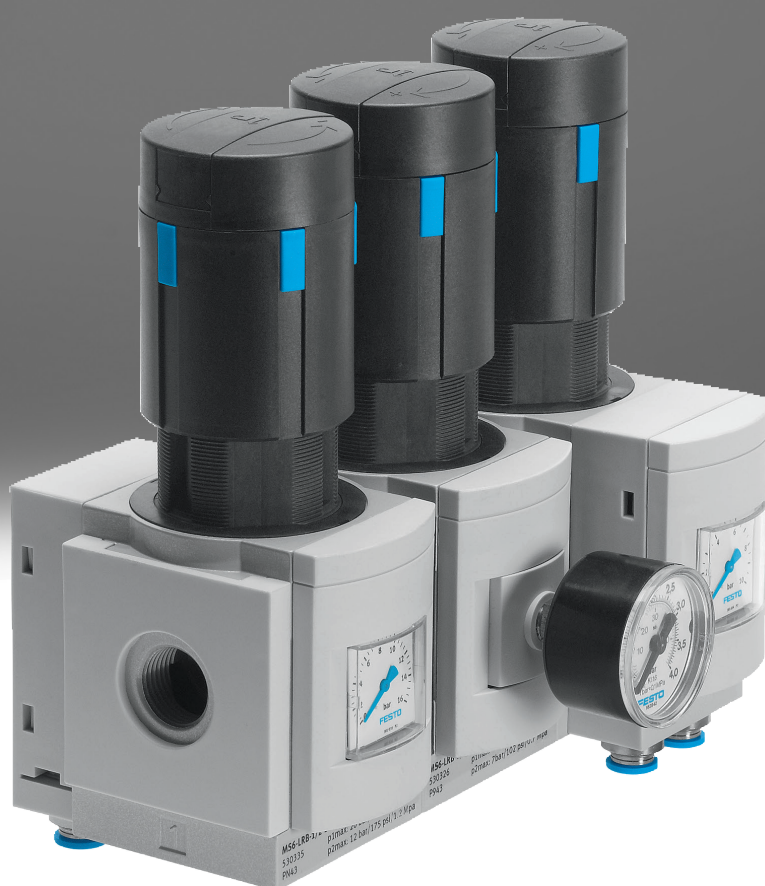


Pressure regulator MS6N-LRB

FESTO



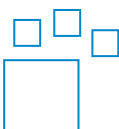
Characteristics

At a glance

- Grid dimension: 62 mm
- Good control characteristics with minimal pressure hysteresis and primary pressure compensation
- Return flow option for exhausting from output 2 to input 1 already integrated
- With or without secondary exhausting
- Optional pressure sensor

Ordering data - modular system

Link [ms6n-lrb](#)



Configurable product

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

Function

[LRB] Pressure regulator for manifold assembly

To build up a regulator manifold with through air supply for pressure ranges that can be adjusted independently of one another

Pneumatic connection

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

Pressure regulation range

There are different pressure regulation ranges:

- 0.3 ... 4 bar
- 0.3 ... 7 bar
- 0.5 ... 12 bar

Pressure gauge alternatives

Two pressure gauge connections for variable installation

Alternative pressure gauge scale

The scaling of the built-in pressure gauge can be selected. The unit options available are [MPa], [bar] / [psi].

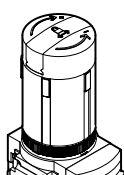
Secondary exhausting

The regulated working pressure can also be reduced without a consuming device via the optional secondary exhausting.

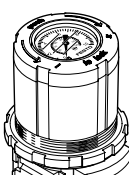
Rotary knob alternative

Optionally with longer rotary knob or with pressure gauge integrated in the rotary knob.

[LD] Long rotary knob



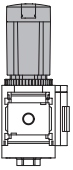
[DM2] Rotary knob pressure gauge, large



Characteristics

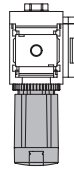
Alternative mounting position

[] None



Rotary knob positioned above the appliance as standard.

[KD] Rotary knob underneath

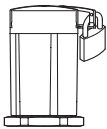


Optionally with rotary knob positioned below the device.

Lockability

Various options for locking the rotary knob to protect the settings from being changed.

[AS] Can be locked using accessories



[E11] With integrated lock



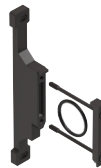
Type of mounting

[WR] Mounting bracket with knurled nut on regulator knob



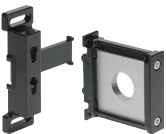
- For wall mounting an individual device

[WP] Mounting bracket basic design



- For connecting the modules for wall mounting
- In combination with connecting plate MS6-AQ... for mounting an individual device on a wall
- In combination with mounting plate MS6-AEND for wall mounting of a single device
- Same wall distance when used in combination with series MS4 and MS6

[WPM] Mounting bracket for hooking in service unit components



- For connecting the modules for wall mounting
- In combination with connecting plate MS6-AQ... for mounting an individual device on a wall
- In combination with mounting plate MS6-AEND for wall mounting of a single device
- For installing modules with the regulator knob pointing downwards

[WB] Mounting centrally at rear (wall mounting top and bottom), connecting plates not required



- For wall mounting an individual device

Outlet direction

Available with flow in the opposite direction.

