OVAL

DELTA FLOWPET

MODEL FLX

GENERAL SPECIFICATION

GS.No.GBD620E-4

■GENERAL

DELTA FLOWPET combines OVAL's field-proven, stainless steel body industrial vortex flowmeter EX DELTA with a newly designed, small preamplifier featuring a flow switch. Besides fast delivery and competitively priced, it offers the best price/performance, rugged construction, and ease of operation.

■FEATURES

1. Can monitor the total flow or instantaneous flowrate with an externally furnished selector magnet in the field.
2. A sturdy stainless steel body contains no moving parts to deteriorate from age and wear.
3. Inherently no limitation on physical orientation in meter installation.
4. Provides an output (total flow in pulse or instantaneous flowrate in analog form) for remote processing.

■GENERAL SPECIFICATIONS

●Meter Body

Item		Description
Nominal Size		10, 15, 25, 40, 50, 80, 100mm
Process Connection		Wafer type
Flange Ratings		JIS 10, 16, 20, 30K ASME/JPI 150, 300 (10mm in nominal size is not applicable.)
Standard Piping		Nominal thickness Sch. 40
Applicable Fluid		Liquid, gas, and steam (Steam is not acceptable for meters 10mm in nominal dia.)
Flow Range		See pages 2 and 3.
Operating Temp. Range		Standard models: –10 to +80˚C, High temp. models: –10 to +200˚C
Max. Operating Pressure		Depends on process connections. See table below. (Design pressure: 5.00MPa)
Accuracy		±1% of full scale or better (10mm in nominal size ±2% or better) (*: In analog output, ±0.5% of full scale is added.)
Material	**Meter body, bluff body**	SCS14A (Nom. size 10mm, meter body: SS14A; Bluff body: SUS316)
	Sensor	10 to 25mm: SUS316, 40 to 100mm: XM19 (Super stainless steel)
	Adapter	SCS13A
Physical Orientation		No limitation to cause loss of accuracy (Take into consideration ease of service,waterproof work at cable entry.)
Installation Location		Under the eaves (Avoid locations exposed to the sun.)

●Converter

Item			Description
Model			PA55
Mounting Design			Integrally mounted on the meter
Display (digital LCD display)			1 Cumulative total flow (8-digit) 2 Instantaneous flowrate (hourly) 5-digit 3 Instantaneous flowrate (per-minute) 5-digit 4 Resettable total flow 7-digit 1, 2, 3,4 are selectable with a selector magnet furnished external to the unit. Shows the flow units (L, m^3, g, kg, t, L (normal), m^3 (normal) and decimal point on the LCD. (Display is rotatable through 360˚ for max. viewability.)
Remote Output	**Battery powered**		None
	※ **Externally powered**	Analog output	4 to 20mA at 0 to FS (analog is adjustable with front-face switch.)
		Alarm output	Open collector output allowable current: 20mA Max. voltage applied: 30V LED on top (red in color) indicates an alarmed status. (High and low alarm output status setpoints (ON/OFF select) are adjustable with a switch on top.)
		Pulse output	Open collector output allowable current: 20mA Max. voltage applied: 30V Pulse width (Scaled pulse: 30ms; Unscaled pulse: 1ms)
Cable			5-conductor shielded cable (one meter long) ... furnished for externally powered model
Transmission Length			Max.1km (conductor area 1.25mm^2)
Power Supply	**Battery powered**		Lithium battery pack Good for 4 years (at room temperature) ... with low battery alarm
	Externally powered		12 to 45VDC
Installation location			① Free from rainwater and running water. ② Minimal temperature variation. ③ Not exposed to the direct rays of the sun.
Construction			Non-explosionproof
Material			Polycarbonate
Backup			An EEPROM retains parameters and variables.

■FLOW RANGES

●Liquid Service

Select the minimum flowrate from Table A (based on specific gravity) or Table B (based on viscosity), whichever is greater.

Table A (based on specific gravity)

Unit: m^3/h

Sp. gr. / Size, mm	Min. Flowrate 0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	Max. Rate
10	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	2.2
15	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	4.7
25	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	16
40	1.7	1.5	1.4	1.3	1.3	1.2	1.2	1.1	31
50	2.7	2.5	2.3	2.2	2.1	2.0	1.9	1.8	53
80	6.0	5.5	5.1	4.7	4.6	4.6	4.6	4.6	118
100	11	11	11	11	11	11	11	11	205

Table B (based on viscosity)

Viscosity unit: mm^2/s

K. viscosity / Size, mm	Min. Flowrate (m^3/h) 1	2	3	5	10	15	20	25	30	40
10		0.3	0.4	0.6	1.1					
15	0.4	1.2	1.8	2.9						
25				1.8	5.9					
40				2.8	6.5	14				
50				3.6	7.1	15	24			
80					11	16	26	38		
100					14	21	28	45	55	

Beyond the bounds of measurement

●In the shadowed area ☐, determine using Table A (based on specific gravity).

●Gas Service

This table shows flow ranges in actual flowrate.

