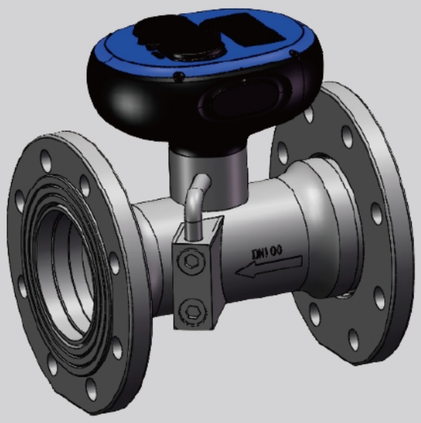
PWM Series Ultrasonic Water Meter

DN50-DN300

Features

- Superior Hydraulic Design, Without Installation Requirements Of Straight Pipe
- Wide Turndown Ratio, R is Up To 1000
- Suitable For Mass Flow And Tiny Flow Measurement
- The Design Of Integrated Flow, Pressure, Wireless Reading Meets Monitoring Pipeline Requirement



- IP68 Protection Class, Whole Meter Sealed Completely Ensures Long Term Underwater Working
- Double D Size Batteries Can Continuously Work For 15 Years
- Bi-directional Measuring Forward And Reverse Flow
- Data Logger Function Can Save 10 Years' Data Including Day, Month And Year
- LCD Display Volume, Flow Rate, Flow Direction, Alarm, Leak Detection At The Same Time
- Standard RS485 (Modbus-RTU), A Variety Of Options, NB-IOT, OCT, GPRS etc.
- Electric Components According To ROHS, OSP Processed Circuit Board
- Stainless Steel Body (SS304) is Integrated Stretching Patent Right Product
- International Standard Flange Connection, Simple Installation
- According To Sanitary Standard For Drinking Water

Technical Specification

Max. Working Pressure	1.6Mpa
Temperature Class	T30、T50、T70、T90（Default T30）
Accuracy Class	ISO 4064, Accuracy class 2
Body Material	Stainless steel SS304（Opt. SS316 or SS316L）
Battery Life	Up to 15 years (consumption ≤0.5mW)
Protection Class	IP68
Environmental Temperature	-40 ~ 70℃, ≤100%RH
Pressure Loss	ΔP10、ΔP16（based on different dynamic flow）
Climatic And Mechanical Environment	Class C
Electromagnetic Class	E2
Communication	RS485 (baud rate adjustable), Pulse (default 2ml/pulse, changable) Opt. NB-IOT, GPRS
Display	9 digit LCD display volume, flow rate, pressure, error alarm, flow direction, low battery power alarm, output
RS485	Baud rate 2400bps, 4800bps, 9600bps, 19200bps (default 9600bps, ModBus-RTU)
Connection	Flanges according to EN1092-1/ANSI B16.5-150 (others customized)
Flow Profile Sensitivity Class	U3/D0 or U0/D0
Measuring Frequency	No less than 1second/time
Data Logger	Store the latest 10 years' data including Day, Month and Year The data can be permanently saved even after the loss of power
Frequency	1-4 times/second

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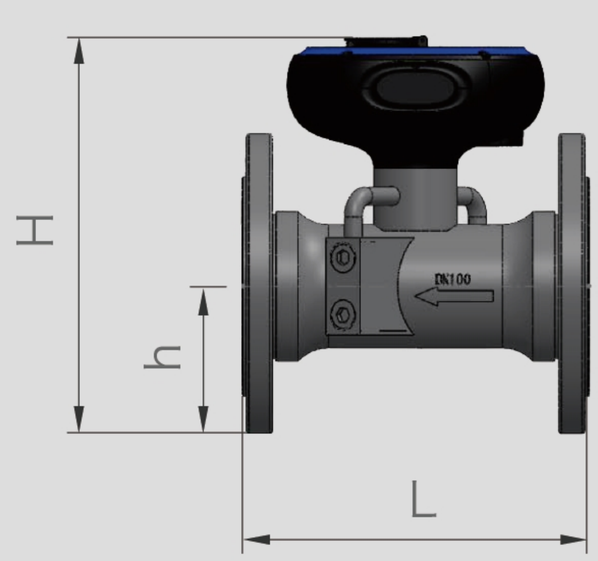
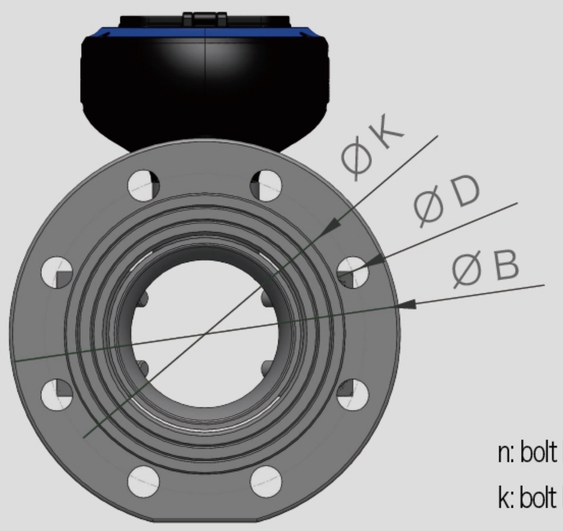
· Measuring Range

