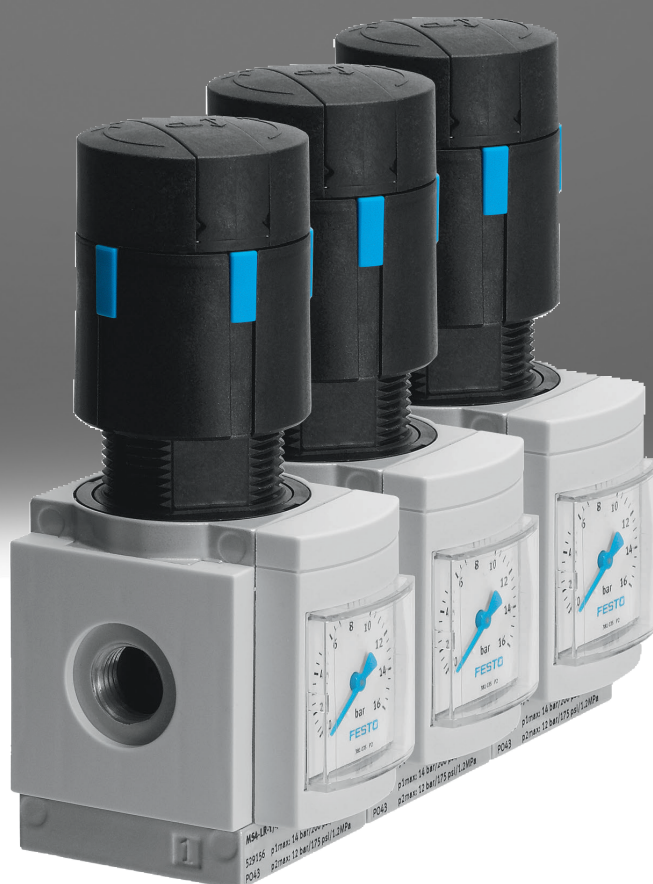


## Pressure regulator MS4N-LRB

**FESTO**



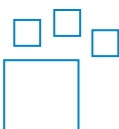
## Characteristics

### At a glance

- Grid dimension: 40 mm
- Good control characteristics with minimal pressure hysteresis and primary pressure compensation
- Return flow option for exhausting from output 2 to input 1 already integrated
- With or without secondary exhausting
- Optional pressure sensor

### Ordering data - modular system

Link [ms4n-lrb](#)



Configurable product

This product and all its product options can be ordered online via the configurator.

### Function

[LRB] Pressure regulator for manifold assembly

To build up a regulator manifold with through air supply for pressure ranges that can be adjusted independently of one another

### Pneumatic connection

By installing connecting plates it is easier to replace the module if necessary (e.g. when using piping).

### Pressure regulation range

There are different pressure regulation ranges:

- 0.3 ... 4 bar
- 0.3 ... 7 bar
- 0.5 ... 12 bar

### Pressure gauge alternatives

Two pressure gauge connections for variable installation

### Alternative pressure gauge scale

The scaling of the built-in pressure gauge can be selected. The unit options available are [MPa], [bar] / [psi].

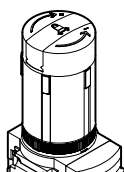
### Secondary exhausting

The regulated working pressure can also be reduced without a consuming device via the optional secondary exhausting.

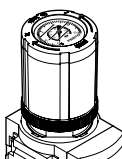
### Rotary knob alternative

Optionally with longer rotary knob or with pressure gauge integrated in the rotary knob.

[LD] Long rotary knob



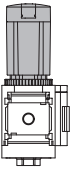
[DM1] Rotary knob pressure gauge, small



## Characteristics

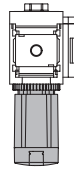
### Alternative mounting position

[ ] None



Rotary knob positioned above the appliance as standard.

[KD] Rotary knob underneath

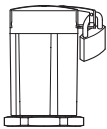


Optionally with rotary knob positioned below the device.

### Lockability

Various options for locking the rotary knob to protect the settings from being changed.

[AS] Can be locked using accessories



[E11] With integrated lock



### Type of mounting

[WR] Mounting bracket with knurled nut on regulator knob



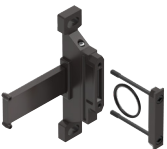
- For wall mounting an individual device

[WP] Mounting bracket basic design



- For connecting the modules for wall mounting
- In combination with connecting plate MS4-AG... for mounting an individual device on a wall
- In conjunction with mounting plate MS4-AEND for wall mounting of a single device
- Same wall distance when used in combination with series MS4 and MS6

[WPM] Mounting bracket for hooking in service unit components



- For connecting the modules for wall mounting
- In combination with connecting plate MS4-AG... for mounting an individual device on a wall
- In conjunction with mounting plate MS4-AEND for wall mounting of a single device
- For installing modules with the regulator knob pointing downwards

[WB] Mounting centrally at rear (wall mounting top and bottom), connecting plates not required



For wall mounting an individual device

## Characteristics

|       |                                                                                |
|-------|--------------------------------------------------------------------------------|
| [WBM] | Mounting centrally at rear (wall mounting top), connecting plates not required |
|-------|--------------------------------------------------------------------------------|



For wall mounting an individual device

### Outlet direction

Available with flow in the opposite direction.

## Type code

|      |                                                                                         |  |
|------|-----------------------------------------------------------------------------------------|--|
| 001  | Series                                                                                  |  |
| MS   | MS series                                                                               |  |
| 002  | Size                                                                                    |  |
| 4    | Grid dimension 40 mm                                                                    |  |
| 003  | Thread type                                                                             |  |
| N    | NPT thread                                                                              |  |
| 004  | Function                                                                                |  |
| LRB  | Pressure regulator for manifold assembly                                                |  |
| 005  | Pneumatic connection, inch                                                              |  |
| 1/4  | Female thread NPT 1/4                                                                   |  |
| AQK  | Sub-base NPT1/8                                                                         |  |
| AQN  | Sub-base NPT1/4                                                                         |  |
| AQP  | Sub-base NPT3/8                                                                         |  |
| 006  | Pressure regulation range                                                               |  |
| D5   | 0.3 ... 4 bar                                                                           |  |
| D6   | 0.3 ... 7 bar                                                                           |  |
| D7   | 0.5 ... 12 bar                                                                          |  |
| 007  | Pressure gauge alternatives                                                             |  |
|      | None                                                                                    |  |
| A4   | Adapter for EN pressure gauge 1/4, without pressure gauge                               |  |
| A8   | Adapter for EN pressure gauge 1/8, without pressure gauge                               |  |
| AD1  | Pressure sensor with LCD display, M8 plug, PNP, 3-pin                                   |  |
| AD2  | Pressure sensor with LCD display, M8 plug, NPN, 3-pin                                   |  |
| AD3  | Pressure sensor with LCD display, M12 plug, PNP, 4-pin, analogue output 4 ... 20 mA     |  |
| AD4  | Pressure sensor with LCD display, M12 plug, NPN, 4-pin, analogue output 4 ... 20 mA     |  |
| AD7  | Pressure sensor with switching display, M8 plug, threshold value comparator, PNP, N/O   |  |
| AD8  | Pressure sensor with switching display, M8 plug, threshold value comparator, PNP, N/C   |  |
| AD9  | Pressure sensor with switching display, M8 plug, window comparator, PNP, N/O            |  |
| AD10 | Pressure sensor with operational status indicator, M8 plug, window comparator, PNP, N/C |  |
| RG   | Integrated pressure gauge, red/green scale                                              |  |
| VS   | Cover plate                                                                             |  |

