

Lubricators MS4-LOE – Metric 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: G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$
- Supply pressure: 1 ... 12 bar
- Flow rate: 1,100 ... 2,200 l/min

| Product Range Overview | | | | | | |
|------------------------|-------------------|-----------------------------------|---|--------------------|------------|-----------------------------------|
| Type | Flow rate [l/min] | Pneumatic connections | | Bowl guard | | Reverse flow |
| | | Body thread | Port plate | Plastic bowl guard | Metal bowl | Flow direction from right to left |
| MS4 | | | AG... | R | U | Z |
| LOE | 1,100 ... 2,200 | G $\frac{1}{8}$, G $\frac{1}{4}$ | G $\frac{1}{8}$, G $\frac{1}{4}$, G $\frac{3}{8}$ | ■ | ■ | ■ |

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 → 346
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

Contents

| | |
|----------------------|-------|
| Technical Data | → 334 |
| Dimensional Drawings | → 336 |
| Ordering Data | → 336 |
| Accessories | → 338 |

→ www.festo.com/catalog/ms4-loe

Lubricators MS4-LOE – Metric Series

Technical Data

FESTO

ISO Symbol



| General Technical Data | | |
|---------------------------|----------|------|
| Pneumatic connection 1, 2 | G1/8 | G1/4 |
| Supply pressure [bar] | 1 ... 12 | |

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

| Standard Nominal Flow Rate q _N [l/min] | | |
|---|-------|-------|
| Pneumatic connection 1, 2 | G1/8 | G1/4 |
| In main flow direction 1 → 2 | 1,100 | 2,200 |

| Operating and Environmental Conditions | | |
|---|--|--|
| Minimum flow for lubricator operation [l/min] | 40 | |
| Operating medium | Compressed air | |
| Max. oil capacity [cm ³] | 30 (with plastic bowl guard) 36 (with metal bowl) | |
| Bowl guard | Plastic bowl guard | |
| | Metal bowl | |
| Ambient temperature [°C] | -10 ... +60 | |
| Temperature of medium [°C] | -10 ... +60 | |
| Storage temperature [°C] | -10 ... +60 | |
| 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 [g] | |
|-------------------------|-----|
| With plastic bowl guard | 194 |
| With metal bowl | 354 |

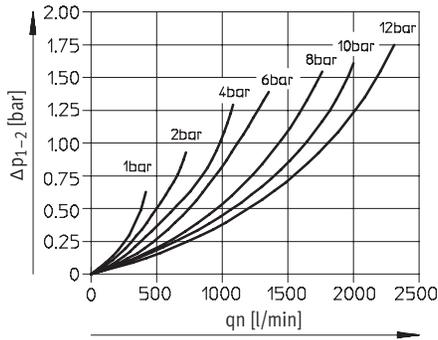
- For spare parts go to: www.festo.com/en/spare_parts_service

Lubricators MS4-LOE – Metric Series

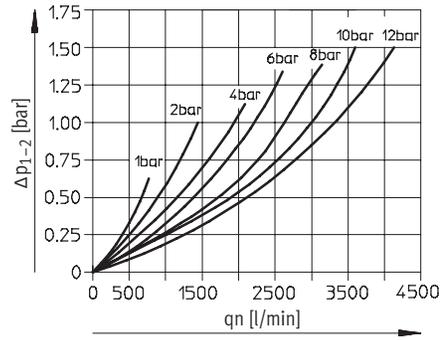
Technical Data

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

MS4-LOE-1/8

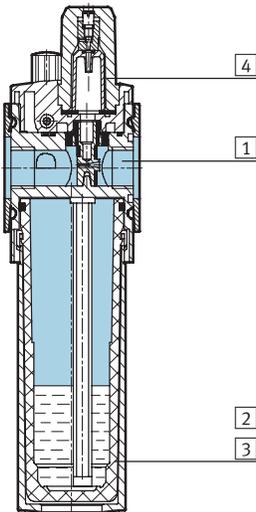


MS4-LOE-1/4



Materials

Sectional view



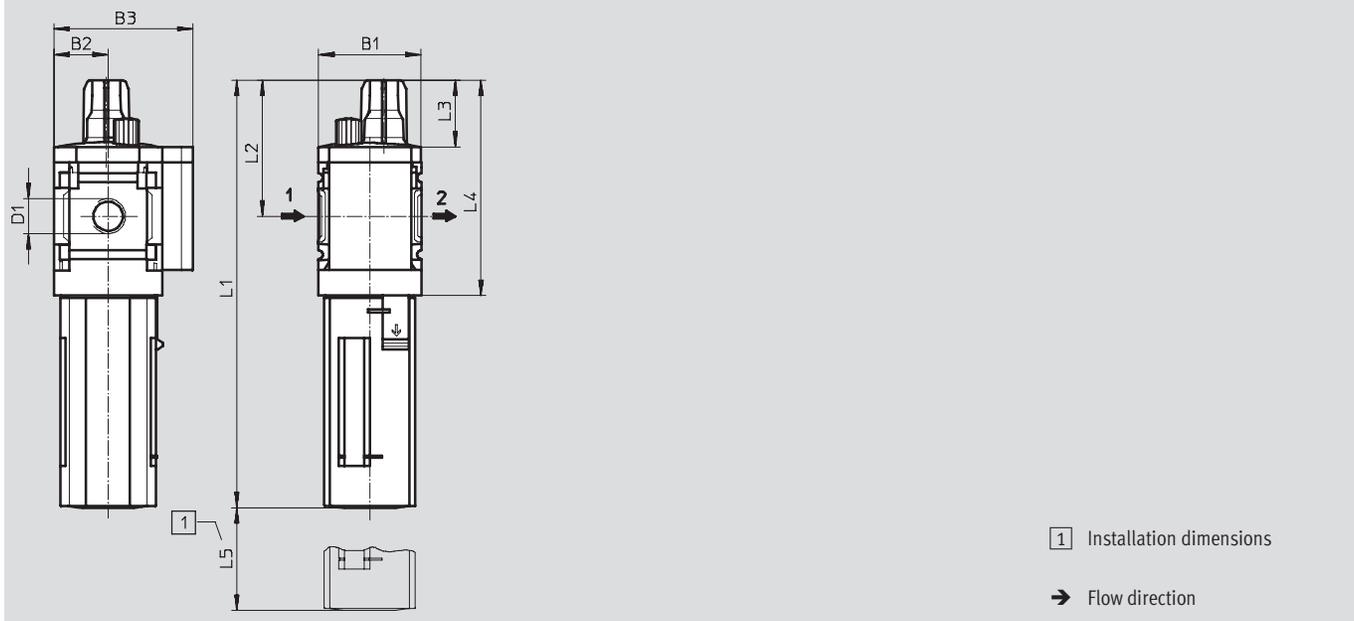
| Lubricators | | |
|-------------|--------------------|-------------------------|
| 1 | Body | Die-cast aluminum |
| 2 | Plastic bowl guard | Polycarbonate/polyamide |
| 3 | Metal bowl | Aluminum |
| | Viewing window | Polyamide |
| 4 | Lubricator dome | Polycarbonate |
| - | Seals | Nitrile rubber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

