

New

3-color display Digital Flow Switch for Water

3-color/2-screen display



Main screen

Sub screen
Note 3)

Main screen	Instantaneous flow rate <small>Note 1)</small>
Sub screen <small>Note 3)</small>	Set value



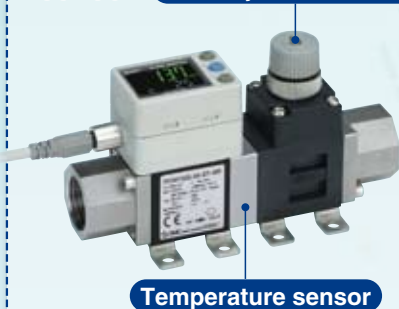
Instantaneous flow rate <small>Note 1)</small>			
Accumulated value	Peak/Bottom value	Line name	Fluid temperature <small>Note 2)</small>

Note 1) Main screen shows the instantaneous flow rate only.
 Note 2) Fluid temperature can be displayed only when the digital flow switch with a temperature sensor is selected.
 Note 3) Sub screen can be turned off.

New Flow range: Line up 250 L type



Integrated flow adjustment valve and temperature sensor



Temperature sensor

Remote type



Remote sensor unit

Remote type
3-color display Digital flow monitor

PVC piping type



- Applicable fluid: Deionized water, chemical, etc.
- Integrated type and remote type added to series.

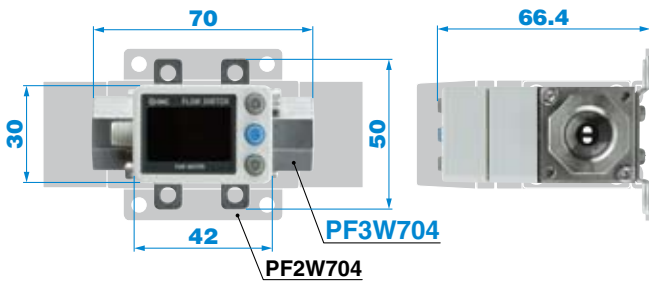
Series PF3W

IP65

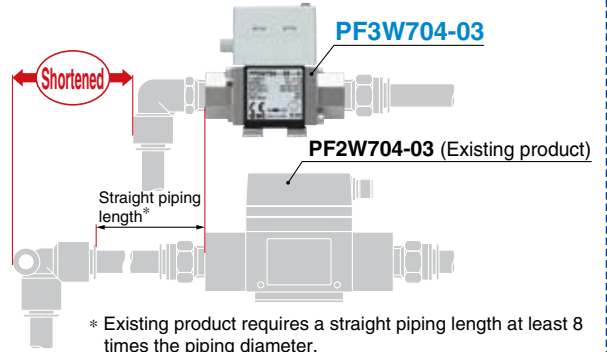


CAT.ES100-80C

40% smaller than existing product



Reducing piping space



Temperature sensor

Display range: **-10 to 110°C**
(Temperature sensor alone)

Minimum setting unit: **1°C**

Analog output:
Current output/Voltage output



Temperature display



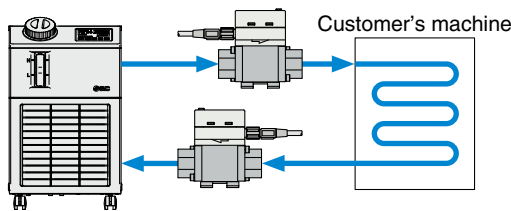
Flow adjustment valve

Space saving and reduced piping labor

Fluid temperature: 0 to 90°C

Ethylene glycol aqueous solution can be used

Example) Flow control of the circulating fluid in a chiller

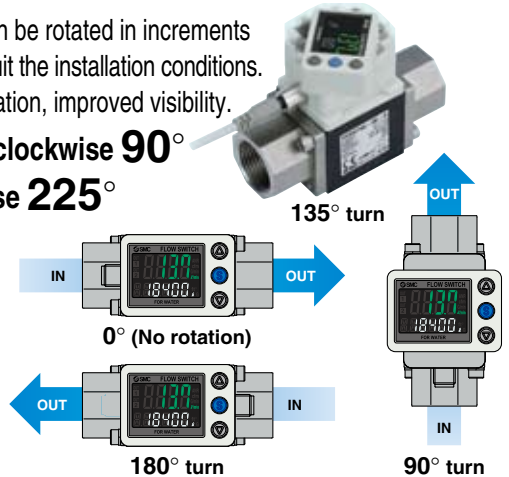


Rotatable display

Display can be rotated in increments of 45° to suit the installation conditions. Easy operation, improved visibility.

Counterclockwise **90°**

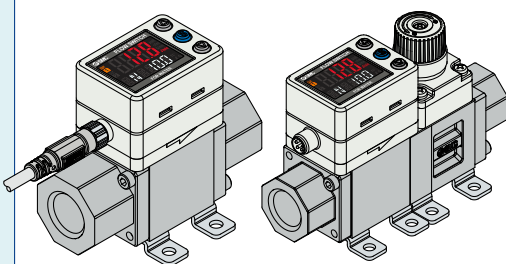
Clockwise **225°**



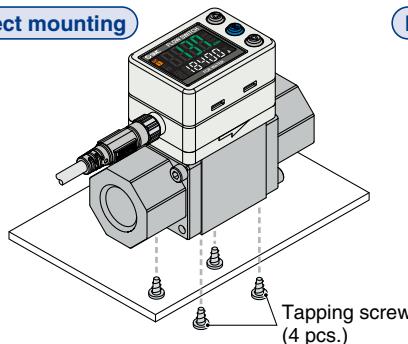
Non-grease

Mounting

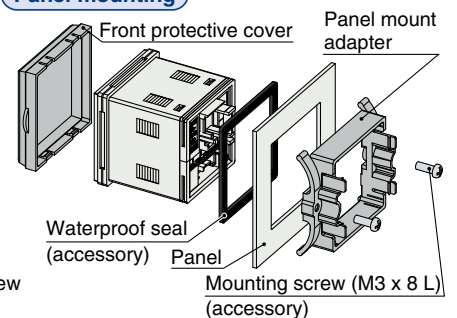
Bracket mounting



Direct mounting

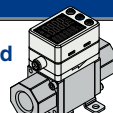
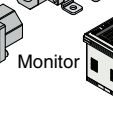
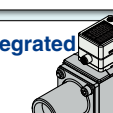
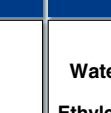
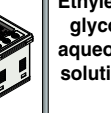



Panel mounting



Measured flow rate **250 L/min** added

Variations

Type	Applicable fluid	Rated flow range (L/min)	Flow adjustment valve/Temperature sensor				Port size Rc, NPT, G
			None	Flow adjustment valve	Temperature sensor	Flow adjustment valve + Temperature sensor	
Integrated  Remote sensor  	Water	0.5 to 4	●	●	●	●	3/8
		2 to 16	●	●	●	●	3/8, 1/2
	Ethylene glycol aqueous solution	5 to 40	●	—	●	—	1/2, 3/4
		10 to 100	●	—	●	—	3/4, 1
		New 50 to 250	●	—	●	—	1 1/4, 1 1/2
PVC piping type Integrated  Remote sensor  	Deionized water	10 to 100	●	—	—	—	25A
	Chemical	New 30 to 250	●	—	—	—	30A

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3-Color Display Digital Flow Switch for PVC Piping PF3W

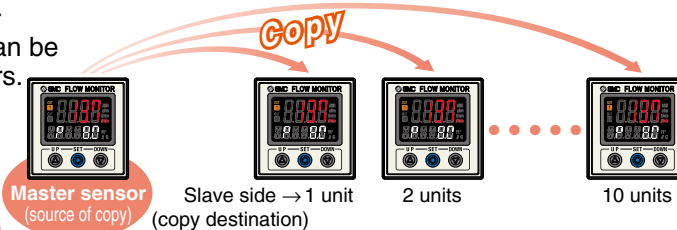
3-Color Display Digital Flow Monitor for Water PF3W3

Function Details

3-color display Digital flow monitor can copy to up to 10 switches simultaneously.

