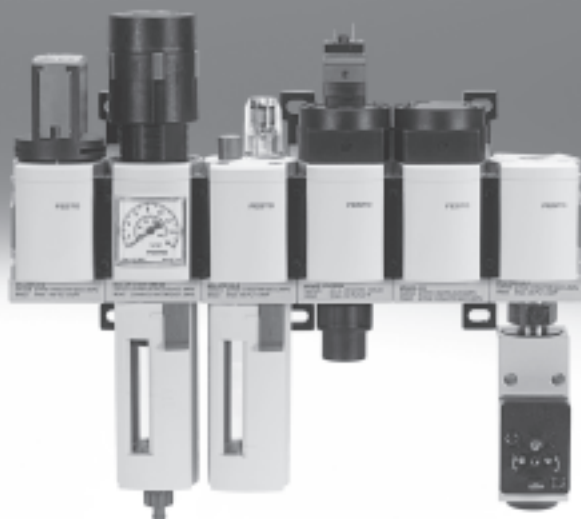


Service unit combinations MSB, MS series

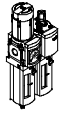
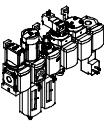
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Service unit combinations MSB, MS series

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Product range overview – MS series service units

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	–	–	–	■	■	–	–	–	■	■
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–
Service unit combinations (further variants can be ordered using the configurator → Internet: msb4, msb6 or msb9)													
MSB 	4	G1/4	G1/8, G1/4, G3/8	–	–	–	■	■	–	–	–	■	■
	6	G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	■	■	–	–	–	■	■
	9	–	–	–	–	–	–	–	–	–	–	–	–
	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	–	–	■	■	■	–	–	–	■	■
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	■	■	■	–	–	–	■	■
	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	–	–	–	–	–	–	–	–	■	■
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	–	–	–	■	■
	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	–	–	–	–	–	–	■	■	–	–
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	–	■	■	–	–
	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	–	–	–	–	–	–	–	–	–	–
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	–	–	–	–	–
	12	–	G1, G1 1/4, G1 1/2, 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, G1 1/4, G1 1/2	–	–	–	–	–	–	–	–	–	–
	12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–	–	–

Service unit combinations MSB, 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	
Service units																	
MSB-FRC	4	■	–	■	–	■	–	–	■	–	–	–	■	–	–	■	msb4
	6	■	■	■	–	■	–	–	■	–	–	–	■	–	–	■	msb6
	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Service unit combinations																	
MSB	4	■	■	■	–	■	–	–	■	–	–	–	■	–	–	■	8
	6	■	■	■	–	■	–	–	■	–	–	–	■	–	–	■	8
	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Individual devices																	
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 unit combinations MSB, MS series

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Product range overview – MS series service units

Type	Size	Pneumatic connection in housing	Connecting plate	Pressure regulation range [bar]						Supply voltage			
				0.05 ... 0.7	0.05 ... 2.5	0.1 ... 4	0.3 ... 7	0.1 ... 12	0.5 ... 16	24 V DC, connection pattern to EN 175301	24 V DC, connection M12 to IEC 61076-2-101	110 V AC, connection pattern to EN 175301	230 V AC, connection pattern to EN 175301
Code			AG...	D2	D4	D5	D6	D7	D8	V24	V24P	V110	V230
Individual devices													
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	–	–	■	■	■	–	–	–	–
		9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	■	■	■	–	–	–	–
		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	–	–	■	■	■	–	–	–	–
		9	–	–	–	–	–	–	–	–	–	–	–
		12	–	–	–	–	–	–	–	–	–	–	–
Precision pressure regulators MS-LRP		4	–	–	–	–	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	–	■	–	–	–	–
		9	–	–	–	–	–	–	–	–	–	–	–
		12	–	–	–	–	–	–	–	–	–	–	–
Precision pressure regulators MS-LRPB		4	–	–	–	–	–	–	–	–	–	–	–
		6	G1/2	G1/4, G3/8, G1/2, G3/4	■	■	■	–	■	–	–	–	–
		9	–	–	–	–	–	–	–	–	–	–	–
		12	–	–	–	–	–	–	–	–	–	–	–
Electrical pressure regulators MS-LRE		4	–	–	–	–	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	■	■	■	–	–	–	–
		9	–	–	–	–	–	–	–	–	–	–	–
		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	–	–	–	–	–	–	–	–	–
		9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–	–
On-off valves, manually actuated 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	–	–	–	–	–	–	–	–	–
		9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–	–
On-off valves, electrically actuated 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	–	–	–	–	–	■	–	■	■
		9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	■	■	■	■
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	■	■	■	■
Soft-start valves, pneumatically actuated 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	–	–	–	–	–	–	–	–	–
		9	–	–	–	–	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–	–
Soft-start valves, electrically actuated 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	–	–	–	–	–	■	–	■	■
		9	–	–	–	–	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	■	■	■	■

Service unit combinations MSB, MS series

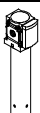
Product range overview – MS series service units

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		R	U	VS	AG	A8	A4	AD...	AS	E11	S	Z	
Individual devices													
Pressure regulators MS-LR	4	–	–	■	■	■	■	■	■	■	–	■	ms4-lr
	6	–	–	■	■	–	■	■	■	■	–	■	ms6-lr
	9	–	–	■	■	–	■	■	■	■	–	■	ms9-lr
	12	–	–	■	■	–	■	–	■	■	–	■	ms12-lr
Pressure regulators MS-LRB	4	–	–	■	■	■	■	■	■	■	–	■	ms4-lrb
	6	–	–	■	■	–	■	■	■	■	–	■	ms6-lrb
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–
Precision pressure regulators MS-LRP	4	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	■	–	■	■	■	■	■	–	■	ms6-lrp
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–
Precision pressure regulators MS-LRPB	4	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	■	–	■	■	■	■	■	–	■	ms6-lrpb
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–
Electrical pressure regulators MS-LRE	4	–	–	–	–	–	–	–	–	–	–	–	–
	6	–	–	■	■	–	■	–	–	–	–	■	ms6-lre
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	–	–	–	–	–	–	–	–	–	–
Lubricators MS-LOE	4	■	■	–	–	–	–	–	–	–	–	■	ms4-loe
	6	■	■	–	–	–	–	–	–	–	–	■	ms6-loe
	9	–	■	–	–	–	–	–	–	–	–	■	ms9-loe
	12	–	■	–	–	–	–	–	–	–	–	■	ms12-loe
On-off valves, manually actuated MS-EM(1)	4	–	–	■	■	■	■	■	–	–	■	■	ms4-em1
	6	–	–	■	■	–	■	■	–	–	■	■	ms6-em1
	9	–	–	■	■	–	■	–	–	–	■	■	ms9-em
	12	–	–	■	■	–	■	–	–	–	■	■	ms12-em
On-off valves, electrically actuated MS-EE	4	–	–	■	■	■	■	■	–	–	■	■	ms4-ee
	6	–	–	■	■	–	■	■	–	–	■	■	ms6-ee
	9	–	–	■	■	–	■	–	–	–	■	■	ms9-ee
	12	–	–	■	■	–	■	–	–	–	■	■	ms12-ee
Soft-start valves, pneumatically actuated MS-DL	4	–	–	■	■	■	■	■	–	–	–	■	ms4-dl
	6	–	–	■	■	–	■	■	–	–	–	■	ms6-dl
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	■	■	–	■	–	–	–	–	■	ms12-dl
Soft-start valves, electrically actuated MS-DE	4	–	–	■	■	■	■	■	–	–	–	■	ms4-de
	6	–	–	■	■	–	■	■	–	–	–	■	ms6-de
	9	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	–	■	■	–	■	–	–	–	–	■	ms12-de

Service unit combinations MSB, MS series

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Product range overview – MS series service units

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

Service unit combinations MSB, MS series

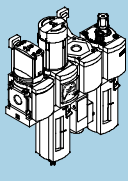
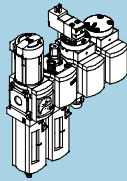
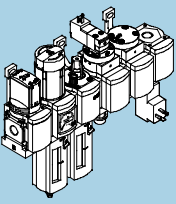
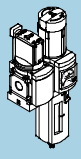
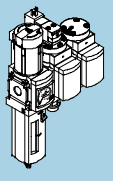
Product range overview – MS series service units

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	
Individual devices													
Soft start and exhaust valves MS-SV-C	4	–											–
	6	–	–	■	■	–	■	■	–	–	■	■	ms6-sv
	9	–	–	■	■	–	■	■	–	–	■	■	ms9-sv
	12	–											–
Soft start and exhaust valves MS-SV-E	4	–											–
	6	–	–	■	■	–	■	■	–	–	■	■	ms6-sv
	9	–											–
	12	–											–
Membrane air dryers MS-LDM1	4	–	■	–	–	–	–	–	–	–	–	■	ms4-ldm1
	6	–	■	–	–	–	–	–	–	–	–	■	ms6-ldm1
	9	–											–
	12	–											–
Branching modules MS-FRM	4	–	–	■	■	■	■	■	–	–	–	■	ms4-frm
	6	–	–	■	■	–	■	■	–	–	–	■	ms6-frm
	9	–	–	■	■	–	■	■	–	–	–	■	ms9-frm
	12	–	–	■	–	–	–	–	–	–	–	–	ms12-frm
Distributor blocks MS-FRM-FRZ	4	–	–	–	–	–	–	–	–	–	–	■	ms4-frm
	6	–	–	–	–	–	–	–	–	–	–	■	ms6-frm
	9	–											–
	12	–											–
Flow sensors SFAM	4	–											–
	6	–	–	–	–	–	–	–	■	■	–	■	sfam-62
	9	–	–	–	–	–	–	–	■	■	–	■	sfam-90
	12	–											–

Service unit combinations MSB4/MSB6, MS series

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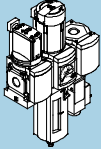
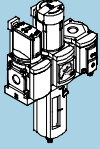
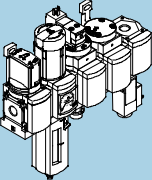
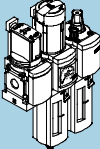
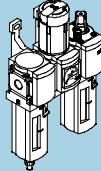
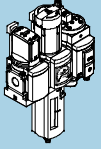
Product range overview

Combinations		Combination 1	Combination 2	Combination 3	Combination 4	Combination 5
						
Comprising:						
Manually operated on-off valve	EM1	■	–	■	■	–
Filter regulator with pressure gauge, lockable	LFR	■	■	■	■	■
Pressure regulator with pressure gauge, lockable	LR	–	–	–	–	–
Filter	LF	–	–	–	–	–
Lubricator	LOE	■	■	■	–	–
Solenoid actuated on-off valve	EE	–	■	■	–	■
Solenoid actuated on-off valve, with pressure sensor	EE	–	–	–	–	–
Pneumatically actuated soft-start valve	DL	–	■	■	–	■
Branching module with pressure switch	FRM	■	–	■	–	–
Branching module with pressure sensor	FRM	–	–	–	–	–
Mounting bracket	WP	■	■	■	■	■
Type codes → Page		11	11	11	11	11
Technical data → Page		12	15	19	23	26

Service unit combinations MSB4/MSB6, MS series

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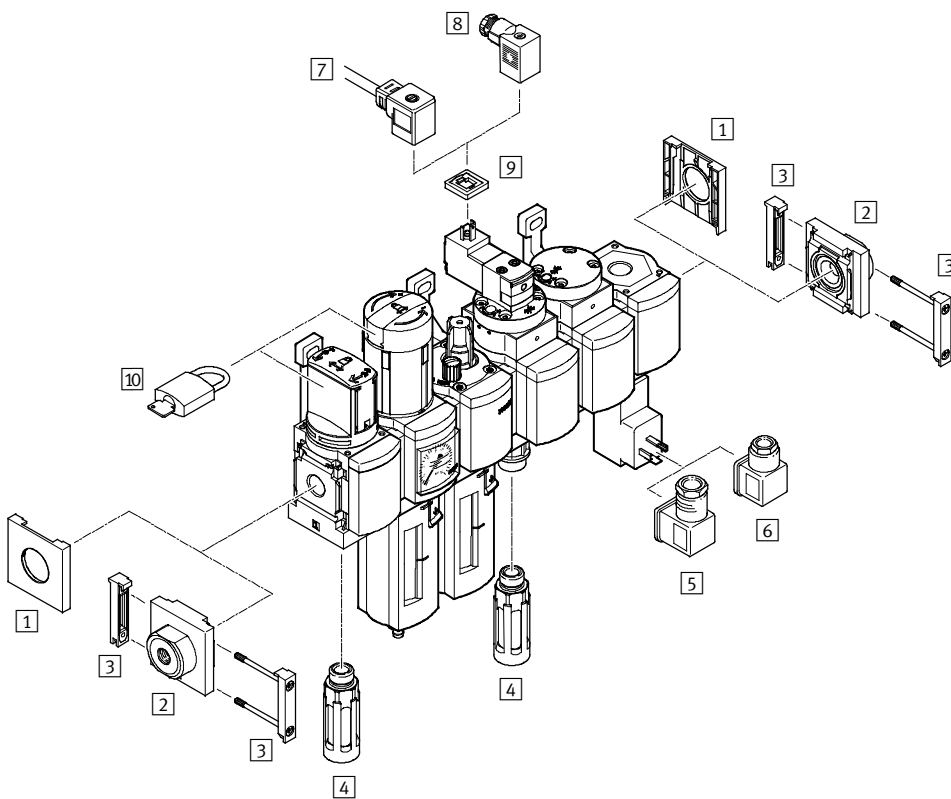
Product range overview

