

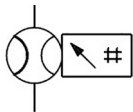
PF3W7, Digital Flow Switch for Water, 3-Colour Display, Integrated display

PF3W720-F04-FTN-M

Datasheet

General series information

- Compact size.
- Rotary display.
- Display visibility improved.
- Built-in temperature sensor.
- IP65, RoHS Compliant & CE Compliant.



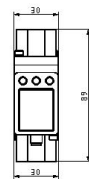
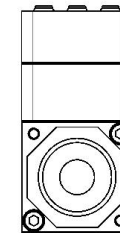
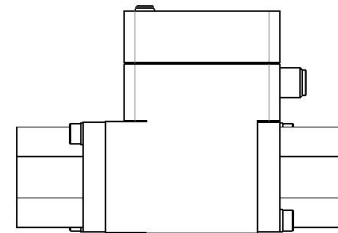
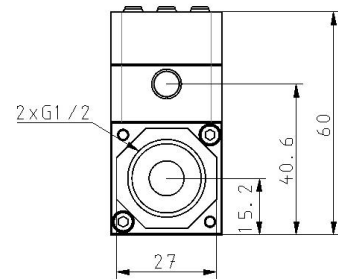
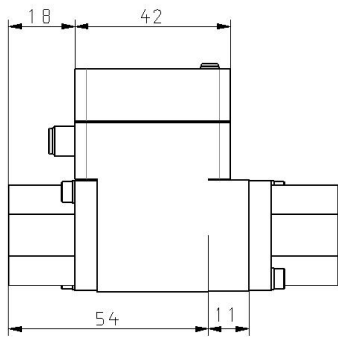
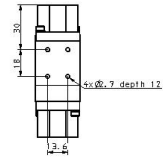
Flow meter with digital display

Standard specifications

| | |
|---------------------------------------|--|
| Rated Flow Range | 20 (2 to 16 l/min) |
| Flow Adjustment Valve | None |
| Thread Type | F (G) |
| Port Size | 04 (1/2) |
| Output Specification | F (OUT1: PNP - OUT2: Analogue 4 to 20 mA) |
| Temperature Sensor | T (With Temperature Sensor) |
| Lead Wire | N (Without Lead Wire, With M8 Connector) |
| Integrated display/Unit specification | M (Flow Rate: l/min, Temperature: °C) |
| Bracket | None |
| Calibration Certificate | None |
| Made to Order | None |
| Proof pressure | 1.5 MPa |
| General power supply | 12 to 24 VDC ±10 % |
| Response time | 0.5 s/ 1 s/ 2 s |
| Internal voltage drop | 1.5 V or less (at load current of 80 mA) |
| Current consumption | 50 mA or less |
| Material | PPS, Stainless steel 304, FKM, SCS13, Non-grease |
| Enclosure | IP65 |

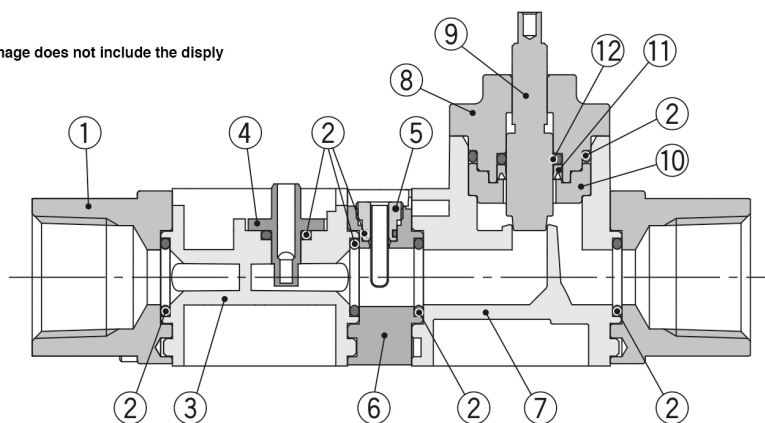
| | |
|--|--|
| Repeatability | ±2 % F.S. |
| Applicable fluid | Water and ethylene glycol aqueous solution (with viscosity of 3 mPa·s [3 cP] or less) |
| Analog current output | 4 to 20 mA Max. load impedance: 300 Ω for 12 VDC, 600 Ω for 24 VDC |
| Flow display range | 1.7 to 22.0 l/min (Flow under 1.7 l/min is displayed as "0.0") |
| Operating temperature range | Operation, Storage: 35 to 85 % R.H. (No condensation) |
| Pressure range | 0 - 1 MPa |
| Accuracy | Display value: ±3 % F.S. Analogue output: ±3 % F.S. |
| Smallest settable increment | 0.1 l/min |
| Max. load current | 80 mA |
| Hysteresis mode | Variable |
| Display | 2-screen display (Main screen: 4-digit, 7-segment, 2-colour, Red/Green Sub screen: 6-digit, 11-segment, White) Display values updated 5 times per second |
| Indicator light | Output 1, Output 2: Orange |
| Withstand voltage | 1000 VAC for 1 minute between terminals and housing |
| Insulation resistance | 50 MΩ or more (500 VDC measured via megohmmeter) between terminals and housing |
| Temperature characteristics | ±5 % F.S. (25 °C standard) |
| Standards | CE, UL |
| Flow detection method | Karman vortex |
| Switch output protection | Short-circuit protection |
| Fluid temperature | 0 to 90 °C (No freezing or condensation) |
| Pressure loss (without flow adjustment valve) | 45 kPa or less at the maximum flow |
| Conversion of accumulated pulse (Pulse width: 50 ms) | 0.1 L/pulse |
| Display unit | Instantaneous flow: l/min, Accumulated flow: L |
| Accumulated flow range | 99999999.9 L |
| Switch output mode Flow rate | Select from Hysteresis, Window comparator, Accumulated output, or accumulated pulse output modes. |
| Switch output mode Temperature | Select from Hysteresis mode or Window comparator mode. |
| Set flow range | 1.7 - 22.0 l/min |
| Switch output Max. applied voltage | 28 VDC |
| Weight | 0.420 Kg |

Dimensions



Constructions

*This construction image does not include the display



Component Parts

| No. | Description | Material | Note |
|-----|-----------------------------|---------------------|---|
| 1 | Attachment | SCS13 | Stainless steel 304 equivalent PF3W704/720/740/711/504/520/540/511 PF3W721/521 |
| | | Stainless steel 304 | |
| 2 | Seal | FKM | |
| 3 | Body | PPS | |
| 4 | Sensor | PPS | |
| 5 | Temperature sensor | Stainless steel 304 | |
| 6 | Temperature sensor body | Stainless steel 304 | |
| 7 | Flow adjustment valve body | PPS | |
| 8 | Flow adjustment valve cover | PPS | |
| 9 | Flow adjustment valve shaft | Stainless steel 304 | |
| 10 | Shaft support | PPS | |
| 11 | Seal | FKM | |
| 12 | Seal | FKM | |

Additional information

| | |
|---------------------------|--|
| Catalogue | PF3W-Dd_EU.pdf |
| Declaration of conformity | newDoC_PF3W_TF1Y123EN.pdf DoC_PF3Wx_TFG0006.pdf |
| Installation manuals | IM_PF3W7_TF2Z076EN-B.pdf |
| Operation manuals | OM_PF3W7_OMM0005EN-R.pdf |