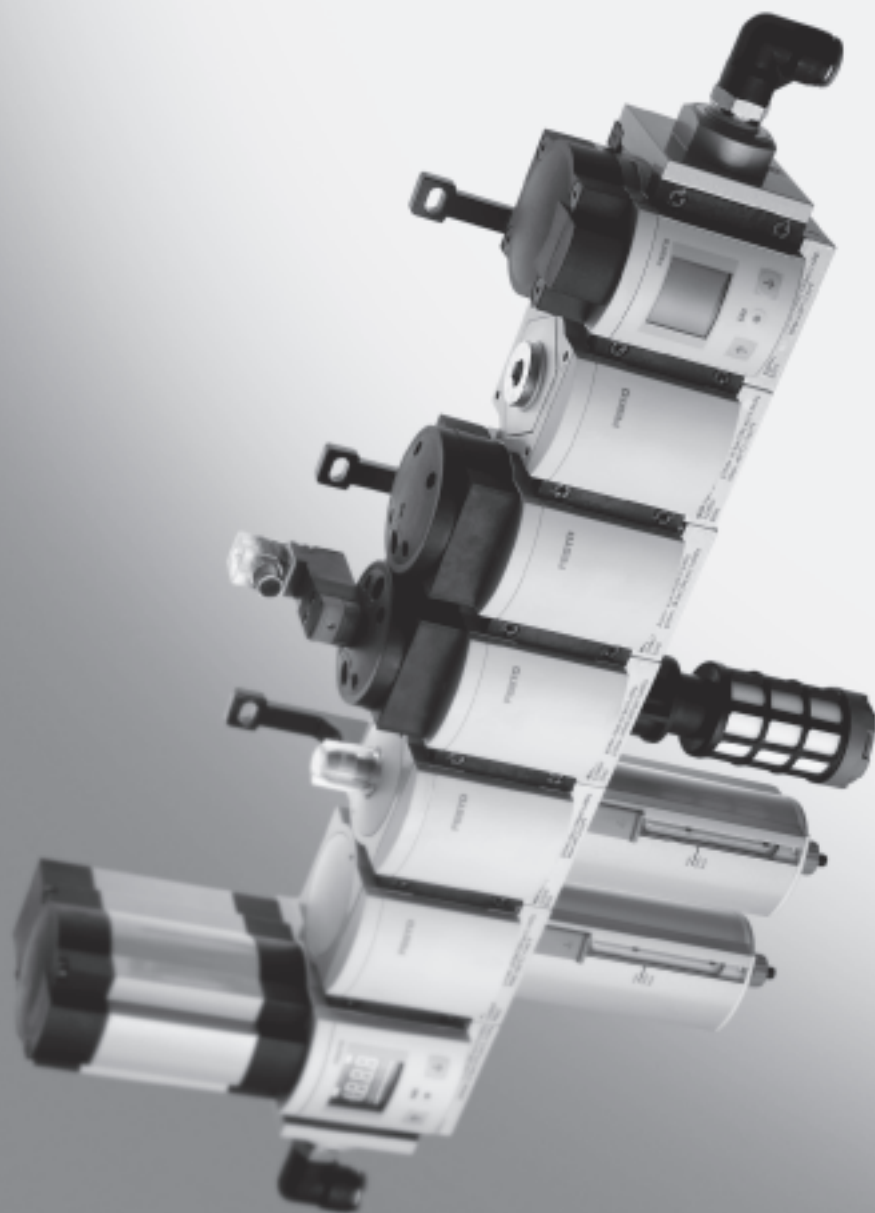


Wide range of configuration options

→ www.festo.com/en/engineering



- Three sizes:
MS4 – grid
dimension 40 mm
MS6 – grid
dimension 62 mm
MS12 – grid
dimension 124 mm
- Modular
- Easy to assemble
- Broad range of functions
- Compact with high flow rates
- Modern design
- Wide choice of variants
- Integrated safety functions

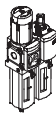
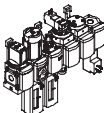
Specified types in accordance with
ATEX directive for potentially
explosive atmospheres

→ www.festo.com/en/ex

MS series service units

Product range overview

FESTO

Type	Size			Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]						Grade of filtration [µm]					
						0.05 ... 0.7	0.05 ... 2.5	0.1 ... 4	0.3 ... 7	0.1 ... 12	0.5 ... 16	0.01	1	5	40		
Code					AG...	D2	D4	D5	D6	D7	D8	A	B	C	E		
Service units																	
MSB-FRC		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	■	■	–	–	–	■	■			
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	■	■	–	–	–	■	■			
		12	–														
Service unit combinations (further variants can be ordered using the configurator → www.festo.com/en/engineering)																	
MSB		4	G1/4	G1/8, G1/4, G3/8	–	–	–	■	■	–	–	–	■	■			
		6	G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	■	■	–	–	–	■	■			
		12	–														
Individual devices																	
Filter regulators MS-LFR		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	■	■	■	–	–	–	■	■			
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	■	■	■	■	–	–	■	■			
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	■	■	■	–	–	■	■			
Filters MS-LF		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–	–	■	■			
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–	–	■	■			
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–	■	■			
Fine and micro filters MS-LFM		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	■	■	–	–			
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	■	■	–	–			
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	■	■	–	–			
Activated carbon filters MS-LFX		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–	–	–	–			
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–	–	–	–			
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–	–	–			
Pressure regulators MS-LR		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	■	■	■	–	–	–	–	–			
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	■	■	■	■	–	–	–	–			
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	■	■	■	–	–	–	–			
Pressure regulators MS-LRB		4	G1/4	G1/8, G1/4, G3/8	–	–	■	■	■	–	–	–	–	–			
		6	G1/2	G1/4, G3/8, G1/2, G3/4	–	–	■	■	■	■	–	–	–	–			
		12	–														
Precision pressure regulators MS-LRP		4	–														
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	–	■	–	–	–	–	–			
		12	–														
Precision pressure regulators MS-LRPB		4	–														
		6	G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	–	■	–	–	–	–	–			
		12	–														

