

## Branching modules MS-FRM, MS series, NPT

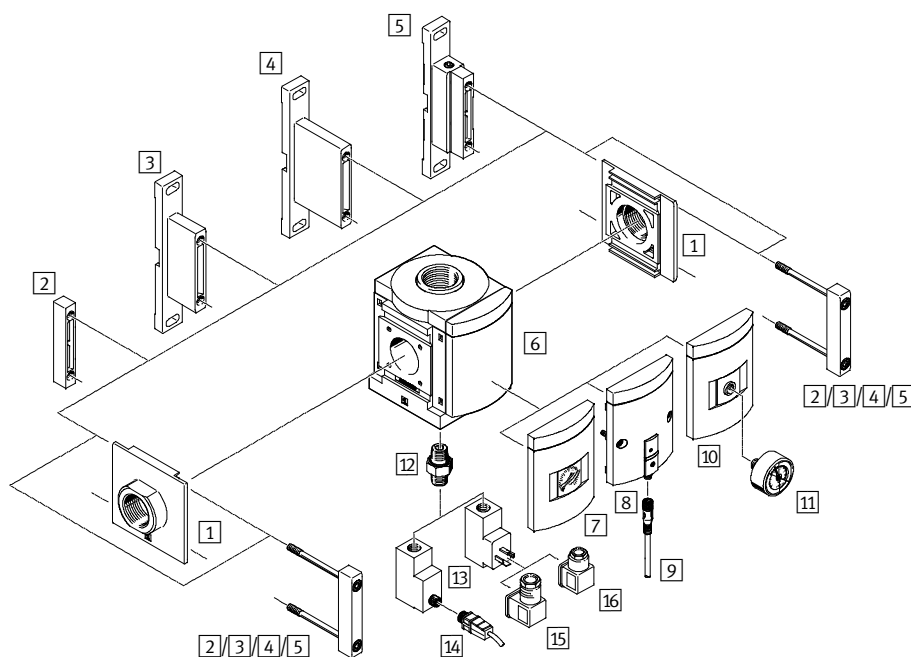
**FESTO**



## Branching modules MS9-FRM, MS series, NPT

Peripherals overview

**FESTO**



 **Note**

Additional accessories:

– Module connector for combination with size MS6, MS9 or MS12

➔ Internet: rmv, armv

| Mounting attachments and accessories |                                                          |                           |                                               |             |                 |
|--------------------------------------|----------------------------------------------------------|---------------------------|-----------------------------------------------|-------------|-----------------|
|                                      |                                                          | Individual component      |                                               | Combination | ➔ Page/Internet |
|                                      |                                                          | Without connecting thread | With connecting thread<br>NPT¾-14 or NPT1-11½ |             |                 |
| 1                                    | Connecting plate<br>MS9-AQ...                            | ■                         | –                                             | ■           | ms9-aq          |
| 2                                    | Module connector<br>MS9-MV                               | ■                         | –                                             | ■           | ms9-mv          |
| 3                                    | Mounting bracket<br>MS9-WP                               | ■                         | ■                                             | ■           | ms9-wp          |
| 4                                    | Mounting bracket<br>MS9-WPB                              | ■                         | ■                                             | ■           | ms9-wp          |
| 5                                    | Mounting bracket<br>MS9-WPM                              | ■                         | –                                             | ■           | ms9-wp          |
| 6                                    | Cover plate<br>VS                                        | ■                         | ■                                             | ■           | 8               |
| 7                                    | MS pressure gauge<br>AG                                  | ■                         | ■                                             | ■           | 8               |
| 8                                    | Pressure sensor without display<br>AD7 ... AD10          | ■                         | ■                                             | ■           | 8               |
| 9                                    | Connecting cable<br>NEBU-M8...-LE3                       | ■                         | ■                                             | ■           | 10              |
| 10                                   | Adapter plate for EN pressure gauge ¼<br>A4              | ■                         | ■                                             | ■           | 8               |
| 11                                   | Pressure gauge<br>MA                                     | ■                         | ■                                             | ■           | 10              |
| 12                                   | Double nipple (included in the scope of delivery)<br>ESK | ■                         | ■                                             | ■           | –               |
| 13                                   | Pressure switch PEV<br>X/Y/M12                           | ■                         | ■                                             | ■           | 8               |
| 14                                   | Connecting cable<br>NEBU-M12...-LE4                      | ■                         | ■                                             | ■           | 10              |
| 15                                   | Angled socket<br>PEV-¼-WD-LED-...                        | ■                         | ■                                             | ■           | 11              |
| 16                                   | Plug socket<br>MSSD-C-4P                                 | ■                         | ■                                             | ■           | 11              |

