

Lubricators MS12N-LOE – Inch Series



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 atomized. The oil mist component is proportional to the compressed air flow rate.

- Pneumatic connection: 1 NPT, 1¼ NPT, 1½ NPT, 2 NPT
- Supply pressure: 15 ... 235 psi
- Flow rate: 706.0 ... 776.6 scfm

Product Range Overview						
Type	Flow rate [scfm]	Pneumatic connections		Bowl guard		Reverse flow
		Body thread	Port plate	Plastic bowl guard	Metal bowl	Flow direction from right to left
MS12N			AG...	R	U	Z
LOE	706.0 ... 776.6	–	1 NPT, 1¼ NPT, 1½ NPT, 2 NPT	–	■	■

Features

- 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 mm²/s (= cSt) at 40°C

- Festo special oil OFSW-32 → 1190
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

Contents

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- www.festo.com/catalog/ms12n-loe

Lubricators MS12N-LOE – Inch Series

Technical Data

FESTO

ISO Symbol



General Technical Data				
Pneumatic connection 1, 2 ¹⁾	1 NPT	1¼ NPT	1½ NPT	2 NPT
Supply pressure [psi]	15 ... 235			

1) Dependent on port plate selected, must be ordered separately as an accessory → 1188

Standard Nominal Flow Rate q _N ²⁾ [scfm]				
Pneumatic connection 1, 2	1 NPT	1¼ NPT	1½ NPT	2 NPT
In main flow direction 1 → 2	706.0	723.7	741.3	776.6

2) Dependent on port plate selected, must be ordered separately as an accessory → 1188
Measured at p₁ = 88 psi and Δp = 7.4 psi

Operating and Environmental Conditions	
Minimum flow for lubricator operation [scfm]	≤14.1
Operating medium	Compressed air, air quality class 5.7.– to DIN ISO 8573-1
Max. oil capacity [in ³]	91.50
Bowl guard	Metal bowl
Ambient temperature [°F]	32 ... 140
Temperature of medium [°F]	32 ... 140
Storage temperature [°F]	14 ... 140
Assembly position	Vertical ±5°
Corrosion resistance CRC ³⁾	2

3) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Weights [lb]	
With metal bowl	13.00

- Wearing parts kits → 1190
- For spare parts go to: www.festo.com/en/spare_parts_service