MS series service units

Product range overview

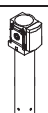
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Type	Size	Bowl guard		Condensate drains				Pressure indicator					Actuator lock		Options		→ Page
		Plastic bowl guard	Metal bowl	Manual rotary	Semi-automatic	Fully automatic	External, fully-automatic, electrical	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter for EN pressure gauge G1/8	Adapter for EN pressure gauge G1/4	Pressure sensor with display	Rotary knob, lockable	Rotary knob, long	Silencer	Flow direction from right to left	
Code		R	U	M	H	V	E...	VS	AG	A8	A4	AD...	AS	LD	S	Z	
Service units																	
MSB-FRC	4	■	–	■	–	■	–	–	■	–	–	–	■	–	–	■	2-2
	6	■	■	■	–	■	–	–	■	–	–	–	■	–	–	■	
	12	–															
Service unit combinations																	
MSB	4	■	■	■	–	■	–	–	■	–	–	–	■	–	–	■	2-2
	6	■	■	■	–	■	–	–	■	–	–	–	■	–	–	■	
	12	–															
Individual devices																	
Filter regulators MS-LFR	4	■	■	■	■	■	–	■	■	■	■	■	■	■	–	■	3-2
	6	■	■	■	■	■	■	■	■	–	■	■	■	■	–	■	
	12	–	■	■	–	■	■	■	■	–	■	–	■	■	–	■	3-18
Filters MS-LF	4	■	■	■	■	■	–	–	–	–	–	–	–	–	–	■	4-2, 4-4
	6	■	■	■	■	■	■	–	–	–	–	–	–	–	–	■	
	12	–	■	■	–	■	■	–	–	–	–	–	–	–	–	■	4-26, 4-28
Fine and micro filters MS-LFM	4	■	■	■	■	■	–	–	–	–	–	–	–	–	–	■	4-2, 4-12
	6	■	■	■	■	■	■	–	–	–	–	–	–	–	–	■	
	12	–	■	■	–	■	■	–	–	–	–	–	–	–	–	■	4-26, 4-33
Activated carbon filters MS-LFX	4	■	■	■	–	–	–	–	–	–	–	–	–	–	–	■	4-2, 4-20
	6	■	■	■	–	–	–	–	–	–	–	–	–	–	–	■	
	12	–	■	–	–	–	–	–	–	–	–	–	–	–	–	■	4-26, 4-40
Pressure regulators MS-LR	4	–	–	–	–	–	–	■	■	■	■	■	■	■	–	■	5-2, 5-7
	6	–	–	–	–	–	–	■	■	–	■	■	■	■	–	■	
	12	–	–	–	–	–	–	■	■	–	■	–	■	■	–	■	5-58
Pressure regulators MS-LRB	4	–	–	–	–	–	–	■	■	■	■	■	■	■	–	■	5-2, 5-16
	6	–	–	–	–	–	–	■	■	–	■	■	■	■	–	■	
	12	–															
Precision pressure regulators MS-LRP	4	–															5-24, 5-29
	6	–	–	–	–	–	–	■	–	–	■	■	■	■	–	■	
	12	–															
Precision pressure regulators MS-LRPB	4	–															5-24, 5-38
	6	–	–	–	–	–	–	■	–	–	■	■	■	■	–	■	
	12	–															

MS series service units

Product range overview

FESTO

Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]				Supply voltage			
				0.3 ... 4	0.3 ... 7	0.5 ... 12	0.5 ... 16	24 V DC (connection pattern to EN 175301)	24 V DC (connection pattern M12 to DESINA)	110 V AC (connection pattern to EN 175301)	230 V AC (connection pattern to EN 175301)
Code			AG...	D5	D6	D7	D8	V24	V24P	V110	V230
Individual devices											
Electrical pressure regulators MS-LRE		4	–					–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	■	–	–	–
		12	–								
Lubricators MS-LOE		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–
On-off valves MS-EM(1)		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–
On-off valves MS-EE		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	■	–	■
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	■	–	■
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	■	■	■
Soft-start valves MS-DL		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–
Soft-start valves MS-DE		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	■	–	■
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	■	–	■
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	■	■	■
Membrane air dryers MS-LDM1		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–
		12	–								
Branching modules MS-FRM		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–
Flow sensors MS-SFE		4	–								
		6	G1/2	G1/2	–	–	–	–	–	–	–
		12	–								

MS series service units

Product range overview

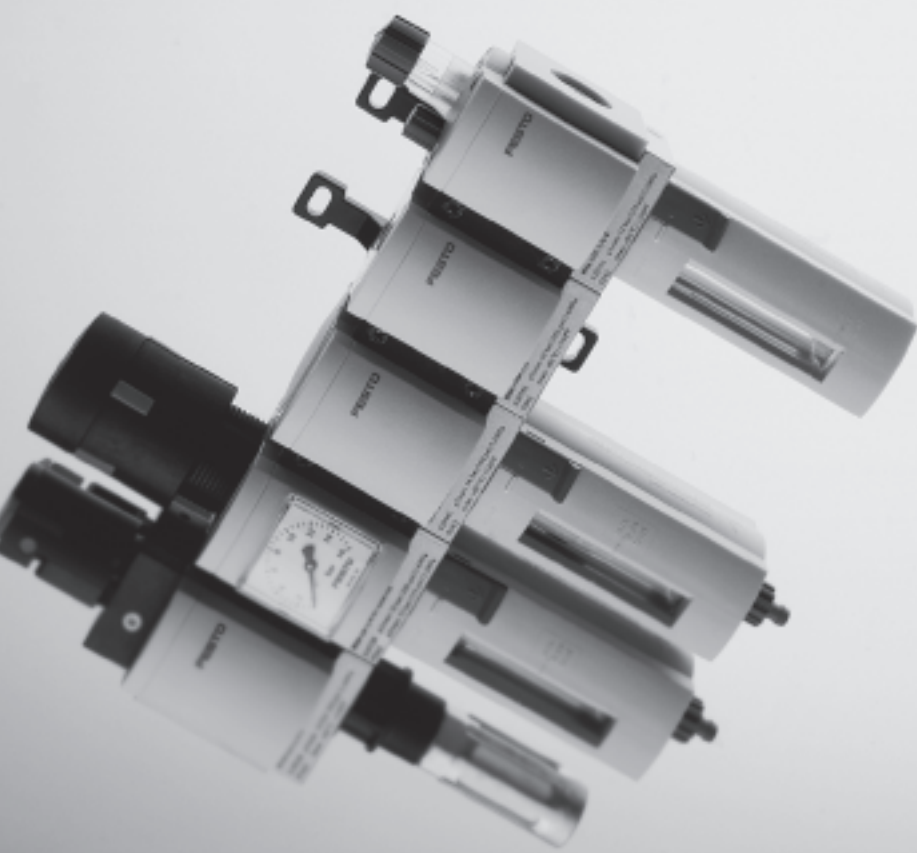
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Type	Size	Bowl guard		Pressure indicator					Switch output		Options		→ Page
		Plastic bowl guard	Metal bowl	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter for EN pressure gauge G1/8	Adapter for EN pressure gauge G1/4	Pressure sensor with display	2x PNP	2x NPN	Silencer	Flow direction from right to left	
Individual devices													
Electrical pressure regulators MS-LRE	4	-											5-46
	6	-	-	■	■	-	■	-	-	-	-	■	
	12	-											
Lubricators MS-LOE	4	■	■	-	-	-	-	-	-	-	-	■	6-2
	6	■	■	-	-	-	-	-	-	-	-	■	
	12	-	■	-	-	-	-	-	-	-	-	-	■
On-off valves MS-EM(1)	4	-	-	■	■	■	■	■	-	-	■	■	7-2, 7-5
	6	-	-	■	■	-	■	■	-	-	■	■	
	12	-	-	■	■	-	■	-	-	-	■	■	7-30, 7-33
On-off valves MS-EE	4	-	-	■	■	■	■	■	-	-	■	■	7-2, 7-10
	6	-	-	■	■	-	■	■	-	-	■	■	
	12	-	-	■	■	-	■	-	-	-	■	■	7-30, 7-37
Soft-start valves MS-DL	4	-	-	■	■	■	■	■	-	-	-	■	7-2, 7-18
	6	-	-	■	■	-	■	■	-	-	-	■	
	12	-	-	■	■	-	■	-	-	-	-	■	7-30, 7-41
Soft-start valves MS-DE	4	-	-	■	■	■	■	■	-	-	-	■	7-2, 7-23
	6	-	-	■	■	-	■	■	-	-	-	■	
	12	-	-	■	■	-	■	-	-	-	-	■	7-30, 7-45
Membrane air dryers MS-LDM1	4	-	■	-	-	-	-	-	-	-	-	■	8-2
	6	-	■	-	-	-	-	-	-	-	-	■	
	12	-											
Branching modules MS-FRM	4	-	-	■	■	■	■	■	-	-	-	■	9-2
	6	-	-	■	■	-	■	■	-	-	-	■	
	12	-	-	■	-	-	-	-	-	-	-	-	9-14
Flow sensors MS-SFE	4	-											10-2
	6	-	-	-	-	-	-	-	■	■	-	■ ¹⁾	
	12	-											

