Proportional pressure regulator
VPPL-3L-3-G14-0L40H-V1-V-S1-7
Part number: 1635980
FESTO


## Data sheet

| Feature | Value |
| :---: | :---: |
| Nominal diameter, pressurization | 3 mm |
| Nominal diameter, exhaust | 3 mm |
| Type of actuation | electrical |
| Sealing principle | soft |
| Assembly position | Any <br> Preferably upright |
| Design structure | directly-controlled piston regulator |
| Short circuit strength | No |
| Max. line length | 30 m |
| Safety instructions | Safety setting VPPL |
| Polarity protected | for all electrical connections |
| Type of reset | mechanical spring |
| Type of piloting | direct |
| Valve function | 3-way closed proportional-pressure regulator |
| Type of display | LED display |
| Operating pressure MPa | <= 5 MPa |
| Working pressure | < $=50 \mathrm{bar}$ |
| Pressure regulation range MPa | 0.04 ... 4 MPa |
| Pressure regulation range | 0.4 ... 40 bar |
| Inlet pressure 1 | 0 ... 50 bar |
| Supply pressure 1 MPa | $0 \ldots 5 \mathrm{MPa}$ |
| Max. pressure hysteresis (MPa) | 0.04 MPa |
| Max. pressure hysteresis | $\begin{aligned} & 0.4 \mathrm{bar} \\ & 5.8 \mathrm{psi} \\ & \hline \end{aligned}$ |
| $b$ value | 0.25 |
| C value | 0.81/sbar |
| Standard nominal flow rate | $2451 / \mathrm{min}$ |
| Standard nominal flow rate 2-3 | $2821 / \mathrm{min}$ |
| Switching time off | 654 ms |
| Switching time on | 428 ms |
| Operating voltage range DC | 21.6 ... 27.6 V |
| Duty cycle | 100 \% |
| Max. electrical power consumption | 26.7 W |
| Residual ripple | 10 \% |
| Signal range, analog output | 0-10 V |
| Signal range, analog input | 0-10 V |
| SETPOINT/ACTUAL values | Voltage type 0-10 V |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [7:4:4] Inert gases |
| Note on operating and pilot medium | Lubricated operation not possible |
| Authorization | c UL us - Listed (OL) |
| KC mark | KC-EMV |
| CE symbol (see declaration of conformity) | according to EU-EMV guideline |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC |
| Corrosion resistance classification CRC | 2 - Moderate corrosion stress |
| PWIS conformity | VDMA24364 zone III |


| Feature | Value |
| :--- | :--- |
| Medium temperature | $5 \ldots 50^{\circ} \mathrm{C}$ |
| Protection class | IP65 |
| Ambient temperature | $5 \ldots 50^{\circ} \mathrm{C}$ |
| Storage temperature | $-10 \ldots 60^{\circ} \mathrm{C}$ |
| Product weight | $1,100 \mathrm{~g}$ |
| Linearity error in $\pm \%$ FS | $1 \%$ FS |
| Overall accuracy | $1,25 \%$ FS |
| Temperature coefficient | $0.04 \% / \mathrm{K}$ |
| Repetition accuracy in $\pm \%$ FS | $1 \%$ FS |
| Diagnosis interface electrical connection | Socket, M12, 5-pin, A-coded |
| Electrical connection IN | Plug, M12, 5-pin, A-coded |
| Electrical connection OUT | Plug, M12, 5 -pin, A-coded |
| Mounting type | with through hole |
| Pneumatic connection, port 1 | G1/4 |
| Pneumatic connection, port 2 | G1/4 |
| Pneumatic connection, port 3 | G1/4 |
| Materials note | Conforms to RoHS |
| Material housing | Anodised wrought aluminium alloy |

