

# Proportional-pressure regulator VPPL-3L-3-G14-0L40H-V1-A-S1-7

Part number: 1635977

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature   | Value   |
|---|---|
| Nominal size, supply                                  | 3 mm  |
| Nominal size, exhaust                                 | 3 mm  |
| Type of actuation                                     | Electrical  |
| Sealing principle                                     | Soft  |
| Mounting position                                     | Any<br>Preferably upright   |
| Design  | Directly actuated piston regulator  |
| Short circuit current rating                          | No  |
| Max. cable length                                     | 30 M  |
| Safety instructions                                   | Safety position VPPL: if the power supply cable is interrupted, the output pressure drops to 0 bar. |
| Symbol  | 00991479  |
| Reverse polarity protection                           | For all electrical connections  |
| Type of reset   | Mechanical spring   |
| Type of piloting                                      | Direct  |
| Valve function  | 3-way proportional-pressure regulator, closed   |
| Display type  | LED indicator   |
| Operating pressure                                    | ≤5 MPa  |
| Operating pressure                                    | ≤50 bar   |
| Pressure regulation range                             | 0.04 MPa ... 4 MPa  |
| Pressure regulation range                             | 0.4 bar ... 40 bar  |
| Inlet pressure 1                                      | 0 bar ... 50 bar  |
| Inlet pressure 1                                      | 0 MPa ... 5 MPa   |
| Max. pressure hysteresis                              | 0.04 MPa  |
| Max. pressure hysteresis                              | 0.4 bar   |
| Max. pressure hysteresis                              | 5.8 psi   |
| b value   | 0.25  |
| C value   | 0.8 l/sbar  |
| Standard nominal flow rate (standardised to DIN 1343) | 245 l/min   |
| Standard nominal flow rate 2-3                        | 282 l/min   |
| Switching time off                                    | 654 ms  |
| Switching time on                                     | 428 ms  |
| Operational voltage range DC                          | 21.6 V ... 27.6 V   |
| Duty cycle  | 100%  |
| Max. electrical power consumption                     | 26.7 W  |

| Feature                                      | Value  |
|--|--|
| Residual ripple                              | 10%  |
| Signal range analogue output                 | 4 - 20 mA  |
| Signal range analogue input                  | 0 - 10 V   |
| SETPOINT/ACTUAL values                       | Voltage type 0 - 10 V                                  |
| Operating medium                             | Compressed air to ISO 8573-1:2010 [7:4:4]<br>Inert gas |
| Note on operating and pilot medium           | Lubricated operation not possible                      |
| Approval                                     | c UL us - Listed (Oil)                                 |
| KC mark                                      | KC-EMV   |
| CE mark (see declaration of conformity)      | To 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                                     |
| Media temperature                            | 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                     | 1 %FS  |
| Total accuracy                               | 1.5 %FS  |
| Temperature coefficient                      | 0.04 %/K   |
| Repetition accuracy in ± %FS                 | 1 %FS  |
| Electrical connection diagnostics interface  | Socket, M12, 5-pin, A-coded                            |
| Electrical connection, IN                    | Plug connector, M12, 5-pin, A-coded                    |
| Electrical connection, OUT                   | Plug connector, M12, 5-pin, A-coded                    |
| Type of mounting                             | With through-hole                                      |
| Pneumatic connection, port 1                 | G1/4   |
| Pneumatic connection, port 2                 | G1/4   |
| Pneumatic connection, port 3                 | G1/4   |
| Note on materials                            | RoHS compliant   |
| Material housing                             | Anodised wrought aluminium alloy                       |