Lubricators MS12N-LOE – Inch Series

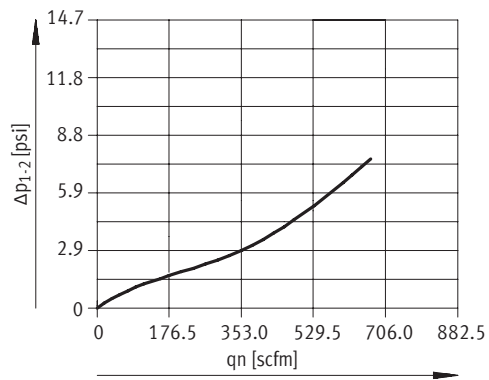
Technical Data



Standard Flow Rate q_n as a Function of the Differential Pressure Δp_{1-2}

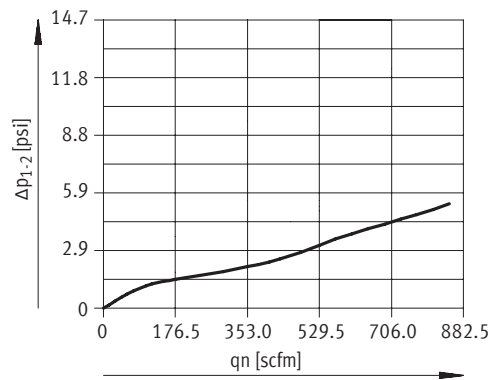
With port plate MS12-AGF

Pneumatic connection 1NPT



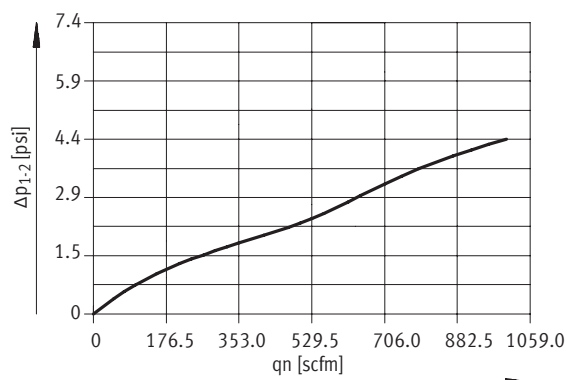
With port plate MS12-AGG

Pneumatic connection 1¼NPT



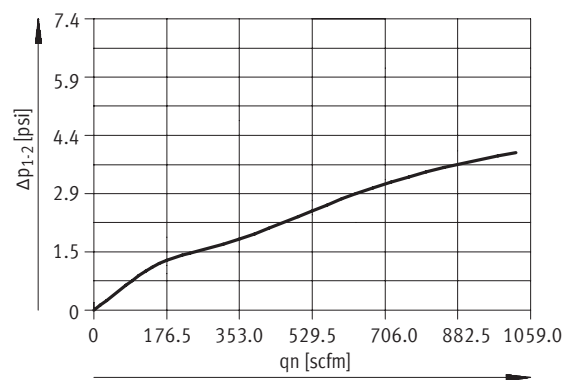
With port plate MS12-AGH

Pneumatic connection 1½NPT



With port plate MS12-AGI

Pneumatic connection 2NPT



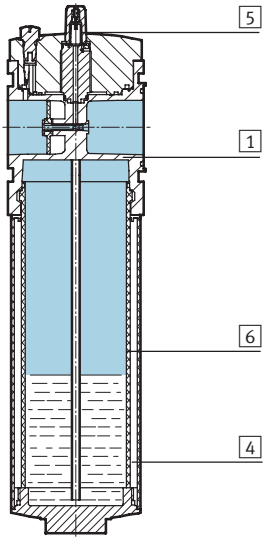
Lubricators MS12N-LOE – Inch Series

Technical Data



Materials

Sectional view



Lubricator		
1	Body	Die-cast aluminum
4	Metal bowl	Aluminum/polyamide
5	Lubricator dome	Polycarbonate
6	Metal bowl sight glass	Polyamide
-	Seals	Nitrile rubber

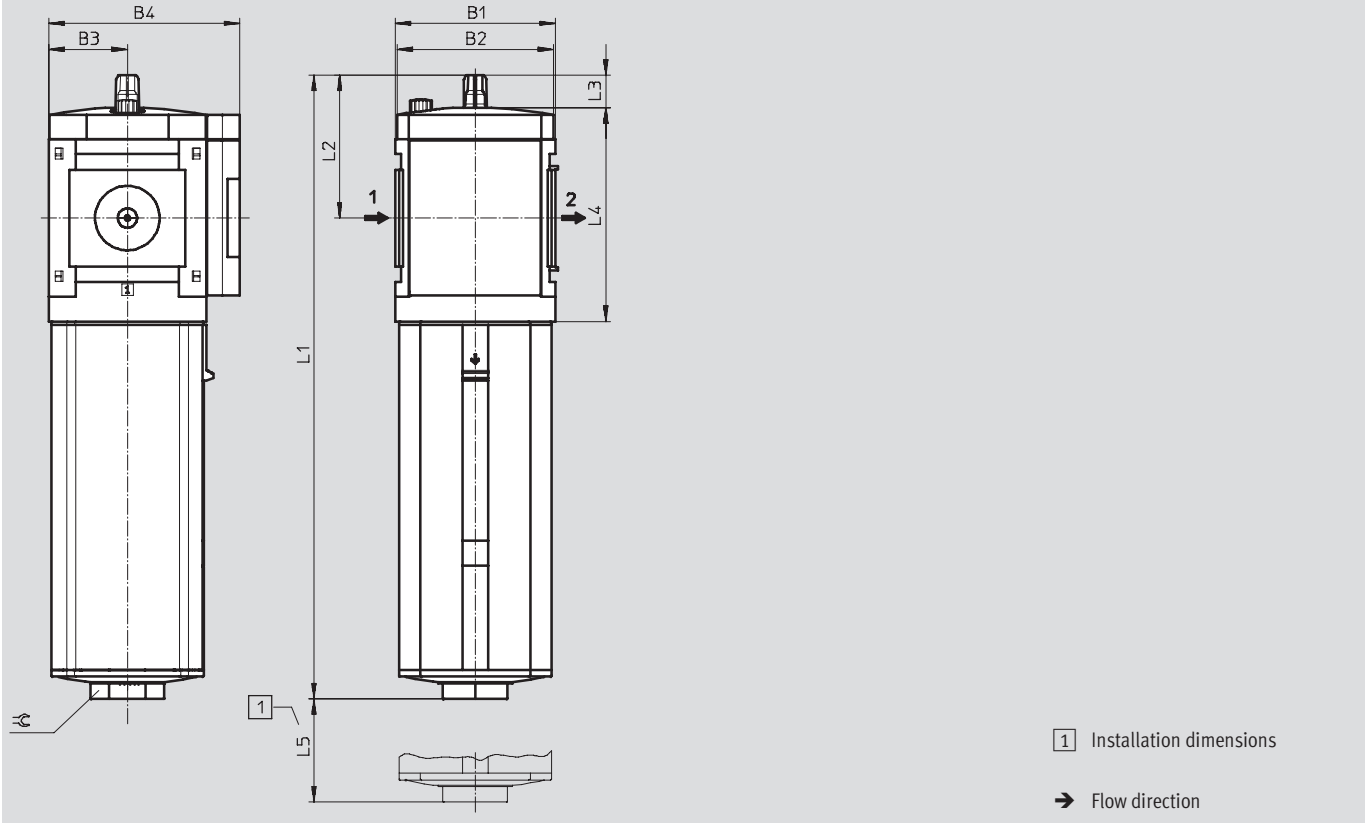
Lubricators MS12N-LOE – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products



