

Filter Regulators MS4N-LFR – Inch Series



A filter regulator combines a filter and a pressure regulator into a single unit. The sintered filter with water separator removes contamination, pipe sinter, rust and condensate from the compressed air. The pressure setting can be adjusted with the regulator.

- Pneumatic connection: 1/8 NPT, 1/4 NPT, 3/8 NPT
- Filtration grade: 5 µm, 40 µm
- Supply pressure
 - for manual drain: 12 ... 206 psi
 - for semiautomatic drain: 22 ... 176 psi
 - for fully automatic drain: 29 ... 176 psi
- Controlled pressure range: 4.4 ... 176 psi
- Flow rate: 30.0 ... 67.1 scfm

| Product Range Overview | | | | | | | | | | | | | | | | | | | | |
|------------------------|---------------------------|------------|---------------------------------|-------------|-------------|-----------------------|----|--------------------|------------|------------|---------------|-----------------|--------------------------------------|------------------------------|------------------------------------|------------------------------------|------------------------------|-----------------------|-------------------|-----------------------------------|
| Type | Pneumatic connections | | Pressure regulation range [psi] | | | Filtration grade [µm] | | Bowl guard | | Bowl drain | | | Pressure indicator | | | | | Pressure adjustment | | Reverse flow |
| | | | | | | | | | | | | | | | | | | | | |
| MS4N | Body thread | Port plate | 4.4... 59 | 4.4 ... 103 | 7.4 ... 176 | 5 | 40 | Plastic bowl guard | Metal bowl | Manual | Semiautomatic | Fully automatic | Cover plate (without pressure gauge) | Integrated MS pressure gauge | Adapter for pressure gauge 1/8 NPT | Adapter for pressure gauge 1/4 NPT | Pressure sensor with display | Rotary knob, lockable | Rotary knob, long | Flow direction from right to left |
| LFR | 1/8 NPT, 1/4 NPT, 3/8 NPT | AG... | D5 | D6 | D7 | C | E | R | U | M | H | V | VS | AG | A8 | A4 | AD... | AS | LD | Z |

Features

- Good control characteristics with low hysteresis and primary pressure compensation
- High flow rates
- Directly actuated diaphragm regulator
- Three pressure regulation ranges
- Modular, in-line or panel mounting
- Lockable rotary knob
- Available with or without secondary venting
- Two pressure gauge connections for different fitting options
- Reverse flow option for exhausting from output 2 to output 1
- Optional pressure sensor with display and electric output

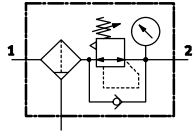
Contents

- Technical Data → 122
- Dimensional Drawings → 126
- Ordering Data → 129
- Accessories → 132
- Replacement Parts → 142
- www.festo.com/catalog/ms4n-lfr

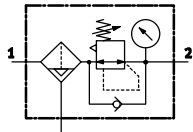
Filter Regulators MS4N-LFR – Inch Series

Technical Data

ISO Symbol



Manual bowl drain



Semi or fully automatic bowl drain



| General Technical Data | | | |
|---------------------------|----------|---|---------|
| Pneumatic connection 1, 2 | | 1/8 NPT | 1/4 NPT |
| Filtration grade | [µm] | 5 (air purity class at the output 3.7.- to DIN ISO 8573-1) 40 (air purity class at the output 5.7.- to DIN ISO 8573-1) | |
| Supply pressure | M [psi] | 12 ... 206 (manual drain) | |
| | H [psi] | 22 ... 176 (semiautomatic drain) | |
| | V [psi] | 29 ... 176 (fully automatic drain) | |
| Pressure regulation range | D5 [psi] | 4.4 ... 59 | |
| | D6 [psi] | 4.4 ... 103 | |
| | D7 [psi] | 7.4 ... 176 (4.4 ... 147 with variant pressure sensor AD...) | |
| Max. hysteresis | [psi] | 3.7 | |

| Standard Nominal Flow Rate q _N ¹⁾ [scfm] | | | |
|--|-------|--------------------|--------------------|
| Pneumatic connection 1, 2 | | 1/8 NPT | 1/4 NPT |
| D5 – Pressure regulation range 4.4 ... 59 psi | | | |
| Filtration grade | 5 µm | 31.8 ²⁾ | 63.5 ²⁾ |
| | 40 µm | 38.8 ²⁾ | 67.1 ²⁾ |
| D6 – Pressure regulation range 4.4 ... 103 psi | | | |
| Filtration grade | 5 µm | 31.8 | 53.0 |
| | 40 µm | 35.3 | 60.0 |
| D7 – Pressure regulation range 7.4 ... 176 psi | | | |
| Filtration grade | 5 µm | 30.0 | 42.4 |
| | 40 µm | 31.8 | 53.0 |

1) Measured at p₁ = 147 psi and p₂ = 88 psi, □p = 15 psi
 2) Measured at p₁ = 147 psi and p₂ = 44 psi, □p = 15 psi

Filter Regulators MS4N-LFR – Inch Series

Technical Data



| Operating and Environmental Conditions | | | |
|--|---|--------------------|----------------------|
| Bowl drain | Manual M | Semiautomatic H | Fully automatic V |
| Operating medium without pressure sensor AD... | Compressed air | | |
| Operating medium with pressure sensor AD... | Filtered compressed air, lubricated or unlubricated, filtration grade 40 µm | | |
| Max. condensate volume [in ³] | 1.16 (with plastic bowl guard) 1.53 (with metal bowl) | | |
| Bowl guard | Plastic bowl guard | | |
| | Metal bowl | | |
| Ambient temperature without pressure sensor AD... [°F] | 14 ... 140 | 41 ... 140 | 41 ... 140 |
| Ambient temperature with pressure sensor AD... [°F] | 32 ... 122 | 41 ... 122 | 41 ... 122 |
| Medium temperature without pressure sensor AD... [°F] | 14 ... 140 | 41 ... 140 | 41 ... 140 |
| Medium temperature with pressure sensor AD... [°F] | 32 ... 122 | 41 ... 122 | 41 ... 122 |
| Storage temperature [°F] | 14 ... 140 | 14 ... 140 | 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 | 0.55 |
| With metal bowl | 0.95 |

- Wearing parts kits → 142
- Filter cartridges → 142
- For spare parts go to: www.festo.com/en/spare_parts_service

