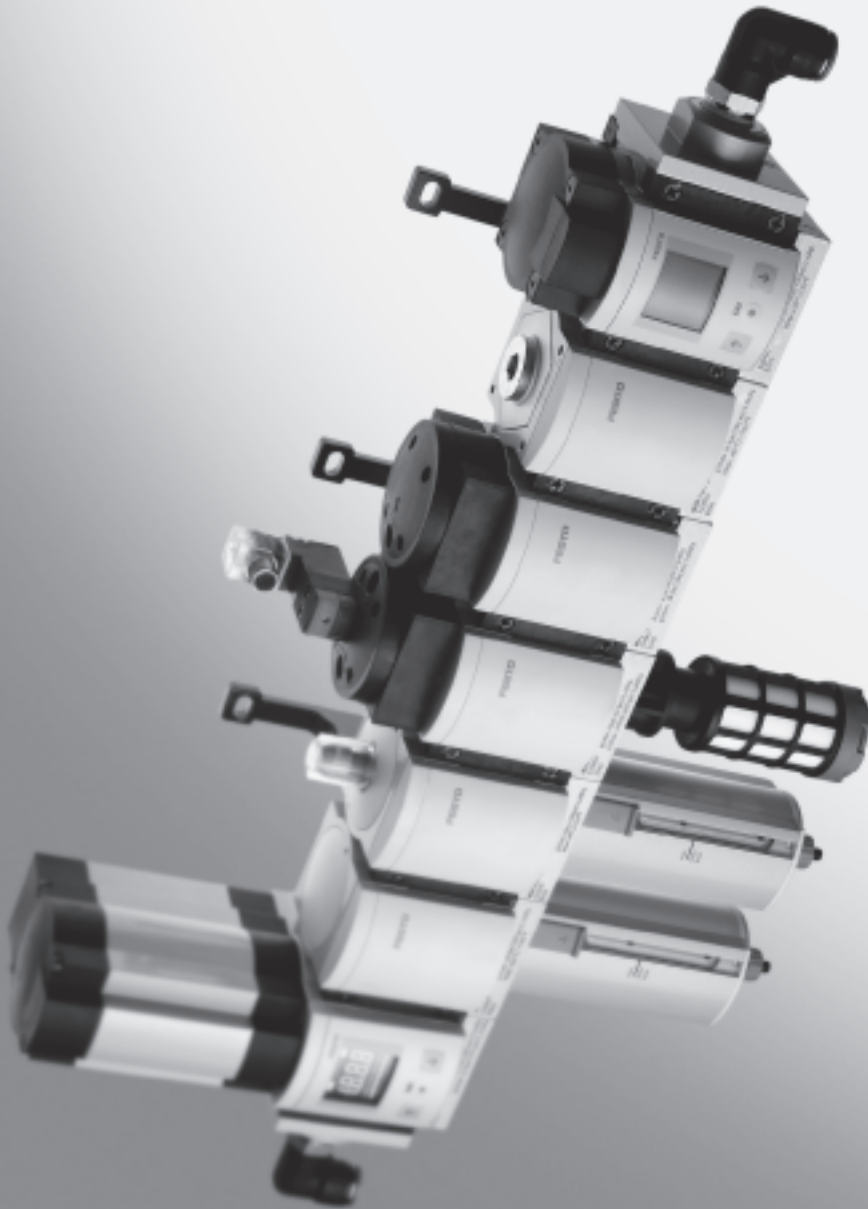


Wide range of configuration options

→ www.festo.com/en/engineering



- Easy to assemble thanks to a modular structure
- Three sizes:
 - MS4 – grid dimension 40 mm
 - MS6 – grid dimension 62 mm
 - MS12 – grid dimension 124 mm
- 8 connection sizes: G¹/₈ to G2
- Modern design
- Compact with high flow rates: up to 22,000 l/min with size MS12
- Integrated safety functions
- Broad range of functions: Individual components, preassembled combinations ex-stock, application-specific combinations or complete turnkey solutions

Specified types in accordance with ATEX directive for potentially explosive atmospheres

→ www.festo.com/en/ex

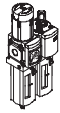
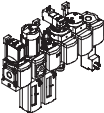








MS series service units

Product range overview



MS series service units

1

Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]						Grade of filtration [µm]			
				0.05	0.05	0.1	0.3	0.1	0.5				
				...	...	...	...	...	...	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	-	-	-	-	-	-	■	■	-	-
Active carbon filter 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



Type	Size	Bowl guard		Condensate drain				Pressure display				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 plate for EN pressure gauge G 1/8	Adapter plate for EN pressure gauge G 1/4	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	-	■	■	-	■	■	-	-	-	-	-	-	-	-	■	4-32, 4-34
Fine and micro filters MS-LFM	4	■	■	■	■	■	-	-	-	-	-	-	-	-	-	■	4-2, 4-12
	6	■	■	■	■	■	■	-	-	-	-	-	-	-	-	■	4-32, 4-39
	12	-	■	■	-	■	■	-	-	-	-	-	-	-	■		
Active carbon filter MS-LFX	4	■	■	-	-	-	-	-	-	-	-	-	-	-	-	■	4-2, 4-24
	6	■	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
	12	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	4-32, 4-46
Pressure regulators MS-LR	4	-	-	-	-	-	-	■	■	■	■	■	■	■	-	■	5-2
	6	-	-	-	-	-	-	■	■	-	■	■	■	■	-	■	
	12	-	-	-	-	-	-	■	■	-	■	-	■	■	-	■	5-66
Pressure regulators MS-LRB	4	-	-	-	-	-	-	■	■	■	■	■	■	■	-	■	5-14
	6	-	-	-	-	-	-	■	■	-	■	■	■	■	-	■	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Precision pressure regulators MS-LRP	4	-	-	-	-	-	-	■	-	■	■	■	■	■	-	■	5-26
	6	-	-	-	-	-	-	■	-	■	■	■	■	■	-	■	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Precision pressure regulators MS-LRPB	4	-	-	-	-	-	-	■	-	■	■	■	■	■	-	■	5-40
	6	-	-	-	-	-	-	■	-	■	■	■	■	■	-	■	
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

