

# Proportional pressure control valve VPPM-6F-L-1-F-0L10H-V1N-S1

Part number: 542241

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                  | Value                                                                                                     |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Nominal width pressurization             | 6 mm                                                                                                      |
| Exhaust nominal width                    | 4.5 mm                                                                                                    |
| Actuation type                           | Electrical                                                                                                |
| Sealing principle                        | Soft                                                                                                      |
| Mounting position                        | Any                                                                                                       |
| Structural design                        | Pilot-controlled diaphragm regulator                                                                      |
| Short-circuit protection                 | For all electrical connections                                                                            |
| Safety instructions                      | VPPM safety position: if the supply cable breaks, the outlet pressure is maintained in uncontrolled form. |
| Symbol                                   | 00995303                                                                                                  |
| Reverse polarity protection              | for all electrical connections                                                                            |
| Reset method                             | Mechanical spring                                                                                         |
| Type of control                          | Pilot-controlled                                                                                          |
| Valve function                           | 3-way proportional pressure control valve                                                                 |
| Display type                             | LED                                                                                                       |
| Pressure regulation range MPa            | 0.01 MPa ... 1 MPa                                                                                        |
| Pressure regulation range                | 0.1 bar ... 10 bar                                                                                        |
| Inlet pressure 1                         | 0 bar ... 11 bar                                                                                          |
| Inlet pressure 1 MPa                     | 0 MPa ... 1.1 MPa                                                                                         |
| Max. pressure hysteresis                 | 0.05 bar                                                                                                  |
| Standard nominal flow rate               | 1400 l/min                                                                                                |
| DC operating voltage range               | 21.6 V ... 26.4 V                                                                                         |
| Max. current consumption                 | 300 mA                                                                                                    |
| Duty cycle                               | 100%                                                                                                      |
| Max. electrical power consumption        | 7 W                                                                                                       |
| Residual ripple                          | 10 %                                                                                                      |
| Switching output                         | NPN                                                                                                       |
| Analog output signal range               | 0 - 10 V                                                                                                  |
| Analog input signal range                | 0 - 10 V                                                                                                  |
| Operating medium                         | Compressed air as per ISO 8573-1:2010 [7:4:4]<br>Inert gas                                                |
| Information on operating and pilot media | Operation with oil lubrication not possible                                                               |
| Certification                            | RCM compliance mark<br>c UL us - Listed (OL)                                                              |
| KC characters                            | KC EMC                                                                                                    |

| Feature                                      | Value                                                 |
|----------------------------------------------|-------------------------------------------------------|
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU RoHS directive   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| Certificate issuing authority                | UL E322346                                            |
| Corrosion resistance class (CRC)             | 2 - Moderate corrosion stress                         |
| LABS (PWIS) conformity                       | VDMA24364-B1/B2-L                                     |
| Temperature of medium                        | 10 °C ... 50 °C                                       |
| Degree of protection                         | IP65                                                  |
| Ambient temperature                          | 0 °C ... 60 °C                                        |
| Product weight                               | 400 g                                                 |
| Linearity                                    | 1 %FS                                                 |
| Hysteresis                                   | 0.5 %FS                                               |
| Reproducibility                              | 0.5 %FS                                               |
| Overall accuracy                             | 1.25 %FS                                              |
| Temperature coefficient                      | 0.04 %/K                                              |
| Repetition accuracy FS                       | 0.5 %                                                 |
| Electrical connection                        | 8-pin<br>M12<br>Plug                                  |
| Type of mounting                             | Optionally:<br>With through-hole<br>With accessories  |
| Pneumatic connection 1                       | Sub-base                                              |
| Pneumatic connection 2                       | Sub-base                                              |
| Pneumatic connection 3                       | Sub-base                                              |
| Note on materials                            | RoHS-compliant                                        |
| Housing material                             | Wrought aluminum alloy<br>Anodized                    |