

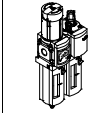
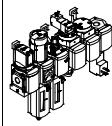
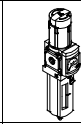
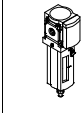
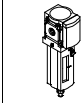
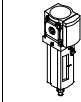
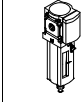
Lubricators MS-LOE, MS series



# Lubricators MS-LOE, 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 ... 0.7	0.05 ... 2.5	0.1 ... 4	0.3 ... 7	0.1 ... 12	0.5 ... 16	0.01	1	5	40
Code			AG.../AQ...	D2	D4	D5	D6	D7	D8	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	-	-	-	-	-	-	-	-	-	-

# Lubricators MS-LOE, 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>																	
<b>MSB-FRC</b>	4	■	-	■	-	■	-	-	■	-	-	-	■	-	-	■	msb4
	6	■	■	■	-	■	-	-	■	-	-	-	■	-	-	■	msb6
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Service unit combinations</b>																	
<b>MSB</b>	4	■	■	■	-	■	-	-	■	-	-	-	■	-	-	■	msb4
	6	■	■	■	-	■	-	-	■	-	-	-	■	-	-	■	msb6
	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Individual devices</b>																	
Filter regulators <b>MS-LFR</b>	4	■	■	■	■	■	-	■	■	■	■	■	■	■	-	■	ms4-lfr
	6	■	■	■	■	■	■	■	■	■	■	■	■	■	-	■	ms6-lfr
	9	-	■	■	■	■	■	■	■	■	■	■	■	■	-	■	ms9-lfr
	12	-	■	■	-	■	■	■	■	■	■	■	■	■	-	■	ms12-lfr
Filters <b>MS-LF</b>	4	■	■	■	■	■	-	-	-	-	-	-	-	-	-	■	ms4-lf
	6	■	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms6-lf
	9	-	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms9-lf
	12	-	■	■	-	■	■	-	-	-	-	-	-	-	-	■	ms12-lf
Fine and micro filters <b>MS-LFM</b>	4	■	■	■	■	■	-	-	-	-	-	-	-	-	-	■	ms4-lfm
	6	■	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms6-lfm
	9	-	■	■	■	■	■	-	-	-	-	-	-	-	-	■	ms9-lfm
	12	-	■	■	-	■	■	-	-	-	-	-	-	-	-	■	ms12-lfm
Activated carbon filters <b>MS-LFX</b>	4	■	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms4-lfx
	6	■	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms6-lfx
	9	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms9-lfx
	12	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	ms12-lfx
Water separators <b>MS-LWS</b>	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	■	-	-	■	■	-	-	-	-	-	-	-	-	■	ms6-lws
	9	-	■	-	-	■	■	-	-	-	-	-	-	-	-	■	ms9-lws
	12	-	■	-	-	■	■	-	-	-	-	-	-	-	-	■	ms12-lws

# Lubricators MS-LOE, 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 ... 0.7	0.05 ... 2.5	0.1 ... 4	0.3 ... 7	0.1 ... 12	0.5 ... 16	24 V DC, connection pattern to EN 175301	24 V DC, connection M12 to IEC 61076-2-101	110 V AC, connection pattern to EN 175301	230 V AC, connection pattern to EN 175301
Code			AG.../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	-	-	-	-	-	-	■	■	■

# Lubricators MS-LOE, 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	■	■	-	-	-	-	-	-	-	-	■	8
	6	■	■	-	-	-	-	-	-	-	-	■	8
	9	-	■	-	-	-	-	-	-	-	-	■	15
	12	-	■	-	-	-	-	-	-	-	-	■	22
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

# Lubricators MS-LOE, 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	G $\frac{1}{2}$	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$ , G $\frac{3}{4}$	■	–	–	–	■	■	–	–
		9	G $\frac{3}{4}$ , G1	G $\frac{1}{2}$ , G $\frac{3}{4}$ , G1, G1 $\frac{1}{4}$ , G1 $\frac{1}{2}$	■	–	–	–	■	■	■	–
		12	–									
Soft start and exhaust valves <b>MS-SV-D</b>		4	–									
		6	G $\frac{1}{2}$	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$ , G $\frac{3}{4}$	–	■	–	–	■	■	–	–
		9	–									
		12	–									
Soft start and exhaust valves <b>MS-SV-E</b>		4	–									
		6	G $\frac{1}{2}$	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$ , G $\frac{3}{4}$	–	–	■	■	–	–	–	■
		9	–									
		12	–									
Membrane air dryers <b>MS-LDM1</b>		4	G $\frac{1}{8}$ , G $\frac{1}{4}$	G $\frac{1}{8}$ , G $\frac{1}{4}$ , G $\frac{3}{8}$	–	–	–	–	–	–	–	–
		6	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$ , G $\frac{3}{4}$	–	–	–	–	–	–	–	–
		9	–									
		12	–									
Branching modules <b>MS-FRM</b>		4	G $\frac{1}{8}$ , G $\frac{1}{4}$	G $\frac{1}{8}$ , G $\frac{1}{4}$ , G $\frac{3}{8}$	–	–	–	–	–	–	–	–
		6	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$	G $\frac{1}{4}$ , G $\frac{3}{8}$ , G $\frac{1}{2}$ , G $\frac{3}{4}$	–	–	–	–	–	–	–	–
		9	G $\frac{3}{4}$ , G1	G $\frac{1}{2}$ , G $\frac{3}{4}$ , G1, G1 $\frac{1}{4}$ , G1 $\frac{1}{2}$	–	–	–	–	–	–	–	–
		12	–	G1, G1 $\frac{1}{4}$ , G1 $\frac{1}{2}$ , G2	–	–	–	–	–	–	–	–
Distributor blocks <b>MS-FRM-FRZ</b>		4	G $\frac{1}{4}$	–	–	–	–	–	–	–	–	–
		6	G $\frac{1}{2}$	–	–	–	–	–	–	–	–	–
		9	–									
		12	–									
Flow sensors <b>SFAM</b>		4	–									
		6	G $\frac{1}{2}$	G $\frac{1}{2}$	–	–	–	–	–	–	–	–
		9	–	G1, G1 $\frac{1}{2}$	–	–	–	–	–	–	–	–
		12	–									