Type code

001	Series	
MS	MS series	
002	Size	
6	Grid dimension 62 mm	
003	Thread type	
N	NPT thread	
004	Function	
LRB	Pressure regulator for manifold assembly	
005	Pneumatic connection, inch	
1/2	Female thread NPT 1/2	
AQN	Sub-base NPT1/4	
AQP	Sub-base NPT3/8	
AQR	Sub-base NPT1/2	
AQS	Sub-base NPT3/4	
006	Pressure regulation range	
D5	0.3 ... 4 bar	
D6	0.3 ... 7 bar	
D7	0.5 ... 12 bar	
D8	0.5 ... 16 bar	
007	Pressure gauge alternatives	
	None	
A4	Adapter for EN pressure gauge 1/4, without pressure gauge	
AD1	Pressure sensor with LCD display, M8 plug, PNP, 3-pin	
AD2	Pressure sensor with LCD display, M8 plug, NPN, 3-pin	
AD3	Pressure sensor with LCD display, M12 plug, PNP, 4-pin, analogue output 4 ... 20 mA	
AD4	Pressure sensor with LCD display, M12 plug, NPN, 4-pin, analogue output 4 ... 20 mA	
AD7	Pressure sensor with switching display, M8 plug, threshold value comparator, PNP, N/O	
AD8	Pressure sensor with switching display, M8 plug, threshold value comparator, PNP, N/C	
AD9	Pressure sensor with switching display, M8 plug, window comparator, PNP, N/O	
AD10	Pressure sensor with operational status indicator, M8 plug, window comparator, PNP, N/C	
RG	Integrated pressure gauge, red/green scale	

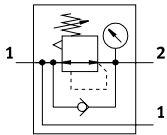
008	Alternative pressure gauge scale	
	MS pressure gauge	
BAR	bar	
MPA	MPa	
009	Secondary exhausting	
	With secondary exhausting	
OS	Without secondary exhaust	
010	Rotary knob alternative	
	None	
LD	Long rotary knob	
DM2	Rotary knob pressure gauge, large	
011	Alternative mounting position	
	None	
KD	Rotary knob underneath	
012	Lockability	
	None	
AS	Can be locked using accessories	
E11	With integrated lock	
013	Alternative pressure outlet	
	None	
BI	Angled outlet block QS 5/16-U	
BJ	Angled outlet block QS 3/8-U	
014	Type of mounting	
	Without mounting bracket	
WB	Mounting centrally at rear (wall mounting top and bottom), connecting plates not required	
WP	Mounting bracket basic design	
WPB	Mounting bracket for large wall gap	
WPM	Mounting bracket for hooking in service unit components	
WR	Mounting bracket with knurled nut on regulator knob	
015	Outlet direction	
Z	Pressure output to the front	

Datasheet

General technical data

Pneumatic connection, port 1	1/2 NPT					
Pneumatic connection, port 2	1/2 NPT			QS-8		
Pressure regulation range	0.5 ... 12 bar	0.3 ... 4 bar	0.3 ... 7 bar	0.5 ... 12 bar	0.3 ... 4 bar	0.3 ... 7 bar
Size	6					
Design	Directly actuated diaphragm regulator, With through compressed air supply					
Controller function	Output pressure constant, Via primary pressure compensation, With secondary venting					
Type of mounting	Either: Front panel mounting In-line installation With accessories					
Mounting position	optional					
Actuator lock	Rotary knob with detent, can be closed with accessories					
Max. pressure hysteresis	0.25 bar					
Pressure gauge (ANALOG) or Pressure display (DIGITAL)	Prepared for G1/4, With pressure gauge			With pressure gauge		

Function (shown with pressure gauge)



Standard nominal flow rate q_{nN}

Pneumatic connection, port 2	1/2 NPT			QS-8		
Pressure regulation range	0.5 ... 12 bar	0.3 ... 4 bar	0.3 ... 7 bar	0.5 ... 12 bar	0.3 ... 4 bar	0.3 ... 7 bar
Standard nominal flow rate (standardised to DIN 1343)	5,500 l/min	7,300 l/min	6,300 l/min	800 l/min	600 l/min	880 l/min

Operating and environmental conditions

Operating pressure	0.8 ... 20 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	-10 ... 60°C
Media temperature	-10 ... 60°C
Storage temperature	-10 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress
Suitable for use with food ²⁾	See supplementary material information

1) Corrosion resistance class CRC 2 to Festo standard FN 940070. Moderate corrosion stress. Indoor application where condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with the surrounding industrial environment.

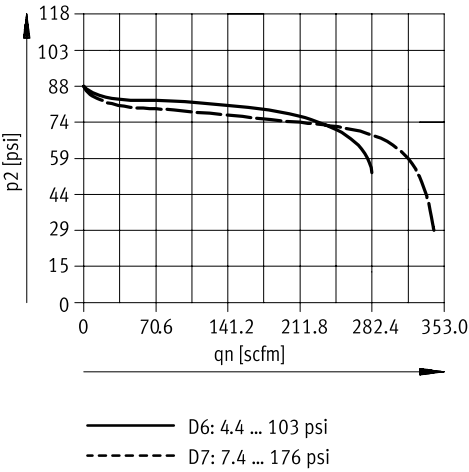
2) More information www.festo.com/catalogue/ms-lr → Support/Downloads.

Materials

Material housing	Die-cast aluminium
Material membrane	NBR
Material seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

