

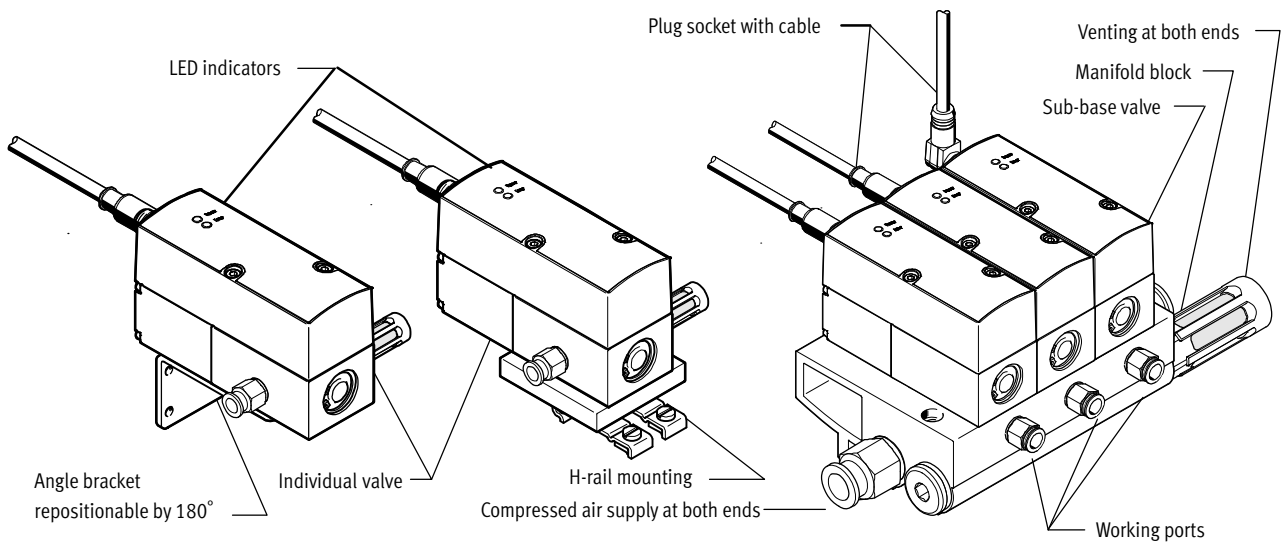
# Proportional pressure regulators VPPX



## Proportional pressure regulators VPPX

Features

**FESTO**



### Innovative

- Multi-sensor control (cascade control)
- Control characteristic adjustable via FCT
- Temperature compensated
- High dynamic response
- High repetition accuracy

### Versatile

- Individual valves (in-line valve)
- Sub-base valves (manifold/flanged valve)
- Actual value input for external sensors
- Limit value freely adjustable
- Possible to control many physical variables
- Setpoint value and actual value individually adjustable via FCT

### Reliable

- Integrated pressure sensor with separate output
- Wire break monitoring
- Pressure is maintained if the controller fails

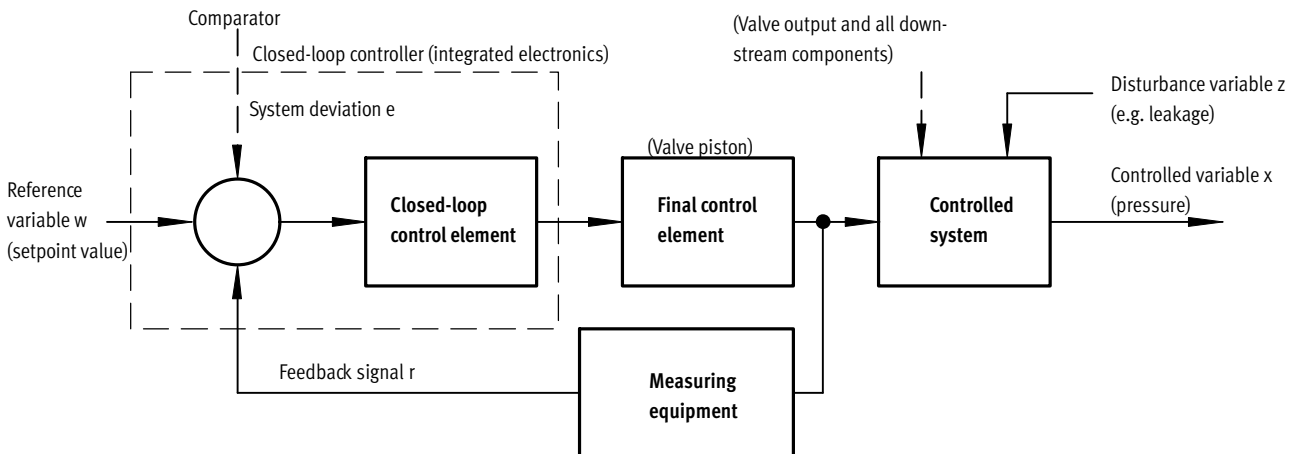
### Easy to mount

- Manifold block (connection block)
- H-rail mounting
- Individually via mounting bracket
- QS fittings

# Proportional pressure regulators VPPX

Key features

## Layout of a control circuit



### Configuration

The figure shows a closed-loop control circuit. The reference variable  $w$  (setpoint value, e.g. 5 volts or 8 mA) initially acts on a comparator. The measuring equipment sends the controlled variable  $x$  value (actual value, e.g. 3 bar) to the comparator as a feedback signal  $r$ . The closed-loop control element detects the system

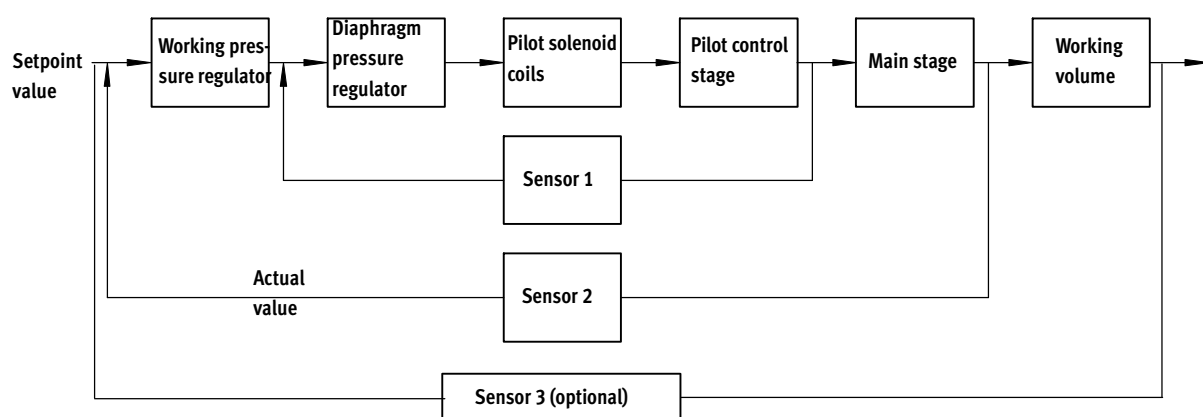
deviation  $e$  and actuates the final control element. The output of the final control element acts on the controlled system. The closed-loop control element thus attempts to compensate for the difference between the reference variable  $w$  and the controlled variable  $x$  by using the final control element.