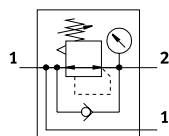
|     |                                                                                           |  |
|-----|-------------------------------------------------------------------------------------------|--|
| 008 | Alternative pressure gauge scale                                                          |  |
|     | MS pressure gauge                                                                         |  |
| BAR | bar                                                                                       |  |
| MPA | MPa                                                                                       |  |
| 009 | Secondary exhausting                                                                      |  |
|     | With secondary exhausting                                                                 |  |
| OS  | Without secondary exhaust                                                                 |  |
| 010 | Rotary knob alternative                                                                   |  |
|     | None                                                                                      |  |
| LD  | Long rotary knob                                                                          |  |
| DM1 | Rotary knob pressure gauge, small                                                         |  |
| DM2 | Rotary knob pressure gauge, large                                                         |  |
| 011 | Alternative mounting position                                                             |  |
|     | None                                                                                      |  |
| KD  | Rotary knob underneath                                                                    |  |
| 012 | Lockability                                                                               |  |
|     | None                                                                                      |  |
| AS  | Can be locked using accessories                                                           |  |
| E11 | With integrated lock                                                                      |  |
| 013 | Alternative pressure outlet                                                               |  |
|     | None                                                                                      |  |
| BH  | Angled outlet block QS 1/4-U                                                              |  |
| BI  | Angled outlet block QS 5/16-U                                                             |  |
| BJ  | Angled outlet block QS 3/8-U                                                              |  |
| 014 | Type of mounting                                                                          |  |
|     | Without mounting bracket                                                                  |  |
| WB  | Mounting centrally at rear (wall mounting top and bottom), connecting plates not required |  |
| WBM | Mounting centrally at rear (wall mounting top), connecting plates not required            |  |
| WP  | Mounting bracket basic design                                                             |  |
| WPB | Mounting bracket for large wall gap                                                       |  |
| WPM | Mounting bracket for hooking in service unit components                                   |  |
| WR  | Mounting bracket with knurled nut on regulator knob                                       |  |
| 015 | Outlet direction                                                                          |  |
| Z   | Pressure output to the front                                                              |  |

## Datasheet

## General technical data

|                                                       |                                                                                |                                        |                     |
|-------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------|---------------------|
| Pneumatic connection, port 1                          | 1/4 NPT                                                                        |                                        |                     |
| Pneumatic connection, port 2                          | 1/4 NPT                                                                        |                                        | QS-8                |
| Pressure regulation range                             | 0.5 ... 12 bar                                                                 | 0.3 ... 4 bar                          | 0.3 ... 7 bar       |
| Size                                                  | 4                                                                              |                                        |                     |
| Design                                                | Directly actuated diaphragm regulator, With through compressed air supply      |                                        |                     |
| Controller function                                   | Output pressure constant, With secondary exhausting, With return flow function |                                        |                     |
| Type of mounting                                      | Either:<br>Front panel mounting<br>Inline installation<br>With accessories     |                                        |                     |
| Mounting position                                     | Any                                                                            |                                        |                     |
| Actuator lock                                         | Rotary knob with detent, can be closed with accessories                        |                                        |                     |
| Max. pressure hysteresis                              | 0.25 bar                                                                       |                                        |                     |
| Pressure gauge (ANALOG) or Pressure display (DIGITAL) | With pressure gauge                                                            | Prepared for G1/8, With pressure gauge | With pressure gauge |

## Function (shown with pressure gauge)

Standard nominal flow rate q<sub>N</sub>

|                                                       |                |               |               |           |
|-------------------------------------------------------|----------------|---------------|---------------|-----------|
| Pneumatic connection, port 2                          | 1/4 NPT        |               |               | QS-8      |
| Pressure regulation range                             | 0.5 ... 12 bar | 0.3 ... 4 bar | 0.3 ... 7 bar |           |
| Standard nominal flow rate (standardised to DIN 1343) | 1,500 l/min    | 1,900 l/min   | 1,700 l/min   | 840 l/min |

## Operating and environmental conditions

|                                              |                                                                                            |
|----------------------------------------------|--------------------------------------------------------------------------------------------|
| Operating pressure                           | 0.8 ... 14 bar                                                                             |
| Operating medium                             | Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas                                       |
| Note on operating and pilot medium           | Lubricated operation possible (in which case lubricated operation will always be required) |
| Ambient temperature                          | -10 ... 60°C                                                                               |
| Media temperature                            | -10 ... 60°C                                                                               |
| Storage temperature                          | -10 ... 60°C                                                                               |
| Corrosion resistance class CRC <sup>1)</sup> | 2 - Moderate corrosion stress                                                              |
| Suitable for use with food <sup>2)</sup>     | See supplementary material information                                                     |

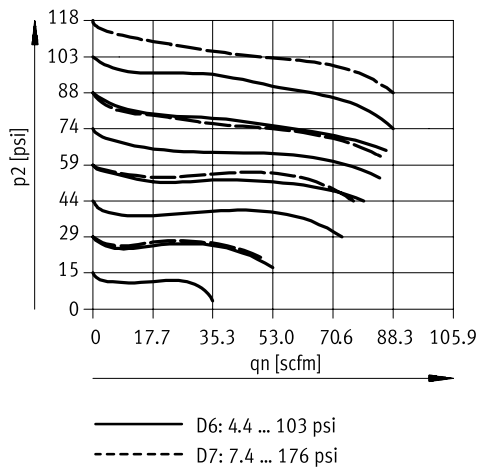
1) Corrosion resistance class CRC 2 to Festo standard FN 940070. Moderate corrosion stress. Indoor application where condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with the surrounding industrial environment.

2) More information [www.festo.com/catalogue/ms-lr](http://www.festo.com/catalogue/ms-lr) → Support/Downloads.

## Materials

|                       |                    |
|-----------------------|--------------------|
| Material housing      | Die-cast aluminium |
| Material membrane     | NBR                |
| Material sub-base     | Die-cast aluminium |
| Material seals        | NBR                |
| Note on materials     | RoHS compliant     |
| LABS (PWS) conformity | VDMA24364-B1/B2-L  |

