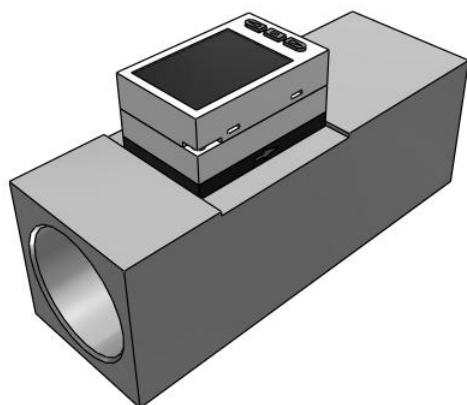


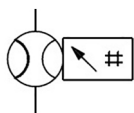


PF3A7*H-L, Digital Flow Switch for Large Flow with IO-Link PF3A712H-F20-L3N

Datasheet

General series information

- Applicable fluid: Air, N₂, CO₂, Ar.
- Flow range: Max. 12000 L/min.
- Flow ratio: 100:1.
- 3-color/ 2-screen display.
- Port Size: 1, 1 1/2, 2.
- Outputs: IO-Link, NPN/PNP and analogue/external input.
- IP65.



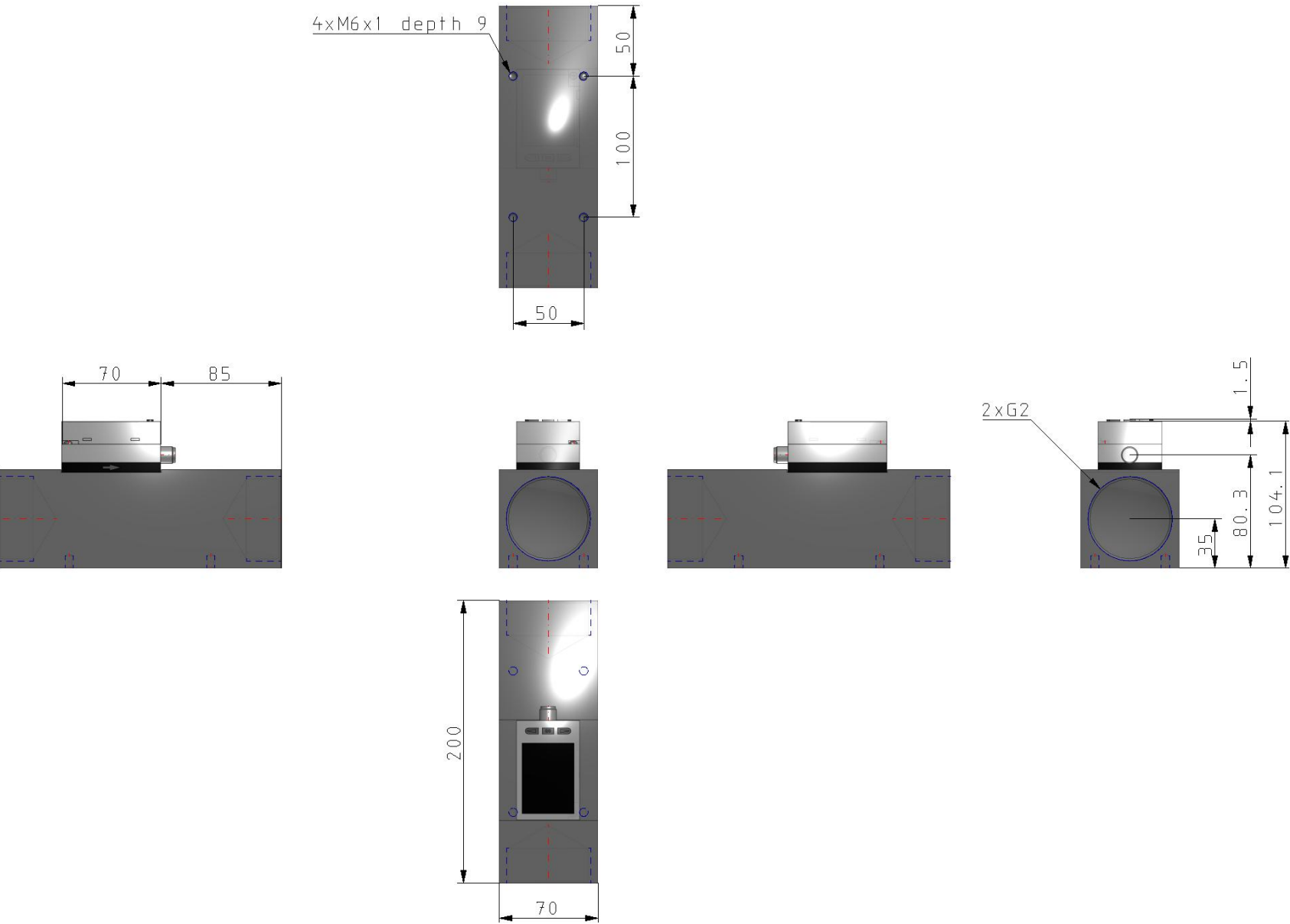
Flow meter with digital display

Standard specifications

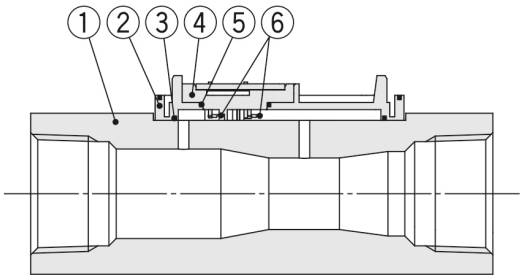
Rated Flow Range	12 (120 to 12000 l/min)
Thread Type	F [G (ISO 1179-1 Compliant)]
Port Size	20 (2)
Output Specification	L3 [Out: IO-Link, Switch Output (N/P); Func: Analog Voltage Output <-> External Input; Monitor Unit Model: PFG300 Series]
Lead Wire	N (w/o Lead Wire and M12 Connector)
Unit Specification	Units Selection Function
Calibration Certificate	None, Certificate in both English and Japanese
Maximum temperature of pressure medium	50 °C
Minimum temperature of pressure medium	0 °C
Proof pressure	2.25 MPa
General power supply	21.6 - 30 VDC
Approvals	CE marking (EMC Directive, RoHS Directive)
Response time	3.3 ms or less, variable from 0 to 60 s/0.01 s increments
Internal voltage drop	1.5 V or less (at load current of 80 mA)

Current consumption	150 mA or less
Operating humidity range	Operating/Stored: 35 to 85 % RH (No condensation)
Enclosure	IP65
Repeatability	Switch output/Display: ± 1.0 % F.S. Analogue output: ± 1.0 % F.S.
Applicable fluid	Air, Nitrogen
Rated pressure range	0.1 to 1.5 MPa
Maximum load current	80 mA
Flow display range	0 to 12600 l/min (Flow under 120 l/min is displayed as "0")
Fluid contact material	Aluminum alloy, PPS, HNBR [Sensor: Pt, Au, Fe, Lead glass (exempted from the RoHS application), Al ₂ O ₃]
Operating temperature range	Operating: 0 to 50 °C, Stored: -10 to 60 °C (No freezing or condensation)
Smallest settable increment	100 L
Max. applied voltage	30 V (NPN output)
Hysteresis mode	Variable from 0
