

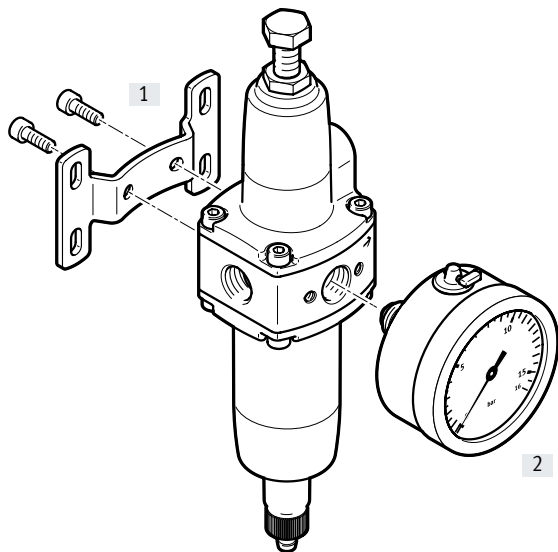
Filter regulators PCRP

FESTO

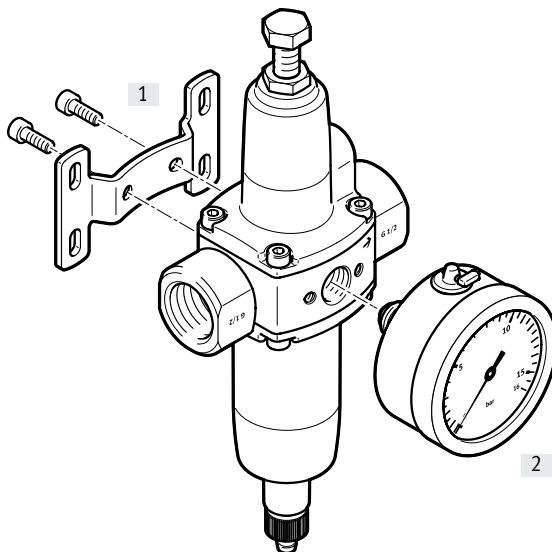


Peripherals overview

PCR-44-G14/N14



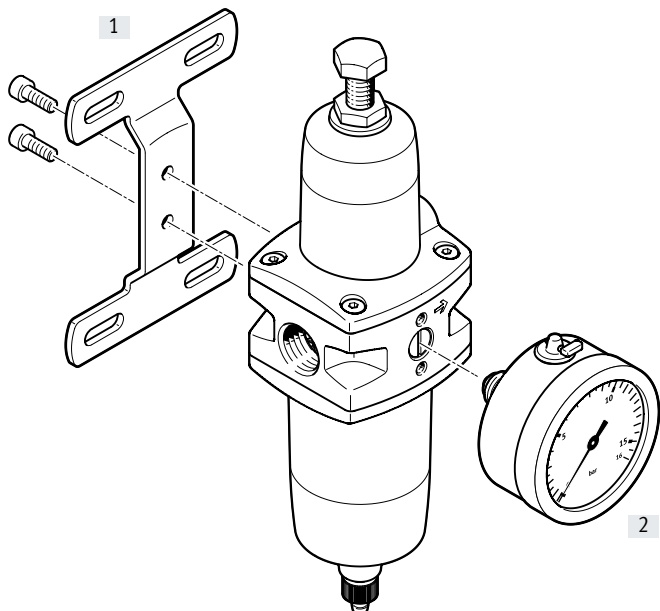
PCR-44-G12/N12



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

PCR-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	
PCR-P	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	