The settings of the master sensor (source of copy) can be copied to the slave sensors.

- **Reducing setting labor**
- **Minimizing risk of mistakes in setting**



Indicator

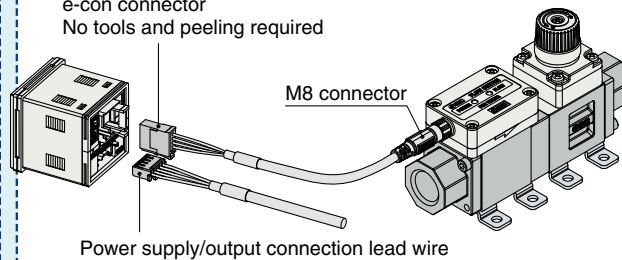
Visually check status of sensor via indicator.



Flow rate: High	●	Blinking green/Fast
Flow rate: Low	●	Blinking green/Slow
Rated flow or less	●	OFF
Rated flow or more	●	Red ON

Reducing wiring labor by connector

e-con connector
No tools and peeling required



PVC piping type



Wetted Parts

Pipe	CPVC (Heat resistant PVC)
Body	PPS
Seal	FKM

3-color display

Digital Flow Switch for Water

Series PF3W



How to Order

Remote sensor unit Output specification/Temperature sensor

For how to order of remote monitor unit, refer to page 18.



Symbol	OUT1	OUT2	Temperature sensor
	Flow rate	Temperature	
1	Analog 1 to 5 V	—	None
2	Analog 4 to 20 mA	—	
1T	Analog 1 to 5 V	Analog 1 to 5 V	

* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

Note) Analog output of 4 to 20 mA with temperature sensor is made to order. (Refer to page 10.)

Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate	Temperature
Nil	L/min	°C
G*	L/min (gal/min)	°C/°F

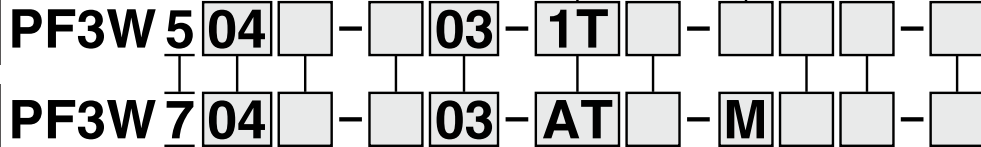
* Under the New Measurement Law, units other than SI (symbol "Nil") cannot be used in Japan.

Note) G: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]
1 [gal/min] ↔ 3.785 [L/min]
°F = 9/5°C + 32

Remote sensor unit

Integrated display



Type

5	Remote sensor unit
7	Integrated display

Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min
21	50 to 250 L/min

Thread type

Nil	Rc
N	NPT
F	G*

* ISO228 equivalent

Port size

Symbol	Port size	Rated flow range				
		04	20	40	11	21
03	3/8	●	●	—	—	—
04	1/2	—	●	●	—	—
06	3/4	—	—	●	●	—
10	1 1/1	—	—	—	●	—
12	1 1/4	—	—	—	—	●
14	1 1/2	—	—	—	—	●

Flow adjustment valve

Symbol	With/without flow adjustment valve	Rated flow range				
		04	20	40	11	21
Nil	None	●	●	●	●	●
S	Yes	●	●	●	—	—

Note 1) 100 and 250 L/min types with flow adjustment valves are not available.

Note 2) The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

Note 1) External input: The accumulated value, peak value, and bottom value can be reset.

Note 2) For units with temperature sensor, OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

Integrated display Output specification/Temperature sensor

Symbol	OUT1	OUT2		Temperature sensor
	Flow rate	Flow rate	Temperature	
A	NPN	NPN	—	None
B	PNP	PNP	—	
C	NPN	Analog 1 to 5 V	—	
D	NPN	Analog 4 to 20 mA	—	
E	PNP	Analog 1 to 5 V	—	
F	PNP	Analog 4 to 20 mA	—	
G	NPN	External input ^{Note 1)}	—	
H	PNP	External input ^{Note 1)}	—	
AT	NPN	(NPN) ^{Note 2)}	NPN	With temperature sensor
BT	PNP	(PNP) ^{Note 2)}	PNP	
CT	NPN	(Analog 1 to 5 V) ^{Note 2)}	Analog 1 to 5 V	
DT	NPN	(Analog 4 to 20 mA) ^{Note 2)}	Analog 4 to 20 mA	
ET	PNP	(Analog 1 to 5 V) ^{Note 2)}	Analog 1 to 5 V	
FT	PNP	(Analog 4 to 20 mA) ^{Note 2)}	Analog 4 to 20 mA	

Options/Part No.

When optional parts are required separately, use the following part numbers to place an order.

Description	Part no.	Qty.	Note
Bracket ^{Note)}	ZS-40-K	1	For PF3W704/720/504/520 With 4 tapping screws (3 x 8)
	ZS-40-L	1	For PF3W740/540 With 4 tapping screws (3 x 8)
	ZS-40-M	1	For PF3W711/511 With 4 tapping screws (4 x 10)
Lead wire with M8 connector	ZS-40-A	1	Lead wire length (3 m)

Note) For units with flow adjustment valve, 2 brackets are required.



Made to Order

X109	Seal material EPDM
X128	Analog 4 to 20 mA 2 output type ^{Note)}
X143	Piping material brass

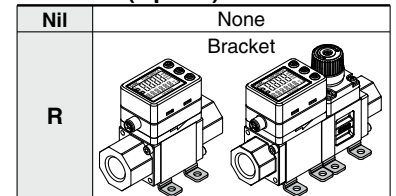
Note) Applicable only for remote type with temperature sensor (Refer to page 10.)

Calibration certificate (Only flow sensor)

Nil	None
A	With calibration certificate

* The certificate is written in both English and Japanese. Integrated display type with temperature sensor can only display flow rate.

Bracket (Option)



Note) With bracket is not available for 250 L/min type.

Integrated display/Unit specification

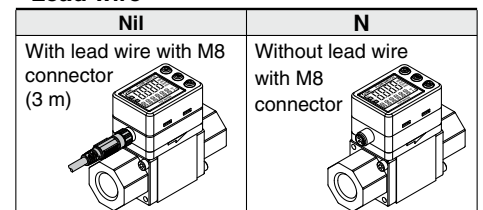
Symbol	Instantaneous flow rate	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

* Under the New Measurement Law, units other than SI (symbol "M") cannot be used in Japan.

