

Accessories

	<p>Air service units Technical information 11.027</p>	
	<p>Series K Air service units, G 1/8, G 1/4 11.010</p> <p>Series RD Inline pressure regulator, G 1/8, G 1/4 11.036</p> <p>Series X Air service units, G 1/4 – G 3/4 11.040</p> <p>Series Y Air service units, G 1/4 – G 1 11.070 (available in NPT see catalogue ...)</p>	 
	<p>Series RP Precision pressure regulator, G 1/4 – G 1/2 11.064</p> <p>Function fittings Miniature regulator, check valve, inline hand valve, quick couplers, silencers 11.100</p>	

For AIRTEC fittings, tube connectors and plastic tubes see catalogue-No. A75



Series FK

Filter,
G 1/8 – G 1/4 11.012

Series RK

Pressure regulator,
G 1/8 – G 1/4 11.014



Series FRK

Filter/regulator,
G 1/8 – G 1/4 11.016

Series OK

Lubricator,
G 1/8 – G 1/4 11.018



Series FROK

Two piece
air service unit,
G 1/8 – G 1/4 11.020

Series KK

Ball valve,
G 1/8 – G 1/4 11.022





Series DAK

Soft start valve,
 G 1/4 11.023



Series VMK

3/2-way inline valve,
 G 1/4 11.024



Series TK

Distribution block and
 pressure switch,
 G 1/4 11.026

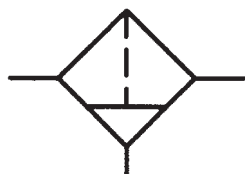
**Accessories for
 Series K**

11.032



Technical data for series

FK



Order code

FK-14-00-5-1201				
Series	Size	Pressure range	Filter element	Options
FK* = standard 5 µm	18 = G 1/8 14 = G 1/4	00 = Standard	5* = 5 µm 3 = 0.3 µm 1 = 0.01 µm A = activated carbon filter	1201* = polycarbonate bowl, semi-automatic drain 1301 = polycarbonate bowl, auto drain 2201 = metal bowl, semi-automatic drain 4201 = polycarbonate bowl, with metal guard, semi-automatic drain
FKA = activated carbon filter				
FKF = fine filter 0.3 µm				
FKM = microfilter 0.01 µm				

* = standard type

Design and function

The filter operates on the centrifugal force principle with a sintered filter.

The filter should be inspected regularly to avoid the build up of condensate in the filter bowl. Various filter elements can be installed depending on the particular application.

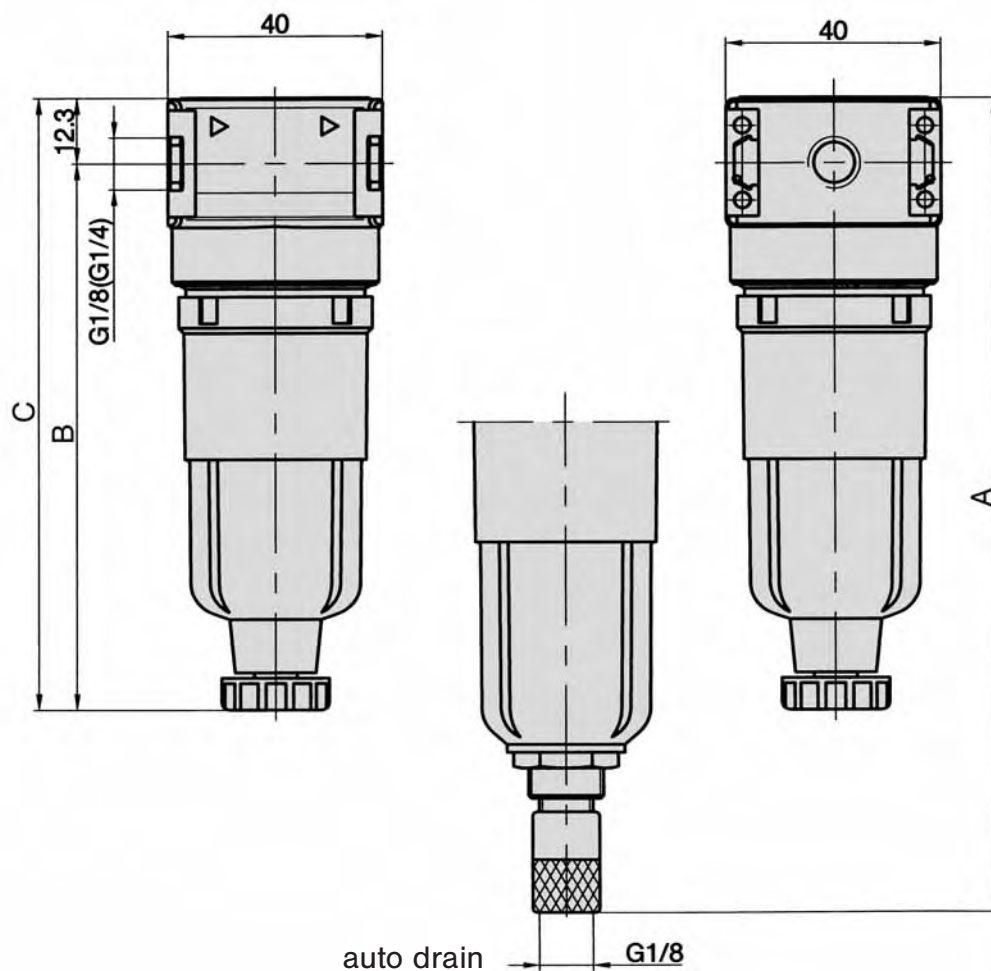
The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 11.032.

Order number	FK-18-00-...	FK-14-00-...
Please complete according to order code. The following details are for standard series.		
Connection size	G 1/8	G 1/4
Flow rate (5 µm filter element)	1150 NI/min (1.168 Cv)	
Mounting	vertically, drain plug at bottom	
Supply pressure manual drain	0.5 – 16 bar (7 – 232 psi)	
semi-automatic drain	1.5 – 16 bar (21 – 232 psi)	
auto drain	1.5 – 10 bar (21 – 145 psi)	
Bowl volume	max. 16 cm ³	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)	
Weight	0.210 kg (0.463 lb.) for option 1201	

Dimensions for series

FK

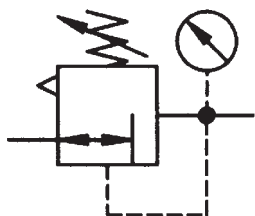


Order number	FK-18	FK-14	FKA-18	FKA-14	FKF-18	FKF-14	FKM-18	FKM-14
A	153		–	–	153	142.4	153	142.4
B	102.5		95.5	100.5	102.5	125.8 ¹⁾	102.5	125.8 ¹⁾
C	114.8		107.8	122.8	114.8	138.1 ¹⁾	114.8	138.1 ¹⁾

¹⁾ = semi-automatic drain

Technical data for series

RK



Order code

RK-14-10-0-0021			
Series	Size	Pressure range	Options
	18 = G 1/8 14 = G 1/4	03 = 0.1 ... 3 bar 06 = 0.2 ... 6 bar 10* = 0.5 ... 10 bar	0001 = without gauge flow from left to right 0011 = without gauge flow from right to left 0021* = with gauge flow from left to right 0031 = with gauge flow from right to left 0002 = key lockable, without gauge flow from left to right 0012 = key lockable, without gauge flow from right to left 0022 = key lockable, with gauge flow from left to right 0032 = key lockable, with gauge flow from right to left

Design and function

Pressure regulator with diaphragm and relieving feature. The outlet pressure of the regulator remains constant regardless of incoming pressure changes.

The components of series K can easily be connected by using the coupling kit KPK-00.

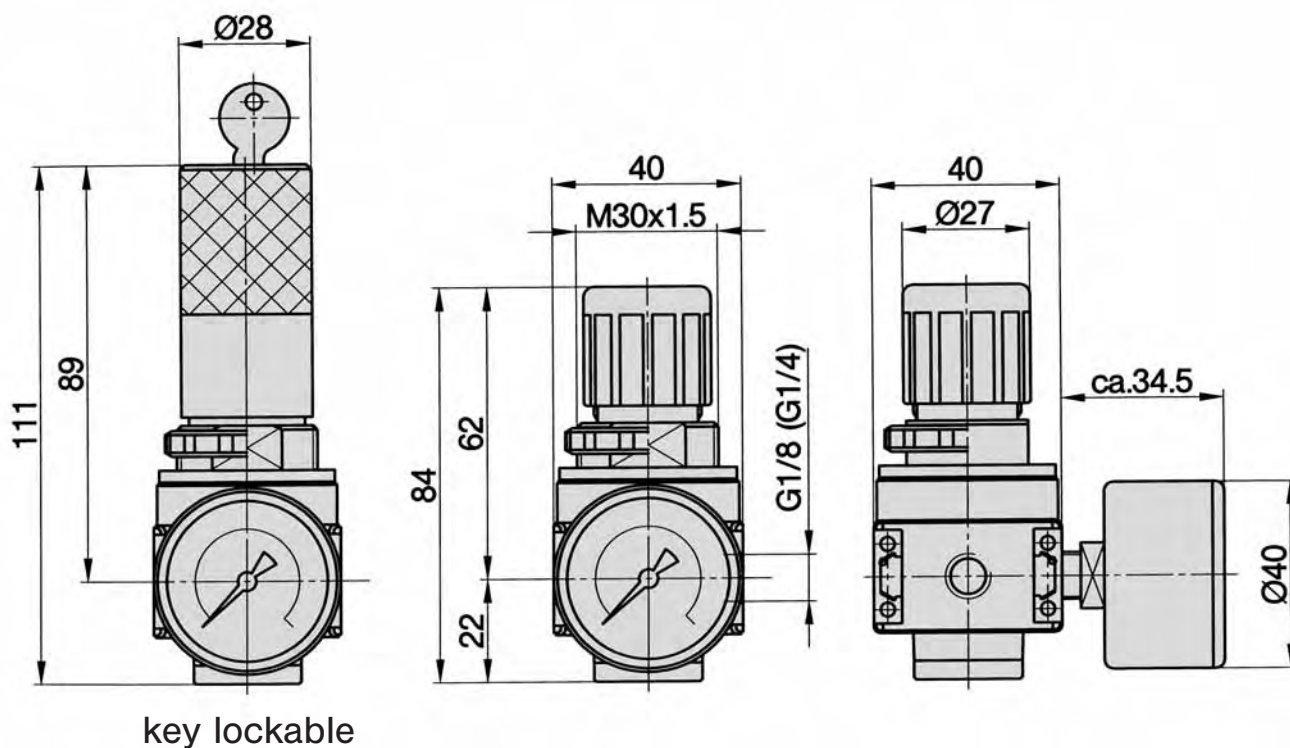
For additional accessories see pages 11.032 and 11.033.

Order number Please complete according to order code.	RK-18-03-...	RK-18-06-...	RK-18-10-...	RK-14-03-...	RK-14-06-...	RK-14-10-...
Connection	G 1/8			G 1/4		
Mounting	arbitrary					
Input range	max. 16 bar (max. 232 psi)					
Output range	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)
Flow rate	1.130 NI/min. (1.148 Cv)					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Weight without pressure gauge*	0.260 kg (0.573 lb.), with key lockable knob 0.345 kg (0.760 lb.)					

* = standard type

Dimensions for series

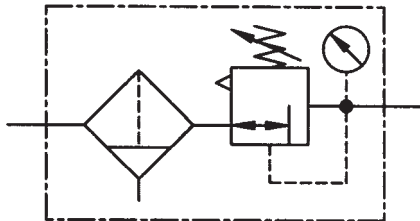
RK



The main body of the regulator has two G 1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow.
 (Note: The second port must be plugged.)

Technical data for series

FRK



Order code

FRK-14-10-5-1221

Options for digits No. 1 and 2

- 12*** = polycarbonate bowl, semi-automatic drain
- 13 = polycarbonate bowl, auto drain
- 22 = metal bowl, semi-automatic drain
- 42 = polycarbonate bowl with metal guard, semi-automatic drain

Options for digit No. 3

- 0 = without gauge
flow from left to right
- 1 = without gauge
flow from right to left
- 2*** = with gauge
flow from left to right
- 3 = with gauge
flow from right to left

Options for digit No. 4

- 1 = standard
- 2 = key lockable

Design and function

The filter/regulator is a diaphragm style regulator with relieving function. The filter includes a semi-automatic drain. The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed.

The filter removes both solid and liquid particles from the incoming air. The bowl can be supplied with a semi-automatic (drains when pressure is shut off) or auto drain.

The components of series K can easily be connected by using the coupling kit KPK-00.

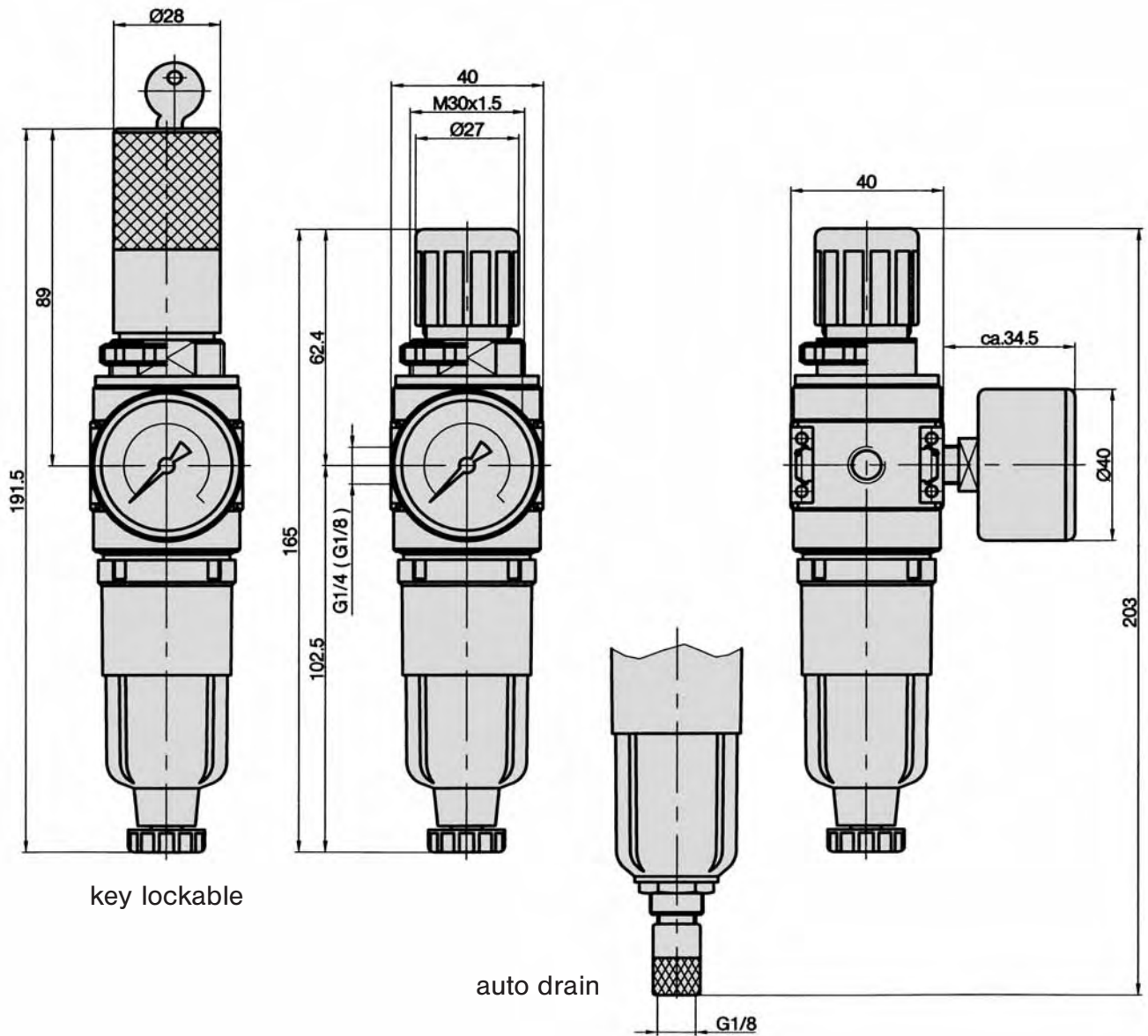
For additional accessories see pages 11.032 and 11.033.

Order number Please complete according to order code.	FRK-18- 03-5-...	FRK-18- 06-5-...	FRK-18- 10-5-...*	FRK-14- 03-5-...	FRK-14- 06-5-...	FRK-14- 10-5-...*
Connection	G 1/8			G 1/4		
Mounting	vertically, drain plug at bottom					
Input range	max. 16 bar (10 bar with auto drain)					
Output range	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)
Filter element	5 µm					
Flow rate	1.130 NI/min. (1.148 Cv)					
Bowl volume	max. 16 cm³					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Weight without pressure gauge*	0.280 kg (0.617 lb.), with key lockable knob 0.385 kg (0.849 lb.)					

* = standard type

Dimensions for series

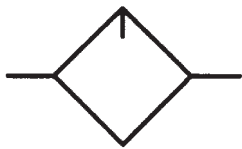
FRK



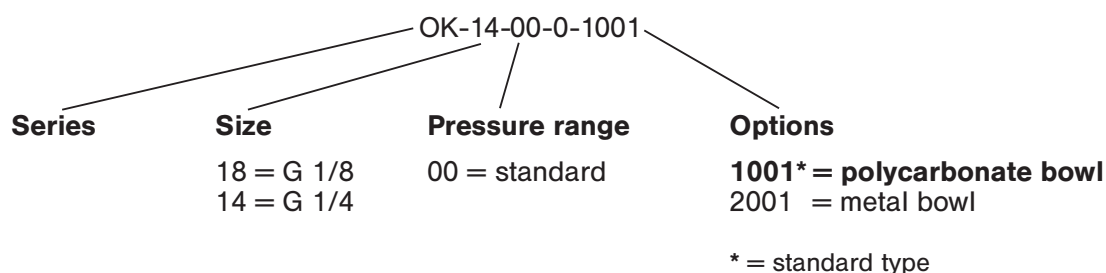
The main body of the regulator has two G 1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow.
(Note: The second port must be plugged.)

Technical data for series

OK



Order code



Design and function

The lubricator has a proportional adjustment screw for adjustment of the oil/air mix.

The filter should be inspected regularly to avoid the build up of condensate in the filter bowl. Various filter elements can be installed depending on the particular application.

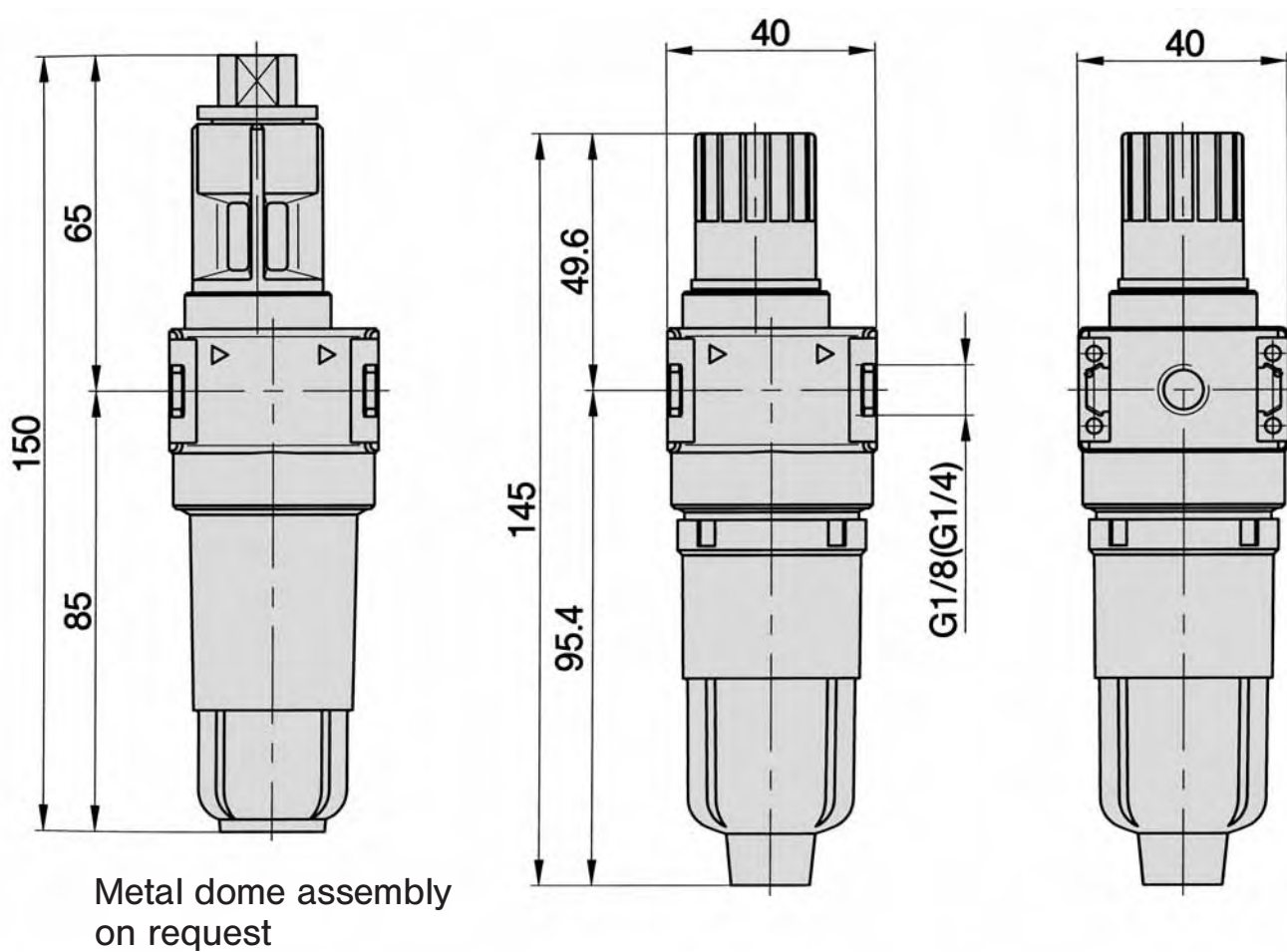
The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 11.032.

Order number	OK-18-00-0-1001	OK-18-00-0-2001	OK-14-00-0-1001	OK-14-00-0-2001
Connection	G 1/8		G 1/4	
Mounting	vertically			
Input range	max. 16 bar (232 psi)	max. 20 bar (290 psi)	max. 16 bar (232 psi)	max. 20 bar (290 psi)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Bowl volume	35 cm³			
Type of oil	HL 25 according to DIN 51524 – ISO VG 32			
Weight	0.230 kg (0.507 lb.)			

Dimensions for series

OK



Technical data for series

FROK



Order code

FROK-14-10-5-1221

Options for digits No. 1 and 2

- 12***=polycarbonate bowl, semi-automatic drain
- 13 = polycarbonate bowl, auto drain
- 22 = metal bowl, semi-automatic drain
- 42 = polycarbonate bowl with metal guard, semi-automatic drain

Options for digit No. 3

- 0 = without gauge flow from left to right
- 1 = without gauge flow from right to left
- 2***= with gauge flow from left to right
- 3 = with gauge flow from right to left

Options for digit No. 4

- 1 = standard
- 2 = key lockable

Design and function

The air service unit includes a filter/regulator, and lubricator.

The filter/regulator is a diaphragm style regulator with relieving feature. The filter includes a semi-automatic drain. The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed.

The filter removes both solid and liquid particles from the incoming air. The bowl can be supplied with a semi-automatic (drains when pressure is shut off) or auto drain.

The lubricator has a proportional adjustment screw.

The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see pages 11.032 and 11.033.

Order number Please complete according to order code.	FROK-18- 03-5-...	FROK-18- 06-5-...	FROK-18- 10-5-...*	FROK-14- 03-5-...	FROK-14- 06-5-...	FROK-14- 10-5-...*
Connection	G 1/8			G 1/4		
Mounting	vertically, drain plug at bottom					
Input range	max. 12 bar (10 bar with auto drain)					
Output range	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)
Filter element	5 µm					
Flow rate	800 NI/min. (0.813 Cv)					
Bowl volume	max. 16 cm³ condensation volume, 35 cm³ oil bowl					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Type of oil	HL 25 according to DIN 51524 – ISO VG 32					
Weight without pressure gauge*	0.510 kg (1.124 lbs.)					

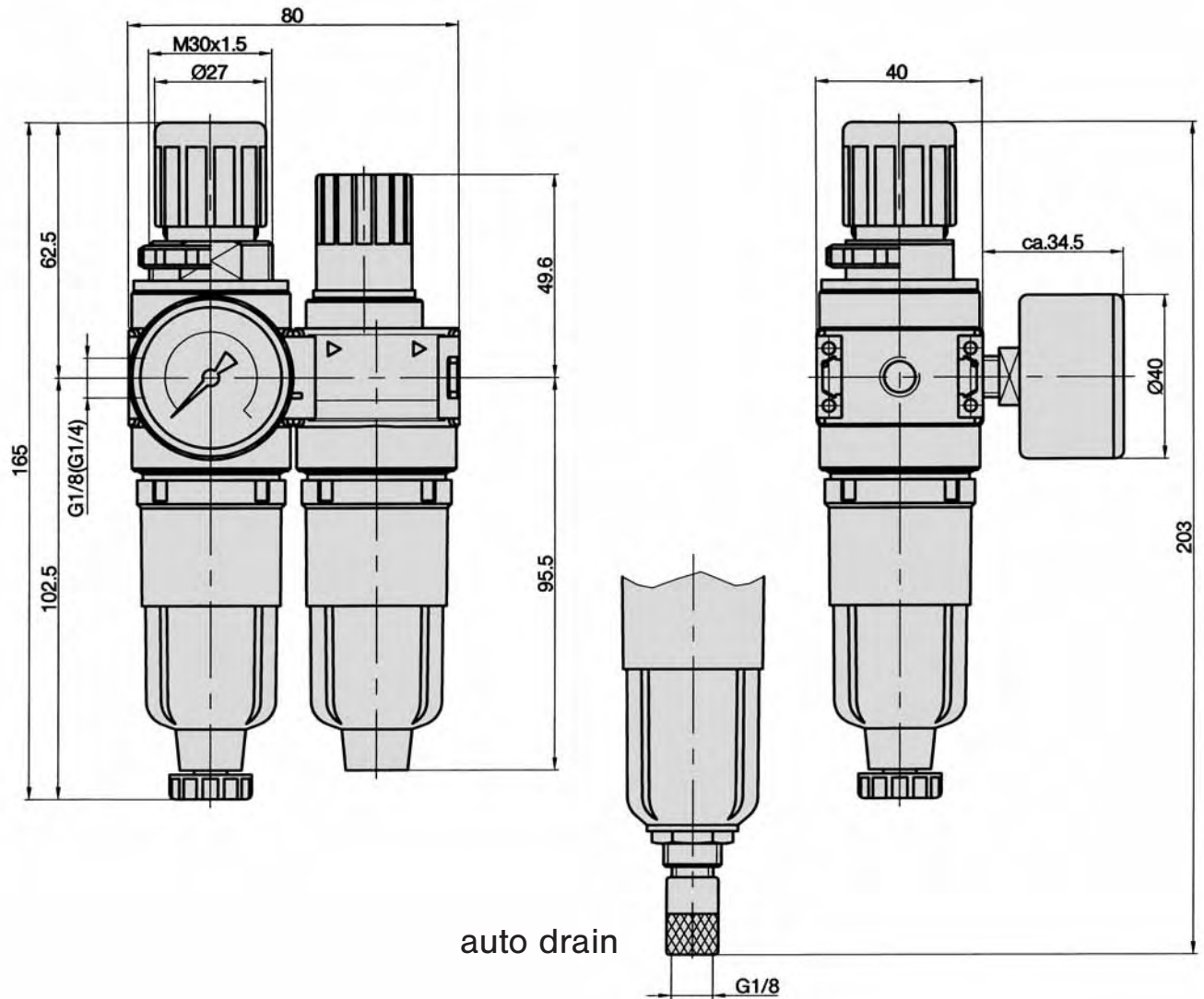
* = standard type

Series K
Two piece air service unit
G 1/8, G 1/4



Dimensions for series

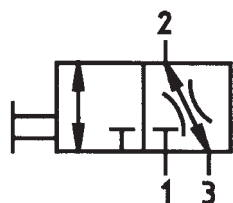
FROK



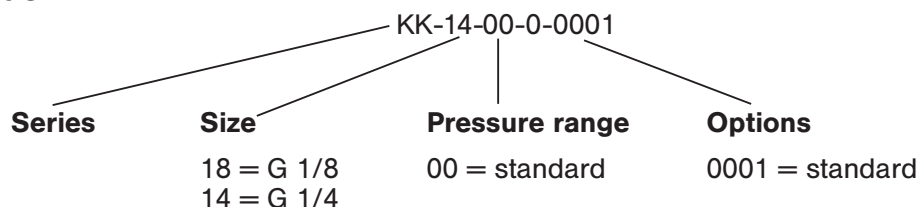
The main body of the regulator has two G 1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow.
(Note: The second port must be plugged.)

Technical data for series

KK



Order code



Design and function

3/2-way ball valve for the shut-off of downstream air.

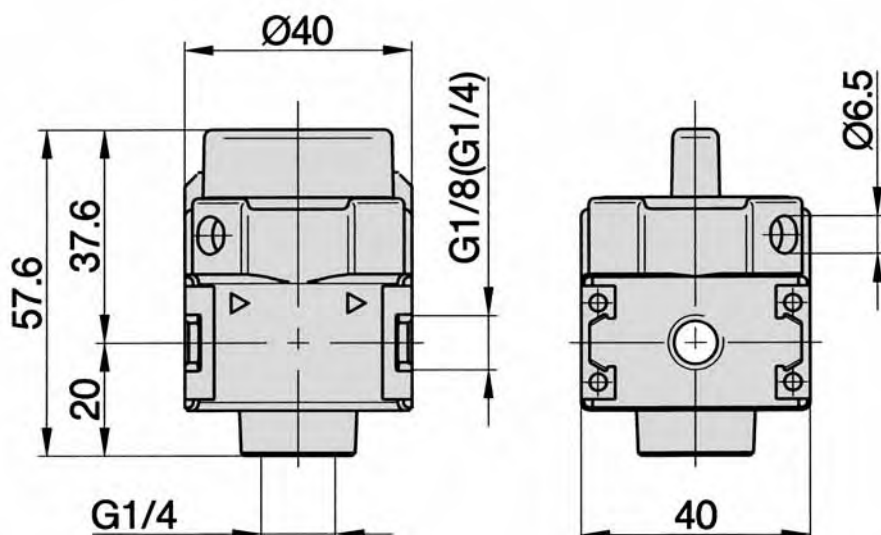
The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 11.032.

Order number	KK-18-00-0-0001	KK-14-00-0-0001
Connection	G 1/8	G 1/4
Mounting	arbitrary	
Input range	max. 16 bar (max. 232 psi)	
Flow rate	1800 NI/min. (1.829 Cv)	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)	
Weight	0.246 kg (0.542 lb.)	

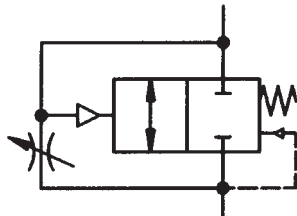
Dimensions for series

KK



Technical data for series

DAK



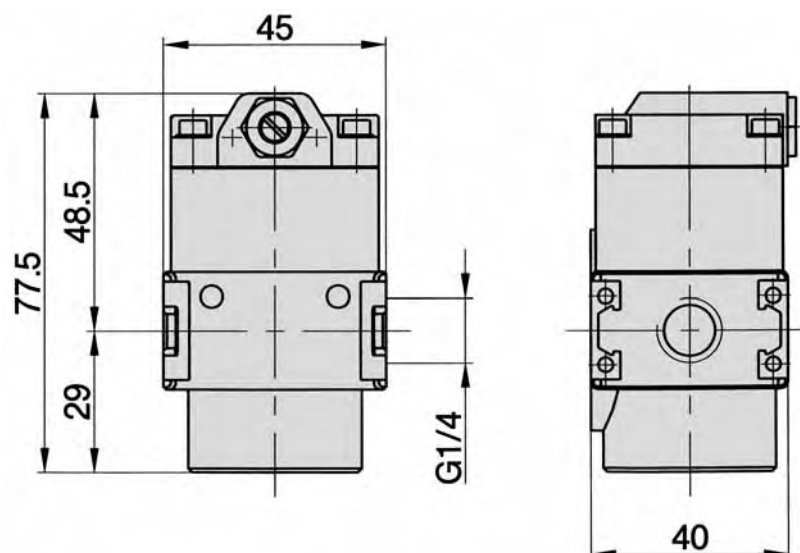
Design and function

Soft start valve with adjustable filling time. This valve can be used to slowly increase the system pressure through an adjustable throttle. When 50 % of the incoming pressure is achieved the valve opens completely. The components of series K can easily be connected by using the coupling kit KPK-00. For additional accessories see page 11.032.

Order number	DAK-14-00-0-0001
Connection	G 1/4
Mounting	arbitrary
Pressure range	2.5 ... 16 bar (36 ... 232 psi)
Flow rate	2200 NI/min (2.235 Cv)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)
Weight	0.430 kg (0.948 lb.)

Dimensions for series

DAK

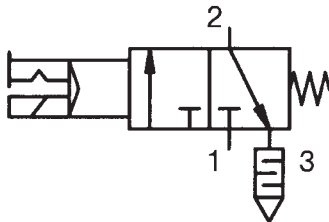


Series K
3/2-way inline valve
G 1/4

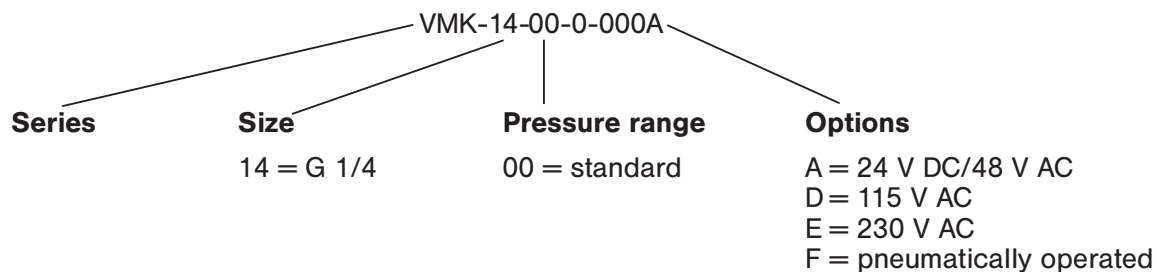


Technical data for series

VMK



Order code



Design and function

Solenoid or pneumatically operated 3/2-way poppet valve with spring return. The solenoid and plug socket are supplied with the unit.

