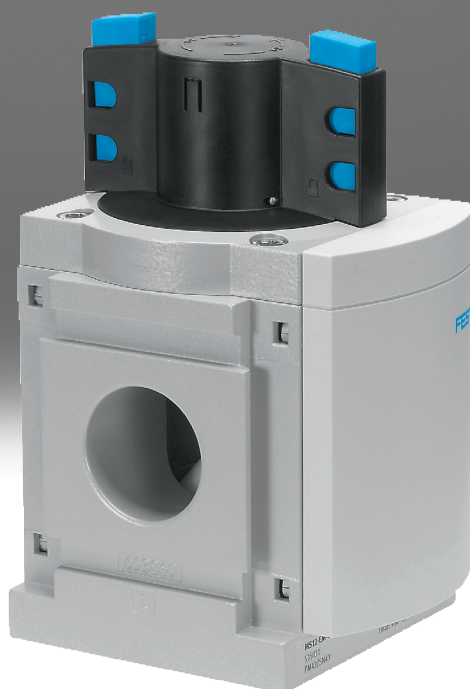


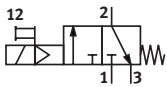
On/off valve MS12N-EM

FESTO



Characteristics

At a glance

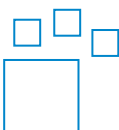


Solenoid manually actuated on/off valve for pressurizing and exhausting pneumatic systems.

- Turning the rotary knob switches the valve.
- A muffler can be attached or the exhaust air can be ducted at port 3
- With optional pressure gauge and pressure sensor

Ordering data - modular system

Link [ms12n_em](#)



Configurable product

This product and all its product options can be ordered online via the configurator.

Pneumatic connection

The installation of connection plates makes it easier to replace the module if necessary (e.g., when using piping).

Pressure gauge alternatives

- Features [AG]: integrated pressure gauges
- Features [A4]: Adapter for pressure gauge

Type of mounting

[WP] Mounting bracket standard design



- For connecting the modules for wall mounting
- In conjunction with sub-base for wall mounting of a single device

Type code

001	Series	
MS	MS series	
002	Size	
12	Width dimension 124 mm	
003	Thread type	
N	NPT thread	
004	Function	
EM	On/off valve, manual	
005	Pneumatic connection, inch	
AQT	Sub-base NPT1	
AQU	Sub-base NPT11/4	
AQV	Sub-base NPT11/2	
AQW	Sub-base NPT2	
G	Module without connecting thread, without sub-base	
006	Pressure gauge alternatives	
	Without	
A4	Adapter plate for EN pressure gauge 1/4, without pressure gauge	
AG	MS pressure gauge	
007	Alternative pressure gauge scale	
	MS pressure gauge	
BAR	Bar	
MPA	MPa	
008	Type of mounting	
	Without mounting bracket	
WP	Mounting bracket standard design	
009	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Pneumatic connection 1 ¹⁾	–
Pneumatic connection 2 ²⁾	–
Pneumatic connection 3	G1
Structural design	Piston gate valve
Lap	Positive overlap
Type of mounting	Alternatively: In-line installation With accessories
Mounting position ³⁾	Any
Valve function	3/2-way, bistable
Exhaust air function	Cannot be throttled
Actuation type	Manual
Type of control	directly
Flow direction	Non-reversible

1) With sub-bases: 1 NPT, 1 1/4 NPT, 1 1/2 NPT or 2 NPT

2) With sub-bases: 1 NPT, 1 1/4 NPT, 1 1/2 NPT or 2 NPT

3) On/off valve mounted vertically when combined with a pressure sensor, as condensate should not collect in the pressure sensor.