MS series service units

MS series service units

Product range overview



MS series service units

1

Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]				Supply voltage				
				0.3	0.3	0.5	0.5	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	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	■	■	■	■	–	–	–	–
		12	–									
Lubricator MS-LOE		4	G $\frac{1}{8}$, G $\frac{1}{4}$	G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$	–	–	–	–	–	–	–	
		6	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	–	–	–	
		12	–	G1, G1 $\frac{1}{4}$, G1 $\frac{1}{2}$, G2	–	–	–	–	–	–	–	
Manual on-off valves MS-EM(1)		4	G $\frac{1}{8}$, G $\frac{1}{4}$	G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$	–	–	–	–	–	–	–	
		6	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	–	–	–	
		12	–	G1, G1 $\frac{1}{4}$, G1 $\frac{1}{2}$, G2	–	–	–	–	–	–	–	
Electrical on-off valves MS-EE		4	G $\frac{1}{8}$, G $\frac{1}{4}$	G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$	–	–	–	–	■	–	■	■
		6	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	■	–	■	■
		12	–	G1, G1 $\frac{1}{4}$, G1 $\frac{1}{2}$, G2	–	–	–	–	■	■	■	■
Pneumatic soft-start valves MS-DL		4	G $\frac{1}{8}$, G $\frac{1}{4}$	G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$	–	–	–	–	–	–	–	
		6	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	–	–	–	
		12	–	G1, G1 $\frac{1}{4}$, G1 $\frac{1}{2}$, G2	–	–	–	–	–	–	–	
Electrical soft-start valves MS-DE		4	G $\frac{1}{8}$, G $\frac{1}{4}$	G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$	–	–	–	–	■	–	■	■
		6	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	■	–	■	■
		12	–	G1, G1 $\frac{1}{4}$, G1 $\frac{1}{2}$, G2	–	–	–	–	■	■	■	■
Soft start and exhaust valves MS-SV		4	–									
		6	G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	■	–	–	–
		12	–									
Membrane air dryers MS-LDM1		4	G $\frac{1}{8}$, G $\frac{1}{4}$	G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$	–	–	–	–	–	–	–	
		6	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$	G $\frac{1}{4}$, G $\frac{3}{8}$, G $\frac{1}{2}$, G $\frac{3}{4}$	–	–	–	–	–	–	–	
		12	–									

MS series service units

Product range overview



Type	Size	Bowl guard		Pressure display					Options		→Page
		Plastic bowl guard	Metal bowl	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G 1/8	Adapter plate for EN pressure gauge G 1/4	Pressure sensor with display	Silencer	Flow direction from right to left	
Individual devices											
Electrical pressure regulators MS-LRE	4	-									5-54
	6	-	-	■	■	-	■	-	-	■	
	12	-									
Lubricator MS-LOE	4	■	■	-	-	-	-	-	-	■	6-2
	6	■	■	-	-	-	-	-	-	■	
	12	-	■	-	-	-	-	-	-	■	6-10
Manual on-off valves MS-EM(1)	4	-	-	■	■	■	■	■	■	■	7-2, 7-5
	6	-	-	■	■	-	■	■	■	■	
	12	-	-	■	■	-	■	-	■	■	7-40, 7-43
Electrical on-off valves MS-EE	4	-	-	■	■	■	■	■	■	■	7-2, 7-10
	6	-	-	■	■	-	■	■	■	■	
	12	-	-	■	■	-	■	-	■	■	7-40, 7-47
Pneumatic soft-start valves MS-DL	4	-	-	■	■	■	■	■	-	■	7-2, 7-18
	6	-	-	■	■	-	■	■	-	■	
	12	-	-	■	■	-	■	-	-	■	7-40, 7-51
Electrical soft-start valves MS-DE	4	-	-	■	■	■	■	■	-	■	7-2, 7-23
	6	-	-	■	■	-	■	■	-	■	
	12	-	-	■	■	-	■	-	-	■	7-40, 7-55
Soft start and exhaust valves MS-SV	4	-									7-30
	6	-	-	■	■	-	■	■	■	■	
	12	-									
Membrane air dryers MS-LDM1	4	-	■	-	-	-	-	-	-	■	8-2
	6	-	■	-	-	-	-	-	-	■	
	12	-									




MS series service units

Product range overview



MS series service units

1

Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]				Supply voltage				
				0.3	0.3	0.5	0.5	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												
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	-	-	-	-	-	-	-	-
Distributor blocks MS-FRM-FRZ		4	G1/4	-	-	-	-	-	-	-	-	-
		6	G1/2	-	-	-	-	-	-	-	-	-
		12	-	-	-	-	-	-	-	-	-	-
Flow sensors MS-SFE		4	-	-	-	-	-	-	-	-	-	-
		6	G1/2	G1/2	-	-	-	-	-	-	-	-
		12	-	-	-	-	-	-	-	-	-	-

MS series service units

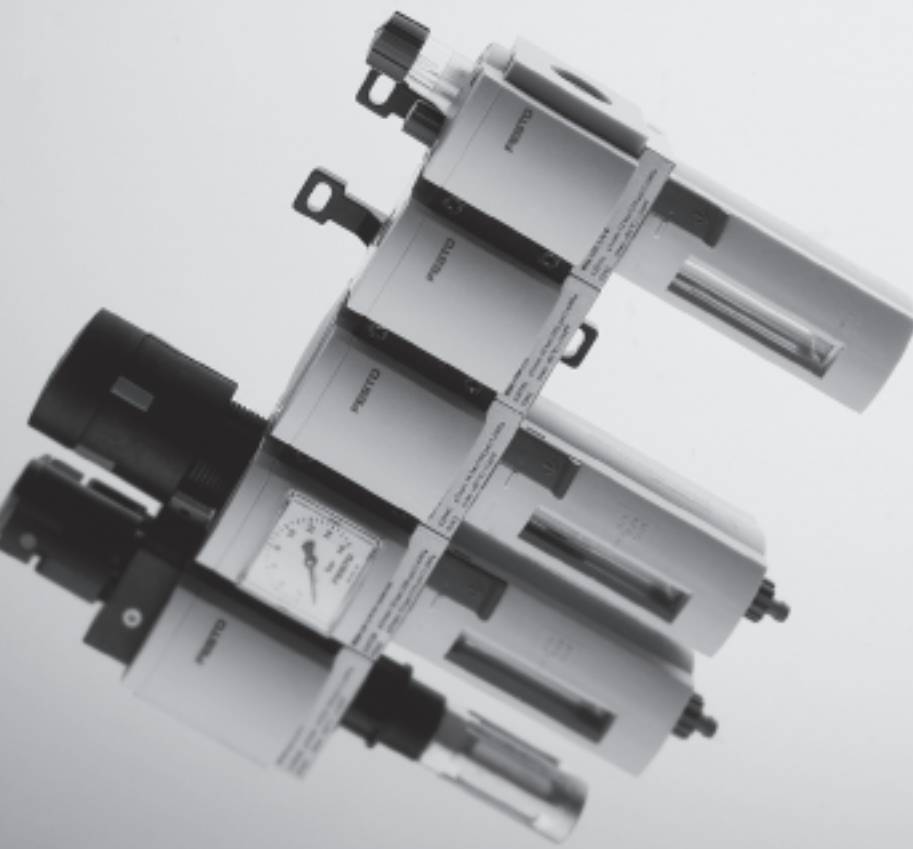
Product range overview



Type	Size	Pressure display					Switch output		Options		→Page
		Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G 1/8	Adapter plate for EN pressure gauge G 1/4	Pressure sensor with display	2x PNP	2x NPN	Silencer	Flow direction from right to left	
		VS	AG	A8	A4	AD...	P2	N2	S	Z	
Individual devices											
Branching modules MS-FRM	4	■	■	■	■	■	-	-	-	■	9-2
	6	■	■	-	■	■	-	-	-	■	
	12	■	-	-	-	-	-	-	-	-	9-16
Distributor blocks MS-FRM-FRZ	4	-	-	-	-	-	-	-	-	-	9-12
	6	-	-	-	-	-	-	-	-	-	
	12	-	-	-	-	-	-	-	-	-	
Flow sensors MS-SFE	4	-	-	-	-	-	-	-	-	-	10-2
	6	-	-	-	-	-	■	■	-	■ ¹⁾	
	12	-	-	-	-	-	-	-	-	-	

