

## Water separators MS-LWS, MS series

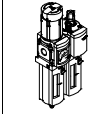
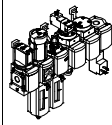
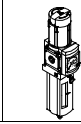
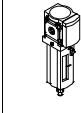
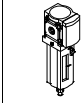
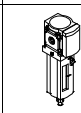
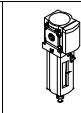
**FESTO**



# Water separators MS-LWS, MS series



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.../AQ...	0.7	2.5	4	7	12	16	A	B	C	E
<b>Service unit combinations</b>													
<b>MSB-FRC</b> 	4	G1/8, G1/4	G1/8, G1/4, G3/8	-	-	-	■	■	-	-	-	■	■
	6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	■	■	-	-	-	■	■
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
<b>Service unit combinations (further variants can be ordered using the configurator → Internet: msb4, msb6 or msb9)</b>													
<b>MSB</b> 	4	G1/4	G1/8, G1/4, G3/8	-	-	-	■	■	-	-	-	■	■
	6	G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	■	■	-	-	-	■	■
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
<b>Individual devices</b>													
<b>Filter regulators</b> <b>MS-LFR</b> 	4	G1/8, G1/4	G1/8, G1/4, G3/8	-	-	■	■	■	-	-	-	■	■
	6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	■	■	■	■	-	-	■	■
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	-	-	■	■	■	■	-	-	■	■
	12	-	G1, G1 1/4, G1 1/2, G2	-	-	-	■	■	■	-	-	■	■
<b>Filters</b> <b>MS-LF</b> 	4	G1/8, G1/4	G1/8, G1/4, G3/8	-	-	-	-	-	-	-	-	■	■
	6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	-	-	-	-	-	■	■
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	-	-	-	-	-	-	-	-	■	■
	12	-	G1, G1 1/4, G1 1/2, G2	-	-	-	-	-	-	-	-	■	■
<b>Fine and micro filters</b> <b>MS-LFM</b> 	4	G1/8, G1/4	G1/8, G1/4, G3/8	-	-	-	-	-	-	■	■	-	-
	6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	-	-	-	■	■	-	-
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	-	-	-	-	-	-	■	■	-	-
	12	-	G1, G1 1/4, G1 1/2, G2	-	-	-	-	-	-	■	■	-	-
<b>Activated carbon filters</b> <b>MS-LFX</b> 	4	G1/8, G1/4	G1/8, G1/4, G3/8	-	-	-	-	-	-	-	-	-	-
	6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	-	-	-	-	-	-	-	-	-	-
	9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	-	-	-	-	-	-	-	-	-	-
	12	-	G1, G1 1/4, G1 1/2, G2	-	-	-	-	-	-	-	-	-	-
<b>Water separators</b> <b>MS-LWS</b> 	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	-	-	-	-	-	-	-	-	-	-

# Water separators MS-LWS, MS series

Product range overview – MS series service units



Type	Size	Bowl guard		Condensate drains				Pressure indicator					Security		Options		→ Page/ Internet
		Plastic bowl with plastic bowl guard	Metal bowl	Manual rotary	Semi-automatic	Fully automatic	External, fully automatic, electrical	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G1/8	Adapter plate for EN pressure gauge G1/4	Pressure sensor	Rotary knob with detent, lockable via accessories	Rotary knob with integrated lock	Silencer	Flow direction from right to left	
Code		R	U	M	H	V	E...	VS	AG	A8	A4	AD...	AS	E11	S	Z	
<b>Service unit combinations</b>																	
MSB-FRC	4	■	-	■	-	■	-	-	■	-	-	-	■	-	-	■	msb4
	6	■	■	■	-	■	-	-	■	-	-	-	■	-	-	■	msb6
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Service unit combinations</b>																	
MSB	4	■	■	■	-	■	-	-	■	-	-	-	■	-	-	■	msb4
	6	■	■	■	-	■	-	-	■	-	-	-	■	-	-	■	msb6
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Individual devices</b>																	
Filter regulators MS-LFR	4	■	■	■	■	■	-	■	■	■	■	■	■	■	-	■	ms4-lfr
	6	■	■	■	■	■	■	■	■	■	■	■	■	■	-	■	ms6-lfr
	9	-	■	■	■	■	■	■	■	■	■	■	■	■	-	■	ms9-lfr
	12	-	■	■	-	■	■	■	■	■	■	■	■	■	-	■	ms12-lfr
Filters MS-LF	4	■	■	■	■	■	-	-	-	-	-	-	-	-	-	■	ms4-lf
	6	■	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms6-lf
	9	-	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms9-lf
	12	-	■	■	-	■	■	-	-	-	-	-	-	-	-	■	ms12-lf
Fine and micro filters MS-LFM	4	■	■	■	■	■	-	-	-	-	-	-	-	-	-	■	ms4-lfm
	6	■	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms6-lfm
	9	-	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms9-lfm
	12	-	■	■	-	■	■	-	-	-	-	-	-	-	-	■	ms12-lfm
Activated carbon filters MS-LFX	4	■	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms4-lfx
	6	■	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms6-lfx
	9	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms9-lfx
	12	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms12-lfx
Water separators MS-LWS	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	■	-	-	■	■	-	-	-	-	-	-	-	-	■	8
	9	-	■	-	-	■	■	-	-	-	-	-	-	-	-	■	16
	12	-	■	-	-	■	■	-	-	-	-	-	-	-	-	■	24

# Water separators MS-LWS, MS series

Product range overview – MS series service units



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

# Water separators MS-LWS, 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	
<b>Individual devices</b>													
Pressure regulators <b>MS-LR</b>	4	-	-	■	■	■	■	■	■	■	-	■	ms4-lr
	6	-	-	■	■	-	■	■	■	■	-	■	ms6-lr
	9	-	-	■	■	-	■	■	■	■	-	■	ms9-lr
	12	-	-	■	■	-	■	-	■	■	-	■	ms12-lr
Pressure regulators <b>MS-LRB</b>	4	-	-	■	■	■	■	■	■	■	-	■	ms4-lrb
	6	-	-	■	■	-	■	■	■	■	-	■	ms6-lrb
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
Precision pressure regulators <b>MS-LRP</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	■	-	■	■	■	■	■	-	■	ms6-lrp
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
Precision pressure regulators <b>MS-LRPB</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	■	-	■	■	■	■	■	-	■	ms6-lrpb
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
Electrical pressure regulators <b>MS-LRE</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	■	■	-	■	-	-	-	-	■	ms6-lre
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
Lubricators <b>MS-LOE</b>	4	■	■	-	-	-	-	-	-	-	-	■	ms4-loe
	6	■	■	-	-	-	-	-	-	-	-	■	ms6-loe
	9	-	■	-	-	-	-	-	-	-	-	■	ms9-loe
	12	-	■	-	-	-	-	-	-	-	-	■	ms12-loe
On-off valves, manually actuated <b>MS-EM(1)</b>	4	-	-	■	■	■	■	■	-	-	■	■	ms4-em1
	6	-	-	■	■	-	■	■	-	-	■	■	ms6-em1
	9	-	-	■	■	-	■	-	-	-	■	■	ms9-em
	12	-	-	■	■	-	■	-	-	-	■	■	ms12-em
On-off valves, electrically actuated <b>MS-EE</b>	4	-	-	■	■	■	■	■	-	-	■	■	ms4-ee
	6	-	-	■	■	-	■	■	-	-	■	■	ms6-ee
	9	-	-	■	■	-	■	■	-	-	■	■	ms9-ee
	12	-	-	■	■	-	■	-	-	-	■	■	ms12-ee
Soft-start valves, pneumatically actuated <b>MS-DL</b>	4	-	-	■	■	■	■	■	-	-	-	■	ms4-dl
	6	-	-	■	■	-	■	■	-	-	-	■	ms6-dl
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	■	■	-	■	-	-	-	-	■	ms12-dl
Soft-start valves, electrically actuated <b>MS-DE</b>	4	-	-	■	■	■	■	■	-	-	-	■	ms4-de
	6	-	-	■	■	-	■	■	-	-	-	■	ms6-de
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	■	■	-	■	-	-	-	-	■	ms12-de