Combinations	Combination 6		Combination 7	Combination 8	Combination 9	Combination 10
						
Comprising:						
Manually operated on-off valve EM1	■	■	■	■	–	■
Filter regulator with pressure gauge, lockable LFR	■	■	■	■	–	■
Pressure regulator with pressure gauge, lockable LR	–	–	–	–	■	–
Filter LF	–	–	–	–	■	–
Lubricator LOE	–	–	–	■	■	–
Solenoid actuated on-off valve EE	–	–	■	–	–	–
Solenoid actuated on-off valve, with pressure sensor EE	–	–	–	–	–	■
Pneumatically actuated soft-start valve DL	–	–	■	–	–	–
Branching module with pressure switch FRM	■	–	■	–	–	–
Branching module with pressure sensor FRM	–	■	–	–	–	–
Mounting bracket WP	■	■	■	■	■	■
Type codes → Page	11	11	11	11	11	11
Technical data → Page	30	30	34	38	41	45

Service unit combinations MSB4/MSB6, MS series

Peripherals overview

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 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/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	Silencer U	48
5	Angled socket PEV-1/4-WD-LED	48
6	Plug socket MSSD-C-4P	48
7	Plug socket with cable KMEB	48
8	Plug socket MSSD-EB	48
9	Illuminating seal MEB-LD	48
10	Padlock LRVS-D	48
–	Mounting bracket MS4/6-WP/WPB/WPE/WPM	ms4-wp, ms6-wp

Service unit combinations MSB4/MSB6, MS series

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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											
MSB4											
1/4	Thread G1/4										
MSB6											
1/2	Thread G1/2										
Service unit combination											
On-off valve		➔ Internet: ms4-em1, ms6-em1									
C3	MS...-EM1										
Filters		➔ Internet: ms4-lf, ms6-lf									
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		➔ Internet: ms4-lfr, ms6-lfr									
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		➔ Internet: ms4-lr, ms6-lr									
N2	MS...-LR-D6-AS										
N3	MS...-LR-D7-AS										
Soft-start valve		➔ Internet: ms4-dl, ms6-dl									
A1	MS...-DL										
Lubricator		➔ Internet: ms4-loe, ms6-loe									
M1	MS...-LOE-R										
M2	MS...-LOE-U										
On-off valve		➔ Internet: ms4-ee, ms6-ee									
D1	MS...-EE-V24										
D7	MS...-EE-10V24										
D14	MS...-EE-10V24P-AD7										
Branching module		➔ Internet: ms4-frm, ms6-frm									
F3	MS...-FRM-Y										
F12	MS...-FRM-AD7										
Type of mounting											
WP	Mounting bracket										

Further variants can be ordered using the modular system → www.festo.com

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

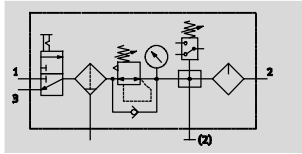
Service unit combinations MSB4/MSB6, MS series

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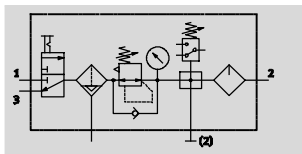
Technical data – Combination 1

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Branching module MS...-FRM-Y with pressure switch without display
- Lubricator MS...-LOE-R
- Mounting bracket MS...-WP

- - Flow rate
900 ... 3,300 l/min
- - Temperature range
-10 ... +60 °C
- - Pressure regulation range
1 ... 12 bar



- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- The unit is vented when switched off
- Electrical pressure monitoring with adjustable switching pressure
- Removal of filtered and unlubricated compressed air at the branching module connections

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
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 [6:4:4] (grade of filtration 5 µm)	
	Compressed air in accordance with ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent, lockable with accessories	
Pressure regulation range [bar]	1 ... 12	
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate q _{nN} [l/min]		
Size	MSB4	MSB6
Grade of filtration	5 µm	900
	40 µm	950
	5 µm	3,200
	40 µm	3,300

Service unit combinations MSB4/MSB6, MS series

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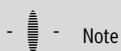
Technical data – Combination 1

Operating and environmental conditions				
Condensate drain	Manual rotary		Fully automatic	
Size	MSB4	MSB6	MSB4	MSB6
Operating pressure [bar]	1.5 ... 14	1.5 ... 18	2 ... 12	2 ... 12
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
	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 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	1,700	2,550
Mounting bracket	40	76



Note

Materials → Technical data of the individual devices

Standard flow rate qn as a function of output pressure p2

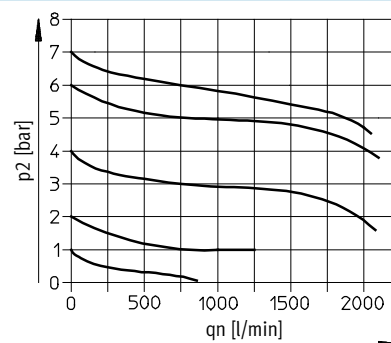
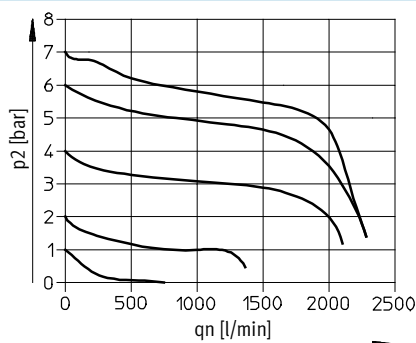
Pressure regulation range 1 ... 12 bar

Grade of filtration 5 µm

Grade of filtration 40 µm

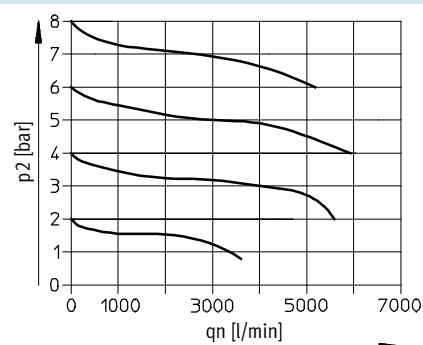
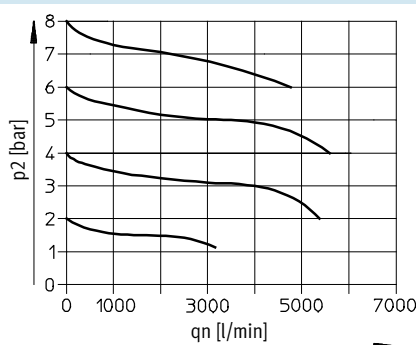
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

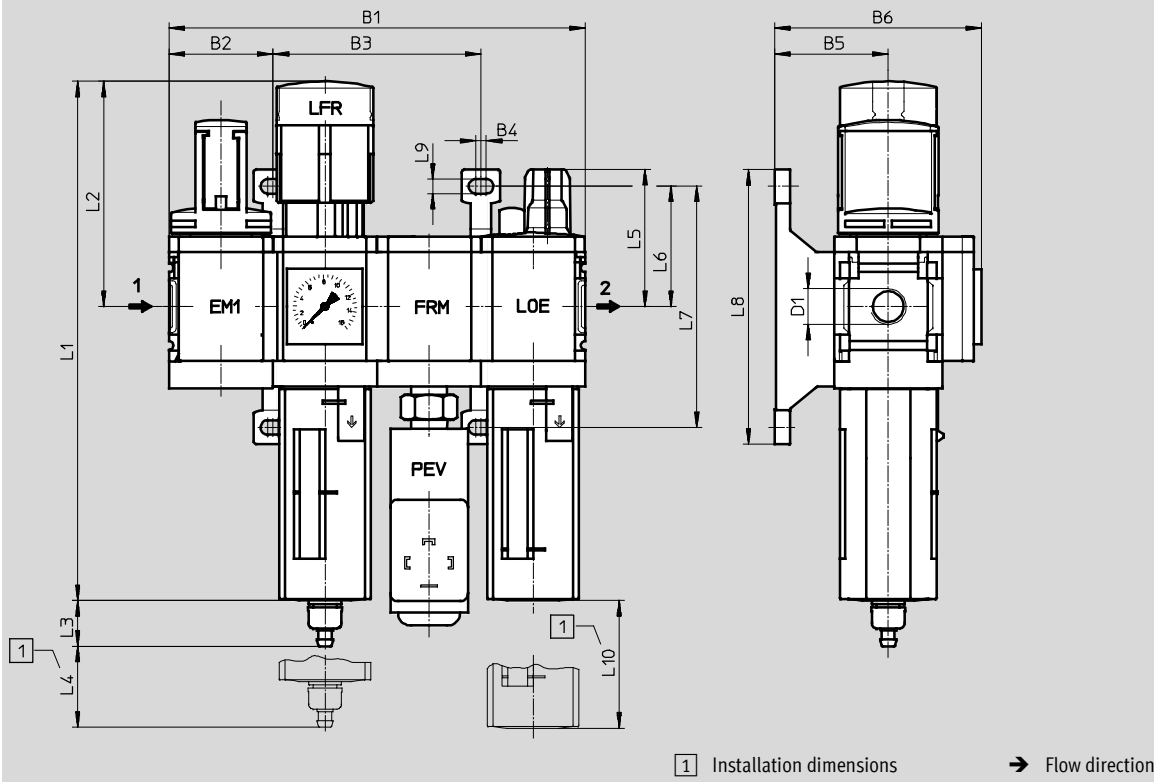
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Technical data – Combination 1

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	160.8	40.2	80.4	4	44	80	G $\frac{1}{4}$	201	87
MSB6	248	62	124	4.5	54	100	G $\frac{1}{2}$	285	134.5

Type	L3 Condensate drain		L4	L5	L6	L7	L8	L9	L10
	manual rotary	fully auto- matic							
MSB4	17.7	20.4	25	53	46.5	93.2	106	5.6	80
MSB6	15.8	18.5	68	66	71	142	158	6.6	130

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

Ordering data						
Pressure regulation range 1... 12 bar						
Size	Condensate drain	Connection	Grade of filtration 5 μm			Grade of filtration 40 μm
			Part No.	Type		Part No.
Plastic bowl guard						
MSB4	manual rotary	G¼	542307	MSB4-¼:C3J3F3M1-WP		542295 MSB4-¼:C3J1F3M1-WP
	fully automatic	G¼	542313	MSB4-¼:C3J4F3M1-WP		542301 MSB4-¼:C3J2F3M1-WP
MSB6	manual rotary	G½	542283	MSB6-½:C3J3F3M1-WP		542271 MSB6-½:C3J1F3M1-WP
	fully automatic	G½	542289	MSB6-½:C3J4F3M1-WP		542277 MSB6-½:C3J2F3M1-WP

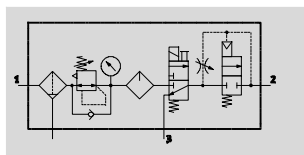
Service unit combinations MSB4/MSB6, MS series

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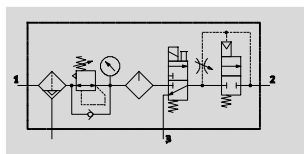
Technical data – Combination 2

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Mounting bracket MS...-WP

- Flow rate
550 ... 2,000 l/min
- Temperature range
-10 ... +60 °C
- Pressure regulation range
4 ... 12 bar



- For filtered and lubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- When supply pressure is closed, quick venting ensures rapid pressure reduction

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
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	
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	
Coil characteristics	24 V DC	
	24 V DC: 2,5 W (pressure regulation range 4 ... 9 bar) 24 V DC: 1,5 W (pressure regulation range 4 ... 12 bar)	

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

Standard nominal flow rate q _N [l/min]		
Size	MSB4	MSB6
Grade of filtration	5 µm	550
	40 µm	600
		1,900
		2,000

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 2

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
Operating 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	Compressed air in accordance with ISO 8573-1:2010 [-:4:-]		Compressed air in accordance with ISO 8573-1:2010 [7:4:-]		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 ... +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

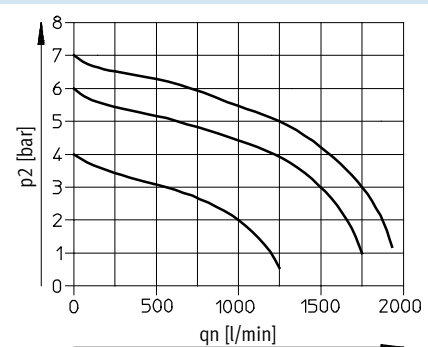
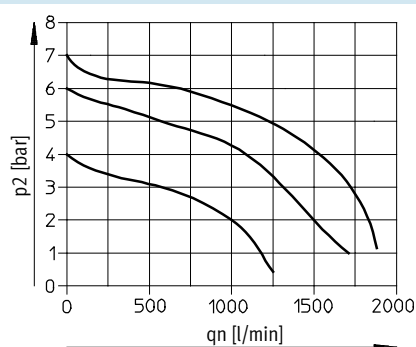
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [g]		
Size	MSB4	MSB6
Service unit combination	1,800	3,000
Mounting bracket	40	76

