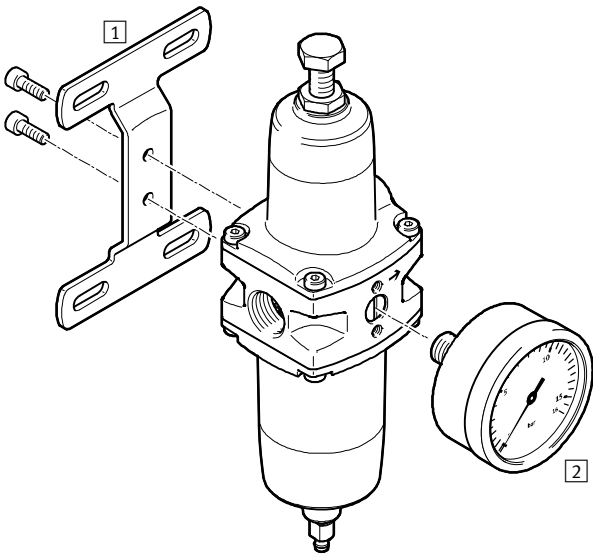


Filter regulators PCRP



## Filter regulators PCRP

Peripherals overview



Mounting components and accessories		→ Page/Internet
1	Mounting bracket PAMP	8
2	Pressure gauge PAGN	9
-	Filter cartridge PFEP	8

# Filter regulators PCRP

Type codes

PCRP – 64 – N12 – 7 – E – R1 – M – T18

**Basic function**

PCRP	Filter regulator
------	------------------

**Size**

64	Grid dimension 64 mm
----	----------------------

**Pneumatic connection**

G14	Female thread G <sup>3</sup> / <sub>4</sub>
G12	Female thread G <sup>1</sup> / <sub>2</sub>
N14	Female thread NPT <sup>1</sup> / <sub>4</sub>
N12	Female thread NPT <sup>1</sup> / <sub>2</sub>

**Pressure regulation range**

7	0.5 ... 7 bar
12	0.5 ... 12 bar

**Grade of filtration**

E	40 µm
C	5 µm

**Bowl**

R1	Stainless steel casting
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**Condensate drain**

M	Manual rotary
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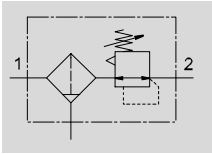
**Temperature range [°C]**




T18	-20 ... +80
T19	-60 ... +80

# Filter regulators PCRP

Technical data

Function



-  - Flow rate  
1920 ... 4115 l/min
-  - Temperature range  
-60 ... +80 °C
-  - Operating pressure  
1 ... 20 bar

Conforms to standard:  
NACE MR0175/ISO 15156 (housing and bowl)



- Space-saving design with filter and regulator in a single unit
- Good particle separation and high flow rate
- Good regulation characteristics with minimal hysteresis
- Robust housing for the specific requirements of the process automation industry
- Suitable for use outdoors and at temperatures down to -60 °C
- Resistant to UV radiation and corrosive environments
- Two pressure regulation ranges: 0.5 ... 7 bar and 0.5 ... 12 bar
- Two pressure gauge connections for flexible installation
- Setting values are secured by means of adjusting screw with lock
- New filter cartridges → 8

General technical data				
Size	64			
Pneumatic connection 1, 2	G $\frac{1}{4}$	G $\frac{1}{2}$	NPT $\frac{1}{4}$ -18	NPT $\frac{1}{2}$ -14
Design	Filter regulator without pressure gauge			
Conforms to standard	NACE MR0175/ISO 15156 (housing and bowl)			
Controller function	With primary pressure compensation, with secondary venting			
Type of mounting	Via mounting kit			
	In-line installation			
Mounting position	Vertical $\pm 5^\circ$			
Grade of filtration [µm]	40			
	5			
Air quality class at the outlet	Compressed air to ISO 8573-1:2010 [6:4:4] (grade of filtration 5 µm)			
	Compressed air to ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)			
	Inert gases			
Condensate drain	Manual rotary			
Actuator lock	Adjusting screw with lock			
Pressure regulation range [bar]	0.5 ... 7 (7.25 ... 101.5 psi/0.05 ... 0.7 MPa)			
	0.5 ... 12 (7.25 ... 174 psi/0.05 ... 1.2 MPa)			
Max. pressure hysteresis [bar]	0.2			
Pressure indication	G $\frac{1}{4}$ prepared			
Max. condensate volume [cm $^3$ ]	30			