Filter Regulators MS4N-LFR – Inch Series

Technical Data



Standard Flow Rate q_n as a Function of Output Pressure p_2

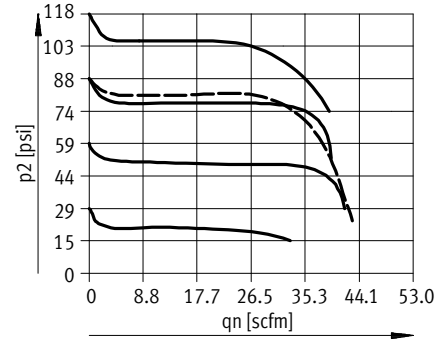
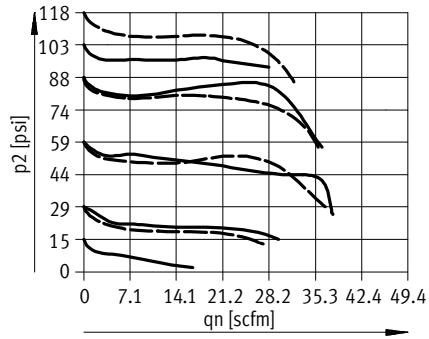
Pressure regulation range D6 or D7

Filtration grade 5 μm

Filtration grade 40 μm

MS4N-LFR-1/8

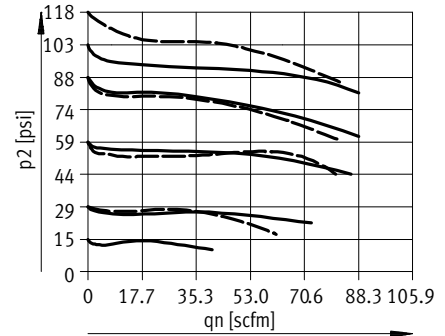
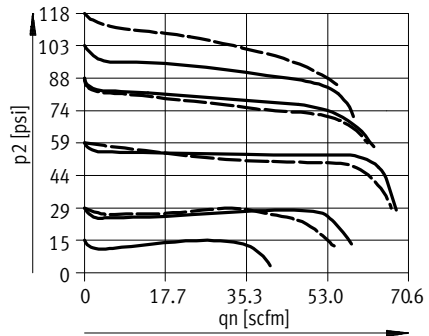
Primary pressure $p_1 = 147$ psi



— D6: 4.4 ... 103 psi
 - - - D7: 7.4 ... 176 psi

MS4N-LFR-1/4

Primary pressure $p_1 = 147$ psi



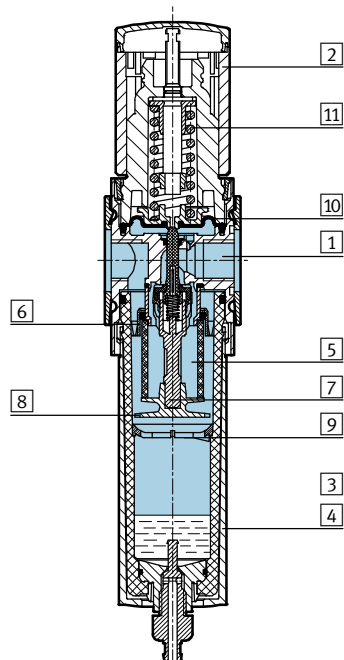
— D6: 4.4 ... 103 psi
 - - - D7: 7.4 ... 176 psi

Filter Regulators MS4N-LFR – Inch Series

Technical Data

Materials

Sectional view



| Filter regulator | | |
|-------------------|------------------------------|--|
| 1 | Body | Die-cast aluminum |
| 2 | Regulating knob | Polyamide/polyacetate |
| 3 | Plastic bowl guard | Polycarbonate/polyamide |
| 4 | Metal bowl Viewing window | Aluminum Polyamide |
| 5 | Filter element | Polyethylene |
| 6 | Spin disk | Polyacetate |
| 7 | Filter holder | Polyacetate |
| 8 | Separating plate | Polyacetate |
| 9 | Stabilizing disk | Polyacetate |
| 10 | Diaphragm | Nitrile rubber |
| 11 | Spring | Steel |
| - | Seals | Nitrile rubber |
| Note on materials | | Free of copper and PTFE only with cover plate VS |

Filter Regulators MS4N-LFR – Inch Series

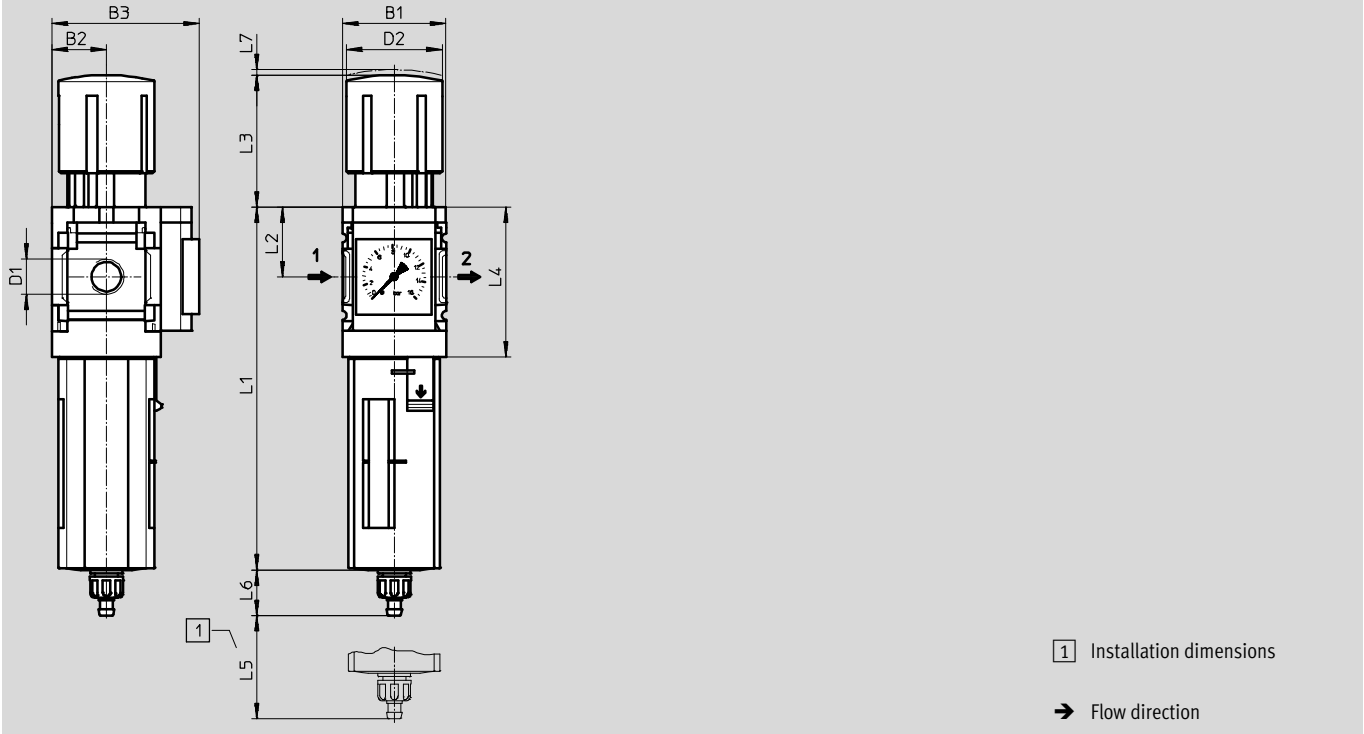
Dimensional Drawings



Dimensions¹⁾ – Standard

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

With pressure gauge, display unit [psi], rotary knob as standard, manual bowl drain



