



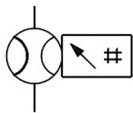
## PF3A8\*H, Modular Digital Flow Switch

### PF3A801H-L2

Datasheet

### General series information

- Built-in temperature and pressure sensor
- Connection to air combination unit possible
- Applicable fluid: Air, N<sub>2</sub>
- Flow range: Max. 2000 l/min
- Flow ratio: 100:1
- 3-colour/ 4-screen display
- Outputs: IO-Link and PNP/NPN
- IP65.



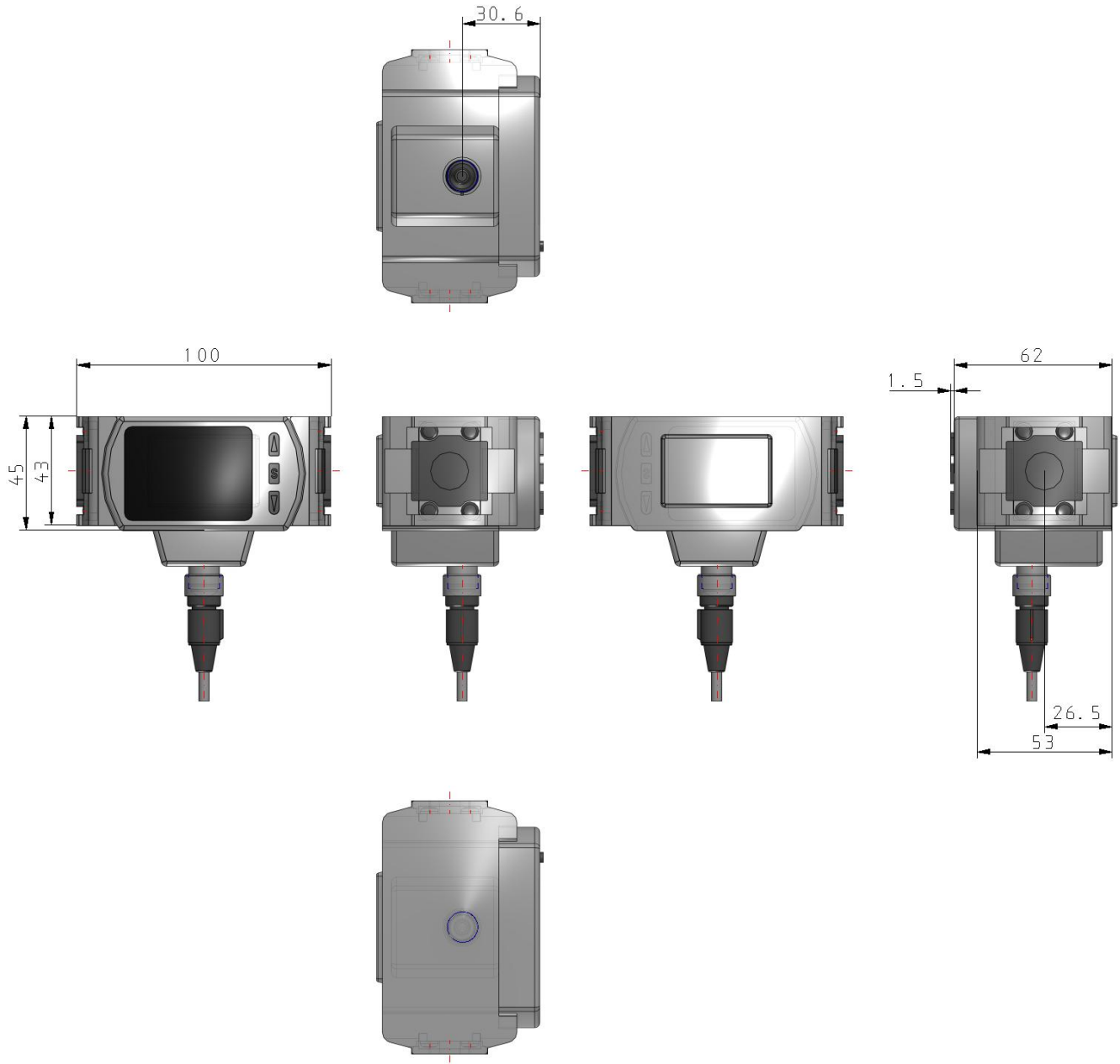
Flow meter with digital display

### Standard specifications

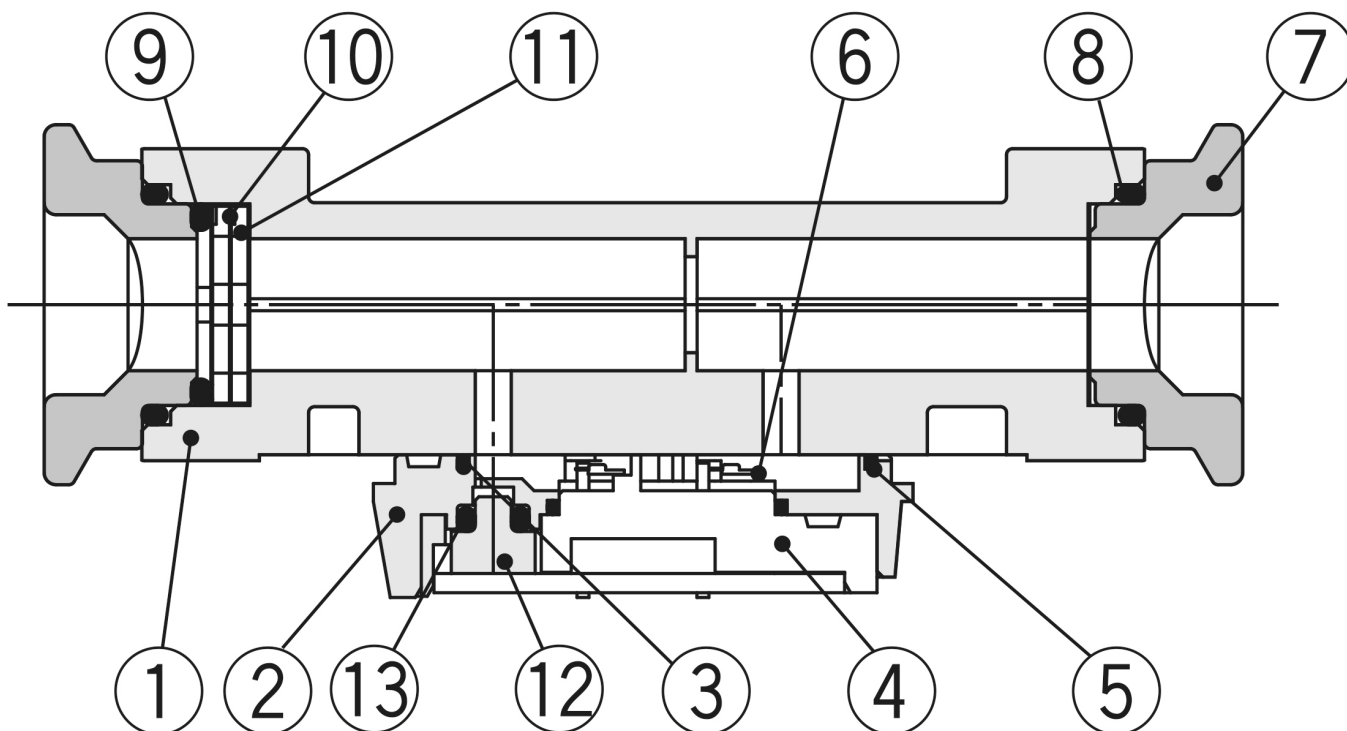
Rated Flow Range	01 (10 to 1000 l/min)
Output Specification	L2 [Out1: IO-Link, Switch Output (N/P); Out2: Switch Output (N/P)]
Lead Wire	w/Lead Wire and M12 Connector, 3m
Unit Specification	Units Selection Function
Calibration Certificate	None, Certificate in both English and Japanese
Flow Direction	Left to Right
Proof pressure	1.5 MPa
Conform to the European RoHS Directive	Conform
Approvals	CE, EMC, RoHS
Operating humidity range	Operating/Stored: 35 to 85 % RH (No condensation)
Internal voltage drop	1.5 V or less (at load current of 80 mA)
Current consumption	150 mA or less
Enclosure	IP65
Repeatability	±1.0% F.S.