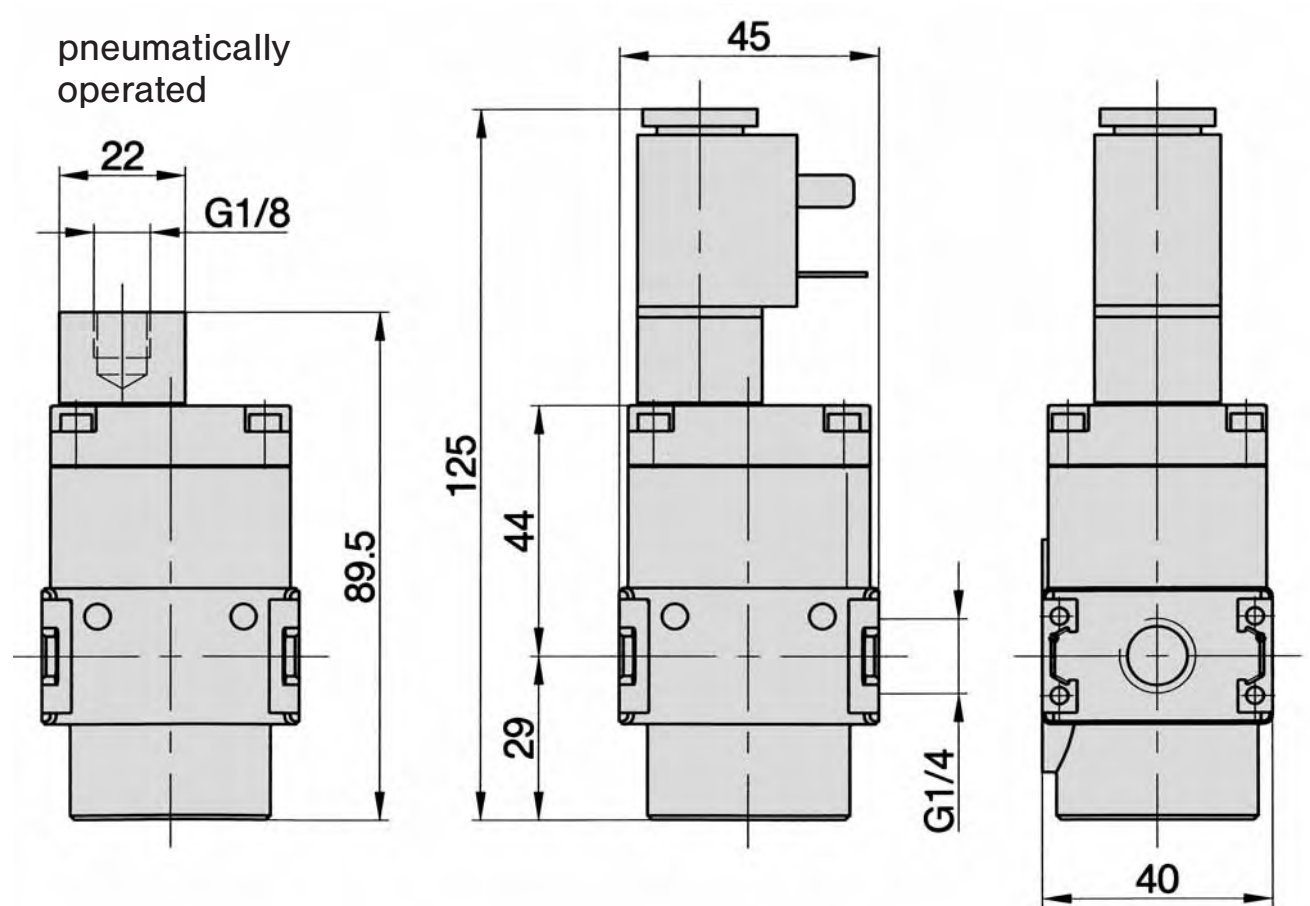
The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 11.032.

Order number Please complete according to order code.	VMK-14-00-0-...
Connection	G 1/4
Mounting	arbitrary
Pressure range	2 ... 10 bar (29 ... 145 psi)
Duty cycle	100 %
Degree of protection	IP 65 according to EN 60529
Flow rate	2000 NI/min (2.032 Cv)
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)
Weight	0.450 kg (0.992 lb.)

Dimensions for series

VMK



Series K
Distribution block and pressure switch
G 1/4



Technical data for series

TK



Design and function

Distribution manifold block for additional air supply or other components.

This unit can be combined with pressure switch PE-18-01-04 (see page 7.180) to provide a preset pressure indicating system when combined with the air service units.

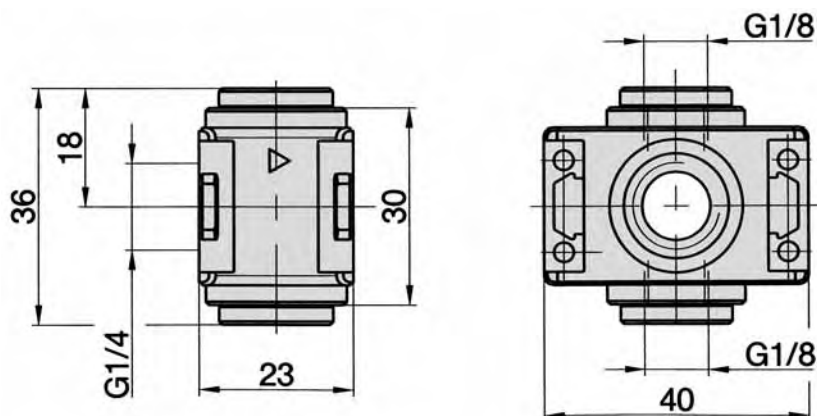
The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 11.032.

Order number	TK-14-00-0-0001
Connection	G 1/4, two outlets G 1/8
Mounting	arbitrary
Pressure range	0 ... 16 bar (0 ... 232 psi)
Flow rate	2700 NI/min for G 1/4, 1300 NI/min for G 1/8 (2.743 Cv for G 1/4, 1.321 Cv for G 1/8)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)
Weight	0.090 kg (0.198 lb.)

Dimensions for series

TK



Air service units

Technical information

Semi-automatic condensate drain

A semi-automatic condensate drain contains a spring-loaded valve, which opens as soon as the operating pressure falls. In addition, the container is sealed by means of a screw plug. The condensate can be drained manually by opening the screw plug in the pressure-free state, or automatically by shutting off the operating pressure. The screw plug must be removed in automatic mode.

The semi-automatic condensate drain requires a minimum operating pressure of 1.5 bar (21.75 psi), otherwise the air will flow out of the bowl. (Only with screw plug removed).



Fully automatic condensate drain

The fully automatic condensate drain function can be switched to manual. For manual operation, the screw in the container must be turned to the left (counter clockwise).

For automatic operation, the screw must be turned to the right (clockwise) until it stops.

In automatic operation, the drain is always open in the pressure-free state. Under pressure, a float opens the drain valve as soon as a condensate level is reached.

The automatic condensate drain requires a minimum operating pressure of 1.5 bar (21.75 psi), otherwise the air will flow out of the bowl.



General information

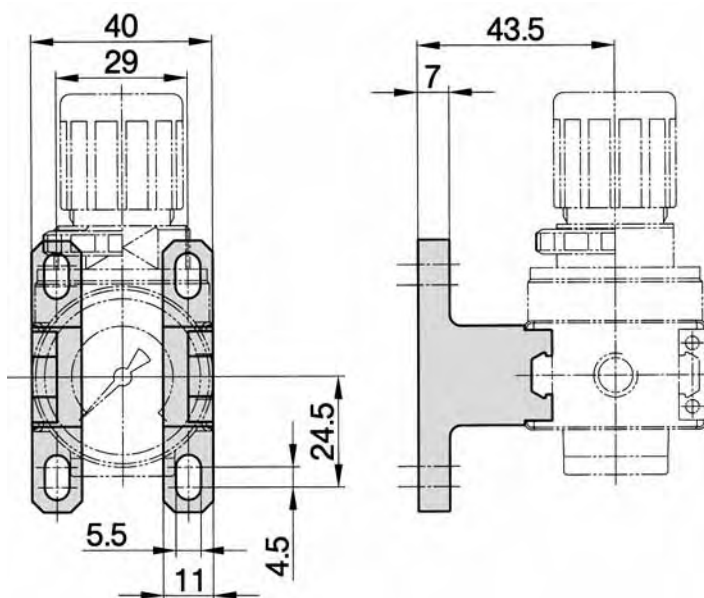
Plastic containers may only be cleaned with water, soap solution or a similar neutral media. Cleaning agents containing trichloroethylene, such as benzene, acetone and any liquids containing plasticisers, may not be used under any circumstances.

HL 25 oil in accordance with DIN 51524 - ISO VG 32 should be used in conjunction with mist oilers.

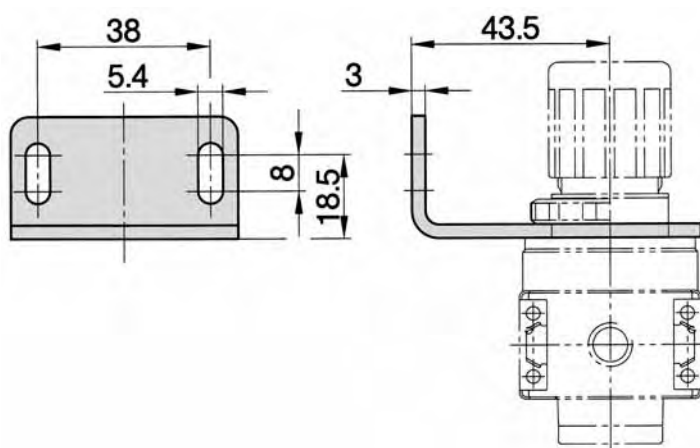
Accessories for series

K

Mounting bracket WK-00



Mounting bracket WK-30

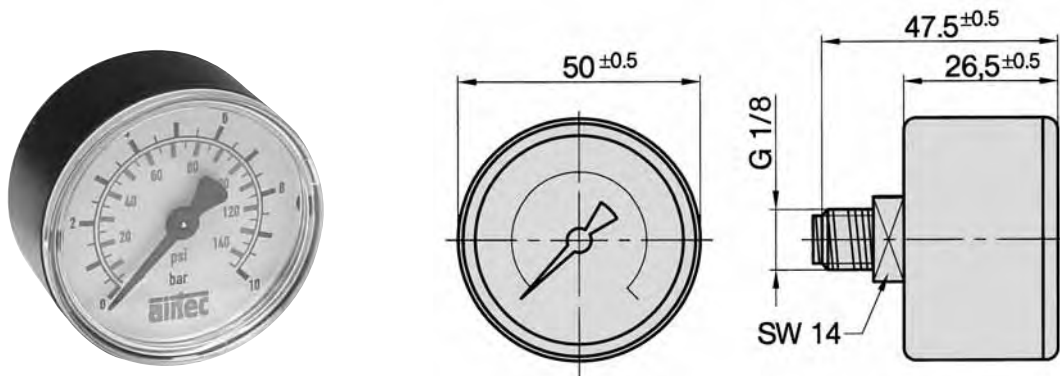


The mounting nut (see page 11.033) has to be ordered separately.

Accessories for series

K

Pressure gauge MXA-40



The sealing ring for gauge mounting on series K is supplied with the gauge.

Order number	MXA-40-06-18	MXA-40-10-18	MXA-40-16-18
Ranges	0 ... 6 bar (0 ... 87 psi)	0 ... 10 bar (0 ... 145 psi)	0 ... 16 bar (0 ... 232 psi)
Application	Constant load 3/4 x scale value Alternating load 2/3 x scale value		
Materials	Body : Plastic, highly shock resistant, black (ABS) Window : Plexiglass, convex, clipped-on Dial : Plastic, white with stop pin, scale black or blue Pointer : Plastic, black Movement : CuZn alloy Measuring element: Cu alloy		
Temperature range	- 40 °C ... + 60 °C (- 40 °F ... + 140 °F)		
Accuracy class	2.5 according to EN 837-1		
Temperature drift	0.4 % / 10 K if deviation from normal temperature 20 °C (68 °F).		
Weight	0.065 kg (0.143 lb.)		

Mounting nut RM-30



Order number	RM-30-K	RM-30-M	RM-30-Mv
Materials	plastic	brass	brass (nickel-plated)
Thread	M 30 x 1.5		

Coupling Kit KPK-00

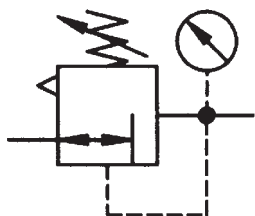


Pressure regulator for inline mounting G 1/8, G 1/4



Technical data for series

RD



Order code

RD-14-10-0-0021			
Series	Size	Pressure range	Options
	18 = G 1/8 14 = G 1/4	03 = 0.1 ... 3.5 bar 07 = 0.15 ... 7 bar 10* = 0.5 ... 10 bar	0001 = without gauge 0021* = with gauge

* = standard type

Design and function

Regulator with diaphragm and relieving feature. Mounting nut must be ordered separately (see page 11.033).

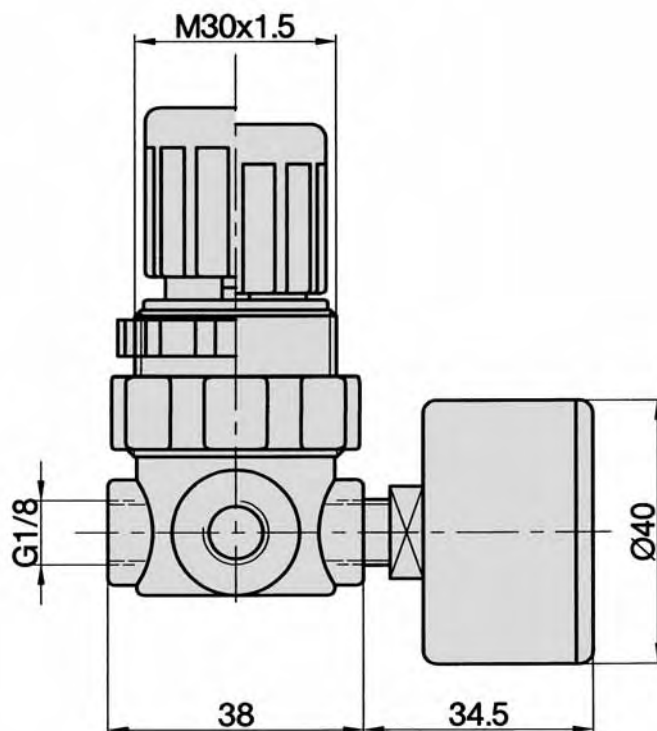
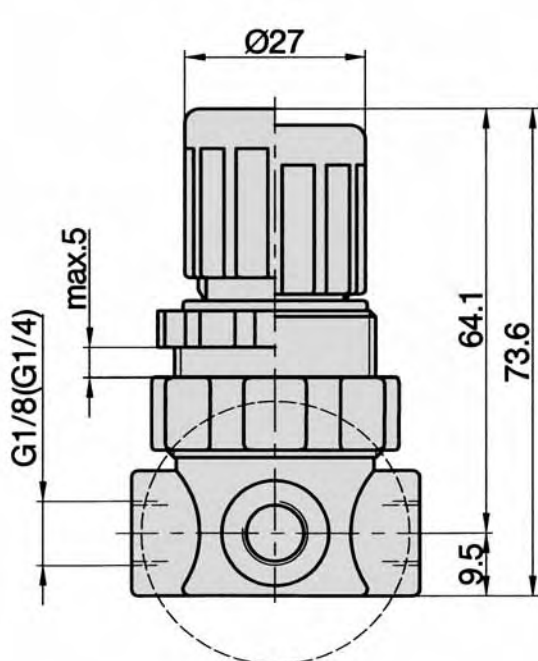
Order number Please complete according to order code.	RD-18-03-...	RD-18-07-...	RD-18-10-...	RD-14-03-...	RD-14-07-...	RD-14-10-...
Connection	G 1/8			G 1/4		
Mounting	arbitrary					
Input range	max. 28 bar (max. 406 psi)					
Output range	0.1 ... 3.5 bar (1.5 ... 51 psi)	0.15 ... 7 bar (2.2 ... 101 psi)	0.15 ... 10 bar (2.2 ... 145 psi)	0.1 ... 3.5 bar (1.5 ... 51 psi)	0.15 ... 7 bar (2.2 ... 101 psi)	0.15 ... 10 bar (2.2 ... 145 psi)
Flow rate	350 NI/min. (0.356 Cv)					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Weight without pressure gauge	0.140 kg (0.308 lb.)					

Pressure regulator for inline mounting G 1/8, G 1/4



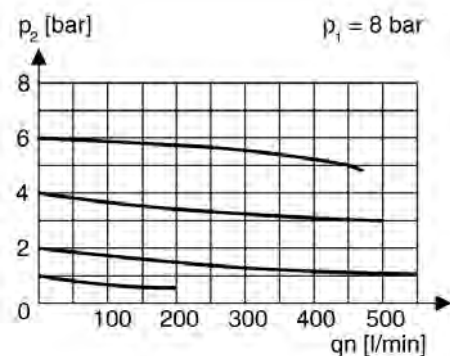
Dimensions for series

RD

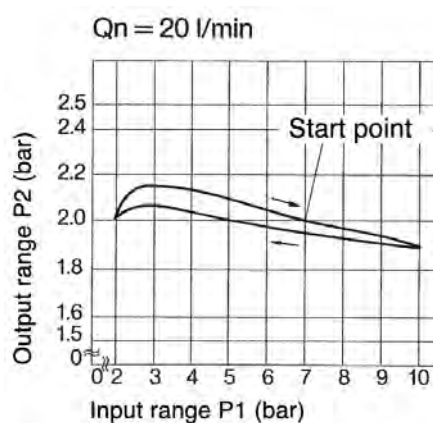


The main body of the regulator has two G 1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow.
(Note: The second port must be plugged.)

Nenndurchfluss



Hysterese



Series X
Air service units
G 1/4 to G 3/4



Series FX

Filter,
 G 1/4 to G 3/4 11.042

Series RX

Pressure regulator,
 G 1/4 to G 3/4 11.044



Series FRX

Filter/regulator,
 G 1/4 to G 3/4 11.046



Series OX

Lubricator,
 G 1/4 to G 3/4 11.048



Series FROX

Two-piece
 air service unit,
 G 1/4 to G 3/4 11.050



Series KX

Ball valve,
G 1/4 to G 3/4 11.052

Series VMX

3/2-way inline valve,
G 1/4 to G 1/2 11.054



Series DAX

Soft start valve,
G 1/4 to G 1/2 11.056

Series TX

Distribution block and
pressure switch,
G 1/4 to G 3/4 11.058

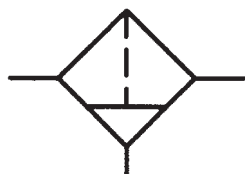


**Accessories for
Series X**

11.062

Technical data for series

FX



Order code				
FX-12-00-5-1201				
Series	Size	Options for digits No. 2, 3, 4		
FX* = standard 5 µm	14 = G 1/4 (X1)	201* = semi-automatic drain		
FXA = activated carbon filter	37 = G 3/8 (X1)	301 = auto drain		
FXF = finefilter 0.3 µm	12 = G 1/2 (X2)	Options for digit No. 1		
FXM = microfilter 0.01 µm	34 = G 3/4 (X2)	1* = polycarbonate bowl		
		3 = metal bowl with sight glass		
		4 = polycarbonate bowl with guard		
	Pressure range	Filter element		
	00 = standard	5* = 5 µm		
		3 = 0.3 µm		
		1 = 0.01 µm		
		A = activated carbon filter		

Design and function

The filter operates on the centrifugal force principle with a sintered filter.

The filter should be inspected regularly to avoid the build up of condensate in the filter bowl. Various filter elements can be installed depending on the particular application.

Easy block assembly for components to be connected in series.

The components of series X can be easily connected by using the coupling kit KPX.

Series FXA, FXF and FXM are only available in size 12 and 14.

For additional accessories see pages 11.062 and 11.063.

The FXA series is only available as option 1001 or 2001. The bowl is always without drain.

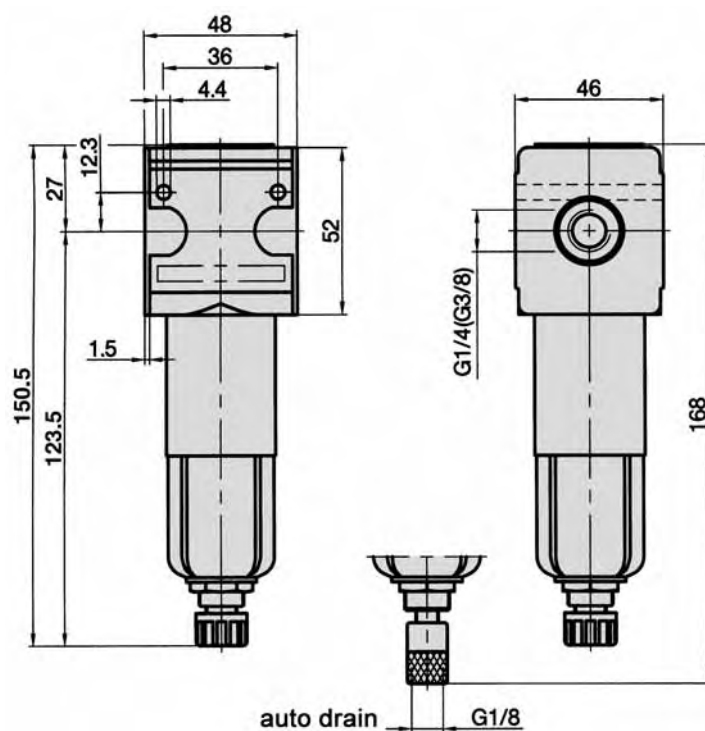
Order number Please complete according to order code.	FX-14-00-...	FX-37-00-...	FX-12-00-...	FX-34-00-...
Connection	G 1/4	G 3/8	G 1/2	G 3/4
Serie	X1		X2	
Nominal size*	2100 NI/min (2.134 Cv)		4000 NI/min (4.065 Cv)	
Mounting	vertically, drain plug at bottom			
Input range	0 ... 16 bar (0 ... 232 psi) Min. 1.5 bar with auto drain Max. 20 bar with metal bowl		0 ... 16 bar (0 ... 232 psi) 1.5 ... 12 bar with auto drain Max. 20 bar with metal bowl	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Bowl volume	max. 25 cm³		max. 50 cm³	
Weight*	0.275 kg (0.606 lb.)		0.798 kg (1.759 lbs.)	

* = standard type

Dimensions for series

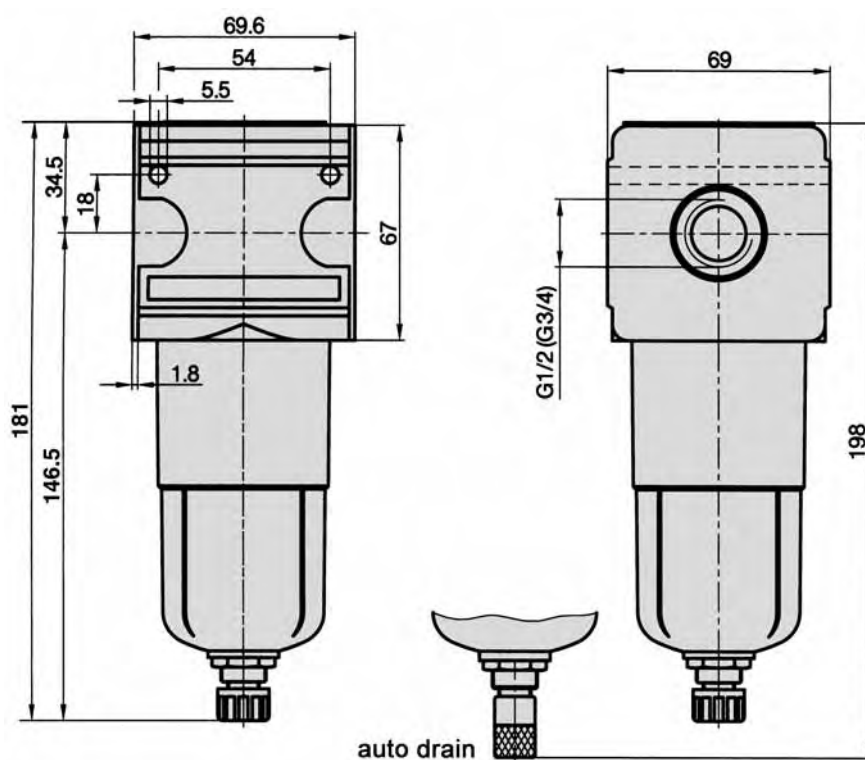
FX

FX-14, FX-37



Dimensions for activated carbon, fine, and micro filter on request.

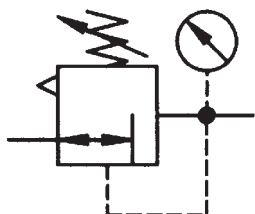
FX-12, FX-34



Dimensions for activated carbon, fine, and micro filter on request.

Technical data for series

RX



Order code

RX-14-10-0-0021

Series

Size

14 = G 1/4 (X1)
 37 = G 3/8 (X1)
 12 = G 1/2 (X2)
 34 = G 3/4 (X2)

Pressure range

03 = 0.5 ... 3 bar
 06 = 0.5 ... 6 bar
10* = 0.5 ... 10 bar

Options for digits No. 1, 2, 3

000 = without gauge,
 flow from left to right
 001 = without gauge,
 flow from right to left
**002* = with gauge,
 flow from left to right**
 003 = with gauge,
 flow from right to left

**Options for
 digit No. 4**

1 = standard
 2 = key
 lockable

Design and function

Pressure regulator with diaphragm and relieving function. The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed.

The components of series X can easily be connected by using the coupling kit KPX.

Components of size 12 and 34 can be connected to each other.

For additional accessories see pages 11.062 and 11.063.

Order number Please complete according to order code.	RX-14-...	RX-37-...	RX-12-...	RX-34-...
Connection	G 1/4	G 3/8	G 1/2	G 3/4
Series	X1		X2	
Mounting	with bracket or in-line			
Input range	max. 16 bar (max. 232 psi)			
Output range*	0.5 ... 10 bar (7.25 ... 145 psi)* (others see order code)			
Flow rate	1500 NI/min (1.524 Cv)		5600 NI/min (5.691 Cv)	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Weight without pressure gauge	0.330 kg (0.727 lb.) 0.530 kg key lockable (1.168 lbs.)		0.850 kg (1.874 lb.) 1.050 kg key lockable (2.315 lbs.)	

* = standard type

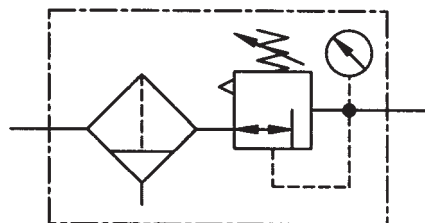
RX

[illegible]

11.045

Technical data for series

FRX



Order code

FRX-14-10-5-1221

Series

Size

14 = G 1/4 (X1)
 37 = G 3/8 (X1)
 12 = G 1/2 (X2)
 34 = G 3/4 (X2)

Pressure range

03 = 0.5 ... 3 bar
 06 = 0.5 ... 6 bar
 10* = 0.5 ... 10 bar

Options for digit No. 1

1* = polycarbonate bowl
 3 = metal bowl with sight glass
 4 = polycarbonate bowl with guard

Options for digit No. 3

0 = without gauge,
 flow from left to right
 1 = without gauge,
 flow from right to left
 2* = **with gauge,**
flow from left to right
 3 = with gauge,
 flow from right to left

Options for digit No. 2

2* = **semi-automatic**
drain
 3 = auto drain

Options for digit No. 4

1 = standard
 2 = key lockable

Design and function

The filter/regulator is a diaphragm style with relieving function. The filter includes a manual drain.

The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed.

The filter removes both solid and liquid particles from the incoming air. The bowl can be supplied with a semi-automatic (drains when pressure is shut off) or a fully auto drain.

The components of series X can easily be connected by using the coupling kit KPX.

Components of size 12 and 34 can be connected to each other.

For additional accessories see pages 11.062 and 11.063.

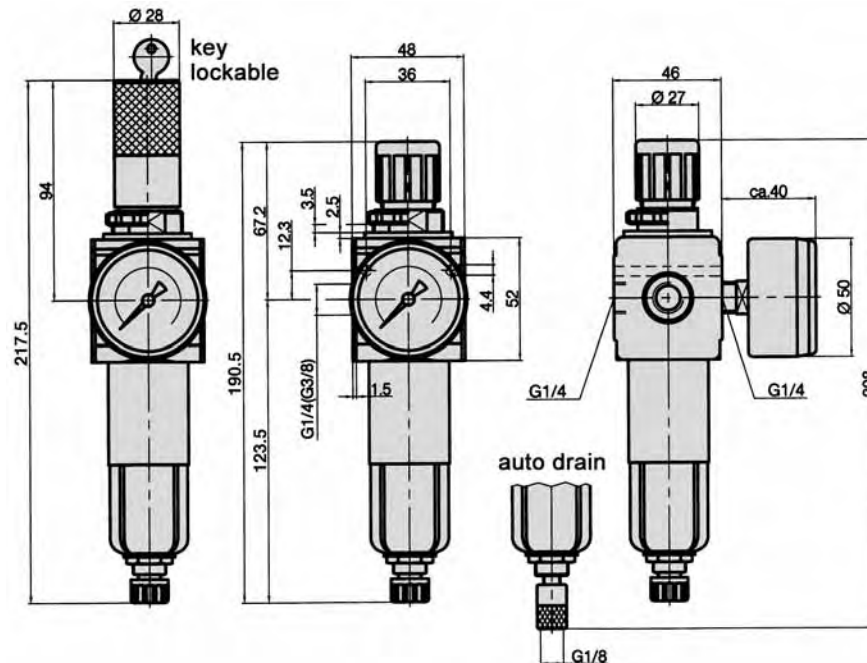
Order number Please complete according to order code.	FRX-14-...	FRX-37-...	FRX-12-...	FRX-34-...
Connection	G 1/4	G 3/8	G 1/2	G 3/4
Series	X1		X2	
Mounting	vertically, drain plug at bottom			
Input range	max. 16 bar (max. 232 psi) 1.5 ... 10 bar with auto drain		max. 16 bar (max. 232 psi) 1.5 ... 12 bar with auto drain	
Output range*	0.5 ... 10 bar (7.25 ... 145 psi)* (others see order code)			
Flow rate	1500 NI/min (1.524 Cv)		3500 NI/min (3.557 Cv)	
Filter element	5 µm			
Bowl volume	25 cm³		50 cm³	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Weight without pressure gauge*	0.330 kg (0.727 lb.) 0.530 kg key lockable (1.168 lbs.)		0.850 kg (1.874 lb.) 1.050 kg key lockable (2.315 lbs.)	

* = standard type

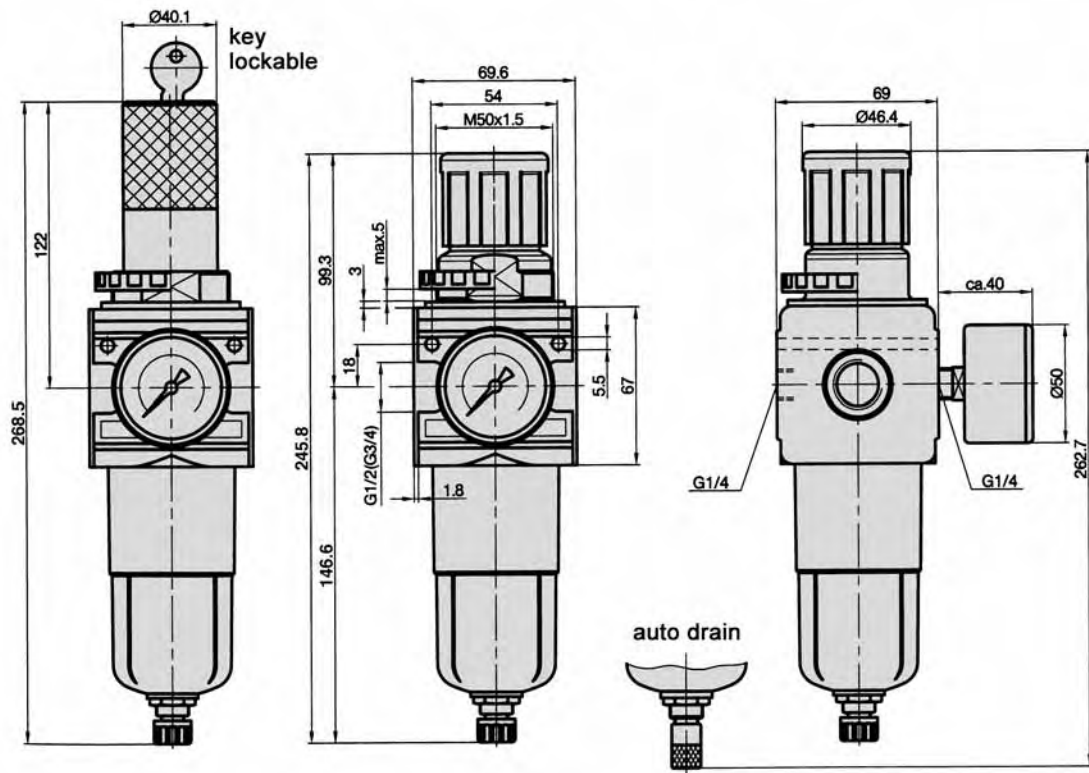
Dimensions for series

FRX

FRX-14, FRX-37



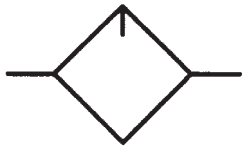
FRX-12, FRX-34



The main body of the regulator has two G 1/4 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow.
(Note: The second port must be plugged.)