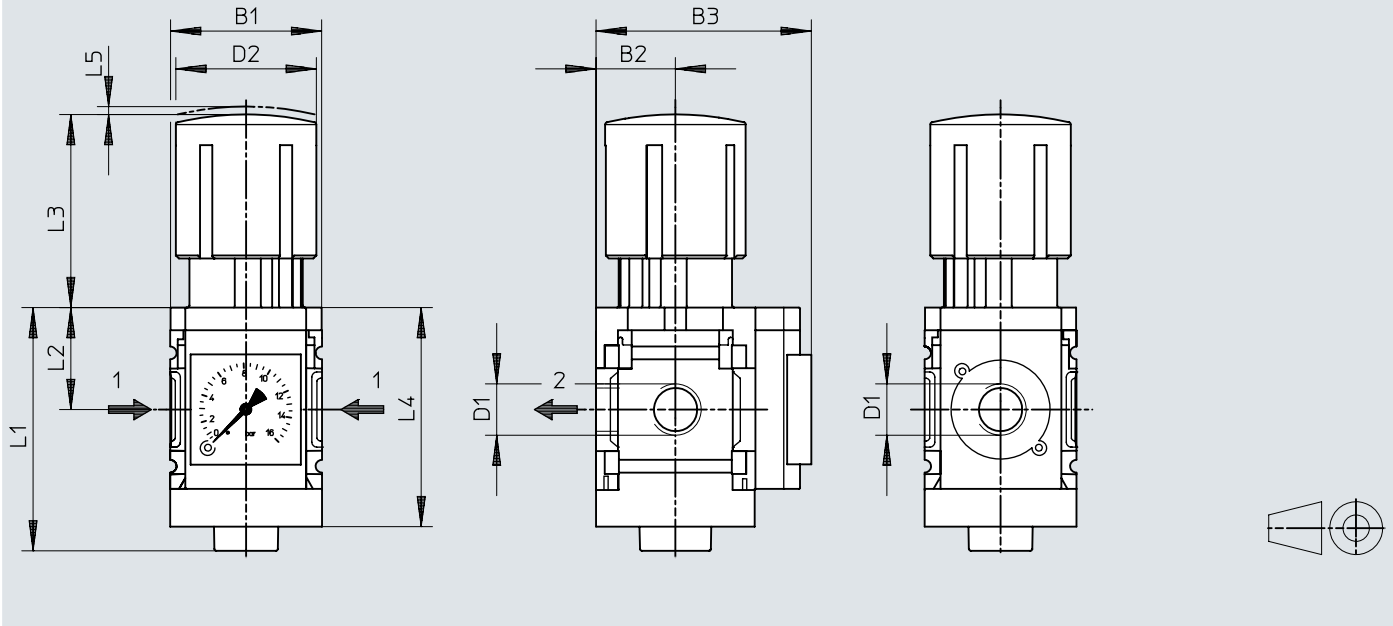
## Datasheet

Standard flow rate  $q_n$  as a function of output pressure  $p_2$  ( $p_1 = 147 \text{ psi}$ ) – MS4N-LRB-1/4

Dimensions

Dimensions – Basic type Integrated MS pressure gauge with standard scale / with red/green scale, rotary knob with latch

Download CAD data [www.festo.com](http://www.festo.com)



|              | B1     | B2     | B3           |              | D1      | D2     | L1     | L2     | L3     | L4     | L5     |
|--------------|--------|--------|--------------|--------------|---------|--------|--------|--------|--------|--------|--------|
|              | [inch] | [inch] | 1)<br>[inch] | 2)<br>[inch] |         | [inch] | [inch] | [inch] | [inch] | [inch] | [inch] |
| MS4N-LRB-1/4 | 1,57   | 0,83   | 2,24         | 2,30         | 1/4 NPT | 1,46   | 2,54   | 1,06   | 2,37   | 2,30   | 0,08   |

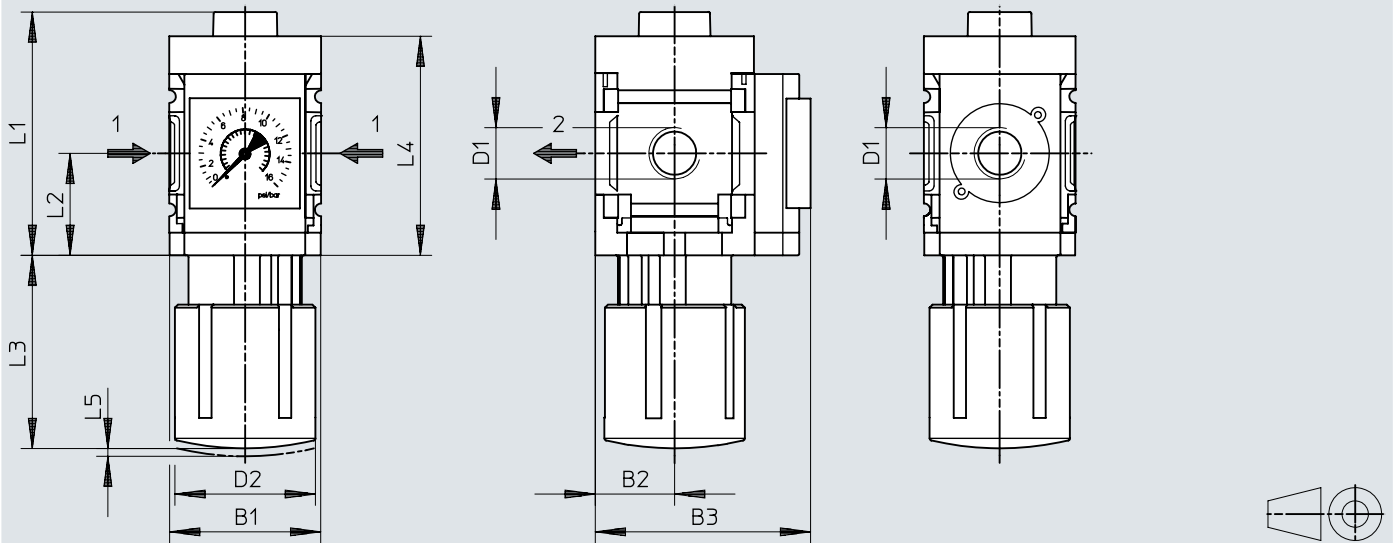
1) Standard scale  
2) Red/green scale



## Dimensions

Dimensions – Alternative mounting position, rotary knob underneath

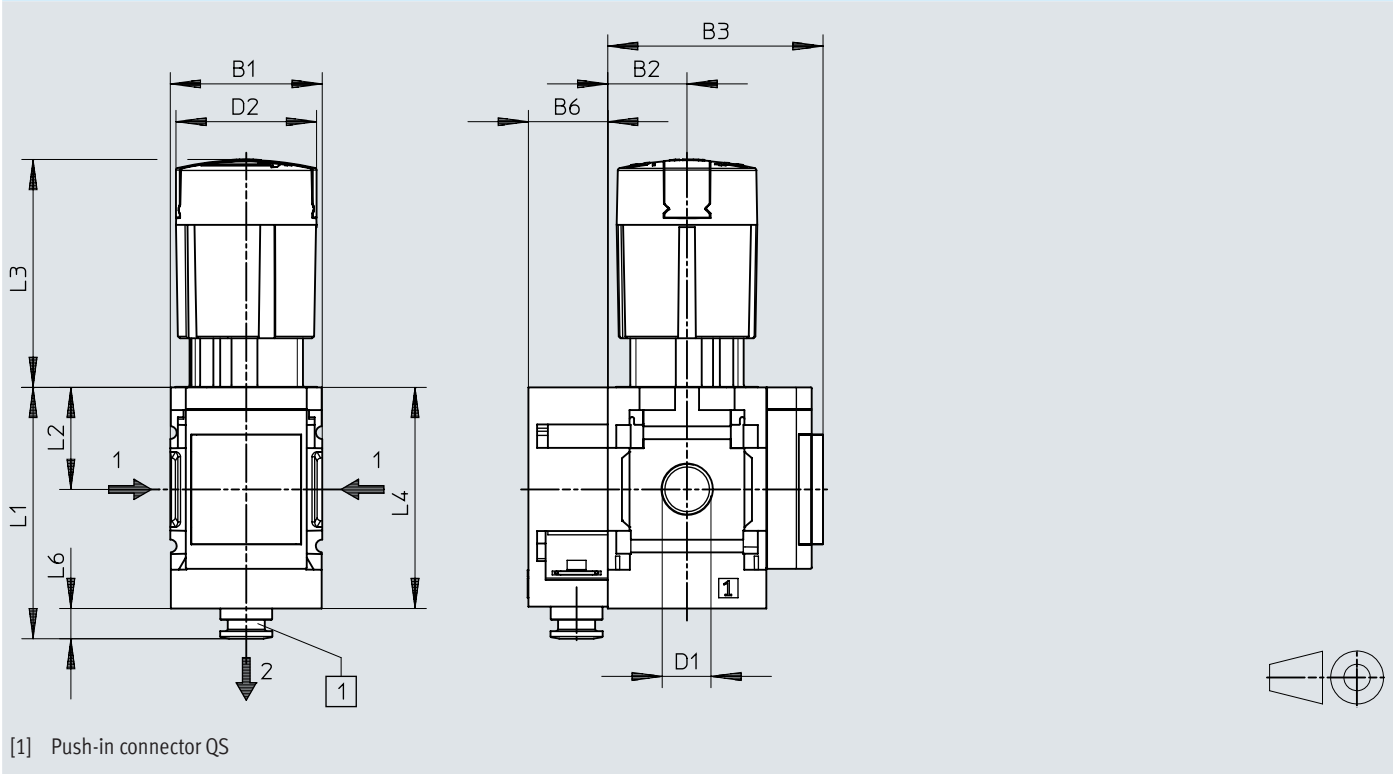
Download CAD data [www.festo.com](http://www.festo.com)