1) To be ordered via configurator software only → www.festo.com/en/engineering

Wide range of configuration options

→ www.festo.com/en/engineering



- MS4 – grid
dimension 40 mm
MS6 – grid
dimension 62 mm
- Modular
- Easy to assemble
- Broad range of functions
- Compact with high flow rates
- Modern design
- Wide choice of variants
- Integrated safety functions

Specified types in accordance with
ATEX directive for potentially
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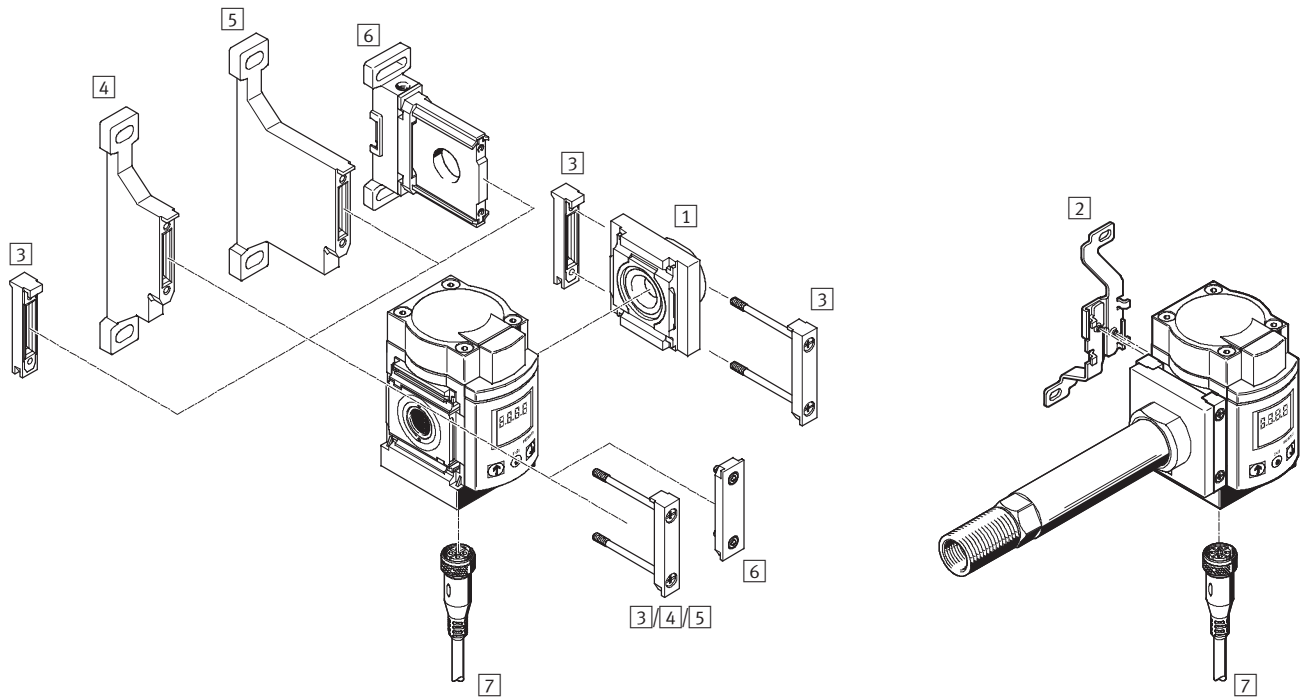
Flow sensors MS6-SFE, MS series

Peripherals overview

FESTO

For service unit combinations
with filter cartridge

For individual mounting
with connecting plates and inlet section



Mounting attachments and accessories

	In service unit combinations, MS series	Individual mounting	→ Page
1 Connecting plate MS6-AG...	■	■ included in scope of delivery	11-2
2 Mounting bracket MS6-WB	–	■ included in scope of delivery	11-4
3 Module connector MS6-MV	■	–	11-8
4 Mounting bracket MS6-WP	■	–	11-6
5 Mounting bracket MS6-WPB	■	–	11-6
6 Mounting bracket MS6-WPM	■	–	11-7
7 Plug socket with cable SIM-M12-5GD...	■	■	11-9

Flow sensors MS6-SFE, MS series

Type codes

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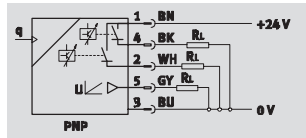
		MS	6	-	SFE	-	F5	-		-	P2	I	-	M12
Series														
MS	Standard service unit													
Size														
6	Grid dimension 62 mm													
Service function														
SFE	Flow sensor													
Flow measuring range [l/min]														
F5	200 ... 5 000													
Type of mounting/Pneumatic connection														
	Inline installation in service unit combination series MS/ depends on connecting plate selected → Accessories													
AGD	With accessories/connecting plate with internal G $\frac{1}{2}$ thread and stabilizing attachment with internal G $\frac{1}{2}$ thread or outer G $\frac{3}{4}$ thread													
Switch output														
P2	2x PNP													
N2	2x NPN													
Analogue output														
U	0 ... 10 V													
I	4 ... 20 mA													
Electrical connection														
M12	Plug M12x1, 5-pin													

Flow sensors MS6-SFE, MS series

Technical data

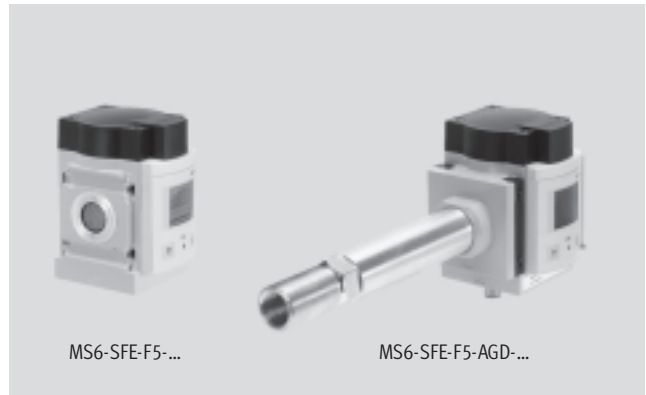
FESTO

Function¹⁾



1) For example with 2 switch outputs PNP and 0 ... 10 V analogue

- - Flow rate
200 ... 5,000 l/min
- - Temperature range
0 ... +50 °C
- - Operating pressure
0 ... 16 bar



- Switch output
2x PNP or 2x NPN
- Analogue output
0 ... 10 V or 4 ... 20 mA
- Suitable for flow and consumption measurement
- Switching points for measurement are freely programmable
- Freely selectable pulse output for consumption measurement

- - Note
To comply with the specified accuracies, the MS6-SFE-F5-AGD-... must be supplied via a connection inside diameter of at least 10 mm and the MS6-SFE-F5-... must be supplied via a pneumatic connection of at least G $\frac{1}{2}$.

