

## Lubricators MS6N-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: 1/4 NPT, 3/8 NPT, 1/2 NPT, 3/4 NPT
- Supply pressure: 15 ... 235 psi
- Flow rate: 88.3 ... 254.2 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
<b>MS6N</b>			<b>AG...</b>	<b>R</b>	<b>U</b>	<b>Z</b>
LOE	88.3 ... 254.2	1/4 NPT, 3/8 NPT, 1/2 NPT	1/4 NPT, 3/8 NPT, 1/2 NPT, 3/4 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 mm<sup>2</sup>/s (= cSt) at 40°C
- Festo special oil OFSW-32 → 920
  - ARAL Vitam GF 32
  - BP Energol HLP 32
  - Esso Nuto H 32
  - Mobil DTE 24
  - Shell Tellus Oil DO 32

### Contents

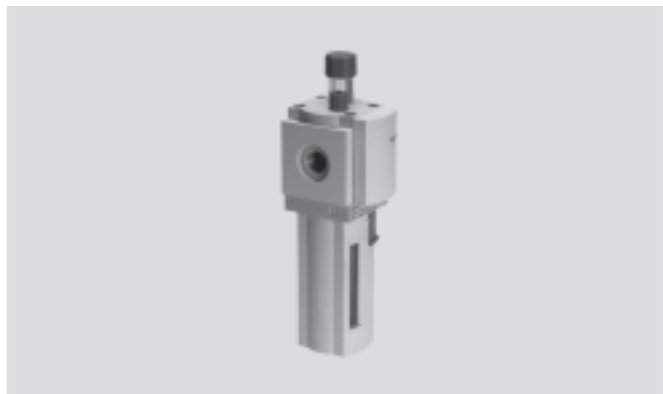
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→ <a href="http://www.festo.com/catalog/ms6n-loe">www.festo.com/catalog/ms6n-loe</a>	

# Lubricators MS6N-LOE – Inch Series

Technical Data

FESTO

ISO Symbol



General Technical Data			
Pneumatic connection 1, 2	1/4 NPT	3/8 NPT	1/2 NPT
Supply pressure	[psi]	15 ... 235	

Standard Nominal Flow Rate q <sub>N</sub> [scfm]			
Pneumatic connection 1, 2	1/4 NPT	3/8 NPT	1/2 NPT
In main flow direction 1 → 2	88.3	187.1	254.2

Operating and Environmental Conditions	
Minimum flow for lubricator operation	[scfm] 1.8
Operating medium	Filtered compressed air, filtration grade 40 µm
Max. oil capacity	[in <sup>3</sup> ] 4.58 (with plastic bowl guard) 4.88 (with metal bowl)
Bowl guard	Plastic 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 <sup>1)</sup> 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	1.20
With metal bowl	1.62

- For spare parts go to: [www.festo.com/en/spare\\_parts\\_service](http://www.festo.com/en/spare_parts_service)