Lubricators MS4-LOE – Metric Series

Dimensional Drawings, Ordering Data – Pre-configured Products



Dimensions¹⁾ – Standard Download CAD Data → www.festo.com/us/cad



| Type | B1 | B2 | B3 | D1 | L1 Bowl guard | | L2 | L3 | L4 | L5 |
|-------------|----|----|----|-------------------------------|------------------|-------|----|----|----|----|
| | | | | | Plastic | Metal | | | | |
| MS4-LOE-1/8 | 42 | 21 | 54 | G ¹ / ₈ | 166.6 | 184.9 | 53 | 26 | 84 | 80 |
| MS4-LOE-1/4 | | | | G ¹ / ₄ | | | | | | |

1) Dimensions are in millimeters, unless otherwise noted.

Note: This product conforms with the ISO 1179-1 standard and the ISO 228-1 standard.

| Ordering Data | | | | | | | | | |
|-------------------------------|--------------------------------------|---------------|--|----|--|------------|---------------|--|----|
| Connection | Plastic bowl with plastic bowl guard | | | | | Metal bowl | | | |
| | Part No. | Type | | LT | | Part No. | Type | | LT |
| G ¹ / ₈ | 529413 | MS4-LOE-1/8-R | | 1D | | 535791 | MS4-LOE-1/8-U | | Q |
| G ¹ / ₄ | 529411 | MS4-LOE-1/4-R | | 1D | | 535790 | MS4-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 MS4-LOE – Metric Series



Ordering Data – Configurable Products

| M Mandatory Data | | | | | | O Options | |
|----------------------|-----------|----------|--------------|-------------------------|------------|------------------------|------------------------|
| Part No. | Series | Size | Function | Connection size | Bowl | Type of mounting | Reverse flow direction |
| 527701 | MS | 4 | LOE | 1/8, 1/4, AGA, AGB, AGC | R U | WP WPM WB WBM | Z |
| Order example | | | | | | | |
| 527701 | MS | 4 | - LOE | - AGB | - R | - WP | - Z |

| Ordering Table | | | |
|----------------|------------------------|--------------------------------------|----------------------------|
| Grid dimension | [mm] | 40 | Conditions Code Enter code |
| M | Part No. | 527701 | |
| | Series | Standard | MS MS |
| | Size | 4 | 4 4 |
| | Function | Lubricators | -LOE -LOE |
| | Connection size | Body thread G1/8 | -1/8 |
| | | Body thread G1/4 | -1/4 |
| | | Port plate G1/8 (dimensions → 342) | -AGA |
| | | Port plate G1/4 (dimensions → 342) | -AGB |
| | | Port plate G3/8 (dimensions → 342) | -AGC |
| | Bowl | Plastic bowl with plastic bowl guard | -R |
| | | Metal bowl | -U |
| O | Type of mounting | Mounting bracket (dimensions → 343) | 1 -WP |
| | | Mounting bracket (dimensions → 343) | 1 -WPM |
| | | Mounting bracket (dimensions → 340) | -WB |
| | | Mounting bracket (dimensions → 340) | -WBM |
| | Reverse flow direction | Flow direction from right to left | -Z |

1 WP, WPM Only with port plate AGA, AGB or AGC

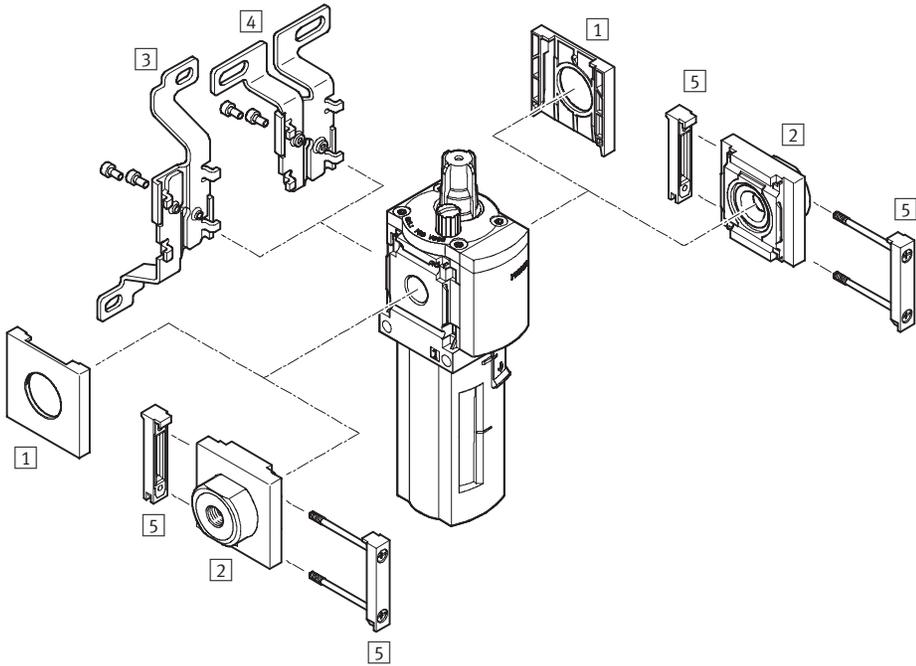
Transfer order code

| | | | | | | | | | | | | |
|--------|----|---|---|-----|---|--|---|--|---|--|---|--|
| 527701 | MS | 4 | - | LOE | - | | - | | - | | - | |
|--------|----|---|---|-----|---|--|---|--|---|--|---|--|

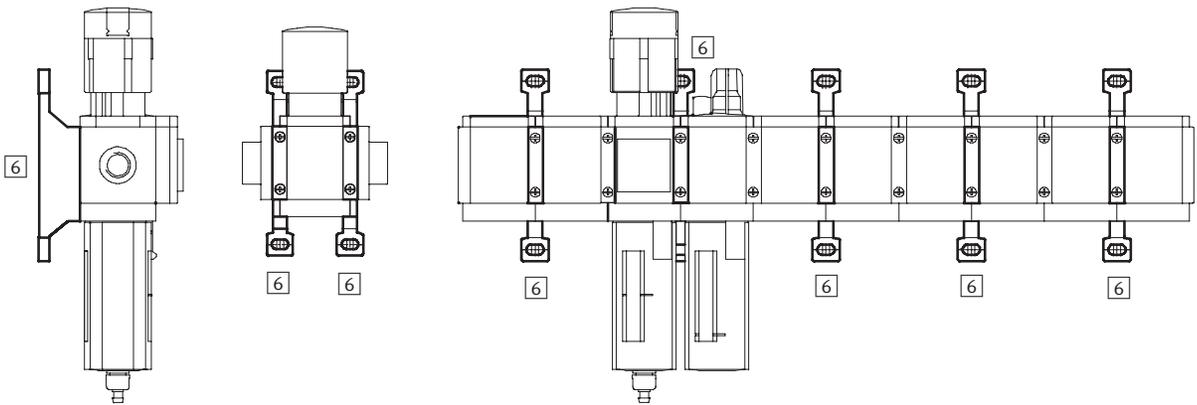
Lubricators MS4-LOE – Metric Series

Accessories Overview

Mounting Attachments and Accessories



Single unit and combination unit mounting brackets.