# Filter regulators PCRP

Technical data

Flow rates					
Pressure regulation range	0.5 ... 7 bar			0.5 ... 12	
Pneumatic connection 1, 2	G $\frac{1}{4}$ , NPT $\frac{1}{4}$ -18	G $\frac{1}{2}$ , NPT $\frac{1}{2}$ -14		G $\frac{1}{4}$ , NPT $\frac{1}{4}$ -18	G $\frac{1}{2}$ , NPT $\frac{1}{2}$ -14
Standard nominal flow rate $q_{nV}^{1)}$ [l/min]					
Grade of filtration	40 $\mu$ m	3320	4115	2845	3100
	5 $\mu$ m	2040	2150	1920	1980
Max. standard flow rate [l/min]					
Grade of filtration	40 $\mu$ m	3980	6750	3990	6440
	5 $\mu$ m	2410	2920	2400	2740

1) Measured at  $p_1 = 10$  bar,  $p_2 = 6$  bar and  $\Delta p = 1$  bar.

Operating and environmental conditions		
Type code	PCRP-...-T18	PCRP-...-T19
Operating pressure [bar]	1 ... 20 (14.5 ... 290 psi/0.1 ... 2 MPa)	
Operating medium	Compressed air to ISO 8573-1:2010 [-:4:-]	
	Inert gases	
Ambient temperature [°C]	-20 ... +80	-60 ... +80
Temperature of medium [°C]	-20 ... +80	-60 ... +80
Storage temperature [°C]	-20 ... +80	-60 ... +80

Weight [g]		
Pneumatic connection 1, 2	G $\frac{1}{4}$ , NPT $\frac{1}{4}$ -18	G $\frac{1}{2}$ , NPT $\frac{1}{2}$ -14
Filter regulator PCRP	1965	1910

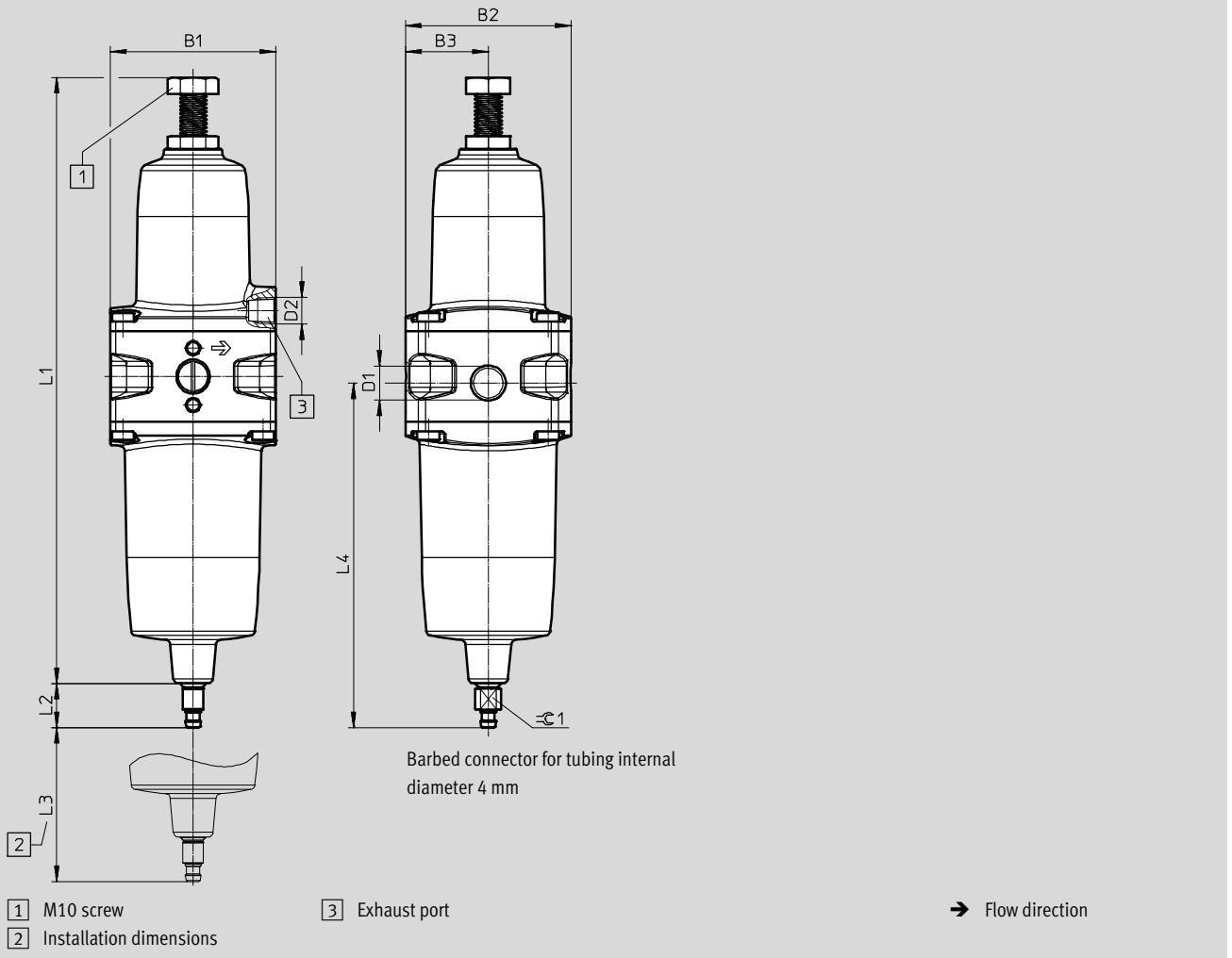
Materials		
Type code	PCRP-...-T18	PCRP-...-T19
Housing	Stainless steel casting, material number: 1.4409/CF3M(316L)	
Filter holder	Stainless steel casting, material number: 1.4409/CF3M(316L)	
Bowl	Stainless steel casting, material number: 1.4409/CF3M(316L)	
Filter	High-alloy stainless steel, material number: 1.4404/316L	
Drain screw	High-alloy stainless steel, material number: 1.4404/316L	
Adjusting screw	High-alloy stainless steel	
Spring	High-alloy stainless steel	
Seals	CR	
	NBR	
	-	VMQ
Note on materials	RoHS-compliant	
	Contains paint-wetting impairment substances	

