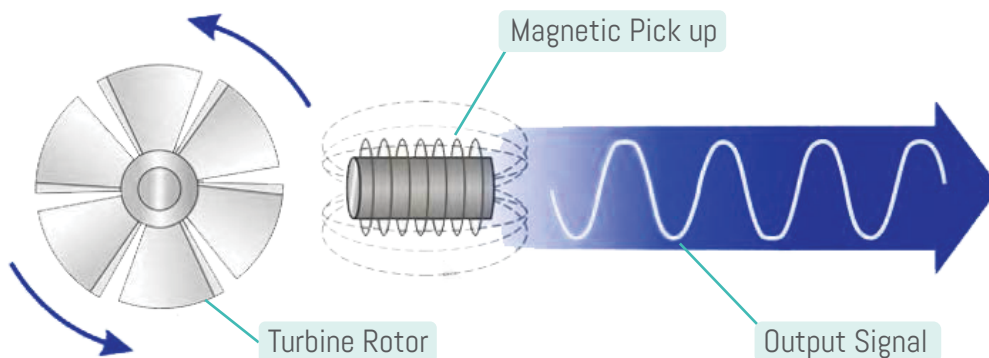


Liquid Turbine Flowmeter



Feature

- Flow measurement of tap water, demineralised water and chemicals.
- Fuels, marine engine fuel monitoring, vegetable oil, thermal oil and solvents.
- Special models for refrigerants, pharmaceutical fluids, cryogenic fluids, liquefied gases and high-pressure applications .

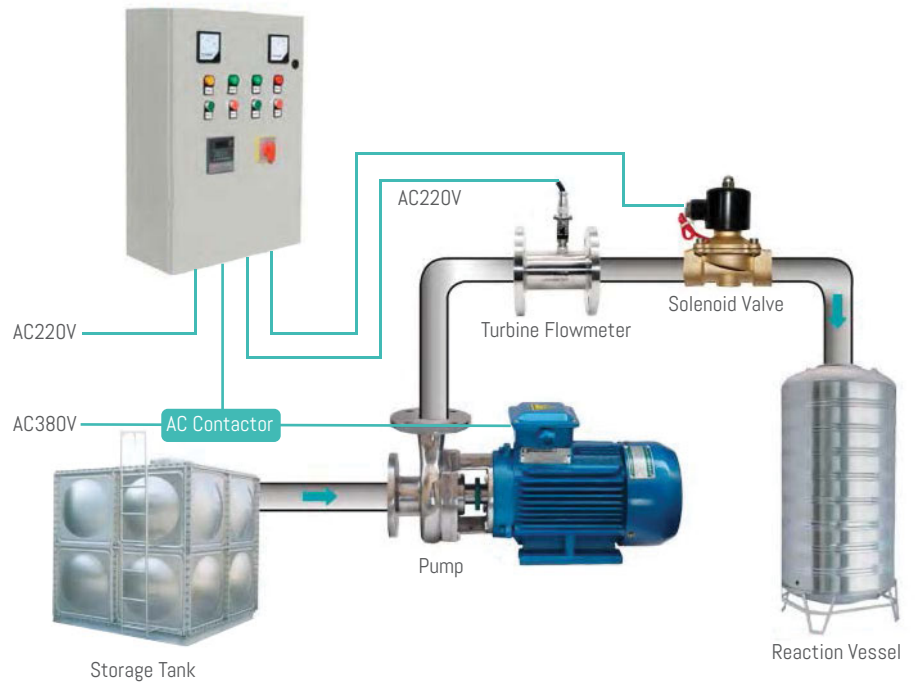


A turbine flow meter is used for volumetric total flow and/or flow rate measurement and has a relatively simple working principle. As fluid flows through the turbine meter, it impinges upon turbine blades that are free to rotate about an axis along the center line of the turbine housing. The angular (rotational) velocity of the turbine rotor is directly proportional to the fluid velocity flowing through the turbine. The resulting output is taken by an electrical pickoff(s) mounted on the flow meter body.

Ideal for Batching Applications

Good to use for application of blending/batching as well as storage and off-loading etc.