Note) G, F, J: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]
1 [gal/min] ↔ 3.785 [L/min]
°F = 9/5°C + 32

Lead wire



3-color display Digital Flow Switch for Water Series PF3W

Refer to "Handling Precautions for SMC Products" for Flow Switch Precautions and the Operation Manual in our website for Specific Product Precautions.

Specifications (Integrated Display)

Model	PF3W704	PF3W720	PF3W740	PF3W711	PF3W721	
Applicable fluid	Water and ethylene glycol aqueous solution (with viscosity of 3 mPa·s [3 cP] or less) ^{Note 1)}					
Detection method	Karman vortex					
Rated flow range	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	
Display flow range	0.35 to 5.50 L/min (Flow under 0.35 L/min is displayed as "0.00")	1.7 to 22.0 L/min (Flow under 1.7 L/min is displayed as "0.0")	3.5 to 55.0 L/min (Flow under 3.5 L/min is displayed as "0.0")	7 to 140 L/min (Flow under 7 L/min is displayed as "0")	20 to 350 L/min (Flow under 20 L/min is displayed as "0")	
Set flow range	0.35 to 5.50 L/min	1.7 to 22.0 L/min	3.5 to 55.0 L/min	7 to 140 L/min	20 to 350 L/min	
Minimum setting unit	0.01 L/min	0.1 L/min	0.1 L/min	1 L/min	2 L/min	
Conversion of accumulated pulse (Pulse width: 50 ms)	0.05 L/pulse	0.1 L/pulse	0.5 L/pulse	1 L/pulse	2 L/pulse	
Fluid temperature	0 to 90°C (with no freezing and condensation)					
Display unit	Instantaneous flow rate: L/min, Accumulated flow: L					
Accuracy	Display value: ±3% F.S. Analog output: ±3% F.S.					
Repeatability	±2% F.S. ^{Note 2)}					
Temperature characteristics	±5% F.S. (25°C reference)					
Operating pressure range ^{Note 3)}	0 to 1 MPa					
Proof pressure ^{Note 3)}	1.5 MPa					
Pressure loss (without flow adjustment valve)	45 kPa or less at the maximum flow				60 kPa or less at the maximum flow	
Accumulated flow range ^{Note 4)}	99999999.9 L		99999999 L			
Switch output	NPN or PNP open collector output					
Maximum load current	80 mA					
Maximum applied voltage	28 VDC					
Internal voltage drop	NPN: 1 V or less (at 80 mA load current) PNP: 1.5 V or less (at 80 mA load current)					
Response time ^{Note 2), 5)}	0.5 s/1 s/2 s					
Output protection	Short circuit protection					
Output mode	Select from hysteresis mode, window comparator mode, accumulated output mode, or accumulated pulse output mode.					
Flow rate mode	Select from hysteresis mode or window comparator mode.					
Temperature mode	Select from hysteresis mode or window comparator mode.					
Response time ^{Note 6)}	0.5 s/1 s/2 s (linked with the switch output)					
Voltage output	Voltage output: 1 to 5 V Output impedance: 1 kΩ					
Current output	Output current: 4 to 20 mA Max. load impedance: 300 Ω for 12 VDC, 600 Ω for 24 VDC					
Hysteresis	Variable					
External input	Voltage free input: 0.4 V or less (Reed or Solid state), input for 30 ms or longer					
Display method	2-screen display (Main screen: 4-digit, 7-segment, 2-color, Red/Green Sub screen: 6-digit, 11-segment, White) Display values updated 5 times per second					
Indicator light	Output 1, Output 2: Orange					
Power supply voltage	12 to 24 VDC ±10%					
Current consumption	50 mA or less					
Environment	IP65					
Operating temperature range	0 to 50°C (with no freezing and condensation)					
Operating humidity range	Operation, Storage: 35 to 85% R.H. (with no condensation)					
Withstand voltage ^{Note 7)}	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 marking, UL (CSA), RoHS					
Wetted parts material ^{Note 8)}	PPS, Stainless steel 304, FKM, SCS13					
Piping port size	3/8	3/8, 1/2	1/2, 3/4	3/4, 1	1 1/4, 1 1/2	
Weight	Without temperature sensor/Without flow adjustment valve	210 g	260 g	410 g	720 g	890 g
	With temperature sensor/Without flow adjustment valve	285 g	335 g	530 g	860 g	1075 g
	Without temperature sensor/With flow adjustment valve	310 g	360 g	610 g	—	—
	With temperature sensor/With flow adjustment valve	385 g	435 g	730 g	—	—
With lead wire with connector	+85 g					

- Note 1) Refer to "Measurable Range for Ethylene Glycol Aqueous Solution" on page 6. Measurement can be performed with a fluid that does not corrode wetted parts and has viscosity of 3 mPa·s [3 cP] or less. Be aware that water leakage may happen due to internal seal shrinkage or swelling depending on kinds of fluid.
- Note 2) When 0.5 s is selected for the response time of the switch output, the repeatability becomes ±3% F.S.
- Note 3) Operating pressure range and proof pressure change according to the fluid temperature. Refer to page 4.
- Note 4) Cleared by turning off the power supply. It is possible to select the function to memorize it. (Every 2 or 5 minutes) When 5 minutes memorizing is selected, the lifetime of the memory element (electronic part) is 1 million times (5 minutes x 1 million times = 5 million minutes = Approx. 9.5 years for 24 hour energizing). Calculate the lifetime based on your operating conditions before using the memorizing function, and do not exceed it.
- Note 5) The response time when the set value is 90% in relation to the step input. (The response time is 7 s when it is output by the temperature sensor.)
- Note 6) The response time until the set value reaches 90% in relation to the step input. (The response time is 7 s when it is analog output by the temperature sensor.)
- Note 7) When the temperature sensor is used, it will be 250 VAC.
- Note 8) Refer to "Wetted Parts Construction" on page 6 for details.
- Note 9) External scratch marks and dirt are judged as good parts provided that they do not affect product performance.

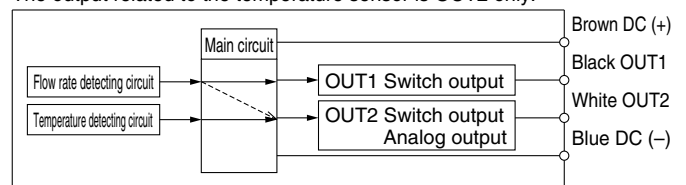
Temperature Sensor Specifications

Rated temperature range	0 to 100°C ^{Note 1)}
Setting/Display temperature range	-10 to 110°C
Minimum setting unit	1°C
Display unit	°C
Display accuracy	±2°C
Analog output accuracy	±3% F.S.
Response time	7 s ^{Note 2)}
Ambient temperature characteristics	±5% F.S.

Note 1) The rated temperature range is for the temperature sensor alone.
The fluid temperature range specification of the flow switch as a whole is 0 to 90°C.

Note 2) The response time is for the temperature sensor alone.

The output related to the temperature sensor is OUT2 only.



The OUT2 can be selected from the output for temperature or flow rate by button operation.