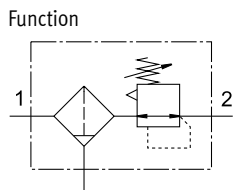
005	Filter version	
C	5 µm	
E	40 µm	

006	Bowl type	
R1	Stainless steel	

007	Condensate drain	
M	Manual	

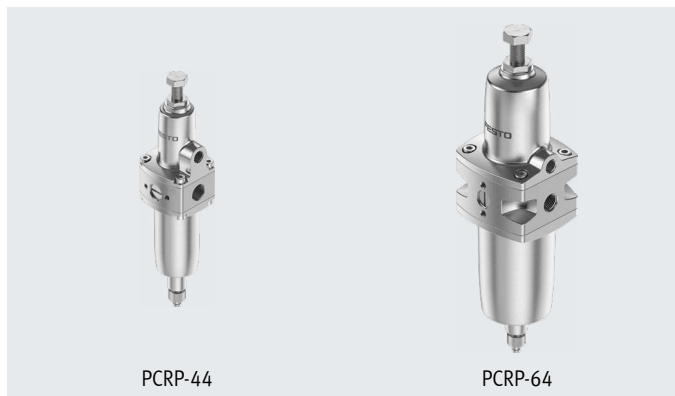
008	Temperature range	
T18	-20 ... +80°C	
T19	-60 ... +80°C	

Data sheet



- - 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									
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 μ m	1750	1750	3320	4115	2845	3100	
	5 μ m	1600	1600	2040	2150	1920	1980	
Max. standard flow rate [l/min]								
Grade of filtration	40 μ m	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 μ m	2400	2400	2410	2920	2400	2740	

1) Measured at $p_1 = 10$ bar, $p_2 = 6$ bar and $\Delta p = 1$ 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 μ m)	720	750 (grade of filtration 5 μ m)	805	1965		1910
	670 (grade of filtration 40 μ m)		755 (grade of filtration 40 μ m)				

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						

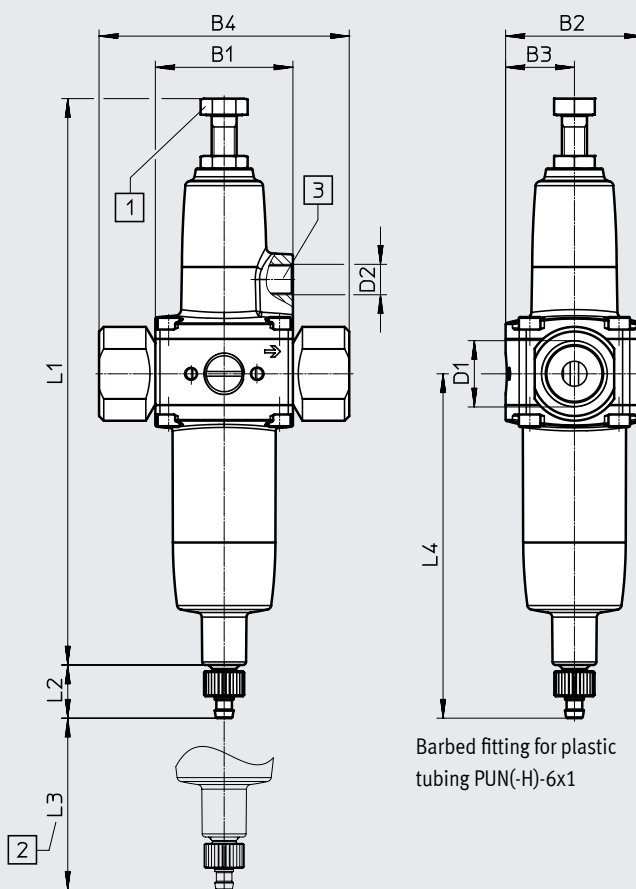
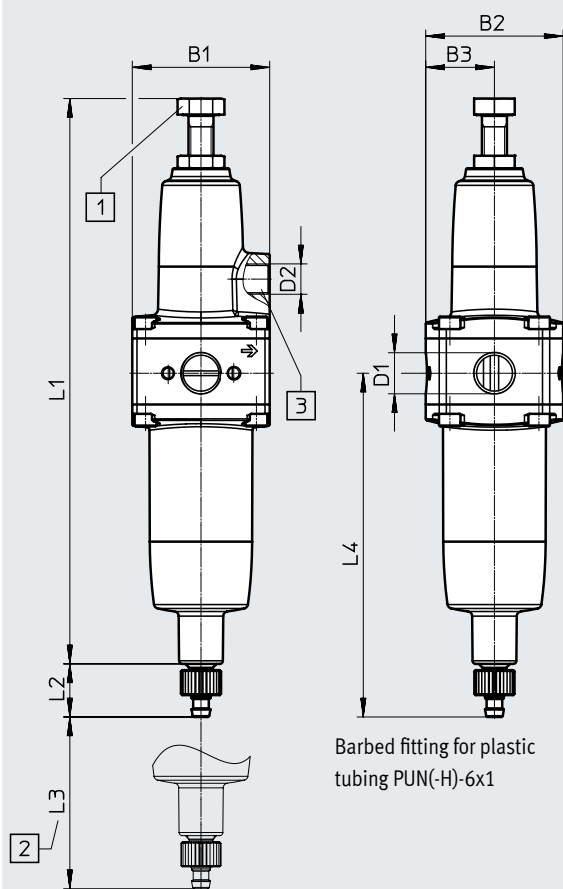
Data sheet