1) Can only be ordered using the configurator → www.festo.com/en/engineering

Wide range of configuration options
→ www.festo.com/en/engineering

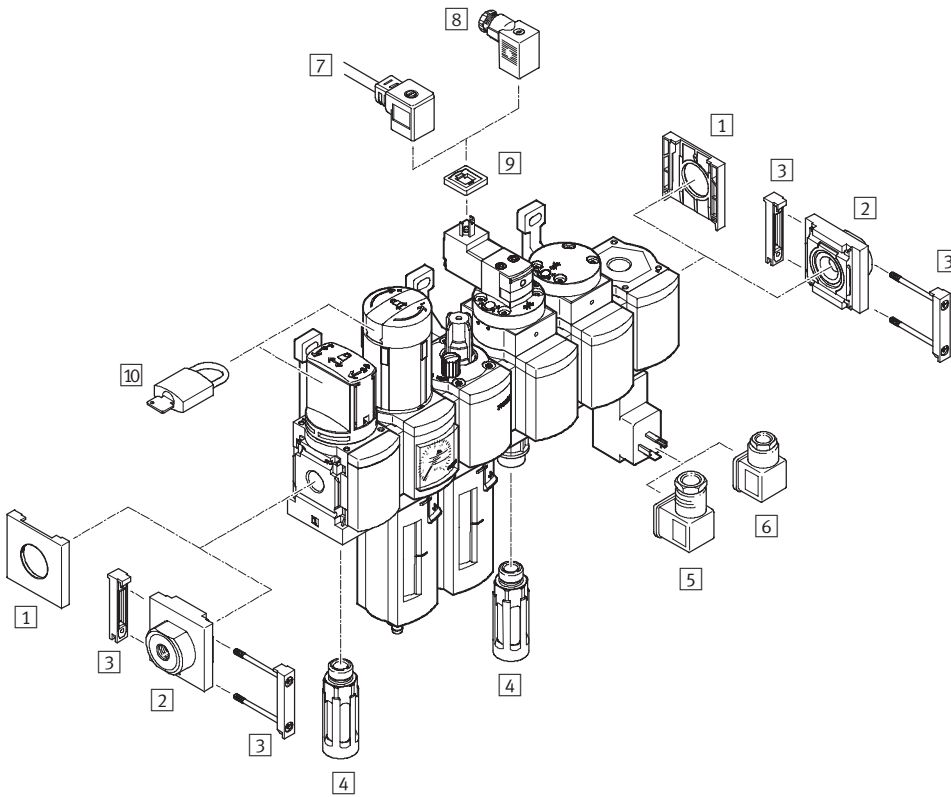



- MS4 – grid
dimension 40 mm
MS6 – grid
dimension 62 mm
- Modular
- Easy to assemble
- Broad range of functions
- Compact with high flow rates
- Modern design
- Wide choice of variants
- Integrated safety functions

Specified types in accordance with
ATEX directive for potentially
explosive atmospheres
→ www.festo.com/en/ex

Service unit combinations MSB4/MSB6, MS series

Peripherals overview



-  - Note
The choice of accessories depends on the selected service unit combination.

Range of accessories
➔ Peripherals pages of the individual devices

Mounting attachments and accessories		➔ Page
1	Cover cap MS4/6-END	11-3
2	Connecting plate MS4/6-AG...	11-2
3	Module connector MS4/6-MV	11-7
4	Silencer U	11-10
5	Angled socket PEV-1/4-WD-LED	11-9
6	Plug socket MSSD-C-4P	11-9
7	Plug socket with cable KMEB	11-9
8	Plug socket MSSD-EB	11-9
9	Illuminating seal MEB-LD	11-9
10	Padlock LRVS-D	11-10
-	Mounting bracket (for service unit MSB-FRC) MS4/6-WP/WPB/WPM	11-5, 11-6

Service unit combinations MSB4/MSB6, MS series

Type codes

MSB 6 - 1/2 : H7 N3 M2 - WP

Series

MSB	Service unit combination
-----	--------------------------

Size

4	Grid dimension 40 mm
6	Grid dimension 62 mm

Pneumatic connection

1/4	Thread G1/4
1/2	Thread G1/2

Service unit combination

On-off valve → 7-4

C3	MS...-EM1
----	-----------

Filters → 4-3

H1	MS...-LF-ERV
H2	MS...-LF-ERM
H3	MS...-LF-CRM
H4	MS...-LF-CRV
H7	MS...-LF-EUV
H8	MS...-LF-EUM

Filter regulator → 3-3

J1	MS...-LFR-D7-ERM-AS
J2	MS...-LFR-D7-ERV-AS
J3	MS...-LFR-D7-CRM-AS
J4	MS...-LFR-D7-CRV-AS

Pressure regulator → 5-4

N2	MS...-LR-D6-AS
N3	MS...-LR-D7-AS

Soft-start valve → 7-4

A1	MS...-DL
----	----------

Lubricator → 6-3

M1	MS...-LOE-R
M2	MS...-LOE-U

On-off valve → 7-4

D1	MS...-EE-V24
D7	MS...-EE-10V24

Branching module → 9-4

F3	MS...-FRM-Y
----	-------------

Type of mounting

WP	Mounting bracket
----	------------------

Further variants can be ordered using the modular system

Service unit combinations → www.festo.com/en/engineering

- Connection size
- Connecting plates
- Service unit equipment
- Alternative flow direction

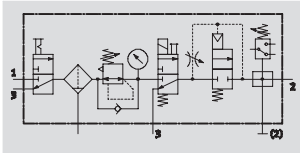
Service unit combinations MSB4/MSB6, MS series

Technical data

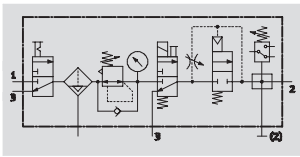


Function

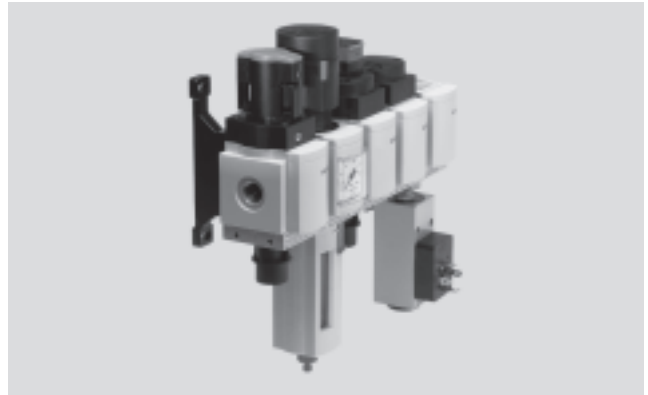
With condensate drain
manual rotary



With condensate drain
fully automatic



- - Flow rate
700 ... 3,100 l/min
- - Temperature range
-10 ... +60 °C
- - Pressure regulation
range
4 ... 12 bar



- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- To shut-off and vent the following device or the system
- Electrical pressure monitoring with adjustable switching pressure

- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Branching module MS...-FRM-Y with pressure switch without display
- Mounting bracket MS...-WP

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G $\frac{1}{4}$	G $\frac{1}{2}$
Regulating function	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical $\pm 5^\circ$	
Grade of filtration μm	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	4 ... 9 (with on-off valve MS...-EE-10V24)	
	4 ... 12 (with on-off valve MS...-EE-V24)	
Pressure indicator	With pressure gauge	
Supply voltage [V DC]	24	

• Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Standard nominal flow rate q_{nN} [l/min]			
Size		MSB4	MSB6
Grade of filtration	5 μm	700	3,000
	40 μm	750	3,100

Service unit combinations MSB4/MSB6, MS series

Technical data

Operating and environmental conditions									
	Pressure regulation range 4 ... 9 bar				Pressure regulation range 4 ... 12 bar				
Condensate drain	Manual rotary		Fully automatic		Manual rotary		Fully automatic		
Size	MSB4	MSB6	MSB4	MSB6	MSB4	MSB6	MSB4	MSB6	
Supply pressure [bar]	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 14	4.5 ... 18	4.5 ... 12	4.5 ... 12	
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm								
Ambient temperature [°C]	-10 ... +50		+5 ... +50		-10 ... +60			+5 ... +60	
Temperature of medium [°C]	-10 ... +50		+5 ... +50		-10 ... +60			+5 ... +60	
Storage temperature [°C]	-10 ... +60		-10 ... +60		-10 ... +60			-10 ... +60	
Corrosion resistance	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.

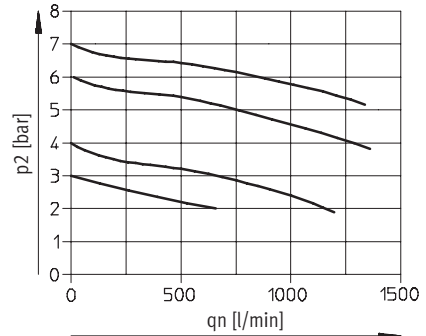
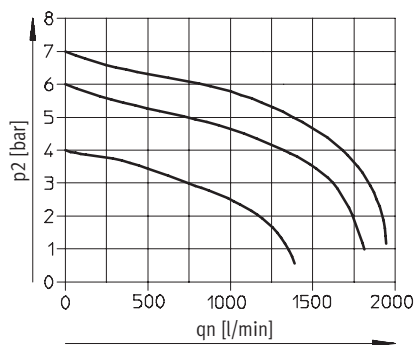
Weights [g]		
Size	MSB4	MSB6
Service unit combination	2,200	3,500
Mounting bracket	40	76

Note
Materials → Technical data of the individual devices

Standard flow rate qn as a function of output pressure p2

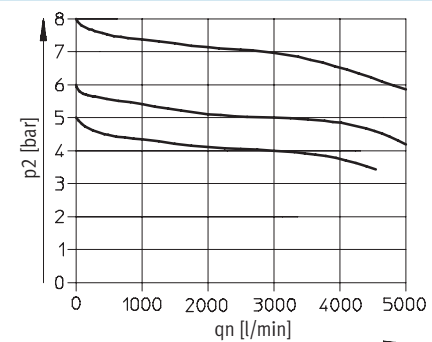
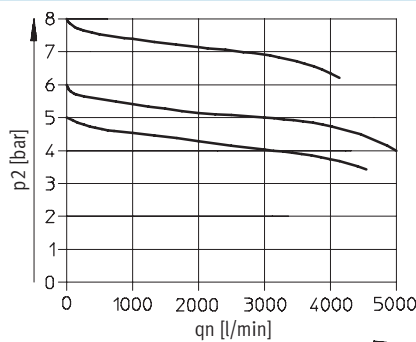
Pressure regulation range 4 ... 9 bar / 4 ... 12 bar
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series



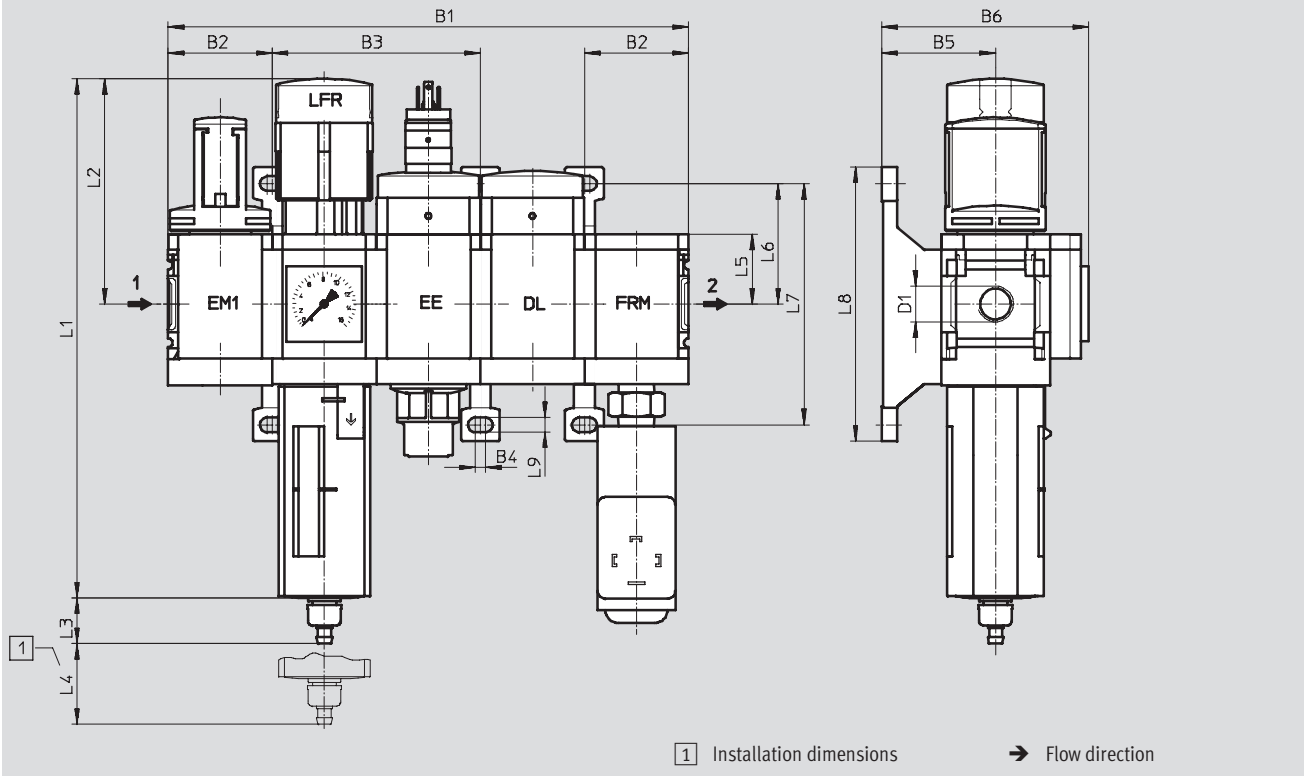
Technical data

MS series service units
Service units

2

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

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	201	40.2	80.4	4	44	80	G $\frac{1}{4}$	201	87
MSB6	310	62	124	4.5	54	100	G $\frac{1}{2}$	285	134.5

