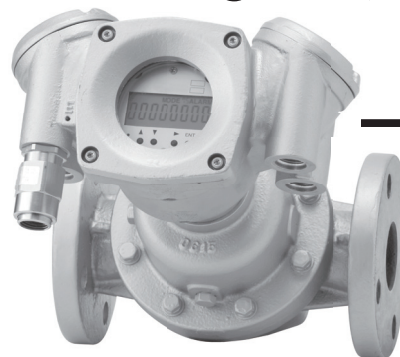


GENERAL SPECIFICATIONS



GS-F1021E-00

POSITIVE DISPLACEMENT OIL FLOWMETER (Electronic Totalizing Unit)



Overview

POSITIVE DISPLACEMENT OIL FLOWMETER for general use is a positive displacement type flowmeter composed of two rotors and measures flow directly.

There is little deterioration in the accuracy because a couple of roots rotates with non-contact. This flowmeter measures with high accuracy and wide flow range.

Features

●Measurement with High Accuracy

As the fluid is directly measured, the integration accuracy of this flowmeter is within $\pm 0.5\%$. (The accuracy within $\pm 0.2\%$ is also available depending on the demands for a dealing and a tax certificate, etc.)

Especially, as a pair of rotors is non-contact, a light material can be adopted for the flowmeter and low viscosity fluids can be measured with high accuracy and wide flow range.

●Small Size and Light Weight

As the roots type rotors are adopted for the rotor, discharging fluid volume in one rotation of rotor is larger and the roots type meter is designed small and light.

●Excellent Stability of Accuracy

Mechanical parts of the roots type meter will not be worn because of non-contact rotation and there is little change of accuracy in a long time operation.

●Excellent Durability

As the rotors rotate without contact, the rotors are excellent in durability.

●Small Pressure Loss

The pressure loss is smaller than another positive displacement type flow meter because the rotors do not contact each other.

●Compact and Multi-functional Electronic Totalizing Unit

Compact design with a built-in micro-computer, and equipped with multiple functions including temperature compensation, linearization and so on.

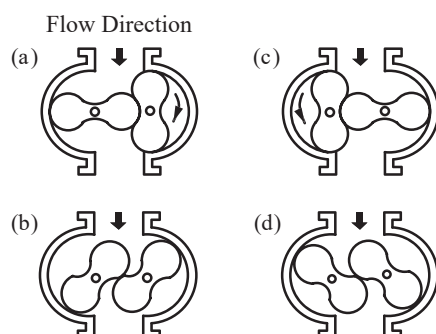
●A Variety of Output

A variety of pulse output (voltage, current, open collector) analog output, and communication are available.

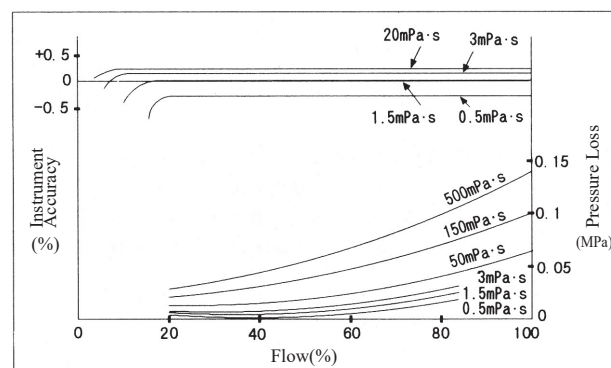
Standard Specification

Applicable Fluid	Petroleum, Petrochemical
Accuracy	$\pm 0.5\%$ or $\pm 0.2\%$ (Option)
Flow Rate Range	0.07 ~ 160 m ³ /h
Fluid Temperature	-5 ~ 150°C (Max. 50°C in case of roots material AC7A) Max. 150°C in case of FC200)
Max. Working Pressure	Max. 2.5 MPa
Fluid Viscosity	Max. 150,000 mPa·s
Connection Size	25mm(1B) ~ 100mm(4B)
Flange Rating	FC 250 : JIS 10K FF FCD400 : JIS 10K FF SCPH2 : (JIS 10K, 20K RF) (ASME · JPI 150, 300 RF)
Material	Main Body
	FC 250 : (Capacity 35-52 type) FCD400 : (Capacity 35-41 type) SCPH2 : (Capacity 35-52 type (80mm of 45 type is excluded.))
	Rotor
	FC200, AC7A or ADC
	Rotor Shaft
Material	SUS416 hard chrome plating
	Bearing
	C5191, FC, Ball Bearing
Material	Driving Gear
	SUS316
Piping Installation	Horizontal or Vertical Piping
Paint Color	Silver

Principle of Operation



Performance Characteristic



Note) Flow rate in 100% are the maximum values of intermittent flow in each type of capacity.