Series PF3W

Refer to "Handling Precautions for SMC Products" for Flow Switch Precautions and the Operation Manual in our website for Specific Product Precautions.

Specifications (Remote Sensor Unit)

Refer to page 18 for monitor unit specifications.

Model	PF3W504	PF3W520	PF3W540	PF3W511	PF3W521	
Applicable fluid	Water and ethylene glycol aqueous solution (with viscosity of 3 mPa·s [3 cP] or less) ^{Note 1)}					
Detection method	Karman vortex					
Rated flow range	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	
Fluid temperature	0 to 90°C (with no freezing and condensation)					
Accuracy	±3% F.S.					
Repeatability	±2% F.S.					
Temperature characteristics	±5% F.S. (25°C reference)					
Operating pressure range ^{Note 2)}	0 to 1 MPa ^{Note 2)}					
Proof pressure ^{Note 2)}	1.5 MPa					
Pressure loss (without flow adjustment valve)	45 kPa or less at the maximum flow				60 kPa or less at the maximum flow	
Analog output	Response time ^{Note 3)}	1s				
	Voltage output	Voltage output: 1 to 5 V Output impedance: 1 kΩ				
	Current output	Output current: 4 to 20 mA Max. load impedance: 300 Ω for 12 VDC, 600 Ω for 24 VDC				
Indicator light	For power supply status, flow rate indicator (Blinking speed changes in response to flow rate), and other error indicator					
Power supply voltage	12 to 24 VDC ±10%					
Current consumption	30 mA or less					
Environment	Enclosure	IP65				
	Operating temperature range	0 to 50°C (with no freezing and condensation)				
	Operating humidity range	Operation, Storage: 35 to 85% R.H. (with no condensation)				
	Withstand voltage ^{Note 4)}	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 marking, UL (CSA), RoHS					
Wetted parts material ^{Note 5)}	PPS, Stainless steel 304, FKM, SCS13					
Piping port size	3/8		3/8, 1/2		1 1/4, 1 1/2	
	3/8	1/2, 3/4	3/4, 1		1 1/4, 1 1/2	
Weight	Without temperature sensor/Without flow adjustment valve	195 g	245 g	395 g	705 g	875 g
	With temperature sensor/Without flow adjustment valve	270 g	320 g	515 g	840 g	1060 g
	Without temperature sensor/With flow adjustment valve	295 g	345 g	595 g	—	—
	With temperature sensor/With flow adjustment valve	370 g	415 g	715 g	—	—
	With lead wire with connector	+85 g				

Note 1) Refer to "Measurable Range for Ethylene Glycol Aqueous Solution" on page 6.

Measurement can be performed with a fluid that does not corrode wetted parts and has viscosity of 3 mPa·s [3 cP] or less. Be aware that water leakage may happen due to internal seal shrinkage or swelling depending on kinds of fluid.

Note 2) Operating pressure range and proof pressure change according to the fluid temperature. Refer to the graphs below.

Note 3) The response time until the set value reaches 90% in relation to the step input. (The response time is 7 s when it is analog output by the temperature sensor.)

Note 4) When the temperature sensor is used, it will be 250 VAC.

Note 5) Refer to "Wetted Parts Construction" on page 6 for details.

Note 6) External scratch marks and dirt are judged as good parts provided that they do not affect product performance.

Temperature Sensor Specifications

Rated temperature range	0 to 100°C ^{Note 1)}
Analog output accuracy	±3% F.S.
Response time	7 s ^{Note 2)}
Ambient temperature characteristics	±5% F.S.

Note 1) The rated temperature range is for the temperature sensor alone.

The fluid temperature range specification of the flow switch as a whole is 0 to 90°C.

Note 2) The response time is for the temperature sensor alone.

Set Flow Range and Rated Flow Range



Caution Set the flow within the rated flow range.

The set flow range is the range of flow rate that is possible in setting.

The rated flow range is the range that satisfies the sensor's specifications (accuracy etc.).

Although it is possible to set a value outside the rated flow range, the specifications will not be guaranteed even if the value stays within the set flow range.

Sensor	Flow range									
	0.5 L/min	2 L/min	5 L/min	20 L/min	40 L/min	100 L/min	140 L/min	250 L/min	350 L/min	
PF3W704 PF3W504	0.5 L/min	4 L/min								
	0.35 L/min	5.5 L/min								
	0.35 L/min	5.5 L/min								
PF3W720 PF3W520	2 L/min	16 L/min								
	1.7 L/min	22 L/min								
	1.7 L/min	22 L/min								
PF3W740 PF3W540		5 L/min	40 L/min							
	3.5 L/min	55 L/min								
	3.5 L/min	55 L/min								
PF3W711 PF3W511		10 L/min	100 L/min							
		7 L/min	140 L/min							
		7 L/min	140 L/min							
PF3W721			20 L/min	250 L/min						350 L/min
			20 L/min	350 L/min						350 L/min
PF3W521			20 L/min	250 L/min						
			20 L/min	280 L/min						
			20 L/min	280 L/min						

* In the case of the PF3W5 series, the displayable and settable ranges are the same as the PF3W3 series flow monitor.

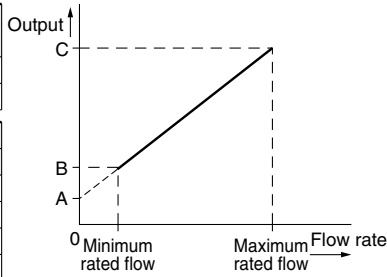
Rated flow range Display flow range Set flow range

Analog Output

Flow rate/Analog output

	A	B		C	
		4/16/40	100 250		
Voltage output	1 V	1.5 V	1.4 V	1.8 V	5 V
Current output	4 mA	6 mA	5.6 mA	7.2 mA	20 mA

Model	Rated flow [L/min]	
	Minimum	Maximum
PF3W704/504	0.5	4
PF3W720/520	2	16
PF3W740/540	5	40
PF3W711/511	10	100
PF3W721/521	50	250

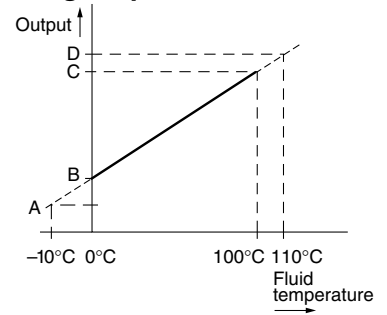


Fluid temperature/Analog output

PF3W7/5

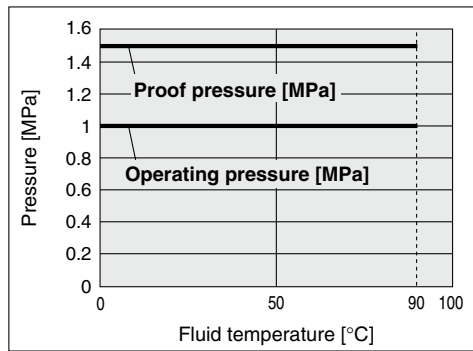
	A	B
Voltage output	0.6 V	1 V
Current output	2.4 mA	4 mA