# Water separators MS-LWS, MS series



Product range overview – MS series service units

Type	Size	Pneumatic connection in housing	Connecting plate	Performance Level			Supply voltage					
				Category 1, 1-channel	Category 3, 2-channel	Category 4, 2-channel with self-monitoring	24 V DC, Sub-D, 9-pin	24 V DC, connection pattern to EN 175301	24 V DC, connection M12 to IEC 61076-2-101	110/230 V AC, connection pattern to EN 175301	22 ... 31.6 V DC, connection M12, AS-i Safety at Work	
Code			AG.../AQ...	C	D	E	10V24	10V24/ V24	10V24P	V110/ V230	ASIS	
<b>Individual devices</b>												
Soft start and exhaust valves <b>MS-SV-C</b>		4	–									
		6	G1/2	G1/4, G3/8, G1/2, G3/4	■	–	–	–	■	■	–	–
		9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	■	–	–	–	■	■	■	–
		12	–									
Soft start and exhaust valves <b>MS-SV-D</b>		4	–									
		6	G1/2	G1/4, G3/8, G1/2, G3/4	–	■	–	–	■	■	–	–
		9	–									
		12	–									
Soft start and exhaust valves <b>MS-SV-E</b>		4	–									
		6	G1/2	G1/4, G3/8, G1/2, G3/4	–	–	■	■	–	–	–	■
		9	–									
		12	–									
Membrane air dryers <b>MS-LDM1</b>		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–	–
		9	–									
		12	–									
Branching modules <b>MS-FRM</b>		4	G1/8, G1/4	G1/8, G1/4, G3/8	–	–	–	–	–	–	–	–
		6	G1/4, G3/8, G1/2	G1/4, G3/8, G1/2, G3/4	–	–	–	–	–	–	–	–
		9	G3/4, G1	G1/2, G3/4, G1, G1 1/4, G1 1/2	–	–	–	–	–	–	–	–
		12	–	G1, G1 1/4, G1 1/2, G2	–	–	–	–	–	–	–	–
Distributor blocks <b>MS-FRM-FRZ</b>		4	G1/4	–	–	–	–	–	–	–	–	–
		6	G1/2	–	–	–	–	–	–	–	–	–
		9	–									
		12	–									
Flow sensors <b>SFAM</b>		4	–									
		6	G1/2	G1/2	–	–	–	–	–	–	–	–
		9	–	G1, G1 1/2	–	–	–	–	–	–	–	–
		12	–									

# Water separators MS-LWS, MS series

Product range overview – MS series service units

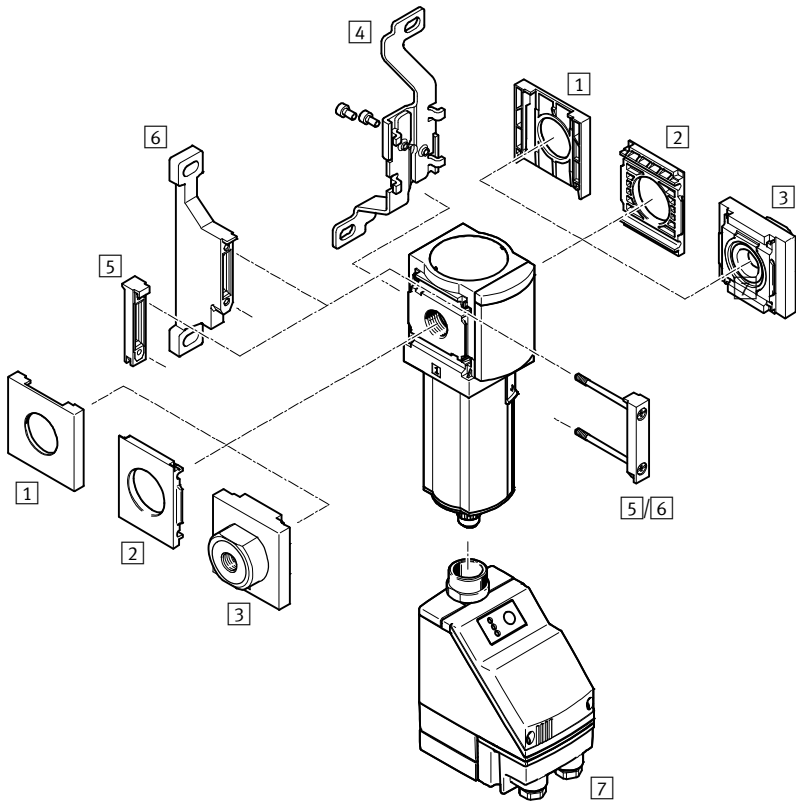


Type	Size	Bowl guard		Pressure indicator					Switch output		Options		→ Page/ Internet
		Plastic bowl with plastic bowl guard	Metal bowl	Cover plate (without pressure gauge)	Integrated MS pressure gauge	Adapter plate for EN pressure gauge G <sup>3</sup> / <sub>8</sub>	Adapter plate for EN pressure gauge G <sup>1</sup> / <sub>4</sub>	Pressure sensor	2x PNP or NPN, 1 analogue output 4 ... 20 mA	2x PNP or NPN, 1 analogue output 0 ... 10 V	Silencer	Flow direction from right to left	
Code		R	U	VS	AG	A8	A4	AD...	2SA	2SV	S	Z/R	
<b>Individual devices</b>													
Soft start and exhaust valves <b>MS-SV-C</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	■	■	-	■	■	-	-	■	■	ms6-sv
	9	-	-	■	■	-	■	■	-	-	■	■	ms9-sv
	12	-	-	-	-	-	-	-	-	-	-	-	-
Soft start and exhaust valves <b>MS-SV-D</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	■	■	-	■	■	-	-	■	■	ms6-sv
	9	-	-	-	-	-	-	-	-	-	-	-	-
Soft start and exhaust valves <b>MS-SV-E</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	■	■	-	■	■	-	-	■	■	ms6-sv
	9	-	-	-	-	-	-	-	-	-	-	-	-
Membrane air dryers <b>MS-LDM1</b>	4	-	■	-	-	-	-	-	-	-	-	■	ms4-ldm1
	6	-	■	-	-	-	-	-	-	-	-	■	ms6-ldm1
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
Branching modules <b>MS-FRM</b>	4	-	-	■	■	■	■	■	-	-	-	■	ms4-frm
	6	-	-	■	■	-	■	■	-	-	-	■	ms6-frm
	9	-	-	■	■	-	■	■	-	-	-	■	ms9-frm
	12	-	-	■	-	-	-	-	-	-	-	-	ms12-frm
Distributor blocks <b>MS-FRM-FRZ</b>	4	-	-	-	-	-	-	-	-	-	-	■	ms4-frm
	6	-	-	-	-	-	-	-	-	-	-	■	ms6-frm
	9	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-
Flow sensors <b>SFAM</b>	4	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	■	■	-	■	sfam-62
	9	-	-	-	-	-	-	-	■	■	-	■	sfam-90
	12	-	-	-	-	-	-	-	-	-	-	-	-

# Water separators MS6-LWS, MS series

Peripherals overview

## Water separator MS6-LWS



Note

Additional accessories:

- Module connector for combination with size MS4/MS6 or size MS9 → Internet: amv, rmv, armv
- Adapter for mounting on profiles → Internet: ipm-80, ipm-40-80, ipm-80-80

### Mounting attachments and accessories

		Individual device		Combination		→ Page/Internet
		Without connecting plate	With connecting plate	Without connecting plate	With connecting plate	
1	Cover cap MS6-END	■	-	■	-	ms6-end
2	Mounting plate MS6-AEND	■ <sup>1)</sup>	-	■ <sup>1)</sup>	-	ms6-aend
3	Connecting plate-SET MS6-AG...	-	■ <sup>1)</sup>	-	■ <sup>1)</sup>	ms6-ag
	Connecting plate-SET MS6-AQ...	-	■ <sup>1)</sup>	-	■ <sup>1)</sup>	ms6-aq
4	Mounting bracket MS6-WB	■	■	-	-	ms6-wb
5	Module connector MS6-MV	-	■	■	■	ms6-mv
6	Mounting bracket MS6-WP	■	■	■	■	ms6-wp
	Mounting bracket (not illustrated) MS6-WPB/WPE/WPM	■	■	■	■	ms6-wp
7	Fully automatic, electrically actuated condensate drain E2/E3/E4	■	■	■	■	14

1) Module connector MS6-MV [5] or mounting bracket MS6-WP/WPB/WPE/WPM [6] is required for mounting.



# Water separators MS6-LWS, MS series

Type codes

		MS	6	-	LWS	-	1/4	-	U	-	V
<b>Series</b>											
MS	Standard service unit										
<b>Size</b>											
6	Grid dimension 62 mm										
<b>Service function</b>											
LWS	Water separator										
<b>Pneumatic connection</b>											
1/4	Female thread G $\frac{1}{4}$										
3/8	Female thread G $\frac{3}{8}$										
1/2	Female thread G $\frac{1}{2}$										
<b>Bowl guard</b>											
U	Integrated as metal bowl										
<b>Condensate drain</b>											
V	Fully automatic										

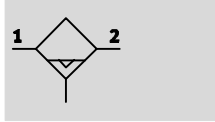
Further variants can be ordered using the modular system → 14

- Pneumatic connection
- Condensate drain
- Type of mounting
- EU certification
- UL certification
- Flow direction

# Water separators MS6-LWS, MS series

Technical data

Condensate drain,  
fully automatic



- - Flow rate  
2,400 ... 3,800 l/min
- - Temperature range  
+1 ... +60 °C
- - Operating pressure  
0.8 ... 16 bar
- - [www.festo.com](http://www.festo.com)



The maintenance-free water separator removes condensate from the compressed air.