- - Note
After a filter regulator MS6-LFR or pressure regulator MS6-LR, a branching module MS6-FRM must be fitted in front of a flow sensor MS6-SFE-F5-... in order that the specified accuracies can be maintained.

General technical data			
	In service unit combinations, MS series		Individual mounting
Flow measuring range [l/min]	200 ... 5,000 ¹⁾		
Pneumatic connection 1	min. G $\frac{1}{2}$		Female thread G $\frac{1}{2}$ Male thread G $\frac{3}{4}$
Pneumatic connection 2	G $\frac{1}{2}$ ²⁾	G $\frac{3}{4}$ ²⁾	Female thread G $\frac{1}{2}$
Measuring principle	Thermal		
Method of measurement	Heat Loss		
Measured variable	Flow rate Consumption		
Direction of flow	Unidirectional P1 > P2		
Type of display	Illuminated LCD (optimised display)		
Displayable unit(s)	l, m ³ , l/min		
Reproducibility of switching point	$\pm(0.8\% \text{ o.m.v.} + 0.2\% \text{ FS})$ ³⁾		
Reproducibility of analogue value	$\pm(0.8\% \text{ o.m.v.} + 0.2\% \text{ FS})$ ³⁾		
Accuracy under rated conditions (6 bar, 23 °C, horizontal mounting position)	$\pm(3\% \text{ o.m.v.} + 0.3\% \text{ FS})$ ³⁾⁴⁾		
Type of mounting	Inline installation		With accessories
Assembly position	Horizontal $\pm 5^\circ$		
Product weight [g]	600		1,100

- 1) Restricted at operating pressure < 5 bar, diagram $\rightarrow$ 10-5
2) Depends on connecting plate selected, must be ordered separately as accessory $\rightarrow$ 11-2
3) % o.m.v. = % of measured value
% FS = % of measuring range's final value (full scale)
4) Reduced accuracy with variant Z: $\pm(5\% \text{ o.m.v.} + 0.3\% \text{ FS})$. Variant Z (flow direction from right to left), to be ordered via configurator software $\rightarrow$ www.festo.com/en/engineering

Flow sensors MS6-SFE, MS series

Technical data

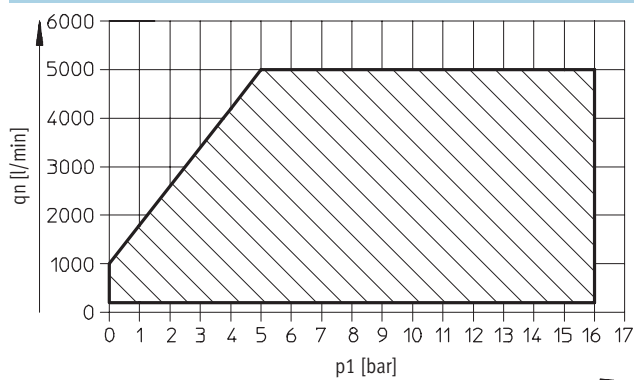
FESTO

Electrical data					
Type		MS6-SFE-...-P2U	MS6-SFE-...-P2I	MS6-SFE-...-N2U	MS6-SFE-...-N2I
Switch output		2x PNP	2x PNP	2x NPN	2x NPN
Analogue output	[V]	0 ... 10	–	0 ... 10	–
	[mA]	–	4 ... 20	–	4 ... 20
Switching element function		NC contact			
		NO contact			
Switching function		Window comparator			
		Threshold value with variable hysteresis			
Operating voltage	[V DC]	15 ... 30			
Load resistance	[Ω]	≥ 10,000	≤ 500	≥ 10,000	≤ 500
Max. output current	[mA]	≤100			
Electrical connection		Straight plug, M12x1, 5-pin			
Pin allocation in accordance with standards		EN 60947-5-2			
Protection against short circuit		Yes			
Protection class to EN 60 529		IP65			
CE symbol		89/336/EEC (EMC)			

Operating and environmental conditions	
Operating pressure	[bar] 0 ... 16
Operating medium	Compressed air, air quality class 5.4.3 to DIN ISO 8573-1
Ambient temperature	[°C] 0 ... 50
Temperature of medium	[°C] 0 ... 50
Corrosion resistance class CRC ¹⁾	2

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Flow measuring range qn as a function of operating pressure p1



Flow sensors MS6-SFE, MS series

Technical data

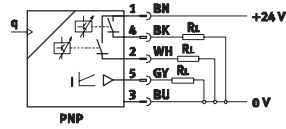
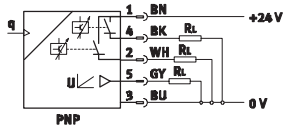
FESTO

Electrical outputs¹⁾

2 switch outputs PNP

0 ... 10 V analogue

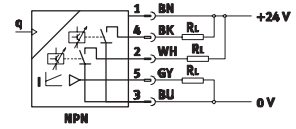
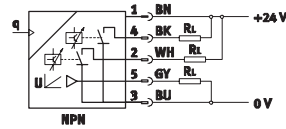
4 ... 20 mA analogue



2 switch outputs NPN

0 ... 10 V analogue

4 ... 20 mA analogue



Terminal allocation

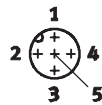
1 = +24 V

2 = Switch output B

3 = 0 V

4 = Switch output A

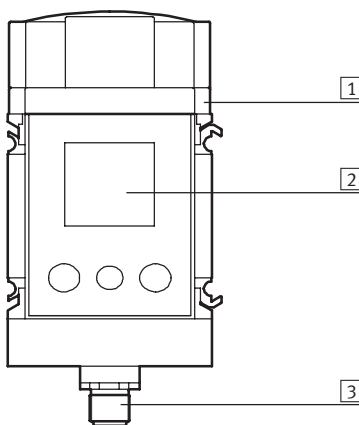
5 = Analogue output C



1) Core colours indicated apply when using plug sockets with cable SIM-M12-5GD → 11-9

Materials

Sectional view



Flow sensor		
1	Body	Die-cast aluminium, polyamide, reinforced
2		
3	Plug contacts	Gold-plated brass
-	Inspection glass	Polycarbonate