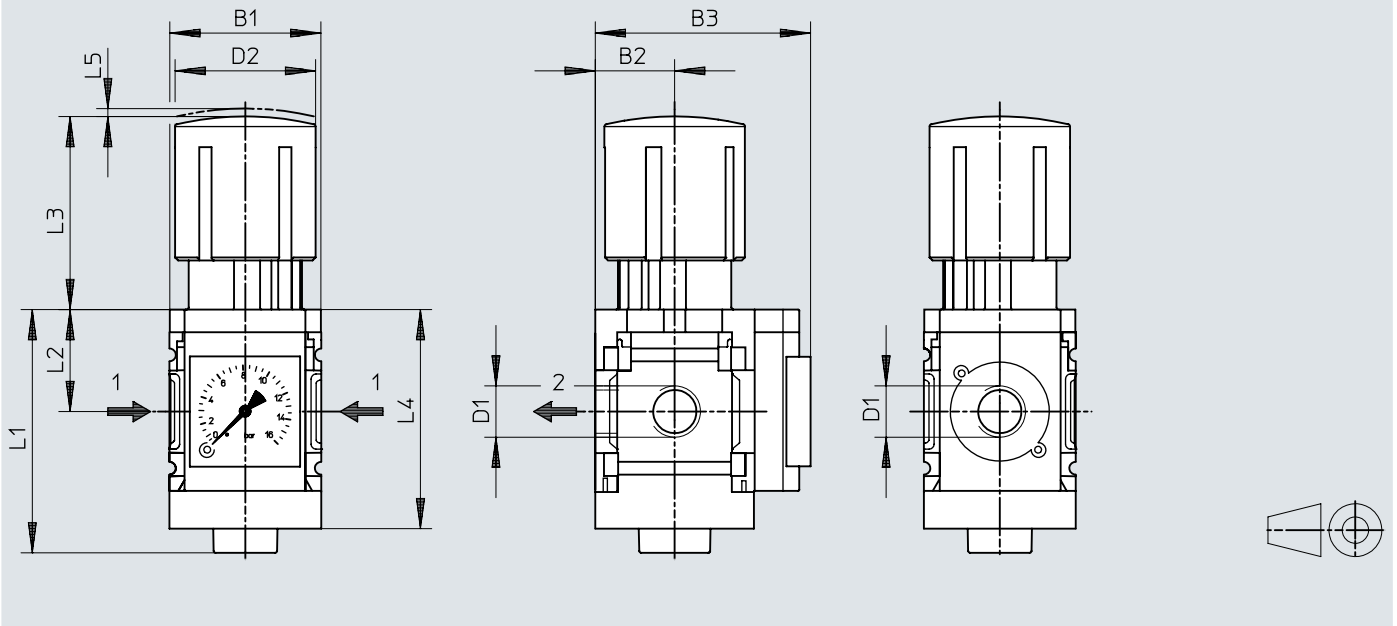
Standard flow rate qn as a function of output pressure p2 (p1 = 147 psi) – MS6N-LRB-1/2



Dimensions

Dimensions – Basic type Integrated MS pressure gauge with standard scale /
with red/green scale, rotary knob with latch

Download CAD data www.festo.com

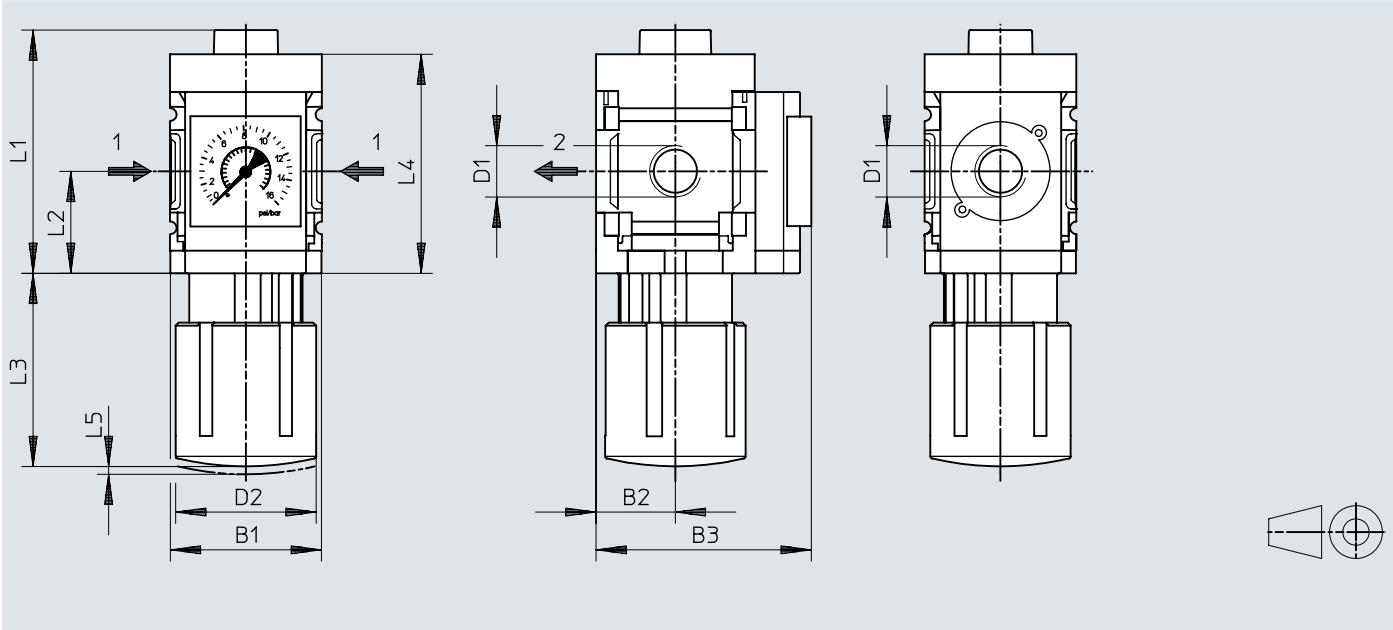


	B1	B2	B3		D1	D2	L1	L2	L3	L4	L5
	[inch]	[inch]	1) [inch]	2) [inch]		[inch]	[inch]	[inch]	[inch]	[inch]	[inch]
MS6N-LRB-1/2	2,44	1,22	3,03	3,09	1/2 NPT	2,02	3,70	1,54	3,74	3,35	0,20

- 1) Standard scale
2) Red/green scale

Dimensions

Dimensions – Alternative mounting position, rotary knob underneath Download CAD data www.festo.com