### Method of operation

This process runs continuously so changes in the reference variable are always detected. However, a system deviation will also occur if the reference variable is constant but the controlled variable changes. This happens when the flow through the valve changes in response to a switching operation, a cylinder movement or a

change in load. The disturbance variable  $z$  will also cause a system deviation. An example of this is when the pressure drops in the air supply. The disturbance variable  $z$  acts on the controlled variable  $x$  unintentionally. In all cases, the regulator attempts to readjust the controlled variable  $x$  to the reference variable  $w$ .

## Multi-sensor control (cascade control) of the VPPX



### Cascade control

Unlike conventional direct-acting regulators, with multi-sensor control several control circuits are nested inside each other. The overall controlled

system is divided into smaller sub-sections that are easier to control for the specific task.

### Control precision

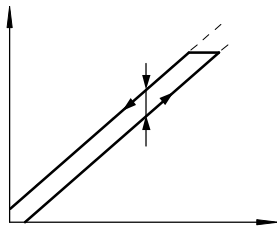
Multi-sensor control significantly improves control precision and dynamic response in comparison with single-acting regulators.

# Proportional pressure regulators VPPX

Key features

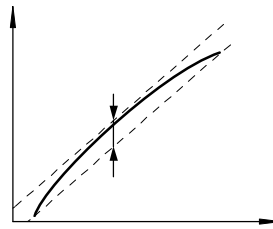
## Terms related to the proportional pressure regulator

### Hysteresis



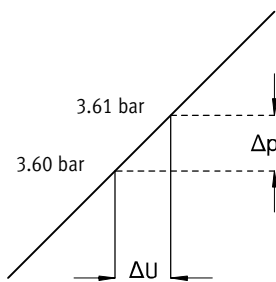
There is always a linear relationship within a certain tolerance between the setpoint value entered and the pressure output. Nevertheless, it makes a difference whether the setpoint value is entered as rising or falling. The difference between the maximum deviations is referred to as hysteresis.

### Linearity error



A perfectly linear progression of the control characteristic of the output pressure is theoretical. The maximum percentage deviation from this theoretical control characteristic is referred to as the linearity error. The percentage value refers to the maximum output pressure (full scale).

### Response sensitivity



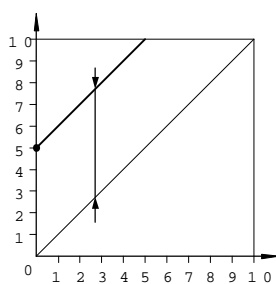
The response sensitivity of the device determines how sensitively one can change, i.e. adjust, a pressure. The smallest setpoint value difference that results in a change in the output pressure is referred to as the response sensitivity. In this case, 0.01 bar.

### Repetition accuracy (reproducibility)



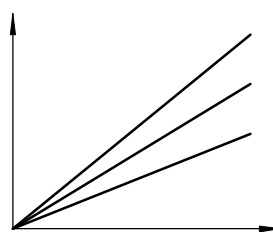
The repetition accuracy is the margin within which the fluid output variables are scattered when the same electrical input signal coming from the same direction is repeatedly adjusted. The repetition accuracy is expressed as a percentage of the maximum fluid output signal.

### Zero offset



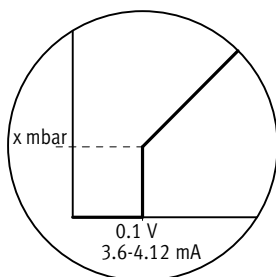
If, for example, a VPPX cannot be vented for safety reasons, the minimum pressure can be increased from the zero point. The smallest setpoint value is then assigned an output pressure of 5 bar, for example, and the largest setpoint value an output pressure of 10 bar. Zero point suppression is automatically switched off if the zero offset is used.

### Pressure range adaptation



In the delivery status, 100% setpoint value corresponds to 100% of the fluid output signal. Pressure range adaptation or adjustment enables the fluid output variable to be matched to the setpoint value.

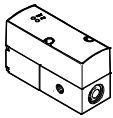
### Zero point suppression



In practice there may be residual voltage or residual current at the setpoint input of the VPPX via the setpoint generator. Zero point suppression is used so that the valve is reliably vented at a setpoint value of zero.

# Proportional pressure regulators VPPX

Product range overview

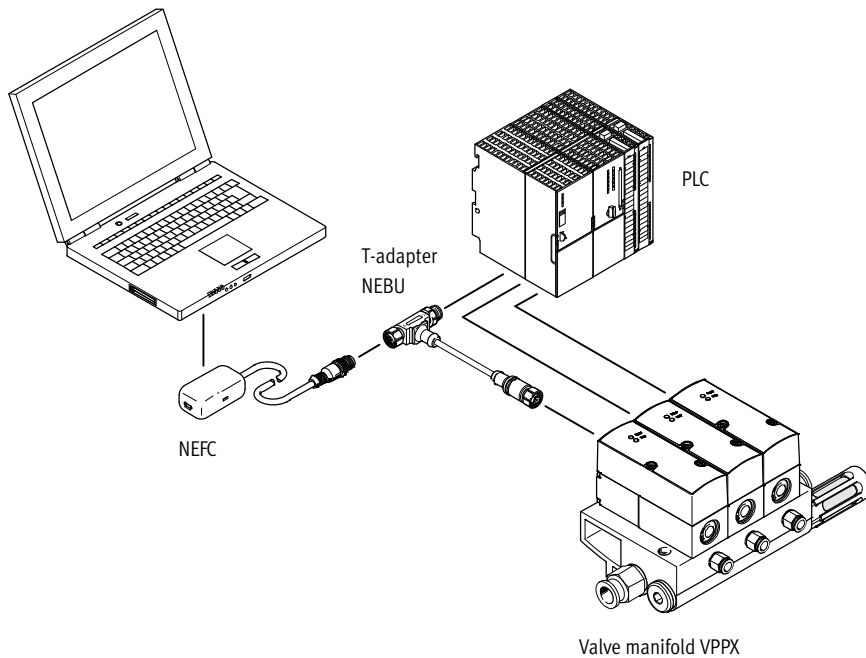
| Function            | Version   | Design                  | Pneumatic connection<br>1, 2, 3 | Nominal width for pressurisation/exhaust [mm] | Pressure regulation range [bar] | Setpoint value input |              | → Page/Internet |
|---------------------|---|-------------------------|---------------------------------|---|---------------------------------|----------------------|--------------|-----------------|
|                     |   |                         |                                 |   |                                 | Voltage type         | Current type |                 |
| Pressure regulators | LED operator unit (standard)  |                         |                                 |   |                                 |                      |              |                 |
|                     |  | Piloted diaphragm valve | G1/8                            | 6/4.5   | 0.1 ... 10                      | ■                    | ■            | 9               |
|                     |   |                         | Sub-base                        | 6/4.5   | 0.1 ... 10                      | ■                    | ■            |                 |
|                     |   |                         |                                 | 8/7   | 0.1 ... 10                      | ■                    | ■            |                 |
| G1/4                | 8/7   | 0.1 ... 10              | ■                               | ■   |                                 |                      |              |                 |

## Overview of VPPX

Parameterisation of the proportional valve VPPX can be carried out using the Festo Configuration Tool.

