

# Proportional pressure control valve VPPM-6F-L-1-F-0L6H-V1N-S1

Part number: 542240

**FESTO**



## 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. |
| 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            | 0.006 MPa...0.6 MPa   |
| Pressure regulation range                | 0.06 bar...6 bar  |
| Inlet pressure 1                         | 0 bar...8 bar   |
| Inlet pressure 1 MPa                     | 0 MPa...0.8 MPa   |
| Max. pressure hysteresis                 | 0.03 bar  |
| Standard nominal flow rate               | 900 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   |

| Feature                                      | Value   |
|--|---|
| Certification                                | RCM compliance mark<br>c UL us - Listed (OL)          |
| KC characters                                | KC EMC  |
| 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                             | With through-hole<br>With accessories<br>Optionally:  |
| 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                    |