Applicable fluid	Air, Nitrogen
Rated pressure range	0 - 1 MPa
Switch output	Select from NPN or PNP open collector output
Flow display range	0 to 1050 l/min (Flow under 10 L/min is displayed as "0")
Contact material for circulating fluid	Stainless steel 304, Aluminium alloy, PPS, HNBR [Sensor: Pt, Au, Ni, Fe, Lead glass (exempted from the RoHS application), Al <sub>2</sub> O <sub>3</sub> ]
Operating temperature range	Operating: 0 to 50 °C, Stored: -10 to 60 °C (No freezing or condensation)
Smallest settable increment	1 l/min
Max. load current	80 mA
Display	LCD, 4-screen display Upper line: Red/Green, Lower line: Orange Upper/Lower line: 10 digits (7 segments 5 digits, 11 segments 5 digits)
Display accuracy	±3.0 % F.S.
Indicator light	OUT indicator: Orange LED is ON when output is ON
Withstand voltage	1000 VAC for 1 minute between terminals and housing
Insulation resistance	50 MΩ (500 VDC measured via megohmmeter) between terminals and housing
Maximum fluid temperature	50 °C
Minimum fluid temperature	0 °C
Flow detection method	Thermal type (Bypass flow type)
Set point range Instantaneous flow	10 - 1000 l/min
Smallest settable increment Accumulated flow	10 L
Accumulated volume per pulse	Select from 10 L/pulse or 100 L/pulse
Accumulated value hold function	Interval of 2 or 5 minutes can be selected
Pressure characteristics	±5.0 % F.S. (Ambient temperature of 0 to 50 °C, 25 °C standard)
Electrical protection	Polarity protection
Accuracy temperature characteristics	±5.0 % F.S. (Ambient temperature of 0 to 50 °C, 25 °C standard)
Output mode	Hysteresis mode, Window comparator mode, Error output, Output OFF, Accumulated output, Accumulated pulse output (Only flow rate)
Switch operation	Select from Normal or Reversed output
Switch output protection	Over current protection
Display range Accumulated flow	0 to 9,999.99 x 10 <sup>6</sup> L (6-digit display) 0 to 9,999,999.99 x 10 <sup>3</sup> L (9-digit display)
Minimum display unit	1 l/min
Minimum display unit Accumulated flow	10 L
Length of lead wire with connector	3 m
Power supply voltage when used as an IO-Link device	21.6 to 30 VDC
Switch output response time	5 ms or less
Hysteresis	Variable from 0
Weight	0.440 Kg

# Dimensions



## Constructions



## Component Parts

No.	Description	Material	Note
1	<b>Body</b>	ADC	
2	<b>Branch passage</b>	PPS	
3	<b>Gasket</b>	HNBR	
4	<b>Sensor base</b>	PPS	
5	<b>Gasket</b>	HNBR	
6	<b>Sensor</b>	Au, Pt, Al <sub>2</sub> O <sub>3</sub>	
7	<b>Attachment</b>	ADC	
8	<b>O-ring</b>	HNBR	
9	<b>O-ring</b>	HNBR	
10	<b>Mesh</b>	Stainless steel 304	
11	<b>Spacer</b>	PPS	
12	<b>Pressure sensor</b>	Silicon, PPS	
13	<b>O-ring</b>	HNBR	

## Additional information

Catalogue	<a href="#">PF3A7_H-D_EU.pdf</a>
Declaration of conformity	<a href="#">newDoC_PF3A7xH_TF1Y128EN.pdf</a>
Installation manuals	<a href="#">IM_PF3A8xH_TF2Z037EN.pdf</a>
Operation manuals	<a href="#">OM_PF3A8xx_OMY0005EN-C.pdf</a> <a href="#">PF3A8xx_Quickguide_EN.pdf</a>