

Overview

Description	Page		
	Characteristics	Dimensions	Order instructions Type overview
Filter-water-separator Pressure range up to max. 30 bar	156–159	160	155, 156
Pressure regulating valve Pressure range up to max. 40 bar	156–159	161	155, 156
Low-pressure regulating valve	156–159	162	155, 156
Pressure regulating valve -40 to +80°C	156–159	161	155, 156
Pressure regulating valve -40 to +80°C	156–159	161	155, 156
Filter-regulator -40 to +80°C	156–159	160	155, 156
Pressure regulating valve Brass version For panel mounting	156–159	163	155, 156
Pressure regulating valve (water regulator)	156–159	163	155, 156
Pressure regulating valve for weight compensation	156–159	162	155, 156
Precision pressure regulating valve	156–159	164	155, 156
Filter-regulator for small capacity compres- sors (for direct mounting onto compressor's receiver)	156–159	164	155, 156

Special units

- For high pressure ranges
- For special temperature ranges
- For special media



Special units

- For high pressure ranges
- For special temperature ranges
- For special media

Characteristics

Pressures quoted as gauge pressure

Characteristics	Symbol	Unit	Filter-regulator for -40 to +80°C	Pressure regulating valve for -40 to +80°C	Pressure regulating valve for -40 to +80°C	Filter-water-separator $p_{max.} = 30 \text{ bar}$
For series			airfit swing	airfit swing	airfit comfort	airfit swing
Type			SK-1/4-5D	SR-1/4-SO	CR-1/2-SO	SF-1/4-D-SO
Port size			G1/4	G1/4	G1/2	G1/4
Max. condensate capacity		cm ³	22	–	–	22
Pore size of filter element		µm	5	–	–	30
Condensate drainage			Manual, semi-automatic (pressure relief)	–	–	Manual, semi-automatic (pressure relief)
Installation			Vertical, bowl at the bottom	In any position	In any position	Vertical, bowl at the bottom
Medium and ambient temperatures	T_{min} T_{max}	°C °C	-40 +80	-40 +80	-40 +80	0 +50 at 10 bar
Weight (mass)		kg	0.35	0.3	0.55	0.25
Pneumatic characteristics						
Operating pressure range – inlet pressure	$p_{1 \text{ min}}$	bar	0	0	0	0
	$p_{1 \text{ max}}$	bar	16	16	16	30
Operating pressure range – outlet pressure	$p_{2 \text{ min}}$	bar	0.5	0.5	0.5	–
	$p_{2 \text{ max}}$	bar	8	8	8	–
Min. pressure difference	$p_1 - p_2$	bar	0.2	0.2	0.2	–
Hysteresis $p_1=10/p_2=0$ $p_1=10/p_2=8$		bar	0.5	0.5	0.9	–
		bar	0.4	0.4	0.7	–
Maximum flow ¹⁾	Q_{max}	l/min	2280	2850	5700	1440 ³⁾
		m ³ /h	137	171	342	86
Degree of moisture separation at recommended flow	η	%	95	–	–	
Own air usage	Q	l/min	–	–	–	

¹⁾ At $p_1 = 10 \text{ bar}$ and $p_2 = 6.3 \text{ bar}$, $\Delta p = 1 \text{ bar}$

