

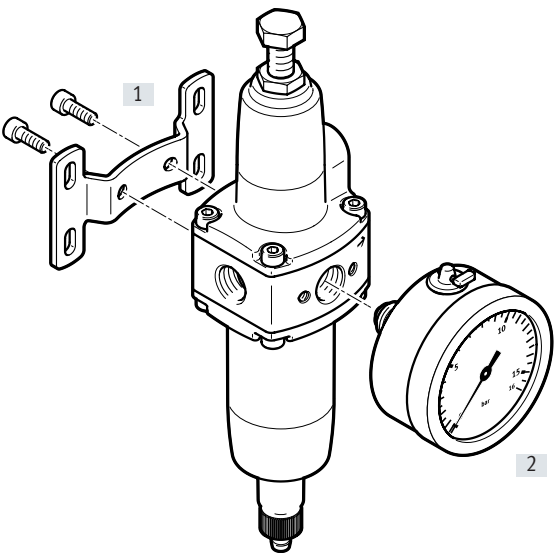
Filter regulators PCRP

FESTO

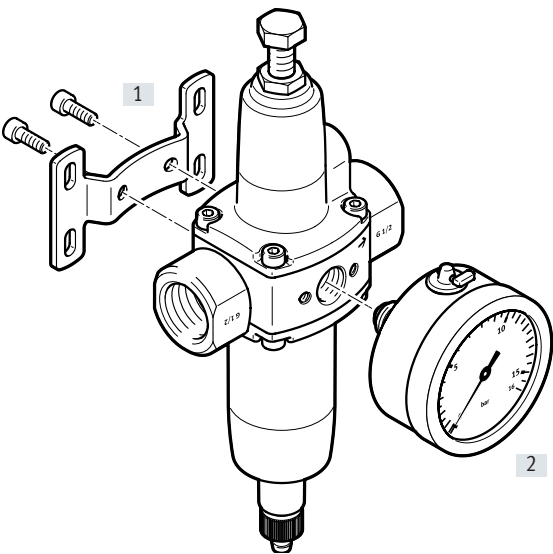


Peripherals overview

PCRP-44-G14/N14

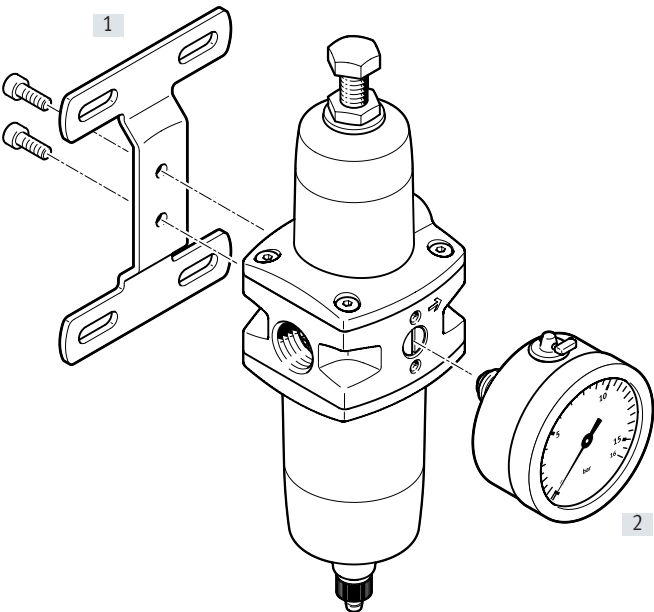


PCRP-44-G12/N12



Mounting attachments and accessories		→ Page/Internet
[1]	Mounting bracket PAMP-MB-44	10
[2]	Pressure gauge PAGN	12
–	Filter cartridge PFEP	11
–	Filter cartridge MS4-LFP	11

PCRP-64



Mounting attachments and accessories		→ Page/Internet
[1]	Mounting bracket PAMP-MB-64	10
[2]	Pressure gauge PAGN	12
–	Filter cartridge PFEP	11

