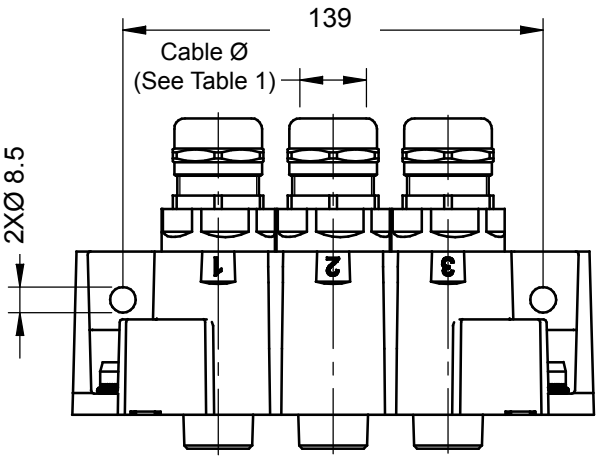
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 2(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







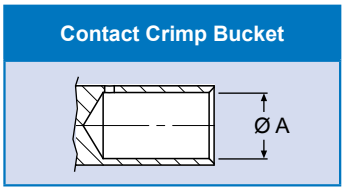


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 01 Connector
Assembly for Metallic Gland

IRT 01 P - 3 1 S M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
01 (3 Contacts Screw Matings)

Shell Style
P (Plug)

Number of Contacts
3

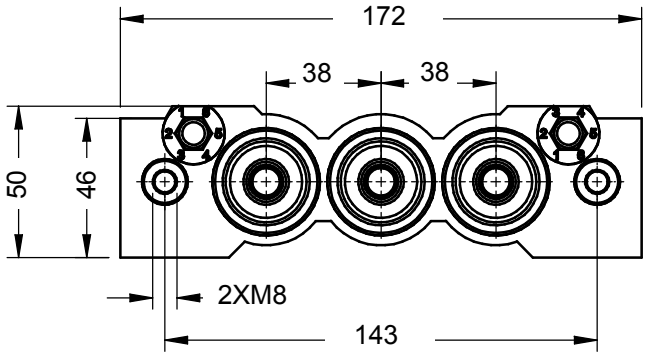
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

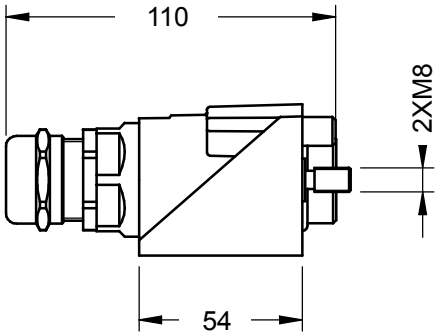
Backend
Metallic Gland (M)

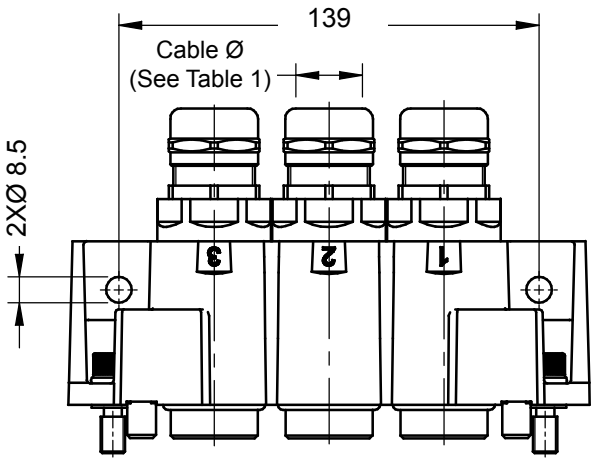
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 2(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 ÷ +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







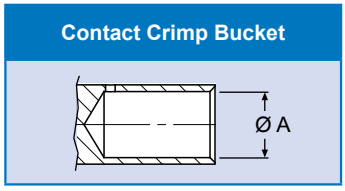


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 01 Connector
Assembly for Clamp with Strain Relief

IRT 01 R - 3 1 P E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
01 (3 Contacts Screw Matings)

Shell Style
R (Receptacle)

Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

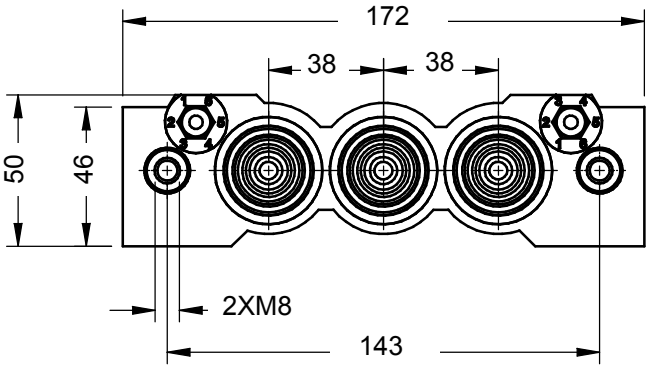
Backend
Clamp with Strain Relief (E)

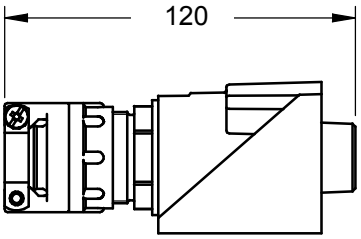
Contact Gender
P - Male
S - Female

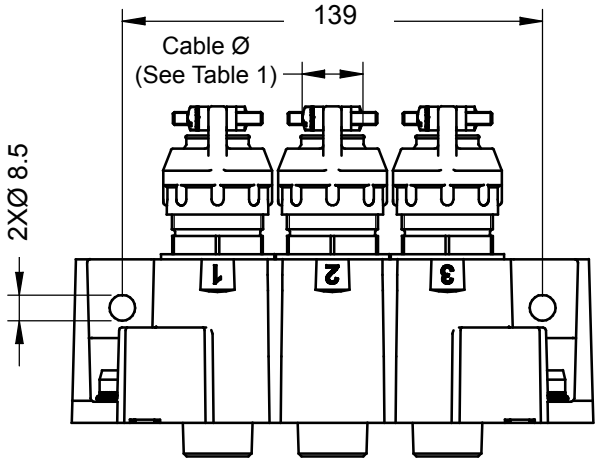
Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 2(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 01
Assembly for Clamp with Strain Relief







Contact Crimp Bucket

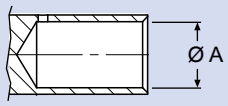


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 01
Assembly for Clamp with Strain Relief

IRT 01 P - 3 1 S E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
01 (3 Contacts Screw Matings)

Shell Style
P (Plug)

Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

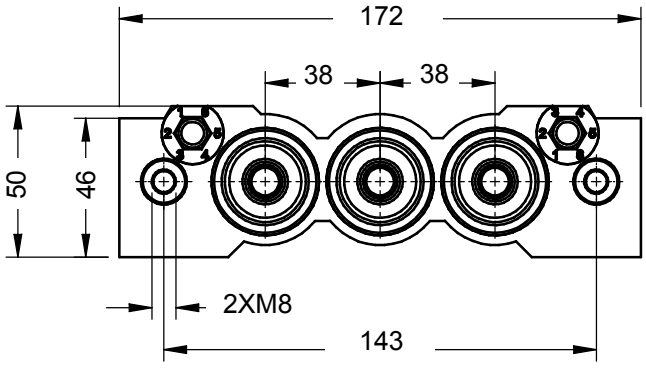
Backend
Clamp with Strain Relief (E)

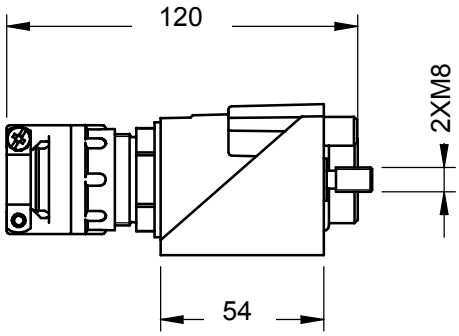
Contact Gender
P - Male
S - Female

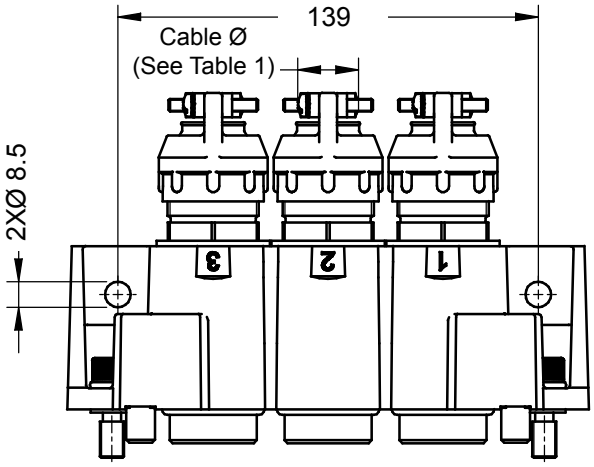
Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 2(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 01
Assembly for Clamp with Strain Relief







Contact Crimp Bucket

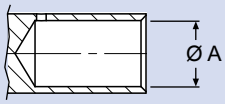


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 01
Assembly for Screen EMC Gland

IRT 01 R - 3 1 P S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
01 (3 Contacts Screw Matings)

Shell Style
R (Receptacle)

Number of Contacts
3

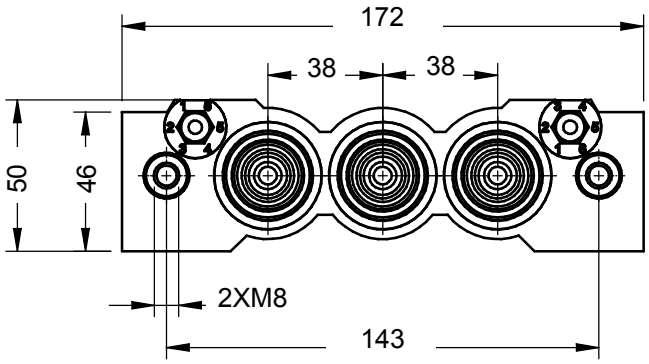
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

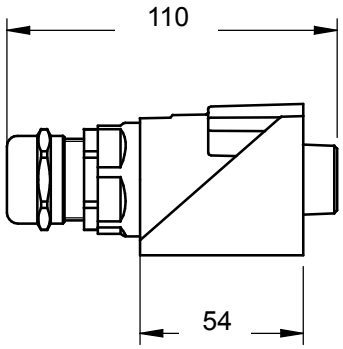
Backend
Screen EMC Gland (S)

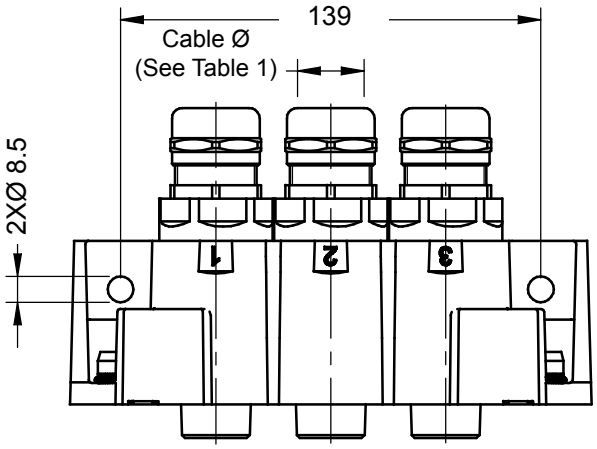
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 2(1)-1(2) Different Contact Types
(See Table 1)

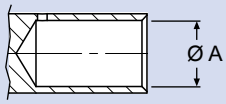
Application Notes:
- Receptacle with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







Contact Crimp Bucket



System for Shielding Retention

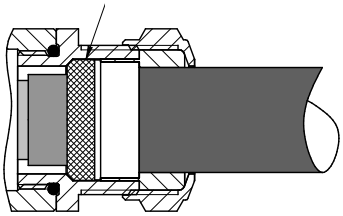


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 01
Assembly for Screen EMC Gland

IRT 01 P - 3 1 S S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
01 (3 Contacts Screw Matings)

Shell Style
P (Plug)

Number of Contacts
3

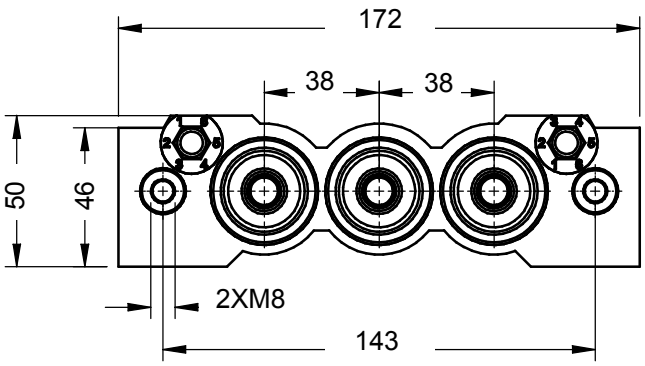
Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 2(1)-1(2) Different Contact Types
(See Table 1)

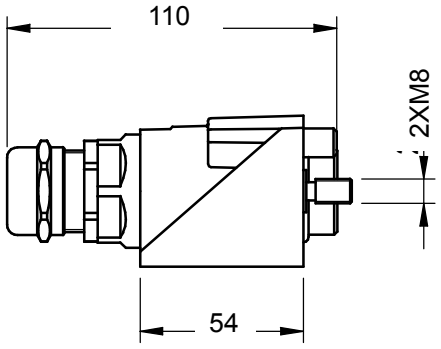
Contact Gender
P - Male
S - Female

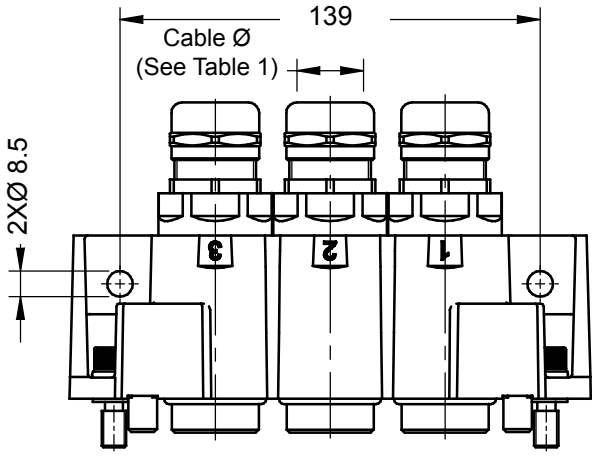
Backend
Screen EMC Gland (S)

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

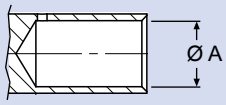
Application Notes:
- Plug with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







Contact Crimp Bucket



System for Shielding Retention

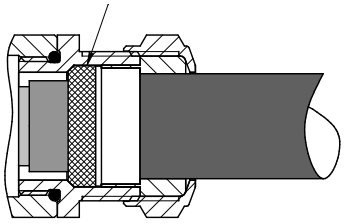


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 02
Assembly for Metallic Gland

IRT 02 R - 4 1 P M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
02 (4 Contacts Screw Matings)

Shell Style
R (Receptacle)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Metallic Gland (M)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

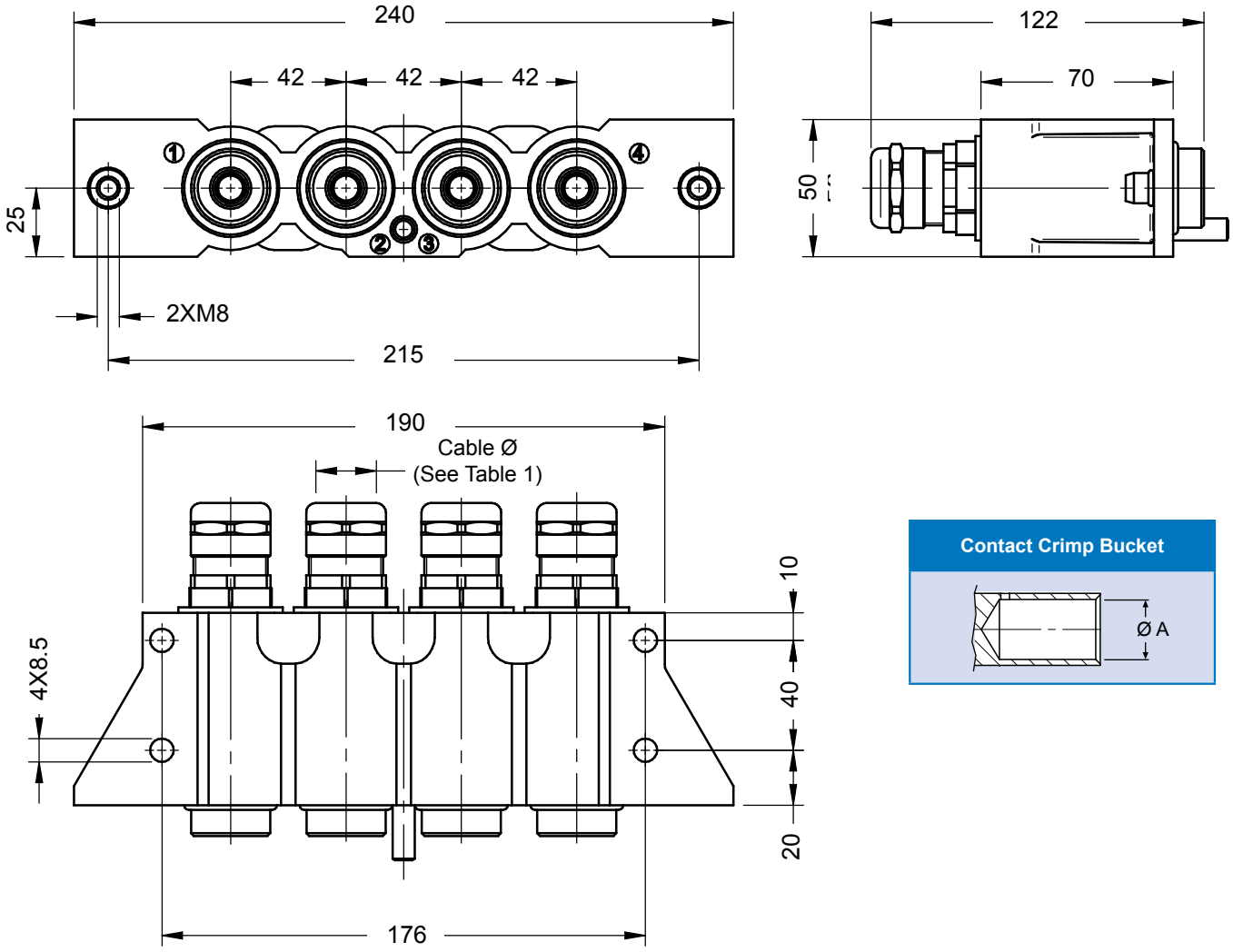


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 02
Assembly for Metallic Gland

IRT 02 P - 4 1 S M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
02 (4 Contacts Screw Matings)

Shell Style
P (Plug)

Number of Contacts
4

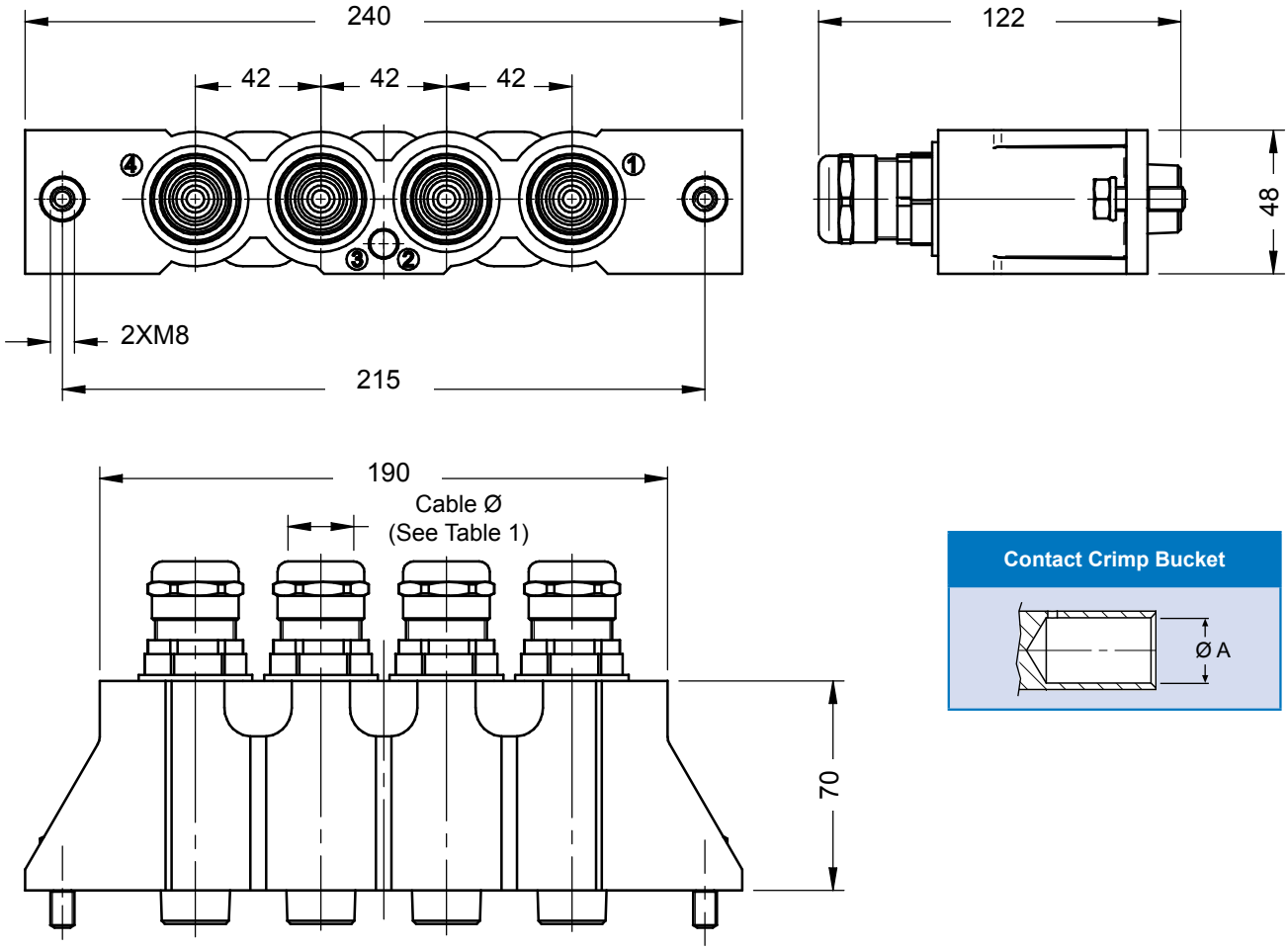
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Metallic Gland (M)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.



Contact Crimp Bucket

TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 02
Assembly for Clamp with Strain Relief

IRT 02 R - 4 1 P E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
02 (4 Contacts Screw Matings)

Shell Style
R (Receptacle)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

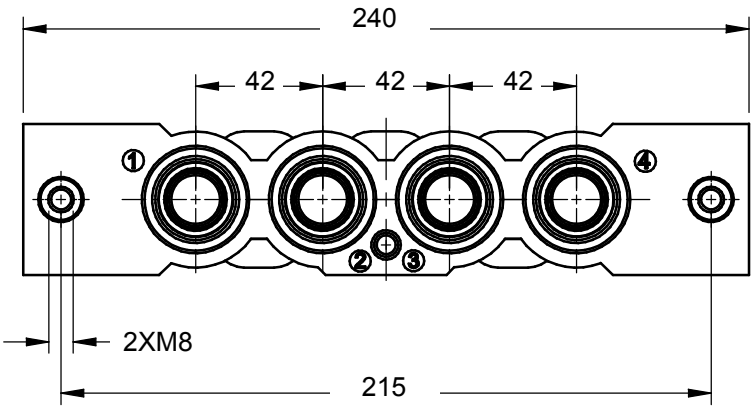
Backend
Clamp with Strain Relief (E)

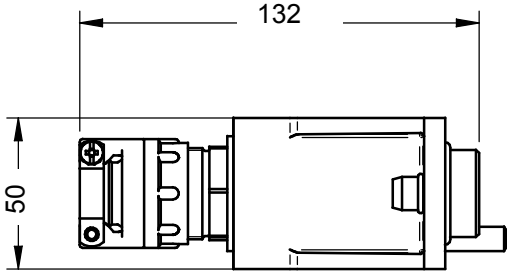
Contact Gender
P - Male
S - Female

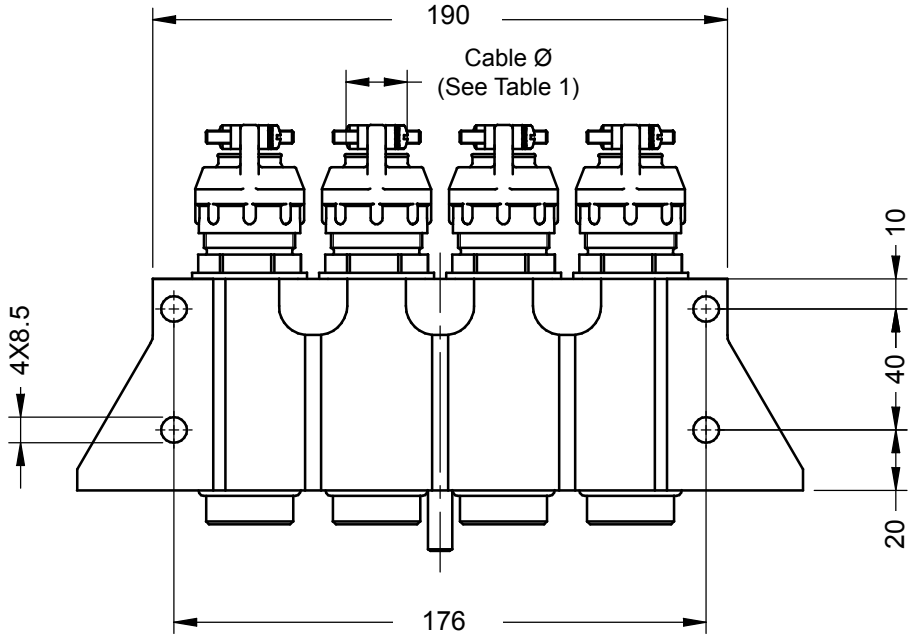
Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 02
Assembly for Clamp with Strain Relief







Contact Crimp Bucket

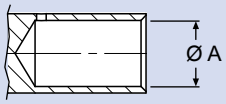


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

CAGE Code A6854
Printed in U.S.A.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 02
Assembly for Clamp with Strain Relief

IRT 02 P - 4 1 S E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
02 (4 Contacts Screw Matings)

Shell Style
P (Plug)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Clamp with Strain Relief (E)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 02
Assembly for Clamp with Strain Relief

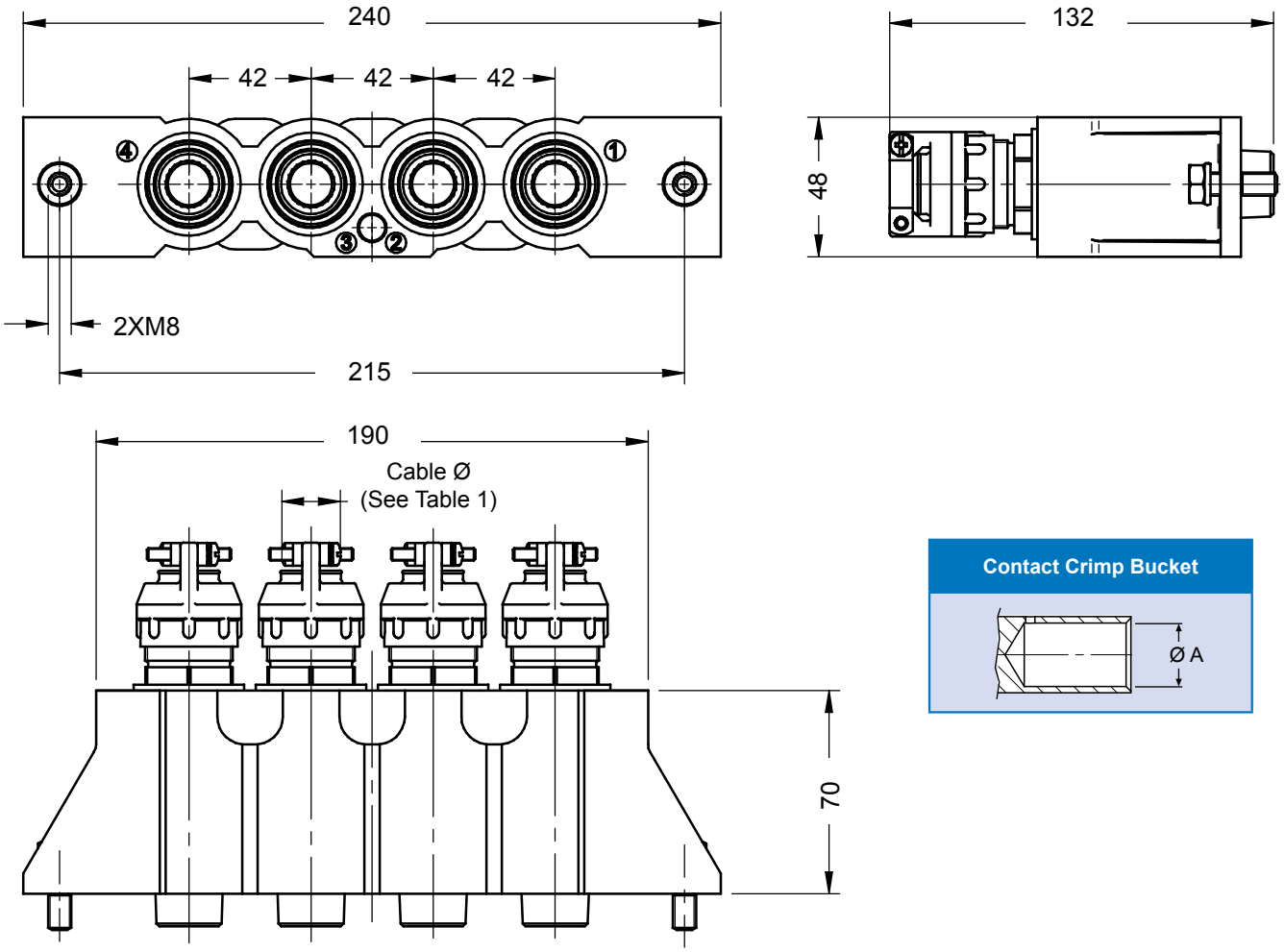


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 02
Assembly for Screen EMC Gland

IRT 01 R - 4 1 P S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
02 (4 Contacts Screw Matings)

Shell Style
R (Receptacle)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Screen EMC Gland (S)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 02
Assembly for Screen EMC Gland

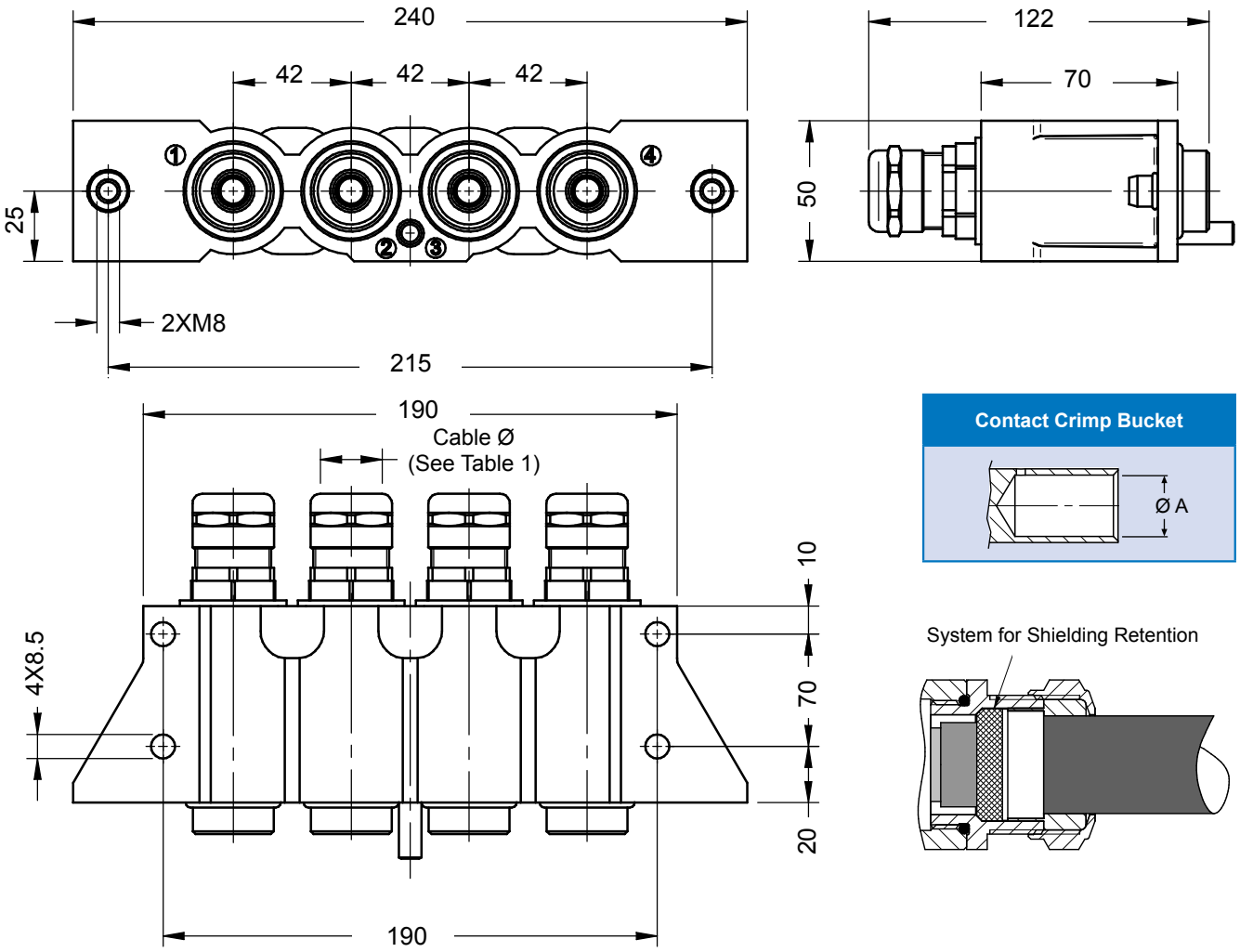


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 02
Assembly for Screen EMC Gland

IRT 02 P - 4 1 S S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
02 (4 Contacts Screw Matings)

Shell Style
P (Plug)