# Filter regulators PCRP

Technical data

**Dimensions**

Download CAD data → [www.festo.com](http://www.festo.com)



Type code	B1	B2	B3	D1	D2	L1	L2	L3 min.	L4	±1
PCR-64-G14	64	64	32	G1/4	NPT1/8-27	234.3	17	60	135.7	8
PCR-64-G12				G1/2						
PCR-64-N14				NPT1/4						
PCR-64-N12				NPT1/2						

• Note: This product conforms to ISO 1179-1 and to ISO 228-1

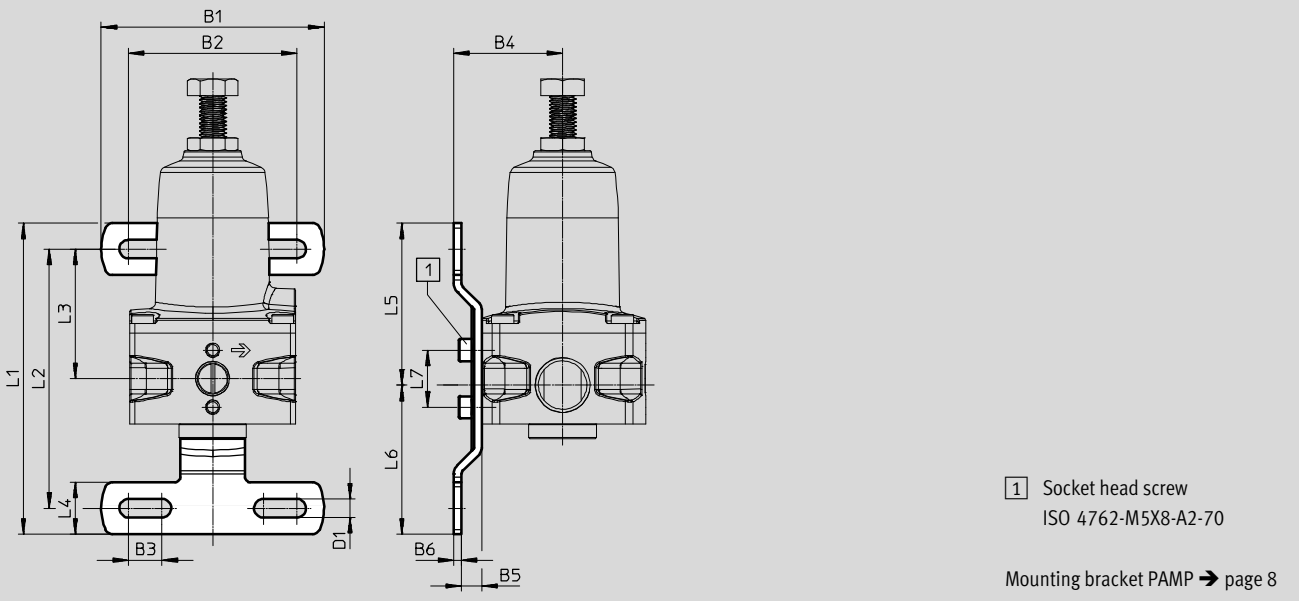
# Filter regulators PCRP

Technical data

**Dimensions – Accessories**

Download CAD data → [www.festo.com](http://www.festo.com)

Using mounting bracket PAMP



B1	B2	B3	B4	B5	B6	D1	L1	L2	L3	L4	L5	L6	L7
86	65	13	42	7.8	3	7.1	120	100	50	20	62.5	57.5	22

**Ordering data**

Temperature range -20 ... +80 °C

Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
	Part No.	Type code	Part No.	Type code

Pressure regulation range 0.5 ... 7 bar

G $\frac{1}{4}$	<b>4787803</b>	<b>PCRP-64-G14-7-C-R1-M-T18</b>	<b>4787805</b>	<b>PCRP-64-G14-7-E-R1-M-T18</b>
G $\frac{1}{2}$	<b>4787811</b>	<b>PCRP-64-G12-7-C-R1-M-T18</b>	<b>4787813</b>	<b>PCRP-64-G12-7-E-R1-M-T18</b>
NPT $\frac{1}{4}$ -18	<b>4787799</b>	<b>PCRP-64-N14-7-C-R1-M-T18</b>	<b>4787801</b>	<b>PCRP-64-N14-7-E-R1-M-T18</b>