	Size, mm / Density kg/m³		Min. Flowrate (m^3/h) 0.38	0.7	1.2	2.0	3.6	6	11	19	34	(60)	Max. Flowrate (m^3/h)
Table C	10		4.5	3.3	2.6	2.2	1.8	1.5	1.3	1.1	0.9	0.7	8.5
	15		9.4	6.9	5.4	4.6	3.8	3.2	2.6	2.2	1.8	1.5	18
	25		23	17	13	12	10	8	7	6	5	4	60
	40		39	29	23	19	16	13	11	9	8	6	119
	50		63	46	37	31	26	22	18	15	12	10	199
	80		140	101	80	67	56	47	38	32	26	22	741
	100		240	174	140	115	95	80	66	55	45	37	1280
Table D	Kind of Gas	Density kg/Nm³	Gas Pressure MPa (gauge) at 20°C										Gas Viscosity
	Argon	1.785	—	—	—	0.02	0.12	0.26	0.55	1.05	2	3.6	0.0209(mPa·s)
	Air	1.293	—	—	0	0.07	0.20	0.4	0.85	1.5	2.7	—	0.017
	Oxygen	1.429	—	—	0	0.05	0.17	0.35	0.75	1.35	2.5	4.4	0.0192
	Carbon dioxide	1.977	—	—	—	0.01	0.1	0.23	0.5	0.95	1.7	3.3	0.0138
	Nitrogen	1.251	—	—	—	0.07	0.21	0.42	0.85	1.55	2.8	—	0.0166

○How to Determine the Minimum Flowrate

Find a value nearest (lower value) to the applicable gas pressure in Table D, follow the same column upwards and find a value intersecting the desired nominal size in Table C for the minimum flowrate. If it is desired to determine the minimum flowrate more accurately, calculate as follows:

Example 1

Find the min. flowrate of a fluid: air, temperature: 20°C, pressure: 0.5MPa (gauge), and nom. size: 80mm.

Solution: The min. flowrate at 0.4MPa and 0.85MPa of air with respect to nom. size 80mm in Table D are $47m^3/h$ and $38m^3/h$, respectively, from corresponding Table C. The min. flowrate at 0.5MPa is thus determined by proportion as follows:

$$Qmin = 38 + \frac{0.85 - 0.5}{0.85 - 0.4} \times (47 - 38) \fallingdotseq 45 m^3/h$$

Or, it can be determined by calculating the actual density. Actual density ρ of air at 20°C and 0.5MPa is

$$\rho = 1.293 \times \frac{273.15}{273.15+20} \times \frac{0.101325+0.5}{0.101325} \fallingdotseq 7.15 kg/m^3$$

From Table C, the min. flowrate at a density of 6 and nom. size 80mm is $47m^3/h$; at a density of 11 is $38m^3/h$. The min. flowrate at a density of 7.15 can thus be found by proportion as follows:

$$Qmin = 38 + \frac{11 - 7.15}{11 - 6} \times (47 - 38) \fallingdotseq 45 m^3/h$$

Example 2

Find the min. flowrate and applicable nom. size of a fluid: carbon dioxide, temperature: 5 to 30°C, pressure 0.8 to 1.5MPa, max. flowrate: $1800m^3/h$ (normal).

Solution: Firstly, find the actual max. flowrate and determine the nom. size. If there is some latitude in temperature and pressure, take the higher value for temperature and the lower value for pressure as the reference value in calculating the max. flowrate. The actual max. flowrate is thus calculated as follows:

$$Qmax. = 800 \times \frac{273.15+30}{273.15} \times \frac{0.101325}{0.101325+0.8} \fallingdotseq 99 m^3/h$$

It follows that the nominal size is 40mm, and the min. flowrate is based on the lower value in temperature and the higher value in pressure.

From Tables C and D, the min. flowrate at 40mm size and 0.95MPa pressure is $9m^3/h$. At 1.7MPa pressure, it is $8m^3/h$. The actual min. flowrate is thus determined by proportion as

$$Qmin = 8 + \frac{1.7 - 1.5}{1.7 - 0.95} \times (9 - 8) \fallingdotseq 8.3 m^3/h$$

NOTE: If the calculation results in a figure with decimal places, ignore decimal places in the max. flowrate. In the min. flowrate, round off fractional results.

●Saturated Steam Service

Unit : kg/h

Pressure MPa (gauge)	Nominal size											
	15mm		25mm		40mm		50mm		80mm		100mm	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
0.049	5.4	15	14	51	22	102	36	172	79	641	135	1100
0.098	6.1	20	15	67	25	133	41	224	90	834	154	1440
0.196	8.0	29	20	98	33	194	54	325	118	1210	202	2090
0.294	9.5	38	24	128	40	254	64	425	141	1580	241	2730
0.392	11	47	27	158	45	313	74	524	162	1950	277	3370
0.490	13	56	30	187	51	371	83	621	181	2310	310	4000
0.588	14	65	33	216	56	429	91	718	199	2670	342	4620
0.686	15	73	36	245	61	487	99	815	217	3030	372	5240
0.785	16	82	39	275	65	545	107	912	234	3390	400	5860
0.883	17	91	42	303	70	602	114	1000	250	3750	428	6480
0.981	18	99	44	333	74	661	121	1100	265	4110	455	7100
1.08	19	108	47	362	78	718	128	1200	281	4470	481	7730
1.18	20	117	49	391	83	776	135	1290	295	4830	507	8350
1.27	21	125	52	417	86	827	141	1380	308	5150	529	8900
1.37	22	133	54	446	90	885	147	1480	323	5510	553	9520

■CONVERTER - SCALED PULSE UNITS

The tables below show the scaled pulse units in volume flow.
To reduce into units other than volume flowrate in fixed conversion, such as normal flowrate, determine using tables A through D (pages 4 and 5).