| Type | B1 | B2 | B3 | D1 | D2 | L1 | | L2 | L3 | L4 | L5 | L6 | | L7 |
|--------------|------|------|------|---------|------|------------|-------|------|------|------|------|---------|-------|------|
| | | | | | | Bowl guard | | | | | | Plastic | Metal | |
| | | | | | | Plastic | Metal | | | | | | | |
| MS4N-LFR-1/8 | 1.57 | 0.83 | 2.24 | 1/8 NPT | 1.46 | 5.54 | 6.23 | 1.06 | 2.01 | 2.30 | 0.98 | 0.70 | 0.70 | 0.08 |
| MS4N-LFR-1/4 | | | | 1/4 NPT | | | | | | | | | | |

1) Dimensions are in inches, unless otherwise noted.

Filter Regulators MS4N-LFR – Inch Series

Dimensional Drawings

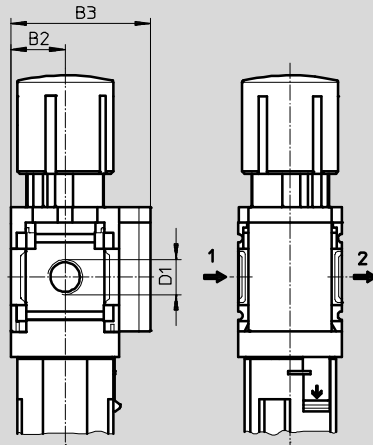


Dimensions¹⁾ – Pressure Gauge Alternatives

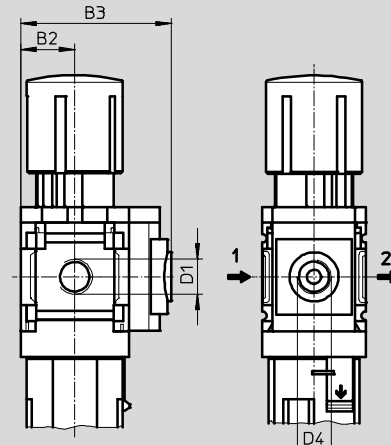
Download CAD Data → www.festo.com/us/cad

Cover plate VS

Adapter plate A8/A4 for EN pressure gauge 1/8/1/4, without pressure gauge



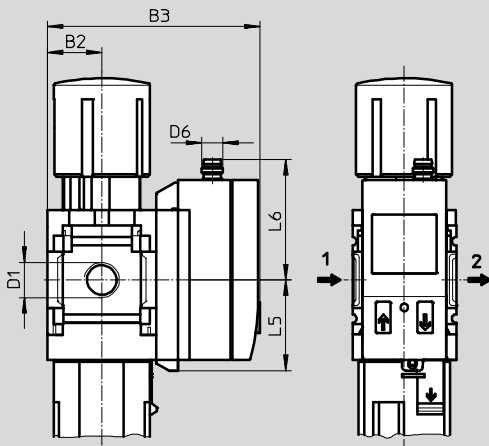
→ Flow direction



→ Flow direction

Pressure sensor with display AD1 ... AD4

Technical data SDE1 → www.festo.com/catalog/sde1



→ Flow direction

AD1 variants:
SDE1-D10-G2-MS-L-P1-M8 with 3-pin plug M8x1, 1 switching output PNP

AD3 variants:
SDE1-D10-G2-MS-L-PI-M12 with 4-pin plug M12x1, 1 switching output PNP and 4 ... 20 mA analog

AD2 variants:
SDE1-D10-G2-MS-L-N1-M8 with 3-pin plug M8x1, 1 switching output NPN

AD4 variants:
SDE1-D10-G2-MS-L-NI-M12 with 4-pin plug M12x1, 1 switching output NPN and 4 ... 20 mA analog

| Type | B2 | B3 | D1 | D4 | D6 | L5 | L6 |
|--------------------------|------|------|---------|------|-------|------|------|
| MS4N-LFR-1/8-...-VS | 0.83 | 2.13 | 1/8 NPT | - | - | - | - |
| MS4N-LFR-1/4-...-VS | | | 1/4 NPT | | | | |
| MS4N-LFR-1/8-...-A8 | 0.83 | 2.30 | 1/8 NPT | G1/8 | - | - | - |
| MS4N-LFR-1/4-...-A8 | | | 1/4 NPT | | | | |
| MS4N-LFR-1/8-...-A4 | 0.83 | 2.30 | 1/8 NPT | G1/4 | - | - | - |
| MS4N-LFR-1/4-...-A4 | | | 1/4 NPT | | | | |
| MS4N-LFR-1/8-...-AD1/AD2 | 0.83 | 3.25 | 1/8 NPT | - | M8x1 | 1.38 | 1.84 |
| MS4N-LFR-1/4-...-AD1/AD2 | | | 1/4 NPT | | | | |
| MS4N-LFR-1/8-...-AD3/AD4 | 0.83 | 3.25 | 1/8 NPT | - | M12x1 | 1.38 | 2.20 |
| MS4N-LFR-1/4-...-AD3/AD4 | | | 1/4 NPT | | | | |

1) Dimensions are in inches, unless otherwise noted.

Filter Regulators MS4N-LFR – Inch Series

Dimensional Drawings



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

For installation into control panel

Standard

Standard, lockable AS

Long LD

Long, lockable LD-AS

1) Max. control panel thickness

| Type | B4 | B5 | D2 | D3 +0.04 | L3 | L8 | L9 |
|--------------------|------|------|------|-------------|------|------|------|
| MS4N-LFR-... | - | - | 1.46 | 1.18 | 2.01 | 0.51 | 0.24 |
| MS4N-LFR-...-AS | 1.90 | 1.17 | | | 2.37 | | |
| MS4N-LFR-...-LD | - | - | 1.46 | - | 2.01 | - | - |
| MS4N-LFR-...-LD-AS | 1.90 | 1.17 | | | 2.37 | | |

1) Dimensions are in inches, unless otherwise noted.

