



## **Lubricator LOE – Basic Version**



Metric

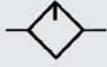
Inch

## 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 <sup>2</sup> /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	

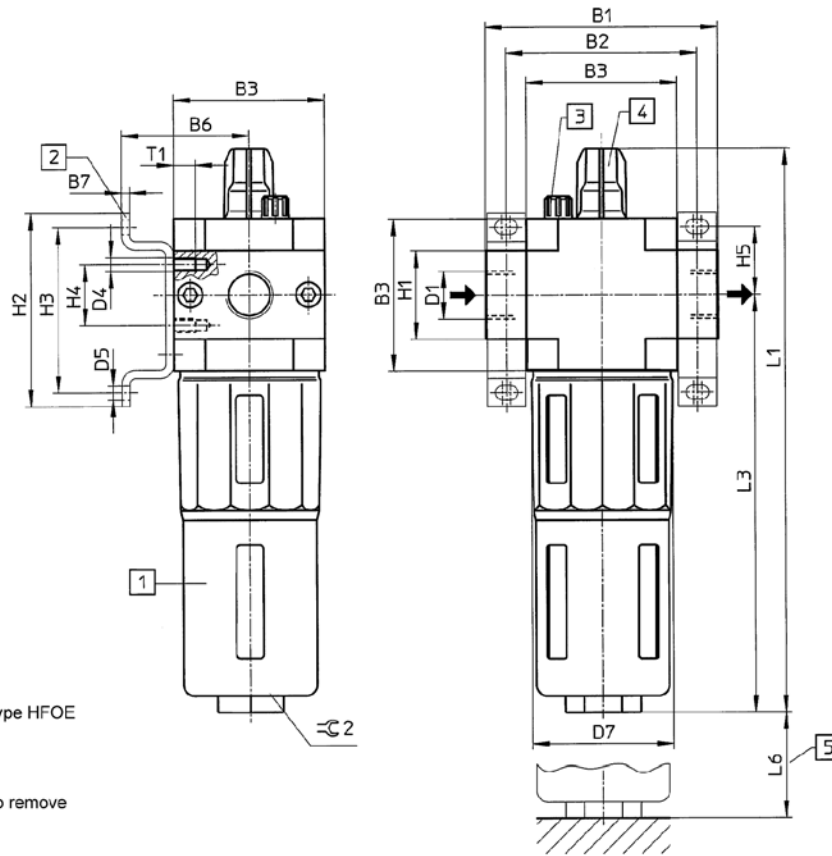
\* At 90 psi / 6 bar inlet and  $\Delta p = 15$  psi / 1 bar.

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

Metric

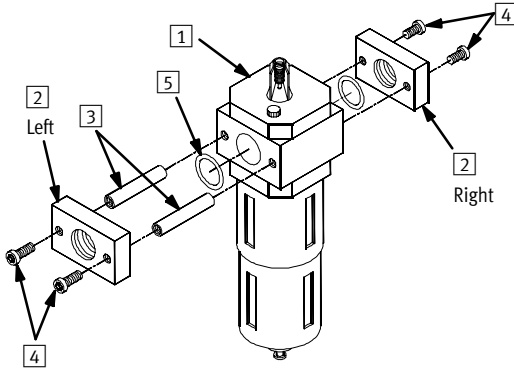
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## Ship-From-Stock Component Program

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 <b>3</b>	Item <b>4</b>	Item <b>5</b>	Item <b>6</b> [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:	<b>1</b>	120 536	1	Main Unit
	<b>2</b>	380 297	1	Left Port Block
		380 299	1	Right Port Block
	<b>3</b>	369 989	2	Single Unit Joining Rod
	<b>4</b>	202 824	4	Port Block Screws
	<b>5</b>	200 950	3	Port Block Seals
	<b>6</b>	159 593	1	Mounting Bracket Kit

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