

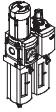
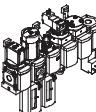
## Service units MSB-FRC, MS series

**FESTO**



## Service units MSB-FRC, MS series

Product range overview – MS series service units

Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]						Grade of filtration [ $\mu\text{m}$ ]			
				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
<b>Service units</b>													
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	-	-	-	■	■	-	-	■	■
		9	-										
		12	-										
<b>Service unit combinations (further variants can be ordered using the configurator → Internet: msb4, msb6 or msb9)</b>													
MSB		4	G1/4	G1/8, G1/4, G3/8	-	-	-	■	■	-	-	■	■
		6	G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	■	■	-	-	■	■
		9	-										
		12	-										
<b>Individual devices</b>													
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	-	-	■	■	■	-	-	■	■
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	■	■	■	-	-	■	■
		12	-	G1, G11/4, G11/2, 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	-	-	-	-	-	-	-	■	■
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	-	-	■	■
		12	-	G1, G11/4, G11/2, 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	-	-	-	-	-	-	■	■	-
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	-	■	■	-
		12	-	G1, G11/4, G11/2, 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	-	-	-	-	-	-	-	-	-
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	-	-	-	-
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	-	-	-	-
Water separators MS-LWS		4	-										
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	-	-	-	-	-	-
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	-	-	-	-
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	-	-	-	-

# Service units MSB-FRC, MS series

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Product range overview – MS series service units

Type	Size	Bowl guard		Condensate drains				Pressure indicator				Security		Options		➔ Page/ Internet	
		Plastic bowl with 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 G1/8	Adapter plate for EN pressure gauge G1/4	Pressure sensor	Rotary knob with detent, lockable via accessories	Rotary knob with integrated lock	Silencer	Flow direction from right to left	
Code		R	U	M	H	V	E...	VS	AG	A8	A4	AD...	AS	E11	S	Z	
<b>Service units</b>																	
MSB-FRC	4	■	—	■	—	■	—	—	■	—	—	—	■	—	—	■	8
	6	■	■	■	—	■	—	—	■	—	—	—	■	—	—	■	8
	9	—															—
	12	—															—
<b>Service unit combinations</b>																	
MSB	4	■	■	■	■	—	■	—	—	■	—	—	■	—	—	■	msb4
	6	■	■	■	■	—	■	—	—	■	—	—	■	—	—	■	msb6
	9	—															—
	12	—															—
<b>Individual devices</b>																	
Filter regulators MS-LFR	4	■	■	■	■	■	■	—	■	■	■	■	■	■	■	—	■ ms4-lfr
	6	■	■	■	■	■	■	■	■	■	■	■	■	■	■	—	■ ms6-lfr
	9	—	■	■	■	■	■	■	■	■	■	■	■	■	■	—	■ ms9-lfr
	12	—	■	■	■	—	■	■	■	■	■	■	■	■	■	—	■ ms12-lfr
Filters MS-LF	4	■	■	■	■	■	■	—	—	—	—	—	—	—	—	—	■ ms4-lf
	6	■	■	■	■	■	■	■	■	—	—	—	—	—	—	—	■ ms6-lf
	9	—	■	■	■	■	■	■	■	—	—	—	—	—	—	—	■ ms9-lf
	12	—	■	■	■	—	■	■	■	—	—	—	—	—	—	—	■ ms12-lf
Fine and micro filters MS-LFM	4	■	■	■	■	■	■	■	—	—	—	—	—	—	—	—	■ ms4-lfm
	6	■	■	■	■	■	■	■	■	—	—	—	—	—	—	—	■ ms6-lfm
	9	—	■	■	■	■	■	■	■	—	—	—	—	—	—	—	■ ms9-lfm
	12	—	■	■	■	—	■	■	■	—	—	—	—	—	—	—	■ ms12-lfm
Activated carbon filters MS-LFX	4	■	■	■	—	—	—	—	—	—	—	—	—	—	—	—	■ ms4-lfx
	6	■	■	■	—	—	—	—	—	—	—	—	—	—	—	—	■ ms6-lfx
	9	—	■	—	—	—	—	—	—	—	—	—	—	—	—	—	■ ms9-lfx
	12	—	■	—	—	—	—	—	—	—	—	—	—	—	—	—	■ ms12-lfx
Water separators MS-LWS	4	—															—
	6	—	■	—	—	■	■	—	—	—	—	—	—	—	—	—	■ ms6-lws
	9	—	■	—	—	■	■	—	—	—	—	—	—	—	—	—	■ ms9-lws
	12	—	■	—	—	■	■	—	—	—	—	—	—	—	—	—	■ ms12-lws