|                     | B1<br>[inch] | B2<br>[inch] | B3<br>[inch] | D1      | D2<br>[inch] | L1<br>[inch] | L2<br>[inch] | L3<br>[inch] | L4<br>[inch] | L5<br>[inch] |
|---------------------|--------------|--------------|--------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|
| MS4N-LRB-1/4-...-KD | 1,57         | 0,83         | 2,24         | 1/4 NPT | 1,46         | 2,54         | 1,06         | 2,37         | 2,30         | 0,08         |

Dimensions

Dimensions – Angled outlet block, pressure outlet to the rear Download CAD data [www.festo.com](http://www.festo.com)

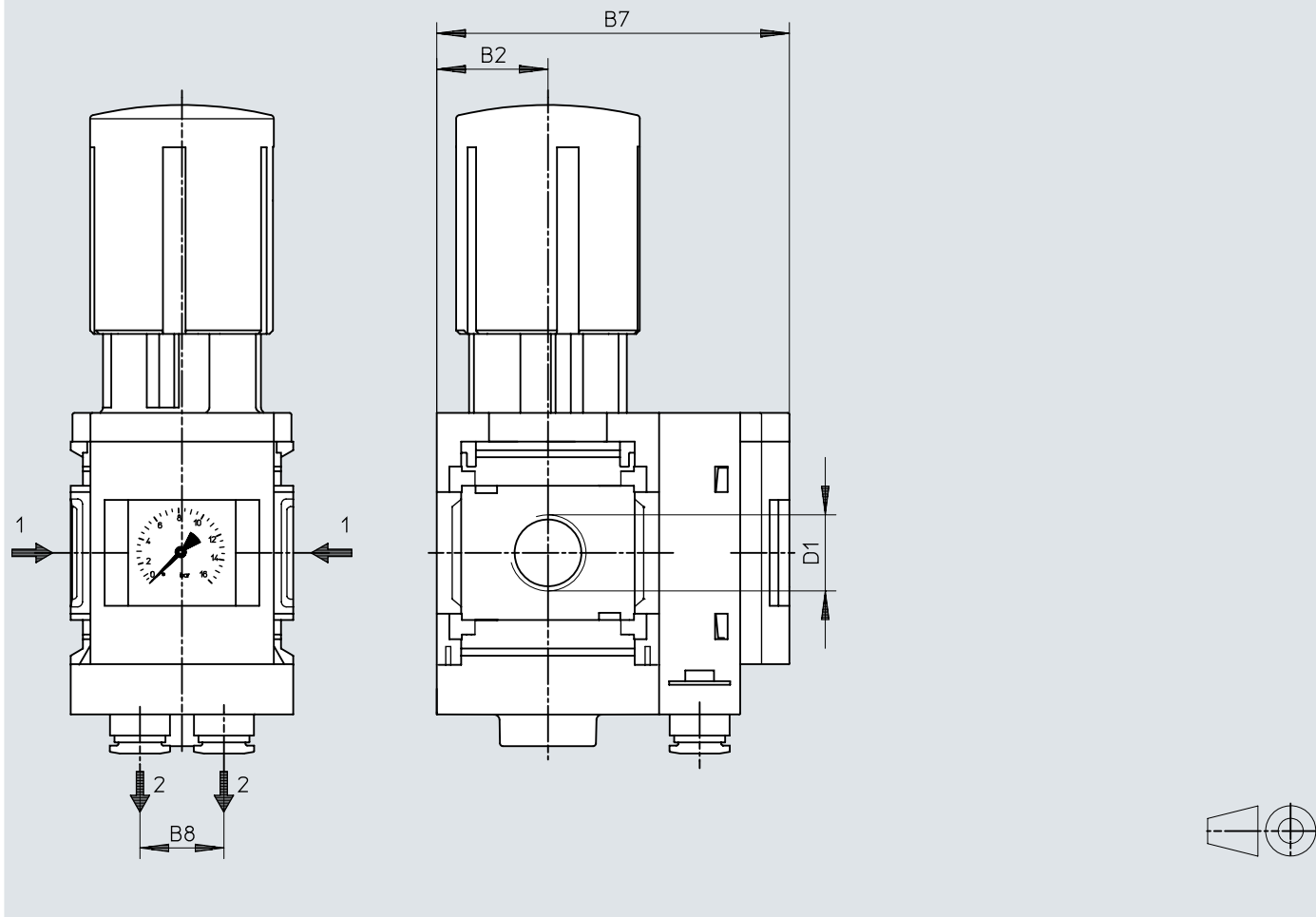


|                        | B1     | B2     | B3     | B6     | D1      | D2<br>ø | L1     | L2     | L3     | L4     | L6     |
|------------------------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|
|                        | [inch] | [inch] | [inch] | [inch] |         | [inch]  | [inch] | [inch] | [inch] | [inch] | [inch] |
| MS4N-LRB-1/4-...-BC/BD | 1,57   | 0,83   | 2,24   | 0,83   | 1/4 NPT | 1,46    | 2,62   | 1,06   | 2,37   | 2,30   | 0,31   |

