

Lubricators MS4N-LOE – Inch Series

FESTO



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: 1/8 NPT, 1/4 NPT, 3/8 NPT
- Supply pressure: 15 ... 176 psi
- Flow rate: 38.8 ... 77.7 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
MS4N			AG...	R	U	Z
LOE	38.8 ... 77.7	1/8 NPT, 1/4 NPT	1/8 NPT, 1/4 NPT, 3/8 NPT	■	■	■

Features			Contents
<ul style="list-style-type: none"> • 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) 	<p>The following oils are recommended for Festo components:</p> <p>Viscosity range to ISO 3448, ISO class VG 32</p> <p>32 mm²/s (= cSt) at 40°C</p>	<ul style="list-style-type: none"> • Festo special oil OFSW-32 → 360 • ARAL Vitam GF 32 • BP Energol HLP 32 • Esso Nuto H 32 • Mobil DTE 24 • Shell Tellus Oil DO 32 	<p>Technical Data → 348</p> <p>Dimensional Drawings → 350</p> <p>Ordering Data → 350</p> <p>Accessories → 352</p> <p>→ www.festo.com/catalog/ms4n-loe</p>

Lubricators MS4N-LOE – Inch Series

Technical Data

FESTO

ISO Symbol



General Technical Data		
Pneumatic connection 1, 2	1/8 NPT	1/4 NPT
Supply pressure [psi]	15 ... 176	

Standard Nominal Flow Rate qnN [scfm]		
Pneumatic connection 1, 2	1/8 NPT	1/4 NPT
In main flow direction 1 → 2	38.8	77.7

Operating and Environmental Conditions		
Minimum flow for lubricator operation [scfm]	1.4	
Operating medium	Compressed air	
Max. oil capacity [in ³]	1.83 (with plastic bowl guard) 2.20 (with metal bowl)	
Bowl guard	Plastic bowl guard	
	Metal bowl	
Ambient temperature [°F]	14 ... 140	
Temperature of medium [°F]	14 ... 140	
Storage temperature [°F]	14 ... 140	
Assembly position	Vertical ±5°	
Corrosion resistance CRC ¹⁾	2	

- 1) 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 plastic bowl guard	0.39
With metal bowl	0.71