Flow characteristics

Normal nominal flow rate (normalized to DIN 1343) ¹⁾	25,000 ... 32,000 l/min
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1) Measured at p₁ = 6 bar and p₂ = 5 bar, Δp = 1 bar, depending on the selected sub-bases, which must be ordered separately → Accessories page: ms12-aq

Operating and environmental conditions

Operating pressure	0 ... 20 bar
Operating medium	Compressed air as per ISO 8573-1:2010 [---]
Ambient temperature	-10 ... 60°C
Temperature of medium	-10 ... 60°C
Corrosion resistance class (CRC) ¹⁾	2 - Moderate corrosion stress

1) For more information, visit www.festo.com/x/topic/kbk

Weight

Product weight	3,900 g
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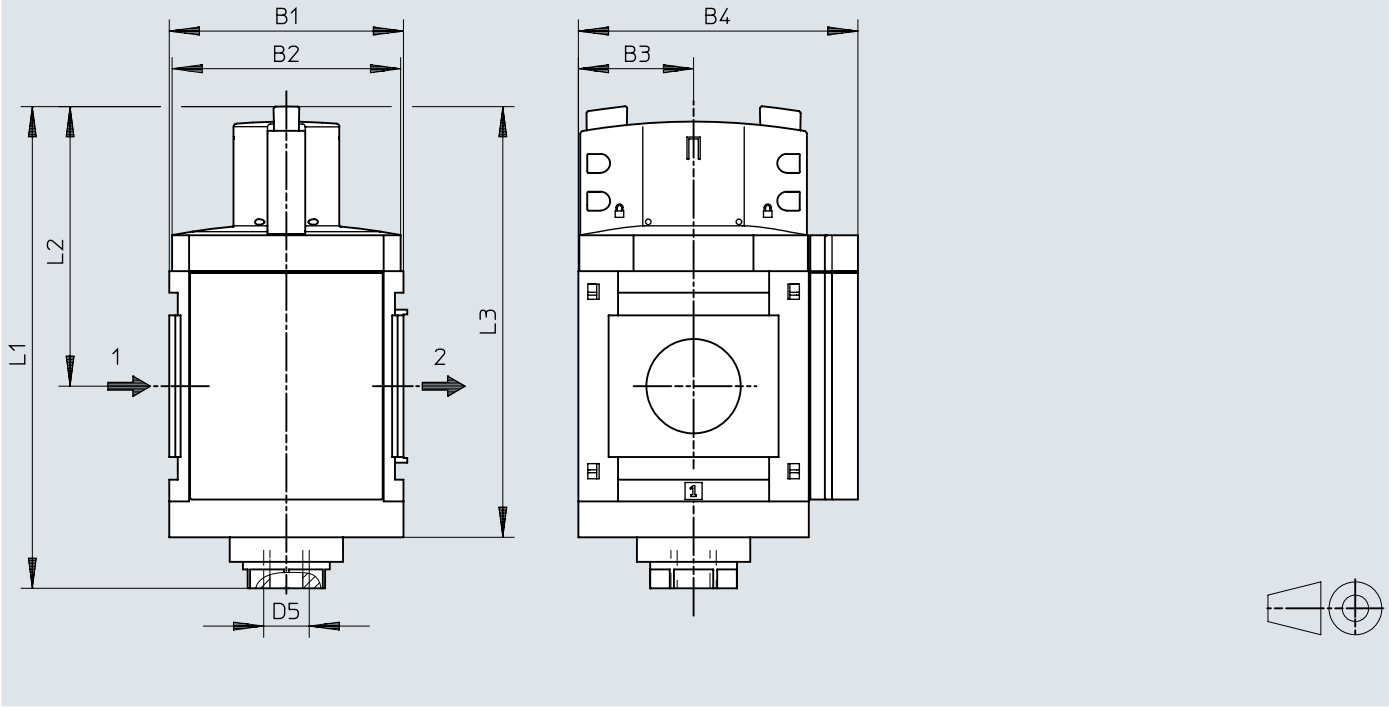
Materials

Housing material	Die-cast aluminum
Seals material	NBR
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Dimensions

Dimensions – Basic type, module without connection thread, without connection plate G, with cover plate