Lubricators MS4-LOE – Metric Series

Accessories Overview



| Mounting Attachments and Accessories | | | | | | |
|--------------------------------------|------------------------------------|--------------------|-----------------|--------------------------|-----------------|--------|
| | | Single unit | | Combination unit → 2.1-1 | | → Page |
| | | without port plate | with port plate | without port plate | with port plate | |
| 1 | Cover cap MS4-END | ■ | - | ■ | - | 341 |
| 2 | Port plate MS4-AG... | - | ■ | - | ■ | 342 |
| 3 | Mounting bracket MS4-WB | ■ | ■ | - | - | 340 |
| 4 | Mounting bracket MS4-WBM | ■ | ■ | - | - | 340 |
| 5 | Body connector MS4-MV | - | ■ | ■ | ■ | 342 |
| 6 | Mounting bracket MS4-WP/WPB/WPM | - | ■ | ■ | ■ | 343 |

Lubricators MS4-LOE – Metric Series

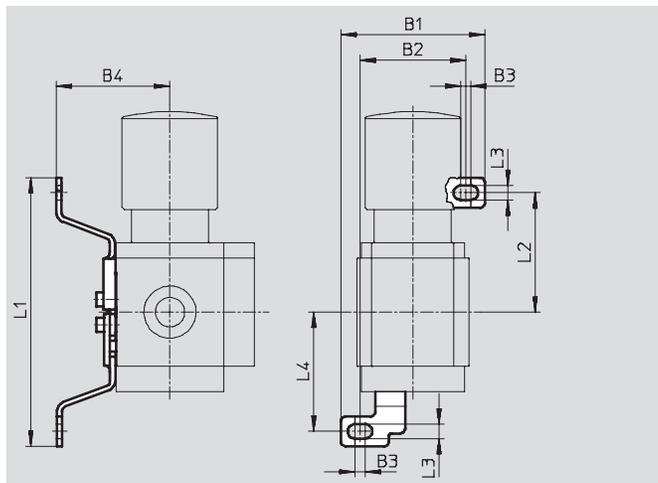


Accessories

3 Mounting bracket MS4-WB

- For wall mounting

Material:
Steel

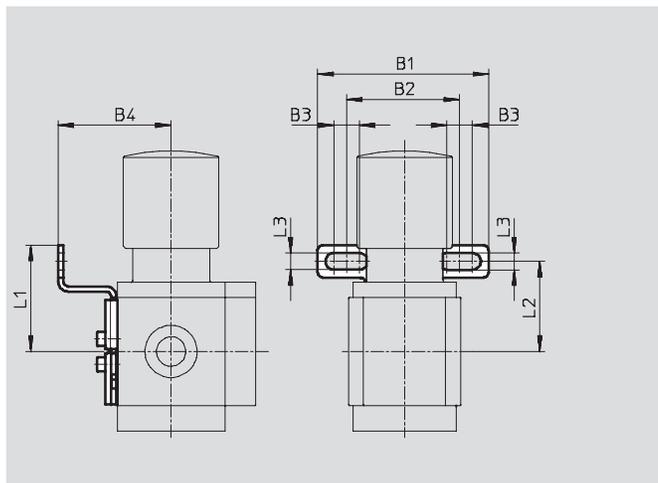


| Dimensions and Ordering Data | | | | | | | | | | |
|------------------------------|------|----|------|-------|------|-----|------|------------|----------|--------|
| B1 | B2 | B3 | B4 | L1 | L2 | L3 | L4 | Weight [g] | Part No. | Type |
| 56.2 | 41.2 | 4 | 44.2 | 104.6 | 46.6 | 5.6 | 46.5 | 46 | 532185 | MS4-WB |

4 Mounting bracket MS4-WBM

- For wall mounting

Material:
Steel



| Dimensions and Ordering Data | | | | | | | | | |
|------------------------------|----|----|----|------|----|-----|------------|----------|---------|
| B1 | B2 | B3 | B4 | L1 | L2 | L3 | Weight [g] | Part No. | Type |
| 66.5 | 44 | 10 | 44 | 41.3 | 35 | 6.5 | 48 | 526062 | MS4-WBM |

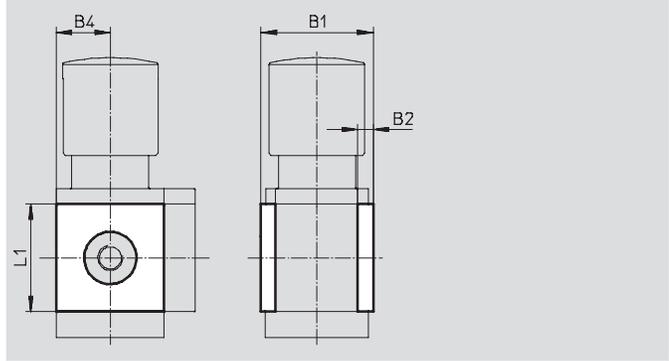
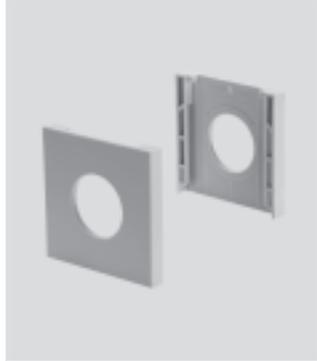
Lubricators MS4-LOE – Metric Series