## Dimensions

Dimensions – Angled outlet block, pressure outlet to the front

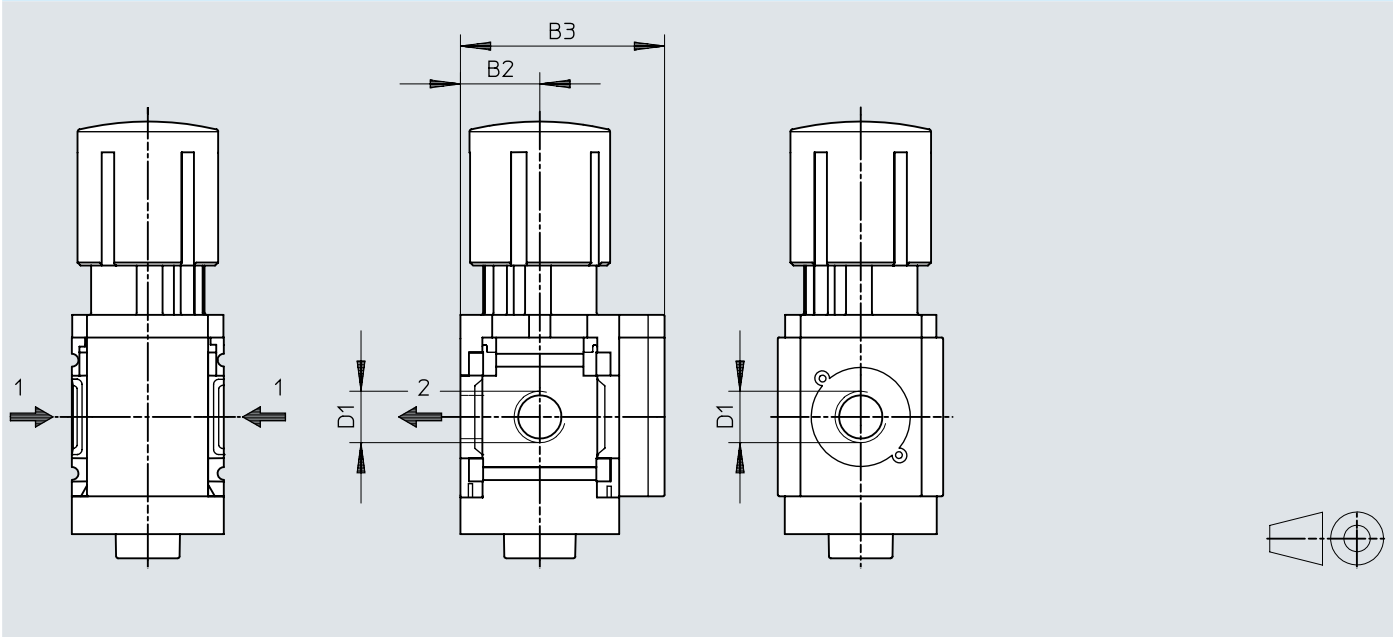
Download CAD data [www.festo.com](http://www.festo.com)



|                        | B2<br>[inch] | B7<br>[inch] | D1      |
|------------------------|--------------|--------------|---------|
| MS4N-LRB-1/4-...-BC/BD | 0,83         | 2,95         | 1/4 NPT |

Dimensions

Dimensions – Pressure gauge alternatives, cover plate Download CAD data [www.festo.com](http://www.festo.com)

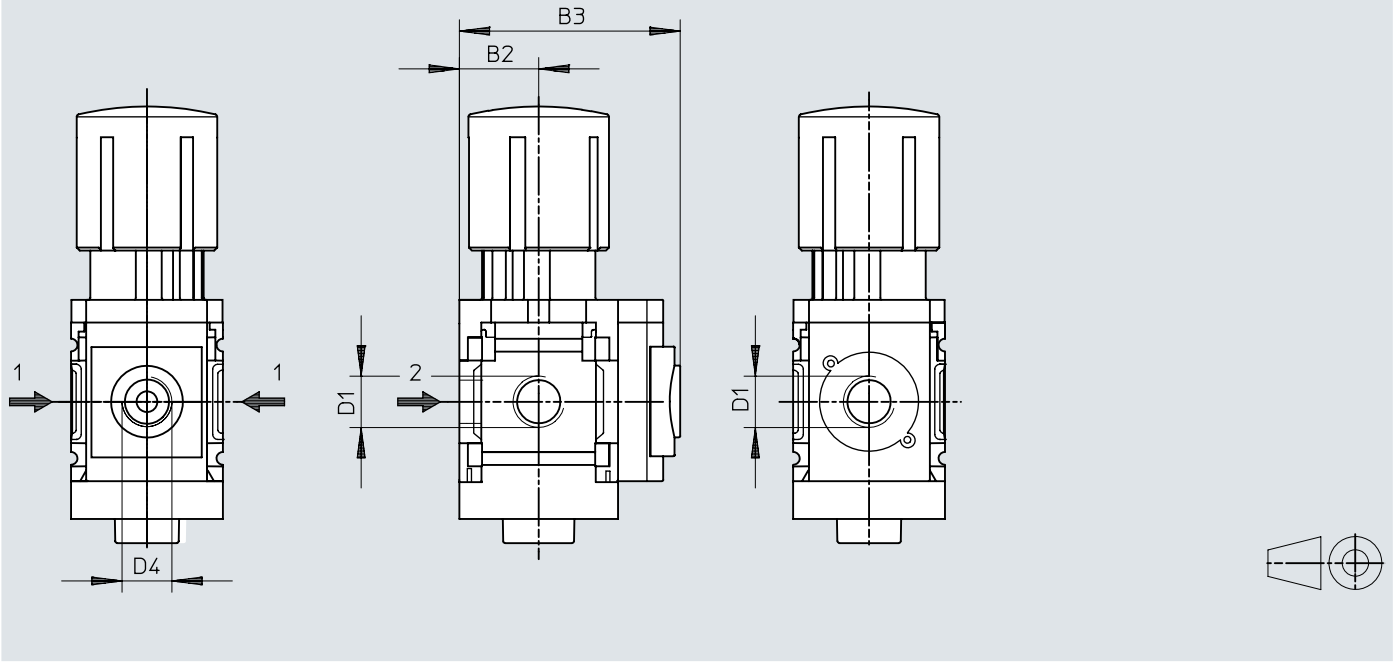


|                     | B2<br>[inch] | B3<br>[inch] | D1      |
|---------------------|--------------|--------------|---------|
| MS4N-LRB-1/4-...-VS | 0,83         | 2,13         | 1/4 NPT |

Dimensions

Dimensions – Pressure gauge alternatives, adapter for EN pressure gauge 1/8 and 1/4, without pressure gauge

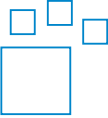
Download CAD data [www.festo.com](http://www.festo.com)



|                     | B2<br>[inch] | B3<br>[inch] | D1      | D4      |
|---------------------|--------------|--------------|---------|---------|
| MS4N-LRB-1/4-...-A8 | 0,83         | 2,30         | 1/4 NPT | 1/8 NPT |
| MS4N-LRB-1/4-...-A4 |              |              |         | 1/4 NPT |