Number of Contacts
4

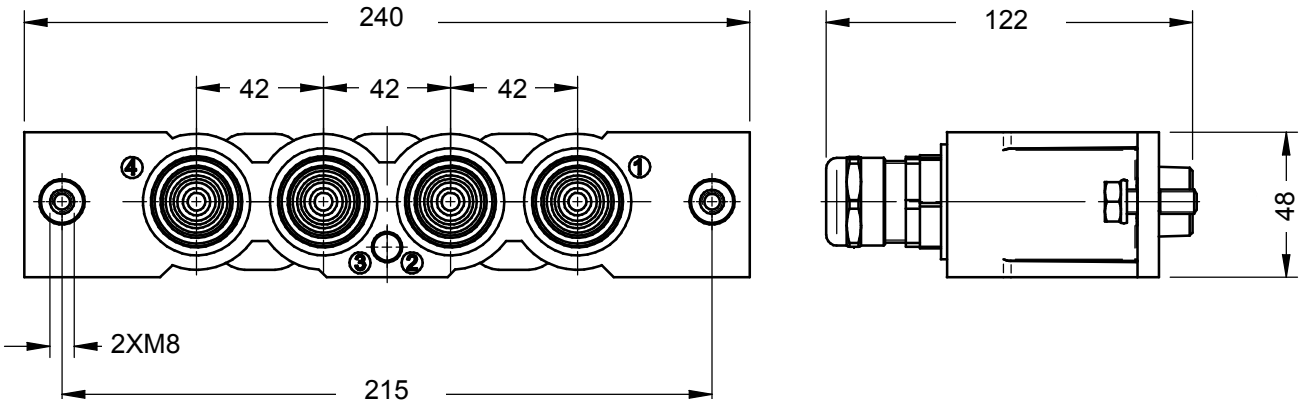
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

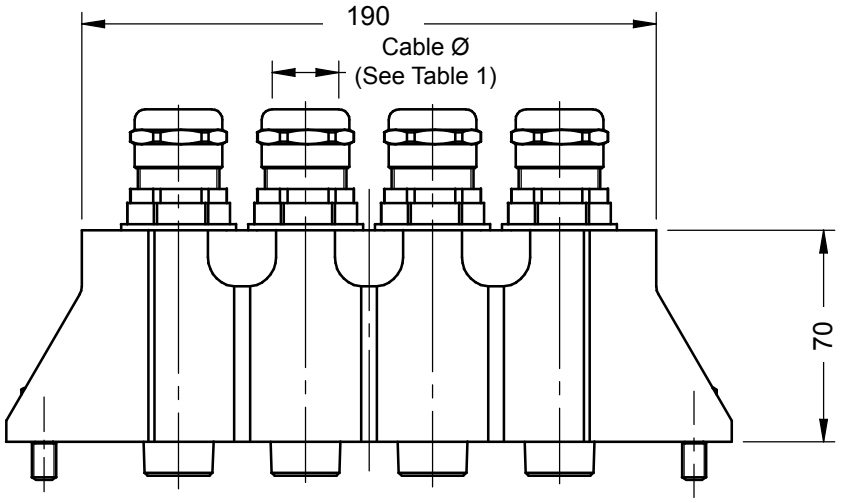
Backend
Screen EMC Gland (S)

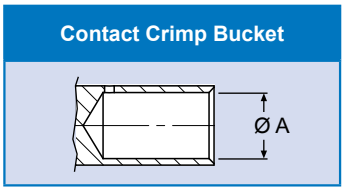
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







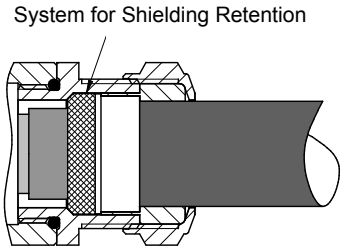


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 03
Assembly for Metallic Gland

IRT 03 R - 4 1 P M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
03 (4 Contacts Lever System)

Shell Style
R (Receptacle)

Number of Contacts
4

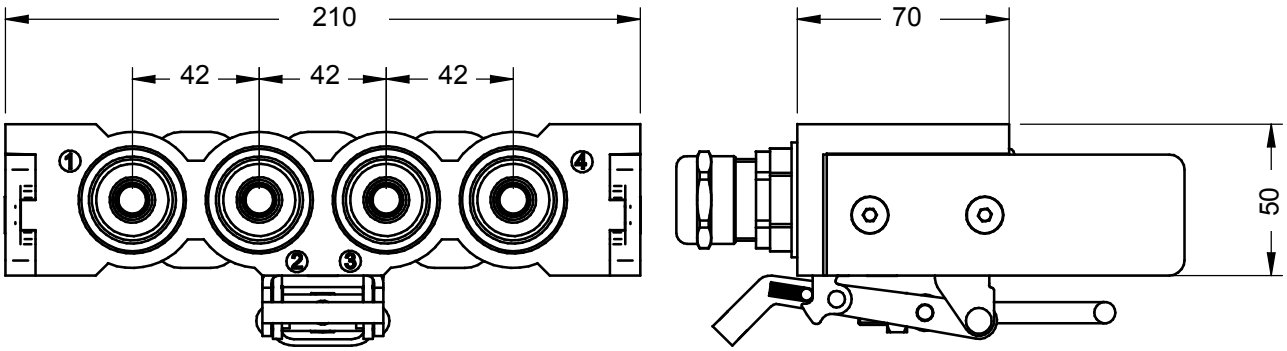
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

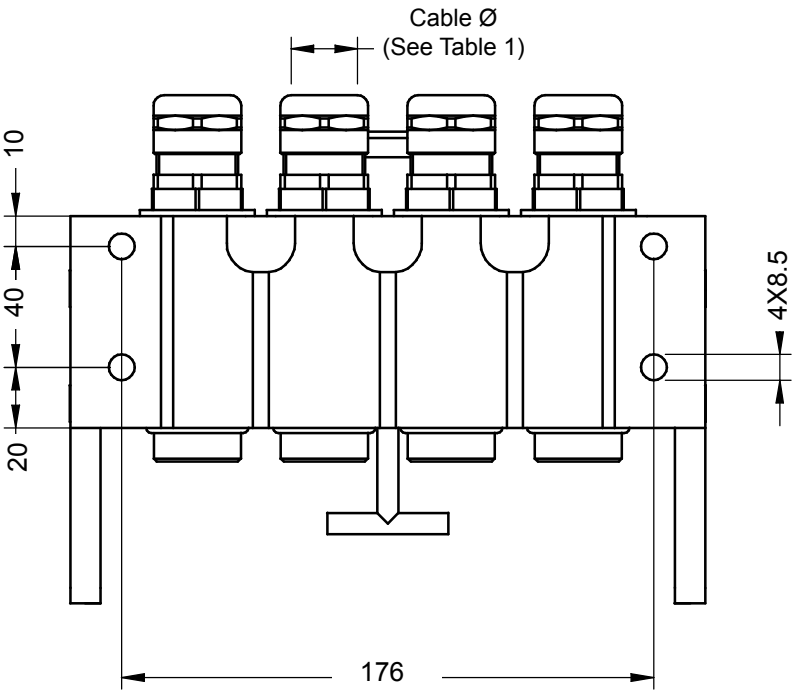
Backend
Metallic Gland (M)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.





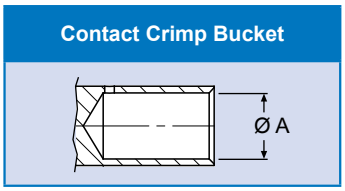


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 03
Assembly for Metallic Gland

IRT 03 P - 4 1 S M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
03 (4 Contacts Lever System)

Shell Style
P (Plug)

Number of Contacts
4

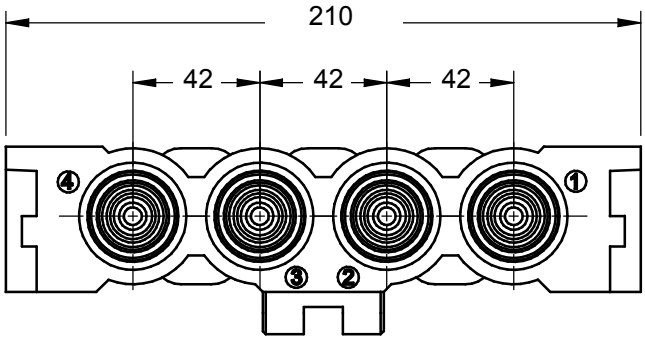
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

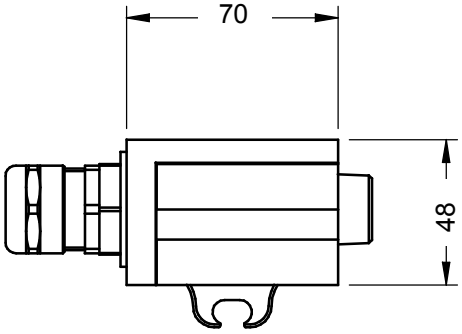
Backend
Metallic Gland (M)

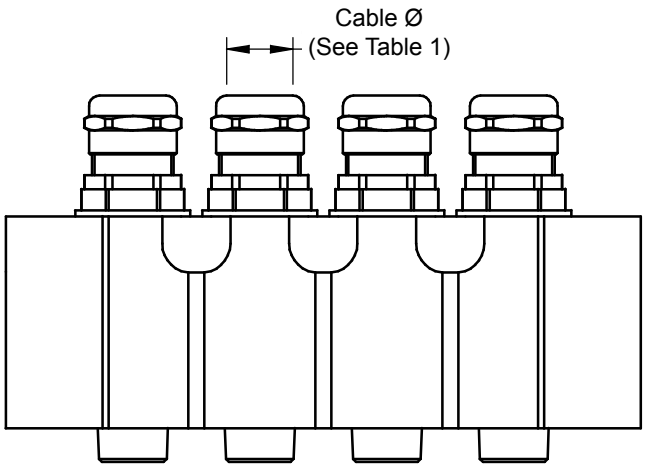
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







Contact Crimp Bucket

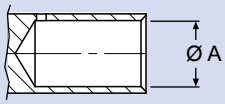


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 03
Assembly for Clamp with Strain Relief

IRT 03 R - 4 1 P E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
03 (4 Contacts Lever System)

Shell Style
R (Receptacle)

Number of Contacts
4

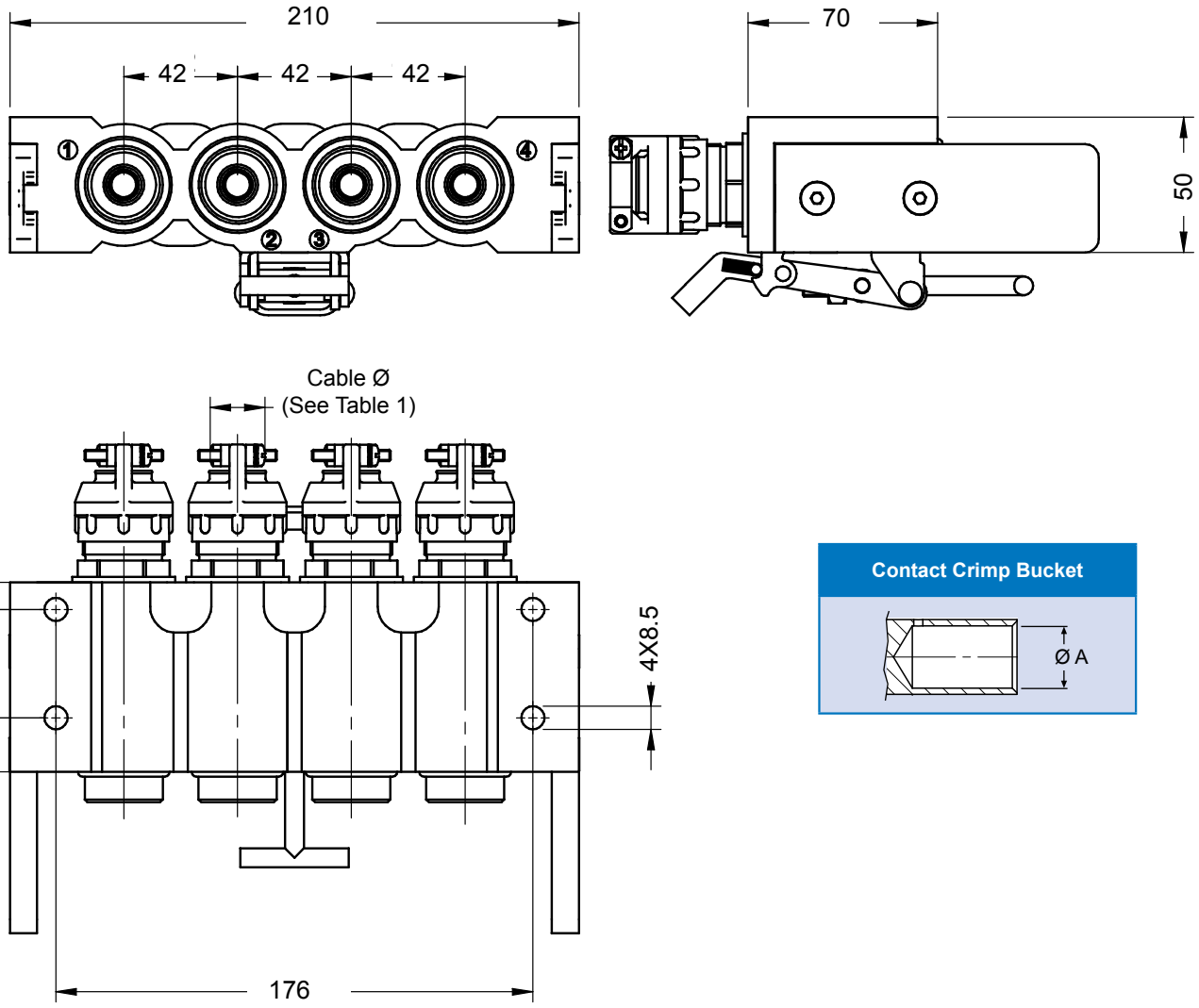
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Clamp with Strain Relief (E)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.



Contact Crimp Bucket

TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 03
Assembly for Clamp with Strain Relief

IRT 03 P - 4 1 S E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
03 (4 Contacts Lever System)

Shell Style
P (Receptacle)

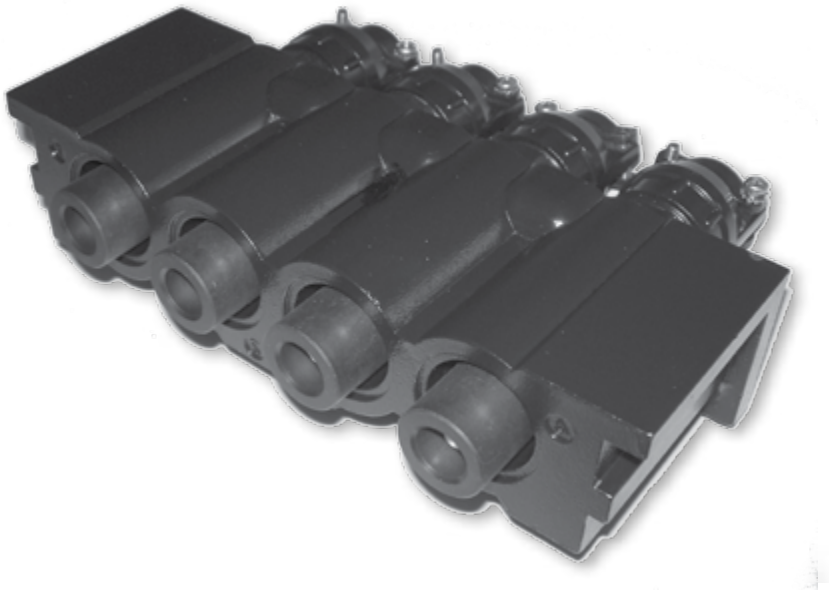
Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Clamp with Strain Relief (E)

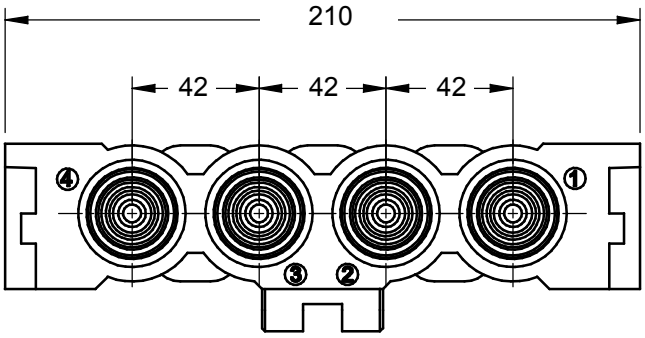
Contact Gender
P - Male
S - Female

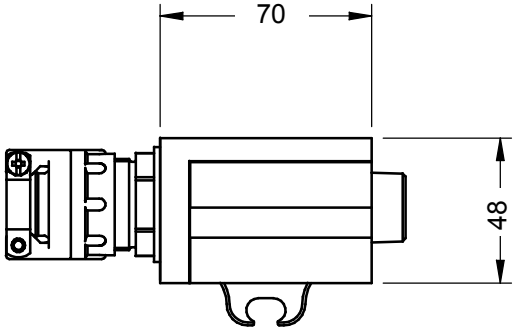
Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

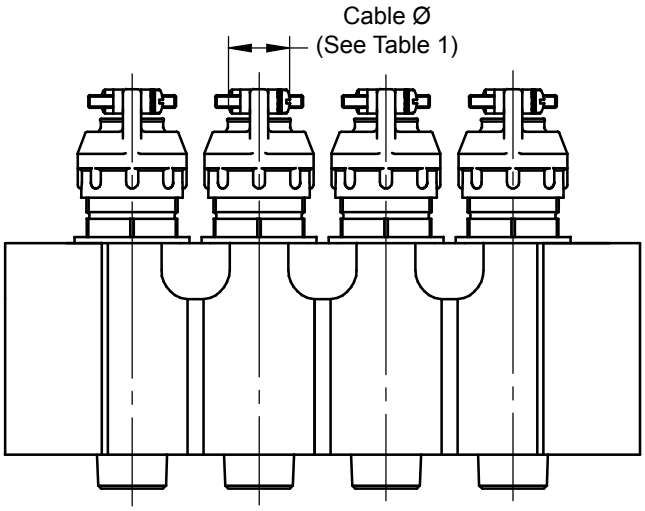


Application Notes:
- Plug with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 03
Assembly for Clamp with Strain Relief







Contact Crimp Bucket

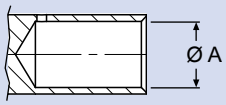


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 03
Assembly for Screen EMC Gland

IRT 03 R - 4 1 P S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
03 (4 Contacts Lever System)

Shell Style
R (Receptacle)

Number of Contacts
4

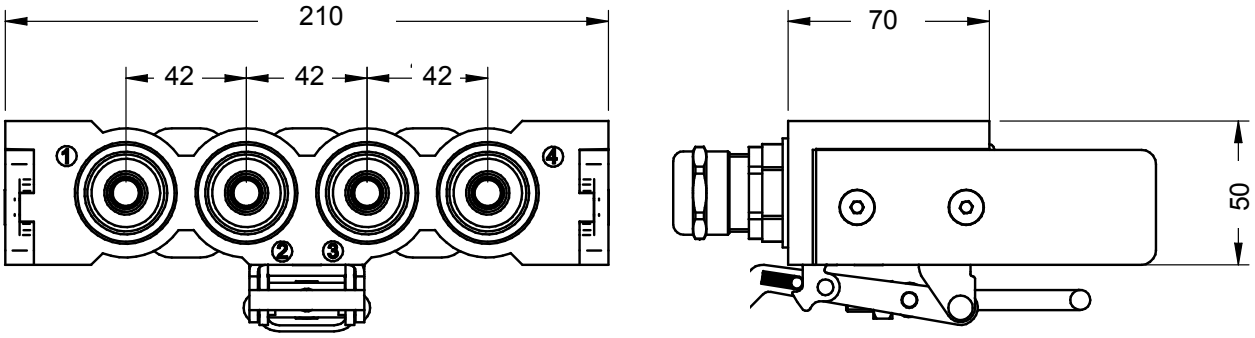
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

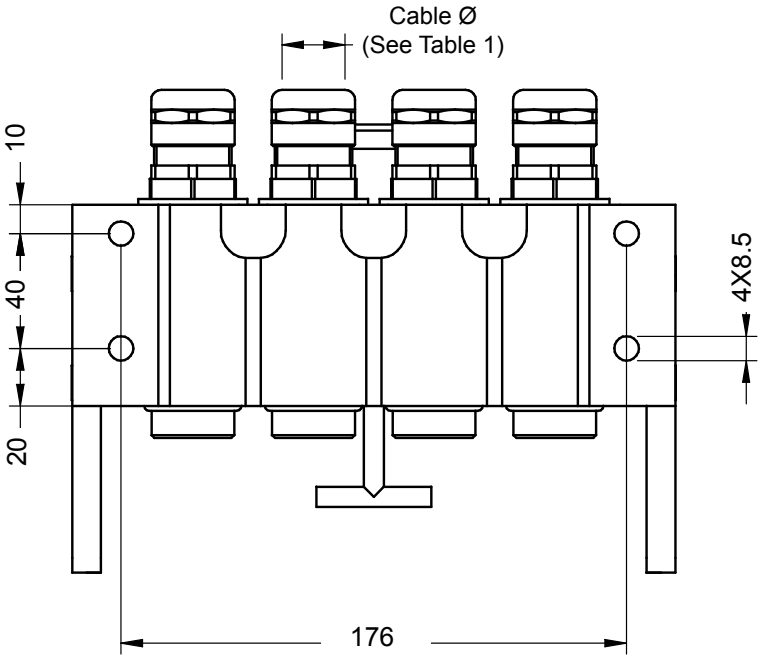
Backend
Screen EMC Gland (S)

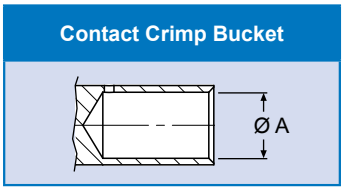
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.







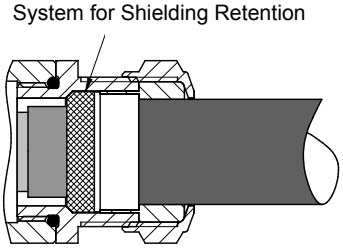


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 03
Assembly for Screen EMC Gland

IRT 03 P - 4 1 S S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
03 (4 Contacts Lever System)

Shell Style
P (Plug)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

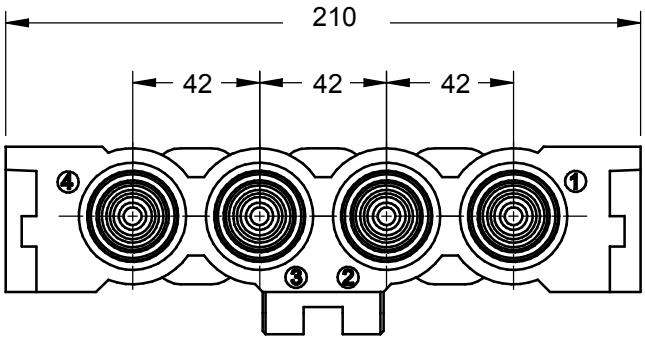
Backend
Screen EMC Gland (S)

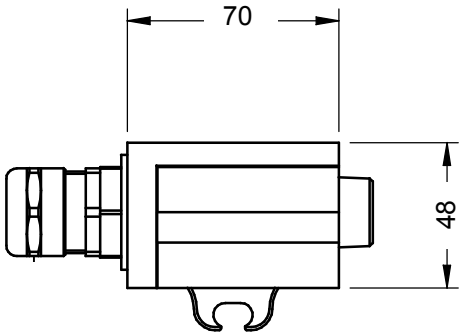
Contact Gender
P - Male
S - Female

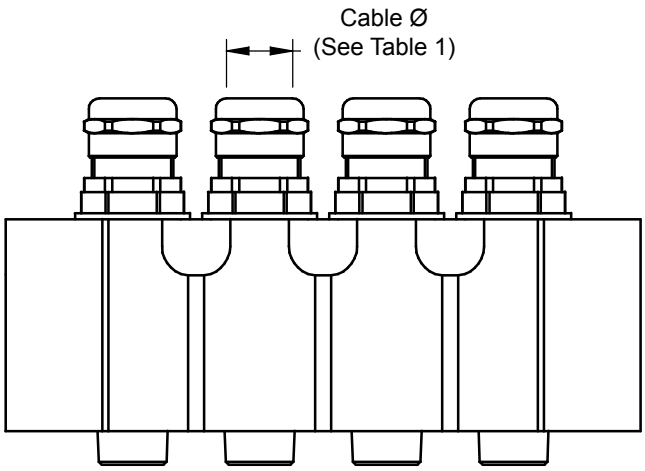
Contact Type
Different types can be used:
1 ; 2 ; 3 .... : All Same Contact type
Example 3(1)-1(2) Different Contact Types
(See Table 1)

Application Notes:
- Plug with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 16.0 mm Min.
- Creepage distance: 16.0 mm Min.

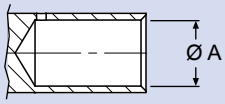
IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 03
Assembly for Screen EMC Gland







Contact Crimp Bucket



System for Shielding Retention

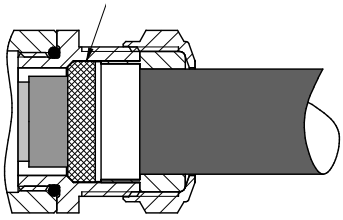


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	6	13	120	150
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	10	17	150	250
3	IRT-3-P-1650G10	IRT-3-S-1650G10	16.5	4/0	120	16	19	350	450
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	10	17	250	300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	12.5	16	320	400

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 04
Assembly for Metallic Gland

IRT 04 R - 3 5 P M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
04 (3 Contacts Double Lever System)

Shell Style
R (Receptacle)

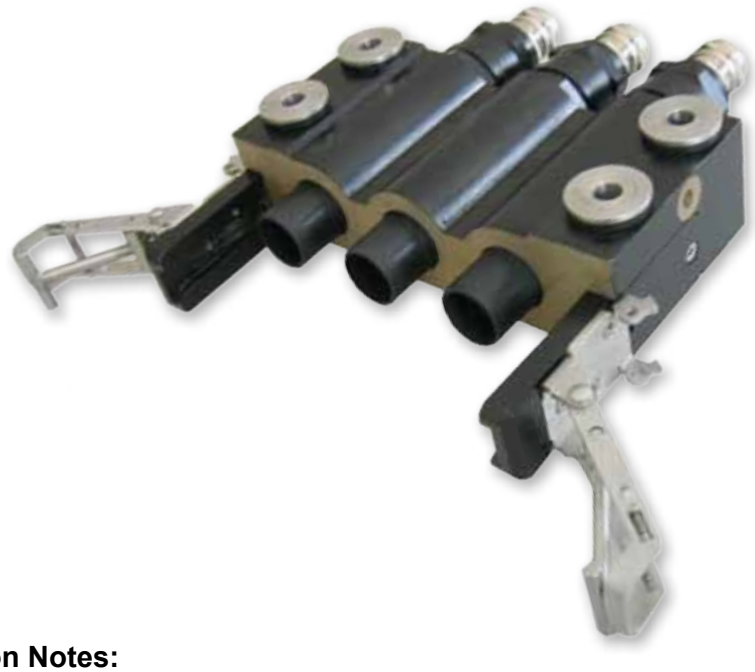
Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Metallic Gland (M)

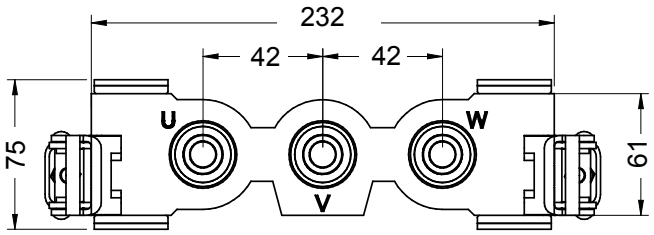
Contact Gender
P - Male
S - Female

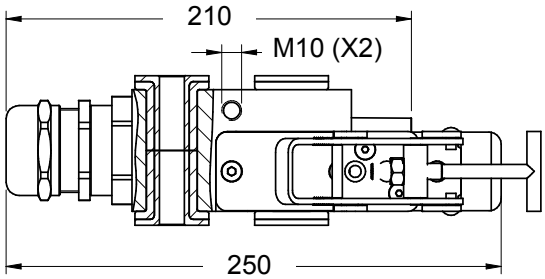
Contact Type
Different types can be used:
4 ; 4A ; 4B .... : All Same Contact Type
Example 2(4)-1(4A) Different Contact Types
(See Table 1)

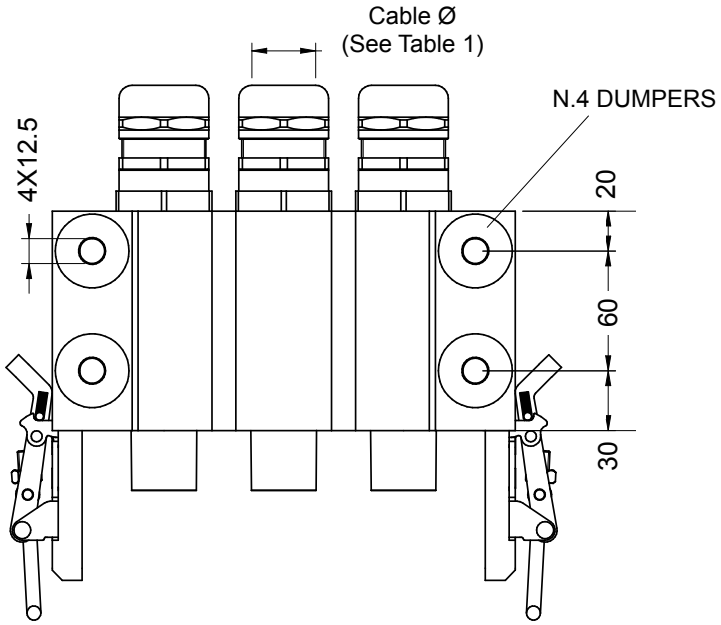


Application Notes:
- Receptacle with metallic gland and dumpers, for bogie applications. RoHs compliant.
- Working voltage: 3000 Vac.
- Test voltage: 12000 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 04
Assembly for Metallic Gland







Contact Crimp Bucket

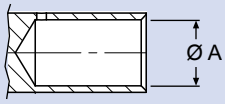


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	26MCM	120	11	21	450	520
4A	IRT-4-P-1650G10	IRT-4-S-1650G10	16.5	4/0	107	11	21	350	450
4B	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	3/0	95	11	21	320	400
4C	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	2/0	70	11	21	250	300
4D	IRT-4-P-1150G10	IRT-4-S-1150G10	11.5	1/0	50	10	17	150	250

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 04
Assembly for Metallic Gland

IRT 04 P - 3 5 S M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
04 (3 Contacts Double Lever System)

Shell Style
P (Plug)

Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Metallic Gland (M)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
4 ; 4A ; 4B .... : All Same Contact Type
Example 2(4)-1(4A) Different Contact Types
(See Table 1)

Application Notes:
- Plug with metallic gland. RoHs compliant.
- Working voltage: 3000 Vac.
- Test voltage: 12000 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

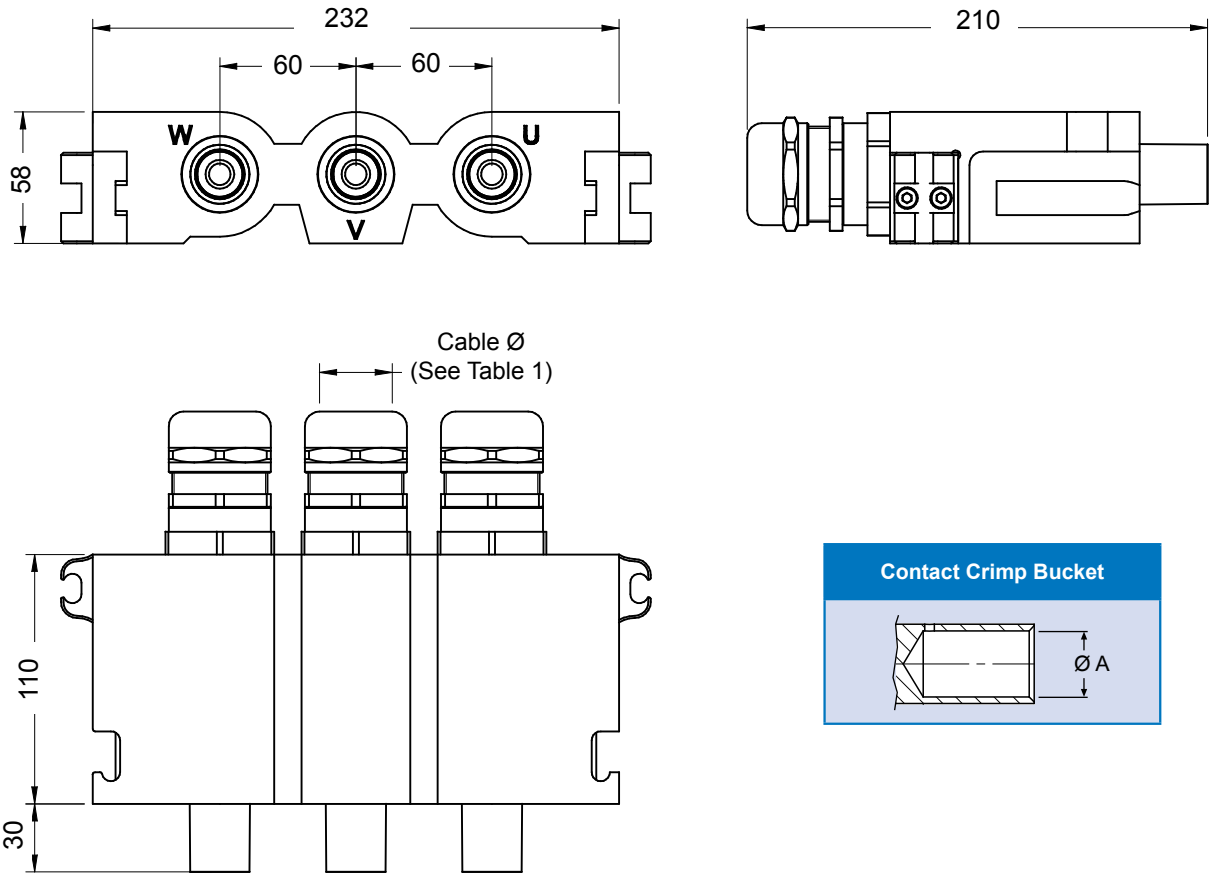


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	26MCM	120	11	21	450	520
4A	IRT-4-P-1650G10	IRT-4-S-1650G10	16.5	4/0	107	11	21	350	450
4B	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	3/0	95	11	21	320	400
4C	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	2/0	70	11	21	250	300
4D	IRT-4-P-1150G10	IRT-4-S-1150G10	11.5	1/0	50	10	17	150	250

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 04
Assembly for Clamp with Strain Relief

IRT 04 R - 3 5 P E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
04 (3 Contacts Double Lever System)

Shell Style
R (Receptacle)