-  - Note
Materials → Technical data of the individual devices

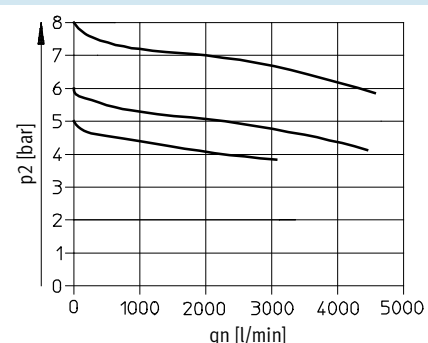
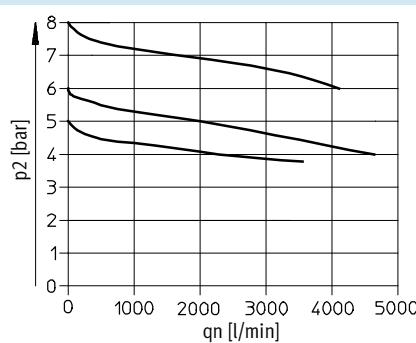
Standard flow rate qn as a function of output pressure p2		
Pressure regulation range	Grade of filtration 5 µm	Grade of filtration 40 µm
4 ... 9 bar / 4 ... 12 bar		
MSB4-1/4		

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

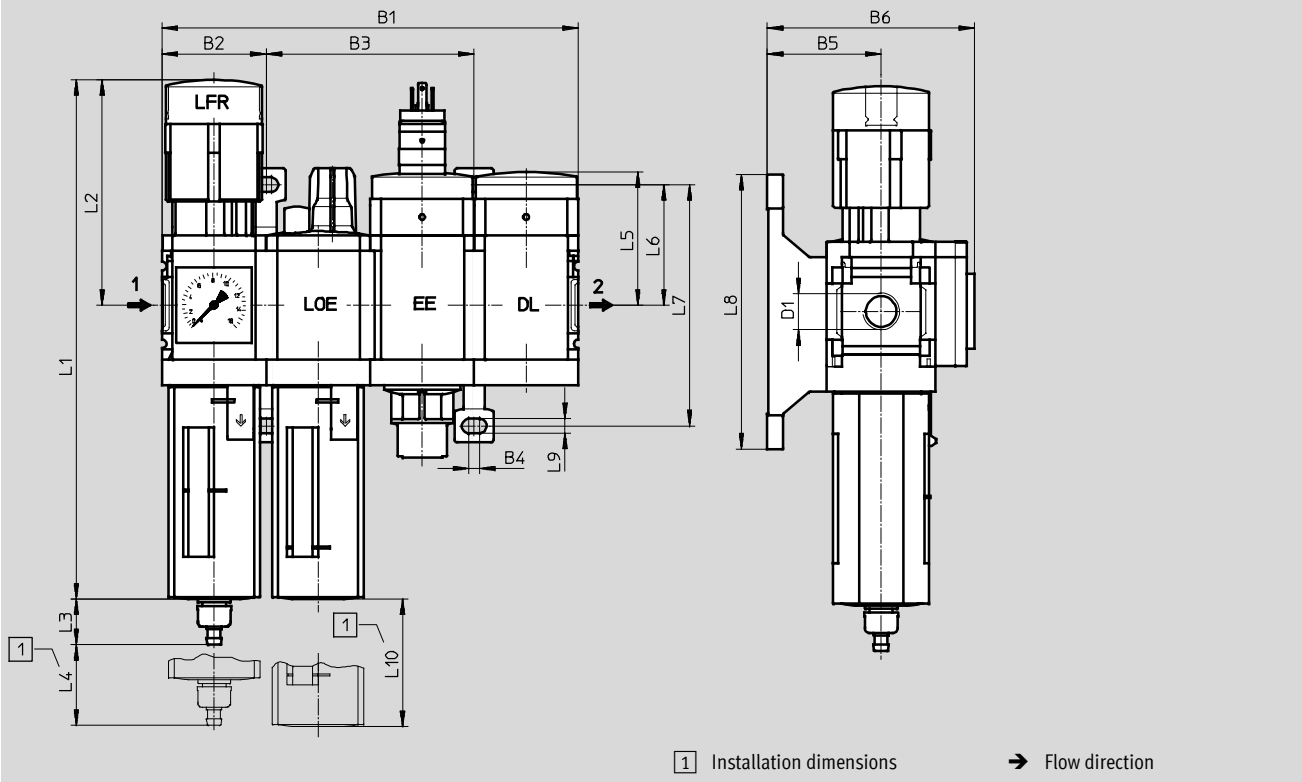
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Technical data – Combination 2

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	160.8	40.2	80.4	4	44	80	G $\frac{1}{4}$	201	87
MSB6	248	62	124	4.5	54	100	G $\frac{1}{2}$	285	134.5

Type	L3 Condensate drain		L4	L5	L6	L7	L8	L9	L10
	manual rotary	fully auto- matic							
MSB4	17.7	20.4	25	51.7	46.5	93.2	106	5.6	80
MSB6	15.8	18.5	68	71	71	142	158	6.6	130

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

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 2

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	G¼	542632	MSB4-¼:J3M1D7A1-WP		542628 MSB4-¼:J1M1D7A1-WP
	fully automatic	G¼	542634	MSB4-¼:J4M1D7A1-WP		542630 MSB4-¼:J2M1D7A1-WP
MSB6	manual rotary	G½	542648	MSB6-½:J3M1D7A1-WP		542644 MSB6-½:J1M1D7A1-WP
	fully automatic	G½	542650	MSB6-½:J4M1D7A1-WP		542646 MSB6-½:J2M1D7A1-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.
Plastic bowl guard						
MSB4	manual rotary	G¼	531106	MSB4-¼:J3M1D1A1-WP		531102 MSB4-¼:J1M1D1A1-WP
	fully automatic	G¼	531108	MSB4-¼:J4M1D1A1-WP		531104 MSB4-¼:J2M1D1A1-WP
MSB6	manual rotary	G½	530227	MSB6-½:J3M1D1A1-WP		530223 MSB6-½:J1M1D1A1-WP
	fully automatic	G½	530229	MSB6-½:J4M1D1A1-WP		530225 MSB6-½:J2M1D1A1-WP

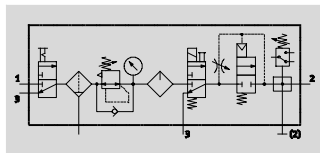
Service unit combinations MSB4/MSB6, MS series

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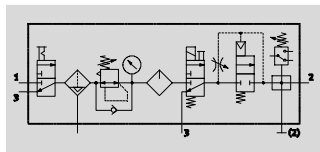
Technical data – Combination 3

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



- On-off valve MS...-EM1 manually actuated
- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- 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

- Flow rate
550 ... 2,300 l/min
- Temperature range
-10 ... +60 °C
- Pressure regulation range
4 ... 12 bar



- For filtered and lubricated 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

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
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 [6:4:4] (grade of filtration 5 µm)	
	Compressed air in accordance with ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	
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	
Coil characteristics	24 V DC	
	24 V DC: 2,5 W (pressure regulation range 4 ... 9 bar) 24 V DC: 1,5 W (pressure regulation range 4 ... 12 bar)	

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

Standard nominal flow rate q _N [l/min]			
Size		MSB4	MSB6
Grade of filtration	5 µm	550	2,100
	40 µm	600	2,300

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 3

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
Operating 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	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]							
	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 ... +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.

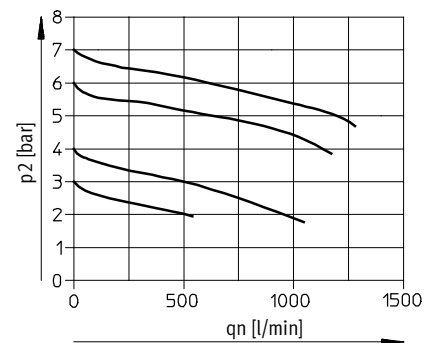
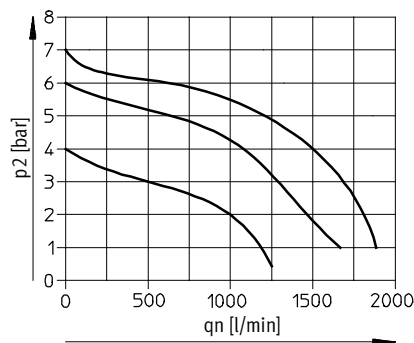
Weights [g]		
Size	MSB4	MSB6
Service unit combination	2,200	4,000
Mounting bracket	40	76

-  - Note

Materials → Technical data of the individual devices

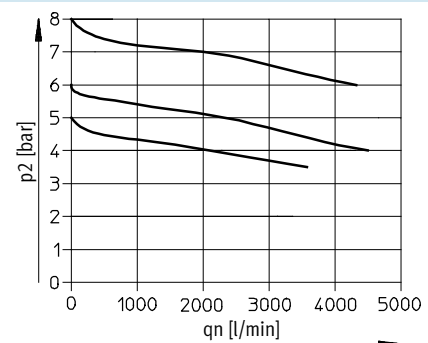
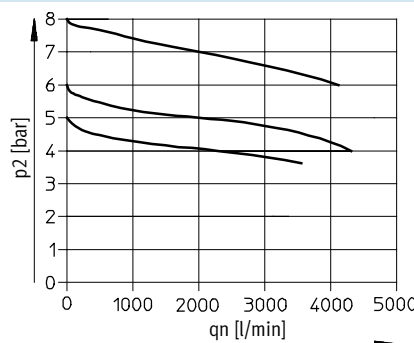
Standard flow rate qn as a function of output pressure p2		
Pressure regulation range	Grade of filtration 5 µm	Grade of filtration 40 µm
4 ... 9 bar / 4 ... 12 bar		
MSB4-1/4		

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

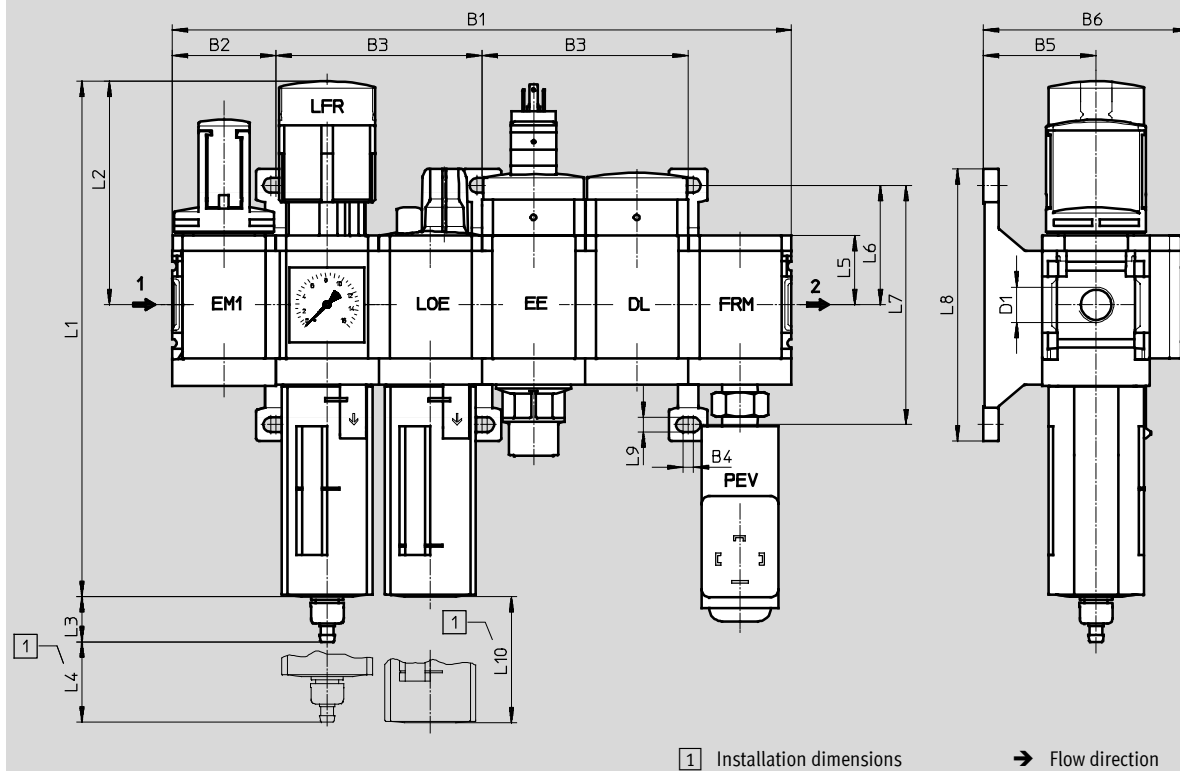
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Technical data – Combination 3

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	241.2	40.2	80.4	4	44	80	G1/4	201	87
MSB6	372	62	124	4.5	54	100	G1/2	285	134.5

Type	L3 Condensate drain		L4	L5	L6	L7	L8	L9	L10
	manual rotary	fully auto-matic							
MSB4	17.7	20.4	25	27	46.5	93.2	106	5.6	80
MSB6	15.8	18.5	68	39	71	142	158	6.6	130

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

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 3

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	G¼	542624	MSB4-¼:C3J3M1D7A1F3-WP		542619 MSB4-¼:C3J1M1D7A1F3-WP
	fully automatic	G¼	542626	MSB4-¼:C3J4M1D7A1F3-WP		542622 MSB4-¼:C3J2M1D7A1F3-WP
MSB6	manual rotary	G½	542640	MSB6-½:C3J3M1D7A1F3-WP		542636 MSB6-½:C3J1M1D7A1F3-WP
	fully automatic	G½	542642	MSB6-½:C3J4M1D7A1F3-WP		542638 MSB6-½:C3J2M1D7A1F3-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	G¼	542309	MSB4-¼:C3J3M1D1A1F3-WP		542297 MSB4-¼:C3J1M1D1A1F3-WP
	fully automatic	G¼	542315	MSB4-¼:C3J4M1D1A1F3-WP		542303 MSB4-¼:C3J2M1D1A1F3-WP
MSB6	manual rotary	G½	542285	MSB6-½:C3J3M1D1A1F3-WP		542273 MSB6-½:C3J1M1D1A1F3-WP
	fully automatic	G½	542291	MSB6-½:C3J4M1D1A1F3-WP		542279 MSB6-½:C3J2M1D1A1F3-WP