Flow sensors MS6-SFE, MS series

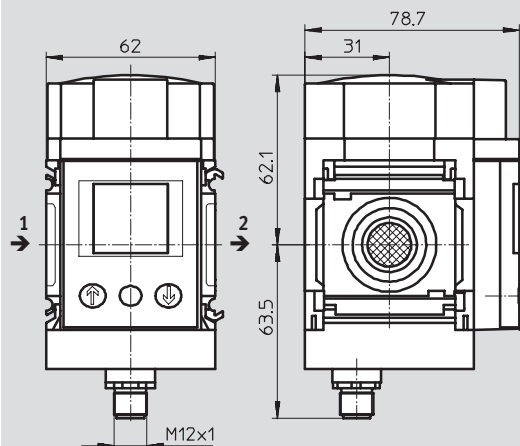
Technical data

FESTO

Dimensions

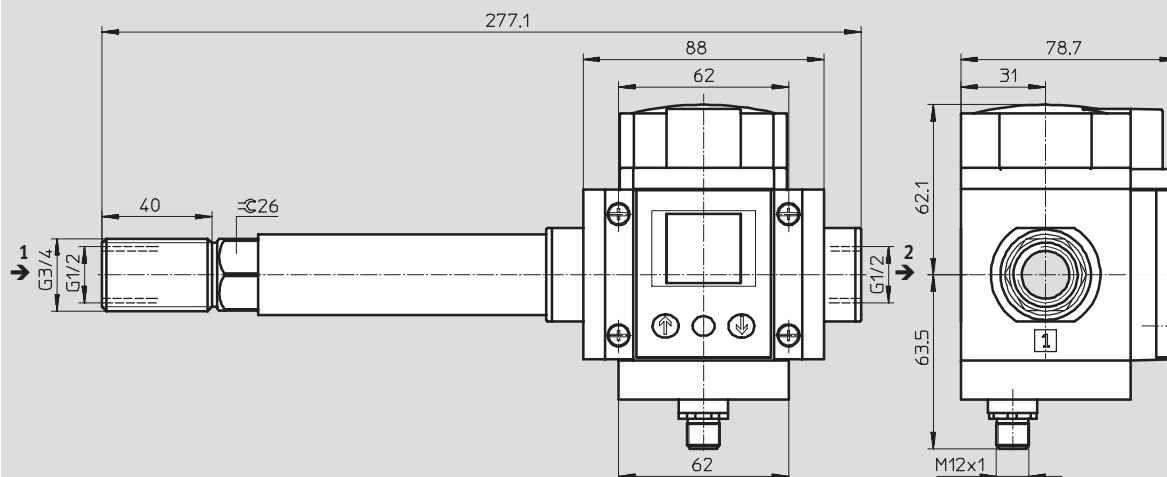
Download CAD data → www.festo.com/en/engineering

In service unit combinations, MS series



→ Flow direction

Individual mounting



→ Flow direction

Ordering data

Size	Switch output		Analogue output		In service unit combinations, MS series		Individual mounting	
	2x PNP	2x NPN	4 ... 20 mA	0 ... 10 V	Part No.	Type	Part No.	Type
MS6	■	—	■	—	538 421	MS6-SFE-F5-P2I-M12	538 417	MS6-SFE-F5-AGD-P2I-M12
	■	—	—	■	538 422	MS6-SFE-F5-P2U-M12	538 418	MS6-SFE-F5-AGD-P2U-M12
	—	■	■	—	538 423	MS6-SFE-F5-N2I-M12	538 419	MS6-SFE-F5-AGD-N2I-M12
	—	■	—	■	538 424	MS6-SFE-F5-N2U-M12	538 420	MS6-SFE-F5-AGD-N2U-M12



MS series service units

Accessories

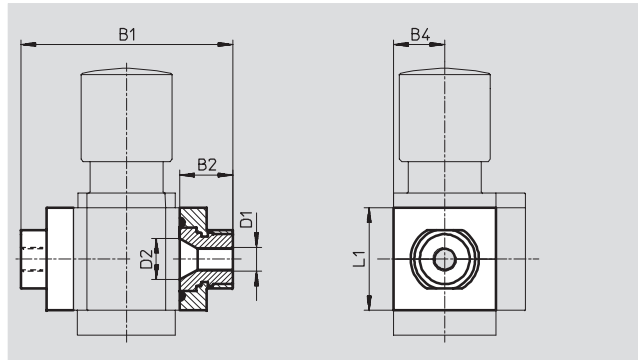
FESTO

Connecting plate MS4/6-AG...

(order code: AG...)

- Adapter for pneumatic connection
- MS6-AGE for implementing threaded connection G $\frac{3}{4}$

Material:
Aluminium



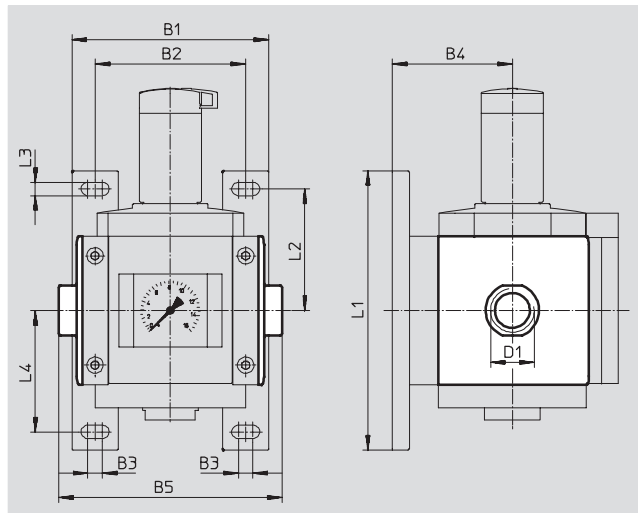
Dimensions and ordering data									
Size	B1	B2	B4	D1	D2	L1	Weight [g]	Part No.	Type
MS4	83.5	21.5	21	G $\frac{1}{8}$	16.8	42	128	526 068	MS4-AGA
				G $\frac{1}{4}$				526 069	MS4-AGB
				G $\frac{3}{8}$				526 070	MS4-AGC
MS6	115	26.5	31	G $\frac{1}{4}$	24	62	300	526 080	MS6-AGB
				G $\frac{3}{8}$				526 081	MS6-AGC
				G $\frac{1}{2}$				526 082	MS6-AGD
				G $\frac{3}{4}$				526 083	MS6-AGE

Connecting plate MS12-AG...

(order code: AG...)

- Adapter for pneumatic connection

Material:
Die-cast aluminium
Free of copper and PTFE



Dimensions and ordering data												
Size	B1	B2	B3	B4	B5	D1	L1	L2	L3	L4	Weight [g]	Part No. Type
MS12	162	124	12	99	184	G1	230	100	11	100	1,300	537 135 MS12-AGF
					184	G1 $\frac{1}{4}$						537 136 MS12-AGG
					184	G1 $\frac{1}{2}$						537 137 MS12-AGH
					196	G2						537 138 MS12-AGI

MS series service units

Accessories

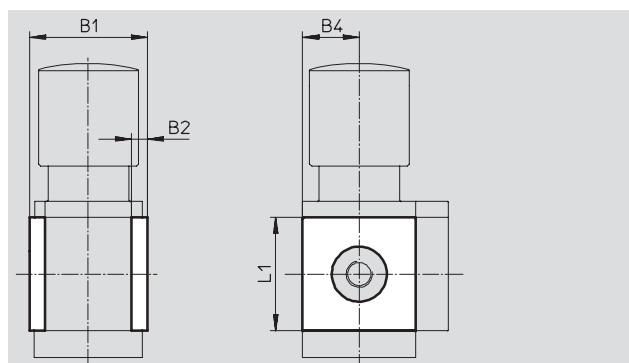
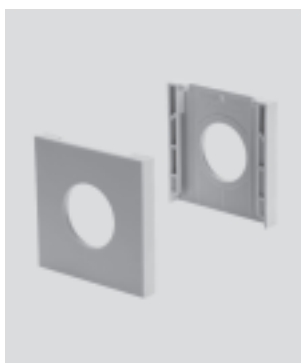
Cover cap MS4/6-END

- Can be used to cover the body sides of the first and last module if connecting plates are not used.