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

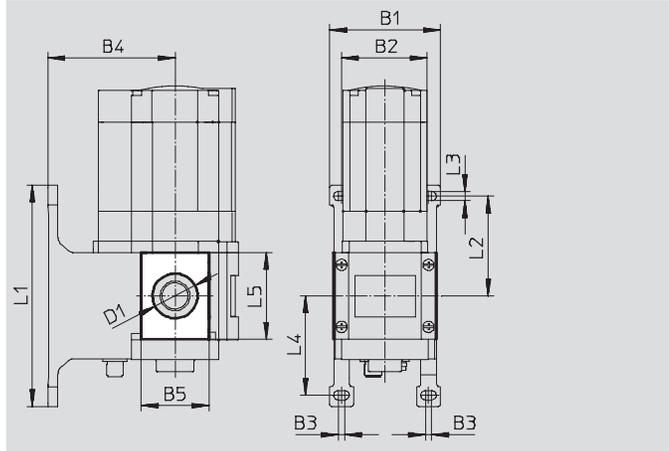


| Dimensions and Ordering Data | | | | | | |
|------------------------------|----|----|----|----------|---------|--|
| B1 | B2 | B4 | L1 | Part No. | Type | |
| 43.6 | 6 | 21 | 42 | 538779 | MS4-END | |

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 ∅ | L1 | L2 | L3 | L4 | L5 | CRC ¹⁾ | Weight [g] | Part No. | Type |
| | | | WP | WPB | | | | | | | | | | | |
| 55.2 | 40.2 | 4 | 44 | 66 | 30.4 | 20.3 | 106 | 46.5 | 5.6 | 46.7 | 42 | 2 | 4 | 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 MS4-LOE – Metric Series

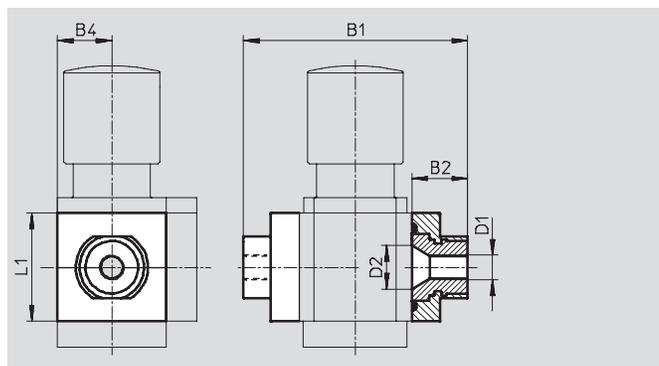
Accessories

FESTO

2 Port plate MS4-AG...

- Adapter for pneumatic connection

Material:
Aluminum



| Dimensions and Ordering Data | | | | | | | |
|------------------------------|------|----|-----------------|------|----|------------|----------------|
| B1 | B2 | B4 | D1 | D2 | L1 | Weight [g] | Part No. Type |
| 83.5 | 21.5 | 21 | G $\frac{1}{8}$ | 16.8 | 42 | 128 | 526068 MS4-AGA |
| | | | G $\frac{1}{4}$ | | | | 526069 MS4-AGB |
| | | | G $\frac{3}{8}$ | | | | 526070 MS4-AGC |

5 Body connector MS4-MV

- For connecting modules

Material:
Stainless steel/polyacetate



| Ordering Data | |
|---------------|---------------|
| Weight [g] | Part No. Type |
| 36 | 532798 MS4-MV |

Lubricators MS4-LOE – Metric Series

Accessories



6 Mounting Bracket MS4-WP...

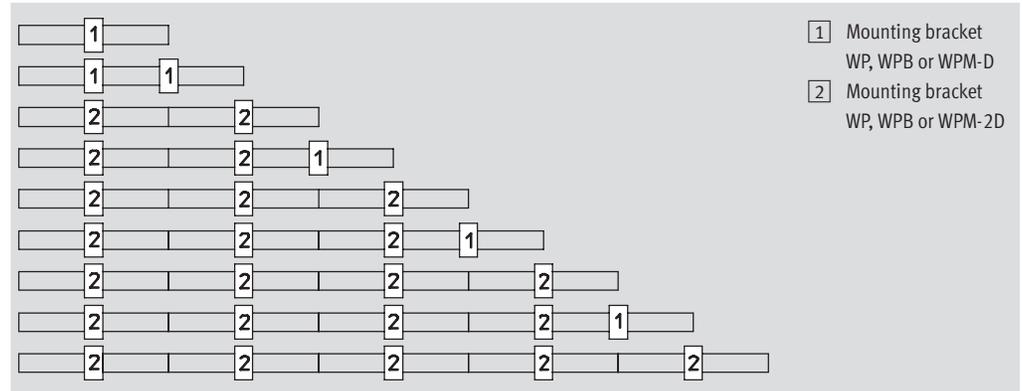
Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 40 mm

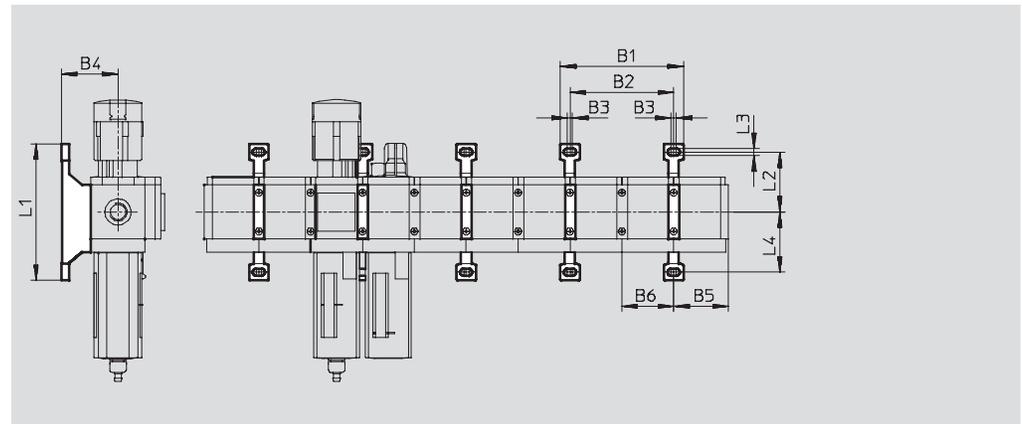
2 units: 80 mm

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 |
|--------------|------|----|----|----|------|----|-----|------|-----|------|
| MS4-WP | 95.2 | 80 | 4 | 44 | 41.9 | 40 | 106 | 46.5 | 5.6 | 46.7 |
| MS4-WPB | | | | 66 | | | | | | |
| MS4-WPM-...D | | | | 44 | | | | | | |