- Constantly high condensate separation (99%) up to the maximum flow rate
- Metal bowl
- Available with fully automatic or fully automatic, electrically actuated condensate drain
- Optional device variant EX4 for use in potentially explosive areas in zones 1, 2, 21 and 22

General technical data		
Size	MS6	
Pneumatic connection 1, 2	Female thread	G $\frac{1}{4}$ , G $\frac{3}{8}$ or G $\frac{1}{2}$
	Connecting plate AG...	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$ or G $\frac{3}{4}$
	Connecting plate AQ...	NPT $\frac{1}{4}$ , NPT $\frac{3}{8}$ , NPT $\frac{1}{2}$ or NPT $\frac{3}{4}$
Constructional design	Centrifugal separator	
Type of mounting	Via accessories	
	In-line installation	
Mounting position	Vertical $\pm 5^\circ$	
Air purity class at the output	Compressed air in accordance with ISO 8573-1:2010 [7:7:4] (with variant E2, E3 or E4: [--:7:4])	
Bowl guard	Integrated as metal bowl	
Condensate drain	Fully automatic	
	Fully automatic, electrically actuated	
Degree of condensate separation [%]	99	
Max. condensate volume [ml]	38	

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

Standard nominal flow rate q <sub>nN</sub> <sup>1)</sup>			
Size	MS6		
Pneumatic connection	G $\frac{1}{4}$ /NPT $\frac{1}{4}$	G $\frac{3}{8}$ /NPT $\frac{3}{8}$	G $\frac{1}{2}$ /NPT $\frac{1}{2}$
q <sub>nN</sub> [l/min]	2,400	3,500	3,800

1) Measured at p<sub>1</sub> = 6 bar and Δp = 1 bar

# Water separators MS6-LWS, MS series

Technical data

Operating and environmental conditions		
Condensate drain	Fully automatic V	Fully automatic, electrical E2/E3/E4
Size	MS6	MS6
Operating pressure [bar]	2 ... 12 (2 ... 10) <sup>1)</sup>	0.8 ... 16 (0.8 ... 10) <sup>1)</sup>
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:-:-]	Compressed air in accordance with ISO 8573-1:2010 [-:-:-]
	Inert gases	
Ambient temperature [°C]	+5 ... +60	+1 ... +60
Temperature of medium [°C]	+5 ... +60	+1 ... +60
Storage temperature [°C]	-10 ... +60	+1 ... +60
Corrosion resistance class CRC <sup>2)</sup>	2	
UL certification	cULus recognized (OL)	

1) Value in brackets applies to MS6-LWS with UL certification.

2) Corrosion resistance class CRC 2 to Festo standard FN 940070

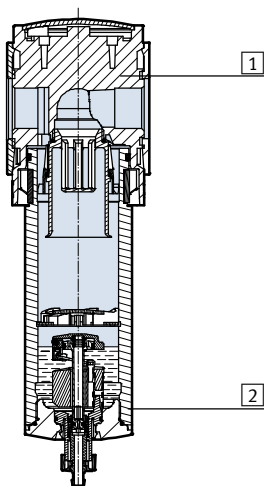
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

ATEX	
EU certification	EX4
ATEX category gas	II 2G
Ex-ignition protection type gas	c T6 X
ATEX category dust	II 2D
EX-ignition protection type dust	c 60 °C X
ATEX ambient temperature	+5 °C ≤ Ta ≤ +60 °C
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Weight [g]	
Size	MS6
Water separator	820
Water separator with fully automatic, electrically actuated condensate drain E2/E3/E4	1,800

## Materials

Sectional view



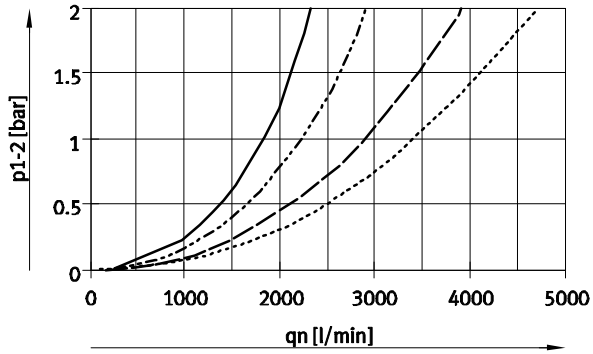
Water separator		
1	Housing	Die-cast aluminium
2	Bowl	Wrought aluminium alloy
	Inspection window	PA
-	Seals	NBR
Note on materials		RoHS-compliant (not with variant E2, E3 or E4) Free of copper and PTFE

# Water separators MS6-LWS, MS series

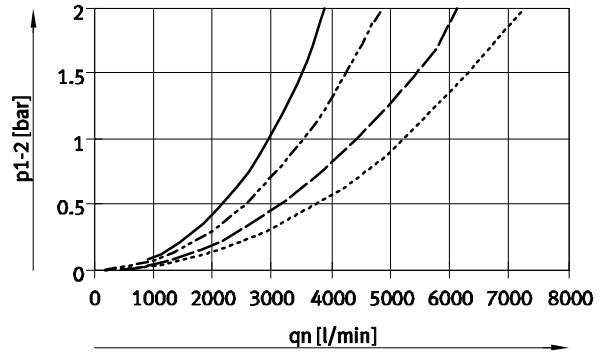
Technical data

## Standard flow rate $q_n$ as a function of differential pressure $p_{1-2}$

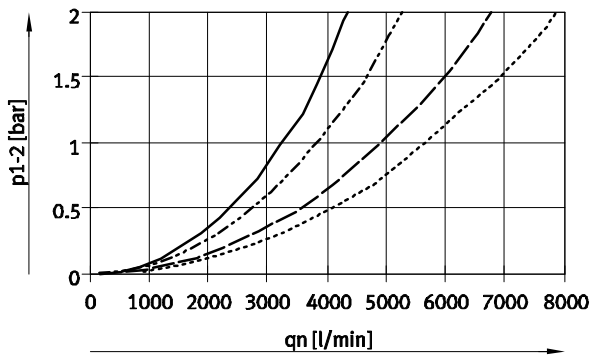
Pneumatic connection  $G\frac{1}{4}/NPT\frac{1}{4}$



Pneumatic connection  $G\frac{3}{8}/NPT\frac{3}{8}$



Pneumatic connection  $G\frac{1}{2}/NPT\frac{1}{2}$



- 4 bar
- - - 6 bar
- · - · 10 bar
- · · · 14 bar

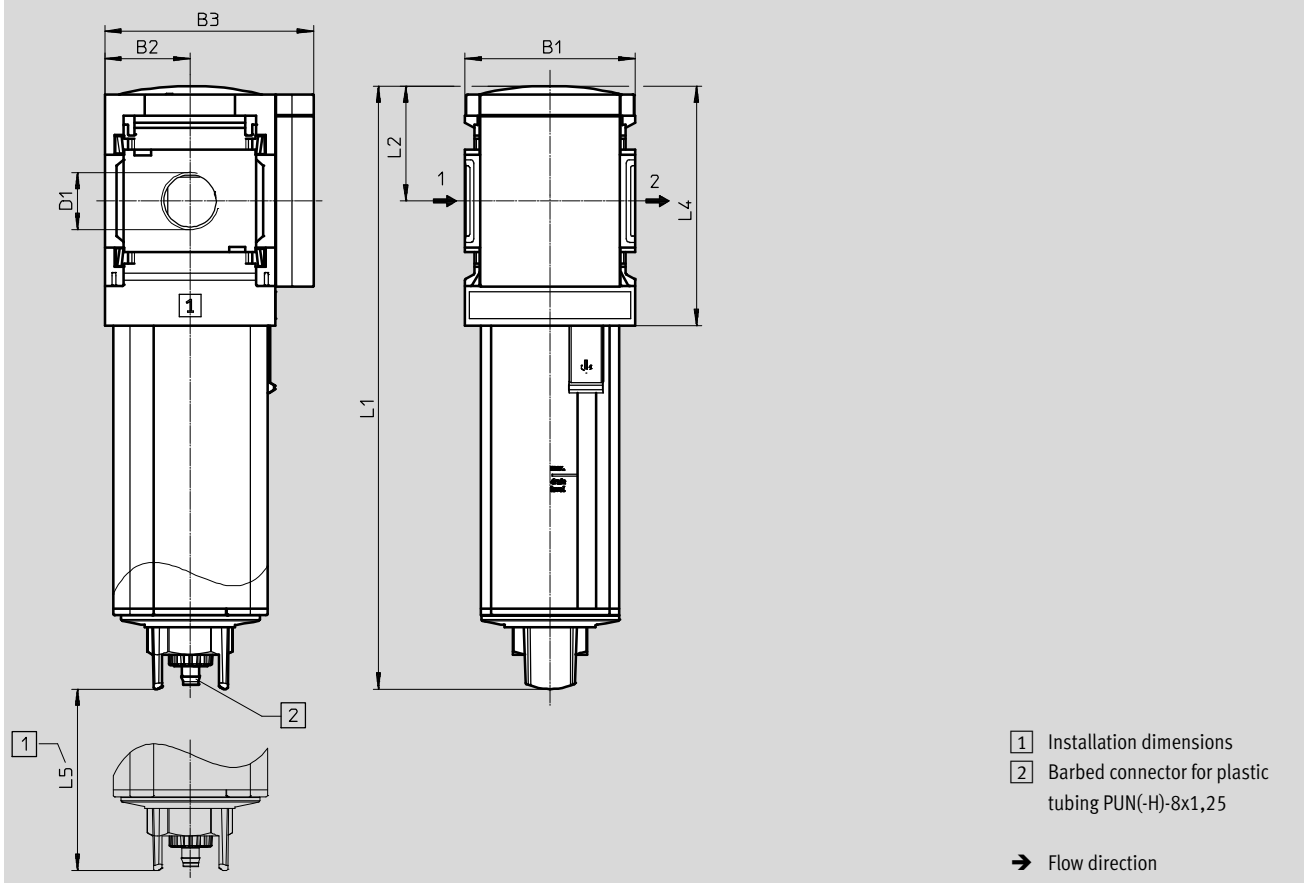
# Water separators MS6-LWS, MS series

Technical data

## Dimensions – Basic version

Download CAD data → [www.festo.com](http://www.festo.com)

