

## PF3W5, Digital Flow Switch for Water, Remote sensor unit PF3W520-F04-1T

Datasheet

### General series information

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



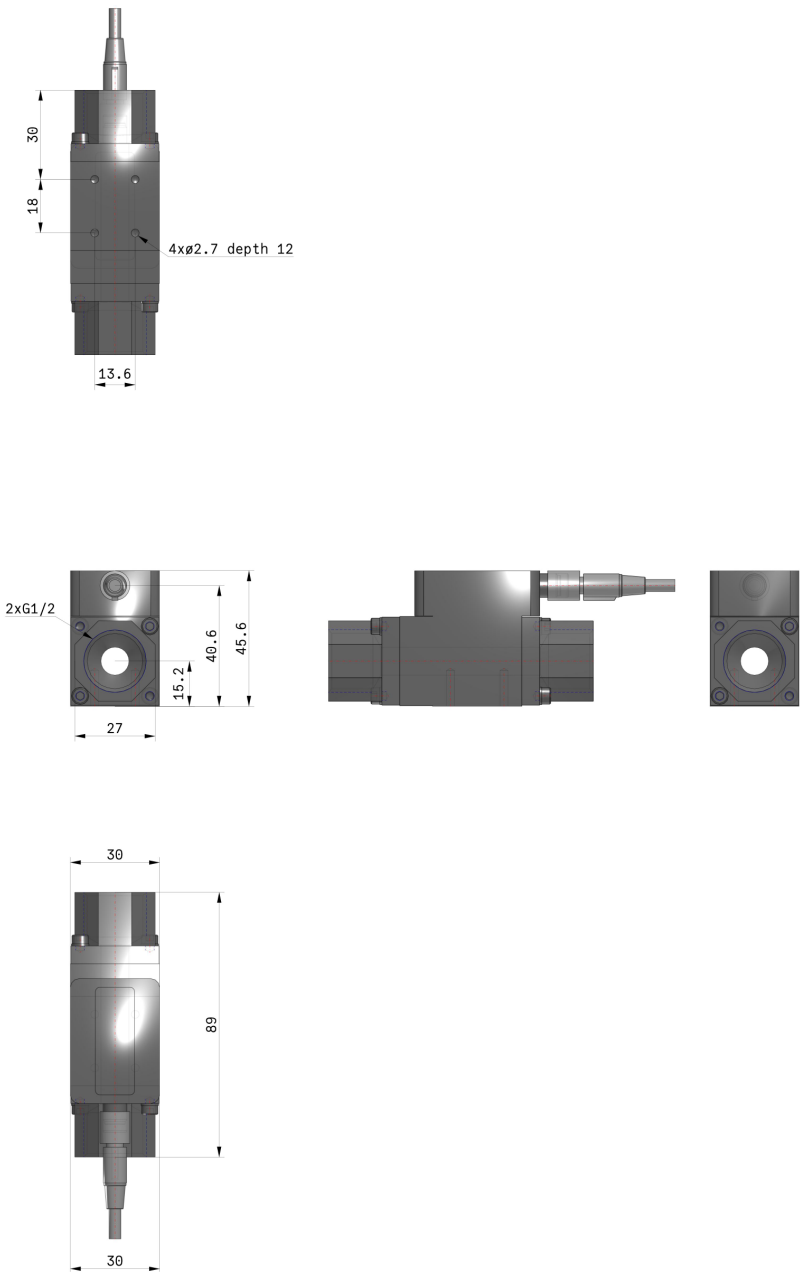
Flow meter with digital display

### 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                  | 1 (OUT1: Analogue 1 to 5 V)                           |
| Temperature Sensor                    | T (With Temperature Sensor)                           |
| Lead Wire                             | With Lead Wire, With M8 Connector                     |
| Integrated display/Unit specification | Flow Rate: l/min, Temperature: °C                     |
| Bracket                               | None                                                  |
| Calibration Certificate               | None                                                  |
| Made to Order                         | None                                                  |
| General power supply                  | 12 to 24 VDC $\pm 10$ %                               |
| Response time                         | 1 s                                                   |
| Current consumption                   | 30 mA or less                                         |
| Material                              | PPS, Stainless steel 304, FKM, SCS13, Non-grease      |
| Operating humidity range              | Operation, Storage: 35 to 85 % R.H. (No condensation) |
| Enclosure                             | IP65                                                  |
| Repeatability                         | $\pm 2$ % F.S.                                        |

