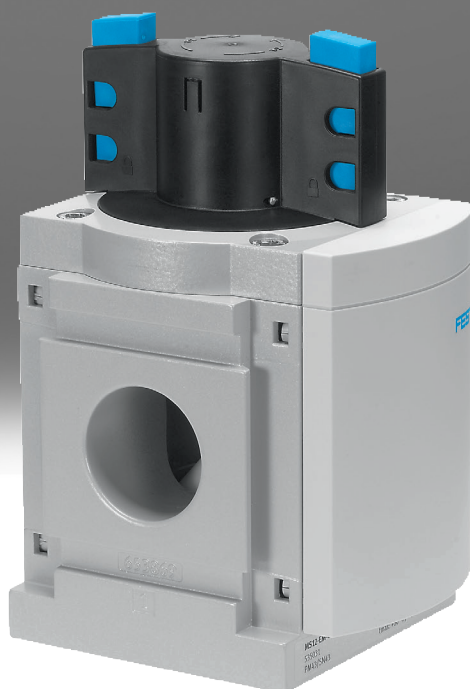


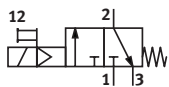
On/off valve MS12N-EM

FESTO



Characteristics

At a glance

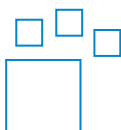


Manually actuated on/off valve for pressurising and exhausting pneumatic systems.

- The valve is switched by turning the rotary knob
- A silencer can be attached or the exhaust air can be ducted at port 3
- Optionally with 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

By installing connecting plates it is easier to replace the module if necessary (e.g. when using piping).

Pressure gauge alternatives

- Key features [AG]: integrated pressure gauge
- Key features [A4]: Adapter for pressure gauge

Type of mounting

[WP] Mounting bracket basic design



- For connecting the modules for wall mounting
- In combination with connecting plate for wall mounting an individual unit

Type code

001	Series	
MS	MS series	
002	Size	
12	Grid 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	
	None	
A4	Adapter 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 basic design	
009	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Pneumatic connection, port 1 ¹⁾	–
Pneumatic connection, port 2 ²⁾	–
Pneumatic connection, port 3	G1
Design	Piston gate valve
lap	Overlap
Type of mounting	Either: Inline installation With accessories
Mounting position ³⁾	Any
Valve function	3/2-way, double solenoid
Exhaust-air function	Cannot be throttled
Type of actuation	Manual
Type of piloting	Direct
Flow direction	Non-reversible

1) With connecting plates: 1 NPT, 1 1/4 NPT, 1 1/2 NPT or 2 NPT

2) With connecting plates: 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 must not collect in the pressure sensor.

Flow characteristics

Standard nominal flow rate (standardised 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 connecting plates, which must be ordered separately → Accessories page: ms12-aq