	C	D
Voltage output	5 V	5.4 V
Current output	20 mA	21.6 mA

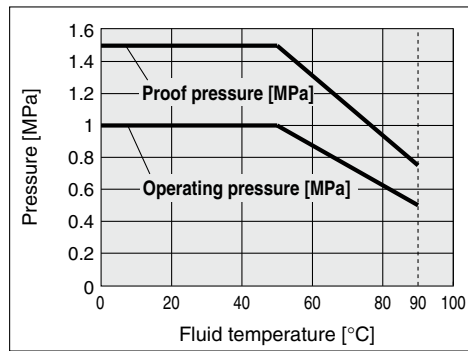


Operating Pressure and Proof Pressure

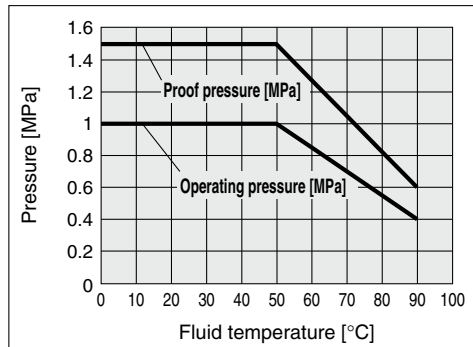
PF3W704/720/740/504/520/540



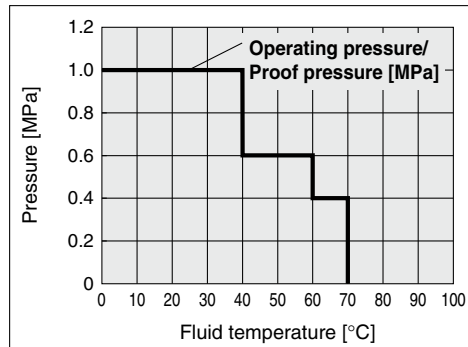
PF3W704S/720S/740S/504S/520S/540S



PF3W711/511



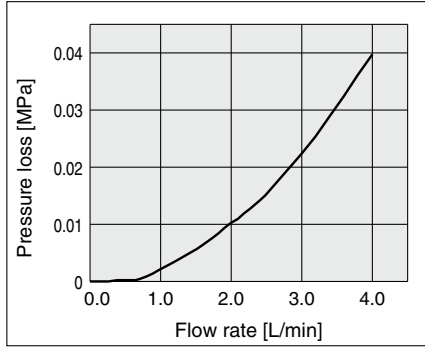
PF3W721/521



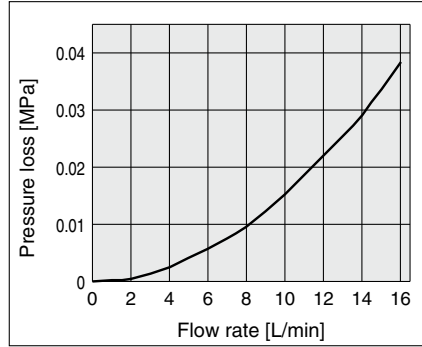
Series PF3W

Flow-rate Characteristics (Pressure Loss: Without Flow Adjustment Valve)

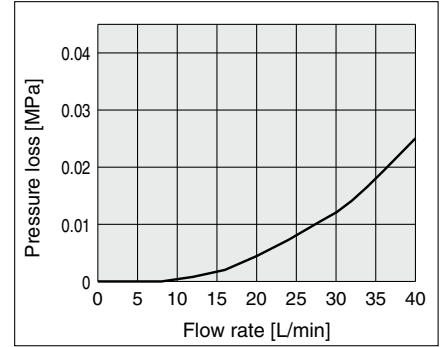
PF3W704/504



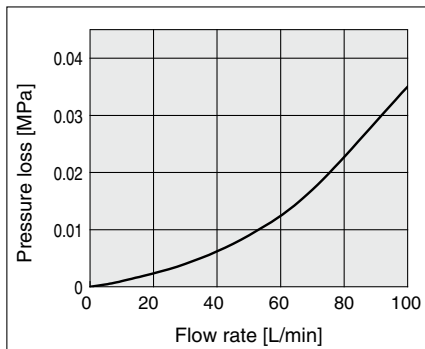
PF3W720/520



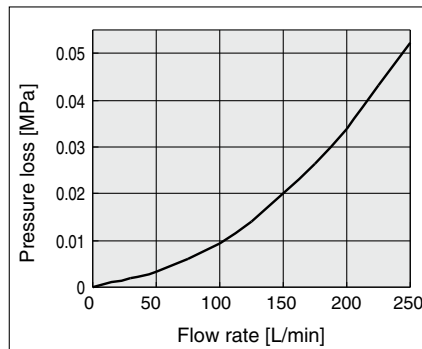
PF3W740/540



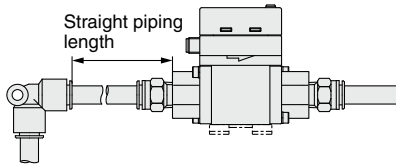
PF3W711/511



PF3W721/521



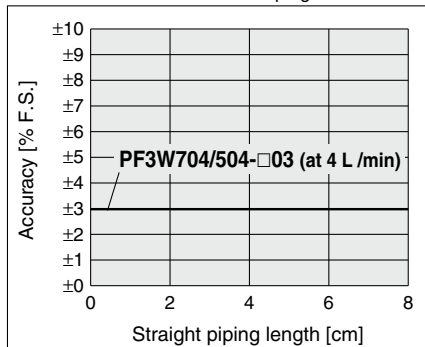
Straight Piping Length and Accuracy (Reference Value)



- The smaller the piping size, the more the product is affected by the straight piping length.
- Fluid pressure has almost no affect.
- Low flow rate lessens the effect of the straight piping length.
- Use a straight pipe that is 8 cm or longer in length to satisfy the $\pm 3\%$ F.S. specification. (11 cm or longer for 100 L/min and 250 L/min types)

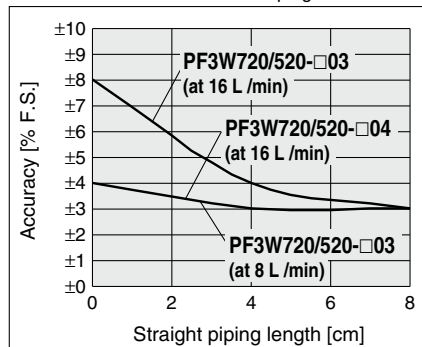
PF3W704/504

Pressure: 0.3 MPa
Piping diameter: $\phi 12$



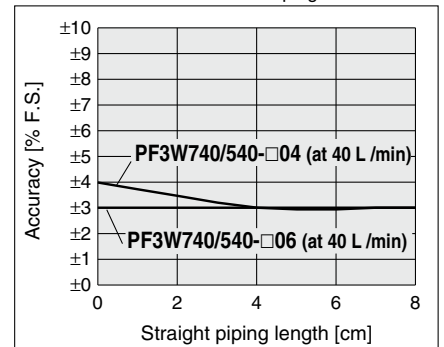
PF3W720/520

Pressure: 0.3 MPa
Piping diameter: $\phi 12$



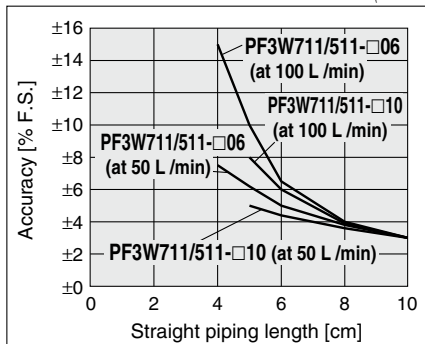
PF3W740/540

Pressure: 0.3 MPa
Piping diameter: $\phi 16$



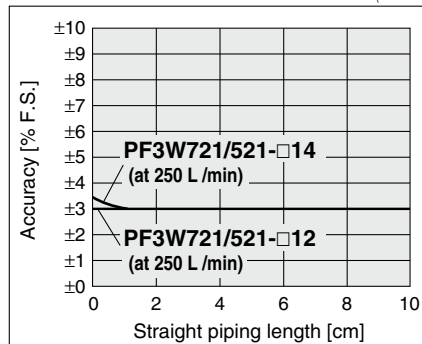
PF3W711/511

Pressure: 0.3 MPa Piping diameter: 25A (Port size 10)
20A (Port size 06)