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

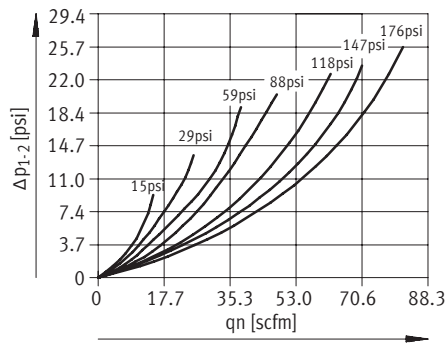
Lubricators MS4N-LOE – Inch Series

Technical Data

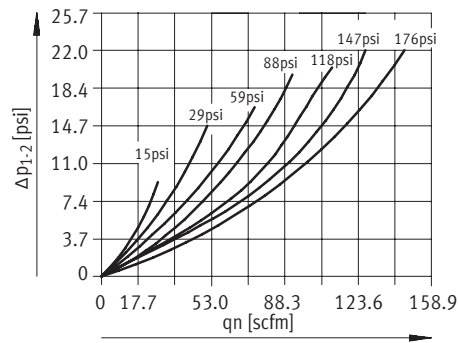
FESTO

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

MS4N-LOE-1/8

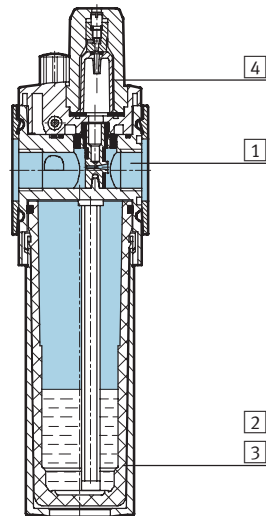


MS4N-LOE-1/4



Materials

Sectional view

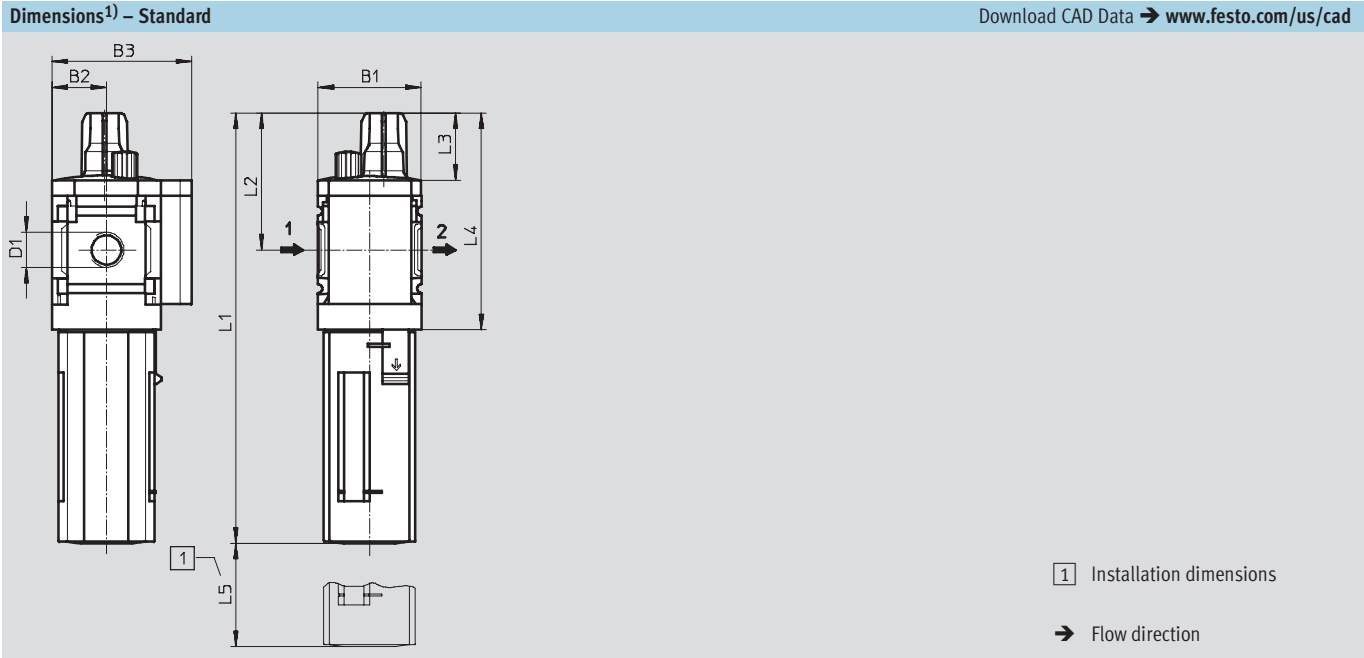


Lubricators		
1	Body	Die-cast aluminum
2	Plastic bowl guard	Polycarbonate/polyamide
3	Metal bowl	Aluminum
	Viewing window	Polyamide
4	Lubricator dome	Polycarbonate
-	Seals	Nitrile rubber

Lubricators MS4N-LOE – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products

FESTO



Type	B1	B2	B3	D1	L1 Bowl guard		L2	L3	L4	L5
					Plastic	Metal				
MS4N-LOE-1/8	1.65	0.83	2.13	1/8 NPT	6.56	7.28	2.09	1.02	3.31	3.94
MS4N-LOE-1/4				1/4 NPT						

1) Dimensions are in inches, unless otherwise noted.