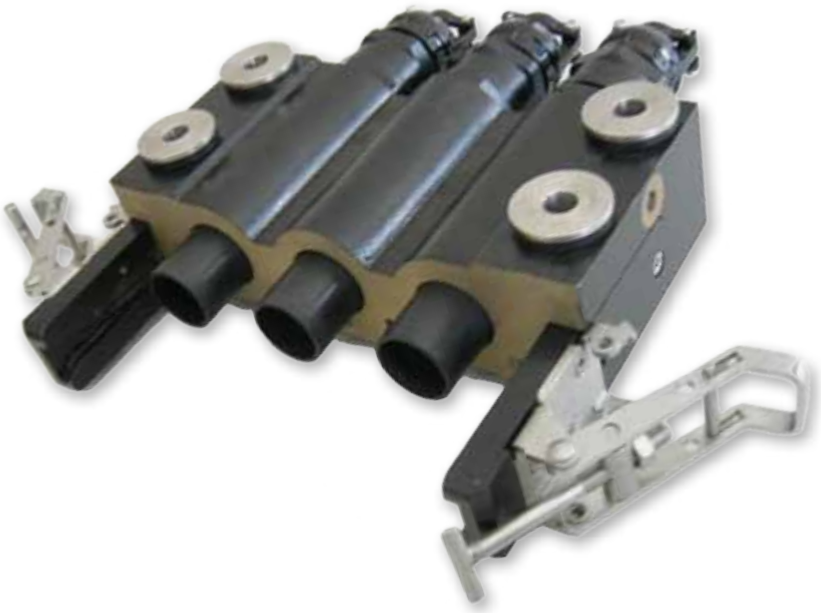
Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Clamp with Strain Relief (E)

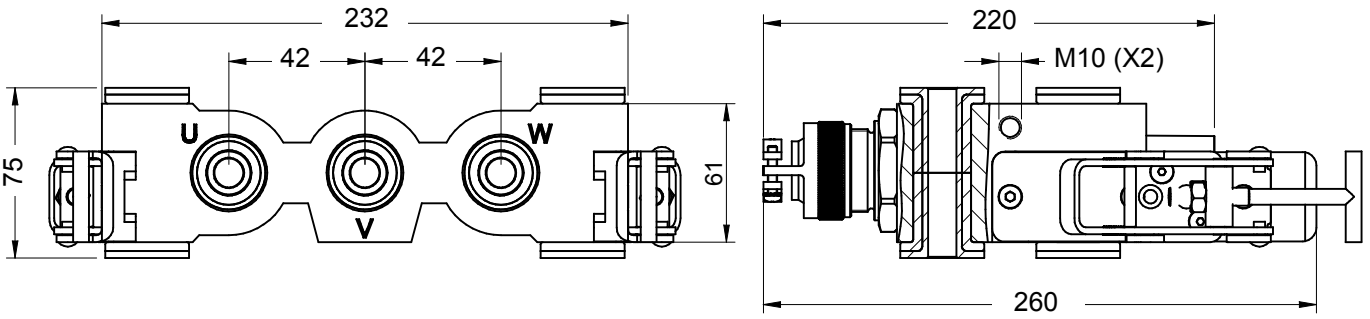
Contact Gender
P - Male
S - Female

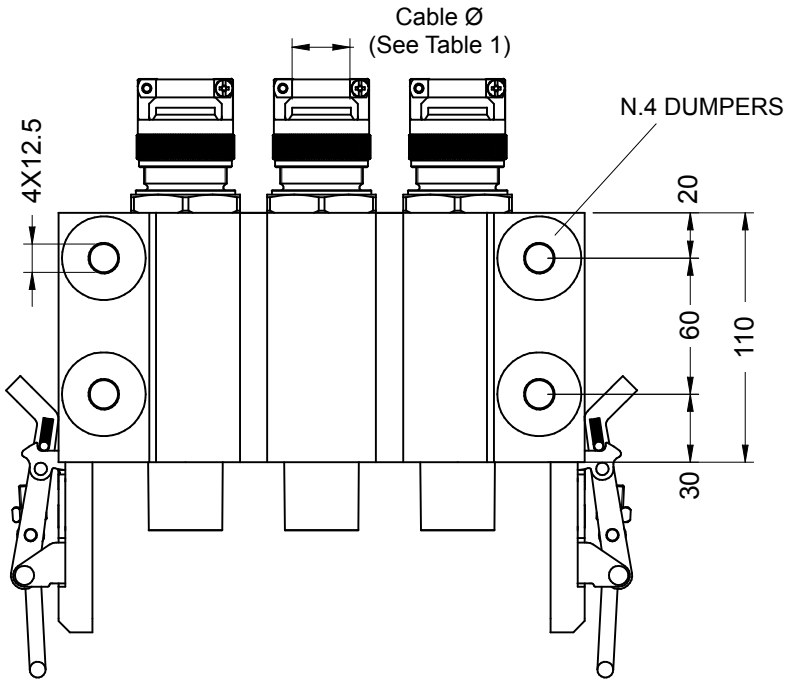
Contact Type
Different types can be used:
4 ; 4A ; 4B .... : All Same Contact Type
Example 2(4)-1(4A) Different Contact Types
(See Table 1)



Application Notes:
- Receptacle with clamp with strain relief and dumpers, for bogie applications. RoHs compliant.
- Working voltage: 3000 Vac.
- Test voltage: 12000 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 04
Assembly for Clamp with Strain Relief





Contact Crimp Bucket

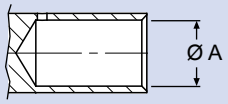


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	26MCM	120	11	21	450	520
4A	IRT-4-P-1650G10	IRT-4-S-1650G10	16.5	4/0	107	11	21	350	450
4B	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	3/0	95	11	21	320	400
4C	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	2/0	70	11	21	250	300
4D	IRT-4-P-1150G10	IRT-4-S-1150G10	11.5	1/0	50	10	17	150	250

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 04
Assembly for Clamp with Strain Relief

IRT 04 P - 3 5 S E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
04 (3 Contacts Double Lever System)

Shell Style
P (Plug)

Number of Contacts
3

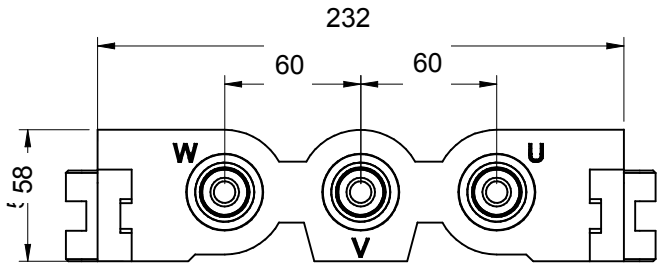
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

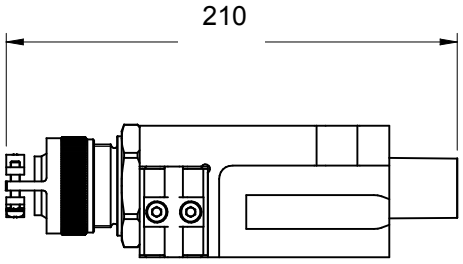
Backend
Clamp with Strain Relief (E)

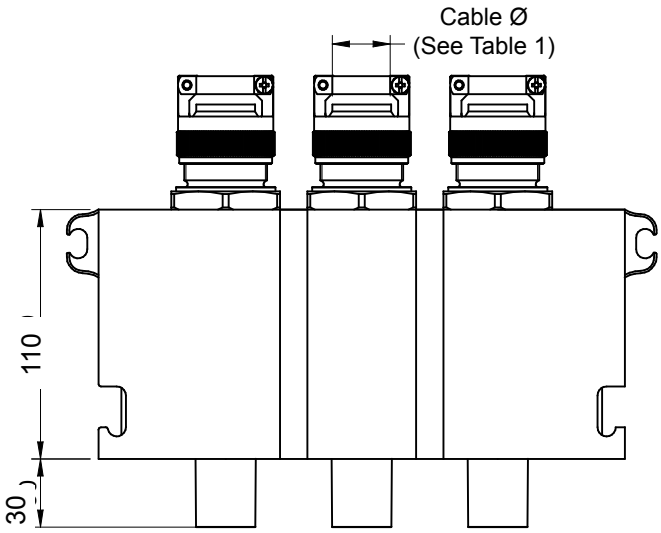
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
4 ; 4A ; 4B .... : All Same Contact Type
Example 2(4)-1(4A) Different Contact Types
(See Table 1)

Application Notes:
- Plug with clamp with strain relief. RoHs compliant.
- Working voltage: 3000 Vac.
- Test voltage: 12000 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.







Contact Crimp Bucket

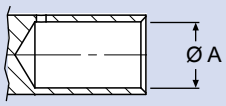


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	26MCM	120	11	21	450	520
4A	IRT-4-P-1650G10	IRT-4-S-1650G10	16.5	4/0	107	11	21	350	450
4B	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	3/0	95	11	21	320	400
4C	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	2/0	70	11	21	250	300
4D	IRT-4-P-1150G10	IRT-4-S-1150G10	11.5	1/0	50	10	17	150	250

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 04
Assembly for Screen EMC Gland

IRT 04 R - 3 5 P S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
04 (3 Contacts Double Lever System)

Shell Style
R (Receptacle)

Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

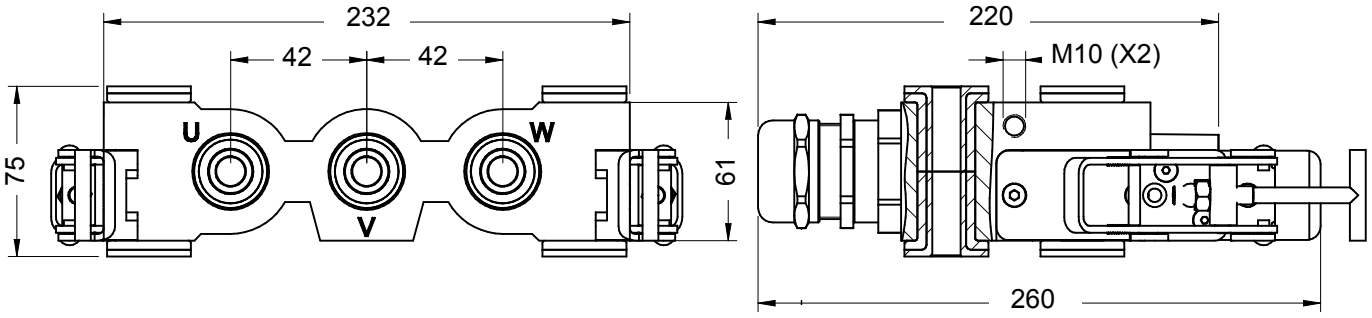
Backend
Screen EMC Gland (S)

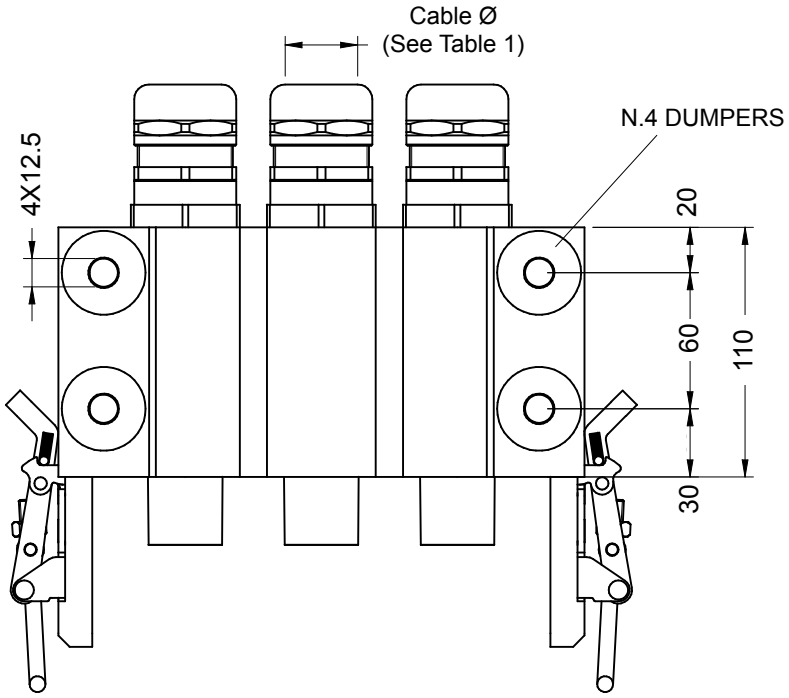
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
4 ; 4A ; 4B .... : All Same Contact Type
Example 2(4)-1(4A) Different Contact Types
(See Table 1)

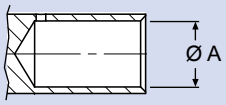
Application Notes:
- Receptacle with screen EMC gland and dumpers, for bogie applications. RoHs compliant.
- Working voltage: 3000 Vac.
- Test voltage: 12000 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 04
Assembly for Screen EMC Gland





Contact Crimp Bucket



System for Shielding Retention

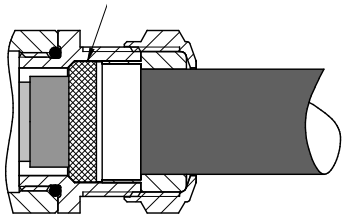


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	26MCM	120	11	21	450	520
4A	IRT-4-P-1650G10	IRT-4-S-1650G10	16.5	4/0	107	11	21	350	450
4B	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	3/0	95	11	21	320	400
4C	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	2/0	70	11	21	250	300
4D	IRT-4-P-1150G10	IRT-4-S-1150G10	11.5	1/0	50	10	17	150	250

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 04
Assembly for Screen EMC Gland

IRT 04 P - 3 5 S S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
04 (3 Contacts Double Lever System)

Shell Style
P (Plug)

Number of Contacts
3

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

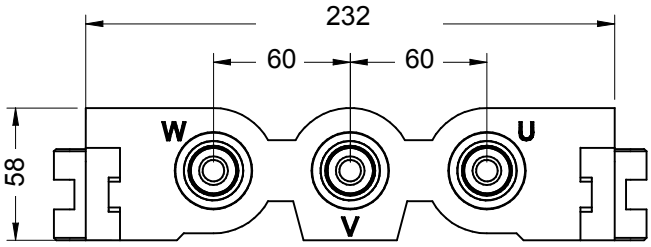
Backend
Screen EMC Gland (S)

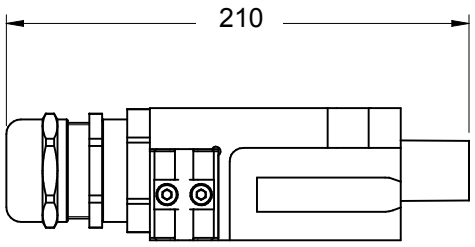
Contact Gender
P - Male
S - Female

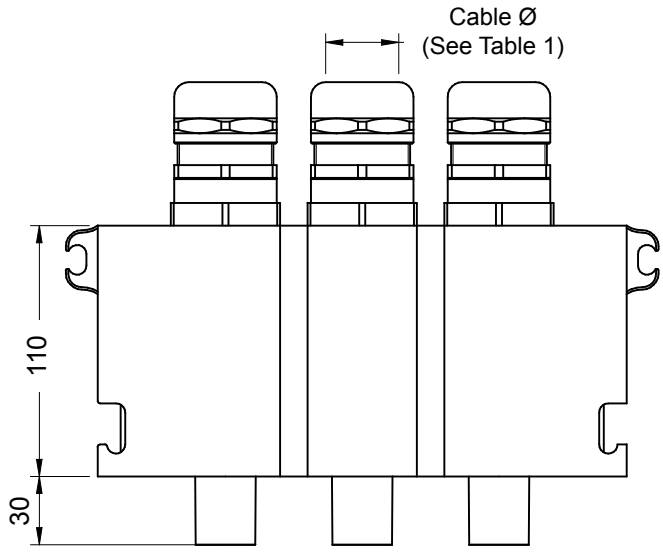
Contact Type
Different types can be used:
4 ; 4A ; 4B .... : All Same Contact Type
Example 2(4)-1(4A) Different Contact Types
(See Table 1)

Application Notes:
- Plug with screen EMC gland. RoHs compliant.
- Working voltage: 3000 Vac.
- Test voltage: 12000 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

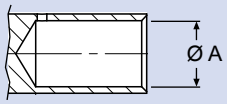
IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 04
Assembly for Screen EMC Gland







Contact Crimp Bucket



System for Shielding Retention

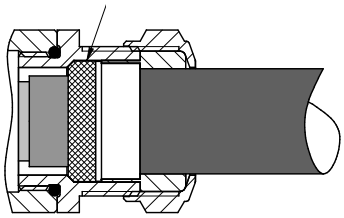


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	26MCM	120	11	21	450	520
4A	IRT-4-P-1650G10	IRT-4-S-1650G10	16.5	4/0	107	11	21	350	450
4B	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	3/0	95	11	21	320	400
4C	IRT-4-P-1440G10	IRT-4-S-1440G10	14.4	2/0	70	11	21	250	300
4D	IRT-4-P-1150G10	IRT-4-S-1150G10	11.5	1/0	50	10	17	150	250

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 05
Assembly for Metallic Gland

IRT 05 R - 4 5 P M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
05 (4 Contacts Lever System)

Shell Style
R (Receptacle)

Number of Contacts
4

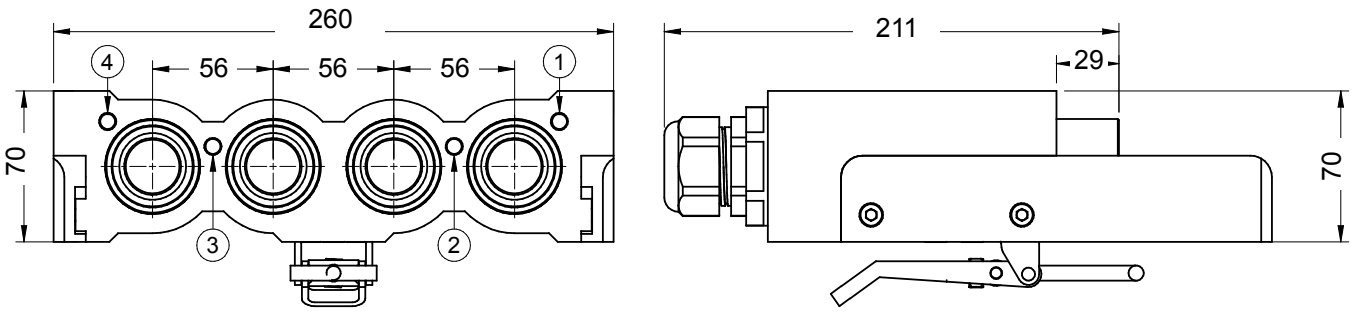
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

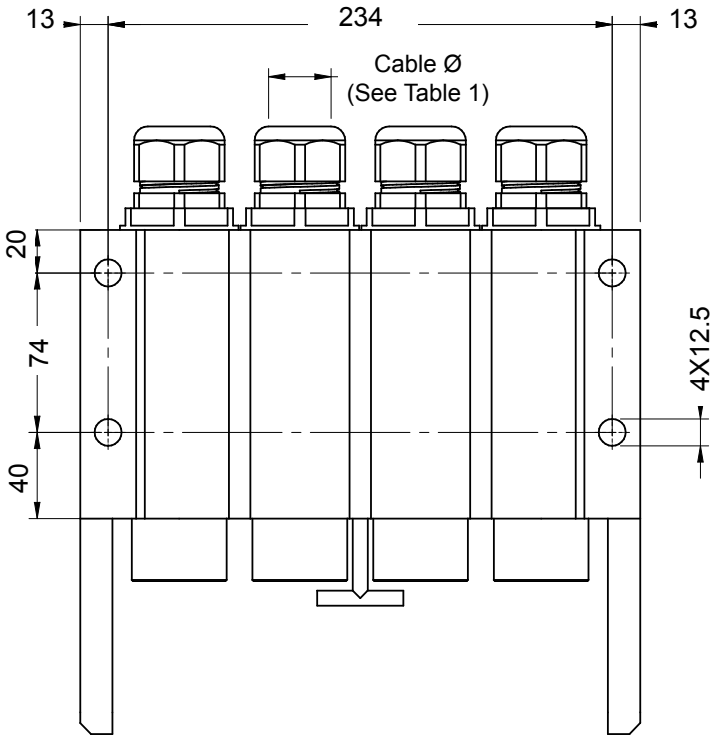
Backend
Metallic Gland (M)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
5 ; 5A ; 5B .... : All Same Contact Type
Example 3(5)-1(5A) Different Contact Types
(See Table 1)

Application Notes:
- Receptacle with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.





Contact Crimp Bucket

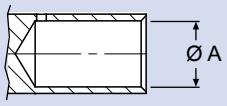


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
5	IRT-5-P-2200G10	IRT-5-S-2200G10	22	373MCM	185	28	32	550	600
5A	IRT-5-P-2090G10	IRT-5-S-2090G10	20.9	313MCM	150	24	28	500	550
5B	IRT-5-P-1780G10	IRT-5-S-1780G10	17.8	262MCM	120	16	19	450	520
5C	IRT-5-P-1550G10	IRT-5-S-1550G10	15.5	3/0	95	13	16	320	400
5D	IRT-5-P-900G10	IRT-5-S-900G10	9	2	35	8	11	120	150

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 05
Assembly for Metallic Gland

IRT 05 P - 4 5 S M XX

Series IRT Multi Pole Power Connector

Connector Shell Size
05 (4 Contacts Lever System)

Shell Style
P (Plug)

Number of Contacts
4

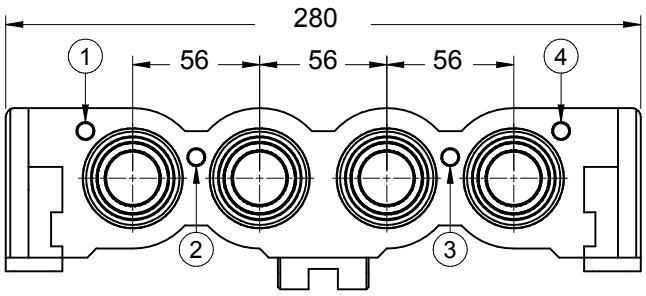
Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

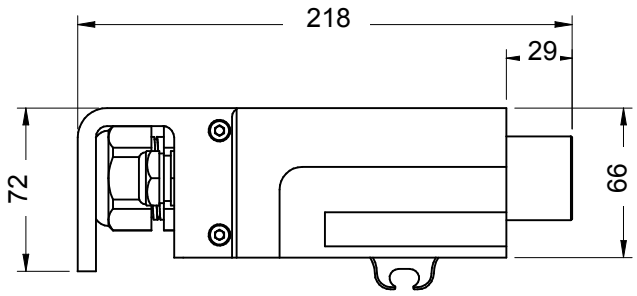
Backend
Metallic Gland (M)

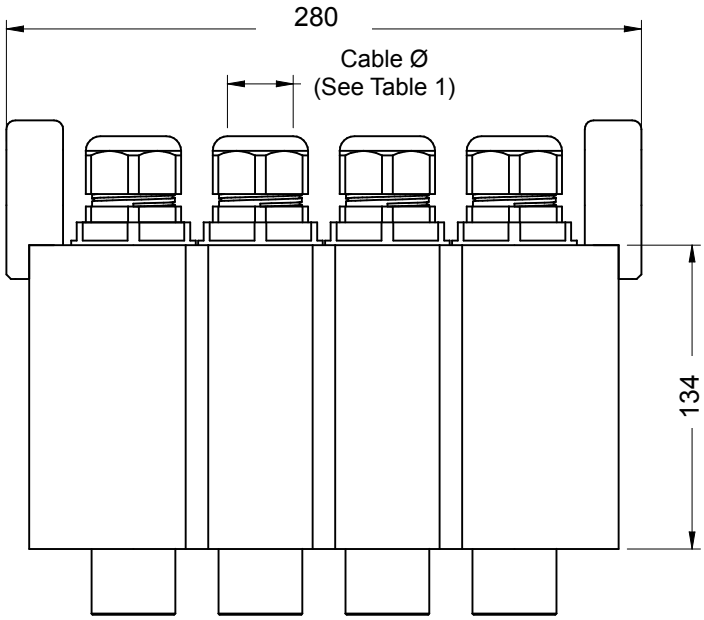
Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
5 ; 5A ; 5B .... : All Same Contact Type
Example 3(5)-1(5A) Different Contact Types
(See Table 1)

Application Notes:
- Plug with metallic gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.







Contact Crimp Bucket

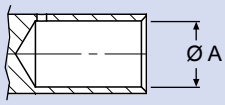


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
5	IRT-5-P-2200G10	IRT-5-S-2200G10	22	373MCM	185	28	32	550	600
5A	IRT-5-P-2090G10	IRT-5-S-2090G10	20.9	313MCM	150	24	28	500	550
5B	IRT-5-P-1780G10	IRT-5-S-1780G10	17.8	262MCM	120	16	19	450	520
5C	IRT-5-P-1550G10	IRT-5-S-1550G10	15.5	3/0	95	13	16	320	400
5D	IRT-5-P-900G10	IRT-5-S-900G10	9	2	35	8	11	120	150

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 05
Assembly for Clamp with Strain Relief

IRT 05 R - 4 5 P E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
05 (4 Contacts Lever System)

Shell Style
R (Receptacle)

Number of Contacts
4

Contact Type
Different types can be used:
5 ; 5A ; 5B .... : All Same Contact Type
Example 3(5)-1(5A) Different Contact Types
(See Table 1)

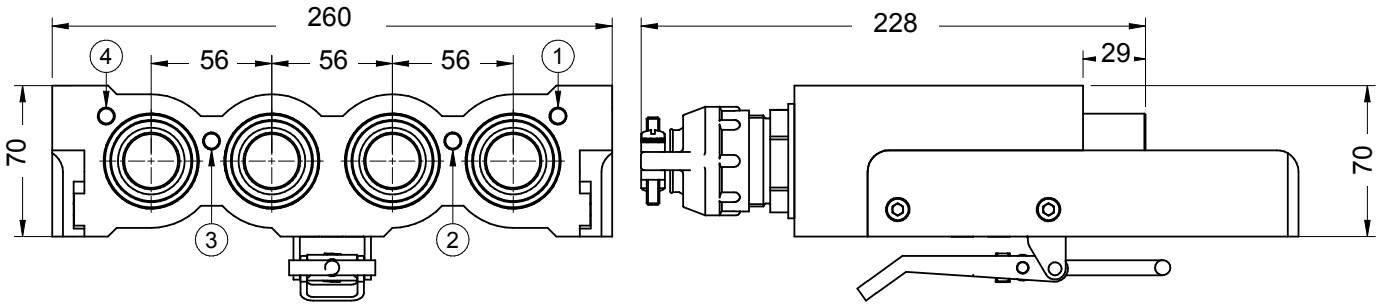
Contact Gender
P - Male
S - Female

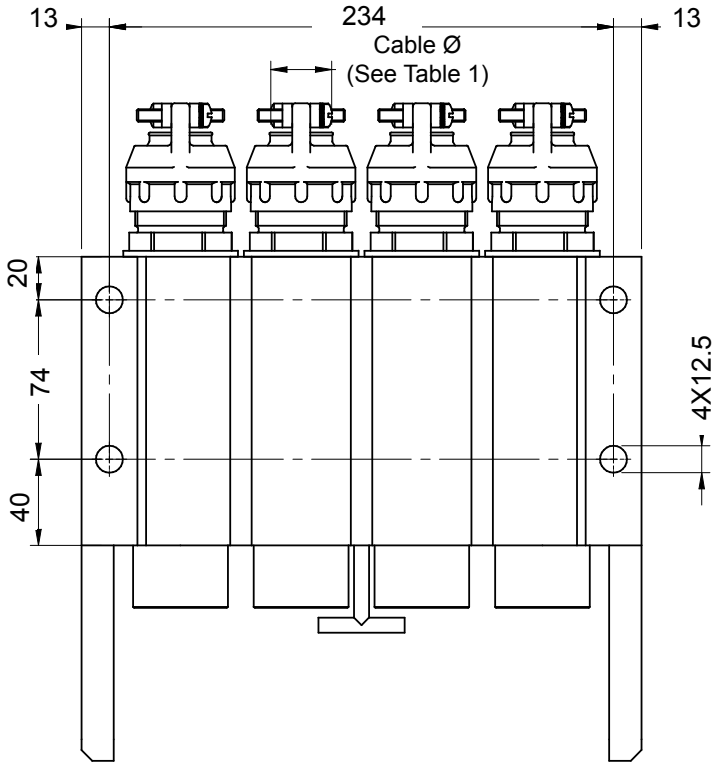
Backend
Clamp with Strain Relief (E)

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Application Notes:
- Receptacle with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 05
Assembly for Clamp with Strain Relief





Contact Crimp Bucket

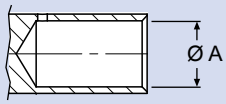


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
5	IRT-5-P-2200G10	IRT-5-S-2200G10	22	373MCM	185	28	32	550	600
5A	IRT-5-P-2090G10	IRT-5-S-2090G10	20.9	313MCM	150	24	28	500	550
5B	IRT-5-P-1780G10	IRT-5-S-1780G10	17.8	262MCM	120	16	19	450	520
5C	IRT-5-P-1550G10	IRT-5-S-1550G10	15.5	3/0	95	13	16	320	400
5D	IRT-5-P-900G10	IRT-5-S-900G10	9	2	35	8	11	120	150

* Related to cables section

CAGE Code A6854
Printed in U.S.A.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 05
Assembly for Clamp with Strain Relief

IRT 05 P - 4 5 S E XX

Series IRT Multi Pole Power Connector

Connector Shell Size
05 (4 Contacts Lever System)

Shell Style
P (Plug)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

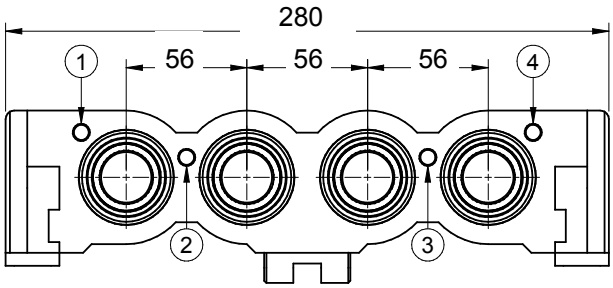
Backend
Clamp with Strain Relief (E)

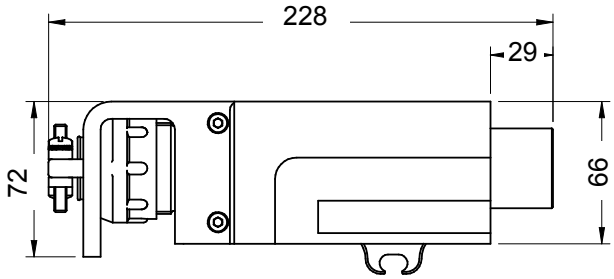
Contact Gender
P - Male
S - Female

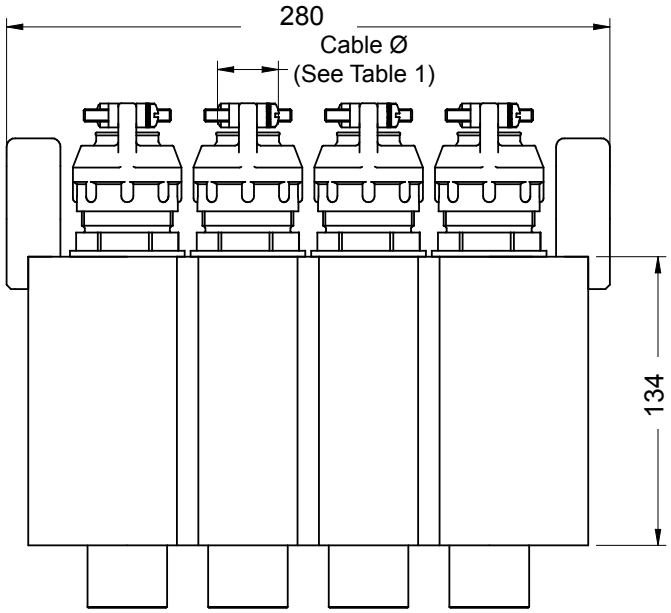
Contact Type
Different types can be used:
5 ; 5A ; 5B .... : All Same Contact Type
Example 3(5)-1(5A) Different Contact Types
(See Table 1)

Application Notes:
- Plug with clamp with strain relief. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with electrodeposited black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 05
Assembly for Clamp with Strain Relief







Contact Crimp Bucket

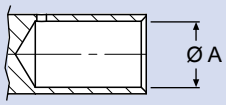


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
5	IRT-5-P-2200G10	IRT-5-S-2200G10	22	373MCM	185	28	32	550	600
5A	IRT-5-P-2090G10	IRT-5-S-2090G10	20.9	313MCM	150	24	28	500	550
5B	IRT-5-P-1780G10	IRT-5-S-1780G10	17.8	262MCM	120	16	19	450	520
5C	IRT-5-P-1550G10	IRT-5-S-1550G10	15.5	3/0	95	13	16	320	400
5D	IRT-5-P-900G10	IRT-5-S-900G10	9	2	35	8	11	120	150

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 05
Assembly for Screen EMC Gland

IRT 05 R - 4 5 P S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
05 (4 Contacts Lever System)

Shell Style
R (Receptacle)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

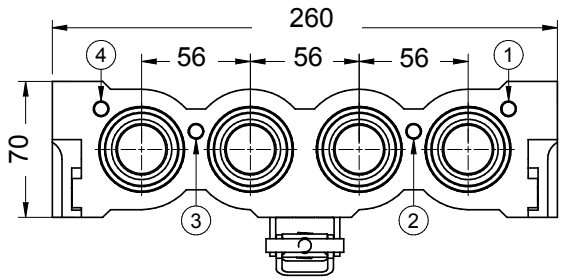
Backend
Screen EMC Gland (S)

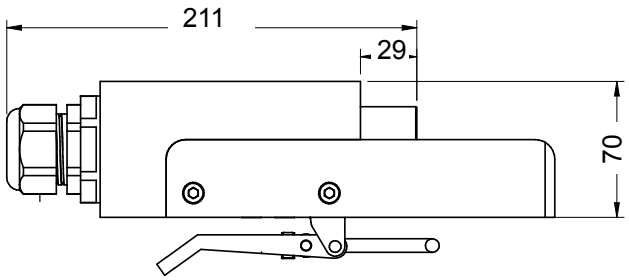
Contact Gender
P - Male
S - Female

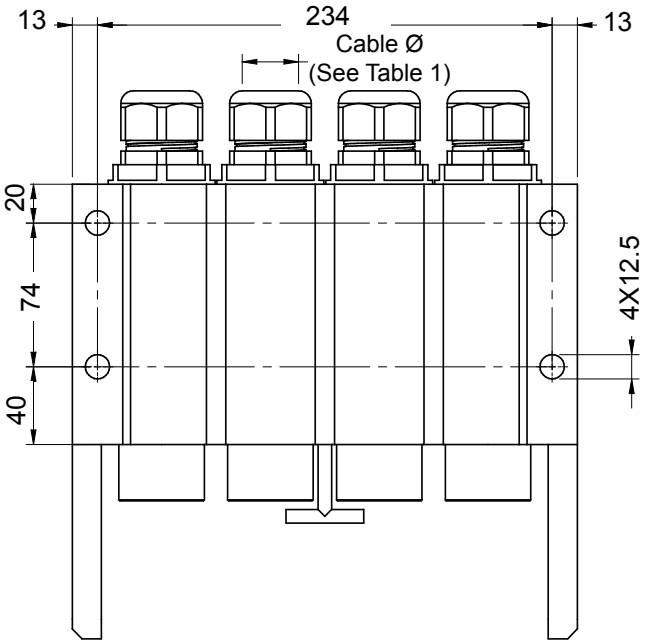
Contact Type
Different types can be used:
5 ; 5A ; 5B .... : All Same Contact Type
Example 3(5)-1(5A) Different Contact Types
(See Table 1)

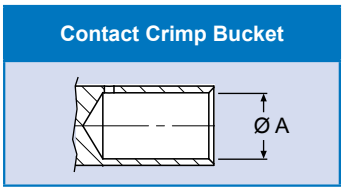
Application Notes:
- Receptacle with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 26.8 mm Min.
- Creepage distance: 26.8 mm Min.