PF3W721/521

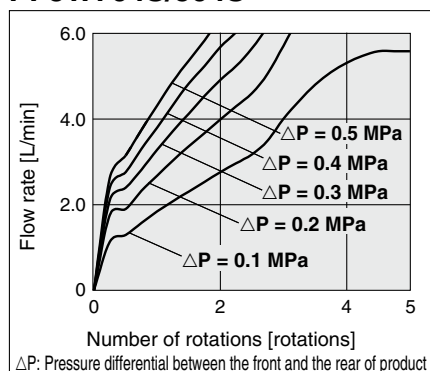
Pressure: 0.3 MPa Piping diameter: 32A (Port size 12)
40A (Port size 14)



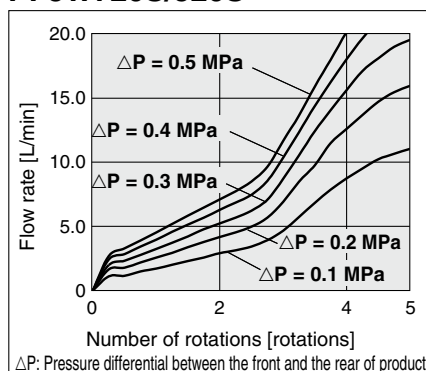
* No data for 4 cm, or for under 5 cm, as these cannot be used due to piping dimensions.

Flow-rate Characteristics of Flow Adjustment Valve

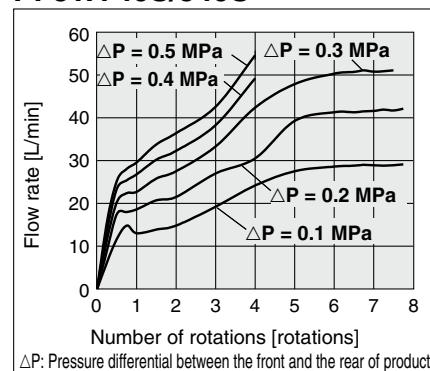
PF3W704S/504S



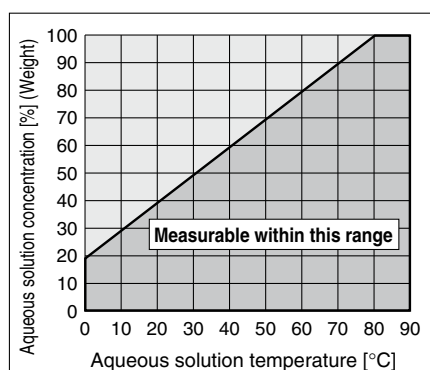
PF3W720S/520S



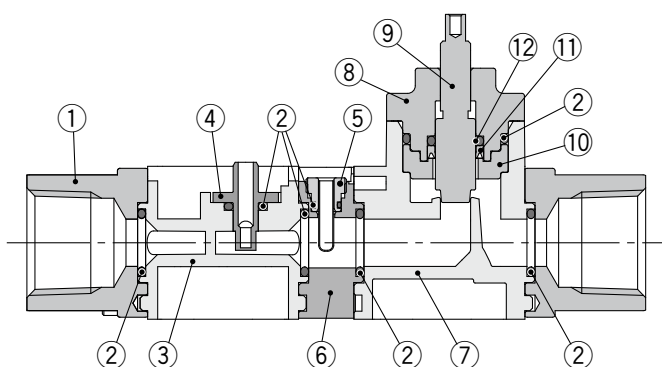
PF3W740S/540S



Measurable Range for Ethylene Glycol Aqueous Solution (Reference Value)



Wetted Parts Construction



Component Parts

No.	Description	Material	Note
1	Attachment	SCS13	Stainless steel 304 equivalent PF3W704/720/740/711/504/520/540/511
		Stainless steel 304	
2	Seal	FKM	
3	Body	PPS	
4	Sensor	PPS	
5	Temperature sensor	Stainless steel 304	With brazing (JIS Z 3261: BAg-7, ISO 3677: B-Ag56CuZnSn-620/650)
6	Temperature sensor body	Stainless steel 304	
7	Flow adjustment valve body	PPS	
8	Flow adjustment valve cover	PPS	
9	Flow adjustment valve shaft	Stainless steel 304	
10	Shaft support	PPS	
11	Y seal	FKM	
12	Cap seal	FKM	

Series PF3W

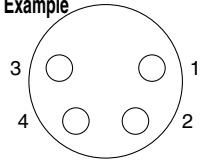
Dimensions

PF3W704/720/740/711/721

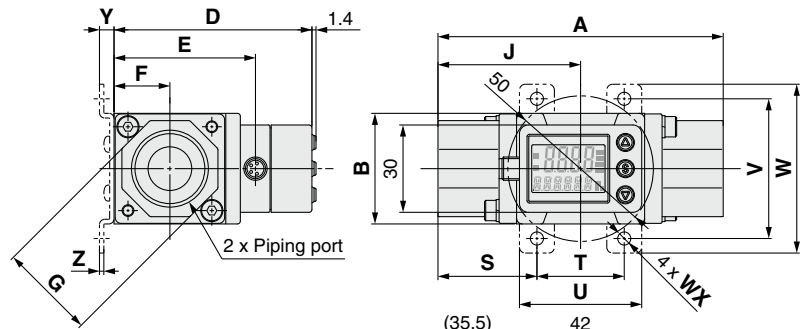
Integrated display

Connector pin number

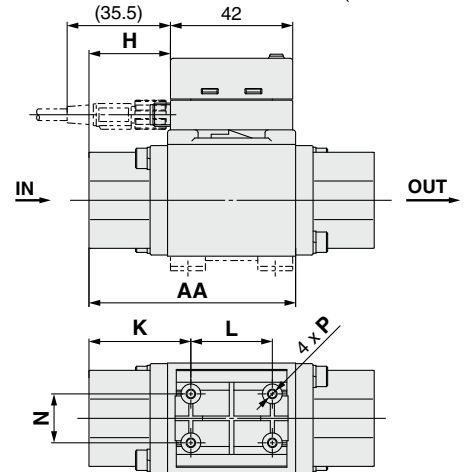
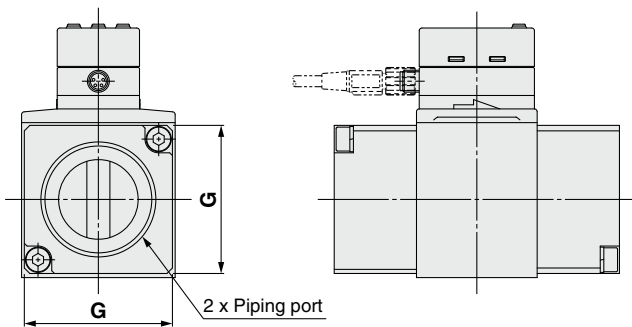
Example