Dimensions

Download CAD data → www.festo.com

PCR-44-G14/N14

PCR-44-G12/N12



- [1] M8 screw
- [2] Installation dimension

[3] Exhaust port

→ 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
PCR-44-G14	44	44	22	-	G1/4	G1/8	181.1	17	60	110.1
PCR-44-G12				80	G1/2					
PCR-44-N14				-	1/4 NPT	1/8 NPT				
PCR-44-N12				80	1/2 NPT					

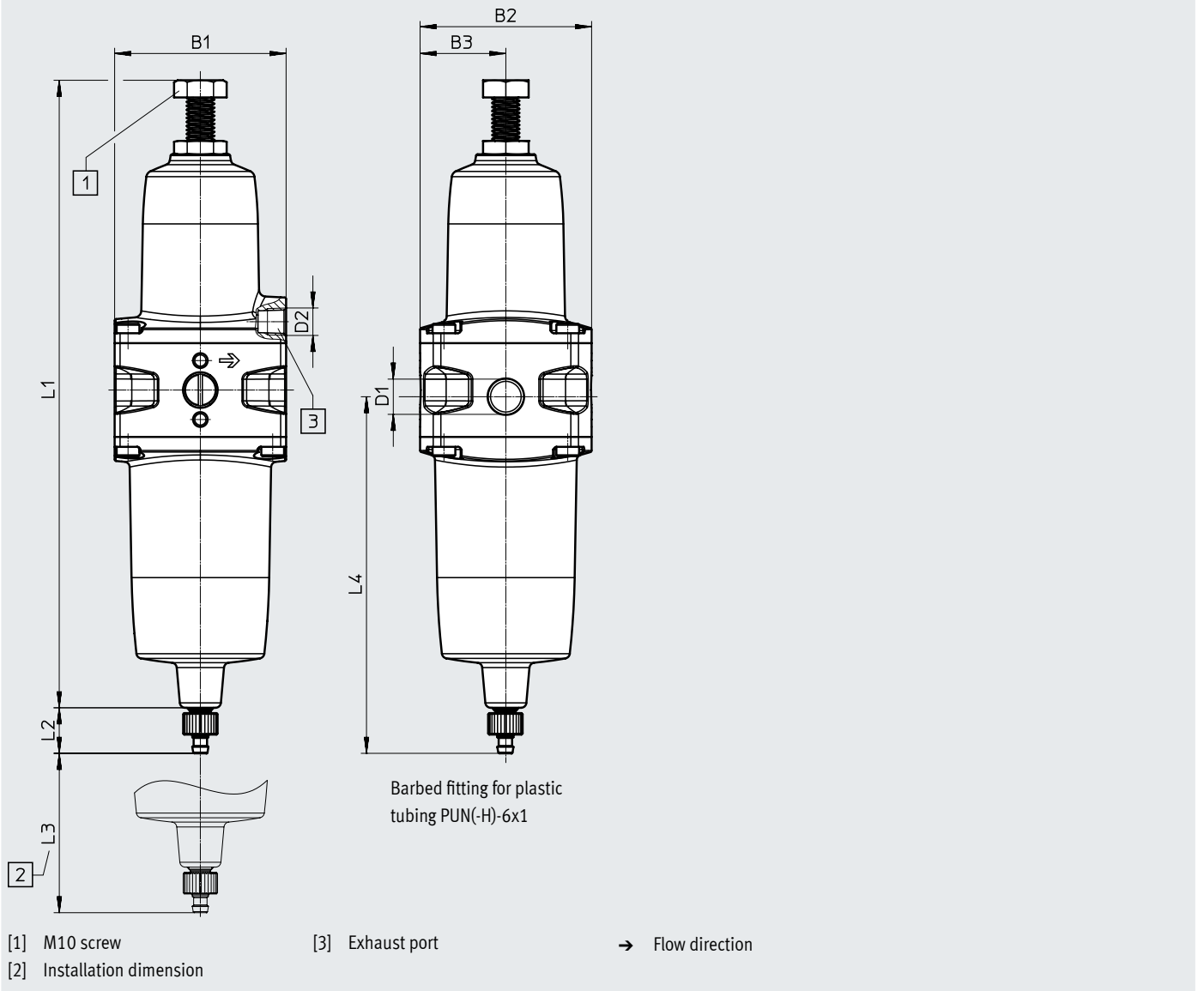
† Note: This product conforms to ISO 1179-1 and ISO 228-1.