³⁾ At $p_1 = 6.3 \text{ bar}$, $\Delta p = 1 \text{ bar}$



Pressure regulating valve $p_{max.} = 40 \text{ bar}$	Pressure regulating valve for panel mounting		Pressure regulating valve for water applications		Low-pressure regulating valve		Pressure regulating valve for weight compensation		Filter-regulator for small capacity compressors		Precision pressure regulating valve for three different pressure ranges		
airfit swing	airfit light (with brass housing)		airfit light		airfit light		airfit swing		-		-		
SR-1/4-SO	MRS-06	MRS-08	WRP-06	WRP-08	MRP-1/8-SO	MRP-1/4-SO	SR-1/4-PE-MW	SR-1/4-PE-MW	MFRS-08		XRP-08-8	XRP-08-4	XRP-08-08 ²⁾
G1/4	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4	G1/4	G3/8	$p_1 = G3/8 \text{ A}$ $p_2 = G1/4$		G1/4	G1/4	G1/4
-	-	-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-	-	30		-	-	-
-	-	-	-	-	-	-	-	-	Permanent		-	-	-
In any position	In-line mounting, panel mounting \emptyset to DIN 43696 (30.3 ^{+0.2} mm)		In-line mounting, wall mounting with bracket, panel mounting \emptyset to DIN 43696 (30.3 ^{+0.2} mm)		In any position		In any position		Vertical, bowl at the bottom		In any position		
0 +60	0 +60	0 +60	0 +60	0 +60	0 +50	0 +50	0 +60	0 +60	0 +60 at 10 bar		-5 +60	-5 +60	-5 +60
0.3	0.18	0.18	0.11	0.11	0.11	0.11	-	-	0.5		0.7	0.7	0.7
0 40	0 16	0 16	0 10	0 10	0 10	0 10	0 16	0 16	0 10		1 10	1 7	1 7
0.5 16	0.5 8	0.5 8	1 4	1 4	0.1 0.25	0.1 0.25	0.2 2	0.2 2	0.5 8		0.5 8	0.1 4	0.02 0.8
0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.3	0.2		-	-	-
0.5 0.4	1.6 0.6	1.6 0.6	-	-	-	-	-	-	1.6 0.6		Max. 0.1 bar		
2850 171	550 33	585 35	11 ⁵⁾ 0.66	11 ⁵⁾ 0.66	650 39	650 39	560 34		550 33		675 ⁴⁾ 41	375 ⁴⁾ 23	135 ⁴⁾ 8
-	-	-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-	-	-		Max. 10 at full airflow		

²⁾ The precision pressure regulator should not be used for "static" applications, i.e. with zero airflow. In such cases a small "artificial" airflow should be created on the secondary side using a 0.3 – 0.6 mm \emptyset jet.

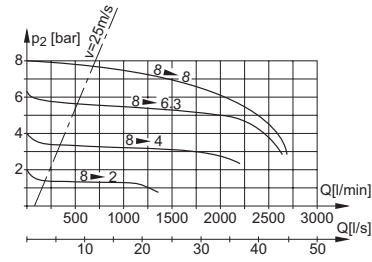
⁴⁾ Corresponds to 25 m/s with NW8 mm bore.

⁵⁾ At $p_1 = 5 \text{ bar}$ and $p_2 = 2 \text{ bar}$

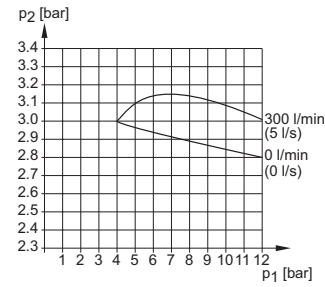
Filter-regulator – Type: SK-1/4-5D
(-40°C to +80°C)

Special units

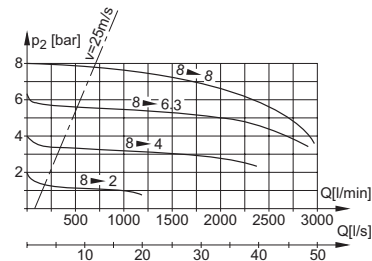
Flow characteristics



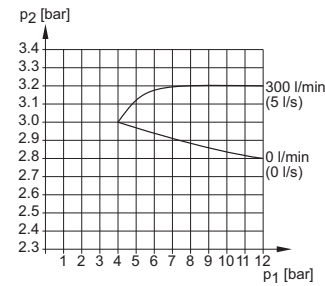
Outlet pressure variation with fluctuating inlet pressure



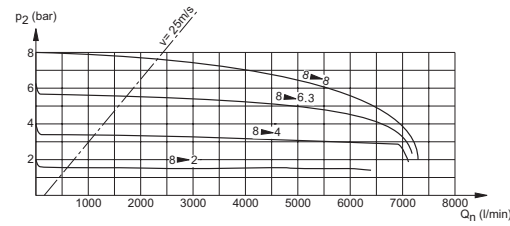
Pressure regulating valve
Type: SR-1/4 -SO (-40°C to +80°C)
Type: SR-1/4 -SO (0 to 40 bar)