## Branching modules MS9-FRM, MS series, NPT

Type codes

|                                    |                                                            |    |   |   |     |   |    |   |    |   |   |
|------------------------------------|------------------------------------------------------------|----|---|---|-----|---|----|---|----|---|---|
|                                    |                                                            | MS | 9 | - | FRM | - | NG | - | VS | - | Y |
| <b>Series</b>                      |                                                            |    |   |   |     |   |    |   |    |   |   |
| MS                                 | Standard service unit                                      |    |   |   |     |   |    |   |    |   |   |
| <b>Size</b>                        |                                                            |    |   |   |     |   |    |   |    |   |   |
| 9                                  | Grid dimension 90 mm                                       |    |   |   |     |   |    |   |    |   |   |
| <b>Service function</b>            |                                                            |    |   |   |     |   |    |   |    |   |   |
| FRM                                | Branching module                                           |    |   |   |     |   |    |   |    |   |   |
| <b>Connection size</b>             |                                                            |    |   |   |     |   |    |   |    |   |   |
| NG                                 | Module without connecting thread, without connecting plate |    |   |   |     |   |    |   |    |   |   |
| <b>Pressure gauge alternatives</b> |                                                            |    |   |   |     |   |    |   |    |   |   |
| VS                                 | Cover plate                                                |    |   |   |     |   |    |   |    |   |   |
| <b>Pressure switch</b>             |                                                            |    |   |   |     |   |    |   |    |   |   |
|                                    | Without pressure switch                                    |    |   |   |     |   |    |   |    |   |   |
| Y                                  | With pressure switch                                       |    |   |   |     |   |    |   |    |   |   |

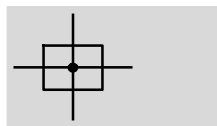
Additional variants can be ordered using the modular system → 8

- Connecting plates
- Pressure gauge/pressure gauge alternatives
- Alternative pressure gauge scale
- Pressure switch
- Type of mounting
- Alternative flow direction

## Branching modules MS9-FRM, MS series, NPT

Technical data

Function



-  - Flow rate  
10,000 ... 50,000 l/min
-  - Temperature range  
-10 ... +60 °C
-  - Operating pressure  
0 ... 20 bar



- Pneumatic manifold with 4 connections
- Attachment facility for auxiliary modules
- Outlet at top and bottom
- Can be used as an intermediate distributor for varying air qualities
- Optional pressure sensor

| General technical data    |                                                                                                                                                                                                                                                                      |                       |                                                                                                 |                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------|----------------------------------|
| Pneumatic connection 1, 2 | NPT $\frac{3}{4}$ -14                                                                                                                                                                                                                                                | NPT1-11 $\frac{1}{2}$ | NPT $\frac{1}{2}$ -14 ... NPT1 $\frac{1}{2}$ -11 $\frac{1}{2}$<br>(with connecting plate AQ...) | - (without connecting thread NG) |
| Pneumatic connection 3, 4 | NPT1-11 $\frac{1}{2}$                                                                                                                                                                                                                                                |                       |                                                                                                 |                                  |
| Design                    | Branching module                                                                                                                                                                                                                                                     |                       |                                                                                                 |                                  |
| Type of mounting          | Via accessories<br>In-line installation                                                                                                                                                                                                                              |                       |                                                                                                 |                                  |
| Mounting position         | Any <sup>1)</sup>                                                                                                                                                                                                                                                    |                       |                                                                                                 |                                  |
| Pressure display          | Via pressure sensor for displaying output pressure via operational status indicator and electrical output<br>Via pressure gauge for displaying output pressure<br>Via pressure gauge with red/green scale for displaying output pressure<br>G $\frac{1}{4}$ prepared |                       |                                                                                                 |                                  |

1) The branching module must be mounted vertically when combined with a pressure sensor as condensate must not collect in the pressure sensor.