Fully automatic condensate drain V



- 1 Installation dimensions
- 2 Barbed connector for plastic tubing PUN(-H)-8x1,25

→ Flow direction

Type	B1	B2	B3	D1	L1	L2	L4	L5
MS6-LWS-1/4-...-V	62	31	76	G $\frac{1}{4}$	220	42	88	64
MS6-LWS-3/8-...-V				G $\frac{3}{8}$				
MS6-LWS-1/2-...-V				G $\frac{1}{2}$				

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

# Water separators MS6-LWS, MS series

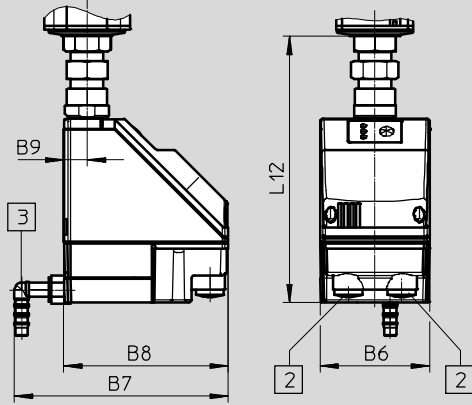
Technical data

## Dimensions – Condensate drain

Download CAD data → [www.festo.com](http://www.festo.com)

Fully automatic, electrically actuated E2/E3/E4

Technical data → Internet: [pwea](http://pwea)



Condensate drain PWEA:

- 2 Electrical connection: Screw terminal PG9
- 3 Connection 360° rotatable for plastic tubing PUN-H-12x2

Type	B6	B7	B8	B9	L12
MS6-LWS-...-E2/E3/E4	72	140	108	15	174.5

## Ordering data

Size	Condensate drain	Connection	Part No.	Type
Integrated as metal bowl				
MS6	Fully automatic	G1/4	564868	MS6-LWS-1/4-U-V
		G3/8	564869	MS6-LWS-3/8-U-V
		G1/2	564870	MS6-LWS-1/2-U-V

# Water separators MS6-LWS, MS series

Ordering data – Modular products

Ordering table		Grid dimension [mm]	62	Condi- tions	Code	Enter code	
<b>M</b>	Module No.	<b>564858</b>					
	Series	Standard			<b>MS</b>	MS	
	Size	6			<b>6</b>	6	
	Function	Water separator			<b>-LWS</b>	-LWS	
	Pneumatic connection	Female thread G $\frac{1}{4}$		1	<b>-1/4</b>		
		Female thread G $\frac{3}{8}$		1	<b>-3/8</b>		
		Female thread G $\frac{1}{2}$		1	<b>-1/2</b>		
		Connecting plate G $\frac{1}{4}$			<b>-AGB</b>		
		Connecting plate G $\frac{3}{8}$			<b>-AGC</b>		
		Connecting plate G $\frac{1}{2}$			<b>-AGD</b>		
		Connecting plate G $\frac{3}{4}$			<b>-AGE</b>		
		Connecting plate NPT $\frac{1}{4}$		1	<b>-AQN</b>		
		Connecting plate NPT $\frac{3}{8}$		1	<b>-AQP</b>		
		Connecting plate NPT $\frac{1}{2}$		1	<b>-AQR</b>		
		Connecting plate NPT $\frac{3}{4}$		1	<b>-AQS</b>		
	Bowl guard	Metal bowl			<b>-U</b>	-U	
	Condensate drain	Fully automatic (P1 max. 12 bar)			<b>-V</b>		
		External, fully automatic, electric	110 V AC, terminals (P1 max. 16 bar)		1	<b>-E2</b>	
			230 V AC, terminals (P1 max. 16 bar)		1	<b>-E3</b>	
			24 V DC, terminals (P1 max. 16 bar)		1	<b>-E4</b>	
<b>O</b>	Type of mounting	Mounting bracket standard design		2	<b>-WP</b>		
		Mounting bracket for attaching the service units		1 2	<b>-WPM</b>		
		Mounting bracket centrally at rear (wall mounting top and bottom), connecting plates not required			<b>-WB</b>		
	EU certification	II 2GD to EU Explosion Protection Directive (ATEX)			<b>-EX4</b>		
	UL certification	cULus, ordinary location for Canada and USA			<b>-UL1</b>		
	Flow direction	Flow direction from right to left			<b>-Z</b>		

- 1 1/4, 3/8, 1/2, AQN, AQP, AQR, AQS, E2, E3, E4, WPM  
Not with EU certification EX4
- 2 WP, WPM Only with connecting plate AGB, AGC, AGD, AGE, AQN, AQP, AQR or AQS.