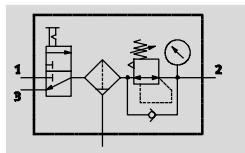
Service unit combinations MSB4/MSB6, MS series

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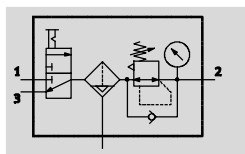
Technical data – Combination 4

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



-  Flow rate
950 ... 5,100 l/min
-  Temperature range
-10 ... +60 °C
-  Pressure regulation
range
0.5 ... 12 bar



- On-off valve MS...-EM1
manually actuated
- Filter regulator MS...-LFR-D7
- Mounting bracket MS...-WP

- For filtered and unlubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
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 [6:4:4] (grade of filtration 5 µm)	
	Compressed air in accordance with ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent, lockable with accessories	
Pressure regulation range [bar]	0.5 ... 12	
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate qnN [l/min]			
Size		MSB4	MSB6
Grade of filtration	5 µm	950	4,800
	40 µm	1,000 / 1,700	5,100

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 4

Operating and environmental conditions					
Condensate drain		Manual rotary		Fully automatic	
Size		MSB4	MSB6	MSB4	MSB6
Operating pressure	[bar]	0.8 ... 14	0.8 ... 18	2 ... 12	2 ... 12
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
		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 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	1,300	1,100
Mounting bracket	40	76

-  - Note
Materials → Technical data of the individual devices

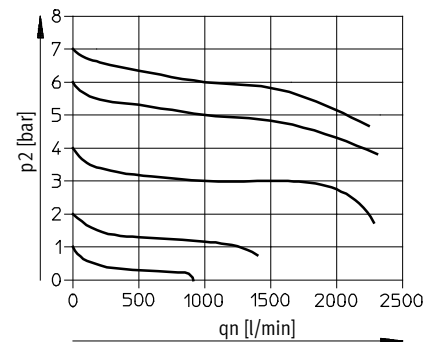
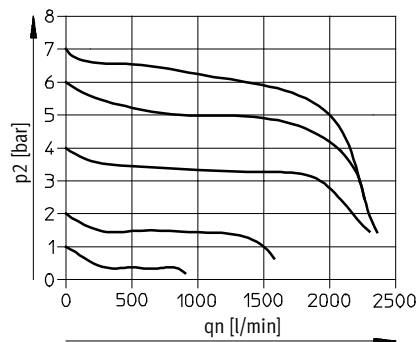
Standard flow rate q_n as a function of output pressure p_2

Pressure regulation range 0.5 ... 12 bar Grade of filtration 5 μm

Grade of filtration 40 μm

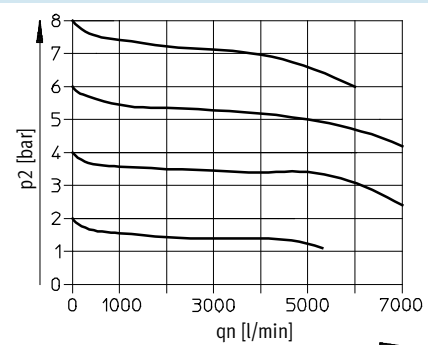
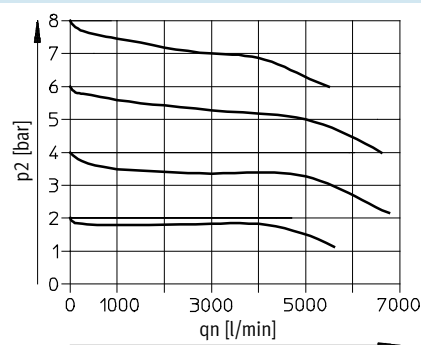
MSB4-1/4

Primary pressure $p_1 = 10$ bar



MSB6-1/2

Primary pressure $p_1 = 10$ bar



Service unit combinations MSB4/MSB6, MS series

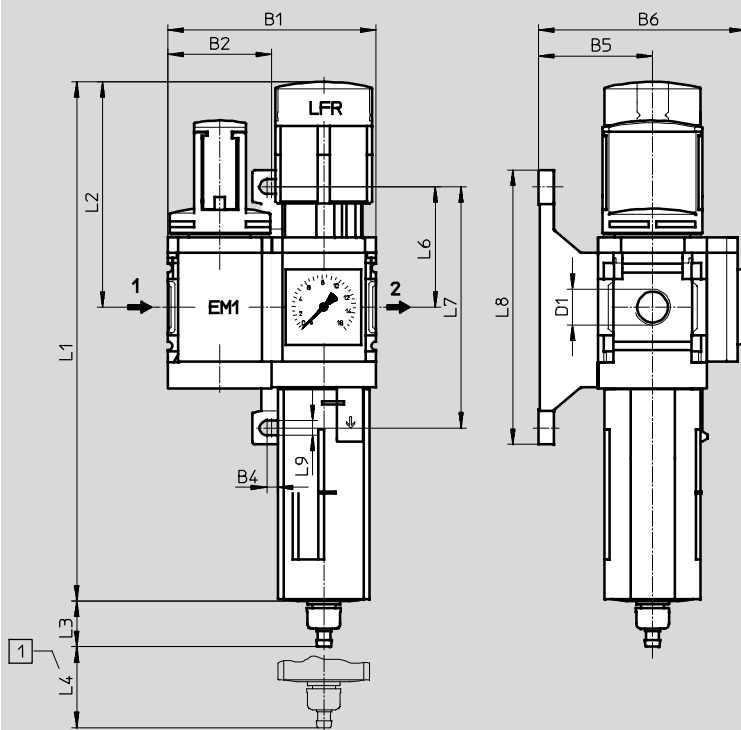
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Technical data – Combination 4

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



1 Installation dimensions

→ Flow direction

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

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

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

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	Part No.	Type
Plastic bowl guard						
MSB4	manual rotary	G¼	542304	MSB4-¼:C3J3-WP	542292	MSB4-¼:C3J1-WP
		G¼	—	—	8025354	MSB4-¼:C3J1-WP
	fully automatic	G¼	542310	MSB4-¼:C3J4-WP	542298	MSB4-¼:C3J2-WP
MSB6	manual rotary	G½	542280	MSB6-½:C3J3-WP	542268	MSB6-½:C3J1-WP
		G½	—	—	8025355	MSB6-½:C3J1-WP
	fully automatic	G½	542286	MSB6-½:C3J4-WP	542274	MSB6-½:C3J2-WP

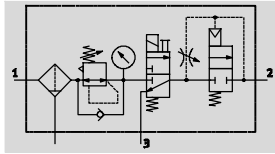
Service unit combinations MSB4/MSB6, MS series

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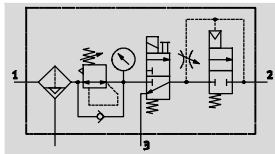
Technical data – Combination 5

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



- Filter regulator MS...-LFR-D7
- On-off valve MS...-EE-10V24 or MS...-EE-V24 solenoid actuated
- Soft-start valve MS...-DL pneumatically actuated
- Mounting bracket MS...-WP

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



- For filtered and unlubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range
- Gradual pressure build-up prevents sudden, unpredictable movements
- When supply pressure is closed, quick venting ensures rapid pressure reduction

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
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	
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	
Coil characteristics	24 V DC	
	24 V DC: 2,5 W (pressure regulation range 4 ... 9 bar) 24 V DC: 1,5 W (pressure regulation range 4 ... 12 bar)	

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

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

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 5

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
Operating 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	Compressed air in accordance with ISO 8573-1:2010 [-:4:-]		Compressed air in accordance with ISO 8573-1:2010 [7:4:-]		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 ... +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	1,600	2,400
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

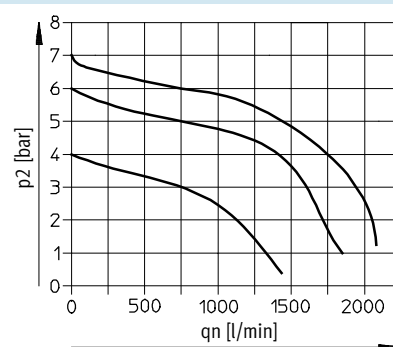
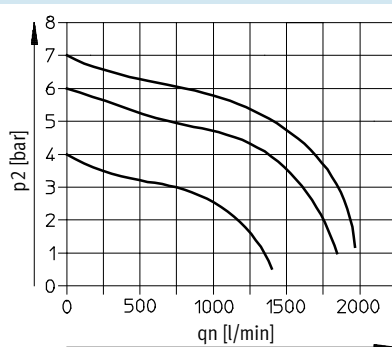
Grade of filtration 5 µm

Grade of filtration 40 µm

4 ... 9 bar / 4 ... 12 bar

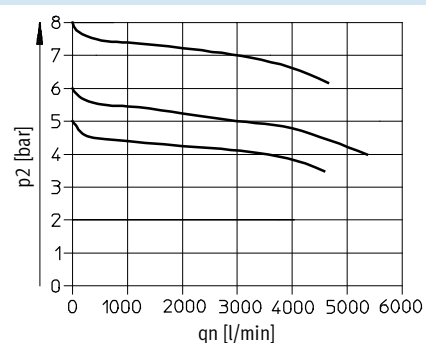
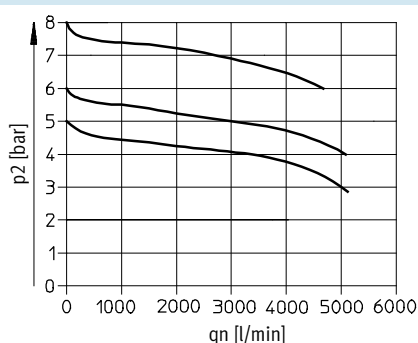
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

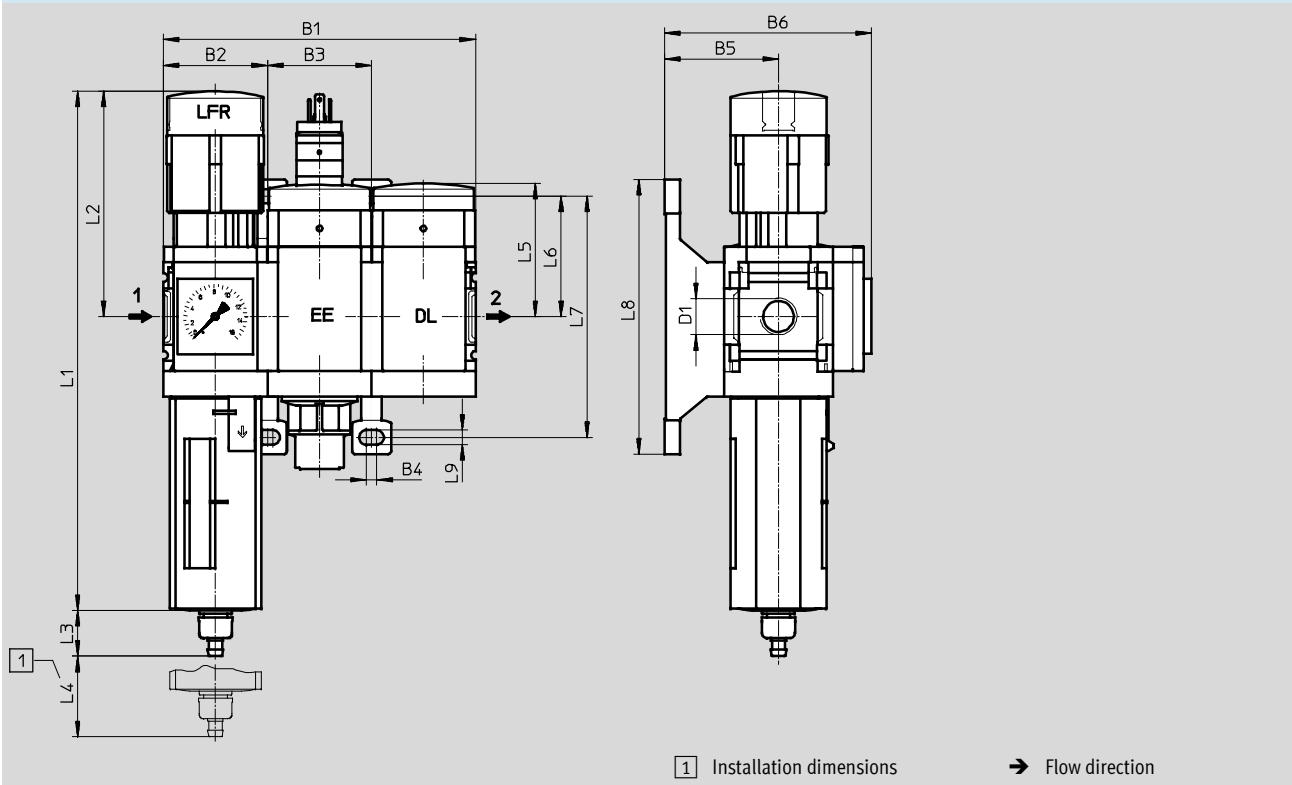
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Technical data – Combination 5