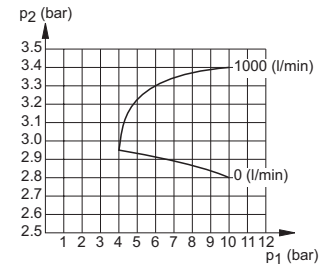
Outlet pressure variation with fluctuating inlet pressure



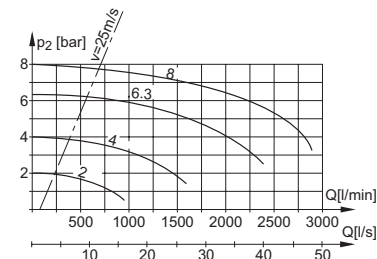
Pressure regulating valve – Type: CR-1/2 -SO
(-40°C bis +80°C)



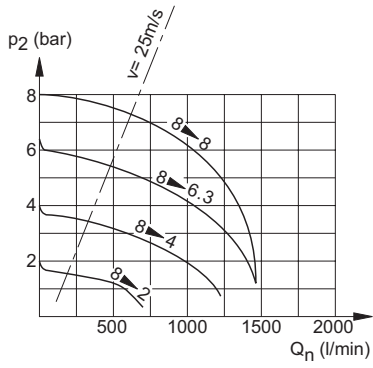
Outlet pressure variation with fluctuating inlet pressure



Filter-water-separator – Type: SF-1/4-D-SO
(0 to 30 bar)



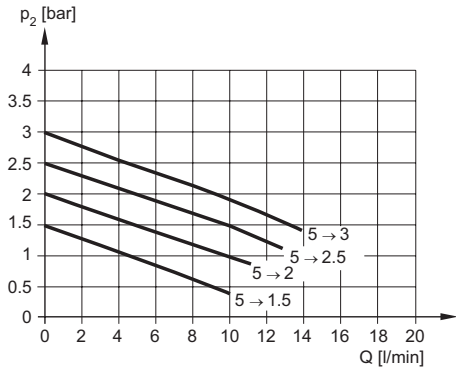
Pressure regulating valve – Type: MRS-08



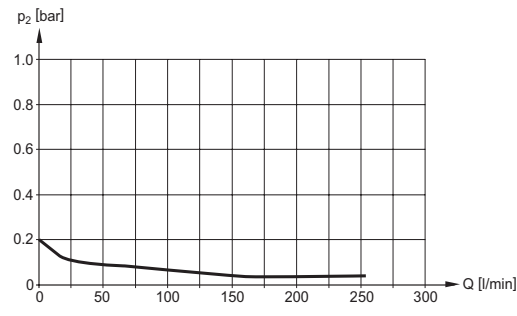
Special units

Flow characteristics

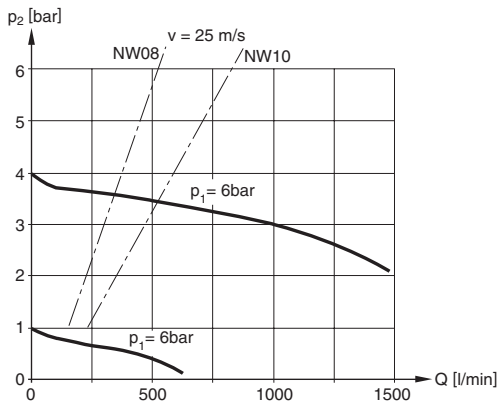
Pressure regulating valve for use with water
Type: WRP-06, WRP-08



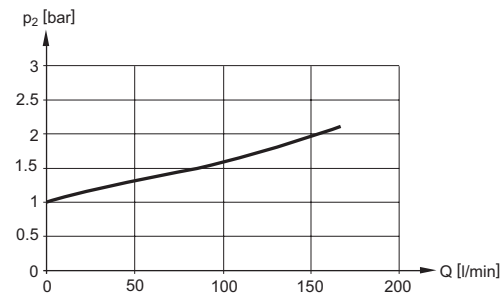
Low-pressure regulating valve
Type: MRP-06-SO, MRP-08-SO