Display	LCD, 2-screen display (Main screen/Sub screen) Main screen: Red/Green, Sub screen: Orange Main screen/Sub screen: 9 digits (7 segments 7 digits, 11 segments 2 digits)
Display accuracy	± 3.0 % F.S.
Indicator light	OUT indicator: Red LED is ON when output is ON
Withstand voltage	1000 VAC for 1 minute between terminals and housing
Insulation resistance	50 M Ω (500 VDC measured via megohmmeter) between terminals and housing
Flow detection method	Thermal type
Set point range Instantaneous flow	120 to 12600 l/min
Set point range Accumulated flow	0 to 999,999,999,990 L
Accumulated volume per pulse	Select from 100 L/pulse or 1000 L/pulse
Accumulated value hold function	Interval of 2 or 5 minutes can be selected
Pressure characteristics	± 2.5 % F.S. (0.1 to 1.0 MPa, 0.5 MPa standard)
Electrical protection	Polarity protection
Analogue output accuracy	± 3.0 % F.S.
Accuracy temperature characteristics	± 5.0 % F.S. (Ambient temperature of 0 to 50 °C, 25 °C standard)
Output mode	Select from Hysteresis, Window comparator, Accumulated output, Accumulated pulse output, Error output, or Switch output OFF modes
Analogue output type	Voltage output: 1 to 5 V (0 to 10 V can be selected)
External input type	No-voltage input: 0.4 V or less
External input mode	Select from Accumulated value external reset or Peak/Bottom value reset
External input time	30 ms or longer
Display range Accumulated flow	0 to 999,999,999,90 L
Minimum display unit	10 l/min
Minimum display unit Accumulated flow	1000 L
Weight	1.720 Kg

Dimensions



Constructions



Component Parts

No.	Description	Material	Note
1	Body	Aluminum alloy	Anodized
2	Branch passage	PPS	—
3	Gasket	HNBR	—
4	Sensor base	PPS	—
5	Gasket	HNBR	—
6	Sensor	Au, Pt, Al ₂ O ₃	—

Additional information

Catalogue	PF3A7_H-E_EU.pdf
Declaration of conformity	newDoC_PF3A7xH_TF1V123EN.pdf newDoC_PF3A7xH_TF124-132EN.pdf
Installation manuals	IM_PF3A7xH-L_TF2Z091EN-A.pdf IM_PF3A7xH_TF2Z086EN-A.pdf
Operation manuals	OM_PF3A7xH-L_OMX0002EN-G.pdf OM_PF3A7xH_OMU0002EN-H.pdf