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

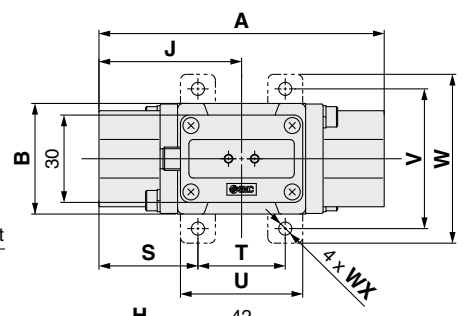
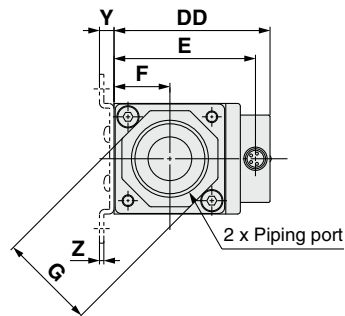


For PF3W721

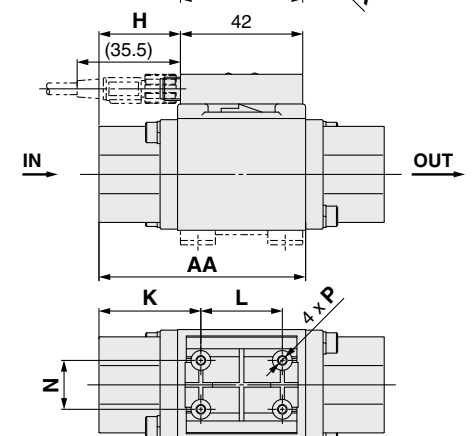
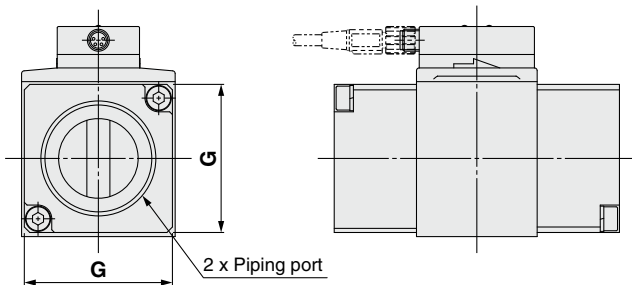


PF3W504/520/540/511/521

Remote sensor unit



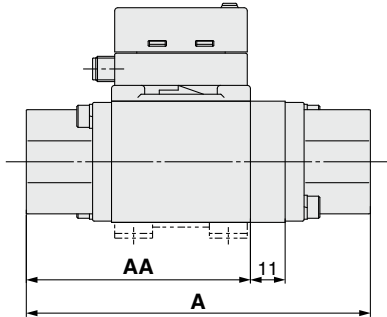
For PF3W521



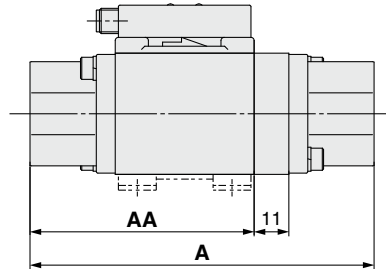
Model	Port size (Rc, NPT, G)	A	AA	B	D	DD	E	F	G	H	J	K	L	N	P	Bracket dimensions										
																S	T	U	V	W	WX	Y	Z			
PF3W704/504	3/8	70	50	30	60	45.6	40.6	15.2	24	14	35	26	18	13.6	ø2.7 depth 14	24	22	32	40	50	4.5	5	1.5			
PF3W720/520	3/8, 1/2	78	54	30	60	45.6	40.6	15.2	27	18	39	30	18	13.6	ø2.7 depth 12	28	22	32	40	50	4.5	5	1.5			
PF3W740/540	1/2, 3/4	98	71	38	68	53.6	48.6	19.2	32	28	49	35	28	16.8	ø2.7 depth 12	34	30	42	48	58	4.5	5	1.5			
PF3W711/511	3/4, 1	124	92	46	77	62.6	57.6	23.0	41	42	63	48	28	18.0	ø3.5 depth 14	44	36	48	58	70	5.5	7	2.0			
PF3W721/521	1 1/4, 1 1/2	104	74	56	91	76.6	71.6	28.5	54	31	52	39.5	25	27.5	ø3.5 depth 14	—	—	—	—	—	—	—	—			
	G1 1/4	108	76																					33	54	41.5
	G1 1/2	112	78																					35	56	43.5

Dimensions

PF3W704/720/740/711-□-□T
 Integrated display: With temperature sensor



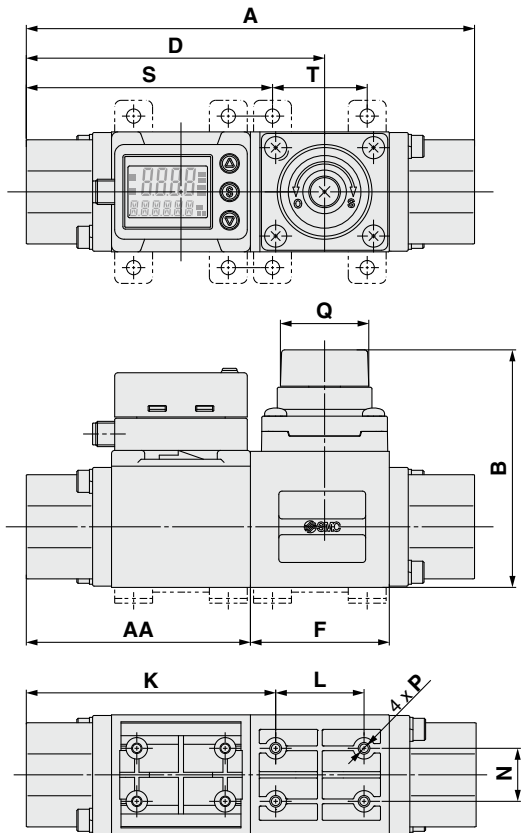
PF3W504/520/540/511-□-□T
 Remote sensor unit: With temperature sensor