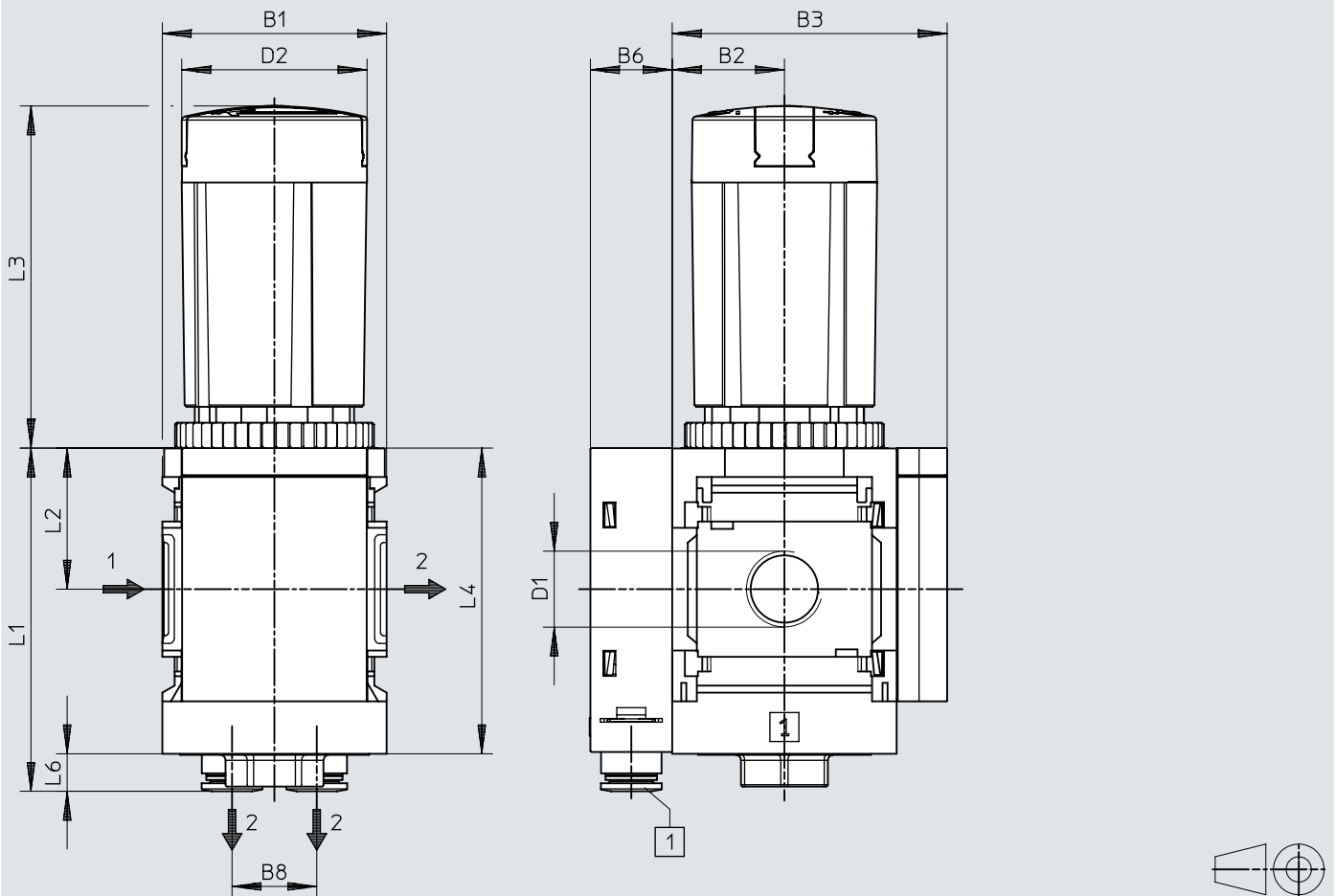


	B1 [inch]	B2 [inch]	B3 [inch]	D1	D2 [inch]	L1 [inch]	L2 [inch]	L3 [inch]	L4 [inch]	L5 [inch]
MS6N-LRB-1/2-...-KD	2,44	1,22	3,03	1/2 NPT	2,02	3,70	1,54	3,74	3,35	0,20

