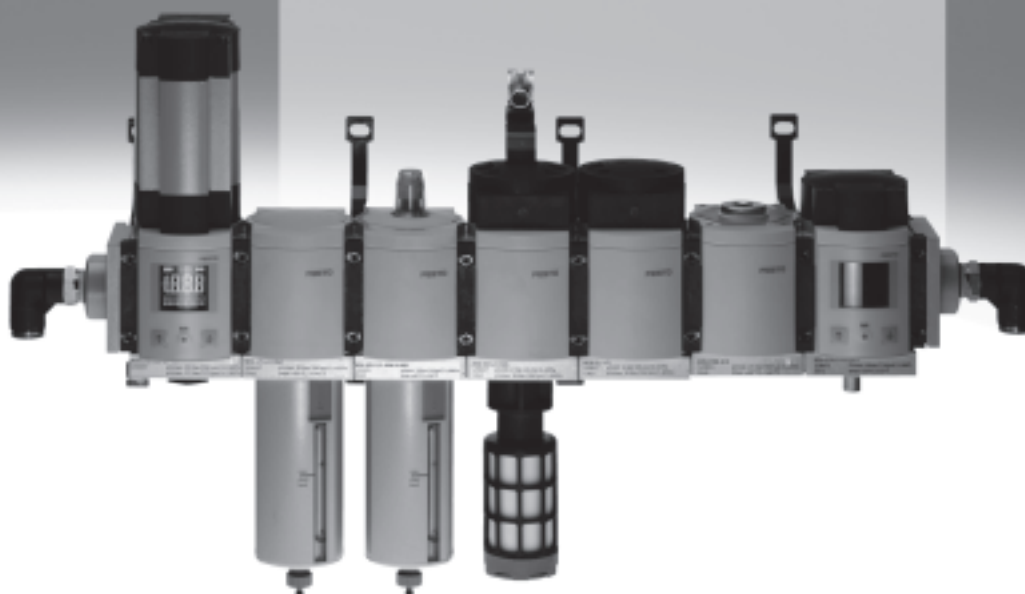


Service unit combinations MSB, MS series

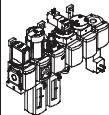
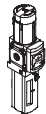
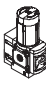
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Service unit combinations MSB, MS series

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Product range overview – MS series service units

Type		Size		Pneumatic connection in housing	Connecting plate	Pressure regulation range						Grade of filtration			
						[bar]						[µm]			
						0.05 ... 0.7	0.05 ... 2.5	0.1 ... 4	0.3 ... 7	0.1 ... 12	0.5 ... 16				
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	–												
		12	–	G1, G1¼, G1½, G2	–	–	–	■	■	■	–	–	■	■	
Filter 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	–												
		12	–	G1, G1¼, G1½, 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, G1¼, G1½	–	–	–	–	–	–	■	■	–	–	
		12	–	G1, G1¼, G1½, 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, G1¼, G1½	–	–	–	–	–	–	–	–	–	–	
		12	–	G1, G1¼, G1½, G2	–	–	–	–	–	–	–	–	–	–	
Pressure regulators MS-LR		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	■	■	■	–	–	–	–	–	
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	■	■	■	■	–	–	–	–	
		9	–												
		12	–	G1, G1¼, G1½, 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	–												

Service unit combinations MSB, MS series

Product range overview – MS series service units

Type	Size	Bowl guard		Condensate drains				Pressure indicator					Actuator lock		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 with display	Rotary knob, lockable	Rotary knob, long	Silencer	Flow direction from right to left	
Code		R	U	M	H	V	E ...	VS	AG	A8	A4	AD...	AS	LD	S	Z	
Service units																	
MSB-FRC	4	■	–	■	–	■	–	–	■	–	–	–	■	–	–	■	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12	–	■	■	–	■	■	■	■	–	■	–	■	■	–	■	ms12-lfr
Filters MS-LF	4	■	■	■	■	■	–	–	–	–	–	–	–	–	–	■	ms4-lf
	6	■	■	■	■	■	■	–	–	–	–	–	–	–	–	■	ms6-lf
	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	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
Pressure regulators MS-LR	4	–	–	–	–	–	–	■	■	■	■	■	■	■	–	■	ms4-lr
	6	–	–	–	–	–	–	■	■	–	■	■	■	■	–	■	ms6-lr
	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

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			
				0.3 ... 4	0.3 ... 7	0.5 ... 12	0.5 ... 16	24 V DC, connection pattern to EN 175301	24 V DC, connection pattern M12 to DESINA	110 V AC, connection pattern to EN 175301	230 V AC, connection pattern to EN 175301
Code			AG...	D5	D6	D7	D8	V24	V24P	V110	V230
Individual devices											
Electrical pressure regulators MS-LRE		4	–					–	–	–	–
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	■	■	■	■	–	–	–
		9	–								
		12	–								
Lubricators MS-LOE		4	G ¹ / ₈ , G ¹ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈	–	–	–	–	–	–	–
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
		9	–								
		12	–	G ¹ / ₄ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
Electrical on-off valves MS-EM(1)		4	G ¹ / ₈ , G ¹ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈	–	–	–	–	–	–	–
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
		9	–								
		12	–	G ¹ / ₄ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
Electrical on-off valves MS-EE		4	G ¹ / ₈ , G ¹ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈	–	–	–	–	■	–	■
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	■	–	■
		9	–								
		12	–	G ¹ / ₄ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	■	■	■
Electrical soft-start valves MS-DL		4	G ¹ / ₈ , G ¹ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈	–	–	–	–	–	–	–
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
		9	–								
		12	–	G ¹ / ₄ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
Electrical soft-start valves MS-DE		4	G ¹ / ₈ , G ¹ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈	–	–	–	–	■	–	■
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	■	–	■
		9	–								
		12	–	G ¹ / ₄ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	■	■	■
Soft start and exhaust valves MS-SV		4	–								
		6	G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	■	–	–
		9	–								
		12	–								
Membrane air dryers MS-LDM1		4	G ¹ / ₈ , G ¹ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈	–	–	–	–	–	–	–
		6	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	–	–	–	–	–	–	–
		9	–								
		12	–								

Service unit combinations MSB, MS series

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Product range overview – MS series service units

Type	Size	Bowl guard		Pressure indicator					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 with display	Silencer	Flow direction from right to left	
Individual devices											
Electrical pressure regulators MS-LRE	4	-									-
	6	-	-	■	■	-	■	-	-	■	ms6-lre
	9	-									-
	12	-									-
Lubricators MS-LOE	4	■	■	-	-	-	-	-	-	■	ms4-loe
	6	■	■	-	-	-	-	-	-	■	ms6-loe
	9	-									-
	12	-	■	-	-	-	-	-	-	■	ms12-loe
Electrical on-off valves MS-EM(1)	4	-	-	■	■	■	■	■	■	■	ms4-em1
	6	-	-	■	■	-	■	■	■	■	ms6-em1
	9	-									-
	12	-	-	■	■	-	■	-	■	■	ms12-em
Electrical on-off valves MS-EE	4	-	-	■	■	■	■	■	■	■	ms4-ee
	6	-	-	■	■	-	■	■	■	■	ms6-ee
	9	-									-
	12	-	-	■	■	-	■	-	■	■	ms12-ee
Electrical soft-start valves MS-DL	4	-	-	■	■	■	■	■	-	■	ms4-dl
	6	-	-	■	■	-	■	■	-	■	ms6-dl
	9	-									-
	12	-	-	■	■	-	■	-	-	■	ms12-dl
Electrical soft-start valves MS-DE	4	-	-	■	■	■	■	■	-	■	ms4-de
	6	-	-	■	■	-	■	■	-	■	ms6-de
	9	-									-
	12	-	-	■	■	-	■	-	-	■	ms12-de
Soft start and exhaust valves MS-SV	4	-									-
	6	-	-	■	■	-	■	■	■	■	ms6-sv
	9	-									-
	12	-									-
Membrane air dryers MS-LDM1	4	-	■	-	-	-	-	-	-	■	ms4-ldm1
	6	-	■	-	-	-	-	-	-	■	ms6-ldm1
	9	-									-
	12	-									-

Service unit combinations MSB, MS series

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Product range overview – MS series service units

Type	Size				Pressure regulation range [bar]				Supply voltage				
Code		Pneumatic connection in housing	Connecting plate		0.3 ... 4	0.3 ... 7	0.5 ... 12	0.5 ... 16	24 V DC, connection pattern to EN 175301	24 V DC, connection pattern M12 to DESINA	110 V AC, connection pattern to EN 175301	230 V AC, connection pattern to EN 175301	
			AG...	D5	D6	D7	D8	V24	V24P	V110	V230		
Individual devices													
Branching modules MS-FRM		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–	–	
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–	–	
		9	–										
		12	–	G1, G11/4, G11/2, G2	–	–	–	–	–	–	–	–	
Distributor blocks MS-FRM-FRZ		4	G1/4	–	–	–	–	–	–	–	–	–	
		6	G1/2	–	–	–	–	–	–	–	–	–	
		9	–										
		12	–										
Flow sensors MS-SFE		4	–										
		6	G1/2	G1/2	–	–	–	–	–	–	–	–	
		9	–										
		12	–										

Service unit combinations MSB, MS series

Product range overview – MS series service units



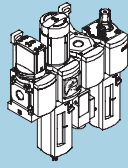
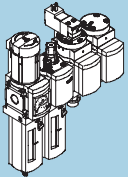
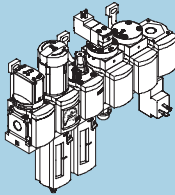
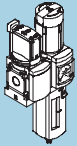
Type	Size	Pressure indicator					Switch output		Options		→ Page/ Internet
		Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G1/8	Adapter plate for EN pressure gauge G1/4	Pressure sensor with display	2x PNP	2x NPN	Silencer	Flow direction from right to left	
VS	AG	A8	A4	AD...	P2	N2	S	Z			
Individual devices											
Branching modules MS-FRM	4	■	■	■	■	■	-	-	-	■	ms4-frm
	6	■	■	-	■	■	-	-	-	■	ms6-frm
	9	-									-
	12	■	-	-	-	-	-	-	-	-	ms12-frm
Distributor blocks MS-FRM-FRZ	4	-	-	-	-	-	-	-	-	-	ms4-frm
	6	-	-	-	-	-	-	-	-	-	ms6-frm
	9	-									-
	12	-									-
Flow sensors MS-SFE	4	-									-
	6	-	-	-	-	-	■	■	-	■ ¹⁾	ms6-sfe
	9	-									-
	12	-									-