Pressure regulating valve – Type: SR-1/4-PE-MW, SR-1/4-PE-MW

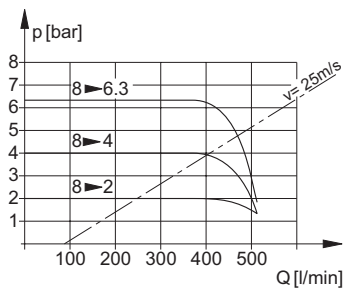


Exhaust flow (from 2 → 3)

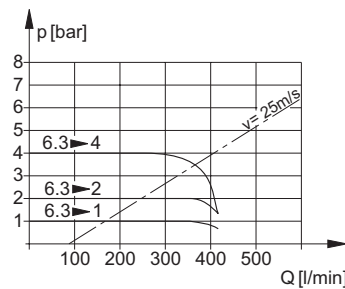


Precision pressure regulating valve

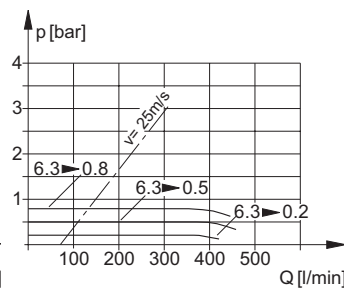
Type: XRP-08-8
 $p_2 = 0.5-8$ bar



Type: XRP-08-4
 $p_2 = 0.1-4$ bar



Type: XRP-08-08
 $p_2 = 0.02-0.8$ bar



Special units

Dimensions

Filter-regulator

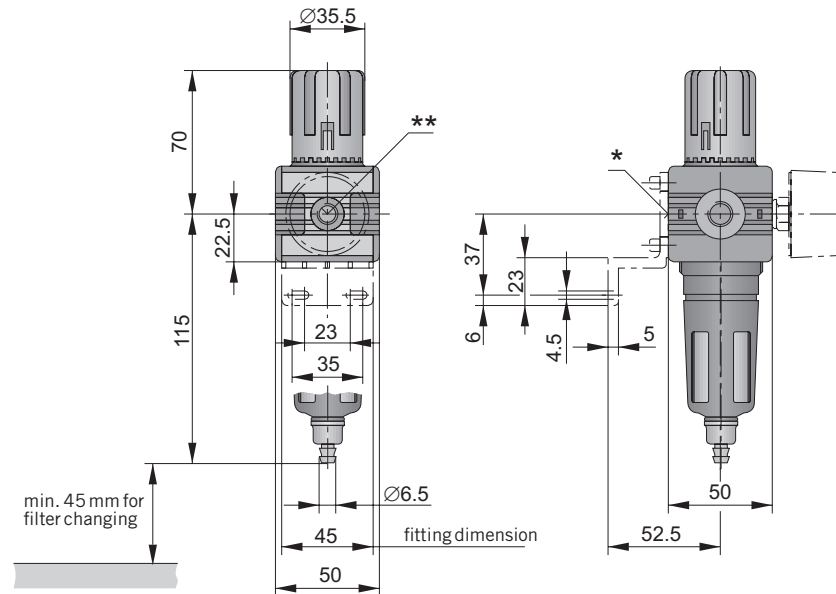
Series airfit swing G1/4

Quick, easy filter change
with Quick-Snap system

Pressure regulating valve

Series airfit swing G1/4

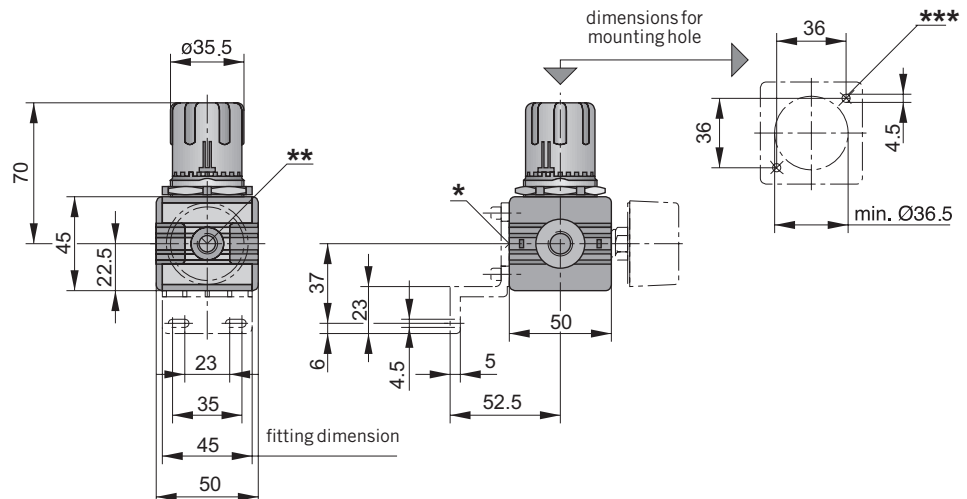