NPT $\frac{1}{2}$ -14	<b>4787807</b>	<b>PCRP-64-N12-7-C-R1-M-T18</b>	<b>4787809</b>	<b>PCRP-64-N12-7-E-R1-M-T18</b>

Pressure regulation range 0.5 ... 12 bar

G $\frac{1}{4}$	<b>4787804</b>	<b>PCRP-64-G14-12-C-R1-M-T18</b>	<b>4787806</b>	<b>PCRP-64-G14-12-E-R1-M-T18</b>
G $\frac{1}{2}$	<b>4787812</b>	<b>PCRP-64-G12-12-C-R1-M-T18</b>	<b>4787814</b>	<b>PCRP-64-G12-12-E-R1-M-T18</b>
NPT $\frac{1}{4}$ -18	<b>4787800</b>	<b>PCRP-64-N14-12-C-R1-M-T18</b>	<b>4787802</b>	<b>PCRP-64-N14-12-E-R1-M-T18</b>
NPT $\frac{1}{2}$ -14	<b>4787808</b>	<b>PCRP-64-N12-12-C-R1-M-T18</b>	<b>4787810</b>	<b>PCRP-64-N12-12-E-R1-M-T18</b>

**Ordering data**

Temperature range -60 ... +80 °C

Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
	Part No.	Type code	Part No.	Type code

Pressure regulation range 0.5 ... 7 bar

G $\frac{1}{4}$	<b>5394669</b>	<b>PCRP-64-G14-7-C-R1-M-T19</b>	<b>5394671</b>	<b>PCRP-64-G14-7-E-R1-M-T19</b>
G $\frac{1}{2}$	<b>5394677</b>	<b>PCRP-64-G12-7-C-R1-M-T19</b>	<b>5394679</b>	<b>PCRP-64-G12-7-E-R1-M-T19</b>
NPT $\frac{1}{4}$ -18	<b>5394665</b>	<b>PCRP-64-N14-7-C-R1-M-T19</b>	<b>5394667</b>	<b>PCRP-64-N14-7-E-R1-M-T19</b>
NPT $\frac{1}{2}$ -14	<b>5394673</b>	<b>PCRP-64-N12-7-C-R1-M-T19</b>	<b>5394675</b>	<b>PCRP-64-N12-7-E-R1-M-T19</b>