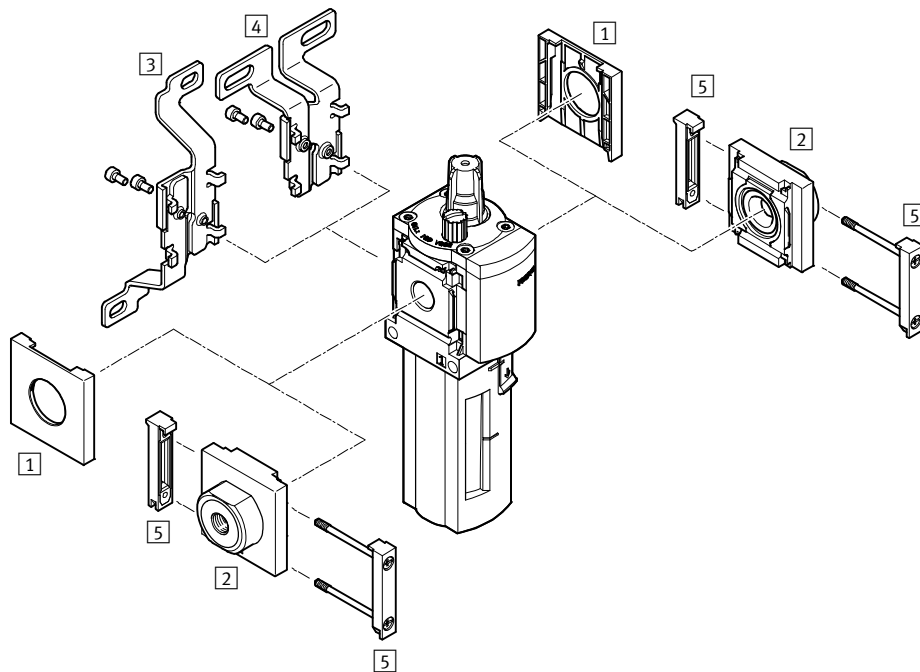
# Lubricators MS-LOE, MS series


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>1</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	-	-	-	-	-	-	-	-	-	-	-	-

# Lubricators MS4/MS6-LOE, MS series

Peripherals overview



-  - Note

Additional accessories:

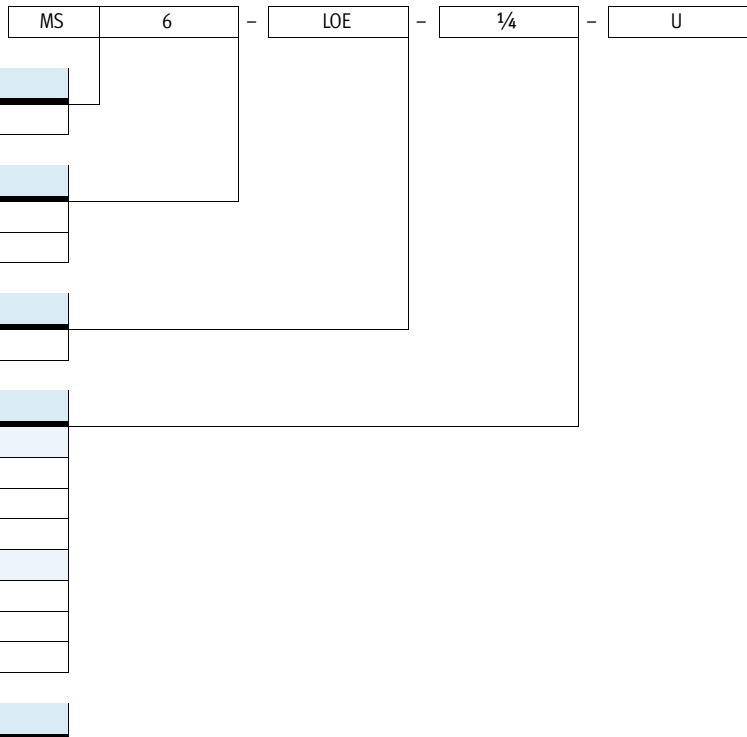
- Module connector for combination with sizes MS4/MS6 or size MS9 → Internet: amv, rmv, armv
- Adapter plate for mounting on profiles → Internet: ipm-80, ipm-40-80, ipm-80-80

Mounting attachments and accessories						
		Individual unit		Combination		→ Page/Internet
		without connecting plate	with connecting plate	without connecting plate	with connecting plate	
1	Cover cap MS4/6-END	■	-	■	-	ms4-end, ms6-end
2	Connecting plate-SET MS4/6-AG...	-	■	-	■	ms4-ag, ms6-ag
	Connecting plate-SET MS4/6-AQ...	-	■	-	■	ms4-aq, ms6-aq
3	Mounting bracket MS4/6-WB	■	■	-	-	ms4-wb, ms6-wb
4	Mounting bracket MS4-WBM	■	■	-	-	ms4-wbm
5	Module connector MS4/6-MV	-	■	■	■	ms4-mv, ms6-mv
-	Mounting bracket MS4/6-WP/WPB/WPE/WPM	-	■	■	■	ms4-wp, ms6-wp



# Lubricators MS4/MS6-LOE, MS series

Type codes



Series	
MS	Standard service unit

Size	
4	Grid dimension 40 mm
6	Grid dimension 62 mm

Service function	
LOE	Lubricators

Connection size	
MS4	
1/8	Thread G1/8
1/4	Thread G1/4
MS6	
1/4	Thread G1/4
3/8	Thread G3/8
1/2	Thread G1/2

Bowl guard	
R	Plastic bowl guard
U	Integrated as metal bowl

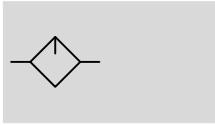
Further variants can be ordered using the modular system → 14




- Connecting plates
- Type of mounting
- EU certification
- UL certification
- Flow direction

# Lubricators MS4/MS6-LOE, MS series

Technical data

Function



-  - Flow rate  
1,100 ... 7,200 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Operating pressure  
1 ... 16 bar



The proportional lubricator adds a precision adjustable quantity of oil to the compressed air stream. The pressure drop that occurs when air flows through a Venturi nozzle is used to convey oil from the container

to the drip cap. From here, the oil drips into the air duct directly behind the proportional valve, where it is atomised. The oil mist component is proportional to the compressed air flow rate.

- Proportional lubricator with precision oil metering
- Reduces wear on drive units subject to high loading
- High flow rate
- Quick and easy oil top-up even during operation (under pressure)
- Optional device variant EX4 for use in potentially explosive areas in zones 1, 2, 21 and 22

The following oils are recommended for Festo components:  
Viscosity range to ISO 3448, ISO class VG 32  
32 mm<sup>2</sup>/s (= cSt) at 40°C

- Festo special oil OFSW-32 → 29
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

General technical data		
Size	MS4	MS6
Pneumatic connection 1, 2		
Female thread	G <sup>1</sup> / <sub>8</sub> or G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub> , G <sup>3</sup> / <sub>8</sub> or G <sup>1</sup> / <sub>2</sub>
Connecting plate AG...	G <sup>1</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>4</sub> or G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub> , G <sup>3</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>2</sub> or G <sup>3</sup> / <sub>4</sub>
Connecting plate AQ...	NPT <sup>1</sup> / <sub>8</sub> , NPT <sup>1</sup> / <sub>4</sub> or NPT <sup>3</sup> / <sub>8</sub>	NPT <sup>1</sup> / <sub>4</sub> , NPT <sup>3</sup> / <sub>8</sub> , NPT <sup>1</sup> / <sub>2</sub> or NPT <sup>3</sup> / <sub>4</sub>
Design	Proportional standard mist lubricator	
Type of mounting	Via accessories In-line installation	
Assembly position	Vertical ±5°	
Bowl guard	Plastic bowl guard Integrated as metal bowl	
Minimum flow for lubricator operation [l/min]	40	50
Max. oil capacity [cm <sup>3</sup> ]	30 (with plastic bowl guard) 36 (with metal bowl)	75 (with plastic bowl guard) 80 (with metal bowl)