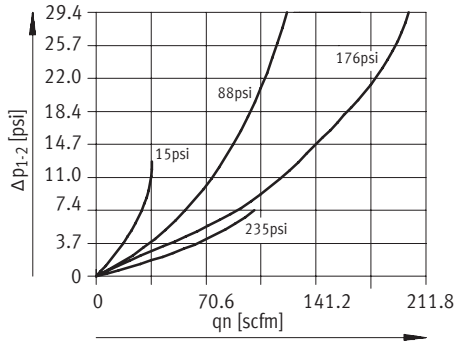
# Lubricators MS6N-LOE – Inch Series

Technical Data

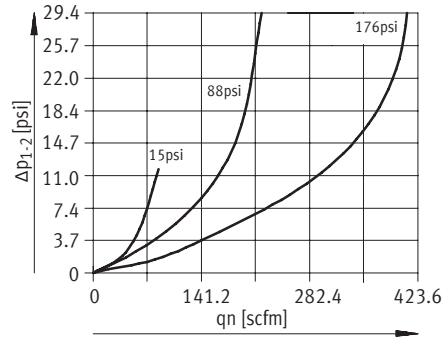


## Standard Flow Rate $q_n$ as a Function of the Differential Pressure $\Delta p_{1-2}$

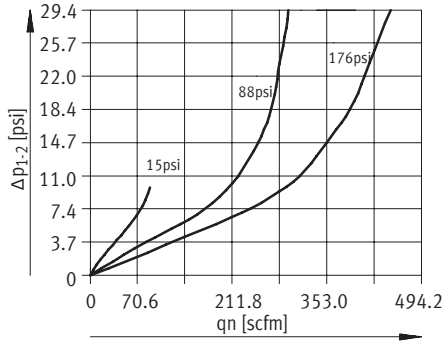
MS6N-LOE-1/4



MS6N-LOE-3/8

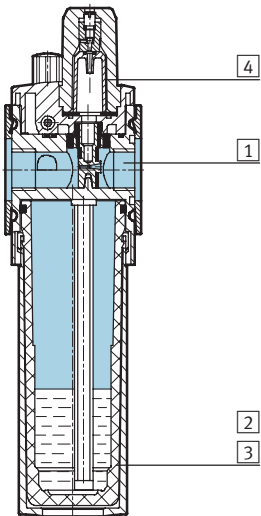


MS6N-LOE-1/2



## 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 MS6N-LOE – Inch Series

Dimensional Drawings, Ordering Data – Pre-configured Products



**Dimensions<sup>1)</sup> – Standard** Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

1 Installation dimensions  
→ Flow direction

Type	B1	B2	B3	D1	L1 Bowl guard		L2	L3	L4	L5
					Plastic	Metal				
MS6N-LOE-1/4	2.44	1.22	2.99	1/4 NPT	8.49	8.74	2.60	1.06	4.37	5.12
MS6N-LOE-3/8				3/8 NPT						
MS6N-LOE-1/2				1/2 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
1/4 NPT	531710	MS6N-LOE-1/4-R	1D	531716	MS6N-LOE-1/4-U	Q
3/8 NPT	531712	MS6N-LOE-3/8-R	1D	531718	MS6N-LOE-3/8-U	Q
1/2 NPT	531711	MS6N-LOE-1/2-R	1D	531717	MS6N-LOE-1/2-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 MS6N-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
527675	MS	6	N	LOE	1/4, 3/8, 1/2, AQN, AQP, AQR, AQS	R U	WP WPM WB	Z
<b>Order example</b>								
<b>527675</b>	<b>MS</b>	<b>6</b>	<b>N</b>	<b>- LOE</b>	<b>- AQN</b>	<b>- R</b>	<b>- WP</b>	<b>- Z</b>

Ordering Table		Grid dimension [mm]	62	Conditions	Code	Enter code
M	Part No.	527675				
	Series	Standard			MS	MS
	Size	6			6	6
	Thread	NPT thread			N	N
	Function	Lubricators			-LOE	-LOE
	Connection size	Body thread 1/4 NPT			-1/4	
		Body thread 3/8 NPT			-3/8	
		Body thread 1/2 NPT			-1/2	
		Port plate 1/4 NPT (dimensions → 916)			-AQN	
		Port plate 3/8 NPT (dimensions → 916)			-AQP	
		Port plate 1/2 NPT (dimensions → 916)			-AQR	
	Bowl	Plastic bowl with plastic bowl guard			-R	
		Metal bowl			-U	
O	Type of mounting	Mounting bracket (dimensions → 917)		1	-WP	
		Mounting bracket (dimensions → 917)		1	-WPM	
		Mounting bracket (dimensions → 914)			-WB	
	Reverse flow direction	Flow direction from right to left			-Z	