Applicable Fluid	Nominal Size mm	Max. Flowrate m^3/h (Unscaled pulse freq., Hz)	Nominal Meter Factor L/P (Nom. Unscaled pulse units)	Unscaled Pulse Output Freq. (Hz) Q: Volume flowrate m^3/h	Scaled Pulse Units Standard (m^3/P)
Liquids	10	2.2 (142.6)	0.004285	64.8 Q	0.01
	15	4.7 (97.83)	0.01335	20.8 Q	0.01
	25	16 (55.11)	0.08065	3.44 Q	0.01
	40	31 (189.0)	0.04556	6.10 Q	0.01
	50	53 (147.1)	0.1001	2.78 Q	0.1
	80	118 (98.49)	0.3328	0.835 Q	0.1
	100	205 (75.25)	0.7567	0.367 Q	0.1
Gases	10	8.5 (110.2)	0.02143	13.0 Q	0.01
	15	18 (74.93)	0.06673	4.16 Q	0.01
	25	60 (41.33)	0.4033	0.689 Q	0.1
	40	119 (145.1)	0.2278	1.22 Q	0.1
	50	199 (110.4)	0.5005	0.555 Q	0.1
	80	741 (123.7)	1.664	0.167 Q	1
	100	1280 (93.98)	3.784	0.0734 Q	1

■SCALED PULSE UNITS FOR FIXED CONVERSION

When it is required that the volume flowrate (flowrate in terms of volume) be reduced to the equivalent flowrate under standard conditions (normal flowrate) or to the mass flowrate by multiplying a conversion factor in fixed conversion, the scaled pulse units are determined by the units selector tables shown below.

Case	Fluid	Fixed Conversion or Not	Table to Select
1	Gases	Conversion to normal conditions (normal flowrate)	A
2	Saturated steam	Conversion to mass flowrate	B
3	Gases	Conversion to mass flowrate	C
4	Liquids	Conversion to mass flowrate	D

●Case 1

"Conversion factor" is calculated by the following equation:

$$\text{Conversion factor} = \frac{273.15}{T+273.15} \times \frac{P+0.101325}{0.101325} \times \frac{Z_0}{Z}$$

(Except where significant influence is expected, it is assumed that Zn/Z = 1.)

where T = Operating temp. (°C)

P = Operating pressure (MPa [gauge])

Zn = Compressibility coefficient under standard conditions

Z = Compressibility coefficient under operating conditions

Table A

Nom. Size mm	Conversion Factor	Standard Scaled Pulse Units m^3 (normal)
10	0.50 to 4.66	0.01
	4.67 to 46.6	0.1
	46.7 to 60.0	1
15	0.50 to 1.49	0.01
	1.50 to 14.9	0.1
	15.0 to 60.0	1
25	0.50 to 2.47	0.1
	2.48 to 24.7	1
	24.8 to 60.0	10
40	0.50 to 4.38	0.1
	4.39 to 43.8	1
	43.9 to 60.0	10
50	0.50 to 1.99	0.1
	2.00 to 19.9	1
	20.0 to 60.0	10
80	0.50 to 1.99	0.1
	2.00 to 19.9	1
	20.0 to 60.0	10
100	0.50 to 2.64	1
	2.65 to 26.4	10
	26.5 to 60.0	100

●Case 2

Table B

Nom. Size mm	Saturated Steam Press. MPa	Standard Scaled Pulse Units kg
15	0.05 to 0.167	0.01
	0.168 to 1.46	0.1
25	0.05 to 0.355	0.1
	0.356 to 1.46	1
40	0.05 to 0.745	0.1
	0.746 to 1.46	1
50	0.05 to 0.265	0.1
	0.266 to 1.46	1
80	0.05 to 1.03	1
	1.04 to 1.46	10
100	0.05 to 0.392	1
	0.393 to 1.46	10