Type	L3 Condensate drain		L4	L5	L6	L7	L8	L9
	manual rotary	fully automatic						
MSB4	17.7	20.4	25	27	46.5	93.2	106	5.6
MSB6	15.8	18.5	68	39	71	142	158	6.6

· | · Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

Service unit combinations MSB4/MSB6, MS series

FESTO

Technical data

Ordering data						
Pressure regulation range 4 ... 9 bar						
Size	Condensate drain	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
Plastic bowl guard						
MSB4	manual rotary	G $\frac{1}{4}$	542 623	MSB4- $\frac{1}{4}$:C3J3D7A1F3-WP	542 618	MSB4- $\frac{1}{4}$:C3J1D7A1F3-WP
	fully automatic	G $\frac{1}{4}$	542 625	MSB4- $\frac{1}{4}$:C3J4D7A1F3-WP	542 621	MSB4- $\frac{1}{4}$:C3J2D7A1F3-WP
MSB6	manual rotary	G $\frac{1}{2}$	542 639	MSB6- $\frac{1}{2}$:C3J3D7A1F3-WP	542 635	MSB6- $\frac{1}{2}$:C3J1D7A1F3-WP
	fully automatic	G $\frac{1}{2}$	542 641	MSB6- $\frac{1}{2}$:C3J4D7A1F3-WP	542 637	MSB6- $\frac{1}{2}$:C3J2D7A1F3-WP

Ordering data						
Pressure regulation range 4 ... 12 bar						
Size	Condensate drain	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm	
			Part No.	Type	Part No.	Type
Plastic bowl guard						
MSB4	manual rotary	G $\frac{1}{4}$	542 305	MSB4- $\frac{1}{4}$:C3J3D1A1F3-WP	542 293	MSB4- $\frac{1}{4}$:C3J1D1A1F3-WP
	fully automatic	G $\frac{1}{4}$	542 311	MSB4- $\frac{1}{4}$:C3J4D1A1F3-WP	542 299	MSB4- $\frac{1}{4}$:C3J2D1A1F3-WP
MSB6	manual rotary	G $\frac{1}{2}$	542 281	MSB6- $\frac{1}{2}$:C3J3D1A1F3-WP	542 269	MSB6- $\frac{1}{2}$:C3J1D1A1F3-WP
	fully automatic	G $\frac{1}{2}$	542 287	MSB6- $\frac{1}{2}$:C3J4D1A1F3-WP	542 275	MSB6- $\frac{1}{2}$:C3J2D1A1F3-WP



MS series service units

Accessories

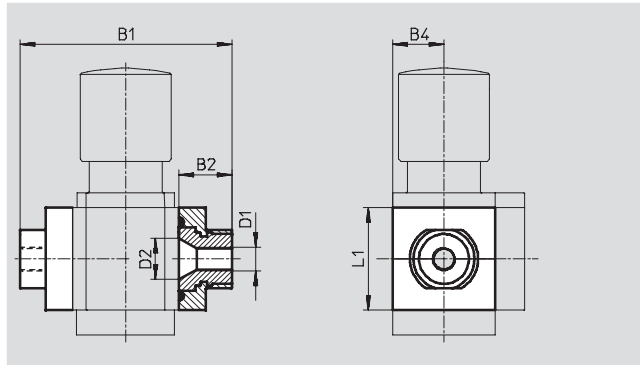


Connecting plate MS4/6-AG...

(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

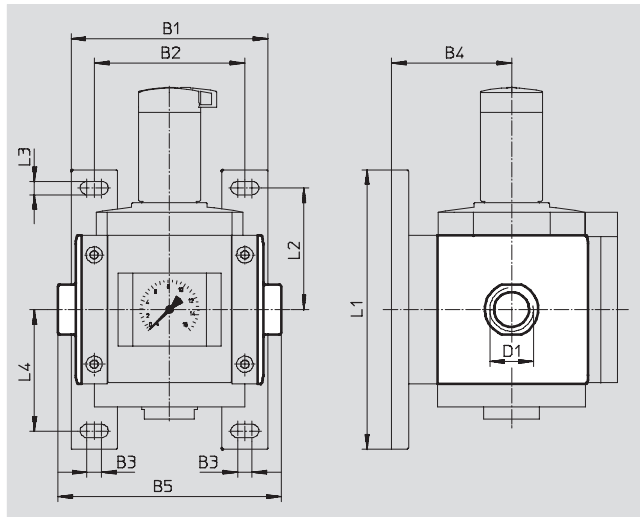
-||- Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

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	G $\frac{1}{4}$						537 136	MS12-AGG
					184	G $\frac{1}{2}$						537 137	MS12-AGH
					196	G2						537 138	MS12-AGI

-||- Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

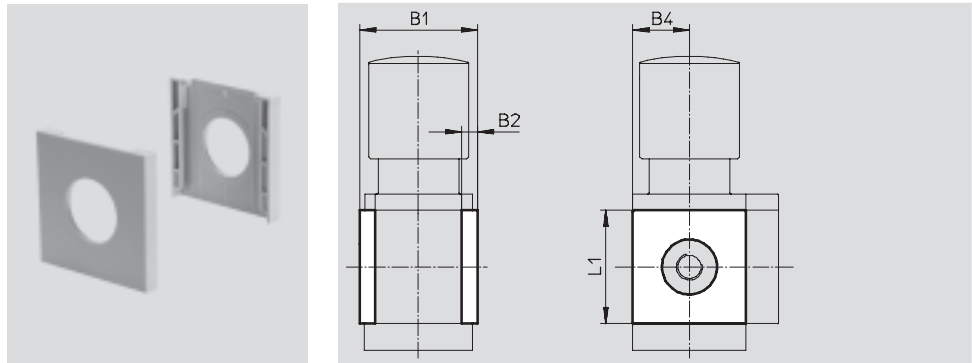
MS series service units

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

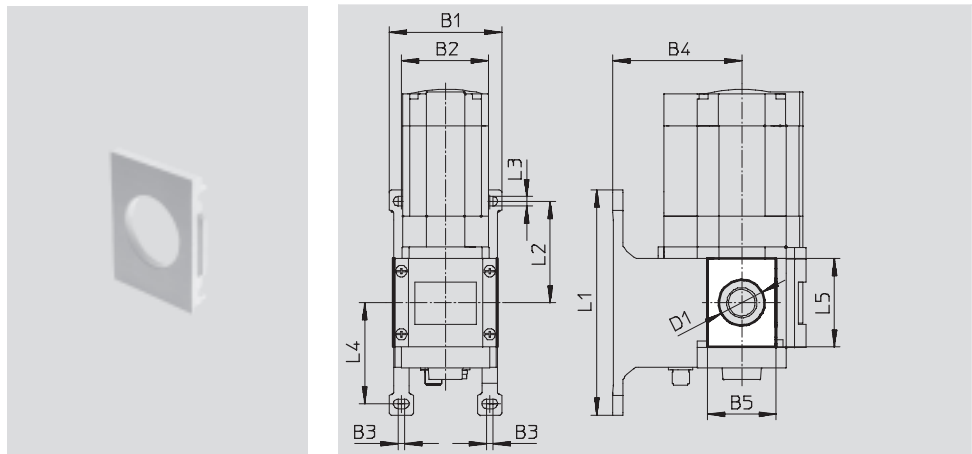
• Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.