# Service units MSB-FRC, MS series

Product range overview – MS series service units

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Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]						Supply voltage			
				0.05	0.05	0.1	0.3	0.1	0.5	24 VDC, connection pattern to EN 175301	24 VDC, connection pattern to IEC 61076-2-101	110 VAC, connection pattern to EN 175301	230 VAC, connection pattern to EN 175301
Code	AG...	D2	D4	D5	D6	D7	D8	V24	V24P	V110	V230		
<b>Individual devices</b>													
Pressure regulators <b>MS-LR</b>		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	-	-	■	■	■	■	-	-	-
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	■	■	■	■	-	-	-
		12	-	G1, G11/4, G11/2, G2	-	-	-	■	■	■	-	-	-
Pressure regulators <b>MS-LRB</b>		4	G1/4	G1/8, G1/4, G3/8	-	-	■	■	■	-	-	-	-
		6	G1/2	G1/4, G3/8, G1/2, G3/4	-	-	■	■	■	■	-	-	-
		9	-										
		12	-										
Precision pressure regulators <b>MS-LRP</b>		4	-										
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	-	■	-	-	-	-
		9	-										
		12	-										
Precision pressure regulators <b>MS-LRPB</b>		4	-										
		6	G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	-	■	-	-	-	-
		9	-										
		12	-										
Electrical pressure regulators <b>MS-LRE</b>		4	-										
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	■	■	■	■	-	-	-
		9	-										
		12	-										
Lubricators <b>MS-LOE</b>		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	-	-	-	-	-	-	-	-	-
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	-	-	-	-
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	-	-	-	-
On-off valves, manually actuated <b>MS-EM(1)</b>		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	-	-	-	-	-	-	-	-	-
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	-	-	-	-
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	-	-	-	-
On-off valves, electrically actuated <b>MS-EE</b>		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	-	-	-	-	-	■	-	■	■
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	-	-	-	-	-	■	■	■	■
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	■	■	■	■
Soft-start valves, pneumatically actuated <b>MS-DL</b>		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	-	-	-	-	-	-	-	-	-
		9	-										
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	-	-	-	-
Soft-start valves, electrically actuated <b>MS-DE</b>		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	-	-	-	-	-	■	-	■	■
		9	-										
		12	-	G1, G11/4, G11/2, G2	-	-	-	-	-	■	■	■	■

# Service units MSB-FRC, MS series

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Product range overview – MS series service units

Type	Size	Bowl guard		Pressure indicator						Security		Options		➔ Page/ Internet
		Plastic bowl with plastic bowl guard	Metal bowl	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G1/8	Adapter plate for EN pressure gauge G1/4	Pressure sensor	Rotary/knob with detent, lockable via accessories	Rotary/knob with integrated lock	Silencer	Flow direction from right to left		
		Code	Code	R	U	VS	AG	A8	A4	AD...	AS	E11	S	Z
<b>Individual devices</b>														
Pressure regulators <b>MS-LR</b>	4	–	–	■	■	■	■	■	■	■	■	–	■	ms4-lr
	6	–	–	■	■	–	■	■	■	■	■	–	■	ms6-lr
	9	–	–	■	■	–	■	■	■	■	■	–	■	ms9-lr
	12	–	–	■	■	–	■	–	■	■	■	–	■	ms12-lr
Pressure regulators <b>MS-LRB</b>	4	–	–	■	■	■	■	■	■	■	■	–	■	ms4-lrb
	6	–	–	■	■	–	■	■	■	■	■	–	■	ms6-lrb
	9	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–	–
Precision pressure regulators <b>MS-LRP</b>	4	–	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	■	–	–	■	■	■	■	■	–	■	ms6-lrp
	9	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–	–
Precision pressure regulators <b>MS-LRPB</b>	4	–	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	■	–	–	■	■	■	■	■	–	■	ms6-lrbp
	9	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–	–
Electrical pressure regulators <b>MS-LRE</b>	4	–	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	■	■	–	■	■	■	–	–	–	■	ms6-lre
	9	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>MS-LOE</b>	4	■	■	–	–	–	–	–	–	–	–	–	■	ms4-loe
	6	■	■	–	–	–	–	–	–	–	–	–	■	ms6-loe
	9	–	■	–	–	–	–	–	–	–	–	–	■	ms9-loe
	12	–	■	–	–	–	–	–	–	–	–	–	■	ms12-loe
On-off valves, manually actuated <b>MS-EM(1)</b>	4	–	–	■	■	■	■	■	■	–	–	■	■	ms4-em1
	6	–	–	■	■	–	■	■	■	–	–	■	■	ms6-em1
	9	–	–	■	■	–	■	■	–	–	–	■	■	ms9-em
	12	–	–	■	■	–	■	■	–	–	–	■	■	ms12-em
On-off valves, electrically actuated <b>MS-EE</b>	4	–	–	■	■	■	■	■	■	–	–	■	■	ms4-ee
	6	–	–	■	■	–	■	■	■	–	–	■	■	ms6-ee
	9	–	–	■	■	–	■	■	–	–	–	■	■	ms9-ee
	12	–	–	■	■	–	■	■	–	–	–	■	■	ms12-ee
Soft-start valves, pneumatically actuated <b>MS-DL</b>	4	–	–	■	■	■	■	■	■	–	–	–	■	ms4-dl
	6	–	–	■	■	–	■	■	■	–	–	–	■	ms6-dl
	9	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	■	■	–	■	■	–	–	–	–	■	ms12-dl
Soft-start valves, electrically actuated <b>MS-DE</b>	4	–	–	■	■	■	■	■	■	–	–	–	■	ms4-de
	6	–	–	■	■	–	■	■	■	–	–	–	■	ms6-de
	9	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	■	■	–	■	■	–	–	–	–	■	ms12-de

## Service units MSB-FRC, MS series

Product range overview – MS series service units

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Type	Size	Pneumatic connection in housing	Connecting plate	Performance Level		Supply voltage			
				Category 1, 1-channel	Category 4, 2-channel with self-monitoring	24 VDC, connection pattern to EN 175301	24 VDC, connection M12 to IEC 61076-2-101/ to EN 60947-5-2	110 VAC, connection pattern to EN 175301	230 VAC, connection pattern to EN 175301
Code		AG...		C	E	V24	V24P	V110	V230
<b>Individual devices</b>									
Soft start and exhaust valves <b>MS-SV-C</b>		4	–						
		6	G1/2	G1/4, G3/8, G1/2, G3/4	■	–	■	■	■
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	■	–	■	■	■
		12	–						
Soft start and exhaust valves <b>MS-SV-E</b>		4	–						
		6	G1/2	G1/4, G3/8, G1/2, G3/4	–	■	■	–	–
		9	–						
		12	–						
Membrane air dryers <b>MS-LDM1</b>		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	–	–	–	–	–
		9	–						
		12	–						
Branching modules <b>MS-FRM</b>		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	–	–	–	–	–
		9	G3/4, G1	G1/2, G3/4, G1, G11/4, G11/2	–	–	–	–	–
		12	–	G1, G11/4, G11/2, G2	–	–	–	–	–
Distributor blocks <b>MS-FRM-FRZ</b>		4	G1/4	–	–	–	–	–	–
		6	G1/2	–	–	–	–	–	–
		9	–						
		12	–						
Flow sensors <b>SFAM</b>		4	–						
		6	G1/2	G1/2	–	–	–	–	–
		9	–	G1, G11/2	–	–	–	–	–
		12	–						