Flow Range

Rotor Material: FC200 Accuracy:±0.2%

Unit : m³/h

Connection Size(mm)	Capacity Model	Use Condition	Fluid Temperature (mPa · s)				
			Gasoline 0.3 ~ 0.9	Kerosene 0.9 ~ 2	Light oil 2 ~ 5	A · B Heavy oil 5 ~ 150	C Heavy oil 150 ~ 500
25	35	Intermittent	2.5 ~ 3.5	1.5 ~ 3.5	1 ~ 4	0.4 ~ 4	0.4 ~ 3.5
		Continuous	2.5 ~ 2.5	1.5 ~ 2.5	1 ~ 3.5	0.4 ~ 3.5	0.4 ~ 2.5
25	38	Intermittent	3 ~ 6	2 ~ 6	1.5 ~ 7	0.5 ~ 7	0.5 ~ 6
40		Continuous	3 ~ 4.5	2 ~ 4.5	1.5 ~ 6	0.5 ~ 6	0.5 ~ 4.5
50	41	Intermittent	5 ~ 13	3 ~ 13	2.6 ~ 15	0.6 ~ 15	0.6 ~ 13
		Continuous	5 ~ 9	3 ~ 9	2.6 ~ 13	0.6 ~ 13	0.6 ~ 9
50	45	Intermittent	13 ~ 35	8 ~ 35	5 ~ 40	2 ~ 40	2 ~ 35
80		Continuous	13 ~ 25	8 ~ 25	5 ~ 35	2 ~ 35	2 ~ 25
80	47	Intermittent	20 ~ 50	12 ~ 50	8 ~ 55	4 ~ 55	4 ~ 50
		Continuous	20 ~ 35	12 ~ 35	8 ~ 50	4 ~ 50	4 ~ 35
100	51	Intermittent	30 ~ 120	25 ~ 120	17 ~ 130	8 ~ 130	8 ~ 120
		Continuous	30 ~ 85	25 ~ 85	17 ~ 120	8 ~ 120	8 ~ 85
100	52	Intermittent	40 ~ 150	25 ~ 150	20 ~ 160	10 ~ 160	—
		Continuous	40 ~ 110	25 ~ 110	20 ~ 140	10 ~ 140	—

Rotor Material: FC200 Accuracy:±0.5%

Unit : m³/h

Connection Size(mm)	Capacity Model	Use Condition	Fluid Temperature (mPa · s)				
			Gasoline 0.3 ~ 0.9	Kerosene 0.9 ~ 2	Light oil 2 ~ 5	A · B Heavy oil 5 ~ 150	C Heavy oil 150 ~ 500
25	35	Intermittent	1.5 ~ 3.5	1 ~ 3.5	0.6 ~ 4	0.07 ~ 4	0.07 ~ 3.5
		Continuous	1.5 ~ 2.5	1 ~ 2.5	0.6 ~ 3.5	0.07 ~ 3.5	0.07 ~ 2.5
25	38	Intermittent	2 ~ 6	1 ~ 6	0.8 ~ 7	0.1 ~ 7	0.1 ~ 6
40		Continuous	2 ~ 4.5	1 ~ 4.5	0.8 ~ 6	0.1 ~ 6	0.1 ~ 4.5
50	41	Intermittent	3 ~ 13	2 ~ 13	1.5 ~ 15	0.25 ~ 15	0.25 ~ 13
		Continuous	3 ~ 9	2 ~ 9	1.5 ~ 13	0.25 ~ 13	0.25 ~ 9
50	45	Intermittent	8 ~ 35	5 ~ 35	3.5 ~ 40	0.6 ~ 40	0.6 ~ 35
80		Continuous	8 ~ 25	5 ~ 25	3.5 ~ 35	0.6 ~ 35	0.6 ~ 25
80	47	Intermittent	12 ~ 50	8 ~ 50	5 ~ 55	1 ~ 55	1 ~ 50
		Continuous	12 ~ 35	8 ~ 35	5 ~ 50	1 ~ 50	1 ~ 35
100	51	Intermittent	25 ~ 120	16 ~ 120	12 ~ 130	4 ~ 130	4 ~ 120
		Continuous	25 ~ 85	16 ~ 85	12 ~ 120	4 ~ 120	4 ~ 85
100	52	Intermittent	30 ~ 150	20 ~ 150	15 ~ 160	8 ~ 160	—
		Continuous	30 ~ 110	20 ~ 110	15 ~ 140	8 ~ 140	—