Filter-regulator – Type: SK-1/4-5D (-40°C to +80°C)



- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

Pressure regulating valve

Type: SR-1/4-SO (-40°C to +80°C)
Type: SR-1/4-SO (0 to 40 bar)



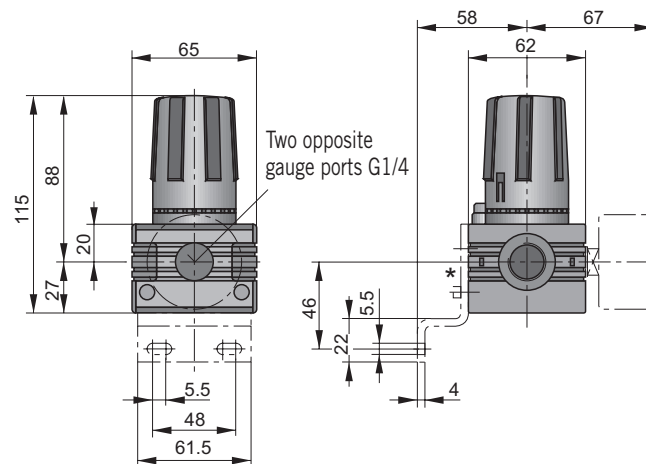
- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8
- *** For self-tapping screw M4, DIN 7500, maximum screw depth: 10 mm



For order instructions see page 164, for characteristics see page 156–159,
for accessories see page 165

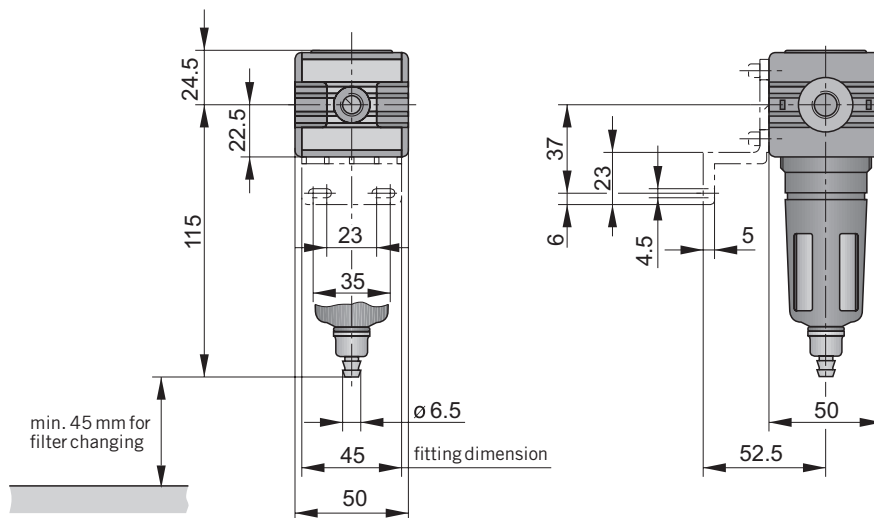
Dimensions in mm

Pressure regulating valve – Type: CR-1/2-SO (-40°C to +80°C)



* On delivery the plug screw is not assembled.