**M** Mandatory data  
**O** Options

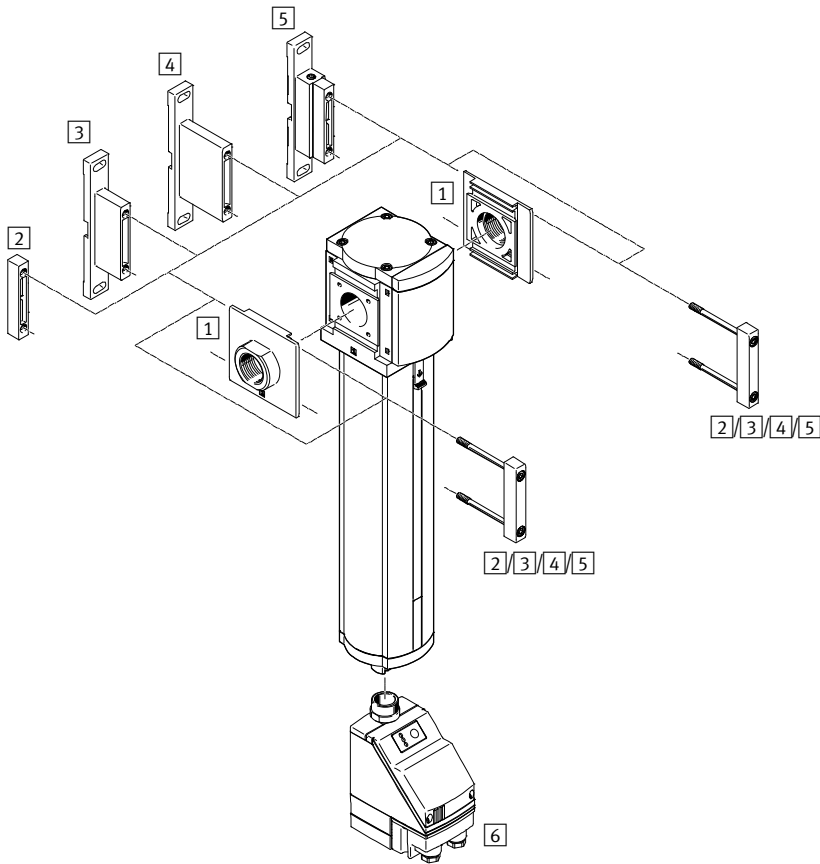
**Transfer order code**

564858 MS 6 - LWS - [ ] - U - [ ] - [ ] - [ ] - [ ] - [ ]

# Water separators MS9-LWS, MS series

Peripherals overview

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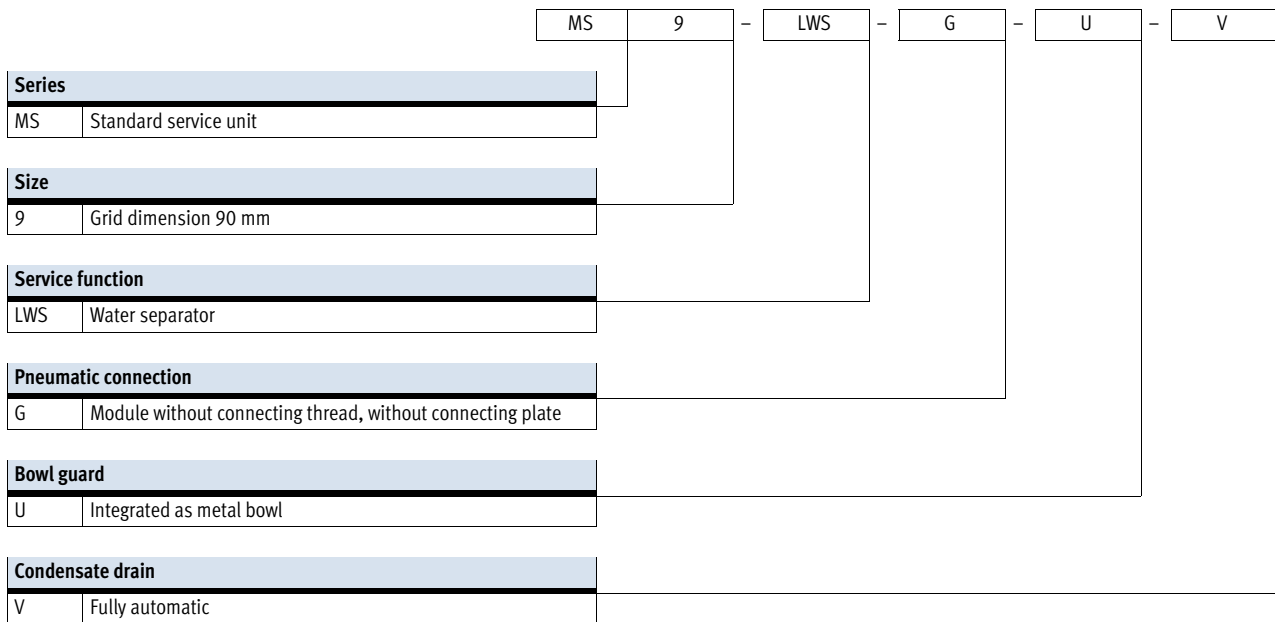
- - Note  
 Additional accessories:  
 - Module connector for combinations with size MS6, MS9 or MS12  
 → Internet: rmv, armv

Mounting attachments and accessories					
	Individual device	Combination		→ Page/ Internet	
		With female thread	With connecting plate AG.../AQ...		Module without connecting thread, without connecting plate G
		Without EU certification EX4	With EU certification EX4		
1	Connecting plate-SET MS9-AG...	-	■	■	ms9-ag
	Connecting plate-SET MS9-AQ...	-	■	-	ms9-aq
2	Module connector MS9-MV	-	-	■	ms9-mv
3	Mounting bracket MS9-WP	■	■	■	ms9-wp
4	Mounting bracket MS9-WPB	■	■	■	ms9-wp
5	Mounting bracket MS9-WPM	■	■	-	ms9-wp
6	Condensate drain, fully automatic, electrically actuated E2/E3/E4	■	■	■	22



# Water separators MS9-LWS, MS series

Type codes



Additional variants can be ordered using the modular product system → 22

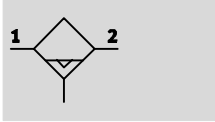
- Pneumatic connection
- Condensate drain
- Type of mounting
- EU certification
- UL certification
- Flow direction




# Water separators MS9-LWS, MS series

Technical data

FESTO

Condensate drain,  
fully automatic




-  - Flow rate  
12,000 ... 15,000 l/min
-  - Temperature range  
+1 ... +60 °C
-  - Operating pressure  
0.8 ... 16 bar



The water separator removes condensate from the compressed air.

- Constantly high condensate separation (99%) up to the maximum flow rate
- Metal bowl
- Available with fully automatic or fully automatic, electrically actuated condensate drain
- Optional device variant EX4 for use in potentially explosive areas in zones 1, 2, 21 and 22

General technical data	
Size	MS9
Pneumatic connection 1, 2	
Female thread	G3/4, G1, NPT3/4 or NPT1
Connecting plate AG...	G1/2, G3/4, G1, G1 1/4 or G1 1/2
Connecting plate AQ...	NPT1/2, NPT3/4, NPT1, NPT1 1/4 or NPT1 1/2
Module without connecting thread/plate G	-
Design	Centrifugal separator
Type of mounting	Via accessories In-line installation
Mounting position	Vertical ±5°
Air purity class at the output	Compressed air in accordance with ISO 8573-1:2010 [-:7:4]
Bowl guard	Integrated as metal bowl
Condensate drain	Fully automatic Fully automatic, electrically actuated
Degree of condensate separation [%]	99
Max. condensate volume [ml]	220

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

Standard nominal flow rate $q_{nN}^{1)}$ [l/min]			
Pneumatic connection	G3/4/NPT3/4	G1/NPT1	Module without connecting thread, without connecting plate G
$q_{nN}$ [l/min]	12,000 ±15%	15,000 ±15%	15,000 ±15%

1) Measured at  $p_1 = 6$  bar and  $\Delta p = 1$  bar

# Water separators MS9-LWS, MS series

Technical data

Operating and environmental conditions		
Condensate drain	Fully automatic V	Fully automatic, electrically actuated E2/E3/E4
Operating pressure [bar]	2 ... 12	0.8 ... 16
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [---:--]	
Ambient temperature [°C]	+5 ... +60	+1 ... +60
Temperature of medium [°C]	+5 ... +60	+1 ... +60
Storage temperature [°C]	+5 ... +60	+1 ... +60
Corrosion resistance class CRC <sup>1)</sup>	2	
Certification (variant UL1)	cULus recognized (OL)	

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

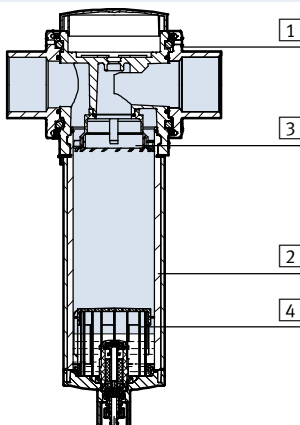
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

ATEX	
EU certification	EX4
ATEX category gas	II 2G
Ex-ignition protection type gas	c T6 X
ATEX category dust	II 2D
EX-ignition protection type dust	c 60 °C X
ATEX ambient temperature	+5 °C ≤ Ta ≤ +60 °C
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Weight [g]	
Water separator	2,000
Water separator with condensate drain, fully automatic, electrically actuated E2/E3/E4	2,400

## Materials

Sectional view



Water separator		
1	Housing	Die-cast aluminium
2	Bowl	Wrought aluminium alloy
	Inspection window	PA
3	Spin disc	POM
4	Isolating disc	POM
-	Cover	PA reinforced
-	Connecting plate, module connector, mounting bracket	Die-cast aluminium
-	Seals	NBR
Note on materials		RoHS-compliant (not with variant E2, E3 or E4)