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

Manual M

Barbed fitting for plastic tubing
PCN-4

Semiautomatic H

QS fitting for plastic tubing
PUN-6/PAN-6

Fully automatic V

Barbed fitting for plastic tubing
PCN-4

| Type | L6 |
|--------------------|------|
| Plastic bowl guard | |
| MS4N-LFR-...-M | 0.70 |
| Metal bowl | |
| MS4N-LFR-...-M | 0.70 |

| Type | L6 |
|--------------------|------|
| Plastic bowl guard | |
| MS4N-LFR-...-H | 0.87 |
| Metal bowl | |
| MS4N-LFR-...-H | 0.87 |

| Type | L6 |
|--------------------|------|
| Plastic bowl guard | |
| MS4N-LFR-...-V | 0.80 |
| Metal bowl | |
| MS4N-LFR-...-V | 0.80 |

1) Dimensions are in inches, unless otherwise noted.

Filter Regulators MS4N-LFR – Inch Series



Ordering Data – Pre-configured Products

| Ordering Data | | | | | | | |
|---|------------|-----------------------|------------------------|----|------------------------|------------------------|----|
| Pressure regulation range 4.4 ... 103 psi | | | | | | | |
| Bowl drain | Connection | Filtration grade 5 µm | | | Filtration grade 40 µm | | |
| | | Part No. | Type | LT | Part No. | Type | LT |
| Plastic bowl guard | | | | | | | |
| Manual | 1/8 NPT | 531230 | MS4N-LFR-1/8-D6-CRM-AS | 1D | 531222 | MS4N-LFR-1/8-D6-ERM-AS | 1D |
| | 1/4 NPT | 531229 | MS4N-LFR-1/4-D6-CRM-AS | 1D | 531221 | MS4N-LFR-1/4-D6-ERM-AS | 1D |
| Fully automatic | 1/8 NPT | 531234 | MS4N-LFR-1/8-D6-CRV-AS | 1D | 531226 | MS4N-LFR-1/8-D6-ERV-AS | 1D |
| | 1/4 NPT | 531233 | MS4N-LFR-1/4-D6-CRV-AS | 1D | 531225 | MS4N-LFR-1/4-D6-ERV-AS | 1D |

| Ordering Data | | | | | | | |
|---|------------|-----------------------|------------------------|----|------------------------|------------------------|----|
| Pressure regulation range 7.4 ... 176 psi | | | | | | | |
| Bowl drain | Connection | Filtration grade 5 µm | | | Filtration grade 40 µm | | |
| | | Part No. | Type | LT | Part No. | Type | LT |
| Plastic bowl guard | | | | | | | |
| Manual | 1/8 NPT | 531214 | MS4N-LFR-1/8-D7-CRM-AS | 1D | 531206 | MS4N-LFR-1/8-D7-ERM-AS | 1D |
| | 1/4 NPT | 531213 | MS4N-LFR-1/4-D7-CRM-AS | 1D | 531205 | MS4N-LFR-1/4-D7-ERM-AS | 1D |
| Fully automatic | 1/8 NPT | 531218 | MS4N-LFR-1/8-D7-CRV-AS | 1D | 531210 | MS4N-LFR-1/8-D7-ERV-AS | 1D |
| | 1/4 NPT | 531217 | MS4N-LFR-1/4-D7-CRV-AS | 1D | 531209 | MS4N-LFR-1/4-D7-ERV-AS | 1D |
| Metal bowl | | | | | | | |
| Manual | 1/8 NPT | 535734 | MS4N-LFR-1/8-D7-CUM-AS | Q | 535740 | MS4N-LFR-1/8-D7-EUM-AS | Q |
| | 1/4 NPT | 535750 | MS4N-LFR-1/4-D7-CUM-AS | Q | 535756 | MS4N-LFR-1/4-D7-EUM-AS | Q |
| Fully automatic | 1/8 NPT | 535736 | MS4N-LFR-1/8-D7-CUV-AS | Q | 535738 | MS4N-LFR-1/8-D7-EUV-AS | Q |
| | 1/4 NPT | 535752 | MS4N-LFR-1/4-D7-CUV-AS | Q | 535754 | MS4N-LFR-1/4-D7-EUV-AS | Q |

LT = Lead time 1D typically ships same day/next day 3D typically ships within 3 days

Filter Regulators MS4N-LFR – Inch Series



Ordering Data – Configurable Products

M Mandatory Data →

| Part No. | Series | Size | Thread | Function | Connection size | Pressure regulation range | Filtration grade | Bowl |
|----------------------|-----------|----------|----------|--------------|-------------------------|---------------------------|------------------|------------|
| 527694 | MS | 4 | N | LFR | 1/8, 1/4, AQK, AQN, AQP | D5 D6 D7 | E C | R U |
| Order example | | | | | | | | |
| 527694 | MS | 4 | N | - LFR | - AQK | - D6 | - C | - R |

Ordering Table

| Grid dimension | [mm] | 40 | Conditions | Code | Enter code |
|---------------------------|---------------------------------------|----|------------|-------------|------------|
| M Part No. | 527694 | | | | |
| Series | Standard | | | MS | MS |
| Size | 4 | | | 4 | 4 |
| Thread | NPT thread | | | N | N |
| Function | Filter regulator | | | -LFR | -LFR |
| Connection size | Body thread 1/8 NPT | | | -1/8 | |
| | Body thread 1/4 NPT | | | -1/4 | |
| | Port plate 1/8 NPT (dimensions → 137) | | | -AQK | |
| | Port plate 1/4 NPT (dimensions → 137) | | | -AQN | |
| | Port plate 3/8 NPT (dimensions → 137) | | | -AQP | |
| Pressure regulation range | 4.4 ... 59 psi | | | -D5 | |
| | 4.4 ... 103 psi | | | -D6 | |
| | 7.4 ... 176 psi | | | -D7 | |
| Filtration grade | 40 µm | | | -E | |
| | 5 µm | | | -C | |
| Bowl | Plastic bowl with plastic bowl guard | | | -R | |
| | Metal bowl | | | -U | |