●Case 3

Table C

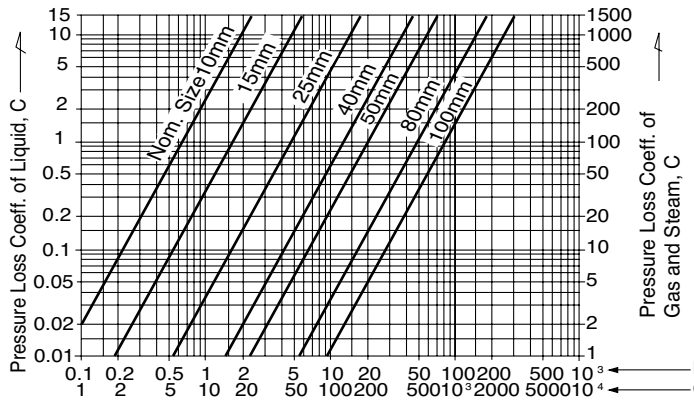
Nom. Size mm	Fluid Density in Service kg/m³	Standard Scaled Pulse Units, kg
10	0.50 to 4.66	0.01
	4.67 to 46.6	0.1
	46.7 to 60.0	1
15	0.50 to 1.49	0.01
	1.50 to 14.9	0.1
	15.0 to 60.0	1
25	0.50 to 2.47	0.1
	2.48 to 24.7	1
	24.8 to 60.0	10
40	0.50 to 4.38	0.1
	4.39 to 43.8	1
	43.9 to 60.0	10
50	0.50 to 1.99	0.1
	2.00 to 19.9	1
	20.0 to 60.0	10
80	0.50 to 1.99	0.1
	2.00 to 19.9	1
	20.0 to 60.0	10
100	0.50 to 2.64	1
	2.65 to 26.4	10
	26.5 to 60.0	100

●Case 4

Table D

Nom. Size mm	Liquid Sp. Gr.	Standard Total Flow Units, kg
10	0.500 to 2.00	1
15	0.500 to 0.749	1
	0.750 to 2.00	10
25	0.500 to 1.23	10
	1.24 to 2.00	100
40	0.500 to 2.00	10
50	0.500 to 0.999	10
	1.00 to 2.00	100
80	0.500 to 2.00	100
100	0.500 to 1.32	100
	1.330 to 2.00	1000

■PRESSURE LOSSES



$$\Delta P = \frac{C \times \rho}{100}$$

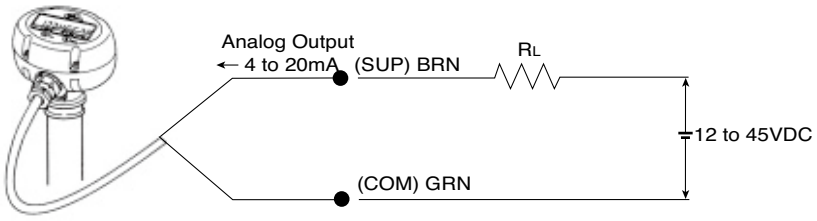
ΔP: Pressure loss (kPa)

ρ : Density (kg/m³)

To determine the pressure loss, find intersection C of two lines-flowrate (Q) and slanted line of the given meter size, and substitute it into the formula above.

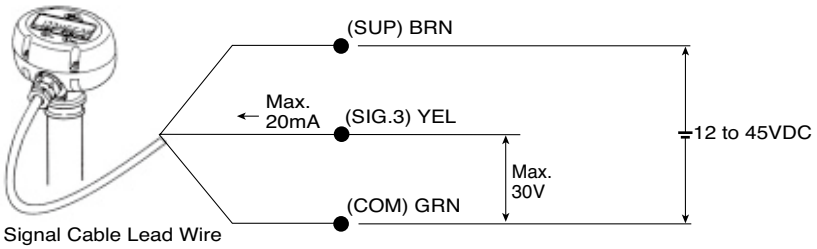
■WIRING CONNECTIONS, EXTERNALLY POWERED TYPE

●Analog Output (2-wire)



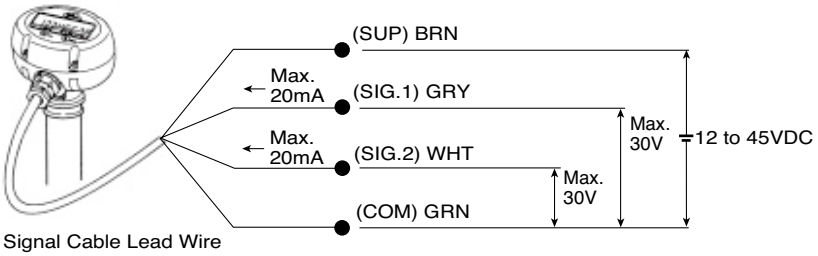
Signal Cable Lead Wire
1 meter long furnished

●Scaled or Unscaled Pulse Output (3-wire)



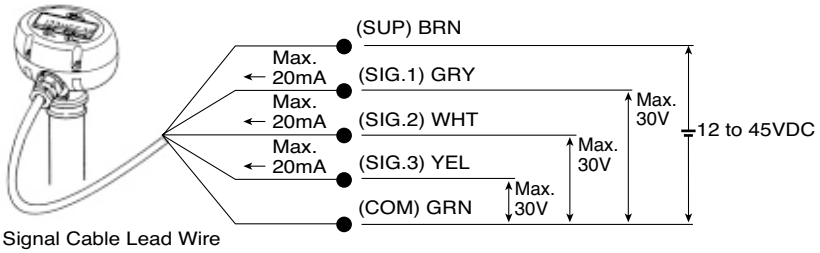
Signal Cable Lead Wire
1 meter long furnished