The connection between the PC and the proportional valve VPPX takes place via a T-adapter (NEBU-M12G8-K-0.15-NPS-M12W8)

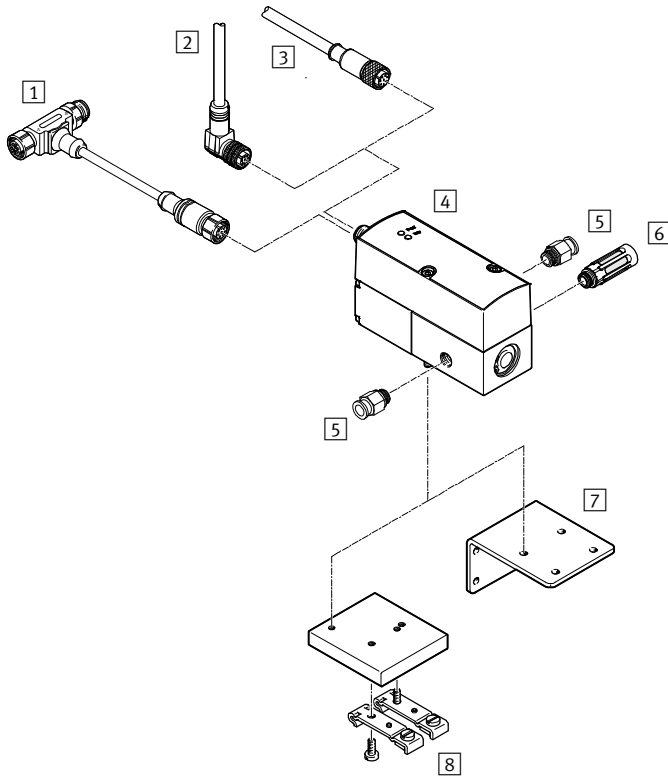
and a USB converter (NEFC-M12G5-0.3-U1G5).



## Proportional pressure regulators VPPX

Peripherals overview

### Individual valve VPPX-6L ..., VPPX-8L ...

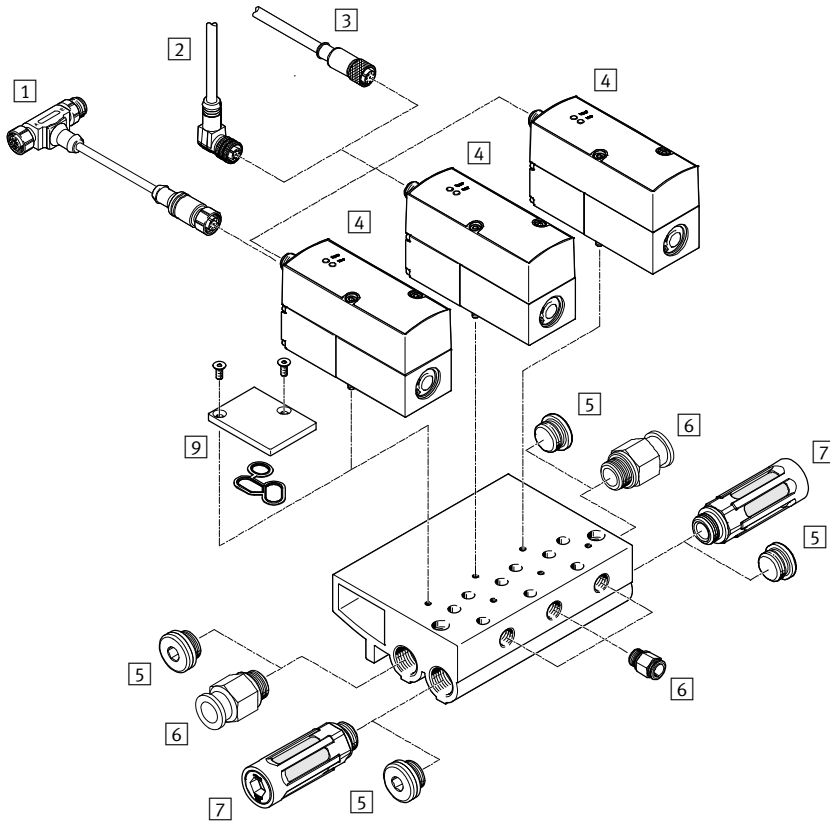


| Accessories |   |   |    |
|-------------|---|---|----|
|             | Brief description                               | → Page/Internet   |    |
| 1           | T-adapter NEBU-M12G8-...                        | For adapter NEFC  | 19 |
| 2           | Angled plug socket with cable, NEBU-M12W8-...   | –   | 19 |
| 3           | Straight plug socket with cable SIM-M12-8GD-... | –   | 19 |
| 4           | Proportional pressure regulator VPPX            | Operator unit with LED  | 9  |
| 5           | Push-in fitting QS                              | For connecting compressed air tubing with standard outside diameter | qs |
| 6           | Silencers                                       | For fitting in exhaust ports  | u  |
| 7           | Angle bracket VAME-P1-A                         | For mounting the valve  | 17 |
| 8           | H-rail mounting VAME-P1-T                       | For mounting on an H-rail   | 18 |

# Proportional pressure regulators VPPX

Peripherals overview

## Manifold assembly with VPPX-6F ..., VPPX-8F ...



| Accessories |   |  |
|-------------|---|--|
|             | Brief description                               | → Page/Internet  |
| 1           | T-adaptor NEBU-M12G8-...                        | For adapter NEFC<br>19   |
| 2           | Angled plug socket with cable NEBU-M12W8-...    | –<br>19  |
| 3           | Straight plug socket with cable SIM-M12-8GD-... | –<br>19  |
| 4           | Proportional pressure regulator VPPX            | Operator unit with LED<br>9  |
| 5           | Blanking plug B                                 | –<br>b   |
| 6           | Push-in fitting QS                              | For connecting compressed air tubing with standard outside diameter<br>qs                |
| 7           | Silencers                                       | For fitting in exhaust ports<br>u  |
| 8           | Manifold block VABM                             | –<br>15  |
| 9           | Blanking plate VABB-P1                          | For vacant position; seal and countersunk screws included in the scope of delivery<br>16 |