| Standard nominal flow rate $q_{nN^{1)}$ [l/min] |                      |                                                         |                                                         |                      |                      |
|-------------------------------------------------|----------------------|---------------------------------------------------------|---------------------------------------------------------|----------------------|----------------------|
| Pneumatic connection                            | Connecting plate AQR | Thread NPT $\frac{3}{4}$ -14 or<br>connecting plate AQS | Thread NPT1-11 $\frac{1}{2}$ or<br>connecting plate AQT | Connecting plate AQU | Connecting plate AQV |
| In main flow direction 1 $\rightarrow$ 2        | 10,000               | 25,000                                                  | 45,000                                                  | 47,000               | 50,000               |
| Outlet at top                                   | 13,000               |                                                         |                                                         |                      |                      |
| Outlet at bottom                                | 13,000               |                                                         |                                                         |                      |                      |

1) Measured at  $p_1 = 6$  bar and  $p_2 = 5$  bar,  $\Delta p = 1$  bar

# Branching modules MS9-FRM, MS series, NPT

Technical data

| Operating and environmental conditions       |                                                                                                        |                            |                          |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| Variant                                      | Standard                                                                                               | Pressure switch<br>X/Y/M12 | Pressure sensor<br>AD... |
| Operating pressure [bar]                     | 0 ... 20                                                                                               | 0 ... 12                   | 0 ... 10                 |
| Operating medium                             | Compressed air in accordance with ISO 8573-1:2010 [7:4:4]                                              |                            |                          |
| Note on operating/pilot medium               | Operation with lubricated medium possible (in which case lubricated operation will always be required) |                            |                          |
| Ambient temperature [°C]                     | -10 ... +60                                                                                            | -10 ... +60                | 0 ... +50                |
| Temperature of medium [°C]                   | -10 ... +60                                                                                            | -10 ... +60                | 0 ... +50                |
| Storage temperature [°C]                     | -10 ... +60                                                                                            | -10 ... +60                | -10 ... +60              |
| Corrosion resistance class CRC <sup>1)</sup> | 2                                                                                                      |                            |                          |

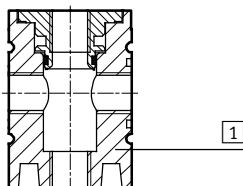
1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. 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.

| Weight [g]                                       |       |
|--------------------------------------------------|-------|
| Branching module                                 | 1,000 |
| Branching module with pressure switch<br>X/Y/M12 | 1,100 |

## Materials

Sectional view

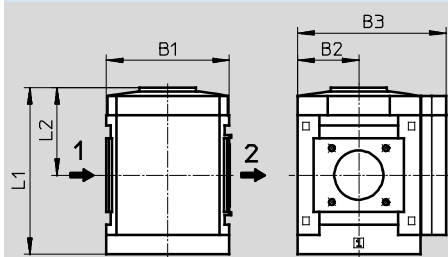


| Branching module  |                                                      |                                               |
|-------------------|------------------------------------------------------|-----------------------------------------------|
| 1                 | Housing                                              | Die-cast aluminium                            |
| -                 | Cover                                                | PA reinforced                                 |
| -                 | Connecting plate, module connector, mounting bracket | Die-cast aluminium                            |
| Note on materials |                                                      | RoHS-compliant                                |
|                   |                                                      | Free of copper and PTFE (not with variant AG) |

## Dimensions – Basic version

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

Without connecting thread NG



→ Flow direction

| Type       | B1 | B2 | B3  | L1  | L2 |
|------------|----|----|-----|-----|----|
| MS9-FRM-NG | 90 | 45 | 109 | 122 | 64 |

## Branching modules MS9-FRM, MS series, NPT

Technical data

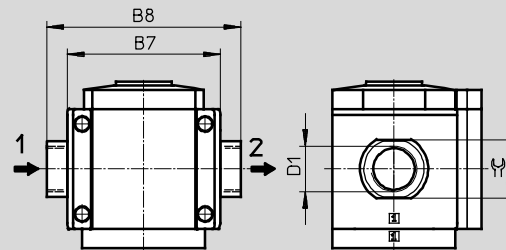
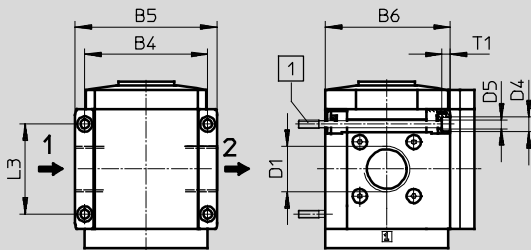
**FESTO**

### Dimensions – Connecting thread/connecting plate

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

With connecting thread N $\frac{3}{4}$  or N1

With connecting plate AQ...