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	120.6	40.2	40.2	4	44	80	G $\frac{1}{4}$	201	87
MSB6	186	62	62	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	51.7	46.5	93.2	106	5.6
MSB6	15.8	18.5	68	71	71	142	158	6.6

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

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 5

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	G¼	542631	MSB4-¼:J3D7A1-WP		542627 MSB4-¼:J1D7A1-WP
	fully automatic	G¼	542633	MSB4-¼:J4D7A1-WP		542629 MSB4-¼:J2D7A1-WP
MSB6	manual rotary	G½	542647	MSB6-½:J3D7A1-WP		542643 MSB6-½:J1D7A1-WP
	fully automatic	G½	542649	MSB6-½:J4D7A1-WP		542645 MSB6-½:J2D7A1-WP

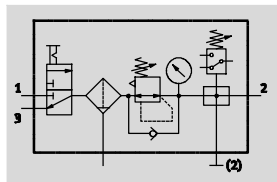
Ordering data						
Pressure regulation range 4 ... 12 bar						
Size	Condensate drain	Connection	Grade of filtration 5 µm			Grade of filtration 40 µm
			Part No.	Type		Part No. Type
Plastic bowl guard						
MSB4	manual rotary	G¼	531105	MSB4-¼:J3D1A1-WP		531101 MSB4-¼:J1D1A1-WP
	fully automatic	G¼	531107	MSB4-¼:J4D1A1-WP		531103 MSB4-¼:J2D1A1-WP
MSB6	manual rotary	G½	530226	MSB6-½:J3D1A1-WP		530222 MSB6-½:J1D1A1-WP
	fully automatic	G½	530228	MSB6-½:J4D1A1-WP		530224 MSB6-½:J2D1A1-WP

Service unit combinations MSB4/MSB6, MS series

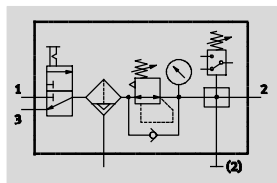
Technical data – Combination 6

Function

With condensate drain,
manual rotary



With condensate drain,
fully automatic



- Manually operated on-off valve MS...-EM1
- Filter regulator MS...-LFR-D7 with pressure gauge

- Flow rate
1,250 ... 4,500 l/min
- Temperature range
-10 ... +60 °C
- Pressure regulation range
0.5 ... 12 bar

- Branching module MS...-FRM-Y with pressure switch or MS...-FRM-AD7 with pressure sensor for displaying output pressure via operational status indicator
- Mounting bracket MS...-WP



- For filtered and unlubricated compressed air supply
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- Electrical pressure monitoring with adjustable switching pressure

General technical data				
Size	MSB4		MSB6	
Branching module with	Pressure switch	Pressure sensor	Pressure switch	Pressure sensor
Pneumatic connection 1, 2, 3	G1/4		G1/2	
Regulator function	Output pressure constant, with primary pressure compensation, with return flow, with secondary venting			
Type of mounting	Via accessories			
Mounting position	Vertical ±5°			
Grade of filtration [µm]	5	–	5	–
	40	40	40	40
Air purity class at the output	Compressed air according to ISO 8573-1:2010 [6:4:4] (grade of filtration 5 µm)	–	Compressed air according to ISO 8573-1:2010 [6:4:4] (grade of filtration 5 µm)	–
	Compressed air according to ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	Compressed air according to ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	Compressed air according to ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	Compressed air according to ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)
Bowl guard	Plastic bowl guard			
Condensate drain	Manual rotary	Manual rotary	Manual rotary	Manual rotary
	Fully automatic	–	Fully automatic	–
Actuation security	Rotary knob with detent, can be locked using accessories			
Pressure regulation range [bar]	0.5 ... 12	0.5 ... 10	0.5 ... 12	0.5 ... 10
Pressure indication	Via pressure gauge for displaying output pressure			

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

Standard nominal flow rate q _n [l/min]				
Size	MSB4		MSB6	
Branching module with	Pressure switch	Pressure sensor	Pressure switch	Pressure sensor
Grade of filtration	5 µm	1,250	4,400	–
	40 µm	1,300	4,500	4,500

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 6

Operating and environmental conditions						
Condensate drain	Manual rotary				Fully automatic	
Size	MSB4		MSB6		MSB4	MSB6
Branching module with	Pressure switch	Pressure sensor	Pressure switch	Pressure sensor	MSB4	MSB6
Operating pressure [bar]	0.8 ... 14		0.8 ... 18		2 ... 12	2 ... 12
Operating medium	Compressed air according to ISO 8573-1:2010 [7:4:4]					
	Inert gases					
Note on operating/ pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)					
Ambient temperature [°C]	-10 ... +60	0 ... +50	-10 ... +60	0 ... +50	+5 ... +60	
Temperature of medium [°C]	-10 ... +60	5 ... +60	-10 ... +60	5 ... +60	+5 ... +60	
Storage temperature [°C]	-10 ... +60				-10 ... +60	
Corrosion resistance class CRC ¹⁾	2					

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

Components subject to moderate corrosion stress. 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.

Weight [g]		
Size	MSB4	MSB6
Service unit combination	1,500	2,000
Mounting bracket	40	76



Note

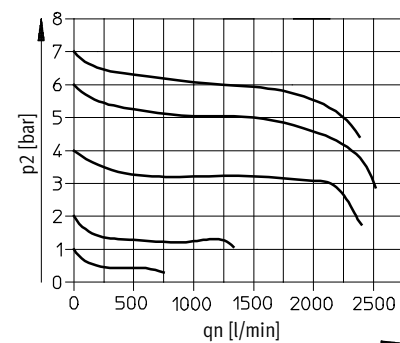
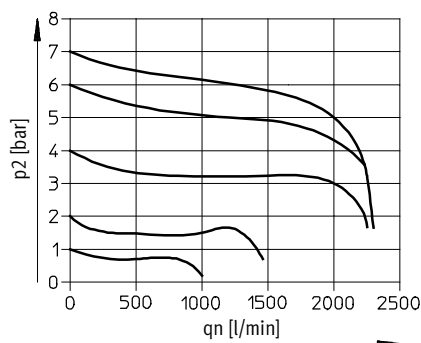
Materials → Technical data of the individual devices

Standard flow rate q_n as a function of output pressure p_2

Pressure regulation range 0.5 ... 12 bar
MSB4-1/4

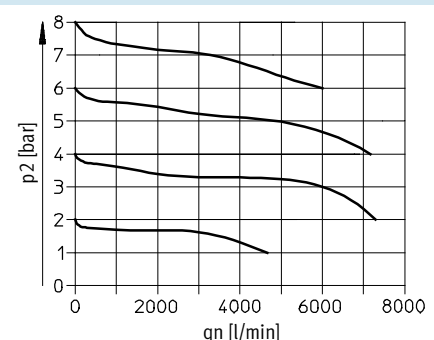
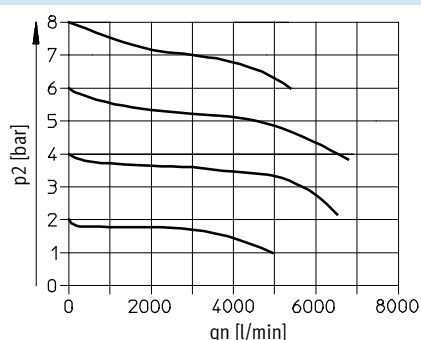
Grade of filtration 40 μm

Primary pressure $p_1 = 10$ bar



MSB6-1/2

Primary pressure $p_1 = 10$ bar



Service unit combinations MSB4/MSB6, MS series

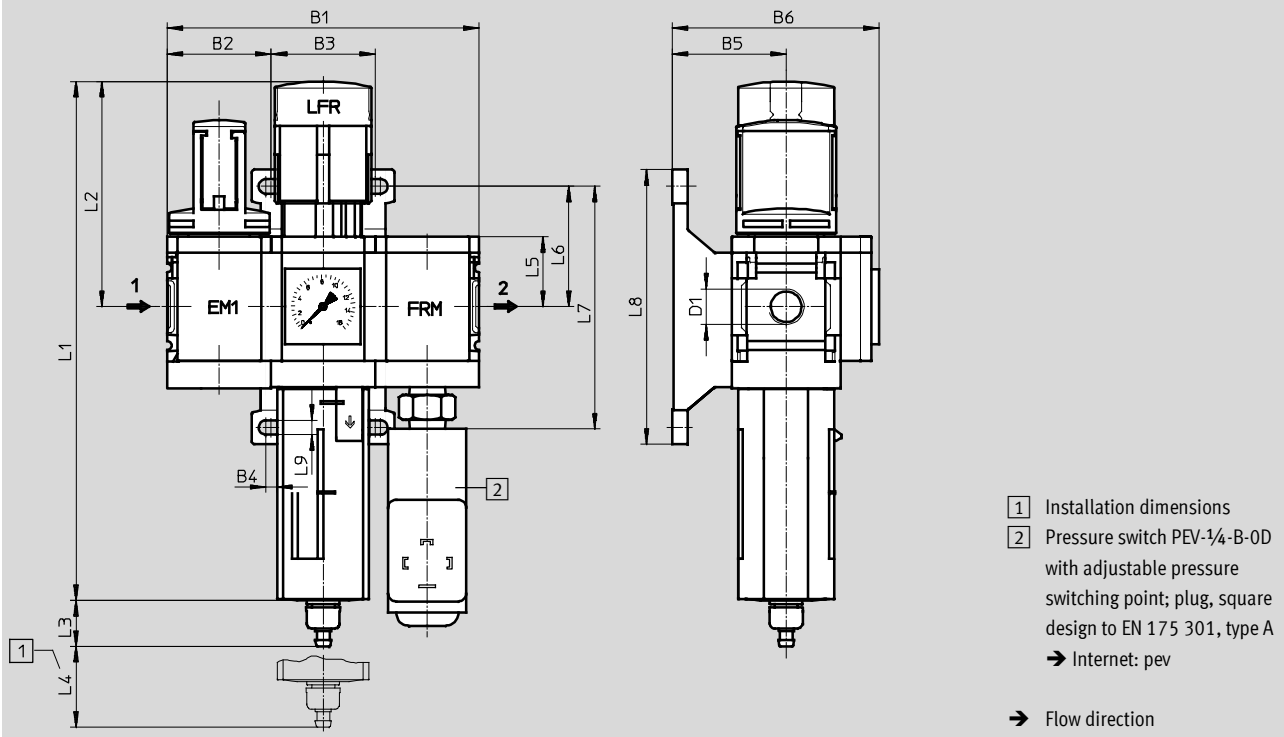
Technical data – Combination 6

FESTO

Dimensions

Download CAD data → www.festo.com

Manually operated on-off valve, filter regulator with pressure gauge, display unit [bar], branching module with pressure switch



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	120.6	40.2	40.2	4	44	80	G $\frac{1}{4}$	201	87
MSB6	186	62	62	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 to ISO 1179-1 and to ISO 228-1

Service unit combinations MSB4/MSB6, MS series

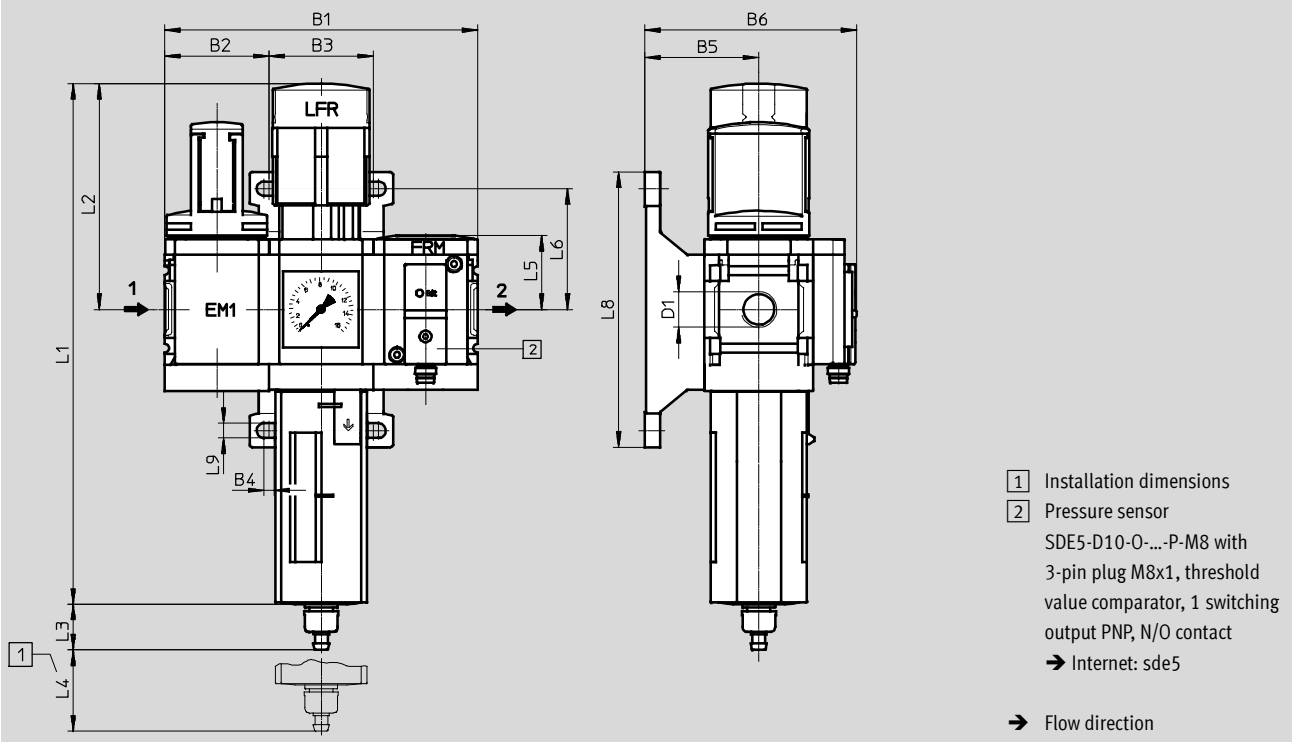
Technical data – Combination 6

FESTO

Dimensions

Download CAD data → www.festo.com

Manually operated on-off valve, filter regulator with pressure gauge, display unit [bar], branching module with pressure sensor