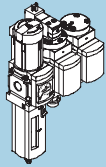
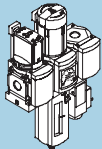
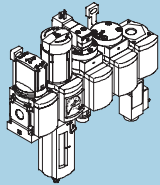
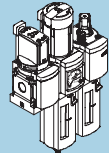
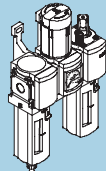
1) Can only be ordered using the configurator → Internet: ms6-sfe

Service unit combinations MSB4/MSB6, MS series

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Product range overview

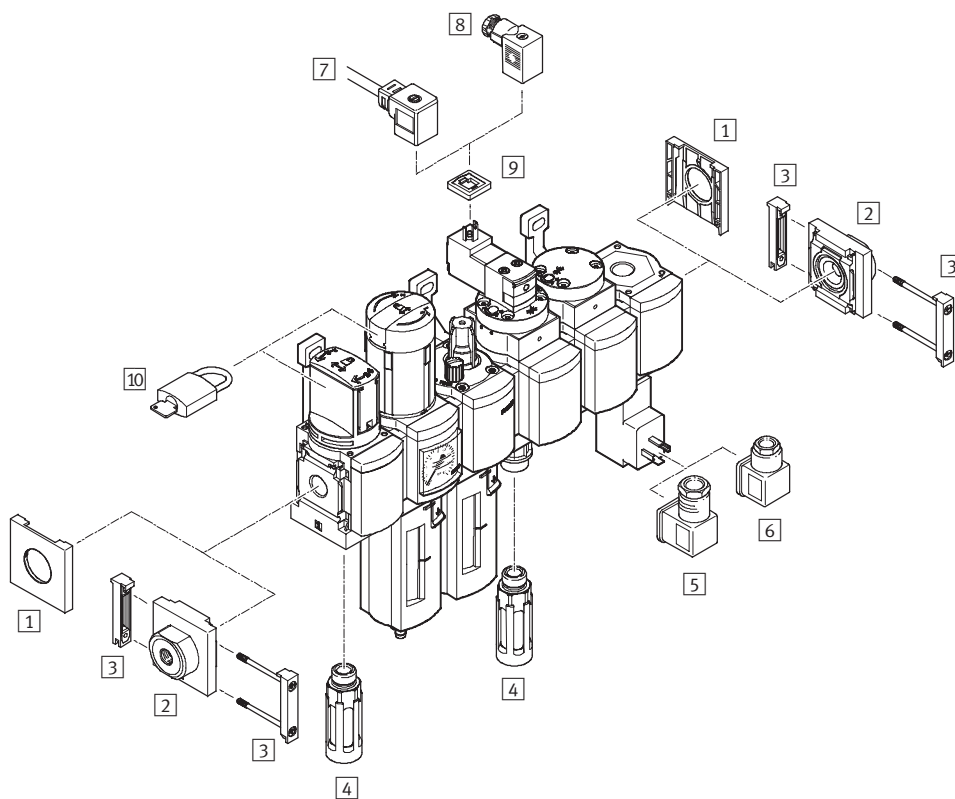
Combinations				
consisting of:				
On-off valve manually actuated EM1	■	–	■	■
Filter regulator with pressure gauge, lockable LFR	■	■	■	■
Pressure regulator with pressure gauge, lockable LR	–	–	–	–
Filter LF	–	–	–	–
Lubricator LOE	■	■	■	–
On-off valve solenoid actuated EE	–	■	■	–
Soft-start valve pneumatically actuated DL	–	■	■	–
Branching module with pressure switch FRM	■	–	■	–
Mounting bracket WP	■	■	■	■
Type codes → Page/Internet	10	10	10	10
Technical data → Page/Internet	11	14	18	22

Combinations					
consisting of:					
On-off valve manually actuated EM1	–	■	■	■	–
Filter regulator with pressure gauge, lockable LFR	■	■	■	■	–
Pressure regulator with pressure gauge, lockable LR	–	–	–	–	■
Filter LF	–	–	–	–	■
Lubricator LOE	–	–	–	■	■
On-off valve solenoid actuated EE	■	–	■	–	–
Soft-start valve pneumatically actuated DL	■	–	■	–	–
Branching module with pressure switch FRM	–	■	■	–	–
Mounting bracket WP	■	■	■	■	■
Type codes → Page/Internet	10	10	10	10	10
Technical data → Page/Internet	25	29	32	36	39

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	43
5	Angled socket PEV-1/4-WD-LED	43
6	Plug socket MSSD-C-4P	43
7	Plug socket with cable KMEB	43
8	Plug socket MSSD-EB	43
9	Illuminating seal MEB-LD	43
10	Padlock LRVS-D	43
–	Mounting bracket MS4/6-WP/WPB/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																					
1/4	Thread G1/4																				
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																				
Branching module		➔ Internet: ms4-frm, ms6-frm																			
F3	MS...-FRM-Y																				
Type of mounting																					
WP	Mounting bracket																				

Further variants can be ordered using the modular system

Service unit combinations → www.festo.com

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

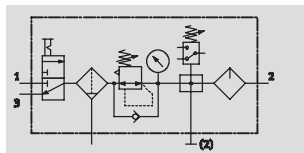
Service unit combinations MSB4/MSB6, MS series

FESTO

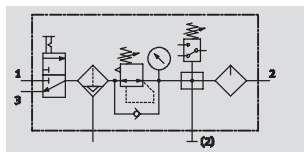
Technical data – Combination 1

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	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	1 ... 12	
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate q _N [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	MSB4MSB6
Supply pressure [bar]		1.5 ... 14	1.5 ... 18	1.5 ... 121.5 ... 12
Operating medium		Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm		
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.

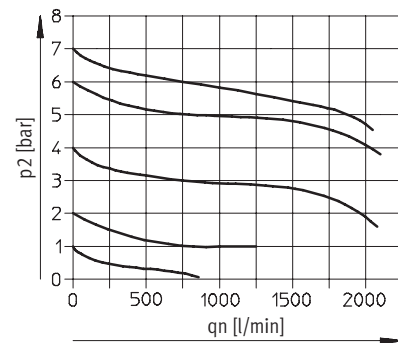
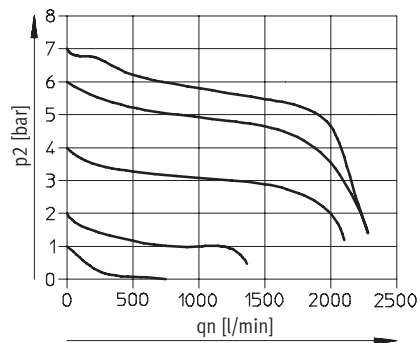
Weights [g]		
Size	MSB4	MSB6
Service unit combination	1,700	2,550
Mounting bracket	40	76

-  - Note

Materials → Technical data of the individual devices

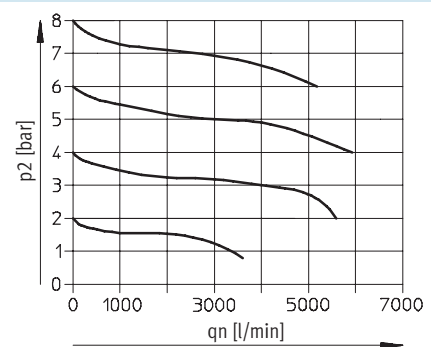
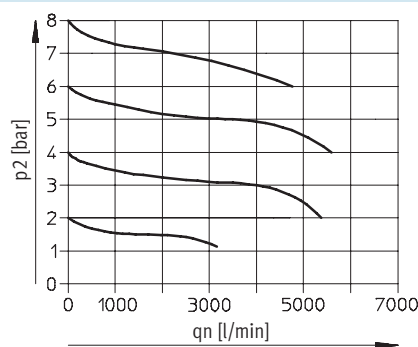
Standard flow rate qn as a function of output pressure p2		
Pressure regulation range 1 ... 12 bar	Grade of filtration 5 µm	Grade of filtration 40 µm
MSB4-1/4		

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

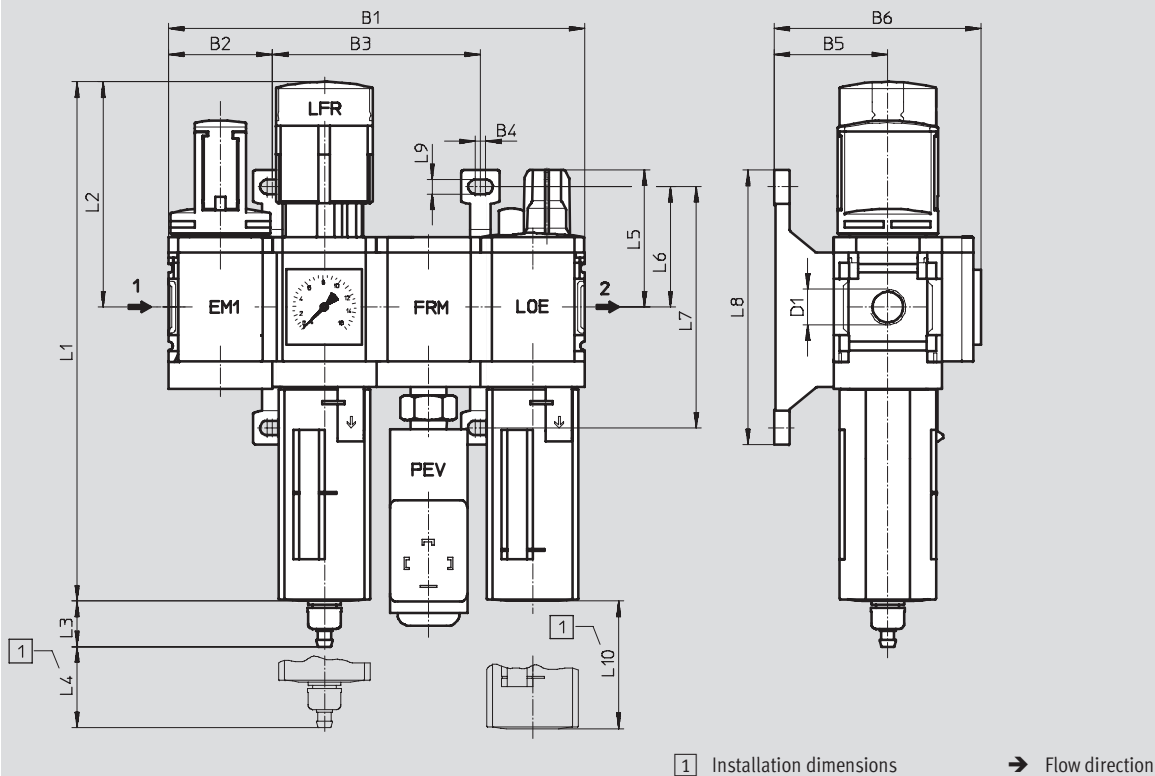
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Technical data – Combination 1

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 automatic							
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 with the ISO 1179-1 standard and the ISO 228-1 standard.