Transfer order code

Filter Regulators MS4N-LFR – Inch Series

Ordering Data – Configurable Products

| M | | Options | | | | | |
|-------------|--|----------------------------------|-------------------|-------------|----------|------------------------------|------------------------|
| Bowl drain | Pressure gauge alternatives | Alternative pressure gauge scale | Secondary venting | Rotary knob | Security | Type of mounting | Reverse flow direction |
| M H V | VS A8 A4 AD1 AD2 AD3 AD4 | BAR MPA | OS | LD | AS | WR WP WPM WB WBM | Z |
| - M | - A8 | - | - | - LD | - AS | - WPM | - Z |

| Ordering Table | | Grid dimension [mm] | 40 | Conditions | Code | Enter code |
|------------------------|---|--|-----|------------|------|------------|
| M | Bowl drain | Manual | | | -M | |
| | | Semiautomatic (P1 max. 176 psi) | | | -H | |
| | | Fully automatic (P1 max. 176 psi) | | | -V | |
| O | Pressure gauge alternatives | Cover plate | | | -VS | |
| | | Adapter plate for EN pressure gauge 1/8, without pressure gauge | | | -A8 | |
| | | Adapter plate for EN pressure gauge 1/4, without pressure gauge | | | -A4 | |
| | | Pressure sensor with display, M8 plug, 1 switching output PNP, 3-pin | 1 | | -AD1 | |
| | | Pressure sensor with display, M8 plug, 1 switching output NPN, 3-pin | 1 | | -AD2 | |
| | | Pressure sensor with display, M12 plug, 1 switching output PNP, 4-pin, analog output 4 ... 20 mA | 1 | | -AD3 | |
| | | Pressure sensor with display, M12 plug, 1 switching output NPN, 4-pin, analog output 4 ... 20 mA | 1 | | -AD4 | |
| | | Alternative pressure gauge scale | bar | 2 | | -BAR |
| MPa | 2 | | | -MPA | | |
| Secondary venting | Without secondary venting | | | -OS | | |
| Rotary knob | Long rotary knob | | | -LD | | |
| Security | Lockable rotary knob | | | -AS | | |
| Type of mounting | Mounting bracket with knurled nut for regulator head (dimensions → 135) | 3 | | | -WR | |
| | Mounting bracket (dimensions → 138) | 4 | | | -WP | |
| | Mounting bracket (dimensions → 138) | 4 | | | -WPM | |
| | Mounting bracket (dimensions → 134) | | | | -WB | |
| | Mounting bracket (dimensions → 134) | | | | -WBM | |
| Reverse flow direction | Flow direction from right to left | | | | -Z | |

1 AD1 ... AD4 Measuring range max. 147 psi

2 BAR, MPA Not with pressure gauge alternatives VS, A8, A4, AD1, AD2, AD3, AD4

3 WR Not with long rotary knob LD

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

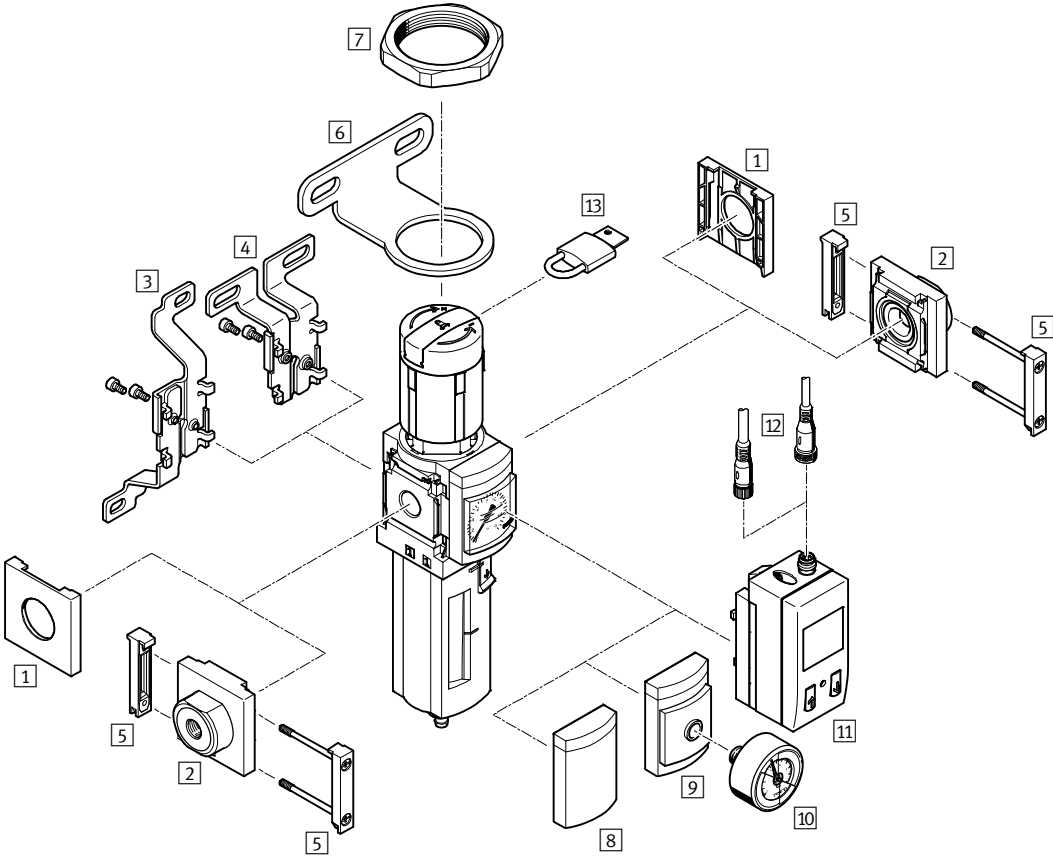
Transfer order code

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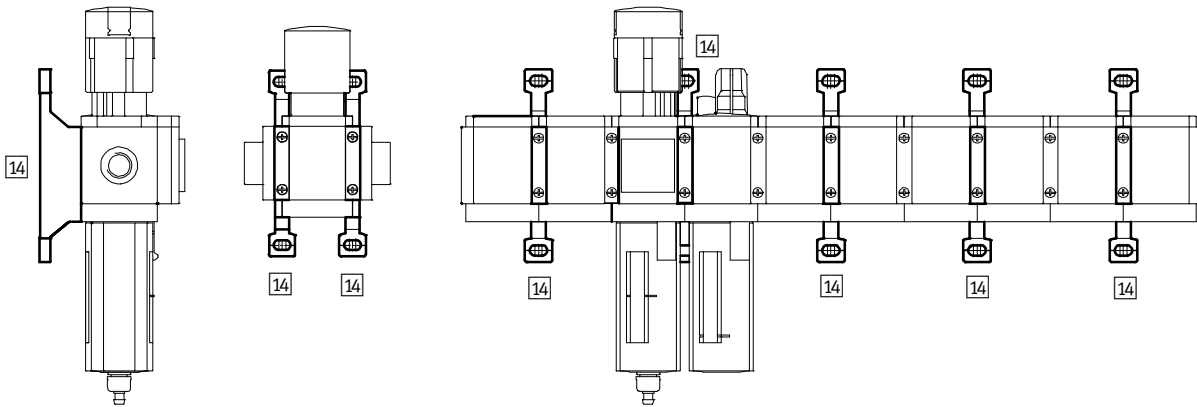
Filter Regulators MS4N-LFR – Inch Series

Accessories Overview

Mounting Attachments and Accessories



Single unit and combination unit mounting brackets.