1 Mounting screw M6xmin.90 to DIN 912 (not included in the scope of delivery) for wall mounting without mounting bracket

→ Flow direction

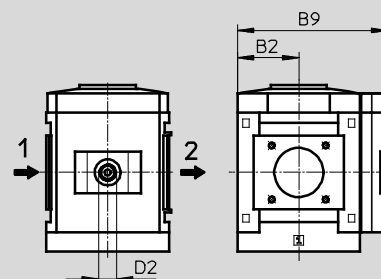
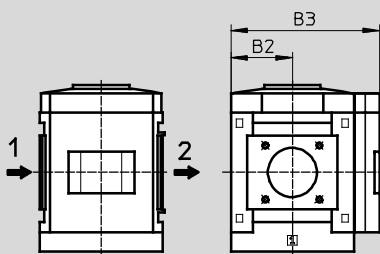
| Type                    | B4 | B5  | B6   | B7  | B8  | D1                                   | D4 | D5  | L3 | T1 | ⌀  |
|-------------------------|----|-----|------|-----|-----|--------------------------------------|----|-----|----|----|----|
| MS9-FRM-N $\frac{3}{4}$ | 90 | 104 | 91.5 | –   | –   | NPT $\frac{3}{4}$ -14                | 11 | 6.5 | 66 | 6  | –  |
| MS9-FRM-N1              |    |     |      |     |     | NPT1-11 $\frac{1}{2}$                |    |     |    |    |    |
| MS9-FRM-AQR             | –  | –   | –    | 112 | 132 | NPT $\frac{1}{2}$ -14                | –  | –   | –  | –  | 30 |
| MS9-FRM-AQS             |    |     |      |     | 132 | NPT $\frac{3}{4}$ -14                |    |     |    |    | 36 |
| MS9-FRM-AQT             |    |     |      |     | 142 | NPT1-11 $\frac{1}{2}$                |    |     |    |    | 41 |
| MS9-FRM-AQU             |    |     |      |     | 162 | NPT1 $\frac{1}{4}$ -11 $\frac{1}{2}$ |    |     |    |    | 50 |
| MS9-FRM-AQV             |    |     |      |     | 176 | NPT1 $\frac{1}{2}$ -11 $\frac{1}{2}$ |    |     |    |    | 55 |

### Dimensions – Pressure gauge alternatives

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

Integrated MS pressure gauge with standard scale AG or red/green scale RG, display unit [bar]

Adapter plate A4 for EN pressure gauge  $\frac{1}{4}$ , without pressure gauge



→ Flow direction

| Type              | B2 | B3  | B9  | D2              |
|-------------------|----|-----|-----|-----------------|
| MS9-FRM-...-AG/RG | 45 | 109 | –   | –               |
| MS9-FRM-...-A4    |    | –   | 110 | G $\frac{1}{4}$ |

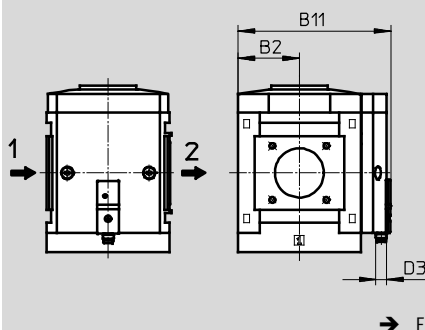
# Branching modules MS9-FRM, MS series, NPT

Technical data

## Dimensions – Pressure gauge alternatives

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

Pressure sensor without LCD display (operational status indicator only) AD7 ... AD10

Technical data → Internet: [sde5](#)


Variant AD7:  
SDE5-D10-O-...-P-M8 with 3-pin plug M8x1, threshold value comparator, 1 switching output PNP, N/O contact

Variant AD8:  
SDE5-D10-C-...-P-M8 with 3-pin plug M8x1, threshold value comparator, 1 switching output PNP, N/C contact

Variant AD9:  
SDE5-D10-O3-...-P-M8 with 3-pin plug M8x1, window comparator, 1 switching output PNP, N/O contact