1 WP, WPM Only with port plate AQN, AQP, AQR or AQS

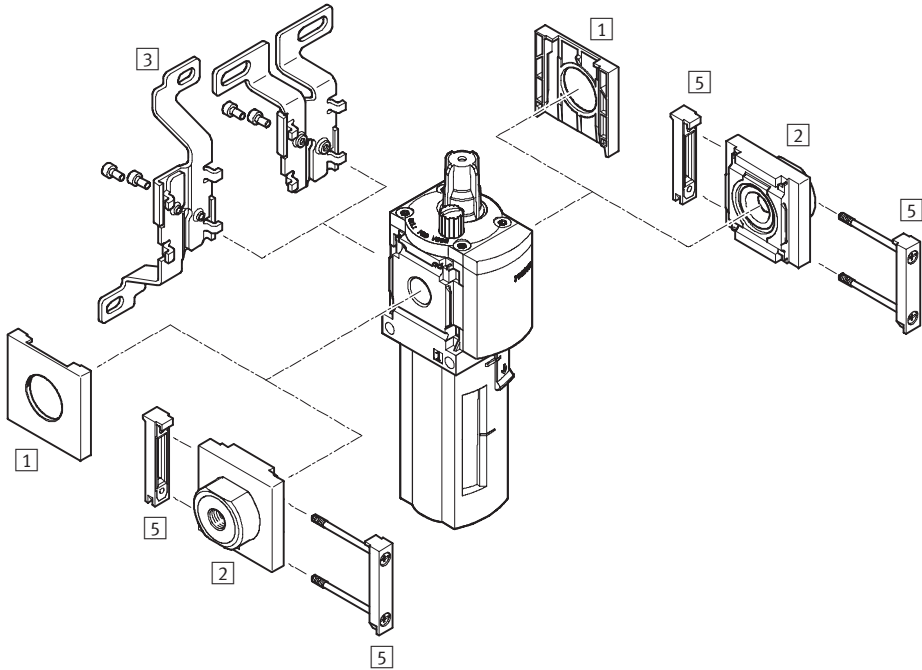
Transfer order code

527675	MS	6	N	- LOE	-		-		-	
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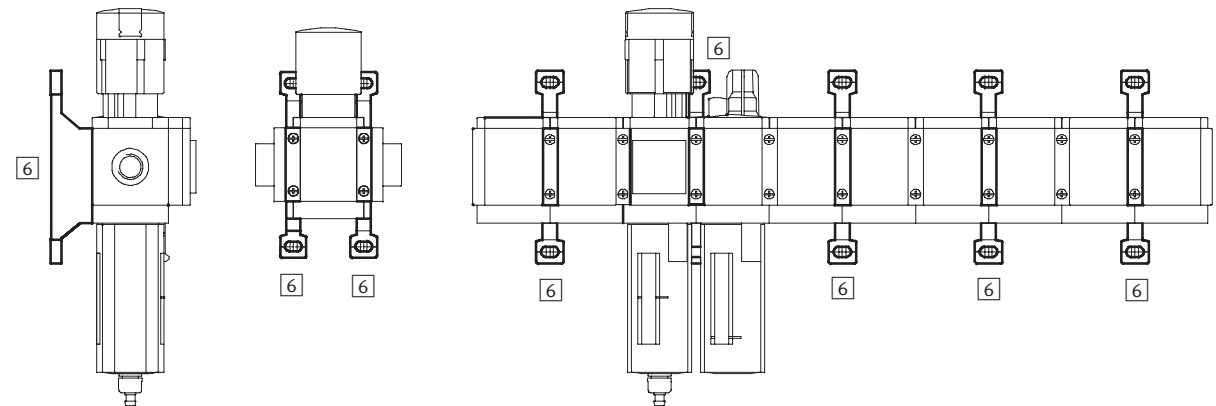
# Lubricators MS6N-LOE – Inch Series

Accessories Overview

## Mounting Attachments and Accessories



Single unit and combination unit mounting brackets.