Filter Regulators MS4N-LFR – Inch Series

Accessories Overview



| Mounting Attachments and Accessories | | | | | | |
|--------------------------------------|--|--------------------|-----------------|--------------------|-----------------|--------|
| | | Single unit | | Combination unit | | → Page |
| | | without port plate | with port plate | without port plate | with port plate | |
| 1 | Cover cap MS4-END | ■ | - | ■ | - | 136 |
| 2 | Port plate MS4N-AQ... | - | ■ | - | ■ | 137 |
| 3 | Mounting bracket MS4-WB | ■ | ■ | - | - | 134 |
| 4 | Mounting bracket MS4-WBM | ■ | ■ | - | - | 134 |
| 5 | Body connector MS4-MV | - | ■ | ■ | ■ | 137 |
| 6 | Regulator wall bracket MS4-WR | ■ | ■ | - | - | 135 |
| 7 | Hex nut MS4-WRS | ■ | ■ | ■ | ■ | 135 |
| 8 | Cover plate VS | ■ | ■ | ■ | ■ | 130 |
| 9 | Adapter for EN pressure gauge 1/8/1/4 A8/A4 | ■ | ■ | ■ | ■ | 130 |
| 10 | Pressure gauge MA | ■ | ■ | ■ | ■ | 141 |
| 11 | Pressure sensor SDE1-...-MS AD1 ... AD4 | ■ | ■ | ■ | ■ | 130 |
| 12 | Plug socket with cable SIM-M8-3.../SIM-M12-4... | ■ | ■ | ■ | ■ | 141 |
| 13 | Padlock LRVS-D | ■ | ■ | ■ | ■ | 141 |
| 14 | Mounting bracket MS4-WP/WPB/WPM | - | ■ | ■ | ■ | 138 |

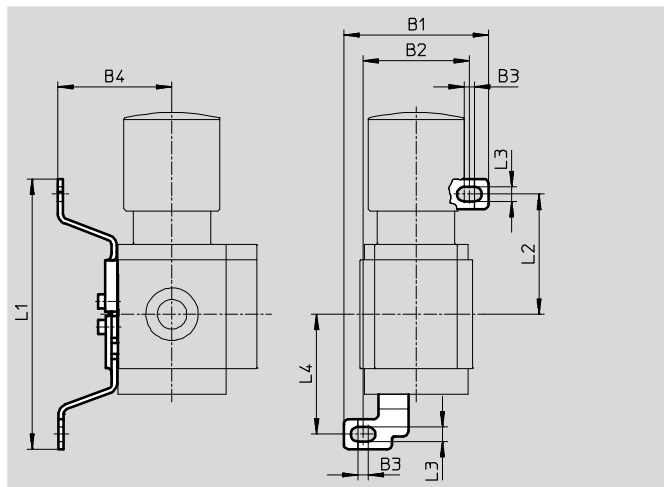
Filter Regulators MS4N-LFR – Inch Series

Accessories

3 Mounting bracket MS4-WB

- For wall mounting

Material:
Steel

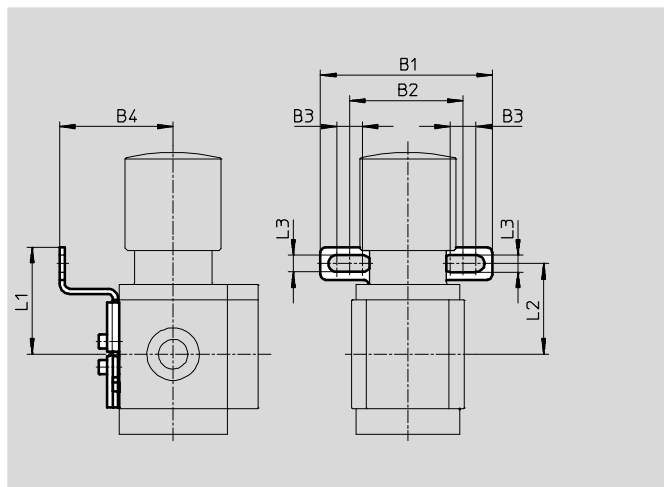


| Dimensions and Ordering Data | | | | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|-------------|----------|--------|
| B1 | B2 | B3 | B4 | L1 | L2 | L3 | L4 | Weight [lb] | Part No. | Type |
| 2.21 | 1.62 | 0.16 | 1.74 | 4.12 | 1.83 | 0.22 | 1.83 |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

Filter Regulators MS4N-LFR – Inch Series

Accessories

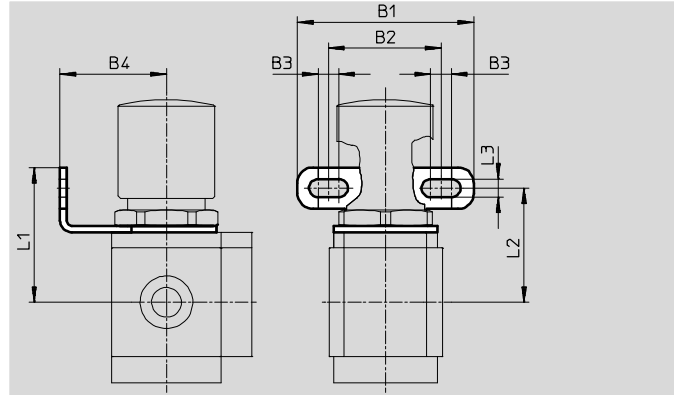
6 Mounting bracket MS4-WR

- For wall mounting a filter regulator and pressure regulator

Material:
Steel

Note

The hex nut for attaching components to this bracket must be ordered separately.



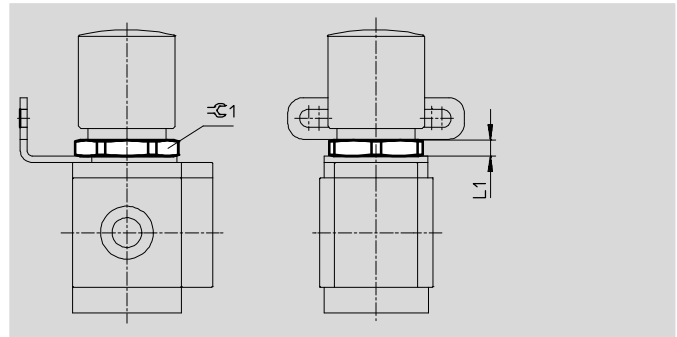
Dimensions and Ordering Data

| B1 | B2 | B3 | B4 | L1 | L2 | L3 | Weight [lb] | Part No. | Type |
|------|------|------|------|------|------|------|-------------|----------|--------|
| 2.68 | 1.73 | 0.31 | 1.61 | 2.05 | 1.73 | 0.28 | 0.10 | 526064 | MS4-WR |

7 Hex nut MS4-WRS

- For front panel mounting
- For attaching components to the mounting bracket MS-WR