Type codes

001	Series	
PCRP	Filter regulator	

002	Size	
44	44	
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	

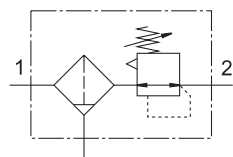
006	Bowl type	
R1	Stainless steel	

007	Condensate drain	
M	Manual	

008	Temperature range	
T18	-20 ... +80°C	
T19	-60 ... +80°C	

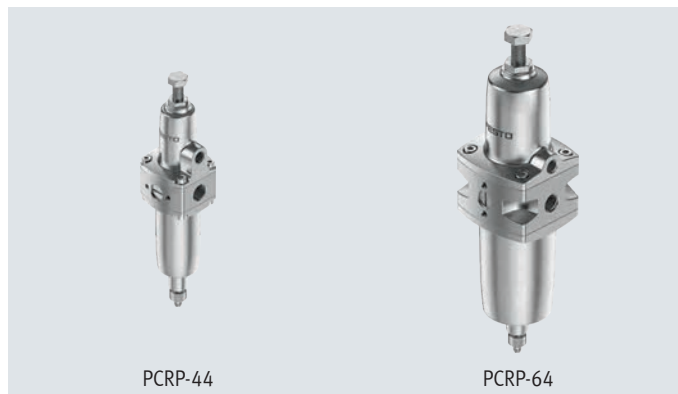
Data sheet

Function



-  - Standard nominal flow rate
1600 ... 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
- Safe to use in explosion zones 1/2/21/22
- New filter cartridges → 11

General technical data

General technical data									
Size		44				64			
Pneumatic connection 1, 2		G1/4	G1/2	1/4 NPT	1/2 NPT	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	[cm³]	12 (temperature range –20 ... +80°C)				30			
		13 (temperature range –60 ... +80°C)							

Data sheet

Flow rates							
Size	44			64			
Pressure regulation range	0.5 ... 12 bar			0.5 ... 7 bar		0.5 ... 12 bar	
Pneumatic connection 1, 2	G1/4, 1/4 NPT		G1/2, 1/2 NPT	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 µm	1750	1750	3320	4115	2845	3100
	5 µm	1600	1600	2040	2150	1920	1980
Max. standard flow rate [l/min]							
Grade of filtration	40 µm	2500 (temperature range -20 ... +80°C)	2500 (temperature range -20 ... +80°C)	3980	6750	3990	6440
		2020 (temperature range -60 ... +80°C)	2020 (temperature range -60 ... +80°C)				
	5 µm	2400	2400	2410	2920	2400	2740

1) Measured at p1 = 10 bar, p2 = 6 bar and Δp = 1 bar.

Operating and environmental conditions			
Temperature range		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]							
Size	44			64			
Pneumatic connection 1, 2	G1/4, 1/4 NPT		G1/2, 1/2 NPT	G1/4, 1/4 NPT		G1/2, 1/2 NPT	
Temperature range [°C]	-20 ... +80	-60 ... +80	-20 ... +80	-60 ... +80			
Filter regulator PCRP	665 (grade of filtration 5 µm)	720	750 (grade of filtration 5 µm)	805	1965	1910	
	670 (grade of filtration 40 µm)		755 (grade of filtration 40 µm)				

Materials					
Size	44			64	
Temperature range	[°C]	−20 ... +80	−60 ... +80	−20 ... +80	−60 ... +80
Housing	Stainless steel casting, material number: 1.4409/CF3M(316L)				
Filter support	POM		Stainless steel casting, material number: 1.4409/CF3M(316L)		
Bowl	Stainless steel casting, material number: 1.4409/CF3M(316L)				
Filter	PE		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		–	VMQ
Note on materials	RoHS-compliant				
	Contains paint-wetting impairment substances				

Data sheet

Dimensions

PCRP-44-G14/N14

Barbed fitting for plastic tubing PUN(-H)-6x1

[1] M8 screw
[2] Installation dimension
[3] Exhaust port

PCRP-44-G12/N12

Barbed fitting for plastic tubing PUN(-H)-6x1

→ Flow direction

Note
The adapters for the pneumatic connection G1/2 or 1/2 NPT are included in the scope of delivery.

Type	B1	B2	B3	B4	D1	D2	L1	L2	L3 min.	L4
PCRP-44-G14	44	44	22	–	G1/4	G1/8	181.1	17	60	110.1
PCRP-44-G12				80	G1/2					
PCRP-44-N14				–	1/4 NPT	1/8 NPT				
PCRP-44-N12				80	1/2 NPT					