## Proportional pressure regulators VPPX




Type codes

|  |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
|--|--|------|---|---|---|---|---|---|---|---|---|-----|---|----|-----|
|  |  | VPPX | - | 6 | - | L | - | L | - | 1 | - | G18 | - | 0L | 10H |
| <b>Type</b>                                  |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| VPPX   | Proportional pressure regulator<br>Modular |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Nominal width</b>                         |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| 6  | 6 mm                                       |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| 8  | 8 mm                                       |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Design</b>                                |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| L  | In-line valve                              |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| F  | Flanged valve                              |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Dynamic response class</b>                |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| L  | Low  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Valve function</b>                        |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| 1  | 3/2-way valve, normally closed             |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Pneumatic connection</b>                  |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| G18  | G $\frac{1}{8}$ thread                     |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| G14  | G $\frac{1}{4}$ thread                     |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| F  | Flange/sub-base                            |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Lower pressure value of control range</b> |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| 0L   | 0 bar                                      |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| <b>Upper pressure value of control range</b> |  |      |   |   |   |   |   |   |   |   |   |     |   |    |     |
| 10H  | 10 bar                                     |      |   |   |   |   |   |   |   |   |   |     |   |    |     |



## Proportional pressure regulators VPPX

Technical data

-  - Flow rate  
1,400 ... 2,750 l/min
-  - Voltage  
21.6 ... 26.4 V DC
-  - Pressure regulation range  
0.02 ... 10 bar

### Variants


- Analogue setpoint signal adjustable via FCT 0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA
- External sensor input
- Actual value output adjustable via FCT 0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA
- Programming interface



| General technical data     |                |                                       |          |                 |     |          |  |
|----------------------------|----------------|---------------------------------------|----------|-----------------|-----|----------|--|
| Port                       |                | G $\frac{1}{8}$                       |          | G $\frac{1}{4}$ |     | Sub-base |  |
| Valve function             |                | 3-way proportional pressure regulator |          |                 |     |          |  |
| Design                     |                | Piloted diaphragm regulator           |          |                 |     |          |  |
| Sealing principle          |                | Soft                                  |          |                 |     |          |  |
| Actuation type             |                | Electric                              |          |                 |     |          |  |
| Type of control            |                | Piloted                               |          |                 |     |          |  |
| Reset method               |                | Mechanical spring                     |          |                 |     |          |  |
| Type of mounting           |                | Via through-hole, via accessories     |          |                 |     |          |  |
| Mounting position          |                | Any                                   |          |                 |     |          |  |
| Nominal width              | Pressurisation | [mm]                                  | 6        | 8               | 6   | 8        |  |
|                            | Exhaust        | [mm]                                  | 4.5      | 7               | 4.5 | 7        |  |
| Standard nominal flow rate |                | [l/min]                               | → Graphs |                 |     |          |  |
| Product weight             |                | [g]                                   | 400      | 560             | 400 | 560      |  |

| Electrical data                      |         |   |                          |  |  |        |   |
|--------------------------------------|---------|---|--------------------------|--|--|--------|---|
| Type                                 |         | VPPX-6  |                          |  |  | VPPX-8 |   |
| Electrical connection                |         | Plug, round design, 8-pin, M12                                    |                          |  |  |        |   |
| Operating voltage range              |         | [V DC]  | 24 ± 10% = 21.6 ... 26.4 |  |  |        |   |
| Residual ripple                      |         | [%]   | 10                       |  |  |        |   |
| Duty cycle                           |         | [%]   | 100                      |  |  |        |   |
| Max. electrical power consumption    |         | [W]   | 7                        |  |  |        | 7 |
| Setpoint input signal                | Voltage | [V DC]  | 0 ... 10                 |  |  |        |   |
|                                      | Current | [mA]  | 0 ... 20, 4 ... 20       |  |  |        |   |
| Protection against short circuit     |         | For all electrical connections                                    |                          |  |  |        |   |
| Protection against polarity reversal |         | For all electrical connections                                    |                          |  |  |        |   |
| Protection class                     |         | IP65  |                          |  |  |        |   |
| CE marking                           |         | To EU EMC Directive (see declaration of conformity) <sup>1)</sup> |                          |  |  |        |   |
| Certification                        |         | RCM trademark   |                          |  |  |        |   |

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.  
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

-  - Note

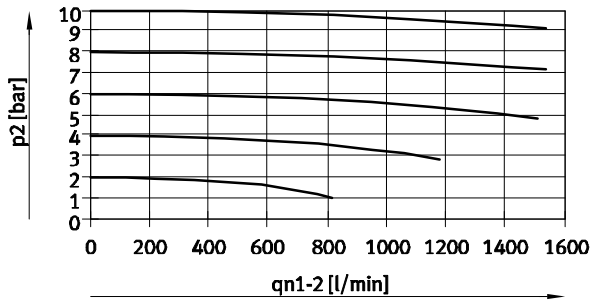
Output pressure remains unregulated if the power supply cable is interrupted.

# Proportional pressure regulators VPPX

Technical data

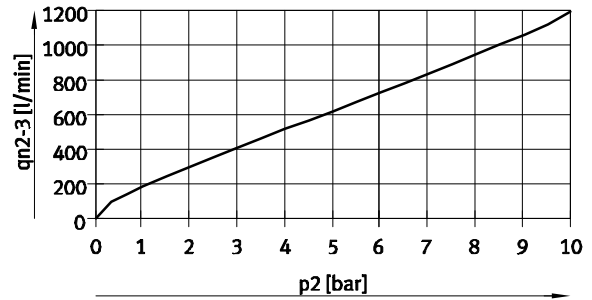
Flow rate  $q_n$  from 1  $\rightarrow$  2 as a function of output pressure  $p_2$

VPPX-6L/F-...-0L10H-... (10 bar)



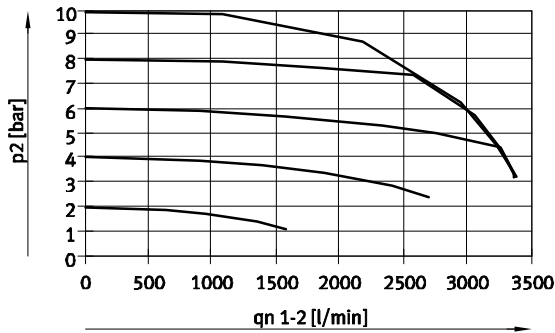
Flow rate  $q_n$  from 2  $\rightarrow$  3 as a function of output pressure  $p_2$

VPPX-6L/F-...-0L10H-... (10 bar)



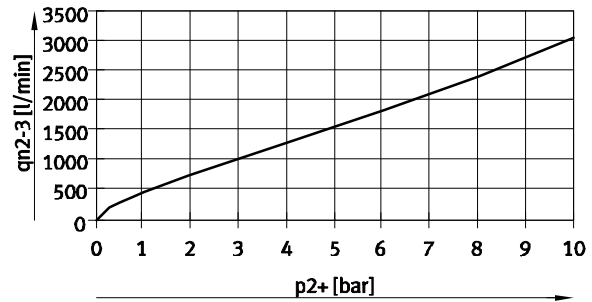
Flow rate  $q_n$  from 1  $\rightarrow$  2 as a function of output pressure  $p_2$

