



# THREAD LIQUID TURBINE FLOW METER

Model: F07.0402

For Reliable Liquid Measurement



New High-tech  
Enterprise



CE



Ex-proof



ISO

# APPLICATION

Hydraulic/  
lubrication  
system

Alcohol

Petroleum

Distilled  
Water

Food &  
Beverage

HVAC  
System

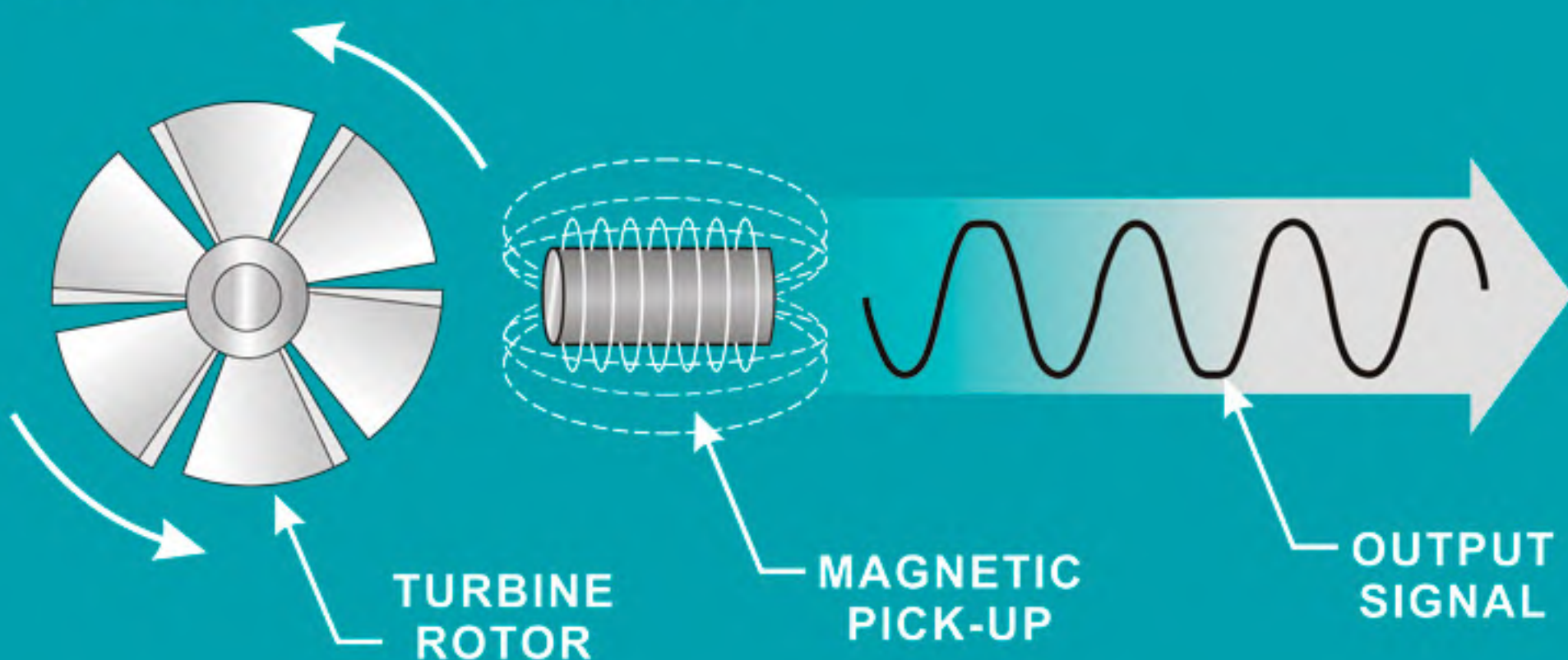
## WHAT IS A LIQUID TURBINE FLOWMETER?

Turbine Flow Meter is a volumetric measuring turbine type. The flowing fluid engages the rotor causing it to rotate at an angular velocity proportional to the fluid flow rate.

The angular velocity of the rotor results in the generation of an electrical signal (AC sine wave type) in the pickup.