# Service units MSB-FRC, MS series

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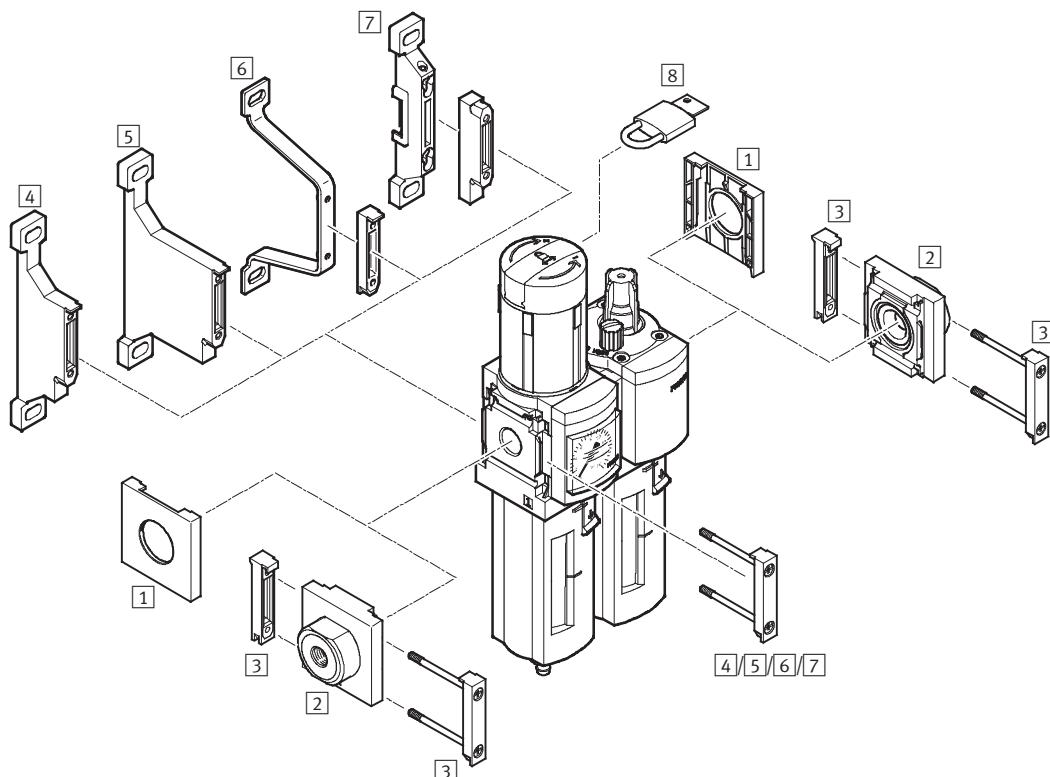
Product range overview – MS series service units

Type	Size	Bowl guard		Pressure indicator				Switch output		Options		➔ Page/ Internet
		Plastic bowl with plastic bowl guard	Metal bowl	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G1/8	Adapter plate for EN pressure gauge G1/4	Pressure sensor	2x PNP or NPN, 1 analogue output 4 ... 20 mA	2x PNP or NPN, 1 analogue output 0 ... 10 V	Silencer	Flow direction from right to left
Code		R	U	VS	AG	A8	A4	AD...	2SA	2SV	S	Z/R
<b>Individual devices</b>												
<b>MS-SV-C</b> Soft start and exhaust valves	4	–										–
	6	–	–	■	■	–	■	■	–	–	■	■
	9	–	–	■	■	–	■	■	–	–	■	■
	12	–										–
<b>MS-SV-E</b> Soft start and exhaust valves	4	–										–
	6	–	–	■	■	–	■	■	–	–	■	■
	9	–										–
	12	–										–
<b>MS-LDM1</b> Membrane air dryers	4	–	■	–	–	–	–	–	–	–	–	■
	6	–	■	–	–	–	–	–	–	–	–	■
	9	–										–
	12	–										–
<b>MS-FRM</b> Branching modules	4	–	–	■	■	■	■	■	–	–	–	■
	6	–	–	■	■	–	■	■	–	–	–	■
	9	–	–	■	■	–	■	■	–	–	–	■
	12	–	–	■	–	–	–	–	–	–	–	ms12-frm
<b>MS-FRM-FRZ</b> Distributor blocks	4	–	–	–	–	–	–	–	–	–	–	■
	6	–	–	–	–	–	–	–	–	–	–	■
	9	–										–
	12	–										–
<b>SFAM</b> Flow sensors	4	–										–
	6	–	–	–	–	–	–	–	■	■	–	■
	9	–	–	–	–	–	–	–	■	■	–	■
	12	–										–