Technical data for series

OX



Order code

OX-14-00-0-1001			
Series	Size	Pressure range	Options
	14 = G 1/4 (X1)	00 = standard	1001* = polycarbonate bowl
	37 = G 3/8 (X1)		3001 = metal bowl with sight glass
	12 = G 1/2 (X2)		4001 = polycarbonate bowl with guard
	34 = G 3/4 (X2)		

Design and function

The lubricator has a proportional adjusting screw for adjustment of the oil/air mix.
The components of series X can easily be connected by using the coupling kit KPX.
Components of size 12 and 34 can be connected to each other.
For additional accessories see page 11.062.

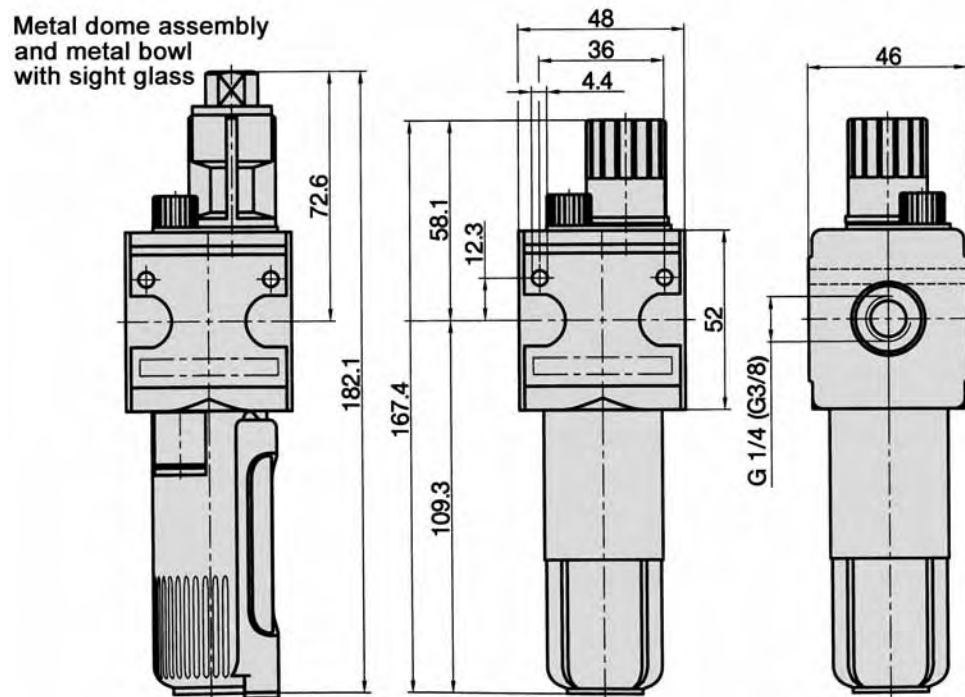
Order number Please complete according to order code.	OX-14-00-0-...	OX-37-00-0-...	OX-12-00-0-...	OX-34-00-0-...
Connection	G 1/4	G 3/8	G 1/2	G 3/4
Series	X1		X2	
Mounting	vertically			
Input range	max. 16 bar, max. 20 bar with metal bowl (max. 232 psi, max. 290 psi			
Flow rate*	1800 NI/min (1.829 Cv)		5000 NI/min (5.081 Cv)	
Bowl volume	50 cm³		125 cm³	
Type of oil	HL 25 according to DIN 51524 – ISO VG 32			
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Weight*	0.330 kg (0.727 lb.)		0.690 kg (1.521 lbs.)	

* = standard type

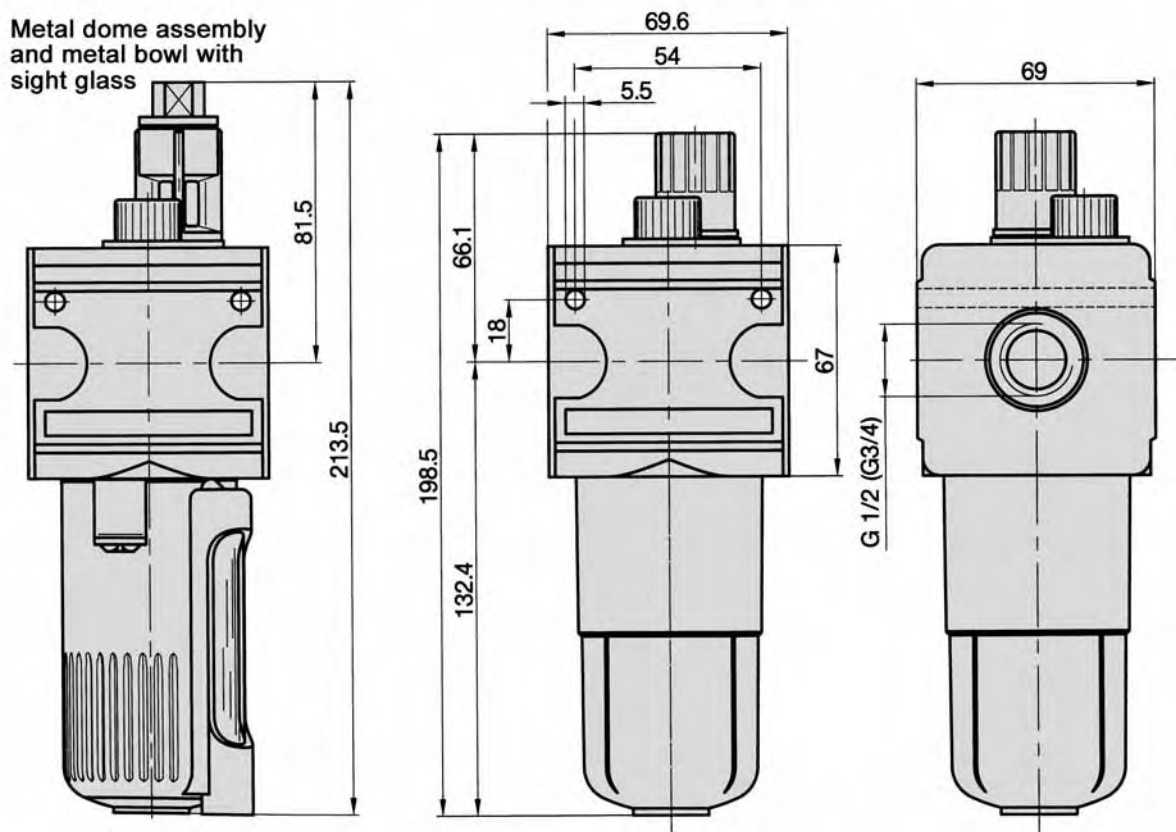
Dimensions for series

OX

OX-14, OX-37



OX-12, OX-34



Series X
Two piece air service unit
G 1/4 to G 3/4



Technical data for series

FROX



Order code

FROX-14-10-5-1221

Series

Size

14 = G 1/4 (X1)
 37 = G 3/8 (X1)
 12 = G 1/2 (X2)
 34 = G 3/4 (X2)

Pressure range

03 = 0.5 ... 3 bar
 06 = 0.5 ... 6 bar
10* = 0.5 ... 10 bar

Options for digit No. 1

1* = polycarbonate bowl
 3 = metal bowl with sight glass
 4 = polycarbonate bowl with guard

Options for digit No. 3

0 = without gauge,
 flow from left to right
 1 = without gauge,
 flow from right to left
**2* = with gauge,
 flow from left to right**
 3 = with gauge,
 flow from right to left

Options for digit No. 2

**2* = semi-automatic
 drain**
 3 = auto drain

Options for digit No. 4

1 = standard
 2 = key lockable

Design and function

The air service unit includes a filter/regulator, and lubricator.

The filter/regulator is a diaphragm style with relieving feature. The filter includes a manual drain.

The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed.

The filter removes both solid and liquid particles from the incoming air. The bowl can be supplied with a semi-automatic (drains when pressure is shut off) or auto drain.

The lubricator has a proportional adjusting.

The components of series X can easily be connected by using the coupling kit KPX.

Components of size 12 and 34 can be connected to each other.

For additional accessories see pages 11.062 and 11.063.

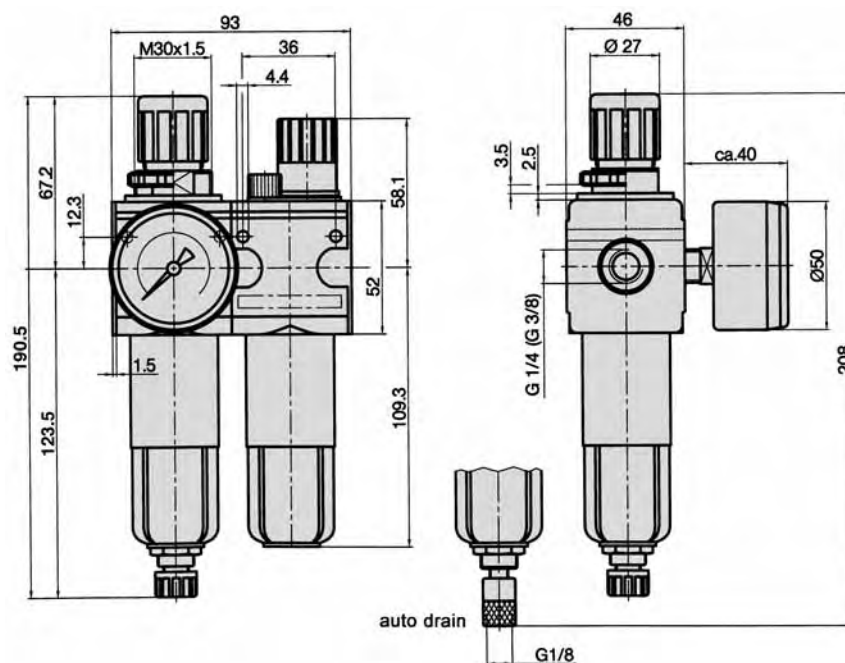
Order number Please complete according to order code.	FROX-14-...	FROX-37-...	FROX-12-...	FROX-34-...
Connection	G 1/4	G 3/8	G 1/2	G 3/4
Series	X1		X2	
Mounting	vertically, drain plug at bottom			
Input range	max. 16 bar (max. 232 psi) 1.5 ... 10 bar with auto drain		max. 16 bar (max. 232 psi) 1.5 ... 12 bar with auto drain	
Output range	0.5 ... 10 bar (7.25 ... 145 psi)* (others see order code)			
Flow rate	1150 NI/min (1.168 Cv)		3600 NI/min (3.659 Cv)	
Filter element	5 µm			
Bowl volume	25 cm³ condensate, 50 cm³ oil		50 cm³ condensate, 125 cm³ oil	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Weight without pressure gauge*	0.850 kg (1.874 lbs.)		1.730 kg (3.814 lbs.)	

* = standard type

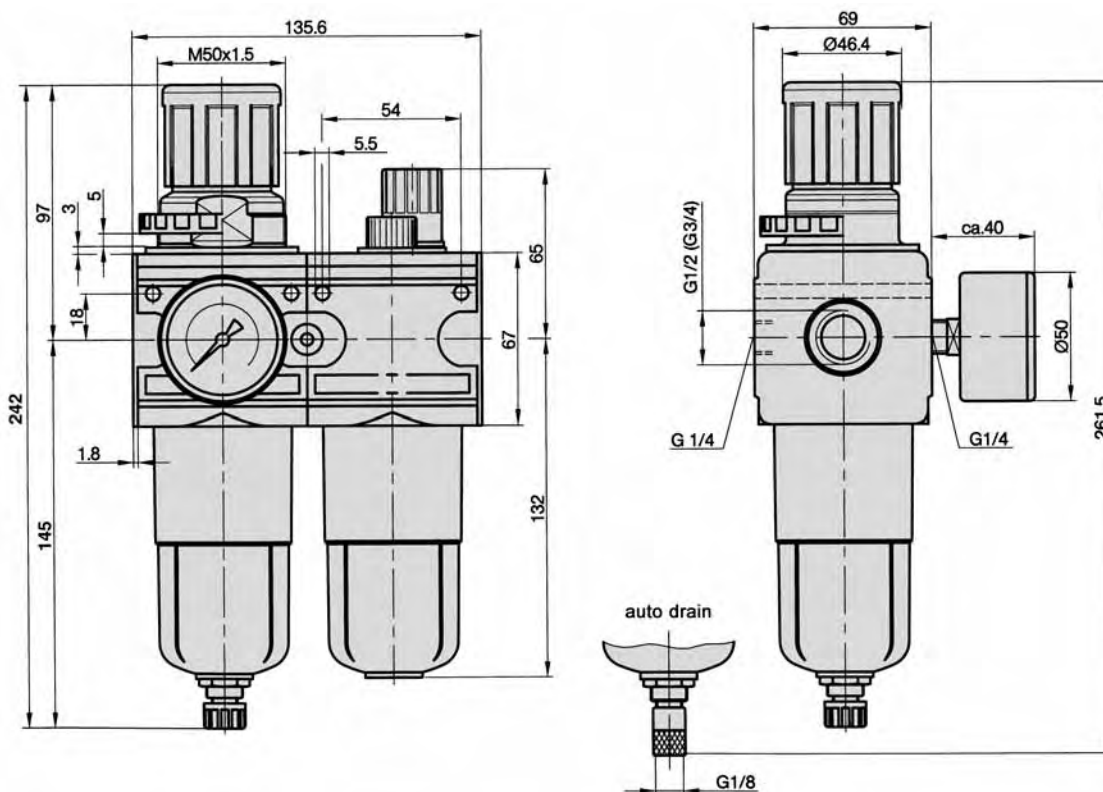
Dimensions for series

FROX

FROX-14, FROX-37



FROX-12, FROX-34



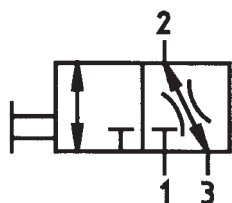
The main body of the regulator has two G 1/4 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow.
 (Note: The second port must be plugged.)

Series X
Lockable ball valve
G 1/4 – G 3/4

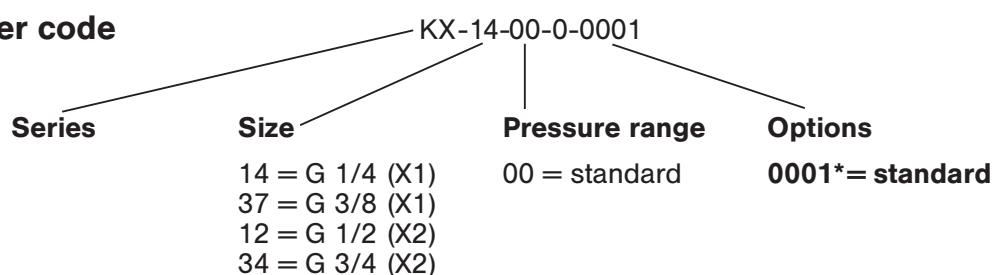


Technical data for series

KX



Order code



Design and function

3/2-way ball valve for the shut-off of downstream air.

Easy block assembly for components to be connected in series.

The components of series X can easily be connected by using the coupling kit KPX.

Components of size 12 and 34 can be connected to each other.

For additional accessories see page 11.062.

Order number Please complete according to order code.	KX-14-00-0-...	KX-37-00-0-...	KX-12-00-0-...	KX-34-00-0-...		
Connection	G 1/4	G 3/8	G 1/2	G 3/4		
Series	X1		X2			
Mounting	with bracket or in-line					
Input range	max. 16 bar (max. 232 psi)					
Flow rate	2800 NI/min (2.845 Cv)		11000 NI/min (11.176 Cv)			
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Weight*	0.360 kg (0.794 lb.)		0.820 kg (1.808 lbs.)			

* = standard type

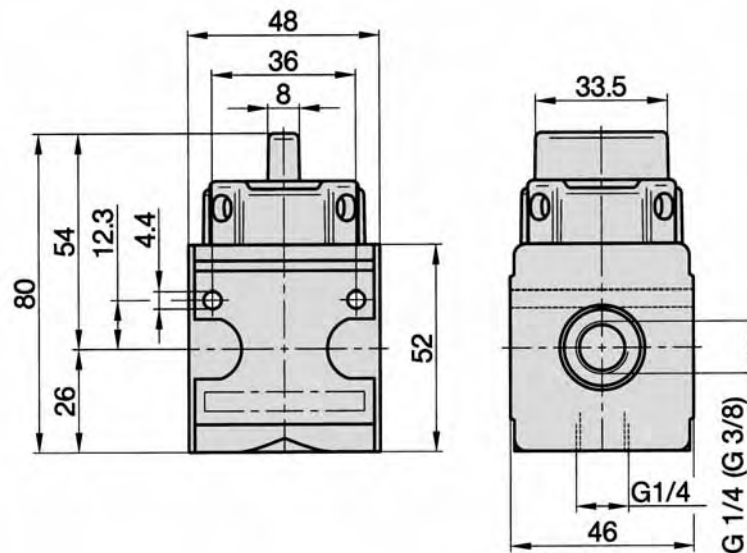
Series X
Lockable ball valve
G 1/4 – G 3/4



Dimensions for series

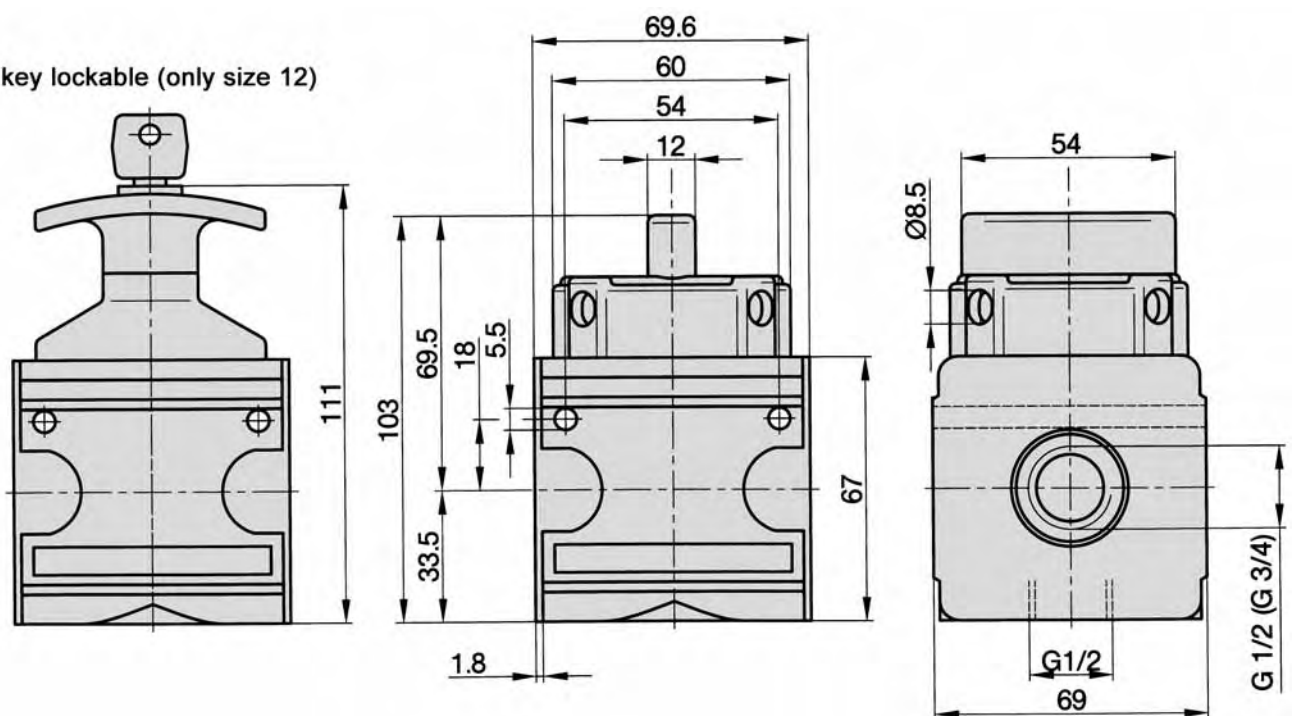
KX

KX-14, KX-37



KX-12, KX-34

key lockable (only size 12)

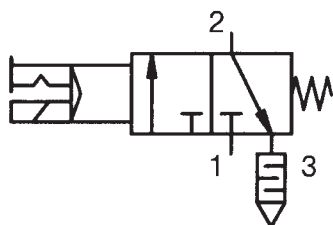


Series X
3/2-way inline valve
G 1/4, G 1/2



Technical data for series

VMX



Order code

VMX-14-00-0-000A			
Series	Size	Pressure range	Options
	14 = G 1/4 (X1) 12 = G 1/2 (X2)	00 = standard	A = 24 V DC/48 V AC D = 115 V AC E = 230 V AC F = pneumatically operated

Design and function

Solenoid or pneumatically operated 3/2-way poppet valve with spring return. The solenoid and plug socket are supplied with the unit.

Easy block assembly for components to be connected in series.

The components of series X can be easily connected by using the coupling kit KPX.

For additional accessories see page 11.062.

Order number Please complete according to order code.	VMX-14-00-0-...	VMX-12-00-0-...
Connection	G 1/4	G 1/2
Series	X1	X2
Mounting	with bracket or in-line	
Pressure range	2 ... 10 bar (29 ... 145 psi)	
Einschaltdauer	100 %	
Degree of protection	IP 65 according to EN 60529	
Flow rate	870 NI/min (0.884 Cv)	4000 NI/min (4.065 Cv)
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)	
Weight	0.450 kg (0.992 lb.)	1.050 kg (2.315 lbs.)

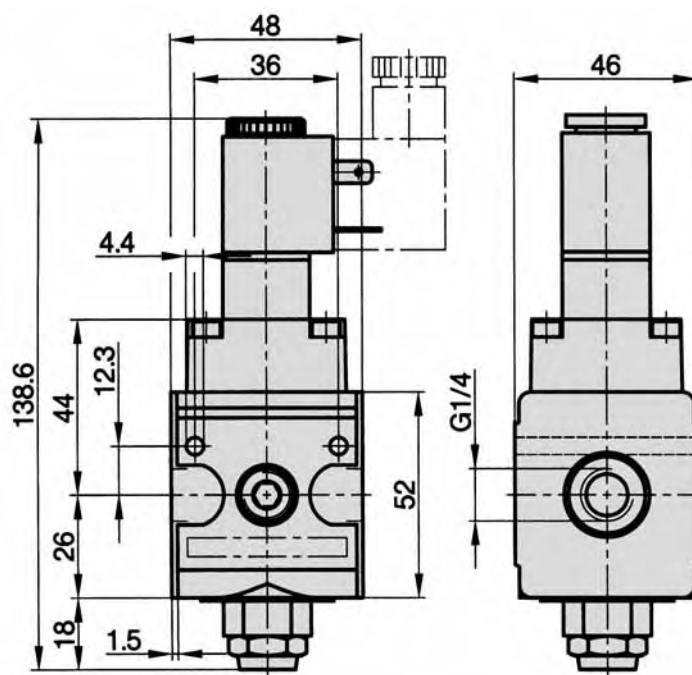
Series X
3/2-way inline valve
G 1/4, G 1/2



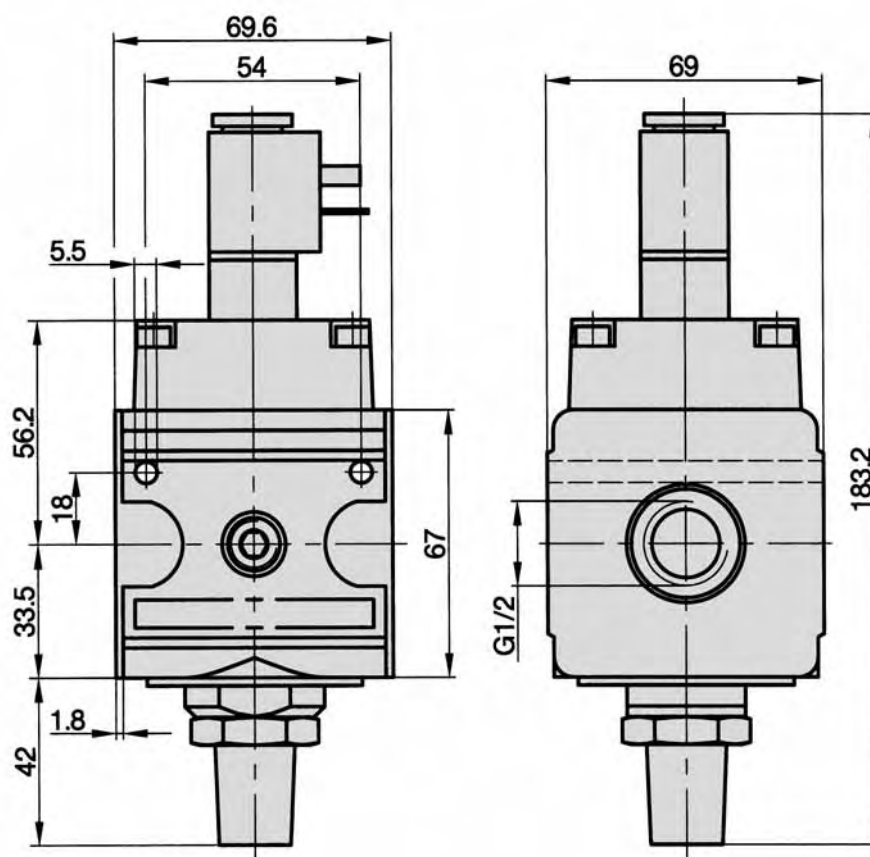
Dimensions for series

VMX

VMX-14

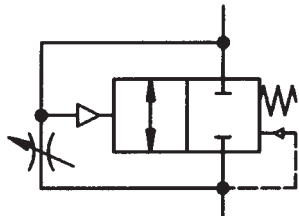


VMX-12

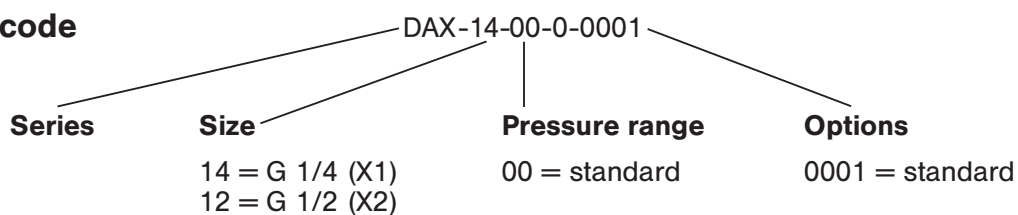


Technical data for series

DAX



Order code



Design and function

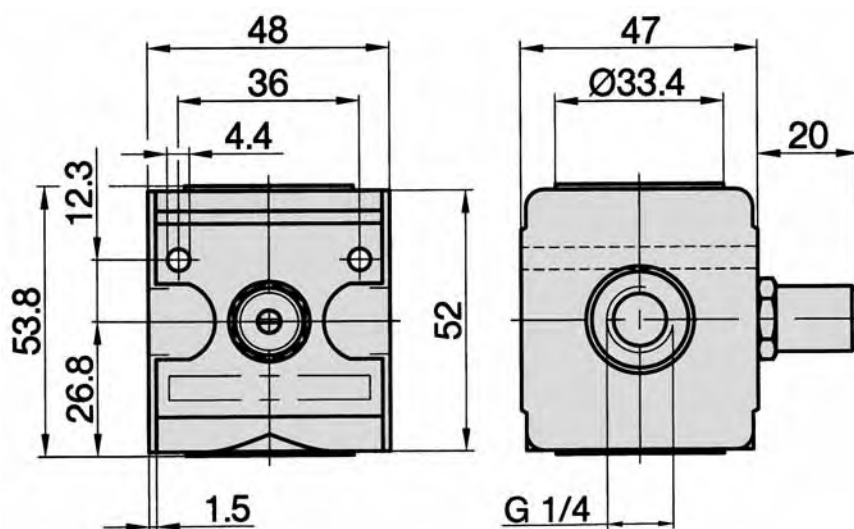
Soft start valve with adjustable filling time. This valve can be used to slowly increase the system pressure through an adjustable throttle. When 50 % of the incoming pressure is achieved the valve opens completely. The components of series X can be easily connected by using the coupling kit KPX. For additional accessories see page 11.062.

Order number	DAX-14-00-0-0001	DAX-12-00-0-0001
Connection	G 1/4	G 1/2
Series	X1	X2
Mounting	with bracket or in-line	
Pressure range	2 ... 16 bar (29 ... 232 psi)	
Flow rate	1000 NI/min (1.016 Cv)	4000 NI/min (4.065 Cv)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)	
Weight	0.330 kg (0.727 lb.)	0.770 kg (1.697 lbs.)

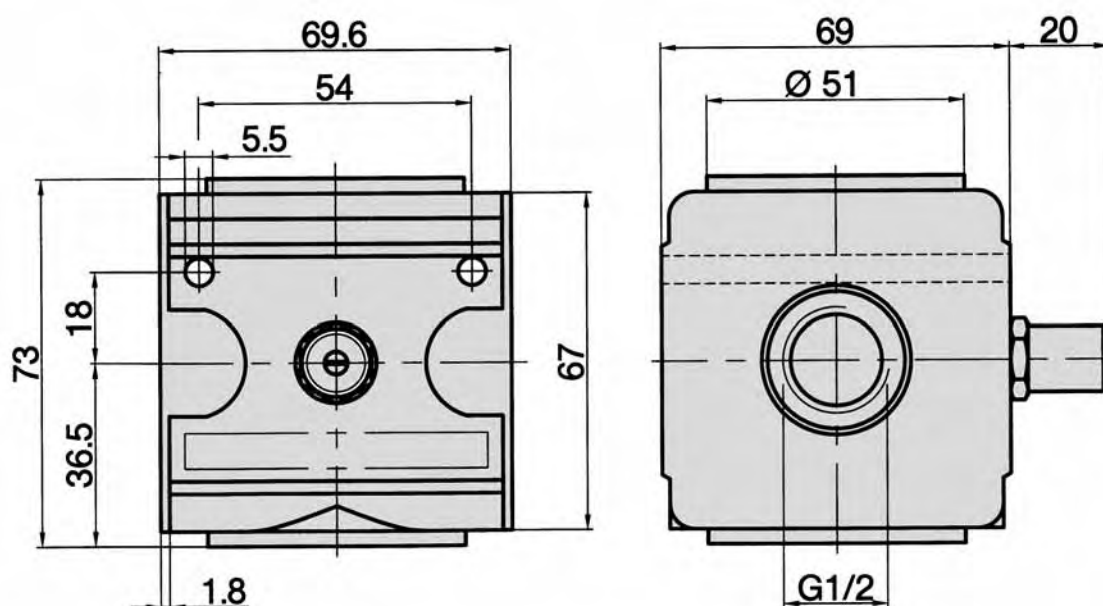
Dimensions for series

DAX

DAX-14



DAX-12



Series X
Distribution block and pressure switch
G 1/4 – G 3/4

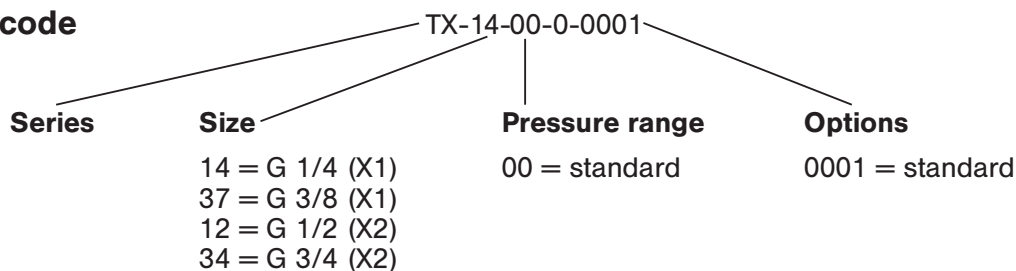


Technical data for series

TX



Order code



Design and function

Distribution manifold block for additional air supply or other components.

This unit can be combined with pressure switch PE-18-01-04 (see page 7.181) to provide a preset pressure indicating system when combined with the air service units.

Easy block assembly for components to be connected in series.

The components of series X can be easily connected by using the coupling kit KPX.

Components of size 12 and 34 can be connected to each other.

For additional accessories see page 11.062.

Order number	TX-14-00-0-0001	TX-37-00-0-0001	TX-12-00-0-0001	TX-34-00-0-0001
Connection	G 1/4	G 3/8	G 1/2	G 3/4
Outlets	4 x G 1/4		2 x G 1/2, 2 x G 1/4	
Series	X1		X2	
Mounting	with bracket or in-line			
Pressure range	0 ... 16 bar (0 ... 232 psi)			
Flow rate	2500 NI/min (2.540 Cv) 2000 NI/min (outlet A*) (2.032 Cv) 900 NI/min (outlet B*) (0.915 Cv)		11000 NI/min (11.176 Cv) 8750 NI/min (outlet A*) (8.892 Cv) 1340 NI/min (outlet B*) (1.362 Cv)	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Weight*	0.330 kg (0.727 lb.)			

* = outlet ports see page 11.059.