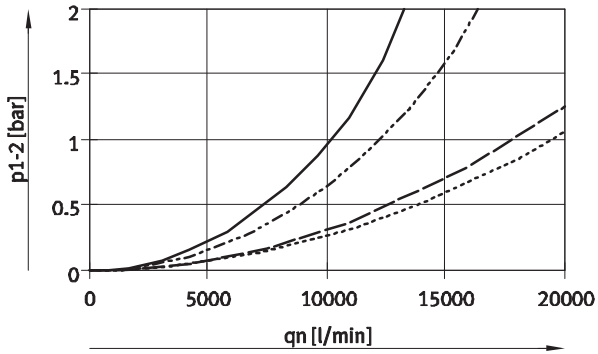
# Water separators MS9-LWS, MS series

Technical data

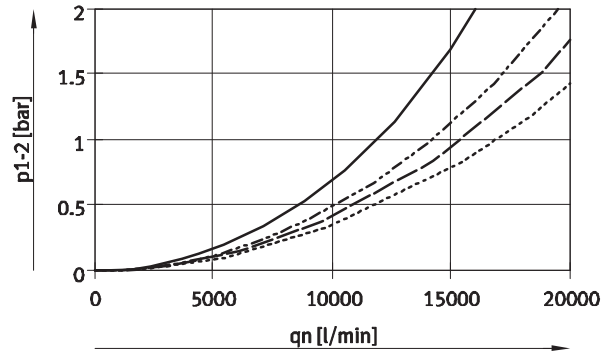
FESTO

## Standard flow rate $q_n$ as a function of differential pressure $\Delta p_{1-2}$

Pneumatic connection G $\frac{3}{4}$ /NPT $\frac{3}{4}$



Pneumatic connection G1/NPT1

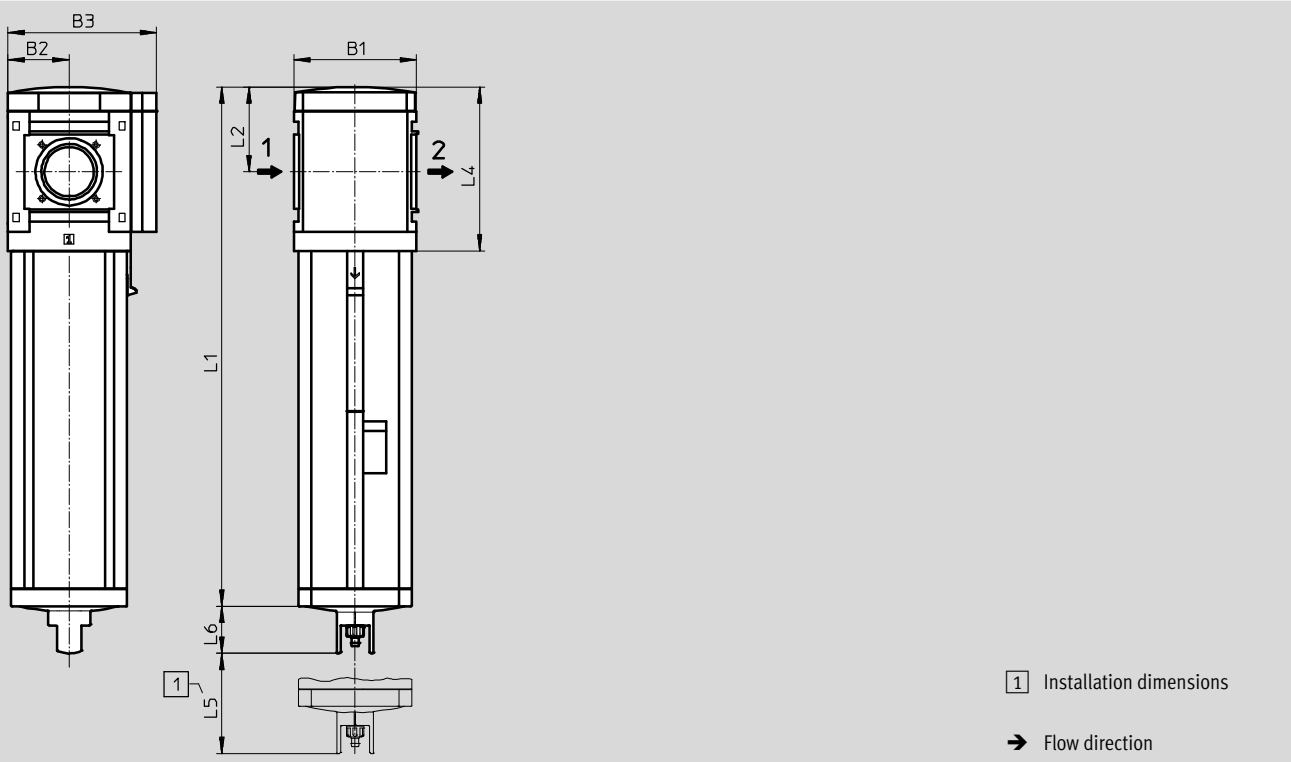


— 4 bar  
- - - 6 bar  
- · - · 10 bar  
· · · · 12 bar

## Dimensions – Basic version

Download CAD data → [www.festo.com](http://www.festo.com)

Module without connecting thread, without connecting plate G, fully automatic condensate drain V



Type	B1	B2	B3	L1	L2	L4	L5	L6
MS9-LWS-G	90	45	109	310.5	62	120	50	34.5

# Water separators MS9-LWS, MS series

Technical data

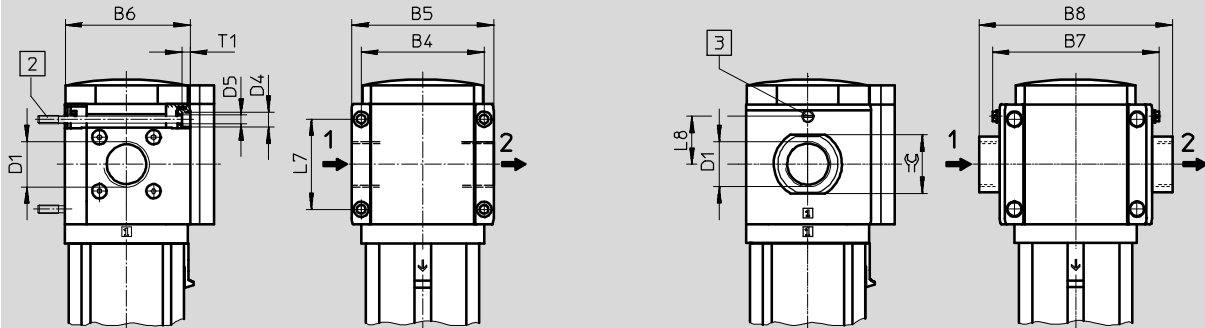
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## Dimensions – Connecting thread/connecting plate

Download CAD data → [www.festo.com](http://www.festo.com)

With female thread

With connecting plate AG.../AQ...



2 Mounting screw M6xmin.90 to DIN 912 (not included in the scope of delivery) for wall mounting without mounting bracket

3 Earthing screw M4x8 (only with MS9-...-EX4)

→ Flow direction

Type	B4	B5	B6	B7		B8	D1	D4	D5	L7	L8		T1	☉
					EX4							EX4		
MS9-LWS-3/4	90	104	91.5	-	-	-	G3/4	11	6.5	66	-	-	6	-
MS9-LWS-1							G1							
MS9-LWS-AGD	-	-	-	112	122	132	G1/2	-	-	-	35	-	-	30
MS9-LWS-AGE							G3/4							36
MS9-LWS-AGF							G1							41
MS9-LWS-AGG							G1 1/4							50
MS9-LWS-AGH							G1 1/2							55
MS9-LWS-N3/4	90	104	91.5	-	-	-	NPT3/4-14	11	6.5	66	-	-	6	-
MS9-LWS-N1							NPT1-11 1/2							
MS9-LWS-AQR	-	-	-	112	122	132	NPT1/2-14	-	-	-	35	-	-	30
MS9-LWS-AQS							NPT3/4-14							36
MS9-LWS-AQT							NPT1-11 1/2							41
MS9-LWS-AQU							NPT1 1/4-11 1/2							50
MS9-LWS-AQV							NPT1 1/2-11 1/2							55

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

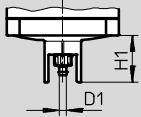
# Water separators MS9-LWS, MS series

Technical data

## Dimensions – Condensate drain

Download CAD data → [www.festo.com](http://www.festo.com)

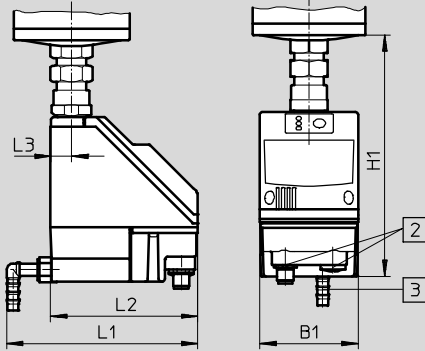
Fully automatic V



Barbed connector for plastic tubing  
PUN(-H)-8x1,25

Fully automatic, electrically actuated E2/E3/E4

Technical data → Internet: [pwea](http://pwea)



Condensate drain PWEA:

- 2 Electrical connection: Screw terminal PG9
- 3 Connection 360° rotatable for plastic tubing PUN-H-12x2

Type	B1	D1	H1	L1	L2	L3
MS9-LWS-...-V	–	5.6	34.5	–	–	–
MS9-LWS-...-E2/E3/E4	72	–	178	140	108	15

## Ordering data

Size	Condensate drain	Connection	Part No.	Type
MS9	Fully automatic	–	571468	MS9-LWS-G-U-V

# Water separators MS9-LWS, MS series

Ordering data – Modular products

Ordering table		Grid dimension [mm]	90	Condi- tions	Code	Enter code	
<b>M</b>	Module No.	<b>567857</b>					
	Series	Standard			<b>MS</b>	MS	
	Size	9			<b>9</b>	9	
	Function	Water separator			<b>-LWS</b>	-LWS	
	Pneumatic connection	Female thread G3/4		1	<b>-3/4</b>		
		Female thread G1		1	<b>-1</b>		
		Connecting plate G1/2			<b>-AGD</b>		
		Connecting plate G3/4			<b>-AGE</b>		
		Connecting plate G1			<b>-AGF</b>		
		Connecting plate G1 1/4			<b>-AGG</b>		
		Connecting plate G1 1/2			<b>-AGH</b>		
		Female thread NPT3/4		1	<b>-N3/4</b>		
		Female thread NPT1		1	<b>-N1</b>		
		Connecting plate NPT1/2		1	<b>-AQR</b>		
		Connecting plate NPT3/4		1	<b>-AQS</b>		
		Connecting plate NPT1		1	<b>-AQT</b>		
		Connecting plate NPT1 1/4		1	<b>-AQU</b>		
		Connecting plate NPT1 1/2		1	<b>-AQV</b>		
		Module without connecting thread, without connecting plate		1	<b>-G</b>		
	Bowl	Metal bowl			<b>-U</b>	-U	
	Condensate drain	Fully automatic (P1 max. 12 bar)			<b>-V</b>		
		External, fully automatic, electric	110 V AC, terminals (P1 max. 16 bar)		1	<b>-E2</b>	
			230 V AC, terminals (P1 max. 16 bar)		1	<b>-E3</b>	
			24 V DC, terminals (P1 max. 16 bar)		1	<b>-E4</b>	
<b>O</b>	Type of mounting	Mounting bracket standard design		2	<b>-WP</b>		
		Mounting bracket for attaching the service units		1 2	<b>-WPM</b>		
		Mounting bracket for large wall gap		2	<b>-WPB</b>		
	EU certification	II 2GD to EU Explosion Protection Directive (ATEX)			<b>-EX4</b>		
	UL certification	cULus, ordinary location for Canada and USA			<b>-UL1</b>		
	Flow direction	Flow direction from right to left			<b>-Z</b>		