# Service units MSB4/MSB6-FRC, MS series

Peripherals overview

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Mounting attachments and accessories		➔ Page/Internet
[1]	Cover cap MS4/6-END	ms4-end, ms6-end
[2]	Connecting plate MS4/6-AG...	ms4-ag, ms6-ag
[3]	Module connector MS4/6-MV	ms4-mv, ms6-mv
[4]	Mounting bracket MS4/6-WP	ms4-wp, ms6-wp
[5]	Mounting bracket MS4/6-WPB	ms4-wp, ms6-wp
[6]	Mounting bracket MS4/6-WPE	ms4-wp, ms6-wp
[7]	Mounting bracket MS4/6-WPM	ms4-wp, ms6-wp
[8]	Padlock LRVS-D	17

# Service units MSB4/MSB6-FRC, MS series

FESTO

Type codes

MSB	6	-	$\frac{3}{8}$	-	FRC2:J6	M1						
<b>Series</b>												
MSB	Service unit											
<b>Size</b>												
4	Grid dimension 40 mm											
6	Grid dimension 62 mm											
<b>Pneumatic connection</b>												
MSB4												
1/8	Thread G $\frac{1}{8}$											
1/4	Thread G $\frac{1}{4}$											
MSB6												
1/4	Thread G $\frac{1}{4}$											
3/8	Thread G $\frac{3}{8}$											
1/2	Thread G $\frac{1}{2}$											
<b>Service unit consisting of:</b>												
<ul style="list-style-type: none"> <li>• Filter regulator with pressure gauge, rotary knob with detent, lockable via accessories</li> <li>• Lubricator</li> </ul>												
<b>Pressure regulation range 0.3 ... 7 bar</b>												
Plastic bowl guard												
FRC3:J7	Grade of filtration 5 µm, manual rotary condensate drain											
FRC4:J8	Grade of filtration 5 µm, fully automatic condensate drain											
FRC1:J5	Grade of filtration 40 µm, manual rotary condensate drain											
FRC2:J6	Grade of filtration 40 µm, fully automatic condensate drain											
<b>Pressure regulation range 0.5 ... 12 bar</b>												
Plastic bowl guard												
FRC7:J3	Grade of filtration 5 µm, manual rotary condensate drain											
FRC8:J4	Grade of filtration 5 µm, fully automatic condensate drain											
FRC5:J1	Grade of filtration 40 µm, manual rotary condensate drain											
FRC6:J2	Grade of filtration 40 µm, fully automatic condensate drain											
<b>Metal bowl</b>												
FRC11:J9	Grade of filtration 5 µm, manual rotary condensate drain											
FRC12:J10	Grade of filtration 5 µm, fully automatic condensate drain											
FRC9:J11	Grade of filtration 40 µm, manual rotary condensate drain											
FRC10:J12	Grade of filtration 40 µm, fully automatic condensate drain											
<b>Lubricators</b>												
M1	Plastic bowl guard											
M2	Metal bowl											

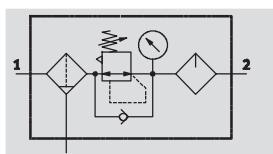
# Service units MSB4/MSB6-FRC, MS series

Technical data

**FESTO**

## Function

With condensate drain  
manual rotary



## Flow rate

800 ... 4,800 l/min

## Temperature range

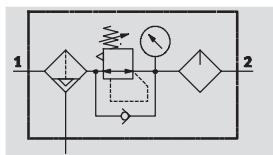
-10 ... +60 °C

## Pressure

1.5 ... 20 bar



With condensate drain  
fully automatic



- Filter, regulator and lubricator function in a single unit
- High flow rate and highly efficient removal of contaminants
- Good regulating characteristics with minimal pressure hysteresis
- Setting values are secured by locking the rotary knob
- Lockable rotary knob
- Two pressure regulation ranges: 0.3 ... 7 bar and 0.5 ... 12 bar
- With manual or integrated, fully automatic condensate drain
- Choice of filter cartridges: 5 µm or 40 µm
- New filter cartridges → 17, Festo special oil → 17

## General technical data

Size	MSB4	MSB6
Pneumatic connection 1, 2	G1/8	G1/4
Design	Filter regulator with pressure gauge Proportional standard mist lubricator	
Regulating function	Output pressure constant, with primary pressure compensation, with return flow function, with secondary venting	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 40	
Air purity class at the output	Compressed air in accordance with ISO 8573-1:2010 [6:4:-] (grade of filtration 5 µm) Compressed air in accordance with ISO 8573-1:2010 [7:4:-] (grade of filtration 40 µm)	
Bowl guard	Plastic bowl guard –	Plastic bowl guard Integrated as metal bowl
Condensate drains	Manual rotary Fully automatic	
Actuator lock	Rotary knob with detent, lockable via accessories	
Pressure regulation range [bar]	0.3 ... 7 0.5 ... 12	
Pressure indicator	With pressure gauge	

Note: This product conforms to ISO 1179-1 and ISO 228-1

# Service units MSB4/MSB6-FRC, MS series

FESTO

Technical data

## Standard nominal flow rate $q_{nN}^1$ [l/min]

Size	MSB4		MSB6		
Pneumatic connection	G1/8	G1/4	G1/4	G3/8	G1/2
Pressure regulation range 0.3... 7 bar					
Grade of filtration	5 µm	900	1,300	2,000	4,400
	40 µm	950	1,400	2,100	4,600
Pressure regulation range 0.5... 12 bar					
Grade of filtration	5 µm	800	850	1,700	3,400
	40 µm	850	900	1,900	3,500
					3,700

1) Measured at p1 = 10 bar and p2 = 6 bar,  $\Delta p = 1$  bar.