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

Standard nominal flow rate q <sub>N</sub> [l/min]					
Size	MS4		MS6		
Pneumatic connection	G <sup>1</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>4</sub>	G <sup>1</sup> / <sub>4</sub>	G <sup>3</sup> / <sub>8</sub>	G <sup>1</sup> / <sub>2</sub>
In main flow direction 1 → 2	1,100	2,200	2,500	5,300	7,200

# Lubricators MS4/MS6-LOE, MS series

Technical data

Operating and environmental conditions		
Size	MS4	MS6
Operating pressure [bar]	1 ... 12 (1 ... 10) <sup>1)</sup>	1 ... 16 (1 ... 10) <sup>1)</sup>
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]	
	Inert gases	
Note on operating/pilot medium	Operation with lubricated medium possible	
Ambient temperature [°C]	-10 ... +60	0 ... +60
Temperature of medium [°C]	-10 ... +60	0 ... +60
Storage temperature [°C]	-10 ... +60	-10 ... +60
Corrosion resistance class CRC <sup>2)</sup>	2	
UL certification	cULus recognized (OL)	

1) Value in brackets applies to MS4/MS6-LOE with UL certification.

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

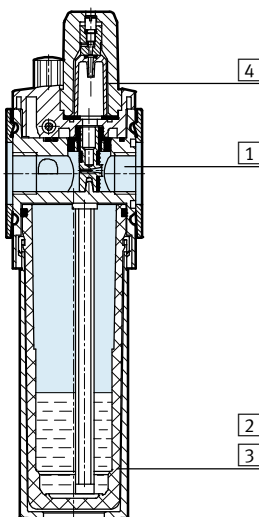
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

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	-10 °C ≤ Ta ≤ +60 °C
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

Weights [g]		
Size	MS4	MS6
Lubricator with plastic bowl guard R	194	600
Lubricator with metal bowl U	354	810

## Materials

Sectional view



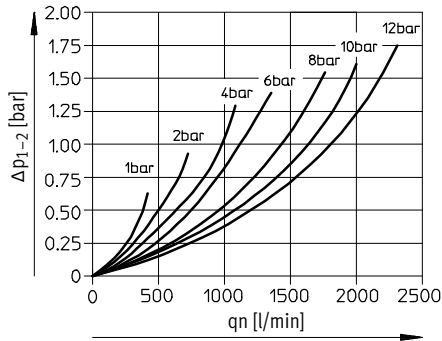
Lubricators		
1	Body	Die-cast aluminium
2	Plastic bowl guard	PC
3	Metal bowl	Wrought aluminium alloy
	Viewing window	PA
4	Lubricator dome	PC
-	Seals	NBR
Note on materials		RoHS-compliant

