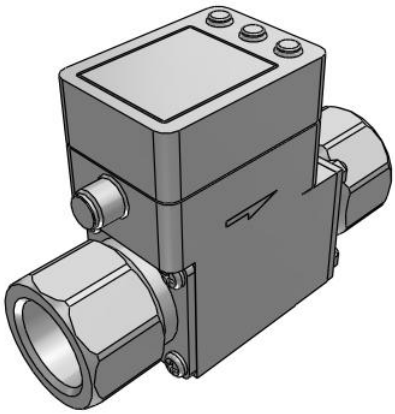


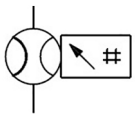
PF3W7-Z, Digital Flow Switch for Water, 2-Screen 3-Color Display, Integrated Display, IP65

PF3W720-F04-FTN-MZ

Datasheet

General series information

- Compact size.
- Rotary display.
- Display visibility improved.
- Built-in temperature sensor.
- IP65.



Flow meter with digital display

Standard specifications

Rated Flow Range	20 (2 to 16 l/min)
Flow Adjustment Valve	W/o Flow Adjustment Valve
Thread	F (G)
Port Size	04 (1/2)
Output Specification/Temperature Sensor	FT (Out 1: PNP; Out 2: Flow Rate: Analogue 4 to 20 mA; Temp.: Analogue 4 to 20 mA; Temperature Sensor: Yes)
Lead Wire	N (w/o Lead Wire and M8 Connector)
Unit Specification	M (Instantaneous Flow: l/min, Accumulated Flow: L, Temperature: °C)
Bracket	None
Calibration Certificate	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
Operating humidity range	Operation, Storage: 35 to 85 % R.H. (No condensation)
Enclosure	IP65

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

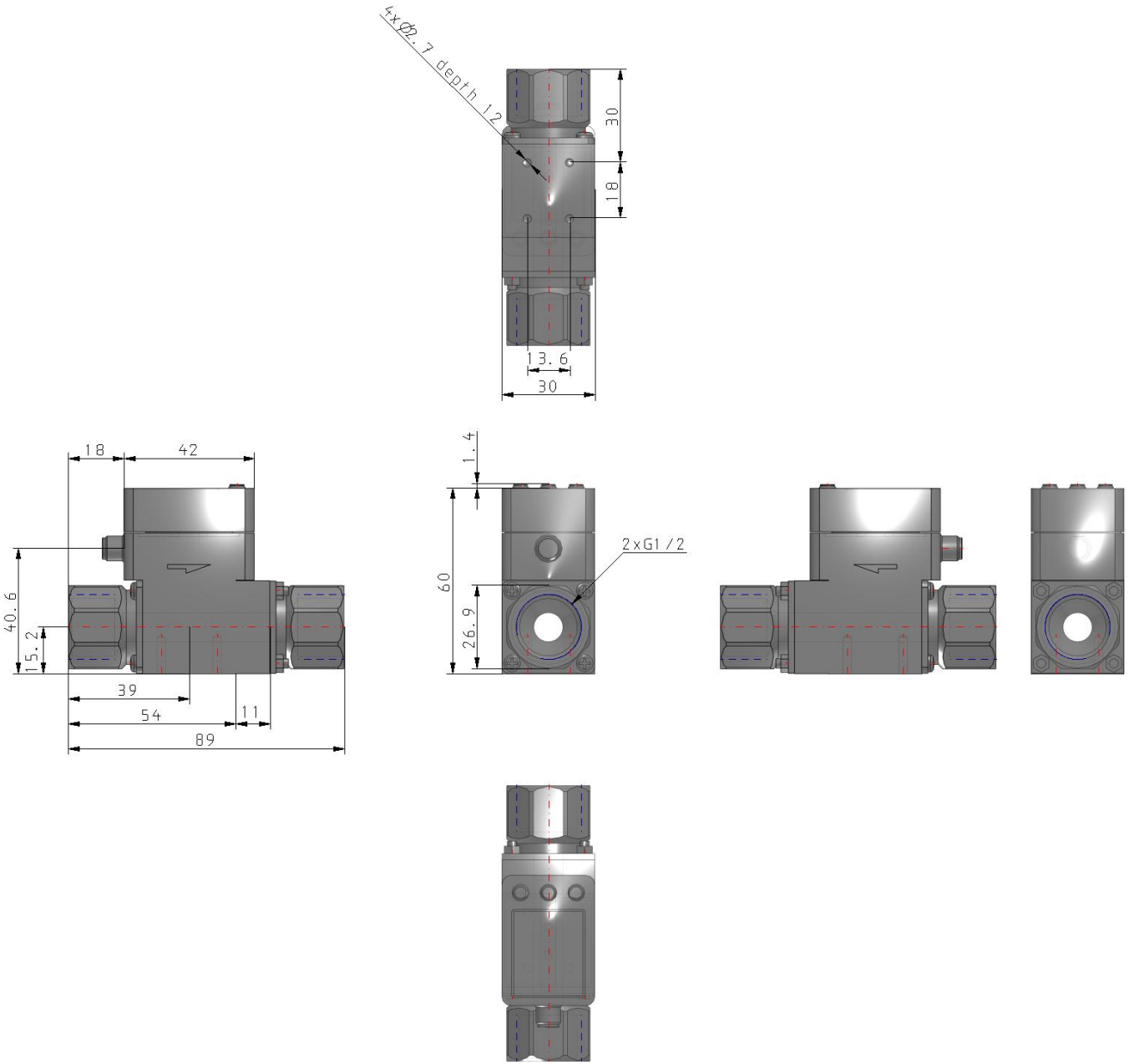
SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Repeatability	±2 % F.S.
Applicable fluid	Water and ethylene glycol aqueous solution (with viscosity of 3 mPa·s [3 cP] or less)
Maximum load current	80 mA
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	0 to 50 °C (No freezing or 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. applied voltage	28 VDC
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
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
Accumulated flow range increment	99999999.9 L
Analogue output response time	0.5 s/1 s/2 s (linked with the switch output)
Weight	0.184 Kg