●High/Low Alarm Output (2 outputs) (4-wire)



Signal Cable Lead Wire
1 meter long furnished

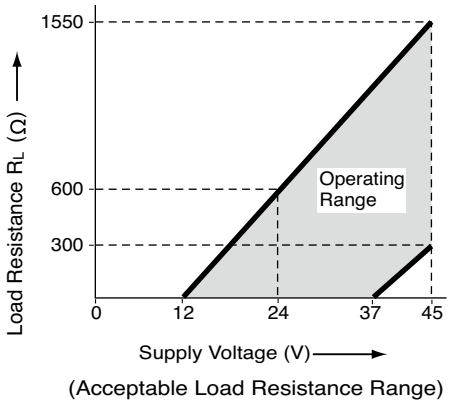
●High/Low Alarm (2 output) + Scaled Pulse or Unscaled Pulse Output (5-wire)



Signal Cable Lead Wire
1 meter long furnished

●Polarities

Lead Color	Description
BRN	SUP (and analog output)
GRY	SIG. 1 ... Alarm 1 output (high/low)
WHT	SIG. 2 ... Alarm 2 output (high/low)
YEL	SIG. 3 ... Factored/unfactored pulse output
GRN	COM

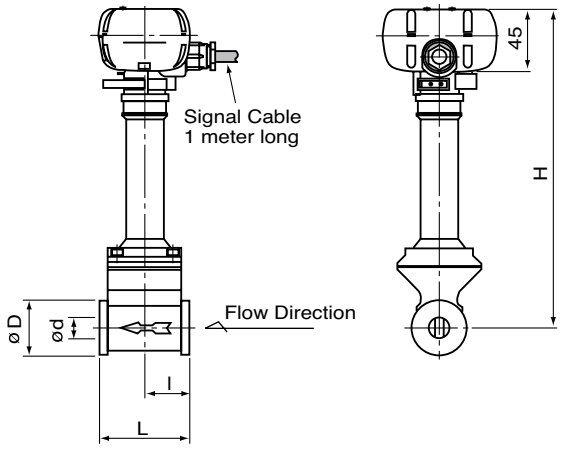


(Acceptable Load Resistance Range)

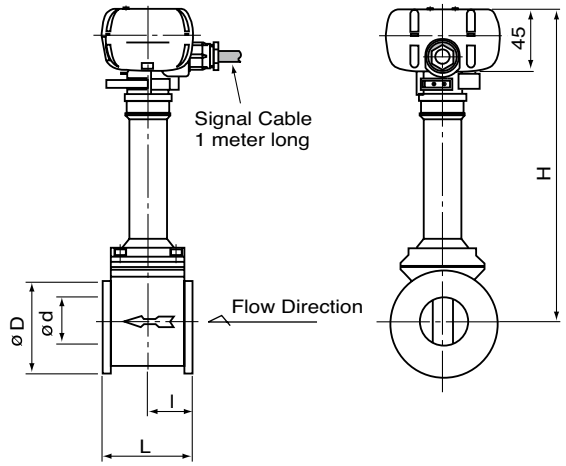
■OUTLINE DIMENSIONS (Unit: mm)

●Standard Type (Fluid temp.: -10 to +80℃)