Dimensions

Dimensions – Angled outlet block, pressure outlet to the rear

Download CAD data www.festo.com

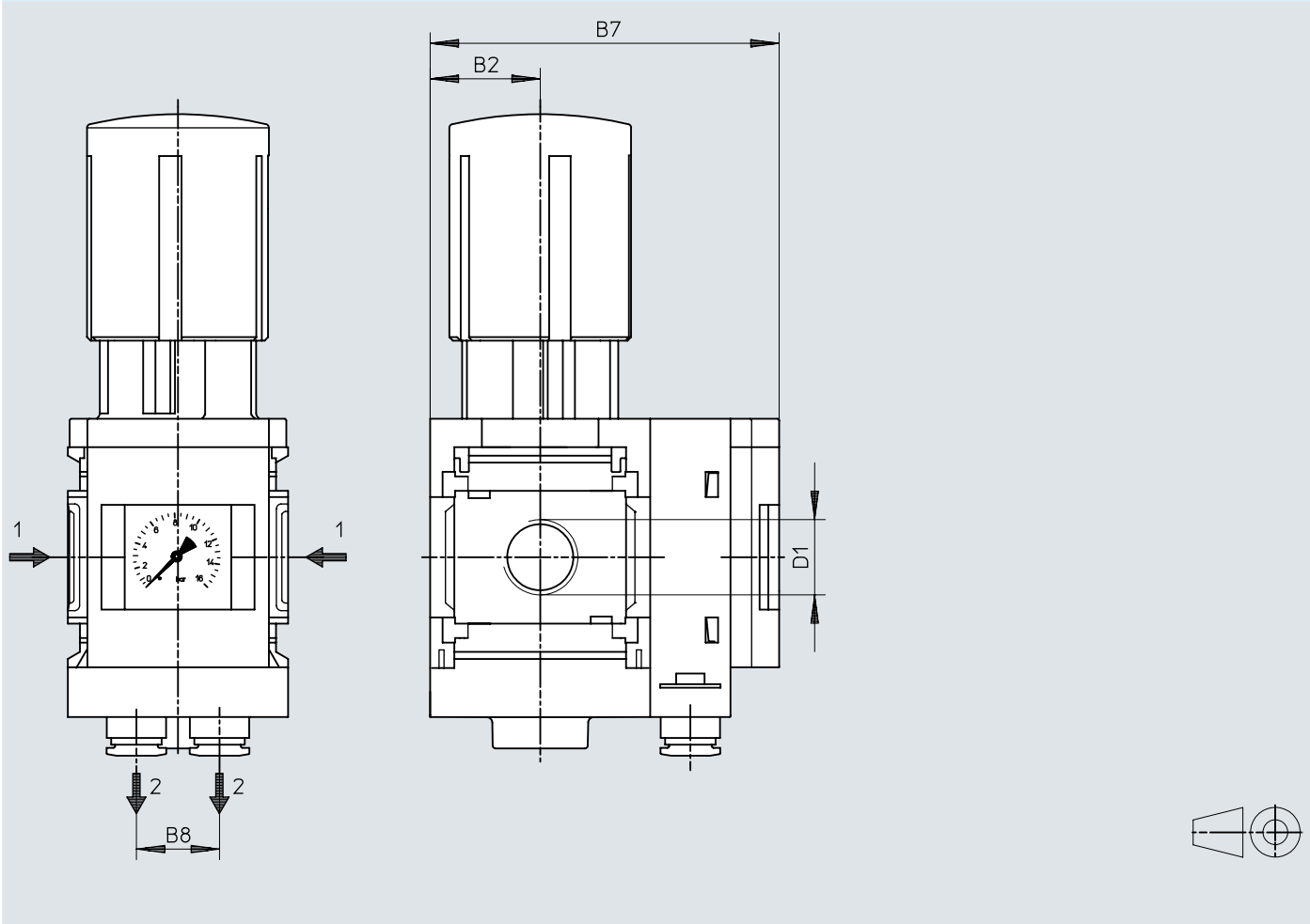


[1] Push-in connector QS

	B1	B2	B3	B6	B8	D1	D2 ø	L1	L2	L3	L4	L6
	[inch]	[inch]	[inch]	[inch]	[inch]		[inch]	[inch]	[inch]	[inch]	[inch]	[inch]
MS6N-LRB-1/2-...-BD/BE	2,44	1,22	3,03	0,91	0,92	1/2 NPT	2,02	3,74	1,54	3,74	3,35	0,41

Dimensions

Dimensions – Angled outlet block, pressure outlet to the front Download CAD data www.festo.com