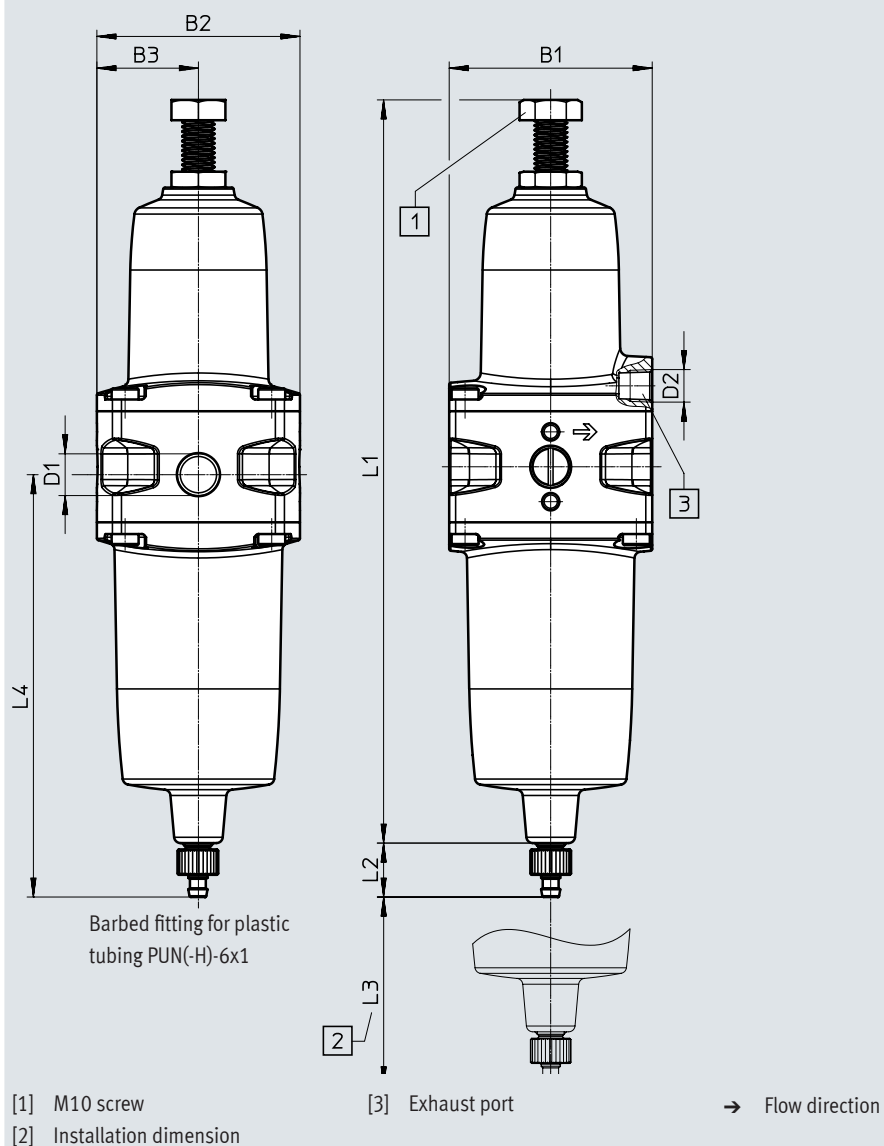
• Note: This product conforms to ISO 1179-1 and ISO 228-1.

Data sheet

Dimensions

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PCRP-64



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					

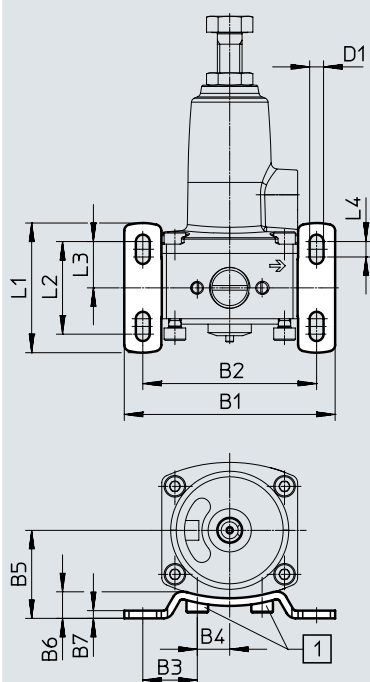
† Note: This product conforms to ISO 1179-1 and ISO 228-1.