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Dimensions

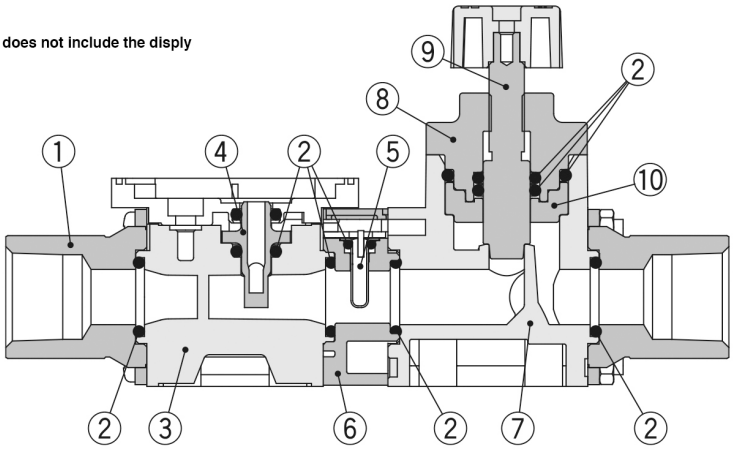


Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Constructions

*This construction image does not include the disply



Component Parts

No.	Description	Material	Note
1	**Attachment**	Stainless steel 304	PF3W704/720/740/504/520/540
		SCS13	Stainless steel 304 equivalent, PF3W711/511
2	**Seal**	FKM	
3	**Body**	PPS	
4	**Sensor**	PPS	
5	**Temperature sensor**	Stainless steel 304	
6	**Temperature sensor body**	PPS	
7	**Flow adjustment valve body**	PPS	
8	**Flow adjustment valve cover**	PPS	
9	**Flow adjustment valve shaft**	Stainless steel 304	
10	**Shaft support**	PPS	

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com

Additional information

Catalogue	PF3W-Z_L-B_EU.pdf
Declaration of conformity	newdoc_pf_tf1w35en.pdf
Installation manuals	IM_PF3W7-L_TF2Z088EN-A.pdf
Operation manuals	OM_PF3W7_OMW0010EN-I.pdf

Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

SMC CORPORATION Zuazobidea 14, 01012, Vitoria-Gasteiz, Álava +34 945184100 +34 945184126 www.smc.eu support.marketingeurope@smc.com