Ordering data

Pressure regulation range 1... 12 bar

Pressure regulation range 1 bar - 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	542 307	MSB4-¼:C3J3F3M1-WP	542 295	MSB4-¼:C3J1F3M1-WP
	fully automatic	G¼	542 313	MSB4-¼:C3J4F3M1-WP	542 301	MSB4-¼:C3J2F3M1-WP
MSB6	manual rotary	G½	542 283	MSB6-½:C3J3F3M1-WP	542 271	MSB6-½:C3J1F3M1-WP
	fully automatic	G½	542 289	MSB6-½:C3J4F3M1-WP	542 277	MSB6-½:C3J2F3M1-WP

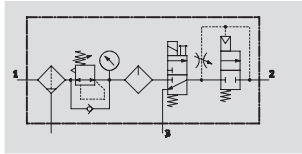
Service unit combinations MSB4/MSB6, MS series

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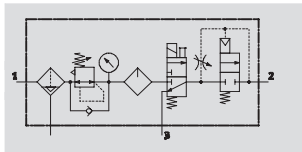
Technical data – Combination 2

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	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	4 ... 9 (with on-off valve MS...-EE-10V24)	
	4 ... 12 (with on-off valve MS...-EE-V24)	
Pressure indicator	With pressure gauge	
Supply voltage [V DC]	24	

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

Standard nominal flow rate q _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
Supply pressure [bar]	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 14	4.5 ... 18	4.5 ... 12	4.5 ... 12
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm							
Ambient temperature [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Temperature of medium [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Storage temperature [°C]	-10 ... +60		-10 ... +60		-10 ... +60		-10 ... +60	
Corrosion resistance CRC ¹⁾	2							

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

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

Weights [g]		
Size	MSB4	MSB6
Service unit combination	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

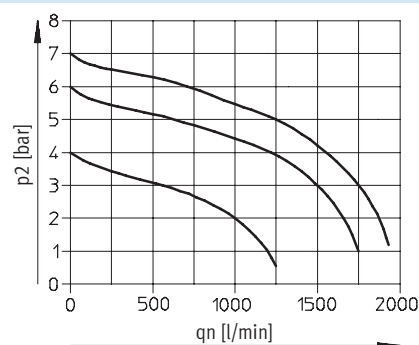
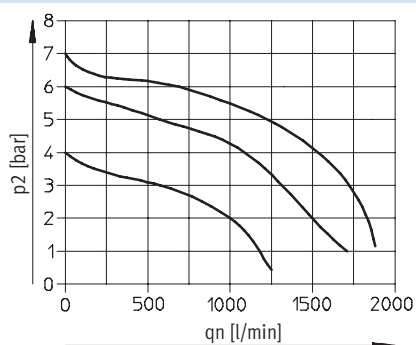
Grade of filtration 5 µm

Grade of filtration 40 µm

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

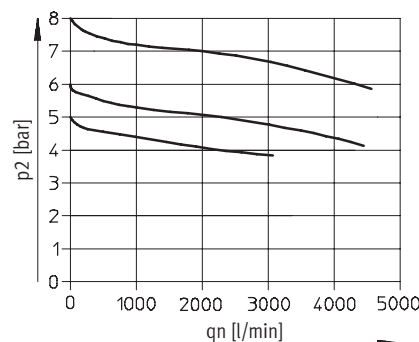
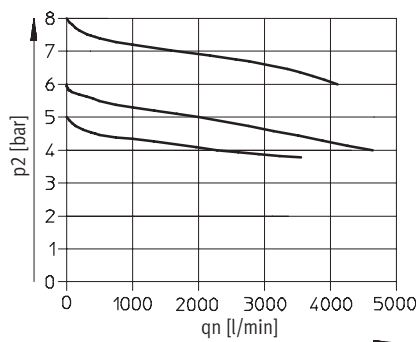
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

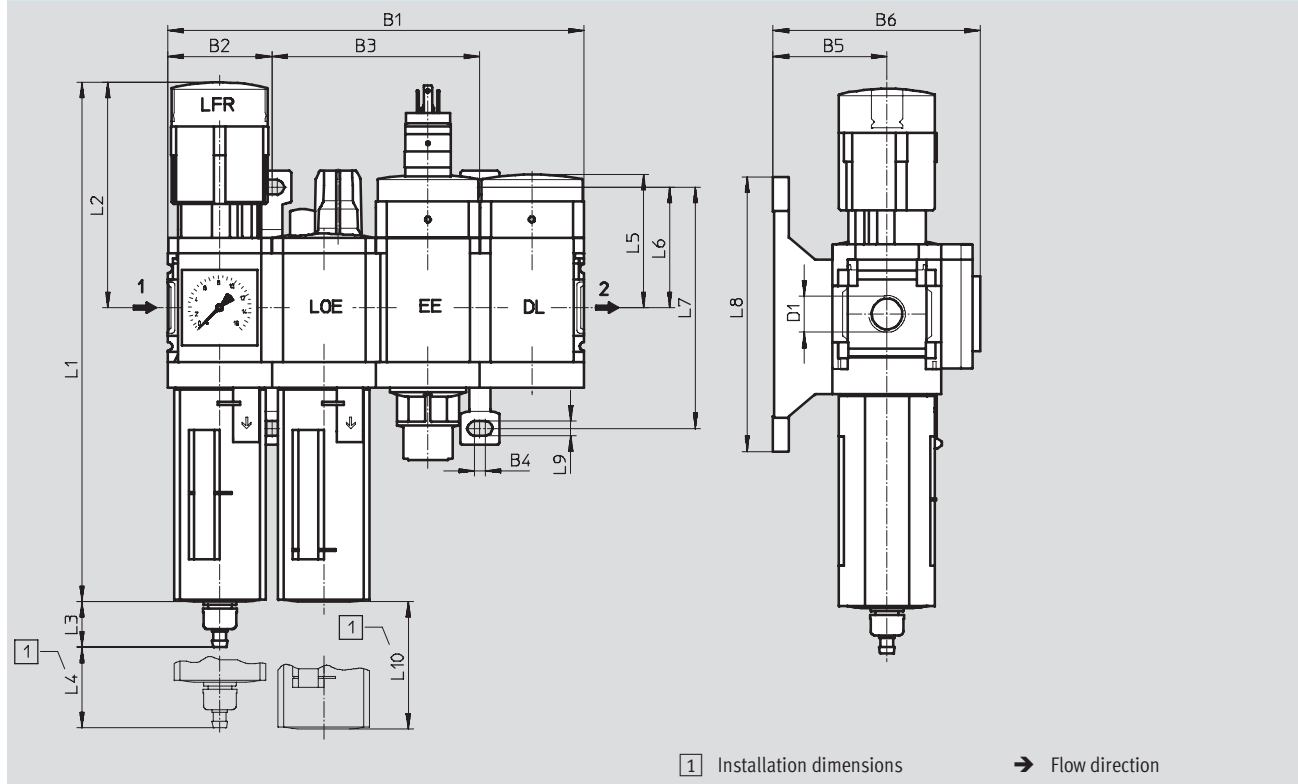
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Technical data – Combination 2

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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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.
Plastic bowl guard						
MSB4	manual rotary	G¼	542 632	MSB4-¼:J3M1D7A1-WP		542 628 MSB4-¼:J1M1D7A1-WP
	fully automatic	G¼	542 634	MSB4-¼:J4M1D7A1-WP		542 630 MSB4-¼:J2M1D7A1-WP
MSB6	manual rotary	G½	542 648	MSB6-½:J3M1D7A1-WP		542 644 MSB6-½:J1M1D7A1-WP
	fully automatic	G½	542 650	MSB6-½:J4M1D7A1-WP		542 646 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	531 106	MSB4-¼:J3M1D1A1-WP		531 102 MSB4-¼:J1M1D1A1-WP
	fully automatic	G¼	531 108	MSB4-¼:J4M1D1A1-WP		531 104 MSB4-¼:J2M1D1A1-WP
MSB6	manual rotary	G½	530 227	MSB6-½:J3M1D1A1-WP		530 223 MSB6-½:J1M1D1A1-WP
	fully automatic	G½	530 229	MSB6-½:J4M1D1A1-WP		530 225 MSB6-½:J2M1D1A1-WP

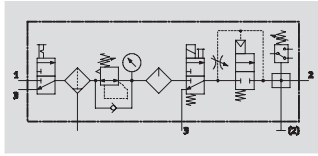
Service unit combinations MSB4/MSB6, MS series

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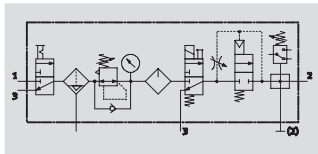
Technical data – Combination 3

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	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	4 ... 9 (with on-off valve MS...-EE-10V24)	
	4 ... 12 (with on-off valve MS...-EE-V24)	
Pressure indicator	With pressure gauge	
Supply voltage [V DC]	24	

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

Standard nominal flow rate qnN [l/min]		
Size	MSB4	MSB6
Grade of filtration	5 µm	2,100
	40 µm	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
Supply pressure [bar]	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 14	4.5 ... 18	4.5 ... 12	4.5 ... 12
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm							
Ambient temperature [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Temperature of medium [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Storage temperature [°C]	-10 ... +60		-10 ... +60		-10 ... +60		-10 ... +60	
Corrosion resistance CRC ¹⁾	2							