- 1 3/4, 1, N3/4, N1, AQR, AQS, AQT, AQU, AQV, G, E2, E3, E4, WPM  
Not with EU certification EX4
- 2 WP, WPM, WPB Not with pneumatic connection G

**M** Mandatory data  
**O** Options

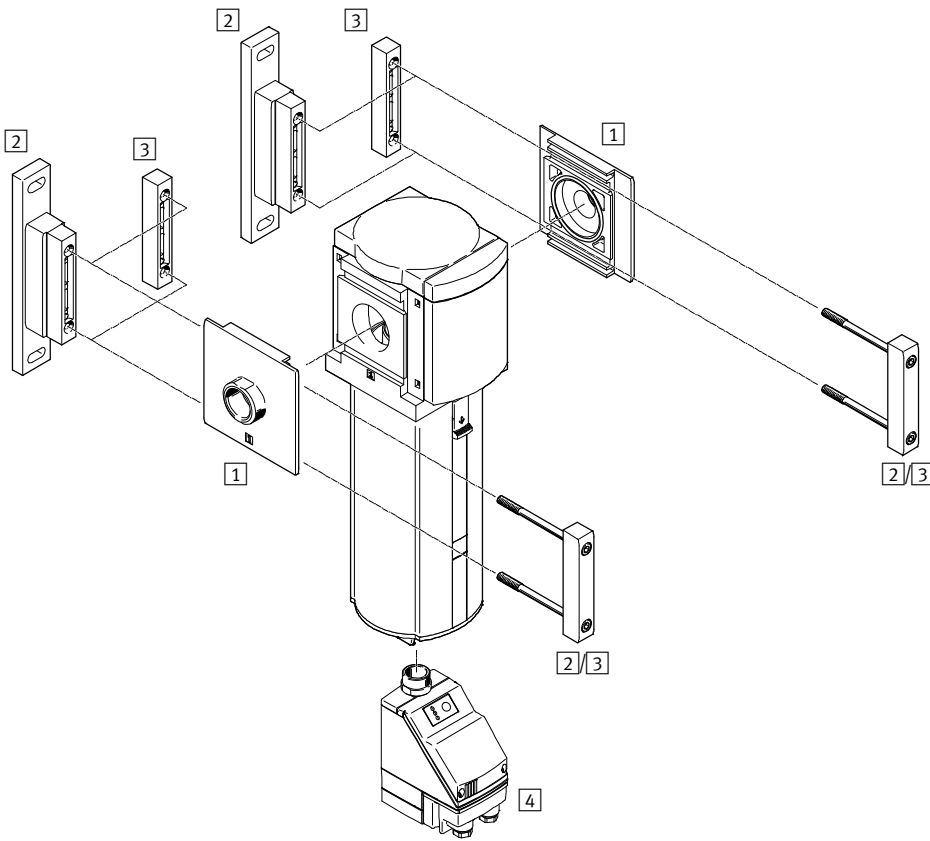
**Transfer order code**


567857 MS 9 - LWS - [ ] - U - [ ] - [ ] - [ ] - [ ] - [ ]

# Water separators MS12-LWS, MS series

Peripherals overview

FESTO



-  - Note  
 Additional accessories:  
 - Module connector for combination with size MS9  
 → Internet: armv

Mounting attachments and accessories		→ Page/Internet
1	Connecting plate-SET MS12-AG...	ms12-ag
	Connecting plate-SET MS12-AQ...	ms12-aq
2	Mounting bracket MS12-WP	ms12-wp
3	Module connector MS12-MV	ms12-mv
4	Fully automatic, electrically actuated condensate drain E2/E3/E4	30



# Water separators MS12-LWS, MS series

Type codes

		MS	12	-	LWS	-	G	-	U	-	V
<b>Series</b>											
MS	Standard service unit										
<b>Size</b>											
12	Grid dimension 124 mm										
<b>Service function</b>											
LWS	Water separator										
<b>Pneumatic connection</b>											
G	Module without connecting thread, without connecting plate										
<b>Bowl guard</b>											
U	Integrated as metal bowl										
<b>Condensate drain</b>											
V	Fully automatic										

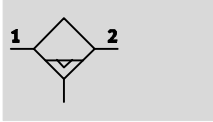
Additional variants can be ordered using the modular product system → 30




- Pneumatic connection
- Condensate drain
- Type of mounting
- Flow direction

# Water separators MS12-LWS, MS series

Technical data

Condensate drain,  
fully automatic



-  - Flow rate  
25,000 l/min
-  - Temperature range  
+1 ... +60 °C
-  - Operating pressure  
0.8 ... 16 bar



The water separator removes condensate from the compressed air.

- Constantly high condensate separation (99%) up to the maximum flow rate
- Available with fully automatic or fully automatic, electrically actuated condensate drain
- Metal bowl

General technical data		
Pneumatic connection 1, 2		
Connecting plate AG...		G1, G1¼, G1½ or G2
Connecting plate AQ...		NPT1, NPT1¼, NPT1½ or NPT2
Module without connecting thread/plate G		-
Design		Centrifugal separator
Type of mounting		Via accessories
		In-line installation
Mounting position		Vertical ±5°
Air purity class at the output		Compressed air to ISO 8573-1:2010 [-:7:4]
Bowl guard		Integrated as metal bowl
Condensate drain		Fully automatic
		Fully automatic, electrically actuated
Degree of condensate separation	[%]	99
Max. condensate volume	[ml]	400

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

Flow rates		
Standard nominal flow rate	[l/min]	25,000 ±15%
q <sub>nN</sub> <sup>1)</sup>		
Max. standard flow rate	[l/min]	40,000 ±15%
q <sub>n max.</sub>		

1) Measured at p<sub>1</sub> = 6 bar and Δp = 0.5 bar

# Water separators MS12-LWS, MS series

Technical data

Operating and environmental conditions		
Condensate drain	Fully automatic V	Fully automatic, electrically actuated E2/E3/E4
Operating pressure [bar]	2 ... 12	0.8 ... 16
Operating medium	Compressed air to ISO 8573-1:2010 [:-:-:-]	
Ambient temperature [°C]	+5 ... +60	+1 ... +60
Temperature of medium [°C]	+5 ... +60	+1 ... +60
Storage temperature [°C]	+5 ... +60	+1 ... +60
Corrosion resistance class CRC <sup>1)</sup>	2	

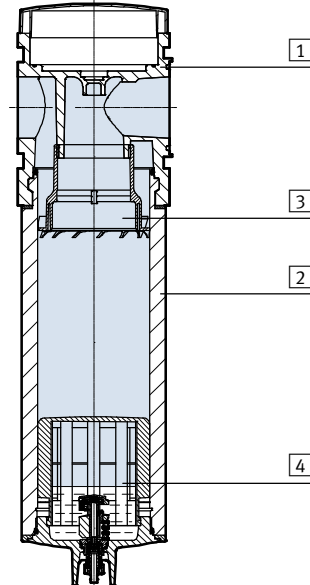
1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Weight [g]	
Water separator	6,300
Water separator with fully automatic, electrically actuated condensate drain E2/E3/E4	7,000
Accessories	
Connecting plate AG...	1,300
Mounting bracket WP	700

## Materials

Sectional view



Water separator		
1	Housing	Die-cast aluminium
2	Bowl	Wrought aluminium alloy
	Inspection window	PA
3	Spin disc	POM
4	Separating plate	POM
-	Cover	PA reinforced
-	Connecting plate, module connector, mounting bracket	Die-cast aluminium
-	Seals	Nitrile rubber
Note on materials		RoHS-compliant (not with variant E2, E3 or E4)