Mounting plate MS4/6-AEND

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

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

Material:
Reinforced polyamide
Conforms to RoHS
Free of copper and PTFE



Dimensions and ordering data														Weight [g]	Part No.	Type	
Size	B1	B2	B3	B4		B5	D1	L1	L2	L3	L4	L5	CRC ¹⁾				
				WP	WPB		∅										
MS4	55.2	40.2	4	44	66	30.4	20.3	106	46.5	5.6	46.7	42	2	4	542 966	MS4-AEND	 New
MS6	79	62	4.5	54	90.5	48.4	32	158	71	6.6	71	62	2	17	535 408	MS6-AEND	

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



Wall mounting plate MS4/6-WP...

Clearances for mounting service unit combinations

1 service unit

MS4: with WP/WPB/WPM-D:
40.2 mm (20.1 mm at
MS4-FRM-FRZ)

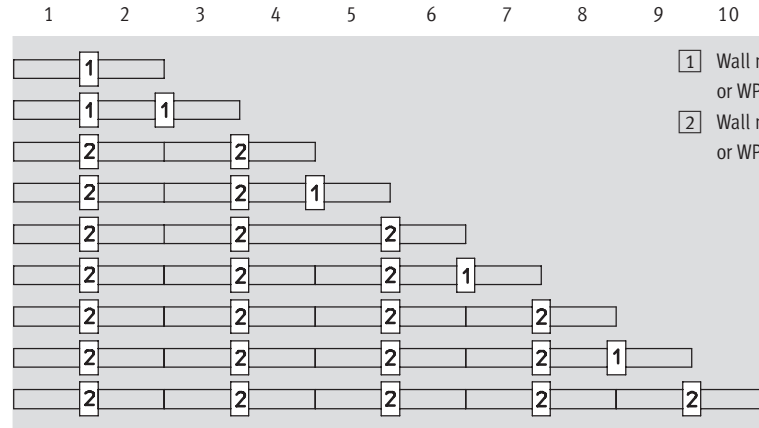
MS6: with WP, WPB: 62 mm (31 mm
at MS4-FRM-FRZ)
with WPM-D: 69 mm
(38 mm at MS6-FRM-FRZ)

2 service units

MS4: with WP/WPB/WPM-2D:
80.4 mm (40.2 mm at
MS4-FRM-FRZ)

MS6: with WP, WPB: 124 mm
(62 mm at MS6-FRM-FRZ)
with WPM-2D: 138 mm
(76 mm at MS6-FRM-FRZ)

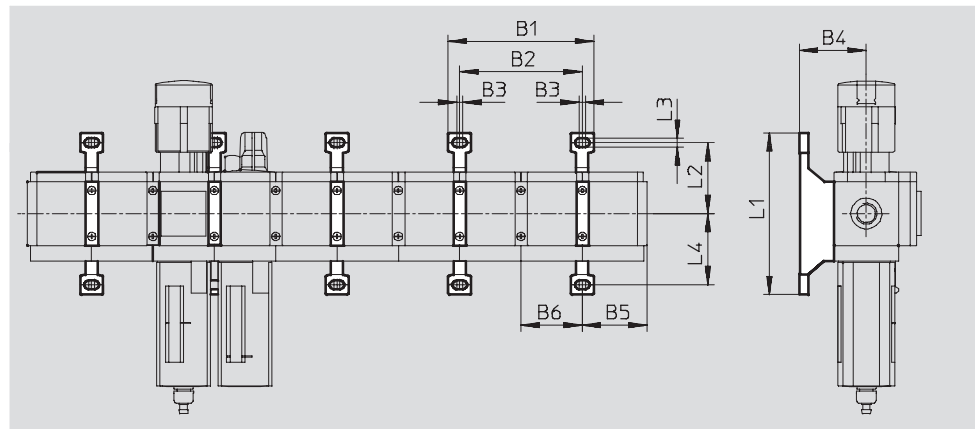
Number of units



Mounting dimensions

- Note

The distributor block MS4/6-FRM-FRZ has a half grid dimension width.



Type	2 service units with grid dimension		1 service unit with grid dimension and 1 distributor block MS-FRM-FRZ		2 distributor blocks MS-FRM-FRZ		B3	B4	Service unit with grid dimension		Distributor block MS-FRM-FRZ		L1	L2	L3	L4			
	B1	B2	B1	B2	B1	B2			B5 ¹⁾	B6	B5 ¹⁾	B6							
MS4-WP	95.4	80.4	75.3	60.3	55.2	40.2	4	44	41.9	40.2	21.8	20.1	106	46.5	5.6	46.7			
MS4-WPB																	92.8	34.8	45.2
MS4-WPM-...D																			
MS6-WP	141	124	110	93	79	62	4.5	54.1	64.5	62	33.5	31	158	71	6.6	71			
MS6-WPB								90.5											
MS6-WPM-...D								168									138	137	107	106	76	17.5	54.1	68	69	37	38	98.6	41.3	41.3

1) With accessory cover cap MS-END

MS series service units

Accessories



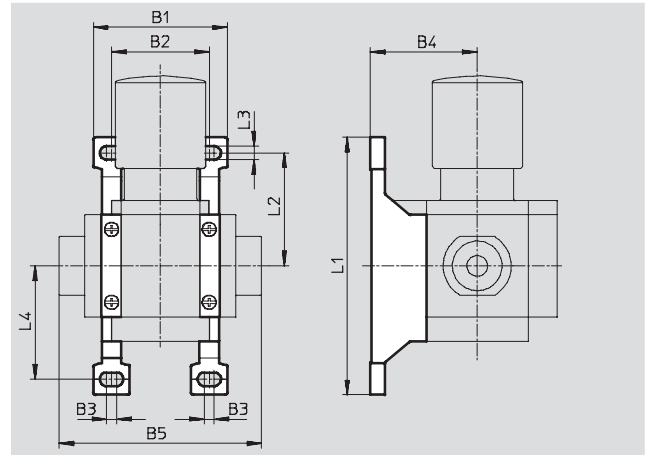
Wall mounting plate MS4/6-WP

(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 MS-AEND 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	54.1	115	158	71	6.6	71	76	532 195 MS6-WP