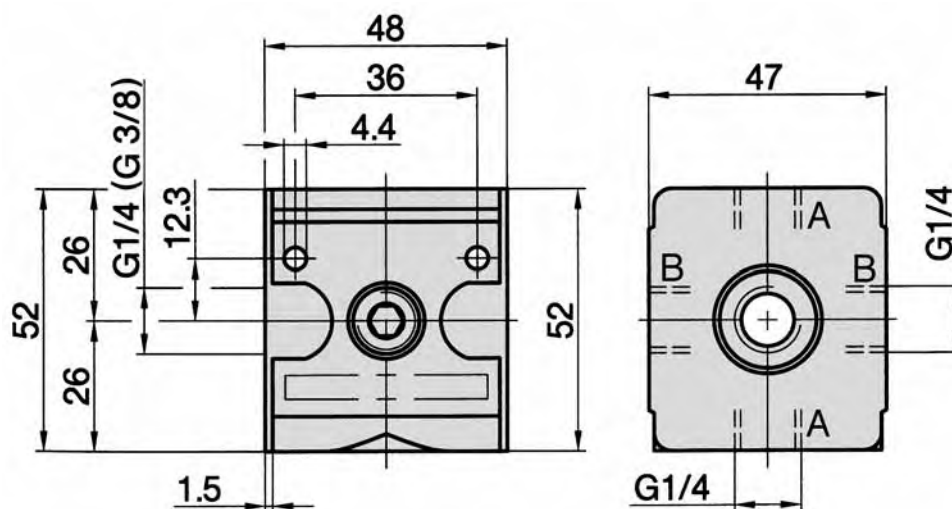
Series X
Distribution block and pressure switch
G 1/4 – G 3/4



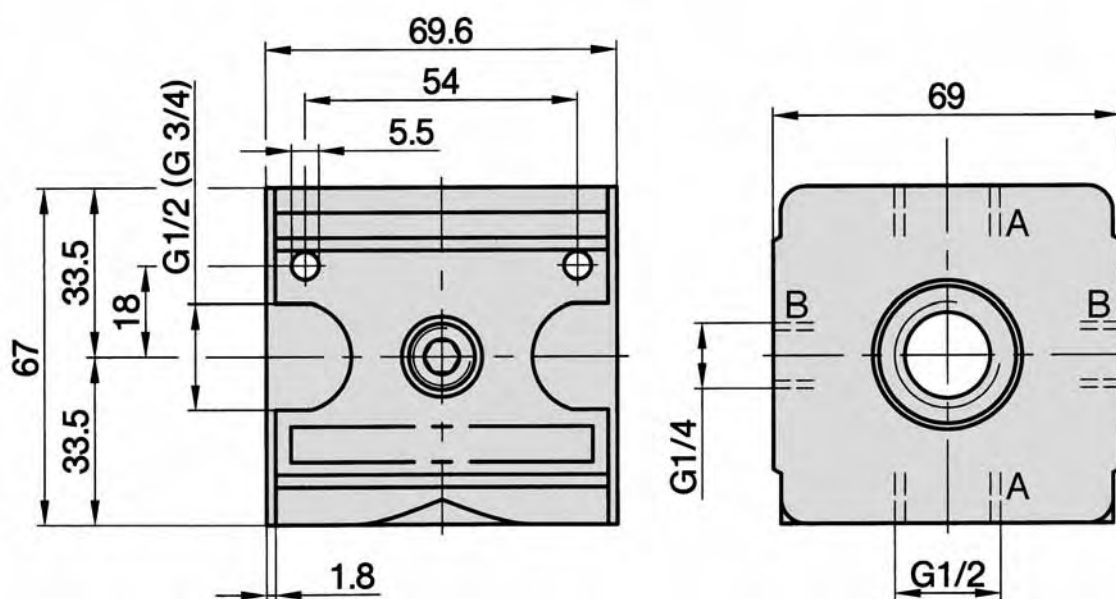
Dimensions for series

TX

TX-14, TX-37



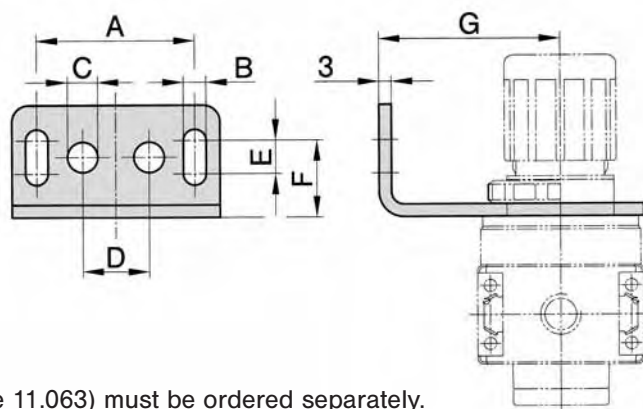
TX-12, TX-34



Accessories for series

X

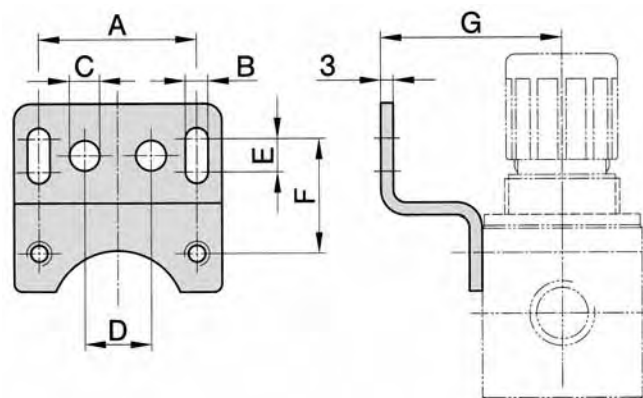
Mounting brackets WK-30, WK-50



The mounting nut (see page 11.063) must be ordered separately.

Order number	Serie	A	B	C	D	E	F	G
WK-30	X1	38	5.4	–	–	8	18.5	43.5
WK-50	X2	50	6.4	10	20	13	24	54.5

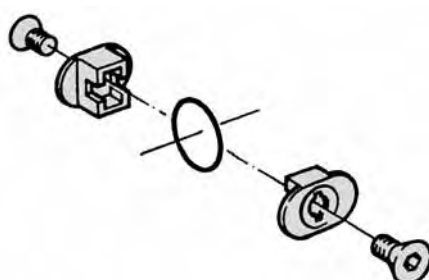
Mounting brackets WX-11, WX-33



The mounting nut (see page 11.063) must be ordered separately.

Order number	Serie	A	B	C	D	E	F	G
WX-11	X1	38	5.4	–	–	8	27.5	48.5
WX-33	X2	50	6.4	10	20	13	33	51.5

Coupling kits KPX-11, KPX-33



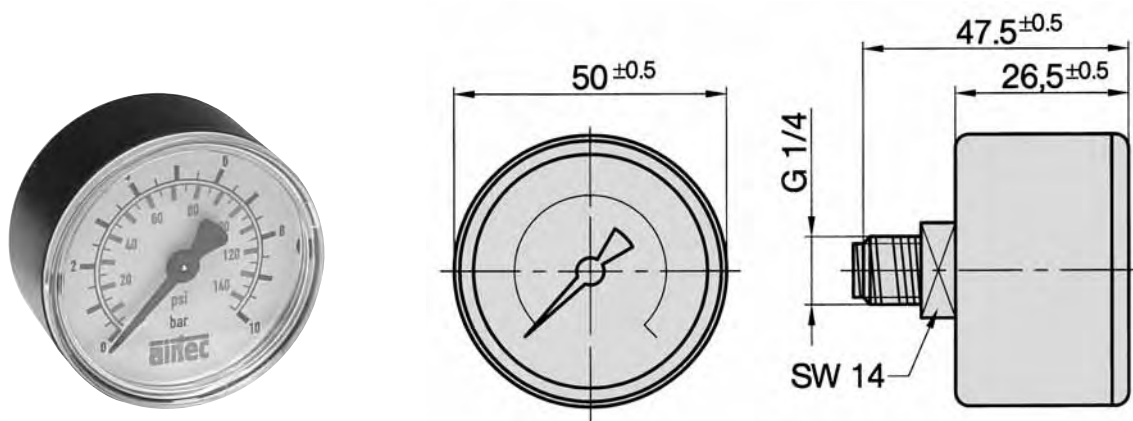
**Mounting set for the assembly
of components of series X**

KPX-11 for series X1
KPX-33 for series X2

Accessories for series

X

Pressure gauge MXA-50



Sealing for assembly of gauge is included.

Order number	MXA-50-06-14	MXA-50-10-14	MXA-50-16-14
Ranges	0 ... 6 bar (0 ... 87 psi)	0 ... 10 bar (0 ... 145 psi)	0 ... 16 bar (0 ... 232 psi)
Application	Constant load 3/4 x scale value Alternating load 2/3 x scale value		
Materials	Body : Plastic, highly shock resistant, black (ABS) Window : Plexiglass, convex, clipped-on Dial : Plastic, white with stop pin, scale black or blue Pointer : Plastic, black Movement : CuZn alloy Measuring element: Cu alloy		
Temperature range	– 40 °C ... + 60 °C (– 40 °F ... + 140 °F)		
Accuracy class	2.5 according to EN 837-1		
Temperature drift	0.4 % / 10 K if deviation from normal temperature 20 °C (68 °F).		
Weight	0.071 kg (0.156 lb.)		

Mounting nuts RM-30, RM-50



Order number	RM-30-K	RM-30-M	RM-30-Mv	RM-50-K
Materials	plastic	brass	brass (nickel-plated)	plastic
Thread	M 30 x 1.5 (serie X1)			M 50 x 1.5 (serie X2)



Series FY

Filter,
G 1/4 to G 1

11.072

Series RY

Pressure regulator,
G 1/4 to G 1

11.077



Series FRY

Filter/regulator,
G 1/4 to G 1

11.080

Series OY

Lubricator,
G 1/4 to G 1

11.083



Series FROY

Filter, Regulator, Lubricator
combination,
G 1/4 to G 1

11.086

Series KY

Ball valve,
G 1/4 to G 1

11.089





Series NY
Non-return valve,
G 1/4 to G 1/2

11.091

Series VMY
3/2-way inline valve,
G 1/4 to G 1

11.093



Series DAY
Soft start valve,
G 1/4 to G 1

11.096

Series TY
Distribution block and
pressure switch,
G 1/4 to G 1

11.098



**Accessories for
Series Y**

11.101

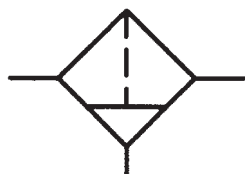
Series RP
Precision pressure
regulator,
G 1/4 – G 1/2

11.110

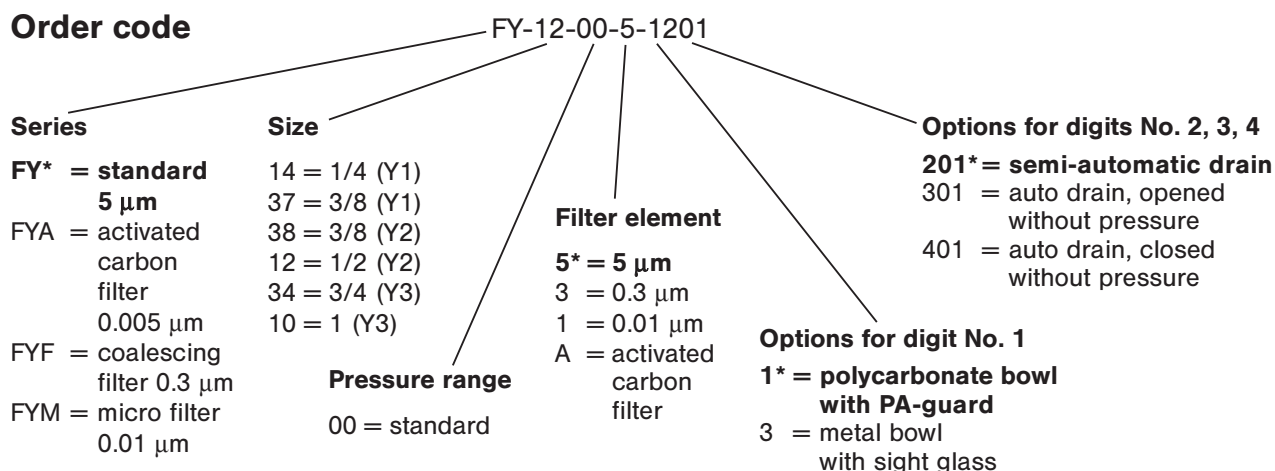


Technical data for series

FY



Order code



Design and function

The FXA series is only available as option 1001 or 2001. The bowl is always without drain.

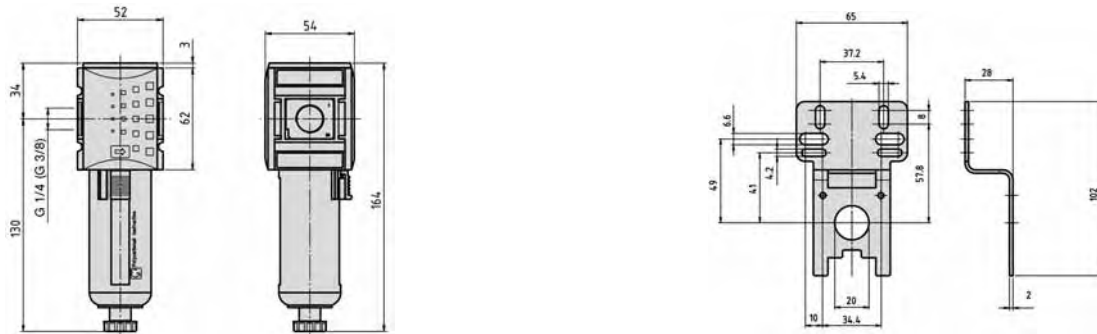
Order number Please complete according to order code.	FY-14-00-...	FY-37-00-...	FY-38-00-...	FY-12-00-...	FY-34-00-...	FY-10-00-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Nominal size*	2200 NI/min (2.236 Cv)	2400 NI/min (2.44 Cv)	3500 NI/mi (3.557 Cv)		13000 NI/min (13.22 Cv)	
Mounting	vertically, drain plug at bottom					
Input range	0.5 ... 16 bar (7.25 ... 232 psi) Min. 1.5 bar with auto drain		0.5 ... 16 bar (7.25 ... 232 psi) 1.5 ... 12 bar with auto drain		1.5 ... 16 bar (21.75 ... 232 psi)	
Temperature range	– 10 °C ... + 50 °C (+ 14 °F ... + 122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Bowl volume	max. 28 cm³		max. 49 cm³		max. 87 cm³	
Weight*	0.212 kg (0.467 lb.)		0.361 kg (0.796 lb.)		0.300 kg (0.661 lb.)	

* = standard type

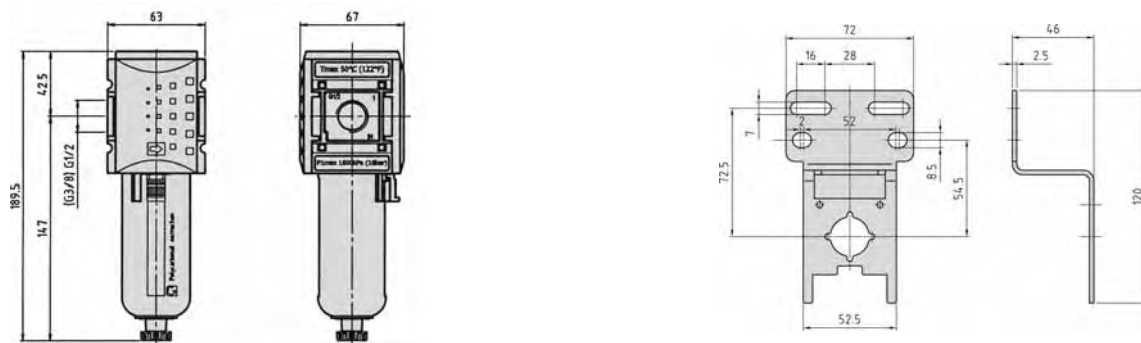
Dimensions for series

FY

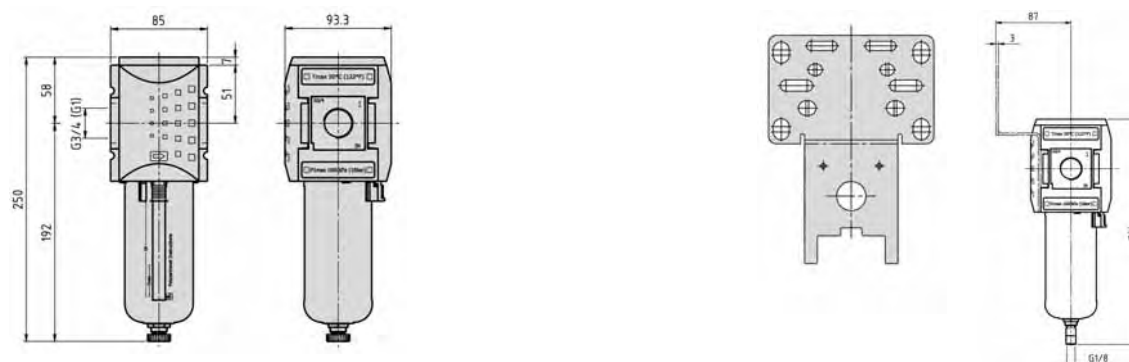
FY-14, FY-37



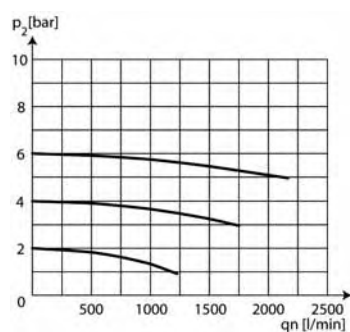
FY-38, FY-12



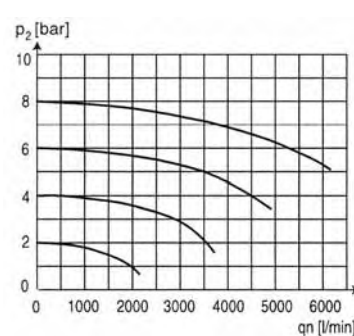
FY-34, FY-10



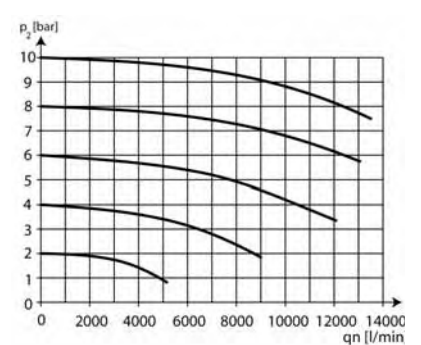
Flow characteristic FY-14, FY-37



Flow characteristic FY-38, FY-12



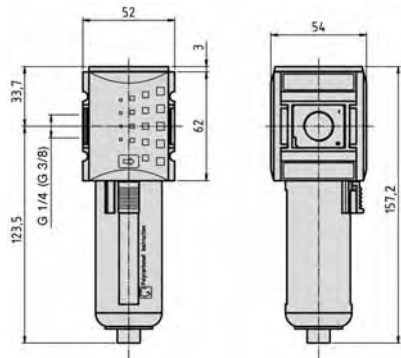
Flow characteristic FY-34, FY-10



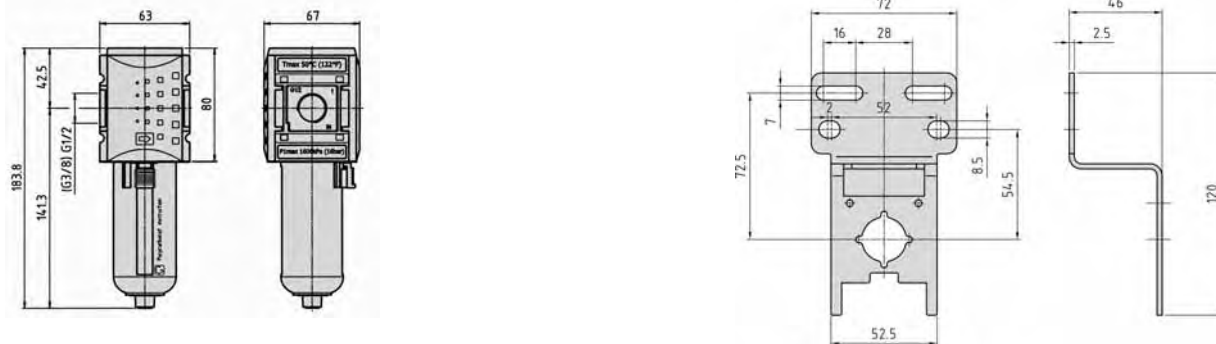
Dimensions for series

FYA – Active carbon filter

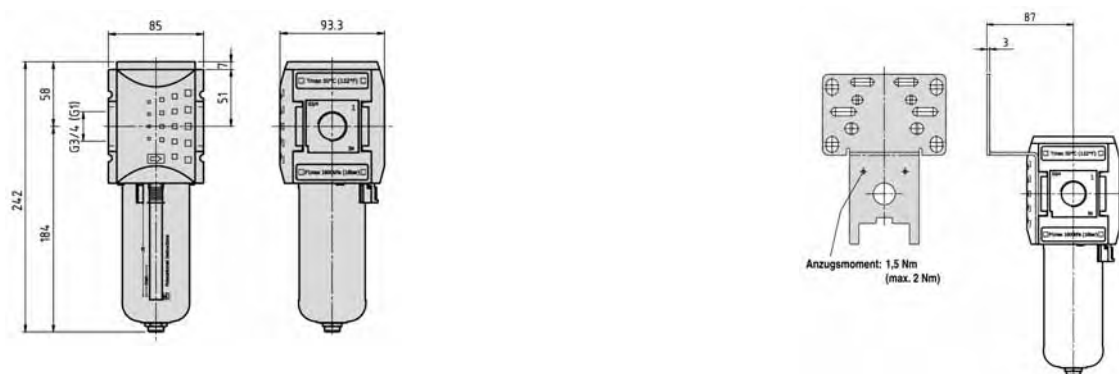
FYA-14, FYA-37



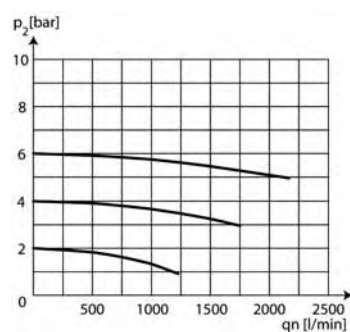
FYA-38, FYA-12



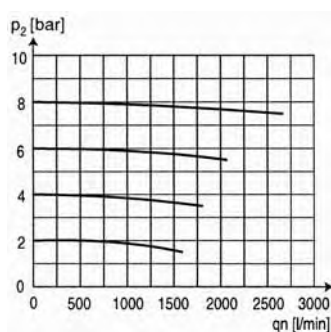
FYA-34, FYA-10



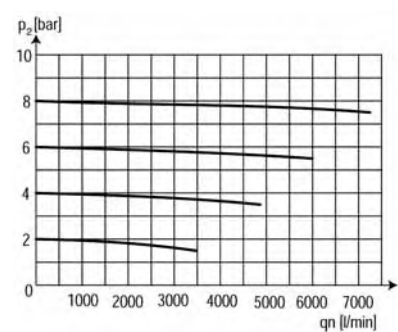
Flow characteristic FYA-14, FYA-37



Flow characteristic FYA-38, FYA-12



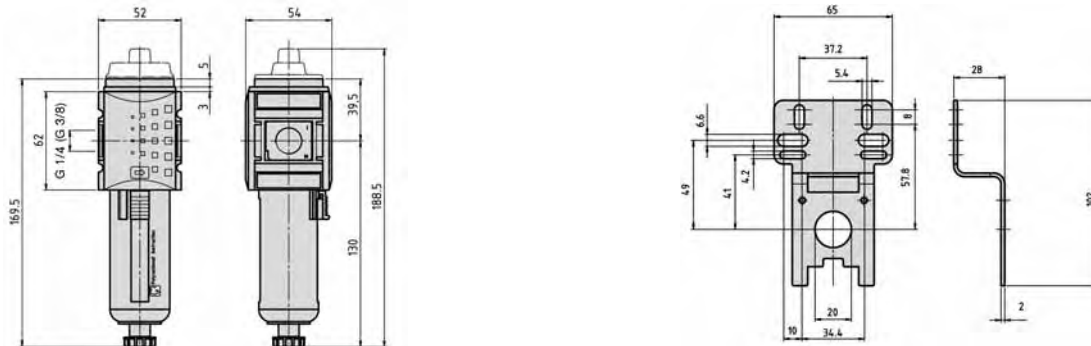
Flow characteristic FYA-34, FYA-10



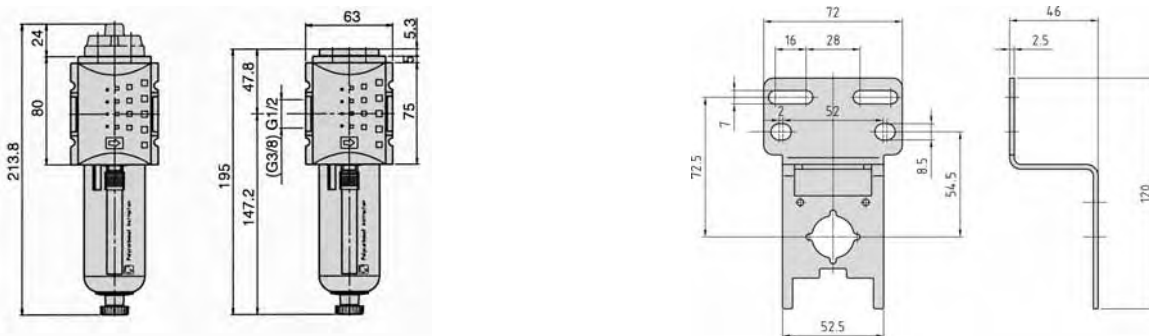
Dimensions for series

FYF – Coalescing filter (pre-filter)

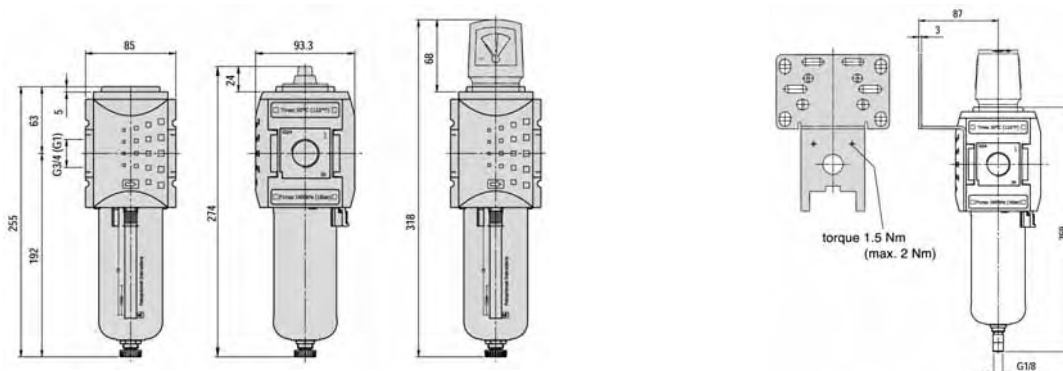
FYF-14, FYF-37



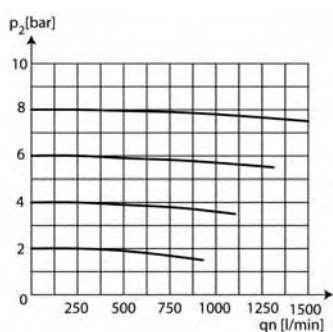
FYF-38, FYF-12



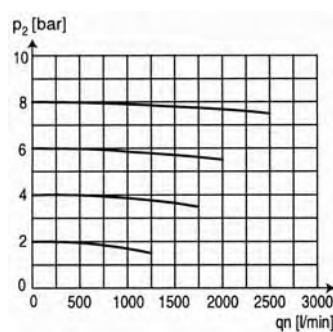
FYF-34, FYF-10



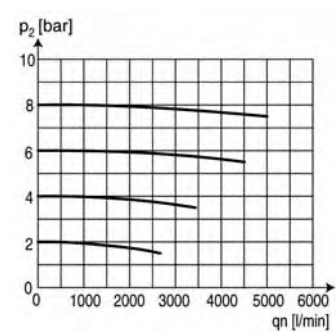
Flow characteristic FYF-14, FYF-37



Flow characteristic FYF-38, FYF-12



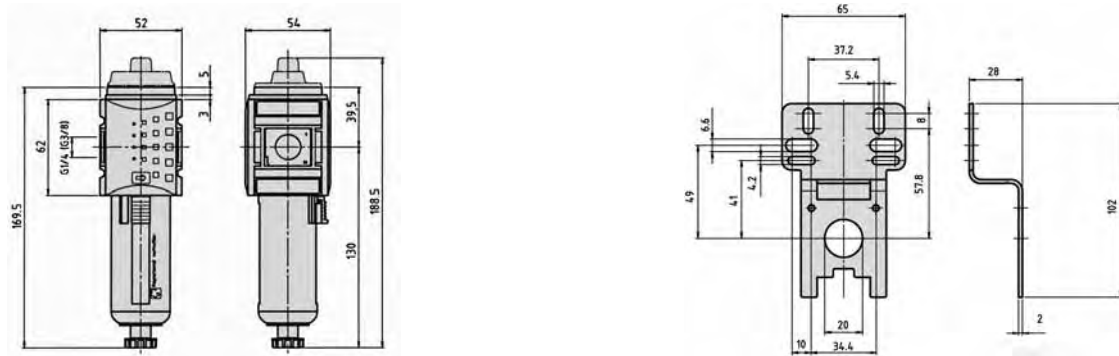
Flow characteristic FYF-34, FYF-10



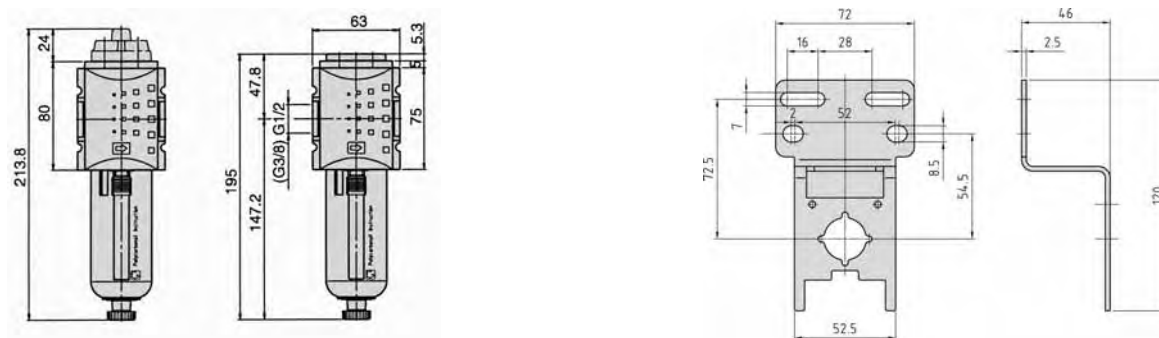
Dimensions for series

FYM – Micro filter

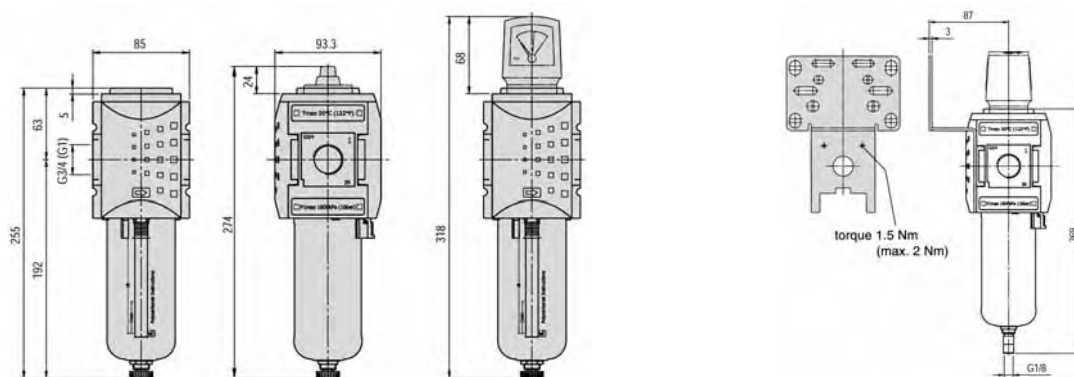
FYM-14, FYM-37



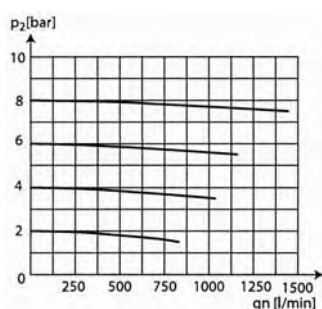
FYM-38, FYM-12



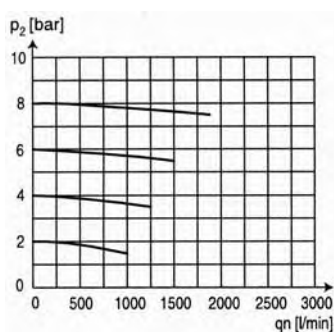
FYM-34, FYM-10



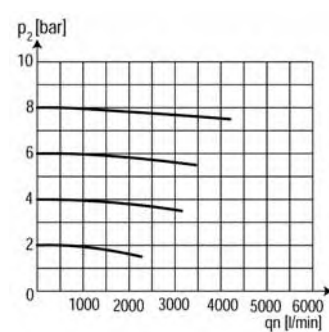
Flow characteristic FYM-14, FYM-37



Flow characteristic FYM-38, FYM-12

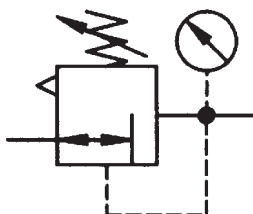


Flow characteristic FYM-34, FYM-10



Technical data for series

RY



Order code

RY-14-10-0-0021				
Series	Size	Pressure range	Options for digits No. 1, 2, 3	Options for digit No. 4
RY = standard	14 = 1/4 (Y1) 37 = 3/8 (Y1) 38 = 3/8 (Y2) 12 = 1/2 (Y2) 34 = 3/4 (Y3) 10 = 1 (Y3)	04 = 0.2 ... 4 bar (2.9 ... 58 psi) 08 = 0.5 ... 8 bar (7.25 ... 116 psi) 10* = 0.5 ... 10 bar (7.25 ... 145 psi)	000 = without gauge, flow from left to right 001 = without gauge, flow from right to left 002* = with gauge, flow from left to right 003 = with gauge, flow from right to left	1 = standard

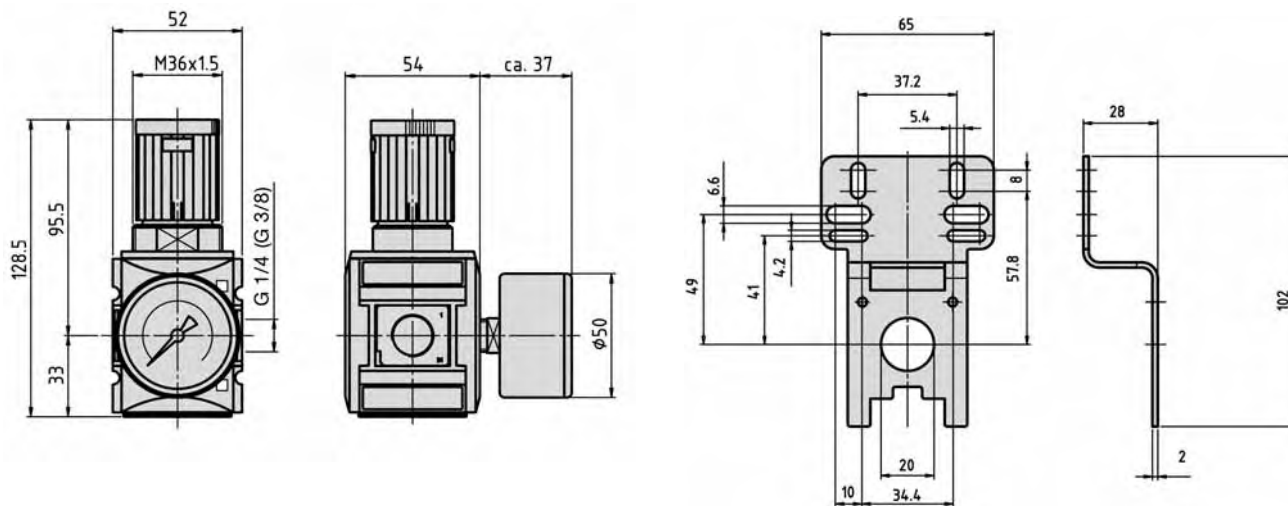
Order number Please complete according to order code.	RY-14-...	RY-37-...	RY-38-...	RY-12-...	RY-34-...	RY-10-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	with bracket or in-line, horizontal or vertical					
Input range	max. 16 bar (max. 232 psi)					
Output range*	0.5 ... 10 bar (7.25 ... 145 psi)* (others see order code)					
Flow rate	2200 NI/min (2.236 Cv)	2700 NI/min (2.744 Cv)	4300 NI/min (4.37 Cv)		14500 NI/min (14.74 Cv)	
Temperature range	– 10 °C ... + 50 °C (+ 14 °F ... + 122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Medium	Compressed air, acc. to ISO 8573-1: 2001, dry air					
Weight without pressure gauge	0.292 kg (0.644 lb.)		0.8 kg (1.764 lbs.)		0.997 kg (2.216 lbs.)	