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

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

Weights [g]		
Size	MSB4	MSB6
Service unit combination	2,200	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

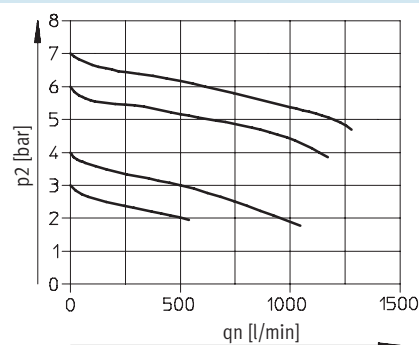
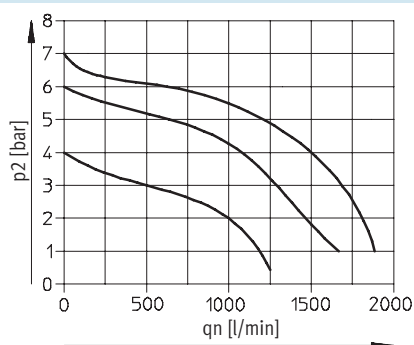
Grade of filtration 5 µm

Grade of filtration 40 µm

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

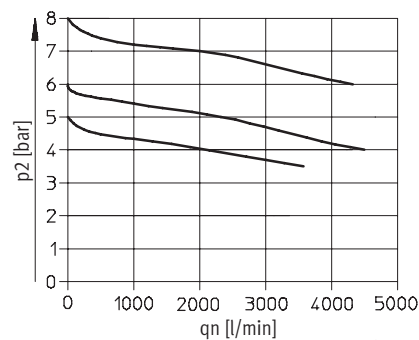
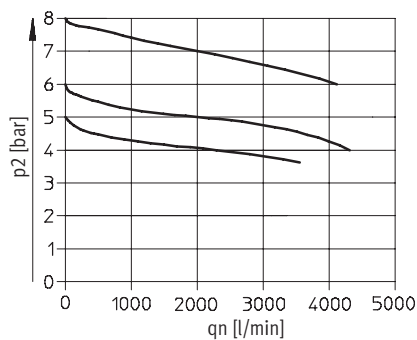
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

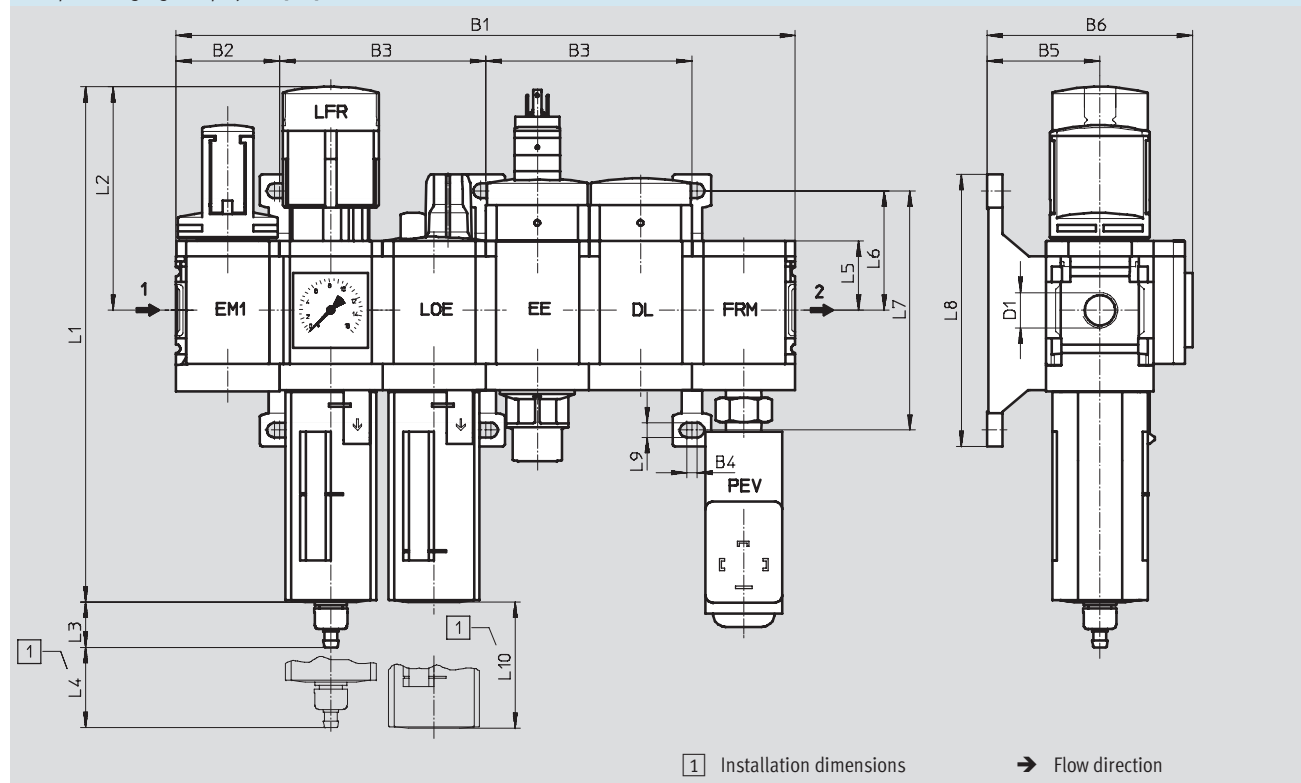
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Technical data – Combination 3

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	G $\frac{1}{4}$	201	87
MSB6	372	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	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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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.
Plastic bowl guard						
MSB4	manual rotary	G¼	542 624	MSB4-¼:C3J3M1D7A1F3-WP		542 619 MSB4-¼:C3J1M1D7A1F3-WP
	fully automatic	G¼	542 626	MSB4-¼:C3J4M1D7A1F3-WP		542 622 MSB4-¼:C3J2M1D7A1F3-WP
MSB6	manual rotary	G½	542 640	MSB6-½:C3J3M1D7A1F3-WP		542 636 MSB6-½:C3J1M1D7A1F3-WP
	fully automatic	G½	542 642	MSB6-½:C3J4M1D7A1F3-WP		542 638 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	542 309	MSB4-¼:C3J3M1D1A1F3-WP		542 297	MSB4-¼:C3J1M1D1A1F3-WP	
	fully automatic	G¼	542 315	MSB4-¼:C3J4M1D1A1F3-WP		542 303	MSB4-¼:C3J2M1D1A1F3-WP	
MSB6	manual rotary	G½	542 285	MSB6-½:C3J3M1D1A1F3-WP		542 273	MSB6-½:C3J1M1D1A1F3-WP	
	fully automatic	G½	542 291	MSB6-½:C3J4M1D1A1F3-WP		542 279	MSB6-½:C3J2M1D1A1F3-WP	

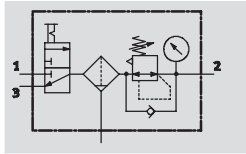
Service unit combinations MSB4/MSB6, MS series

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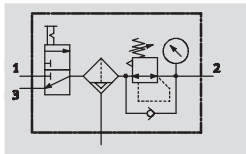
Technical data – Combination 4

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



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

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



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

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G $\frac{1}{4}$	G $\frac{1}{2}$
Regulating function	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical $\pm 5^\circ$	
Grade of filtration $[\mu\text{m}]$	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	0.5 ... 12	
Pressure indicator	With pressure gauge	

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

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

Service unit combinations MSB4/MSB6, MS series

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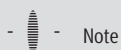
Technical data – Combination 4

Operating and environmental conditions				
Condensate drain	Manual rotary		Fully automatic	
Size	MSB4	MSB6	MSB4	MSB6
Supply pressure [bar]	0.8 ... 14	0.8 ... 18	1.5 ... 12	1.5 ... 12
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm			
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

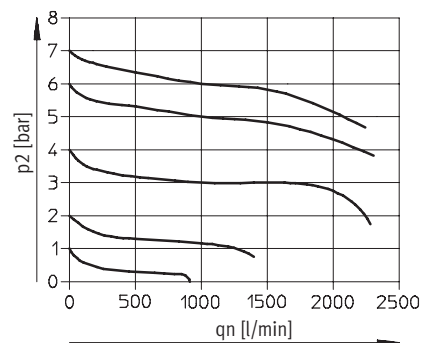
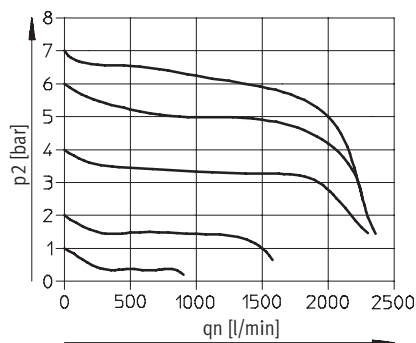
Standard flow rate qn as a function of output pressure p2

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

Grade of filtration 40 µm

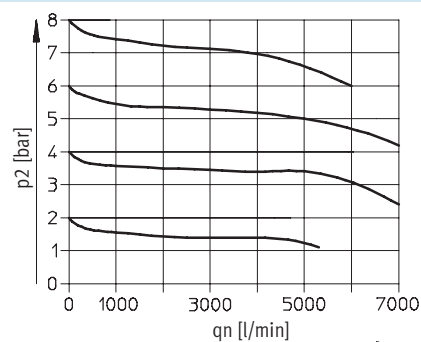
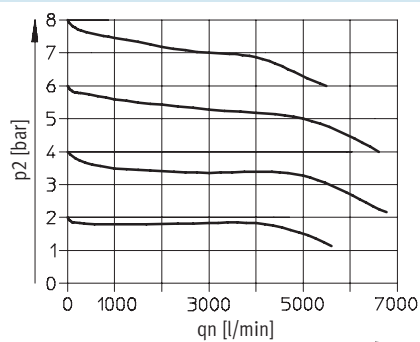
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