Type	B1	B2	B3	B4	B5	B6	D1
MSB4	120.6	40.2	40.2	4	44	82	G $\frac{1}{4}$
MSB6	186	62	62	4.5	54	102	G $\frac{1}{2}$

Type	L1	L2	L3	L4	L5	L6	L8	L9
MSB4	201	87	17.7	25	29.4	46.5	106	5.6
MSB6	285	134.5	15.8	68	41.7	71	158	6.6

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

Ordering data

Size	Condensate drain	Connection	Grade of filtration 5 μm			Grade of filtration 40 μm	
			Part No.	Type		Part No.	Type
Branching module with pressure switch							
MSB4	Manual rotary	G¼	542306	MSB4-¼:C3J3F3-WP		542294	MSB4-¼:C3J1F3-WP
	Fully automatic	G¼	542312	MSB4-¼:C3J4F3-WP		542300	MSB4-¼:C3J2F3-WP
MSB6	Manual rotary	G½	542282	MSB6-½:C3J3F3-WP		542270	MSB6-½:C3J1F3-WP
	Fully automatic	G½	542288	MSB6-½:C3J4F3-WP		542276	MSB6-½:C3J2F3-WP
Branching module with pressure sensor							
MSB4	Manual rotary	G¼	–	–		8025356	MSB4-¼:C3J1F12-WP
MSB6	Manual rotary	G½	–	–		8025357	MSB6-½:C3J1F12-WP

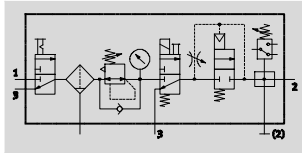
Service unit combinations MSB4/MSB6, MS series

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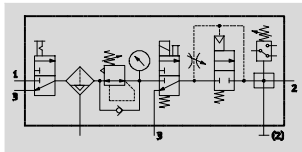
Technical data – Combination 7

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



- 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 dis-
play
- Mounting bracket MS...-WP

- For filtered and unlubricated com-
pressed air
- Supply pressure can be opened and
closed
- Output pressure is infinitely adjust-
able 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

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
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 [6:4:4] (grade of filtration 5 µm)	
	Compressed air in accordance with ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	
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	
Coil characteristics	24 V DC	
	24 V DC: 2,5 W (pressure regulation range 4 ... 9 bar) 24 V DC: 1,5 W (pressure regulation range 4 ... 12 bar)	

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

Standard nominal flow rate qnN [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

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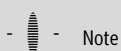
Technical data – Combination 7

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
Operating 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	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]							
	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 ... +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 q_n as a function of output pressure p_2

Pressure regulation range

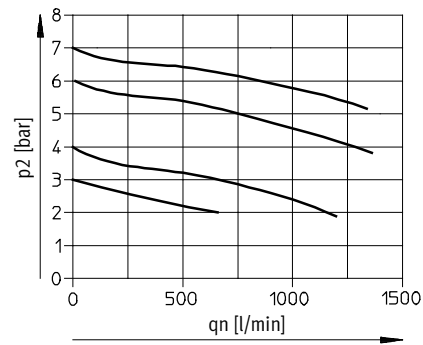
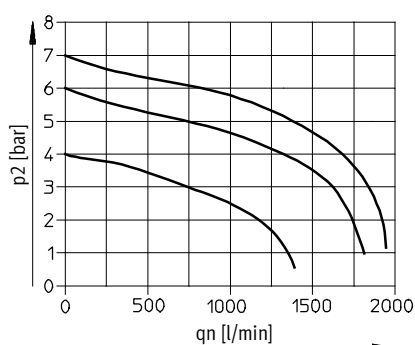
Grade of filtration 5 μm

Grade of filtration 40 μm

4 ... 9 bar / 4 ... 12 bar

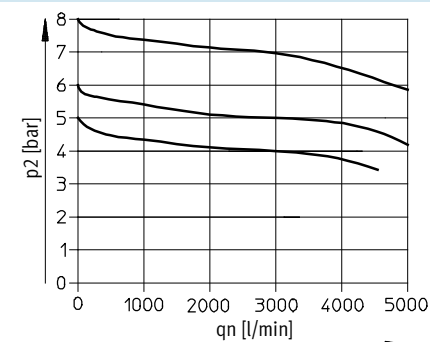
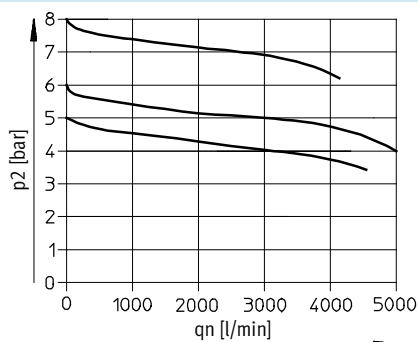
MSB4-1/4

Primary pressure $p_1 = 10$ bar



MSB6-1/2

Primary pressure $p_1 = 10$ bar



Service unit combinations MSB4/MSB6, MS series

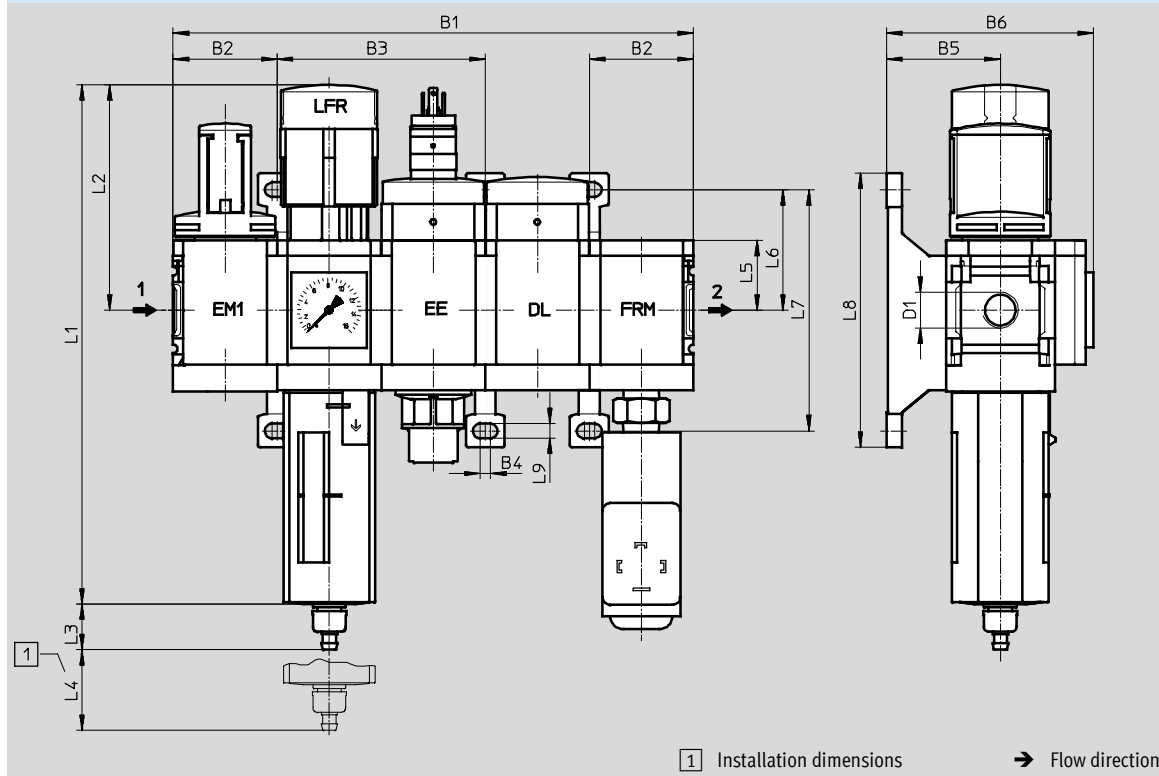
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Technical data – Combination 7

Dimensions

Download CAD data → www.festo.com

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 to ISO 1179-1 and to ISO 228-1

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 7

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.
Plastic bowl guard						
MSB4	manual rotary	G¼	542623	MSB4-¼:C3J3D7A1F3-WP		542618 MSB4-¼:C3J1D7A1F3-WP
	fully automatic	G¼	542625	MSB4-¼:C3J4D7A1F3-WP		542621 MSB4-¼:C3J2D7A1F3-WP
MSB6	manual rotary	G½	542639	MSB6-½:C3J3D7A1F3-WP		542635 MSB6-½:C3J1D7A1F3-WP
	fully automatic	G½	542641	MSB6-½:C3J4D7A1F3-WP		542637 MSB6-½: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	G¼	542305	MSB4-¼:C3J3D1A1F3-WP	542293	MSB4-¼:C3J1D1A1F3-WP
	fully automatic	G¼	542311	MSB4-¼:C3J4D1A1F3-WP	542299	MSB4-¼:C3J2D1A1F3-WP
MSB6	manual rotary	G½	542281	MSB6-½:C3J3D1A1F3-WP	542269	MSB6-½:C3J1D1A1F3-WP
	fully automatic	G½	542287	MSB6-½:C3J4D1A1F3-WP	542275	MSB6-½:C3J2D1A1F3-WP

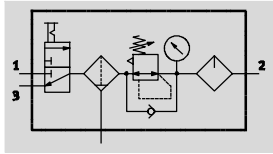
Service unit combinations MSB4/MSB6, MS series

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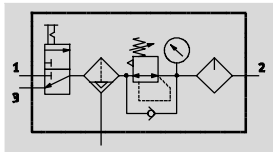
Technical data – Combination 8

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



- On-off valve MS...-EM1
manually actuated
- Filter regulator MS...-LFR-D7
- Lubricator MS...-LOE-R
- Mounting bracket MS...-WP

-  - Flow rate
700 ... 3,100 l/min
-  - Temperature range
-10 ... +60 °C
-  - Pressure regulation
range
1 ... 12 bar



- For filtered and lubricated compressed air
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G $\frac{1}{4}$	G $\frac{1}{2}$
Regulating function	Output pressure constant, with primary pressure compensation, with return flow function, with secondary venting	
Type of mounting	Via accessories	
Assembly position	Vertical $\pm 5^\circ$	
Grade of filtration [µm]	5	
	40	
Air purity class at the output	Compressed air in accordance with ISO 8573-1:2010 [6:4:4] (grade of filtration 5 µm)	
	Compressed air in accordance with ISO 8573-1:2010 [7:4:4] (grade of filtration 40 µm)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent, lockable with accessories	
Pressure regulation range [bar]	1 ... 12	
Pressure indicator	With pressure gauge	

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

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

Service unit combinations MSB4/MSB6, MS series

FESTO

Technical data – Combination 8

Operating and environmental conditions					
Condensate drain		Manual rotary		Fully automatic	
Size		MSB4	MSB6	MSB4	MSB6
Operating pressure	[bar]	1.5 ... 14	1.5 ... 18	2 ... 12	2 ... 12
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]			
		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 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	1,500	1,750
Mounting bracket	40	76

-  - Note
Materials → Technical data of the individual devices

Standard flow rate qn as a function of output pressure p2

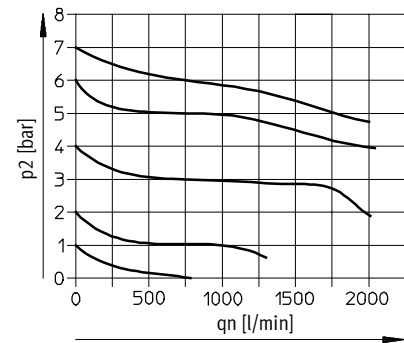
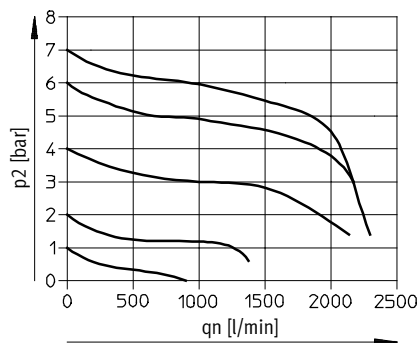
Pressure regulation range 1 ... 12 bar