Ordering Data							
Connection	Plastic bowl with plastic bowl guard				Metal bowl		
	Part No.	Type	LT		Part No.	Type	LT
1/8 NPT	531703	MS4N-LOE-1/8-R	1D		535799	MS4N-LOE-1/8-U	Q
1/4 NPT	531702	MS4N-LOE-1/4-R	1D		535798	MS4N-LOE-1/4-U	Q

LT = Lead time 1D typically ships same day/next day 1W typically ships within 1 week Q request a quote for lead time

Lubricators MS4N-LOE – Inch Series

Ordering Data – Configurable Products

FESTO

M Mandatory Data							O Options	
Part No.	Series	Size	Thread	Function	Connection size	Bowl	Type of mounting	Reverse flow direction
527702	MS	4	N	LOE	1/8, 1/4, AQK, AQN, AQP	R U	WP WPM WB WBM	Z
Order example								
527702	MS	4	N	- LOE	- AQN	- R	- WP	- Z

Ordering Table					
Grid dimension		[mm]	40	Conditions	Code
Enter code					
M	Part No.	527702			
	Series	Standard			
	Size	4			
	Thread	NPT thread			
	Function	Lubricators			
	Connection size	Body thread 1/8 NPT			
		Body thread 1/4 NPT			
		Port plate 1/8 NPT (dimensions → 356)			
		Port plate 1/4 NPT (dimensions → 356)			
		Port plate 3/8 NPT (dimensions → 356)			
	Bowl	Plastic bowl with plastic bowl guard			
		Metal bowl			
O	Type of mounting	Mounting bracket (dimensions → 357)			
		Mounting bracket (dimensions → 357)			
		Mounting bracket (dimensions → 354)			
		Mounting bracket (dimensions → 354)			
	Reverse flow direction	Flow direction from right to left			

1 WP, WPM Only with port plate AQK, AQN or AQP

Transfer order code

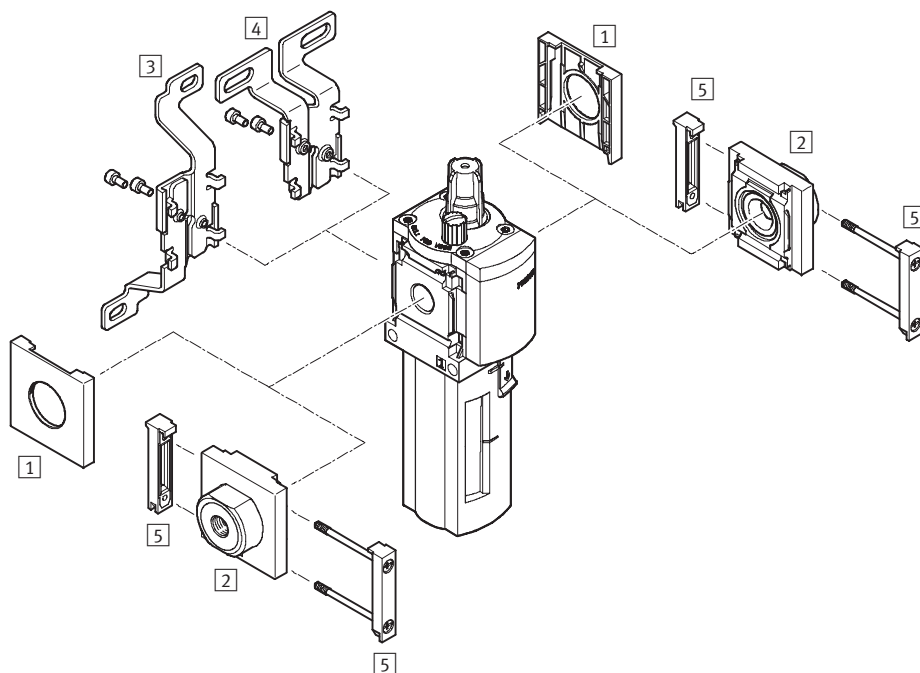
527702	MS	4	N	-	LOE	-		-		-		-	
--------	----	---	---	---	-----	---	--	---	--	---	--	---	--

