

How to Order



Remote Type
Sensor Unit

PF2A5 **10** - **01** - **01** - **01** - **01** - **C**

Flow rate range

10	1 to 10 L/min
50	5 to 50 L/min
11	10 to 100 L/min
21	20 to 200 L/min
51	50 to 500 L/min

Thread type

Nll	Rc
N	NPT
F	G*

* Conforming to ISO228-1.

Port size

Symbol	Port size	Flow rate (L/min)					Applicable model
		10	50	100	200	500	
01	1/8	●	●				PF2A510/550
02	1/4	●	●				
03	3/8			●	●		PF2A511/521
04	1/2					●	PF2A551

Lead wire (Refer to page 326.)

Nll	Lead wire with M12 connector (3 m)
N	Without lead wire

Option (Only for output specifications "1")
(Refer to page 326.)

Nll	None
C	e-con connector (1 pc.)

The cable and connector are shipped unassembled.

Output specifications

Symbol	Specification	Applicable monitor unit model
Nll	Output for monitor unit	PF2A300 series
1	Output for monitor unit + analog output (1 to 5 V)	PF2A200/300 series
2	Output for monitor unit + analog output (4 to 20 mA)	PF2A300 series

Specifications

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>

Model		PF2A510	PF2A550	PF2A511	PF2A521	PF2A551
Measured fluid		Air, Nitrogen				
Detection type		Heater type				
Rated flow range		1 to 10 L/min	5 to 50 L/min	10 to 100 L/min	20 to 200 L/min	50 to 500 L/min
Operating pressure range		-50 kPa to 0.5 MPa		-50 kPa to 0.75 MPa		
Proof pressure		1.0 MPa				
Operating fluid temperature		0 to 50°C				
Accuracy ^{Note 1, 2)}		±5% F.S.				
Repeatability ^{Note 1)}		±1% F.S. (Connected with PF2A3□□), ±3%F.S. (Connected with PF2A2□□)				
Temperature characteristics		±2% F.S. (15 to 35°C, 25°C reference) ±3% F.S. (0 to 50°C, 25°C reference)				
Output specifications ^{Note 3)}	Output for monitor unit	Analog voltage output (non-linear) output impedance 1 kΩ output for monitor unit PF2A3□□ Voltage output 1 to 5 V (within the flow rate range) Accuracy: ±5%F.S., Min. load impedance: 100 kΩ (Output impedance: 1 kΩ)				
	Analog output	Current output 4 to 20 mA (within the flow rate range) Accuracy: ±5%F.S., Max. load impedance: 300 Ω or less (at 12 VDC), 600 Ω or less (at 24 VDC)				
	Power supply voltage		12 to 24 VDC ±10%			
Current consumption		100 mA or less				110 mA or less
Environment	Enclosure	IP65				
	Operating temperature range	Operating: 0 to 50°C, Stored: -25 to 85°C (with no freezing and condensation)				
	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				
Standards and regulations		CE, RoHS				
Weight ^{Note 4)}		200 g		240 g		
Port size (Rc, NPT, G)		1/8, 1/4		3/8		1/2

Note 1) The system accuracy when combined with PF2A2□□/3□□.

Note 2) The piping on the IN side must have a straight section of piping whose length is 8 times the piping diameter or more. If a straight section of piping is not installed, the accuracy may vary by ±5% F.S. or more.

Note 3) Output system can be selected during initial setting.

Note 4) Without lead wire. (Add 20 g for the types of analog output whether voltage or current output selected.)

Note 5) Flow rate unit measured under the following conditions: 0°C and 101.3 kPa.

Note 6) The sensor unit conforms to the CE marking.

Note 7) For details about wiring and thread type, refer to the Operation Manual that can be downloaded from SMC website (<http://www.smcworld.com>).

Note 8) Any products with tiny scratches, smears, or display color variation or brightness which does not affect the performance are verified as conforming products.