Lubricators MS4-LOE – Metric Series

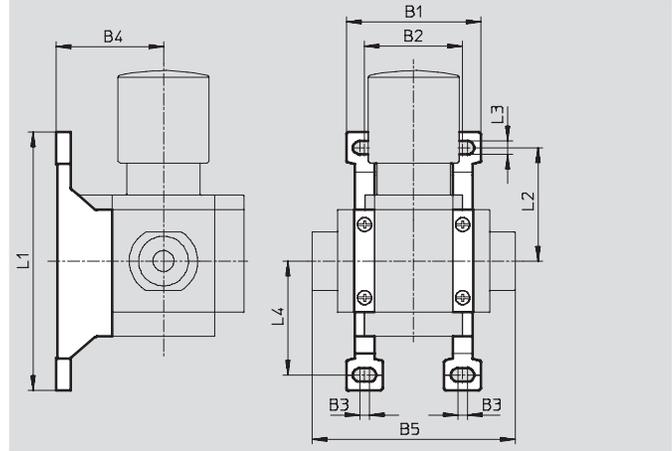


Accessories

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

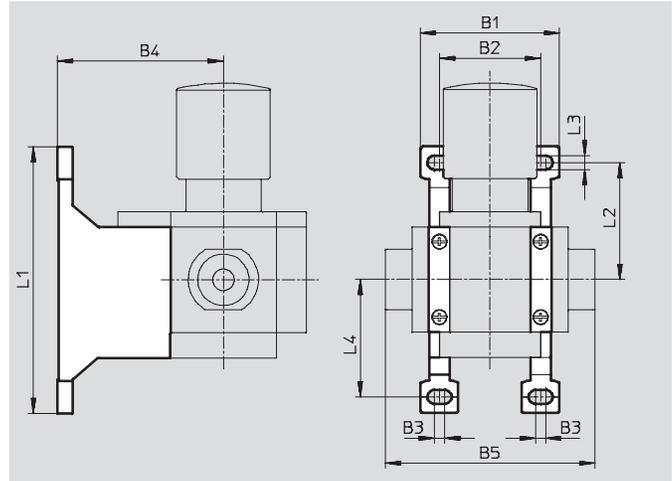


| Dimensions and Ordering Data | | | | | | | | | | | |
|------------------------------|------|----|----|------|-----|------|-----|------|------------|----------|--------|
| B1 | B2 | B3 | B4 | B5 | L1 | L2 | L3 | L4 | Weight [g] | Part No. | Type |
| 55.2 | 40.2 | 4 | 44 | 83.4 | 106 | 46.5 | 5.6 | 46.7 | 39 | 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 [g] | Part No. | Type |
| 55.2 | 40.2 | 4 | 66 | 83.4 | 106 | 46.5 | 5.6 | 46.7 | 55 | 526063 | MS4-WPB |

Lubricators MS4-LOE – Metric Series

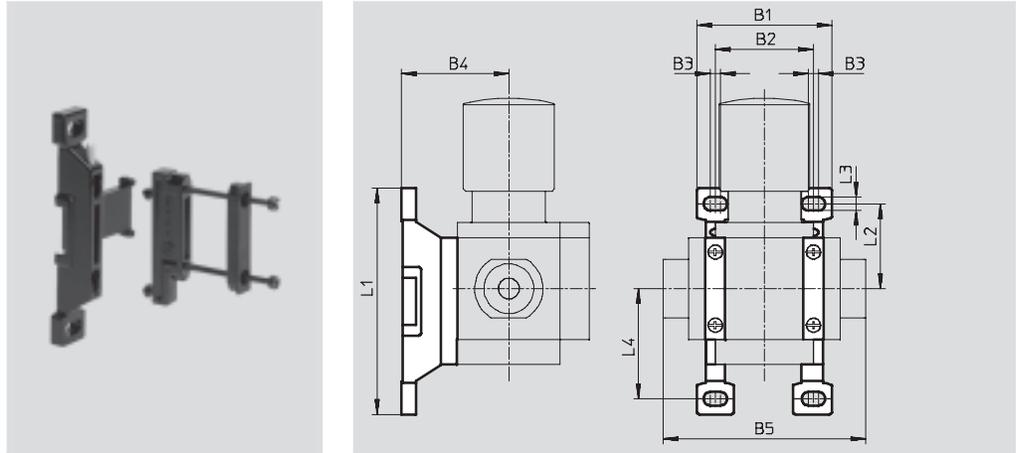
Accessories

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 [g] | Part No. | Type |
| 55.2 | 40 | 4 | 44 | 83.4 | 92.8 | 34.8 | 5.6 | 45.2 | 40 | 45 | 526060 | MS4-WPM-D |
| 95.2 | 80 | | | 123.4 | | | | | 80 | 55 | 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 MS4-LOE – Metric Series

Accessories



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

Lubricators MS4N-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: 1/8 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

- 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 → 360
- ARAL Vitam GF 32
- BP Energol HLP 32
- Esso Nuto H 32
- Mobil DTE 24
- Shell Tellus Oil DO 32

Contents

| | |
|----------------------|-------|
| Technical Data | → 348 |
| Dimensional Drawings | → 350 |
| Ordering Data | → 350 |
| Accessories | → 352 |

→ www.festo.com/catalog/ms4n-loe

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 |

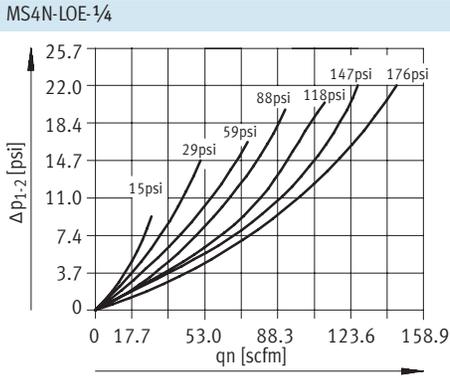
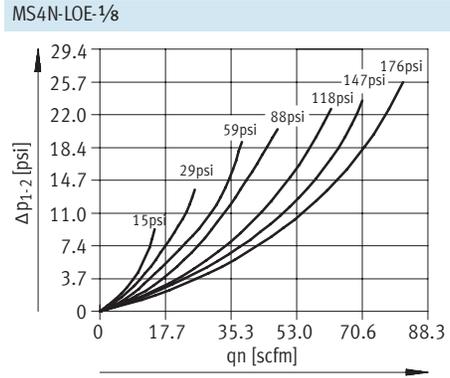
- For spare parts go to: www.festo.com/en/spare_parts_service