Because of its structure, rotor will immediately rotate as soon as the media induces a forward force. As the rotor cannot through the media on its own, it will stop as soon as the media stops. This ensures an extremely fast response time, making the turbine flow meter ideal for batching applications.



Flow Sensor

Excellent forging process, Wear Resistance and Durable
SS304 body (Optional SS316)



High Temperature Cooling Fin (Optional)
Resist High Temperature up to 150 °C



Flow Guiding Element
Stabilizing the flow and minimizing negative effects of turbulence

Integrated Precision Milling Impeller

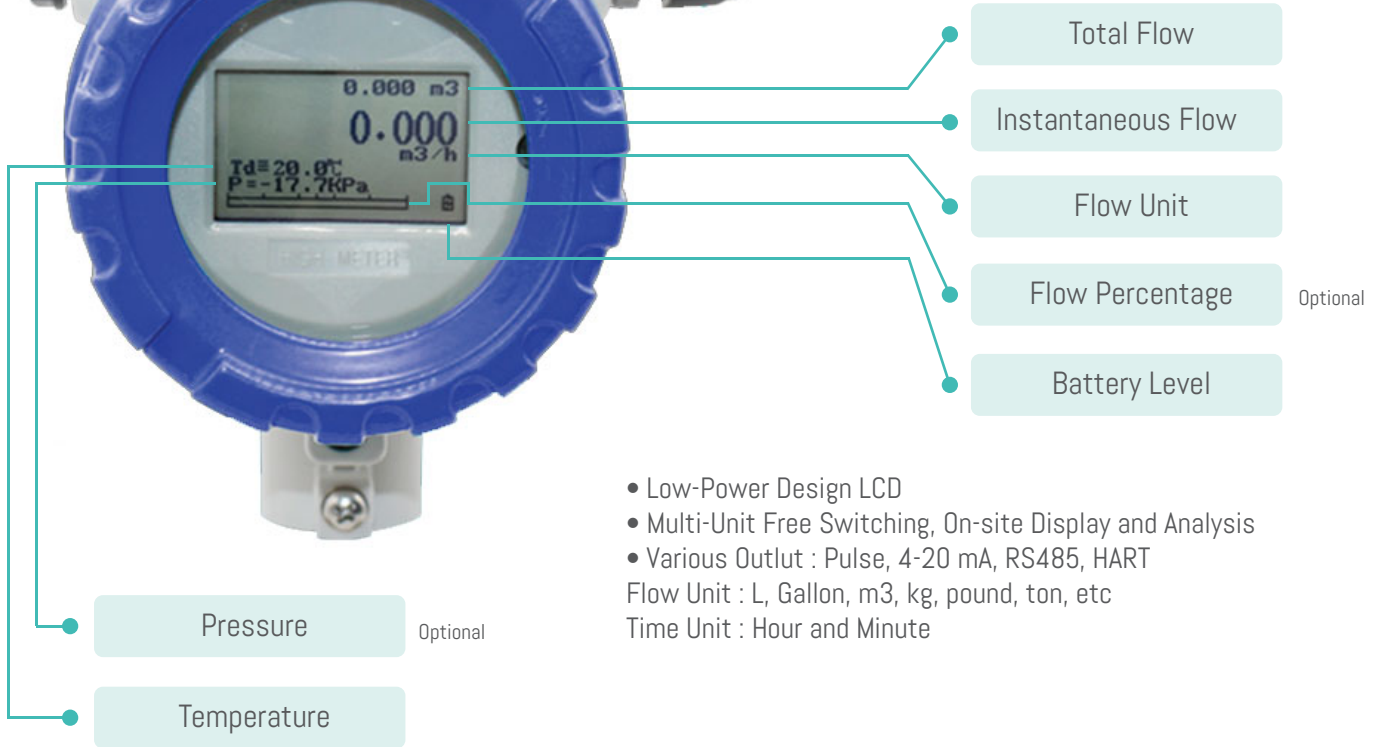
- Duplex Steel Material as Optional
 - 8-pieces impellers structure, hard alloy material
- DN4 - DN25 : 4-pieces impeller
DN32 : 6-pieces impeller
Above DN40 : 8-pieces impeller