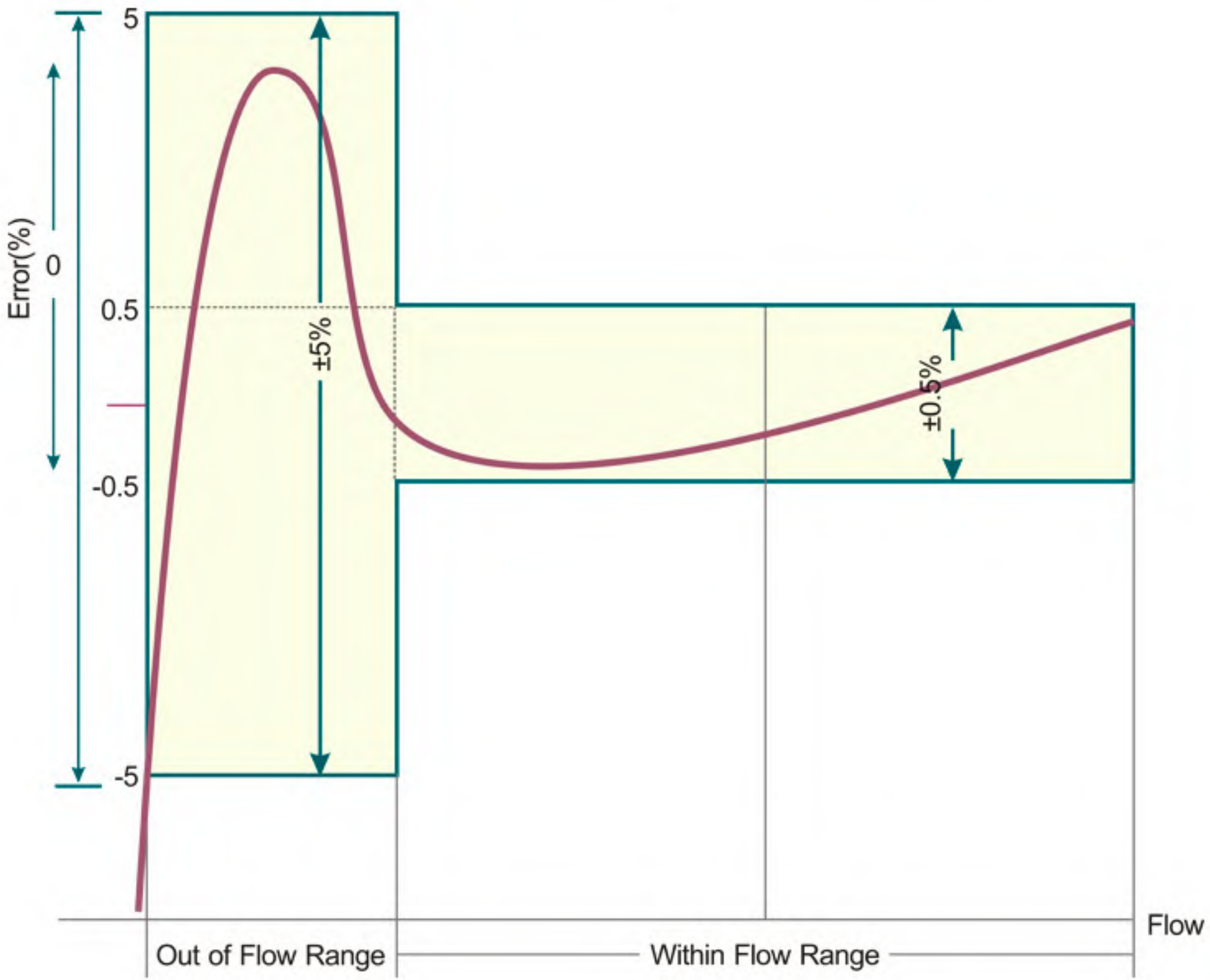
The summation of the pulsing electrical signal is related directly to total flow. The frequency of the signal relates directly to flow rate.