Download CAD data www.festo.com

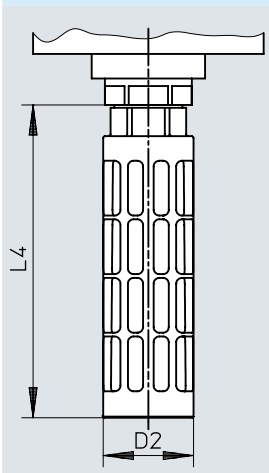


	B1 [inch]	B2 [inch]	B3 [inch]	B4 [inch]	L1 [inch]	L2 [inch]	L3 [inch]	D5
MS12N-EM-G	4,88	4,80	2,40	5,83	10,04	5,83	11,34	G1

Dimensions

Dimensions – Silencer

Download CAD data www.festo.com



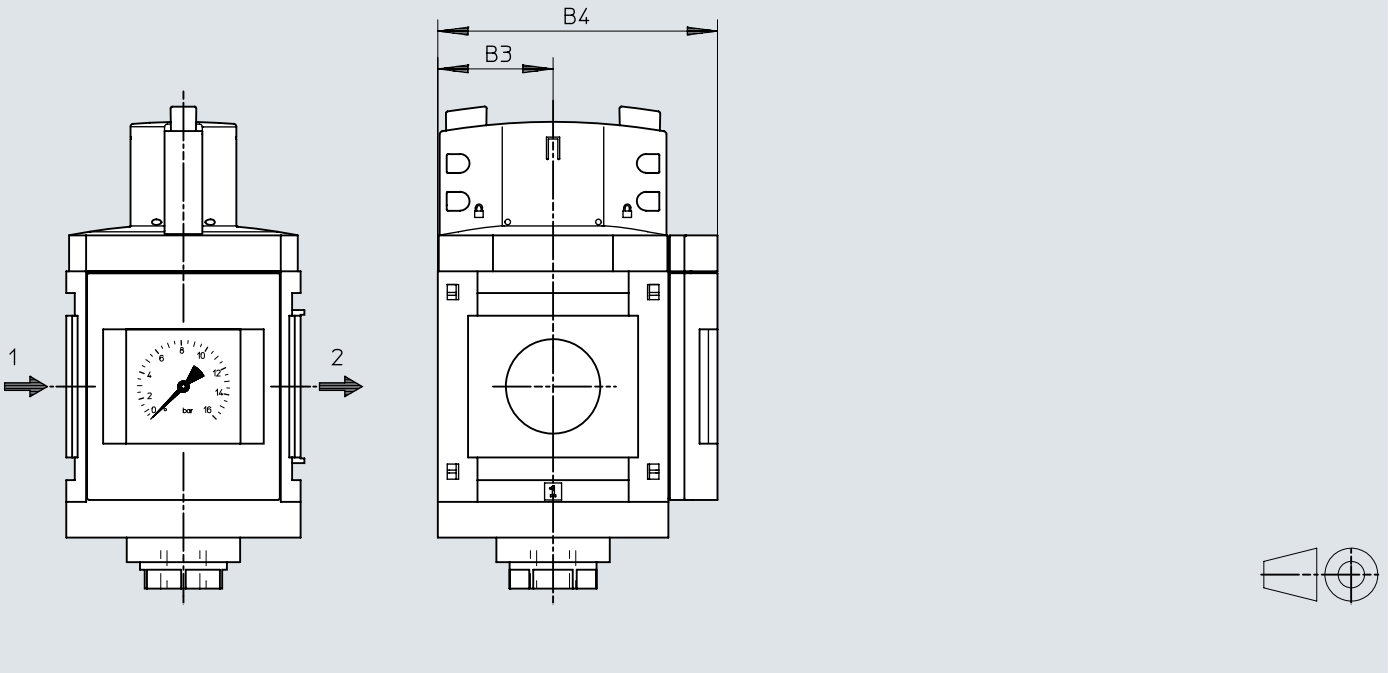
The technical drawing shows a side view of a silencer. It has a cylindrical body with a series of internal baffles. The overall length is indicated by a dimension line labeled L4. The diameter of the body is indicated by a dimension line labeled D2. The top of the silencer has a flange with four mounting holes.