Three Line HD LCD Display

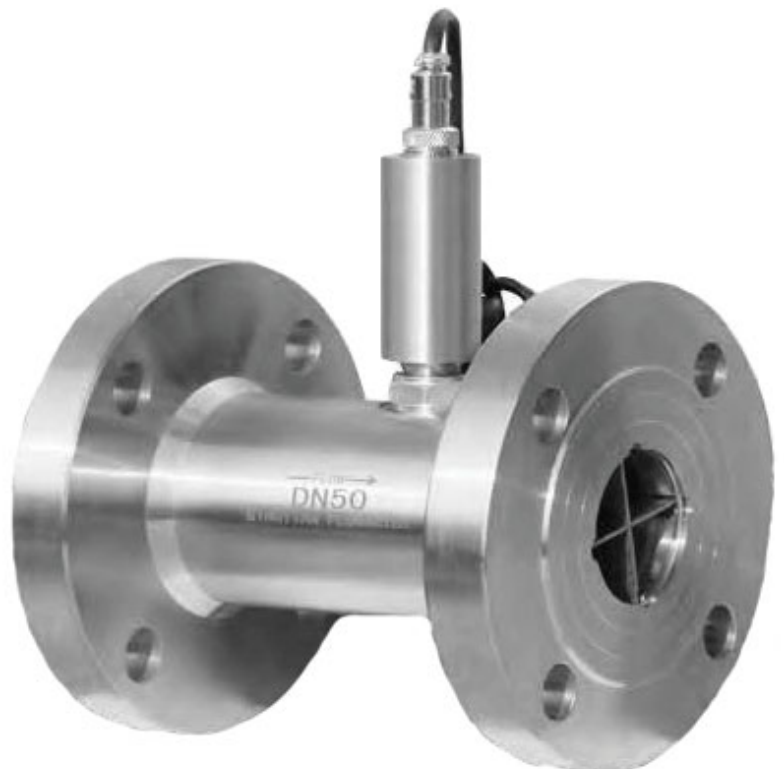
Temperature and pressure display also available



- Low-Power Design LCD
 - Multi-Unit Free Switching, On-site Display and Analysis
 - Various Outlut : Pulse, 4-20 mA, RS485, HART
- Flow Unit : L, Gallon, m3, kg, pound, ton, etc
 Time Unit : Hour and Minute

Perform Outstandingly In High Pressure Applications

- Resist High Pressure up to 42MPa
- No need hole tapping on the body, so it's easy to make high pressure type.