Lubricators MS4N-LOE – Inch Series

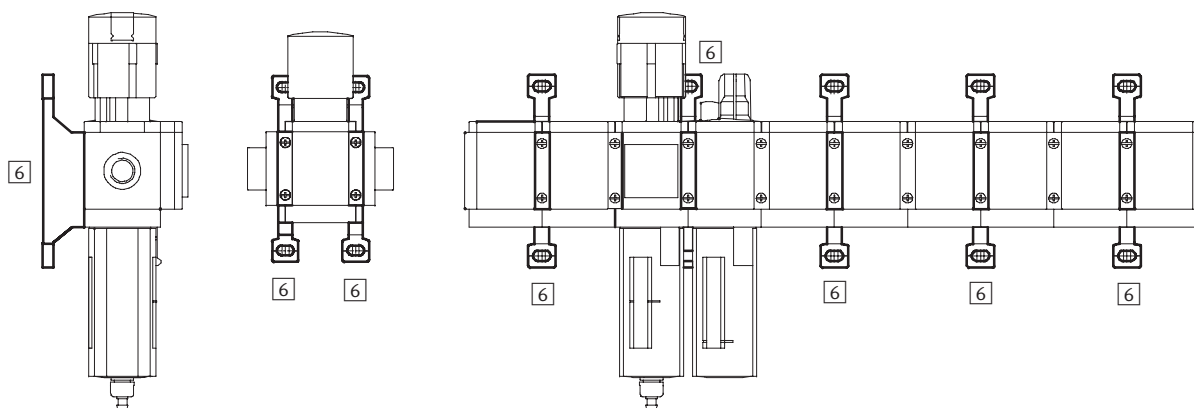
Accessories Overview

FESTO

Mounting Attachments and Accessories



Single unit and combination unit mounting brackets.



Lubricators MS4N-LOE – Inch Series

Accessories Overview



Mounting Attachments and Accessories						
		Single unit		Combination unit ➔ 2.1-49		➔ Page
		without port plate	with port plate	without port plate	with port plate	
1	Cover cap MS4-END	■	–	■	–	355
2	Port plate MS4N-AQ...	–	■	–	■	356
3	Mounting bracket MS4-WB	■	■	–	–	354
4	Mounting bracket MS4-WBM	■	■	–	–	354
5	Body connector MS4-MV	–	■	■	■	356
6	Mounting bracket MS4-WP/WPB/WPM	–	■	■	■	357

Lubricators MS4N-LOE – Inch Series

Accessories

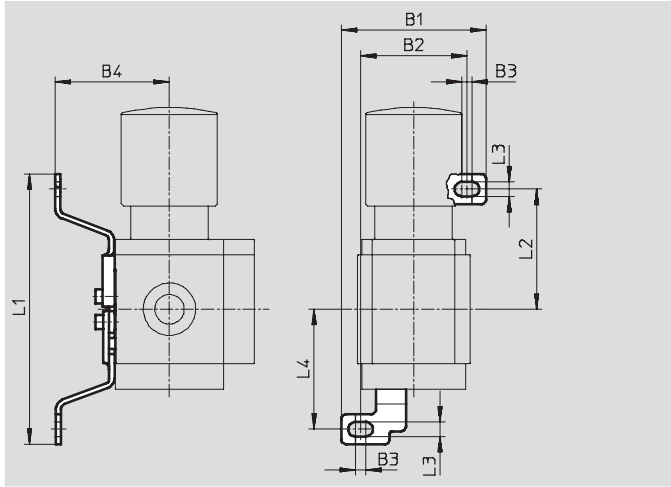
FESTO

3 Mounting bracket MS4-WB

- For wall mounting

Material:

Steel



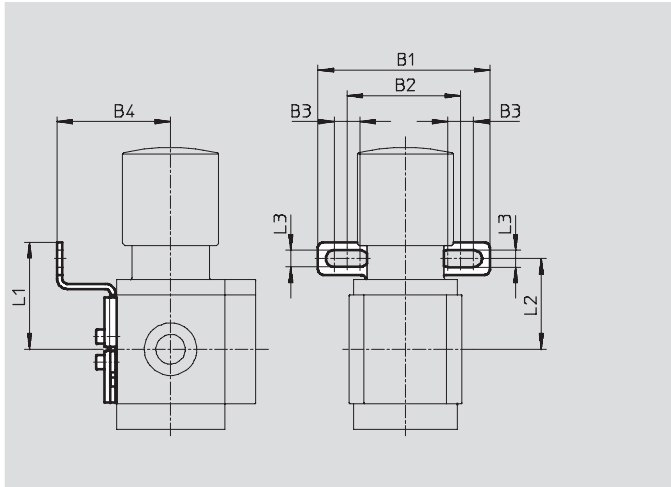
Dimensions and Ordering Data									
B1	B2	B3	B4	L1	L2	L3	L4	Weight [lb]	Part No. Type
2.21	1.62	0.16	1.74	4.12	1.83	0.22	1.83	0.09	532185 MS4-WB

4 Mounting bracket MS4-WBM

- For wall mounting

Material:

Steel



Dimensions and Ordering Data									
B1	B2	B3	B4	L1	L2	L3	Weight [lb]	Part No.	Type
2.62	1.73	0.39	1.73	1.63	1.38	0.26	0.10	526062	MS4-WBM

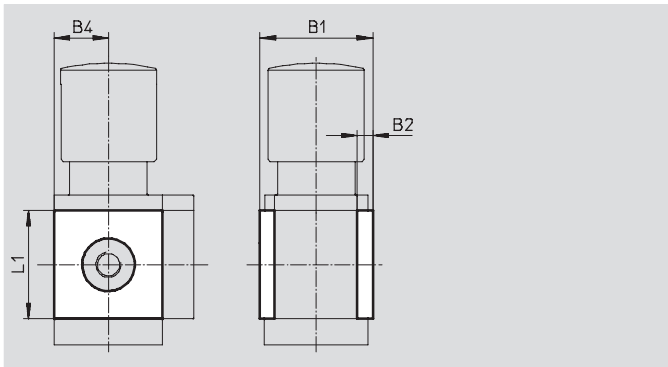
Lubricators MS4N-LOE – Inch Series

Accessories

1 Cover cap MS4-END

- Can be used to cover the body sides of the first and last module if port plates are not used.

Material:
Reinforced polyamide
Free of copper and PTFE

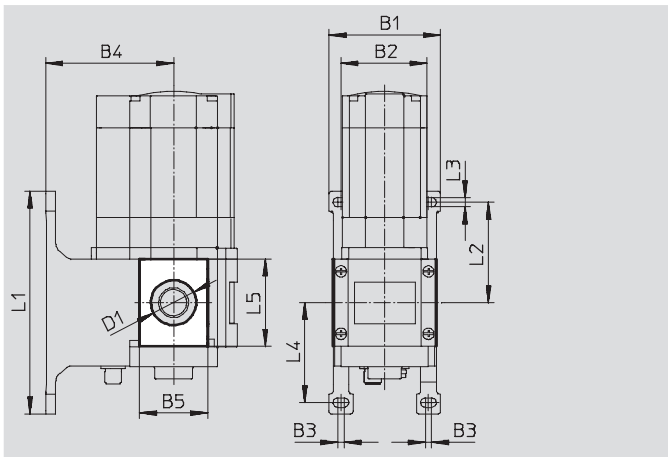


Dimensions and Ordering Data						
B1	B2	B4	L1	Part No.	Type	
1.72	0.24	0.83	1.65	538779	MS4-END	

