

# Proportional pressure control valve VPPL-3Q-3-0L20H-V1-V-S1-2

Part number: 1635987

FESTO



[PDF General operating condition](#)

## Data sheet

| Feature   | Value   |
|---|---|
| Nominal width pressurization                      | 3 mm  |
| Exhaust nominal width                             | 3 mm  |
| Actuation type                                    | Electrical  |
| Sealing principle                                 | Soft  |
| Mounting position                                 | Any<br>Preferably upright   |
| Structural design                                 | Directly controlled piston regulator  |
| Short-circuit protection                          | No  |
| Max. cable length                                 | 30 m  |
| Safety instructions                               | VPPL safety position: if the power supply cable breaks, the outlet pressure will drop to 0 bar. |
| Symbol  | 00995268  |
| Reverse polarity protection                       | for all electrical connections  |
| Reset method                                      | Mechanical spring   |
| Type of control                                   | directly  |
| Valve function                                    | 3-way proportional pressure control valve closed  |
| Display type                                      | LED indicator   |
| Operating pressure                                | ≤2 MPa  |
| Operating pressure                                | ≤20 bar   |
| Pressure regulation range MPa                     | 0.02 MPa ... 2 MPa  |
| Pressure regulation range                         | 0.2 bar ... 20 bar  |
| Inlet pressure 1                                  | 0 bar ... 50 bar  |
| Inlet pressure 1 MPa                              | 0 MPa ... 5 MPa   |
| Max. pressure hysteresis                          | 0.01 MPa  |
| Max. pressure hysteresis                          | 0.1 bar   |
| Max. pressure hysteresis                          | 1.45 psi  |
| b-value   | 0.25  |
| C value   | 0.8 l/sbar  |
| Normal nominal flow rate (normalized to DIN 1343) | 245 l/min   |
| Standard nominal flow rate 2-3                    | 282 l/min   |
| Switching time off                                | 654 ms  |
| On switching time                                 | 428 ms  |
| DC operating voltage range                        | 21.6 V ... 27.6 V   |
| Duty cycle  | 100%  |
| Max. electrical power consumption                 | 26.7 W  |

| Feature                                      | Value  |
|--|--|
| Residual ripple                              | 10%  |
| Analog output signal range                   | 0 - 10 V   |
| Analog input signal range                    | 0 - 10 V   |
| Setpoint/actual values                       | Voltage type 0 - 10 V  |
| Operating medium                             | Compressed air as per ISO 8573-1:2010 [7:4:4]<br>Inert gases |
| Information on operating and pilot media     | Operation with oil lubrication not possible                  |
| Certification                                | c UL us - Listed (OL)  |
| KC characters                                | KC-EMV   |
| CE marking (see declaration of conformity)   | As per EU EMC directive                                      |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC                                   |
| Corrosion resistance class (CRC)             | 2 - Moderate corrosion stress                                |
| LABS (PWIS) conformity                       | VDMA24364 Zone III   |
| Temperature of medium                        | 5 °C ... 50 °C   |
| Degree of protection                         | IP65   |
| Ambient temperature                          | 5 °C ... 50 °C   |
| Storage temperature                          | -10 °C ... 60 °C   |
| Product weight                               | 1100 g   |
| Linearity error in ± % FS                    | 0.5 %FS  |
| Overall accuracy                             | 0.5 %FS  |
| Temperature coefficient                      | 0.04 %/K   |
| Repetition accuracy in ± %FS                 | 0.5 %FS  |
| Electrical connection, diagnostic interface  | Socket, M12, 5-pin, A-coded                                  |
| Electrical connection IN                     | Plug, M12, 5-pin, A-coded                                    |
| Electrical connection OUT                    | Plug, M12, 5-pin, A-coded                                    |
| Type of mounting                             | With through-hole  |
| Pneumatic connection 1                       | Flange   |
| Pneumatic connection 2                       | Flange   |
| Pneumatic connection 3                       | Flange   |
| Note on materials                            | RoHS compliant   |
| Housing material                             | Wrought aluminum alloy, anodized                             |