Dimensions¹⁾ – Standard

Download CAD Data → www.festo.com/us/cad



1) Installation dimensions

→ Flow direction

B1	B2	B3	B4	L1	L2	L3	L4	L5	⌀
4.88	4.80	2.40	5.83	19.02	4.37	0.98	6.54	11.81	1.97

1) Dimensions are in inches, unless otherwise noted.

Ordering Data

Metal bowl

Connection	Part No.	Type	LT
1NPT ... 2NPT ²⁾	537156	MS12-LOE-G-U	1D

LT = Lead time

1D typically ships same day/next day

1W typically ships within 1 week

Q request a quote for lead time

2) Port plate must be ordered separately as an accessory → 1188

Lubricators MS12N-LOE – Inch Series

Ordering Data – Configurable Products



M Mandatory Data						O Options		
Part No.	Series	Size	Thread	Function	Connection size	Bowl	Type of mounting	Reverse flow direction
535044	MS	12	N	LOE	AQT AQU AQV AQW G	U	WP	Z
Order example								
535044	MS	12	N	- LOE	- AQW	- U	- WP	- Z

Ordering Table			
Grid dimension	[mm]	124	Conditions Code Enter code
M	Part No.	535044	
	Series	Standard	MS MS
	Size	12	12 12
	Thread	NPT thread	N N
	Function	Lubricator	-LOE -LOE
	Connection size	Port plate 1 NPT (dimensions → 1188)	-AQT
		Port plate 1¼ NPT (dimensions → 1188)	-AQU
		Port plate 1½ NPT (dimensions → 1188)	-AQV
		Port plate 2 NPT (dimensions → 1188)	-AQW
		Module without connecting thread, without port plate	-G
	Bowl	Metal bowl	-U -U
O	Type of mounting	Mounting bracket (dimensions → 1189)	1 -WP
	Reverse flow direction	Flow direction from right to left	-Z

1 WP Only with port plate AQT, AQU, AQV or AQW

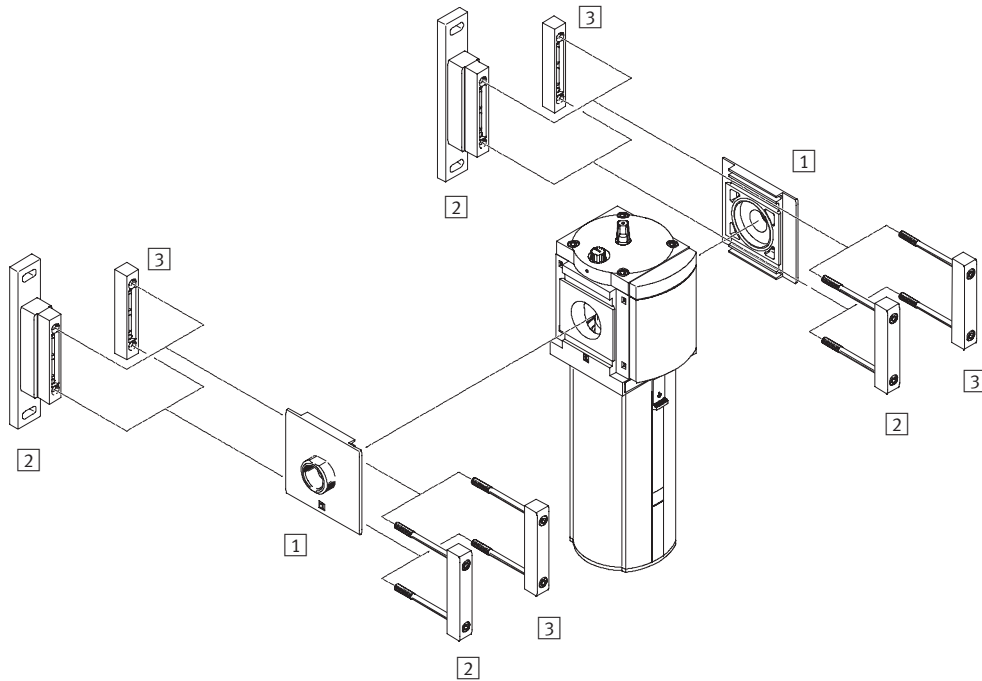
Transfer order code

535044	MS	12	N	- LOE	-	U	-	-	-
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Lubricators MS12N-LOE – Inch Series

Accessories Overview

Mounting Attachments and Accessories



Mounting Attachments and Accessories

		→ Page
1	Port plate MS12-AQ...	1188
2	Mounting bracket MS12-WP	1189
3	Body connector MS12-MV	1188

