

ADDITIONAL FUNCTION

Alarm output function

When specified in placing order, an alarm output function can be added to the local indicator type. Alarm mode can be selected from a low or high alarm. Be sure to specify when placing order since the alarm mode and alarm actuation are necessary for the sake of production convenience.

Alarm output specification

- Contact method : Reed switch 1 point, Setting point is freely adjustable (With setting pointer)
- Electric rating : Max.voltage 125V AC or 100V DC
Working current capacity 10 μA to 0.5A
Max. switching capacity 10VA or 10W

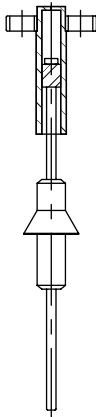
Note) The above-mentioned rating shows the case of resistance load. When using other loads, welding of a contact may be caused by an inrush current. Use it not to exceed rating in the max of an inrush current.

Kind of Load	Inrush current
Load of lamp	5 to 10 times more than usual
Motor load	10 to 15 times more than usual
Inductive load	4 to 5 times more than usual

- Suitable wiring : 0.2 to 2.5 mm² / 24 to 12 AWG (Single wire, stranded wire)
- Insulation resistance: More than 100MΩ (500V DC)
- Withstand voltage : 1500V AC (Retention time 1min.)
- Setting accuracy: ±2% F.S.
- Reset span : Less than 15% F.S. (Less than 20% F.S. for flow range with " * " mark as shown in the Flow rate table.)
- Intrinsically safe version: Recommending the intrinsically safe relay IBRC6011R. (i3aG5 Izumi Electric)

Damper device

This unit (all sizes) for gas measurement type is equipped with a damper as a standard. The damper device can be added at the liquid measurement type with pulsation.



Wiring connection

When selecting the output function, the electric wiring connection can be selected. Refer to Model code.

Flow rate table

Meter size	Water		Air	
	Flow rate L/h	Max.press.loss kPa	Flow rate m ³ /h (nor)	Max.press.loss kPa
15	30 ~ 2000	12	0.9 ~ 45	54
25	~ 4800	13	~ 135	30
	~ 6000*	19		
40	~ 10500	8	~ 220	9
50	~ 15000	10	~ 300	8
	~ 20000*	13	~ 400*	10
80	~ 35000	17	~ 600	13
	~ 50000*	32		
100	~ 70000	14	-	-
	~100000*	26		

Flow rate shows the value converted into water (Density 1.0g/cm³, Viscosity 1.0mPa·s) and air (0°C, 0MPa [1atm]).

The numeric value as indicated shows the flow range in the maximum graduation.

Flow conversion method

In accordance with the specification of instrumentation by customer, the conversion shall be made in the following method and meter size is to be selected.

1. Liquid application

Flow rates on the model code table are for liquid application equivalent to water (Density 1.0g/cm³ and Viscosity 1.0 mPa·s). If actual fluid condition has different values, a conversion calculation is required per following formula:

$$Q_w = Q \times 2.59 / \sqrt{(7.7 / \rho) - 1}$$

Q_w : Water converted flow rate (m³/h)
 Q : Flow rate of actual fluid (m³/h)
 ρ : Density of actual fluid (g/cm³)

In case water converted flow rate is close to the high limit of each meter size, meter size must be selected by reference to viscosity factor in the table.