## Operating and environmental conditions

Condensate drains	Manual rotary	Fully automatic	
Size	MSB4	MSB6	MSB4
Operating pressure [bar]	1.5 ... 14	1.5 ... 20	2 ... 12
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [-:4:-]	Compressed air in accordance with ISO 8573-1:2010 [7:4:-]	Inert gases
Note on operating/pilot medium	Operation with lubricated medium possible (in which case lubricated operation will always be required)		
Ambient temperature [°C]	-10 ... +60	+5 ... +60	
Temperature of medium [°C]	-10 ... +60	+5 ... +60	
Storage temperature [°C]	-10 ... +60	-10 ... +60	
Corrosion resistance	CRC <sup>1)</sup>	2	

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

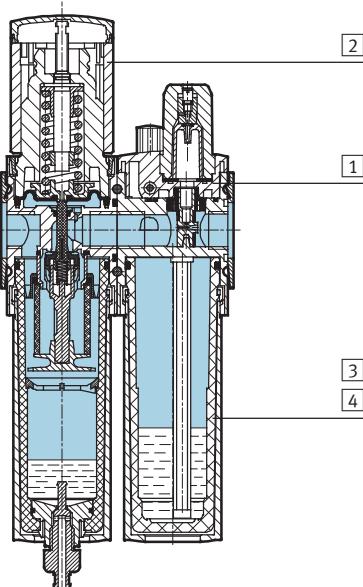
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

## Weights [g]

Size	MSB4	MSB6
With plastic bowl guard	500	1,495
With metal bowl	-	1,713

## Materials

Sectional view



### Service unit

[1] Body	Die-cast aluminium
[2] Regulating knob	PA/POM
[3] Plastic bowl guard	PC
[4] Metal bowl	Wrought aluminium alloy
- Seals	NBR

# Service units MSB4/MSB6-FRC, MS series

Technical data

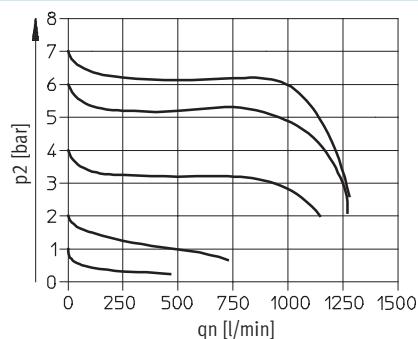
**FESTO**

## Standard flow rate $q_n$ as a function of output pressure $p_2$

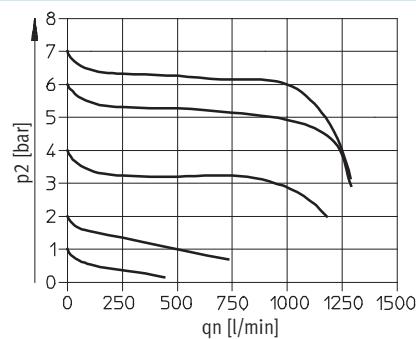
Pressure regulation range 0.3 ... 7 bar      Grade of filtration 5  $\mu\text{m}$

MSB4-1/8

Primary pressure  $p_1 = 10$  bar

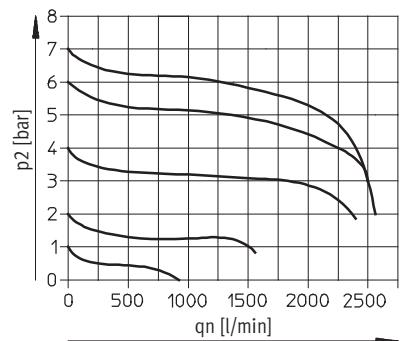
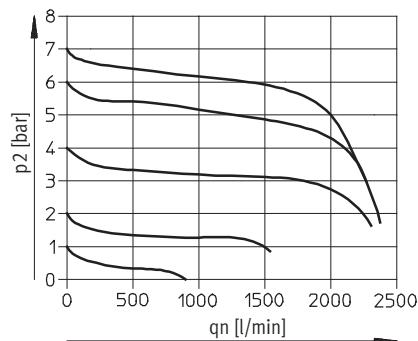


Grade of filtration 40  $\mu\text{m}$



MSB4-1/4

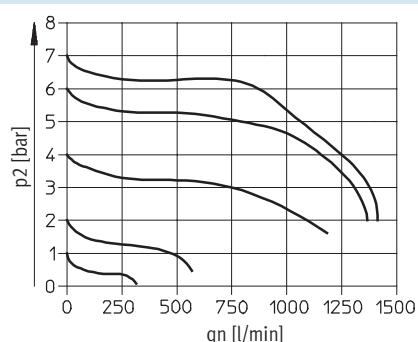
Primary pressure  $p_1 = 10$  bar



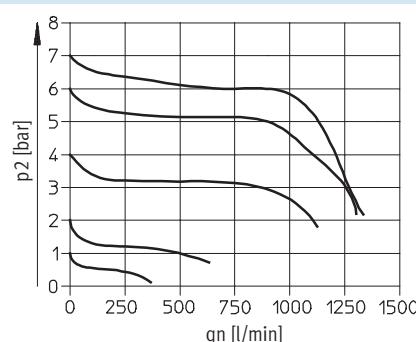
Pressure regulation range 0.5 ... 12 bar      Grade of filtration 5  $\mu\text{m}$

MSB4-1/8

Primary pressure  $p_1 = 10$  bar

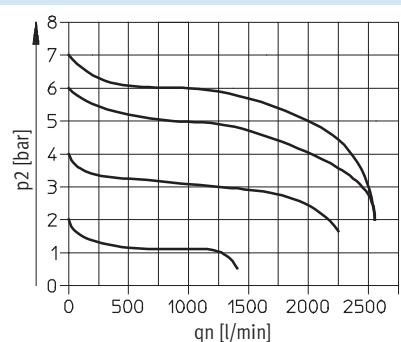
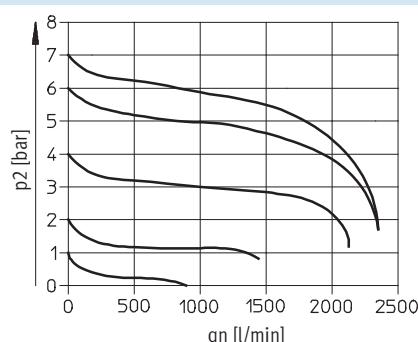