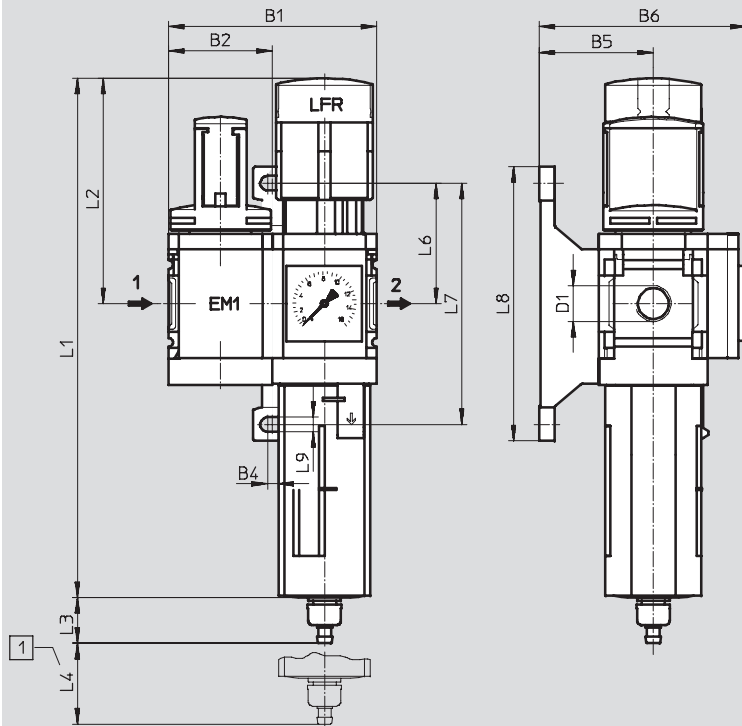
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Technical data – Combination 4

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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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	542 304	MSB4-¼:C3J3-WP		542 292	MSB4-¼:C3J1-WP
	fully automatic	G¼	542 310	MSB4-¼:C3J4-WP		542 298	MSB4-¼:C3J2-WP
MSB6	manual rotary	G½	542 280	MSB6-½:C3J3-WP		542 268	MSB6-½:C3J1-WP
	fully automatic	G½	542 286	MSB6-½:C3J4-WP		542 274	MSB6-½:C3J2-WP

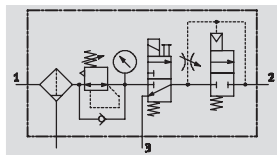
Service unit combinations MSB4/MSB6, MS series

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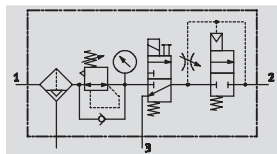
Technical data – Combination 5

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	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	4 ... 9 (with on-off valve MS...-EE-10V24)	
	4 ... 12 (with on-off valve MS...-EE-V24)	
Pressure indicator	With pressure gauge	
Supply voltage [V DC]	24	

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

Standard nominal flow rate q _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

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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
Supply pressure [bar]	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 14	4.5 ... 18	4.5 ... 12	4.5 ... 12
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm							
Ambient temperature [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Temperature of medium [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Storage temperature [°C]	-10 ... +60		-10 ... +60		-10 ... +60		-10 ... +60	
Corrosion resistance CRC ¹⁾	2							

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

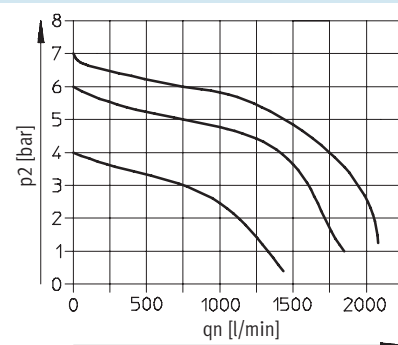
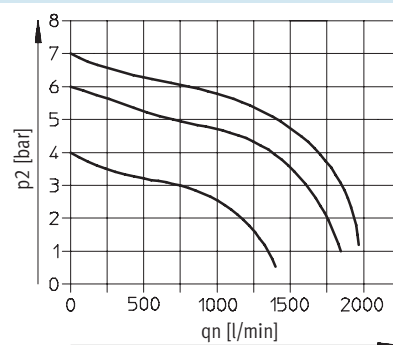
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [g]		
Size	MSB4	MSB6
Service unit combination	1,600	2,400
Mounting bracket	40	76

-  - Note
Materials → Technical data of the individual devices

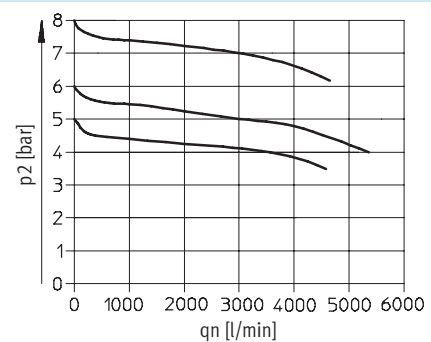
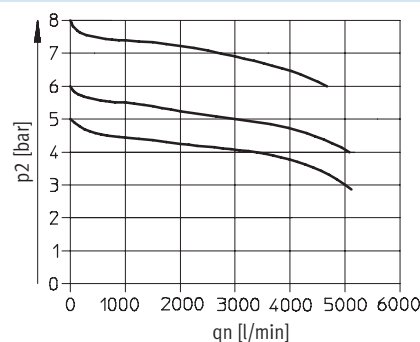
Standard flow rate qn as a function of output pressure p2		
Pressure regulation range	Grade of filtration 5 µm	Grade of filtration 40 µm
4 ... 9 bar / 4 ... 12 bar		
MSB4-1/4		

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

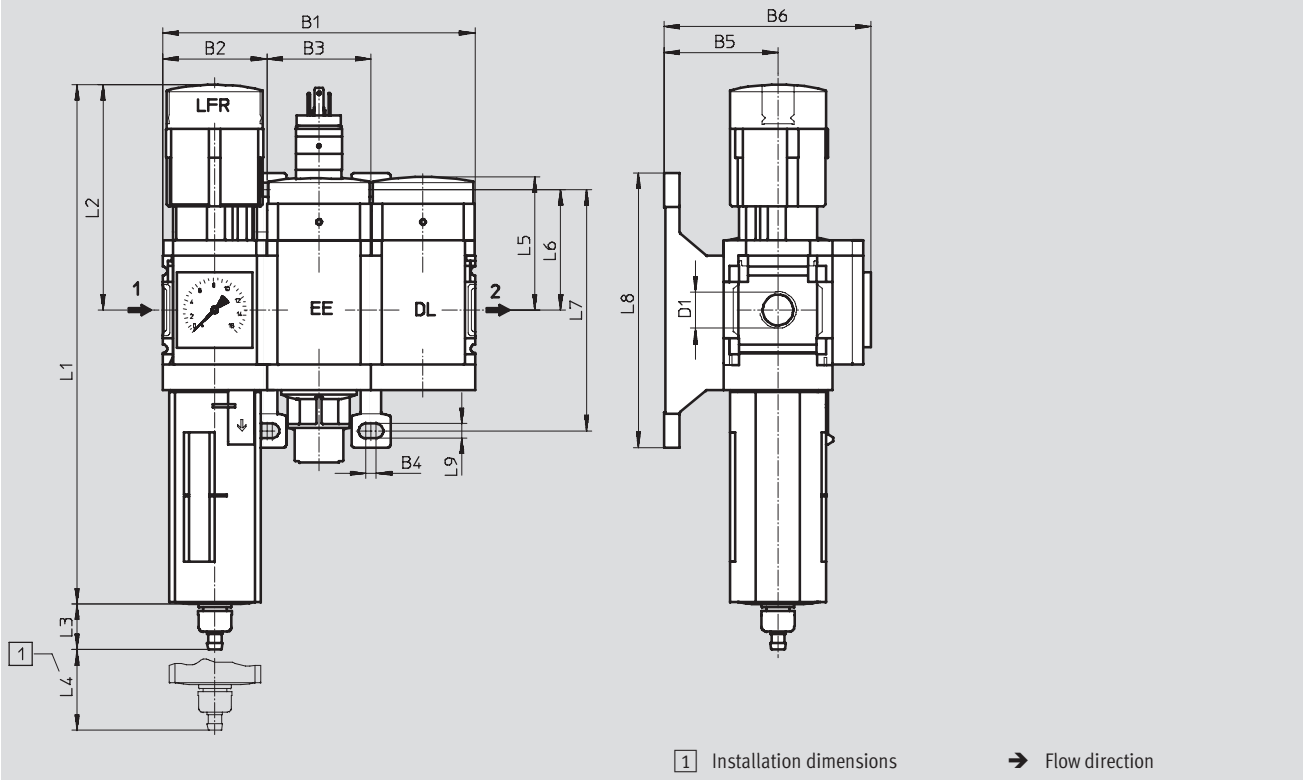
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Technical data – Combination 5

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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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.
Plastic bowl guard						
MSB4	manual rotary	G¼	542 631	MSB4-¼:J3D7A1-WP		542 627 MSB4-¼:J1D7A1-WP
	fully automatic	G¼	542 633	MSB4-¼:J4D7A1-WP		542 629 MSB4-¼:J2D7A1-WP
MSB6	manual rotary	G½	542 647	MSB6-½:J3D7A1-WP		542 643 MSB6-½:J1D7A1-WP
	fully automatic	G½	542 649	MSB6-½:J4D7A1-WP		542 645 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.
Plastic bowl guard						
MSB4	manual rotary	G¼	531 105	MSB4-¼;J3D1A1-WP		531 101 MSB4-¼;J1D1A1-WP
	fully automatic	G¼	531 107	MSB4-¼;J4D1A1-WP		531 103 MSB4-¼;J2D1A1-WP
MSB6	manual rotary	G½	530 226	MSB6-½;J3D1A1-WP		530 222 MSB6-½;J1D1A1-WP
	fully automatic	G½	530 228	MSB6-½;J4D1A1-WP		530 224 MSB6-½;J2D1A1-WP

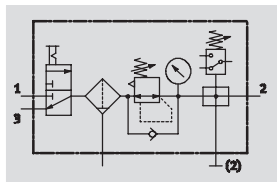
Service unit combinations MSB4/MSB6, MS series

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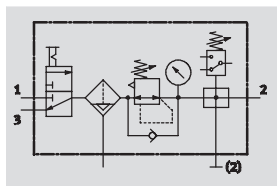
Technical data – Combination 6

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
- Mounting bracket MS...-WP