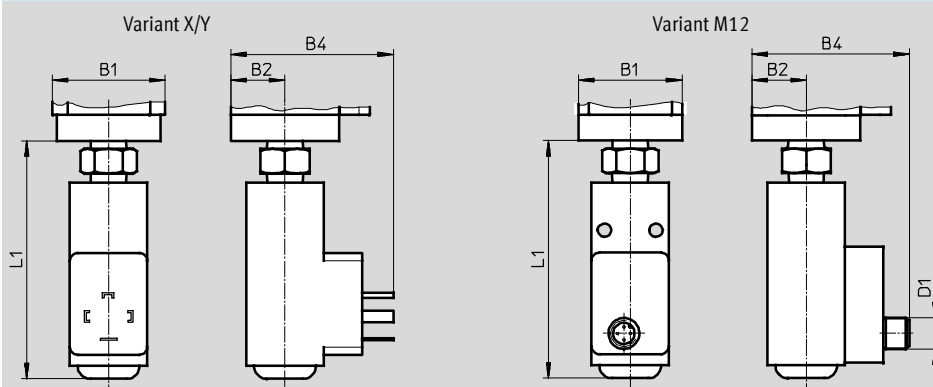
Variant AD10:  
SDE5-D10-C3-...-P-M8 with 3-pin plug M8x1, window comparator, 1 switching output PNP, N/C contact

| Type                         | B2 | B11 | D3 |
|------------------------------|----|-----|----|
| MS9-FRM-...-AD7/AD8/AD9/AD10 | 45 | 112 | M8 |

## Dimensions – Pressure switch

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

Pressure switch with adjustable pressure switching point X/Y/M12

Technical data → Internet: [pev-1/4](#)


Variant X:  
PEV-1/4-SC-OD with display, plug, square design to EN 175 301, type A

Variant Y:  
PEV-1/4-B-OD, plug, square design to EN 175 301, type A

Variant M12:  
PEV-1/4-B-M12 with 4-pin plug M12x1

| Type            | B1 | B2 | B4 | D1    | L1  |
|-----------------|----|----|----|-------|-----|
| MS9-FRM-...-X/Y | 90 | 45 | 87 | –     | 105 |
| MS9-FRM-...-M12 | 90 | 45 | 85 | M12x1 | 105 |

## Ordering data

| Size | Connection | Standard |                             | With pressure switch PEV-1/4-B-OD (variant Y) |                               |
|------|------------|----------|-----------------------------|-----------------------------------------------|-------------------------------|
|      |            | Part No. | Type                        | Part No.                                      | Type                          |
| MS9  | –          | 564148   | MS9-FRM-NG-VS <sup>1)</sup> | 564150                                        | MS9-FRM-NG-VS-Y <sup>1)</sup> |

1) Free of copper and PTFE

## Branching modules MS9-FRM, MS series, NPT

Ordering data – Modular products

**FESTO**

| M Mandatory data → |        |      |          |                                                         |
|--------------------|--------|------|----------|---------------------------------------------------------|
| Module No.         | Series | Size | Function | Connection size                                         |
| 562534             | MS     | 9    | FRM      | N $\frac{3}{4}$ , N1,<br>AQR, AQS, AQT, AQU, AQV,<br>NG |
| Ordering example   |        |      |          |                                                         |
| 562534             | MS     | 9    | - FRM    | - AQS                                                   |

| Ordering table  |                                                            |    |                 |                  |               |
|-----------------|------------------------------------------------------------|----|-----------------|------------------|---------------|
| Grid dimension  | [mm]                                                       | 90 | Condi-<br>tions | Code             | Enter<br>code |
| M Module No.    | 562534                                                     |    |                 |                  |               |
| Series          | Standard                                                   |    |                 | MS               | MS            |
| Size            | 9                                                          |    |                 | 9                | 9             |
| Function        | Branching module                                           |    |                 | -FRM             | -FRM          |
| Connection size | Thread N $\frac{3}{4}$                                     |    |                 | -N $\frac{3}{4}$ |               |
|                 | Thread N1                                                  |    |                 | -N1              |               |
|                 | Connecting plate N $\frac{1}{2}$                           |    |                 | -AQR             |               |
|                 | Connecting plate N $\frac{3}{4}$                           |    |                 | -AQS             |               |
|                 | Connecting plate N1                                        |    |                 | -AQT             |               |
|                 | Connecting plate N1 $\frac{1}{4}$                          |    |                 | -AQU             |               |
|                 | Connecting plate N1 $\frac{1}{2}$                          |    |                 | -AQV             |               |
|                 | Module without connecting thread, without connecting plate |    |                 | -NG              |               |