Grade of filtration 40  $\mu\text{m}$



MSB4-1/4

Primary pressure  $p_1 = 10$  bar



# Service units MSB4/MSB6-FRC, MS series

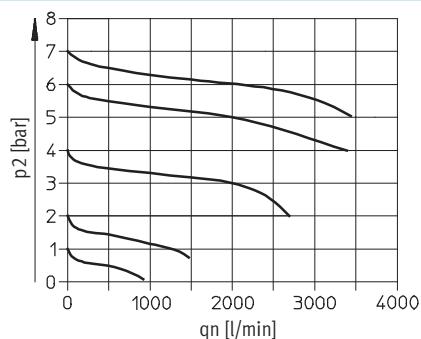
**FESTO**

Technical data

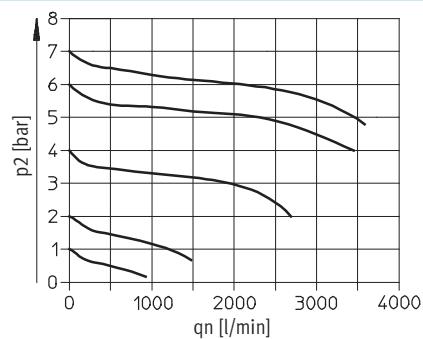
## Standard flow rate $q_n$ as a function of output pressure $p_2$

Pressure regulation range 0.3 ... 7 bar      Grade of filtration 5 µm  
MSB6-1/4

Primary pressure  $p_1 = 10$  bar

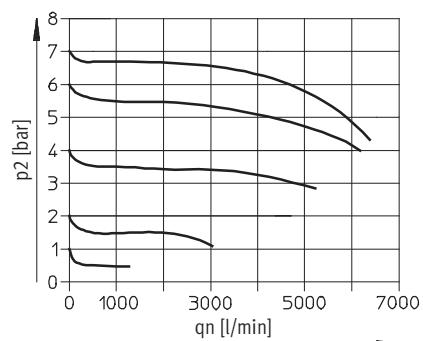
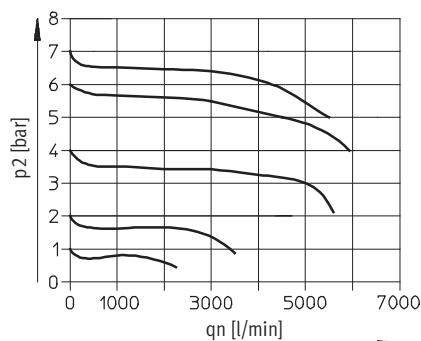


Grade of filtration 40 µm



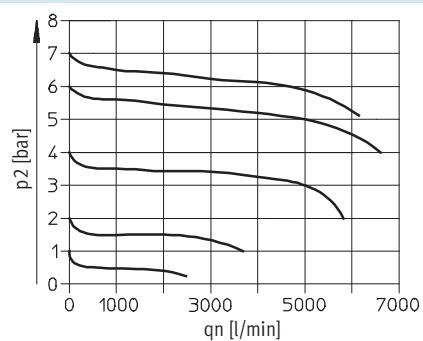
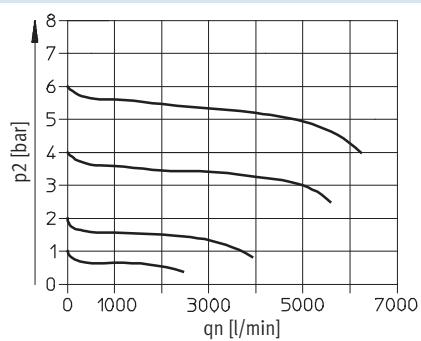
## MSB6-3/8

Primary pressure  $p_1 = 10$  bar



## MSB6-1/2

Primary pressure  $p_1 = 10$  bar



# Service units MSB4/MSB6-FRC, MS series

Technical data

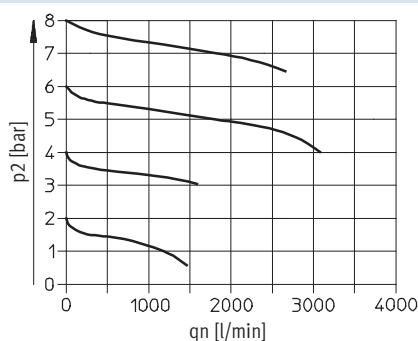
**FESTO**

## Standard flow rate $q_n$ as a function of output pressure $p_2$

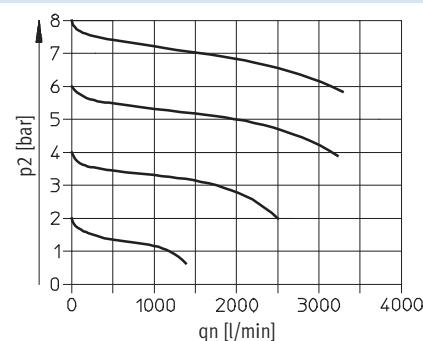
Pressure regulation range 0.5 ... 12 bar   Grade of filtration 5  $\mu\text{m}$