Mounting plate MS4-AEND

- In combination with mounting bracket MS-WP or MS-WPB for mounting an individual unit on a wall with body thread

Material:
Reinforced polyamide
Conforms to RoHS
Free of copper and PTFE



Dimensions and Ordering Data															
B1	B2	B3	B4		B5	D1 Ø	L1	L2	L3	L4	L5	CRC ¹⁾	Weight [lb]	Part No.	Type
			WP	WPB											
2.17	1.58	0.16	1.73	2.60	1.20	0.80	4.17	1.83	0.22	1.84	1.65	2	0.01	542966	MS4-AEND

1) 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.

Lubricators MS4N-LOE – Inch Series

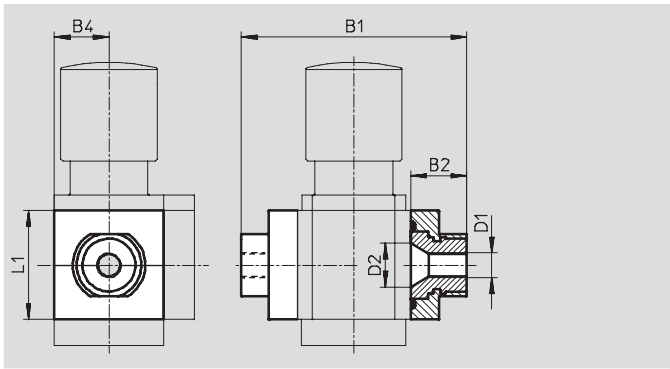
Accessories

2 Port plate MS4N-AQ...

- Adapter for pneumatic connection

Material:

Aluminum



Dimensions and Ordering Data								
B1	B2	B4	D1	D2	L1	Weight [lb]	Part No.	Type
3.29	0.85	0.83	1/8 NPT	0.66	1.65	0.26	526065	MS4N-AQK
			1/4 NPT				526066	MS4N-AQN
			3/8 NPT				526067	MS4N-AQP

5 Body connector MS4-MV

- For connecting modules

Material:

Stainless steel/polyacetate



Ordering Data		
Weight [lb]	Part No.	Type
0.07	532798	MS4-MV

Lubricators MS4N-LOE – Inch Series



Accessories

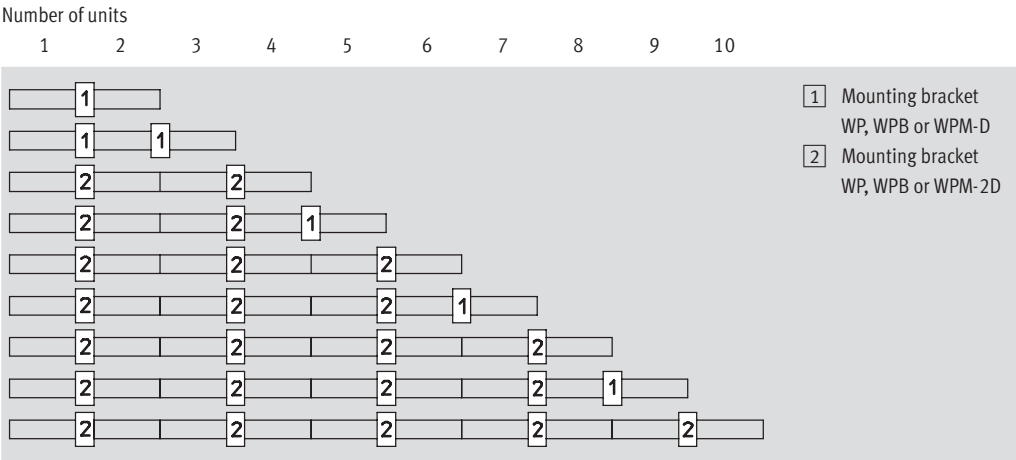
6

Mounting Bracket MS4-WP...

