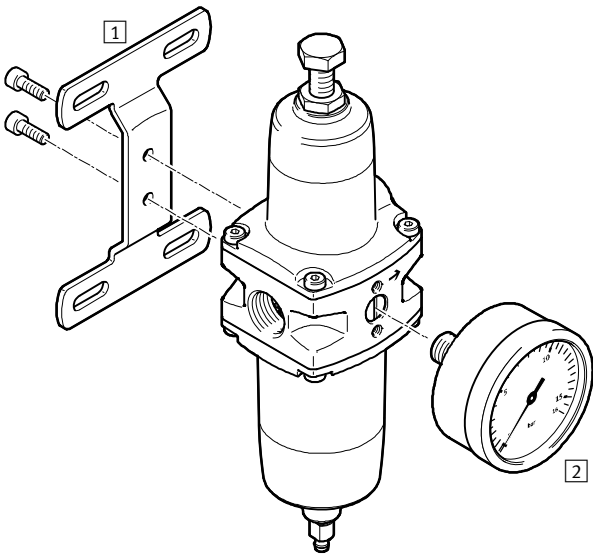


Filter regulators PCRP



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
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Pneumatic connection

G14	Female thread G ³ / ₄
G12	Female thread G ¹ / ₂
N14	Female thread NPT ¹ / ₄
N12	Female thread NPT ¹ / ₂

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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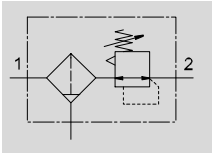
Temperature range [°C]




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 μ m	3320	4115	2845	3100
	5 μ m	2040	2150	1920	1980
Max. standard flow rate [l/min]					
Grade of filtration	40 μ m	3980	6750	3990	6440
	5 μ 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	PCR-...-T18	PCR-...-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

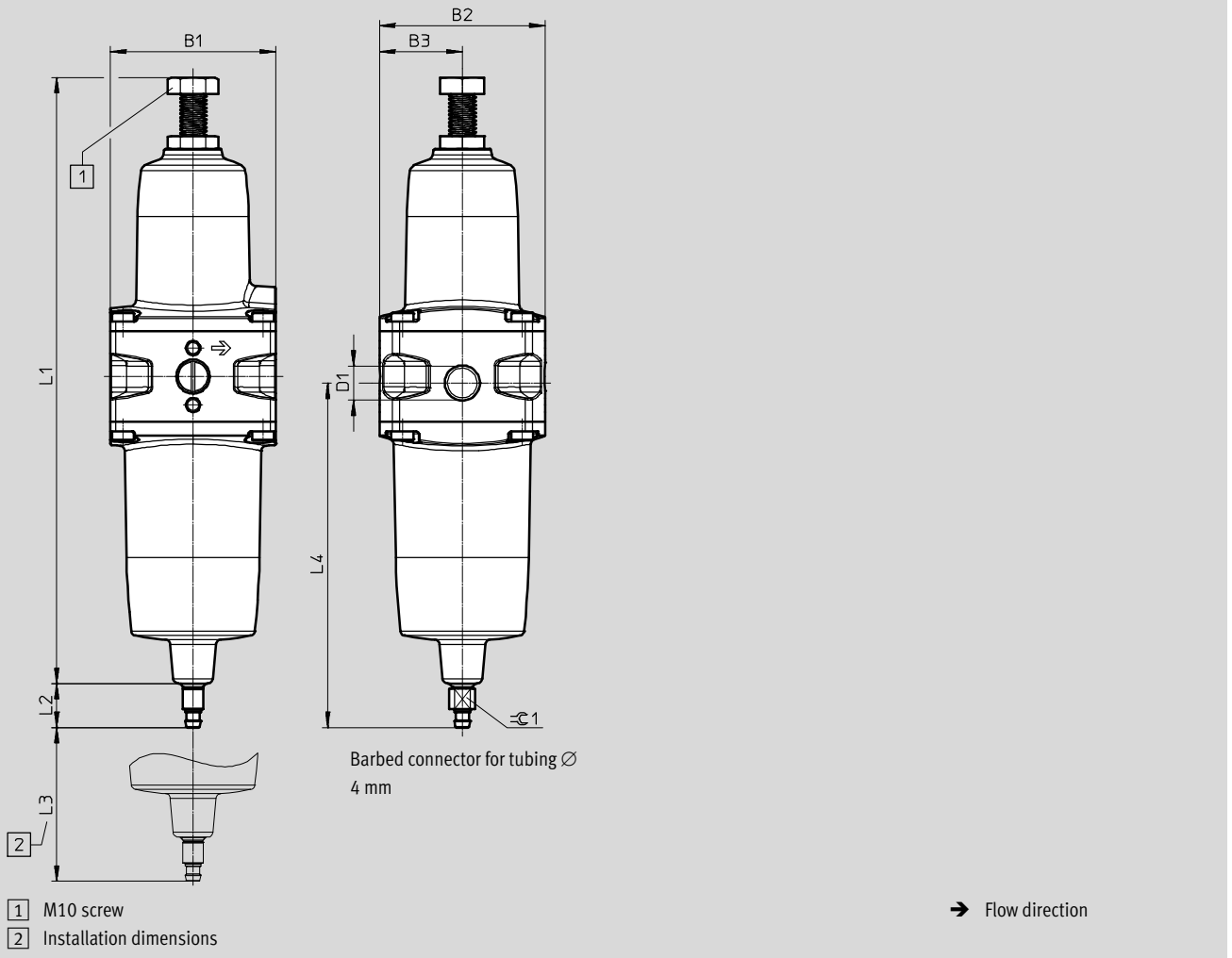
Materials		
Type code	PCR-...-T18	PCR-...-T19
Housing	Stainless steel casting, material number: 1.4409/CF3M(316L)	
Filter holder	Stainless steel casting, material number: 1.4409/CF3M(316L)	
Bowl	Stainless steel casting, material number: 1.4409/CF3M(316L)	
Filter	High-alloy stainless steel, material number: 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