Rotor Material:AC7A or ADC Accuracy:±0.2%

Unit : m³/h

Connection Size(mm)	Capacity Model	Use Condition	Fluid Temperature (mPa · s)				
			Gasoline 0.3 ~ 0.9	Kerosene 0.9 ~ 2	Light oil 2 ~ 5	A · B Heavy oil 5 ~ 150	C Heavy oil 150 ~ 500
25	35	Intermittent	1.5 ~ 3.5	1 ~ 3.5	0.5 ~ 4	0.4 ~ 4	0.4 ~ 3.5
		Continuous	1.5 ~ 2.5	1 ~ 2.5	0.5 ~ 3.5	0.4 ~ 3.5	0.4 ~ 2.5
25	38	Intermittent	2 ~ 6	1.5 ~ 6	0.7 ~ 7	0.5 ~ 7	0.5 ~ 6
40		Continuous	2 ~ 4.5	1.5 ~ 4.5	0.7 ~ 6	0.5 ~ 6	0.5 ~ 4.5
50	41	Intermittent	3 ~ 13	2.6 ~ 13	1.5 ~ 15	0.6 ~ 15	0.6 ~ 13
		Continuous	3 ~ 9	2.6 ~ 9	1.5 ~ 13	0.6 ~ 13	0.6 ~ 9
50	45	Intermittent	8 ~ 35	5 ~ 35	3 ~ 40	2 ~ 40	2 ~ 35
80		Continuous	8 ~ 25	5 ~ 25	3 ~ 35	2 ~ 35	2 ~ 25
80	47	Intermittent	12 ~ 50	8 ~ 50	6 ~ 55	4 ~ 55	4 ~ 50
		Continuous	12 ~ 35	8 ~ 35	6 ~ 50	4 ~ 50	4 ~ 35
100	51	Intermittent	20 ~ 120	17 ~ 120	12 ~ 130	8 ~ 130	8 ~ 120
		Continuous	20 ~ 85	17 ~ 85	12 ~ 120	8 ~ 120	8 ~ 85
100	52	Intermittent	25 ~ 150	20 ~ 150	15 ~ 160	10 ~ 160	—
		Continuous	25 ~ 110	20 ~ 110	15 ~ 140	10 ~ 140	—

Rotor Material:AC7A or ADC Accuracy:±0.5%

Unit : m³/h

Connection Size(mm)	Capacity Model	Use Condition	Fluid Temperature (mPa · s)				
			Gasoline 0.3 ~ 0.9	Kerosene 0.9 ~ 2	Light oil 2 ~ 5	A · B Heavy oil 5 ~ 150	C Heavy oil 150 ~ 500
25	35	Intermittent	0.9 ~ 3.5	0.6 ~ 3.5	0.25 ~ 4	0.07 ~ 4	0.07 ~ 3.5
		Continuous	0.9 ~ 2.5	0.6 ~ 2.5	0.25 ~ 3.5	0.07 ~ 3.5	0.07 ~ 2.5
25	38	Intermittent	1 ~ 6	0.8 ~ 6	0.4 ~ 7	0.1 ~ 7	0.1 ~ 6
40		Continuous	1 ~ 4.5	0.8 ~ 4.5	0.4 ~ 6	0.1 ~ 6	0.1 ~ 4.5
50	41	Intermittent	2 ~ 13	1.5 ~ 13	0.8 ~ 15	0.25 ~ 15	0.25 ~ 13
		Continuous	2 ~ 9	1.5 ~ 9	0.8 ~ 13	0.25 ~ 13	0.25 ~ 9
50	45	Intermittent	5 ~ 35	3.5 ~ 35	1.8 ~ 40	0.6 ~ 40	0.6 ~ 35
80		Continuous	5 ~ 25	3.5 ~ 25	1.8 ~ 35	0.6 ~ 35	0.6 ~ 25
80	47	Intermittent	8 ~ 50	5 ~ 50	2.5 ~ 55	1 ~ 55	1 ~ 50
		Continuous	8 ~ 35	5 ~ 35	2.5 ~ 50	1 ~ 50	1 ~ 35
100	51	Intermittent	16 ~ 120	12 ~ 120	8 ~ 130	4 ~ 130	4 ~ 120
		Continuous	16 ~ 85	12 ~ 85	8 ~ 120	4 ~ 120	4 ~ 85
100	52	Intermittent	20 ~ 150	15 ~ 150	10 ~ 160	8 ~ 160	—
		Continuous	20 ~ 110	15 ~ 110	10 ~ 140	8 ~ 140	—