Lubricators MS4N-LOE – Inch Series

Technical Data

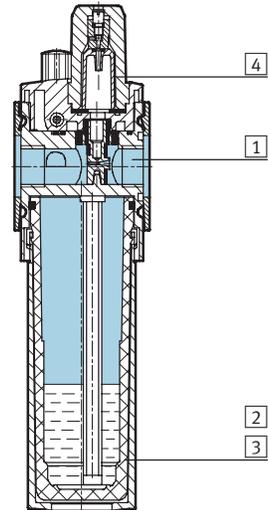


Standard Flow Rate q_n as a Function of the Differential Pressure Δp_{1-2}



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 MS4N-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

| 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 | 3.15 |
| 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

| 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 | | | MS | MS |
| | Size | 4 | | | 4 | 4 |
| | Thread | NPT thread | | | N | N |
| | Function | Lubricators | | | -LOE | -LOE |
| | Connection size | Body thread 1/8 NPT | | | -1/8 | |
| | | Body thread 1/4 NPT | | | -1/4 | |
| | | Port plate 1/8 NPT (dimensions → 356) | | | -AQK | |
| | | Port plate 1/4 NPT (dimensions → 356) | | | -AQN | |
| | | Port plate 3/8 NPT (dimensions → 356) | | | -AQP | |
| | Bowl | Plastic bowl with plastic bowl guard | | | -R | |
| | | Metal bowl | | | -U | |
| O | Type of mounting | Mounting bracket (dimensions → 357) | | 1 | -WP | |
| | | Mounting bracket (dimensions → 357) | | 1 | -WPM | |
| | | Mounting bracket (dimensions → 354) | | | -WB | |
| | | Mounting bracket (dimensions → 354) | | | -WBM | |
| | Reverse flow direction | Flow direction from right to left | | | -Z | |

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

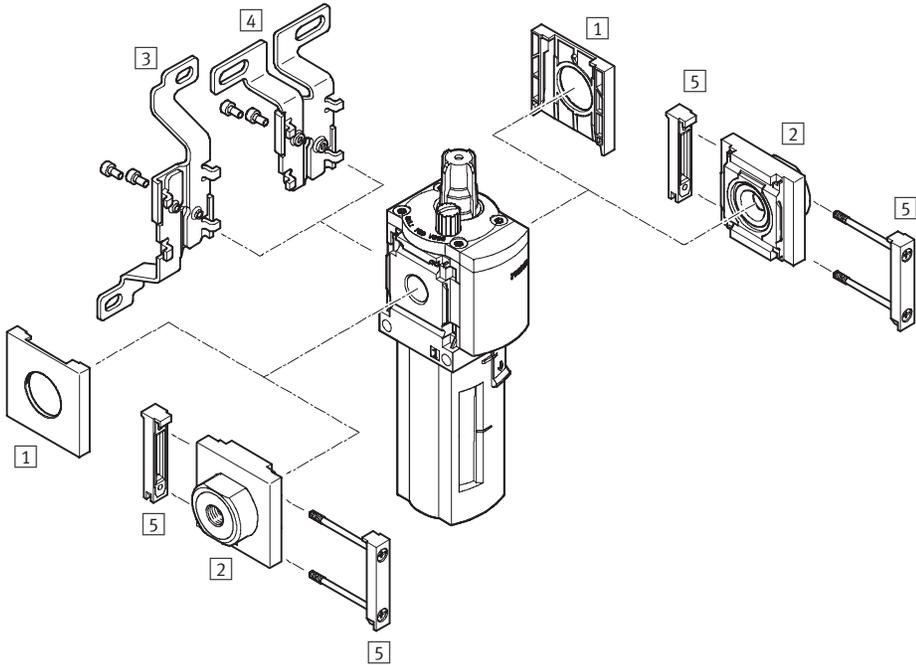
Transfer order code

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

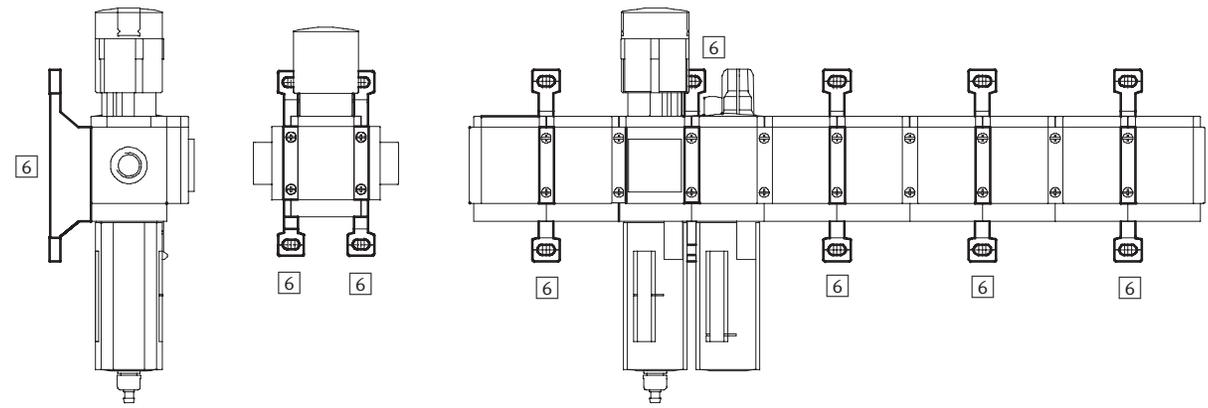
Lubricators MS4N-LOE – Inch Series

Accessories Overview

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

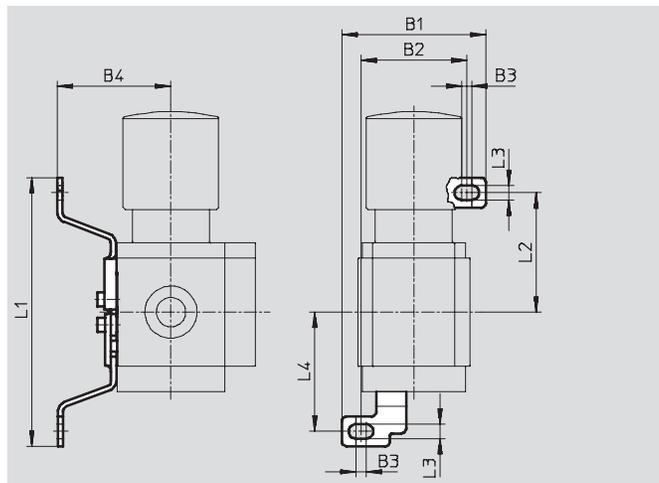


Accessories

3 Mounting bracket MS4-WB

- For wall mounting

Material:
Steel

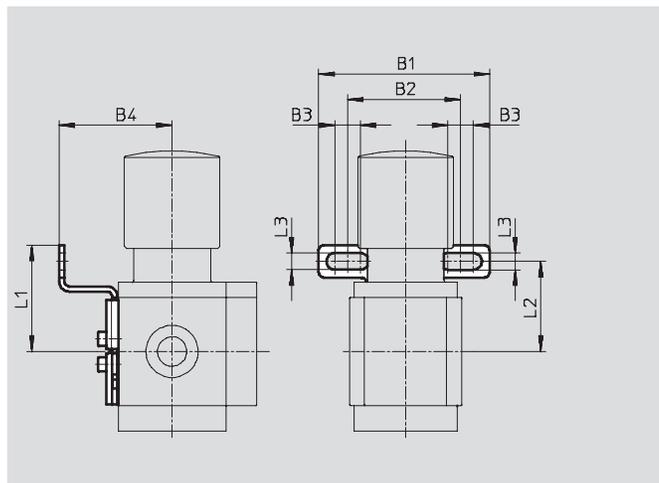


| Dimensions and Ordering Data | | | | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|-------------|----------|--------|
| B1 | B2 | B3 | B4 | L1 | L2 | L3 | L4 | Weight [lb] | Part No. | Type |
| 2.21 | 1.62 | 0.16 | 1.74 | 4.12 | 1.83 | 0.22 | 1.83 |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