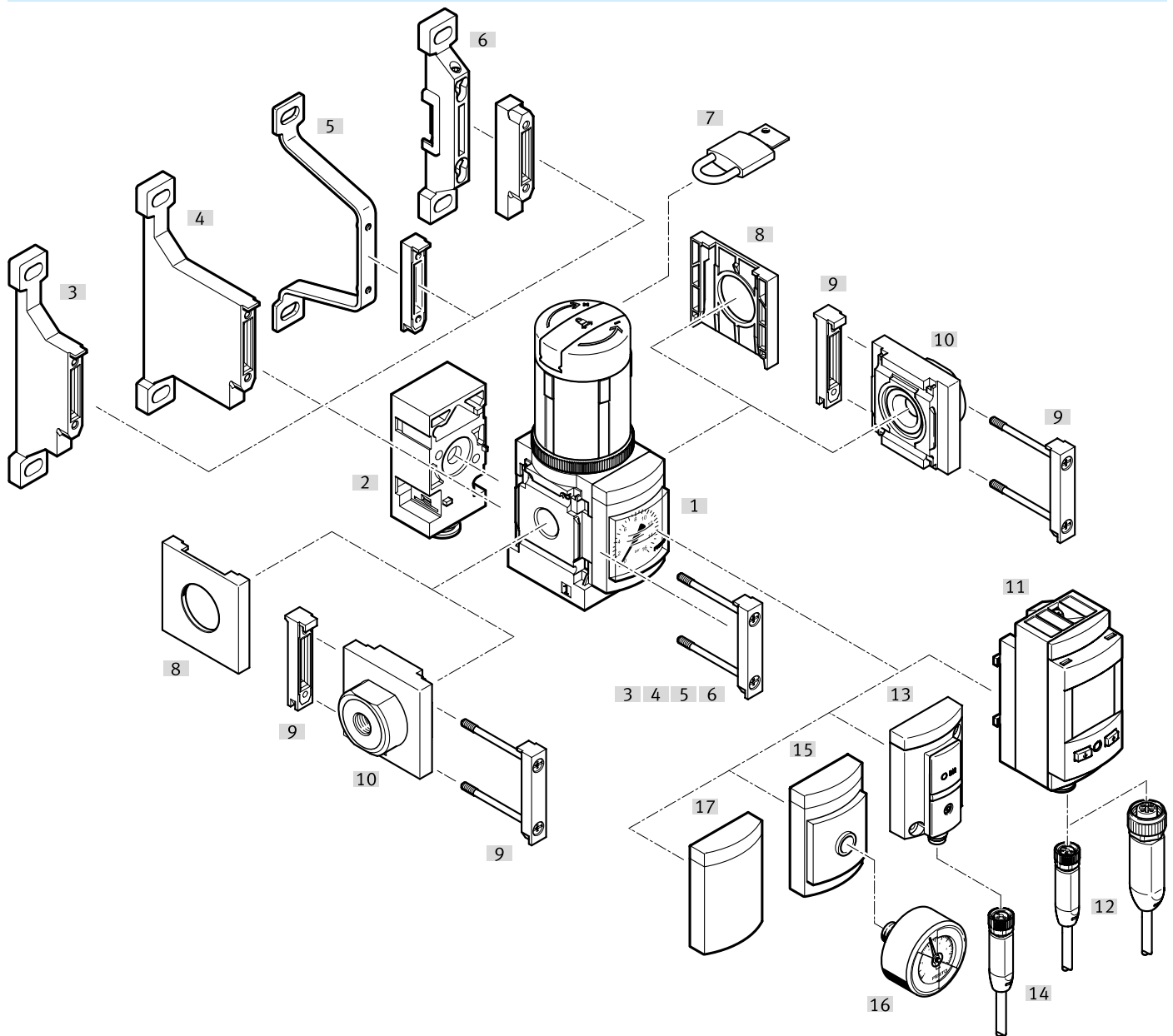
## Ordering data

| Ordering data                                                                     |                              |                           |                    |                |          |                       |
|-----------------------------------------------------------------------------------|------------------------------|---------------------------|--------------------|----------------|----------|-----------------------|
|                                                                                   | Pneumatic connection, port 1 | Pressure regulation range | Flow direction     | Product weight | Part no. | Type                  |
|  | 1/4 NPT                      | 0.3 ... 4 bar             | From left to right | 222 g          | 531780   | MS4N-LRB-1/4-D5-AS    |
|                                                                                   |                              | 0.3 ... 7 bar             |                    |                | 531792   | MS4N-LRB-1/4-D5-A8-AS |
|                                                                                   |                              |                           |                    |                | 531788   | MS4N-LRB-1/4-D6-AS-BI |
|                                                                                   |                              |                           |                    |                | 531782   | MS4N-LRB-1/4-D6-AS    |
|                                                                                   |                              | 0.5 ... 12 bar            |                    |                | 531793   | MS4N-LRB-1/4-D6-A8-AS |
|                                                                                   |                              |                           |                    |                | 531784   | MS4N-LRB-1/4-D7-AS    |

| Ordering data – Modular product system                                           |                 |          |          |
|----------------------------------------------------------------------------------|-----------------|----------|----------|
|                                                                                  | Short type code | Part no. | Type     |
|  | MS4N-LRB        | 527693   | MS4N-LRB |

## Peripherals

### Peripherals overview



| Accessories                                          |                                                                                       | → Link                   |
|------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------|
| Type/order code                                      | Description                                                                           |                          |
| [1] Pressure regulator MS4N-LRB                      |                                                                                       | <a href="#">ms4n-lrb</a> |
| [2] Angled outlet block B...                         |                                                                                       | <a href="#">-</a>        |
| [3] Mounting bracket MS4-WP                          |                                                                                       | <a href="#">18</a>       |
| [4] Mounting bracket MS4-WPB                         |                                                                                       | <a href="#">18</a>       |
| [5] Mounting bracket MS4-WPE                         |                                                                                       | <a href="#">18</a>       |
| [6] Mounting bracket MS4-WPM                         |                                                                                       | <a href="#">18</a>       |
| [7] Padlock LRVS-D                                   |                                                                                       | <a href="#">21</a>       |
| [8] Cover cap MS4-END                                | For devices without connecting plate                                                  | <a href="#">20</a>       |
| [9] Module connector MS4-MV1                         | For device combinations and individual devices with connecting plate                  | <a href="#">18</a>       |
| [10] Connecting plate SET MS4-AQ...                  | For device combinations                                                               | <a href="#">20</a>       |
| [11] Pressure sensor AD11/AD12                       | Order code [AD11], [AD12]; pressure sensor SPAU with LCD display                      | <a href="#">spau</a>     |
| [12] Connecting cable NEBA-M8...-LE4/NEBA-M12...-LE4 |                                                                                       | <a href="#">19</a>       |
| [13] Pressure sensor AD7 ... AD10                    | Order code [AD7], [AD8], [AD9], [AD10]; pressure sensor SDE5 with switching indicator | <a href="#">sde5</a>     |
| [14] Connecting cable NEBA-M8...-LE3                 |                                                                                       | <a href="#">19</a>       |
| [15] Adapter for EN pressure gauge 1/8, 1/4 A8/A4    |                                                                                       | <a href="#">-</a>        |