Material:

Reinforced polyamide

Free of copper and PTFE



Dimensions and ordering data						
Size	B1	B2	B4	L1	Part No.	Type
MS4	43.6	6	21	42	538 779	MS4-END
MS6	67	8	31	62	538 780	MS6-END

Mounting plate MS6-AEND

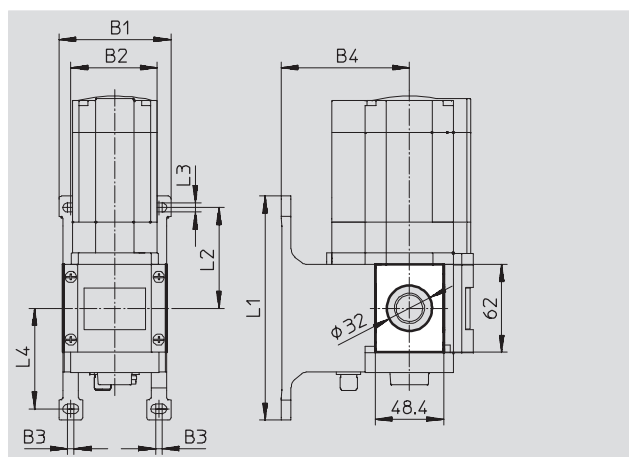
(order code: WBE; scope of delivery includes wall mounting plate MS6-WPB)

- In combination with wall mounting plate MS6-WP or MS6-WPB for mounting an individual unit on a wall with direct thread

Material:

Reinforced polyamide

Free of copper and PTFE



Dimensions and ordering data											
Size	B1	B2	B3	B4	L1	L2	L3	L4	CRC ¹⁾	Weight [g]	Part No. Type
MS6	79	62	4.5	90.5	158	71	6.6	71	2	17	535 408 MS6-AEND  New

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

MS series service units

Accessories

FESTO

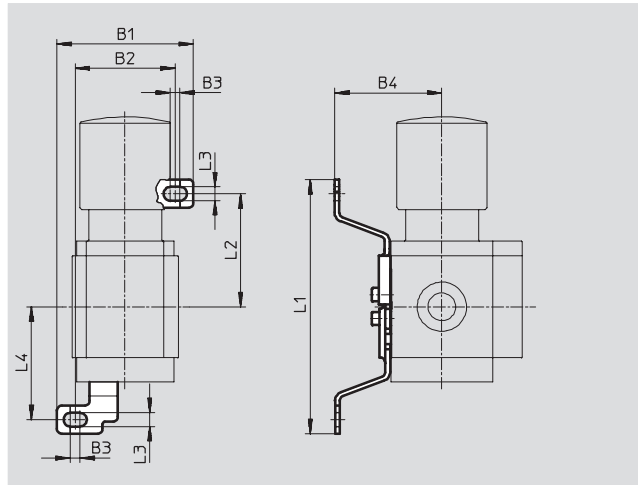
Mounting bracket MS4/6-WB

(order code: WB)

- For wall mounting

Material:

Steel



Dimensions and ordering data

Size	B1	B2	B3	B4	L1	L2	L3	L4	Weight [g]	Part No.	Type
MS4	56.2	41.2	4	44.2	104.6	46.6	5.6	46.5	46	532 185	MS4-WB
MS6	79.4	61.9	4.5	55	157.6	71	6.6	71	121	532 196	MS6-WB

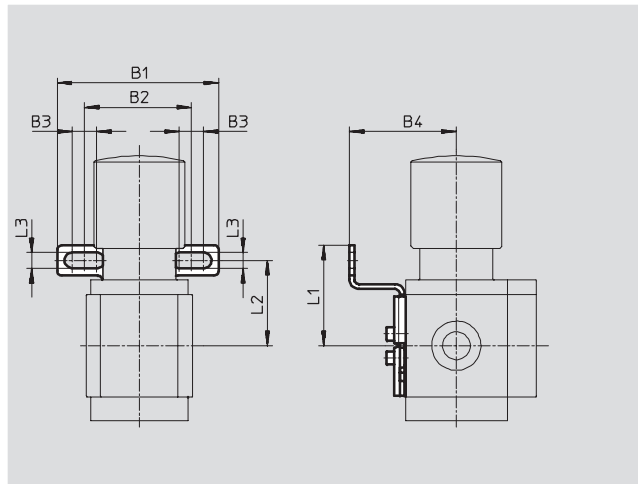
Mounting bracket MS4-WBM

(order code: WBM)

- For wall mounting

Material:

Steel



Dimensions and ordering data

Size	B1	B2	B3	B4	L1	L2	L3	Weight [g]	Part No.	Type
MS4	66.5	44	10	44	41.3	35	6.5	48	526 062	MS4-WBM

MS series service units

Accessories

FESTO

Mounting bracket MS4/6-WP...

Clearances for mounting service unit combinations

1 unit

MS4-...: 40 mm

MS6-...: 62 mm

2 units

MS4-...: 80 mm

MS6-...: 124 mm with WP, WPB

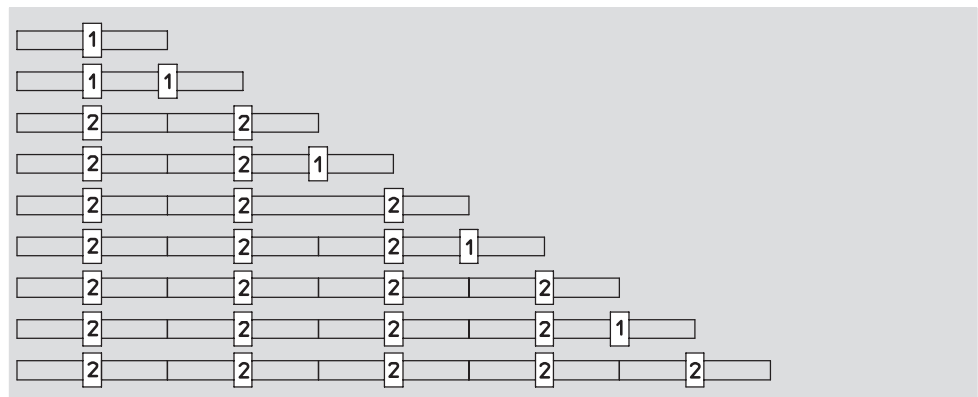
138 mm with WPM-2D

1 Mounting bracket WP, WPB or WPM-D

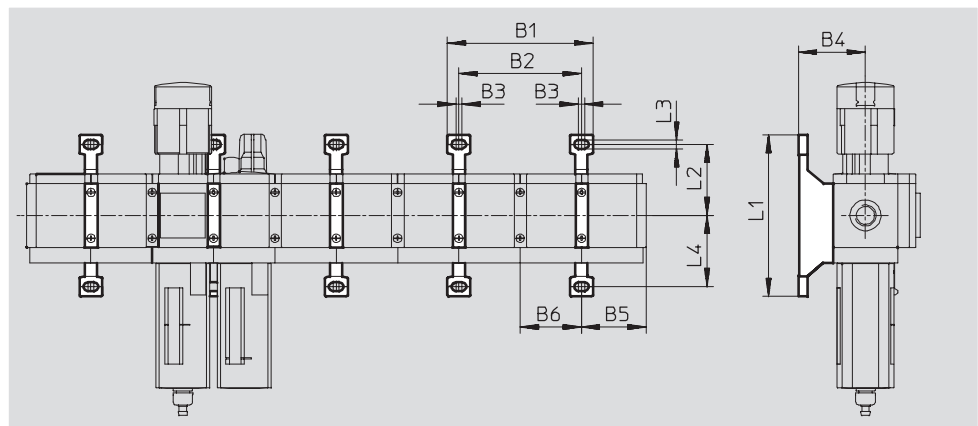
2 Mounting bracket WP, WPB or WPM-2D

Number of units

1 2 3 4 5 6 7 8 9 10



Mounting dimensions



Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS4-WP	95.2	80	4	44	41.9	40	106	46.5	5.6	46.7
MS4-WPB				66						
MS4-WPM-...D				44			92.8	34.8		40
MS6-WP	141	124	4.5	54	64.5	62	158	71	6.6	71
MS6-WPB				90.5						
MS6-WPM-...D				54			98.6	41.3		41.3