# Lubricators MS6N-LOE – Inch Series

Accessories Overview



Mounting Attachments and Accessories						
		Single unit		Combination unit → 3.1-49		→ Page
		without port plate	with port plate	without port plate	with port plate	
1	Cover cap MS6-END	■	-	■	-	915
2	Port plate MS6N-AQ...	-	■	-	■	916
3	Mounting bracket MS6-WB	■	■	-	-	914
5	Body connector MS6-MV	-	■	■	■	916
6	Mounting bracket MS6-WP/WPB/WPM	-	■	■	■	917

# Lubricators MS6N-LOE – Inch Series



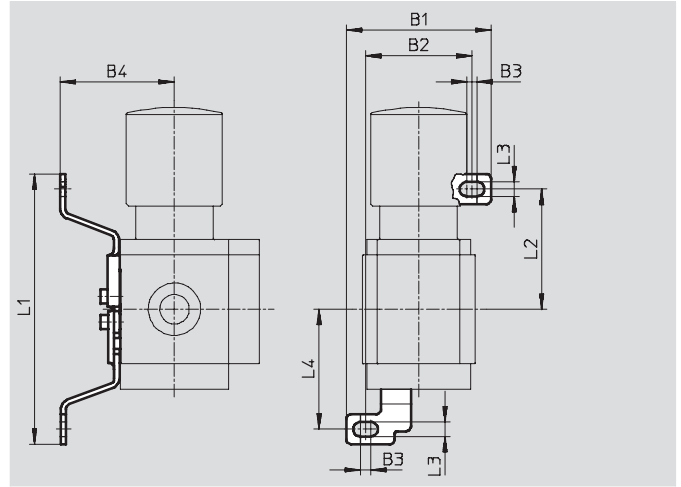
Accessories

## 3 Mounting bracket MS6-WB

- For wall mounting

Material:

Steel



Dimensions and Ordering Data										
B1	B2	B3	B4	L1	L2	L3	L4	Weight [lb]	Part No.	Type
3.13	2.44	0.18	2.17	6.20	2.80	0.26	2.80	0.24	532196	MS6-WB



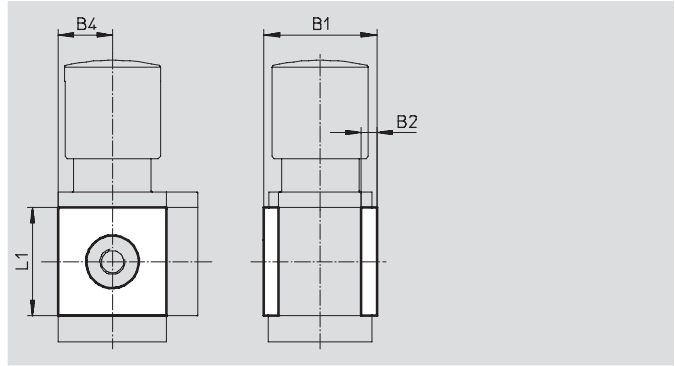
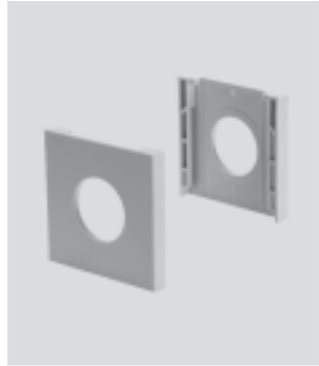
# Lubricators MS6N-LOE – Inch Series

Accessories

## 1 Cover cap MS6-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



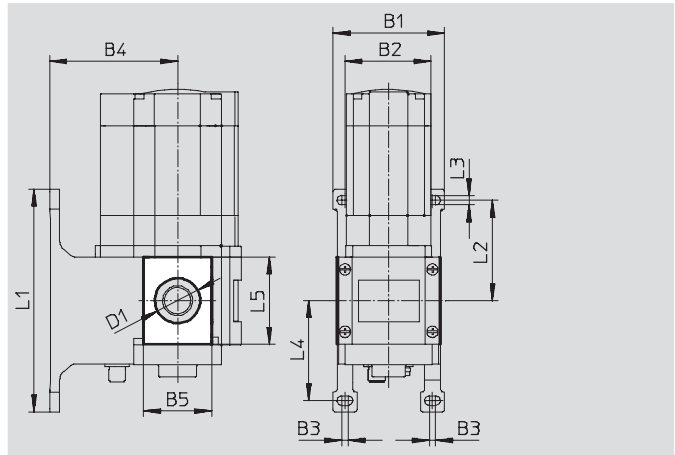
Dimensions and Ordering Data						
B1	B2	B4	L1	Part No.	Type	
2.64	0.31	1.22	2.44	538780	MS6-END	