Grade of filtration 5 µm

Grade of filtration 40 µm

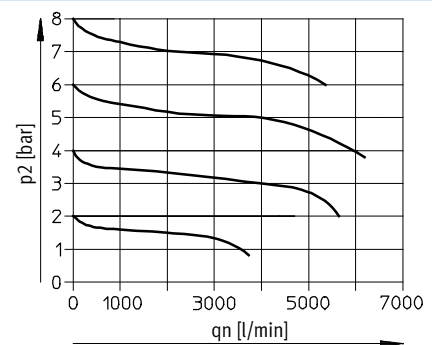
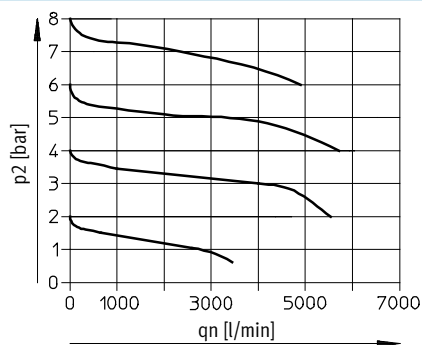
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

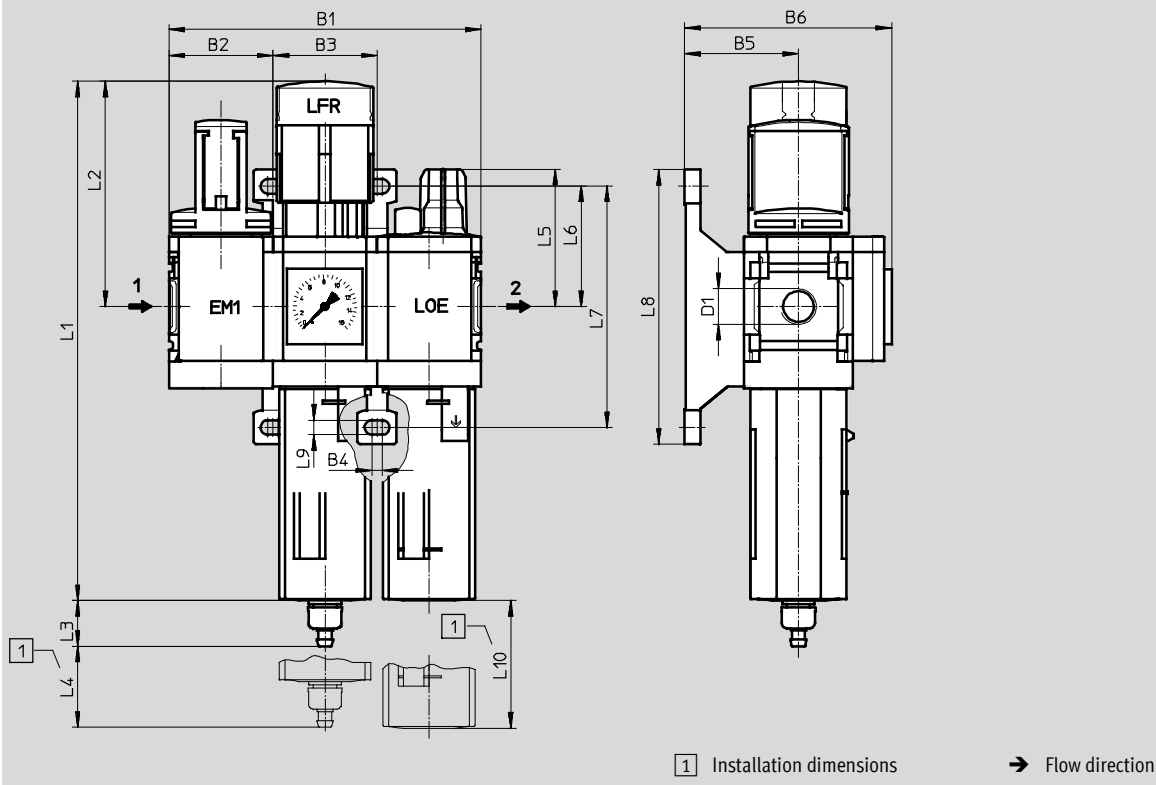
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Technical data – Combination 8

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	120.6	40.2	40.2	4	44	80	G $\frac{1}{4}$	201	87
MSB6	186	62	62	4.5	54	100	G $\frac{1}{2}$	285	134.5

Type	L3 Condensate drain		L4	L5	L6	L7	L8	L9	L10
	manual rotary	fully auto- matic							
MSB4	17.7	20.4	25	53	46.5	93.2	106	5.6	80
MSB6	15.8	18.5	68	66	71	142	158	6.6	130

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

Ordering data

Pressure regulation range 1 ... 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	G¼	542308	MSB4-¼:C3J3M1-WP		542296	MSB4-¼:C3J1M1-WP
	fully automatic	G¼	542314	MSB4-¼:C3J4M1-WP		542302	MSB4-¼:C3J2M1-WP
MSB6	manual rotary	G½	542284	MSB6-½:C3J3M1-WP		542272	MSB6-½:C3J1M1-WP
	fully automatic	G½	542290	MSB6-½:C3J4M1-WP		542278	MSB6-½:C3J2M1-WP

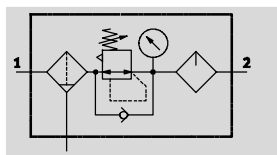
Service unit combinations MSB4/MSB6, MS series

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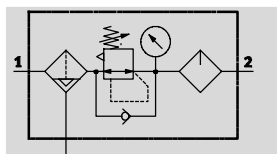
Technical data – Combination 9

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



-  Flow rate
700 ... 4,700 l/min
-  Temperature range
-10 ... +60 °C
-  Pressure regulation
range
1 ... 12 bar



- Filter MS...-LF
- Pressure regulator MS...-LR
- Lubricator MS...-LOE
- Mounting bracket MS...-WP

- For filtered and lubricated compressed air
- Output pressure is infinitely adjustable within the pressure regulation range

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2	G $\frac{1}{4}$	G $\frac{1}{2}$
Type of mounting	Via accessories	
Assembly position	Vertical $\pm 5^\circ$	
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	
	Integrated as metal bowl	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent, lockable with accessories	
Pressure regulation range	N2 [bar]	1 ... 7
	N3 [bar]	1 ... 12
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate q _N [l/min]		
Size	MSB4	MSB6
N2 – Pressure regulation range 1 ... 7 bar		
Grade of filtration 40 μm	1,300	4,700
N3 – Pressure regulation range 1 ... 12 bar		
Grade of filtration	5 μm	3,500
	40 μm	800
		3,500

Service unit combinations MSB4/MSB6, MS series

FESTO

Technical data – Combination 9

Operating and environmental conditions				
Condensate drain	Manual rotary		Fully automatic	
Size	MSB4	MSB6	MSB4	MSB6
Operating pressure [bar]	1.5 ... 14	1.5 ... 18	2 ... 12	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 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		
With plastic bowl guard	1,000	2,000
With metal bowl	–	2,400
Mounting bracket		
	40	76

 Note
Materials → Technical data of the individual devices

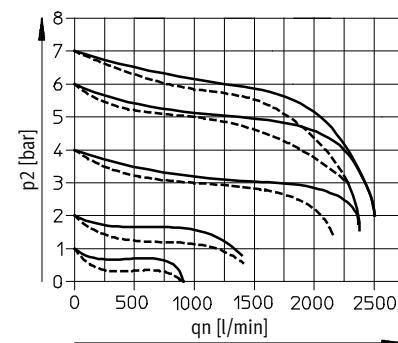
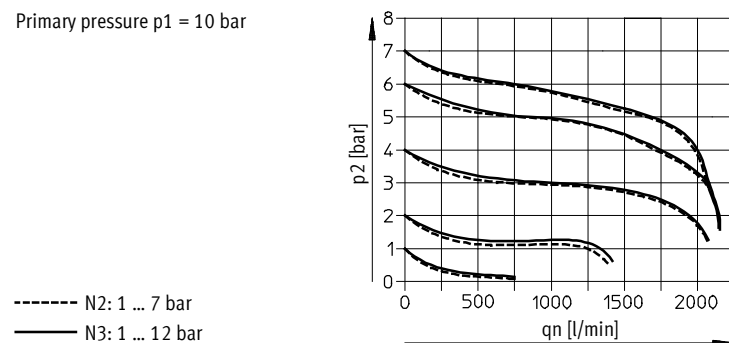
Standard flow rate qn as a function of output pressure p2

Pressure regulation range N2 or N3
MSB4-1/4

Grade of filtration 5 µm

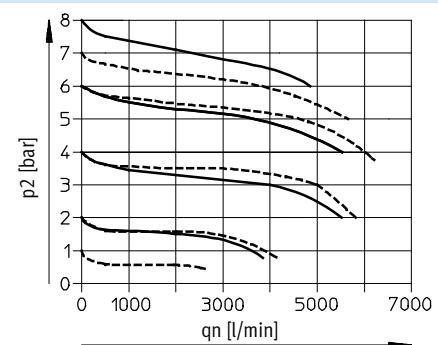
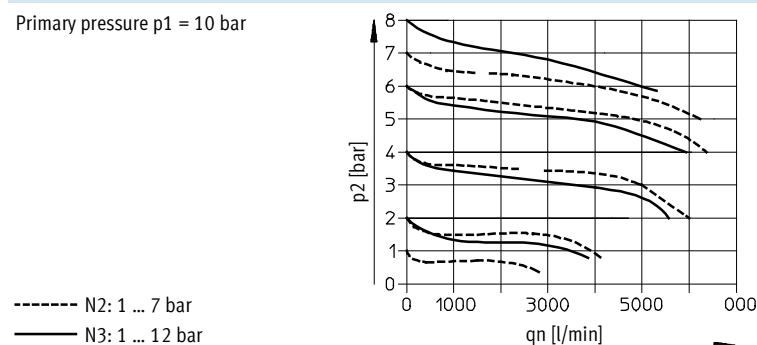
Grade of filtration 40 µm

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

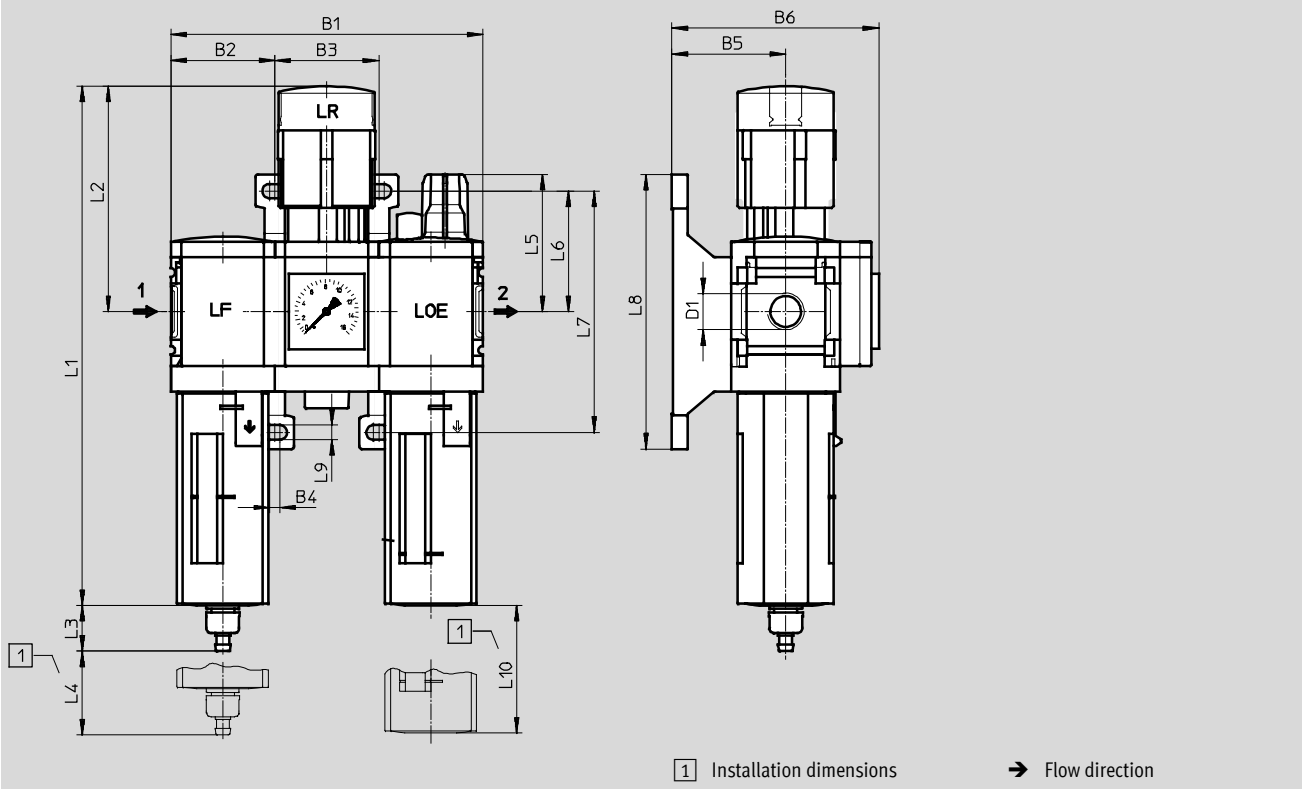
FESTO

Technical data – Combination 9

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



Type	B1	B2	B3	B4	B5	B6	D1	L1	L2
MSB4	120.6	40.2	40.2	4	44	80	G $\frac{1}{4}$	201	87
MSB6	186	62	62	4.5	54	100	G $\frac{1}{2}$	285	134.5

Type	L3 Condensate drain		L4	L5	L6	L7	L8	L9	L10
	manual rotary	fully auto- matic							
MSB4	17.7	20.4	25	53	46.5	93.2	106	5.6	80
MSB6	15.8	18.5	68	66	71	142	158	6.6	130