Filter-water-separator – Type: SF-1/4-5D (0 to 30 bar)



Special units

Dimensions

Pressure regulating valve

Series airfit comfort G1/2

Filter-water-separator

Series airfit swing G1/4

Quick, easy filter change with Quick-Snap system

For order instructions see page 164, for characteristics see page 156–159, for accessories see page 165

Dimensions in mm



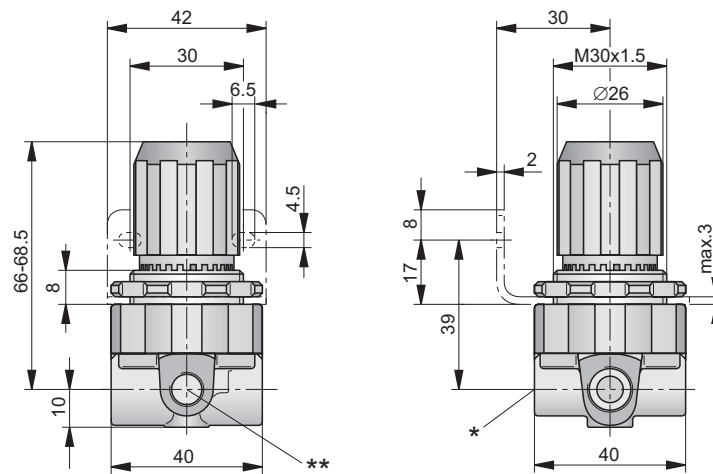
Special units

Dimensions

Pressure regulating valve

Series airfit light G1/8, G1/4

Pressure regulating valve, for panel mounting to DIN 43696 – Type: MRS-06, MRS-08



- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

Pressure regulating valve

Series airfit light G1/8, G1/4

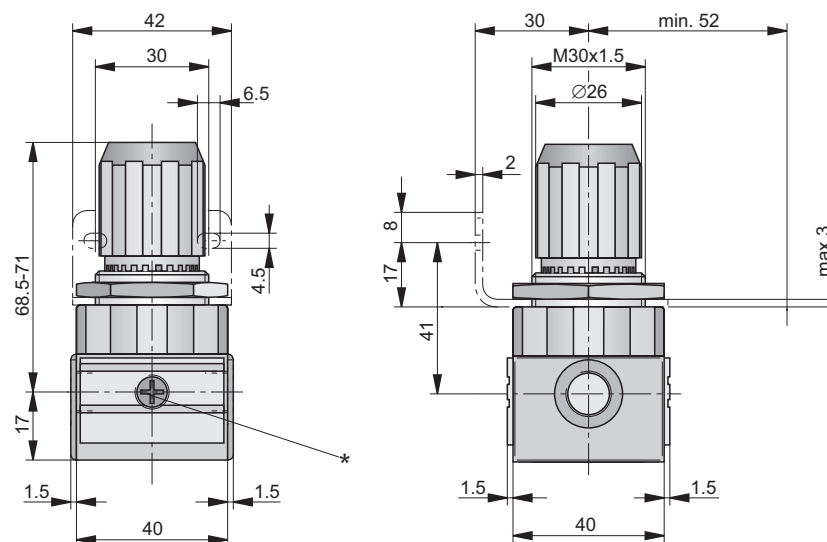
For use with water and drinking water

Material:

External parts – PA66
Internal parts – Brass/POM
Seals – EPDM

- Bracket can be fitted immediately
- Direct wall-mounting preparation provided

Pressure regulating valve for use with water – Type: WRP-06, WRP-08



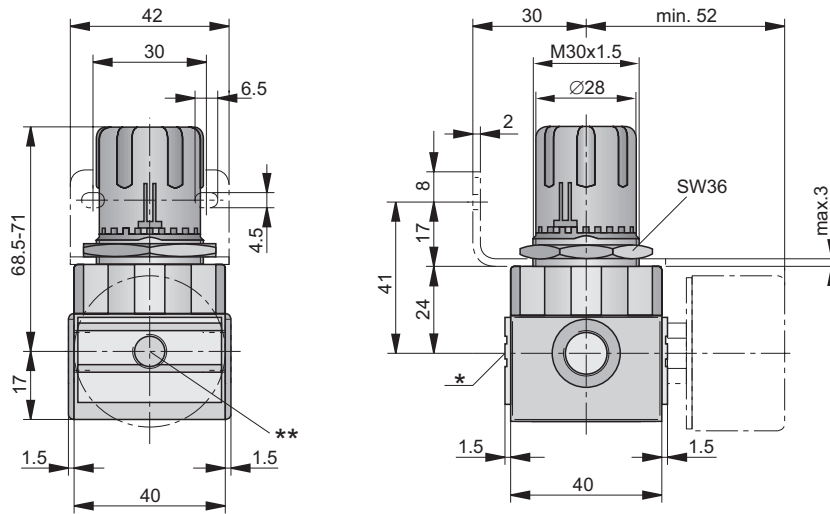
- * On delivery the two plug screws are not assembled.



For order instructions see page 164, for characteristics see page 156–159, for accessories see page 165

Dimensions in mm

Low-pressure regulating valve – Type: MRP-06-SO, MRP-08-SO



- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

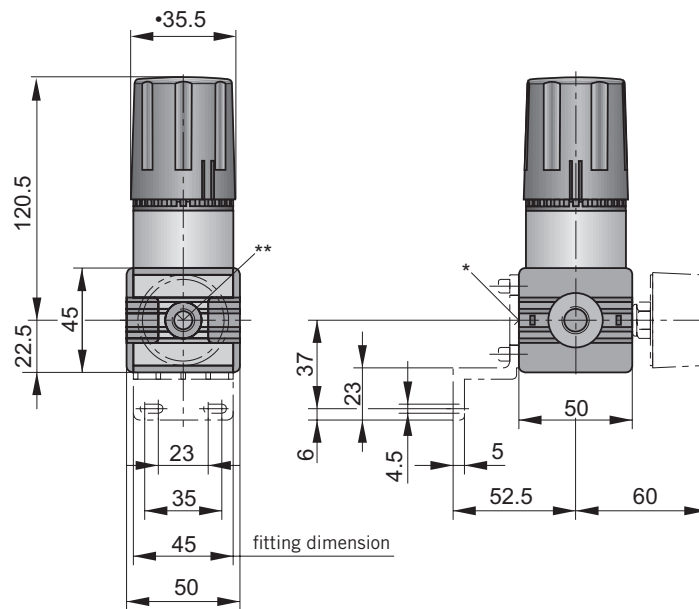
Special units

Dimensions

Pressure regulating valve

*Series airfit light
G1/8, G1/4*

Pressure regulating valve for weight compensation – Type: SR-1/4-PE-MW, SR-3/8-PE-MW



- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

For order instructions see page 164, for characteristics see page 156–159, for accessories see page 165

Dimensions in mm

Pressure regulating valve

*Series airfit swing
G1/4, G3/8*



Special units

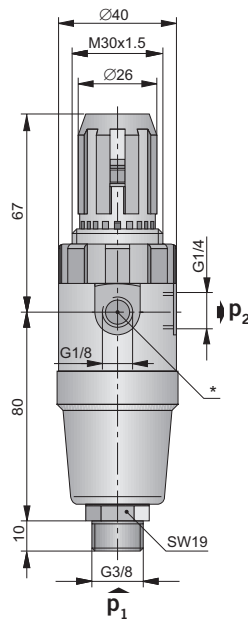
Dimensions

Filter-regulator

Series airfit
G3/8 external thread
G1/4 internal thread

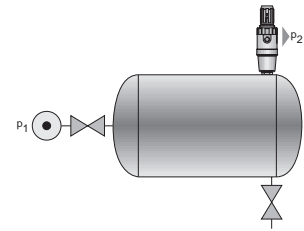
– Robust filter-regulator for direct mounting onto compressor's receiver.