## Mounting plate MS6-AEND

(order code: WBE; scope of delivery includes mounting bracket MS6-WPB)

- 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 ∅	L1	L2	L3	L4	L5	CRC <sup>1)</sup>	Weight [lb]	Part No.	Type
			WP	WPB											
3.11	2.44	0.18	2.13	3.56	1.91	1.26	6.22	2.80	0.26	2.80	2.44	2	0.03	535408	MS6-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.

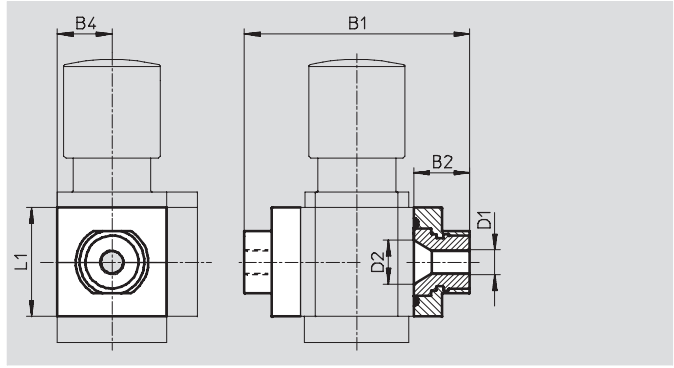
# Lubricators MS6N-LOE – Inch Series

Accessories

### 3 Port plate MS6N-AQ...

- Adapter for pneumatic connection
- MS6-AGE for implementing threaded connection 3/4 NPT

Material:  
Aluminum



Dimensions and Ordering Data								
B1	B2	B4	D1	D2	L1	Weight [lb]	Part No.	Type
4.53	1.04	1.22	1/4 NPT	0.94	2.44	0.60	526076	MS6N-AQN
			3/8 NPT				526077	MS6N-AQP
			1/2 NPT				526078	MS6N-AQR
			3/4 NPT				526079	MS6N-AQS

### 5 Body connector MS...-MV

- For connecting modules

Material:  
Stainless steel/polyacetate



Ordering Data		
Weight [lb]	Part No.	Type
0.11	532799	MS6-MV

# Lubricators MS6N-LOE – Inch Series

Accessories



## 6 Mounting Bracket MS6-WP...

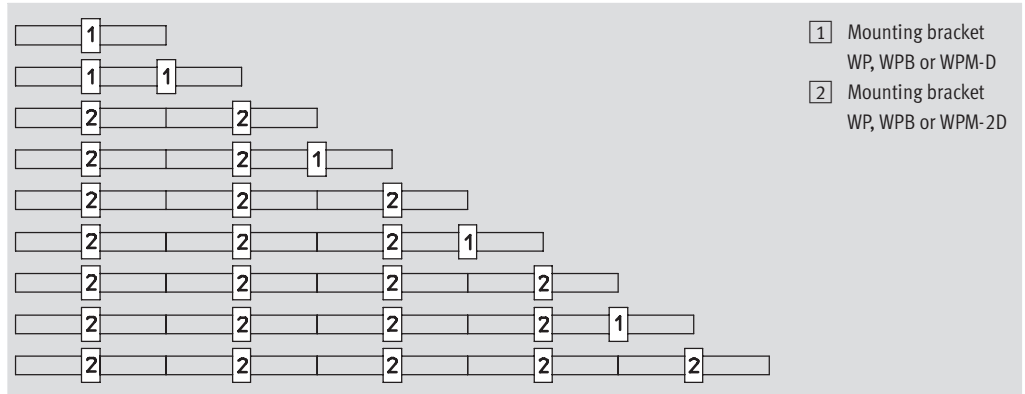
Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 2.44 in with WP, WPB  
2.715 in with WPM-D