VPPX-8L-...-0L10H-... (10 bar)



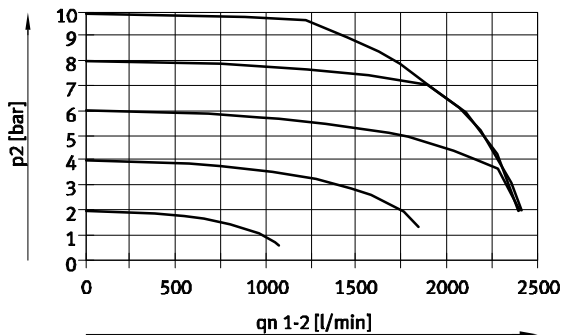
Flow rate  $q_n$  from 2  $\rightarrow$  3 as a function of output pressure  $p_2$

VPPX-8L-...-0L10H-... (10 bar)



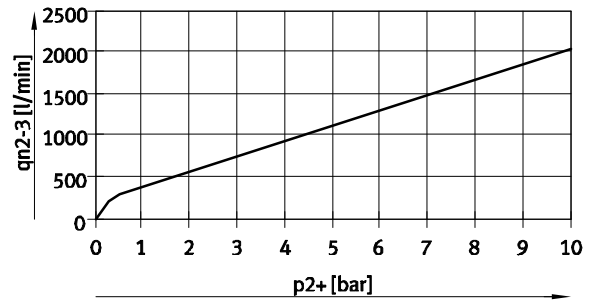
Flow rate  $q_n$  from 1  $\rightarrow$  2 as a function of output pressure  $p_2$

VPPX-8F-...-0L10H-... (10 bar)



Flow rate  $q_n$  from 2  $\rightarrow$  3 as a function of output pressure  $p_2$

VPPX-8F-...-0L10H-... (10 bar)



# Proportional pressure regulators VPPX

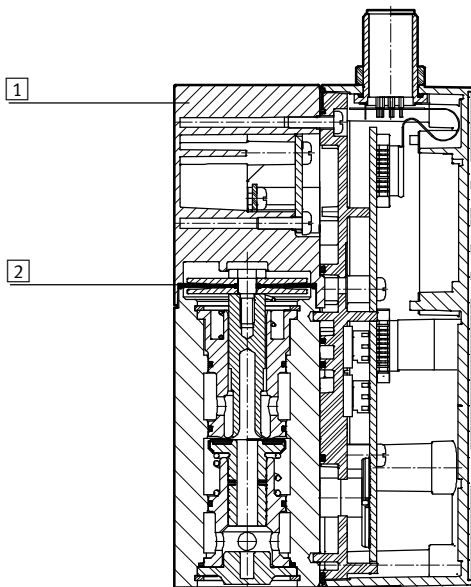
Technical data

| Operating and environmental conditions            |        |   |
|---|--------|---|
| Pressure regulation range                         | [bar]  | 0.1 ... 10                                |
| Operating medium                                  |        | Compressed air to ISO 8573-1:2010 [7:4:4] |
|   |        | Inert gases                               |
| Note on operating/pilot medium                    |        | Lubricated operation not possible         |
| Supply pressure <sup>1)</sup>                     | [bar]  | 0... 11                                   |
| Max. pressure hysteresis                          | [mbar] | 50  |
| FS (full scale) linearity error                   | [%]    | ± 0.5                                     |
| FS (full scale) repetition accuracy               | [%]    | 0.5                                       |
| Temperature coefficient                           | [%/K]  | 0.04                                      |
| Ambient temperature, operator unit LED (standard) | [°C]   | 0 ... 60                                  |
| Ambient temperature, operator unit with LCD       | [°C]   | 0 ... 50                                  |
| Temperature of medium                             | [°C]   | 10 ... 50                                 |
| Note on materials                                 |        | RoHS-compliant                            |
| Corrosion resistance class                        | [CRC]  | 2 <sup>1)</sup>                           |

- 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 the surrounding industrial environment or media such as coolants or lubricating agents.
- 2) Supply pressure 1 should always be 1 bar greater than the maximum regulated output pressure.

## Materials

Sectional view VPPX-6 ..., VPPX-8 ...



|          |           |                         |
|----------|-----------|-------------------------|
| <b>1</b> | Housing   | Wrought aluminium alloy |
| <b>2</b> | Diaphragm | Nitrile rubber          |

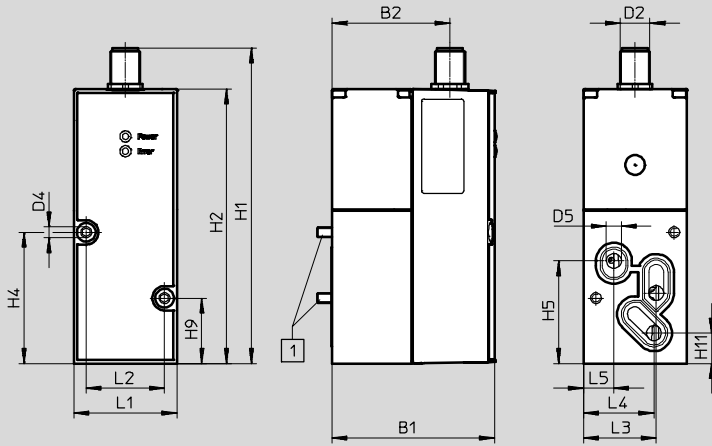
# Proportional pressure regulators VPPX

Technical data

**Dimensions**

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

VPPX-6F

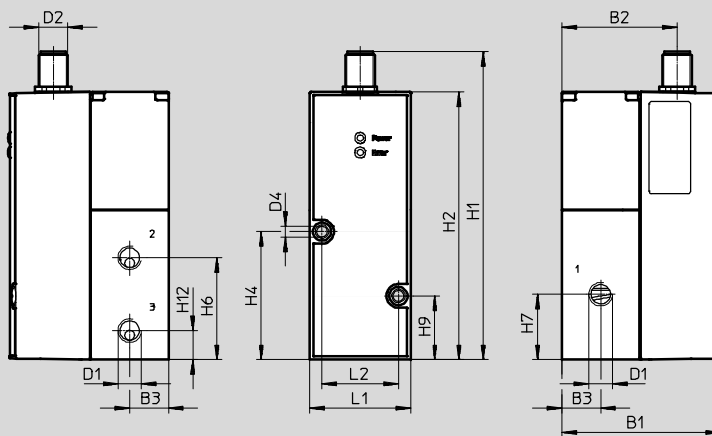


1 Socket head screw M4x65

| Type    | B1   | B2   | D2  | D4<br>Ø | D5<br>Ø | H1    | H2    | H4   | H5   | H8   | H9   | H11  |
|---------|------|------|-----|---------|---------|-------|-------|------|------|------|------|------|
| VPPX-6F | 65.4 | 47.5 | M12 | 4.4     | 6       | 126.9 | 110.4 | 52.8 | 41.3 | 28.3 | 26.3 | 12.2 |