Type code	B1	B2	B3	D1	L1	L2	L3 min.	L4	\varnothing 1
PCR-64-G14	64	64	32	G $\frac{1}{4}$	234.3	17	60	135.7	8
PCR-64-G12				G $\frac{1}{2}$					
PCR-64-N14				NPT $\frac{1}{4}$					
PCR-64-N12				NPT $\frac{1}{2}$					

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

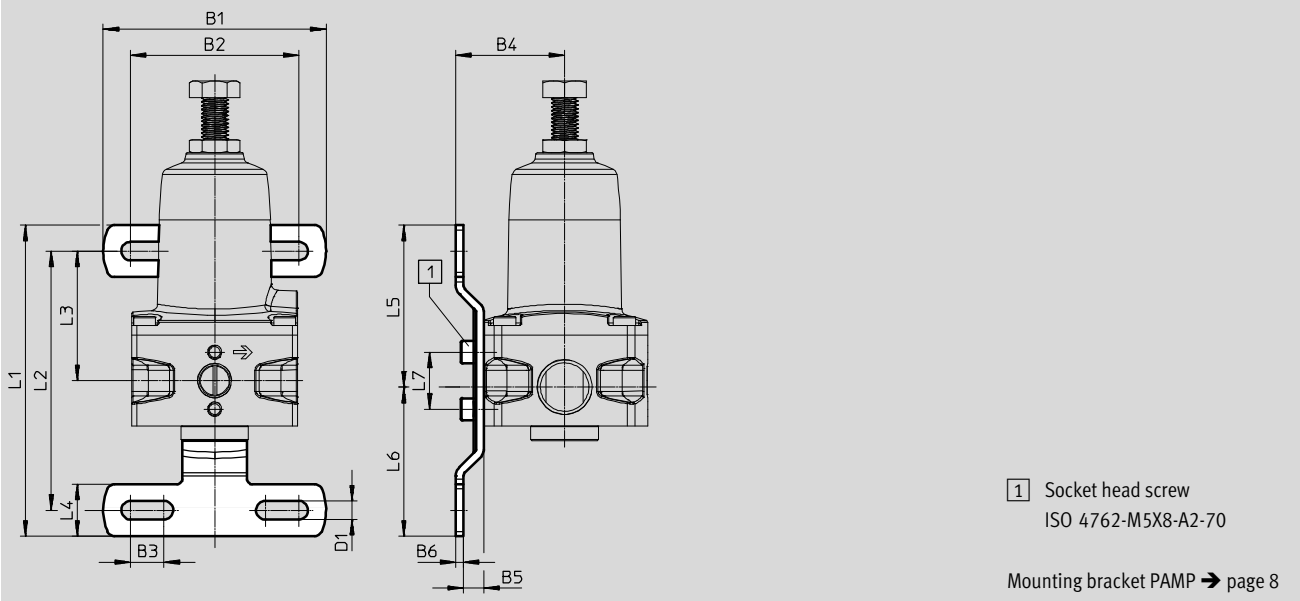
Filter regulators PCRP

Technical data

Dimensions – Accessories

Download CAD data → www.festo.com

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

Pressure regulation range 0.5 ... 12 bar

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

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

Pressure regulation range 0.5 ... 12 bar

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

Filter regulators PCR/P

Accessories

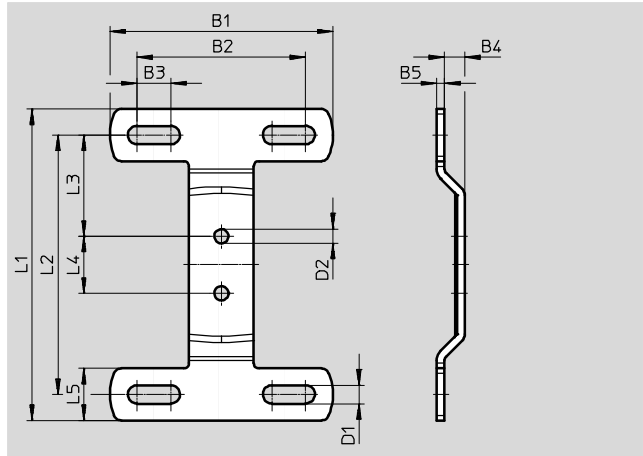
Mounting bracket PAMP

- 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	8081356	PAMP-MB-64

Filter cartridges PFEP

Filter material:
High-alloy stainless steel

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

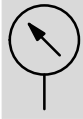



Ordering data				
Size	Grade of filtration [µm]	Weight [g]	Part No.	Type code
64	5	77	8081360	PFEP-64-C
	40	64	8081365	PFEP-64-E

Filter regulators PCRP

Accessories

Pressure gauges PAGN



 Temperature range
-40 ... +200 °C

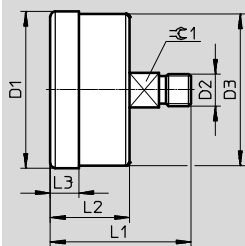


Technical data	
Nominal size	63
Pneumatic connection	G $\frac{1}{4}$
Operating medium	Inert gases Neutral fluids
Note on operating/ pilot medium	No oxygen No acetylene
Design	Bourdon tube pressure gauge
Conforms to standard	EN 837-1
Type of mounting	In-line installation
Connection position	Centred, rear side
Ambient temperature [°C]	-40 ... +60
Temperature of medium [°C]	-40 ... +200 ¹⁾
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



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	8081401	PAGN-63-16-G14-R1-1.6-0.5-V2	