# Lubricators MS4/MS6-LOE, MS series

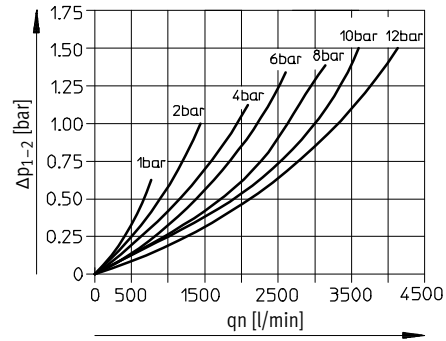
Technical data

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

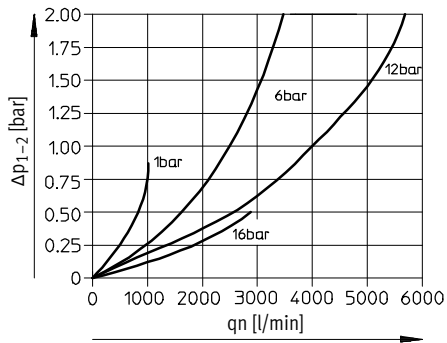
MS4-LOE-1/8



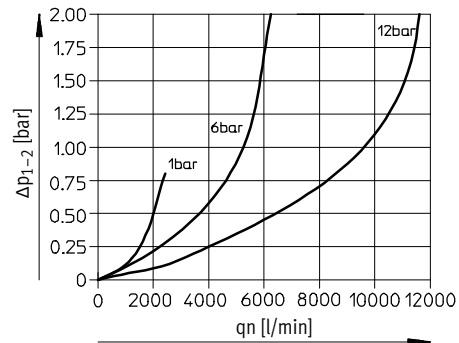
MS4-LOE-1/4



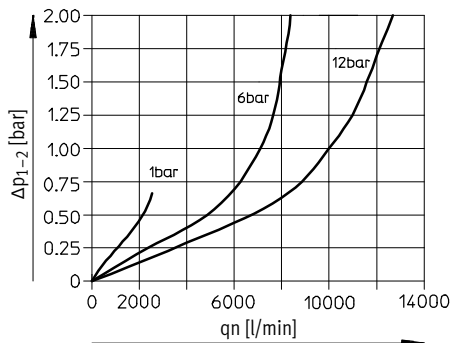
MS6-LOE-1/4



MS6-LOE-3/8



MS6-LOE-1/2

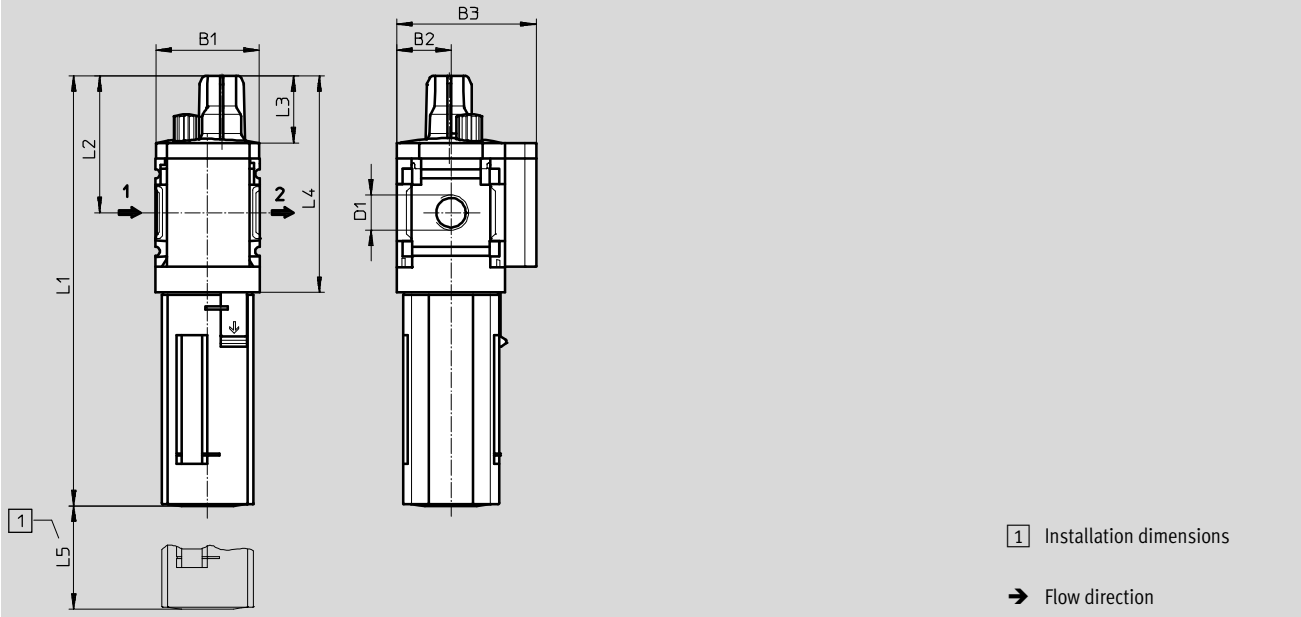


# Lubricators MS4/MS6-LOE, MS series

Technical data

## Dimensions – Basic version

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



Type	B1	B2	B3	D1	L1 Bowl guard		L2	L3	L4	L5
					Plastic	Metal				
MS4-LOE-1/8	42	21	54	G1/8	166.6	184.9	53	26	84.5	80
MS4-LOE-1/4				G1/4						
MS6-LOE-1/4	62	31	76	G1/4	218	223	66	27	112	130
MS6-LOE-3/8				G3/8						
MS6-LOE-1/2				G1/2						

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

Ordering data					
Size	Connection	Plastic bowl guard		Integrated as metal bowl	
		Part No.	Type	Part No.	Type
MS4	G1/8	529413	MS4-LOE-1/8-R	-	-
	G1/4	529411	MS4-LOE-1/4-R	535790	MS4-LOE-1/4-U
MS6	G1/4	529779	MS6-LOE-1/4-R	529781	MS6-LOE-1/4-U
	G3/8	529783	MS6-LOE-3/8-R	529785	MS6-LOE-3/8-U
	G1/2	529775	MS6-LOE-1/2-R	529777	MS6-LOE-1/2-U

# Lubricators MS4/MS6-LOE, MS series

Ordering data – Modular products

Ordering table							
Grid dimension	[mm]	40	62	Condi- tions	Code	Enter code	
<b>M</b>	Module No.	<b>527701</b>	<b>527674</b>				
	Series	Standard			<b>MS</b>	MS	
	Size	4	6		...		
	Function	Lubricators			<b>-LOE</b>	-LOE	
	Pneumatic connection	Female thread G $\frac{1}{8}$	–	1	- $\frac{1}{8}$		
		Female thread G $\frac{1}{4}$	Female thread G $\frac{1}{4}$	1	- $\frac{1}{4}$		
		–	Female thread G $\frac{3}{8}$	1	- $\frac{3}{8}$		
		–	Female thread G $\frac{1}{2}$	1	- $\frac{1}{2}$		
		Connecting plate G $\frac{1}{8}$	–		<b>-AGA</b>		
		Connecting plate G $\frac{1}{4}$	Connecting plate G $\frac{1}{4}$		<b>-AGB</b>		
		Connecting plate G $\frac{3}{8}$	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 $\frac{1}{8}$	–	1	<b>-AQK</b>		
		Connecting plate NPT $\frac{1}{4}$	Connecting plate NPT $\frac{1}{4}$	1	<b>-AQN</b>		
		Connecting plate NPT $\frac{3}{8}$	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	Plastic bowl with plastic bowl guard			<b>-R</b>		
		Metal bowl			<b>-U</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>		
		Mounting bracket centrally at rear (wall mounting top), connecting plates not required	–		<b>-WBM</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  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ , **AQK, AQN, AQP, AQR, AQS, WPM**  
Not with EU certification EX4

2 **WP, WPM** Only with connecting plate AGA, AGB, AGC, AGD, AGE, AQK, AQN, AQP, AQR or AQS

**M** Mandatory data

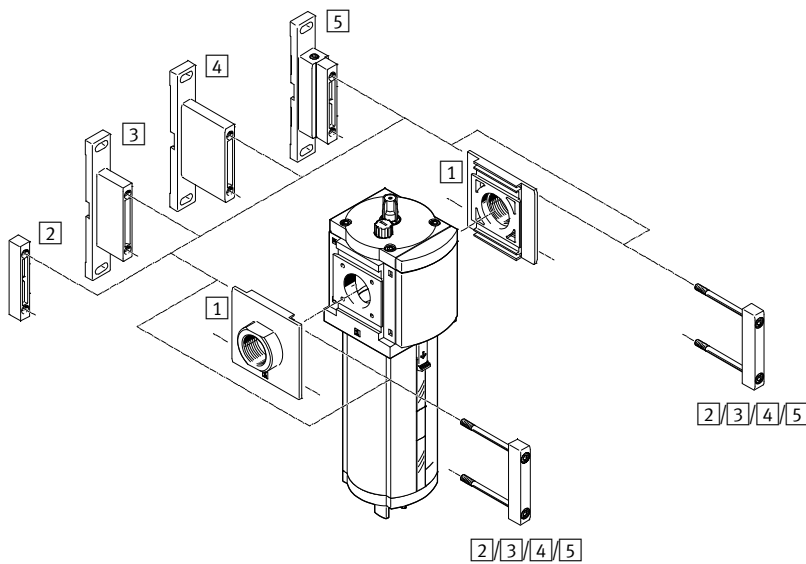
**O** Options


Transfer order code

**MS**  -  **LOE** -  -  -  -  -  -  -

# Lubricators MS9-LOE, MS series

Peripherals overview

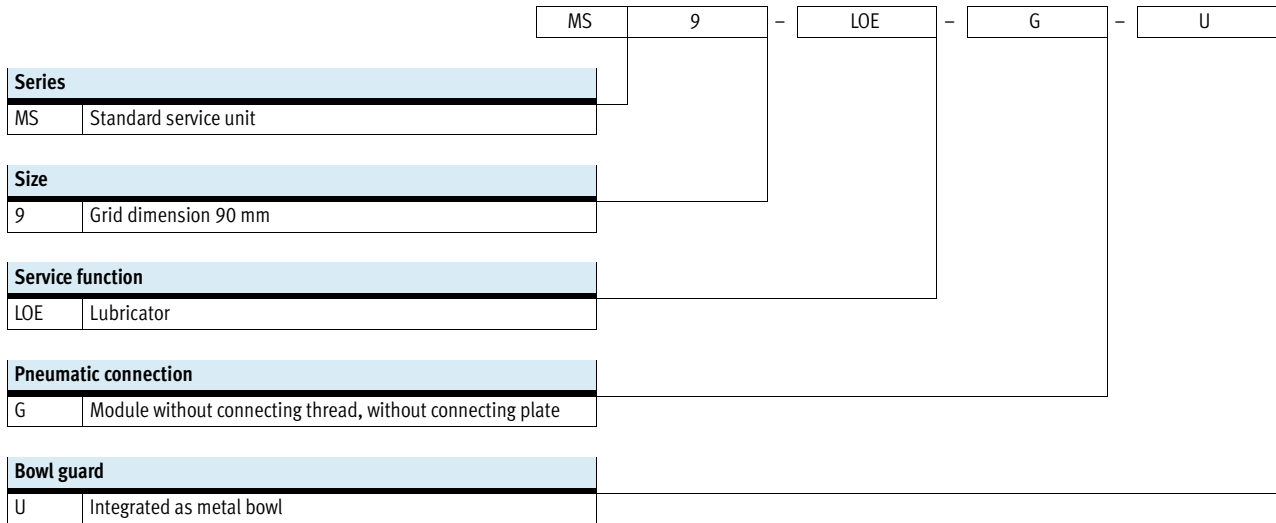


-  - Note  
 Additional accessories:  
 - Module connector for combinations with size MS6, MS9 or MS12  
 → Internet: rmv, armv