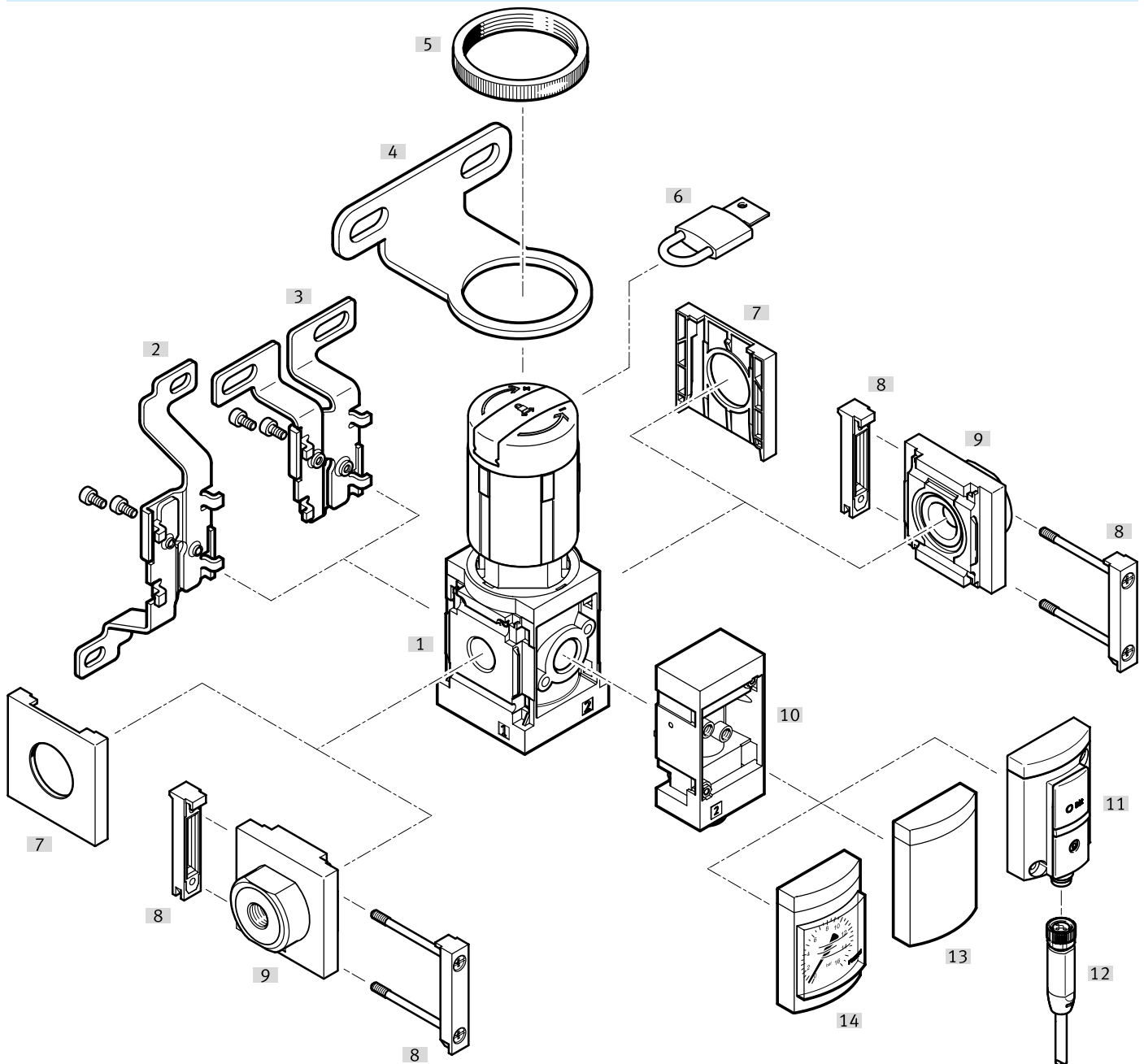
Peripherals

| Accessories            |             | → Link             |
|------------------------|-------------|--------------------|
| Type/order code        | Description |                    |
| [16] Pressure gauge MA |             | <a href="#">20</a> |
| [17] Cover plate VS    |             | <a href="#">↗</a>  |



## Peripherals

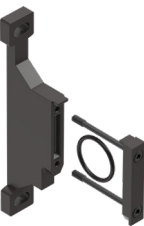
### Peripherals overview – Pressure outlet, front



| Accessories                          |                                                                                       | → Link                   |
|--------------------------------------|---------------------------------------------------------------------------------------|--------------------------|
| Type/order code                      | Description                                                                           |                          |
| [1] Pressure regulator MS4N-LRB      |                                                                                       | <a href="#">ms4n-lrb</a> |
| [2] Mounting bracket MS4-WB          | For an individual device                                                              | <a href="#">18</a>       |
| [3] Mounting bracket MS4-WBM         | For an individual device                                                              | <a href="#">18</a>       |
| [4] Mounting bracket MS4-WR          | For an individual device                                                              | <a href="#">19</a>       |
| [5] Knurled nut MS-LR                | For single device (included in the scope of delivery)                                 | <a href="#">-</a>        |
| [6] Padlock LRVS-D                   |                                                                                       | <a href="#">21</a>       |
| [7] Cover cap MS4-END                | For devices without connecting plate                                                  | <a href="#">20</a>       |
| [8] Module connector MS4-MV1         | For device combinations and individual devices with connecting plate                  | <a href="#">18</a>       |
| [9] Connecting plate SET MS4-AQ...   | For device combinations                                                               | <a href="#">20</a>       |
| [10] Angled outlet block B...        |                                                                                       | <a href="#">-</a>        |
| [11] Pressure sensor AD7 ... AD10    | Order code [AD7], [AD8], [AD9], [AD10]; pressure sensor SDE5 with switching indicator | <a href="#">sde5</a>     |
| [12] Connecting cable NEBA-M8...-LE3 |                                                                                       | <a href="#">19</a>       |
| [13] Cover plate VS                  |                                                                                       | <a href="#">-</a>        |
| [14] MS pressure gauge               |                                                                                       | <a href="#">20</a>       |

## Accessories

| Module connector MS4-MV1                                                         |      |                                 |                        |                |          |         |
|----------------------------------------------------------------------------------|------|---------------------------------|------------------------|----------------|----------|---------|
|                                                                                  | Size | Material module connector       | LABS (PWIS) conformity | Product weight | Part no. | Type    |
|  | 4    | POM, High-alloy stainless steel | VDMA24364-B1/B2-L      | 13 g           | 8119201  | MS4-MV1 |

| Mounting bracket MS4-WP...                                                       |      |                    |                        |                |          |            |
|----------------------------------------------------------------------------------|------|--------------------|------------------------|----------------|----------|------------|
|                                                                                  | Size | Material bracket   | LABS (PWIS) conformity | Product weight | Part no. | Type       |
|  | 4    | Die-cast aluminium | VDMA24364-B1/B2-L      |                | 558869   | MS4-WPE    |
|                                                                                  |      |                    |                        | 39 g           | 532184   | MS4-WP     |
|                                                                                  |      |                    |                        | 45 g           | 526060   | MS4-WPM-D  |
|                                                                                  |      |                    |                        | 55 g           | 526063   | MS4-WPB    |
|                                                                                  |      |                    |                        |                | 526061   | MS4-WPM-2D |

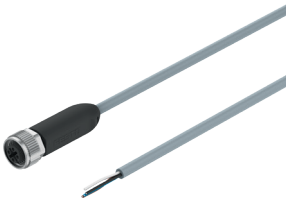
| Mounting bracket MS4-WB                                                            |      |                  |                        |                |          |        |
|------------------------------------------------------------------------------------|------|------------------|------------------------|----------------|----------|--------|
|                                                                                    | Size | Material bracket | LABS (PWIS) conformity | Product weight | Part no. | Type   |
|  | 4    | Steel            | VDMA24364-B1/B2-L      | 46 g           | 532185   | MS4-WB |

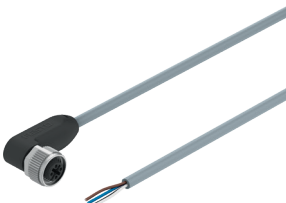
| Mounting bracket MS4-WBM                                                            |      |                  |                        |                |          |         |
|-------------------------------------------------------------------------------------|------|------------------|------------------------|----------------|----------|---------|
|                                                                                     | Size | Material bracket | LABS (PWIS) conformity | Product weight | Part no. | Type    |
|  | 4    | Steel            | VDMA24364-B1/B2-L      | 48 g           | 526062   | MS4-WBM |