MS series service units

Accessories

FESTO

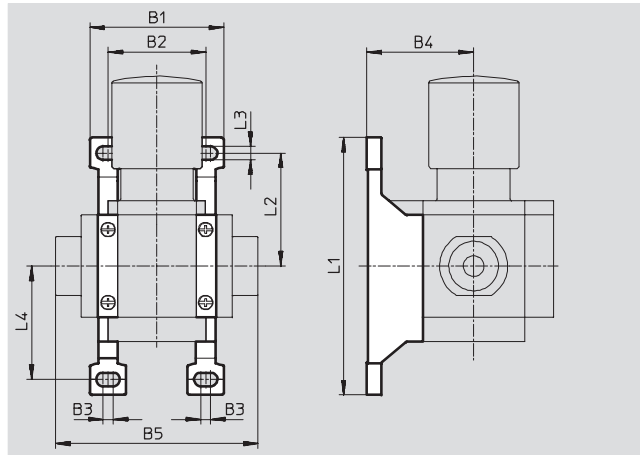
Mounting bracket MS4/6-WP

(order code: WP)

- For connecting the modules for wall mounting
- In combination with a connecting plate MS4/6-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS6-AEND or for mounting an individual unit with direct thread on a wall
- For pressure regulator LRB with angled outlet block B... at rear

Material:

Die-cast aluminium



Dimensions and ordering data

Size	B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [g]	Part No.	Type
MS4	55.2	40.2	4	44	83.4	106	46.5	5.6	46.7	39	532 184	MS4-WP
MS6	79	62	4.5	54	115	158	71	6.6	71	76	532 195	MS6-WP

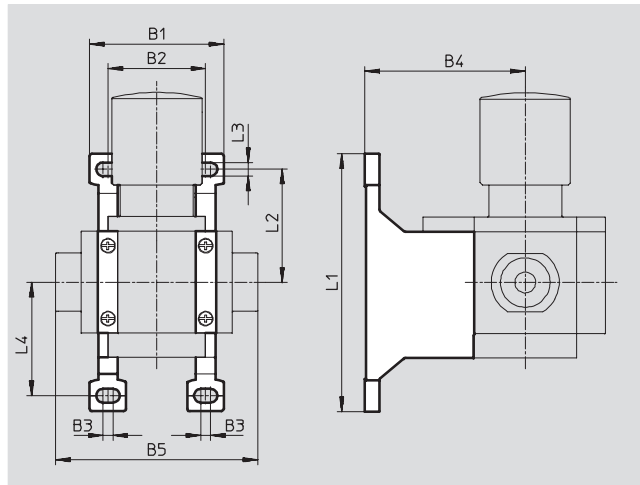
Mounting bracket MS4/6-WPB

(order code: WPB)

- For connecting the modules for wall mounting
- In combination with a connecting plate MS4/6-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS6-AEND or for mounting an individual unit with direct thread on a wall
- Provides large wall gap for pressure regulator

Material:

Die-cast aluminium



Dimensions and ordering data

Size	B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [g]	Part No.	Type
MS4	55.2	40.2	4	66	83.4	106	46.5	5.6	46.7	55	526 063	MS4-WPB
MS6	79	62	4.5	90.5	115	158	71	6.6	71	115	526 074	MS6-WPB

MS series service units

Accessories

FESTO

Mounting bracket MS4/6-WPM

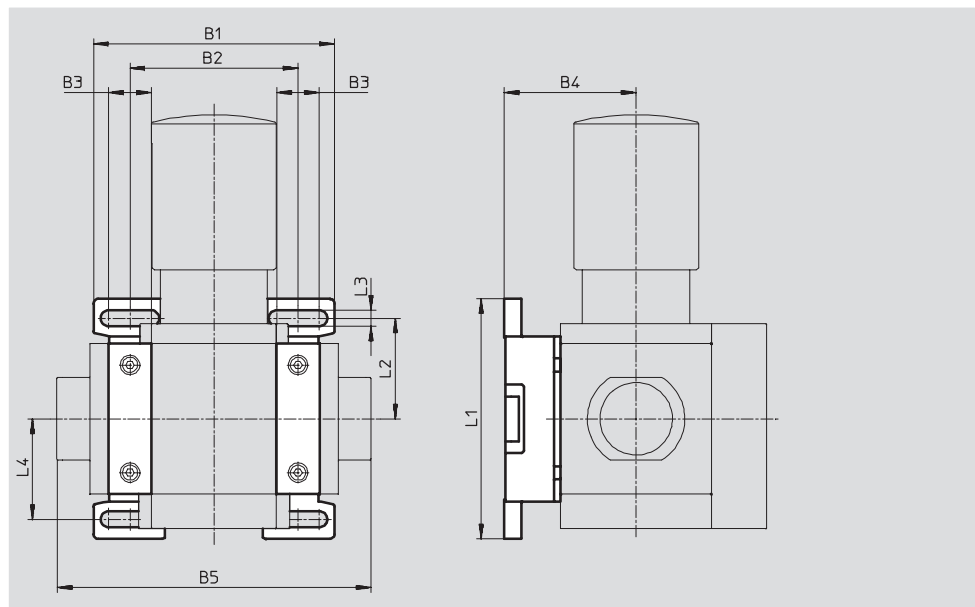
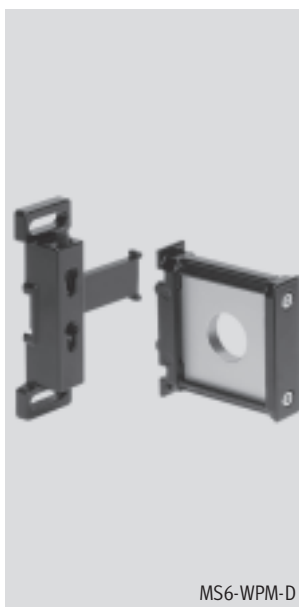
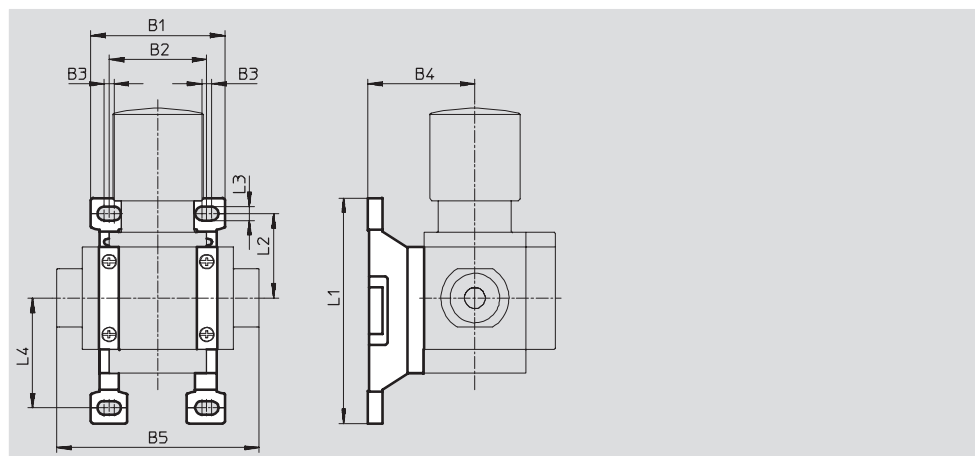
(order code: WPM)