Note) 1. Continuous flow shows the operation for 8-24 hours per day. Intermittent flow shows the operation of 8 hours or less per day.
 2. Select the range of the usual flow to become less than 70-80% of the maximum flow.
 3. Minimum flow might be changed by combination of the counter parts.

Totalizing Unit Standard Specifications (Electronic Totalizing Unit Model: 89PC, 89PD)

Display	Display	LCD Display
	Totalizing Counter	8 digits, Select "Correction"/"Non-correction" (Note: Correction means in case of temperature correcting function is equipped) Unit: L, m ³ , kL
	Reset Counter	
	Momentary Flow Rate	Maximum 7 digits, Unit: /min, or /h
	Temperature Display	Maximum 5 digits (If temperature input is required)
	Mode	Indicates "Display Mode" or "Test Mode"
	Status	Indicates the rotating direction of the flowmeter
	Alarm	Indicates "Elapsed Time"
	Display Change	Changeable by Magnet
Function	*Linearization	Approximation Correction of Line Graph in the 4 Sections (5 Points) (Available up to 10 Sections by Additional Option)
	*Temperature Correction	Correction Range: — 50 to 150°C Temperature range span of temperature resistor can be set. Petroleum in JIS: K 2249 Or Correction by Using General Secondary Formula
	Coefficient Correction	Flow meter constant is set between 0.0001 and 1.9999
	*Thermal Expansion Correction of Flowmeter Measurement Compartment	Thermal Expansion Correction of Flowmeter Measurement Compartment
	Forward and Reverse Distinction	Distinguishes the rotating direction of the flowmeter when a 2-phase pulse is input
	*Accuracy Correction of Temperature Resistor	Approximation Correction of Line Graph in the 2 Sections (3 Points) (Available up to 10 Sections by Additional Option)
	Lapse of Time after Abnormality Occurred	Laps of time is measured from the occurrence of abnormality
	Self-pulse Generation	For the use in loop check or correction calculation check
	Abnormality Detection	Upper or Lower Limit in the Flow Rate. Or Upper or Lower Limit in Temperature etc.
	Accuracy in Linearize Calculation	± 0.005 % or less (at Measuring Point)
Accuracy	Temperature Correction Calculation Accuracy	± 0.075 % or less
	Analog Accuracy	± 0.5 % FS or less
Input	Pulse Input	Positive Displacement Oil Flowmeter (MR sensor) Maximum Input Frequency: 500 Hz
	*Temperature Input	Temperature Resistor (Regulated Current: Part with 2 mA)

Pulse Output	Output Signal	To be selected from open drain (FET) output, voltage pulsation, or current pulsation (Note) 2 Please refer to the Table - 1
	Output Contents	Select corrected/non-corrected pulse, forward and reverse judgment status, alarm output (Correction means the case that temperature correcting function is equipped)
	Output Capacity	30V, 0.1A
	Pulse Width	To be selected from 0.3 to 0.7ms, 6 to 14ms, or 60 to 140ms
	Transmission Distance	1 km or less (When core wire cable is 1.25mm ²) 2 km or less (When core wire cable is 2 mm ²)
Analogue Output	Output Signal	4 to 20 mA (± 0.5 % FS) Please refer to the Table - 1
	Output Contents	Select Corrected/Non-corrected Momentary Flow Rate (Correction means the case that temperature correcting function is equipped)
	Response Time	0.5 to 60 s (Set with interval of 0.5 s)
	Transmission Distance	1 km or less (When core wire cable is 1.25mm ²) 2 km or less (When core wire cable is 2 mm ²)
Communication		Smart Communication
Power Source	Positive Displacement Oil Flowmeter	DC 12 to 24V (It depends the output specification. Please refer Table - 1 for details)
Current Consumption		28mA or less (Rush current: 0.8A) (Note) 3
Backup Function		Corrected/Non-corrected Totalized Value
Parameter Setting		To be set by the push button operation on the display board or by the communication
Waterproof Structure		IP66
Explosion Proof Structure		Pressure Resistant and Explosion Proof Structure (Exdll BT4)
Ambient Temperature		—20 to 60°C (Storage Temperature Range: —20 to 80°C (Note) 4
Ambient Humidity		5 to 90 % in RH

Note) 1. *marked items are option.
2. Output is capable up to 2 points.
For output-capable combination, please refer to the Table - 1
3. Analog output may temporarily consume about 70mA immediately after power -on
4. If ambient temperature is 40°C or higher, use cable with heat-resistant temperature of 90°C or higher.

