

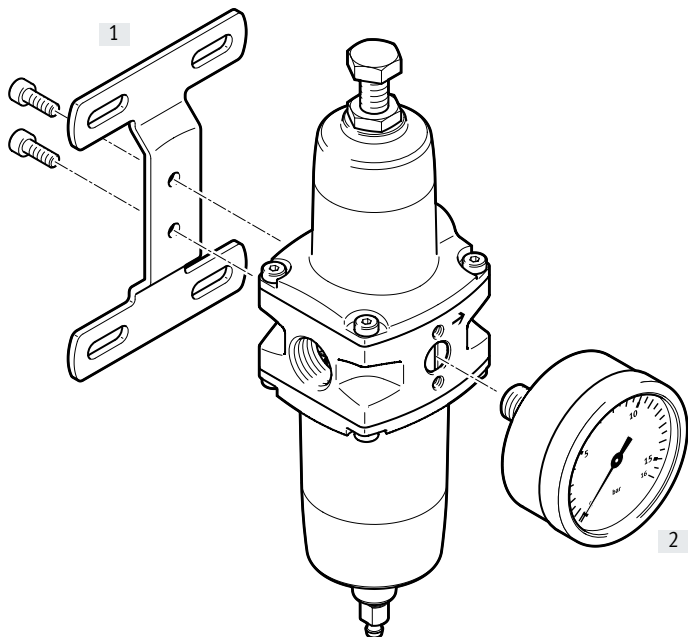
## Filter regulators PCRP

**FESTO**



## Peripherals overview and type codes

### Peripherals overview



Mounting components and accessories		→ Page/Internet
[1]	Mounting bracket PAMP	7
[2]	Pressure gauge PAGN	8
-	Filter cartridge PFEP	7

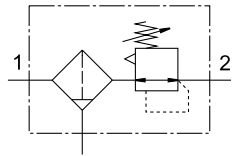
### Type codes

001	Series
PCR	Filter regulator
002	Size
64	64
003	Pneumatic connection
G14	G1/4
G12	G1/2
N14	1/4 NPT
N12	1/2 NPT
004	Pressure regulation range
7	Up to 7 bar
12	Up to 12 bar

005	Filter version
C	5 µm
E	40 µm
006	Bowl type
R1	Stainless steel
007	Condensate drain
M	Manual
008	Temperature range
T18	-20 ... +80°C
T19	-60 ... +80°C

Data sheet

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 process automation
- 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
- The set values are secured by an adjusting screw with lock
- New filter cartridges → 7

General technical data	
Size	64
Pneumatic port 1, 2	G1/4                      G1/2                      1/4 NPT                      1/2 NPT
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 ±5°
Grade of filtration                      [µm]	40 5
Air quality class at the output	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	Manually rotating
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	Prepared for G1/4
Max. condensate volume                      [cm <sup>3</sup> ]	30

## Data sheet

Flow rates					
Pressure regulation range	0.5 ... 7 bar		0.5 ... 12		
Pneumatic port 1, 2	G1/4, 1/4 NPT	G1/2, 1/2 NPT	G1/4, 1/4 NPT	G1/2, 1/2 NPT	
Standard nominal flow rate $q_{nn}^1$ [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		PCR...T18	PCR...T19
Type			
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