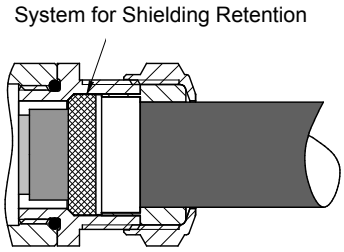
IRT Series
Rectangular Multi Pole Power Connector
Receptacle Shell Size 05
Assembly for Screen EMC Gland











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5A	IRT-5-P-2090G10	IRT-5-S-2090G10	20.9	313MCM	150	24	28	500	550
5B	IRT-5-P-1780G10	IRT-5-S-1780G10	17.8	262MCM	120	16	19	450	520
5C	IRT-5-P-1550G10	IRT-5-S-1550G10	15.5	3/0	95	13	16	320	400
5D	IRT-5-P-900G10	IRT-5-S-900G10	9	2	35	8	11	120	150

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 05
Assembly for Screen EMC Gland

IRT 05 P - 4 5 S S XX

Series IRT Multi Pole Power Connector

Connector Shell Size
05 (4 Contacts Lever System)

Shell Style
P (Plug)

Number of Contacts
4

Modification
Omitted (for Standard)
B0 (Connector Less Contacts)

Backend
Screen EMC Gland (S)

Contact Gender
P - Male
S - Female

Contact Type
Different types can be used:
5 ; 5A ; 5B .... : All Same Contact Type
Example 3(5)-1(5A) Different Contact Types
(See Table 1)

Application Notes:
- Plug with screen EMC gland. RoHs compliant.
- Working voltage: 1500 Vac.
- Test voltage: 4500 Vac.
- Water proof: IP67 level (coupled connectors).
- Contact resistance: 0.3 mΩ max.
- Temperature range: -55 to +125°C.
- Contact: copper alloy silver plating.
- Insulator: UL94V0-NFF16-102:I2F1 (exigency 4).
- Shell: Aluminium alloy with conductive black plating.
- Clearance in air: 26.8 mm Min.
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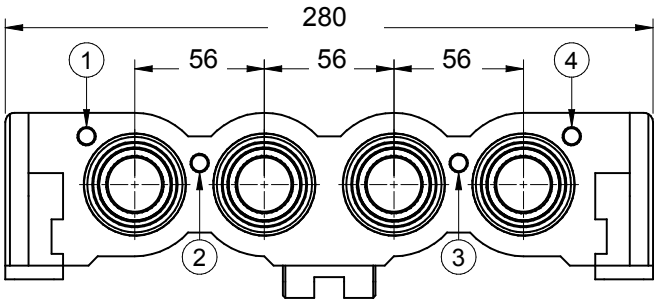
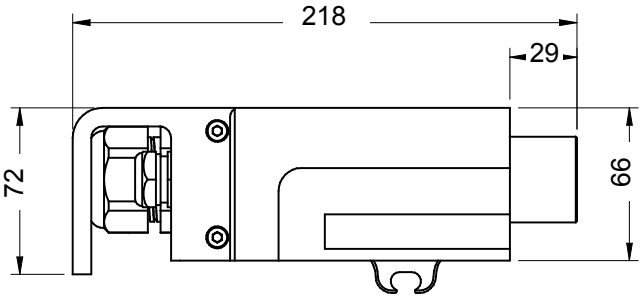
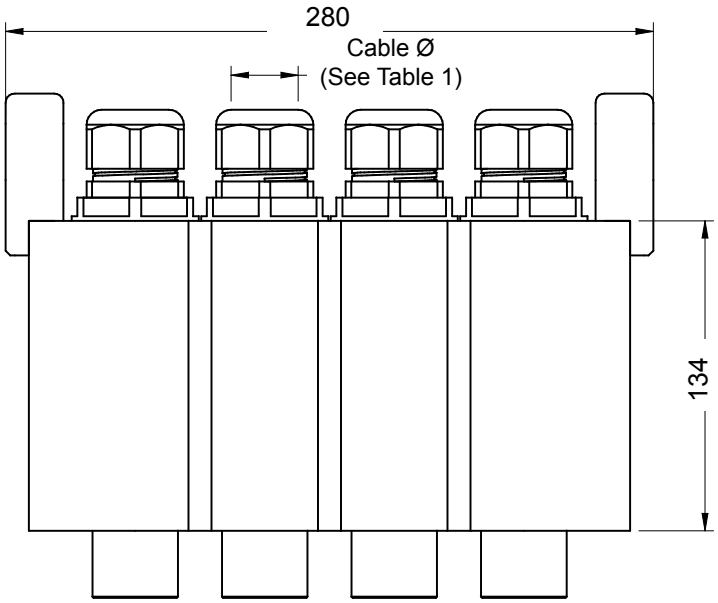
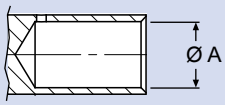
IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 05
Assembly for Screen EMC Gland







Contact Crimp Bucket



System for Shielding Retention

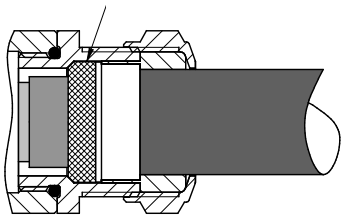


TABLE 1 - CONTACTS

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Section (mmq)	Cable Diameter (mmq) Min	Cable Diameter (mmq) Max	Working Current (A) *	Max Current (A) *
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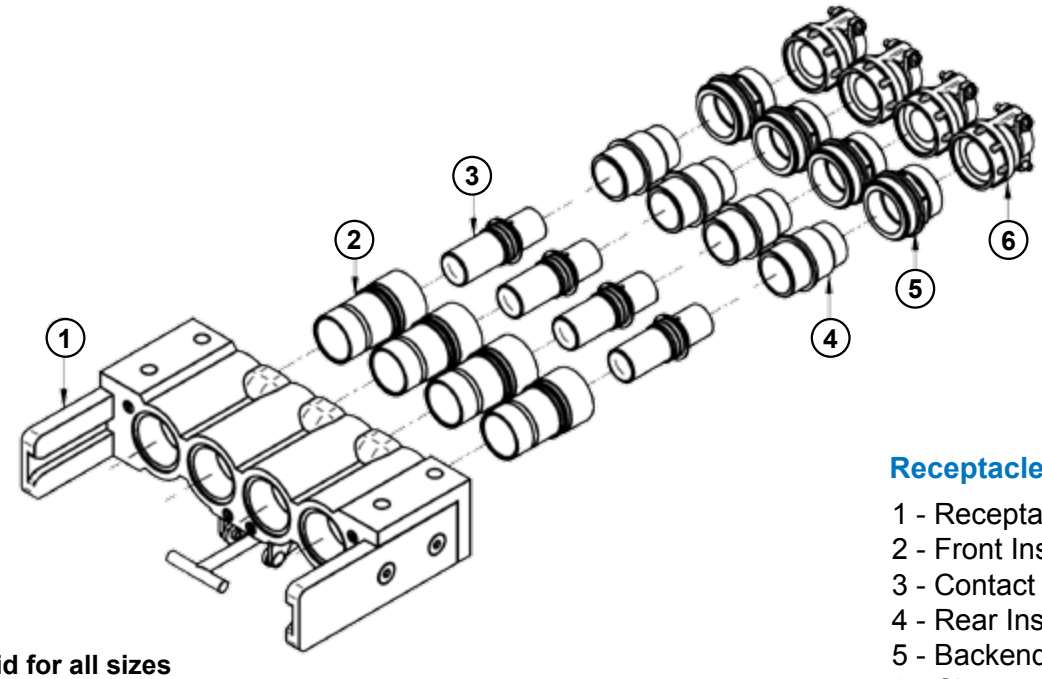
5A	IRT-5-P-2090G10	IRT-5-S-2090G10	20.9	313MCM	150	24	28	500	550
5B	IRT-5-P-1780G10	IRT-5-S-1780G10	17.8	262MCM	120	16	19	450	520
5C	IRT-5-P-1550G10	IRT-5-S-1550G10	15.5	3/0	95	13	16	320	400
5D	IRT-5-P-900G10	IRT-5-S-900G10	9	2	35	8	11	120	150

* Related to cables section

IRT Series
Rectangular Multi Pole Power Connector
Wiring Instructions - Receptacle Connector - Example: Size 03

Wiring Instructions - Receptacle Connector - Example: Size 03

Valid for all kinds of backends



Valid for all sizes

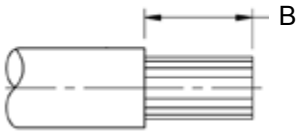
Receptacle Connector

1 - Receptacle Shell
2 - Front Insert
3 - Contact
4 - Rear Insert
5 - Backend Adapter
6 - Clamp

Step 1

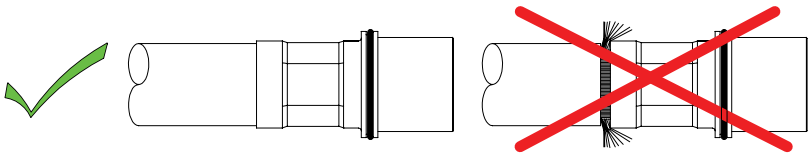
TABLE 2

Contact Type	B (mm)
1	20.0
2	20.0
3	20.0
4	21.0
5	29.0



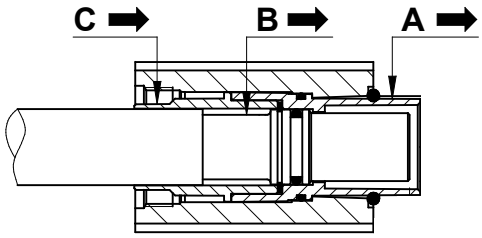
Cut and strip the cable (See TABLE 2).

Step 2



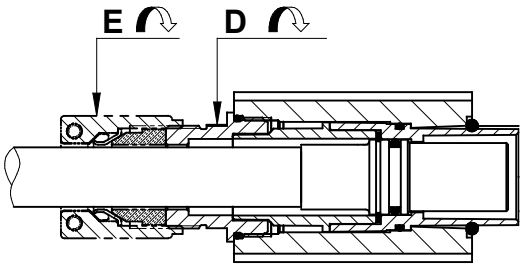
Crimp contacts (3) on conductors.

Step 3



Put the front insert (2) into the body. Insert the contact (3) crimped into the front insert (2).
Install the rear insert (4).

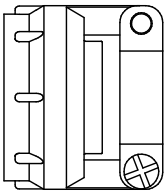
Step 4



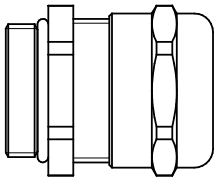
Tightening Torque	
Size	Value (Nm Max)
1	30.0
2 - 3	30.0
4	35.0
5	35.0

Screw the backend onto the rear of the receptacle and tighten.

Step 5



Tightening Torque	
Size	Value (Nm Max)
1	9.0
2 - 3	9.0
4 - 5	13.0

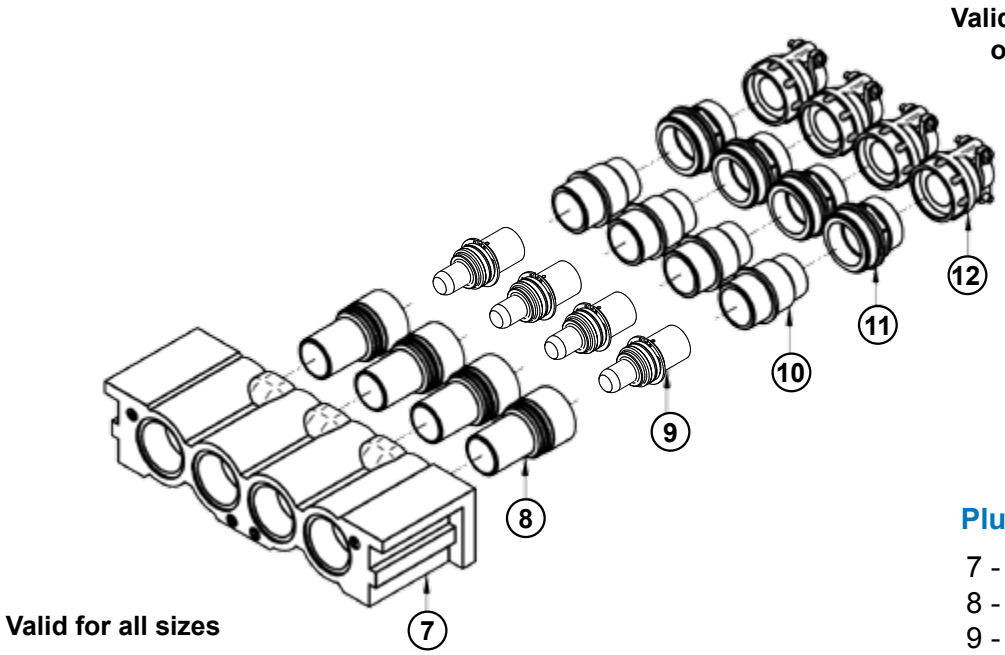


Tightening Torque	
Size	Value (Nm Max)
1	8.0
2 - 3	8.0
4 - 5	18.0

Screw the clamp onto the backend and tighten.
Electrical Test: Insulation resistance 5000 Mohm (Min).
Test Voltage: 3000 Vac according with the arrangement.

IRT Series
Rectangular Multi Pole Power Connector
Wiring Instructions - Plug Connector - Example: Size 03

Wiring Instructions - Plug Connector - Example: Size 03



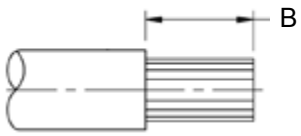
Plug Connector

7 - Plug Shell
8 - Front Insert
9 - Contact
10 - Rear Insert
11 - Backend Adapter
12 - Clamp

Step 1

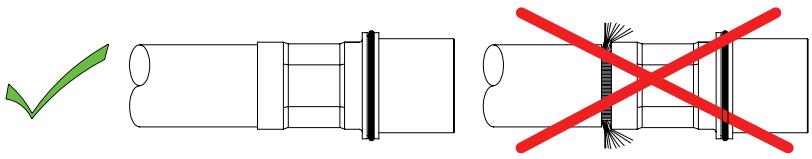
TABLE 2

Contact Type	B (mm)
1	20.0
2	20.0
3	20.0
4	21.0
5	29.0



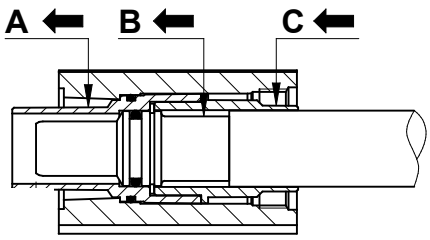
Cut and strip the cable (See TABLE 2).

Step 2



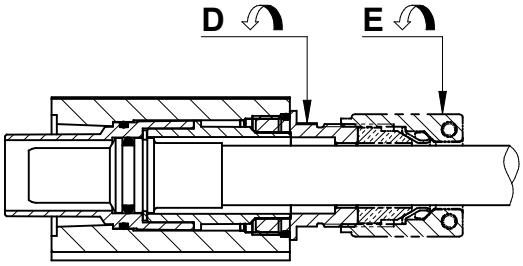
Crimp contacts (3) on conductors.

Step 3



Put the front insert (8) into the body. Insert the contact (9) crimped into the front insert (8).
Install the rear insert (10).

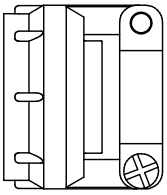
Step 4



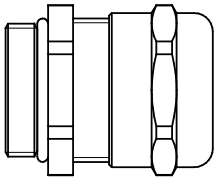
Tightening Torque	
Size	Value (Nm Max)
1	30.0
2 - 3	30.0
4	35.0
5	35.0

Screw the backend onto the rear of the receptacle and tighten.

Step 5



Tightening Torque	
Size	Value (Nm Max)
1	9.0
2 - 3	9.0
4 - 5	13.0



Tightening Torque	
Size	Value (Nm Max)
1	8.0
2 - 3	8.0
4 - 5	18.0

Screw the clamp onto the backend and tighten.

Electrical Test: Insulation resistance 5000 Mohm (Min).
Test Voltage: 3000 Vac according with the arrangement.

Glenair®

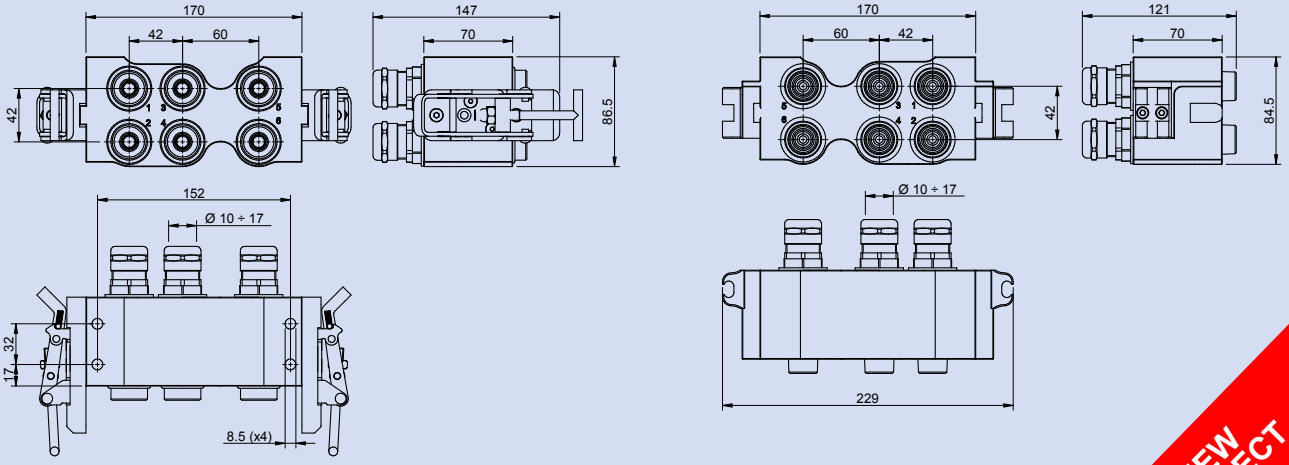
IRT Series
Rectangular Multi Pole Power Connector
- 6 Poles -
Assembly for Metal and Screen EMC Gland

NEW PROJECT

IRT 6 Poles Series Connectors

DESCRIPTION

Receptacle and Plug in aluminium alloy.
Closing system with Latchs with unlocking security system, padlockable.
Assisted and polarized coupling by side guides



NEW PROJECT

CAGE Code A6854

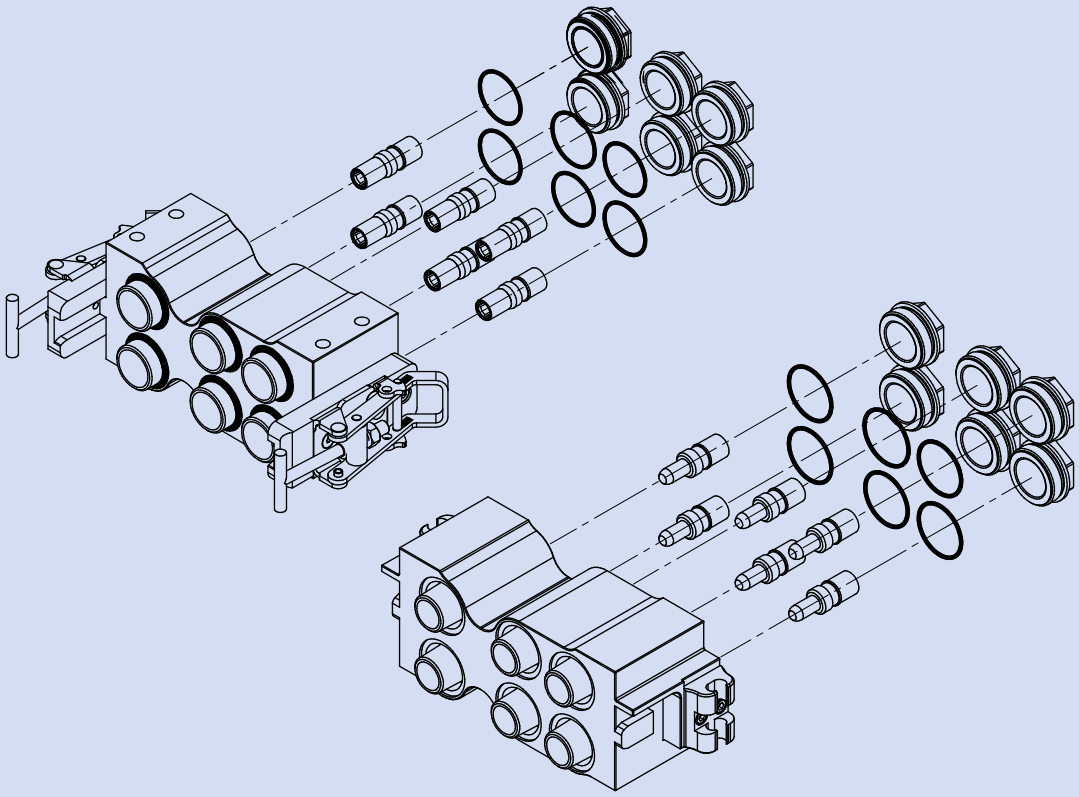
Printed in U.S.A.

IRT Series
Rectangular Multi Pole Power Connector
Plug Shell Size 06
Assembly for Metal and Screen EMC Gland

NEW PROJECT

TECHNICAL CHARACTERISTICS
- 8 socket crimp contacts:
6 size 1/0 contacts wih buckets for 50 mm ²
(interlock - backwarded)
- starting current rating : 180A (for 30 sec. every 2min.)
- working current : Size 1/0 = 150 A a 80°C - Size 16 = 13 A a 80°C
- working voltage : 1'500 Vac / 50 Hz
- test voltage: 4'500 Vac / 50Hz
- working temperature: (-55 to +125)°C
- IP rating (coupled connector): IP67
- weight: 2.5 kg

MATERIAL AND PROTECTION PLATING
Contacts: copper alloy with silver plating (G10)
Inserts: polychloroprene rubber
Gaskets: polychloroprene rubber and silicone
Body: aluminium alloy
- electrodeposition of black paint (F6) (cataphoresis)
RoHS compliant
Latch: stainless steel
Screws and others: stainless steel



NEW PROJECT

IRT Series
Rectangular Multi Pole Power Connector
Crimping Table and Tools

Crimping Table and Tools

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (AWG)	Cable Diameter (mmq)	Die (mmq)	Crimping Tools	Tensile Strength (N)
1	IRT-1-P-620G10	IRT-1-S-620G10	6.2	4	25	M112100	M112004	1500
2	IRT-2-P-1070G10	IRT-2-S-1070G10	10.7	1/0	50	M112007	M112004	2500
3	IRT-5-P-1650G10	IRT-5-S-1650G10	16.5	4/0	120	M112012	M105013	4200
3A	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	2/0	70	M105016	M105013	3300
3B	IRT-3-P-1440G10	IRT-3-S-1440G10	14.4	3/0	95	M105016	M105013	3700
4	IRT-4-P-1780G10	IRT-4-S-1780G10	17.8	262MCM	120	M112018	M105013	4200
4A	IRT-4A-P-1650G10	IRT-4A-S-1650G10	16.5	4/0	107	M112012	M105013	4200
4B	IRT-4B-P-1440G10	IRT-4B-S-1440G10	14.4	3/0	95	M105056	M105013	3700
4C	IRT-4B-P-1440G10	IRT-4B-S-1440G10	14.4	2/0	70	M105016	M105013	3300
4D	IRT-4D-P-1150G10	IRT-4D-S-1150G10	11.5	1/0	50	M112007	M112004	2500
5	IRT-15-P-2200G10	IRT-15-S-2200G10	22.0	373MCM	185	M105035	M105013	5600
5A	IRT-14-P-2090G10	IRT-14-S-2090G10	20.9	313MCM	150	M112012	M105013	4800
5B	IRT-13-P-1780G10	IRT-13-S-1780G10	17.8	262MCM	120	M112012	M105013	4200
5C	IRT-11-P-1550G10	IRT-11-S-1550G10	15.5	3/0	95	M105016	M105013	3700
5D	IRT-10-P-900G10	IRT-10-S-900G10	9.0	2	35	M112007	M112004	2200

Oleodynamic Crimp Tool

Die for Oleodynamic Crimp Tool

For further Crimping steps details, please contact the factory.

WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO EQUIPMENT, SERIOUS PERSONAL INJURY OR EVEN DEATH.

It is the user's responsibility to ensure these products are used safely. Glenair, Inc., including all Glenair, Inc. subsidiaries, is NOT responsible for damage to equipment, personal injury or death from use of Glenair, Inc. products.

Only qualified electrical technicians should use interconnection products in high voltage and other electrical conditions.

Interconnection products must be clean and dry when installed. Mating and de-mating should never occur under load.

Damaged interconnection products must be replaced immediately by a trained electrical technician.

Glenair, Inc. reserves the right to modify this Warning, any other warning, all catalogs, gleniar.com website, and any other technical information with or without notice.

For further information and technical assistance, please contact your local Glenair Sales Office or see our website: **www.glenair.com**

ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Introduction

TSR: Trains for Regional Service

Glenair is a primary supplier of Interconnect components and systems for Trains for Regional Service (TSR) in Italy. Designed and manufactured in cooperation with AnsaldoBreda and Keller, TSRs are double-deck Electric Multiple Unit trains with distributed power, consisting of two MCH motor coaches with driver's cabs and one or more intermediate motor coaches.

The TSR Train cars manufactured in cooperation by AnsaldoBreda and Keller.

The traction unit's composition can be varied from 3 to 6 motor coaches to maintain constant performance. Two or more traction units can be coupled and remote controlled, up to 12 motor coaches. The installation of the train's furnishings allows easy modification of the seat layout, and the ability to substitute seats with a baggage compartment, folding seats, or lockers.

An IGBT traction inverter is installed in each motor coach. Each of these water-cooled inverters feeds two three-phase asynchronous motors. Furthermore, two static groups (3 kV DC/380 V AC 50 Hz) for auxiliary services, each equipped with a battery charter, are installed on the train. Every TSR is equipped with mechanical disc braking on each axle and regenerative electric braking, with reserve rheostat, on each motor axle.

SEPTA Explores Energy-saving Technologies

Southeastern Pennsylvania Transportation Authority (SEPTA) is exploring ways of saving million of dollars by taking advantage of the latest energy storage technologies. The project is focusing on Philadelphia's Market - Frankford subway line, where the fleet of M-4 trains is already equipped with regenerative braking. "Smart Grid" technology will allow SEPTA to capture and store braking energy in large-scale batteries. This recovered energy can then be reused on the network, improving power quality, or fed back to the grid to generate additional revenue for SEPTA.

The new SEPTA train manufactured by Amtrak.

This energy-saving technology is also expected to reduce carbon emission by 1250 tons per year. The joint project between Viridity Energy and SEPTA is being supported by a $900,000.00 grant from the State of Pennsylvania. If the pilot is succesful, the technology could be deployed elsewhere on all the SEPTA network—the Regional Rail Division that provides commuter rail service on thirteen branches to over 150 active stations in Philadelphia, Pennsylvania and its suburbs.

Glenair is one of the main suppliers of Interconnection Systems and Connectors for this advanced, energy saving train.

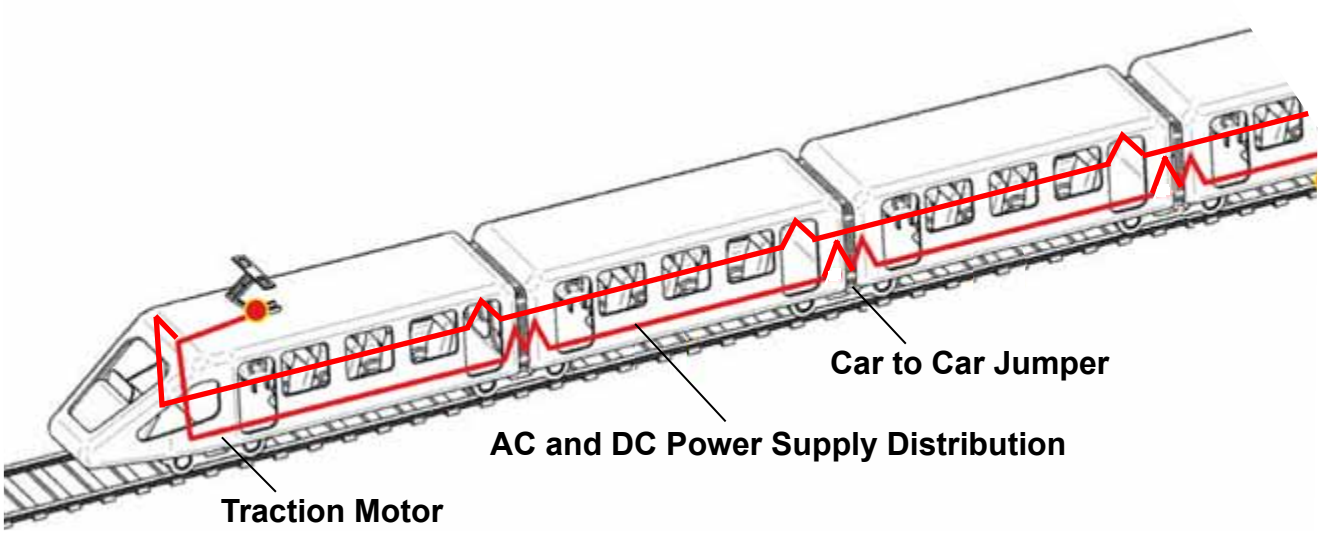
ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Technical Characteristics

ITS 901 Series is the extension of the ITS Reverse Bayonet connector family, for power cables over AWG 1/0.
Suitable for harsh environmental conditions, 901 Series Connectors accept cable from AWG 4 to 262 MCM (35 - 120 mmq), for current up to 450 Amp.
Working voltage: 800 - 1000 Vac.
Available for single wires and multipole jacketed cables, with cable clamp or conduit.
Male contacts with Finger Test Protection, Load Side (Receptacle or Plug).
Long bayonet ramps, three polarization keys and rubber recovered coupling facilitate mating and unmating operations.
901 Series meet the most important rail requirements and specifications:

- Salt Spray Test Corrosion: 500 hours;
- 500 Mating Cycles;
- Shock and Vibrations for Under-Car and Car-To-Car Applications;
- IP67 Sealing (Coupled Connectors);
- Fire Resistant and RoHS Compliant Materials.