Mounting attachments and accessories					
		Individual unit		Combination	→ Page/ Internet
		With female thread 3/4/1/N3/4/N1	With connecting plate AG.../AQ...	Module without connecting thread, without connecting plate G	
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

# Lubricators MS9-LOE, MS series

Type codes



Additional variants can be ordered using the modular product system → 21

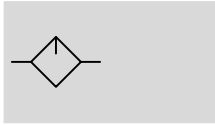
- Pneumatic connection
- Type of mounting
- UL certification
- Flow direction






# Lubricators MS9-LOE, MS series

Technical data

Function



-  - Flow rate  
15,000 ... 20,000 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Operating pressure  
1 ... 16 bar



The proportional lubricator adds a precisely adjustable quantity of oil to the compressed air. The pressure drop that occurs when air flows through a Venturi nozzle is used to convey oil from the container

to the drip cap. From here, the oil drips into the air duct directly behind the proportional valve, where it is atomised. The oil mist part is proportional to the compressed air flow rate.

- Proportional lubricator with precision oil metering
- Integrated sintered filter for filtering the oil
- Reduces wear on drive units subject to high loading
- High flow rate
- Quick and easy oil top-up even during operation (under pressure)

The following oils are recommended for Festo components:  
Viscosity range to ISO 3448, ISO class VG 32  
32 mm<sup>2</sup>/s (= cSt) at 40 °C

- Festo special oil OFSW-32 → 29
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

General technical data	
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	Proportional standard mist lubricator
Type of mounting	Via accessories In-line installation
Mounting position	Vertical ±5°
Bowl guard	Integrated as metal bowl
Minimum flow rate for lubricator operation [l/min]	100
Max. oil capacity [ml]	490

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

Standard nominal flow rate qnN <sup>1)</sup> [l/min]					
Pneumatic connection	Connecting plate AGD/AQR	Female thread G3/4/NPT3/4 or connecting plate AGE/AQS	Female thread G1/NPT1 or connecting plate AGF/AQT	Connecting plate AGG/AQU	Connecting plate AGH/AQV
In main flow direction 1 → 2	8,500	15,000	23,000	26,000	27,000

1) Measured at p1 = 6 bar and Δp = 1 bar.

# Lubricators MS9-LOE, MS series

Technical data



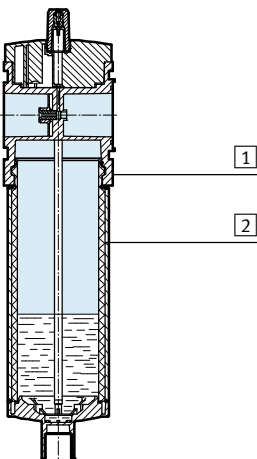
Operating and environmental conditions	
Operating pressure [bar]	1... 16
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]
Ambient temperature [°C]	-10 ... +60
Temperature of medium [°C]	-10 ... +60
Storage temperature [°C]	-10 ... +60
Corrosion resistance class CRC <sup>1)</sup>	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.

Weight [g]	
Lubricator	2,000

## Materials

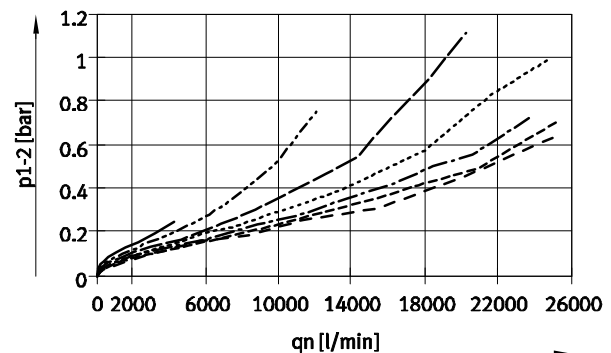
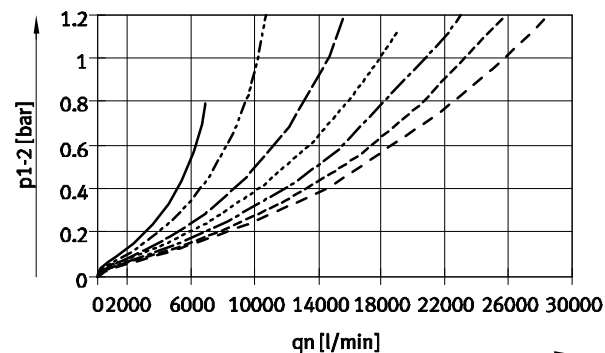
Sectional view



Lubricator		
1	Housing	Die-cast aluminium
2	Bowl	Wrought aluminium alloy
	Inspection window	PA
-	Cover	PA reinforced
-	Connecting plate, module connector, mounting bracket	Die-cast aluminium
-	Seals	NBR
Note on materials		RoHS-compliant

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

Pneumatic connection G $\frac{3}{4}$ /NPT $\frac{3}{4}$       Pneumatic connection G1/NPT1



- 1 bar
- - - - - 2 bar
- - - - - 4 bar
- - - - - 6 bar
- - - - - 8 bar
- - - - - 10 bar
- - - - - 12 bar