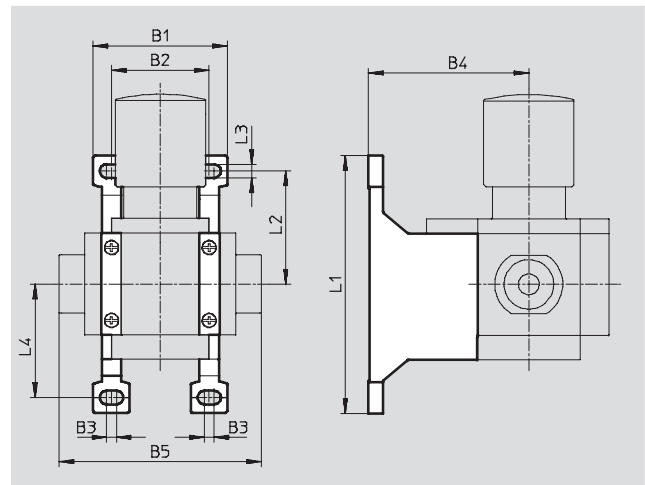
Wall mounting plate MS4/6-WPB

(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 MS-AEND 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



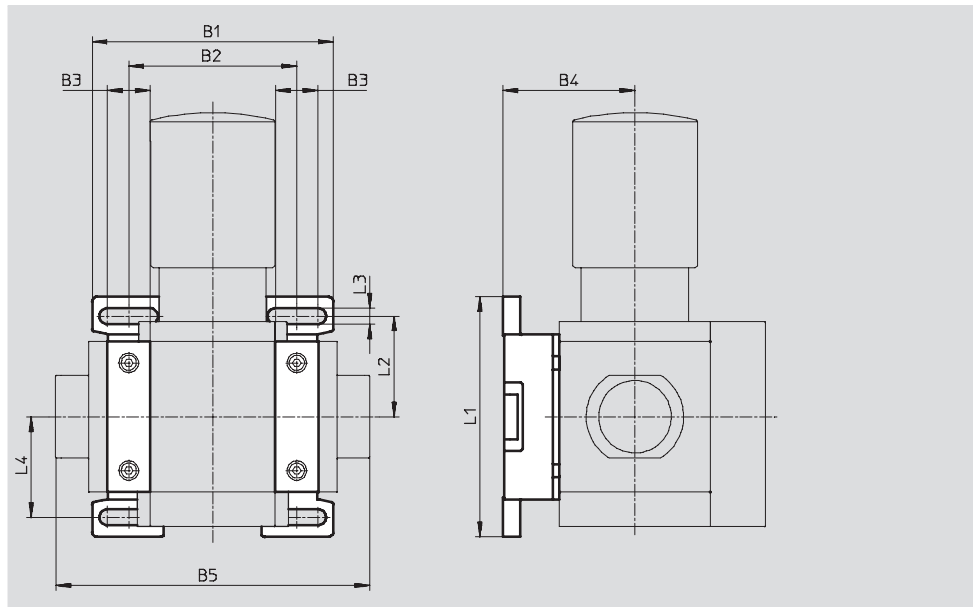
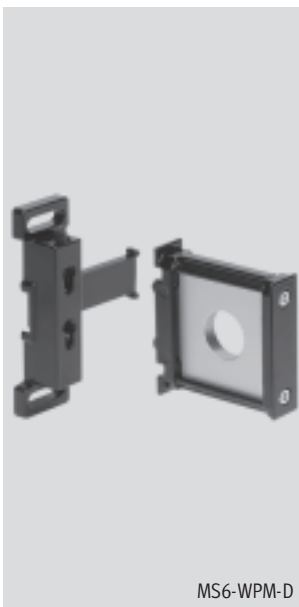
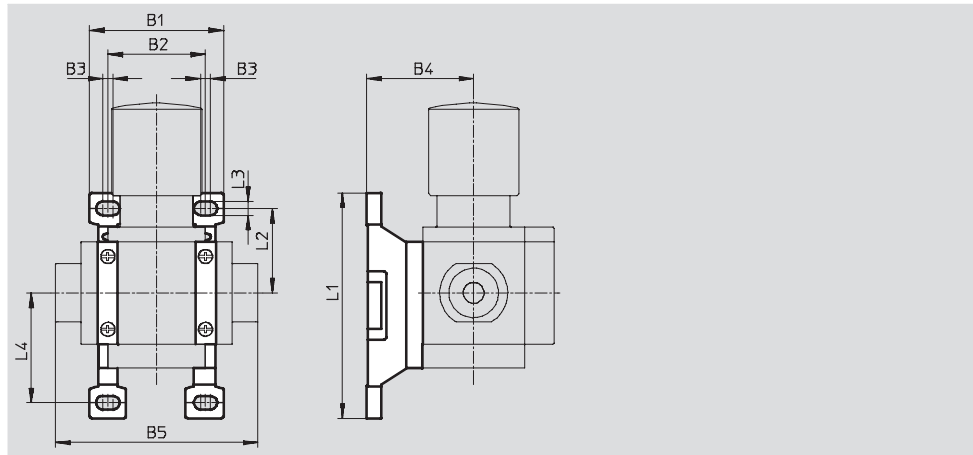
Wall mounting plate MS4/6-WPM

(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	40.2	4	44	83.4	92.8	34.8	5.6	45.2	40.2	45	526 060	MS4-WPM-D
	95.4	80.4			123.4					80.4	55	526 061	MS4-WPM-2D
MS6	99	69	17.5	54.1	129	98.6	41.3	6.6	41.3	69	144	526 073	MS6-WPM-D
	168	138			198					138	154	532 186	MS6-WPM-2D

MS series service units

Accessories

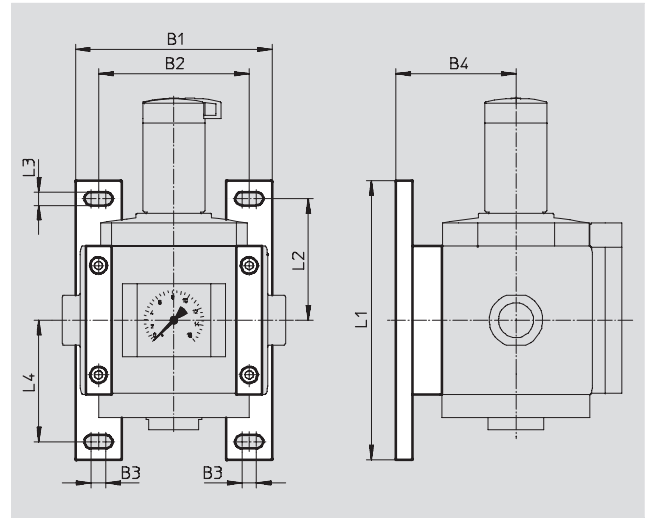


Wall mounting plate MS12-WP

(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



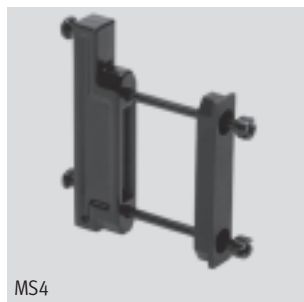
MS12

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

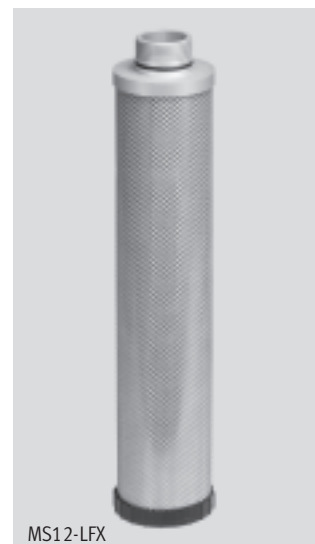
FESTO

Filter cartridge MS4/6-LF...