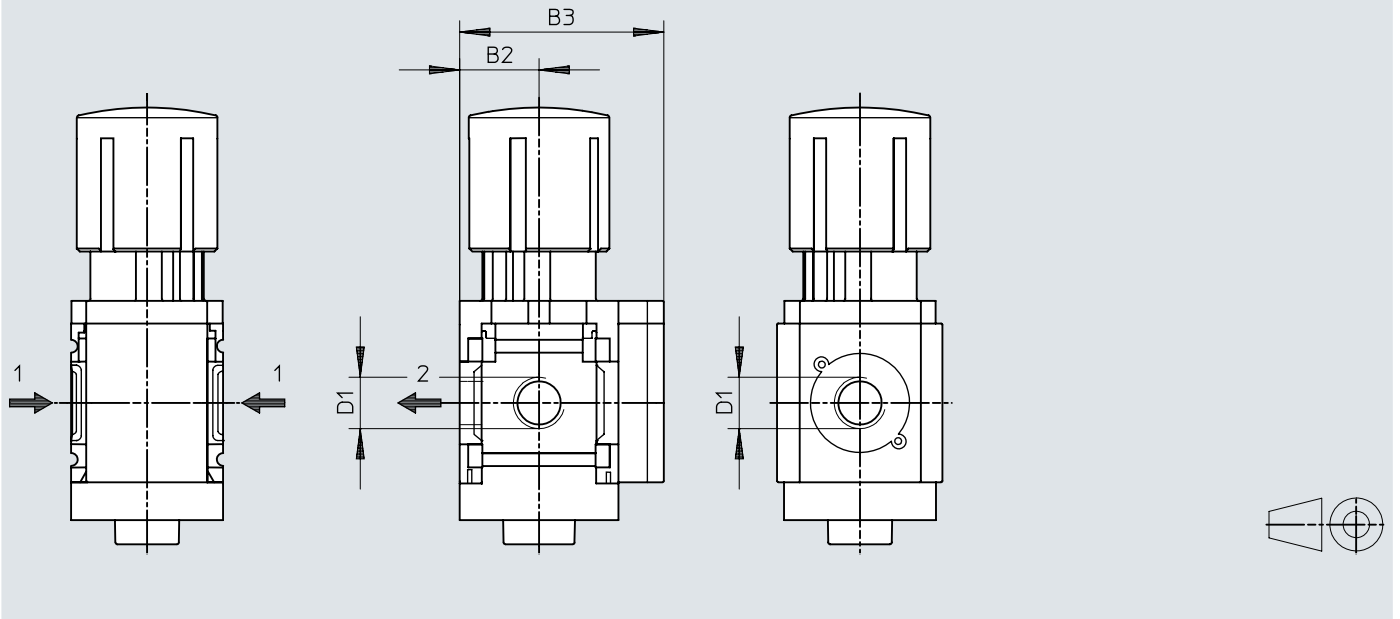


	B2 [inch]	B7 [inch]	B8 [inch]	D1
MS6N-LRB-1/2-...-BD/BE	1,22	3,90	0,92	1/2 NPT

Dimensions

Dimensions – Pressure gauge alternatives, cover plate

Download CAD data www.festo.com

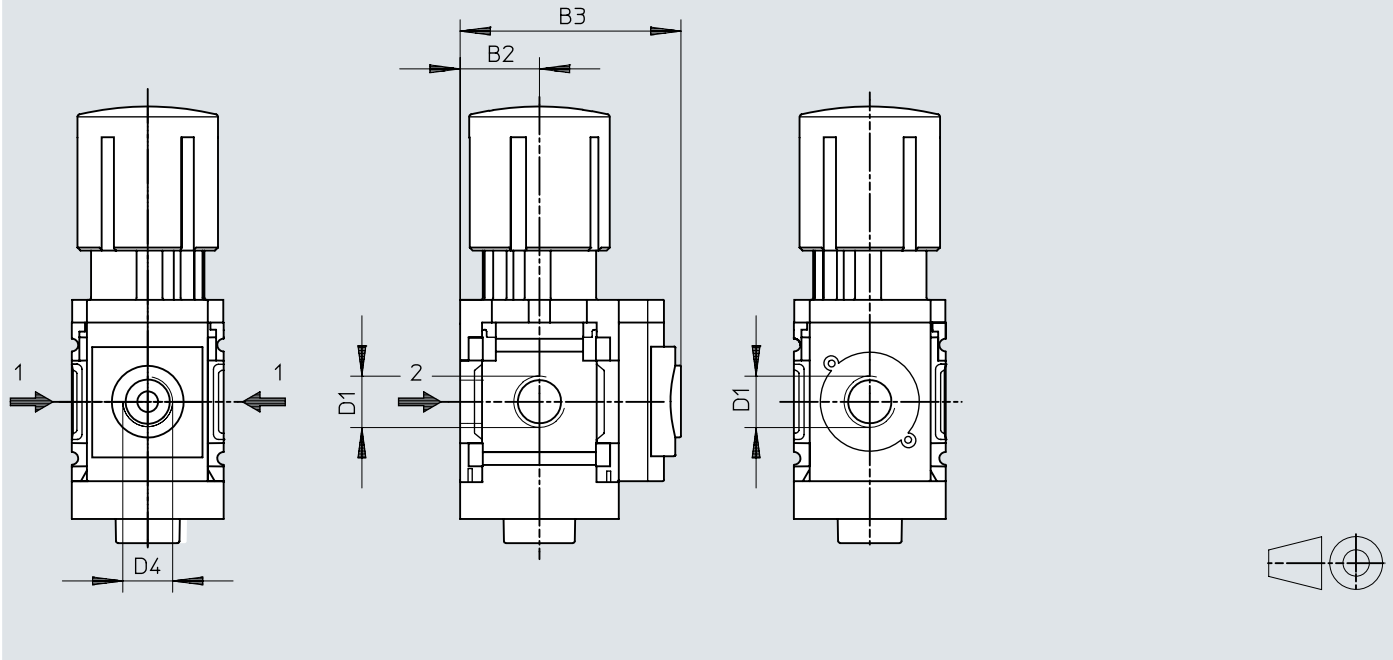


	B2 [inch]	B3 [inch]	D1
MS6N-LRB-1/2-...-VS	1,22	2,99	1/2 NPT

Dimensions

Dimensions – Pressure gauge alternatives, adapter for EN pressure gauge 1/8 and 1/4, without pressure gauge