### ● Turbine Flow Meter



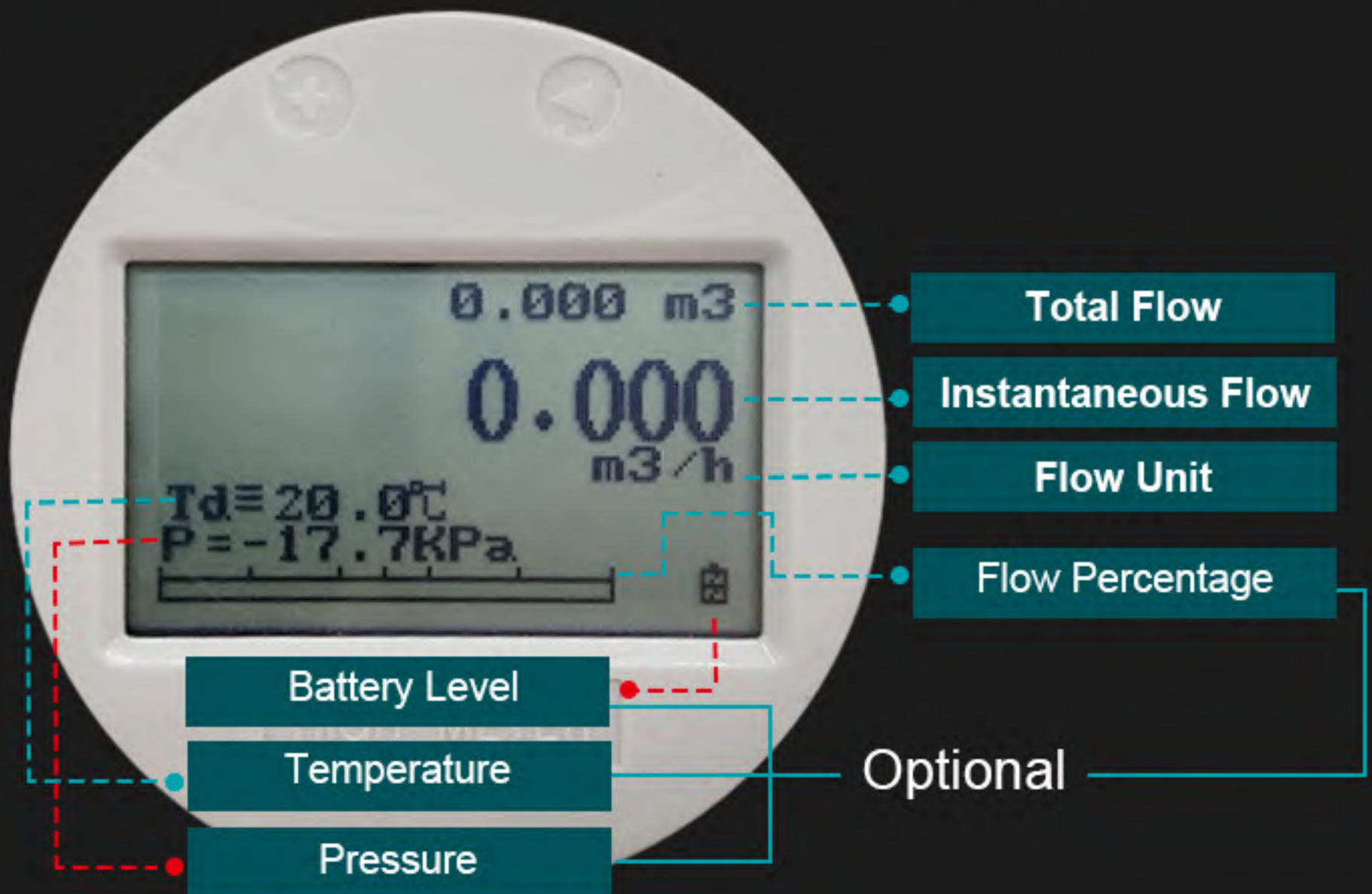
# HIGH PRECISION EVERY DROP IS PRECIOUS

0.5% Accuracy(0.2% Optional)



# PRODUCT FEATURES

## Three Line HD LCD Display



- 1 Low-Power Design LCD
- 2 Multi-unit Free Switching, On-site Display and Analysis

Flow Unit: L, Gallon, M3, Kg, Pound, Ton, etc

Time Unit: Hour and Minute

# Intelligent Transmitter



Dual Power  
Supply (Optional)  
DC3.6V Battery  
+DC24V

Various Outputs

Pulse

4-20mA

RS485

HART

**01** **360°** Rotate Converter, All-dimensional Data Observation

**02** Filter & trigger gate anti-interference

**03** Modular design, convenient for maintenance

# Flow Sensor



SS304 Material  
Optional SS316  
Excellent Forging Process



Resist High Temperature  
up to 150 °C



Resist High Pressure up  
to 42MPa



Wear Resistance,  
Durable Life, Anti-rust



DN10-DN100(Male Thread)

