

Metric

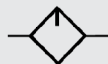
Inch

Lubricator, Type LOE - Basic Version

1/8" – 1"

Lubricator

with Metal Bowl Guard
Type LOE-...-D-...-NPT



The proportional lubricator adds a regulated quantity of oil to the compressed air.

The valve maintains oil-mist content proportional to the flow.

The pressure drop that occurs when air flows through a venturi delivers oil from the bowl to the drip cap. The drop of oil then flows into the air channel where it is atomized.

Oil can be added during operation.

Accessories:

Mounting bracket, Type HFOE-...

Threaded bolt set, Type FRB-... used to combine a D-Series single unit with a lubricator.



The oil drip rate is controlled by means of the regulating screw. Normally 1 to 12 drops per 35 cu ft / 1000 l of air is sufficient.

The following lubricants are recommended for FESTO units:

Recommended Oil Grades	Viscosity
FESTO Special Oil ARAL Vitam GF 32 BP Energol HLP 32 Esso Nuto H 32 Mobil DTE 24 Shell Hydrol OD 32	Hydraulic oil per DIN 51524 Part 2 with a viscosity of 32 mm ² /s at 40°C (HLP 32)

Festo Special Oil in 1 liter container: Order Number 152811 OFSW-32

Order Number Part No. / Type	Lubricator	Inch	173820	173821	173822	173823	173824	173825	173826	173827		
			LOE-1/8-D-MINI-NPT	LOE-1/4-D-MINI-NPT	LOE-3/8-D-MINI-NPT	LOE-3/8-D-MIDI-NPT	LOE-1/2-D-MIDI-NPT	LOE-3/4-D-MIDI-NPT	LOE-3/4-D-MAXI-NPT	LOE-1-D-MAXI-NPT		
		Metric	159620	159621	162680	159586	159587	162681	159622	159623		
			LOE-1/8-D-MINI	LOE-1/4-D-MINI	LOE-3/8-D-MINI	LOE-3/8-D-MIDI	LOE-1/2-D-MIDI	LOE-3/4-D-MIDI	LOE-3/4-D-MAXI	LOE-1-D-MAXI		
	Mounting Bracket		159638 HFOE-D-MINI			159593 HFOE-D-MIDI / MAXI						
	Threaded Bolt Set		159642 FRB-D-MINI			159595 FRB-D-MIDI			159643 FRB-D-MAXI			
Medium	Compressed air, Filtered											
Design	Direct proportional lubricator											
Mounting	Through-holes in housing or mounting bracket, in-line											
Assembly Position	Vertical ± 5°											
Connection			1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	3/4"	1"		
Nominal Flow*			46 scfm / 1300 l/min	81 scfm / 2300 l/min	95 scfm / 2700 l/min	194 scfm / 5500 l/min	216 scfm / 6100 l/min	222 scfm / 6300 l/min	297 scfm / 8400 l/min	318 scfm / 9000 l/min		
Primary Pressure Range	max. 240 psi / 16 bar											
Lubricator Operating Range Minimum	From 0.11 scfm / 3 l/min					From 0.21 scfm / 6 l/min			From 0.35 scfm / 10 l/min			
Max. Oil Capacity	2.75 cu in / 45 ml					6.71 cu in / 110 ml			11.59 cu in / 190 ml			
Temperature Range	14 to 140°F / -10 to 60°C											
Materials	Housing: GD-Zn; Bowl: Polycarbonate; Seals: NBR; Metal bowl guard: Al											
Weight	0.728 lb / 0.330 kg					1.389 lb / 0.630 kg			1.598 lb / 0.725 kg		2.425 lb / 1.100 kg	2.646 lb / 1.200 kg