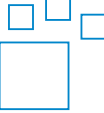
Download CAD data www.festo.com



	B2 [inch]	B3 [inch]	D1	D4
MS6N-LRB-1/2-...-A4	1,22	3,09	1/2 NPT	1/4 NPT

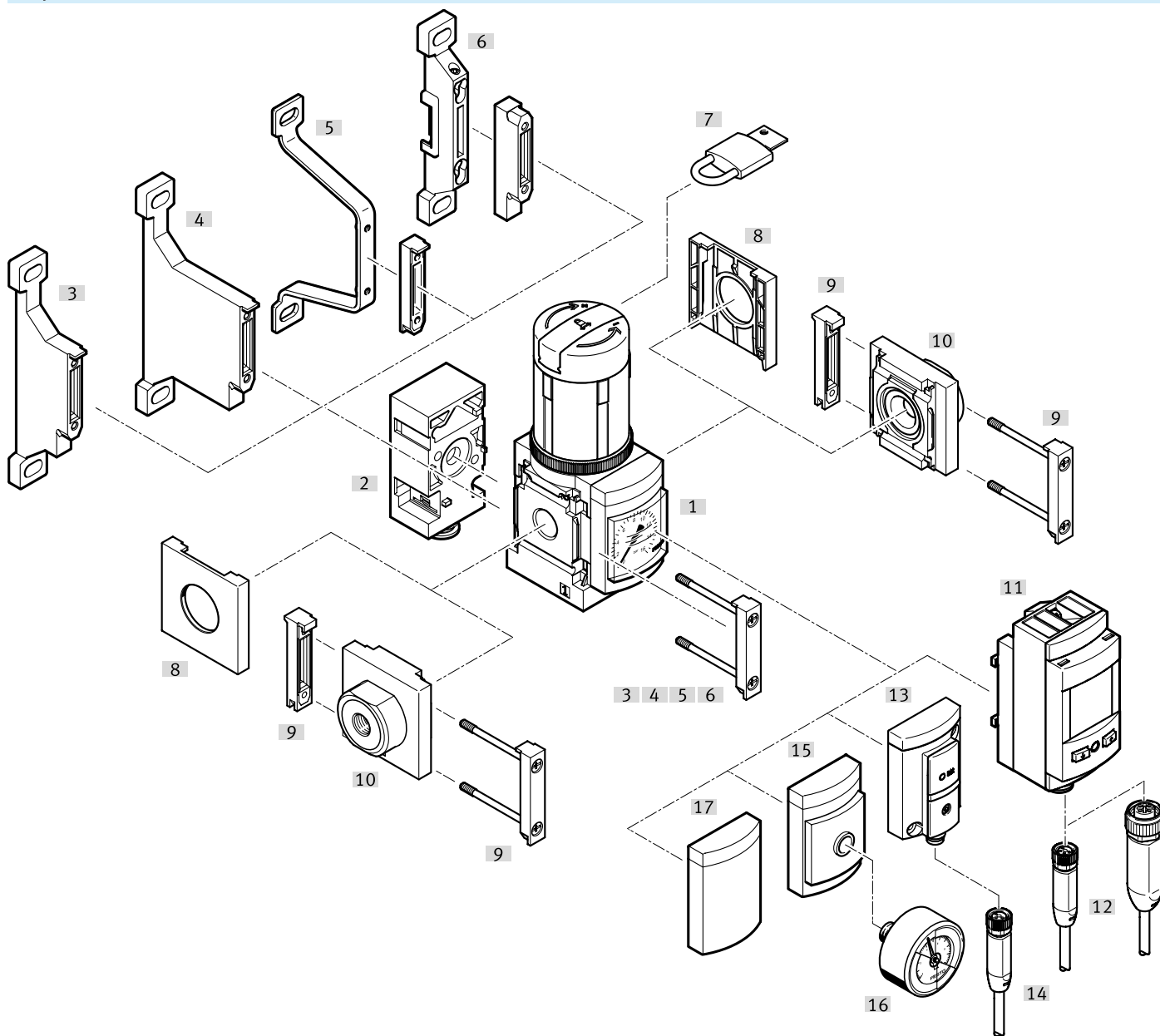
Ordering data

Ordering data						
	Pneumatic connection, port 1	Pressure regulation range	Flow direction	Product weight	Part no.	Type
	1/2 NPT	0.3 ... 4 bar	From left to right	747 g	531818	MS6N-LRB-1/2-D5-AS
					531830	MS6N-LRB-1/2-D5-A4-AS
					531824	MS6N-LRB-1/2-D5-AS-BI
		0.3 ... 7 bar			531831	MS6N-LRB-1/2-D6-A4-AS
					531826	MS6N-LRB-1/2-D6-AS-BI
					531820	MS6N-LRB-1/2-D6-AS
		0.5 ... 12 bar			531828	MS6N-LRB-1/2-D7-AS-BI
					531822	MS6N-LRB-1/2-D7-AS
					531832	MS6N-LRB-1/2-D7-A4-AS

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS6N-LRB	527666	MS6N-LRB

Peripherals

Peripherals overview – Pressure outlet, rear



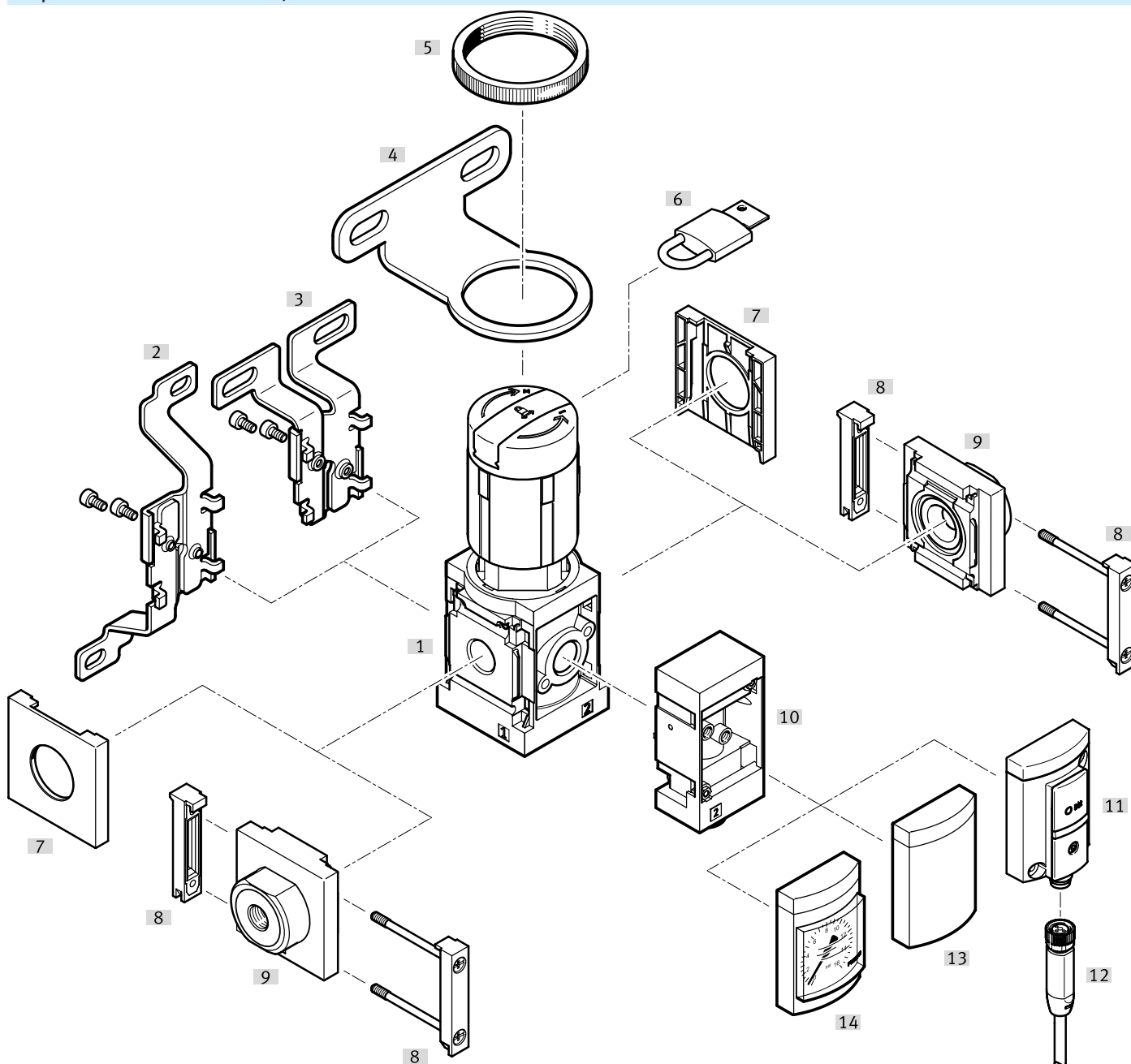
Accessories		→ Link
Type/order code	Description	
[1] Pressure regulator MS6N-LRB		ms6n-lrb
[2] Angled outlet block B...		-
[3] Mounting bracket MS6-WP		17
[4] Mounting bracket MS6-WPB		17
[5] Mounting bracket MS6-WPE		17
[6] Mounting bracket MS6-WPM		17
[7] Padlock LRVS-D		19
[8] Cover cap MS6-END	For devices without connecting plate	19
[9] Module connector MS6-MV1	For device combinations and individual devices with connecting plate	17
[10] Connecting plate SET MS6-AQ...	For device combinations	19
[11] Pressure sensor AD11/AD12	Order code [AD11], [AD12]; pressure sensor SPAU with LCD display	spau
[12] Connecting cable NEBA-M8...-LE4, NEBA-M12...-LE4		18
[13] Pressure sensor AD7 ... AD10	Order code [AD7], [AD8], [AD9], [AD10]; pressure sensor SDE5 with switching indicator	sde5
[14] Connecting cable NEBA-M8...-LE3		18
[15] Adapter for EN pressure gauge 1/8, 1/4 A8/A4		-