Material:
Aluminum



Dimensions and Ordering Data

| L1 | ±0.1 | Weight [lb] | Part No. | Type |
|------|------|-------------|----------|---------|
| 0.24 | 1.42 | 0.01 | 532187 | MS4-WRS |

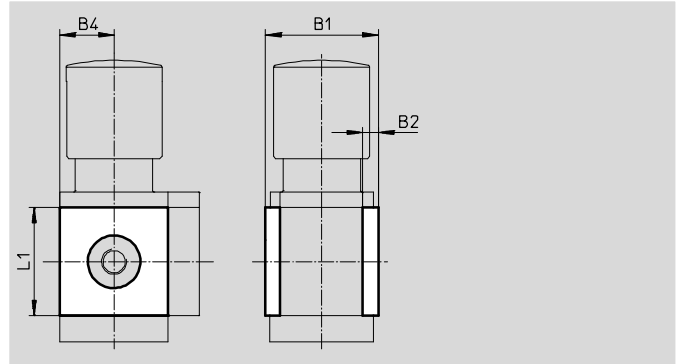
Filter Regulators MS4N-LFR – Inch Series

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

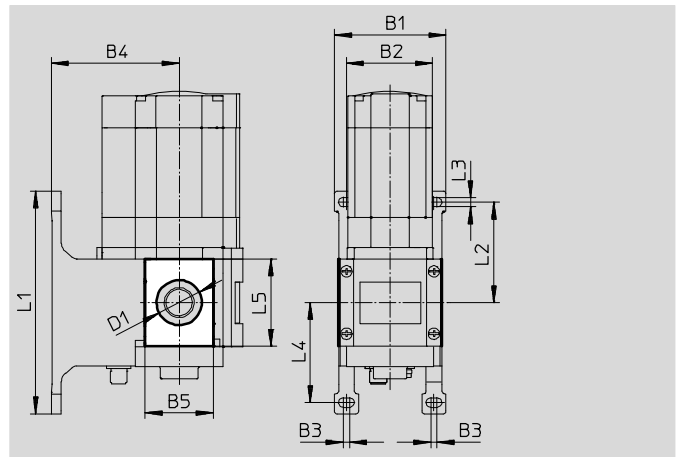


| Dimensions and Ordering Data | | | | | | |
|------------------------------|------|------|------|----------|---------|--|
| B1 | B2 | B4 | L1 | Part No. | Type | |
| 1.72 | 0.24 | 0.83 | 1.65 | 538779 | MS4-END | |

Mounting plate MS4-AEND

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

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.

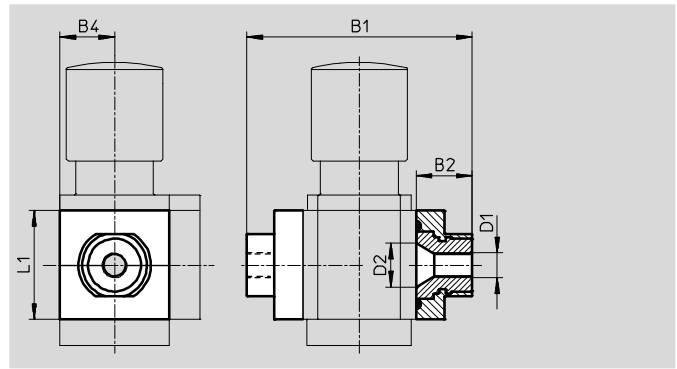
Filter Regulators MS4N-LFR – Inch Series

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 |

Filter Regulators MS4N-LFR – Inch Series

Accessories



14 Mounting Bracket MS4-WP...

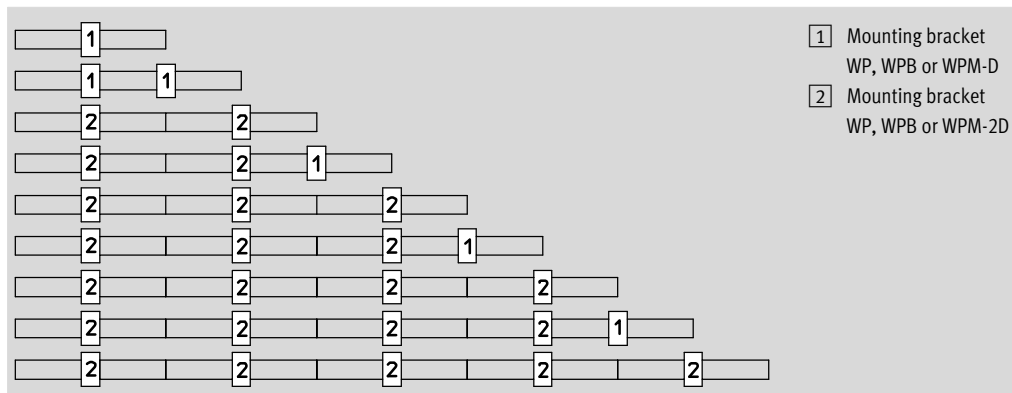
Suggested placement of wall mounting brackets when mounting air preparation combinations

1 unit: 1.575 in

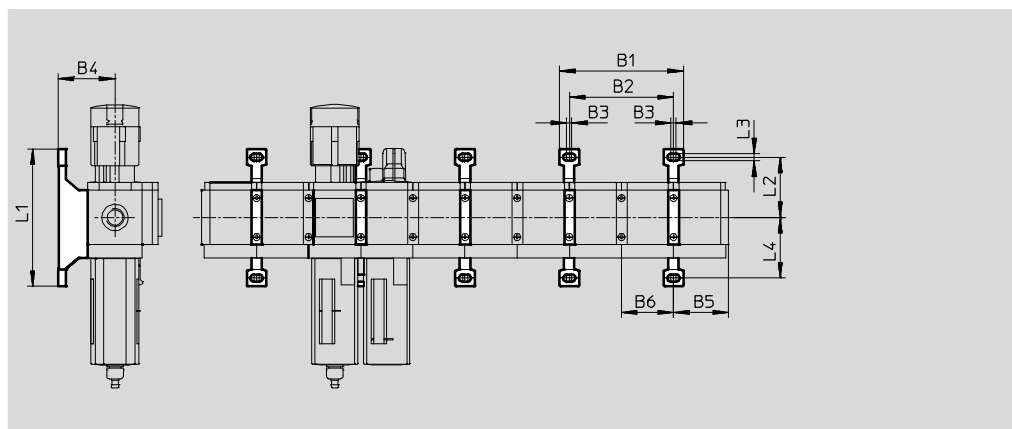
2 units: 3.15 in

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 |

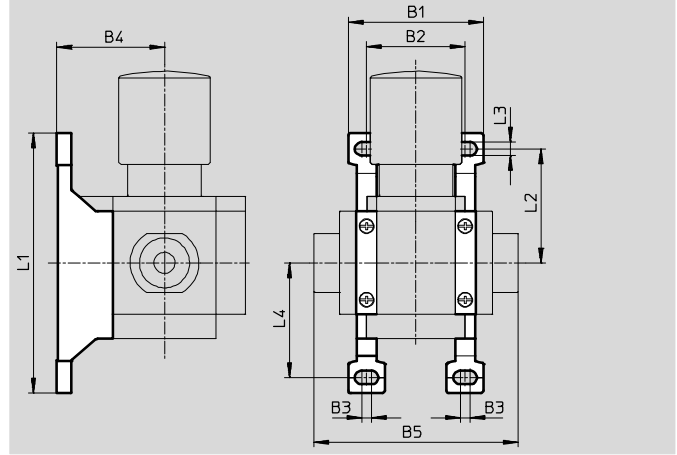
Filter Regulators MS4N-LFR – Inch Series