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



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

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2, 3	G1/4	G1/2
Regulating function	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	0.5 ... 12	
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate qnN [l/min]		
Size	MSB4	MSB6
Grade of filtration	5 µm	1,250
	40 µm	1,300
	5 µm	4,400
	40 µm	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	MSB4MSB6
Supply pressure [bar]		0.8 ... 14	0.8 ... 18	1.5 ... 121.5 ... 12
Operating medium		Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm		
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	2,000
Mounting bracket	40	76

-  - Note
Materials → Technical data of the individual devices

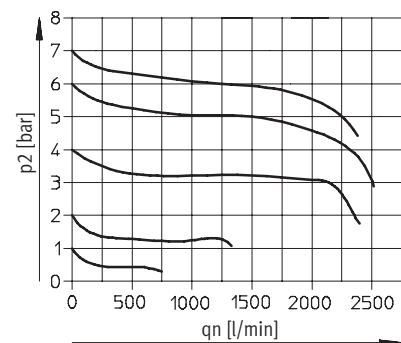
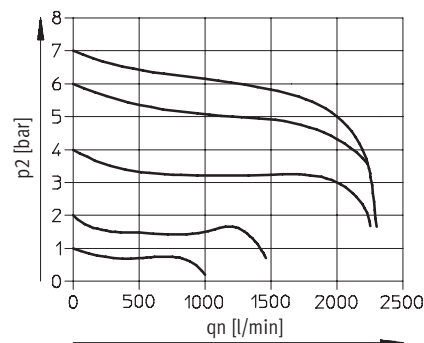
Standard flow rate qn as a function of output pressure p2

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

Grade of filtration 40 µm

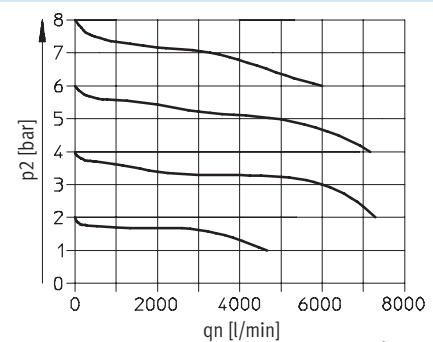
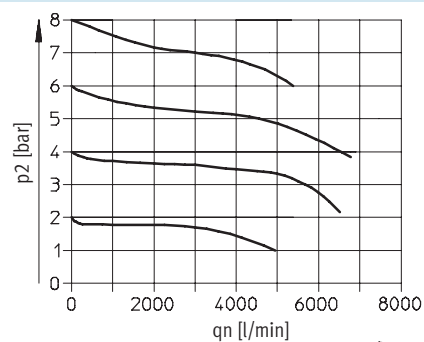
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

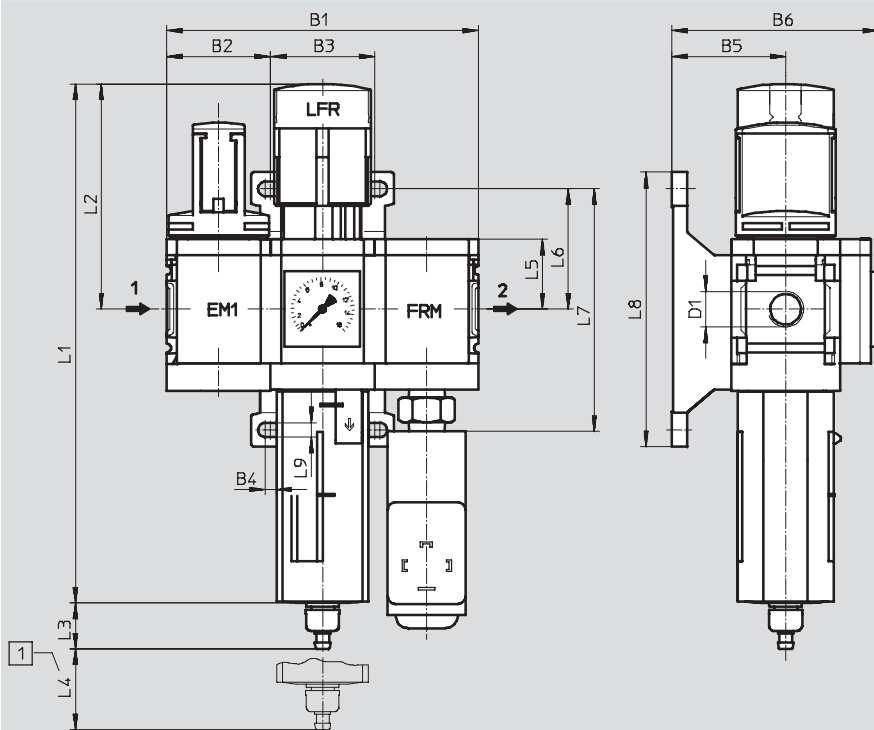
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Technical data – Combination 6

Dimensions

Download CAD data → www.festo.com

With pressure gauge, display unit [bar]



1 Installation dimensions

→ Flow direction

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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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	542 306	MSB4-¼:C3J3F3-WP		542 294	MSB4-¼:C3J1F3-WP
	fully automatic	G¼	542 312	MSB4-¼:C3J4F3-WP		542 300	MSB4-¼:C3J2F3-WP
MSB6	manual rotary	G½	542 282	MSB6-½:C3J3F3-WP		542 270	MSB6-½:C3J1F3-WP
	fully automatic	G½	542 288	MSB6-½:C3J4F3-WP		542 276	MSB6-½:C3J2F3-WP

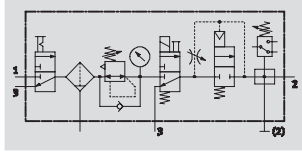
Service unit combinations MSB4/MSB6, MS series

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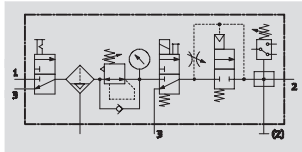
Technical data – Combination 7

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 display
- 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
- 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	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	4 ... 9 (with on-off valve MS...-EE-10V24)	
	4 ... 12 (with on-off valve MS...-EE-V24)	
Pressure indicator	With pressure gauge	
Supply voltage [V DC]	24	

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

Standard nominal flow rate qnN [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

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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
Supply pressure [bar]	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 10	4.5 ... 14	4.5 ... 18	4.5 ... 12	4.5 ... 12
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm							
Ambient temperature [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Temperature of medium [°C]	-10 ... +50		+5 ... +50		-10 ... +60		+5 ... +60	
Storage temperature [°C]	-10 ... +60		-10 ... +60		-10 ... +60		-10 ... +60	
Corrosion resistance CRC ¹⁾	2							

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

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

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

- - Note
Materials → Technical data of the individual devices

Standard flow rate qn as a function of output pressure p2

Pressure regulation range

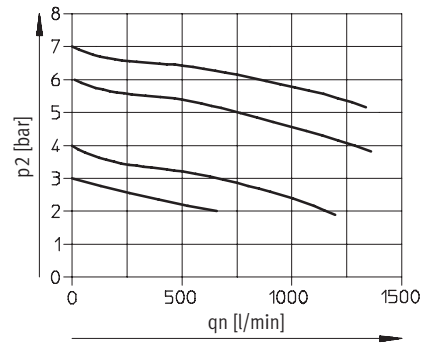
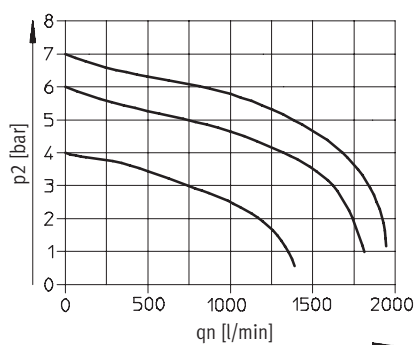
Grade of filtration 5 µm

Grade of filtration 40 µm

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

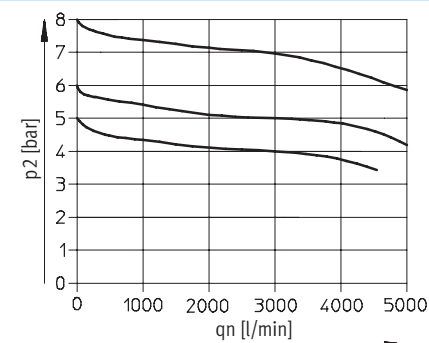
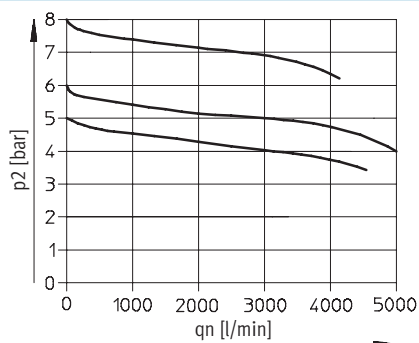
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