	D2 Ø [inch]	L4 [inch]
MS12N-EM-...-S	1,88	6,52

Dimensions

Dimensions – Integrated MS pressure gauge with standard scale / display unit [bar]

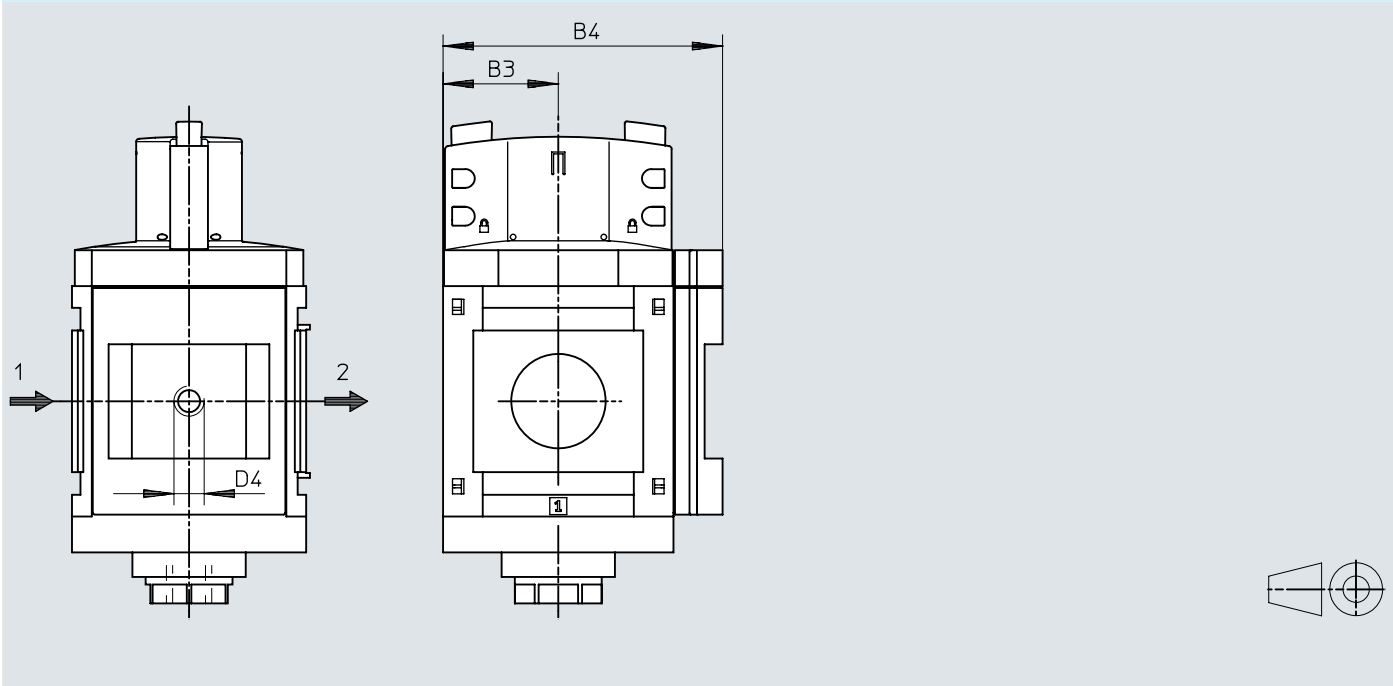
Download CAD data www.festo.com



	B3 [inch]	B4 [inch]
MS12N-EM-....-AG	2,40	5,83

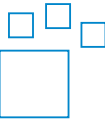
Dimensions

Dimensions – Adapter for EN pressure gauge 1/4, without pressure gauge [Download CAD data](http://www.festo.com) www.festo.com