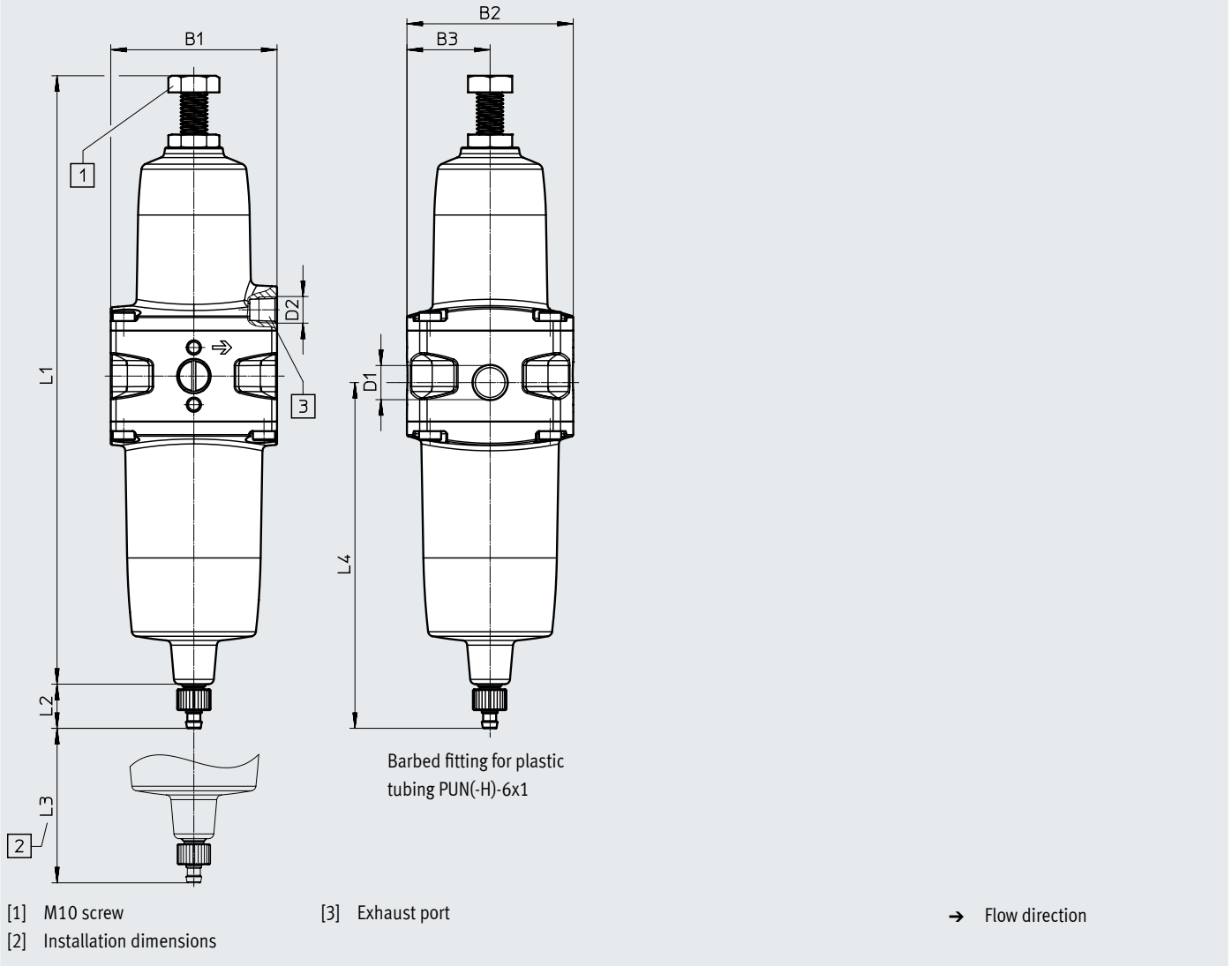
Weights [g]		G1/4, 1/4 NPT	G1/2, 1/2 NPT
Pneumatic port 1, 2			
Filter regulator PCRP		1965	1910

Materials		PCR...T18	PCR...T19
Type			
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	

Data sheet

Dimensions

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Type	B1	B2	B3	D1	D2	L1	L2	L3 Min.	L4
PCRP-64-G14	64	64	32	G1/4	G1/8	234.2	17	60	135.6
PCRP-64-G12				G1/2					
PCRP-64-N14				1/4 NPT	1/8 NPT				
PCRP-64-N12				1/2 NPT					

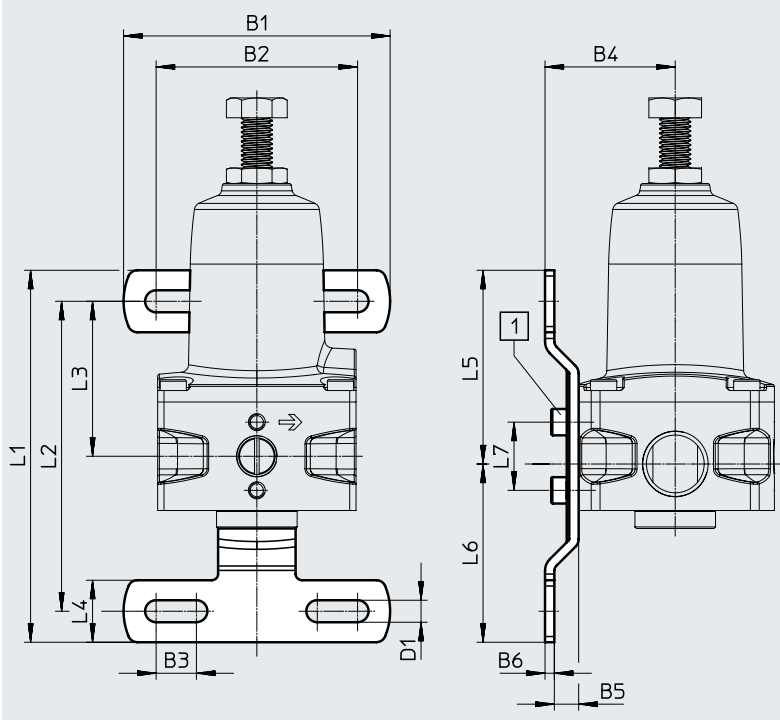
† Note: This product conforms to ISO 1179-1 and ISO 228-1.