Plug Connector

Receptacle Connector

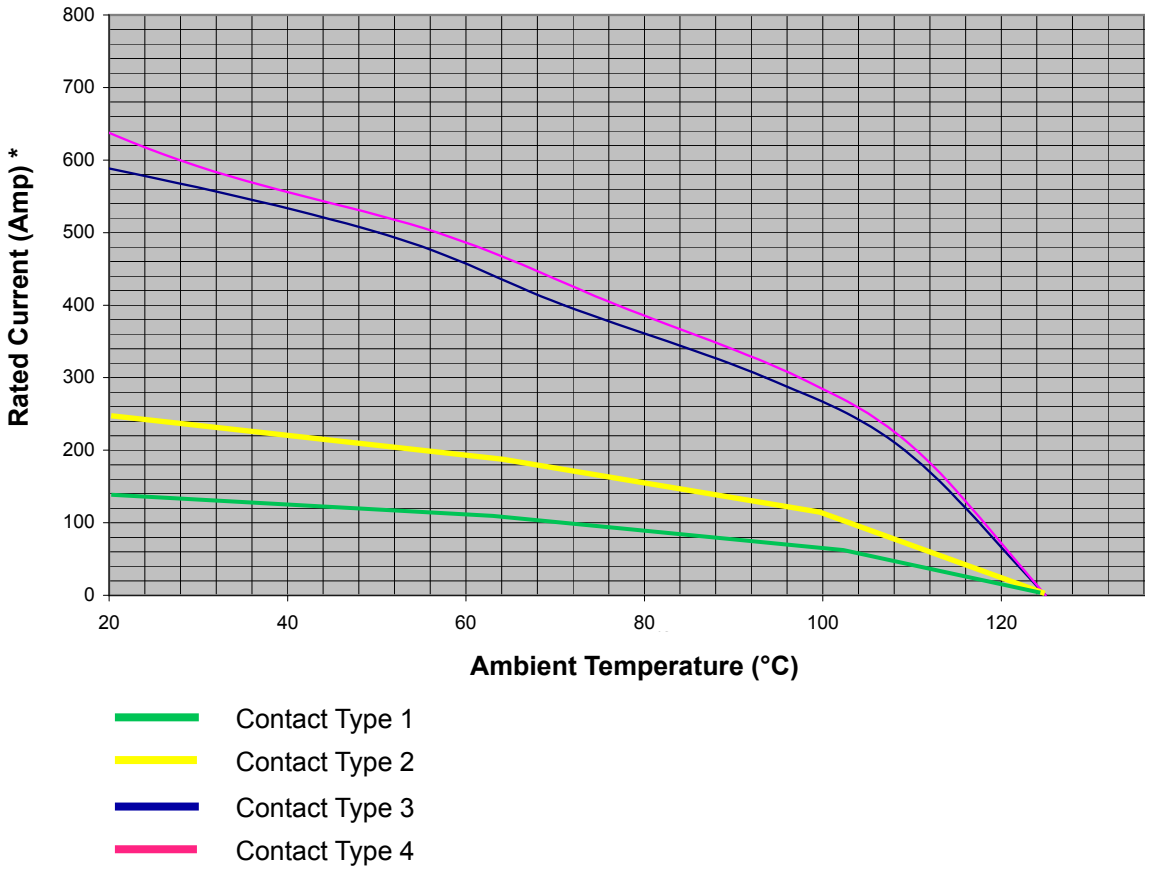


ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Technical Characteristics

Procedures Table

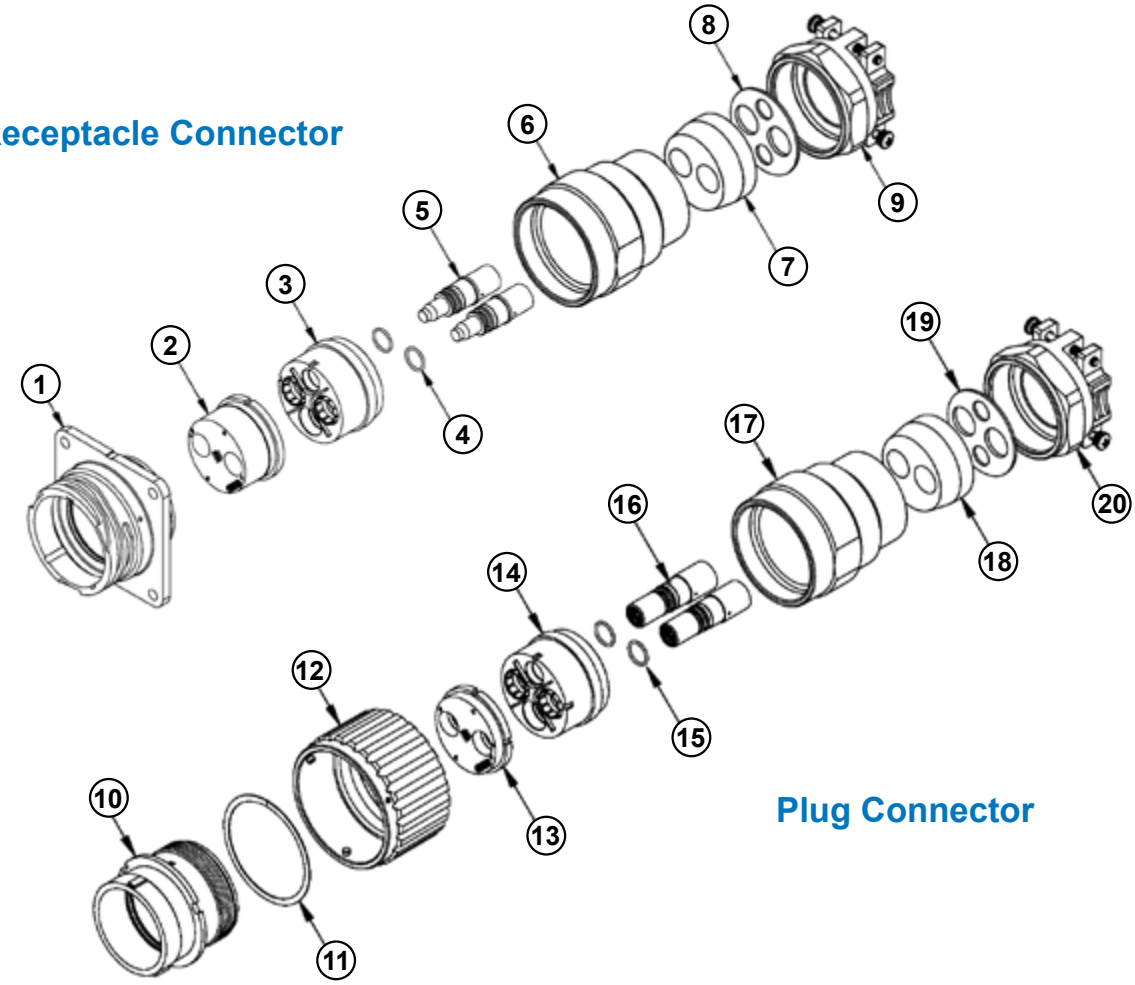
Description	Procedure
Electrical Characteristics	CEI EN 50124 and CEI EN 60077
Environmental Conditions	CEI EN 50125
Water Protection	CEI EN 60529
Shock and Vibration	CEI EN 61373
Corrosion Protection	VG 95210 - 2
Fire Protection	UNI CEI 1170 - 3
Mating Cycles	VG96929

Rated Current Graphic



* According with Cables Section

ITS 901 Components Exploded View



Receptacle Connector

1 - Receptacle shell
2 - Front Male Insert
3 - Back Insert Group
4 - O-Ring
5 - Pin Contacts
6 - Backshell
7 - Sealing Grommet
8 - Compression Ring
9 - Cable Clamp

Plug Connector

10 - Plugshell
11 - Washer
12 - Coupling Nut
13 - Front Insert
14 - Back Insert Group
15 - O-Ring
16 - Socket Contacts
17 - Backshell
18 - Sealing Grommet
19 - Compression Ring
20 - Cable Clamp

ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Available Configurations

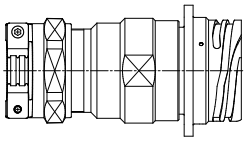
Available Configurations

Receptacle Connectors

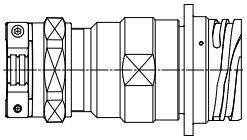
Weight: 850.0 gr

ITS 901 00

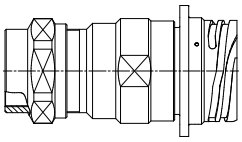
Front Mount



ITS 901 00 - 1 (Page 10)



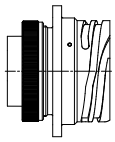
ITS 901 00 - 2 (Page 16)



ITS 901 00 - 3 (Page 22)

ITS 901 02

Rear Mount



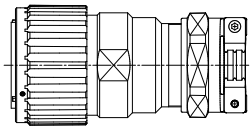
ITS 901 02 (Page 8)

Backshell	Description
1	Single Wires Cable Clamp
2	Jacketed Cable Clamp
3	Adapter for Plastic or Metallic Conduit

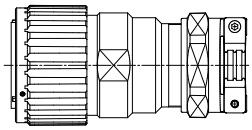
Plug Connectors

Weight: 850.0 gr

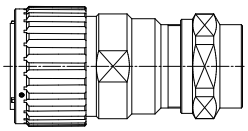
ITS 901 06



ITS 901 06 - 1 (Page 12)

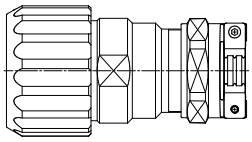


ITS 901 06 - 2 (Page 18)

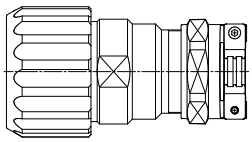


ITS 901 06 - 3 (Page 24)

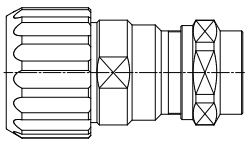
ITS 901 06G



ITS 901 06G - 1 (Page 14)



ITS 901 06G - 2 (Page 20)



ITS 901 06G - 3 (Page 26)

ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
How to Order - Part Number Breakdown

How to Order - Part Number Breakdown

Series
ITS 901: *Multi Pole Bayonet Power Connector*

Contact Arrangements
50-2
50-3
50-31
50N-31

Alternative Rotation
Omitted: *for Standard*
W 90°: *Second Polarization Key*

Modification Codes
Omitted: *for Standard Version*
B0: *Connector Less Contacts*
F7: *Conductive Black Plating*
MXX: *Modified Contacts:*
- M3A, M3B and M3C (for 3 Contacts Type)
- M4A, M4B and M4C (for 4 Contacts Type)

ITS 901	00	50-31	P	W	1	XX

Connector Shell Style
00: *Front and Rear Mount Receptacle with Backshell*
02: *Front and Rear Mount Receptacle without Backshell*
06: *Straight Plug*
06G: *Straight Plug with Rubber Recovered Coupling Nut*

Contacts Gender
P: *Male with Finger Test Protection (Load Side)*
S: *Female*

Connector Backshell
1: *Cable Clamp, Single Wires Environmental*
2: *Cable Clamp, Jacketed Cable Environmental*
3: *Conduit Adapter, Environmental*

* For different cable dimensions, please contact the factory.

ITS 901 02
Front and Rear Mount Receptacle Connector

ITS 901 02 50-2 S W XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
02 (Front and Rear Mount Receptacle without Backshell)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Front and rear mount receptacle without backshell. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 02
Front and Rear Mount Receptacle Connector

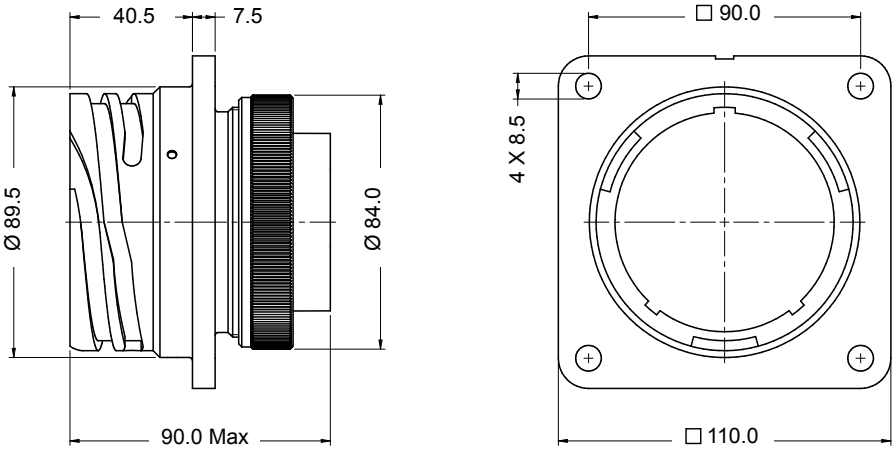


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

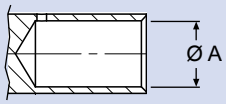


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 00 - 1
Front and Rear Mount Receptacle Connector Assembly for Single Wires Cable Clamp

ITS 901 00 50-2 P W 1 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
00 (Front and Rear Mount Receptacle with Backshell)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
1 (Single Wires Cable Clamp)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Front and Rear mount receptacle with backshell for single wires. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 00 - 1
Front and Rear Mount Receptacle Connector Assembly for Single Wires Cable Clamp

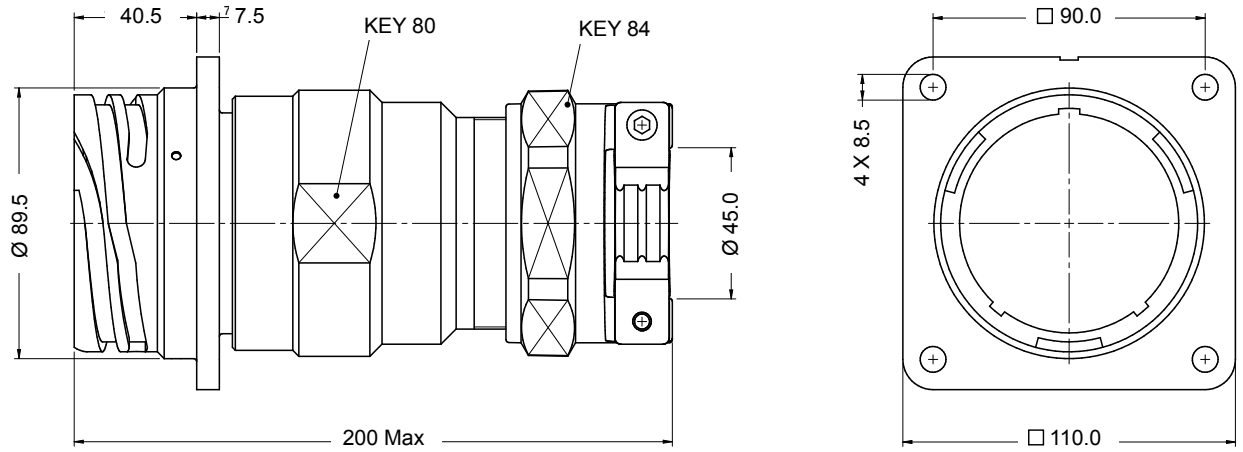


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

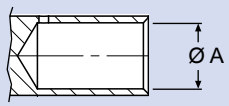


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 06 - 1
Straight Cylindrical Plug
Assembly for Single Wires Cable Clamp

ITS 901 06 50-2 P W 1 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
06 (Straight Plug)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
1 (Single Wires Cable Clamp)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Straight Plug with backshell for single wires. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 06 - 1
Straight Cylindrical Plug
Assembly for Single Wires Cable Clamp

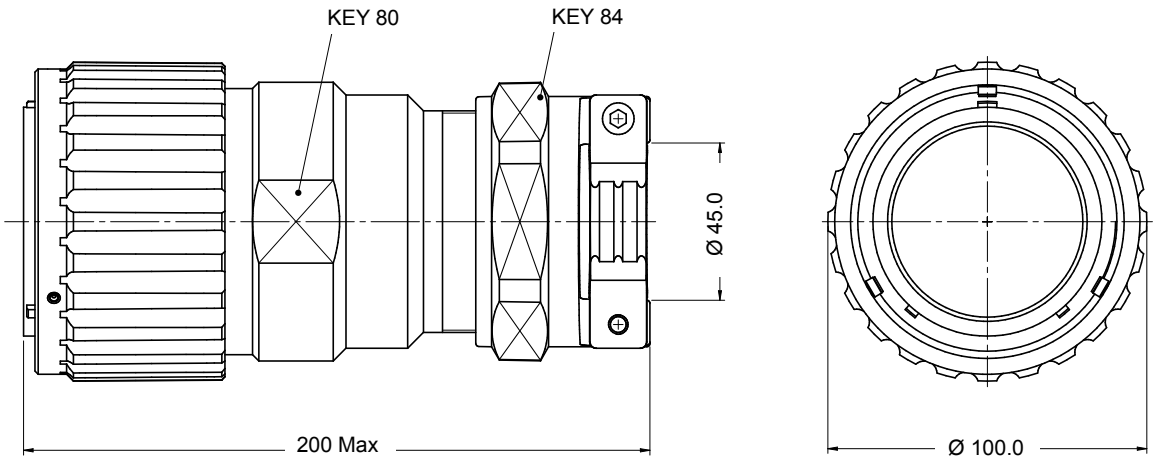


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

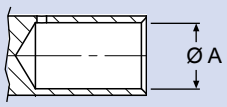


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 06G - 1
Straight Cylindrical Plug with Rubber Recovered Coupling Assembly for Single Wires Cable Clamp

ITS 901 06G 50-2 P W 1 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
06G (Straight Plug with Rubber Recovered Coupling Nut)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
1 (Single Wires Cable Clamp)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Straight Plug with backshell for single wires with rubber recovered coupling. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 06G - 1
Straight Cylindrical Plug with Rubber Recovered Coupling Assembly for Single Wires Cable Clamp

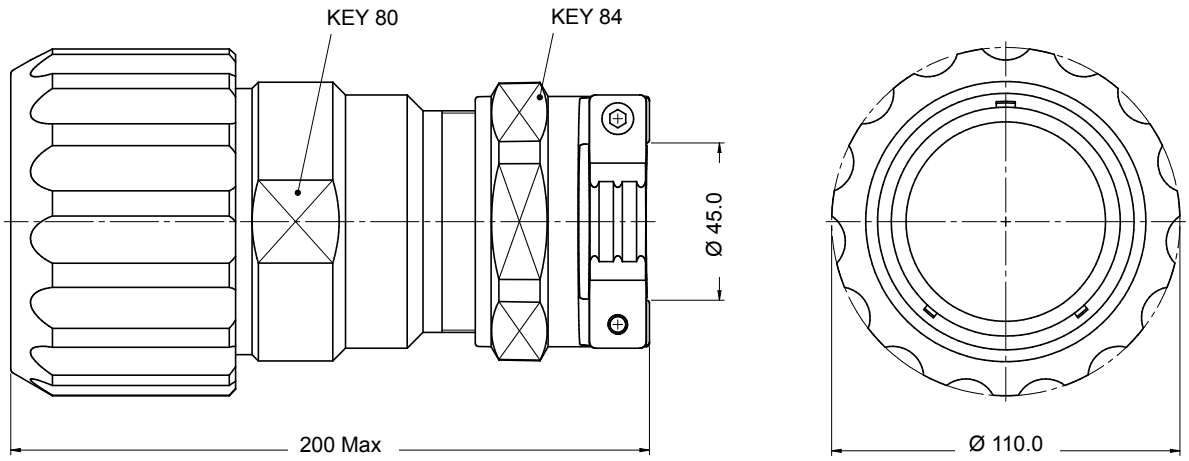


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

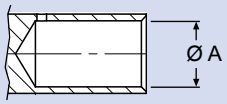


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 00 - 2
Front and Rear Mount Receptacle Assembly for Jacketed Cable

ITS 901 00 50-2 P W 2 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
00 (Front and Rear Mount Receptacle with Backshell)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
2 (Jacketed Cable Clamp)

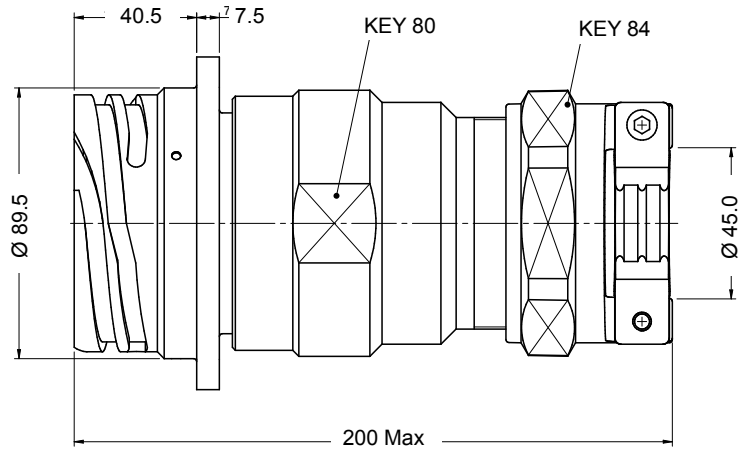
Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Front and Rear mount receptacle with backshell for jacketed cable. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 00 - 2
Front and Rear Mount Receptacle Assembly for Jacketed Cable



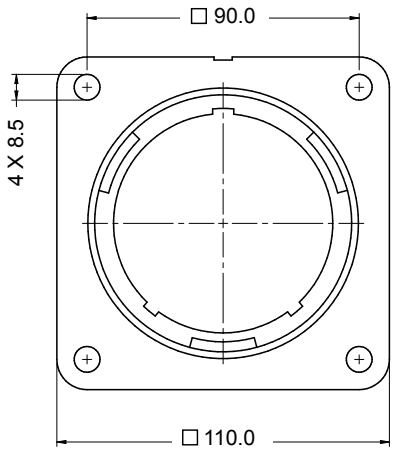


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

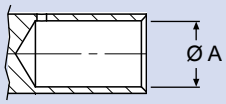


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 06 - 2
Straight Cylindrical Plug
Assembly for Jacketed Cable

ITS 901 06 50-2 P W 2 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
06 (Straight Plug)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
2 (Jacketed Cable Clamp)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Straight Plug with backshell for jacketed cable. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 06 - 2
Straight Cylindrical Plug
Assembly for Jacketed Cable

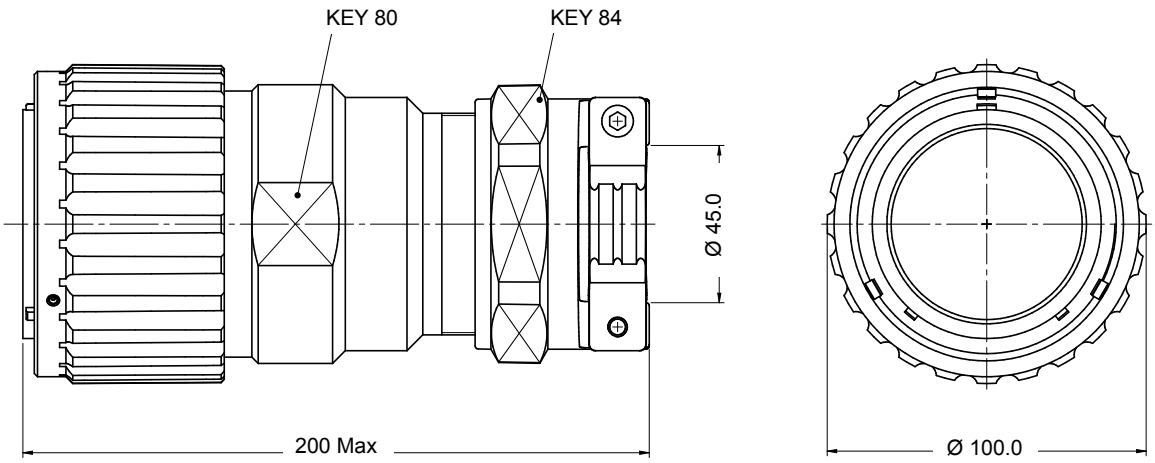


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

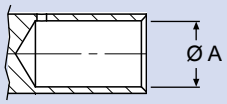


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 06G - 2
Straight Cylindrical Plug with Rubber Recovered Coupling Assembly for Jacketed Cable

ITS 901 06G 50-2 P W 2 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
06G (Straight Plug with Rubber Recovered Coupling Nut)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
2 (Jacketed Cable Clamp)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Straight Plug with backshell for jacketed cable with rubber recovered coupling. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 06G - 2
Straight Cylindrical Plug with Rubber Recovered Coupling Assembly for Jacketed Cable

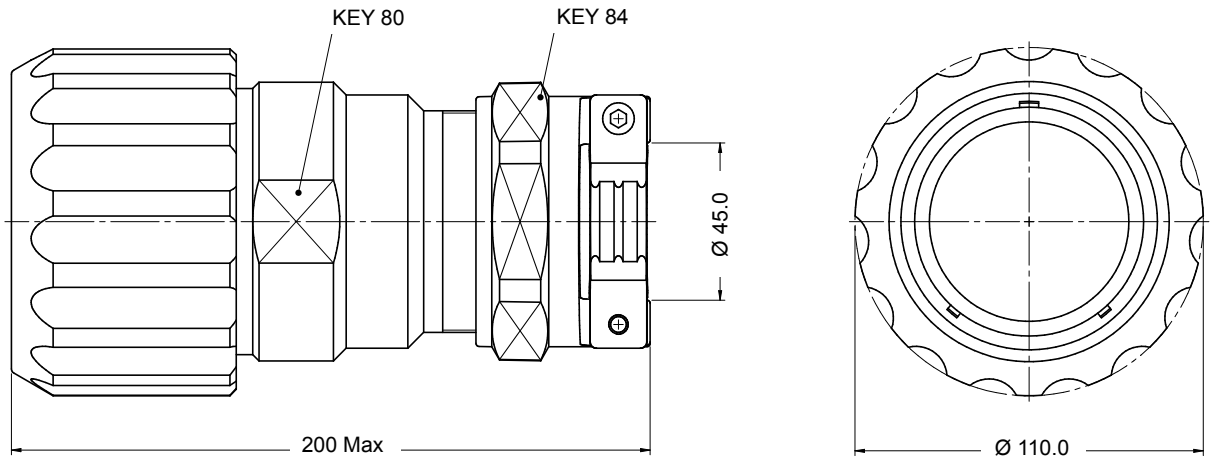


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

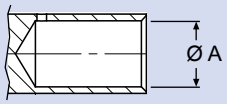


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 00 - 3
Front and Rear Mount Receptacle Assembly for Single Wires and Conduit

ITS 901 00 50-2 P W 3 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
00 (Front and Rear Mount Receptacle with Backshell)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
3 (Adapter for Plastic or Metallic Conduit)

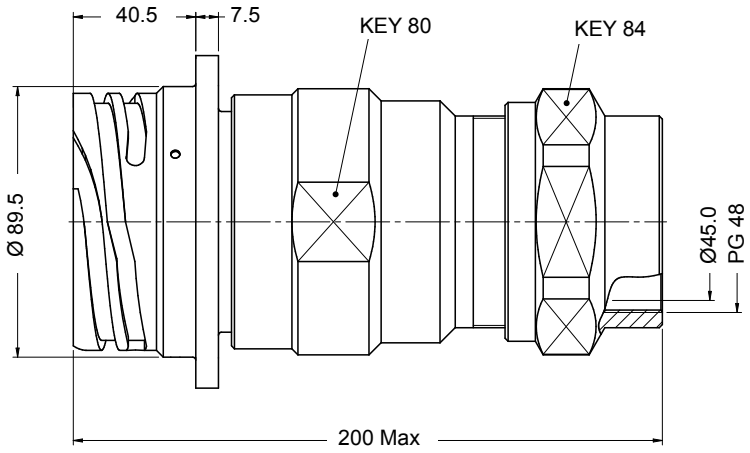
Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

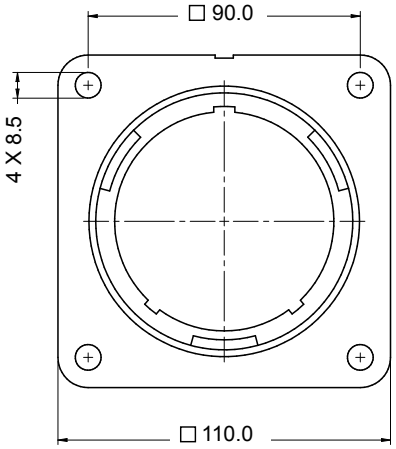
TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Front and Rear mount receptacle with backshell for single wires and conduit. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 00 - 3
Front and Rear Mount Receptacle Assembly for Single Wires and Conduit





B

TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

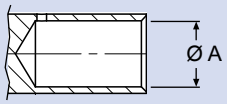


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 06 - 3
Straight Cylindrical Plug
Assembly for Single Wires and Conduit

ITS 901 06 50-2 P W 3 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
06 (Straight Plug)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
3 (Adapter for Plastic or Metallic Conduit)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Straight Plug with backshell for single wires and conduit. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 06 - 3
Straight Cylindrical Plug
Assembly for Single Wires and Conduit

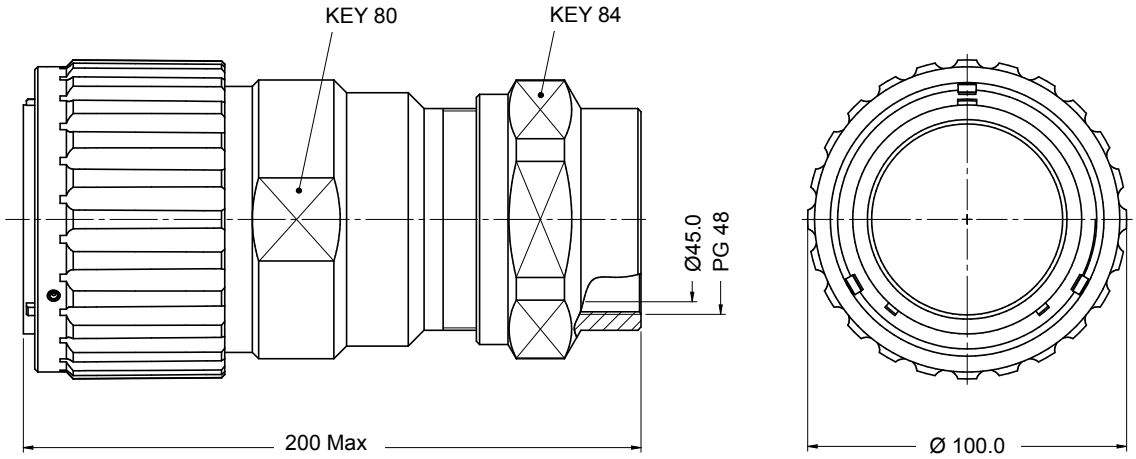


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

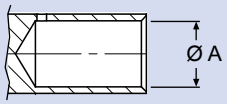


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 06G - 3
Straight Cylindrical Plug with Rubber Recovered Coupling Assembly for Single Wires and Conduit

ITS 901 06G 50-2 P W 2 XX

Series ITS 901 Multi Pole Power Bayonet Connector

Connector Shell Style
06G (Straight Plug with Rubber Recovered Coupling Nut)

Contact Arrangement
50-2 (See Table 1 - Inserts)

Contact Gender
P (Male with Finger Test Protection-Load Side)
S (Female)

Modification
Omitted (for Standard)
XX (See Table 3 - Modification Codes)

Connector Backshell
3 (Adapter for Plastic or Metallic Conduit)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

TABLE 3: MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
MXX	Modified Contacts M3A, M3B and M3C for 3 Contacts Type M4A, M4B and M4C for 4 Contacts Type

Application Notes:
- Straight Plug with backshell for single wires and conduit with rubber recovered coupling. RoHS Compliant.
- Working voltage: 800-1000 Vac. Test voltage: 2800 - 3800 Vac 50Hz (1 min.). See Table 1 - Inserts.
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 to 0.5 mΩ Max.
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102 I1 F2 (Exigency 3).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 901 06G - 3
Straight Cylindrical Plug with Rubber Recovered Coupling Assembly for Single Wires and Conduit

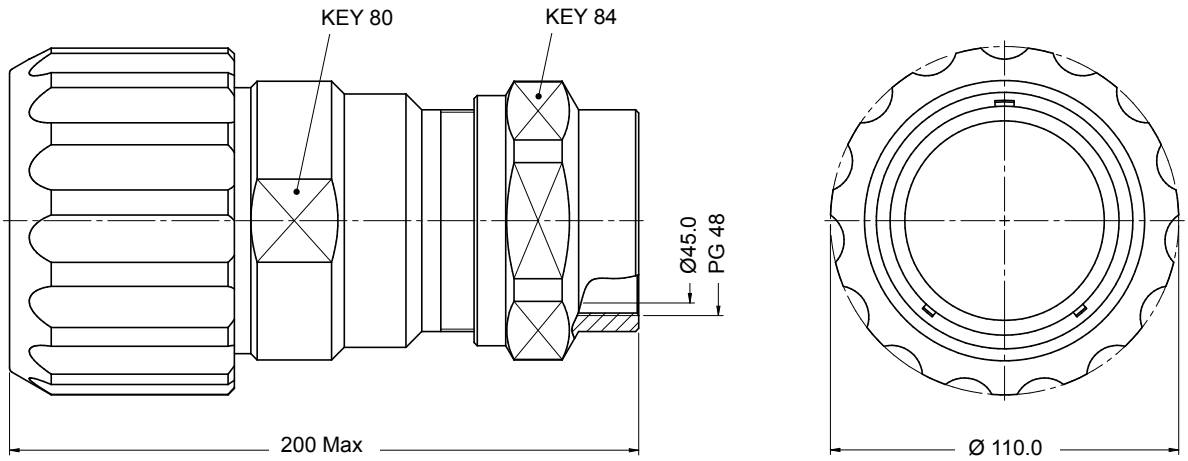


TABLE 1 - INSERTS

Insert Front View				
Arrangement	50-2	50-3	50-31	50-N31
Contact Type	4	3	3 (3) - 1 (2)	3 (3) - 1 (1)
Alternative Contact Type	4A, 4B and 4C	3A, 3B and 3C	3A, 3B and 3C	3A, 3B and 3C
Working Voltage	800 VAC	800 VAC	800 VAC	1.000 VAC.8
Test Voltage	2.800 VAC	2.800 VAC	2.800 VAC	3.800 VAC
Clearance in Air (mm)	3.5	3.5	3.5	12.0
Creepage Distance (mm)	9.7	9.7	9.7	38.0

Contact Crimp Bucket

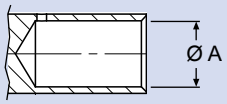


TABLE 2 - STANDARD AND ALTERNATIVE CONTACTS (Referred to TABLE 1)

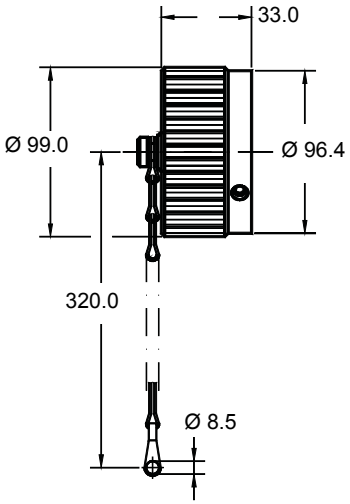
Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Cable Section (mmq)	Working Current (A) *	Max Current (A) *
1	901-1-P-550G10	901-1-S-550G10	5.5	AWG 4	120	150
2	901-2-P-1150G10	901-2-S-1150G10	11.5	AWG 1/0	150	250
3	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4	901-4-P-1780G10	901-4-S-1780G10	17.8	262 MCM	450	520
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
3B	901-3A-P-1440G10	901-3A-S-1440G10	13.3	AWG 2/0	250	300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	AWG 1/0	150	250
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	AWG 4/0	350	450
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	AWG 3/0	320	400
4C	901-3A-P-1440G10	901-3A-S-1440G10	13.5	AWG 2/0	250	320

* Related to cables section

ITS 901 Series
Reverse Bayonet Multi Pole Power Connector Accessories

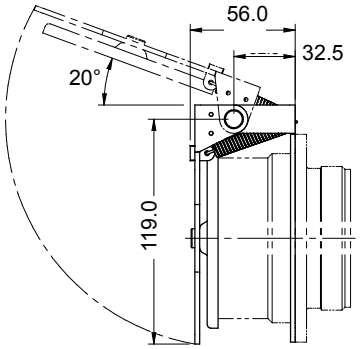
979-02T F6

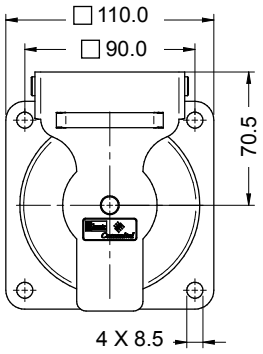
Receptacle Connector Cap with Stainless Steel Chain



979-TM-B

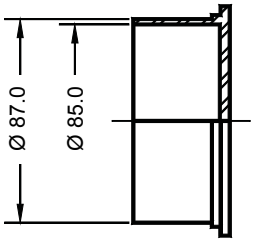
Stainless Spring Cap for Receptacle Connector

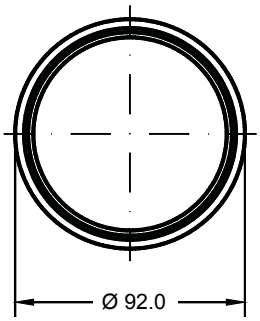




TP 2 110

Receptacle Connector Protective Plastic Dust Cap

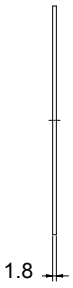


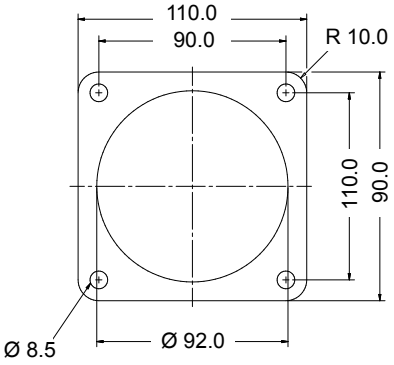


SP 979-46 (Non Conductive)

Connector Mounting Gasket - Front Mounted Square Flange Receptacle

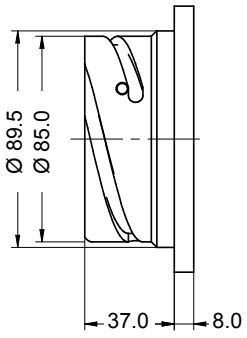
Gasket
Front Mounted

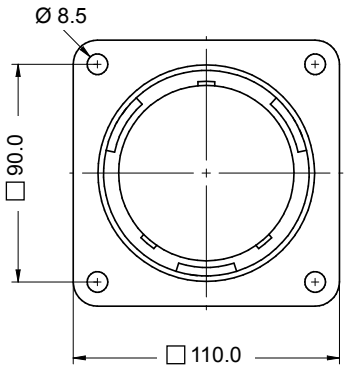




979 05-F6

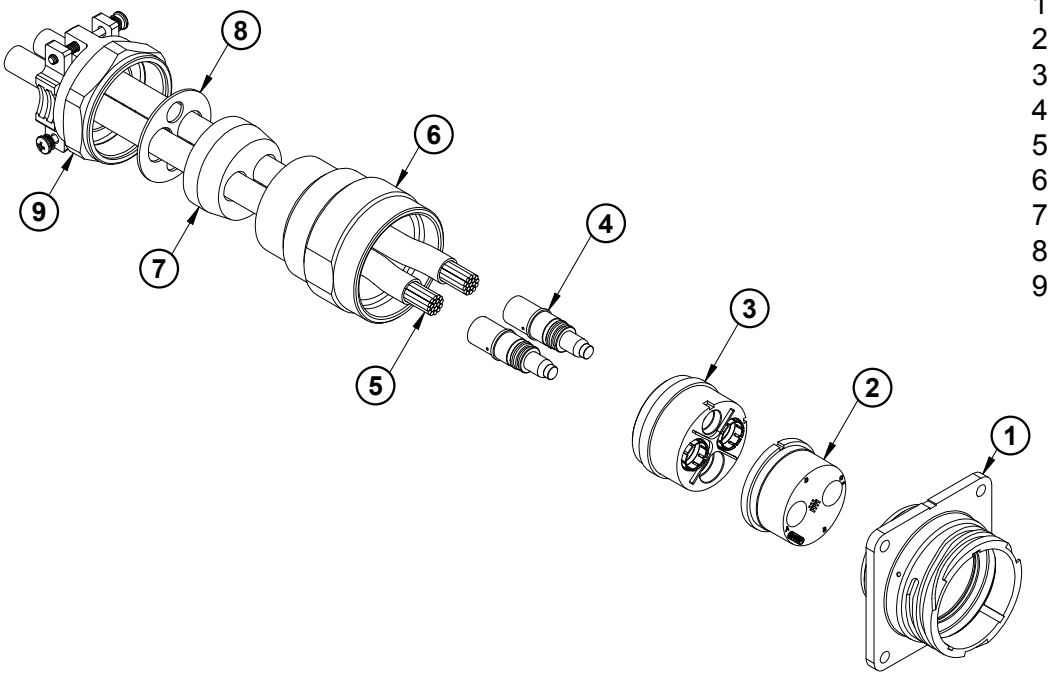
Dummy Plug Stowage Receptacle





ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Assembly Instructions - Receptacle Connector

Assembly Instructions - Receptacle Connector



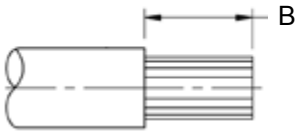
Items Description

1 - Receptacle shell
2 - Front Male Insert
3 - Back Insert Group
4 - Pin Contacts
5 - Wires (Not Supplied)
6 - Backshell
7 - Sealing Grommet
8 - Compression Ring
9 - Cable Clamp

Step 1

TABLE 5

Contact Type	B (mm)
1	12.7
2	14.0
3 (3A, 3B, 3C)	23.2
4 (4A, 4B, 4C)	23.2

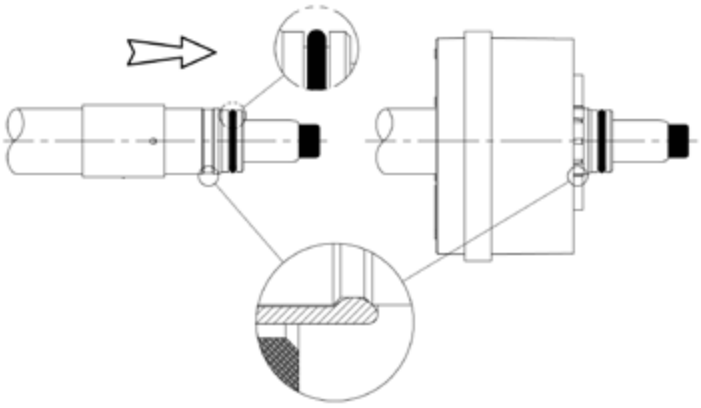


Cut and strip the cable (See TABLE 5)

Step 2

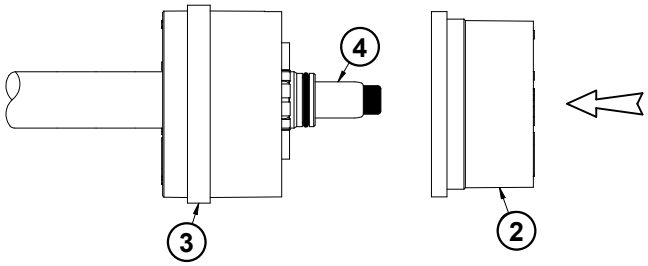
Crimp contacts (4) on conductors.