Product Group



Clamp Type



Thread Type

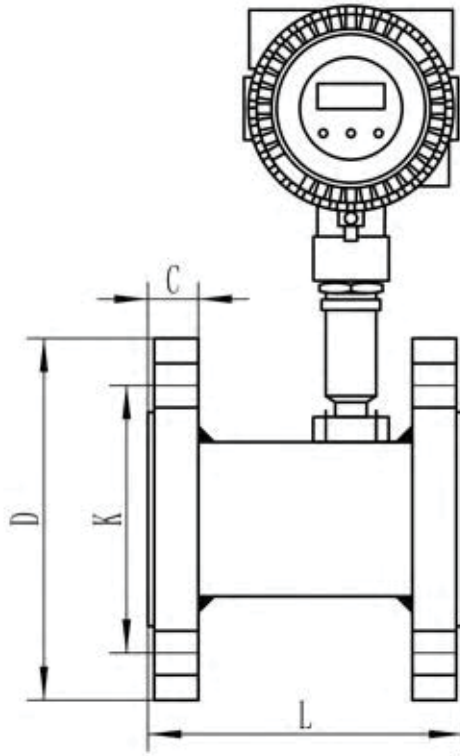


Flange Type

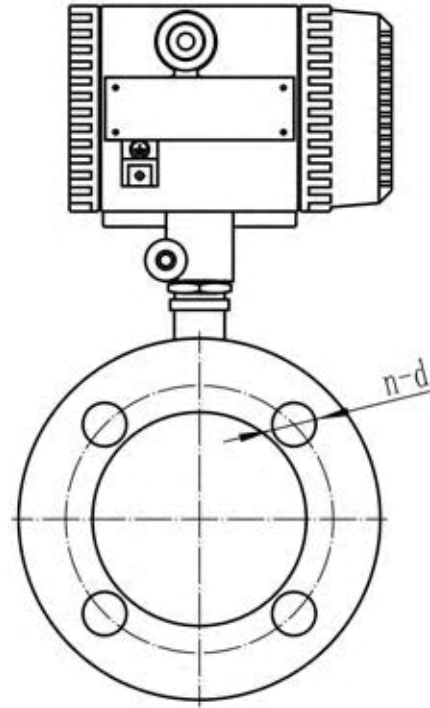


Pulse Signal with Flow Transmitter Economy Version

Flange Dimension



DN15 mm - DN200 mm



Flange Connection DIN Standard

Diameter (mm)	Flange Connection					
	L (mm)	D (mm)	K (mm)	d (mm)	n (Holes)	Flange Thickness C (mm)
10	345	90	60	14	4	16
15	75	95	65	14	4	16
20	80	105	75	14	4	18
25	100	115	85	14	4	18
32	120	140	100	18	4	18
40	140	150	110	18	4	19
50	150	165	125	18	4	21
65	175	185	145	18	4	21
80	200	200	160	18	8	23
100	220	220	180	18	8	23
125	250	250	210	18	8	25
150	300	285	240	22	8	25
200	360	340	295	22	12	27