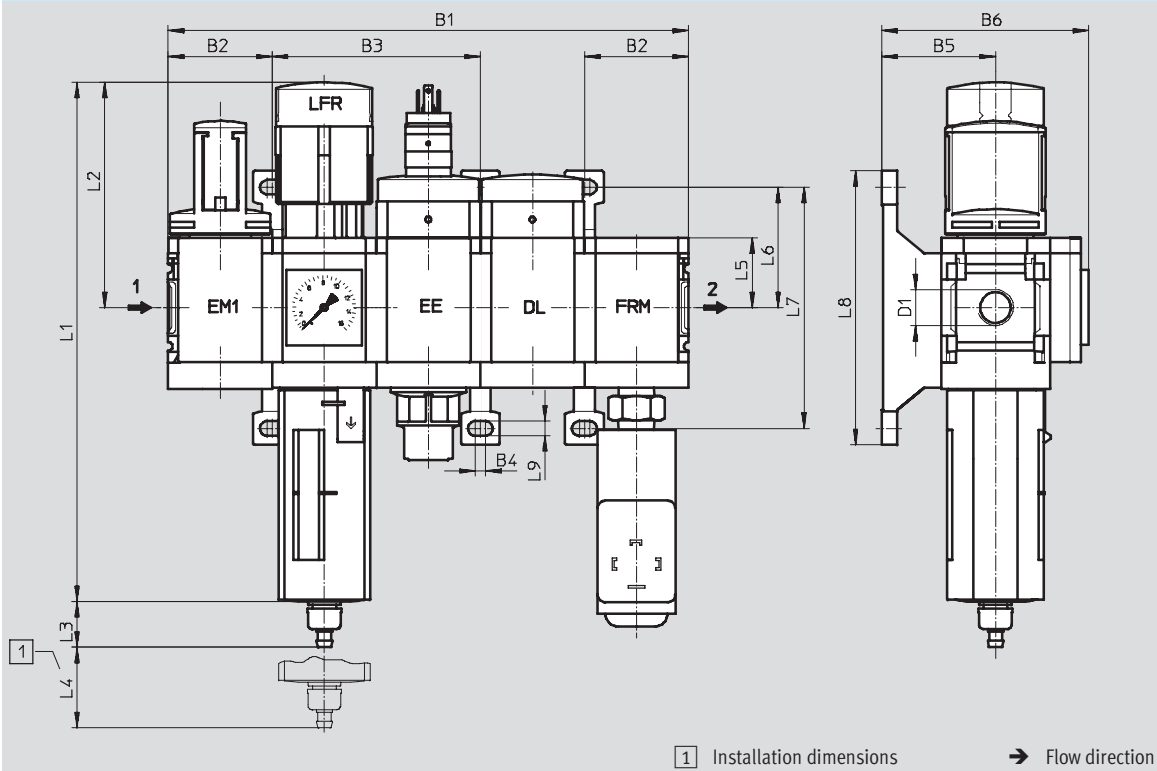
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Technical data – Combination 7

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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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.	Type
Plastic bowl guard						
MSB4	manual rotary	G¼	542 623	MSB4-¼:C3J3D7A1F3-WP		542 618 MSB4-¼:C3J1D7A1F3-WP
	fully automatic	G¼	542 625	MSB4-¼:C3J4D7A1F3-WP		542 621 MSB4-¼:C3J2D7A1F3-WP
MSB6	manual rotary	G½	542 639	MSB6-½:C3J3D7A1F3-WP		542 635 MSB6-½:C3J1D7A1F3-WP
	fully automatic	G½	542 641	MSB6-½:C3J4D7A1F3-WP		542 637 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	542 305	MSB4-¼:C3J3D1A1F3-WP	542 293	MSB4-¼:C3J1D1A1F3-WP
	fully automatic	G¼	542 311	MSB4-¼:C3J4D1A1F3-WP	542 299	MSB4-¼:C3J2D1A1F3-WP
MSB6	manual rotary	G½	542 281	MSB6-½:C3J3D1A1F3-WP	542 269	MSB6-½:C3J1D1A1F3-WP
	fully automatic	G½	542 287	MSB6-½:C3J4D1A1F3-WP	542 275	MSB6-½:C3J2D1A1F3-WP

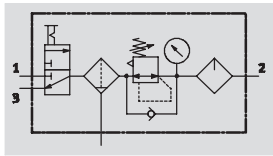
Service unit combinations MSB4/MSB6, MS series

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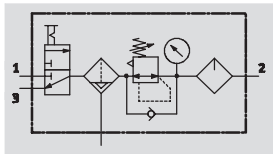
Technical data – Combination 8

Function

With condensate drain
manual rotary



With condensate drain
fully automatic



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



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

- 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	G1/4	G1/2
Regulating function	With primary pressure compensation	
	With return flow function	
	With secondary venting	
	Output pressure constant	
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation range [bar]	1 ... 12	
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate qnN [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

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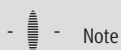
Technical data – Combination 8

Operating and environmental conditions				
Condensate drain	Manual rotary		Fully automatic	
Size	MSB4	MSB6	MSB4	MSB6
Supply pressure [bar]	1.5 ... 14	1.5 ... 18	1.5 ... 12	1.5 ... 12
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm			
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

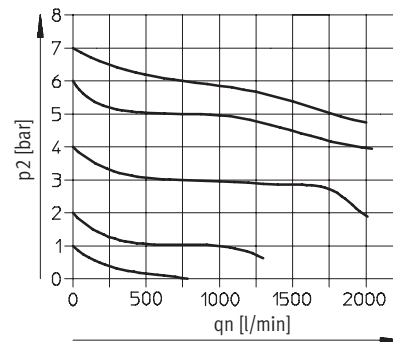
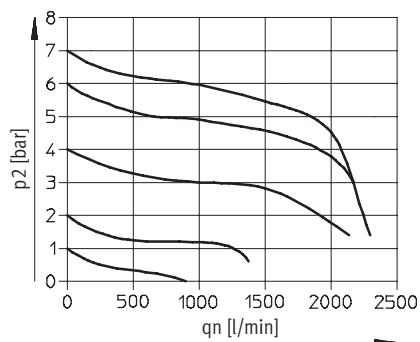
Pressure regulation range 1 ... 12 bar

Grade of filtration 5 µm

Grade of filtration 40 µm

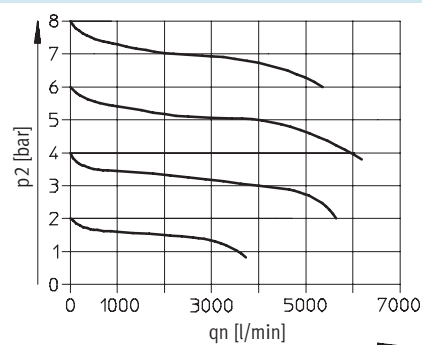
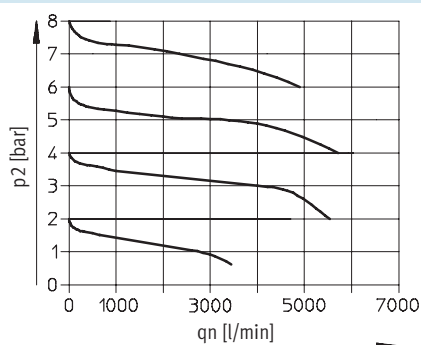
MSB4-1/4

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

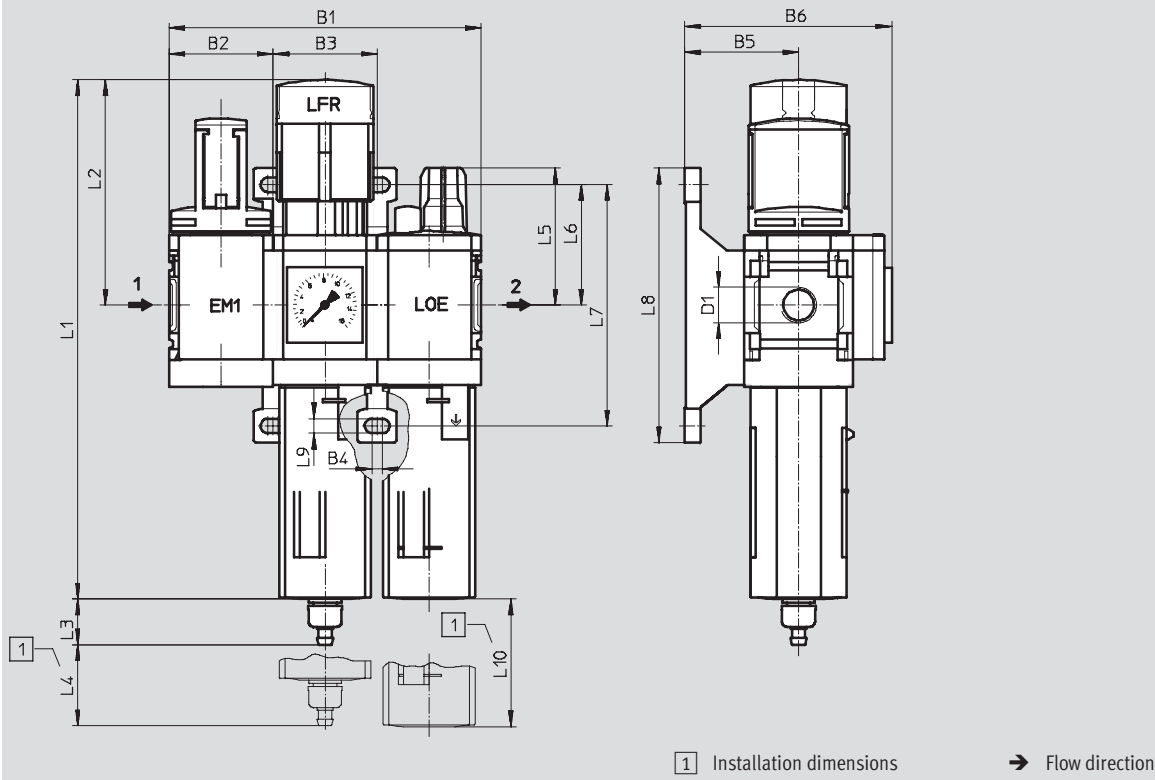
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Technical data – Combination 8

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 automatic							
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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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	542 308	MSB4-¼:C3J3M1-WP		542 296	MSB4-¼:C3J1M1-WP
	fully automatic	G¼	542 314	MSB4-¼:C3J4M1-WP		542 302	MSB4-¼:C3J2M1-WP
MSB6	manual rotary	G½	542 284	MSB6-½:C3J3M1-WP		542 272	MSB6-½:C3J1M1-WP
	fully automatic	G½	542 290	MSB6-½:C3J4M1-WP		542 278	MSB6-½:C3J2M1-WP

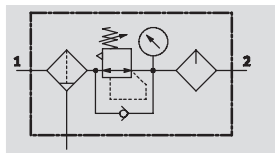
Service unit combinations MSB4/MSB6, MS series

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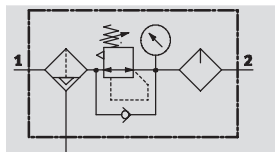
Technical data – Combination 9

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



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

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

General technical data		
Size	MSB4	MSB6
Pneumatic connection 1, 2	G1/4	G1/2
Type of mounting	Via accessories	
Assembly position	Vertical ±5°	
Grade of filtration [µm]	5 (air purity class at the output 3.7.- to DIN ISO 8573-1)	
	40 (air purity class at the output 5.7.- to DIN ISO 8573-1)	
Bowl guard	Plastic bowl guard	
	Metal bowl guard	
Condensate drain	Manual rotary	
	Fully automatic	
Actuator lock	Rotary knob with detent	
	Lockable with accessories	
Pressure regulation N2 [bar]	1 ... 7	
range N3 [bar]	1 ... 12	
Pressure indicator	With pressure gauge	