Step 3



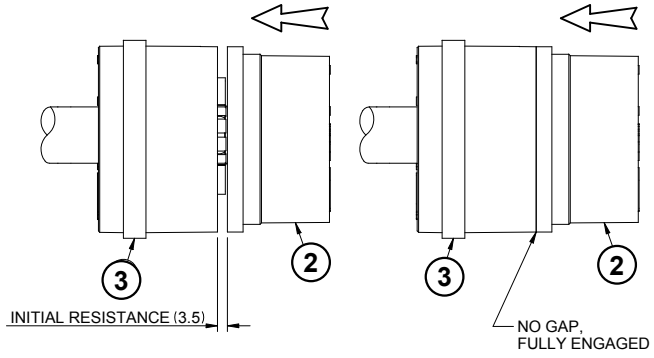
Insert the contact (4) crimped into the back insert (3) until to block in the retention clip.

Step 4



Close the front insert (2) to against the rear insert (3) and check that is assembled correctly per the picture below (Step 5).

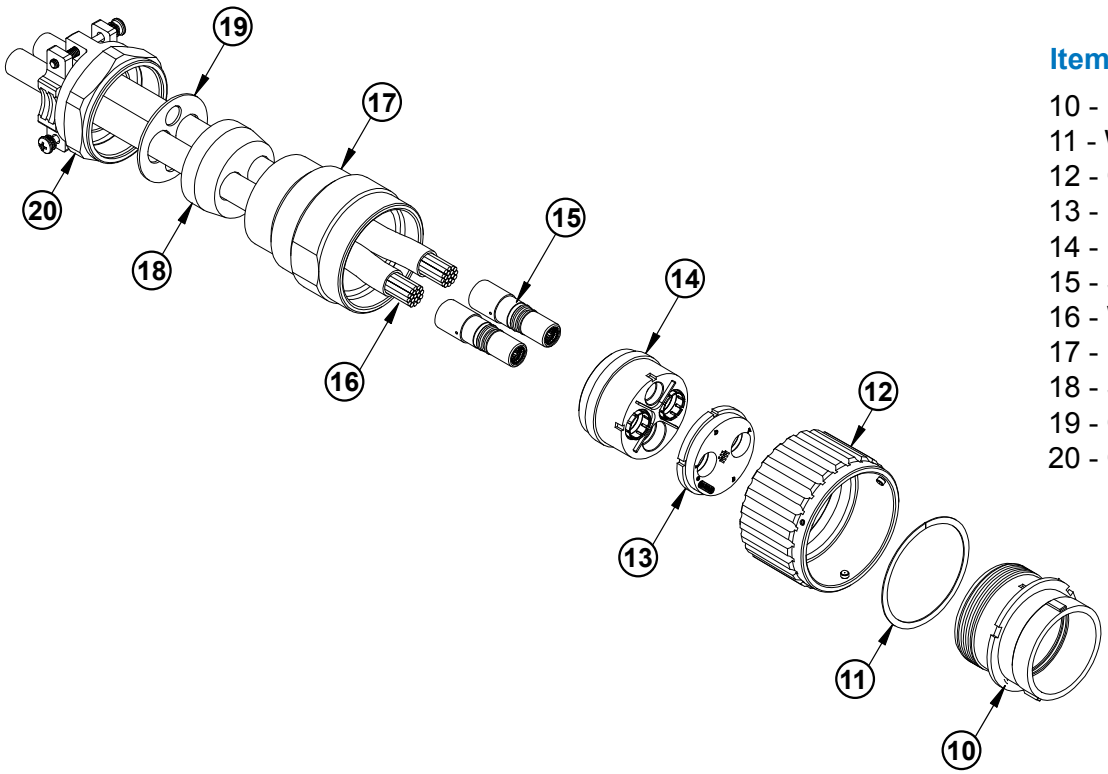
Step 5



Put the insert into the receptacle shell (1), according with internal key. Screw the backshell (6) and tighten.
Torque force = 30 N/m .
Put the grommet (7) and the Compression Ring (8) into the backshell (6) and tighten the clamp.
Torque force = 40 N/m .
Electrical Test: Insulation resistance 5000 Mohm (Min).
Test Voltage: 800 - 1000 Vdc (1 min.) according with the arrangement.

ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Assembly Instructions - Plug Connector

Assembly Instructions - Plug Connector



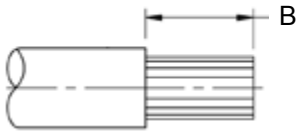
Items Description

10 - Plugshell
11 - Washer
12 - Coupling Nut
13 - Front Insert
14 - Back Insert Group
15 - Socket Contacts
16 - Wires (Not Supplied)
17 - Backshell
18 - Sealing Grommet
19 - Compression Ring
20 - Cable Clamp

Step 1

TABLE 5

Contact Type	B (mm)
1	12.7
2	14.0
3 (3A, 3B, 3C)	23.2
4 (4A, 4B, 4C)	23.2

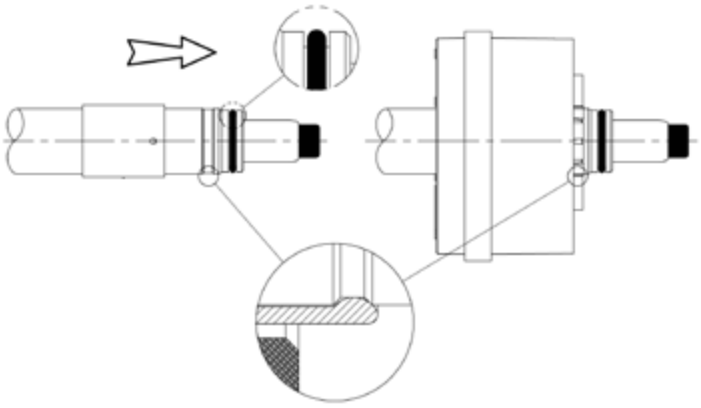


Cut and strip the cable (See TABLE 5)

Step 2

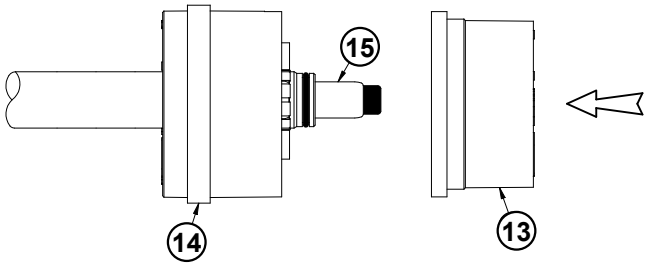
Crimp contacts (15) on conductors.

Step 3



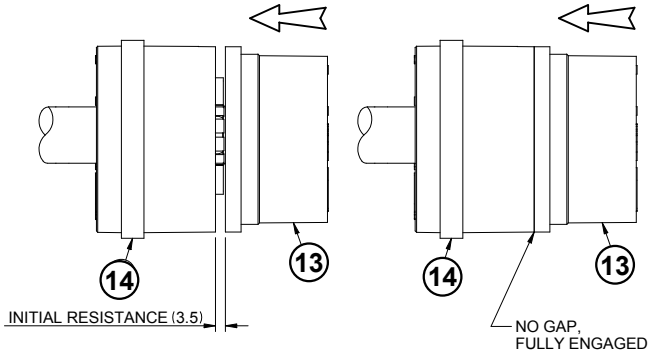
Insert the contact (15) crimped into the back insert (14) until to block in the retention clip.

Step 4



Close the back insert (14) to against the front insert (13) and check that is assembled correctly per the picture below (Step 5).

Step 5



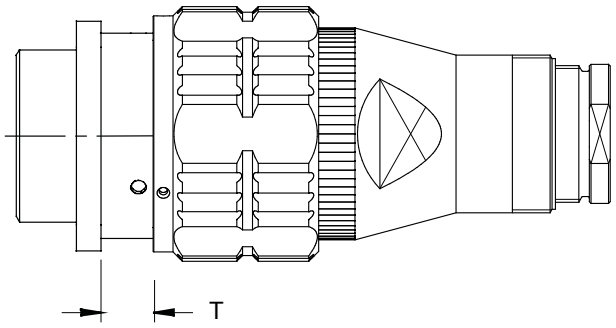
Put the insert into the plugshell (10), according with internal key. Screw the backshell (17) and tighten.
Torque force = 30 N/m .
Put the grommet (18) and the Compression Ring (19) into the backshell (17) and tighten the clamp.
Torque force = 40 N/m .
Electrical Test: Insulation resistance 5000 Mohm (Min).
Test Voltage: 800 - 1000 Vdc (1 min.) according with the arrangement.

ITS 901 Series
Reverse Bayonet Multi Pole Power Connector
Panel Cut-Out Mounting Data

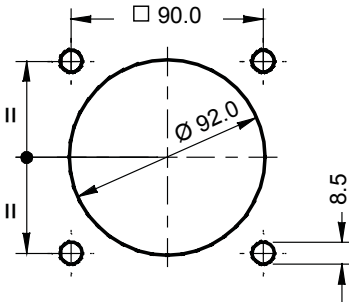
Panel Cut-Out and Panel Thickness

Maximum Panel Thickness for Rear Mount: T = 12 mm

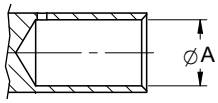
Maximum Panel Thickness with Spring Cap: T = 9.5 mm



Panel Cutout



Contact Crimp Bucket



Crimping Table and Tools

Contact Type	Male Contact P/N	Female Contact P/N	Crimp Bucket - A - (mm)	Die (mmq)	Crimping Tools	Tensile Strength (N)
1	901-1-P-550G10	901-1-S-550G10	5.5	M112006	M112004	1300
2	901-2-P-1150G10	901-2-S-1150G10	11.5	M112010	M112004	2800
3	901-3-P-1650G10	901-3-S-1650G10	16.5	M105033	M105013	4200
4	901-4-P-1780G10	901-4-S-1780G10	17.8	M105052	M105013	4700
3A	901-3A-P-1440G10	901-3A-S-1440G10	14.4	M105016	M105013	3300
3B	901-3A-S-1440G10	901-3A-S-1440G10	14.4	M105016	M105013	3300
3C	901-3C-P-1150G10	901-3C-S-1150G10	11.5	M112010	M112004	2800
4A	901-3-P-1650G10	901-3-S-1650G10	16.5	M105033	M105013	4200
4B	901-3A-P-1440G10	901-3A-S-1440G10	14.4	M112012	M105013	3300
4C	901-3A-S-1440G10	901-3A-S-1440G10	14.4	M105016	M105013	3000

Oleodynamic Crimp Tool

Die for Oleodynamic Crimp Tool

For further Crimping steps details, please contact the factory.

CAGE Code A6854

Printed in U.S.A.

WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO EQUIPMENT, SERIOUS PERSONAL INJURY OR EVEN DEATH.

It is the user's responsibility to ensure these products are used safely. Glenair, Inc., including all Glenair, Inc. subsidiaries, is NOT responsible for damage to equipment, personal injury or death from use of Glenair, Inc. products.

Only qualified electrical technicians should use interconnection products in high voltage and other electrical conditions.

Interconnection products must be clean and dry when installed. Mating and de-mating should never occur under load.

Damaged interconnection products must be replaced immediately by a trained electrical technician.

Glenair, Inc. reserves the right to modify this Warning, any other warning, all catalogs, gleniar.com website, and any other technical information with or without notice.

For further information and technical assistance, please contact your local Glenair Sales Office or see our website: **www.glenair.com**

Glenair®

ITS 500 Series
Reverse Bayonet Single Pole Power Connector
Introduction

Big Apple Subway: New York calls Glenair

Glenair is proud to be one of the main suppliers of connectors and interconnect systems for New York City Transit Authority's new R160 subway cars.

An R160 subway car, manufactured by Alstom Transportation and Kawasaki Heavy Industries.

Equipped with the latest control system, HVAC, and public address system to guarantee the utmost safety and passenger comfort, The R160 is a class of 1,662 subway cars built by two different companies: Alstom Transportation and Kawasaki Heavy Industries. Because the cars were built by two manufacturers, they are designated "R160A" and "R160B," even though the two are almost identical.

Kawasaki and Alstom organized a joint venture for project management, engineering and equipment purchasing to pursue the contract. The two companies built and delivered the rolling stock through the joint venture. Kawasaki not only manufactured 260 cars for the base contract, but was also the engineering leader for the whole project.

Alstom assembled 1,002 R160A cars at its manufacturing plant in Hornell, New York, while Kawasaki assembled 660 R160B cars at its plant in Yonkers, New York.

The new AlsaldoBreda/Firema *Meneghino* train for Milan, Italy

The Meneghino is a new six-car dual-voltage train for the *Metropolitana Milanese* (Milan underground). It belongs to the "MNG" (*Metropolitana di Nuova Generazione* or *Metro New Generation*) family.The MNG is designed and manufactured in cooperation with Ansaldo Breda, a premier Italian rail transport and engineering company. Each train is built with two identical traction units, in the "Rp-M-M" configuration: Each unit includes one trailer coach (Rp) equipped with a driver's cab, and two intermediate motor coaches (M) without a driver's cab.

The new AlsaldoBreda/Firema Meneghino train for Milan, Italy

The electrically - controlled passenger doors (8 on each coach) grant a high reliability standard and very low maintenance. The train is equipped with a highly advanced Passengers' Audio/ Video Information System. With this system, passengers receive informational messages and video regarding train service, broadcast directly to LCD monitors in each compartment.

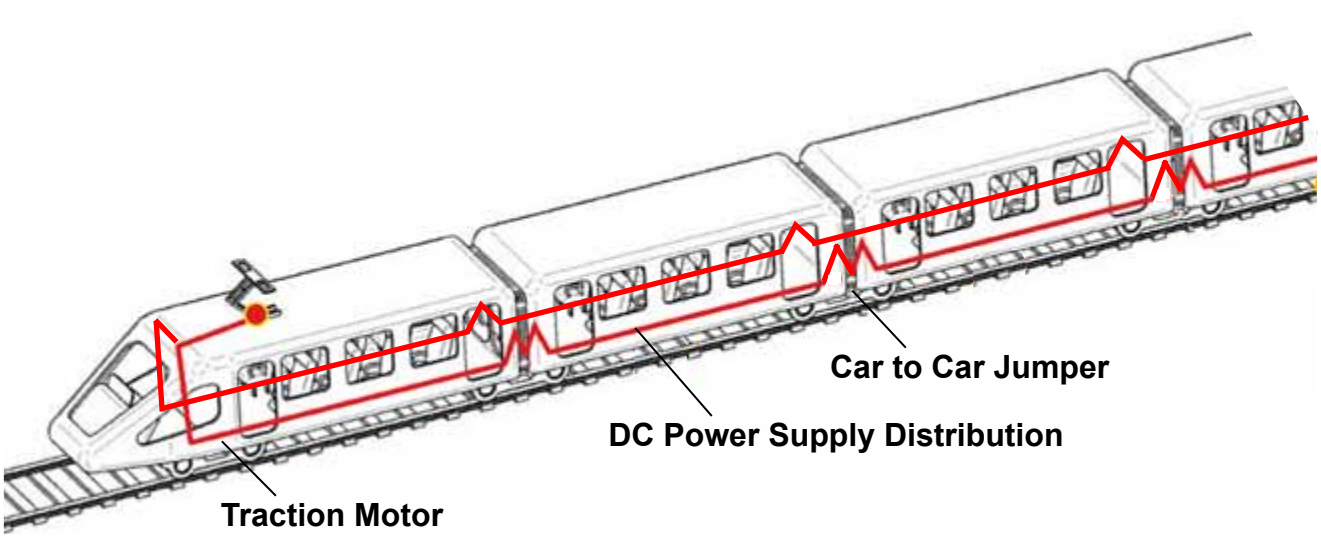
Glenair is a major contributor of connectors and interconnect systems for this advanced metropolitan train.

ITS 500 Series
Reverse Bayonet Single Pole Power Connector
Technical Characteristics

ITS 500 Series derives from an important Military Specification for Power Connectors: VG96929.
Suitable for harsh environmental conditions, ITS 500 accepts cable gauges AWG 3/0 to 444MCM (95-240 mmq), for current up to 750 Amp.
Special insulator drawing allows high working voltage, up to 3000 Vcc.
Suitable for jacketed cables, with or without conduit protection.
Receptacle with finger protection (Load side).
ITS 500 meets the most important rail requirements and specifications:
- 500 Mating Cycles;
- Salt Spray Test Corrosion: 500 hours;
- Shock and Vibrations for Under-Car and Car-To-Car Applications;
- IP67 Sealing (Coupled Connectors);
- Fire Resistant and RoHS Compliant Materials.

Plug Connector

Receptacle Connector

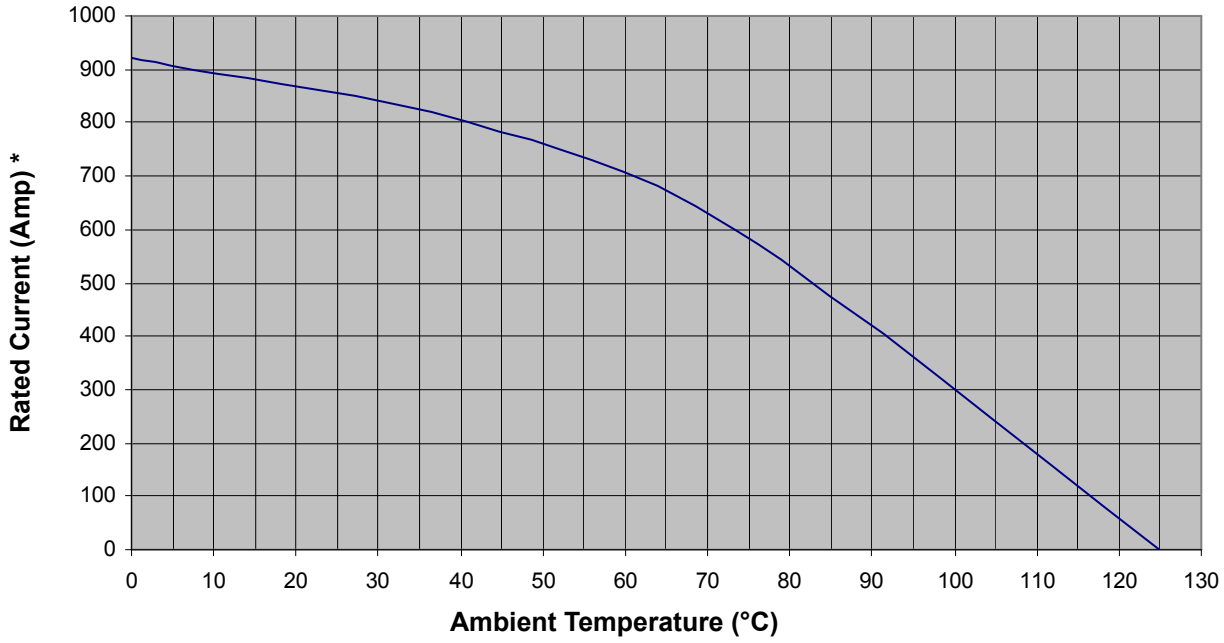


ITS 500 Series
Introducing the Single Pole Power Connector
Technical Characteristics

Procedures Table

Description	Procedure
Electrical Characteristics	CEI EN 50124 and CEI EN 60077
Environmental Conditions	CEI EN 50125
Water Protection	CEI EN 60529
Shock and Vibration	CEI EN 61373
Corrosion Protection	VG 95210 - 2
Fire Protection	UNI CEI 1170 - 3
Mating Cycles	VG96929

Rated Current Graphic

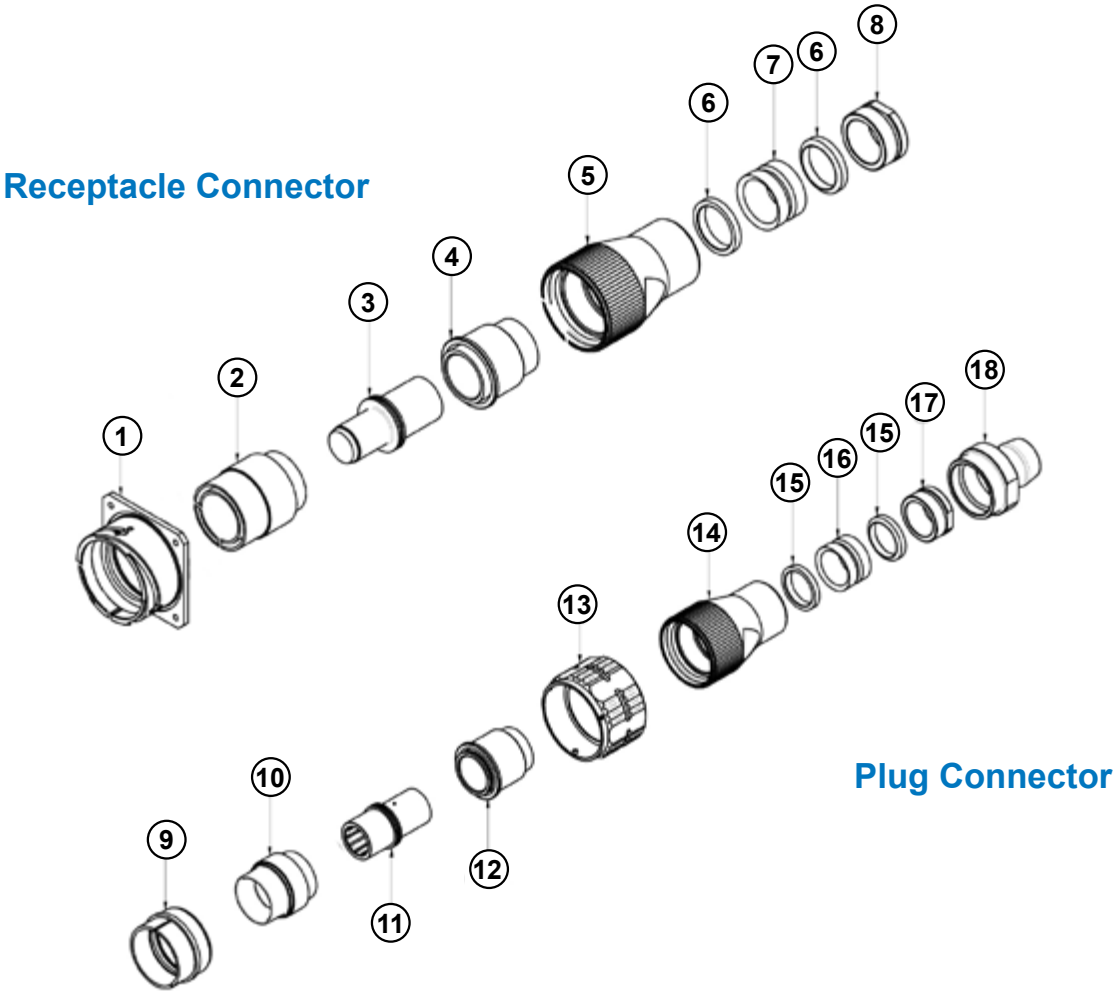


* According with Cables Section

Minimum Creepage Distance: 39 mm (Contact to Contact and Contact to Ground)

Minimum Clearance in Air: 18 mm (Contact to Contact and Contact to Ground)

ITS 500 Components Exploded View



Receptacle Connector

1 - Receptacle Shell
2 - Front Male Insert
3 - Male Contact
4 - Rear Insert
5 - Backshell
6 - Compression Ring
7 - Grommet
8 - Clamp

Plug Connector

9 - Straight Plug Shell
10 - Front Female Insert
11 - Female Contact
12 - Rear Insert
13 - Coupling Nut
14 - Backshell
15 - Compression Ring
16 - Grommet
17 - Clamp
18 - Rubber Conduit Adapter

ITS 500 Series
Introducing the Single Pole Power Connector
Available Configurations

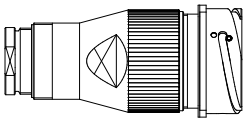
Available Configurations

Receptacle Connectors

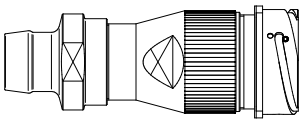
Weight: 850.0 gr

ITS 500 00

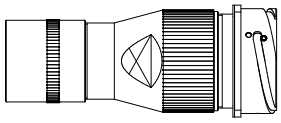
Front Mount



ITS500 00 - GA (Page 8)



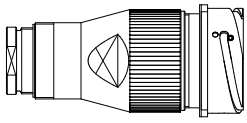
ITS500 00 - GB (Page 14)



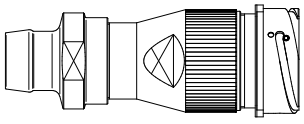
ITS500 00 - GC (Page 20)

ITS 500 030

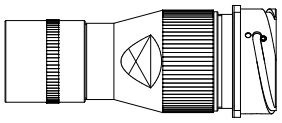
Rear Mount



ITS500 030 - GA (Page 10)



ITS500 030 - GB (Page 16)

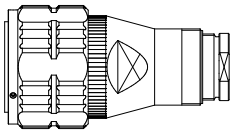


ITS500 030 - GC (Page 22)

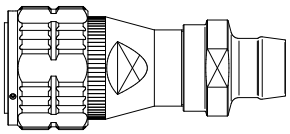
Plug Connectors

Weight: 850.0 gr

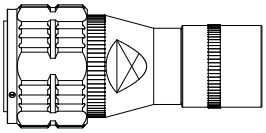
ITS 500 06



ITS500 06 - GA (Page 12)



ITS500 06 - GB (Page 18)



ITS500 06 - GC (Page 24)

Backshell	Description
GA	Jacketed Cable Clamp
GB	Cable Clamp and Rubber Conduit
GC	Cable Clamp and Plastic or Metallic Metric Conduit

ITS 500 Series
Reverse Bayonet Single Pole Power Connector
How to Order - Part Number Breakdown

How to Order - Part Number Breakdown

Connector Shell Style
00: *Front Mount Receptacle*
030: *Rear Mount Receptacle*
06: *Straight Plug*

Contacts Gender
P: *Male with Finger Test Protection (Receptacle only)*
S: *Female (Plug only)*

Cables Type *
3/0 ; 262 MCM ; 444 MCM *AWG*
95 ; 120 ; 150 ; 240 *mmq*

Modification Codes
Omitted: *for Standard Version*
B0: *Connector Less Contacts*
F7: *Conductive Black Plating*
K1: *Stainless Receptacle*
K2: *Stainless Plug Shell for Straight Plug*

ITS 500	00	GA40	P	W	95	A1	XX

Series
ITS 500: *Unipolar Bayonet Connector*

Connector Backshell Style
GA40: *Environmental, Jacketed Cable*
GB40: *Environmental, Jacketed Cable and Rubber Conduit*
GC40: *Environmental, Jacketed Cable and Plastic or Metallic Conduit*

Alternative Rotation
Omitted: *for Standard*
W 90°: *Second Polarization Key*

Cable Diameter Range
A1: *13 - 23 mm*
A2: *19 - 29 mm*
A3: *26 - 32 mm*

* For different cable dimensions, please contact the factory.

ITS 500 00 Series
Front Panel Mount Square Flange Receptacle Assembly for Jacketed Cables

ITS 500 00 GA40 P W 95 A1 XX

Series ITS 500 Unipolar Bayonet Connector

Connector Shell Style
00 (Front Mount Receptacle)

Connector Backshell Style
GA40 (Environmental, Jacketed Cables)

Contact Gender
P (Male with Finger Test Protection)

Modification
XX (See Table 3 - Modification)

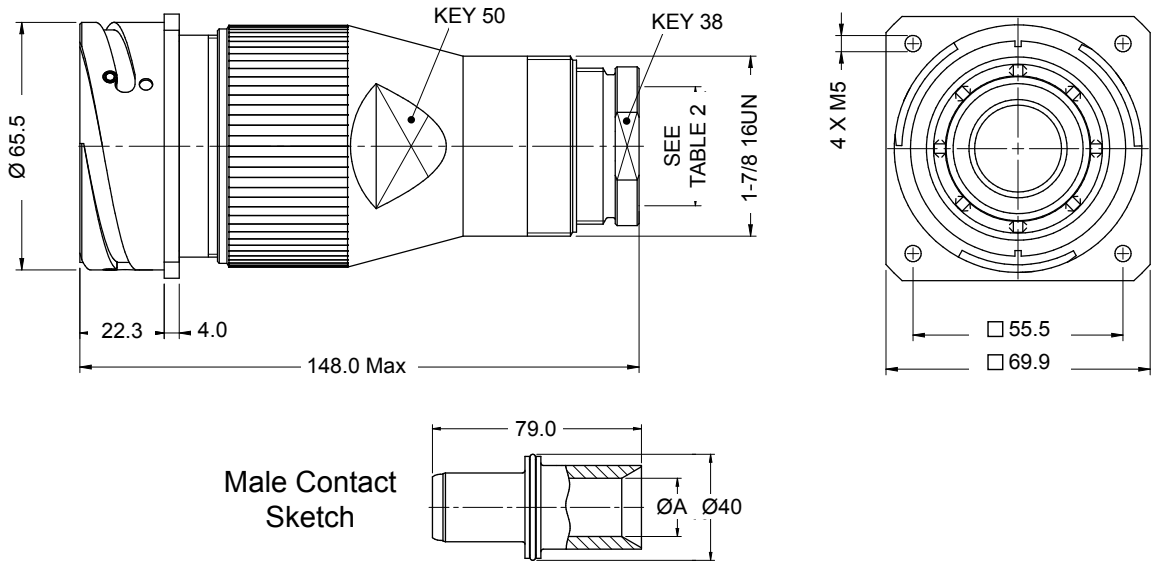
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Front mount receptacle with backshell for jacketed cable. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 00 Series
Front Panel Mount Square Flange Receptacle Assembly for Jacketed Cables



Male Contact Sketch

TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Male	ITS 500-1420PG10	3/0	95	350	400	12.5	14.0	14.2
120	Male	ITS500-1600PG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Male	ITS500-1750PG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Male	ITS500-1750PG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Male	ITS500-2200PG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Male	ITS500-2200PG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Male	ITS500-2680PG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854
Printed in U.S.A.