Operating and environmental conditions

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

1) More information www.festo.com/x/topic/crc

Weight

Product weight	3,900 g
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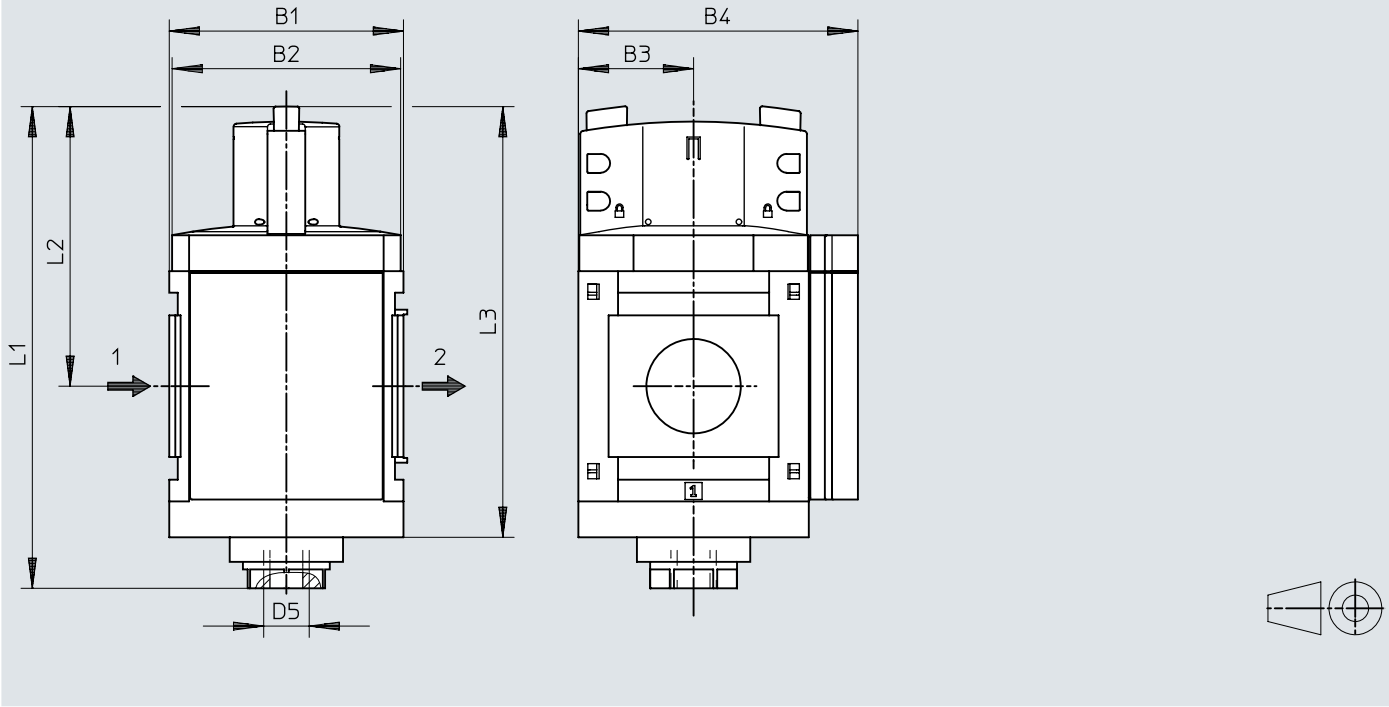
Materials

Material housing	Die-cast aluminium
Material seals	NBR
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Dimensions