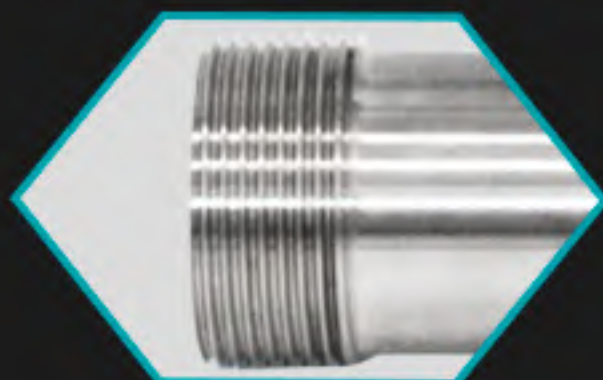


DN15-DN50(Female Thread)



DN4-DN10(Extend Straight pipeline)

## Available Thread Standard



G Thread



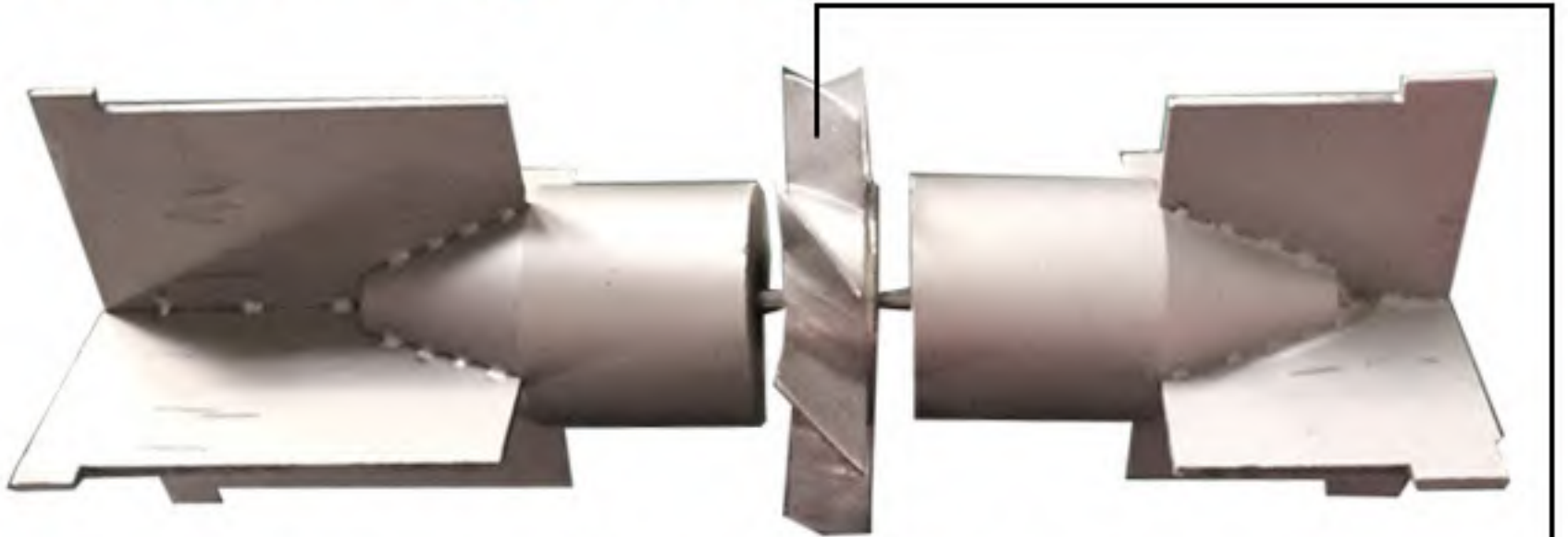
NPT Thread



PT Thread

And More...

## ● Flow Guiding Element



- Stabilizing the flow and minimizing negative effects of turbulence

Duplex Steel  
Material  
(Optional)

8-piece impellers  
structure, hard alloy  
material



## Integrated Precision Milling Impellers ●

DN4~DN25: 4-pieces impellers; DN32: 6-pieces impellers;  
Above DN40: 8-pieces impellers

# Pick-up Sensor

24V+  
24V-



Two Wire DC4-20mA

24V+ Pulse  
24V-



Three Wire Pulse

PREAMPLIFIER



**FLOWMETER**  
Pickup coil generates frequency proportional to flow rate

**PULSE COUNTER** or **BATCHING SYSTEM**  
Counts pulses and indicates total flow  
Gives electrical output for batching operation