ITS 500 030 Series
Rear Panel Mount Square Flange Receptacle Assembly for Jacketed Cables

ITS 500 030 GA40 P W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
030 (Rear Mount Receptacle)

Connector Backshell Style
GA40 (Environmental, Jacketed Cables)

Contact Gender
P (Male with Finger Test Protection)

Modification
XX (See Table 3 - Modification)

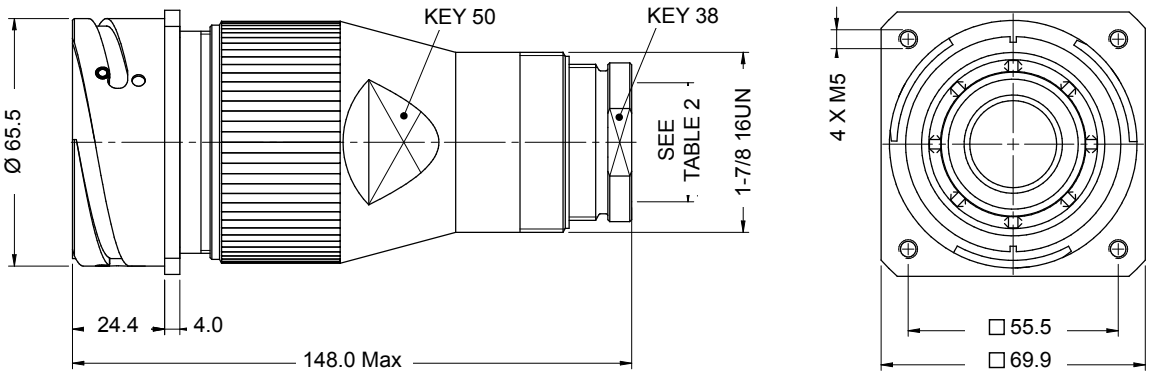
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Rear mount receptacle with backshell for jacketed cable. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 030 Series
Rear Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables



Male Contact Sketch

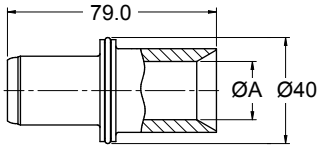


TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Male	ITS 500-1420PG10	3/0	95	350	400	12.5	14.0	14.2
120	Male	ITS500-1600PG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Male	ITS500-1750PG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Male	ITS500-1750PG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Male	ITS500-2200PG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Male	ITS500-2200PG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Male	ITS500-2680PG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

ITS 500 06 Series
Straight Cylindrical Plug
Assembly for Jacketed Cables

ITS 500 06 GA40 S W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
06 (Straight Plug)

Connector Backshell Style
GA40 (Environmental, Jacketed Cables)

Contact Gender
S (Female Contact)

Modification
XX (See Table 3 - Modification)

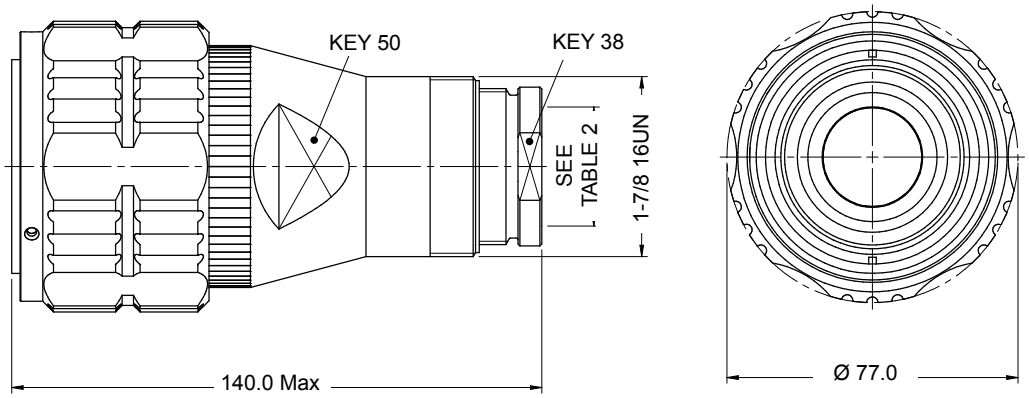
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Straight cylindrical plug with backshell for jacketed cable. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 06 Series
Straight Cylindrical Plug
Assembly for Jacketed Cables



Female Contact Sketch

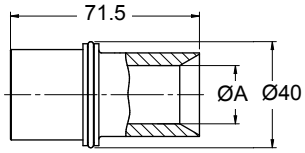


TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Female	ITS 500-1420SG10	3/0	95	350	400	12.5	14.0	14.2
120	Female	ITS500-1600SG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Female	ITS500-1750SG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Female	ITS500-1750SG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Female	ITS500-2200SG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Female	ITS500-2200SG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Female	ITS500-2680SG10	535 MCM	-	750	800	21.0	24.5	26.8

***** For different cable dimensions, please contact the factory.

****** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854
Printed in U.S.A.

ITS 500 00 Series
Front Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Rubber Conduit

ITS 500 00 GB40 P W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
00 (Front Mount Receptacle)

Connector Backshell Style
GB40 (Environmental, Jacketed Cables and Rubber Conduit)

Contact Gender
P (Male with Finger Test Protection)

Modification
XX (See Table 3 - Modification)

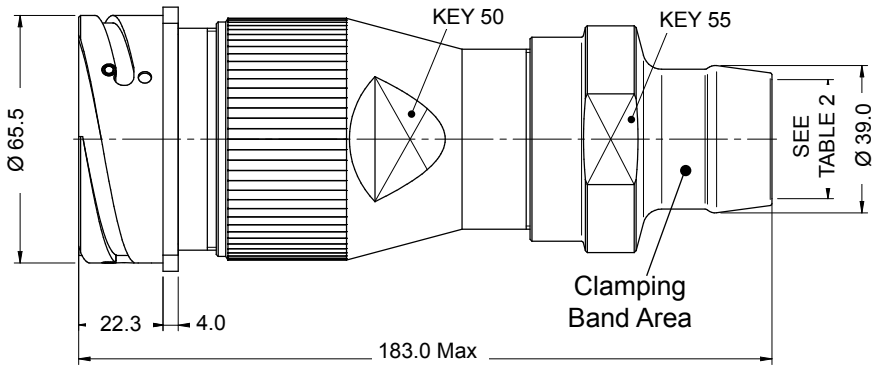
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

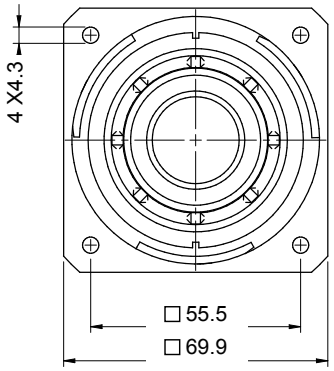
Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Front mount receptacle with backshell for jacketed cable and rubber conduit, blocked with stainless clamping band not supplied with connector. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 00 Series
Front Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Rubber Conduit





Male Contact Sketch

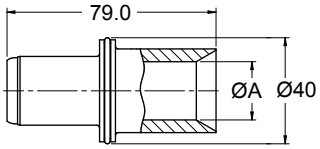


TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Male	ITS 500-1420PG10	3/0	95	350	400	12.5	14.0	14.2
120	Male	ITS500-1600PG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Male	ITS500-1750PG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Male	ITS500-1750PG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Male	ITS500-2200PG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Male	ITS500-2200PG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Male	ITS500-2680PG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854
Printed in U.S.A.

ITS 500 030 Series
Rear Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Rubber Conduit

ITS 500 030 GB40 P W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
030 (Rear Mount Receptacle)

Connector Backshell Style
GB40 (Environmental, Jacketed Cables and Rubber Conduit)

Contact Gender
P (Male with Finger Test Protection)

Modification
XX (See Table 3 - Modification)

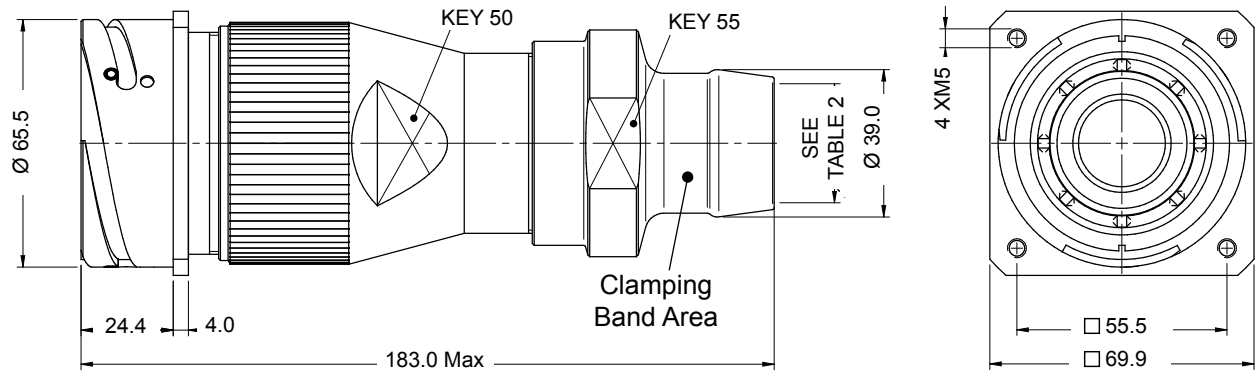
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Rear mount receptacle with backshell for jacketed cable and rubber conduit, blocked with stainless clamping band not supplied with connector. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 030 Series
Rear Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Rubber Conduit



Male Contact Sketch

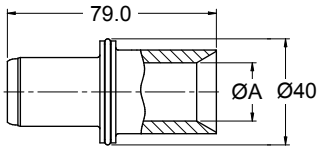


TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Male	ITS 500-1420PG10	3/0	95	350	400	12.5	14.0	14.2
120	Male	ITS500-1600PG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Male	ITS500-1750PG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Male	ITS500-1750PG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Male	ITS500-2200PG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Male	ITS500-2200PG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Male	ITS500-2680PG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

ITS 500 06 Series
Straight Cylindrical Plug
Assembly for Jacketed Cables and Rubber Conduit

ITS 500 06 GB40 S W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
06 (Straight Plug)

Connector Backshell Style
GB40 (Environmental, Jacketed Cables and Rubber Conduit)

Contact Gender
S (Female Contact)

Modification
XX (See Table 3 - Modification)

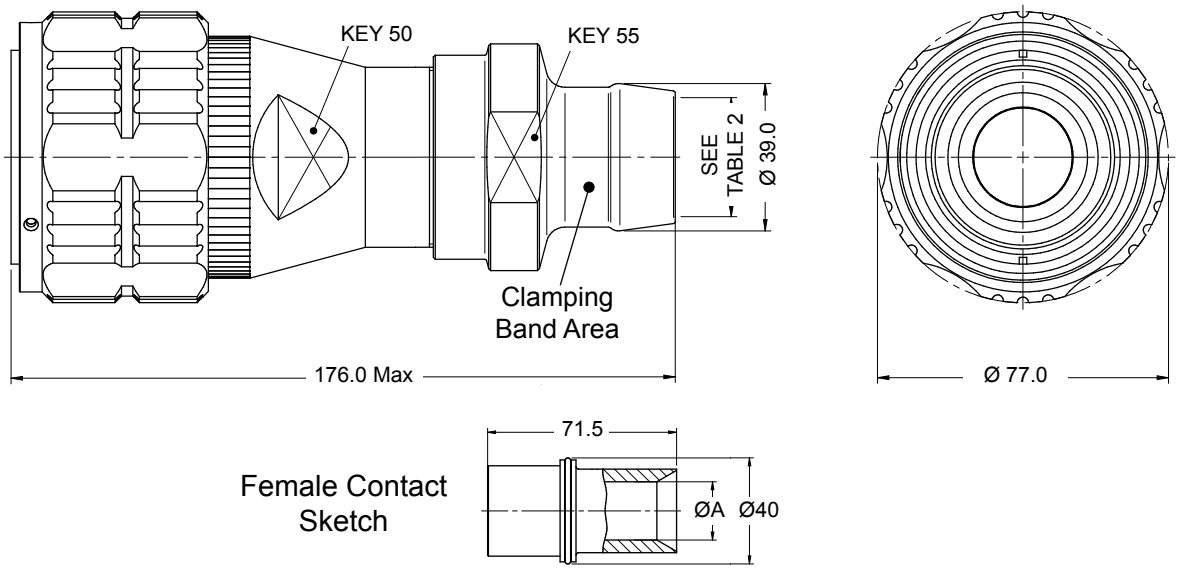
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Straight cylindrical plug with backshell for jacketed cable and rubber conduit, blocked with stainless clamping band not supplied with connector. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 06 Series
Straight Cylindrical Plug
Assembly for Jacketed Cables and Rubber Conduit



Female Contact Sketch

TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Female	ITS 500-1420SG10	3/0	95	350	400	12.5	14.0	14.2
120	Female	ITS500-1600SG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Female	ITS500-1750SG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Female	ITS500-1750SG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Female	ITS500-2200SG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Female	ITS500-2200SG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Female	ITS500-2680SG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854

Printed in U.S.A.

ITS 500 00 Series
Front Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Plastic or Metallic Conduit

ITS 500 00 GC40 P W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
00 (Front Mount Receptacle)

Connector Backshell Style
GC40 (Environmental, Jacketed Cables and Plastic or Metallic Conduit)

Contact Gender
P (Male with Finger Test Protection)

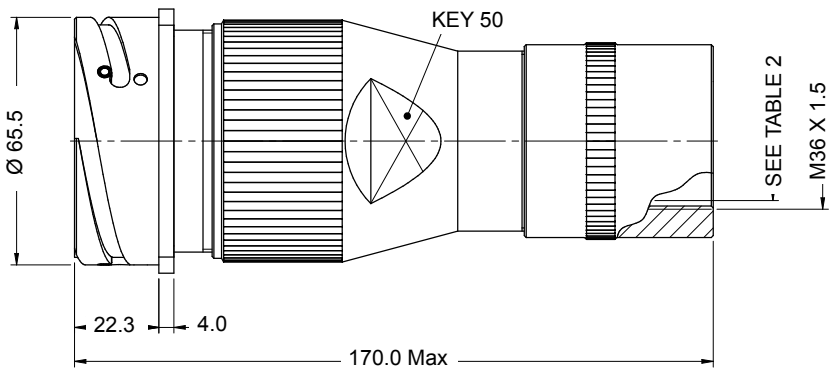
Modification
XX (See Table 3 - Modification)

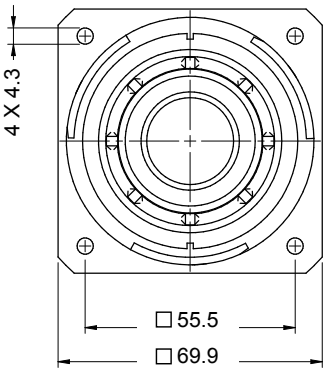
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Front mount receptacle with backshell for jacketed cable and plastic or metallic conduit. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.





Male Contact Sketch

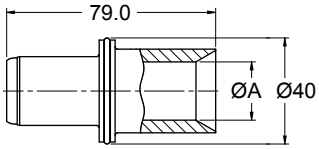


TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Male	ITS 500-1420PG10	3/0	95	350	400	12.5	14.0	14.2
120	Male	ITS500-1600PG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Male	ITS500-1750PG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Male	ITS500-1750PG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Male	ITS500-2200PG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Male	ITS500-2200PG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Male	ITS500-2680PG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854

Printed in U.S.A.

ITS 500 030 Series
Rear Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Plastic or Metallic Conduit

ITS 500 030 GC40 P W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
030 (Rear Mount Receptacle)

Connector Backshell Style
GC40 (Environmental, Jacketed Cables and Plastic or Metallic Conduit)

Contact Gender
P (Male with Finger Test Protection)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

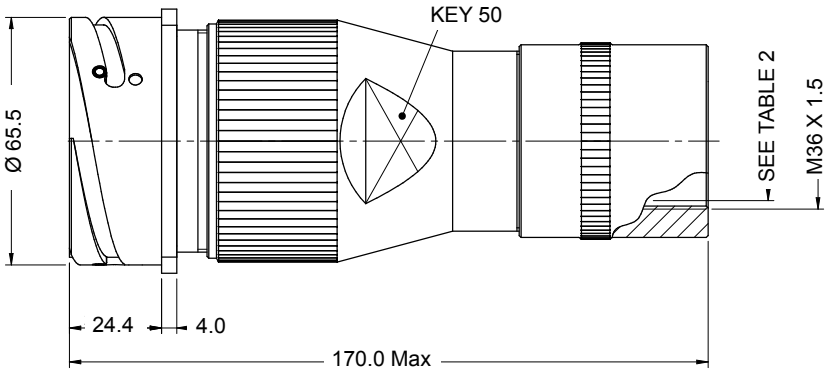
Contact Type
95 (See Table 1 - Contacts)

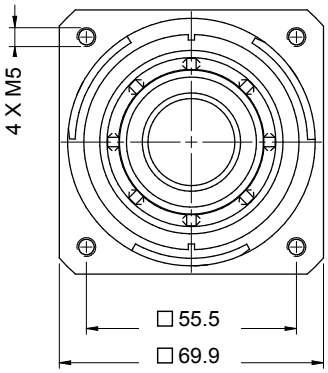
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Modification
XX (See Table 3 - Modification)

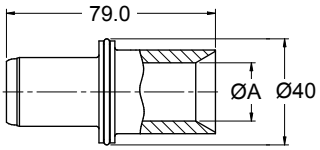
Application Notes:
- Rear mount receptacle with backshell for jacketed cable and plastic or metallic conduit. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 030 Series
Rear Panel Mount Square Flange Receptacle
Assembly for Jacketed Cables and Plastic or Metallic Conduit





Male Contact Sketch



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Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Male	ITS 500-1420PG10	3/0	95	350	400	12.5	14.0	14.2
120	Male	ITS500-1600PG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Male	ITS500-1750PG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Male	ITS500-1750PG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Male	ITS500-2200PG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Male	ITS500-2200PG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Male	ITS500-2680PG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

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Cable Range Code	Min. Cable ø	Max Cable ø
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TABLE 3 - MODIFICATION CODES

Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854
Printed in U.S.A.

ITS 500 06 Series
Straight Cylindrical Plug
Assembly for Jacketed Cables and Plastic or Metallic Conduit

ITS 500 06 GC40 S W 95 A1 XX

Series ITS500 Unipolar Bayonet Connector

Connector Shell Style
06 (Straight Plug)

Connector Backshell Style
GC40 (Environmental, Jacketed Cables and Rubber Conduit)

Contact Gender
S (Female Contact)

Modification
XX (See Table 3 - Modification)

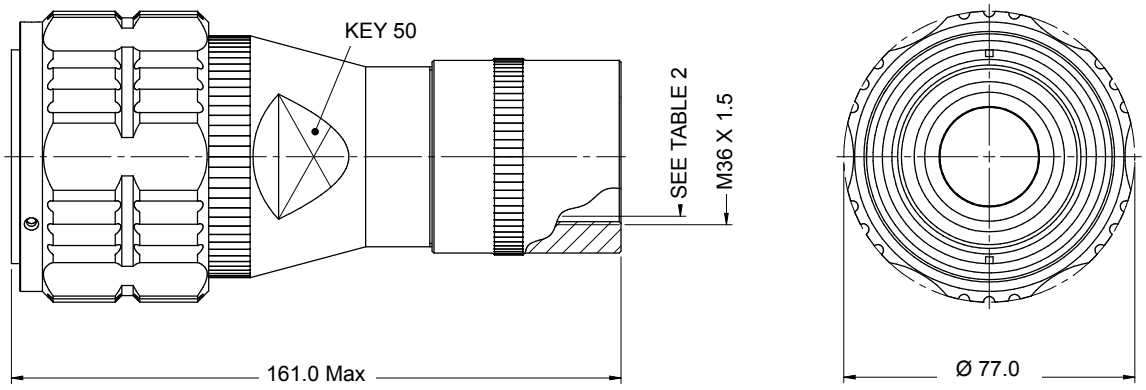
Cable Diameter Range
A1 (See Table 2 - Cable ø Range)

Contact Type
95 (See Table 1 - Contacts)

Alternative Rotation
Omitted (for Standard Version)
W: **90°**(Second Polarization Key)

Application Notes:
- Straight cylindrical plug with backshell for jacketed cable and plastic or metallic conduit. RoHS Compliant.
- Working voltage: 3000 Vcc. Test voltage: 12000 Vcc (1 min.).
- Water proof : IP67 level (coupled connectors).
- Contact resistance: 0.2 mOhm Max
- Temperature range: -55 +125°C.
- Contact: copper alloy with silver plating.
- Insulator: black thermoplastic resin according with UL94V0-NFF16-102:I2F1 (Exigency 4).
- Shells: Aluminium alloy with electrodeposited black paint.

ITS 500 06 Series
Straight Cylindrical Plug
Assembly for Jacketed Cables and Plastic or Metallic Conduit



Female Contact Sketch

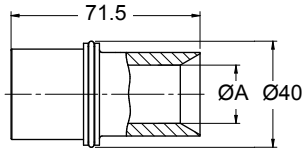


TABLE 1 - CONTACTS

Contact Type	Contact Gender	Contact P/N	Cable AWG *	Cable Section (mmq)	Working Current (A) **	Max Current (A) **	Conductor Min. Ø (mm)	Conductor Max Ø (mm)	Crimp Bucket - ØA - (mm)
95	Female	ITS 500-1420SG10	3/0	95	350	400	12.5	14.0	14.2
120	Female	ITS500-1600SG10	-	120	450	500	14.2	15.5	16.0
262 MCM	Female	ITS500-1750SG10	262 MCM	-	450	520	15.8	16.5	17.5
150	Female	ITS500-1750SG10	-	150	550	630	15.8	16.5	17.5
444 MCM	Female	ITS500-2200SG10	444 MCM	-	640	735	19.6	21.1	22.0
240	Female	ITS500-2200SG10	-	240	750	800	19.6	21.1	22.0
535 MCM	Female	ITS500-2680SG10	535 MCM	-	750	800	21.0	24.5	26.8

* For different cable dimensions, please contact the factory.

** Related to cables ampacity.

TABLE 2 - CABLE Ø RANGE

Cable Range Code	Min. Cable ø	Max Cable ø
A1	13	23
A2	19	29
A3	26	32

TABLE 3 - MODIFICATION CODES

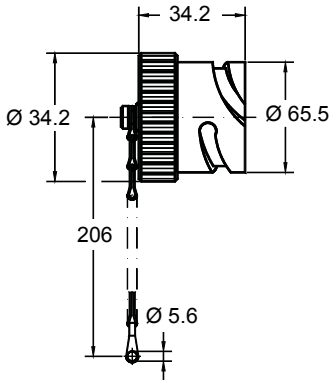
Name	Modification
Omitted	Standard
B0	Connector Less Contacts
F7	Conductive Black Plating
K1	Stainless Receptacle
K2	Stainless Plug Shell for Straight Plug

CAGE Code A6854
Printed in U.S.A.

ITS 500 Series
Reverse Bayonet Single Pole Power Connector Accessories

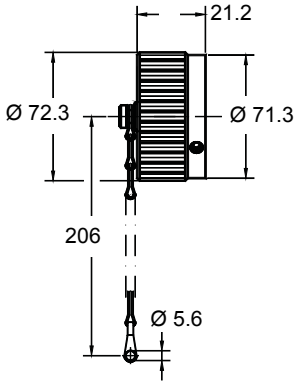
ITB 06T - 40 F6

Plug Connector Cap with Stainless Steel Chain



ITB 02T - 40 F6

Receptacle Connector Cap with Stainless Steel Chain



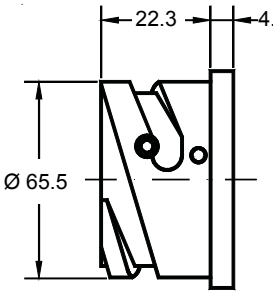
C

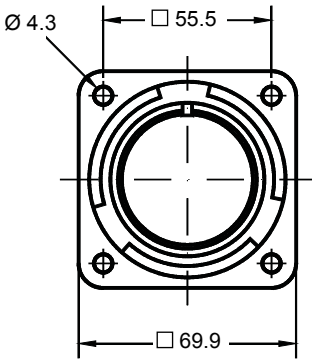
10-030TMB-40

Stainless Spring Cap for Receptacle Connector

ITS 05 - 40 F6

Dummy Plug Stowage Receptacle

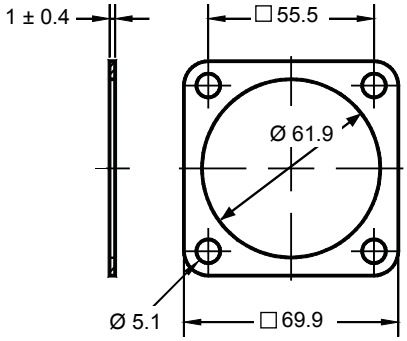




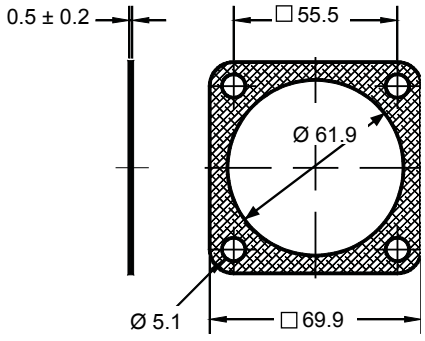
IT - 40450 - 40 (Non Conductive) and IT - 40450 - 40S (Conductive)

Connector Mounting Gasket - Front Mounted Square Flange Receptacle

Gasket
Front Mounted



IT - 40450 - 40
Non Conductive

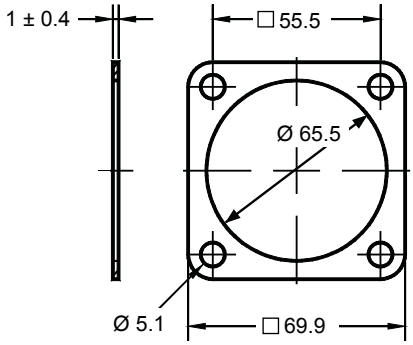


IT - 40450 - 40S
Conductive

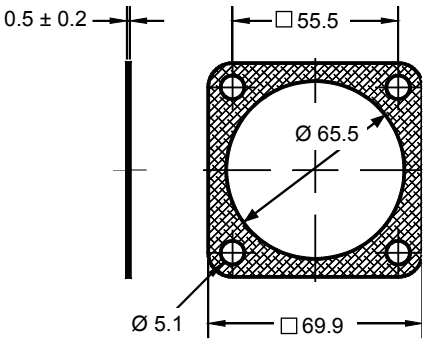
IT - 40460 - 40 (Non Conductive) and IT - 40460 - 40S (Conductive)

Connector Mounting Gaskets - Rear Mounted Square Flange Receptacle

Gasket
Rear Mounted



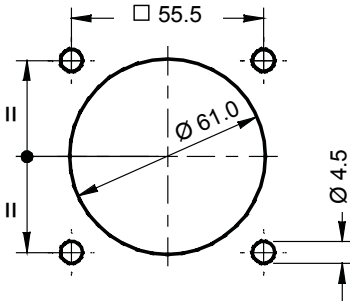
IT - 40460 - 40
Non Conductive



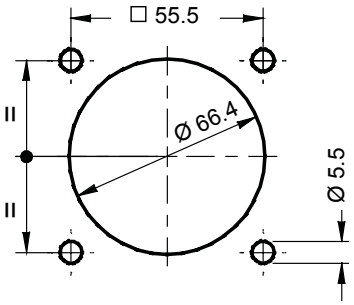
IT - 40460 - 40S
Conductive

ITS 500 Series
Reverse Bayonet Single Pole Power Connector
Panel Cut-Out Mounting Data

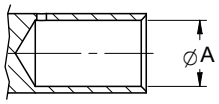
Panel Cut-Out and Panel Thickness



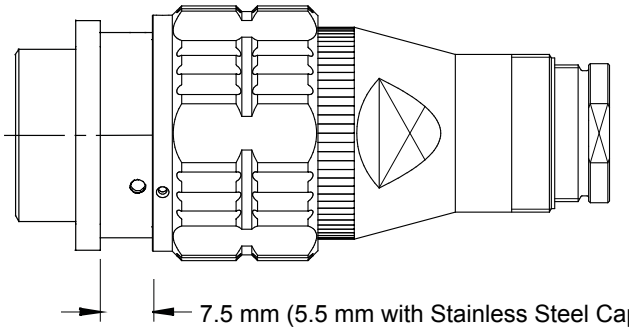
Panel Cutout for Type 00



Panel Cutout for Type 030



Contact Crimp Bucket



Maximum Panel Thickness for Rear Mounting

Crimping Table and Tools

Contact Type	Contact Gender	Contact P/N	Ø A (+0.5 / 0)	Die	Crimping Tools	Tensile Strength (N)
95	Male	ITS 500-1420PG10	14.2	M105016	M105013	3700
	Female	ITS 500-1420SG10				
120	Male	ITS500-1600PG10	16.0	M112012	M105013	4200
	Female	ITS500-1600SG10				
262 MCM	Male	ITS500-1750PG10	17.5	M112018	M105013	4400
	Female	ITS500-1750SG10				
150	Male	ITS500-1750PG10	17.5	M112018	M105013	4800
	Female	ITS500-1750SG10				
444 MCM	Male	ITS500-2200PG10	22.0	M112024	M105013	6500
	Female	ITS500-2200SG10				
240	Male	ITS500-2200PG10	22.0	M105035	M105013	6500
	Female	ITS500-2200SG10				
535 MCM	Male	ITS500-2680PG10	26.8	M112024	M105013	6500
	Female	ITS500-2680SG10				

Oleodynamic Crimp Tool

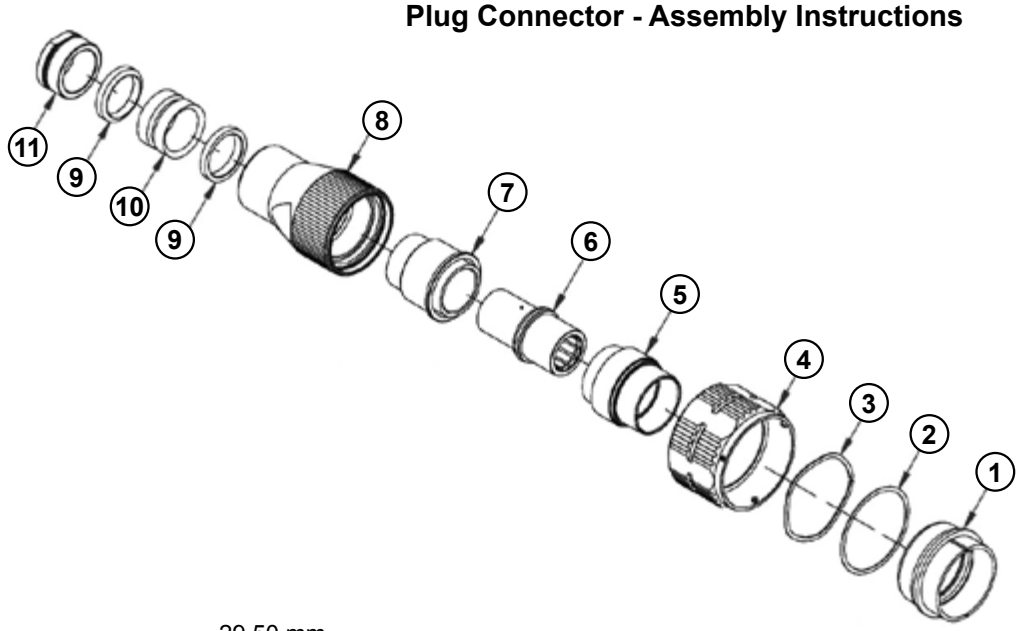
Die for Oleodynamic Crimp Tool

For further Crimping Steps details, please contact the factory.

CAGE Code A6854

Printed in U.S.A.

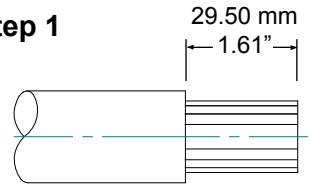
Plug Connector - Assembly Instructions



Items Description

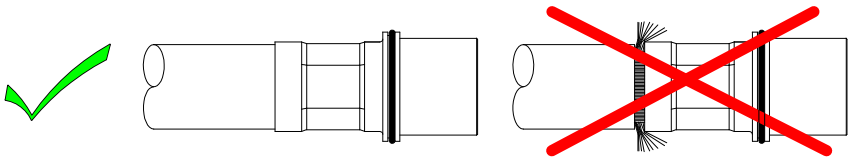
1 - Plugshell
2 - Flat Washer
3 - Wave Spring
4 - Coupling Nut
5 - Front Insert
6 - Female Contact
7 - Rear Insert
8 - Backshell
9 - Compression Ring
10 - Grommet
11 - Backnut

Step 1



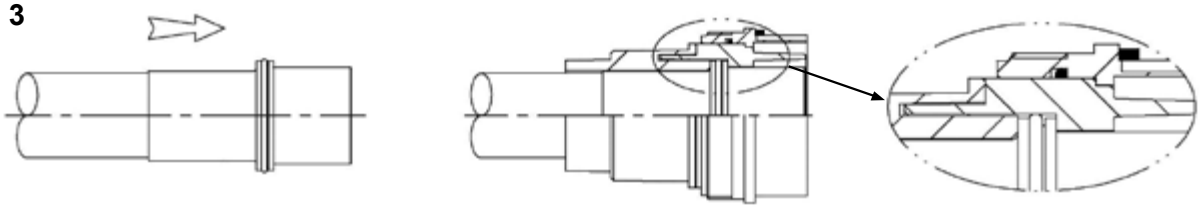
Cut and strip the cable

Step 2



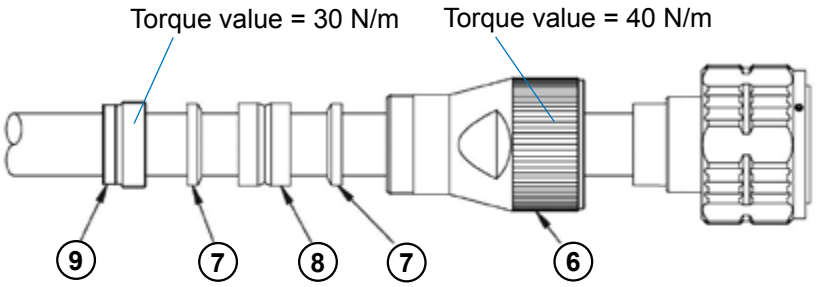
Crimp the contact (6) on the wire.

Step 3



Insert the contact (6) crimped to the wire into the front insert (5). Install the rear insert (7) until it stops against the front insert (5) and check that the insert is assembled correctly per the picture above.

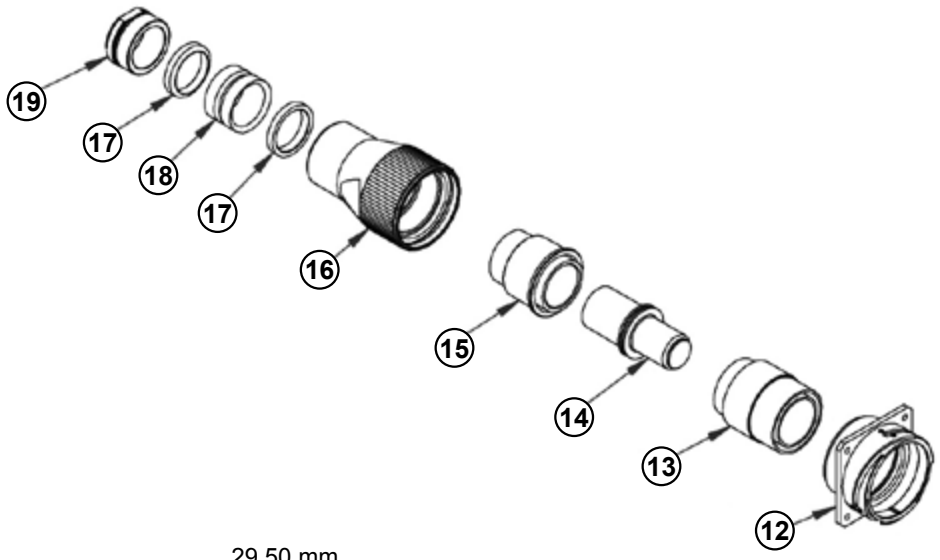
Step 4



Assemble the wave spring (3) and flat washer (2) into the coupling nut (4) and slide down over the plugshell (1). Screw the backshell (8) onto the rear external threads of the plugshell (1) and tighten. Make sure that the angle side of compression ring (7) are facing into the grommet. Then screw the backshell and tighten.
Electrical Test: Insulation resistance (5000 MΩ Min.). Test voltage: 3000 Vcc (1 min.).