Clamped and Sanitary

Only for
DN4 to DN80

PFA Gasket

Clamp

Connector



Tighten or loose the screws to install or dismatle



Pre Amplifier

Flowmeter

Pick up coil generates frequency proportional to flow rate

Pulse Conuter

Counts pulse and indicate total flow

or

Batching System

Give electrical output for batching operation

RS485 Output

Printer

4 - 20 mA Output

Strip Chart

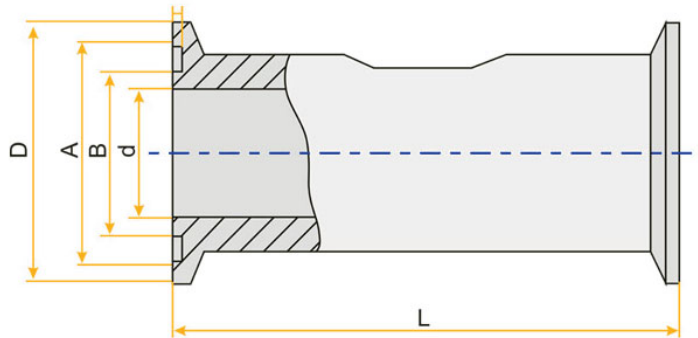
Pulse Output

Remote Totalizer

Alarm Output

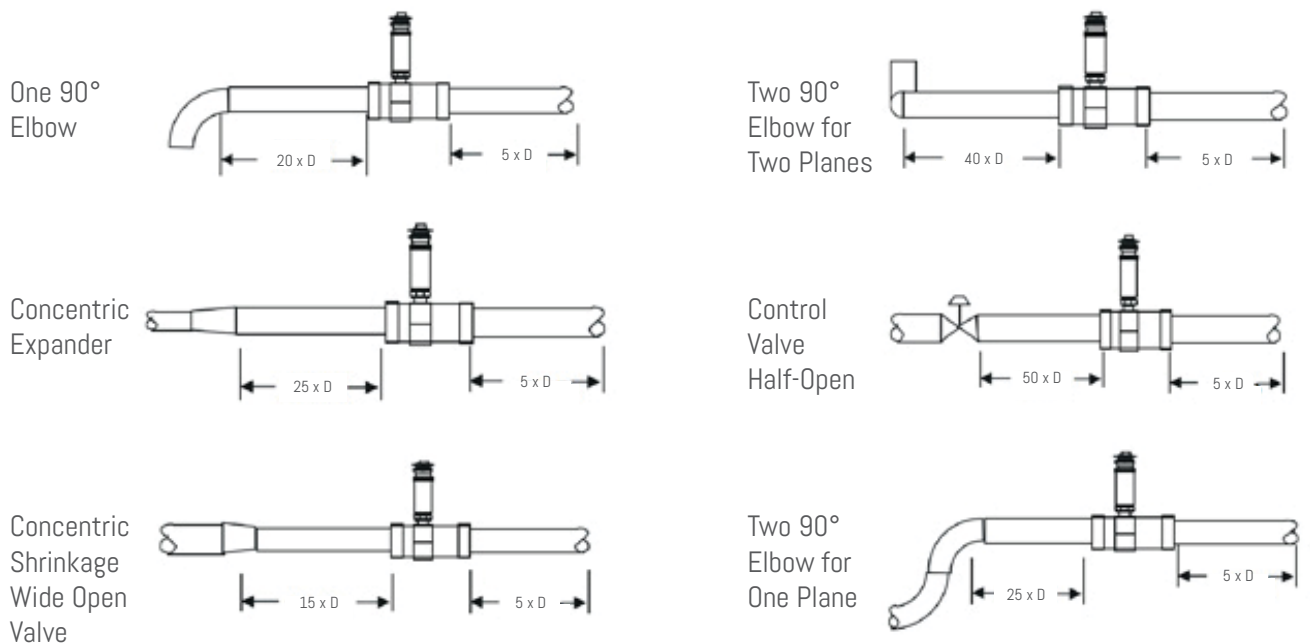
And More

Clamp and Sanitary Dimension

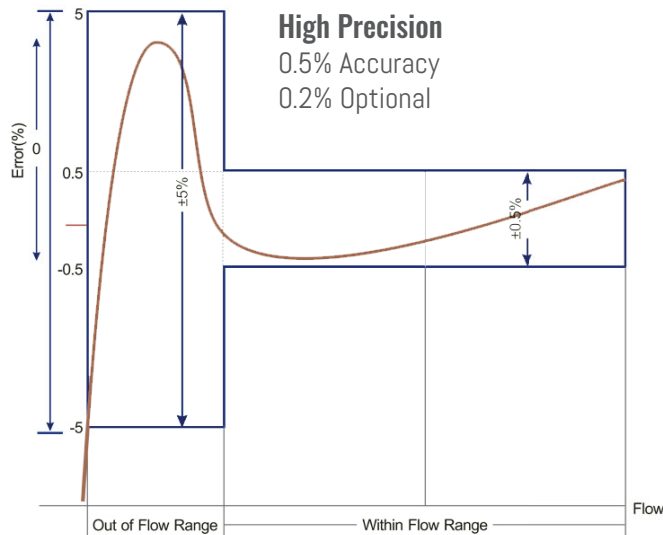


DN	D (mm)	A (mm)	B (mm)	d (mm)	L (mm)
DN4	Dia. 50	OD 45	ID 40.5	4	100
DN6				6	
DN10				10	
DN15				15	
DN20				20	
DN25				25	
DN32				32	
DN40	Dia. 64	Dia 59	Dia. 54	40	140
DN50	Dia. 77	Dia 73.5	Dia. 68.5	50	150

Installation Method



Technical Parameters	
Size & Process Connection	Thread connection:DN4,6, 10, 15,20,32,40,50,65,80, 100 Flange connection:DN15,20,32,40,50,65,80,100, 125,200 Clamp connection DN4,6, 10,15,20,32,40,50,65,80, 100
Accuracy	±0.5%, ±0.2% Optional
Sensor Material	SS304, SS316L Optional
Ambient Conditions	Medium temperature : -20 °C to + 150 °C Atmospheric pressure : 86 Kpa - 106 Kpa Ambient temperature : -20 °C to +60 °C Relative humidity : 5% - 90%
Signal Output	Pulse, 4-20mA, Alarm(Optional)
Digital Communication	RS485, MODBUS; HART
Power Supply	24V DC/3.6V Lithium Battery
Cable Entry	M20*1.5 ; 1/2"NPT
Explosion-proof class	Ex d IIC T6 Gb
Protection class	IP65; IP67 Optional