RS485 OUTPUT

PRINTER

4-20mA OUTPUT

STRIP CHART RECORDER

PULSE OUTPUT

REMOTE TOTALIZER

ALARM OUTPUTS

AND MORE



# MORE PRODUCTS SHOW



# PRODUCT PARAMETER

## Technical Parameters

Size	DN4,6,10,15,20,32,40,50,65,80
Accuracy	±0.5% (±0.2% Optional)
Sensor Material	SS304 (SS316L Optional)
Ambient Conditions	Medium temperature:-20°C~+150°C; Atmospheric pressure:86Kpa~106Kpa Ambient temperature:-20°C~+60°C; Relative humidity:5%~90%
Signal Output	Pulse, 4-20mA
Digital Communication	RS485, 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

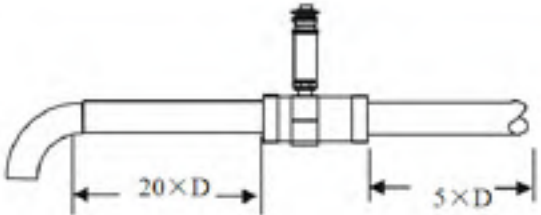
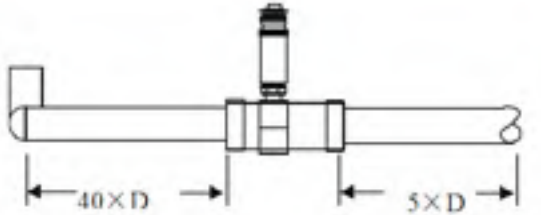
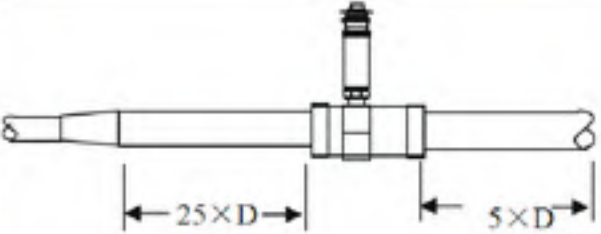
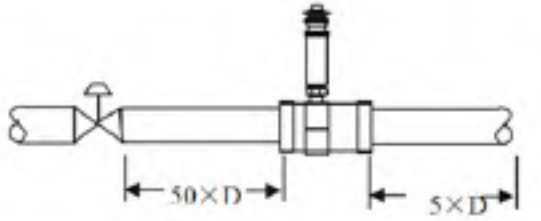
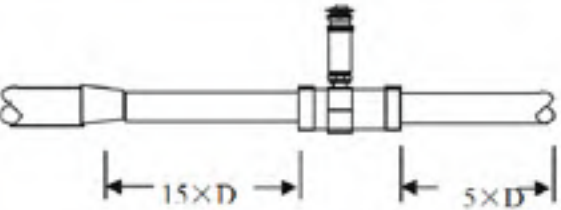
## Flow Range

Diameter (mm)	Standard Range (m <sup>3</sup> /h)	Extended Range (m <sup>3</sup> /h)	Standard Pressure (Mpa)	Customized Pressure Rating(Mpa)
DN4	0.04~0.25	0.04~0.4	1.6	4.0
DN6	0.1~0.6	0.06~0.6	1.6	
DN10	0.2~1.2	0.15~1.5	1.6	6.3
DN15	0.6~6	0.4~8	1.6	
DN20	0.8~8	0.45~9	1.6	10
DN25	1~10	0.5~10	1.6	
DN32	1.5~15	0.8~15	1.6	16
DN40	2~20	1~20	1.6	
DN50	4~40	2~40	1.6	25
DN65	7~70	4~70	1.6	
DN80	10~100	5~100	1.6	42

# Model Selection

Model Suffix Code										Description	
LWGY-											
Diameter											Three Digitals; for example: 010: 10 mm;      015: 15 mm; 080: 80 mm;
Converter		N									No display; 24V DC; Pulse Output
		A									No display; 24V DC; 4-20mA Output
		B									Local display; Lithium Battery Power; No output
		C									Local display; 24V DC Power; 4-20mA Output;
		C1									Local display; 24V DC Power; 4-20mA Output; Modbus RS485 Communication
		C2									Local display; 24V DC Power; 4-20mA 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								
Body Material				S							SS304
				L							
Explosion Rating					N						Safety Field without Explosion
					E						
Fluid Temperature									-T1		-20...+80°C
									-T2		-20...+120°C
									-T3		-20...+150°C

# Installation Notice

<p>One 90° elbow</p>		<p>Two 90° elbows for two planes</p>	
<p>Concentric expander</p>		<p>Control valve half-open</p>	
<p>Concentric shrinkage wide open valve</p>		<p>Two 90° elbows for one plane</p>	