Accuracy as a Flowmeter Equipped with an Intelligent Totalizing Unit

Standard Specifications (Coefficient Correction function)	Within ±0.2%
With Linearization Function	Within ±0.15% and Within ±0.04% of the Linearization Point
With Temperature Correction Function	Within ±0.2%
With Linearization Function + Temperature Correction Function	Within ±0.15% and Within ±0.12% of the Linearization Point

Note) Provided the flow rate range is within ±0.2% of each type of flow rate accuracy.

Cable Wiring Method

1. In order to prevent noise mixing, the signal wire shall be placed by securely avoiding high voltage wiring, or high voltage power source wiring.
2. Please place the wiring away from power wiring as much as possible.

Table - 1

Power Source Voltage: DC 12V, DC 20V to 24V

Output ① (Terminal at Left Side)					Output ② (Terminal at Right Side) (*7)				
Output signal	Single Cable	Old Transmitter Model (*5)	Output	Communication	Open Drain	Voltage Pulse	Current Pulse (With Temp. Correction)	Current Pulse (Without Temp. Correction)	Analog
					2 Wire Type	3 Wire Type	2 Wire Type	2 Wire Type	2 Wire Type
					—	Fp-1 (DC 12V) or (DC-20-24V)	Fp-5 (DC12V) Fp-6 (DC20V) Fp-12 (DC24V)	Fp-5 (DC12V) Fp-6 (DC20V) Fp-12 (DC24V)	—
Open Drain	3 Wire Type	—	○	○ (*1)	○	○ (*3)	○ (*3)	○ (*3)	×
Open Drain	4 Wire Type	—	○	○	○	○ (*3)	○ (*3)	○ (*3)	×
Voltage Pulse	3 Wire Type	Fp-1 (DC 12V) or (DC-20-24V)	○	○ (*1)	○	○ (*3)	○ (*3)	○ (*3)	×
Current Pulse (With Temp. Correction)	2 Wire Type	Fp-5 (DC12V)	×	×	○	○ (*3)	○ (*3)	○ (*3)	×
		Fp-6 (DC20V)	○ (*4)	○					
		Fp-12 (DC24V)	○ (*4)	○					
Current Pulse (Without Temp. Correction)	2 Wire Type	Fp-5 (DC12V)	○ (*4)(*6)	×	○	○ (*3)	○ (*3)	○ (*3)	×
		Fp-6 (DC20V)	○ (*4)	○					
		Fp-12 (DC24V)	○ (*4)	○					
Analog	2 Wire Type	—	○ (*2)	○ (*2)	○	○ (*3)	○ (*3)	○ (*3)	×
None (Power Supply Only)	2 Wire Type	—	×	○	○	○ (*3)	○ (*3)	○ (*3)	×

(*1) It is necessary to add load resistor in Positive (+) side.

(*2) DC 24V only

(*3) Additional power is required.

(*4) Pulse width of current pulse is only 0.3 to 0.7 ms. (Output ② can also be used for 6 to 14ms, and 60 to 140 ms)

(*5) Figure within parentheses () of the old transmitter model indicates the supply voltage.

(*6) Without temperature correction, DC 12V and 2 wire type current pulse can be manufactured by special request.

(*7) Output ② is option.

Standard Unit of Totalizing Unit

Capacity Model	Conn.Size (mm)	Max.Flow Rate (m³/h)	Totalizing Counter (8 digits L)	Reset Counter (8 digits L)	Momentary Flow Rate (7-digit L/h)	Output Pulse Unit (L/P)
35	25	4	1	1	1	0.01
38	25/40	7	1	1	1	0.1
41	50	15	1	1	1	0.1
45	50/80	40	1	1	1	0.1
47	80	55	1	1	1	0.1
51	100	130	1	1	1	1
52	100	160	1	1	1	1

Note) The maximum flow depends on the applied fluid and usage condition.
(This table shows the maximum flow rate equivalent to light oil, A・B heavy oil.)

