




Series Variations

Model Selection Table

Self-contained Type

Model	PFM7	PF2A7	PFMB7
Fluid	Dry air, N ₂ , Ar, CO ₂	Air, N ₂	Dry air, N ₂
Calibration method	Push-button calibration		
Rated flow range	0.2 to 10 L/min 0.5 to 25 L/min 1 to 50 L/min 2 to 100 L/min	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 150 to 3000 L/min 300 to 6000 L/min 600 to 12000 L/min	2 to 200 L/min 5 to 500 L/min 10 to 1000 L/min 20 to 2000 L/min
Power supply voltage	24 VDC ±10%		
Temperature characteristics (based on 25°C)	±2% F.S. (15 to 35°C) ±5% F.S. (0 to 50°C)	±3% F.S. (15 to 35°C) ±5% F.S. (0 to 50°C) ±2% F.S. (PF2A7□□H: 0 to 50°C)	±2% F.S. (15 to 35°C) ±5% F.S. (0 to 50°C)
Repeatability	±1% F.S. (Fluid: Dry air) Analog output: ±3% F.S.	±1% F.S. (PF2A7□□, PF2A7□□H) ±2% F.S. (PF2A7□1)	±1% F.S. (Fluid: Dry air)
Hysteresis	Hysteresis mode: Variable Window comparator mode: Variable	Hysteresis mode: Variable Window comparator mode: Fixed (3 digits*) * Digit is min. calibration unit.	Hysteresis mode: Variable Window comparator mode: Variable
Output	NPN/PNP open collector Accumulated pulse output Analog voltage output Analog current output	NPN/PNP open collector Accumulated pulse output	
Display	2-color display	1-color display	2-color LED display 2-color LCD display
Enclosure	IP40	IP65	IP40
Note	Flow adjustment valve integrable Panel mounting possible DIN rail mountable Selectable flow rate display unit Responses time setting function → All renewed Secret code setting function Power-saving mode Accumulated flow display function	Selectable flow rate display unit Accumulated flow display function	Flow adjustment valve integrable (200 L) Panel mounting possible (200 L) DIN rail mountable (200 L) Selectable flow rate display unit Responses time setting function → All renewed Secret code setting function Power-saving mode Accumulated flow display function
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PFMC7	PF3W		LFE
	 PVC piping type		
	Water, ethylene glycol aqueous solution		Water, Water-soluble coolant
5 to 500 L/min 10 to 1000 L/min 20 to 2000 L/min	0.5 to 4 L/min 2 to 16 L/min 5 to 40 L/min 10 to 100 L/min 50 to 250 L/min		0.5 to 20 L/min 2.5 to 100 L/min 5 to 200 L/min
12 to 24 VDC $\pm 10\%$			24 VDC $\pm 10\%$
	$\pm 5\%$ F.S. (0 to 50°C)		$\pm 5\%$ F.S.
	$\pm 2\%$ F.S.		$\pm 2\%$ F.S. (Displayed values) Analog output: $\pm 1.5\%$ F.S.
	Variable		
NPN/PNP open collector Accumulated pulse output Analog voltage output Analog current output			NPN/PNP open collector Analog voltage output Analog current output
3-color LCD display	3-color display		
	IP65		
Flow adjustment valve integrable Responses time setting function → All renewed Secret code setting function Power-saving mode Accumulated flow display function	3-color/2-screen display Selection of display on sub screen Switching of flow direction Responses time setting function Secret code setting function Power-saving mode Accumulated flow display function		
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PFM