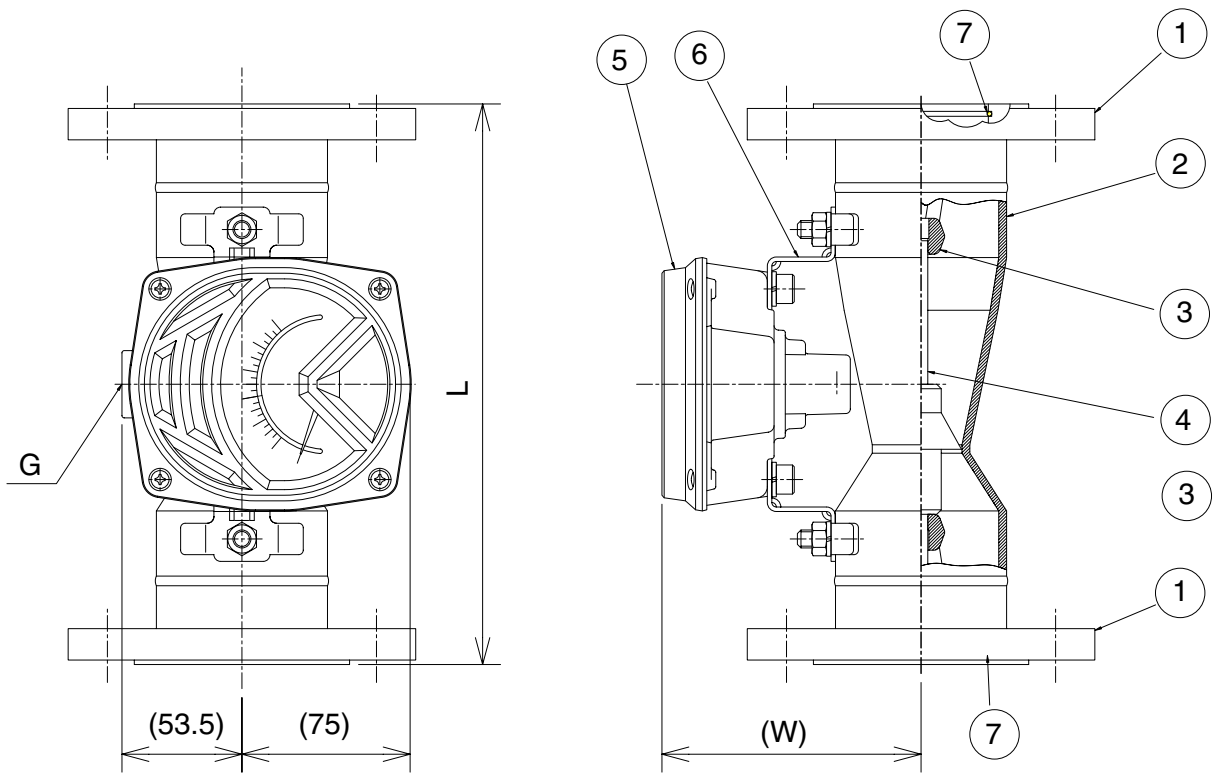
2. Gas application

Flow rates on the model code table are measurable flow rates for air 0°C, 0MPa (1atm). If actual fluid condition has different from values, a conversion calculation is performed by the following formula:

$$Q_A = Q \times 0.0169 \times \sqrt{(\rho \times (273+t) / (0.1013+P))}$$

Q_A : Converted flow rate in air 0°C, 0MPa [m³/h(nor)]
 Q : Flow rate of gas to be measured [m³/h(nor)]
 ρ : Density of gas to be measured [kg/m³ (nor)]
 P : Operating pressure (MPa)
 t : Operating temperature (°C)

DIMENSION



Material

No.	Description	Material
1	Flange	316L SS
2	Tapered tube	316L SS
3	Float guide	316L SS
4	Float	316L SS
5	Indicator	ADC 12
6	Fittings	316 SS
7	Stop ring	316L SS

Note)

- In gas, steam, or damper specification, an up float guide is replaced with damper (cylinder).
- The lower float guide of 15mm and 100mm of meter size is being fixed to the flange. Removal is impossible.

Size and Weight

Meter size	Connection size	Dimension (mm)		Conduit G	Approx. weight (kg)
		L	W		
15	15 (1/2)	250	115.5	Specify from Model code in case of alarm output version.	2.5
25	25 (1)	250	115.5		4.0
40	40 (1 1/2)	250	115.5		4.5
50	50 (2)	250	115.5		7.0
80	80 (3)	250	115.5		13.0
100	100 (4)	250	135.5		18.0

Approx. weight shows the case of ANSI Class 150.

□ Model code

NMX	*	*	*	*	-*	*	*	-*	*	*	*	/*	Specification	Fluid : Liquid	Fluid : Gas	
Indicator type	1												Non-explosion proof type indicator	Common		
Main body		1											Standard	316L SS		
Material in contact with fluid		1											316L SS	The connection size is more than 50mm		
Float material			1										JIS10K	Common		
Rating					-J1								JIS20K			
					-J4								ANSI Class 150			
					-A2								ANSI Class 300			
					-A5											
Connection													RF	RF flange		
Connection size													1	15A , 1/2"		
													2	20A , 3/4"		
													3	25A , 1"		
													4	40A , 1 1/2"		
													5	50A , 2"		
													6	65A , 2 1/2"		
													7	80A , 3"		
													8	100A , 4"		
													9	125A , 5"		
													A	150A , 6"		
Meter size													-1	15mm		
													-3	25mm		
													-4	40mm		
													-5	50mm		
													-7	80mm		
													-8	100mm		
Tapered tube												*	Tapered tube type	Manufacture's code		
Float												*	Float type	Standard X		
Float damper													1	Not provided		
													2	Provided		
Additional function	Output function												/1A	1 point alarm output (HC)		
													/1B	1 point alarm output (HO)		
													/1C	1 point alarm output (LC)		
													/1D	1 point alarm output (LO)		
	Conduit													/M1	M16×1.5 (F)	
														/M2	M20×1.5 (F)	
													/GH	G 1/2 (F)		
													/NP	NPT 1/2 (F)		
Special													/Z	Provided		
														Consult factory for details		

□ Standard graduation division.

There are 16 kinds of standard graduation pattern as shown to the right.

Cautions

- This flowmeter transmits displacement by magnetic coupling. Influence may be received in the measurement to which a magnetic field exists on the spot.
- Please choose a place without a magnetic field around installation. The approaching magnetic material may also affect measurement. Please do not bring close to less than 20cm. A keeping-warm cover etc. should be careful.
- In installing a flow instrument adjacently, in order to avoid a mutual interference, please install the interval of 30cm or more.

Scale range	Subdivision of graduation							
1 - 10	1	2	4	6	8	10		
1.2 - 12	1.2	2	4	6	8	10	12	
1.5 - 15	1.5	2.5	5	7.5	10	12.5	15	
1.6 - 16	1.6	5	10	15	16			
2 - 20	2	5	10	15	20			
2.5 - 25	2.5	5	10	15	20	25		
3 - 30	3	5	10	15	20	25	30	
3.5 - 35	3.5	10	20	30	35			
4 - 40	4	10	20	30	40			
4.5 - 45	4.5	10	20	30	40	45		
5 - 50	5	10	20	30	40	50		
6 - 60	6	10	20	30	40	50	60	
7 - 70	7	20	40	60	70			
7.5 - 75	7.5	20	40	60	75			
8 - 80	8	20	40	60	80			
9 - 90	9	20	40	60	80	90		

* Specification is subject to change without notice.



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