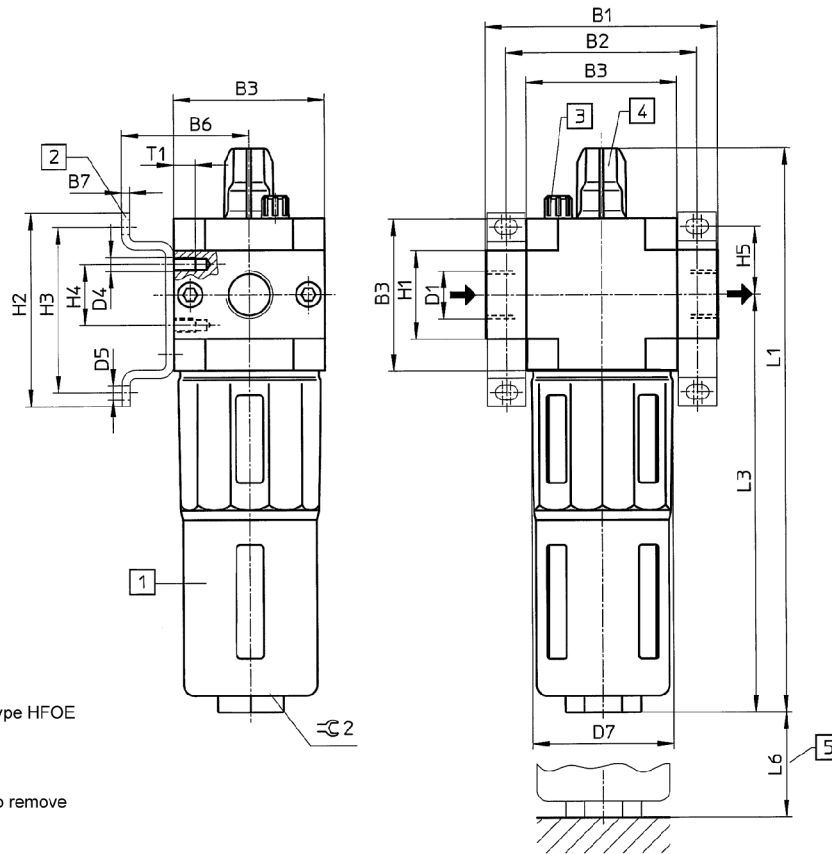
* At 90 psi / 6 bar inlet and $\Delta p = 15$ psi / 1 bar.

Delivery: Short lead time

Lubricator, Type LOE - Basic Version

Dimensions

Type LOE-...-D-...



- 1 Metal bowl guard
- 2 Mounting brackets Type HFOE (order separately)
- 3 Fill plug for oil vessel
- 4 Oil regulator screw
- 5 Clearance required to remove bowl for servicing
- Flow direction

Type	B1	B2	B3	B6	B7	D1	D4	D5	D7	
Inch and Metric Series	in / mm	in / mm	in / mm	in / mm	in / mm	Thread	Thread	in / mm	in / mm	
LOE-1/8-D-MINI-...	2.52 / 64	2.05 / 52	1.57 / 40	1.54 / 39	0.08 / 2	1/8 NPT / G 1/8 ISO	M4	0.17 / 4.3	1.50 / 38	
LOE-1/4-D-MINI-...	2.52 / 64	2.05 / 52	1.57 / 40	1.54 / 39	0.08 / 2	1/4 NPT / G 1/4 ISO	M4	0.17 / 4.3	1.50 / 38	
LOE-3/8-D-MINI-...	2.76 / 70	2.05 / 52	1.57 / 40	1.54 / 39	0.08 / 2	3/8 NPT / G 3/8 ISO	M4	0.17 / 4.3	1.50 / 38	
LOE-3/8-D-MIDI-...	3.35 / 85	2.76 / 70	2.17 / 55	1.85 / 47	0.12 / 3	3/8 NPT / G 3/8 ISO	M5	0.21 / 5.3	2.05 / 52	
LOE-1/2-D-MIDI-...	3.35 / 85	2.76 / 70	2.17 / 55	1.85 / 47	0.12 / 3	1/2 NPT / G 1/2 ISO	M5	0.21 / 5.3	2.05 / 52	
LOE-3/4-D-MIDI-...	3.35 / 85	2.76 / 70	2.17 / 55	1.85 / 47	0.12 / 3	3/4 NPT / G 3/4 ISO	M5	0.21 / 5.3	2.05 / 52	
LOE-3/4-D-MAXI-...	3.78 / 96	3.15 / 80	2.64 / 67	2.09 / 53	0.12 / 3	3/4 NPT / G 3/4 ISO	M5	0.21 / 5.3	2.56 / 65	
LOE-1-D-MAXI-...	4.57 / 116	3.58 / 91	2.64 / 67	2.09 / 53	0.12 / 3	1 NPT / G 1 ISO	M5	0.21 / 5.3	2.56 / 65	
Type	H1	H2	H3	H4	H5	L1	L3	L6	T1	↺ 2
Inch and Metric Series	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	mm
LOE-1/8-D-MINI-...	0.79 / 20	1.69 / 43	1.38 / 35	0.43 / 11	0.69 / 17.5	6.65 / 169	4.88 / 124	3.94 / 100	0.28 / 7	22
LOE-1/4-D-MINI-...	0.79 / 20	1.69 / 43	1.38 / 35	0.43 / 11	0.69 / 17.5	6.65 / 169	4.88 / 124	3.94 / 100	0.28 / 7	22
LOE-3/8-D-MINI-...	0.79 / 20	1.69 / 43	1.38 / 35	0.43 / 11	0.69 / 17.5	6.65 / 169	4.88 / 124	3.94 / 100	0.28 / 7	22
LOE-3/8-D-MIDI-...	1.26 / 32	2.76 / 70	2.36 / 60	0.87 / 22	0.96 / 24.5	8.11 / 206	5.98 / 152	4.72 / 120	0.31 / 8	24
LOE-1/2-D-MIDI-...	1.26 / 32	2.76 / 70	2.36 / 60	0.87 / 22	0.96 / 24.5	8.11 / 206	5.98 / 152	4.72 / 120	0.31 / 8	24
LOE-3/4-D-MIDI-...	1.26 / 32	2.76 / 70	2.36 / 60	0.87 / 22	0.96 / 24.5	8.11 / 206	5.98 / 152	4.72 / 120	0.31 / 8	24
LOE-3/4-D-MAXI-...	1.26 / 32	2.76 / 70	2.36 / 60	0.87 / 22	0.96 / 24.5	8.78 / 223	6.69 / 170	5.91 / 150	0.31 / 8	24
LOE-1-D-MAXI-...	1.57 / 40	2.76 / 70	2.36 / 60	0.87 / 22	0.96 / 24.5	8.78 / 223	6.69 / 170	5.91 / 150	0.31 / 8	24