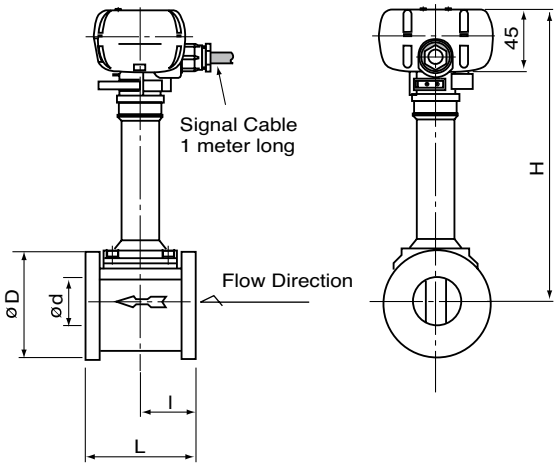
●Nominal sizes: 10, 15mm



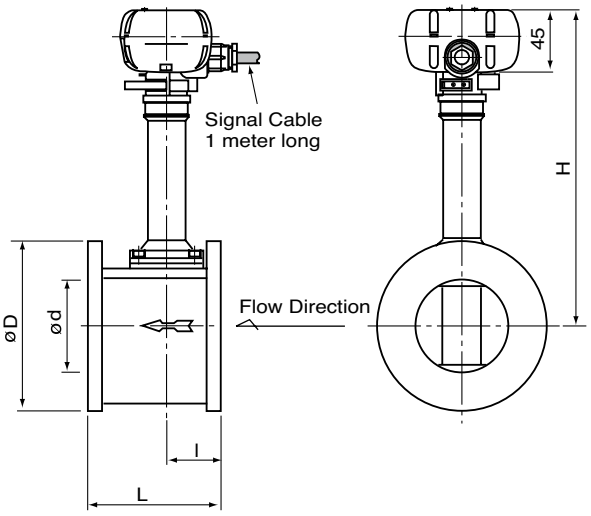
●Nominal size: 25mm



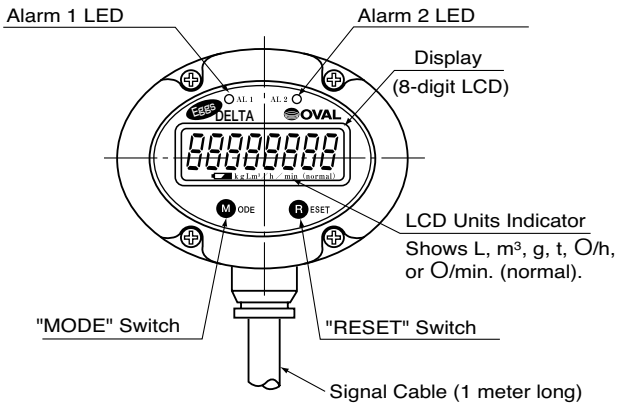
●Nominal sizes: 40, 50mm



●Nominal sizes: 80, 100mm



●Display

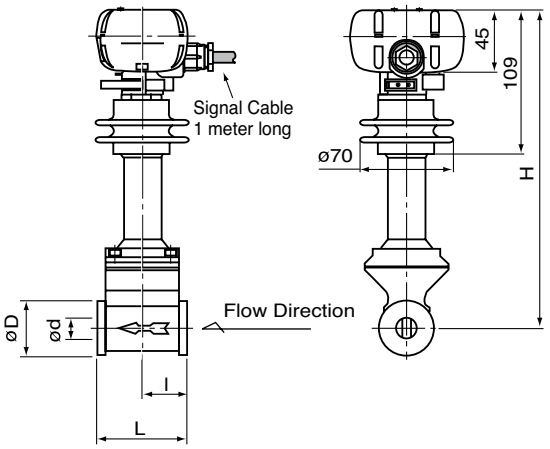


MODE/RESET is selectable with selector magnet furnished with the unit.

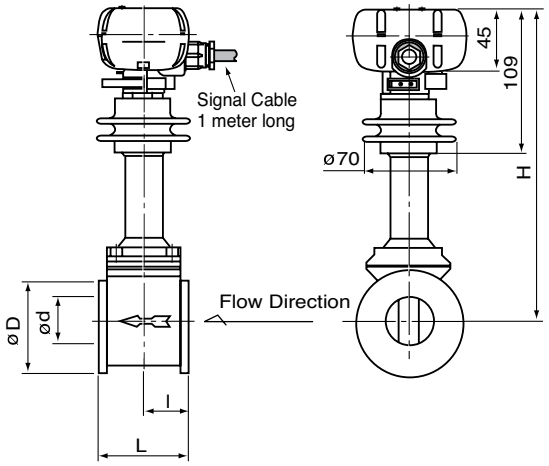
■OUTLINE DIMENSIONS (Unit: mm)

●High-temp. Type (Fluid temp.: -10 to +200℃)