Flange Rating and Max. Working Pressure

Unit:MPa

Nominal Pressure (MPa)	Material Code	Frang Rating				
		JIS			ASME・JPI	
		10K	16K	20K	150	300
B	AA, AE, DA, DE	1.00	—	—	—	—
C	DA, DE	—	1.60	—	—	—
E	NA, NE	1.40	—	2.50	1.96 *1	2.50

Note)*1 shows that the maximum working pressure can be applied when the temperature of the fluid is under 38℃.

System Code

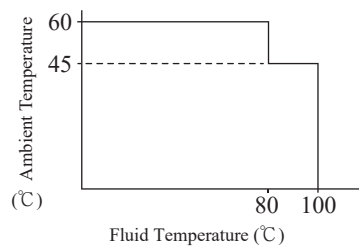
1	2	3	4	5	6	7	8	9	10	11	Contents				
F	R	L									POSITIVE DISPLACEMENT OIL FLOWMETER (Electronic totalizing unit)				
Conn.Size	B	8									25 mm (1 B)				
	0	4									40 mm (1 1/2 B)				
	0	5									50 mm (2 B)				
	0	8									80 mm (3 B)				
	1	0									100 mm (4 B)				
Capacity Model											Intermittent Max. Flow Rate (Applicable Connection Size)				
			3	5								4 m ³ /h (25mm)			
			3	8								7 m ³ /h (25, 40mm) Main body of 25mm : SCPH2 only			
			4	1								15 m ³ /h (50mm)			
			4	5								40 m ³ /h (50, 80mm) Main body of 80mm : FC250 only			
			4	7								55 m ³ /h (80mm)			
			5	1								130 m ³ /h (100mm)			
Max.Working Pressure			Note)2							Max.Working Pressure MPa	Hydraulic Test Pressure MPa	Applicable Flange Rating			
					B			1.00	2.00	10K	—				
					C			1.60	3.20	16K	—				
					E			2.50	3.75	10K, 20K	150, 300				
Material								Main Body	Rotors	Applied Pressure	Fluid Temperature				
					A	A	FC250	FC	Pressure Code B (1.0MPa)	0 ~ 80℃					
					A	E		AC or ADC		0 ~ 50℃					
					D	A	FCD400	FC	Pressure Code B (1.0MPa) C (1.6MPa)	0 ~ 80℃					
					D	E		AC or ADC		0 ~ 50℃					
					N	A	SCPH2	FC	Pressure Code E (2.5MPa)	- 5 ~ 80℃					
					N	E		AC or ADC		- 5 ~ 50℃					
										—					

Note) 1. JIS20K and ASME・JPI300 of flange connection are not applicable for capacity model 52.
2. Pressure Code C is only available for model 0438 and 0541.

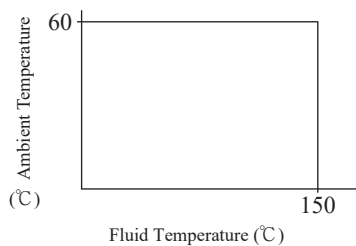
	12	13	14	15	16	17	内 容
Totalizing Unit	89PC						Intelligent Totalizing Unit (When capacity model : 38, 41, 45, 47)
	89PD						Intelligent Totalizing Unit (When capacity model : 35, 51, 52)
				—			
					X		Fluid Temperature 100℃ or Less Note) 1, 2, 3

Note)1. When fluid temperature of 80-100°C, the maximum ambient temperature of the totalizing unit will be 45°C.

Applicable Temperature Range (FRL Type)