PFMB

PFMC

PFMV

PF2A

PF3W

LFE

PF2D







IF

Series Variations

Model Selection Table

Self-contained Type

Model	Sensor unit	Monitor unit	Sensor unit	Monitor unit	Sensor unit	Monitor unit	
	PFM5	PFM3	PFMV5	PFMV3	PF2A5	PF2A3	PF2A2
Fluid	Dry air, N ₂ , Ar, CO ₂		Dry air, N ₂		Air, N ₂		
Sensor input amount		1 input		1 input		1 input	4 inputs
Calibration method		Push-button calibration		Push-button calibration		Push-button calibration	
Rated flow range	0.2 to 10 L/min 0.5 to 25 L/min 1 to 50 L/min 2 to 100 L/min		0 to 0.5 L/min 0 to 1 L/min 0 to 3 L/min		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		
Power supply voltage	24 VDC ±10%		24 VDC ±10%		12 to 24 VDC ±10%		
Temperature characteristics (25°C reference)	±2% F.S. (15 to 35°C) ±5% F.S. (0 to 50°C)	±0.5% F.S. (0 to 50°C)	±2% F.S. (15 to 35°C) ±5% F.S. (0 to 50°C)	±0.5% F.S. (0 to 50°C)	±2% F.S. (15 to 35°C) ±3% F.S. (0 to 50°C)	±1% F.S. (15 to 35°C) ±2% F.S. (0 to 50°C)	±2% F.S. (0 to 50°C)
Repeatability	±0.1% F.S. (Fluid: Dry air) Analog output: ±5% F.S.	±0.1% F.S. (Fluid: Dry air) Analog output: ±5% F.S.	±0.1% F.S. (Fluid: Dry air) Analog output: ±5% F.S.	±0.1% F.S. (Fluid: Dry air) Analog output: ±5% F.S.	±1% F.S. (Connected with PF2A3□) ±2% F.S. (Connected with PF2A2□)	±0.1% F.S.	±3% F.S.
Hysteresis		Hysteresis mode: Variable Window comparator mode: Variable		Hysteresis mode: Variable Window comparator mode: Variable		Hysteresis mode: Variable Window comparator mode: Fixed (3 digits*) * Digit is min. calibration unit.	
Output	Analog voltage output Analog current output	NPN/PNP open collector Accumulated pulse output Analog voltage output Analog current output	Analog voltage output Analog current output	NPN/PNP open collector Analog voltage output Analog current output	Analog voltage output Analog current output	NPN/PNP open collector Accumulated pulse output	
Display		2-color display		2-color display		1-color display	1-color display
Enclosure	IP40		IP40		IP65	IP40	Front only: IP65 The rest: IP40
Note	Flow adjustment valve integrable Panel mounting possible Manifold mountable DIN rail mountable	Panel mounting possible Selectable flow rate display unit Security code setting function Power-saving mode Accumulated flow display function	Manifold mountable	Panel mounting possible Selectable flow rate display unit Security code setting function Power-saving mode Auto shift function	Connectable with 4 ch monitor (Analog voltage output only)	Selectable flow rate display unit Accumulated flow display function	
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Sensor unit	Monitor unit	Sensor unit	Sensor unit	Monitor unit	Sensor unit	Monitor unit	
PF3W5	PF3W3						
Water, ethylene glycol aqueous solution		Water, deionized water, chemicals PVC piping type	Water, Water-soluble coolant		Deionized water, Fluids that do not corrode or clog SuperPPA.		
	1 input			1 input		1 input	4 inputs
	Push-button calibration			Push-button calibration		Push-button calibration	
0.5 to 4 L/min 2 to 16 L/min 5 to 40 L/min 10 to 100 L/min 50 to 250 L/min		10 to 100 L/min 30 to 250 L/min	0.5 to 20 L/min 2.5 to 100 L/min 5 to 200 L/min		0.4 to 4 L/min 1.8 to 20 L/min 4 to 40 L/min		
12 to 24 VDC $\pm 10\%$			24 VDC $\pm 10\%$		12 to 24 VDC $\pm 10\%$		
$\pm 5\%$ F.S. (0 to 50°C)	$\pm 0.5\%$ F.S. (0 to 50°C)	$\pm 5\%$ F.S. (0 to 50°C)	$\pm 5\%$ F.S.		$\pm 5\%$ F.S. (0 to 50°C)	$\pm 1\%$ F.S. (15 to 35°C) $\pm 2\%$ F.S. (0 to 50°C)	$\pm 2\%$ F.S. (0 to 50°C)
$\pm 2\%$ F.S.	$\pm 0.5\%$ F.S.	$\pm 2\%$ F.S.	$\pm 1.5\%$ F.S.	$\pm 0.5\%$ F.S.	$\pm 1\%$ F.S.	$\pm 0.5\%$ F.S.	$\pm 3\%$ F.S.
	Variable			Variable		Hysteresis mode: Variable Window comparator mode: Fixed (3 digits*) * Digit is min. calibration unit.	
Analog voltage output Analog current output	NPN/PNP open collector Analog voltage output Analog current output	Analog voltage output Analog current output	Analog voltage output Analog current output	NPN/PNP open collector Analog voltage output Analog current output	Analog voltage output Analog current output	NPN/PNP open collector Accumulated pulse output	
	3-color display			3-color display		1-color display	1-color display
IP65	Front only: IP65 The rest: IP40	IP65	IP65	Front only: IP65 The rest: IP40	IP65	IP40	Front only: IP65 The rest: IP40
Temperature sensor and flow adjustment valve integrable Flow indicator	3-step setting Copy function 3-color/ 2-screen display	Flow indicator		3-color/ 2-screen display	Connectable with 4 ch monitor (Analog voltage output only)	Selectable flow rate display unit Accumulated flow display function	
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PFM
PFMB
PFMC
PFMV
PF2A
PF3W
LFE
PF2D
IF