MSB6-1/4

Primary pressure  $p_1 = 10$  bar

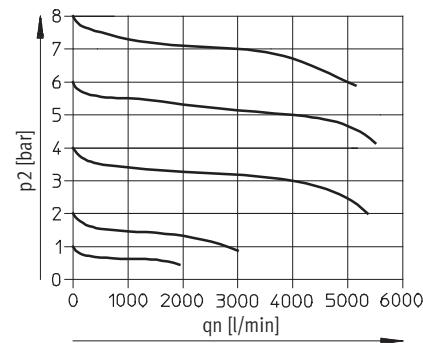
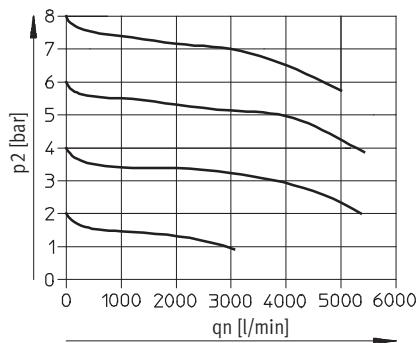


Grade of filtration 40  $\mu\text{m}$



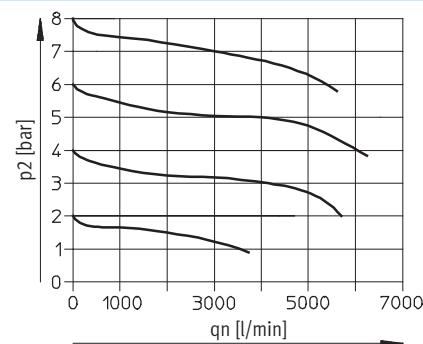
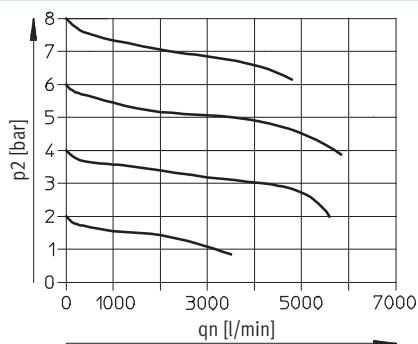
## MSB6-3/8

Primary pressure  $p_1 = 10$  bar



## MSB6-1/2

Primary pressure  $p_1 = 10$  bar



# Service units MSB4/MSB6-FRC, MS series

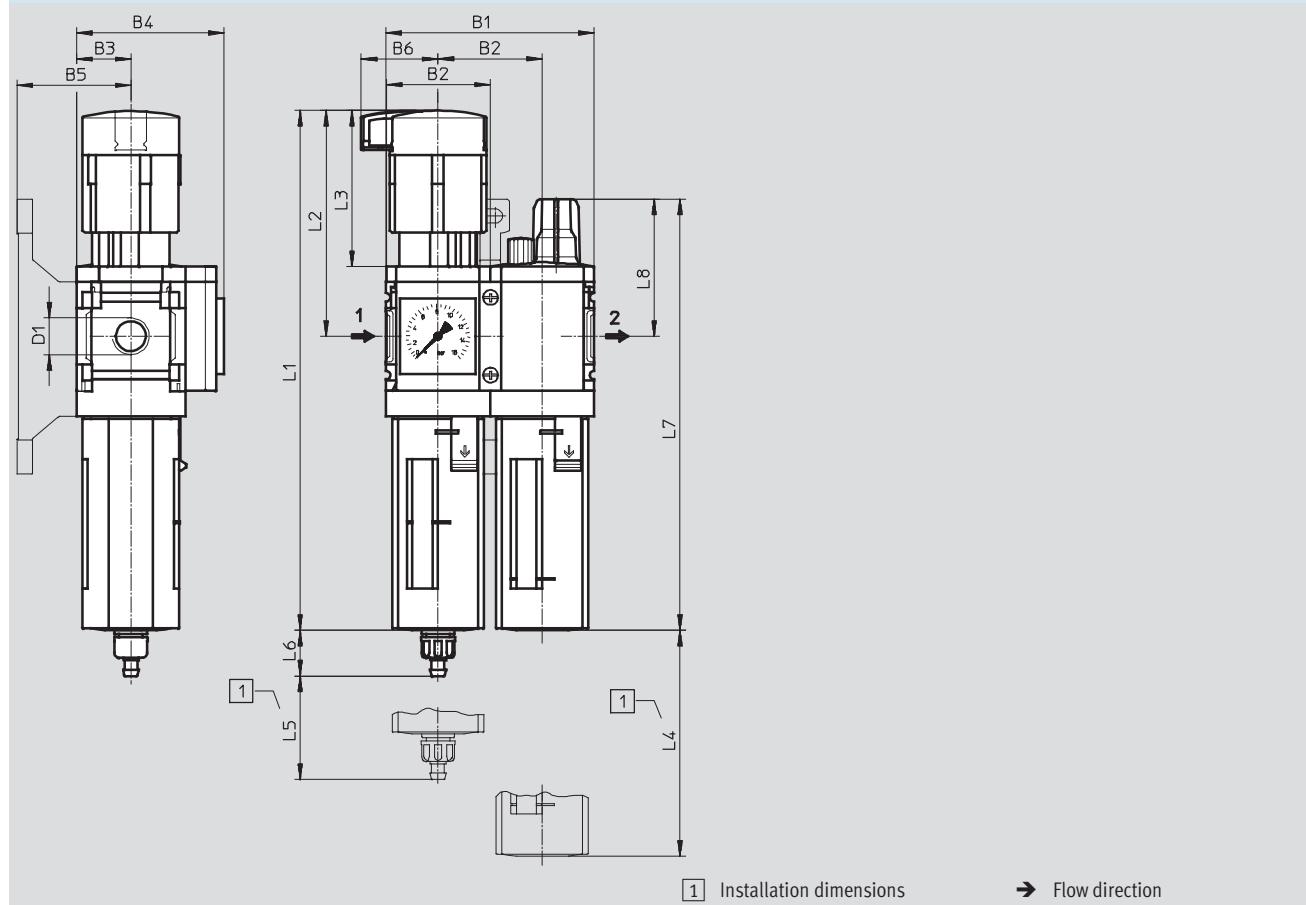
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Technical data