Peripherals

Accessories		→ Link
Type/order code	Description	
[16] Pressure gauge MA		18
[17] Cover plate VS		↗ –

Peripherals

Peripherals overview – Pressure outlet, front



Accessories		→ Link
Type/order code	Description	
[1] Pressure regulator MS6N-LRB		ms6n-lrb
[2] Mounting bracket MS6-WB	For an individual device	17
[3] Mounting bracket MS4-WBM	Not available for this size	–
[4] Mounting bracket MS6-WR	For an individual device	17
[5] Knurled nut MS-LR	For an individual device (included in the scope of delivery)	ms6n-lrb
[6] Padlock LRVS-D		19
[7] Cover cap MS6-END	For devices without connecting plate	19
[8] Module connector MS6-MV1	For device combinations and individual devices with connecting plate	17
[9] Connecting plate SET MS6-AQ...	For device combinations	19
[10] Angled outlet block B...		–
[11] Pressure sensor AD7 ... AD10	Order code [AD7], [AD8], [AD9], [AD10]; pressure sensor SDE5 with switching indicator	sde5
[12] Connecting cable NEBU-M8...-LE3		18
[13] Cover plate VS		–
[14] MS pressure gauge		18

Accessories

Module connector MS6-MV1						
	Size	Material module connector	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	POM, High-alloy stainless steel	VDMA24364-B1/B2-L	33 g	8119204	MS6-MV1

Mounting bracket MS6-WP...						
	Size	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Die-cast aluminium	VDMA24364-B1/B2-L		1025936	MS6-WPE
				76 g	532195	MS6-WP
				115 g	526074	MS6-WPB
				144 g	526073	MS6-WPM-D
				154 g	532186	MS6-WPM-2D

Mounting bracket MS6-WB						
	Size	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Steel	VDMA24364-B1/B2-L	121 g	532196	MS6-WB

Mounting bracket MS6-WR						
	Size	Material bracket	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Steel	VDMA24364-B1/B2-L	90 g	526075	MS6-WR

Accessories

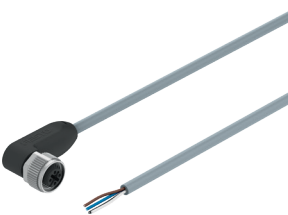
Pressure sensor SPAU-...-T

	Pneumatic connection	Electrical connection 1, connector system	LABS (PWIS) conformity	Product weight	Part no.	Type
	R1/8	M12x1, A-coded to EN 61076-2-101	VDMA24364-B1/B2-L	70 g	8001206	SPAU-P10R-T-R18M-L-PNLK-PNVBA-M12D
		M8x1, A-coded, to EN 61076-2-104			8001203	SPAU-P10R-T-R18M-L-PNLK-PNVBA-M8D
	R1/4	M12x1, A-coded to EN 61076-2-101			8001208	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D
		M8x1, A-coded, to EN 61076-2-104			8001209	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M8D

Connecting cables NEBA, straight

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		3	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
				5 m	8078224	NEBA-M8G3-U-5-N-LE3
		4	2.5 m	8078227	NEBA-M8G4-U-2.5-N-LE4	

Connecting cables NEBA, angled

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		3	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
				5 m	8078231	NEBA-M8W3-U-5-N-LE3
			4	2.5 m	8078233	NEBA-M8W4-U-2.5-N-LE4

Pressure gauge MA

	Conforms to standard	Pneumatic connection	LABS (PWIS) conformity	Product weight	Part no.	Type
	EN 837-1	G1/4	VDMA24364-B1/ B2-L	70 g	183901	MA-40-16-G1/4-EN
		R1/8		60 g	525726	MA-40-16-R1/8-E-RG
		R1/4		70 g	187080	MA-40-16-R1/4-EN
				75 g	525729	MA-50-16-R1/4-E-RG

Accessories

Cover cap MS6-END						
	Size	Material housing	LABS (PWIS) conformity	Part no.	Type	
	6	PA-reinforced	VDMA24364-B1/B2-L	538780	MS6-END	

Mounting plate MS6-AEND						
	Size	Material housing	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	PA-reinforced	VDMA24364-B1/B2-L	11.1 g	535408	MS6-AEND1

Connecting plate SET MS6-A...						
	Size	Pneumatic connection, port 1	Material sub-base	Product weight	Part no.	Type
	6	1/4 NPT	Die-cast aluminium	300 g	526076	MS6N-AQN
		3/8 NPT			526077	MS6N-AQP
		1/2 NPT			526078	MS6N-AQR
		3/4 NPT			526079	MS6N-AQS

Nut MS...-WRS						
	Size	Material nut	LABS (PWIS) conformity	Product weight	Part no.	Type
	6	Wrought aluminium alloy	VDMA24364-B1/B2-L	20.9 g	532188	MS6-WRS

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