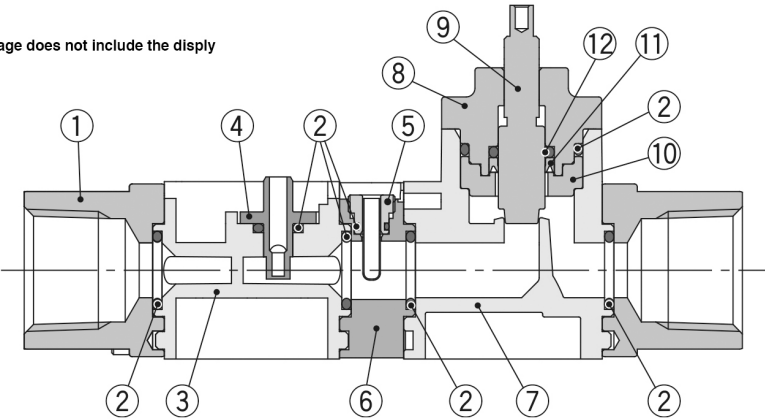
|                                               |                                                                                                                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicable fluid                              | Water and ethylene glycol aqueous solution (with viscosity of 3 mPa·s [3 cP] or less)                                                                             |
| Analog voltage output                         | Voltage output: 1 to 5 V Output impedance: 1 kΩ                                                                                                                   |
| Operating temperature range                   | 0 to 50 °C (No freezing or condensation)                                                                                                                          |
| Pressure range                                | 1.5 MPa                                                                                                                                                           |
| Accuracy                                      | ±3 % F.S.                                                                                                                                                         |
| Indicator light                               | For power supply status, flow rate indicator (Blinking speed changes in response to flow rate.), and other error indicator                                        |
| 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                                                                                                                                                     |
| Fluid temperature                             | 0 to 90 °C (No freezing or condensation)                                                                                                                          |
| Pressure loss (without flow adjustment valve) | 45 kPa or less at the maximum flow                                                                                                                                |
| Temperature sensor specifications             | Rated temperature range 0 to 100°C, 1 to 5 V, Analog output accuracy ±3 % F.S., Ambient temperature characteristics ±5 % F.S. (25 °C standard), Response time 7 s |
| Weight                                        | 0.405 Kg                                                                                                                                                          |

Dimensions



# Constructions

\*This construction image does not include the disply



## Component Parts

| No. | Description                 | Material            | Note                                                               |
|-----|-----------------------------|---------------------|--------------------------------------------------------------------|
| 1   | Attachment                  | SCS13               | Stainless steel 304 equivalent PF3W704/720/740/711/504/520/540/511 |
|     |                             | Stainless steel 304 | PF3W721/521                                                        |
| 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                 | <a href="#">PF3W-Dd_EU.pdf</a>                                                                                                    |
| Declaration of conformity | <a href="#">newDoC_PF3W_TF1Y123EN.pdf</a><br><a href="#">DoC_PF3Wx_TFG0006.pdf</a><br><a href="#">newDoC_PF3W_TF1V119EN-A.pdf</a> |
| Installation manuals      | <a href="#">IM_PF3W5_TF2Z082EN-A.pdf</a>                                                                                          |
| Operation manuals         | <a href="#">OM_PF3W5_OMN0010EN-L.pdf</a>                                                                                          |