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

Standard nominal flow rate qnN [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	700	3,500
40 µm	800	3,500

Service unit combinations MSB4/MSB6, MS series

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Technical data – Combination 9

Operating and environmental conditions				
Condensate drain		Manual rotary		Fully automatic
Size		MSB4	MSB6	MSB4MSB6
Supply pressure [bar]		1.5 ... 14	1.5 ... 18	1.5 ... 121.5 ... 12
Operating medium		Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm		
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

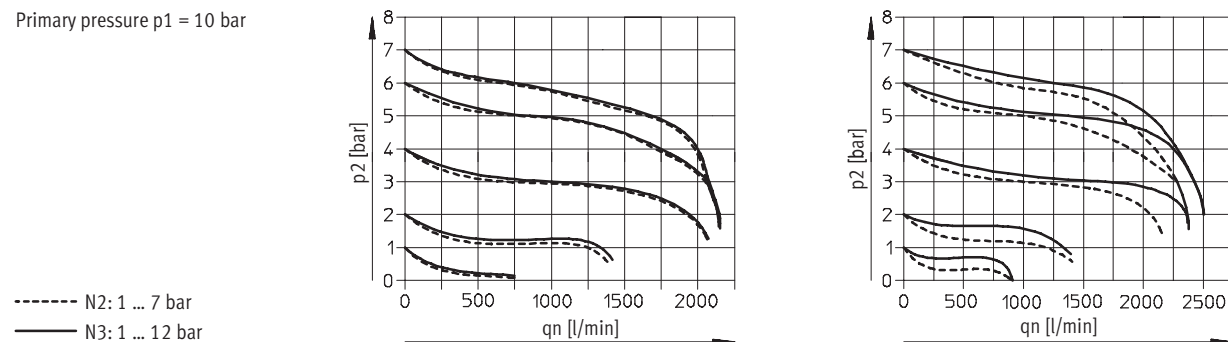
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [g]		
Size	MSB4	MSB6
Service unit combination		
With plastic bowl guard	1,000	2,000
With metal bowl guard	–	2,400
Mounting bracket		
	40	76

- - - - - Note
Materials → Technical data of the individual devices

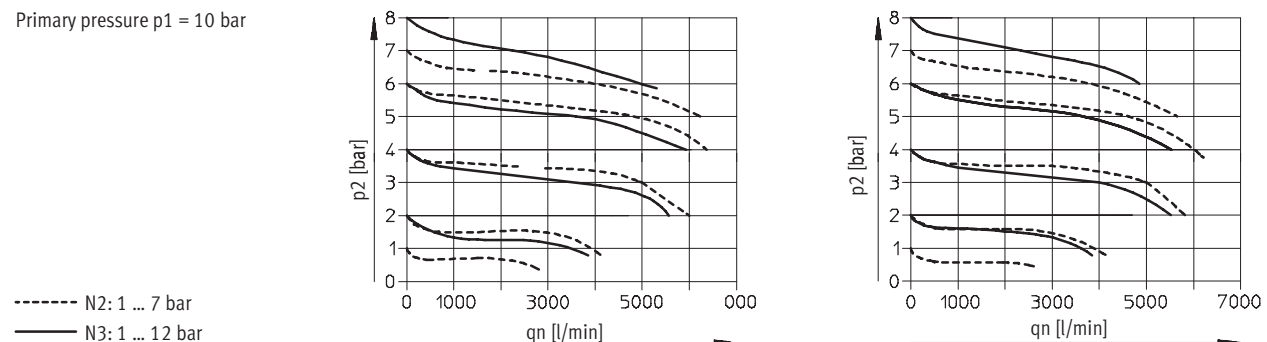
Standard flow rate qn as a function of output pressure p2		
Pressure regulation range N2 or N3	Grade of filtration 5 µm	Grade of filtration 40 µm
MSB4-1/4		

Primary pressure p1 = 10 bar



MSB6-1/2

Primary pressure p1 = 10 bar



Service unit combinations MSB4/MSB6, MS series

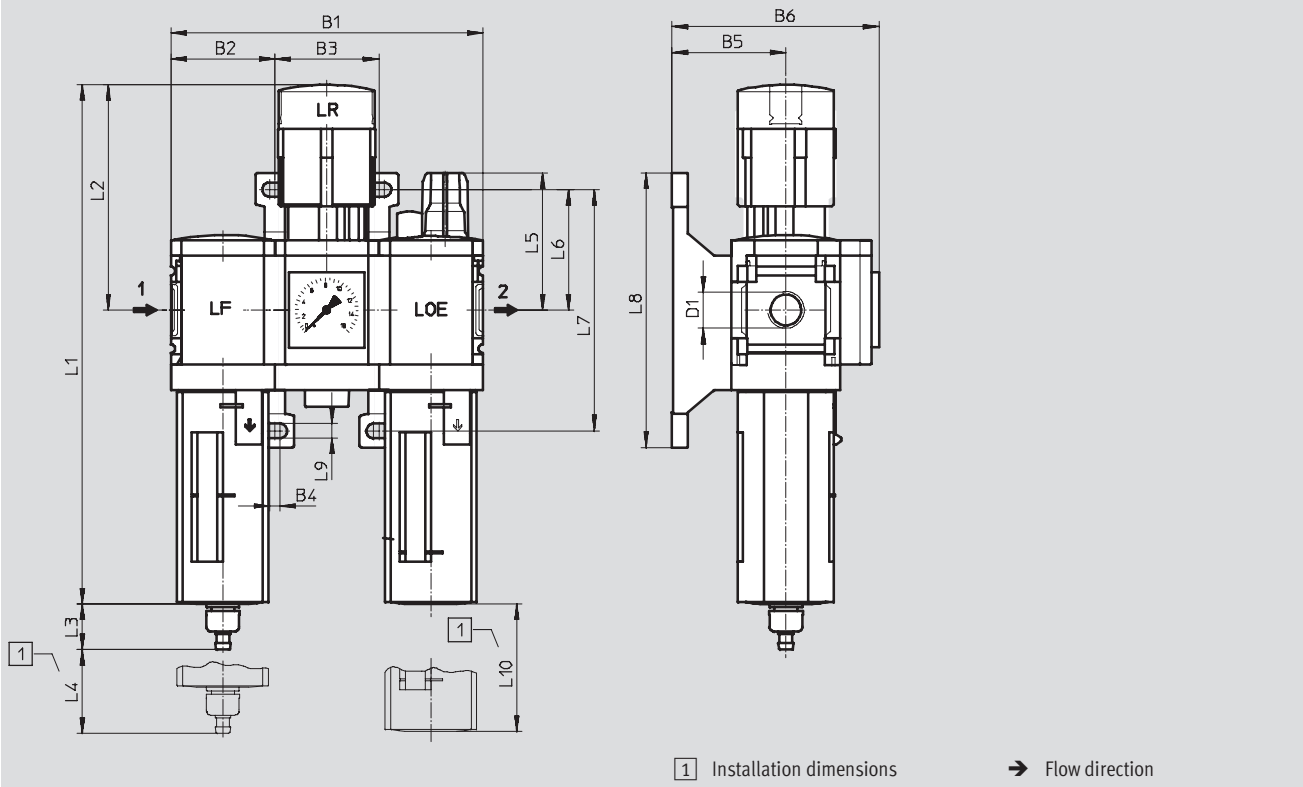
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Technical data – Combination 9

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 with the ISO 1179-1 standard and the ISO 228-1 standard.

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	531 091	MSB4-¼:H2N2M1-WP
	fully automatic	G¼	531 085	MSB4-¼:H1N2M1-WP
MSB6	manual rotary	G½	530 212	MSB6-½:H2N2M1-WP
	fully automatic	G½	530 206	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	531 097	MSB4-¼:H3N3M1-WP		531 093 MSB4-¼:H2N3M1-WP
	fully automatic	G¼	531 099	MSB4-¼:H4N3M1-WP		531 087 MSB4-¼:H1N3M1-WP
MSB6	manual rotary	G½	530 218	MSB6-½:H3N3M1-WP		530 214 MSB6-½:H2N3M1-WP
	fully automatic	G½	530 220	MSB6-½:H4N3M1-WP		530 208 MSB6-½:H1N3M1-WP
Metal bowl guard						
MSB4	manual rotary	G¼	–			531 095 MSB4-¼:H8N3M2-WP
	fully automatic	G¼	–			531 089 MSB4-¼:H7N3M2-WP
MSB6	manual rotary	G½	–			530 216 MSB6-½:H8N3M2-WP
	fully automatic	G½	–			530 210 MSB6-½:H7N3M2-WP

Service unit combinations MSB, MS series

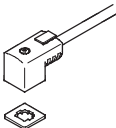
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Accessories

Ordering data – Silencer U				Technical data → Internet: u	
	Description	Pneumatic connection	Part No.	Type	
	for MS4-EM1/EE	G $\frac{1}{4}$	6 842	U-$\frac{1}{4}$-B	
	for MS6-EM1/EE	G $\frac{1}{2}$	6 844	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	164 274	PEV-$\frac{1}{4}$-WD-LED-24
		≤ 230 V AC	4-pin	Yellow LED	164 275	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	171 157	MSSD-C-4P
	for MS4/6-EE/DE	≤ 250 V AC/DC	3-pin	Clamping screws	151 687	MSSD-EB
			4-pin	Insulation displacement technology	192 745	MSSD-EB-S-M14

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	547 268	KMEB-3-24-2,5-LED
					5	547 269	KMEB-3-24-5-LED
				–	2.5	547 270	KMEB-3-24-2,5
					5	547 271	KMEB-3-24-5
			3-pin	LED	2.5	151 688	KMEB-1-24-2,5-LED
					5	151 689	KMEB-1-24-5-LED
					10	193 457	KMEB-1-24-10-LED
		230 V AC	3-pin	–	2.5	151 690	KMEB-1-230AC-2,5
					5	151 691	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		151 717	MEB-LD-12-24DC
		230 V DC/AC ±10%		151 718	MEB-LD-230AC

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