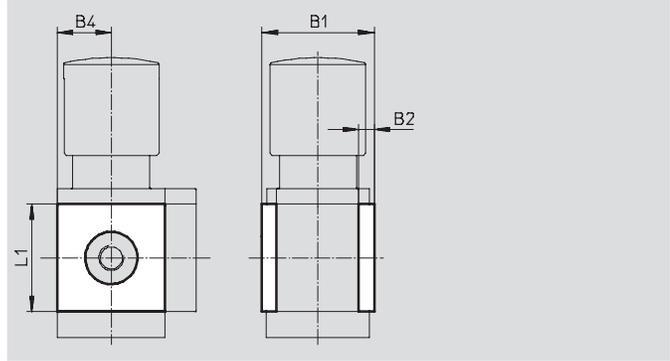
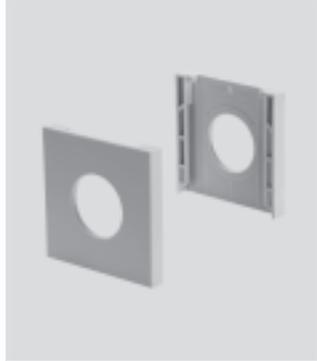
Lubricators MS4N-LOE – Inch Series

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

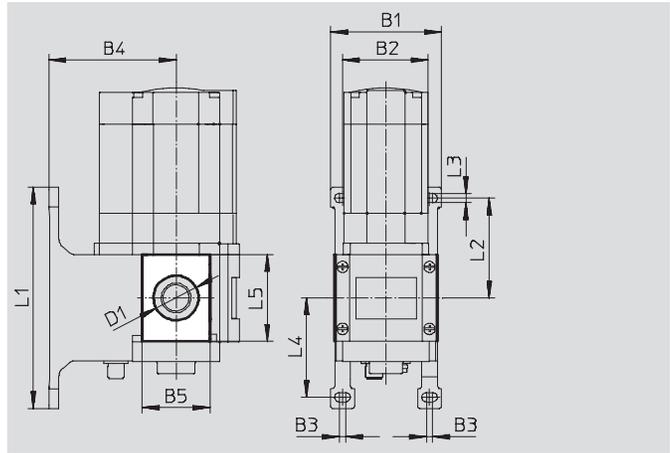


| Dimensions and Ordering Data | | | | | | |
|------------------------------|------|------|------|----------|---------|--|
| B1 | B2 | B4 | L1 | Part No. | Type | |
| 1.72 | 0.24 | 0.83 | 1.65 | 538779 | MS4-END | |

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 ∅ | 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.

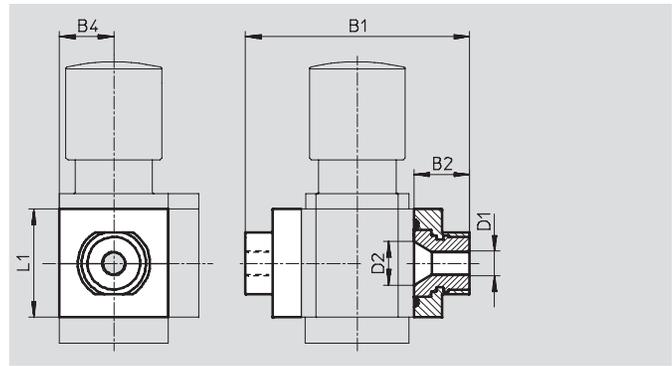
Lubricators MS4N-LOE – Inch Series

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...

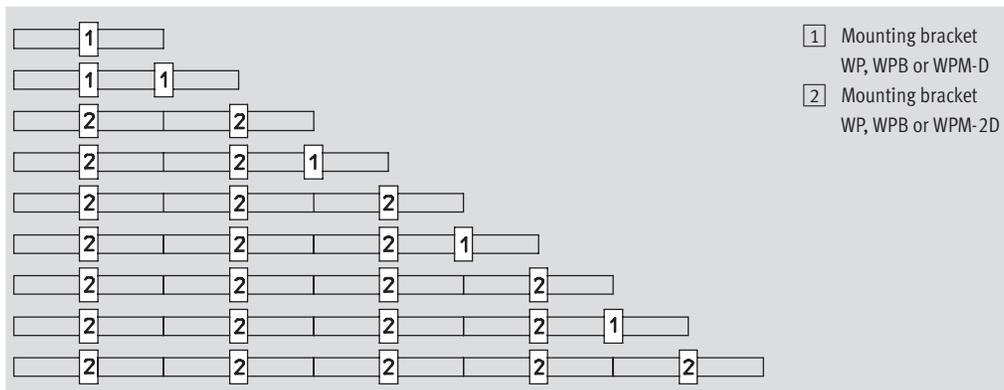
Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 1.575 in

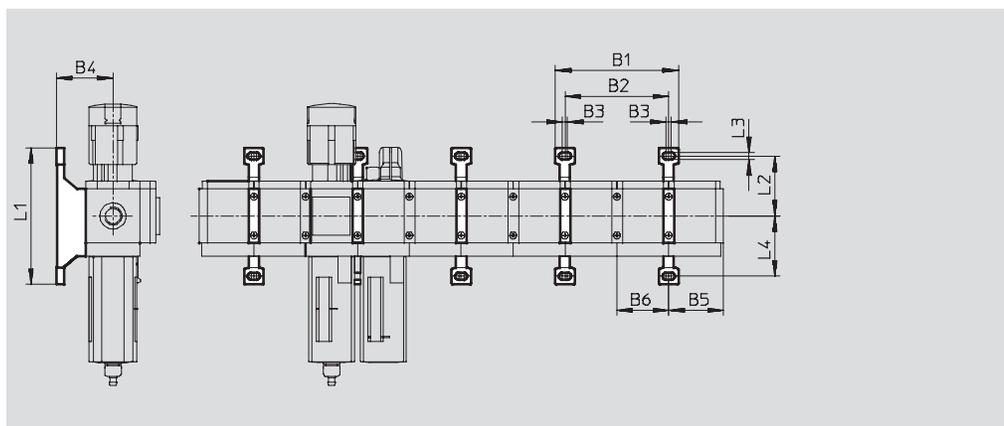
2 units: 3.15 in

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 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| 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 | | | | | | 1.57 |
| MS4-WPM-...D | | | | 1.73 | | | | | | 3.65 |