Data sheet

Dimensions – Accessories

Download CAD data → www.festo.com

PCRP-44 with mounting bracket PAMP-MB-44



[1] Socket head screw
ISO 4762-M4X8-A4-70

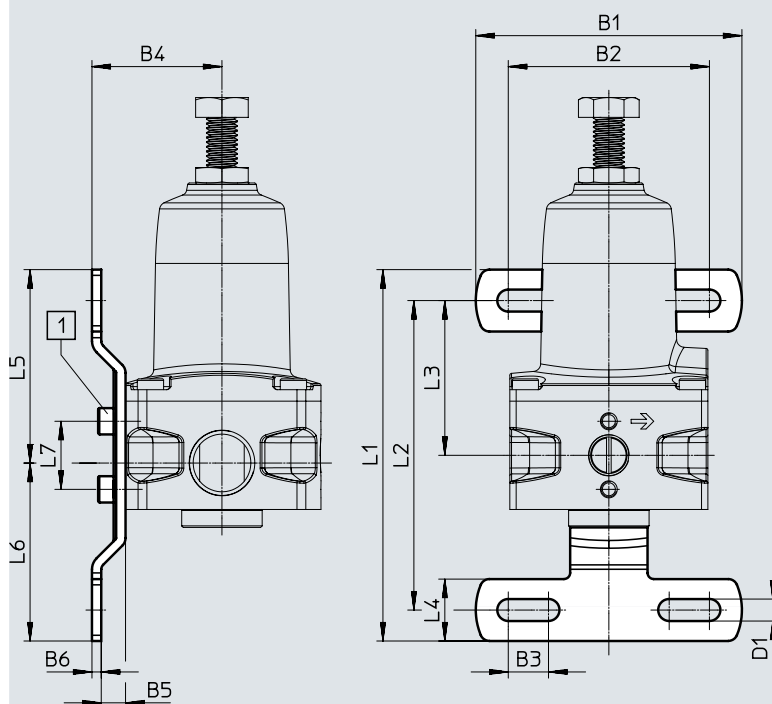
Mounting bracket PAMP
→ page 10

Size	B1	B2	B3	B4	B5	B6	B7	D1	L1	L2	L3	L4
44	68.3	56.3	17.7	10.5	28.5	8.6	2.5	4.5	42	30	15	5

Dimensions – Accessories

Download CAD data → www.festo.com

PCRP-64 with mounting bracket PAMP-MB-64



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

Mounting bracket PAMP
→ page 10

Size	B1	B2	B3	B4	B5	B6	D1	L1	L2	L3	L4	L5	L6	L7
64	86	65	13	42	7.8	3	7.1	120	100	50	20	62.5	57.5	22

Data sheet

Ordering data					
Temperature range –20 ... +80°C					
Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
		Part no.	Type	Part no.	Type
Pressure regulation range 0.5 ... 7 bar					
64	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					
44	G1/4	8120907	PCRP-44-G14-12-C-R1-M-T18	8120906	PCRP-44-G14-12-E-R1-M-T18
	G1/2	8120905	PCRP-44-G12-12-C-R1-M-T18	8120904	PCRP-44-G12-12-E-R1-M-T18
	1/4 NPT	8120903	PCRP-44-N14-12-C-R1-M-T18	8120902	PCRP-44-N14-12-E-R1-M-T18
	1/2 NPT	8120901	PCRP-44-N12-12-C-R1-M-T18	8120900	PCRP-44-N12-12-E-R1-M-T18
64	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					
Size	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
		Part no.	Type	Part no.	Type
Pressure regulation range 0.5 ... 7 bar					
64	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					
44	G1/4	–	–	8120898	PCRP-44-G14-12-E-R1-M-T19
	G1/2	–	–	8120899	PCRP-44-G12-12-E-R1-M-T19
	1/4 NPT	–	–	8120896	PCRP-44-N14-12-E-R1-M-T19
	1/2 NPT	–	–	8120897	PCRP-44-N12-12-E-R1-M-T19
64	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-MB-44

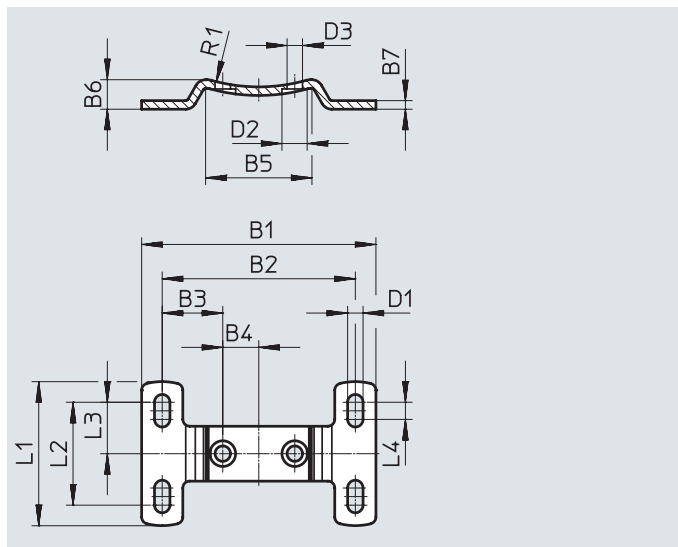
For PCRP-44

- For wall mounting an individual unit

Temperature of medium/ambient
temperature: -60°C ... $+80^{\circ}\text{C}$

Material of bracket/screws:
High-alloy stainless steel

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



Dimensions															
Size	B1	B2	B3	B4	B5	B6	B7	D1	D2	D3	L1	L2	L3	L4	R1
44	68.3	56.3	17.7	10.5	31	8.6	2.5	4.5	7.5	4.5	42	30	15	5	50.8