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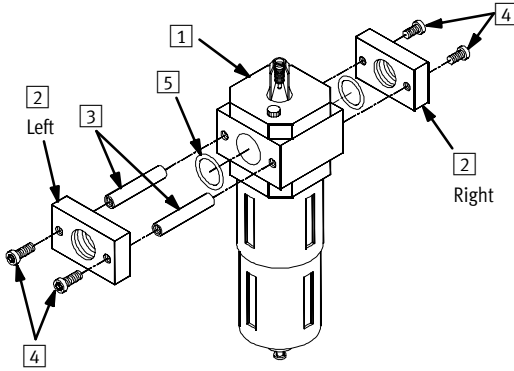
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Ship-From-Stock Component Program

D-Series Service Units Port Sizes 1/8" to 1"

Ordering via the Ship-From-Stock Component Program allows for off-the-shelf availability of the components required to assemble a complete air preparation unit.

A complete Lubricator assembly consists of the following items:



Item	Description	Qty Required per Assy
1	Main Unit	1
2	Port Block	2 [one left, one right]
3	Single Unit Joining Rod	2
4	Port Block Screw	4
5	Port Block Seal	2
6	Mounting Bracket Kit [Not shown]	1

Step 1: Based upon the required Port Size, Maximum Flow, Filtration Level, Drain Type, and Thread Type, select the Main Unit [Item 1] and the Left and Right Port Block [Item 2]. Note the Product Type/Description for the next step.

Port size	Max. Flow (l/min/sfcm)	Item		Product Type/ Description			
		1	2	NPT Thread		BSP Thread	
		Main Unit		Left Connection Port Block	Right Connection Port Block	Left Connection Port Block	Right Connection Port Block
1/8	1300/45.9	123 582	372 030	372 038	380 285	380 287	LOE...-D-MINI-...
	2300/81.2		372 031	372 039	380 289	380 291	
1/4	2800/98.9	120 536	-	-	380 902	380 903	LOE...-D-MIDI-...
	2700/95.4	123 582	372 032	372 040	380 293	380 295	LOE...-D-MINI-...
5500/194.2			120 536	372 035	372 043	380 297	380 299
1/2	6100/215.4	396 443	372 033	372 041	380 301	380 303	LOE...-D-MIDI-...
	8300/293.1		-	-	381 529	381 530	LOE...-D-MAXI-...
3/4	6300/222.5	120 536	372 034	372 042	380 305	380 307	LOE...-D-MIDI-...
	8400/296.6	396 443	372 036	372 044	380 309	380 311	LOE...-D-MAXI-...
1	9000/317.8		372 037	372 045	380 313	380 315	

☐ Not available

Next...Step 2

Inch

Metric

Lubricator Selector Guide

D-Series Service Units Port Sizes 1/8" to 1"

Step 2: Based upon the Product Type/Description from Step 1, select the Joining Rods [Item **3**], the Port Block Screws [Item **4**], the Port Block Seals [Item **5**], and the Mounting Bracket Kit [Item **6**].

	Item 3	Item 4	Item 5	Item 6 [Not shown]
Product Type/Description	Single Unit Joining Rod	Port Block Screw	Port Block Seal	Mounting Bracket Kit
LOE...-D-MINI-...	359 787	200 664	235 260	159 638
LOE...-D-MIDI-...	369 989	202 824	200 950	159 593
LOE...-D-MAXI-...	373 059		234 380	159 593

Step3: Determine the appropriate quantity of each Item.

Ordering Example:

Required: 3/8 port size, 5000 l/min flow, BSP threads.

	Item	Part No.	Qty	Description
Order:	1	120 536	1	Main Unit
	2	380 297	1	Left Port Block
		380 299	1	Right Port Block
	3	369 989	2	Single Unit Joining Rod
	4	202 824	4	Port Block Screws
	5	200 950	3	Port Block Seals
	6	159 593	1	Mounting Bracket Kit