- For connecting the modules for wall mounting
- In combination with a connecting plate MS4/6-AG... for mounting an individual unit on a wall
- Speedy attachment and detachment
- For installation of modules with regulating knob pointing downwards

The distance piece D or 2D (designated in the type code) is included in the scope of delivery and ensures the correct clearance

Material:

Die-cast aluminium



Dimensions and ordering data													
Size	B1	B2	B3	B4	B5	L1	L2	L3	L4	Clearance	Weight [g]	Part No.	Type
MS4	55.2	40	4	44	83.4	92.8	34.8	5.6	45.2	40	45	526 060	MS4-WPM-D
	95.2	80			123.4					80	55	526 061	MS4-WPM-2D
MS6	99	69	17.5	54	129	98.6	41.3	6.6	41.3	62	144	526 073	MS6-WPM-D
	168	138			198					124	154	532 186	MS6-WPM-2D

MS series service units

Accessories

FESTO

Wall mounting plate MS12-WP

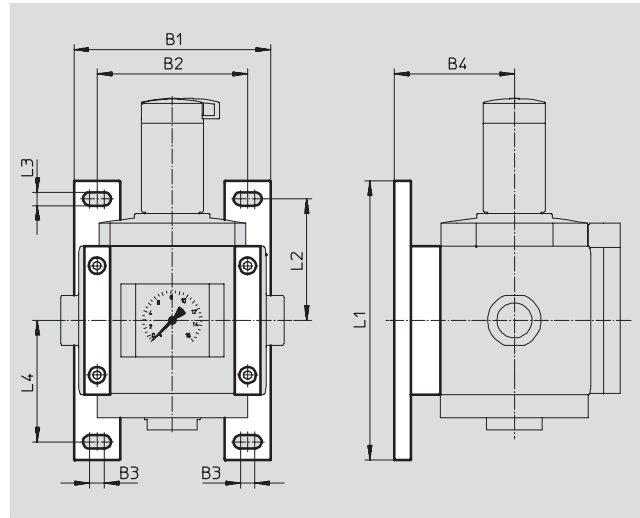
(order code: WP)

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

Material:

Die-cast aluminium

Free of copper and PTFE



Dimensions and ordering data

Size	B1	B2	B3	B4	L1	L2	L3	L4	Weight [g]	Part No.	Type
MS12	162	124	12	99	230	100	11	100	700	537 133	MS12-WP

Module connector MS...-MV

- For connecting modules

Material:

MS4/6: Stainless steel/polyacetate

MS12: Die-cast aluminium,

free of copper and PTFE



MS4/6



MS12

Ordering data

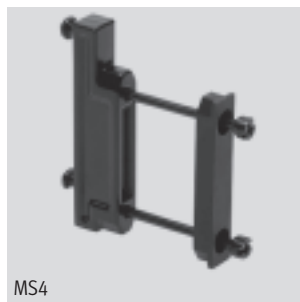
Size	Weight [g]	Part No.	Type
MS4	36	532 798	MS4-MV
MS6	54	532 799	MS6-MV
MS12	500	537 134	MS12-MV

Module connector MS4/6-MVM

- For installation of modules with regulating knob pointing downwards

Material:

Die-cast aluminium



MS4



MS6

Ordering data

Size	Part No.	Type
MS4	532 800	MS4-MVM
MS6	532 801	MS6-MVM

MS series service units

Accessories

FESTO

Ordering data – Plug socket with cable SIM-M8				
	Electrical connection	Cable length [m]	Part No.	Type
	M8x1, 3-pin	2.5	159 420	SIM-M8-3GD-2,5-PU
		5	159 421	SIM-M8-3GD-5-PU
		10	192 964	SIM-M8-3GD-10-PU
	M8x1, 4-pin	2.5	158 960	SIM-M8-4GD-2,5-PU
		5	158 961	SIM-M8-4GD-5-PU
		10	192 965	SIM-M8-4GD-10-PU
	M8x1, 3-pin	2.5	159 422	SIM-M8-3WD-2,5-PU
		5	159 423	SIM-M8-3WD-5-PU
		10	192 965	SIM-M8-3WD-10-PU
	M8x1, 4-pin	2.5	158 962	SIM-M8-4WD-2,5-PU
		5	158 963	SIM-M8-4WD-5-PU
		10	192 965	SIM-M8-4WD-10-PU

Ordering data – Plug socket with cable SIM-M12				
	Electrical connection	Cable length [m]	Part No.	Type
	M12x1, 3-pin	2.5	159 428	SIM-M12-3GD-2,5-PU
		5	159 429	SIM-M12-3GD-5-PU
	M12x1, 4-pin	5	164 259	SIM-M12-4GD-5-PU
	M12x1, 5-pin	2.5	175 715	SIM-M12-5GD-2,5-PU
		5	175 716	SIM-M12-5GD-5-PU
	M12x1, 3-pin	2.5	159 430	SIM-M12-3WD-2,5-PU
		5	159 431	SIM-M12-3WD-5-PU
	M12x1, 4-pin	5	164 258	SIM-M12-4WD-5-PU

Ordering data – Pressure gauge MA					
	Nominal size	Pneumatic connection	Indicating range		Part No. Type
			[bar]	[psi]	
	Pressure gauge MA, DIN EN 837-1				
	40	G $\frac{1}{4}$	0 ... 16	0 ... 232	183 901 MA-40-16-G $\frac{1}{4}$ -EN
	Pressure gauge MA, DIN EN 837-1, with red-green range				
	40	R $\frac{1}{8}$	0 ... 16	–	525 726 MA-40-16-R $\frac{1}{8}$ -E-RG
	50	R $\frac{1}{4}$	0 ... 16	–	525 729 MA-50-16-R $\frac{1}{4}$ -E-RG
	Precision pressure gauge MAP, DIN EN 837-1				
	40	R $\frac{1}{8}$	0 ... 1	0 ... 15	161 126 MAP-40-1- $\frac{1}{8}$ -EN
			0 ... 4	0 ... 58	162 842 MAP-40-4- $\frac{1}{8}$ -EN
			0 ... 6	0 ... 87	161 127 MAP-40-6- $\frac{1}{8}$ -EN
			0 ... 16	0 ... 232	161 128 MAP-40-16- $\frac{1}{8}$ -EN