For Deionized Water and Chemical Liquids

Digital Flow Switch

PF2D Series

RoHS

How to Order

Remote Type Sensor Unit

PF2D5 [20] – [13] – [1] – [C]

Flow rate range

04	0.4 to 4 L/min
20	1.8 to 20 L/min
40	4 to 40 L/min

Port size: (inch)

11	3/8	PF2D504
13	1/2	PF2D520
19	3/4	PF2D540

Output specification

Symbol	Specification	Applicable monitor unit (monitor) model
1	Output for monitor unit + analog output (1 to 5 V)	PF2D200/300 series
2	Output for monitor unit + analog output (4 to 20 mA)	PF2D300 series

Option (Refer to page 391.)

Nil	None
C	e-con connector x 1 pc.

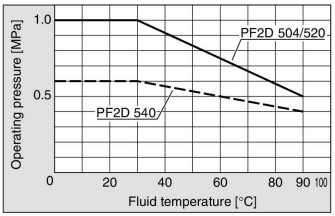
The cable and connector are shipped unassembled.

Specifications for Sensor Unit

Refer to pages 202 and 203 for Flow Switch Precautions. For details about the Specific Product Precautions, refer to the Operation Manual on the SMC website, http://www.smcworld.com Click here for details.

Model		PF2D504	PF2D520	PF2D540
Measured fluid		Liquid not to corrode nor erode deionized water and/or fluoropolymer. Viscosity: 3mPa·s (3cP) or less		
Detection style		Karman vortex		
Rated flow range		0.4 to 4 L/min	1.8 to 20 L/min Note 1)	4 to 40 L/min
Operating pressure range Note 2)		0 to 1 MPa		0 to 0.6 MPa
Proof pressure Note 3)		1.5 MPa		0.9 MPa
Operating fluid temperature		0 to 90°C		
Accuracy Note 4)		±2.5% F.S. (at 25°C water)		
Repeatability		±1% F.S. (at 25°C water)		
Temperature characteristics		±5% F.S. (0 to 50°C, based on 25°C)		
Output specifications	Pulse output	Pulse output, N channel, open drain, output for monitor unit PF2D 300/301 (Specifications: Maximum load current of 10 mA; Maximum applied voltage of 30 V)		
	Analog output	Voltage output Note 5) 1 to 5 V Accuracy: ±2% F.S., Min. load impedance: 100 kΩ (Output impedance: 1 kΩ)		
		Current output Note 6) 4 to 20 mA Accuracy: ±2% F.S.or less, Max. load impedance: 300 Ω or less with 12 VDC, 600 Ω or less with 24 VDC		
Power supply voltage		12 to 24 VDC ±10%		
Current consumption		20 mA or less (without load)		
Environmental resistance	Enclosure	IP65		
	Operating temperature range	Operating: 0 to 50°C, Stored: –25 to 85°C in stock (with no condensation and freezing)		
	Voltage resistance	1000 VAC for 1 min. between external terminals and case		
	Insulation resistance	50 MΩ or more (500 VDC measured via megohmmeter) between external terminals and case		
Standards		CE, RoHS		
Lead wire		Cabtire cord, 4 cores ø3.5, 3 m		
Weight		140 g (without lead wire)		225 g (without lead wire)
Port size		3/8 inch tube	1/2 inch tube	3/4 inch tube
Wetted material		Body: New PFA, Sensor: New PFA, Tube: Super PFA		

Note 1) 1.6 to 20 L/min (0.1 MPa) with viscosity of 1 mPa·s (1 cP) or less
Note 2) The operating pressure range drops according to the fluid temperature. See attached graph.
Note 3) 1.5 times of the maximum operating pressure and varying with fluid temperature.
Note 4) The system accuracy when combined with PF2D30□.
Note 5) When the voltage output is selected.
Note 6) When the current output is selected.
Note 7) The sensor unit conforms to the CE marking.
Note 8) For details about wiring, refer to the Operation Manual that can be downloaded from SMC website (http://www.smcworld.com).



Made to Order

LQ1 series fluoropolymer fittings mounting type is also available. Refer to page 392.

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