Model		PWM								
Nominal Size	(mm)	50	65	80	100	125	150	200	250	300
	(inch)	2	2.5	3	4	5	6	8	10	12
Overload Flow Q4		78.75	125	200	312.5	312.5	500	787.5	1250	2000
Permanent Flow Q3		63	100	160	250	250	400	630	1000	1600
Transitional Flow Q2		0.101	0.160	0.256	0.400	0.400	0.640	1.008	1.600	2.560
Minimum Flow Q1		0.063	0.1	0.16	0.25	0.25	0.4	0.63	1	1.6
R=Q3/Q1		1000								
Q2/Q1		1.6								

· Dimensions & Weight





n: bolt hole numbers

k: bolt hole diameter

Model		PWM								
Nominal Size	(mm)	50	65	80	100	125	150	200	250	300
	(inch)	2	2.5	3	4	5	6	8	10	12
L-Length (mm)		200	200	225	250	250	300	350	450	500
B-Width (mm)		165	185	200	220	255	285	340	406	489
H-Height (mm)		248	259	269	285	309	339	380	444	496
h-Height (mm)		40	90	90	103	117	140	165	203	245
D×n		18×4	18×4	18×8	18×8	18×8	22×8	22×12	22×12	22×12
K (mm)		125	145	160	180	210	240	295	350	400
Pressure (MPa)		1.6	1.6	1.6	1.6	1.6	1.6	1.0	1.0	1.0
Weight (kg)		9	11.5	13	15	17	32	45	68	96

· Installation Requirements

· The meter must be full with water all the time

· For details view the installation manual

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Model Selection

PWM	Ultrasonic Water Meter	
	Pipe Size	
XXX	050-50mm, 300-300mm	
	Body Material	
1	Stainless steel 304 (Opt. 316, 316L)	
2	Others	
	Pressure	
1	Standard (DN50-150 1.6MPA, DN200-300:1.0MPA)	
2	Customized	
	Turndown Ratio R	
1	R1000	
2	R800	
3	R630	
4	R500	
5	R400	
6	other (customized)	
	Output	
1	RS485 (ModBus) (Standard Configuration)	
2	GPRS	
3	OCT Pulse	
4	NB-IoT	
5	Others (customized)	
	Optional Function	
1	Pressure Measurement & Remote Function	
2	Pressure Measurement	
3	Remote Function	

For Example: PWM-050-1-1-1-1-2-1

Stands for: PWM ultrasonic water meter, pipe size DN50, stainless steel, pressure 1.6 MPA, ratio R1000, GPRS, pressure & remote function

GPRS/NB-IoT
Wireless Data Collector

Features

- Built-in Battery + External Battery Combined Power Supply
- Super Long Stand-by Time, The Battery Working Life Is 6 Years If Transfer Twice a Day
- NB Module Transfer & Receive Data By Muti-band Frequency, Monthly Data Usage Is Less Than 10M
- Reading Positive And Negative Flow, Flow Rate, Pressure, Battery Voltage etc.
- The Communication Parts Can Get 5V Power Supply
- Built-in Large Data Logger Can Save 4 Months' Data
- Simple Operation, Real Time Data Synthronization
- The Parameter Setting Can Be Checked By Infrared or Wechat APP, Support Firmware Remote Upgrading

Specification

Power Supply	Built-in Lithium Battery (3.6V)
External Power Supply	Exterior 5V power supply for meter communication parts (only when reading) , Current ⩽80mA
Consumption Current	Stand-by 30uA, transferring peek 100mA
Working Life	2 years (reading in15 minutes, transferring in 2 hours interval) 6 years (reading in15 minutes, transferring in 12 hours interval)
Communication	NB communication module, support internet card, monthly data usage less than 10M
Data Logger Time	Data can be saved in the device for 4 months
Enclosure Material	ABS
Protection Class	IP68
Operation Environment	-40℃ ~ 70℃, ⩽100%RH
Climatic Mechanical Environment	Class C
Electromagnetic Class	E2