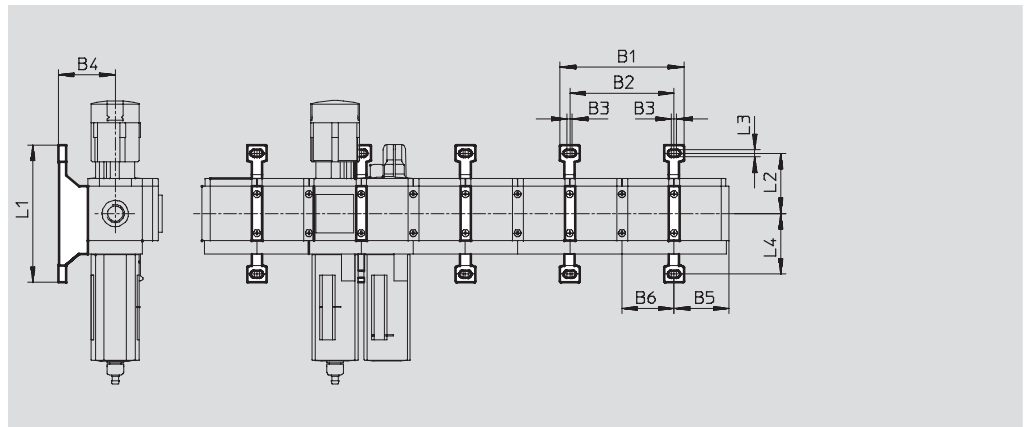
2 units: 4.88 in with WP, WPB  
5.43 in with WPM-2D

Number of units

1 2 3 4 5 6 7 8 9 10



## Mounting dimensions



Type	B1	B2	B3	B4	B5	B6	L1	L2	L3	L4
MS6-WP	5.55	4.88	0.18	2.13	2.54	2.44	6.22	2.80	0.26	2.80
MS6-WPB				3.56						
MS6-WPM-...D	6.61	5.43	0.69	2.13	2.58	2.72	3.88	1.63		1.63

# Lubricators MS6N-LOE – Inch Series

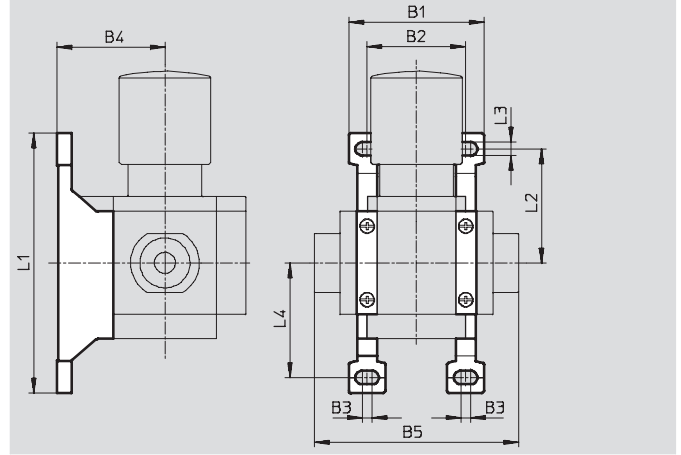


Accessories

## Mounting bracket MS6-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

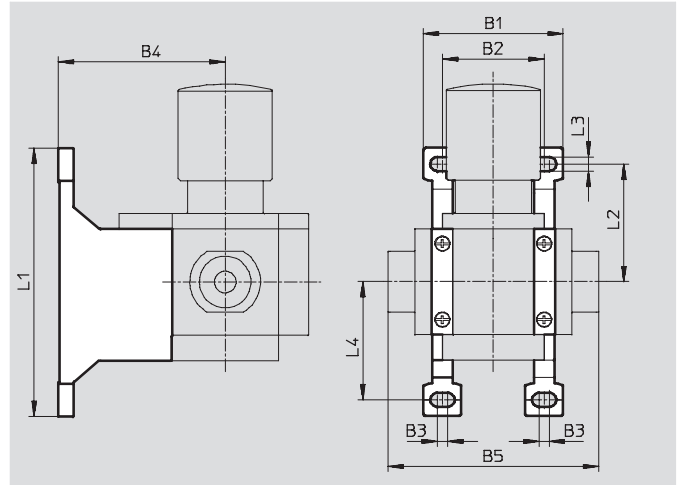


Dimensions and Ordering Data											
B1	B2	B3	B4	B5	L1	L2	L3	L4	Weight [lb]	Part No.	Type
3.11	2.44	0.18	2.13	4.53	6.22	2.80	0.26	2.80	0.15	532195	MS6-WP