* = standard type

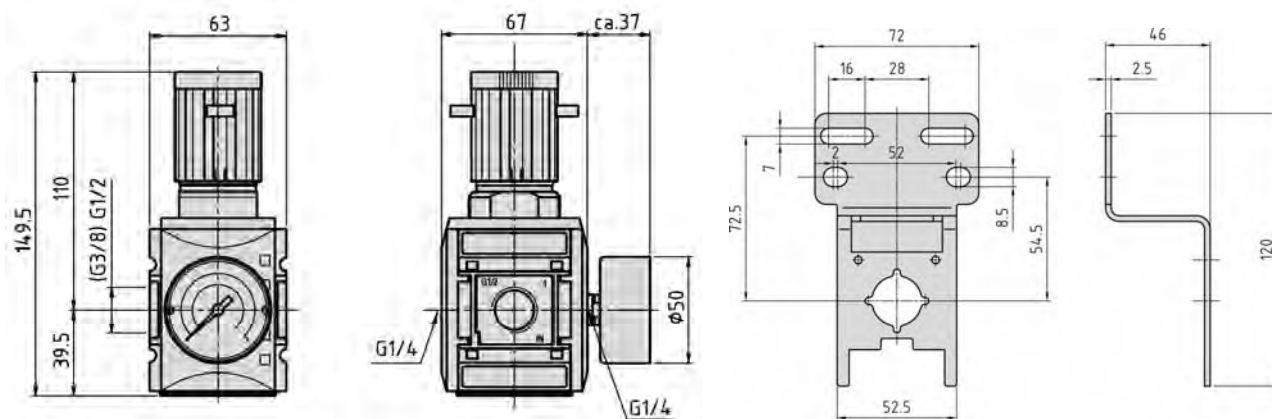
Dimensions for series

RY

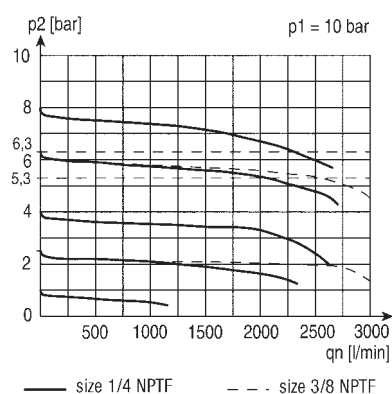
RY-14, RY-37



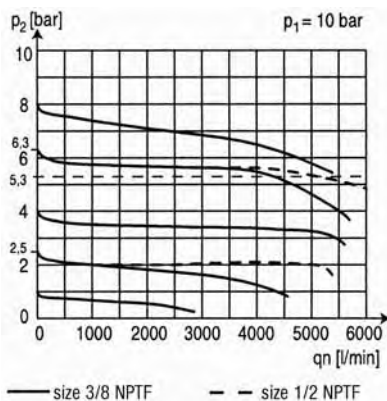
RY-38, RY-12



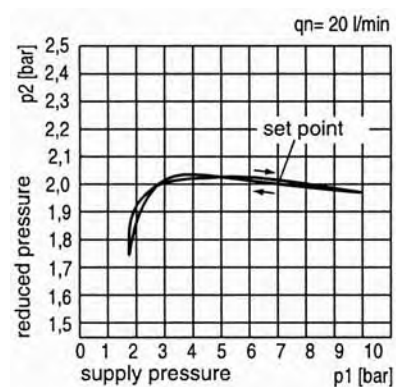
Flow rate: RY-14, RY-37



Flow rate: RY-38, RY-12



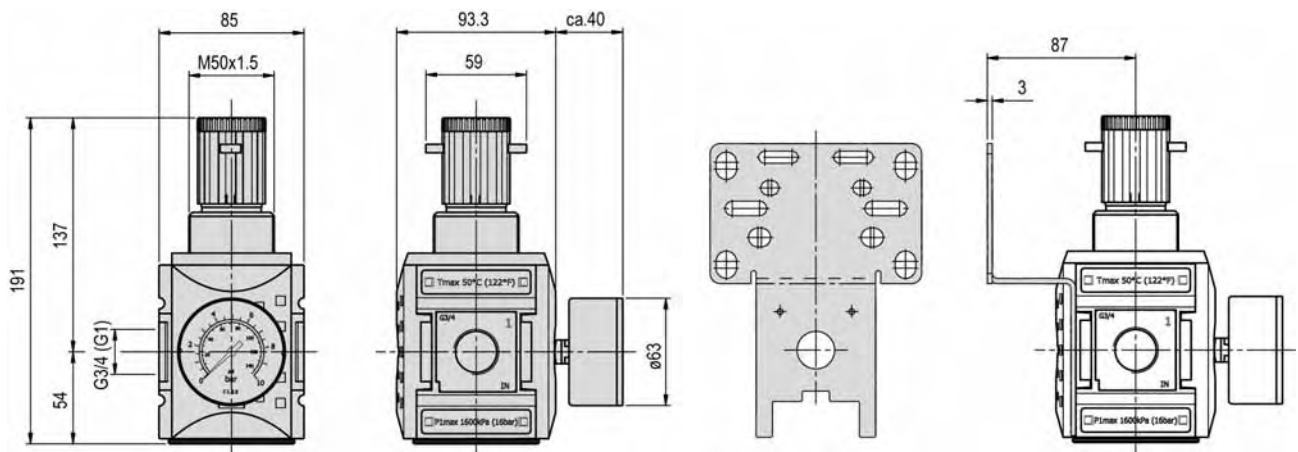
Pressure characteristic



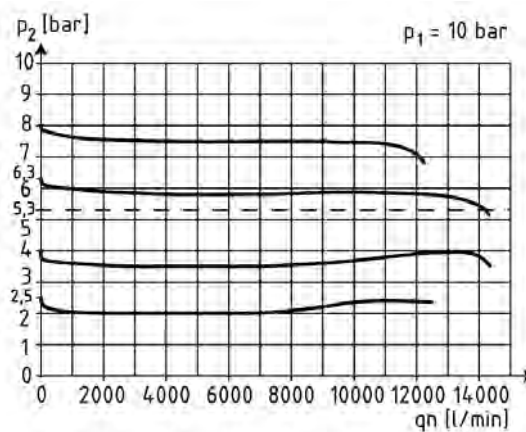
Dimensions for series

RY

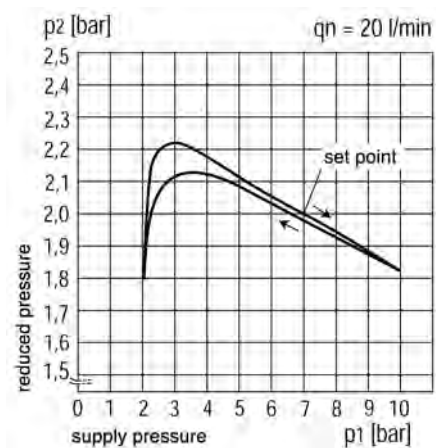
RY-34, RY-10



Flow rate: RY-34, RY-10

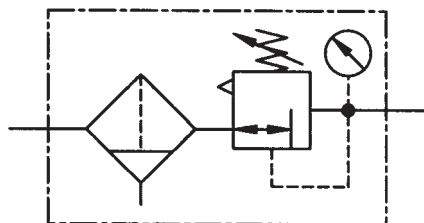


Pressure characteristic



Technical data for series

FRY



Order code

FRY-14-10-5-1221

Series

Size

14 = 1/4 (Y1)
 37 = 3/8 (Y1)
 38 = 3/8 (Y2)
 12 = 1/2 (Y2)
 34 = 3/4 (Y3)
 10 = 1 (Y3)

Pressure range

04 = 0.2 ... 4 bar
 (2.9 ... 58 psi)
 08 = 0.5 ... 8 bar
 (7.25 ... 116 psi)
10* = 0.5 ... 10 bar
 (7.25 ... 145 psi)

Options for digit No. 1

1* = polycarbonate bowl with PA-guard
 3 = metal bowl with sight glass

Options for digit No. 3

0 = without gauge, flow from left to right
 1 = without gauge, flow from right to left
2* = with gauge, flow from left to right
 3 = with gauge, flow from right to left

Options for digit No. 2

2* = semi-automatic drain
 3 = auto drain, NO at operating pressure 0 bar
 4 = auto-drain, NC at operating pressure 0 bar

Options for digit No. 4

1 = standard

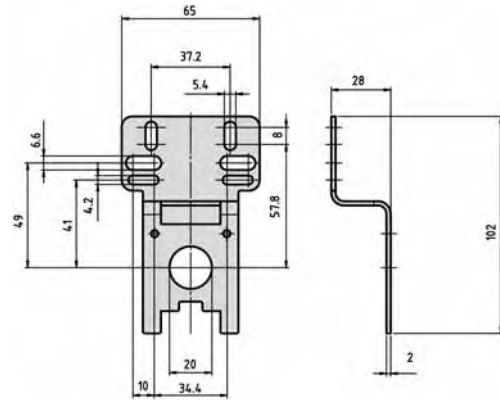
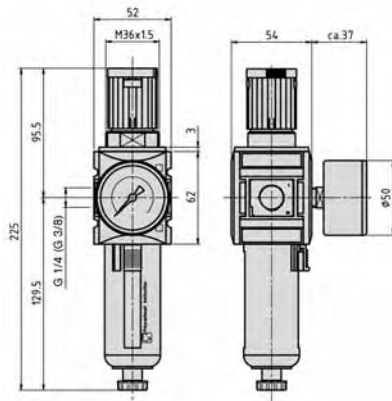
Order number Please complete according to order code.	FRY-14-...	FRY-37-...	FRY-38-...	FRY-12-...	FRY-34-...	FRY-10-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	vertically, drain plug at bottom					
Input range	max. 16 bar (max. 232 psi) 1.5 ... 10 bar with auto drain		max. 16 bar (max. 232 psi) 1.5 ... 12 bar with auto drain		max. 16 bar (max. 232 psi) 1.5 ... 10 bar with auto drain	
Output range*	0.5 ... 10 bar (7.25 ... 145 psi)* (others see order code)					
Flow rate	2600 NI/min (2.642 Cv)		4300 NI/min (4.37 Cv)	5200 NI/min (5.285 Cv)	14500 Ni/min (14.74 Cv)	
Filter element	5 µm					
Bowl volume	28 cm³		49 cm³		87 cm³	
Temperature range	50 °C (122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Medium	Compressed air, acc. to ISO 8573-1:2001, dry air					
Weight without pressure gauge*	0.360 kg (0.794 lb.) 0.530 kg lockable (1.168 lbs.)		0.850 kg (1.874 lb.) 1.050 kg lockable (2.315 lbs.)		0.990 kg (2.18 lb.)	

* = standard type

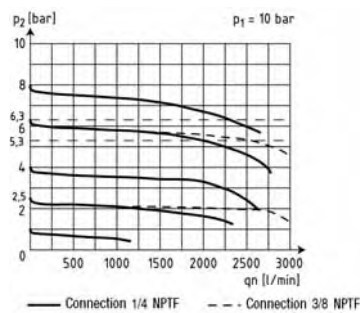
Dimensions for series

FRY

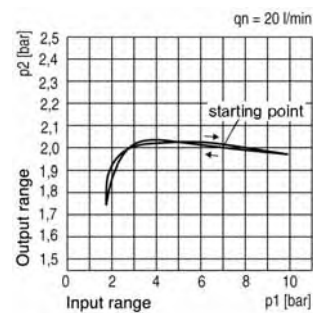
FRY-14, FRY-37



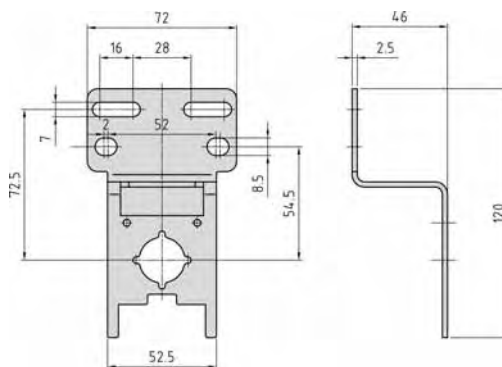
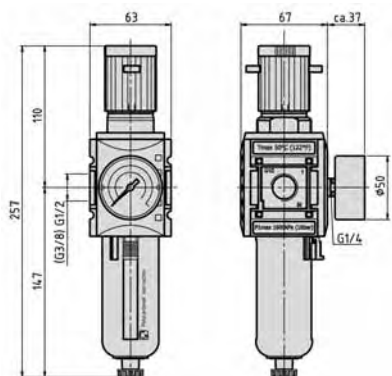
Flow characteristic FRY-14, FRY-37



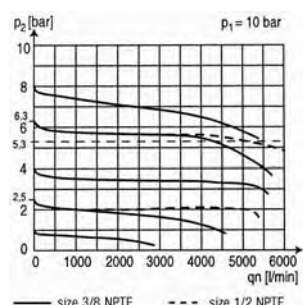
Pressure characteristic



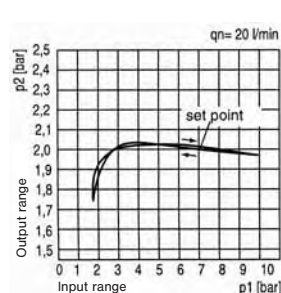
FRY-38, FRY-12



Flow characteristic FRY-38, FRY-12



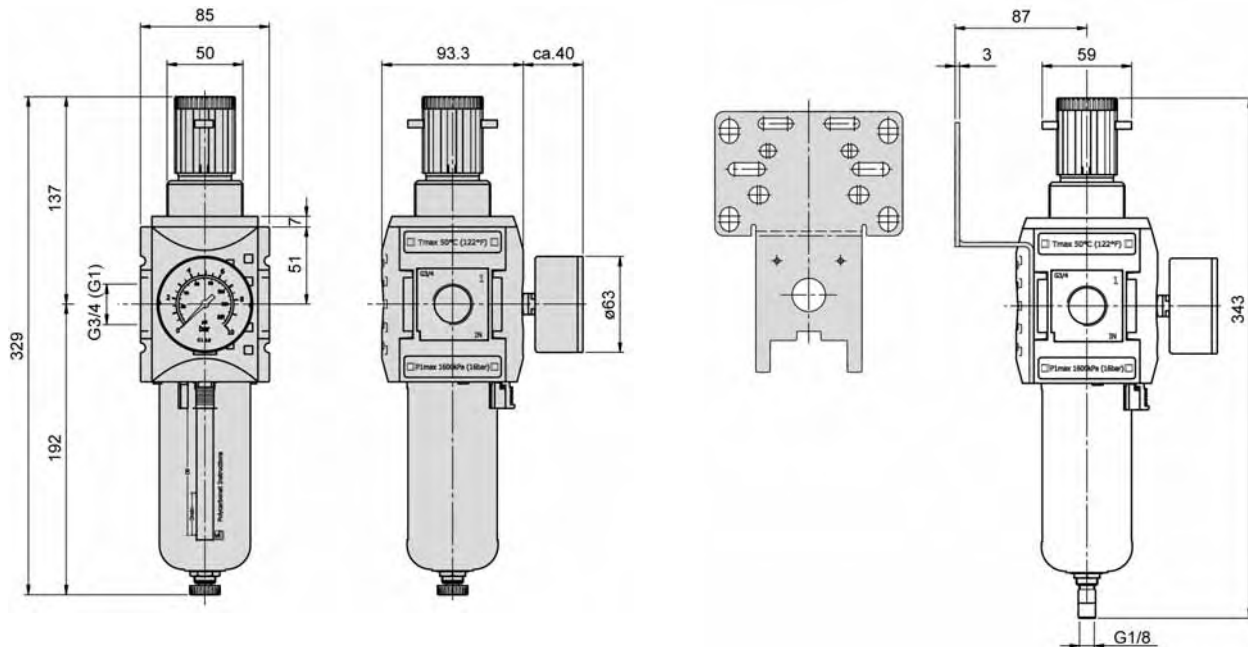
Pressure characteristic



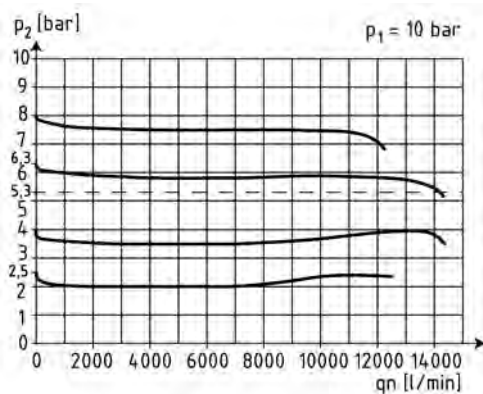
Dimensions for series

FRY

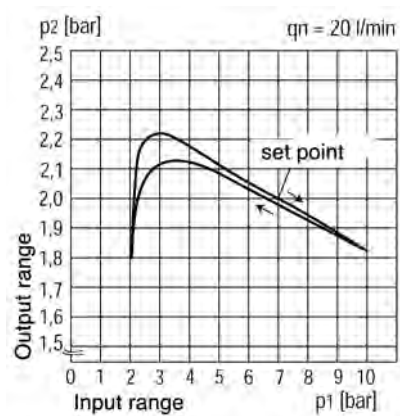
FRY-34, FRY-10



Flow characteristic FRY-38, FRY-12



Pressure characteristic

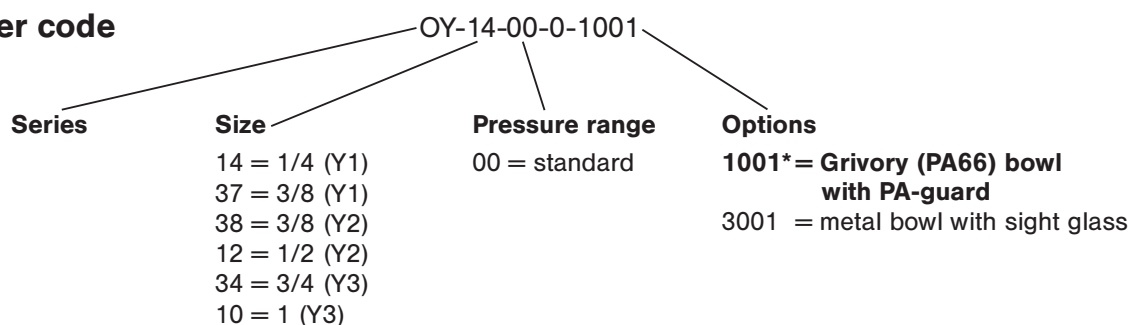


Technical data for series

OY



Order code



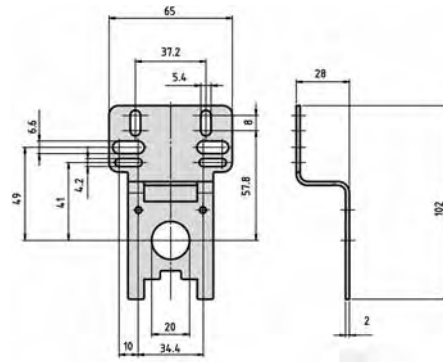
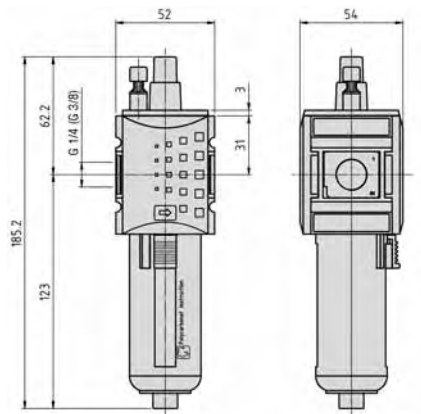
Order number Please complete according to order code.	OY-14-00-0-...	OY-37-00-0-...	OY-38-00-0-...	OY-12-00-0-...	OY-34-00-0-...	OY-10-00-0-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	vertically					
Input range	max. 16 bar, max. 20 bar with metal bowl (max. 232 psi, max. 290 psi)					
Flow rate*	2800 NI/min (2.845 Cv)	3100 NI/min (3.15 Cv)	8000 NI/min (8.13 Cv)		14500 NI/min (14.74 Cv)	
Bowl volume	40 cm³		80 cm³		181 cm³	
Type of oil	HL 25 according to DIN 51524 – ISO VG 32					
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Weight*	0.230 kg (0.507 lb.)		0.690 kg (1.521 lbs.)		0.762 kg (1.680 lbs.)	

* = standard type

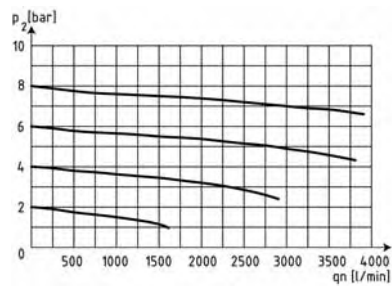
Dimensions for series

OY

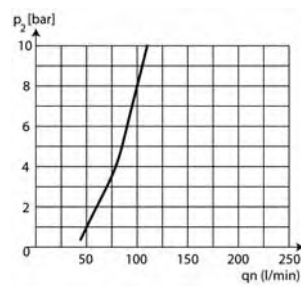
OY-14, OY-37



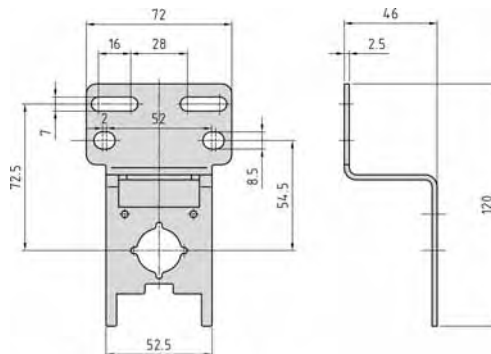
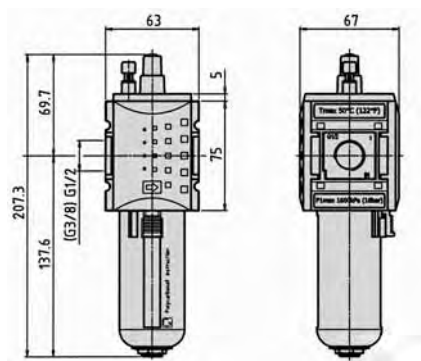
Flow characteristic OY-14, OY-37



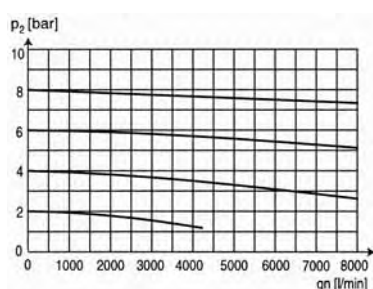
Lubricator: response pressure



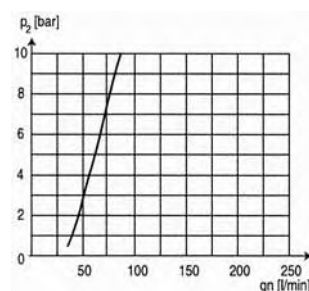
OY-38, OY-12



Flow characteristic OY-38, OY-12



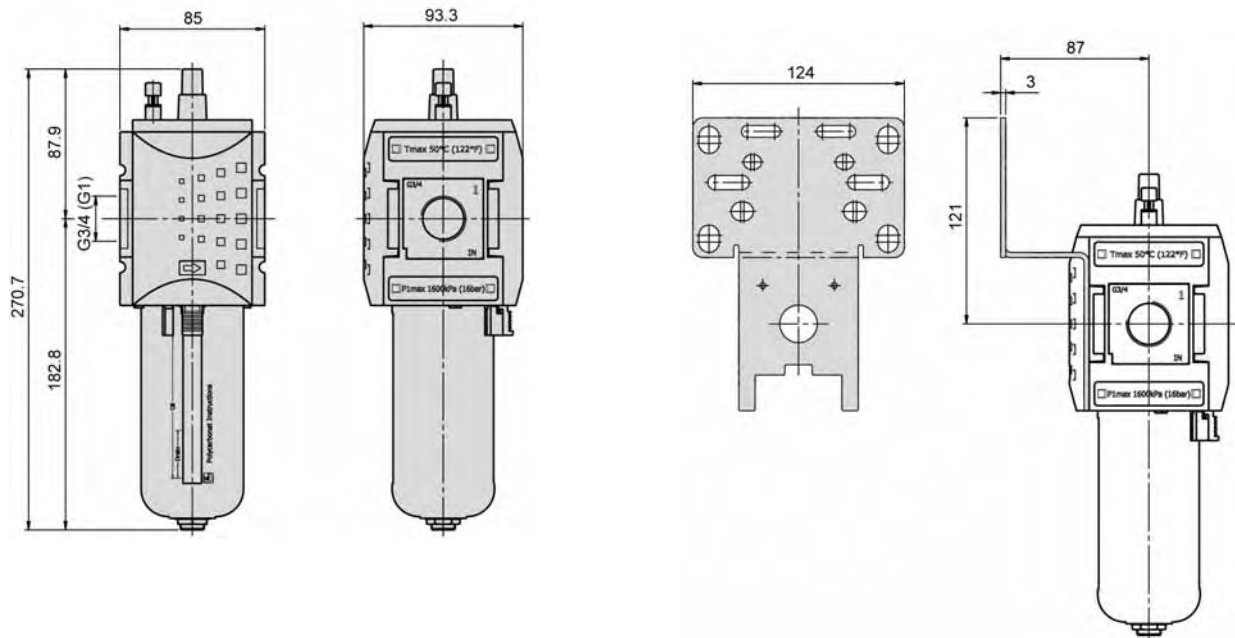
Lubricator: response pressure



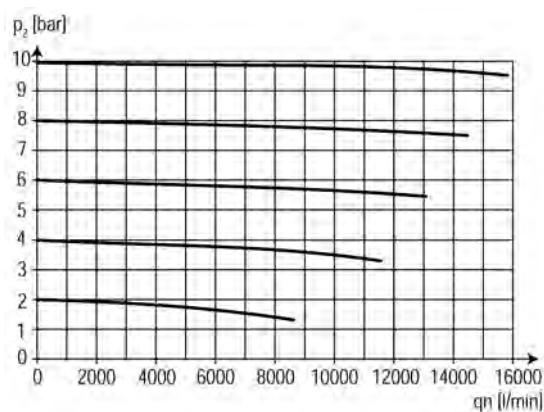
Dimensions for series

OY

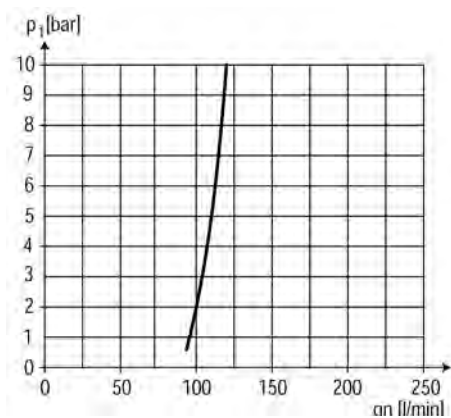
OY-34, OY-10



Flow characteristic OY-34, OY-10



Lubricator: response pressure



Series Y
Filter, Regulator, Lubricator combination
G 1/4 – G 1



Technical data for series

FROY



Order code

FROY-14-10-5-1221

Series

Size

14 = 1/4 (Y1)
 37 = 3/8 (Y1)
 38 = 3/8 (Y2)
 12 = 1/2 (Y2)
 34 = 3/4 (Y3)
 10 = 1 (Y3)

Pressure range

04 = 0.2 ... 4 bar
 (2.9 ... 58 psi)
 08 = 0.5 ... 8 bar
 (7.25 ... 116 psi)
10* = 0.5 ... 10 bar
(7.25 ... 145 psi)

Options for digit No. 1

1* = Grivory (PA66) bowl with PA-guard
 3 = metal bowl with sight glass

Options for digit No. 3

0 = without gauge, flow from left to right
 1 = without gauge, flow from right to left
2* = with gauge, flow from left to right
 3 = with gauge, flow from right to left

Options for digit No. 2

2* = semi-automatic drain
 3 = auto drain, NO
 4 = auto-drain, NC

Options for digit No. 4

1 = standard

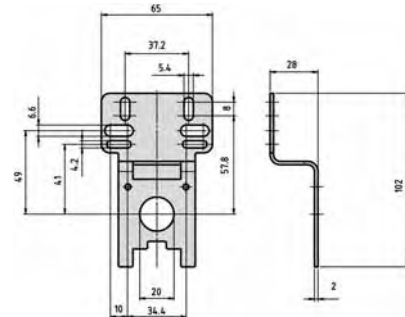
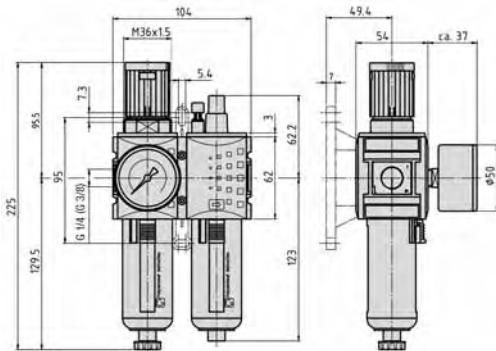
Order number Please complete according to order code.	FROY-14-...	FROY-37-...	FROY-38-...	FROY-12-...	FROY-34-...	FROY-10-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	vertically, drain plug at bottom					
Input range	max. 16 bar (max. 232 psi) 1.5 ... 10 bar with auto drain		max. 16 bar (max. 232 psi) 1.5 ... 12 bar with auto drain		max. 16 bar (max. 232 psi) 1.5 ... 10 bar with auto drain	
Output range*	0.5 ... 10 bar (7.25 ... 145 psi)* (others see order code)					
Flow rate	2000 NI/min (2.032 Cv)	2600 NI/min (2.642 Cv)	4300 NI/min (4.37 Cv)	5200 NI/min (5.285 Cv)	12000 NI/min (12.2 Cv)	
Filter element	5 µm					
Bowl volume	Filter regulator: 28 cm³ Lubricator: 40 cm³		Filter regulator: 49 cm³ Lubricator: 80 cm³		Filter regulator: 87 cm³ Lubricator: 181 cm³	
Temperature range	50 °C (122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Medium	Compressed air, acc. to ISO 8573-1:2001, dry air					
Weight without pressure gauge*	0.633 kg (1.395 lbs.)		1.010 kg (2.227 lbs.)		1.827 kg (4.024 lbs.)	