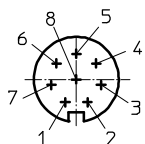
| Type    | L1   | L2   | L3   | L4   | L5   |
|---------|------|------|------|------|------|
| VPPX-6F | 41.5 | 31.5 | 29.3 | 28.4 | 12.3 |

VPPX-6L



| Type    | B1   | B2   | B3 | D1   | D2  | D4<br>Ø | H1    | H2    | H4   | H6 | H7 | H9   | H12 | L1   | L2   |
|---------|------|------|----|------|-----|---------|-------|-------|------|----|----|------|-----|------|------|
| VPPX-6L | 65.5 | 47.5 | 16 | G1/8 | M12 | 4.4     | 126.9 | 110.4 | 52.8 | 42 | 27 | 26.3 | 12  | 41.5 | 31.5 |

**M12 – Pin allocation**



- |                          |                        |                                  |
|--------------------------|------------------------|----------------------------------|
| 1 Do not connect Tx_PC   | 4 Analogue input W+    | 7 0 V DC or GND                  |
| 2 24 V DC supply voltage | 5 Do not connect Rx_PC | 8 Input for ext. sensor signal + |
| 3 Analogue input W-      | 6 Analogue output X    |                                  |

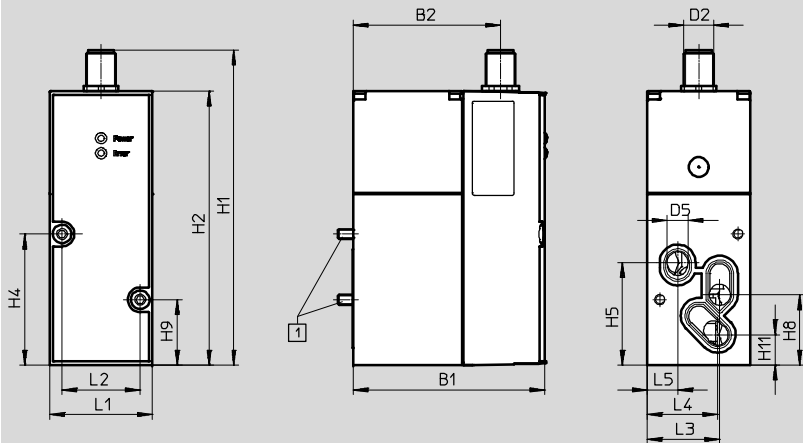
# Proportional pressure regulators VPPX

Technical data

## Dimensions

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

### VPPX-8F

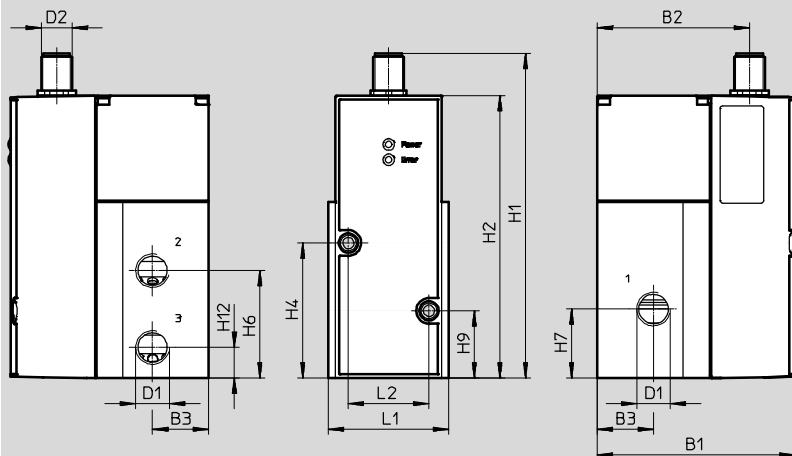


1 Socket head screw M4x77

| Type    | B1   | B2   | D2  | D5 Ø | H1    | H2    | H4   | H5   | H8   | H9   | H11  |
|---------|------|------|-----|------|-------|-------|------|------|------|------|------|
| VPPX-8F | 77.4 | 59.5 | M12 | 8.5  | 126.9 | 110.4 | 52.8 | 41.3 | 28.3 | 26.3 | 12.2 |

| Type    | L1   | L2   | L3   | L4   | L5   |
|---------|------|------|------|------|------|
| VPPX-8F | 41.5 | 31.5 | 29.3 | 28.4 | 12.3 |

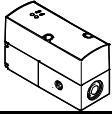
### VPPX-8L



| Type    | B1   | B2   | B3 | D1   | D2  | H1    | H2    | H4   | H6 | H7 | H9   | H12 | L1 | L2   |
|---------|------|------|----|------|-----|-------|-------|------|----|----|------|-----|----|------|
| VPPX-8L | 77.4 | 59.5 | 22 | G1/4 | M12 | 126.9 | 110.4 | 52.8 | 42 | 27 | 26.3 | 12  | 47 | 31.5 |

## Proportional pressure regulators VPPX

Technical data

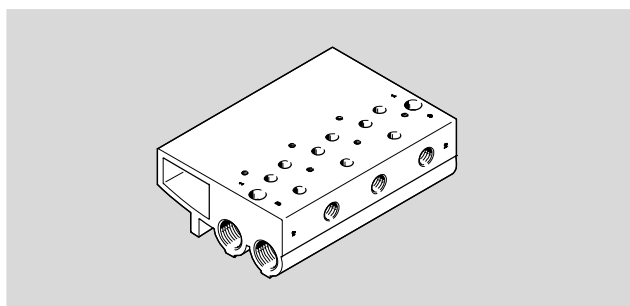
| Ordering data   |                                 |                                       |               |                              |
|---|---------------------------------|---------------------------------------|---------------|------------------------------|
| Proportional pressure regulators VPPX   | Pneumatic connection<br>1, 2, 3 | Pressure regulation<br>range<br>[bar] | Part No.      | Type                         |
| Voltage type 0 ... 10 V   |                                 |                                       |               |                              |
|  | G $\frac{1}{8}$                 | 0.1 ... 10                            | <b>570967</b> | <b>VPPX-6L-L-1-G18-0L10H</b> |
|   | G $\frac{1}{4}$                 |                                       | <b>570969</b> | <b>VPPX-8L-L-1-G14-0L10H</b> |
|   | Sub-base                        |                                       | <b>570968</b> | <b>VPPX-6F-L-1-F-0L10H</b>   |
|   |                                 |                                       | <b>570970</b> | <b>VPPX-8F-L-1-F-0L10H</b>   |