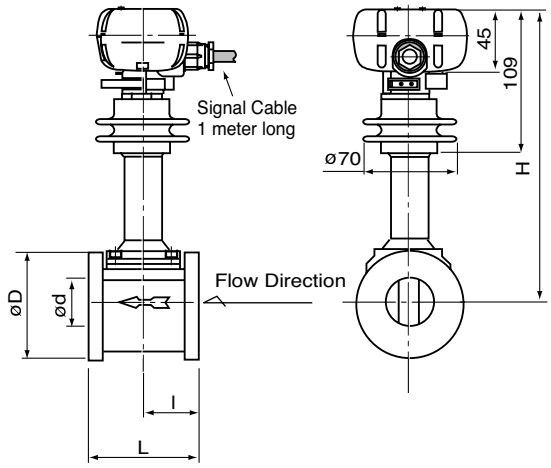
●**Nominal sizes: 10, 15mm**



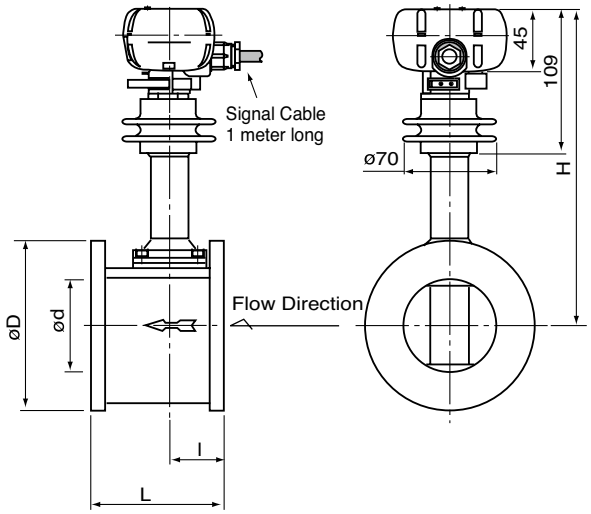
●**Nominal size: 25mm**



●**Nominal sizes: 40, 50mm**



●**Nominal sizes: 80, 100mm**

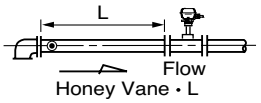
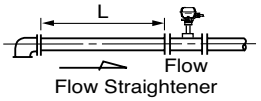
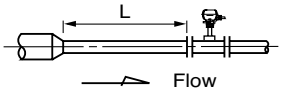
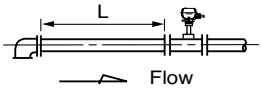
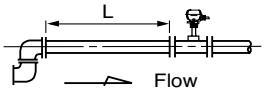
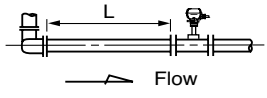
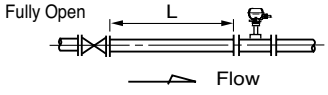
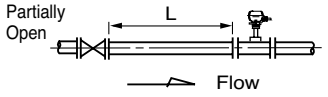


Nom.Size (mm)	L	l	ød	øD	H		Approx. Weight (kg)	
					–10 to +80℃ service	–10 to +200℃ service	–10 to +80℃ service	–10 to +200℃ service
10	65	32.5	10	40	232	264	1.4	1.6
15	65	32.5	14.5	40	232	264	1.4	1.6
25	65	32.5	26.6	67	232	264	2.0	2.2
40	80	40	37.6	81	217	249	2.7	2.9
50	80	40	48.5	91	221	253	2.8	3.0
80	100	40	72.4	126	237	269	5.6	5.8
100	125	48	95.2	156.2	257	289	9.3	9.5

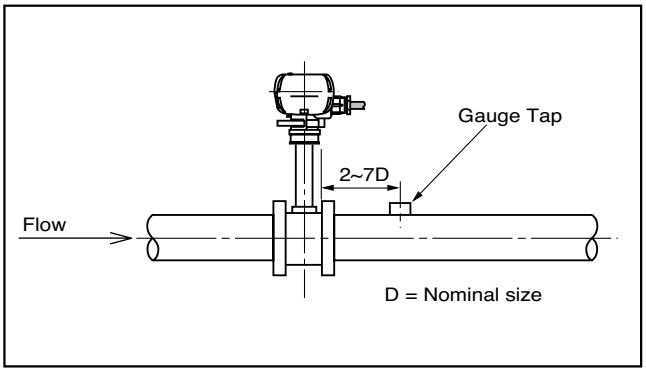
■INSTALLATION CONDITIONS

1. TYPICAL PIPING INSTRUCTIONS

It is generally required that the flow pattern of a fluid flowing in and out of an inferential type flow meter be as uniform as possible for accurate metering performance.
All account of this, proper flow straightening measures have to be applied for piping installation of EX DELTA. The standard piping instructions are shown in the following table.

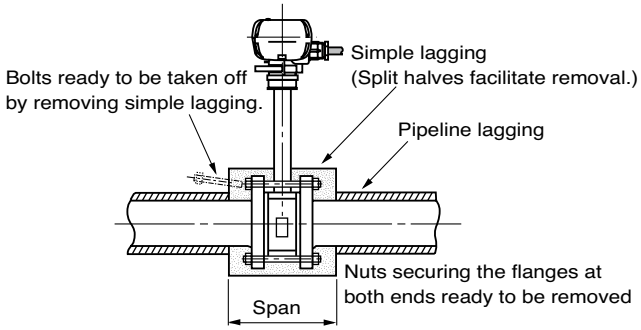
No.	Piping Arrangement		Straight Pipe Length(L)	Remarks	
1	OVAL's flow Straightener		8D	Refer to Paragraph 4 (page 10).	Applicable to meter size>25mm.
			12D	Refer to GS/GCF001.	
2	Reducer		15D Min.	A concentric reducer is upstream of the meter.	
3	Elbow		23D Min.	An elbow is upstream of the meter.	
			25D Min.	Two elbows are upstream of the meter.	
			40D Min.	Two elbows are vertically upstream of the meter.	
4	Fully open gate valve		15D Min.	A full-open gate valve is upstream of the meter.	
5	Partially open gate valve		50D Min.	A partially open gate valve, sharp orifice or something that markedly disturbs the flow pattern is upsteam of the meter.	

Notes 1: Sch.40 pipe is used for the flow straightener.
2: A short pipe section, 5D or longer is provided downsteam of the meter.
3: Taps for pressure gage and/or thermometer should be located downsteam of the meter. (Fig. below).



2. HEAT RETENTION WORK

If it is desired to thermally insulate the pipeline, simple lagging (without mortar finish) at the section where the meter is installed is suggested to facilitate servicing. This arrangement permits taking off flowmeter connecting bolts without breaking the lagging material.