Lubricators MS4N-LOE – Inch Series

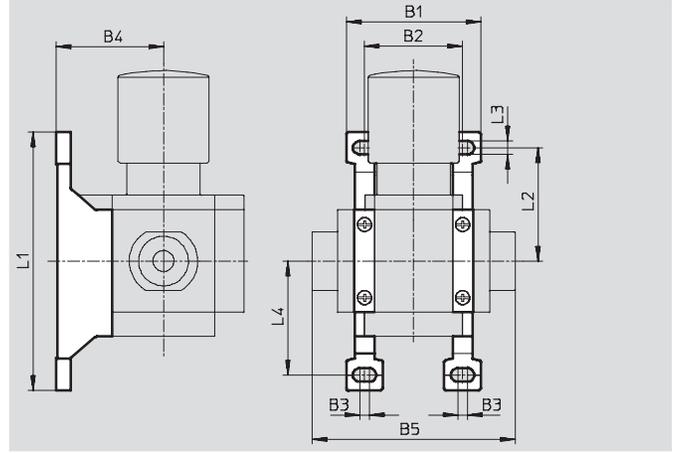


Accessories

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

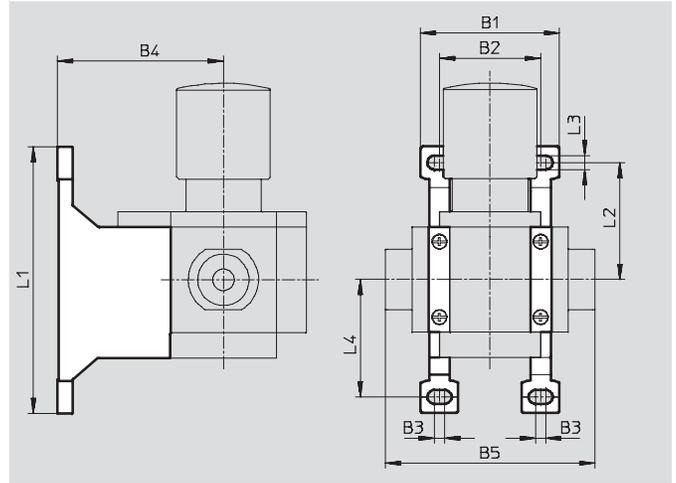


| Dimensions and Ordering Data | | | | | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|------|-------------|----------|--------|
| B1 | B2 | B3 | B4 | B5 | L1 | L2 | L3 | L4 | Weight [lb] | Part No. | Type |
| 2.17 | 1.58 | 0.16 | 1.73 | 3.28 | 4.17 | 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

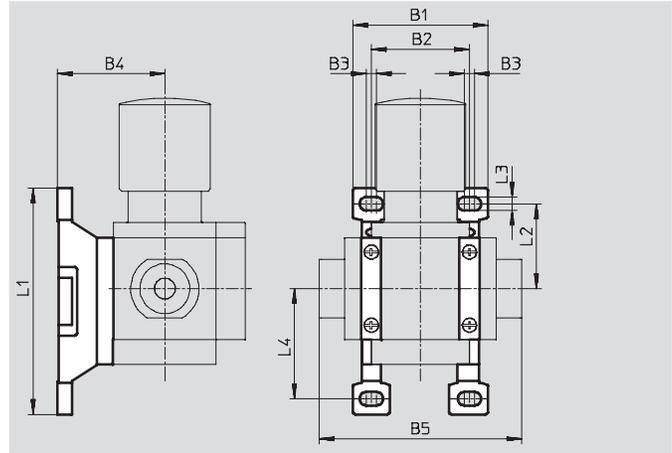
Accessories

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

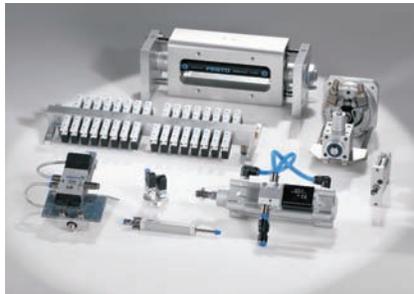


| Ordering Data – Special Oil OFSW | | | | |
|---|-----------------|-------------------|----------|---------|
| | Description | Scope of delivery | Part No. | Type |
|  | for lubricators | 1 liter | 152811 | OFSW-32 |

Product Range and Company Overview

A Complete Suite of Automation Services

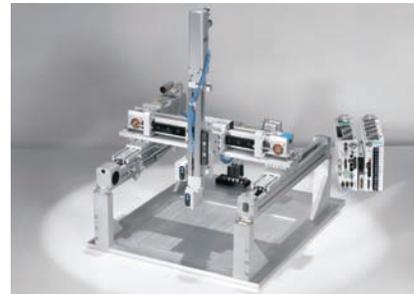
Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

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.



Electromechanical
Electromechanical actuators, motors, controllers & drives



Pneumatics
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 11,500 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 Certification

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

All Festo locations within the United States are registered to ISO 9001.



Festo North America

United States

Customer Resource Center

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

For ordering assistance, or to find
your nearest Festo Distributor,

Call: 1.800.99.FESTO

Fax: 1.800.96.FESTO

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO

Fax: 1.800.96.FESTO

Email: product.support@us.festo.com

Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788
www.festo.com/us

Sales Offices

Appleton

N. 922 Tower View Drive, Suite N
Greenville, WI 54942

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057

Detroit - Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326

New York

395 Moreland Road
Hauppauge, NY 11788

Silicon Valley

2800 Collier Canyon Road
Livermore, CA 94550

Design and Manufacturing Operations



East: 395 Moreland Road, Hauppauge, NY 11788



Central: 1441 East Business Center Drive, Mt. Prospect, IL 60056



West: 2800 Collier Canyon Road, Livermore, CA 94550

Mexico

Headquarters

Festo Pneumatic, S.A.
Av. Ceylán 3, Col. Tequesquahuac
54020 Tlalnepantla, Edo. de México
Call: 011 52 [55] 53 21 66 00
Fax: 011 52 [55] 53 21 66 65
Email: festo.mexico@mx.festo.com
www.festo.com/mx



Canada

Headquarters

Festo Inc.
5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Call: 1.905.624.9000
Fax: 1.905.624.9001
Email: info.ca@ca.festo.com
www.festo.com/ca



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan
Latvia Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com