# Proportional pressure regulators VPPX

Accessories

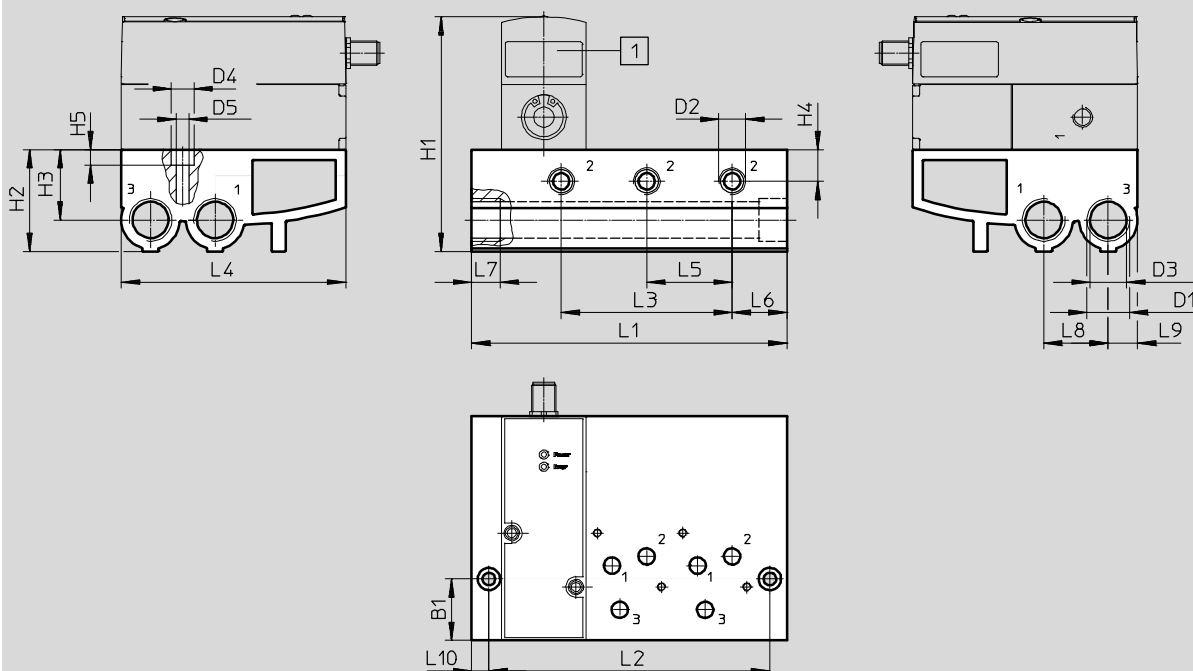
Manifold block  
VABM-P1

Material:  
Wrought aluminium alloy



## Dimensions

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



1 Proportional pressure regulator  
VPPX

### Dimensions and ordering data

| Valve positions | L1  | L2  | L3  | L4    | L5 | L6 | L7 | L8   | L9   | L10 |
|-----------------|-----|-----|-----|-------|----|----|----|------|------|-----|
| 2               | 113 | 96  | 42  | 110.4 | 42 | 27 | 14 | 31.7 | 14.4 | 8.5 |
| 3               | 155 | 138 | 84  | 110.4 | 42 | 27 | 14 | 31.7 | 14.4 | 8.5 |
| 4               | 197 | 180 | 126 | 110.4 | 42 | 27 | 14 | 31.7 | 14.4 | 8.5 |

### Dimensions and ordering data

| Valve positions | B1   | D1   | D2   | D3   | D4 | D5  | H1  | H2 | H3   | H4   | H5  | Part No. | Type                |
|-----------------|------|------|------|------|----|-----|-----|----|------|------|-----|----------|---------------------|
| 2               | 30.2 | G1/2 | G1/4 | 17.8 | 11 | 6.2 | 116 | 50 | 34.5 | 15.5 | 7.5 | 542252   | VABM-P1-SF-G18-2-P3 |
| 3               | 30.2 | G1/2 | G1/4 | 17.8 | 11 | 6.2 | 116 | 50 | 34.5 | 15.5 | 7.5 | 542253   | VABM-P1-SF-G18-3-P3 |
| 4               | 30.2 | G1/2 | G1/4 | 17.8 | 11 | 6.2 | 116 | 50 | 34.5 | 15.5 | 7.5 | 542254   | VABM-P1-SF-G18-4-P3 |

-  - Note

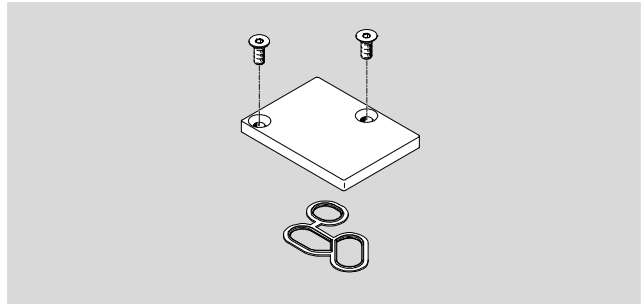
Only flanged valves VPPX-6F- ... and VPPX-8F- ... may be used in combination with the manifold block VABM-P1- ...

## Proportional pressure regulators VPPX

Accessories

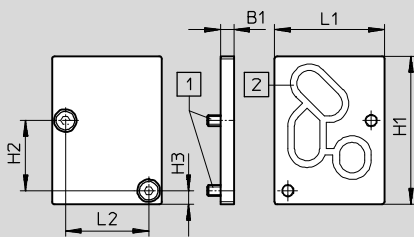
**Blanking plate**  
**VABB-P1**

Material:  
Wrought aluminium alloy, NBR, steel



### Dimensions

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



- 1 Countersunk screw M4x10      2 Seal VMPA- ...

### Dimensions and ordering data

| B1 | H1 | H2   | H3  | L1   | L2   | Part No.      | Type           |
|----|----|------|-----|------|------|---------------|----------------|
| 5  | 56 | 26.5 | 5.2 | 41.5 | 31.5 | <b>558350</b> | <b>VABB-P1</b> |