## Mounting bracket MS6-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
3.11	2.44	0.18	3.56	4.53	6.22	2.80	0.26	2.80	0.23	526074	MS6-WPB

# Lubricators MS6N-LOE – Inch Series

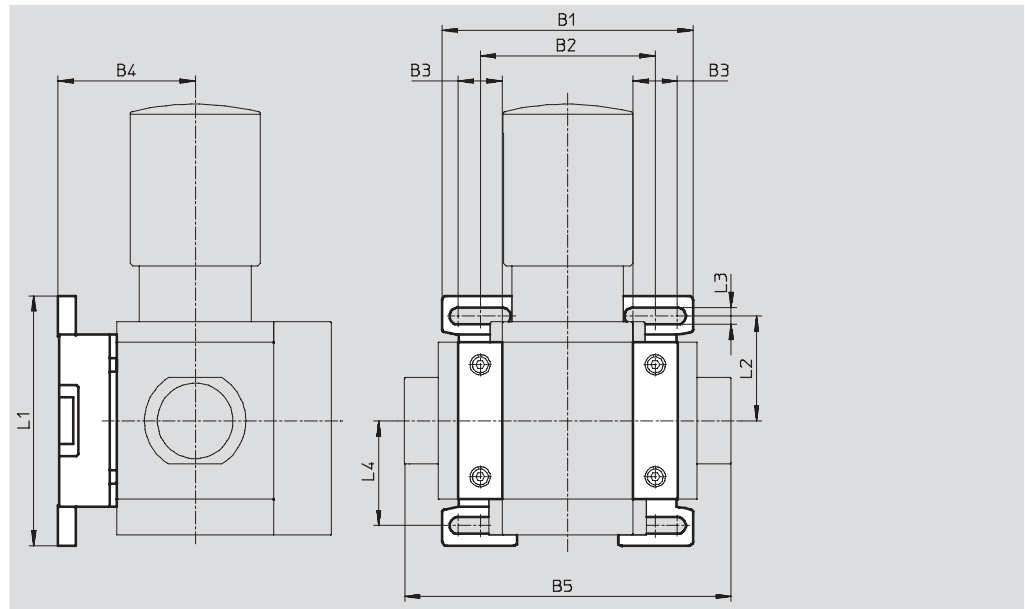
Accessories

## Mounting bracket MS6-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
3.90	2.72	0.69	2.13	5.08	3.88	1.63	0.26	1.63	2.44	0.29	526073	MS6-WPM-D
6.61	5.43			7.80					4.88			

## Body connector MS6-MVM

- For installation of modules with regulating knob pointing downwards

Material:  
Die-cast aluminum



Ordering Data			
Size	Part No.	Type	
MS6	532801	MS6-MVM	

# Lubricators MS6N-LOE – Inch Series

Accessories



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

# Product Range and Company Overview

## A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



**Custom Automation Components**  
Complete custom engineered solutions



**Custom Control Cabinets**  
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## The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



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Electromechanical actuators, motors, controllers & drives



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Pneumatic linear and rotary actuators, valves, and air supply



**PLCs and I/O Devices**  
PLC's, operator interfaces, sensors and I/O devices

## Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

## Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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# Festo North America

## United States

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502 Earth City Expy., Suite 125  
Earth City, MO 63045

For ordering assistance, or to find  
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**Fax:** 1.800.96.FESTO

**Email:** [customer.service@us.festo.com](mailto:customer.service@us.festo.com)

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