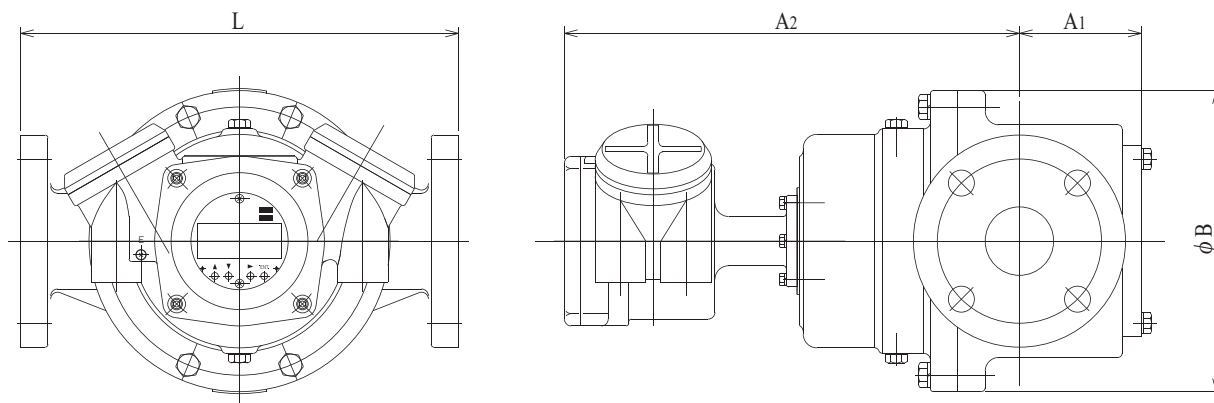


**Applicable Temperature Range
(FRP Type)**



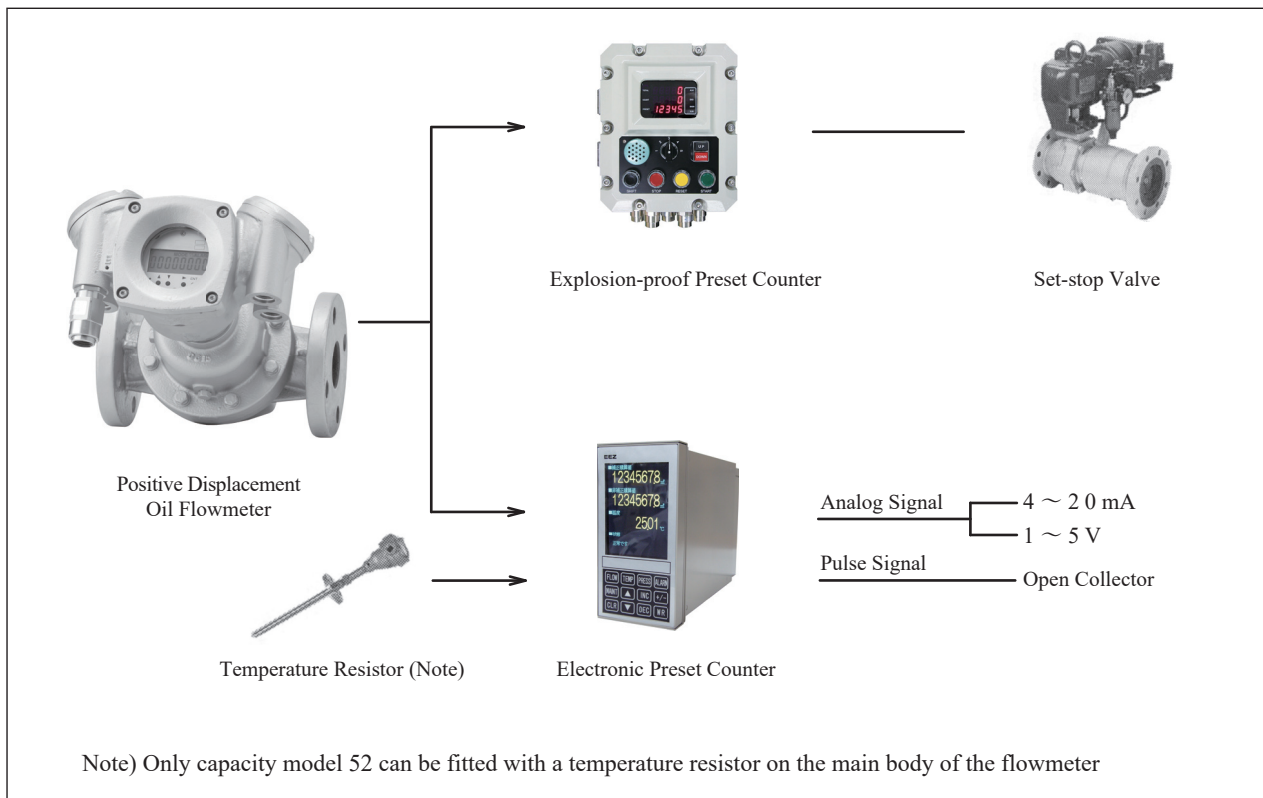
2. It can be used for fluid that exceeds 100°C.
In this case, basic model is “FRP”, ending with “I” (attachment) : maximum fluid temperature 120°C,
or “J” (attachment + heat radiation fin) : maximum fluid temperature 150°C.
If you use this combination for flow rate control etc., check the spec in advance as this may
result in output fluctuations due to the mechanical properties of the coupling.
3. In the case of the basic model “FRP”, totalizing unit is 89PC (when capacity model is 38)
or 89PD (when capacity model is 35, 41, 45, 47, 51, 52).