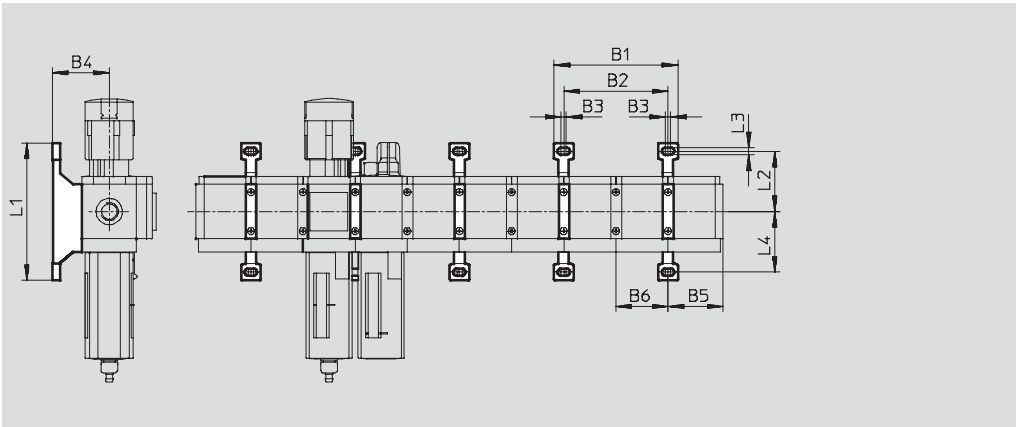
Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 1.575 in

2 units: 3.15 in



Mounting dimensions



Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS4-WP	3.75	3.15	0.16	1.73	1.65	1.57	4.17	1.83	0.22	1.84
MS4-WPB				2.60						
MS4-WPM-...D				1.73						1.57

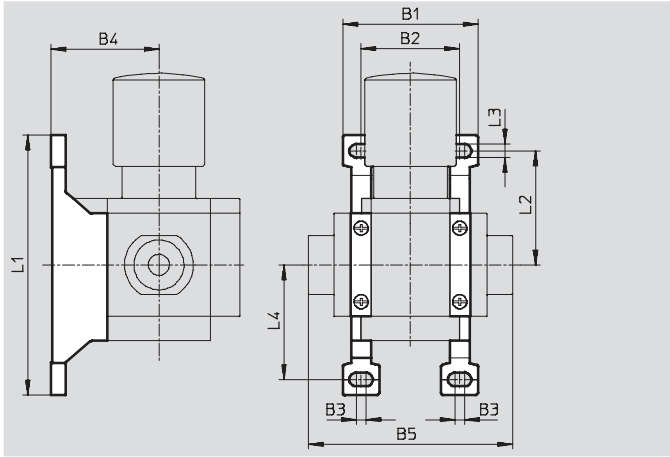
Lubricators MS4N-LOE – Inch Series

Accessories

Mounting bracket MS4-WP

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with body thread on a wall
- For pressure regulator LRB with angled outlet block B... at rear

Material:
Die-cast aluminum

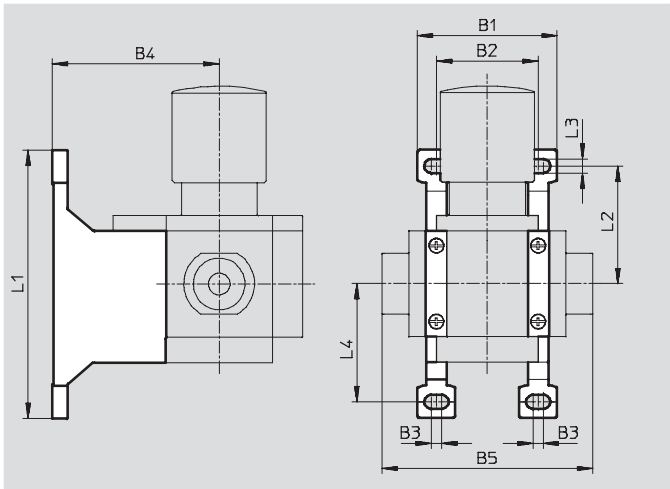


Dimensions and Ordering Data										
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No. Type
2.17	1.58	0.16	1.73	3.28	4.17	1.83	0.22	1.84	0.08	532184 MS4-WP