Transfer order code

|        |    |   |   |     |   |  |
|--------|----|---|---|-----|---|--|
| 562534 | MS | 9 | - | FRM | - |  |
|--------|----|---|---|-----|---|--|

# Branching modules MS9-FRM, MS series, NPT

Ordering data – Modular products

| → <b>M</b> Mandatory data                  |                                  | <b>O</b> Options |                  |                            |
|--------------------------------------------|----------------------------------|------------------|------------------|----------------------------|
| Pressure gauge/pressure gauge alternatives | Alternative pressure gauge scale | Pressure switch  | Type of mounting | Alternative flow direction |
| AG, VS, A4, RG, AD7 ... AD10               | PSI, MPA, BAR                    | X, Y, M12        | WP, WPM, WPB     | Z                          |
| - <b>VS</b>                                |                                  |                  |                  |                            |

| Ordering table                                      |                                  |                                                                                        |                 |       |               |
|-----------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------|-----------------|-------|---------------|
| Grid dimension                                      | [mm]                             | 90                                                                                     | Condi-<br>tions | Code  | Enter<br>code |
| <b>M</b> Pressure gauge/pressure gauge alternatives | MS pressure gauge                | Cover plate                                                                            |                 | -AG   |               |
|                                                     |                                  | Adapter plate for EN pressure gauge 1/4, without pressure gauge                        |                 | -A4   |               |
|                                                     |                                  | Integrated pressure gauge, red/green scale                                             | 1               | -RG   |               |
|                                                     |                                  | Pressure sensor without display, plug M8, threshold value comparator, PNP, N/O contact | 2               | -AD7  |               |
|                                                     |                                  | Pressure sensor without display, plug M8, threshold value comparator, PNP, N/C contact | 2               | -AD8  |               |
|                                                     |                                  | Pressure sensor without display, plug M8, window comparator, PNP, N/O contact          | 2               | -AD9  |               |
|                                                     |                                  | Pressure sensor without display, plug M8, window comparator, PNP, N/C contact          | 2               | -AD10 |               |
|                                                     | Alternative pressure gauge scale | PSI                                                                                    | 3               | -PSI  |               |
|                                                     |                                  | MPa                                                                                    | 3               | -MPA  |               |
|                                                     |                                  | Bar                                                                                    | 3               | -BAR  |               |
| <b>O</b> Pressure switch                            | Pressure switch                  | Pressure switch PEV with display, plug socket, EN175301, type A, cube                  | 4               | -X    |               |
|                                                     |                                  | Pressure switch PEV without display, plug socket, EN 175301, type A, cube              | 4               | -Y    |               |
|                                                     |                                  | Pressure switch PEV without display, plug socket, round, M12, 4-pin                    | 4               | -M12  |               |
|                                                     | Type of mounting                 | Mounting bracket                                                                       | 5               | -WP   |               |
|                                                     |                                  | Mounting bracket                                                                       | 5               | -WPM  |               |
|                                                     |                                  | Mounting bracket for large wall gap                                                    | 5               | -WPB  |               |
|                                                     | Alternative flow direction       | Flow direction from right to left                                                      |                 | -Z    |               |

- 1 **RG** Not with alternative pressure gauge scale PSI, PSI scale serves only as an auxiliary scale
- 2 **AD7 ... AD10** Measuring range max. 10 bar
- 3 **PSI, MPA, BAR** Not with pressure gauge alternatives VS, A4, AD7, AD8, AD9, AD10

- 4 **X, Y, M12** Max. permissible operating pressure P1 = 12 bar
- 5 **WP, WPM, WPB** Not with module NG