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

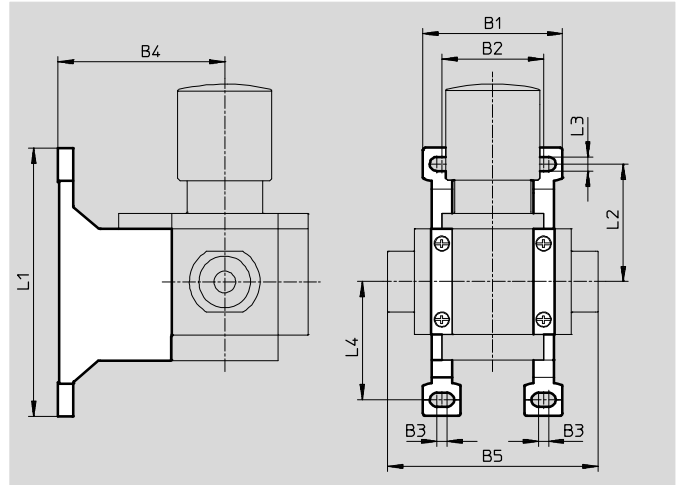


| Dimensions and Ordering Data | | | | | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|------|-------------|----------|--------|
| B1 | B2 | B3 | B4 | B5 | L1 | L2 | L3 | L4 | Weight [lb] | Part No. | Type |
| 2.17 | 1.58 | 0.16 | 1.73 | 3.28 | 4.17 |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

Filter Regulators MS4N-LFR – Inch Series



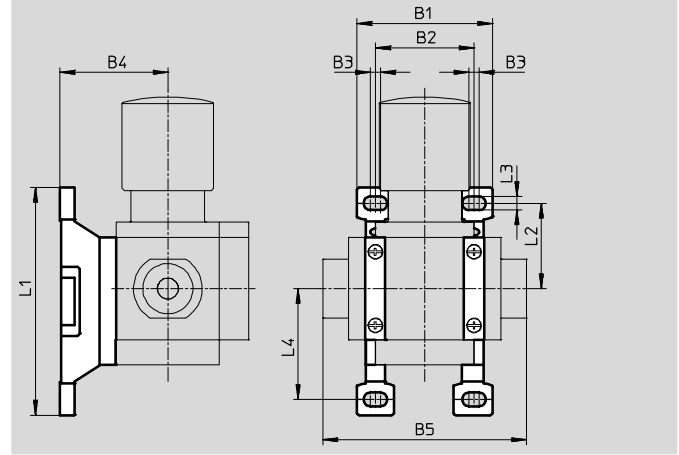
Accessories

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 |

Filter Regulators MS4N-LFR – Inch Series

Accessories



| 11 Ordering Data – Plug Socket with Cable SIM-M8 | | | Technical data → www.festo.com/catalog/sim-m8 | |
|--|-----------------------|-------------------|---|-------------------|
| | Electrical connection | Cable length [ft] | Part No. | Type |
| | | | | |
| | M8x1, 3-pin | 8.2 | 159420 | SIM-M8-3GD-2,5-PU |
| | | 16.4 | 159421 | SIM-M8-3GD-5-PU |
| | | 32.8 | 192964 | SIM-M8-3GD-10-PU |
| | M8x1, 3-pin | 8.2 | 159422 | SIM-M8-3WD-2,5-PU |
| | | 16.4 | 159423 | SIM-M8-3WD-5-PU |
| | | 32.8 | 192965 | SIM-M8-3WD-10-PU |

| 11 Ordering Data – Plug Socket with Cable SIM-M12 | | | Technical data → www.festo.com/catalog/sim-m12 | |
|---|-----------------------|-------------------|---|------------------|
| | Electrical connection | Cable length [ft] | Part No. | Type |
| | | | | |
| | M12x1, 4-pin | 16.4 | 164259 | SIM-M12-4GD-5-PU |
| | M12x1, 4-pin | 16.4 | 164258 | SIM-M12-4WD-5-PU |

| 10 Ordering Data – Pressure Gauge MA | | | | Technical data → www.festo.com/catalog/ma | | |
|--------------------------------------|---|----------------------|------------------|---|----------|-------------------------|
| | Nominal size | Pneumatic connection | Indicating range | | Part No. | Type |
| | | | [bar] | [psi] | | |
| | Pressure gauge MA, DIN EN 837-1 | | | | | |
| | 1.57 | 1/4 NPT | 0 ... 16 | 0 ... 232 | 183908 | MA-40-16-N1/4-EN |
| | Pressure gauge MA, DIN EN 837-1, with red-green range | | | | | |
| | 1.57 | 1/8 NPT | – | 0 ... 232 | 530388 | MA-40-232-N1/8-PSI-E-RG |
| | 1.97 | 1/4 NPT | – | 0 ... 232 | 530391 | MA-50-232-N1/4-PSI-E-RG |

| 13 Ordering Data – Padlock LRVS-D | | | |
|-----------------------------------|--|-------------|---------------|
| | Description | Weight [lb] | Part No. Type |
| | for regulators, filter/regulators and manual on-off valves | 0.24 | 193786 LRVS-D |

Filter Regulators MS4N-LFR – Inch Series

FESTO

Replacement Parts

| Ordering Data – Wearing Parts Kits | | | |
|------------------------------------|---|----------|---------|
| Size | Description | Part No. | Type |
| MS4 | Snap-ring, membrane, bellows, O-rings, screws, stem | 673647 | MS4-LFR |



| Ordering Data – Filter Cartridges | | | |
|-----------------------------------|-----------------------|----------|-----------|
| Size | Filtration grade [µm] | Part No. | Type |
| MS4 | 5 | 534501 | MS4-LFP-C |
| | 40 | 534502 | MS4-LFP-E |

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

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