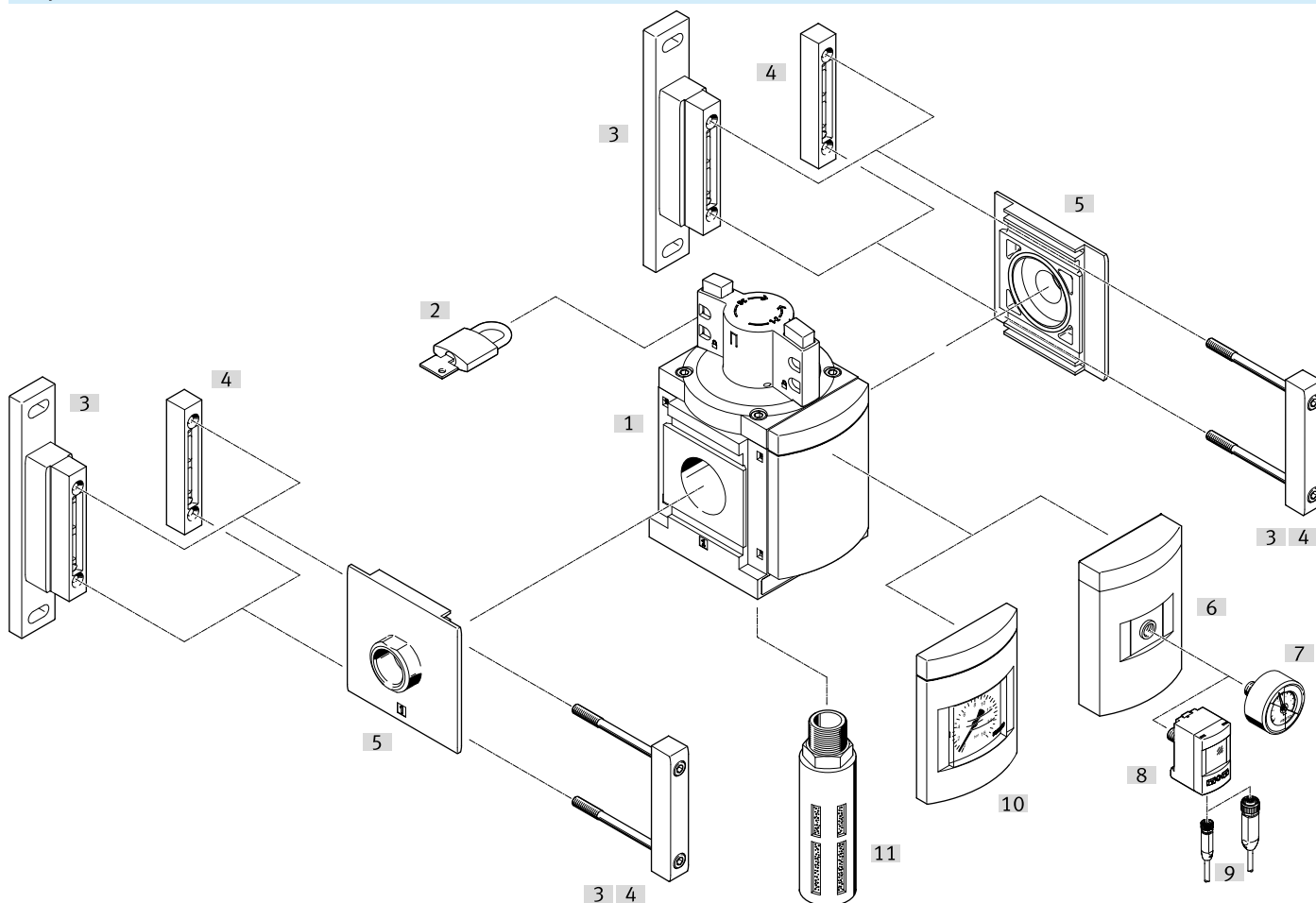
	B3 [inch]	B4 [inch]	D4
MS12N-EM-...-A4	2,40	5,83	G1/4

Ordering data

Ordering data – Modular product system			
	Type code	Part no.	Type
	MS12N-EM	535036	MS12N-EM