Transfer order code

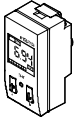
-  -  -  -  -

## Branching modules MS-FRM, MS series, NPT

Accessories

**FESTO**

| Ordering data – Pressure gauge MA                                                 |                                                   |                      |               |           |          |                               |
|-----------------------------------------------------------------------------------|---------------------------------------------------|----------------------|---------------|-----------|----------|-------------------------------|
|                                                                                   | Nominal size                                      | Pneumatic connection | Display range |           | Part No. | Type                          |
|                                                                                   |                                                   |                      | [bar]         | [psi]     |          |                               |
|  | Pressure gauge MA, EN 837-1                       |                      |               |           |          | Technical data ➔ Internet: ma |
|                                                                                   | 40                                                | R¼                   | 0 ... 16      | 0 ... 232 | 187080   | MA-40-16-R¼-EN                |
|                                                                                   |                                                   |                      | 0 ... 25      | 0 ... 360 | 187081   | MA-40-25-R¼-EN                |
|                                                                                   |                                                   | G¼                   | 0 ... 16      | 0 ... 232 | 183901   | MA-40-16-G¼-EN                |
|                                                                                   |                                                   |                      | 0 ... 25      | 0 ... 360 | 183902   | MA-40-25-G¼-EN                |
|                                                                                   | Pressure gauge MA, EN 837-1, with red-green range |                      |               |           |          | Technical data ➔ Internet: ma |
|                                                                                   | 40                                                | R⅛                   | 0 ... 16      | –         | 525726   | MA-40-16-R⅛-E-RG              |
|                                                                                   | 50                                                | R¼                   | 0 ... 16      | –         | 525729   | MA-50-16-R¼-E-RG              |

| Ordering data – Pressure sensor SDE1                                                                                                                                                                                                       |                             |                                                |                       |                 |          | Technical data → Internet: sde1 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------|-----------------------|-----------------|----------|---------------------------------|
|                                                                                                                                                                                                                                            | Pneumatic connection        | Electrical output                              | Electrical connection | Display         | Part No. | Type                            |
| Pressure sensor SDE1 for direct mounting on the service unit with pressure gauge connection (adapter plate for pneumatic connection included in scope of delivery), pressure measurement range 0 ... 10 bar, relative pressure measurement |                             |                                                |                       |                 |          |                                 |
|                                                                                                                                                          | Male thread R $\frac{1}{8}$ | 1 switching output PNP                         | M8x1, 3-pin           | LCD             | 192026   | SDE1-D10-G2-R18-C-P1-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M8x1, 3-pin           | Illuminated LCD | 529970   | SDE1-D10-G2-R18-L-P1-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M12x1, 3-pin          | Illuminated LCD | 534064   | SDE1-D10-G2-R18-L-P1-M12        |
|                                                                                                                                                                                                                                            |                             | 2 switching outputs PNP                        | M8x1, 4-pin           | LCD             | 192027   | SDE1-D10-G2-R18-C-P2-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M8x1, 4-pin           | Illuminated LCD | 529971   | SDE1-D10-G2-R18-L-P2-M8         |
|                                                                                                                                                                                                                                            |                             | 1 switching output PNP and 0 ... 10 V analogue | M8x1, 4-pin           | LCD             | 529958   | SDE1-D10-G2-R18-C-PU-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M8x1, 4-pin           | Illuminated LCD | 529972   | SDE1-D10-G2-R18-L-PU-M8         |
|                                                                                                                                                                                                                                            | Male thread R $\frac{1}{4}$ | 1 switching output PNP                         | M8x1, 3-pin           | LCD             | 192028   | SDE1-D10-G2-R14-C-P1-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M8x1, 3-pin           | Illuminated LCD | 529967   | SDE1-D10-G2-R14-L-P1-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M12x1, 3-pin          | Illuminated LCD | 534157   | SDE1-D10-G2-R14-L-P1-M12        |
|                                                                                                                                                                                                                                            |                             | 2 switching outputs PNP                        | M8x1, 4-pin           | LCD             | 192029   | SDE1-D10-G2-R14-C-P2-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M8x1, 4-pin           | Illuminated LCD | 529968   | SDE1-D10-G2-R14-L-P2-M8         |
|                                                                                                                                                                                                                                            |                             | 1 switching output PNP and 0 ... 10 V analogue | M8x1, 4-pin           | LCD             | 529957   | SDE1-D10-G2-R14-C-PU-M8         |
|                                                                                                                                                                                                                                            |                             |                                                | M8x1, 4-pin           | Illuminated LCD | 529969   | SDE1-D10-G2-R14-L-PU-M8         |