Ordering data				
Size		Grade of filtration [µm]	Part No.	Type
MS4	Micro-filter cartridge	0.01	162 674	MS4/D-MINI-LFM-A
	Fine-filter cartridge	1	162 677	MS4/D-MINI-LFM-B
	Filter cartridge	5	534 501	MS4-LFP-C
	Filter cartridge	40	534 502	MS4-LFP-E
	Active carbon filter cartridge	–	532 912	MS4/D-MINI-LFX
MS6	Micro-filter cartridge	0.01	532 909	MS6-LFM-A
	Micro-filter cartridge (for variant HF, high flow rate)	0.01	552 093	MS6-LFM-A-HF 
	Fine-filter cartridge	1	532 910	MS6-LFM-B
	Fine-filter cartridge (for variant HF, high flow rate)	1	552 092	MS6-LFM-B-HF 
	Filter cartridge	5	534 499	MS6-LFP-C
	Filter cartridge	40	534 500	MS6-LFP-E
	Active carbon filter cartridge	–	532 911	MS6-LFX
	Active carbon filter cartridge (for variant HF, high flow rate)	–	552 094	MS6-LFX-HF 

Filter cartridge MS12-LF...





Ordering data				
Size		Grade of filtration [µm]	Part No.	Type
MS12	Micro-filter cartridge	0.01	537 146	MS12-LFM-A
	Fine-filter cartridge	1	537 145	MS12-LFM-B
	Filter cartridge	5	537 143	MS12-LFP-C
	Filter cartridge	40	537 144	MS12-LFP-E
	Active carbon filter cartridge	–	537 147	MS12-LFX

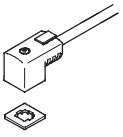
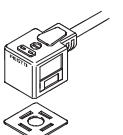
MS series service units


Accessories


FESTO

Ordering data – Angled socket PEV					Technical data → www.festo.com	
	Description	Operating voltage range	Electrical connection	Switching status display	Part No.	Type
	for PEV-1/4-...-OD	15 ... 30 V DC	4-pin	Yellow LED	164 274	PEV-1/4-WD-LED-24
		≤ 230 V AC ≤ 180 V DC	4-pin	Yellow LED	164 275	PEV-1/4-WD-LED-230

Ordering data – Plug socket MSSD					Technical data → www.festo.com	
	Description	Operating voltage range	Electrical connection	Type of mounting cable connection	Part No.	Type
	for PEV-1/4-...-OD	≤ 250 V AC/DC	3-pin	Clamping screws	171 157	MSSD-C-4P
	for MS4/6-EE/DE	≤ 250 V AC/DC	3-pin	Clamping screws	151 687	MSSD-EB
			4-pin	Insulation displacement technology	192 745	MSSD-EB-S-M14
	for MS12-EE/DE	≤ 250 V AC/DC	3-pin	Clamping screws	34 583	MSSD-C
4-pin			Insulation displacement technology	192 748	MSSD-C-S-M16	

Ordering data – Plug socket with cable KMEB/KMC						Technical data → www.festo.com	
	Description	Operating voltage range	Electrical connection	Switching status display	Cable length [m]	Part No.	Type
	for MS4/6-EE/DE	24 V DC	2-pin	LED	2.5	547 268	KMEB-3-24-2,5-LED
				–	5	547 269	KMEB-3-24-5-LED
			–	2.5	547 270	KMEB-3-24-2,5	
				5	547 271	KMEB-3-24-5	
		3-pin	LED	2.5	151 688	KMEB-1-24-2,5-LED	
			–	5	151 689	KMEB-1-24-5-LED	
			–	10	193 457	KMEB-1-24-10-LED	
			–	2.5	151 690	KMEB-1-230AC-2,5	
	for MS12-EE/DE	24 V DC	3-pin	LED	2.5	30 931	KMC-1-24DC-2,5-LED
				–	5	30 933	KMC-1-24DC-5-LED
			–	10	193 459	KMC-1-24-10-LED	
				2.5	30 932	KMC-1-230AC-2,5	
		3-pin	–	5	30 934	KMC-1-230AC-5	
			–	2.5	30 932	KMC-1-230AC-2,5	
			–	5	30 934	KMC-1-230AC-5	
			–	2.5	30 932	KMC-1-230AC-2,5	

Ordering data – Illuminating seal MEB-LD/MC-LD				Technical data → www.festo.com	
	Description	Operating voltage range	Part No.	Type	
	for plug socket with cable KMEB and plug socket MSSD-EB	12 ... 24 V DC	151 717	MEB-LD-12-24DC	
		230 V DC/AC ±10%	151 718	MEB-LD-230AC	
	for plug socket with cable KMC and plug socket MSSD-C	12 ... 24 V DC	19 145	MC-LD-12-24DC	
		230 V DC/AC ±10%	19 146	MC-LD-230AC	


Ordering data – Locking clip CPV18-HV				Technical data → www.festo.com	
	Description	Part No.	Type	PU ¹⁾	
	for MS4/6-EE/DE-...-V24	530 056	CPV18-HV	10	


1) Packaging unit quantity


MS series service units

Accessories



Ordering data – Silencer U			Technical data → www.festo.com	
	Description	Pneumatic connection	Part No.	Type
	for MS4-EM1/EE	G1/4	6 842	U-1/4-B
	for MS6-EM1/EE	G1/2	6 844	U-1/2-B
	for MS12-EM/EE	G1	151 990	U-1-B

Ordering data – Double nipple ESK					
	Description	Pneumatic connection		Part No.	Type
	Adjustable for angular compensation • For retro-fitting pressure switch PEV or pressure sensor SDE1 to branching module MS-FRM	R1/8	R1/4	534 151	ESK-1/8-1/4
		R1/4	R1/4	151 521	ESK-1/4-1/4
			R1/2	534 153	ESK-1/4-1/2

Ordering data – Padlock LRVS-D				
	Description	Weight [g]	Part No.	Type
	for filter or pressure regulators	120	193 786	LRVS-D

Ordering data – Special oil OFSW				
	Description	Scope of delivery	Part No.	Type
	for lubricators	1 litre	152 811	OFSW-32