## Dimensions

With pressure gauge, display unit [bar]

Download CAD Data ➔ [www.festo.com/us/cad](http://www.festo.com/us/cad)



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2	L3	L4	L5	L6		L7	L8
													Condensate drain	manual rotary	fully automatic	
MSB4-1/8	80.4	40.2	21	57	44	29.7	G1/8 G1/4	201	87	60	80	25	17.7	20.4	167	53
MSB4-1/4																
MSB6-1/4	124	62	31	77	54	38.8	G1/4 G3/8 G1/2	284.8	134.5	95.5	130	68	15.8	18.5	215.3	65.6
MSB6-3/8																
MSB6-1/2																

Note: This product conforms to ISO 1179-1 and ISO 228-1

# Service units MSB4/MSB6-FRC, MS series

Technical data

**FESTO**

Ordering data					
Pressure regulation range 0.3 ... 7 bar					
Size	Condensate drain	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm
			Part No.	Type	
Plastic bowl guard					
MSB4	manual rotary	G1/8	531129	MSB4-1/8-FRC3:J7M1	531125 MSB4-1/8-FRC1:J5M1
		G1/4	531113	MSB4-1/4-FRC3:J7M1	531109 MSB4-1/4-FRC1:J5M1
	fully automatic	G1/8	531131	MSB4-1/8-FRC4:J8M1	531127 MSB4-1/8-FRC2:J6M1
		G1/4	531115	MSB4-1/4-FRC4:J8M1	531111 MSB4-1/4-FRC2:J6M1
MSB6	manual rotary	G1/4	530264	MSB6-1/4-FRC3:J7M1	530254 MSB6-1/4-FRC1:J5M1
		G3/8	530288	MSB6-3/8-FRC3:J7M1	530278 MSB6-3/8-FRC1:J5M1
		G1/2	530240	MSB6-1/2-FRC3:J7M1	530230 MSB6-1/2-FRC1:J5M1
	fully automatic	G1/4	530266	MSB6-1/4-FRC4:J8M1	530262 MSB6-1/4-FRC2:J6M1
		G3/8	530290	MSB6-3/8-FRC4:J8M1	530286 MSB6-3/8-FRC2:J6M1
		G1/2	530242	MSB6-1/2-FRC4:J8M1	530238 MSB6-1/2-FRC2:J6M1

Ordering data					
Pressure regulation range 0.5 ... 12 bar					
Size	Condensate drain	Connection	Grade of filtration 5 µm		Grade of filtration 40 µm
			Part No.	Type	
Plastic bowl guard					
MSB4	manual rotary	G1/8	531137	MSB4-1/8-FRC5:J3M1	531133 MSB4-1/8-FRC5:J1M1
		G1/4	531121	MSB4-1/4-FRC7:J3M1	531117 MSB4-1/4-FRC5:J1M1
	fully automatic	G1/8	531139	MSB4-1/8-FRC8:J4M1	531135 MSB4-1/8-FRC6:J2M1
		G1/4	531123	MSB4-1/4-FRC8:J4M1	531119 MSB4-1/4-FRC6:J2M1
MSB6	manual rotary	G1/4	530272	MSB6-1/4-FRC7:J3M1	530268 MSB6-1/4-FRC5:J1M1
		G3/8	530296	MSB6-3/8-FRC7:J3M1	530292 MSB6-3/8-FRC5:J1M1
		G1/2	530248	MSB6-1/2-FRC7:J3M1	530244 MSB6-1/2-FRC5:J1M1
	fully automatic	G1/4	530274	MSB6-1/4-FRC8:J4M1	530270 MSB6-1/4-FRC6:J2M1
		G3/8	530298	MSB6-3/8-FRC8:J4M1	530294 MSB6-3/8-FRC6:J2M1
		G1/2	530250	MSB6-1/2-FRC8:J4M1	530246 MSB6-1/2-FRC6:J2M1
Metal bowl					
MSB6	manual rotary	G1/4	530258	MSB6-1/4-FRC11:J9M2	530276 MSB6-1/4-FRC9:J11M2
		G3/8	530282	MSB6-3/8-FRC11:J9M2	530300 MSB6-3/8-FRC9:J11M2
		G1/2	530234	MSB6-1/2-FRC11:J9M2	530252 MSB6-1/2-FRC9:J11M2
	fully automatic	G1/4	530260	MSB6-1/4-FRC12:J10M2	530256 MSB6-1/4-FRC10:J12M2
		G3/8	530284	MSB6-3/8-FRC12:J10M2	530280 MSB6-3/8-FRC10:J12M2
		G1/2	530236	MSB6-1/2-FRC12:J10M2	530232 MSB6-1/2-FRC10:J12M2

## Service units MSB-FRC, MS series

FESTO

Accessories

### Filter cartridges



#### Ordering data

Size	Grade of filtration [µm]	Part No.	Type
MS4	5 (colour: blue)	534501	MS4-LFP-C
	40 (colour: white)	534502	MS4-LFP-E
MS6	5 (colour: blue)	534499	MS6-LFP-C
	40 (colour: white)	534500	MS6-LFP-E

### Special oil



#### Ordering data

Scope of delivery	Part No.	Type
1 litre	152811	OFSW-32

#### Ordering data – Padlock LRVS-D

	Weight [g]	Part No.	Type
	120	193786	LRVS-D

# Product Range and Company Overview

## A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



**Custom Automation Components**  
Complete custom engineered solutions



**Custom Control Cabinets**  
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With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



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Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

## Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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