Ordering data				
Size	Tightening torque for valve mounting [Nm]	Weight [g]	Part no.	Type
44	2.5 $\pm$ 10%	32	8123058	PAMP-MB-44

Mounting bracket PAMP-MB-64

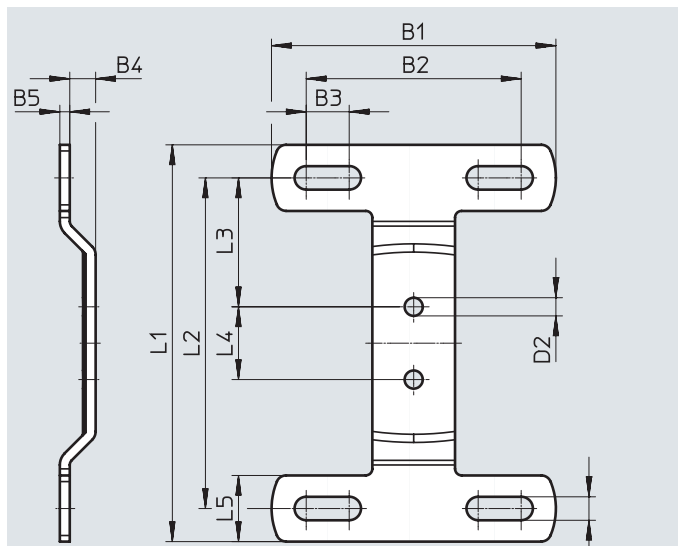
For PCRP-64

- For wall mounting an individual unit

Temperature of medium/ambient
temperature: -60°C ... $+80^{\circ}\text{C}$

Material of bracket/screws:
High-alloy stainless steel

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



Dimensions													
Size	B1	B2	B3	B4	B5	D1	D2	L1	L2	L3	L4	L5	
64	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 $\pm$ 10%	119	8081356	PAMP-MB-64

Accessories

Filter cartridge PFEP

Filter material:
High-alloy stainless steel

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



Ordering data					
Size	For type	Grade of filtration [μm]	Weight [g]	Part no.	Type
44	PCRP-44-...-E-...-T19	40	32	8123059	PFEP-44-E
64	PCRP-64-...-C	5	77	8081360	PFEP-64-C
	PCRP-64-...-E	40	64	8081365	PFEP-64-E

Filter cartridge MS4-LFP

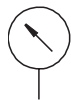
Filter material:
PE



Ordering data				
For type	Grade of filtration [μm]	Part no.	Type	
PCRP-44-...-C-...-T18	5	534501	MS4-LFP-C	
PCRP-44-...-E-...-T18	40	534502	MS4-LFP-E	

Accessories

Pressure gauge PAGN



— ● — Temperature range
−40 ... +200°C



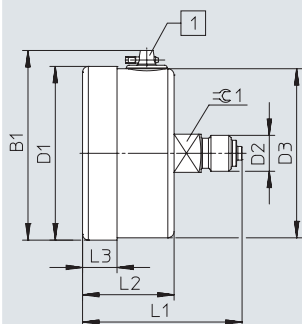
Technical data		
Nominal size	63	
Pneumatic connection	G1/4	
Operating medium	Inert gases	
	Neutral fluids	
Note on operating/ pilot medium	No oxygen	
	No acetylene	
Design	Bourdon tube pressure gauge	
Conforms to standard	EN 837-1	
Type of mounting	In-line installation	
Connection position	Centred, rear	
Ambient temperature	[°C]	−40 ... +60
Temperature of medium	[°C]	−40 ... +200 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
Screwed trunnion/ materials in contact with the media	High-alloy stainless steel
Note on materials	RoHS-compliant

Dimensions

Download CAD data → www.festo.com



[1] ≤ 16 bar with compensating valve

B1	D1 ø	D2	D3 ø	L1	L2	L3	≈ 1
69.5	63	G1/4	62	57	33	11.5	14

Ordering data					
Nominal size	Pneumatic connection	Operating pressure	Display range	Part no.	Type
63	G1/4	0 ... 16 bar	0 ... 16 bar	8081401	PAGN-63-16-G14-R1-1.6-0.5-V2

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