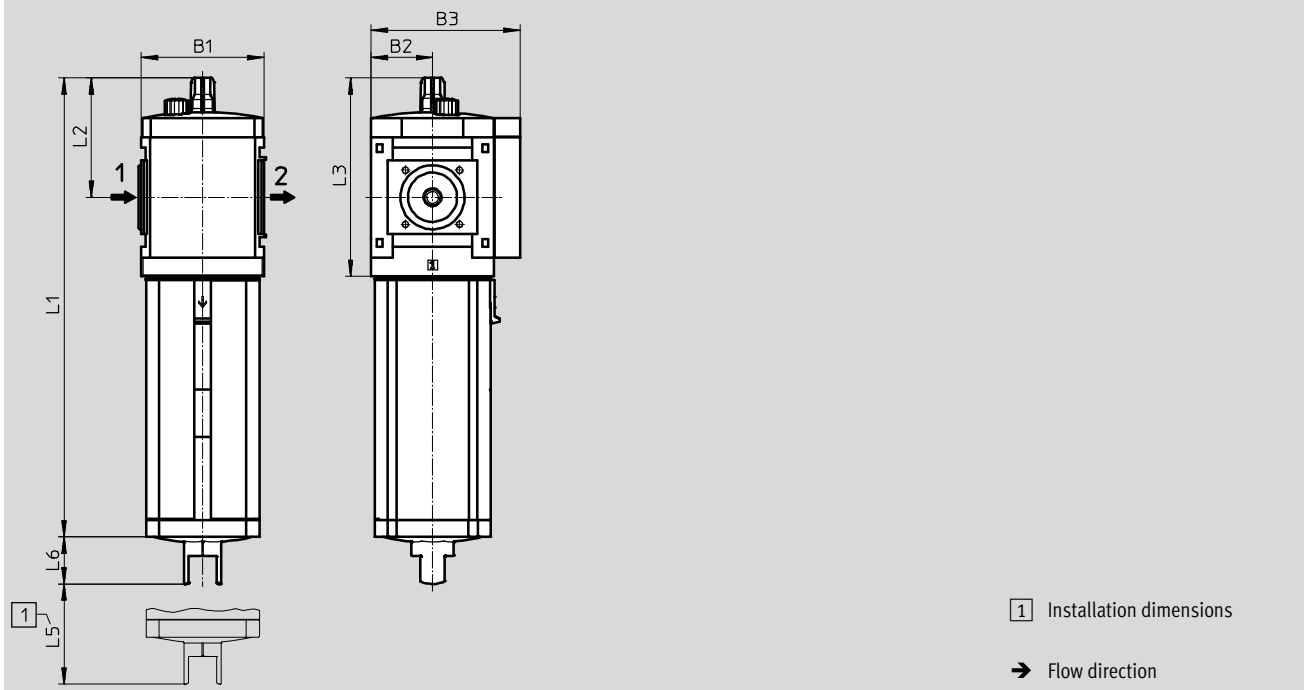
# Lubricators MS9-LOE, MS series

Technical data

## Dimensions – Basic version

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

Module without connecting thread, without connecting plate G



Type	B1	B2	B3	L1	L2	L3	L5 min.	L6
MS9-LOE-G	90	45	109	336.3	87	145	225	34.5

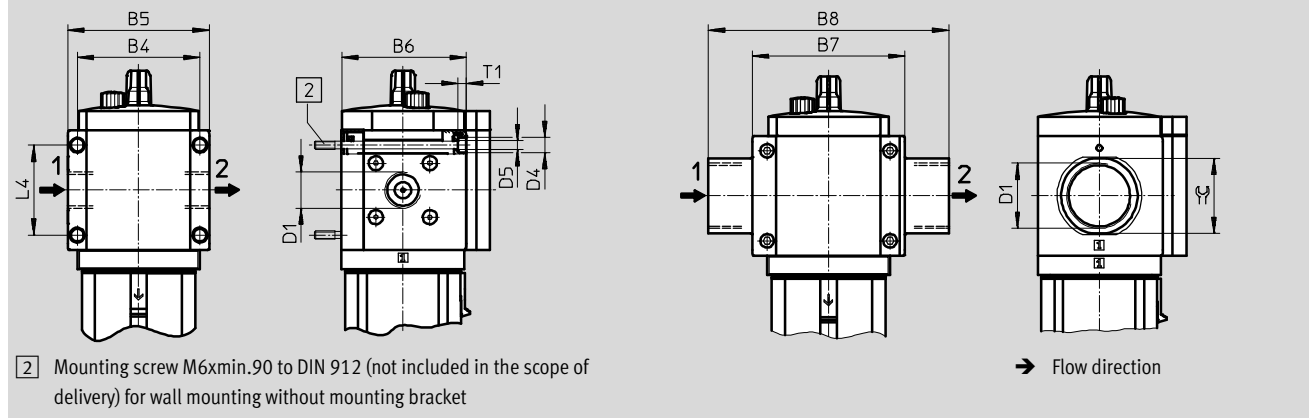
# Lubricators MS9-LOE, MS series

Technical data

**Dimensions – Female thread/connecting plate** Download CAD data → [www.festo.com](http://www.festo.com)

With female thread 3/4/1/N3/4/N1

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



Type	B4	B5	B6	B7	B8	D1	D4 Ø	D5 Ø	L4	T1	☞
MS9-LOE-3/4	90	104	91.5	-	-	G3/4	11	6.5	66	6	-
MS9-LOE-1						G1					
MS9-LOE-AGD	-	-	-	112	132	G1/2	-	-	-	-	30
MS9-LOE-AGE					132	G3/4					36
MS9-LOE-AGF					142	G1					41
MS9-LOE-AGG					162	G1 1/4					50
MS9-LOE-AGH					176	G1 1/2					55
MS9-LOE-N3/4	90	104	91.5	-	-	NPT3/4-14	11	6.5	66	6	-
MS9-LOE-N1						NPT1-11 1/2					
MS9-LOE-AQR	-	-	-	112	132	NPT1/2-14	-	-	-	-	30
MS9-LOE-AQS					132	NPT3/4-14					36
MS9-LOE-AQT					142	NPT1-11 1/2					41
MS9-LOE-AQU					162	NPT1 1/4-11 1/2					50
MS9-LOE-AQV					176	NPT1 1/2-11 1/2					55

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

Ordering data			
Size	Connection	Part No.	Type
MS9	-	564144	MS9-LOE-G-U

# Lubricators MS9-LOE, MS series

Ordering data – Modular products

Ordering table					
Grid dimension	[mm]	90	Condi- tions	Code	Enter code
<b>M</b>	Module No.	<b>562533</b>			
	Series	Standard service unit		<b>MS</b>	MS
	Size	9		<b>9</b>	9
	Function	Lubricator		<b>-LOE</b>	-LOE
	Pneumatic connection	Female thread G $\frac{3}{4}$		<b>-<math>\frac{3}{4}</math></b>	
		Female thread G1		<b>-1</b>	
		Connecting plate G $\frac{1}{2}$		<b>-AGD</b>	
		Connecting plate G $\frac{3}{4}$		<b>-AGE</b>	
		Connecting plate G1		<b>-AGF</b>	
		Connecting plate G1 $\frac{1}{4}$		<b>-AGG</b>	
		Connecting plate G1 $\frac{1}{2}$		<b>-AGH</b>	
		Female thread NPT $\frac{3}{4}$		<b>-N<math>\frac{3}{4}</math></b>	
		Female thread NPT1		<b>-N1</b>	
		Connecting plate NPT $\frac{1}{2}$		<b>-AQR</b>	
		Connecting plate NPT $\frac{3}{4}$		<b>-AQS</b>	
		Connecting plate NPT1		<b>-AQT</b>	
		Connecting plate NPT1 $\frac{1}{4}$		<b>-AQU</b>	
		Connecting plate NPT1 $\frac{1}{2}$		<b>-AQV</b>	
		Module without connecting thread, without connecting plate		<b>-G</b>	
	Bowl	Metal bowl		<b>-U</b>	-U
<b>O</b>	Type of mounting	Mounting bracket standard design	<b>1</b>	<b>-WP</b>	
		Mounting bracket for attaching the service units	<b>1</b>	<b>-WPM</b>	
		Mounting bracket for large wall gap	<b>1</b>	<b>-WPB</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 WP, WPM, WPB** Not with pneumatic connection G