3. PRECAUTIONS TO BE TAKEN ON PROCESS CONDITIONS

(1) Preventing cavitation

In a liquid flow application, line pressure should be higher than the level calculated from the following equation to prevent cavitation:

$P \geq 2.60\Delta P + 1.25Po$ (MPa [abs])

where ΔP: Pressure loss (MPa)

Po: Vapor pressure of the liquid (MPa [abs])

(2) Pulsations

When the delta flowmeter is installed in a line where a pulsating pressure generating source, such as a Roots-blower and compressor, exists, care should be taken to the influences of ripples it may create. The allowable magnitude of pulsation pressure is given by the equation:

$$N < \frac{2.25 \rho V^2}{100} \text{ (kPa)}$$

where N: Pulsation pressure (kPa)

ρ : Density (kg/m^3)

V: Min. flow velocity (m/s)

4. SPACE SAVING

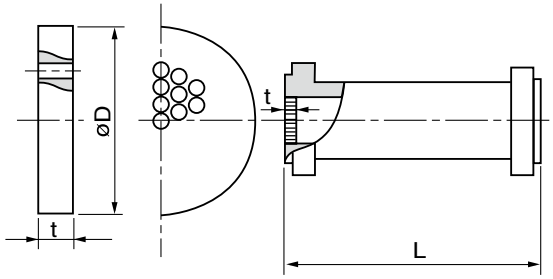
If the required space for a straight pipe is not available upstream of the flowmeter due to installation space limitation, you can avoid the problem by installing a combination Honey Vane "S" and a short pipe.

●Honey Vanes

Outline Dimensions

Nominal size (mm)	øD ※1 (mm)	Honey Vane. S t (mm)	Honey Vane. L L (mm)
25	75	3.5	200
40	90	5.4	320
50	105	6.9	400
80	134	10.2	640
100	159	13.3	800

（※1）：Dimensions with JIS 10K.



Honey Vane. S Honey Vane. L

■PRODUCT CODE EXPLANATION

Item	Code No. ① ② ③	④ ⑤ ⑥	—	⑦	⑧	⑨	⑩	Description	
Model	**F L X**							DELTA FLOWPET	
Nominal Size		**0 1 0**	**—**					10mm	
		0 1 5	**—**					15mm	
		0 2 5	**—**					25mm	
		0 4 0	**—**					40mm	
		0 5 0	**—**					50mm	
		0 8 0	**—**					80mm	
		1 0 0	**—**					100mm	
Flange Ratings				**1**				JIS 10K	
				2				JIS 16K	
				3				JIS 20K	
				4				JIS 30K	
				5				ASME 150 （※1）	
				6				ASME 300 （※1）	
				7				JPI 150 （※1）	
				8				JPI 300 （※1）	
				9				Other than above	
Applicable Fluid					**G**			Gas (–10 to +80˚C)	Standard type
					L			Liquid (–10 to +80˚C)	
					S			High-temp. gas (–10 to +200˚C)	High-temp. type
					H			High-temp. liquid (–10 to +200˚C)	
Output						**0**		None (battery powered)	
						1		Unscaled pulse	
						2		Scaled pulse output	
						3		Analog output	
						4		High/low alarm	
						5		Scaled pulse output + high/low alarm	
						6		Unscaled pulse output + high/low alarm	
Version							**B**		

（※1）：10mm in nominal size is not applicable.

■ORDERING INSTRUCTIONS

Please fill in the blanks or check the boxes ☐ below:

Item	Description
1. Fluid to the meter	
2. Flow ran	Max._____ Normal_____ Min._____ ☐m³/h[normal] ☐m³/h[actual] ☐kg/h
3. Temperature ran	Max._____ Normal_____ Min._____ ˚C
4. Pressure ran	Max._____ Normal_____ Min._____ MPa[gauge]
5. Density or Sp. G	Density_____ ☐kg/m³[normal], ☐kg/m³[actual] Sp. gr._____
6. Viscosi	_____ ☐mPa·s, ☐mm²/s at _____ ˚C
7. Process connecti	Nominal size ____ ☐mm, ☐˝, Flange rating ☐JIS _____ KRF ☐ASME/JPI _____ RF
8. Flow straighten	☐Req'd (Flow straightener and downstream pipe) ☐Not req'd (Prepare a straight pipe of specified length, I.D., Sch. No.)
9. Compensati	☐Temp./press. comp. ☐Pressure comp. ☐Temp. comp.
10. Compensation ra	Temp._____ to _____˚C, Press._____ to _____ MPa [gauge]
11. Compensation ref.	Ref. temp._____ ˚C Press. ref._____ MPa [gauge]
12. Compensation coe (gas measurement)	Z (service conditions) = Zo (standard conditions) =
13. Accuracy t	☐Req'd ☐Not Req'd
14. Conver	Type: ☐Integral construction ☐Separate construction Explosionproof construction: ☐Non-explosionproof ☐Flameproof
15. Ou t	☐Unscaled pulse, ☐Scaled pulse, Pulse unit_____ / P ☐Analog output, Full scale _____ to _____ / h
16. Receiving instrument	☐Separate-mount LCD counter ☐Remotely located receiver (Specify model and spec.)
17. Miscellaneous	