* = standard type

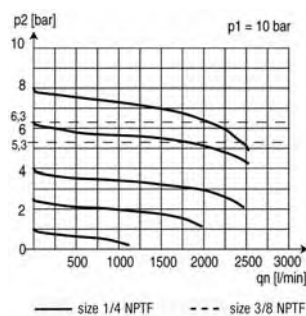
Dimensions for series

FROY

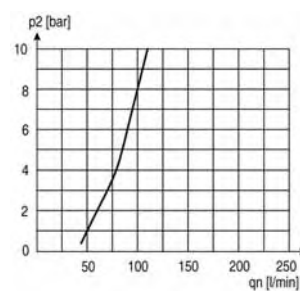
FROY-14, FROY-37



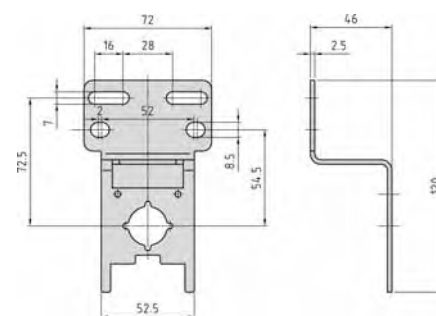
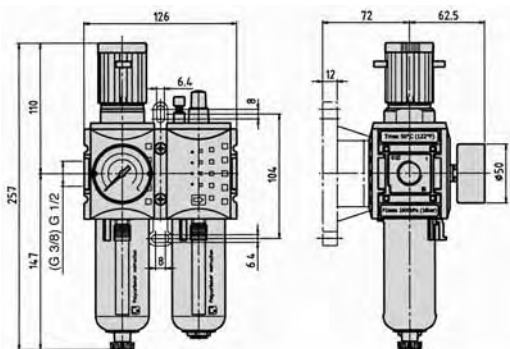
Flow characteristic FROY-14, FROY-37



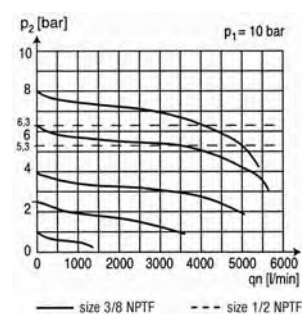
Lubricator: response pressure



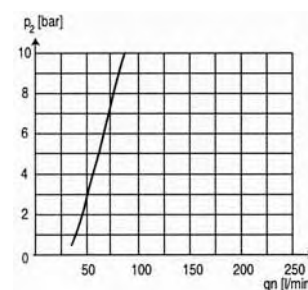
FROY-38, FROY-12



Flow characteristic FROY-38, FROY-12



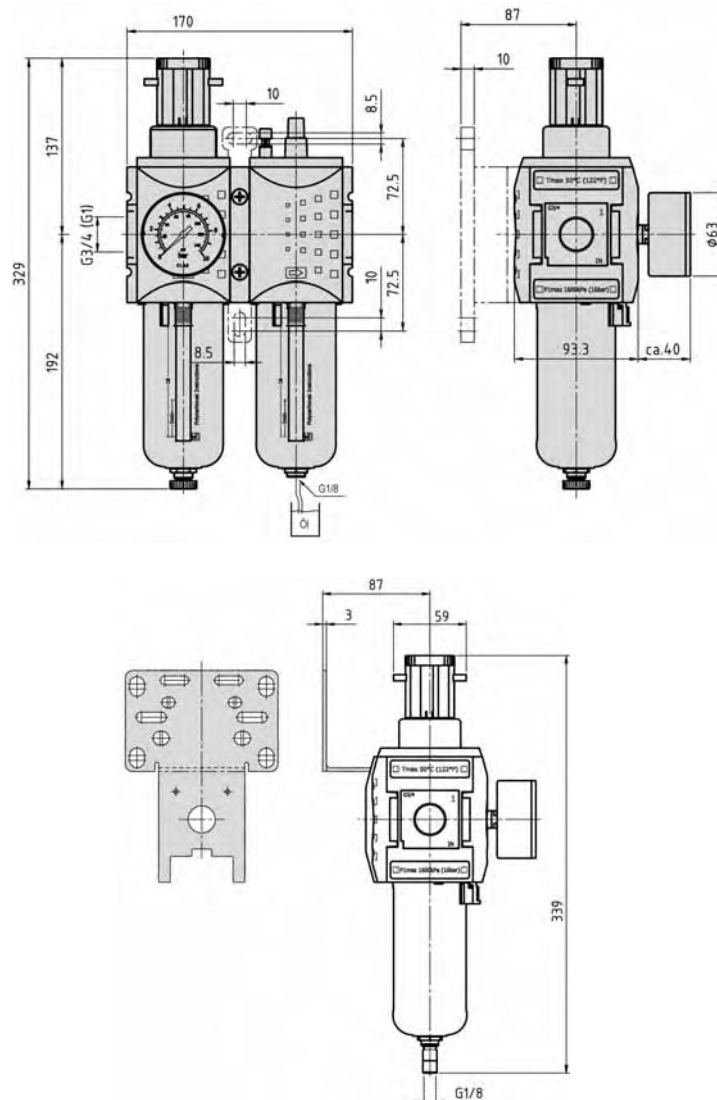
Lubricator: response pressure



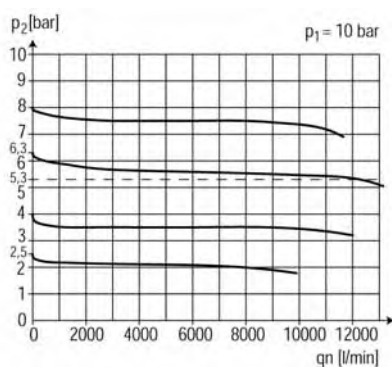
Dimensions for series

FROY

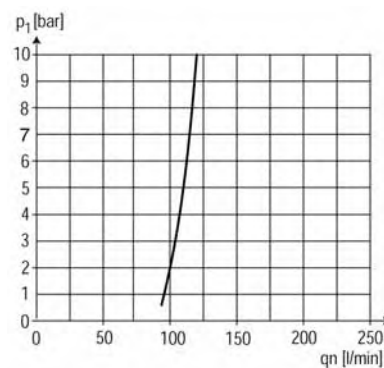
FROY-34, FROY-10



Flow characteristic FROY-34, FROY-10



Lubricator: response pressure

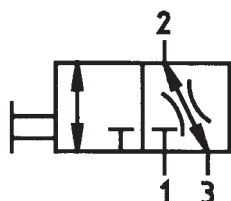


Series Y
Lockable ball valve
G 1/4 – G 1

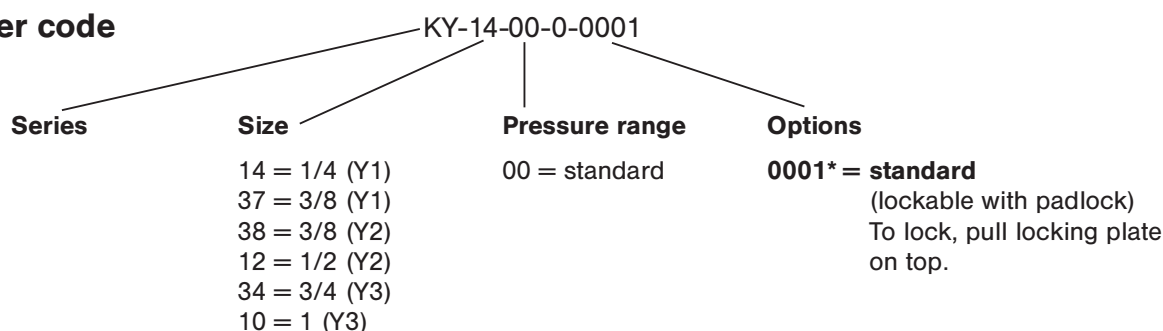


Technical data for series

KY



Order code



Design and function

3/2-way ball valve for the shut-off of downstream air.

Easy block assembly for components to be connected in series.

The components of series Y can easily be connected by using the coupling kit KPY.

Order number Please complete according to order code.	KY-14-00-0-...	KY-37-00-0-...	KY-38-00-0-...	KY-12-00-0-...	KY-34-00-0-...	KY-10-00-0-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	with bracket or in-line, horizontal or vertical					
Input range	max. 16 bar (max. 232 psi)					
Flow rate	2000 NI/min (2.032 Cv)		4300 NI/min (4.37 Cv)	5200 NI/min (5.285 Cv)	14500 NI/min (14.74 Cv)	
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Weight*	0.200 kg (0.441 lb.)		0.820 kg (1.808 lbs.)		0.825 kg (1.82 lbs.)	

* = standard type

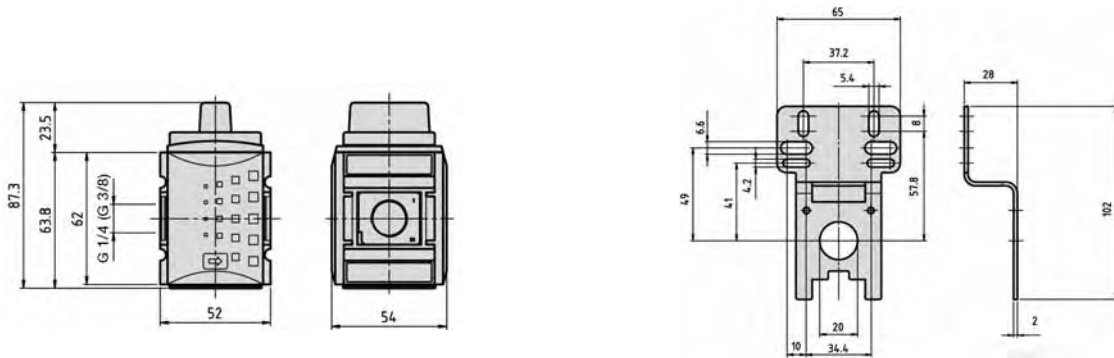
Series Y Lockable ball valve G 1/4 – G 1



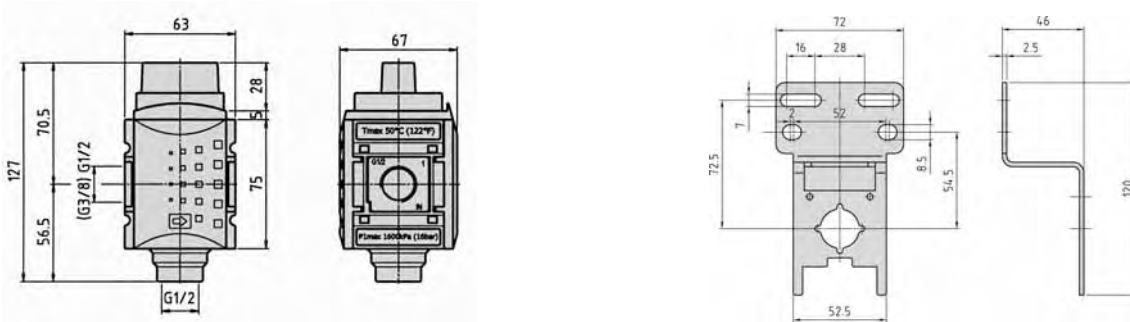
Dimensions for series

KY

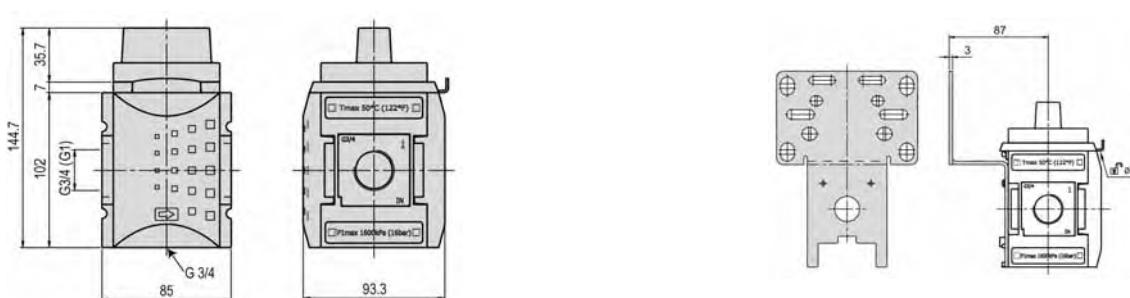
KY-14, KY-37



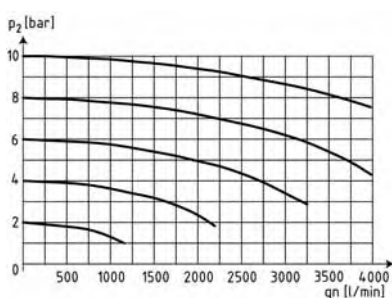
KY-38, KY-12



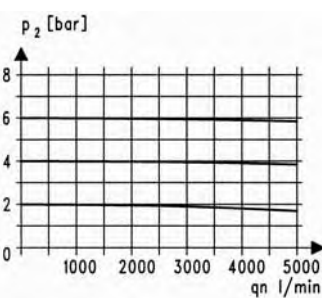
KY-34, KY-10



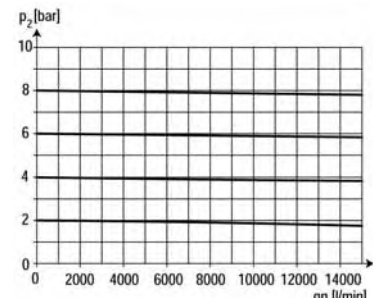
Flow characteristic KY-14, KY-37



Flow characteristic KY-38, KY-12



Flow characteristic KY-34, KY-10

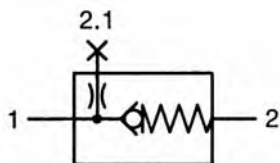


Series Y
Non-return valve
G 1/4 – G 1/2

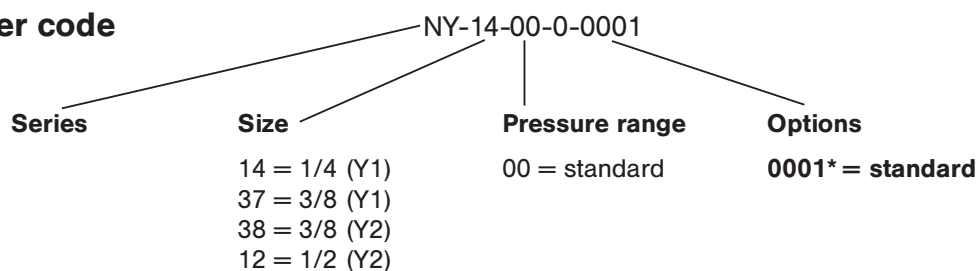


Technical data for series

NY



Order code



Order number Please complete according to order code.	NY-14-00-0-...	NY-37-00-0-...	NY-38-00-0-...	NY-12-00-0-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2
Series	Y1		Y2	
Mounting	with bracket or in-line, horizontal or vertical			
Input range	max. 16 bar (max. 232 psi)			
Flow rate	1250 NI/min (1.27 Cv)		5000 NI/min (5.08 Cv)	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Materials	Housing: Grivory (PA66); Connection: die cast Zinc			
Weight*	0.250 kg (0.551 lb.)		0.320 kg (0.705 lb.)	

* = standard type

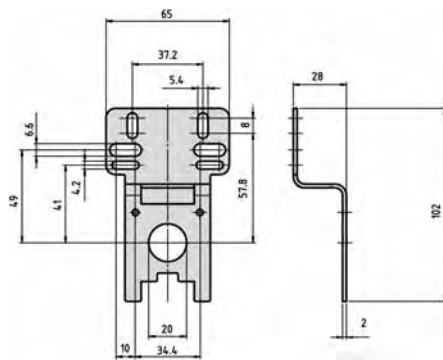
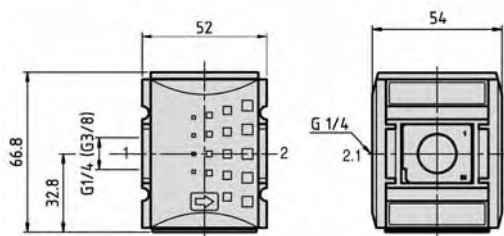
Series Y Non-return valve G 1/4 – G 1/2



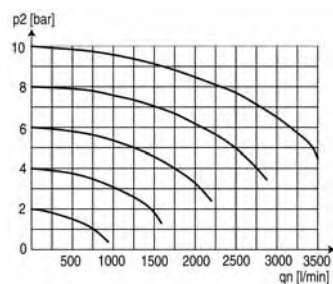
Dimensions for series

NY

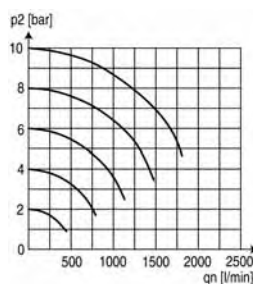
NY-14, NY-37



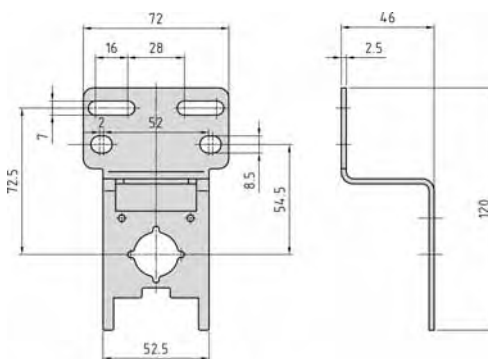
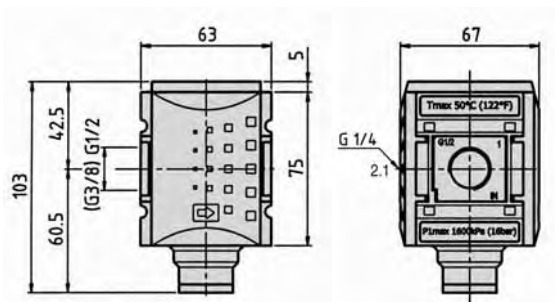
Flow characteristic NY-14, NY-37 nominal flow from 1 → 2



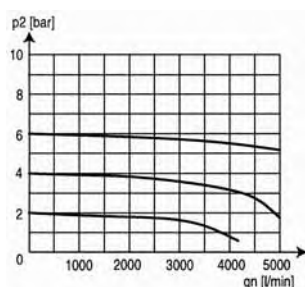
Flow characteristic NY-14, NY-37 nominal flow from 1 → 2.1



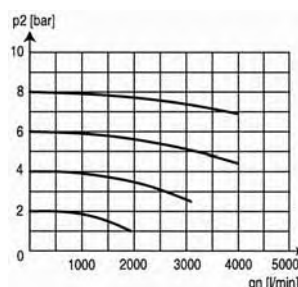
NY-38, NY-12



Flow characteristic NY-38, NY-12 nominal flow from 1 → 2



Flow characteristic NY-38, NY-12 nominal flow from 1 → 2.1

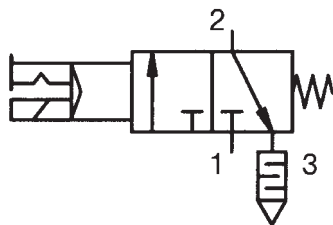


Series Y
3/2-way inline valve
G 1/4 – G 1

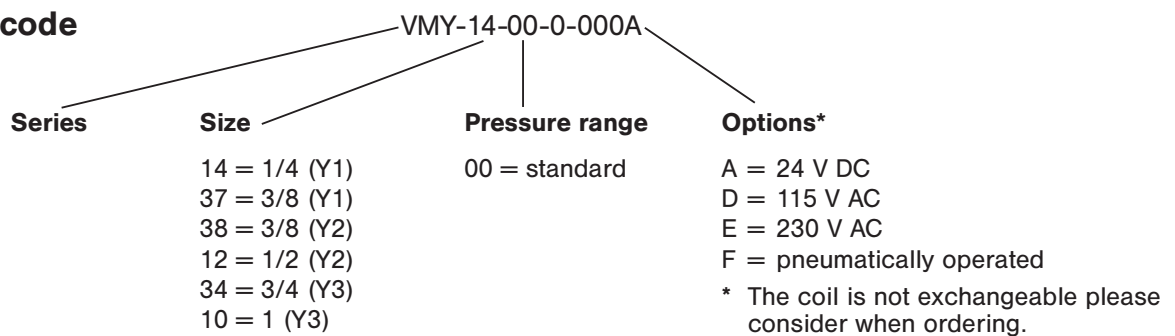


Technical data for series

VMY



Order code



Design and function

Solenoid or pneumatically operated 3/2-way poppet valve with spring return. The solenoid and plug socket are supplied with the unit.

Easy block assembly for components to be connected in series.

The components of series Y can be easily connected by using the coupling kit KPY.

Order number Please complete according to order code.	VMY-14-00-0-...	VMY-37-00-0-...	VMY-38-00-0-...	VMY-12-00-0-...	VMY-34-00-0-...	VMY-10-00-0-...
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	with bracket or in-line, horizontal or vertical					
Pressure range	2 ... 10 bar (29 ... 145 psi)					
Duty cycle	100 %					
Degree of protection	IP 65 according to EN 60529					
Flow rate	1800 NI/min (1.829 Cv)	2000 NI/min (2.032 Cv)	4300 NI/min (4.37 Cv)	5200 NI/min (5.285 Cv)	12500 NI/min (12.71 Cv)	
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Weight	0.196 kg (0.432 lb.)		1.050 kg (2.315 lbs.)		0.677 kg (1.49 lbs.)	

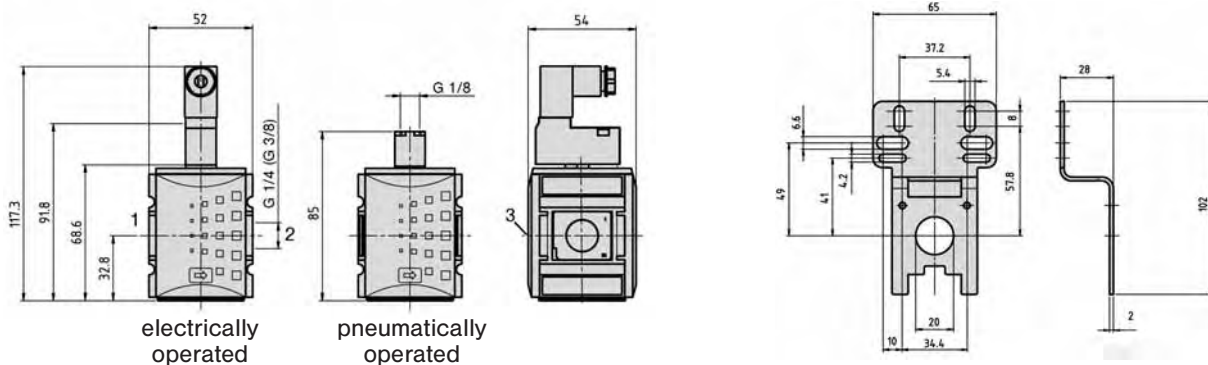
Series Y
3/2-way inline valve
G 1/4 – G 1/2



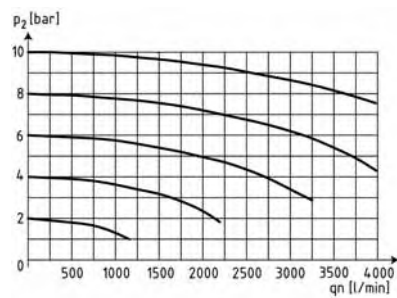
Dimensions for series

VMY

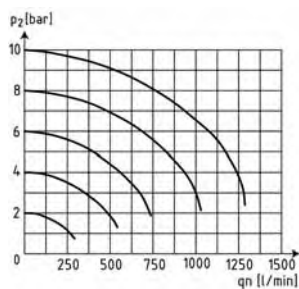
VMY-14, VMY-37



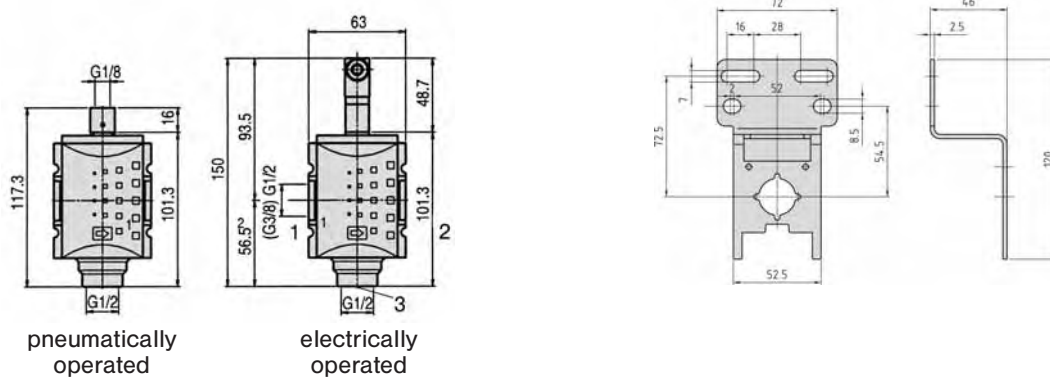
Flow characteristic VMY-14, VMY-37



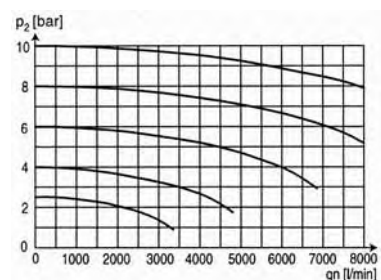
Rear exhaust flow characteristic



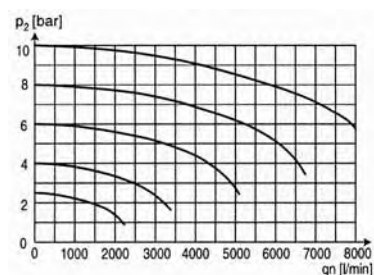
VMY-38, VMY-12



Flow characteristic VMY-38, VMY-12



Rear exhaust flow characteristic



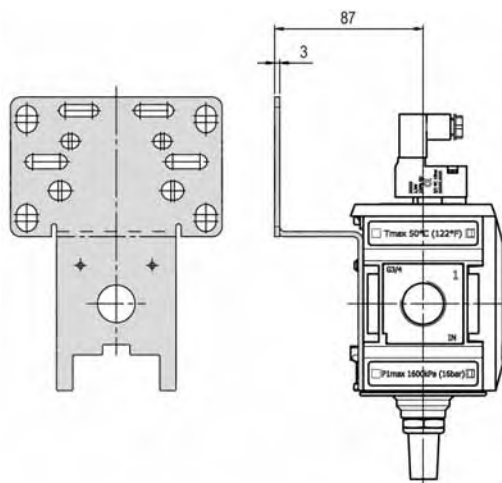
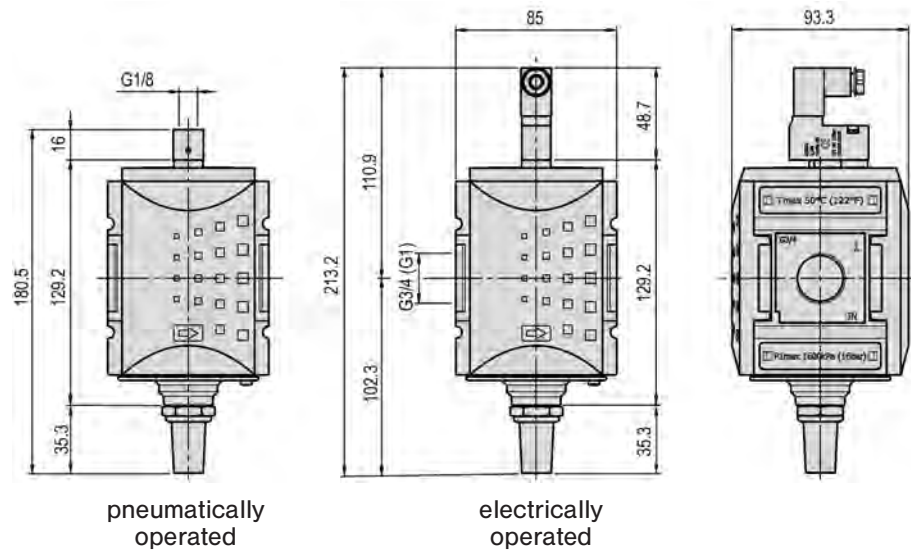
Series Y
3/2-way inline valve
G 3/4, G 1



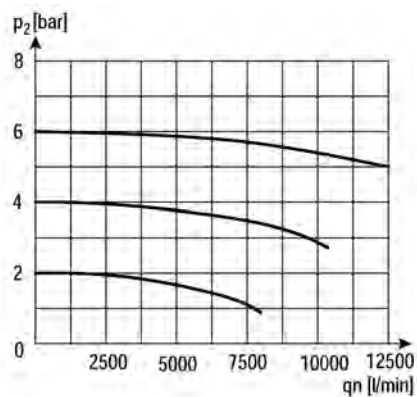
Dimensions for series

VMY

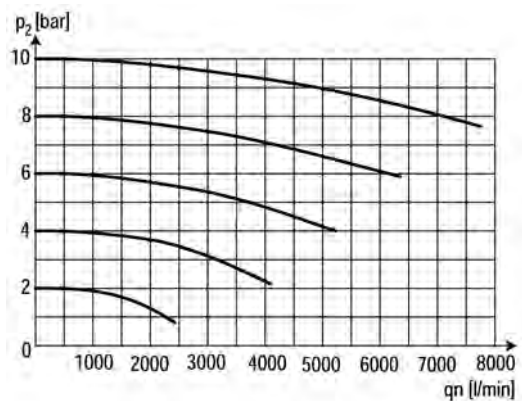
VMY-34, VMY-10



Flow characteristic VMY-34, VMY-10

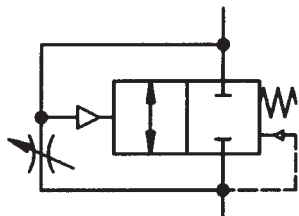


Rear exhaust flow characteristic

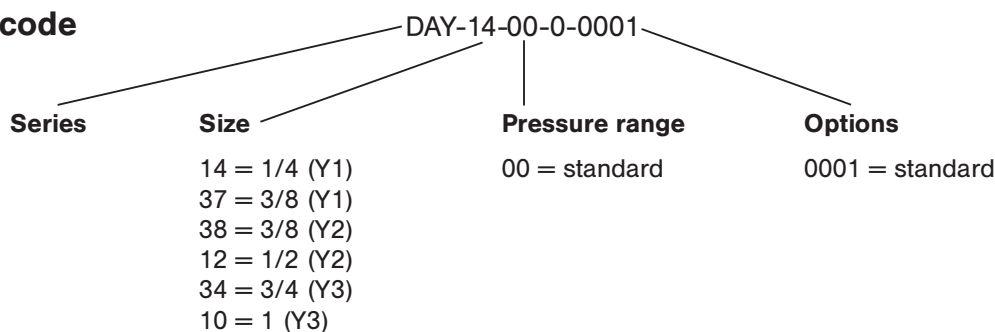


Technical data for series

DAY



Order code



Design and function

Soft start valve with adjustable filling time. This valve can be used to slowly increase the system pressure through an adjustable throttle. When 50 % of the incoming pressure is achieved the valve opens completely. The components of series Y can be easily connected by using the coupling kit KPY.

Order number	DAY-14-00-0-0001	DAY-37-00-0-0001	DAY-38-00-0-0001	DAY-12-00-0-0001	DAY-34-00-0-0001	DAY-10-00-0-0001
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Series	Y1		Y2		Y3	
Mounting	with bracket or in-line, horizontal or vertical					
Pressure range	2 ... 16 bar (29 ... 232 psi)				2,5 ...16 bar (36.25 ... 232 psi)	
Flow rate	1800 NI/min (1.829 Cv)	2000 NI/min (2.032 Cv)	4300 NI/min (4.37 Cv)	5200 NI/min (5.285 Cv)	10000 NI/min (10.17 Cv)	
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Weight	0.180 kg (0.397 lb.)		0.770 kg (1.697 lbs.)		0.430 kg (0.95 lb.)	

DAY

[illegible][illegible]

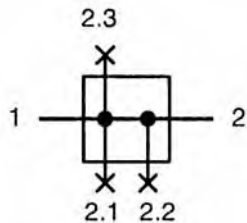
Figure 10 is a line graph showing the relationship between the inlet pressure p_1 (in bar) and the flow rate q_n (in l/min) for the pump. The y-axis represents p_2 [bar] and ranges from 0 to 10. The x-axis represents q_n [l/min] and ranges from 0 to 4000. Five curves are plotted, corresponding to different inlet pressures p_1 : 10, 8, 6, 4, and 2 bar. The curves show that p_2 decreases as q_n increases, and the curves shift downwards as p_1 decreases.

The graph shows the relationship between the pressure p_z in bar and the air flow rate a_n in l/min for three different nozzle diameters. The y-axis represents pressure p_z [bar] from 0 to 8, and the x-axis represents air flow rate a_n [l/min] from 0 to 10000. Three curves are plotted, each corresponding to a different nozzle diameter. The top curve starts at approximately 6 bar for 2000 l/min and decreases to about 5 bar at 10000 l/min. The middle curve starts at 4 bar for 2000 l/min and decreases to about 2.8 bar at 8000 l/min. The bottom curve starts at 2 bar for 2000 l/min and decreases to about 1 bar at 6000 l/min.

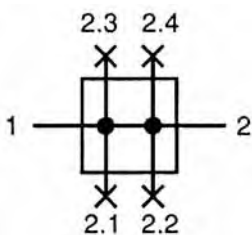
a_n [l/min]	p_z [bar] (Top Curve)	p_z [bar] (Middle Curve)	p_z [bar] (Bottom Curve)
2000	6.0	4.0	2.0
4000	5.8	3.8	1.8
6000	5.6	3.5	1.0
8000	5.4	2.8	-
10000	5.0	-	-

Technical data for series

TY



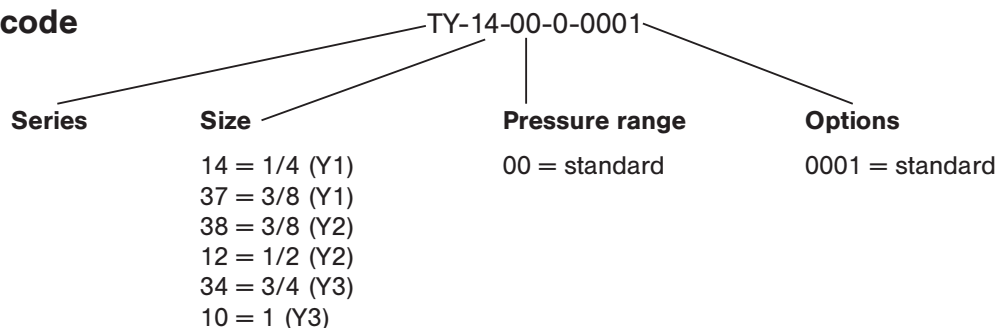
Series Y1



Series Y2



Order code



Order number	TY-14-00-0-0001	TY-37-00-0-0001	TY-38-00-0-0001	TY-12-00-0-0001	TY-34-00-0-0001	TY-10-00-0-0001
Connection	G 1/4	G 3/8	G 3/8	G 1/2	G 3/4	G 1
Outlets	4 x G 1/4	1 x G 3/8 3 x G 1/4	3 x G 3/8 1 x G 1/4 1 x G 1/2	2 x G 1/2 2 x G 3/8 1 x G 1/4	4 x G 3/4	2 x G 1 2 x G 3/4
Series	Y1		Y2		Y3	
Mounting	with bracket or in-line, horizontal or vertical					
Pressure range	0 ... 16 bar (0 ... 232 psi)					
Flow rate	2700 NI/min (2.744 Cv)	3600 NI/min (3.659 Cv)	7250 NI/min (7.368 Cv)	11000 NI/min (11.179 Cv)	18000 NI/min (18.3 Cv)	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Materials	Housing: Grivory (PA66); Connection: die cast Zinc					
Weight*	0.250 kg (0.551 lb.)				0.648 kg (1.43 lbs.)	

* = outlet ports see page 11.059.