## Accessories

| Mounting bracket MS4-WR                                                           |      |                  |                        |                |          |        |
|-----------------------------------------------------------------------------------|------|------------------|------------------------|----------------|----------|--------|
|                                                                                   | Size | Material bracket | LABS (PWIS) conformity | Product weight | Part no. | Type   |
|  | 4    | Steel            | VDMA24364-B1/B2-L      | 49 g           | 526064   | MS4-WR |

| Pressure sensor SPAU-...-T                                                        |                      |                                           |                        |                |          |                                    |
|-----------------------------------------------------------------------------------|----------------------|-------------------------------------------|------------------------|----------------|----------|------------------------------------|
|                                                                                   | Pneumatic connection | Electrical connection 1, connector system | LABS (PWIS) conformity | Product weight | Part no. | Type                               |
|  | R1/8                 | M12x1, A-coded to EN 61076-2-101          | VDMA24364-B1/B2-L      | 70 g           | 8001206  | SPAU-P10R-T-R18M-L-PNLK-PNVBA-M12D |
|                                                                                   |                      | M8x1, A-coded, to EN 61076-2-104          |                        |                | 8001203  | SPAU-P10R-T-R18M-L-PNLK-PNVBA-M8D  |
|                                                                                   | R1/4                 | M12x1, A-coded to EN 61076-2-101          |                        |                | 8001208  | SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D |
|                                                                                   |                      | M8x1, A-coded, to EN 61076-2-104          |                        |                | 8001209  | SPAU-P10R-T-R14M-L-PNLK-PNVBA-M8D  |

| Connecting cables NEBA, straight                                                    |                                                                      |                                           |                                                      |              |          |                        |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------|--------------|----------|------------------------|
|                                                                                     | Electrical connection 1, connector system                            | Electrical connection 2, connector system | Electrical connection 2, number of connections/cores | Cable length | Part no. | Type                   |
|  | M12x1, A-coded to EN 61076-2-101<br>M8x1, A-coded, to EN 61076-2-104 | Open end                                  | 4                                                    | 2.5 m        | 8078239  | NEBA-M12G5-U-2.5-N-LE4 |
|                                                                                     |                                                                      |                                           |                                                      | 5 m          | 8078240  | NEBA-M12G5-U-5-N-LE4   |
|                                                                                     |                                                                      |                                           | 3                                                    | 2.5 m        | 8078223  | NEBA-M8G3-U-2.5-N-LE3  |
|                                                                                     |                                                                      |                                           |                                                      | 5 m          | 8078224  | NEBA-M8G3-U-5-N-LE3    |
|                                                                                     |                                                                      |                                           | 4                                                    | 2.5 m        | 8078227  | NEBA-M8G4-U-2.5-N-LE4  |
|                                                                                     |                                                                      |                                           |                                                      |              |          |                        |

| Connecting cables NEBA, angled                                                      |                                                                      |                                           |                                                      |              |          |                        |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------|--------------|----------|------------------------|
|                                                                                     | Electrical connection 1, connector system                            | Electrical connection 2, connector system | Electrical connection 2, number of connections/cores | Cable length | Part no. | Type                   |
|  | M12x1, A-coded to EN 61076-2-101<br>M8x1, A-coded, to EN 61076-2-104 | Open end                                  | 4                                                    | 2.5 m        | 8078248  | NEBA-M12W5-U-2.5-N-LE4 |
|                                                                                     |                                                                      |                                           |                                                      | 5 m          | 8078249  | NEBA-M12W5-U-5-N-LE4   |
|                                                                                     |                                                                      |                                           | 3                                                    | 2.5 m        | 8078230  | NEBA-M8W3-U-2.5-N-LE3  |
|                                                                                     |                                                                      |                                           |                                                      | 5 m          | 8078231  | NEBA-M8W3-U-5-N-LE3    |
|                                                                                     |                                                                      |                                           | 4                                                    | 2.5 m        | 8078233  | NEBA-M8W4-U-2.5-N-LE4  |
|                                                                                     |                                                                      |                                           |                                                      |              |          |                        |

## Accessories

| Pressure gauge MA                                                                |                      |                      |                        |                |          |                    |
|----------------------------------------------------------------------------------|----------------------|----------------------|------------------------|----------------|----------|--------------------|
|                                                                                  | Conforms to standard | Pneumatic connection | LABS (PWIS) conformity | Product weight | Part no. | Type               |
|  | EN 837-1             | G1/4                 | VDMA24364-B1/B2-L      | 70 g           | 183901   | MA-40-16-G1/4-EN   |
|                                                                                  |                      | R1/8                 |                        | 60 g           | 525726   | MA-40-16-R1/8-E-RG |
|                                                                                  |                      | R1/4                 |                        | 70 g           | 187080   | MA-40-16-R1/4-EN   |
|                                                                                  |                      |                      |                        | 75 g           | 525729   | MA-50-16-R1/4-E-RG |

| Cover cap MS4-END                                                                |      |                  |                        |          |         |  |
|----------------------------------------------------------------------------------|------|------------------|------------------------|----------|---------|--|
|                                                                                  | Size | Material housing | LABS (PWIS) conformity | Part no. | Type    |  |
|  | 4    | Reinforced PA    | VDMA24364-B1/B2-L      | 538779   | MS4-END |  |

| Mounting plate MS4-AEND                                                            |      |                |                        |                |          |          |
|------------------------------------------------------------------------------------|------|----------------|------------------------|----------------|----------|----------|
|                                                                                    | Size | Material plate | LABS (PWIS) conformity | Product weight | Part no. | Type     |
|  | 4    | Reinforced PA  | VDMA24364-B1/B2-L      | 4 g            | 542966   | MS4-AEND |

| Connecting plate SET MS4-AQ...                                                     |      |                              |                        |                |          |          |
|------------------------------------------------------------------------------------|------|------------------------------|------------------------|----------------|----------|----------|
|                                                                                    | Size | Pneumatic connection, port 1 | LABS (PWIS) conformity | Product weight | Part no. | Type     |
|  | 4    | 1/8 NPT                      | VDMA24364-B1/B2-L      | 128 g          | 526065   | MS4N-AQK |
|                                                                                    |      | 1/4 NPT                      |                        |                | 526066   | MS4N-AQN |
|                                                                                    |      | 3/8 NPT                      |                        |                | 526067   | MS4N-AQP |

| Nut MS...-WRS                                                                       |      |                         |                        |                |          |         |
|-------------------------------------------------------------------------------------|------|-------------------------|------------------------|----------------|----------|---------|
|                                                                                     | Size | Material nut            | LABS (PWIS) conformity | Product weight | Part no. | Type    |
|  |      |                         | VDMA24364-B1/<br>B2-L  | 0.7 g          | 8098037  | MS2-WRS |
|                                                                                     | 4    | Wrought aluminium alloy |                        | 6.9 g          | 532187   | MS4-WRS |
|                                                                                     | 6    |                         |                        | 20.9 g         | 532188   | MS6-WRS |

Accessories

|                                                                                   |                        |                |          |        |
|-----------------------------------------------------------------------------------|------------------------|----------------|----------|--------|
| Padlock LRVS-D                                                                    |                        |                |          |        |
|                                                                                   | LABS (PWIS) conformity | Product weight | Part no. | Type   |
|  | VDMA24364-B1/B2-L      | 120 g          | 193786   | LRVS-D |