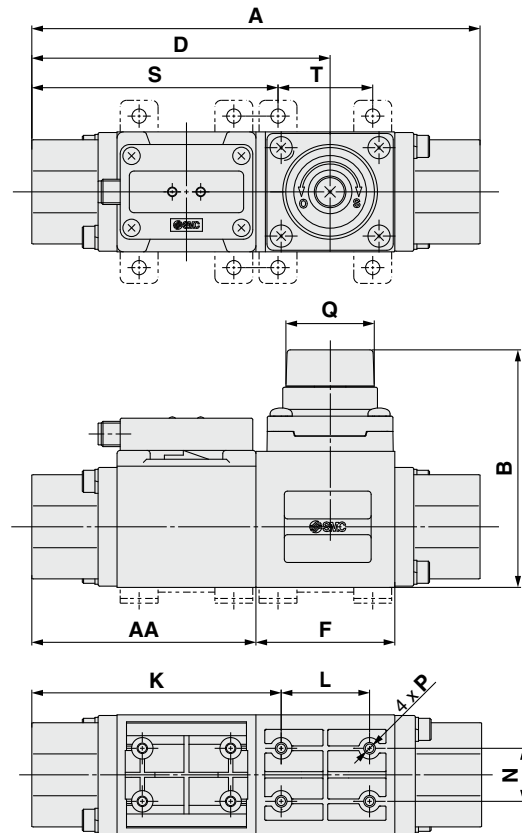
(mm)

Model	A	AA
PF3W704/504-□-□T	81	50
PF3W720/520-□-□T	89	54
PF3W740/540-□-□T	109	71
PF3W711/511-□-□T	135	92
PF3W721/521-□-□T	115	74
PF3W721/521-F12-□T	119	76
PF3W721/521-F14-□T	123	78

PF3W704S/720S/740S
 Integrated display: With flow adjustment valve



PF3W504S/520S/540S
 Remote sensor unit: With flow adjustment valve



(mm)

Model	A	AA	B	D	F	K	L	N	P	Q	Q number of rotations	Bracket dimensions	
												S	T
PF3W704S/504S	104	50	63.6 (Max. 68.6)	70.2	34	58.5	18	13.6	ø2.7 depth 10	ø19	6	56.5	22
PF3W720S/520S	112	54	63.6 (Max. 68.6)	74.2	34	62.5	18	13.6	ø2.7 depth 10	ø19	6	60.5	22
PF3W740S/540S	142	71	75.25 (Max. 81)	94.5	44	79.0	28	16.8	ø2.7 depth 10	ø28	7	78.0	30

3-Color Display Digital Flow Switch for Water
PF3W

3-Color Display Digital Flow Switch for PVC Piping
PF3W

3-Color Display Digital Flow Monitor for Water
PF3W3

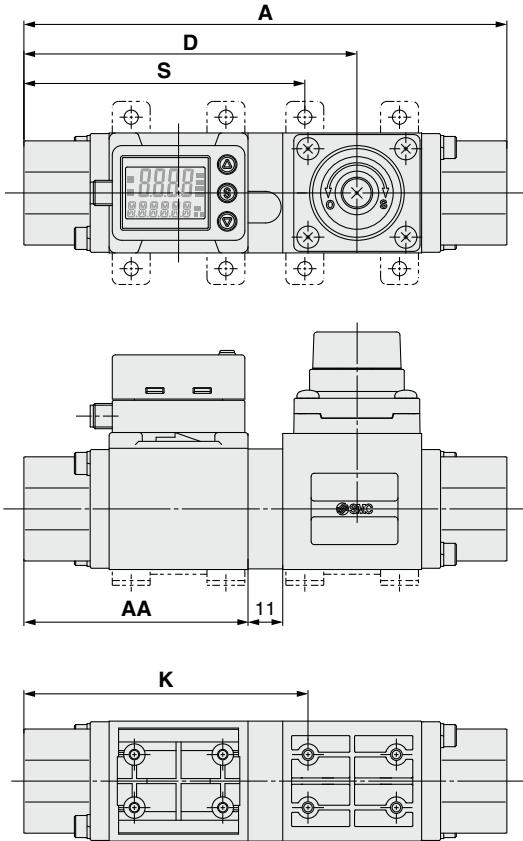
Function Details

Series PF3W

Dimensions

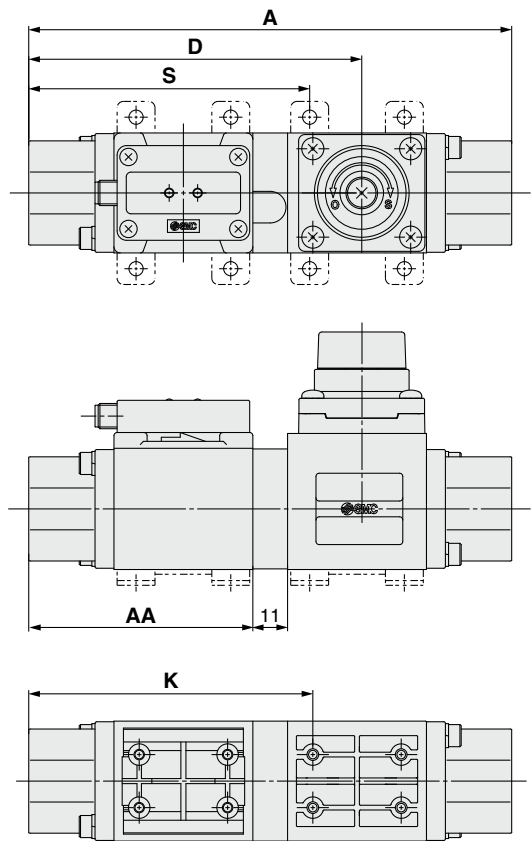
PF3W704S/720S/740S-□-□T

Integrated display: With temperature sensor and flow adjustment valve



PF3W504S/520S/540S-□-□T

Remote sensor unit: With temperature sensor and flow adjustment valve

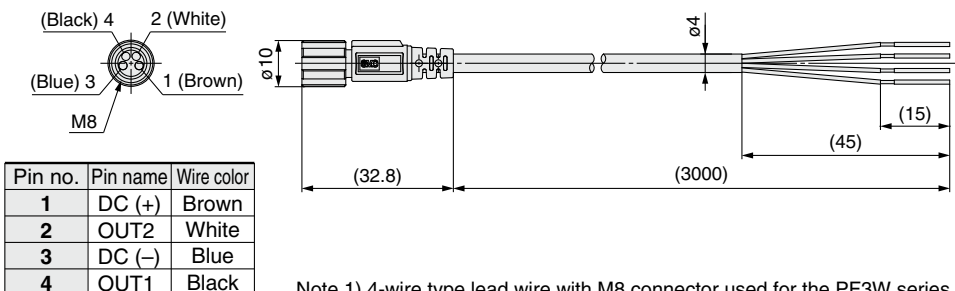


(mm)

Model	A	AA	D	K	S
PF3W704S/504S-□-□T	115	50	81.2	69.5	67.5
PF3W720S/520S-□-□T	123	54	85.2	73.5	71.5
PF3W740S/540S-□-□T	153	71	105.5	90.0	89.0

ZS-40-A

Lead wire with M8 connector



Lead Wire Specifications

Conductor	Nominal cross section	AWG23
	O.D.	Approx. 0.7 mm
Insulator	Material	Heat resistant PVC
	O.D.	Approx. 1.1 mm
Color	Brown, White, Black, Blue	
Sheath	Material	Heat and oil resistant PVC
Finished O.D.	ø4	

Note 1) 4-wire type lead wire with M8 connector used for the PF3W series.

Note 2) Refer to the Operation Manual in our website (<http://www.smcworld.com>) for wiring.