Data sheet

Dimensions

Download CAD data → www.festo.com

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					

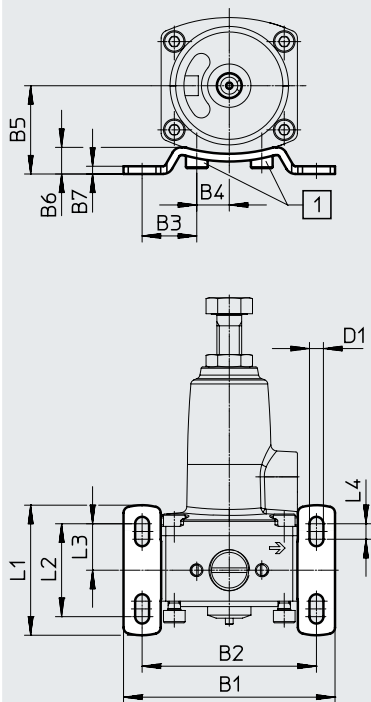
† Note: This product conforms to ISO 1179-1 and ISO 228-1.

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

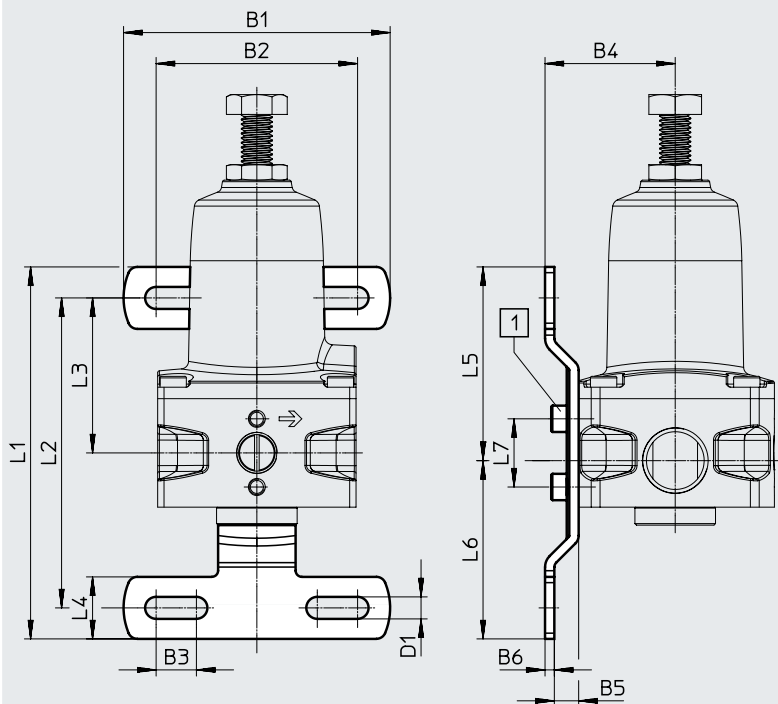
Mounting bracket PAMP
→ page 10

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

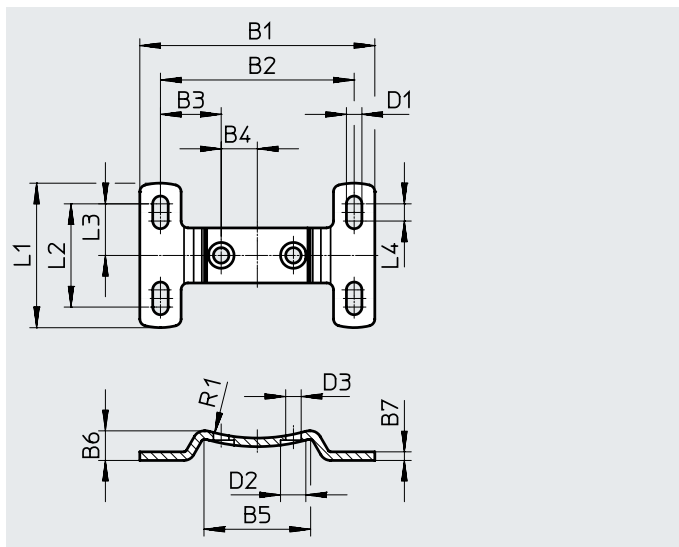
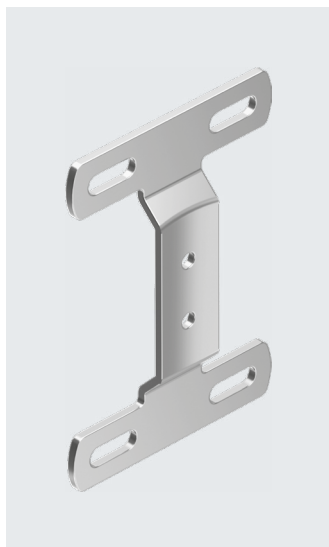
For PCRP-44

- For wall mounting an individual unit

Temperature of medium/ambient temperature: -60°... +80°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 ±10%	32	8123058	PAMP-MB-44

Mounting bracket PAMP-MB-64

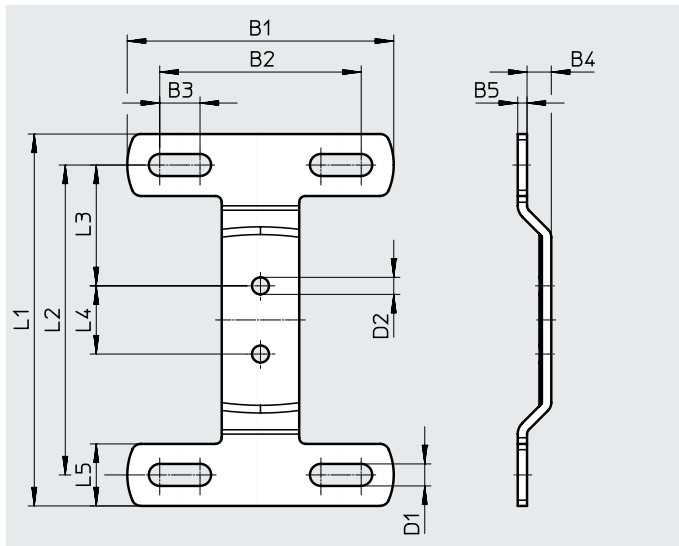
For PCRP-64

- For wall mounting an individual unit

Temperature of medium/ambient temperature: -60°... +80°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 ±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

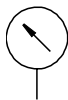
Filter material:
PE



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



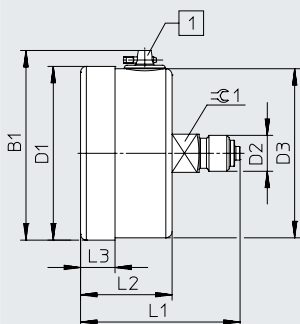
Technical data	
Nominal size	63
Pneumatic connection	G1/4
Operating medium	Inert gases Neutral fluids
Note on operating/ pilot medium	No oxygen No acetylene
Design	Bourdon tube pressure gauge
Conforms to standard	EN 837-1
Type of mounting	In-line installation
Connection position	Centred, rear
Ambient 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 ∅	D2	D3 ∅	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	
Outer scale in bar						
63	G1/4	0 ... 16 bar	0 ... 16 bar	8081401	PAGN-63-16-G14-R1-1.6-0.5-V2	