外形寸法



Capacity Model	Conn.Size (mm)	Main Body Material	Dimensions (mm)				Internal Volume (L)	Approx. Weight (kg)
			L	A1	A2	ϕ B		
35	25	FC250, FCD400	200	35	276	$\square$ 112	0.5	14
		SCPH2						
38	25	SCPH2	200	50	281	$\square$ 112	1	16
	40	FC250, FCD400	200	45	286			
		SCPH2						
41	50	FC250, FCD400	250	60	305	165	2	22
		SCPH2						
45	50	FC250	320	89	333	220	4	45
		SCPH2	360					
	80	FC250	300					
47	80	FC250	320	119	363	220	5	48
		SCPH2	360					
51	100	FC250	450	180	443	300	11	100
		SCPH2						
52	100	FC250	450	206	443	300	13	100
		SCPH2						

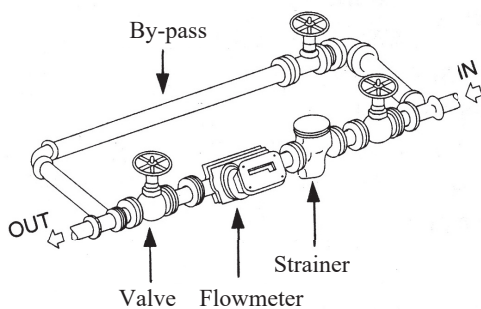
Example of Instrumentation



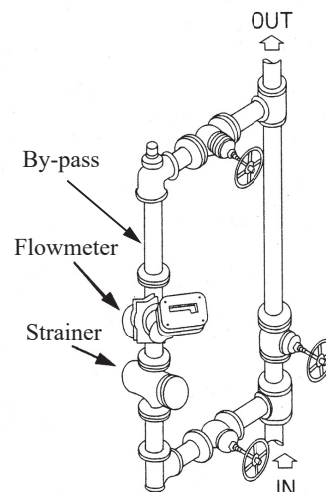
Caution for Flowmeter Piping Installation

- Be sure to operate the flowmeter within the specification stamped on the name plate.
- As shown below, install a strainer at the up-stream of the flowmeter and provide a by-pass for the convenience of flowmeter disassembly and maintenance.
- Install the flowmeter so as to level its rotor shaft pose regardless of the mode (horizontal or vertical) of its associated pipes.
- The flowmeter should be installed on the by-pass side since the dirt in the outlet piping flows back when the flow direction is from bottom to top.

Horizontal Arrangement
(Flow Direction Right → Left)



Vertical Arrangement
(Flow Direction Lower → Upper)



Ordering Instructions

	Item	Contents
1	Applications	Production Control, Dealings, Receipt and Shipment etc.
2	Applicable Fluid Name	Name, Compositions, Existence of Admixture and Corrosion
3	Accuracy	± %
4	Flow Rate	Maximum, Normal, Minimum (Time of Use For Each Day) (L/h or m ³ /h)
5	Operating Temperature	Maximum, Normal, Minimum (℃)
6	Operating Pressure	Maximum, Normal, Minimum (MPa)
7	Viscosity and Specific Gravity	Viscosity (at ℃), Specific Gravity (at ℃)
8	Connection Standard	Connection Size and Flange Standard, etc.
9	Flow Direction	Horizontal or Vertical piping
10	Transmission Unit	Output Pulse Unit (L/P), Pluse width (ms), Output Type
11	Applied Regulations	Name of Regulation and Standards
12	Attached Equipment	Necessity of Strainer and Valve, etc.
13	Power Supply	

*Be sure to read the instruction manual carefully before you use this meter to ensure you use it correctly.

*Note that the contents may be subject to change without notice.

● Contact

Tokico System Solutions, Ltd.

Global Business Div.
Sales Management Headquarters

Parale Mitsui Bldg,8,Higashida-cho,Kawasaki-ku,
Kawasaki-shi,Kanagawa 210-0005 Japan

TEL . 81-50-3852-5336

FAX . 81-44-222-7155

URL : <https://www.tokicosys.com/en/>