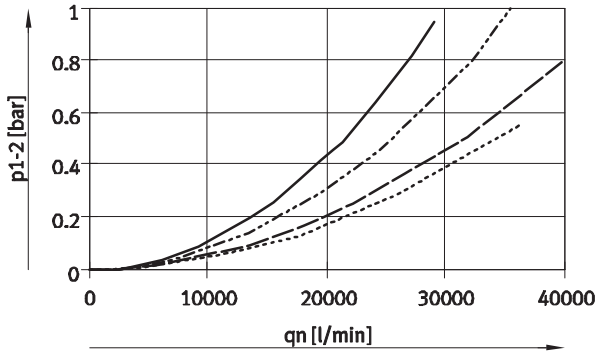
# Water separators MS12-LWS, MS series

Technical data

FESTO

## Standard flow rate $q_n$ as a function of differential pressure $\Delta p_{1-2}$

Pneumatic connection G1½/G2/NPT1½/NPT2

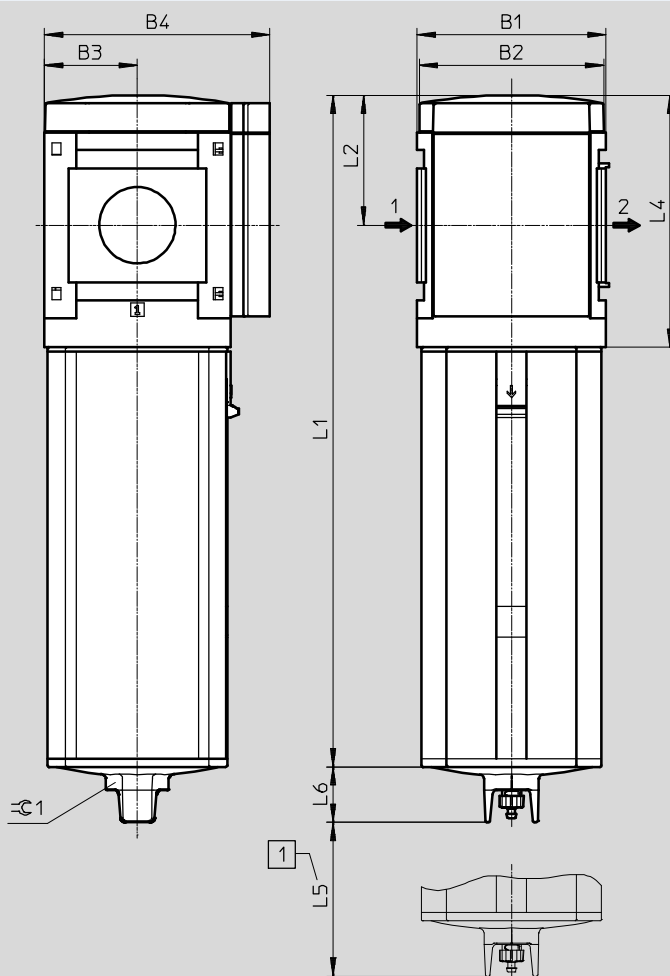


— 4 bar      - - - 10 bar  
 - - - 6 bar      ····· 12 bar

## Dimensions – Basic version

Download CAD data → [www.festo.com](http://www.festo.com)

Module without connecting thread, without connecting plate G, fully automatic condensate drain V



Note  
 Dimensions with  
 - connecting plate → ms12-ag  
 - mounting bracket → ms12-wp  
 1 Installation dimensions  
 → Flow direction

Type	B1	B2	B3	B4	L1	L2	L4	L5	L6	∅1
MS12-LWS-G	124	122	61	148	441	85	165	60	36	36

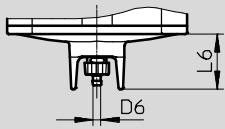
# Water separators MS12-LWS, MS series

Technical data

## Dimensions – Condensate drain

Download CAD data → [www.festo.com](http://www.festo.com)

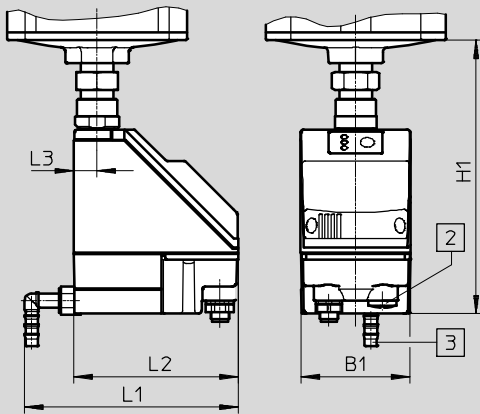
Fully automatic V



Barbed fitting for plastic tubing  
PUN(-H)-8x1,25

Fully automatic, electrically actuated E2/E3/E4

Technical data → Internet: [pwea](http://pwea)



Condensate drain PWEA:  
 [2] Electrical connection:  
 Screw terminal PG9  
 [3] Connection 360° rotatable for  
 plastic tubing PUN-H-12x2

Type	B1	D6	H1	L1	L2	L3	L6
MS12-LWS-...-V	-	5.6	-	-	-	-	36
MS12-LWS-...-E2/E3/E4	72	-	179	140	108	15	-

## Ordering data

Size	Condensate drain	Connection	Part No.	Type
MS12	Fully automatic	-	<b>8005550</b>	<b>MS12-LWS-G-U-V</b>

# Water separators MS12-LWS, MS series

Ordering data – Modular products

Ordering table		Grid dimension [mm]	124	Condi- tions	Code	Enter code	
<b>M</b>	Module No.	<b>569827</b>					
	Series	Standard			<b>MS</b>	MS	
	Size	12			<b>12</b>	12	
	Function	Water separator			<b>-LWS</b>	-LWS	
	Pneumatic connection	Connecting plate G1			<b>-AGF</b>		
		Connecting plate G1¼			<b>-AGG</b>		
		Connecting plate G1½			<b>-AGH</b>		
		Connecting plate G2			<b>-AGI</b>		
		Connecting plate NPT1			<b>-AQT</b>		
		Connecting plate NPT1¼			<b>-AQU</b>		
		Connecting plate NPT1½			<b>-AQV</b>		
		Connecting plate NPT2			<b>-AQW</b>		
		Module without connecting thread, without connecting plate		<b>1</b>	<b>-G</b>		
	Bowl	Metal bowl			<b>-U</b>	-U	
	Condensate drain	Fully automatic (P1 max. 12 bar)			<b>-V</b>		
		External, fully automatic, electric	110 V AC, terminals (P1 max. 16 bar)				<b>-E2</b>
			230 V AC, terminals (P1 max. 16 bar)				<b>-E3</b>
			24 V DC, terminals (P1 max. 16 bar)				<b>-E4</b>
<b>O</b>	Type of mounting	Mounting bracket standard design		<b>2</b>	<b>-WP</b>		
	Flow direction	Flow direction from right to left			<b>-Z</b>		

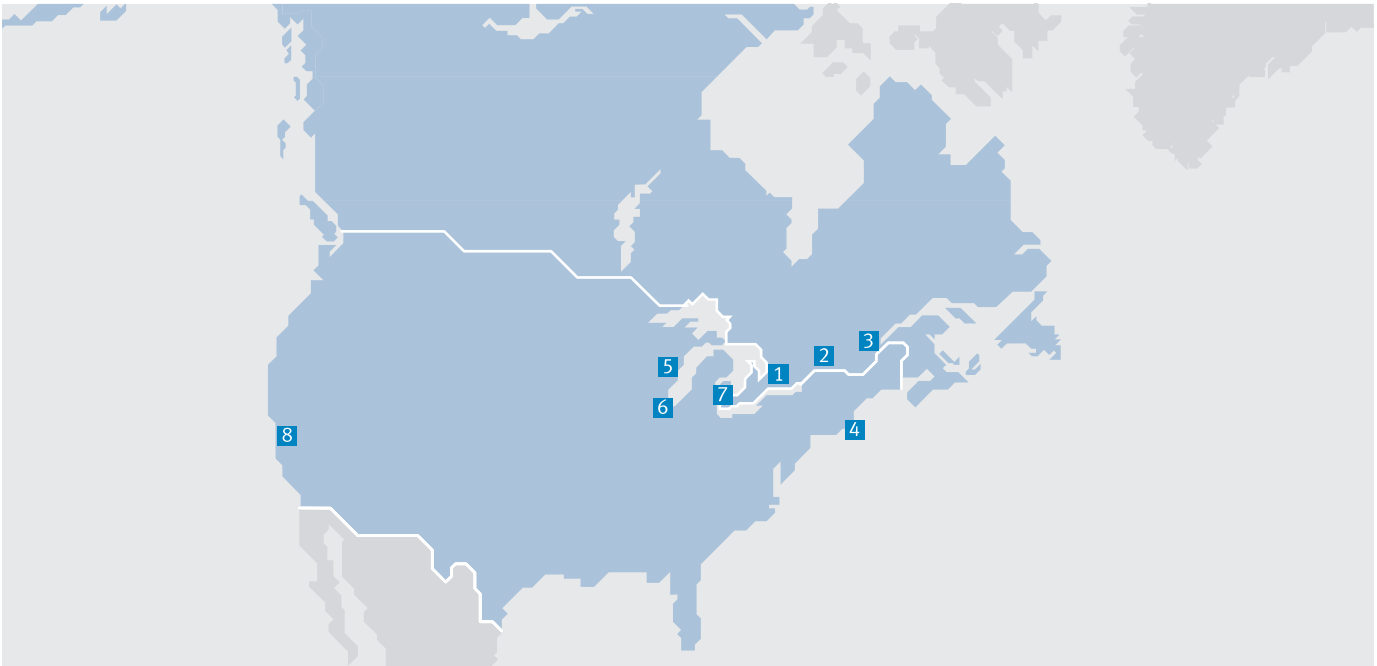
- 1 G** Not with mounting type WP.
- 2 WP** Only with connecting plate AGF, AGG, AGH, AGI, AQT, AQU, AQV or AQW.

- M** Mandatory data
- O** Options

**Transfer order code**

569827 MS 12 - LWS - [ ] - U [ ] - [ ] - [ ] - [ ]

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