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

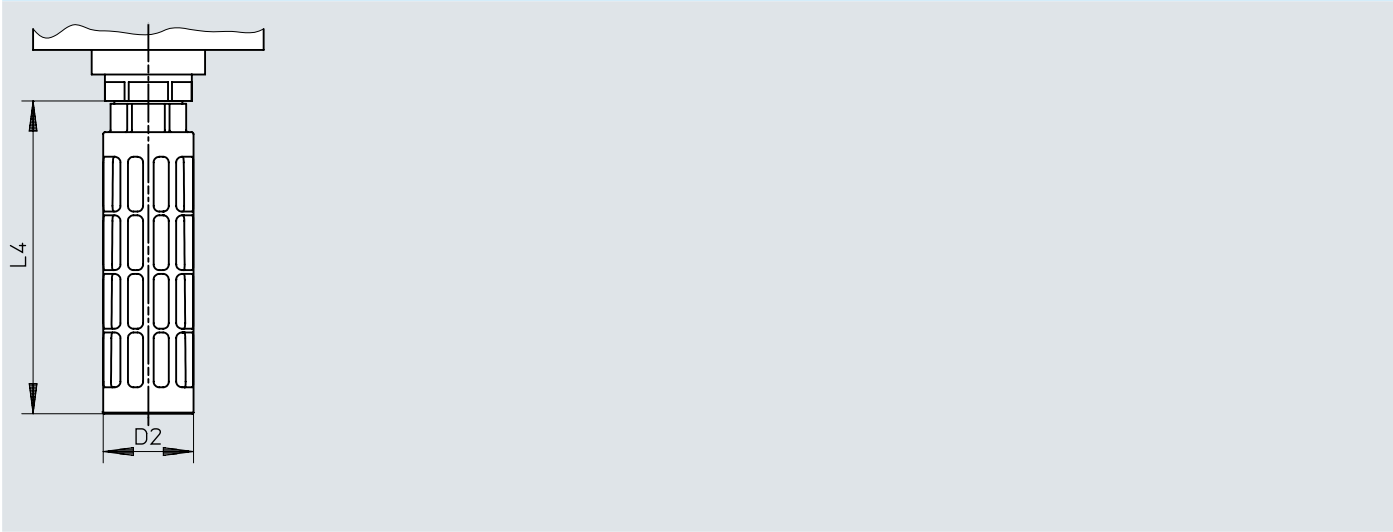
Download CAD data www.festo.com



	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

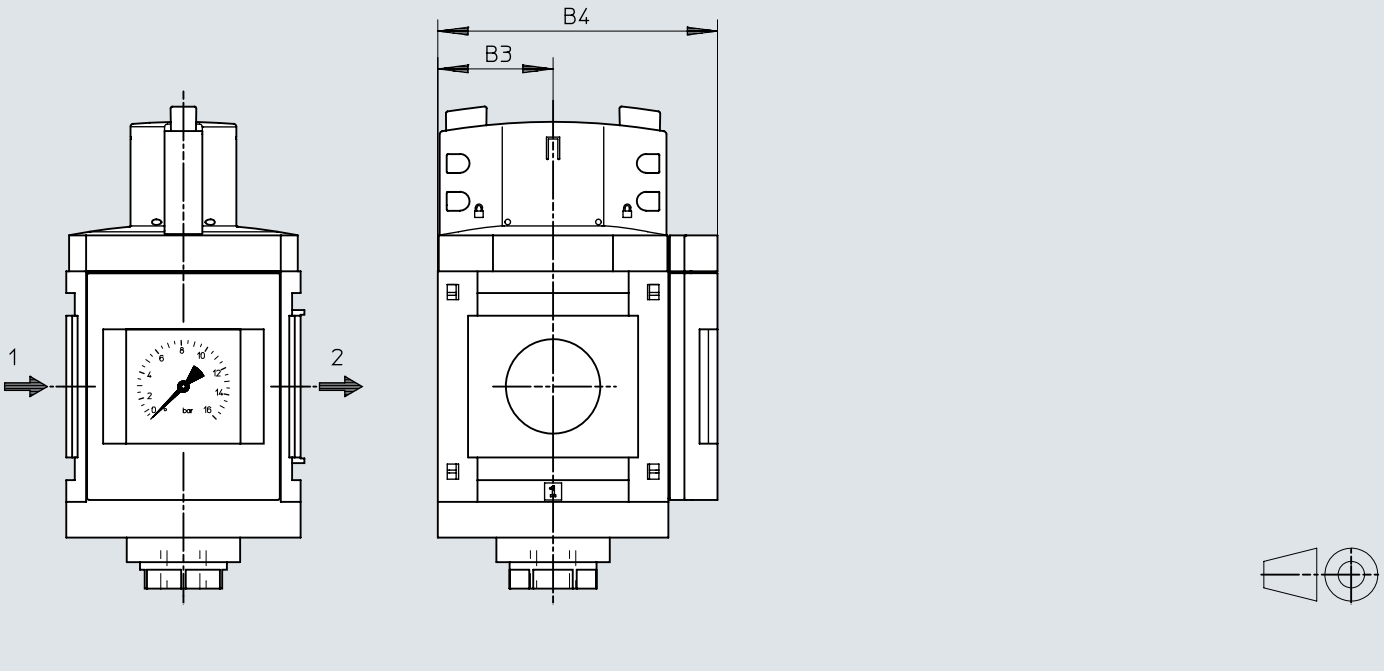


	D2 Ø [inch]	L4 [inch]
MS12N-EM-...-S	1,88	6,52

Dimensions

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

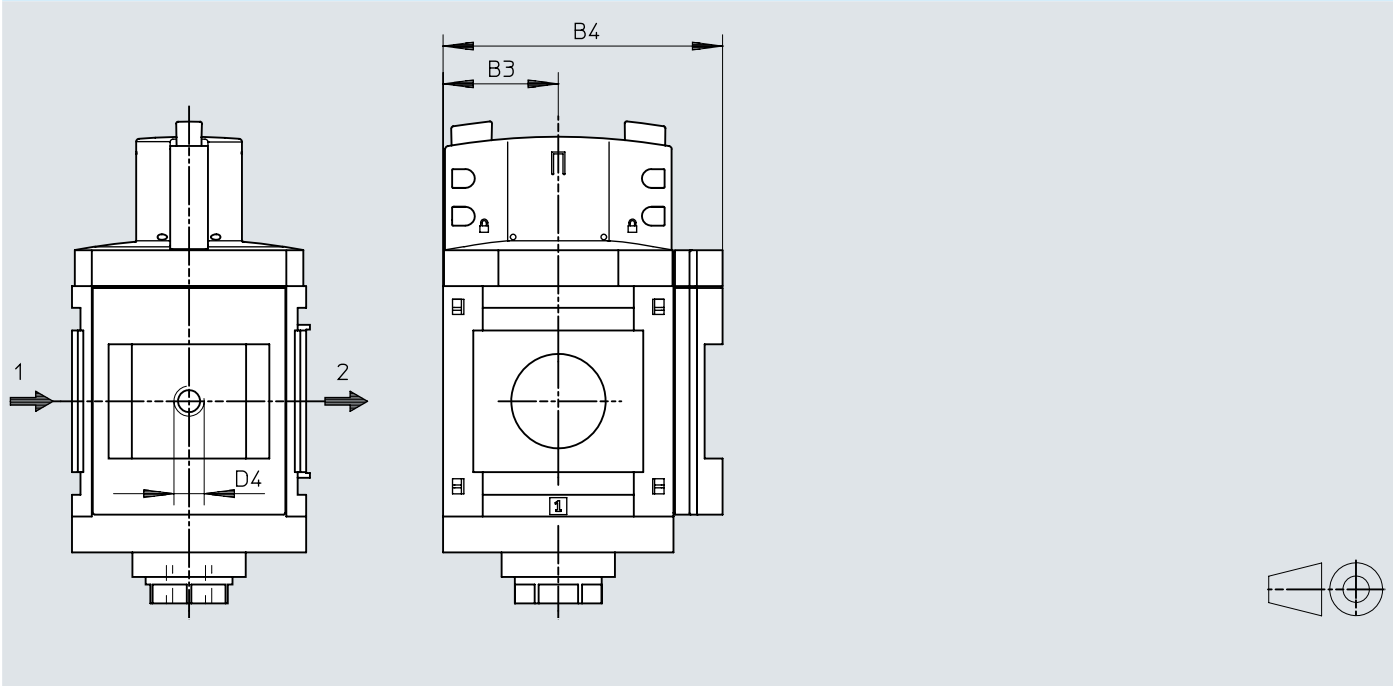
Download CAD data www.festo.com



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

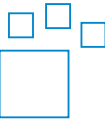
Dimensions

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



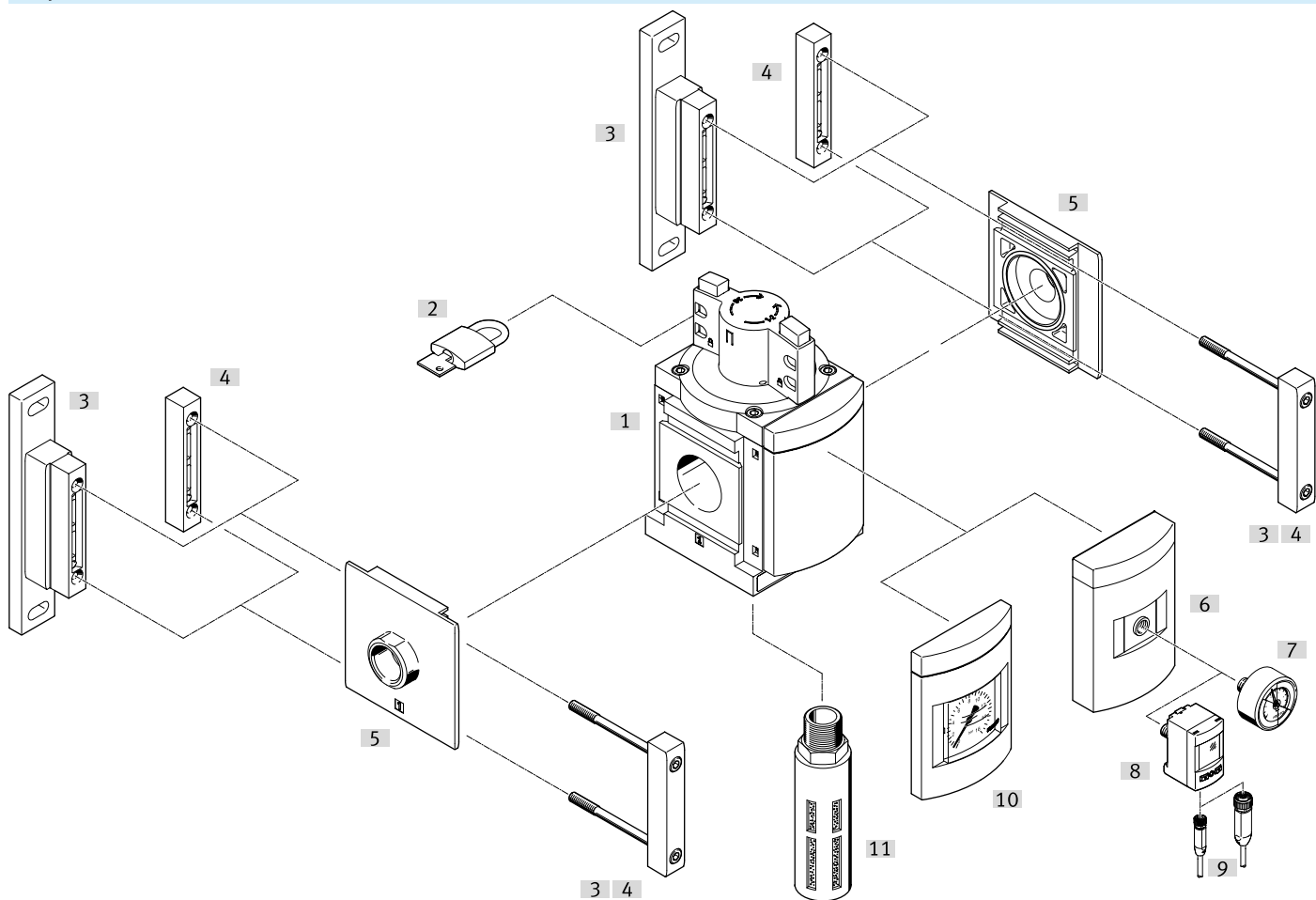
	B3 [inch]	B4 [inch]	D4
MS12N-EM-...-A4	2,40	5,83	G1/4

Ordering data

Ordering information – Modular product system			
	Short type code	Part no.	Type
	MS12N-EM	535036	MS12N-EM

Peripherals

Peripherals overview



Accessories		→ Link
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 connecting the modules	11
[5] Connecting plate 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] Silencer U	-	12

Accessories

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

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

Connecting plate SET MS12-AQ...						
	Pneumatic connection, port 1	Material sub-base	LABS (PWIS) conformity	Product weight	Part no.	Type
	1 NPT	Die-cast aluminium	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	Indicating range	Indicating 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, connector system	Part no.	Type
	R1/4	2 x PNP or 2 x NPN, switchable	M12x1, A-coded to EN 61076-2-101	8001208	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D

Accessories

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

Connecting cables NEBA, straight						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to 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, to 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, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to 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, to EN 61076-2-104			2.5 m	8078233	NEBA-M8W4-U-2.5-N-LE4
				5 m	8078234	NEBA-M8W4-U-5-N-LE4

Silencer U						
	Pneumatic connection	Flow rate to atmosphere	Sound pressure 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