Filter-regulator – Type: MFRS-08



* Gauge port G1/8

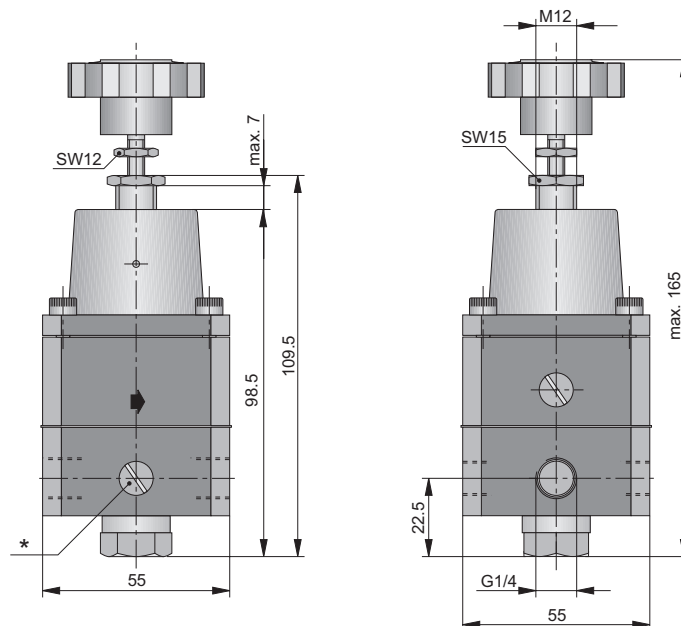
Installation instruction



Precision pressure regulating valve

G1/4

Precision pressure regulating valve – Type: XRP-08-8, -4, -08



* Two opposite gauge ports G1/8
On delivery the plug screw is not assembled.




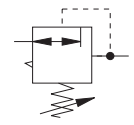
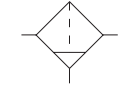
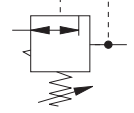
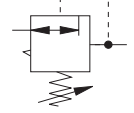
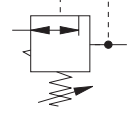
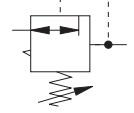

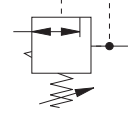
For order instructions see page 164, for characteristics see page 156–159, for accessories see page 165

Dimensions in mm

Special units

Order instructions

Special units

Description	Symbol	Port size	Order instruction	
			Type	Order No.
Filter-regulator for $T_{\min/\max} = -40$ to $+80$ °C		G1/4	SK-1/4-5D	PB 45749-065
Pressure regulating valve for $T_{\min/\max} = -40$ to $+80$ °C		G1/4	SR-1/4-SO	PB 45449-080
Pressure regulating valve for $T_{\min/\max} = -40$ to $+80$ °C		G1/2	CR-1/2-SO	PB 55649-080
Pressure regulating valve for $p_{\min/\max} = 0$ to 40 bar		G1/4	SR-1/4-SO	PB 45449-208
Filter-water-separator $p_{\min/\max} = 0$ to 30 bar		G1/4	SF-1/4-SO	PB 45149-049
Pressure regulating valve for panel mounting to DIN 43696		G1/8	MRS-06	PB 21749-010
		G1/4	MRS-08	PB 21649-010
Pressure regulating valve for use with water		G1/8	WRP-06	PB 21749-554
		G1/4	WRP-08	PB 21649-554
Low-pressure regulating valve		G1/8	MRP-06-SO	PB 21749-850
		G1/4	MRP-08-SO	PB 21649-850
Pressure regulating valve for weight compensation		G1/4	SR-1/4-PE-MW	PB 45449-252
		G3/8	SR-3/8-PE-MW	PB 45549-252
Filter-regulator for direct mounting onto compressor's receiver.		G3/8 external G1/4 internal	MFRS-08	PB 40199-029
Precision pressure regulating valve $p_2 = 0$ to 8 bar		G1/4	XRP-08-8	PB 03249-000
Precision pressure regulating valve $p_2 = 0.1$ to 4 bar		G1/4	XRP-08-4	PB 03249-001
Precision pressure regulating valve $p_2 = 0.02$ to 0.8 bar		G1/4	XRP-08-8	PB 03249-002

Accessories

The order data for the accessories can be found under the respective series

airfit light	see page 17–19
airfit swing	see page 39–41
airfit comfort	see page 63–67