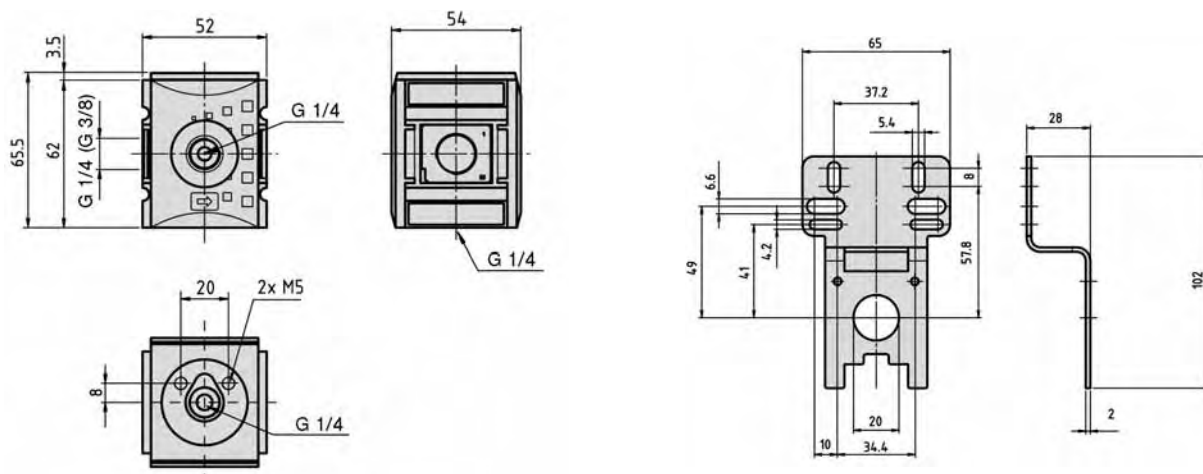
Series Y Distribution block G 1/4 – G 1



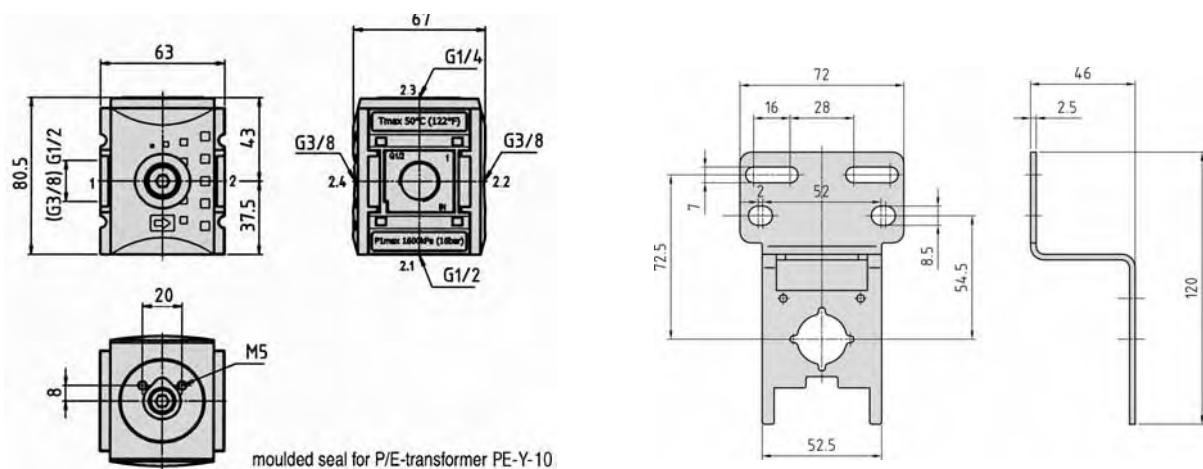
Dimensions for series

TY

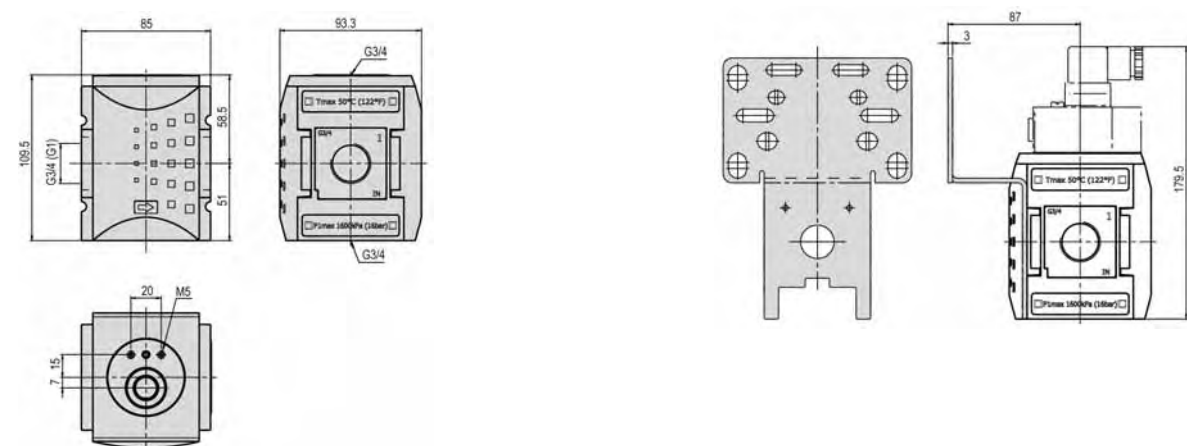
TY-14, TY-37



TY-38, TY-12



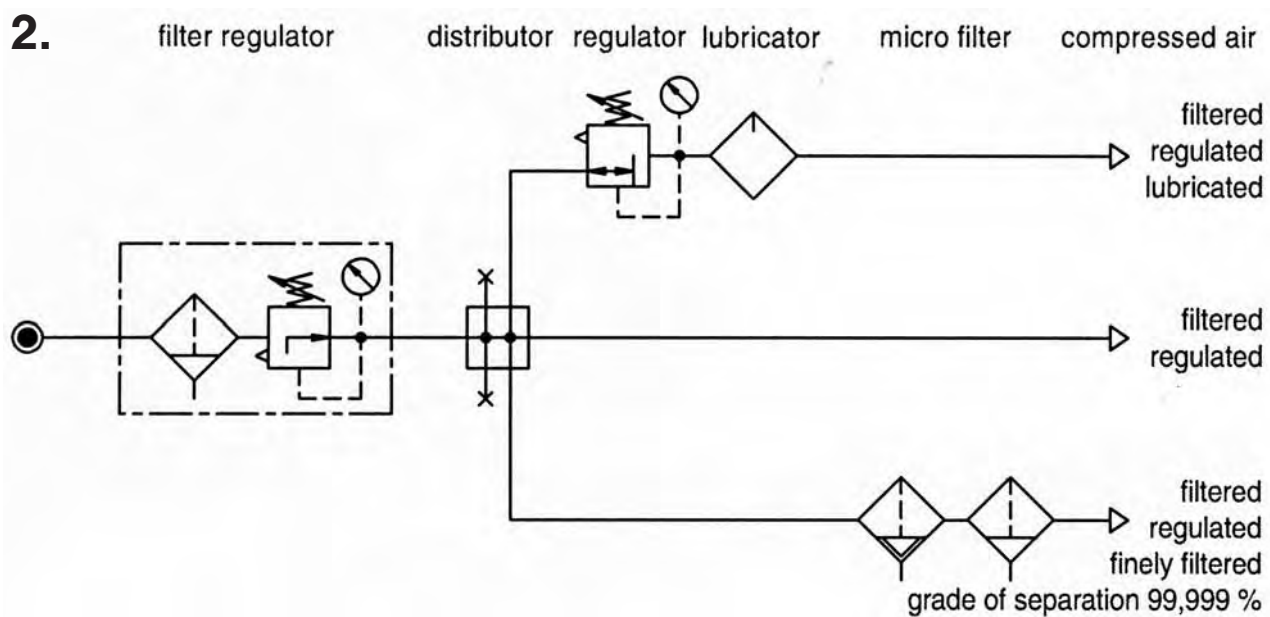
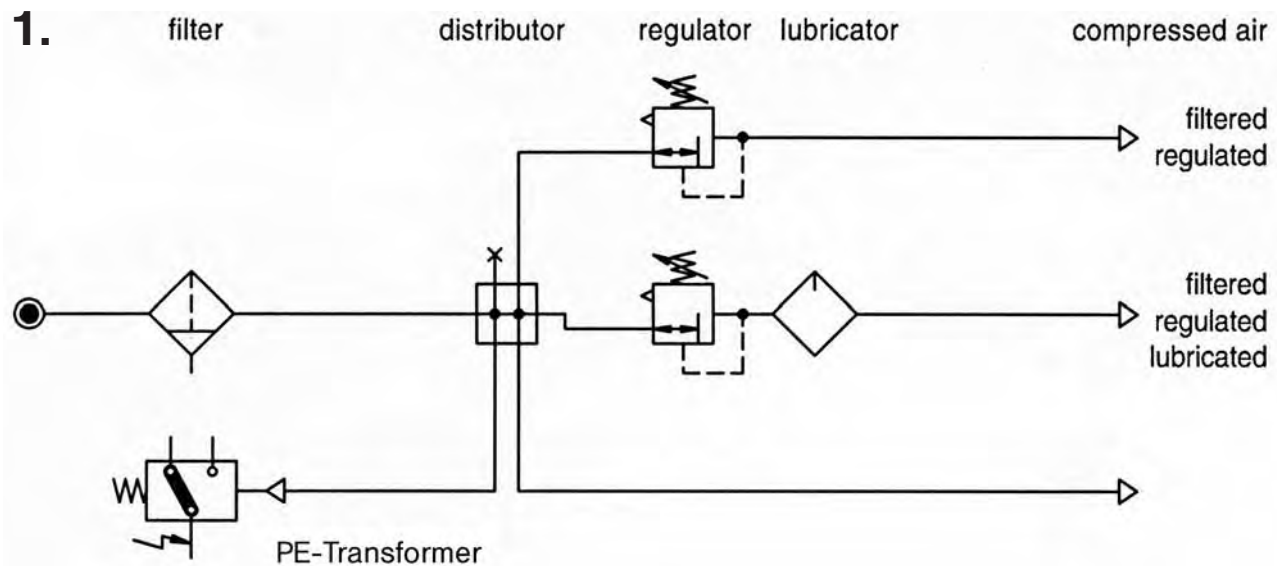
TY-34, TY-10



Dimensions for series

TY

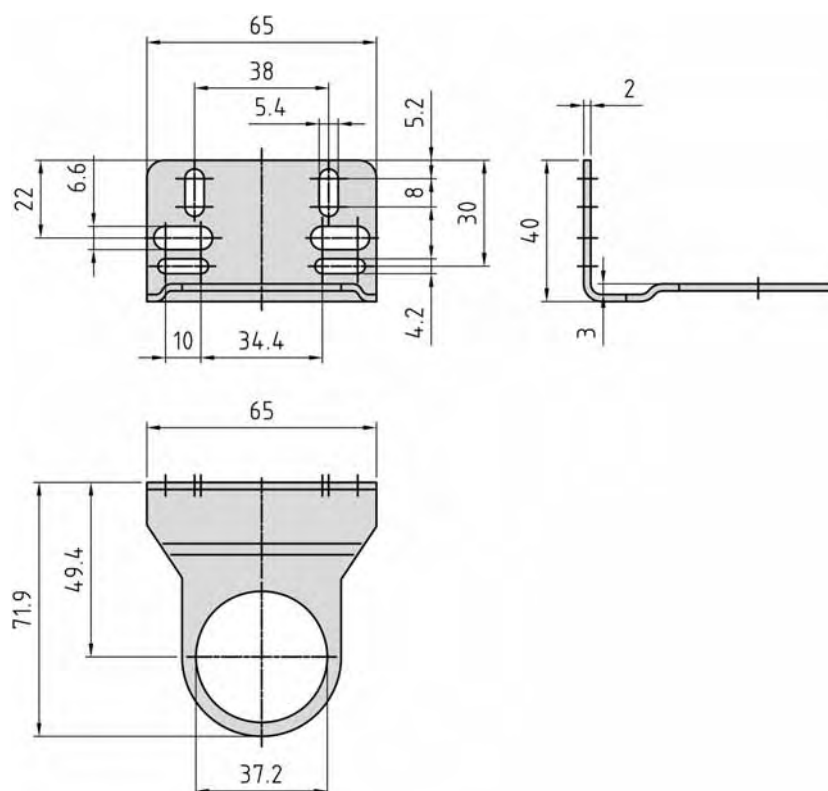
Areas of application for TY-14, TY-37, TY-38, TY-12, TY-34, TY-10



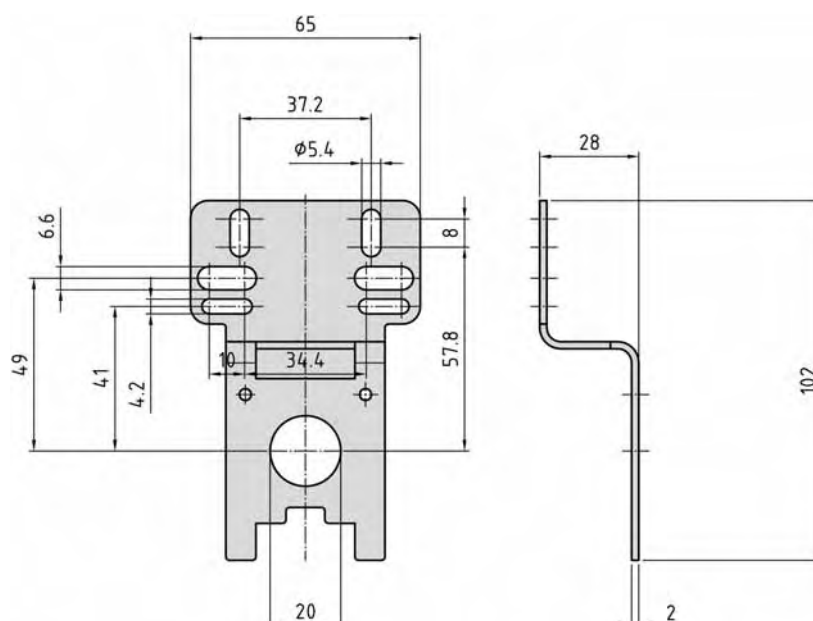
Accessories for series

Y

Mounting brackets WYL-01



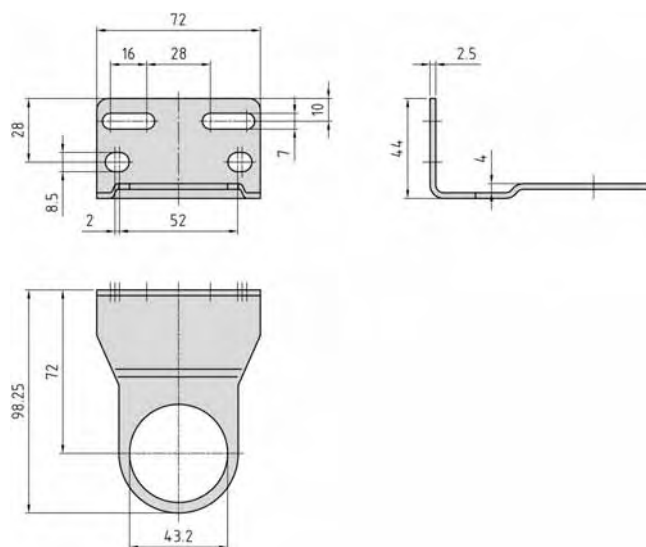
Mounting brackets WYP-01



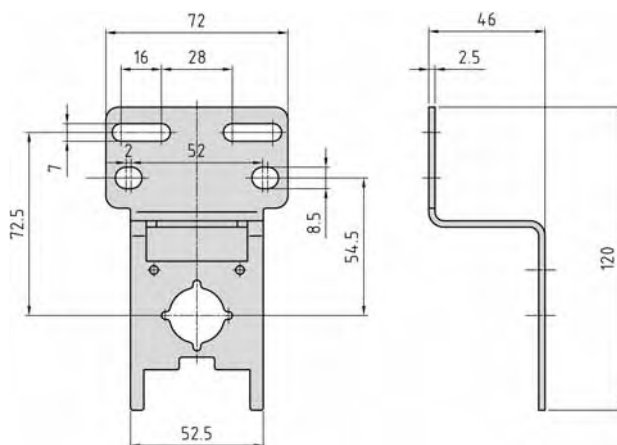
Accessories for series

Y

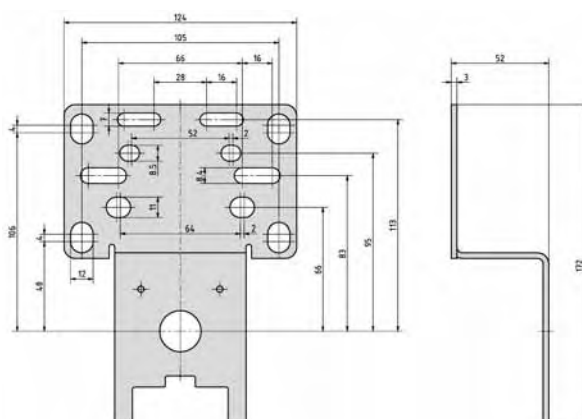
Mounting brackets WYL-02



Mounting brackets WYP-02



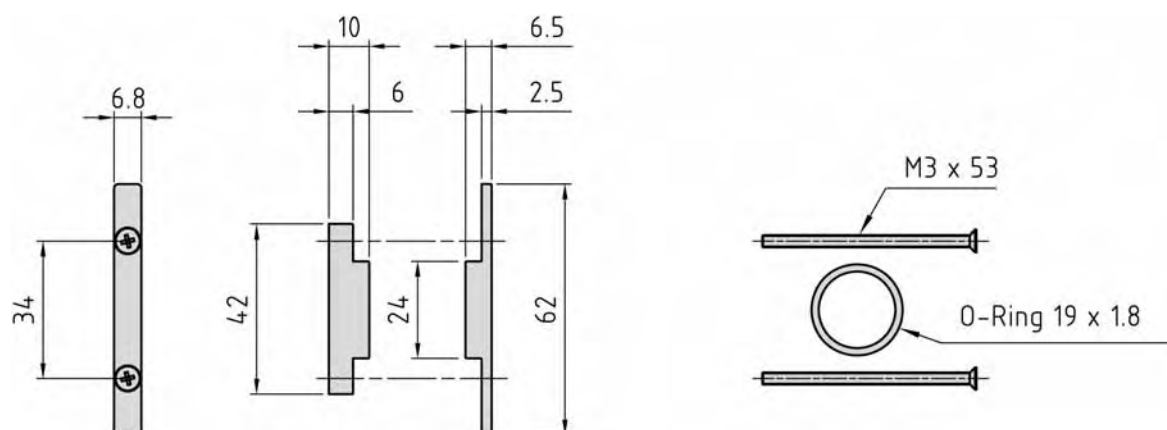
Mounting brackets WYP-03



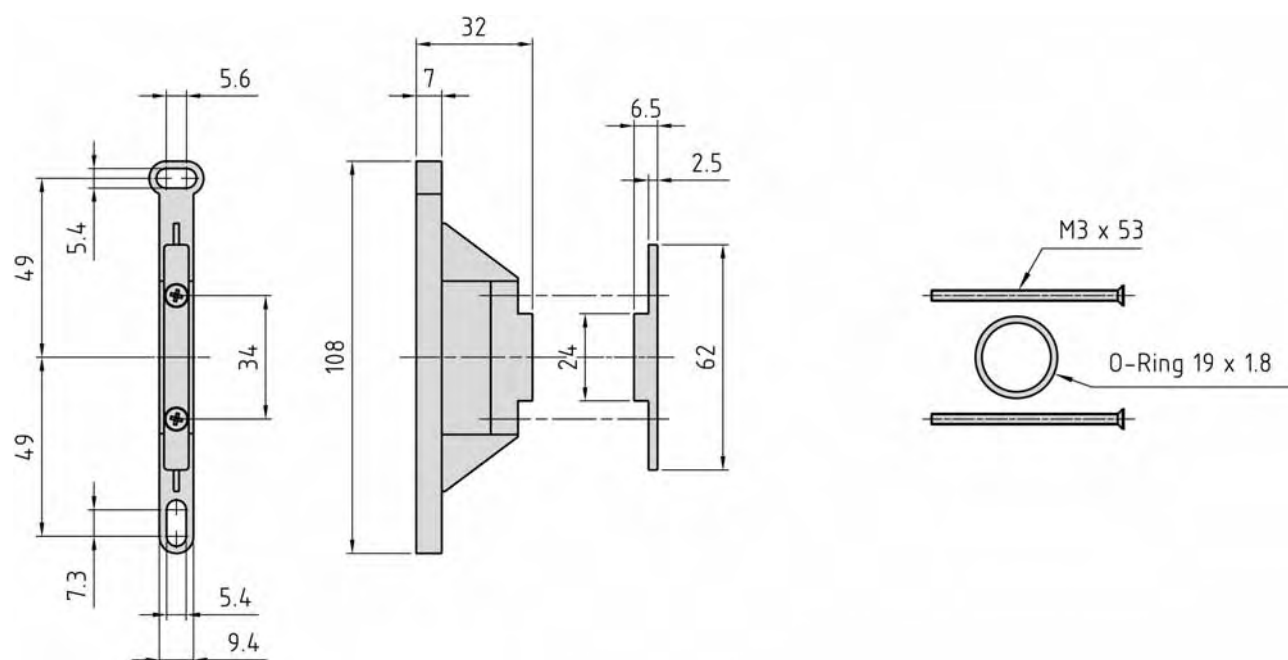
Accessories for series

Y

Coupling kits KPY-01-K



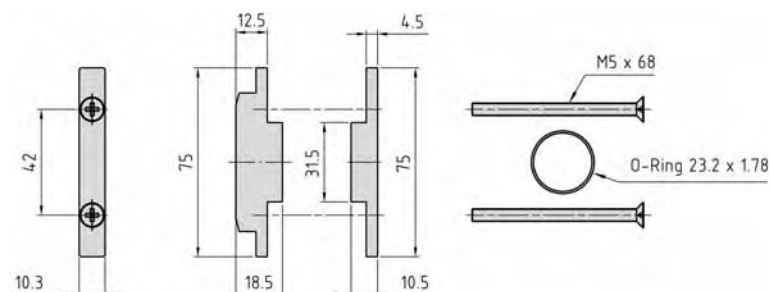
Coupling kits KPY-01-W



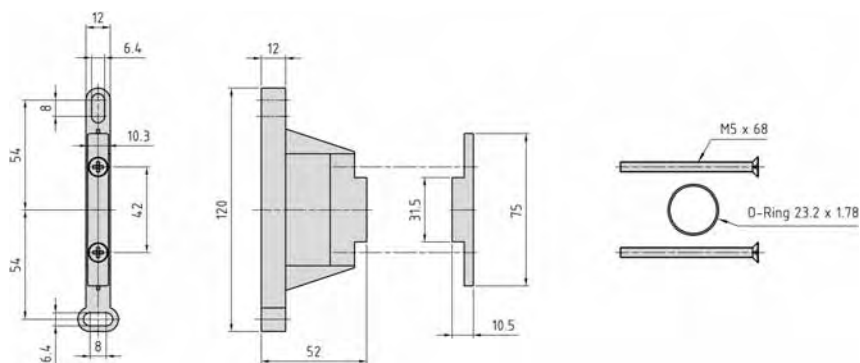
Accessories for series

Y

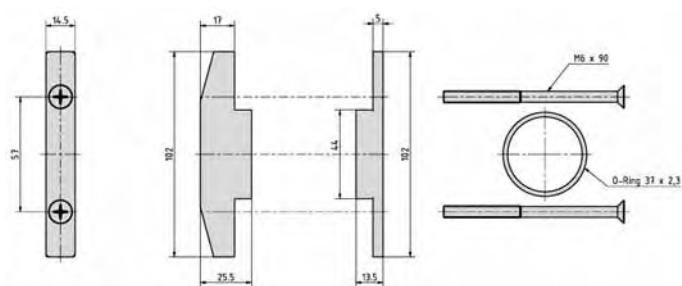
Coupling kits KPY-02-K



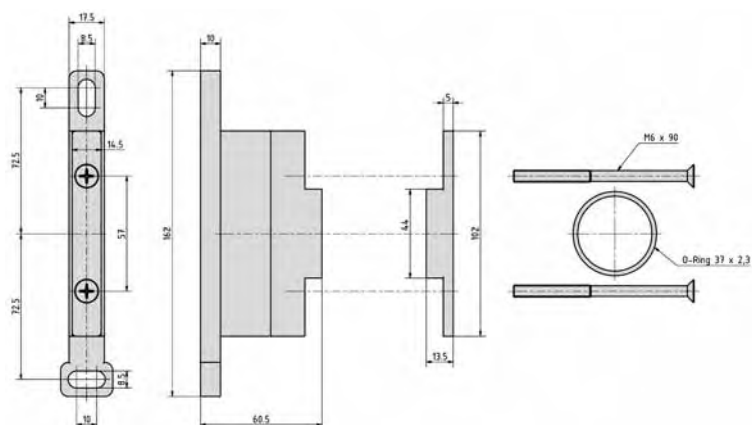
Coupling kits for wall mounting KPY-02-W



Coupling kits KPY-03-K



Coupling kits for wall mounting KPY-03-W



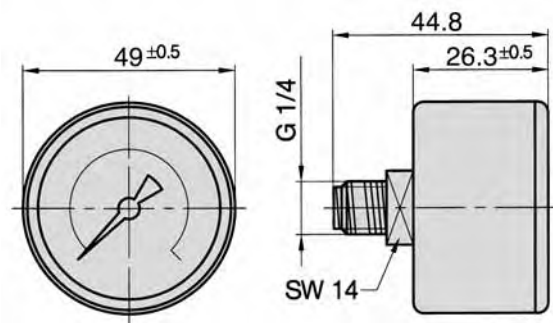
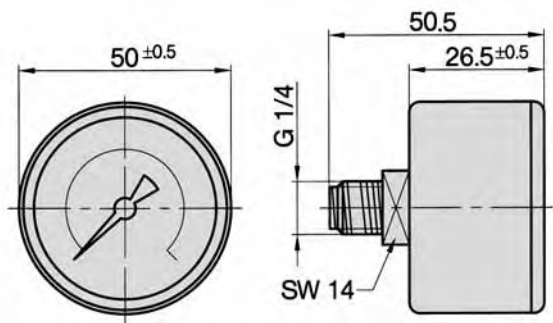
Accessories for series

Y

Pressure gauge MXA-50



Pressure gauge MXA-63

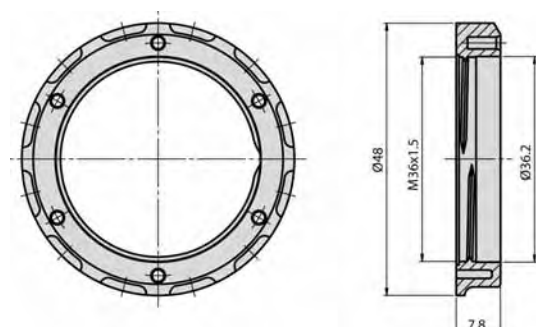


Sealing for assembly of gauge is included.

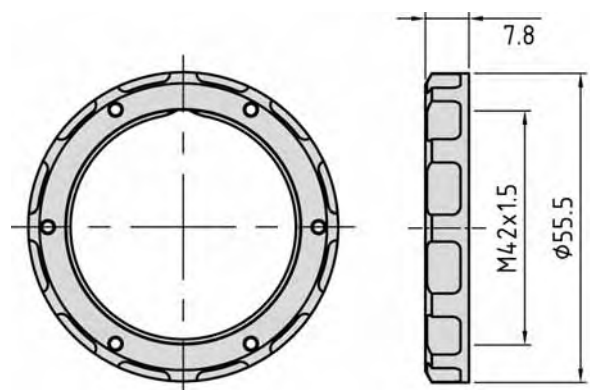
Order number	MXA-50-10-14	MXA-63-10-14	MXA-50-16-14	MXA-63-16-14
Ranges	0 ... 10 bar (0 ... 145 psi)		0 ... 16 bar (0 ... 232 psi)	
Application	Constant load 3/4 x scale value Alternating load 2/3 x scale value			
Materials	Body : Plastic, highly shock resistant, black (ABS)			
	Window : Plexiglass, convex, clipped-on			
	Dial : Plastic, white with stop pin, scale black/red			
	Pointer : Plastic, black			
	Movement : CuZn alloy			
	Measuring element: Cu alloy			
Temperature range	– 40 °C ... + 60 °C (– 40 °F ... + 140 °F)			
Accuracy class	2.5 according to EN 837-1			
Temperature drift	0.4 % / 10 K if deviation from normal temperature 20 °C (68 °F).			
Weight	0.071 kg (0.156 lb.)	0.08 kg (0.18 lb.)	0.071 kg (0.156 lb.)	0.08 kg (0.18 lb.)

Mounting nut RMY-01

material: plastic



Mounting nut RMY-02



Accessories for series

Y

Serie Y1



metal bowl with condensate drain
BE-Y1-HA semi-automatic
BE-Y1-AM-NC automatic normally closed
BE-Y1-AM-NO automatic normally open



metal bowl without drain,
 for activated carbon filter
BE-Y1-KF



metal bowl without drain,
 for lubricator
BE-Y1-L

Serie Y2



metal bowl with condensate drain
BE-Y2-HA semi-automatic
BE-Y2-AM-NC automatic normally closed
BE-Y2-AM-NO automatic normally open



metal bowl without drain,
 for activated carbon filter
BE-Y2-KF



metal bowl without drain,
 for lubricator
BE-Y2-L

Serie Y3



metal bowl with condensate drain
BE-Y3-HA semi-automatic
BE-Y3-AM-NC automatic normally closed
BE-Y3-AM-NO automatic normally open



metal bowl without drain,
 for activated carbon filter
BE-Y3-KF



metal bowl without drain,
 for lubricator
BE-Y3-L

Serie Y1, Y2, Y3



auto drain
AM-Y-NC normally closed
AM-Y-NO normally open



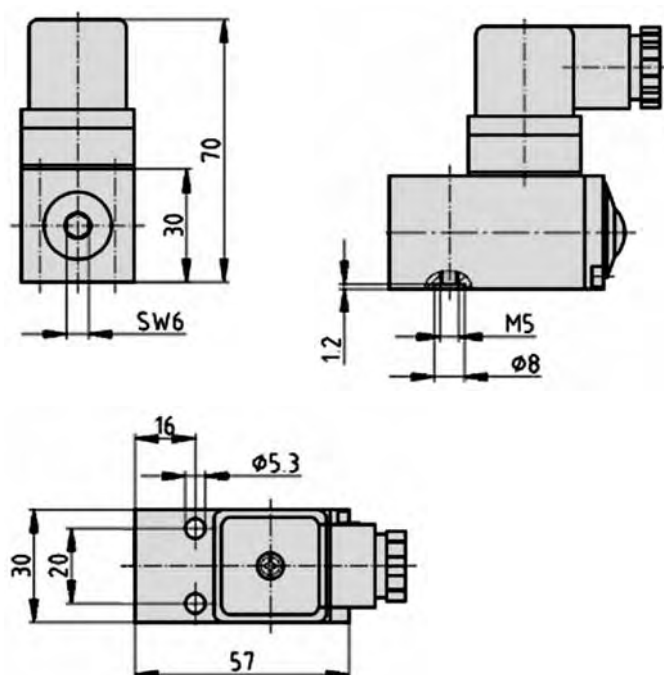
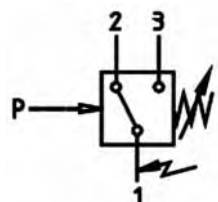
transformer
PE-Y-10



lock
VH-Y-32 with key
VH-Y-31 without key

Technical data for series

PE-Y-10



direct-current switch-power

[V]	resistive load [A]	inductive load [A]
30	5	3
115	0,40	0,05
250	0,25	0,02

alternating-current switch-power

[V]	resistive load [A]	inductive load [A]
115	5	3
250	5	3

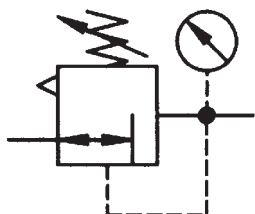
Order number	PE-Y-10
media	air, non corrosive gases and fluids
description	diaphragm
mounting	arbitrary
working range of pressure	0,5 – 10 bar (7.25 to 145 PSI) (overpressure 80 bar (1.160 PSI))
switch difference	4 % – 10 %
temperature range	– 10 °C ... + 80 °C (+ 14 °F ... + 176 °F)
electr. connection	plug connection DIN 43650, form A
circuit element	micro-switch, one wire change over
type of isolation	IP 65
switch function	at increasing pressure terminal 1 – 3 NO terminal 1 – 2 NC
fixing	flange connection
weight	0,172 kg (0.379 lb)

Precision regulator G 1/4, G 1/2

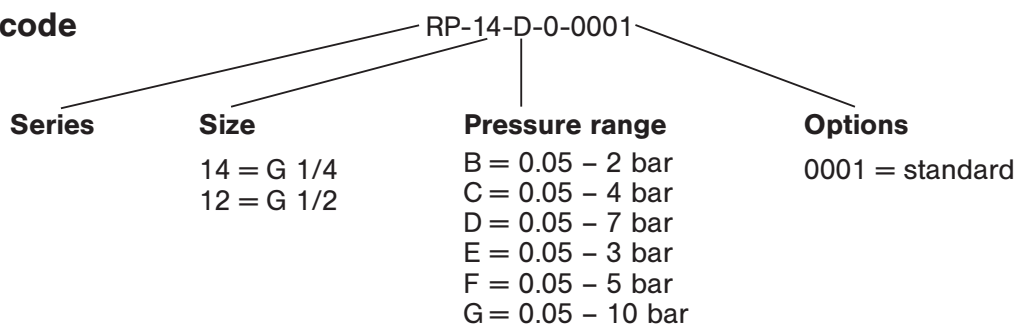


Technical data for series

RP



Order code



Series 14 is only available for pressure ranges B, C and D.
Series 12 is only available for pressure ranges D, E, F and G.

Design and function

Regulator with diaphragm and relieving feature. This regulator should be used with finely filtered air only. Especially for the use in control and processing applications.

Order number Please complete according to order code.	RP-14-...	RP-12-...
Connection	G 1/4	G 1/2
Gauge connection size	G 1/8	G 1/4
Medium	compressed air sintered 0.01 µm, oilfree	
Mounting	arbitrary	
Input range	2 ... 16 bar (29 ... 232 psi)	
Own air consumption	< 2.2 NI/min at 5 bar input pressure	< 1.5 NI/min at 5 bar input pressure
	< 3 NI/min at 7 bar input pressure	< 2 NI/min at 7 bar input pressure
	< 4.1 NI/min at 10 bar input pressure	< 4 NI/min at 10 bar input pressure
		< 6 NI/min at 12 bar input pressure
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)	
Weight	0.600 kg (1.323 lbs.)	1.500 kg (3.307 lbs.)