**M** Mandatory data

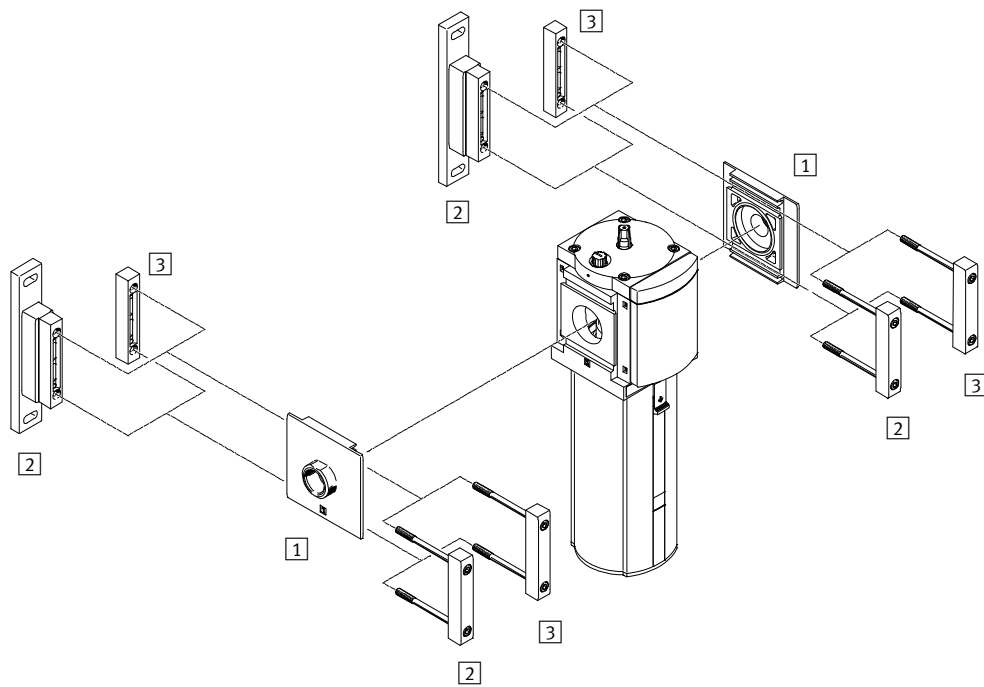
**O** Options


**Transfer order code**

**562533** **MS** **9** - **LOE** -  - **U**  -  -  -

# Lubricators MS12-LOE, MS series

Peripherals overview



-  - 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
2	Mounting bracket MS12-WP	ms12-wp
3	Module connector MS12-MV	ms12-mv

# Lubricators MS12-LOE, MS series

Type codes

MS 12 - LOE - G - U

**Series**

MS	Standard service unit
----	-----------------------

**Size**

12	Grid dimension 124 mm
----	-----------------------

**Service function**

LOE	Lubricator
-----	------------

**Pneumatic connection**

G	Module without connecting thread, without connecting plate Connecting plates → Accessories
---	---

**Bowl guard**

U	Metal bowl
---	------------

Further variants can be ordered using the modular system → 28

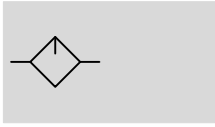
- Pneumatic connection
- Type of mounting
- Flow direction





# Lubricators MS12-LOE, MS series

Technical data

FESTO

Function



-  - Flow rate  
20,000 ... 22,000 l/min
-  - Temperature range  
0 ... 60 °C
-  - Operating pressure  
1 ... 16 bar
-  - [www.festo.com](http://www.festo.com)



The proportional lubricator adds a precision adjustable quantity of oil to the compressed air stream. The pressure drop that occurs when air flows through a Venturi nozzle is used to convey oil from the container

to the drip cap. From here, the oil drips into the air duct directly behind the proportional valve, where it is atomised. The oil mist component is proportional to the compressed air flow rate.

- Proportional lubricator with precision oil metering
- Reduces wear on drive units subject to high loading
- High flow rate
- Quick and easy oil top-up even during operation (under pressure)

The following oils are recommended for Festo components:  
Viscosity range to ISO 3448, ISO class VG 32  
32 mm<sup>2</sup>/s (= cSt) at 40°C

- Festo special oil OFSW-32 → 29
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

General technical data	
Pneumatic connection 1, 2	
Connecting plate AG...	G1, G1¼, G1½ or G2
Module without connecting thread/plate G	–
Design	Proportional standard mist lubricator
Type of mounting	Via accessories In-line installation
Assembly position	Vertical ±5°
Bowl guard	Metal bowl
Minimum flow for lubricator operation [l/min]	400
Max. oil capacity [cm <sup>3</sup> ]	1,500

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

Standard nominal flow rate q <sub>N</sub> <sup>1)</sup> [l/min]				
Pneumatic connection	G1	G1¼	G1½	G2
In main flow direction 1 → 2	20,000	20,500	21,000	22,000

1) Dependent on connecting plate selected, must be ordered separately as an accessory → Internet: ms12-ag  
Measured at p<sub>1</sub> = 6 bar and Δp = 0.5 bar



# Lubricators MS12-LOE, MS series

Technical data

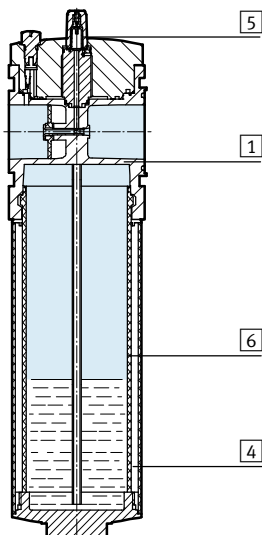
Operating and environmental conditions		
Operating pressure	[bar]	1 ... 16
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [7:4:4]
Ambient temperature	[°C]	0 ... +60
Temperature of medium	[°C]	0 ... +60
Storage temperature	[°C]	-10 ... +60
Corrosion resistance	CRC <sup>1)</sup>	2

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.

Weights [g]	
Lubricator with metal bowl U	6,500

## Materials

Sectional view



Lubricator		
1	Body	Die-cast aluminium
4	Metal bowl	Aluminium
5	Lubricator dome	PC
6	Metal bowl sight glass	PA
-	Seals	NBR