Max Temp
150 °C

Flow Range

Diameter (mm)	Standard Range (m3/h)	Extended Range (m3/h)	Connection Standard (Optional)	Standard Pressure (MPa)	Customize Pressure Rating (MPa)
DN4	0.04 - 0.25	0.04 - 0.4	Thread	6.3	12, 16, 25 ... 42
DN6	0.1 - 0.6	0.06 - 0.6	Thread	6.3	12, 16, 25 ... 42
DN10	0.2 - 1.2	0.15 - 1.5	Thread	6.3	12, 16, 25 ... 42
DN15	0.6 - 6	0.4 - 8	Thread(Flange)	6.3, 2.5 (Flange)	4.0, 6.3, 12, 16, 25 .. 42
DN20	0.8 - 8	0.45 - 9	Thread(Flange)	6.3, 2.5 (Flange)	4.0, 6.3, 12, 16, 25 .. 42
DN25	1 - 10	0.5 - 10	Thread(Flange)	6.3, 2.5 (Flange)	4.0, 6.3, 12, 16, 25 .. 42
DN32	1.5 - 15	0.8 - 15	Thread(Flange)	6.3, 2.5 (Flange)	4.0, 6.3, 12, 16, 25 .. 42
DN40	2 - 20	1 - 20	Thread(Flange)	6.3, 2.5 (Flange)	4.0, 6.3, 12, 16, 25 .. 42
DN50	4 - 40	2 - 40	Thread(Flange)	2.5	4.0, 6.3, 12, 16, 25 ... 42
DN65	7 - 70	4 - 70	Flange	2.5	4.0, 6.3, 12, 16, 25 .. 42
DN80	10 - 100	5 - 100	Flange	2.5	4.0, 6.3, 12, 16, 25 ... 42
DN100	20 - 200	10 - 200	Flange	1.6	4.0, 6.3, 12, 16, 25 .. 42
DN125	25 - 2500	13 - 250	Flange	1.6	2.5, 4.0, 6.3, 12, 16 .. 42
DN150	30 - 300	15 - 300	Flange	1.6	2.5, 4.0, 6.3, 12, 16 .. 42
DN200	80 - 800	40 - 800	Flange	1.6	2.5, 4.0, 6.3, 12, 16 .. 42

Clamp and Sanitary Type are available for DN4 to DN80 only.

Model Select

TBF	XXX	XX	X	X	X	X	XXX	XX	
Diameter									Three Digitals; for example: 010: 10 mm; 015: 15 mm; 080: 80 mm; 100: 100mm
Converter	N								No display, 24V DC, Pulse Output
	A								No display, 24V DC, 4 - 20 mA Output
	B								Local display, Lithium Battery Power No Output
	C								Local display, 24V DC Power 4 - 20 mA Output
	C1								Local display, 24V DC Power, 4 - 20 mA Output Modbus RS485 Communication
	C2								Local display, 24V DC Power, 4 - 20 mA Output HART Communication
Accuracy		05							0.5% of Rate
		02							0.2% of Rate
Flow Range			S						Standard Range: refer to flow range table
			W						Wide Range: refer to flow range table
Body Material				S					SS304
				L					SS316
Explosion Rating					N				Safety Field without Explosion
					E				ExdIIBT6
Pressuring Rating						E			Per Standard
						H (X)			Customized Pressure Rating
Connection							-DXX		DXX : D06, D10, D16, D25, D40 D06 : DIN PN6, D10 : DIN PN10 D16 : DIN PN16; D25 : DIN PN25 D40 : DIN PN40
							-AX		AX : A1, A3, A6 A 1 : ANSI 150#, A3 : ANSI 300# A6 : ANSI 600#
							-JX		JX : J1, J2, J4 J1 : JIS 10K, J2 : JIS 20K, J4 : JIS 40K
							-TH		Thread DN4 ... DN50
Fluid Temperature								-T1	-20 ... +80 °C
								-T2	-20 ... +120 °C
								-T3	-20 ... +150 °C

Clamp and Sanitary Type are available for DN4 to DN80 only.