Data sheet

**Dimensions – Accessories**

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Using mounting bracket PAMP



[1] Socket head screw  
ISO 4762-M5X8-A2-70

Mounting bracket PAMP  
→ page 7

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	Part no.	Type

**Pressure regulation range 0.5 ... 7 bar**

G1/4	4787803	PCRP-64-G14-7-C-R1-M-T18	4787805	PCRP-64-G14-7-E-R1-M-T18
G1/2	4787811	PCRP-64-G12-7-C-R1-M-T18	4787813	PCRP-64-G12-7-E-R1-M-T18
1/4 NPT	4787799	PCRP-64-N14-7-C-R1-M-T18	4787801	PCRP-64-N14-7-E-R1-M-T18
1/2 NPT	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**

G1/4	4787804	PCRP-64-G14-12-C-R1-M-T18	4787806	PCRP-64-G14-12-E-R1-M-T18
G1/2	4787812	PCRP-64-G12-12-C-R1-M-T18	4787814	PCRP-64-G12-12-E-R1-M-T18
1/4 NPT	4787800	PCRP-64-N14-12-C-R1-M-T18	4787802	PCRP-64-N14-12-E-R1-M-T18
1/2 NPT	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	Part no.	Type

**Pressure regulation range 0.5 ... 7 bar**

G1/4	5394669	PCRP-64-G14-7-C-R1-M-T19	5394671	PCRP-64-G14-7-E-R1-M-T19
G1/2	5394677	PCRP-64-G12-7-C-R1-M-T19	5394679	PCRP-64-G12-7-E-R1-M-T19
1/4 NPT	5394665	PCRP-64-N14-7-C-R1-M-T19	5394667	PCRP-64-N14-7-E-R1-M-T19
1/2 NPT	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**

G1/4	5394670	PCRP-64-G14-12-C-R1-M-T19	5394672	PCRP-64-G14-12-E-R1-M-T19
G1/2	5394678	PCRP-64-G12-12-C-R1-M-T19	5394680	PCRP-64-G12-12-E-R1-M-T19
1/4 NPT	5394666	PCRP-64-N14-12-C-R1-M-T19	5394668	PCRP-64-N14-12-E-R1-M-T19
1/2 NPT	5394674	PCRP-64-N12-12-C-R1-M-T19	5394676	PCRP-64-N12-12-E-R1-M-T19

## Accessories

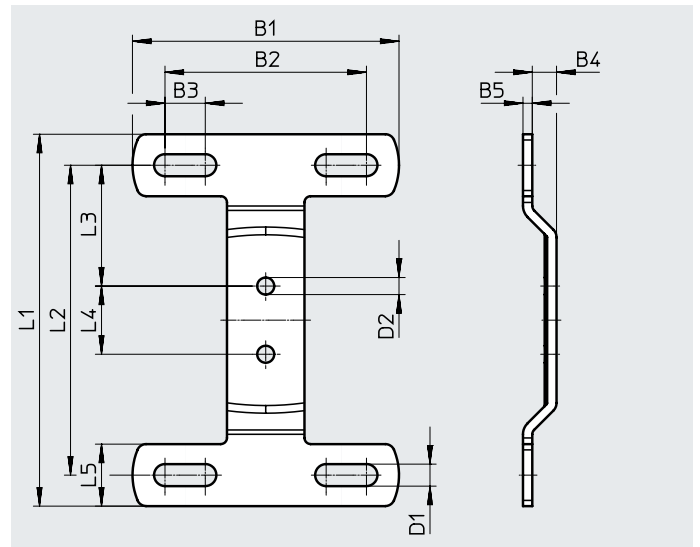
### Mounting bracket PAMP

- For wall mounting an individual unit

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
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
64	5	77	8081360	PFEP-64-C
	40	64	8081365	PFEP-64-E

Accessories

Pressure gauge PAGN



-  - Temperature range  
-40 ... +200 °C



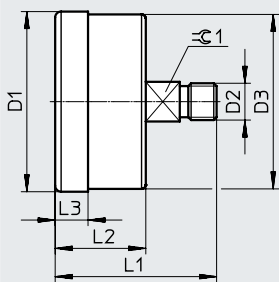
Technical data	
Nominal size	63
Pneumatic connection	G1/4
Operating medium	Inert gases Neutral fluids
Note on operating/ pilot medium	No oxygen No acetylene
Design	Bourdon tube pressure gauge
Conforms to standard	EN 837-1
Type of mounting	In-line installation
Connection position	Centred, rear
Ambient 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
Screwed trunnion/ materials in contact with the media	High-alloy stainless steel
Note on materials	RoHS-compliant

Dimensions

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D1	D2	D3	L1	L2	L3	⌀ 1
63	G1/4	62	57	33	11.5	14

Ordering data					
Nominal size	Pneumatic connection	Operating pressure	Display range	Part no.	Type
<b>Outer scale in bar, inner scale in psi</b>					
63	G1/4	0 ... 16 bar	0 ... 16 bar	<b>8081401</b>	<b>PAGN-63-16-G14-R1-1.6-0.5-V2</b>