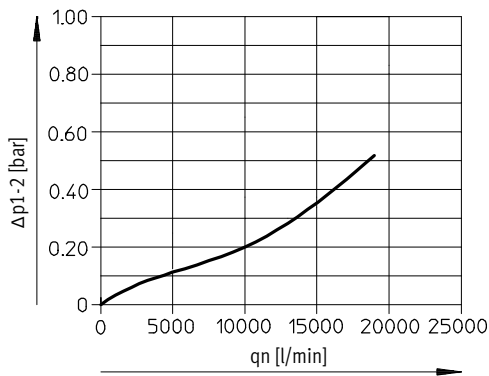
# Lubricators MS12-LOE, MS series

Technical data

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

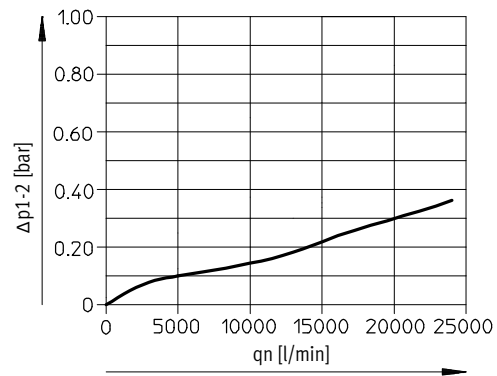
With connecting plate MS12-AGF

Pneumatic connection G1



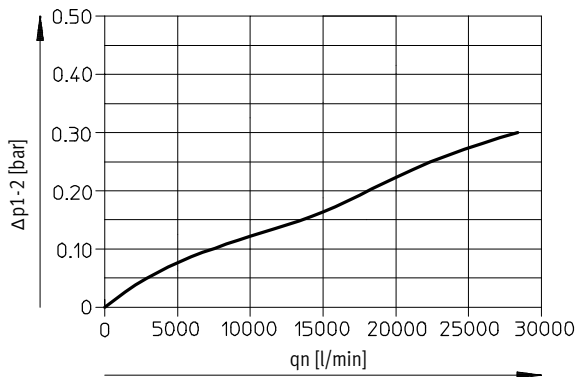
With connecting plate MS12-AGG

Pneumatic connection G1¼



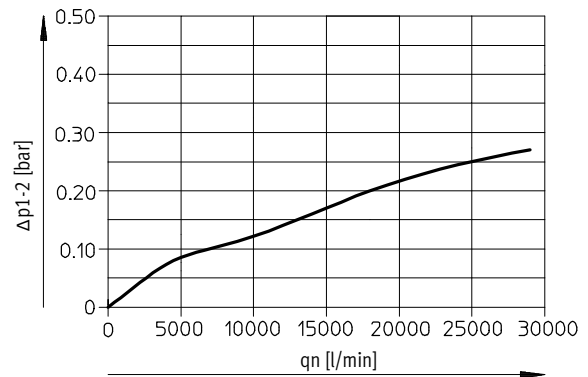
With connecting plate MS12-AGH

Pneumatic connection G1½



With connecting plate MS12-AGI

Pneumatic connection G2

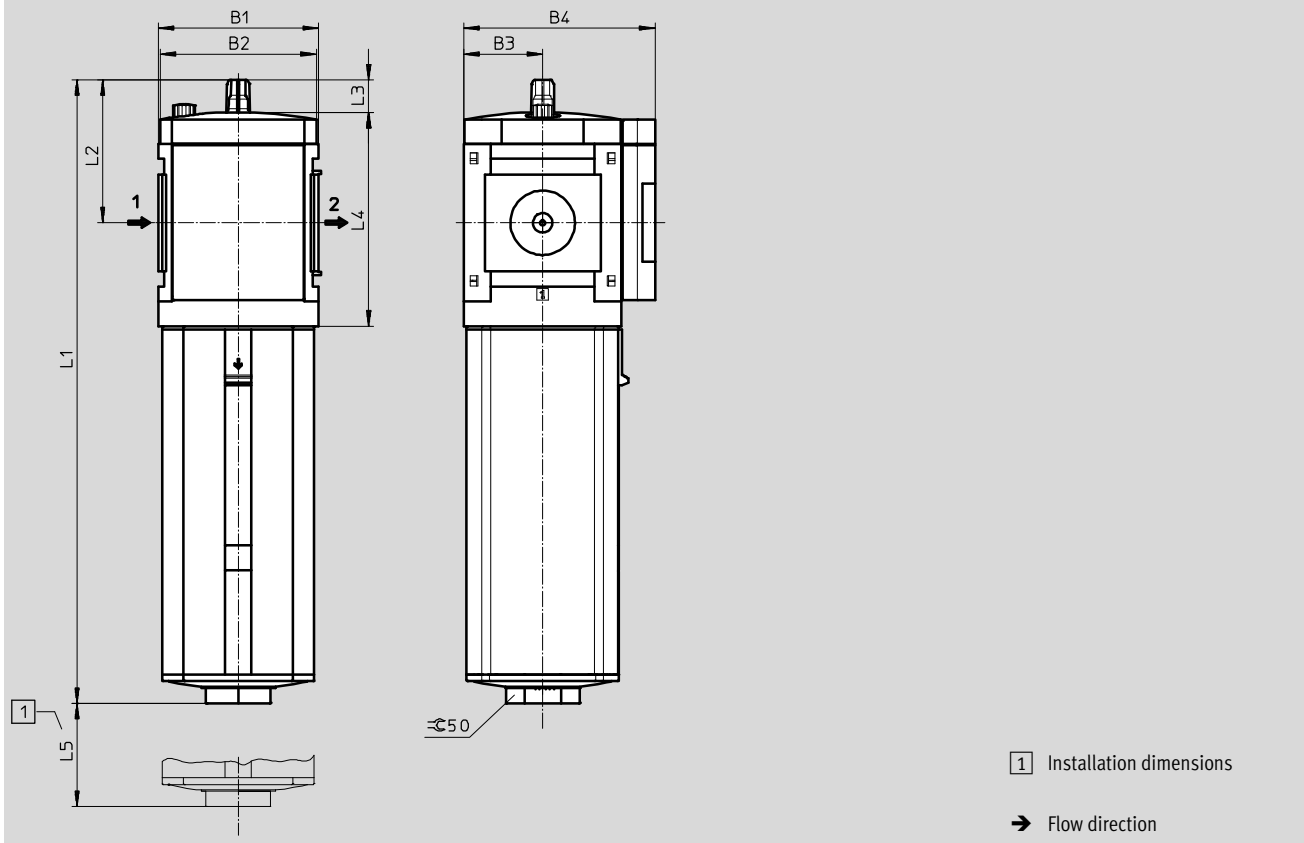


# Lubricators MS12-LOE, MS series

Technical data

## Dimensions – Basic version

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



Type	B1	B2	B3	B4	L1	L2	L3	L4	L5
MS12-LOE	124	122	61	148	483	111	25	166	300

## Ordering data

Metal bowl

Size	Connection	Part No.	Type
MS12	G1 ... G2 <sup>1)</sup>	<b>537156</b>	<b>MS12-LOE-G-U</b>

1) Connecting plate must be ordered separately as an accessory → Internet: ms12-ag

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

# Lubricators MS12-LOE, MS series

Ordering data – Modular products

Ordering table					
Grid dimension	[mm]	124	Condi- tions	Code	Enter code
<b>M</b>	Module No.	<b>535041</b>			
	Series	Standard		<b>MS</b>	MS
	Size	12		<b>12</b>	12
	Function	Lubricator		<b>-LOE</b>	-LOE
	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>	
		Module without connecting thread, without connecting plate		<b>-G</b>	
	Bowl	Metal bowl		<b>-U</b>	-U
<b>O</b>	Type of mounting	Mounting bracket standard design	<b>1</b>	<b>-WP</b>	
	Flow direction	Flow direction from right to left		<b>-Z</b>	

**1 WP** Only with connecting plate AGF, AGG, AGH or AGI.

**M** Mandatory data

**O** Options

Transfer order code

535041 MS 12 - LOE - [ ] - U [ ] - [ ] - [ ]

## Lubricators MS-LOE, MS series

Accessories

FESTO

Special oil



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