Pressure regulation range 0.5 ... 12 bar

G $\frac{1}{4}$	<b>5394670</b>	<b>PCRP-64-G14-12-C-R1-M-T19</b>	<b>5394672</b>	<b>PCRP-64-G14-12-E-R1-M-T19</b>
G $\frac{1}{2}$	<b>5394678</b>	<b>PCRP-64-G12-12-C-R1-M-T19</b>	<b>5394680</b>	<b>PCRP-64-G12-12-E-R1-M-T19</b>
NPT $\frac{1}{4}$ -18	<b>5394666</b>	<b>PCRP-64-N14-12-C-R1-M-T19</b>	<b>5394668</b>	<b>PCRP-64-N14-12-E-R1-M-T19</b>
NPT $\frac{1}{2}$ -14	<b>5394674</b>	<b>PCRP-64-N12-12-C-R1-M-T19</b>	<b>5394676</b>	<b>PCRP-64-N12-12-E-R1-M-T19</b>

## Filter regulators PCRP

Accessories

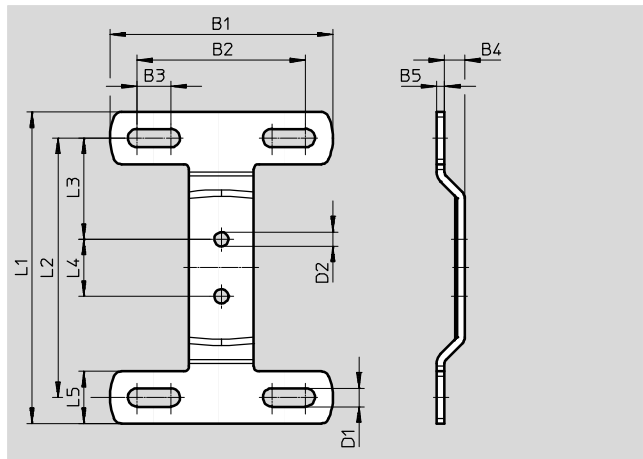
### Mounting bracket PAMP

- For wall mounting of individual component

Temperature of medium/ambient temperature –60 ... +80 °C

Material of bracket/screws:  
High-alloy stainless steel

Note on materials:  
RoHS-compliant  
Free of copper and PTFE



Dimensions											
B1	B2	B3	B4	B5	D1	D2	L1	L2	L3	L4	L5
86	65	13	7.8	3	7.1	5.5	120	100	39	22	20

Ordering data				
Size	Tightening torque for valve mounting [Nm]	Weight [g]	Part No.	Type code
64	5 ±10%	119	<b>8081356</b>	<b>PAMP-MB-64</b>

### Filter cartridges PFEP

Filter material:  
High-alloy stainless steel

Note on materials:  
RoHS-compliant  
Free of copper and PTFE



Ordering data				
Size	Grade of filtration [µm]	Weight [g]	Part No.	Type code
64	5	77	<b>8081360</b>	<b>PFEP-64-C</b>
	40	64	<b>8081365</b>	<b>PFEP-64-E</b>




# Filter regulators PCRP

Accessories

## Pressure gauges PAGN



 Temperature range  
-40 ... +200 °C

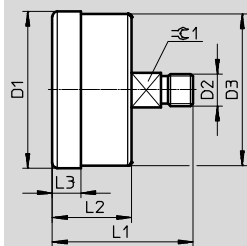


Technical data	
Nominal size	63
Pneumatic connection	G $\frac{1}{4}$
Operating medium	Inert gases Neutral fluids
Note on operating/ pilot medium	No oxygen No acetylene
Design	Bourdon tube pressure gauge
Conforms to standard	EN 837-1
Type of mounting	In-line installation
Connection position	Centred, rear side
Ambient temperature [°C]	-40 ... +60
Temperature of medium [°C]	-40 ... +200 <sup>1)</sup>
Storage temperature [°C]	-40 ... +70
Measurement accuracy class	1.6
Intermittent load factor	0.66
Degree of protection	IP65
Weight [g]	160

1) If the temperature of the medium used is below 0 °C, ensure the operating medium is dry.

Materials	
Housing	High-alloy stainless steel (colour: silver)
Inspection window	PC
Threaded plug/ materials in contact with the media	High-alloy stainless steel
Note on materials	RoHS-compliant

## Dimensions Download CAD data → [www.festo.com](http://www.festo.com)



D1	D2	D3	L1	L2	L3	∅ 1
∅ 63	G $\frac{1}{4}$	∅ 62	57	33	11.5	14

Ordering data						
Nominal size	Pneumatic connection	Operating pressure	Indicating range	Part No.	Type code	
Outer scale in bar, inner scale in psi						
63	G $\frac{1}{4}$	0 ... 16 bar	0 ... 16 bar	<b>8081401</b>	<b>PAGN-63-16-G14-R1-1.6-0.5-V2</b>	