Lubricators MS12N-LOE – Inch Series



Accessories

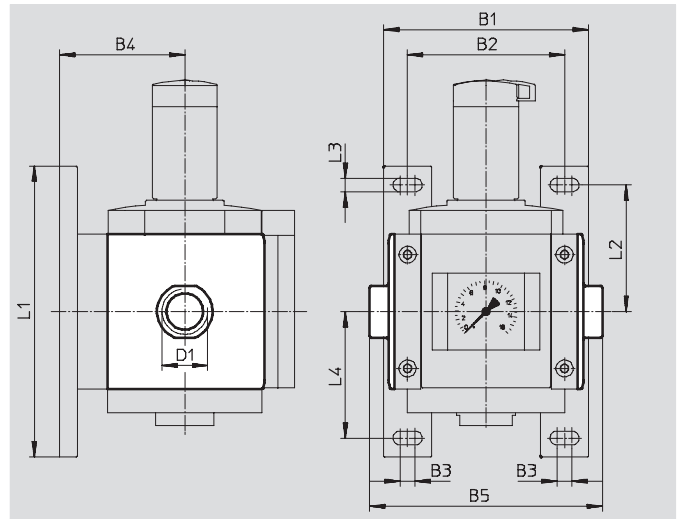
1 Port plate MS12-AQ...

- Adapter for pneumatic connection

Material:

Die-cast aluminum

Free of copper and PTFE



Dimensions and Ordering Data											
B1	B2	B3	B4	B5	D1	L1	L2	L3	L4	Weight [[b]	Part No. Type
6.38	4.88	0.47	3.90	7.24	1 NPT	9.06	3.94	0.43	3.94	2.60	537139 MS12-AQT
				7.24	1¼ NPT						537140 MS12-AQU
				7.24	1½ NPT						537141 MS12-AQV
				7.72	2 NPT						537142 MS12-AQW

3 Body connector MS12-MV

- For connecting modules

Material:

Die-cast aluminum,

Free of copper and PTFE



Ordering Data			
Size	Weight [[b]	Part No.	Type
MS12	1.00	537134	MS12-MV

Lubricators MS12N-LOE – Inch Series

Accessories

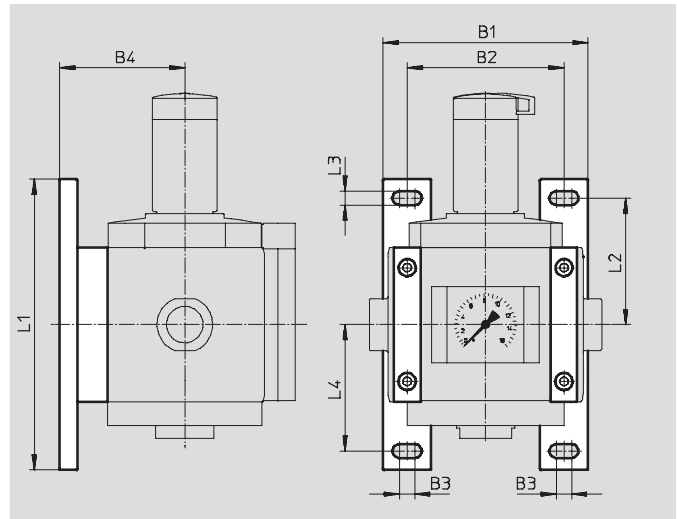
2 Mounting bracket MS12-WP

- To connect the modules for wall mounting
- In combination with a port plate for mounting an individual unit on a wall

Material:

Die-cast aluminum

Free of copper and PTFE



Dimensions and Ordering Data

Size	B1	B2	B3	B4	L1	L2	L3	L4	Weight [[b]	Part No.	Type
MS12	6.38	4.88	0.47	3.90	9.06	3.94	0.43	3.94	1.40	537133	MS12-WP

Lubricators MS12N-LOE – Inch Series

Accessories



Ordering Data – Special Oil OFSW				
	Description	Scope of delivery	Part No.	Type
	for lubricators	1 liter	152811	OFSW-32

Ordering Data – Wearing Parts Kits				
Size	Description		Part No.	Type
MS12	O-rings, seal		673746	MS12-LOE

- For spare parts go to: www.festo.com/en/spare_parts_service

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Subject to change