Mounting bracket MS4-WPB

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- In combination with mounting plate MS-AEND or for mounting an individual unit with direct thread on a wall
- Provides large wall gap for pressure regulator

Material:
Die-cast aluminum



Dimensions and Ordering Data										
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No. Type
2.17	1.58	0.16	2.60	3.28	4.17	1.83	0.22	1.84	0.11	526063 MS4-WPB

Lubricators MS4N-LOE – Inch Series

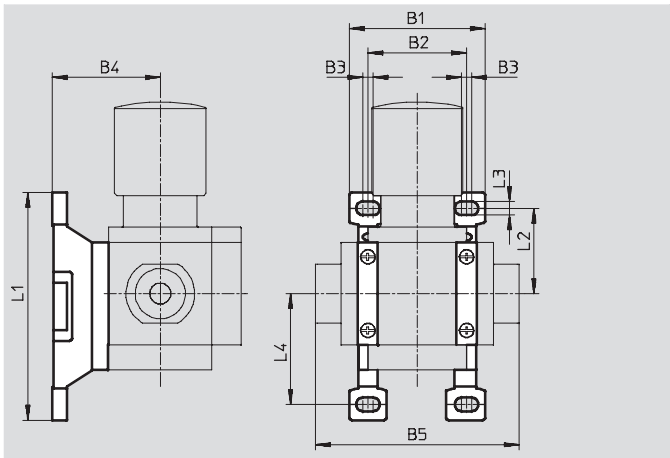
Accessories

Mounting bracket MS4-WPM

- To connect the modules for wall mounting
- In combination with a port plate MS-AG... for mounting an individual unit on a wall
- Speedy attachment and detachment
- For installation of modules with regulating knob pointing downwards

The distance piece D or 2D (designated in the type code) is included in the scope of delivery and ensures the correct clearance

Material:
Die-cast aluminum



Dimensions and Ordering Data												
B1	B2	B3	B4	B5	L1	L2	L3	L4	Clearance	Weight [lb]	Part No.	Type
2.17	1.57	0.16	1.73	3.28	3.65	1.37	0.22	1.78	1.57	0.09	526060	MS4-WPM-D
3.75	3.15			4.86					3.15	0.11	526061	MS4-WPM-2D

Body connector MS4-MVM

- For installation of modules with regulating knob pointing downwards

Material:
Die-cast aluminum



Ordering Data		
Size	Part No.	Type
MS4	532800	MS4-MVM

Lubricators MS4N-LOE – Inch Series

Accessories



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

Festo - Your Partner in Automation



1 Festo Inc.
5300 Explorer Drive
Mississauga, ON L4W 5G4
Canada

Festo Customer Interaction Center
Tel: 1 877 463 3786
Fax: 1 877 393 3786
Email: customer.service.ca@festo.com



2 Festo Pneumatic
Av. Ceylán 3,
Col. Tequesquináhuac
54020 Tlalnepantla,
Estado de México

Multinational Contact Center
01 800 337 8669
ventas.mexico@festo.com



3 Festo Corporation
1377 Motor Parkway
Suite 310
Islandia, NY 11749

Festo Customer Interaction Center
1 800 993 3786
1 800 963 3786
customer.service.us@festo.com



4 Regional Service Center
7777 Columbia Road
Mason, OH 45040

Connect with us

[f](#) [t](#) [in](#) [You Tube](#)

www.festo.com/socialmedia



www.festo.com

Subject to change