Peripherals overview

Peripherals overview



Accessories		→ Page/Internet
Type/order code	Description	
[1] On/off valve MS12N-EM	On/off valve	ms12n-em
[2] Padlock LRVS-D	When closed, the rotary knob can be secured with a padlock.	13
[3] Mounting bracket MS12-WP	Order code [WP]	11
[4] Module connector MS12-MV	For connection of the modules	11
[5] Sub-base-SET MS12-AQ...	Order code [AQ...]	11
[6] Adapter for EN pressure gauge 1/4	Order code [A4]	ms12n-em
[7] Pressure gauge MA	Built-in pressure indicator	11
[8] Pressure sensor SPAU-...-T	Display module	12
[9] Connecting cable NEBA-M...G...-LE4, straight	Connecting cable for display module	12
[9] Connecting cable NEBA-M...G...-LE4, angled	Connecting cable for display module	12
[10] Pressure gauge MS	Order code [AG], [RG]	ms12n-em
[11] Muffer U	-	12

Accessories

Module connector MS12-MV					
	Plate material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	500 g	537134	MS12-MV

Mounting bracket MS12-WP					
	Bracket material	LABS (PWIS) conformity	Product weight	Part no.	Type
	Die-cast aluminum	VDMA24364-B1/B2-L	700 g	537133	MS12-WP

Sub-base-SET MS12-AQ...						
	Pneumatic connection 1	Material of sub-base	LABS (PWIS) conformity	Product weight	Part no.	Type
	1 NPT	Die-cast aluminum	VDMA24364-B1/B2-L	1,300 g	537139	MS12-AQT
	1 1/4 NPT		VDMA24364-B2-L		537140	MS12-AQU
	1 1/2 NPT		VDMA24364-B1/B2-L		537141	MS12-AQV
	2 NPT				537142	MS12-AQW

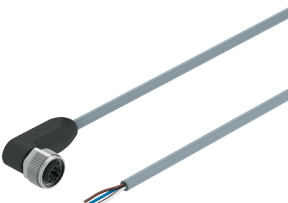
Pressure gauge MA						
	Pneumatic connection	Display range	Display range	Product weight	Part no.	Type
	R1/4	0 ... 232 psi	0 ... 16 bar	70 g	187080	MA-40-16-R1/4-EN

Pressure sensor SPAU					
	Pneumatic connection	Switching output	Electrical connection 1, connection technology	Part no.	Type
	R1/4	2 x PNP or 2 x NPN switchable	M12x1 A-coded as per EN 61076-2-101	8001208	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D

Accessories

Pressure sensor SPAU						
	Pneumatic connection	Switching output	Electrical connection 1, connection technology	Part no.	Type	
	R1/4	2 x PNP or 2 x NPN switchable	M8x1 A-coded as per EN 61076-2-104	8001209	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M8D	

Connecting cables NEBA, straight						
	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/wires	Cable length	Part no.	Type
	M12x1 A-coded as per EN 61076-2-101	Open end	4	2.5 m	8078239	NEBA-M12G5-U-2.5-N-LE4
				5 m	8078240	NEBA-M12G5-U-5-N-LE4
	M8x1 A-coded as per EN 61076-2-104			2.5 m	8078227	NEBA-M8G4-U-2.5-N-LE4
				5 m	8078228	NEBA-M8G4-U-5-N-LE4

Connecting cables NEBA, angled						
	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/wires	Cable length	Part no.	Type
	M12x1 A-coded as per EN 61076-2-101	Open end	4	2.5 m	8078248	NEBA-M12W5-U-2.5-N-LE4
				5 m	8078249	NEBA-M12W5-U-5-N-LE4
	M8x1 A-coded as per EN 61076-2-104			2.5 m	8078233	NEBA-M8W4-U-2.5-N-LE4
				5 m	8078234	NEBA-M8W4-U-5-N-LE4

Muffler U						
	Pneumatic connection	Flow rate with respect to atmosphere	Noise level	Product weight	Part no.	Type
	G1	17,500 l/min	85 dB(A)	233 g	151990	U-1-B

Accessories

Padlock LRVS-D				
	LABS (PWIS) conformity	Product weight	Part no.	Type
	VDMA24364-B1/B2-L	120 g	193786	LRVS-D