

For Water

Digital Flow Switch/High Temperature Fluid Type

Series PFW



How to Order

Integrated Display Type PFW7 20 T — [] 03 — 27 [] — []

Flow rate range

04	0.5 to 4 /min
20	2 to 16 /min
40	5 to 40 /min

Temperature range

T	0° to 90°C
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Thread type

Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Flow rate (/min)			Applicable models
		4	16	40	
03	3/8	●	●		PFW704T, PFW720T
04	1/2	●	●	●	PFW720T, PFW740T
06	3/4			●	PFW740T

Unit specification

Nil	With unit switching function
M	Fixed SI unit (Note)

Note) Fixed units:
Real-time flow rate: /min
Accumulated flow: /

Wiring specification

Nil	3m lead wire with connector
N	Without lead wire

Output specification

27	NPN open collector 2 outputs
67	PNP open collector 2 outputs

Specifications

Model	PFW704T	PFW720T	PFW740T
Measured fluid	Water		
Detection type	Karman vortex		
Flow rate measurement and setting range	0.5 to 4 (setting is 0.6 to 4) /min	2 to 16 /min	5 to 40 /min
Minimum setting unit	0.05 /min	0.1 /min	0.5 /min
Display units ^{Note 1)}	Real-time flow rate	/min, gal (US)/min	
	Accumulated flow	/, gal (US)	
Operating pressure range	0 to 1MPa		
Withstand pressure	1.5MPa		
Accumulated flow range	0 to 999999 /		
Operating Temperature range	Fluid temperature	0° to 90°C (with no cavitation)	
	Ambient temperature	0° to 50°C (with no condensation)	
Linearity	±5% F.S. or less		
Repeatability	±3% F.S. or less		
Temperature characteristics	±5% F.S. or less		
Output specifications ^{Note 2)}	Switch output	NPN open collector	Maximum load current: 80mA; Internal voltage drop: 1V or less (with load current of 80mA) Maximum applied voltage: 30V
		PNP open collector	Maximum load current: 80mA Internal voltage drop: 1.5V or less (with load current of 80mA)
Indication lights	Lights up when output is ON OUT1: Green; OUT2: Red		
Response time	1 sec. or less		
Hysteresis	Hysteresis mode: Variable (can be set from 0); Window comparator mode: 3-digit fixed ^{Note 3)}		
Power supply voltage	12 to 24VDC (ripple ±10% or less)		
Current consumption	70mA or less		
Withstand voltage	1000VAC for 1 min. between external terminal and case		
Insulation resistance	50MΩ (500VDC) between external terminal and case		
Noise resistance	1000Vp-p, Pulse width 1μs, Rise time 1ns		
Vibration resistance	10 to 500Hz at whichever is smaller: 1.5mm amplitude or 98m/s ² acceleration, in X, Y, Z directions for 2 hrs. each		
Impact resistance	490m/s ² in X, Y, Z directions 3 times each		
Weight	710g (without lead wire)		
Enclosure	IP65		
Port size (Rc, NPT, G)	3/8	3/8, 1/2	1/2, 3/4

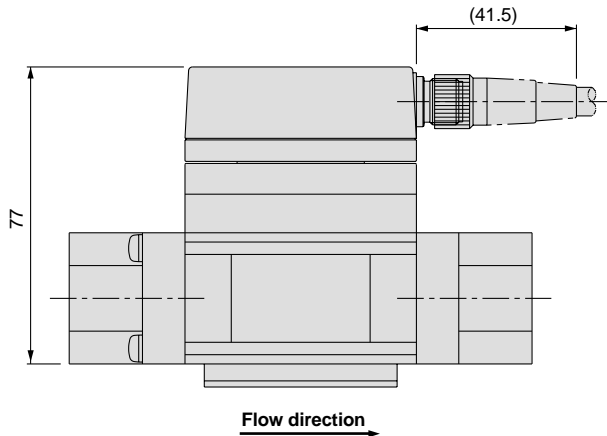
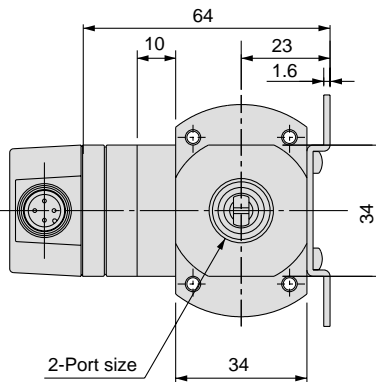
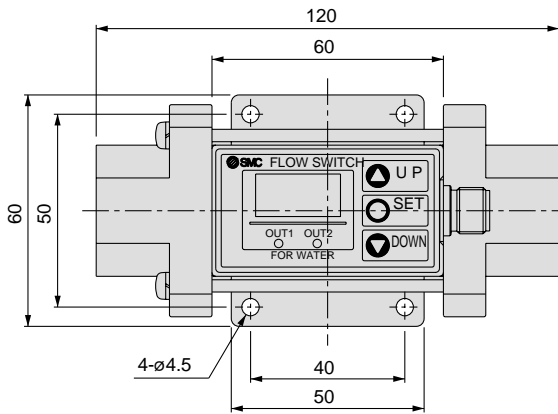
Note 1) For digital flow switch with unit switching function. (Fixed SI unit [/min or /] will be set for switch type without the unit switching function.)

Note 2) The output functions operate only for the real-time flow rate display, and do not operate for the accumulated flow display.

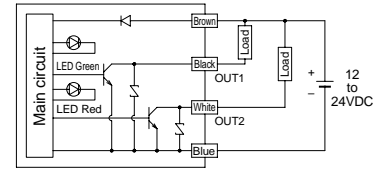
Note 3) Window comparator mode — Since hysteresis will reach 3 digits, keep P1 and P2 apart by 7 digits or more. The minimum setting unit is 1 digit. (refer to the table above).

Dimensions: Integrated Display Type for Water

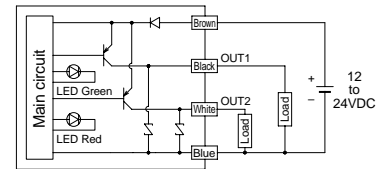
PFW704T, PFW720T, PFW740T



Internal circuits and wiring examples

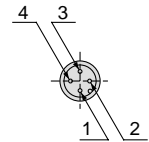


PFW7□□T-□□-27□(-M)



PFW7□□T-□□-67□(-M)

Connector pin numbers



Pin no.	Pin description
1	DC(+)
2	OUT2
3	DC(-)
4	OUT1