| Ordering data – Connecting cable NEBU-M8                                            |                       |                 |                  |          | Technical data → Internet: nebu |  |
|-------------------------------------------------------------------------------------|-----------------------|-----------------|------------------|----------|---------------------------------|--|
|                                                                                     | Electrical connection | Number of wires | Cable length [m] | Part No. | Type                            |  |
|  | M8x1, straight socket | 3               | 2.5              | 541333   | NEBU-M8G3-K-2.5-LE3             |  |
|                                                                                     |                       |                 | 5                | 541334   | NEBU-M8G3-K-5-LE3               |  |
|                                                                                     |                       | 4               | 2.5              | 541342   | NEBU-M8G4-K-2.5-LE4             |  |
|                                                                                     |                       |                 | 5                | 541343   | NEBU-M8G4-K-5-LE4               |  |
|  | M8x1, angled socket   | 3               | 2.5              | 541338   | NEBU-M8W3-K-2.5-LE3             |  |
|                                                                                     |                       |                 | 5                | 541341   | NEBU-M8W3-K-5-LE3               |  |
|                                                                                     |                       | 4               | 2.5              | 541344   | NEBU-M8W4-K-2.5-LE4             |  |
|                                                                                     |                       |                 | 5                | 541345   | NEBU-M8W4-K-5-LE4               |  |

| Ordering data – Connecting cable NEBU-M12                                           |                        |                 |                  |          | Technical data → Internet: nebu |  |
|-------------------------------------------------------------------------------------|------------------------|-----------------|------------------|----------|---------------------------------|--|
|                                                                                     | Electrical connection  | Number of wires | Cable length [m] | Part No. | Type                            |  |
|  | M12x1, straight socket | 3               | 2.5              | 541363   | NEBU-M12G5-K-2.5-LE3            |  |
|                                                                                     |                        |                 | 5                | 541364   | NEBU-M12G5-K-5-LE3              |  |
|                                                                                     |                        | 4               | 2.5              | 550326   | NEBU-M12G5-K-2.5-LE4            |  |
|                                                                                     |                        |                 | 5                | 541328   | NEBU-M12G5-K-5-LE4              |  |
|  | M12x1, angled socket   | 3               | 2.5              | 541367   | NEBU-M12W5-K-2.5-LE3            |  |
|                                                                                     |                        |                 | 5                | 541370   | NEBU-M12W5-K-5-LE3              |  |
|                                                                                     |                        | 4               | 2.5              | 550325   | NEBU-M12W5-K-2.5-LE4            |  |
|                                                                                     |                        |                 | 5                | 541329   | NEBU-M12W5-K-5-LE4              |  |

## Branching modules MS-FRM, MS series, NPT

**FESTO**

Accessories

| Ordering data – Angled socket PEV                                                 |                    |                         |                       |                          | Technical data → Internet: pev-1/4 |                           |
|-----------------------------------------------------------------------------------|--------------------|-------------------------|-----------------------|--------------------------|------------------------------------|---------------------------|
|                                                                                   | Description        | Operating voltage range | Electrical connection | Switching status display | Part No.                           | Type                      |
|  | For PEV-1/4-...-OD | 15 ... 30 V DC          | 4-pin                 | Yellow LED               | <b>164274</b>                      | <b>PEV-1/4-WD-LED-24</b>  |
|                                                                                   |                    | ≤ 230 V AC              | 4-pin                 | Yellow LED               | <b>164275</b>                      | <b>PEV-1/4-WD-LED-230</b> |
|                                                                                   |                    | ≤ 180 V DC              |                       |                          |                                    |                           |

| Ordering data – Plug socket MSSD                                                  |                    |                         |                       |                                    | Technical data → Internet: mssd-c-4p |                  |
|-----------------------------------------------------------------------------------|--------------------|-------------------------|-----------------------|------------------------------------|--------------------------------------|------------------|
|                                                                                   | Description        | Operating voltage range | Electrical connection | Type of mounting: cable connection | Part No.                             | Type             |
|  | For PEV-1/4-...-OD | ≤ 250 V AC/DC           | 3-pin                 | Clamping screws                    | <b>171157</b>                        | <b>MSSD-C-4P</b> |

| Ordering data – Double nipple ESK                                                 |                                                                                                          |                      |      |               |                    |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------|------|---------------|--------------------|
|                                                                                   | Description                                                                                              | Pneumatic connection |      | Part No.      | Type               |
|  | Adjustable for angular compensation<br>• For retrofitting pressure switch PEV to branching module MS-FRM | R1/4                 | R1/4 | <b>151521</b> | <b>ESK-1/4-1/4</b> |
|                                                                                   |                                                                                                          |                      | R1/2 | <b>534153</b> | <b>ESK-1/4-1/2</b> |