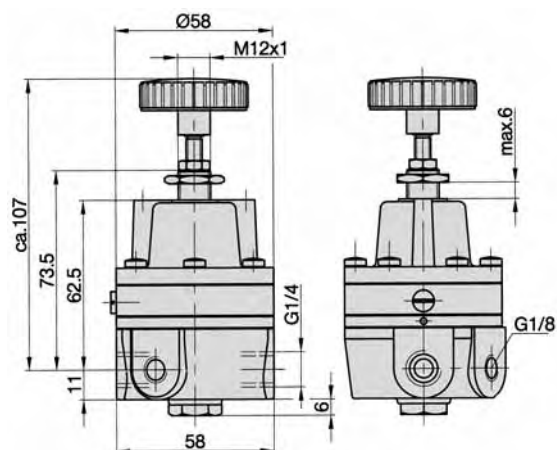
Precision regulator G 1/4, G 1/2



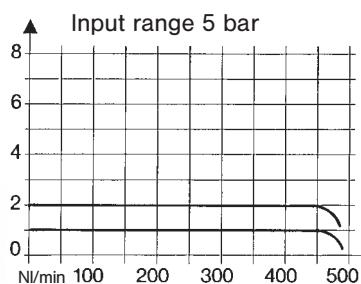
Dimensions for series

RP

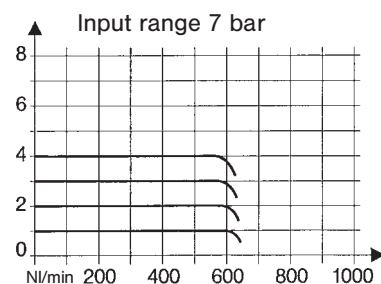
RP-14



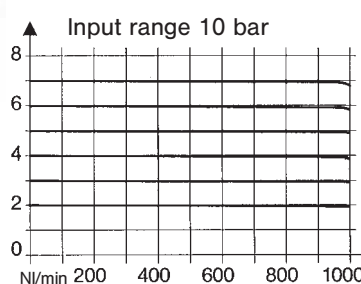
flow characteristics 0.05 – 2 bar (B)



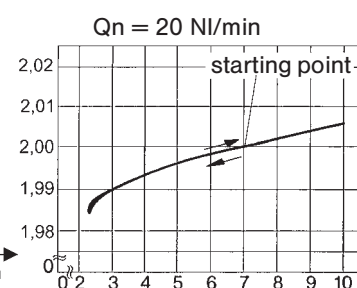
flow characteristics 0.05 – 4 bar (C)



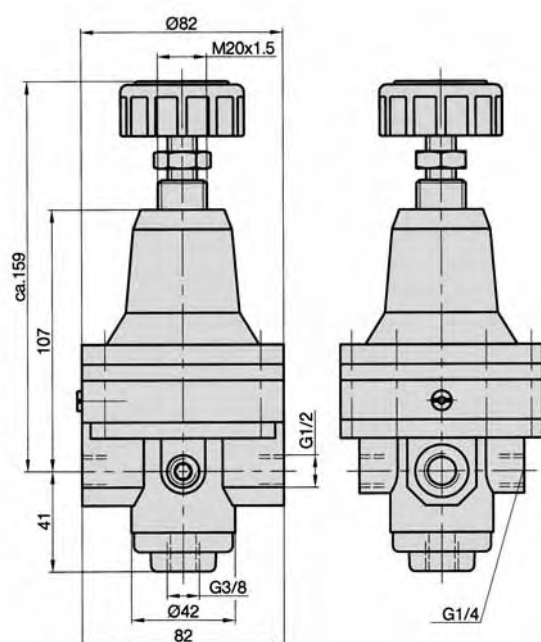
flow characteristics 0.05 – 7 bar (D)



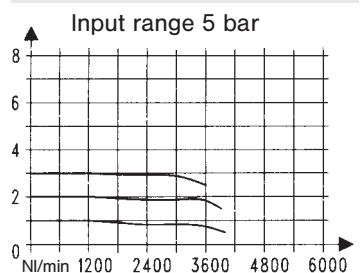
pressure characteristic



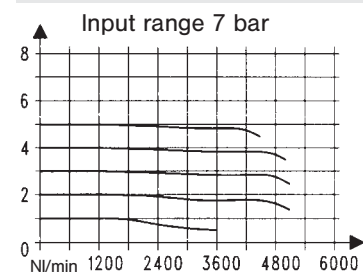
RP-12



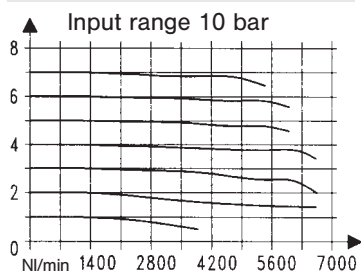
flow characteristics 0.05 – 3 bar (E)



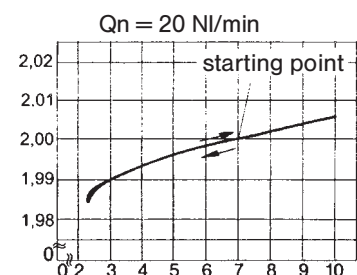
flow characteristics 0.05 – 5 bar (F)









flow characteristics 0.05 – 7 bar (D)



pressure characteristic

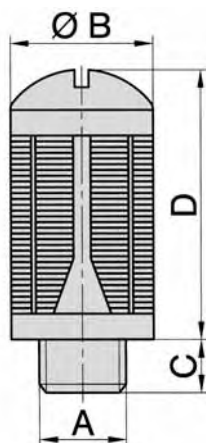


Functional fittings

	<p>40-90 Silencer, plastic 11.121</p> <p>40-501, 40-502 Silencer, sintered bronze 11.122</p>	
	<p>40-358 Flow control silencer 11.123</p> <p>40-350 Check valves 11.124</p>	
	<p>40-351 Hand sliding valves 11.125</p> <p>40-352, 40-353 Quick couplings 11.126</p>	
	<p>40-354 Miniature regulator, screw-in type 11.128</p> <p>40-355 Check valves 11.130</p>	
	<p>40-356, 40-357 Flow control valves 11.132</p>	

Series

40-90



Design and function

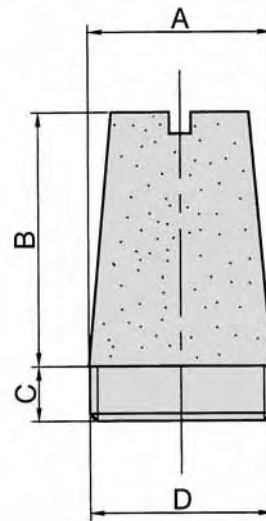
Silencer with granular filling.

Order number	40-90-018	40-90-014	40-90-038	40-90-012-01	40-90-034-01	40-90-100-01
Pressure range	0 ... 6 bar (0 ... 87 psi)					
Noise level 4 bar	84 dB	81 dB	83 dB	83 dB	85 dB	85 dB
Noise level 6 bar	87 dB	84 dB	90 dB	90 dB	91 dB	90 dB
Flow rate at 4 bar	1000 NI/min (1.016 Cv)	1600 NI/min (1.626 Cv)	2100 NI/min (2.134 Cv)	2700 NI/min (2.743 Cv)	7500 NI/min (7.622 Cv)	8300 NI/min (8.435 Cv)
Material	Acetal-resin					
Dimension A	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1
Dimension B	15	19.5	24.5	24.5	48	48
Dimension C	6	8	11	11	18	18
Dimension D	26.5	35	47	47	97	97

Silencer, sintered bronze

Series

40-501

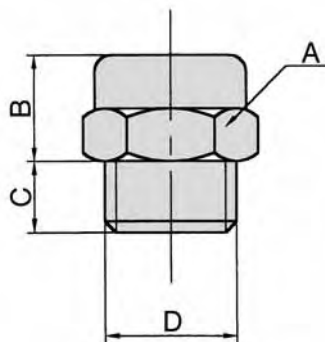


Material: Sintered bronze

Order number	40-501-M 5	40-501-18	40-501-14	40-501-38	40-501-12	40-501-34	40-501-100
Dimension A	9	11	14	18	24	30	38
Dimension B	16	18	20	28	33	53	54
Dimension C	5	6	8	8	10	12	15
Dimension D	M5 (10/32 UNF)	G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1

Series

40-502

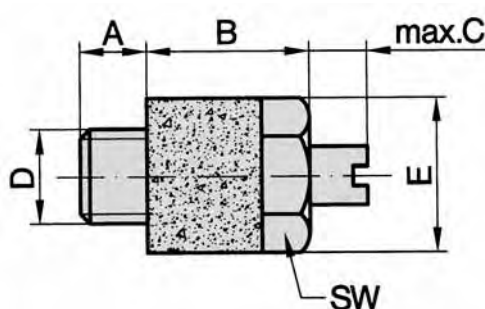


Material: Brass, sintered bronze

Order number	40-502-M 5	40-502-18	40-502-14
Dimension A	8	13	16
Dimension B	5	7	8.5
Dimension C	4	6	8
Dimension D	M5 (10/32 UNF)	G 1/8	G 1/4

Series

40-358

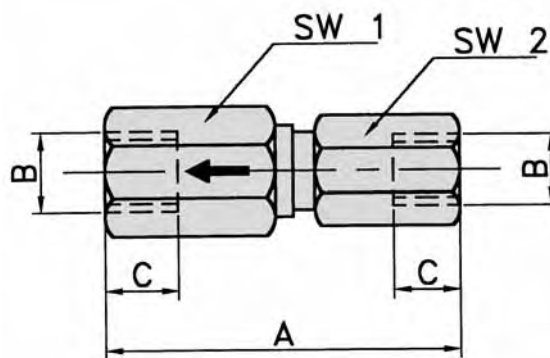


Order number	40-358-18	40-358-14
Dimension A	6	8
Dimension B	17	22
Dimension C	6	8
Dimension D	G 1/8	G 1/4
Dimension E	∅ 16	∅ 19
SW (wrench size)	14	17
Nominal size	4 mm	6 mm
Flow rate	320 NI/min (0.325 Cv)	750 NI/min (0.762 Cv)
Pressure range	0 ... 16 bar (0 ... 232 psi)	
Temperature range	- 10° C ... + 100° C (+ 14 °F ... + 212 °F)	
Materials	Brass, sintered bronze, NBR	
Weight	0.017 kg (0.037 lb.)	0.034 kg (0.075 lb.)

Check valves

Series

40-350



Design and function

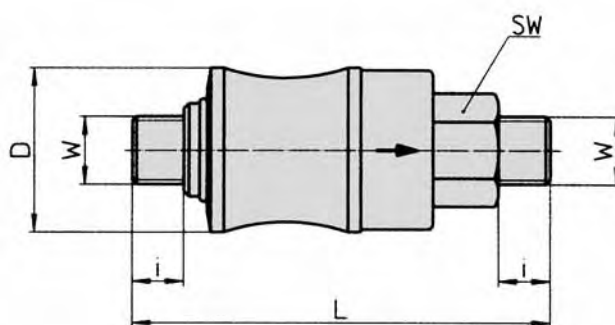
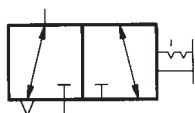
Seat valve with spring return.

Order number	40-350-18-18	40-350-14-14	40-350-38-38	40-350-12-12
Dimension A	39 mm	45,5 mm	59,5 mm	66 mm
Dimension B	G 1/8	G 1/4	G 3/8	G 1/2
Dimension C	8 mm	10 mm	10 mm	14 mm
SW 1 (wrench size)	14 mm	17 mm	22 mm	27 mm
SW 2 (wrench size)	14 mm	17 mm	22 mm	27 mm
Flow rate	230 NI/min (0.234 Cv)	750 NI/min (0.762 Cv)	1650 NI/min (1.676 Cv)	2200 NI/min (2.235 Cv)
Pressure range	0.5 ... 15 bar (7.25 ... 217 psi)			
Temperature range	- 10° C ... + 60° C (+ 14 °F ... + 140 °F)			
Materials	Body: brass, Seals: NBR			
Weight	0.036 kg (0.079 lb.)	0.051 kg (0.112 lb.)	0.144 kg (0.317 lb.)	0.175 kg (0.386 lbs.)

Hand sliding valves

Series

40-351



Design and function

Hand operated 3/2-way sliding valve for inline mounting.

Order number	40-351-18	40-351-14	40-351-38	40-351-12
Dimension D	26 mm	32 mm	37 mm	44 mm
Dimension L	72 mm	81 mm	85 mm	98 mm
Dimension i	8 mm	10 mm	10 mm	12 mm
Dimension W	G 1/8	G 1/4	G 3/8	G 1/2
SW (wrench size)	14 mm	19 mm	22 mm	27 mm
Nominal size	6 mm	8 mm	10 mm	13 mm
Flow rate 1 → 2	750 NI/min (0.762 Cv)	1500 NI/min (1.524 Cv)	2250 NI/min (2.286 Cv)	3000 NI/min (3.049 Cv)
Flow rate 2 → 3	1000 NI/min (1.016 Cv)	2000 NI/min (2.032 Cv)	4160 NI/min (4.228 Cv)	5500 NI/min (5.589 Cv)
Mounting	horizontal			
Pressure range	1 ... 12 bar (14 ... 174 psi)			
Temperature range	0° C ... 90° C (+ 32 °F ... + 194 °F)			
Materials	Body: brass, Sleeve: Al (anodized), Seals: NBR			
Weight	0.100 kg (0.220 lb.)	0.160 kg (0.353 lb.)	0.220 kg (0.485 lb.)	0.370 kg (0.816 lb.)

Quick connect couplings

Technical data for series

40-352, 40-353



Quick coupling
male thread



Quick coupling,
tube connection

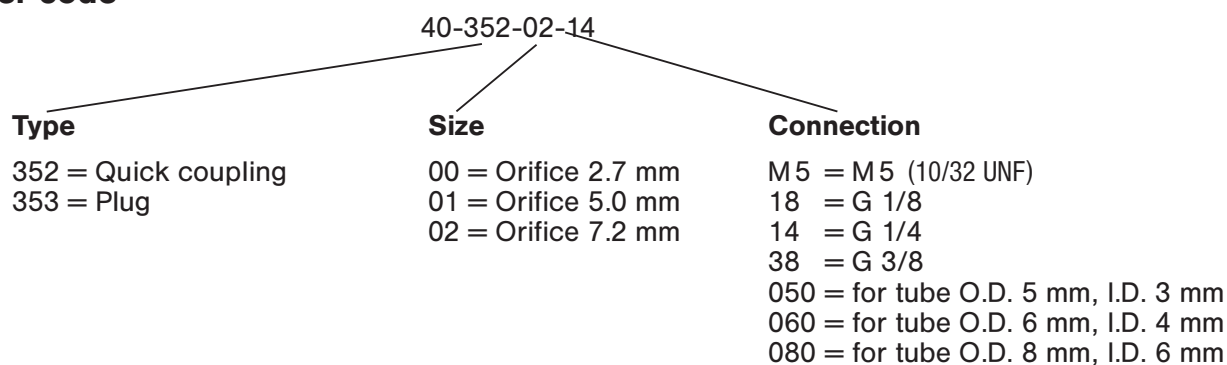


Plug male thread



Plug, tube
connection

Order code



Design and function

Single shut-off quick connect couplings.

Order number Please complete according to order code.	40-352-00-...	40-353-00-...	40-352-01-...	40-353-01-...	40-352-02-...	40-353-02-...
Nominal size	2.7 mm		5 mm		7.2 mm	
Flow rate	165 NI/min (0.168 Cv)		560 NI/min (0.569 Cv)		1000 NI/min (1.016 Cv)	
Pressure range	0 ... 12 bar (0 ... 174 psi)					
Temperature range	− 20 °C ... + 100 °C (− 4 °F ... + 212 °F)					
Materials	Body: brass, Inner parts: stainless steel, Seals: PA					

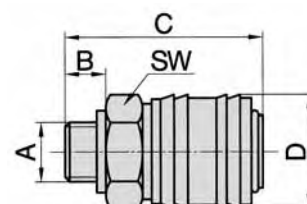
Quick connect couplings

Dimensions for series

40-352, 40-353

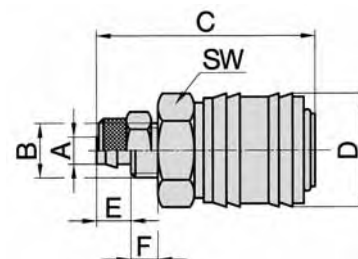
Quick coupling, male thread

Order number	40-352-00-M5	40-352-01-18	40-352-02-14	40-352-02-38
Dimension A	M5	G 1/8	G 1/4	G 3/8
Dimension B	5	7	9	9
Dimension C	26	36	39	41
Dimension D	10	16	25	25
SW (wrench size)	9	14	22	22



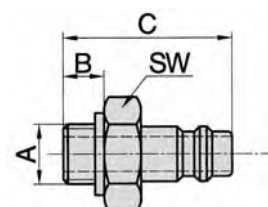
Quick coupling, plastic tube connection

Order number	40-352-00-050	40-352-01-060	40-352-01-080	40-352-02-080
Dimension A	tube O.D. 5, I.D. 3	tube O.D. 6, I.D. 4	tube O.D. 8, I.D. 6	tube O.D. 8, I.D. 6
Dimension B	M7 x 0.5	M10 x 1	M12 x 1	M12 x 1
Dimension C	34	42	42	45
Dimension D	10	16	16	25
Dimension E	7	7	7	7
Dimension F	5	6	6	6
SW (wrench size)	9	14	14	21



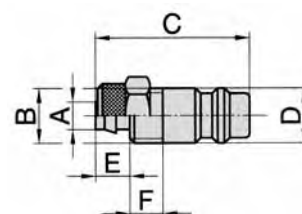
Plug, male thread

Order number	40-353-00-M5	40-353-01-18	40-353-02-14	40-353-02-38
Dimension A	M5 (10/32 UNF)	G 1/8	G 1/4	G 3/8
Dimension B	5	7	9	9
Dimension C	18	25	33	33
SW (wrench size)	7	14	17	19



Plug, plastic tube connection

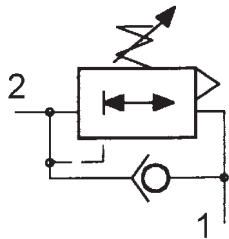
Order number	40-353-00-050	40-353-01-060	40-353-01-080	40-353-02-060	40-353-02-080
Dimension A	tube O.D. 5, I.D. 3	tube O.D. 6, I.D. 4	tube O.D. 8, I.D. 6	tube O.D. 6, I.D. 4	tube O.D. 8, I.D. 6
Dimension B	M7 x 0.5	M10 x 1	M12 x 1	M10 x 1	M12 x 1
Dimension C	25	32	32	34	34
Dimension D	7	10	12	12	12
Dimension E	7	6	6	7	7
Dimension F	5	6	6	6	8



Miniature pressure regulator, screw-in type

Technical data for

40-354



Design and function

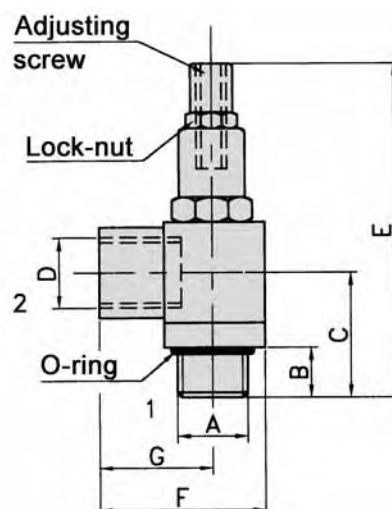
Pressure regulator with relieving feature. The outlet pressure of the regulator remains constant regardless of incoming pressure changes. The pressure is adjustable in flow direction 1 to 2. Direction 2 to 1 remains open by an integrated check valve.

Order number	40-354-18	40-354-18-1	40-354-14	40-354-14-1	40-354-12	40-354-12-1
Connection	G 1/8	1/8 NPTF	G 1/4	G 1/4	G 1/2	G 1/2
Flow rate	320 NI/min (0.325 Cv)		600 NI/min (0.610 Cv)		830 NI/min (0.843 Cv)	
Input range	1 ... 16 bar (14 ... 232 psi)					
Output range	1 ... 8 bar (14 ... 116 psi)					
Temperature range	− 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)					
max. tightening torques Nm	10 (7.4 lbs. ft.)	7 (5.1 lbs. ft.)	12 (8.8 lbs. ft.)	15 (11 lbs. ft.)	30 (22.1 lbs. ft.)	20 (14.7 lbs. ft.)
Materials	Body: Al (black anodized), brass (zinc-plated), PA; Seals: NBR					
Weight	0.06 kg (0.132 lb.)		0.08 kg (0.176 lb.)		0.18 kg (0.397 lb.)	

Miniature regulator, screw-in type

Dimensions for

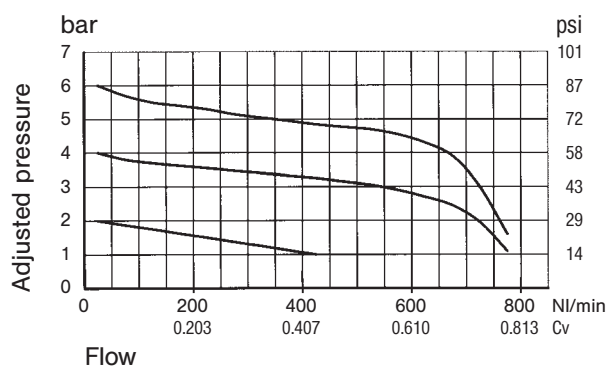
40-354



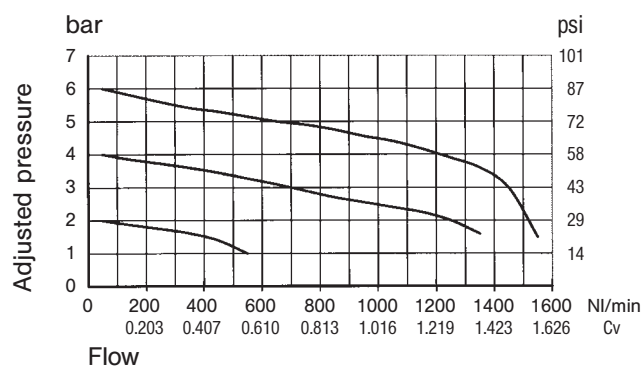
Order number	40-354-18	40-354-18-1	40-354-14	40-354-14-1	40-354-12	40-354-12-1
Dimension A	G 1/8	1/8 NPTF	G 1/4	G 1/4	G 1/2	G 1/2
Dimension B	6.3 mm		9.5 mm		11.5 mm	
Dimension C	19.8 mm		25.8 mm		34 mm	
Dimension D	G 1/8	1/8 NPTF	G 1/4	G 1/4	G 1/2	G 1/2
Dimension E max.	73 mm		81 mm		89 mm	
Dimension F	26.7 mm		32.9 mm		46.3 mm	
Dimension G	18.5 mm		22.5 mm		31 mm	

Flow characteristics

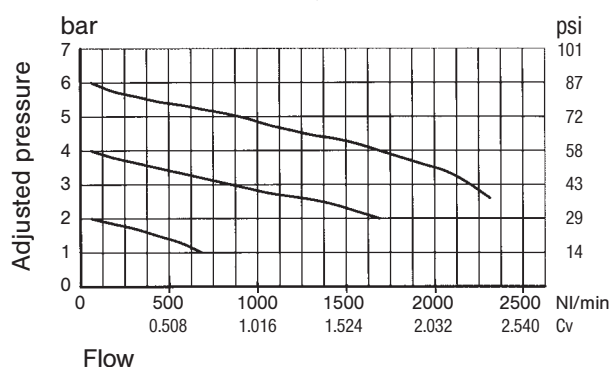
Order-number 40-354-18, 40-354-18-1



Order-number 40-354-14, 40-354-14-1



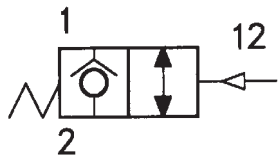
Order-number 40-354-12, 40-354-12-1



Check valve, pilot operated

Technical data for

40-355



Design and function

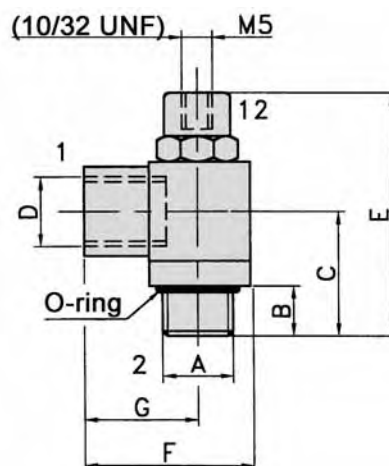
Pilot operated check valve with spring return.

Order number	40-355-18	40-355-18-1	40-355-14	40-355-14-1	40-355-38	40-355-38-1	40-355-12	40-355-12-1
Connection	G 1/8	1/8 NPTF	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2	G 1/2
Flow rate 1 → 2	128 NI/min (0.131 Cv)		617 NI/min (0.627 Cv)		1168 NI/min (1.187 Cv)		1888 NI/min (1.918 Cv)	
Flow rate 2 → 1	289 NI/min (0.294 Cv)		676 NI/min (0.687 Cv)		1156 NI/min (1.175 Cv)		1910 NI/min (1.941 Cv)	
Pressure range	1 ... 10 bar (14 ... 145 psi)							
Temperature range	– 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)							
max. tightening torques Nm	10 (7.4 lbs. ft.)	7 (5.1 lbs. ft.)	12 (8.8 lbs. ft.)	15 (11 lbs. ft.)	20 (14.7 lbs. ft.)	20 (14.7 lbs. ft.)	30 (22.1 lbs. ft.)	20 (14.7 lbs. ft.)
Materials	Body: Al (anodized), brass (zinc-plated), PA; Seals: NBR							
Weight	0.03 kg (0.066 lb.)		0.06 kg (0.132 lb.)		0.10 kg (0.220 lb.)		0.16 kg (0.353 lb.)	

Check valve, pilot operated

Dimensions for

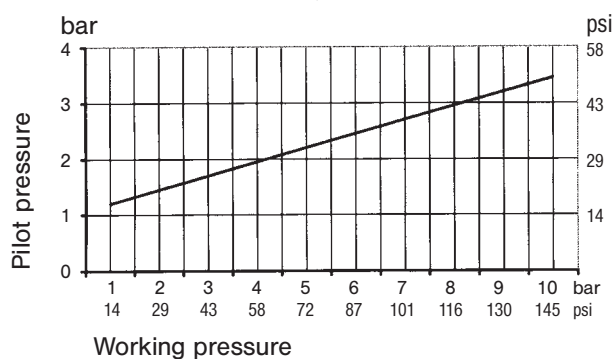
40-355



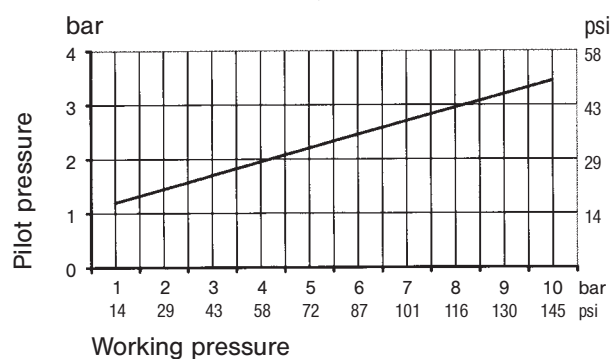
Order number	40-355-18	40-355-18-1	40-355-14	40-355-14-1	40-355-38	40-355-38-1	40-355-12	40-355-12-1
Dimension A	G 1/8	1/8 NPTF	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2	G 1/2
Dimension B	6.3 mm		9.5 mm		9.5 mm		11.5 mm	
Dimension C	19.8 mm		25.8 mm		29 mm		36 mm	
Dimension D	G 1/8	1/8 NPTF	G 1/4	G 1/4	G 3/8	G 3/8	G 1/2	G 1/2
Dimension E max.	41 mm		48 mm		55 mm		65.5 mm	
Dimension F	26.7 mm		32.9 mm		41 mm		46.3 mm	
Dimension G	18.5 mm		22.5 mm		28.5 mm		31 mm	

Pressure characteristics

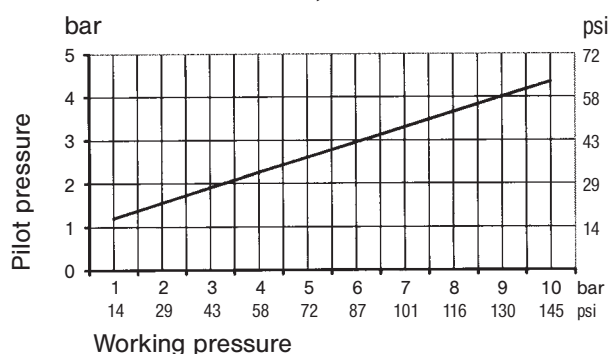
Order-number 40-355-18, 40-355-18-1



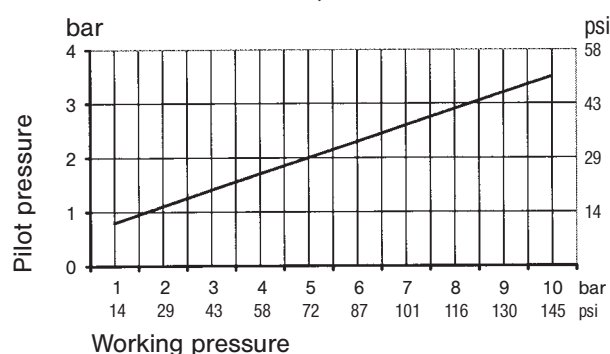
Order-number 40-355-14, 40-355-14-1



Order-number 40-355-38, 40-355-38-1



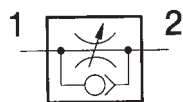
Order-number 40-355-12, 40-355-12-1



Flow control valve, screw-in type

Technical data for series

40-356, 40-357



40-356



40-357

Order code

40-356-28-060

Function

356 = metered-out
357 = metered-in

Connections

M 5 = M 5 (10/32 UNF) compression fitting
25 = M 5 (10/32 UNF) push-in type
18 = G 1/8 compression fitting
28 = G 1/8 push-in type
14 = G 1/4 compression fitting
24 = G 1/4 push-in type
38 = G 3/8 push-in type

Tube sizes

040 = O.D. 4 mm, I.D. 2 mm
050 = O.D. 5 mm, I.D. 3 mm
060 = O.D. 6 mm, I.D. 4 mm
080 = O.D. 8 mm, I.D. 6 mm
100 = O.D. 10 mm, I.D. 8 mm

Design and function

Throttle valve to control the speed of pneumatic devices. The flow rate can be adjusted while air is flowing. The swivel can be rotated by 360°.

Order number Please complete according to order code.	40-356-M5-... 40-356-25-...	40-357-M5-... 40-357-25-...	40-356-18-... 40-356-28-...	40-357-18-... 40-357-28-...	40-356-14-... 40-356-24-...	40-357-14-... 40-357-24-...	40-356-38-...
Function	metered-out	metered-in	metered-out	metered-in	metered-out	metered-in	metered-out
Connection	M 5 (10/32 UNF)		G 1/8		G 1/4		G 3/8
Flow rate 2 → 1*	30 NI/min (0.030 Cv)	40 NI/min (0.041 Cv)	150 NI/min (0.152 Cv)	200 NI/min (0.203 Cv)	300 NI/min (0.305 Cv)	400 NI/min (0.407 Cv)	600 NI/min (0.610 Cv)
Flow rate 1 → 2	40 NI/min (0.041 Cv)	30 NI/min (0.030 Cv)	200 NI/min (0.203 Cv)	150 NI/min (0.152 Cv)	400 NI/min (0.407 Cv)	300 NI/min (0.305 Cv)	900 NI/min (0.915 Cv)
Nominal size	1.5 mm		3 mm		4.5 mm		6.5 mm
Materials	brass (nickel-plated), Seals: NBR, Spindle: stainless steel						
Pressure range	0.5 ... 10 bar (7 ... 145 psi)						
Temperature range	− 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)						

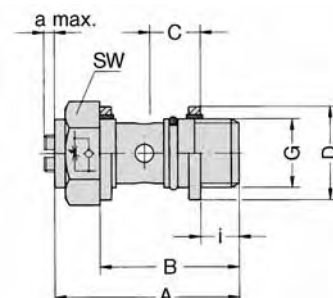
* flow figures based on completely closed throttle.

Flow control valve, screw-in type

Dimensions for series

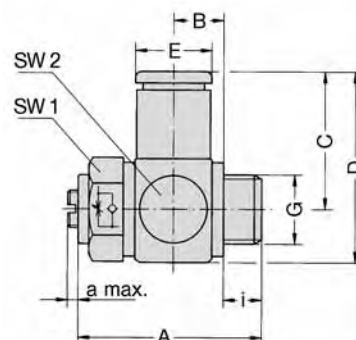
40-356, 40-357

Throttle hollow screw



Order number	SW	i	A	B	C	a max.	D
40-356-18	14	6	32	25	9.5	2	14.7
40-357-18	14	6	32	25	9.5	2	14.7
40-356-14	17	8	35.5	27	9.5	2	17.7
40-357-14	17	8	35.5	27	9.5	2	17.7

Throttle hollow screw, push-in type



Order number	SW 1	SW 2	i	A	B	C	D	E	a max.
40-356-25-040	8	8.5	3.5	20	5.2	16.5	20.5	8.6	1
40-357-25-040	8	8.5	3.5	20	5.2	16.5	20.5	8.6	1
40-356-25-050	8	10	4	22	6	18.5	23	9.9	1
40-357-25-050	8	10	4	22	6	18.5	23	9.9	1
40-356-25-060	8	11	3	22	6.5	20	24.5	11.9	1
40-357-25-060	8	11	3	22	6.5	20	24.5	11.9	1
40-356-28-040	14	16	6	32	9.5	18.5	26.5	8.6	2
40-357-28-040	14	16	6	32	9.5	18.5	26.5	8.6	2
40-356-28-060	14	16	6	32	9.5	22	30	11.9	2
40-357-28-060	14	16	6	32	9.5	22	30	11.9	2
40-356-28-080	14	16	6	32	9.5	24.5	32.5	14.4	2
40-357-28-080	14	16	6	32	9.5	24.5	32.5	14.4	2
40-356-24-040	17	20	8	35.5	9.5	20.5	30.5	8.6	2
40-357-24-040	17	20	8	35.5	9.5	20.5	30.5	8.6	2
40-356-24-060	17	20	8	35.5	9.5	24	34	11.9	2
40-357-24-060	17	20	8	35.5	9.5	24	34	11.9	2
40-356-24-080	17	20	8	35.5	9.5	26.5	36.5	14.4	2
40-357-24-080	17	20	8	35.5	9.5	26.5	36.5	14.4	2
40-356-38-080	20	22	8.5	45	14.3	28	39	14.4	2
40-356-38-100	20	22	8.5	45	14.3	30.5	41.5	14.4	2