ITS 500 Series
Reverse Bayonet Single Pole Power Connector
Assembly Instructions

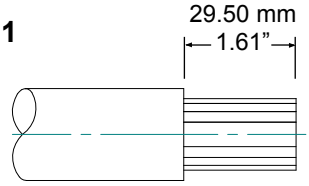
Receptacle Connector - Assembly Instructions



Items Description

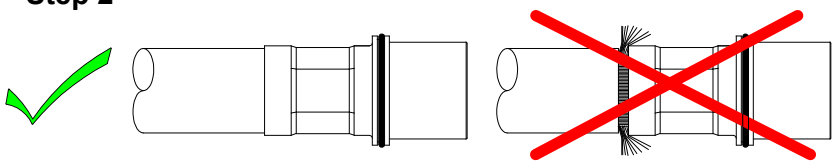
12 - Receptacle
13 - Front Insert
14 - Male Contact
15 - Rear Insert
16 - Backshell
17 - Compression Ring
18 - Grommet
19 - Backnut

Step 1



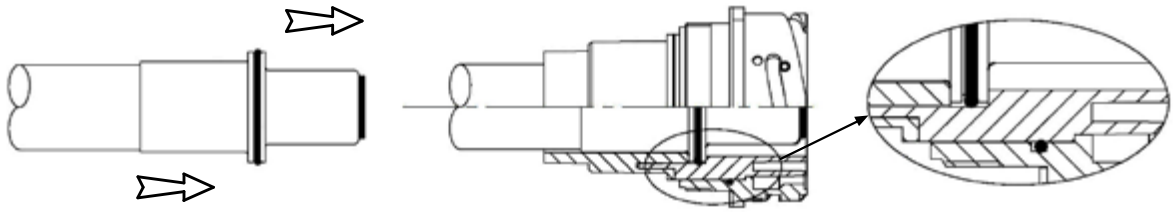
Cut and strip the cable

Step 2



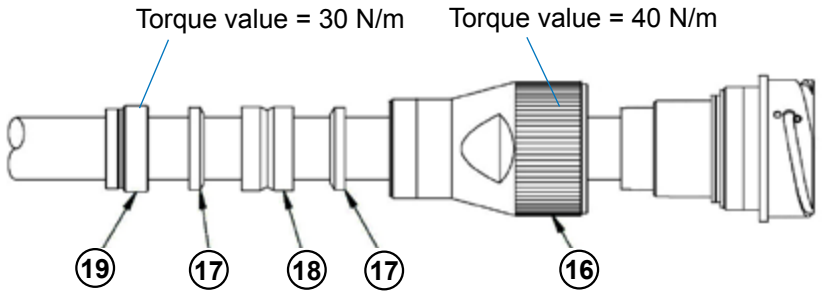
Crimp the contact (14) on the conductor.

Step 3



Insert the contact (14) crimped to the wire into the front insert (13). Install the rear insert (15) until it stops against the front insert (13) and check that the insert is assembled correctly per the picture above.

Step 4



Screw the backshell (16) onto the rear external threads of the receptacle (12) and tighten. Make sure that the angled side of the compression rings (17) are facing into the grommet (18). Then screw the backnut (19).
Electrical Test: Insulation resistance (5000 MΩ Min.). Test voltage: 3000 Vcc (1 min.).

WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO EQUIPMENT, SERIOUS PERSONAL INJURY OR EVEN DEATH.

It is the user's responsibility to ensure these products are used safely. Glenair, Inc., including all Glenair, Inc. subsidiaries, is NOT responsible for damage to equipment, personal injury or death from use of Glenair, Inc. products.

Only qualified electrical technicians should use interconnection products in high voltage and other electrical conditions.

Interconnection products must be clean and dry when installed. Mating and de-mating should never occur under load.

Damaged interconnection products must be replaced immediately by a trained electrical technician.

Glenair, Inc. reserves the right to modify this Warning, any other warning, all catalogs, gleniar.com website, and any other technical information with or without notice.

For further information and technical assistance, please contact your local Glenair Sales Office or see our website: **www.glenair.com**

Glenair®

UJ Series Connector
Introducing the Power Joint System

V250 Train: An Albatross flying on the Dutch Railways

Glenair supplies connectors and interconnect systems for the V250 High Speed Trains which connect the cities of Amsterdam and Brussels. These trains are completely in conformity with the European Technical Specification of Interoperability—they can adapt to the different voltages of the various European railway networks.

V250 is an Italian family of tilting trains manufactured by Ansaldobreda

V250 train combines the benefits of high-speed rail (travel times and service levels) with those of metropolitan travel (frequency and accessibility), providing competitive mobility solutions.

Also known as the Albatross, the V250 is a high-speed train to be built by AnsaldoBreda and styled by Pininfarina.

Designed to express speed, brightness, convenience and comfort, the V250 operates on the newly built HSL-Zuid in the Netherlands and its extension HSL 4 in Belgium.

The Albatross name is a reference to the top speed of the trains, 250 km/h. While this is slower than other high-speed trains, it is higher than the current top speed for Dutch trains of 140 km/h. The distinctive styling of the trains has sometimes been compared to a platypus!

Like Hercule Poirot, Glenair Solves Another One on the Orient Express

Glenair application engineers, every bit the intellectual match for retired Belgian detective Hercule Poirot, were asked to solve not a crime, but a serious problem involving an emergency braking system upgrade on the Orient Express. A complicated interplay of hydraulics, pneumatics and mechanics, the braking system solution had to fit within very limited space, and the train is, of course, a much-revered and valuable historical artifact.

The case was solved with Glenair ITS reverse bayonet connector cables and flange mount receptacles. Plugs with cable clamp backshells mated to receptacles mounted on existing metal junction boxes, along with a specially-designed, corrosion-free and EMI/RFI-protected Glenair Composite Junction Box, factory wired to an internal termination block. Glenair engineered a solution to a modern braking system problem, fully integrated into a historical train.

IC4 Train : Low Emission Diesel Engine with Common Rail Injection

The IC4 is an inter-city train built by Italian AnsaldoBreda for the trans-Great Belt routes of Danske Statsbaner (DSB), Denmark's national railway operator. Glenair is one of the main suppliers of Connectors and Interconnection Systems for this train.

CAGE Code A6854 Printed in U.S.A.

UJ1 AND UJ2 POWER JOINT CONNECTION SYSTEM

Offers the possibility to connect medium and high power cables without the need for bulky junction boxes. The UJ Power Joint System offers the same environmental protection with substantial size and weight savings.

Alternative to Junction Boxes!

Dimension Reduction!

	UJ Series ↑	Junction Box ↓
Dimensions	Small	Regular / Big
Weight	Light	Heavy
Protective Varnish	No	Yes
Modularity	Yes	No
Environmental	Yes	Yes
Electrical Performance	Yes	Yes
Cost Reduction	Yes	No
Temperature Range	High	Standard

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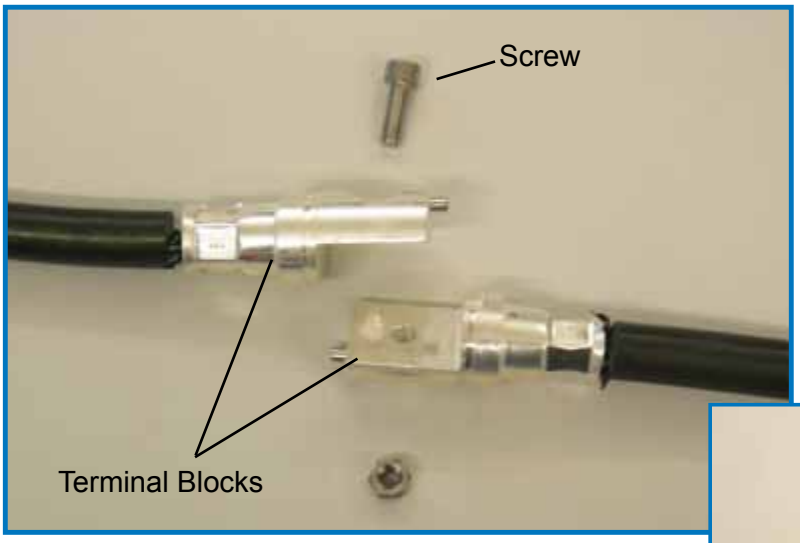
UJ Series Connector
Connectrors and Cables Assembly Procedure

CRIMP TERMINAL BLOCKS

UJ Series is a “Joint” connector: 2 - 3 minutes for mating and unmating, but is really reliable and efficient for Power Applications in harsh conditions.

Phase 1

Crimp Terminal Blocks, assembled with a screw easy and suitable for field assembly.



Phase 2

Positioner protects Terminal Blocks and mantain the correct contact position into the middle of the Plastic Body.

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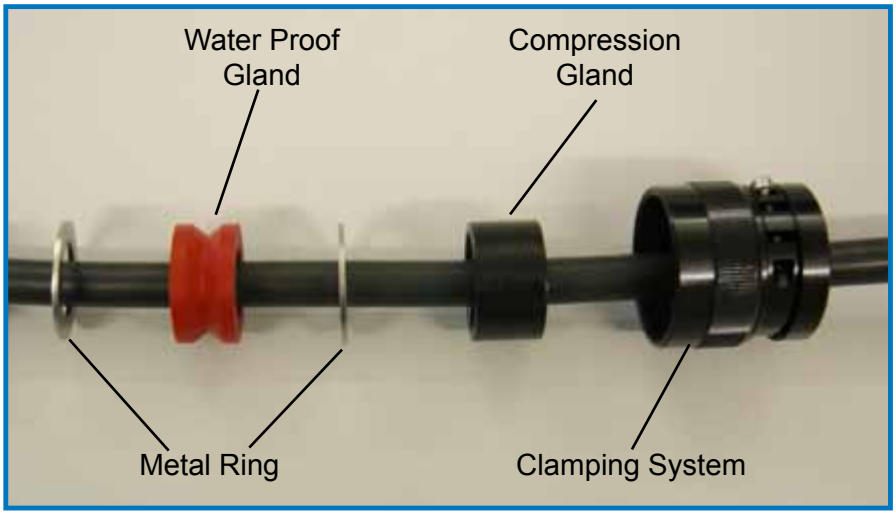
CRIMP TERMINAL BLOCKS

Phase 3

Tightness Clamping system both sides.



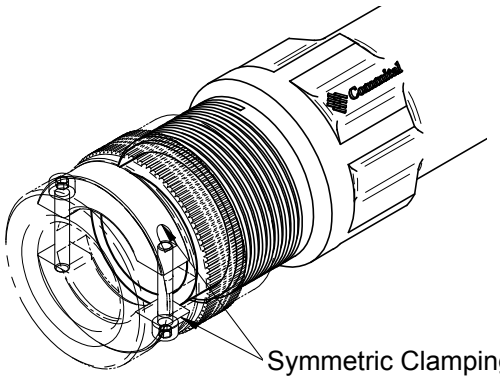
Phase 4

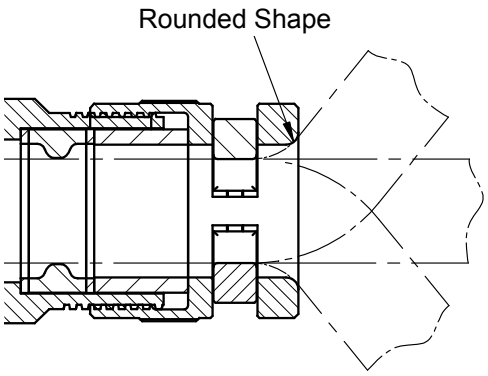
Complete Connector

Internal Section

UJ Series Connector
Details Drawings and Dimensions

CLAMP DETAILS





The symmetric clamping system keeps the cable firmly locked and in axis with cables. The rounded shape on the clamping system and on the termination, allow to avoid cable's insulator damaging in the clamping zone and in the rear end despite casual movements.

UJ1 AND UJ2 SUPPORTS : 2-WAY AND 3-WAY

2 Way Supports:

UJ1 - 2-Way Support P/N
UJ1-S-2

UJ 2 - 2-Way Support
UJ2-S-2

3-Way Supports:

UJ1 - 3-Way Support P/N
UJ1-S-3

UJ 2 - 3-Way Support
UJ2-S-3

DIMENSION TABLE

Support P/N	Description	Number of Positions	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
UJ1-S-2	Suitable for UJ1	2	160	84	190	50	60
UJ2-S-2	Suitable for UJ2	2	140	72	170	40	60
UJ1-S-3	Suitable for UJ1	3	216	70	246	50	60
UJ2-S-3	Suitable for UJ2	3	186	59	216	40	50

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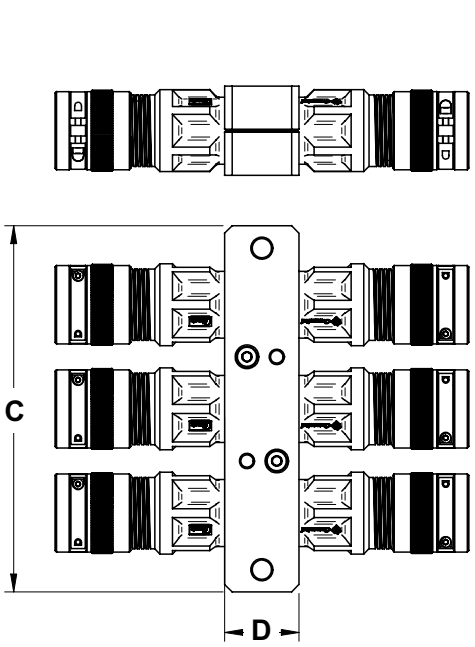
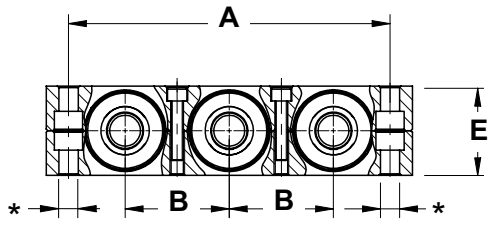
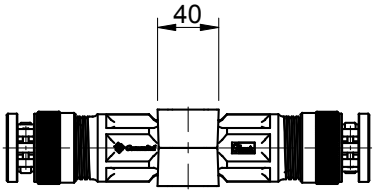
UJ - 3 POSITION ASSEMBLY DRAWINGS -

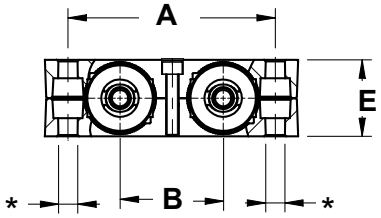




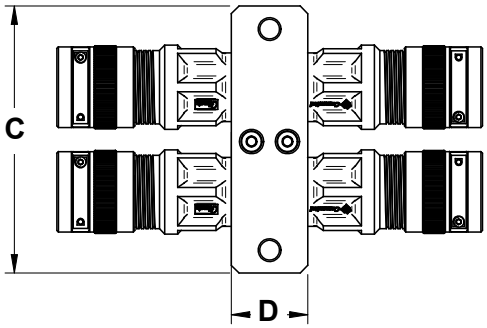
* Suitables for UNI5931-M12

UJ - 2 POSITION ASSEMBLY DRAWINGS -





* Suitables for UNI5931-M12



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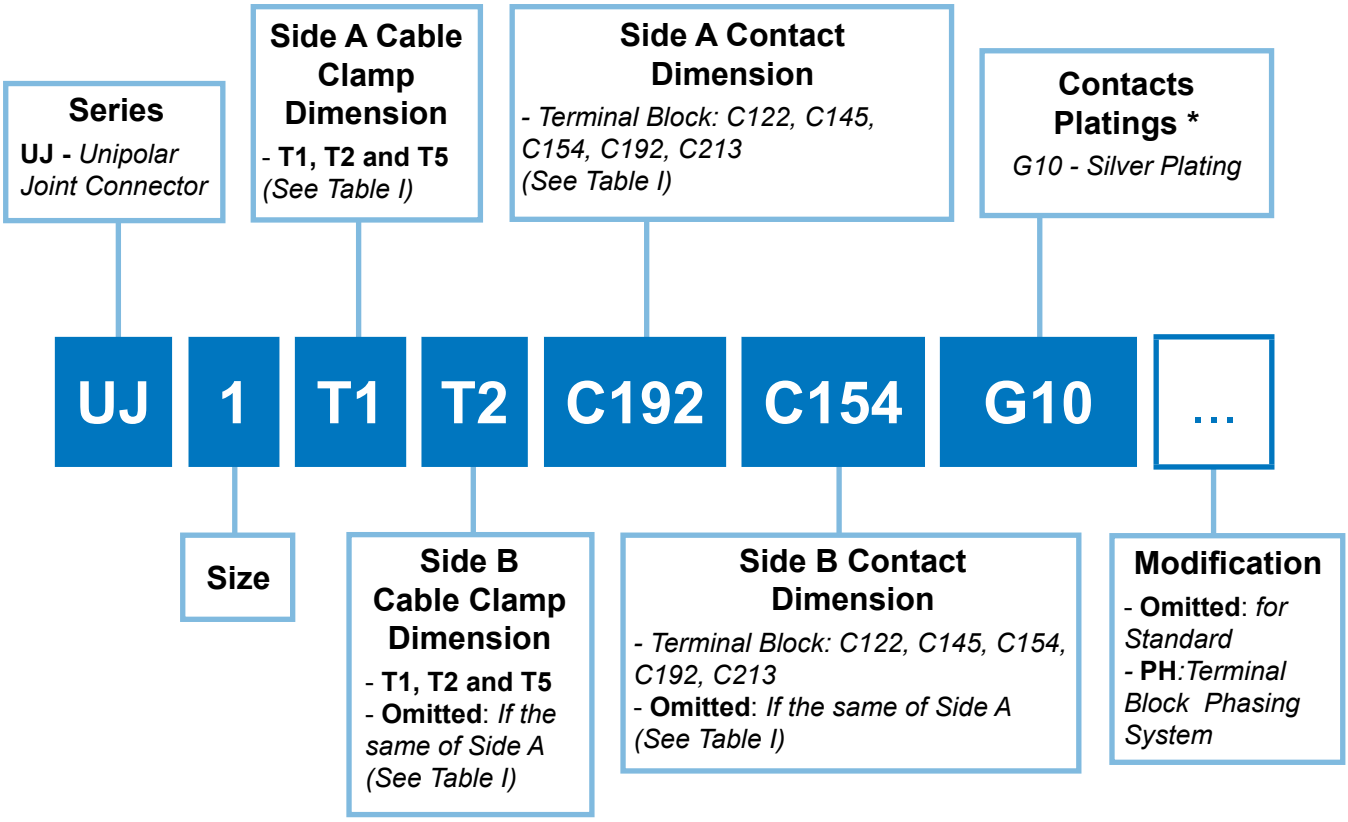
UJ Series Connector
How to Order • Part Number Breakdown

UJ 1 - How to Order



* for **Contact Platings**: please consult the Sales Department for further application requirements.

D

TABLE I - Crimp Bucket Contacts

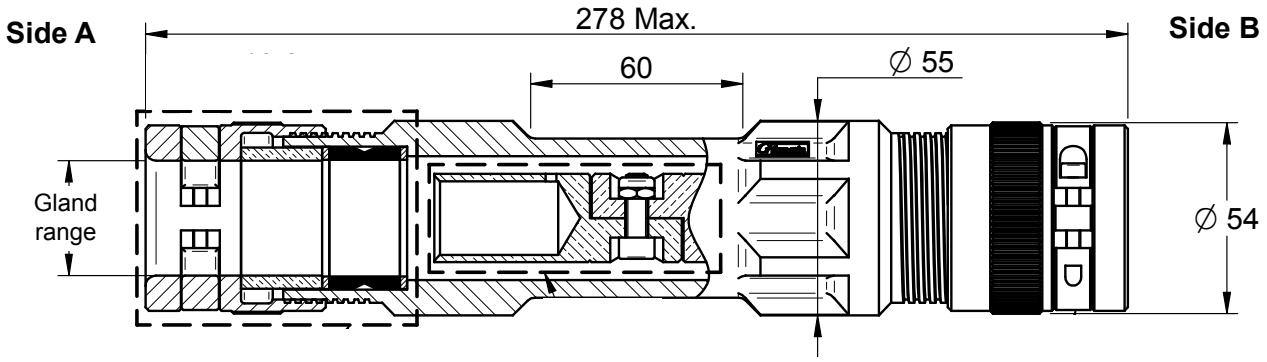
Cables referred to EN 50264

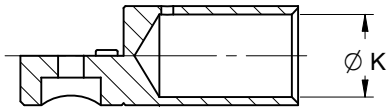
UJ1 Contact P/N	Terminal Block Bucket (K) (mm)	Cable Section (mmq)	Min. Conductor (mm)	Max Conductor (mm)	Min Cable (mm)	Max Cable (mm)	Gland Range 1 (mm)	Gland Range 2 (mm)	Working Current (A) *
C122	12.2	70	11	12	12	25	T2=18-25	T5=12-18	300
C145	14.5	95	12.4	14.3	12	25	T2=18-25	T5=12-18	400
C154	15.4	120	14.2	15	12	25	T2=18-25	T5=12-18	450
C192	19.2	185	17.3	18.2	18	25	T2=18-25	T2=18-25	500
C213	21.3	240	19.1	20.5	24	29	T2=18-25	T1=25-29	750

* Related to cables ampacity.
For different cable dimensions, please contact the factory.

UJ 1 CONNECTOR CHARACTERISTICS

Single Connector weight: 900.0 gr





APPLICATION NOTES:

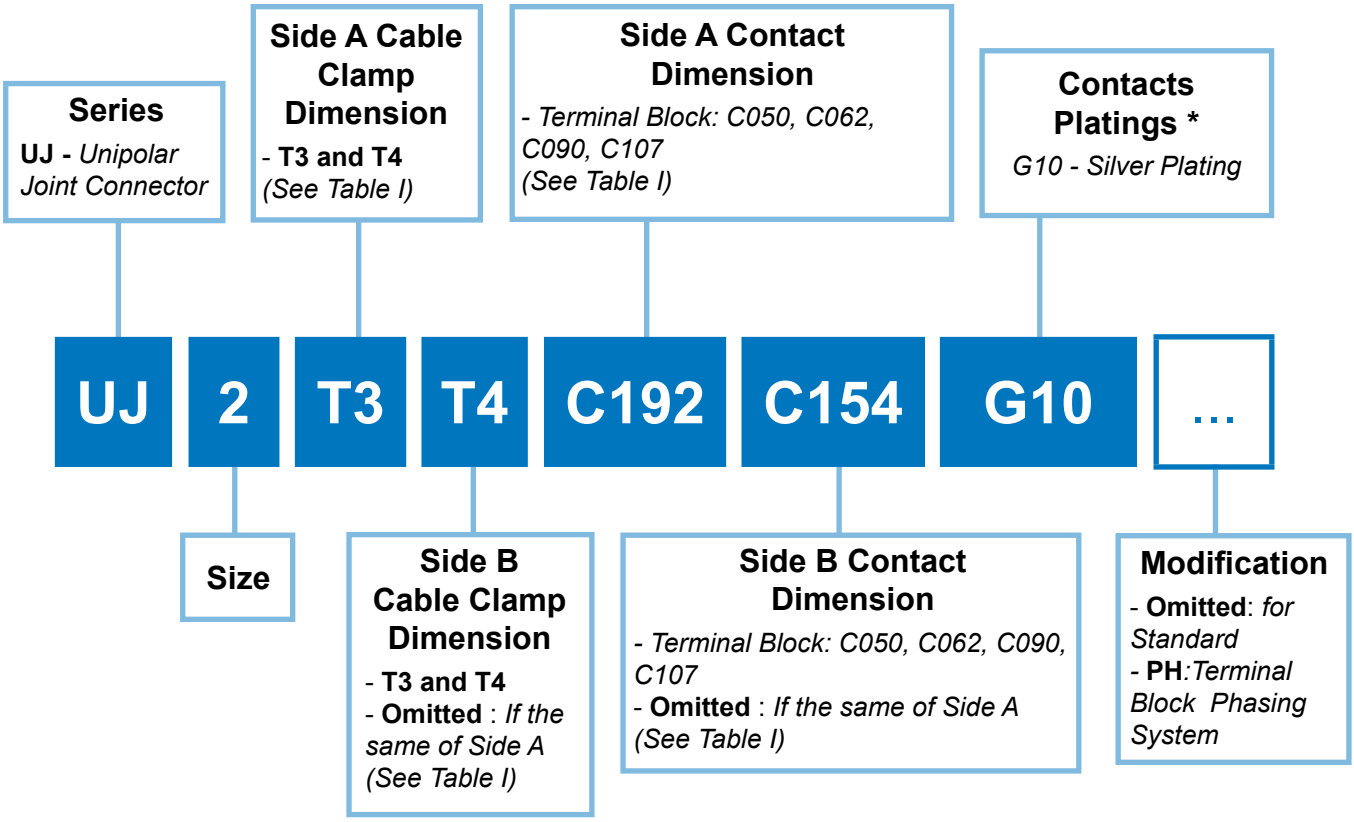
1 - In line junction with polymeric based body and metal strain relief parts RoHS compliant
2 - Crimp contacts face-face coupling with screw locking
3 - Arrangement: Single pole
4 - Contacts: hermaphrodite crimp contacts face-face coupling with screw locking
5 - Working voltage: 3’500 Vac RMS/Vdc
6 - Test voltage: 12’000 Vac RMS
7 - Working temperature: (-40 to +150)°C
8 - Water proof: IP 67 level (coupled connectors)
9 - Max. contact resistance: ≤ 0.5 mΩ
10 - Contacts: copper alloy with silver plating (G10) - Phasing System available
11 - Gaskets: silicone rubber
12 - Cable clamp: aluminum alloy (cable clamp) with electrodeposited black paint
13 - Plastic parts: black thermoplastic resin (body)
(UL 94: V0; NFF 16-102: I2F2 exigence 3; BS; ASTM; UNI-CEI11170)
14 - Screws: stainless steel.

PROCEDURES TABLE

Description	Procedure
Electrical Characteristics	CEI EN 50124 and CEI EN 60077
Environmental Conditions	CEI EN 50125
IP Level	CEI EN 60529
Shock and Vibration	CEI EN 61373
Corrosion	VG 95210 - 2
Fire Protection	UNI CEI 1170 - 3

UJ Series Connector
How to Order • Part Number Breakdown

UJ 2 - How to Order



* for **Contact Platings**: please consult the Sales Department for further application requirements.

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TABLE I - Crimp Bucket Contacts

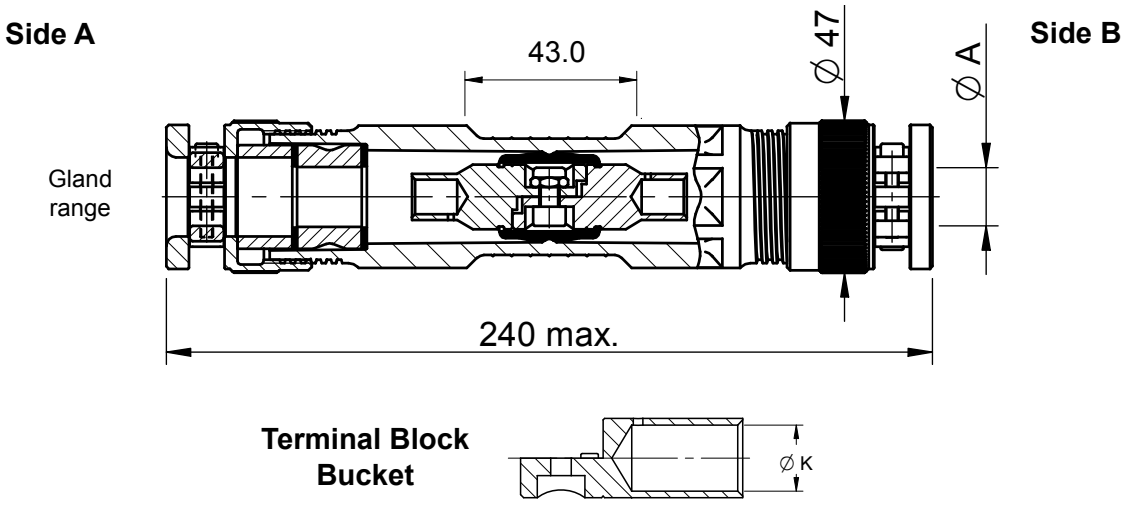
Cables referred to EN 50264

UJ2 Contact P/N	Terminal Block Bucket (K) (mm)	Cable Section (mmq)	Min. Conductor (mm)	Max Conductor (mm)	Min Cable (mm)	Max Cable (mm)	Gland Range 1 (mm)	Gland Range 2 (mm)	Working Current (A) *
C050	5	10	3.9	4.3	5	18	T3=5-12	T4=9-18	100
C062	6.2	16	5	6	5	18	T3=5-12	T4=9-18	120
C090	9	35	7.7	8.8	5	18	T3=5-12	T4=9-18	150
C107	10.7	50	9.2	10.4	5	18	T3=5-12	T4=9-18	200

* Related to cables ampacity.
For different cable dimensions, please contact the factory.

UJ 2 CONNECTOR CHARACTERISTICS

Single Connector weight: 540.0 gr



APPLICATION NOTES:

1 - In line junction with polymeric based body and metal strain relief parts RoHS compliant
2 - Crimp contacts face-face coupling and screw locking
3 - Arrangement: Single pole
4 - Contacts: hermaphrodite crimp contacts, phasable, face-face coupling with screw locking
5 - Working voltage: 3'500 Vac RMS/Vdc
6 - Test voltage: 12000 Vac RMS
7 - Working temperature: (-40 to +150)°C
8 - Water proof: IP 67 level (coupled connectors)
9 - Max. contact resistance: ≤ 0.5 mΩ
10 - Contacts: copper alloy with silver plating (G10) - Phasing System available
11 - Gaskets: silicone rubber
12 - Cable clamp: aluminum alloy with electrodeposited black paint
13 - Insulator: black thermoplastic resin (body)
(UL 94: V0; NFF 16-102: I2F2 exigence 3; BS; ASTM; UNI-CEI11170)
14 - Screws: stainless steel.

PROCEDURES TABLE

Description	Procedure
Electrical Characteristics	CEI EN 50124 and CEI EN 60077
Environmental Conditions	CEI EN 50125
IP Level	CEI EN 60529
Shock and Vibration	CEI EN 61373
Corrosion	VG 95210 - 2
Fire Protection	UNI CEI 1170 - 3

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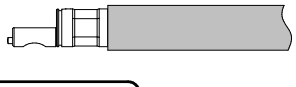
UJ Series Connector
Crimping Instructions and Tools

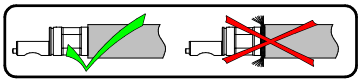
CRIMPING INSTRUCTIONS AND TOOLS

CRIMPING STEPS

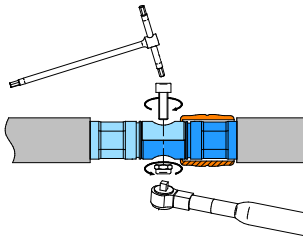
Step 1

Step 2

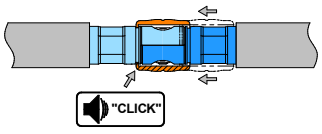




Step 3

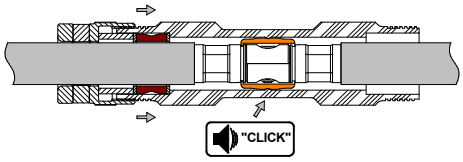


Step 4

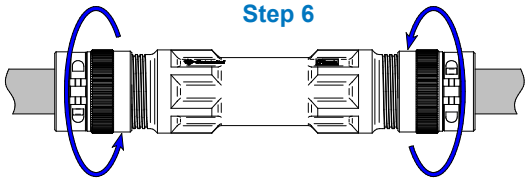


SCREW TYPE: M6 - Torque: 4 (Nm)

Step 5

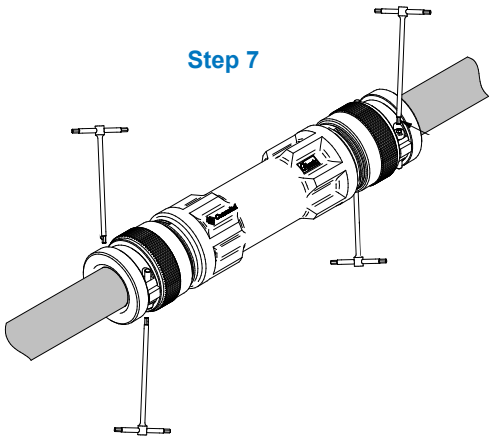


Step 6



CLAMPS Torque: 5 (Nm)

Step 7



- CROSS BAR SCREW TYPE: M4 - Torque: 4 to 6 Max. (Nm)
- ELECTRICAL TEST: 5000 MΩ - 3500 Vcc (1 Min.)

TABLE 1 - UJ1 Contacts

CONTACT P/N	A (+0.5/0) (mm)	DIE	CRIMP TOOL	TENSILE STRENGTH (N)
C122	23	M.112016	M.105013	2800
C145				3700
C154		M.112012		
C192		M.112018		4800
C213	28			

TABLE 2 - UJ2 Contacts

CONTACT P/N	A (+0.5/0) (mm)	DIE	CRIMP TOOL	TENSILE STRENGTH (N)
C050	12	M.112005	M.112004	890
C062		M.112006		1200
C090	14	M.112010		2200
C107				2800

CRIMP TOOLS

Oleodynamic Crimp Tool

Die for Oleodynamic Crimp Tool

For further Crimping Steps details, please contact the factory.

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WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO EQUIPMENT, SERIOUS PERSONAL INJURY OR EVEN DEATH.

It is the user's responsibility to ensure these products are used safely. Glenair, Inc., including all Glenair, Inc. subsidiaries, is NOT responsible for damage to equipment, personal injury or death from use of Glenair, Inc. products.

Only qualified electrical technicians should use interconnection products in high voltage and other electrical conditions.

Interconnection products must be clean and dry when installed. Mating and de-mating should never occur under load.

Damaged interconnection products must be replaced immediately by a trained electrical technician.

Glenair, Inc. reserves the right to modify this Warning, any other warning, all catalogs, gleniar.com website, and any other technical information with or without notice.

For further information and technical assistance, please contact your local Glenair Sales Office or see our website: **www.glenair.com**

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UJ Series Connectors - Revolutionary Connection System

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