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

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 9

Ordering data				
Pressure regulation range 1 ... 7 bar				
Size	Condensate drain	Connection	Grade of filtration 40 µm	
			Part No.	Type
Plastic bowl guard				
MSB4	manual rotary	G¼	531091	MSB4-¼:H2N2M1-WP
	fully automatic	G¼	531085	MSB4-¼:H1N2M1-WP
MSB6	manual rotary	G½	530212	MSB6-½:H2N2M1-WP
	fully automatic	G½	530206	MSB6-½:H1N2M1-WP

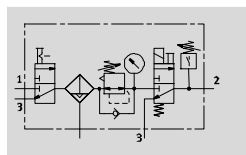
Ordering data						
Pressure regulation range 1 ... 12 bar						
Size	Condensate drain	Connection	Grade of filtration 5 µm			Grade of filtration 40 µm
			Part No.	Type		Part No.
Plastic bowl guard						
MSB4	manual rotary	G¼	531097	MSB4-¼:H3N3M1-WP		531093 MSB4-¼:H2N3M1-WP
	fully automatic	G¼	531099	MSB4-¼:H4N3M1-WP		531087 MSB4-¼:H1N3M1-WP
MSB6	manual rotary	G½	530218	MSB6-½:H3N3M1-WP		530214 MSB6-½:H2N3M1-WP
	fully automatic	G½	530220	MSB6-½:H4N3M1-WP		530208 MSB6-½:H1N3M1-WP
Metal bowl						
MSB4	manual rotary	G¼	–			531095 MSB4-¼:H8N3M2-WP
	fully automatic	G¼	–			531089 MSB4-¼:H7N3M2-WP
MSB6	manual rotary	G½	–			530216 MSB6-½:H8N3M2-WP
	fully automatic	G½	–			530210 MSB6-½:H7N3M2-WP

Service unit combinations MSB4/MSB6, MS series

Technical data – Combination 10

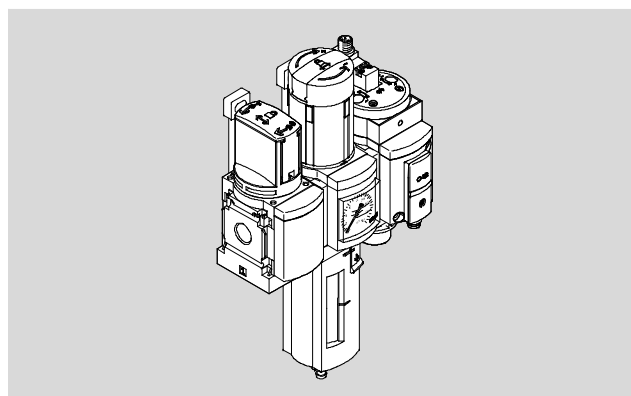
Function

With condensate drain,
manual rotary



- Manually operated on-off valve MS...-EM1
- Filter regulator MS...-LFR-D7
- Solenoid actuated on-off valve MS...-EE-10V24P-AD7, with pressure sensor for displaying output pressure via operational status indicator
- Mounting bracket MS...-WP

-  Flow rate
1,400 ... 4,000 l/min
-  Temperature range
-10 ... +60 °C
-  Pressure regulation range
0.5 ... 10 bar



- For filtered and unlubricated compressed air supply
- Supply pressure can be opened and closed
- Output pressure is infinitely adjustable within the pressure regulation range
- When the supply pressure is closed, quick venting ensures rapid pressure reduction
- Electrical pressure monitoring with adjustable switching pressure

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
Regulator function	Output pressure constant, with primary pressure compensation, with return flow, with secondary venting	
Type of mounting	Via accessories	
Mounting position	Vertical ±5°	
Grade of filtration [µm]	40	
Air purity class at the output	Compressed air according to ISO 8573-1:2010 [7:4:4]	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
Actuation security	Rotary knob with detent, can be locked using accessories	
Pressure regulation range [bar]	0.5 ... 10	
Pressure indication	Via pressure sensor for displaying output pressure via operational status indicator and electrical output	
	Via pressure gauge for displaying output pressure	

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

Electrical data – On-off valve MS...-EE-10V24P-AD7	
Coil characteristics	24 V DC: 1.8 W; permissible voltage fluctuations -15%/+10%
Electrical connection	M12x1 to IEC 61076-2-101
Protection class for solenoid coil	IP65
Duty cycle [%]	100

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 10

Standard nominal flow rate q _N [l/min]		
Size	MSB4	MSB6
Grade of filtration 40 µm	1,400	4,000

Operating and environmental conditions		
Condensate drain	Manual rotary	
Size	MSB4	MSB6
Operating pressure [bar]	0.8 ... 14	0.8 ... 18
Operating medium	Compressed air according to ISO 8573-1:2010 [7:4:4]	
	Inert gases	
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)	
Ambient temperature [°C]	0 ... +60	
Temperature of medium [°C]	+5 ... +60	
Storage temperature [°C]	-10 ... +60	
Corrosion resistance class CRC ¹⁾	2	

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

Components subject to moderate corrosion stress. 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.

Weight [g]		
Size	MSB4	MSB6
Service unit combination	1,600	2,000
Mounting bracket	40	76



Note

Materials → Technical data of the individual devices

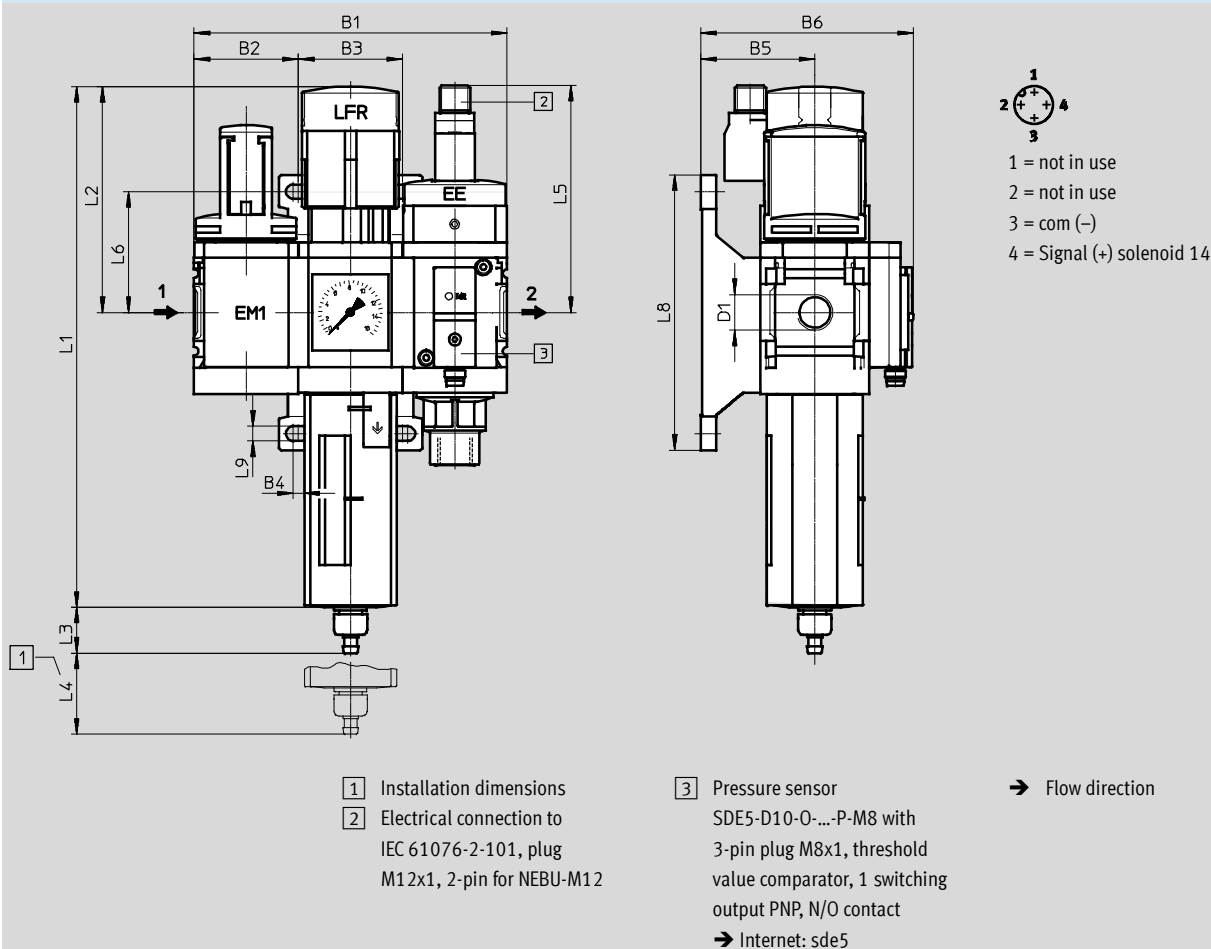
Service unit combinations MSB4/MSB6, MS series

Technical data – Combination 10

Dimensions

Download CAD data → www.festo.com

Manually operated on-off valve, filter regulator with pressure gauge, display unit [bar], solenoid actuated on-off valve with pressure sensor



Type	B1	B2	B3	B4	B5	B6	D1
MSB4	120.6	40.2	40.2	4	44	82	G $\frac{1}{4}$
MSB6	186	62	62	4.5	54	102	G $\frac{1}{2}$

Type	L1	L2	L3	L4	L5	L6	L8	L9
MSB4	201	87	17.7	25	86.3	46.5	106	5.6
MSB6	285	134.5	15.8	68	104	71	158	6.6

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

Ordering data			
Size	Condensate drain	Connection	Grade of filtration 40 µm
			Part No. Type
MSB4	Manual rotary	G $\frac{1}{4}$	8025358 MSB4- $\frac{1}{4}$:C3J1D14-WP
MSB6	Manual rotary	G $\frac{1}{2}$	8025359 MSB6- $\frac{1}{2}$:C3J1D14-WP

Service unit combinations MSB, MS series

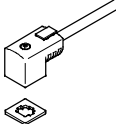
Accessories

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Ordering data – Silencer U				Technical data → Internet: u	
	Description	Pneumatic connection	Part No.	Type	
	for MS4-EM1/EE	G $\frac{1}{4}$	6842	U-$\frac{1}{4}$-B	
	for MS6-EM1/EE	G $\frac{1}{2}$	6844	U-$\frac{1}{2}$-B	

Ordering data – Angled socket PEV					Technical data → Internet: pev	
	Description	Operating voltage range	Electrical connection	Switching status display	Part No.	Type
	for PEV- $\frac{1}{4}$ -...-OD	15 ... 30 V DC	4-pin	Yellow LED	164274	PEV-$\frac{1}{4}$-WD-LED-24
		≤ 230 V AC	4-pin	Yellow LED	164275	PEV-$\frac{1}{4}$-WD-LED-230
		≤ 180 V DC				

Ordering data – Plug socket MSSD					Technical data → Internet: mssd	
	Description	Operating voltage range	Electrical connection	Type of mounting cable connection	Part No.	Type
	for PEV- $\frac{1}{4}$ -...-OD	≤ 250 V AC/DC	3-pin	Clamping screws	171157	MSSD-C-4P
	for MS4/6-EE/DE	≤ 250 V AC/DC	3-pin	Clamping screws	151687	MSSD-EB
			4-pin	Insulation displacement technology	192745	MSSD-EB-S-M14

Ordering data – Plug socket with cable KMEB						Technical data → Internet: kmeb	
	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	547268	KMEB-3-24-2,5-LED
					5	547269	KMEB-3-24-5-LED
				–	2.5	547270	KMEB-3-24-2,5
					5	547271	KMEB-3-24-5
			3-pin	LED	2.5	151688	KMEB-1-24-2,5-LED
					5	151689	KMEB-1-24-5-LED
					10	193457	KMEB-1-24-10-LED
		230 V AC	3-pin	–	2.5	151690	KMEB-1-230AC-2,5
					5	151691	KMEB-1-230AC-5

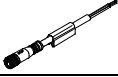
Ordering data – Illuminating seal MEB-LD				Technical data → Internet: meb	
	Description	Operating voltage range		Part No.	Type
	for plug socket with cable KMEB and plug socket MSSD-EB	12 ... 24 V DC		151717	MEB-LD-12-24DC
		230 V DC/AC ±10%		151718	MEB-LD-230AC

Ordering data – Padlock LRVS-D					
	Description	Weight [g]	Part No.	Type	
	for filter or pressure regulators	120	193786	LRVS-D	

Service unit combinations MSB, MS series

Accessories

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Ordering data – Connecting cable NEBU-M8				Technical data → Internet: nebu	
	Electrical connection	Number of wires	Cable length [m]	Part No.	Type
	M8x1, straight socket	3	2.5	541333	NEBU-M8G3-K-2.5-LE3
			5	541334	NEBU-M8G3-K-5-LE3
	M8x1, angled socket	3	2.5	541338	NEBU-M8W3-K-2.5-LE3
			5	541341	NEBU-M8W3-K-5-LE3

Ordering data – Connecting cable NEBU-M12				Technical data → Internet: nebu	
	Electrical connection	Number of wires	Cable length [m]	Part No.	Type
	M12x1, straight socket	4	2.5	550326	NEBU-M12G5-K-2.5-LE4
			5	541328	NEBU-M12G5-K-5-LE4
	M12x1, angled socket	4	2.5	550325	NEBU-M12W5-K-2.5-LE4
			5	541329	NEBU-M12W5-K-5-LE4