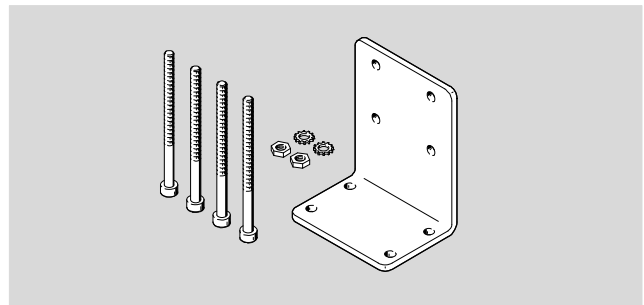


# Proportional pressure regulators VPPX

Accessories

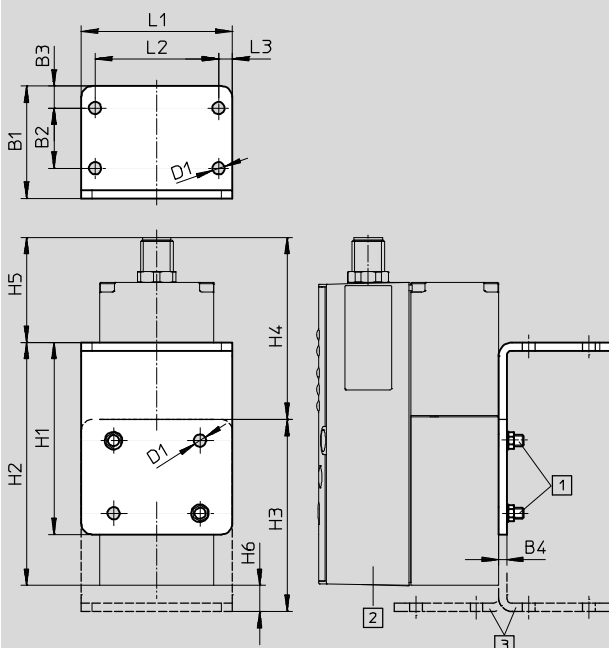
Angle bracket  
VAME-P1-A

Material:  
Wrought aluminium alloy, steel



## Dimensions

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



1 Socket head screw M4

2 Proportional pressure regulator  
VPPX

3 Bracket can be reversed if  
required

## Dimensions and ordering data

| B1 | B2 | B3 | B4 | D1  | H1 | H2   | H3 | H4   | H5   | H6  | L1 | L2 | L3 | Part No. | Type      |
|----|----|----|----|-----|----|------|----|------|------|-----|----|----|----|----------|-----------|
| 41 | 22 | 8  | 3  | 4.5 | 70 | 88.6 | 70 | 66.4 | 38.3 | 9.5 | 55 | 45 | 5  | 542251   | VAME-P1-A |

-  - Note

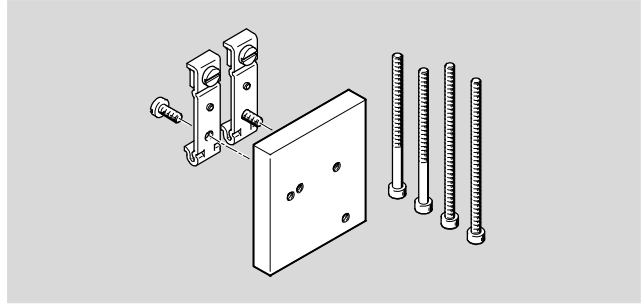
Only in-line valves VPPX-6L- ... and VPPX-8L- ... may be used in combination with the angle bracket VAME-P1-A.

## Proportional pressure regulators VPPX

Accessories

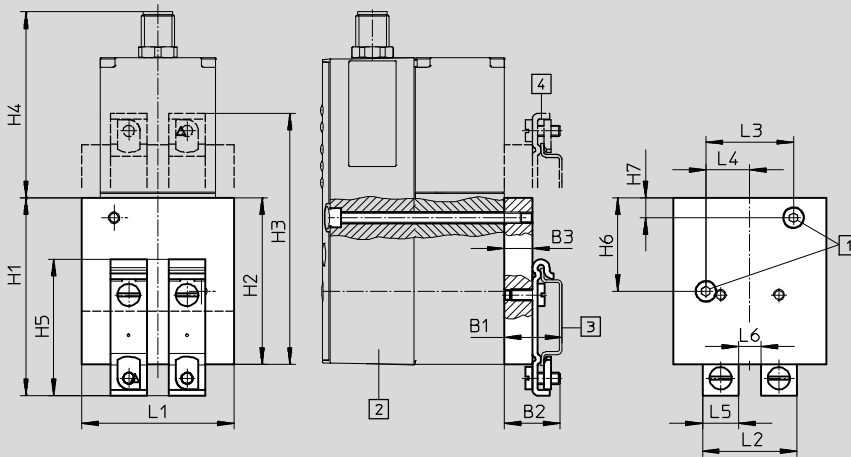
H-rail mounting  
VAME-P1-T

Material:  
Wrought aluminium alloy, steel



### Dimensions

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



1 Socket head screw M4

2 Proportional pressure regulator VPPX

3 H-rail NRH

4 H-rail mounting can be rotated by 180° if required

### Dimensions and ordering data

| B1   | B2 | B3 | H1   | H2 | H3   | H4   | H5   | H6   | H7  | L1 | L2 | L3   | L4   | L5 | L6 | Part No. | Type      |
|------|----|----|------|----|------|------|------|------|-----|----|----|------|------|----|----|----------|-----------|
| 20.7 | 20 | 10 | 71.2 | 60 | 90.3 | 66.9 | 49.1 | 33.7 | 7.2 | 55 | 34 | 31.5 | 15.8 | 13 | 8  | 542255   | VAME-P1-T |

-  Note

Only in-line valves VPPX-6L- ... and VPPX-8L- ... may be used in combination with the H-rail VAME-P1- T.

# Proportional pressure regulators VPPX

Accessories

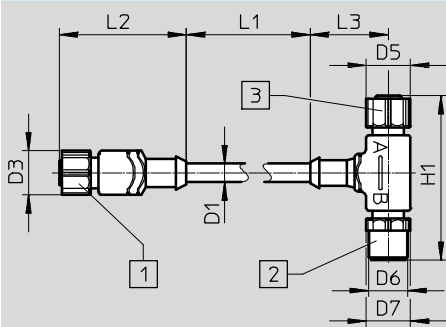
## T-adapter

NEBU-M12G8-K-0.15-NPS-...



### Dimensions

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



1 M12x1 coupling, 8-pin

2 M12x1 plug, 8-pin

3 M12x1 coupling, 4-pin

### Dimensions and ordering data

| D1  | D3   | D5   | D6    | D7   | H1 | L1  | L2   | L3   | Part No. | Type                        |
|-----|------|------|-------|------|----|-----|------|------|----------|-----------------------------|
| 6.2 | 14.5 | 14.5 | M12x1 | 14.5 | 54 | 150 | 41.7 | 11.1 | 570971   | NEBU-M12G8-K-0.15-NPS-M12W8 |

### Ordering data

|  | Description   | Part no.                                    | Type                         |
|--|---|---|------------------------------|
|  |   | Technical data → Internet: connecting cable |                              |
|  | Straight socket, 8-pin, M12                                   | 2 m   | 525616 SIM-M12-8GD-2-PU      |
|  |   | 5 m   | 525618 SIM-M12-8GD-5-PU      |
|  |   | 10 m  | 570008 SIM-M12-8GD-10-PU     |
|  | Angled socket, 8-pin, M12                                     | 2 m   | 542256 NEBU-M12W8-K-2-N-LE8  |
|  |   | 5 m   | 542257 NEBU-M12W8-K-5-N-LE8  |
|  |   | 10 m  | 570007 NEBU-M12W8-K-10-N-LE8 |
|  |   | Technical data → Internet: mpz              |                              |
|  | Setpoint module for generating 6 + 1 analogue voltage signals | 546224                                      | MPZ-1-24DC-SGH-6-SW5         |