

# NB-IoT Residential Ultrasonic Water Meter

## Product Description

Residential ultrasonic water meter is designed for domestic water metering and displaying applications.

Nominal diameter: DN15-DN40.

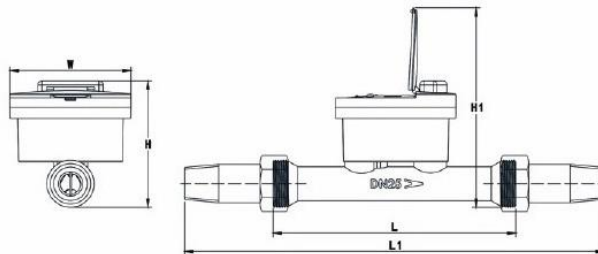
Applications: Tap Water Distribution System.

## Product Features

- ◆ Optional communication interfaces: NB-IoT, M-BUS, RS485, LoRa Wireless, Pulse and GPRS
- ◆ Low pressure drop
- ◆ Automatically records the daily total of the last 2 years and monthly total of the last 24 months
- ◆ Low starting flow
- ◆ No moving parts, wear-free ultrasonic technology, Maintenance-free
- ◆ No optical-electrical conversion needed, digital remote communication
- ◆ Bi-directional flow
- ◆ Conforms with GB/T 778-2007 and C/J/T 434-2013 Ultrasonic Water Meter standards



## Overall Dimensions

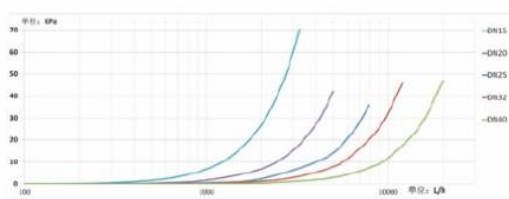


Nominal Diameter	DN15	DN20	DN25	DN32	DN40
L (Length of Flow Sensor) mm	165	195	225 <sup>260</sup>	230 <sup>260</sup>	245 <sup>300</sup>
L1 (Length of Flow Sensor Plus extension pieces) mm	261	310	347 <sup>382</sup>	356 <sup>386</sup>	376 <sup>431</sup>
W (Width) mm	110	110	110	110	110
H1 (Open the height of the cover) mm	167	172	177	186	197
H (Height) mm	102	107	112	121	132
Pipe joint of Flow sensor	G <sup>3</sup> / <sub>4</sub> "	G1"	G1 1/4"	G1 1/4"	G2"
Pipe Joint of Extension Pieces	R <sup>1</sup> / <sub>2</sub> "	R <sup>3</sup> / <sub>4</sub> "	R1"	R1 1/4"	R1 1/2"

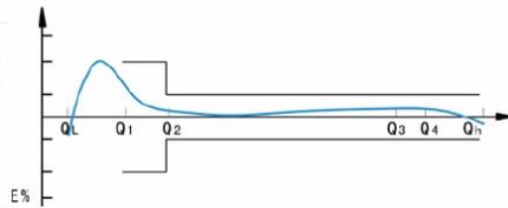
## Technical Parameters

Nominal Diameter	DN15	DN20	DN25	DN32	DN40
$Q_3 \times 40; m^3/h$	2.5	4	6.3	10	16
$R100 Q_2/Q_1(m^3/h)$	0.04/0.025	0.07/0.04	0.1/0.063	0.16/0.1	0.26/0.16
$R160 Q_2/Q_1(m^3/h)$	0.25/0.016	0.04/0.025	0.07/0.04	0.1/0.063	0.16/0.1
$R250 Q_2/Q_1(m^3/h)$	0.16/0.01	0.025/0.016	0.04/0.025	0.07/0.04	0.1/0.063
Starting Flow L/h	1.5	2.0	2.5	4	5
Accuracy Class	Class 2				
Pressure Class	MAP16(MAP10, MAP25)				
Environmental Class	C				
Electromagnetic Class	E1				
Pressure Loss Class	▲P25 (▲P63, ▲P40)				
Flow Field Sensitivity Class	U%D3				
Temperature Rating	T30 (T50, T70, T90)				
Recording	Automatically records the daily total of the last 2 years and monthly total of the last 24 month				
Communication Interfaces	Infrared, M-BUS, RS485, 4-20mA, Lora, GPRS, Pulse, NB-IoT				
Power Supply	DC3.6V (Non-rechargeable Lithium Battery)				
Metering Cycle	1 time/S				
Average Operating Current	≤20μA				

### Pressure Loss Curve



### Flow Error Curve



## Selection Description

◆ MTW Residential Ultrasonic Water Meter follow below order specifications:

MTW - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Communication Interface: KB(Infrared); KV(RS485); KM(MBUS); KP(Pulse); KW(Wireless); KD(4-20mA); KS(Modbus); KG(GPRS); KNB(NB-IoT) etc

Size: DN50; DN300...

Channel: 1(Single Channel); 2(Dual Channels); 4(Quad Channels)

Pipe Joint: L(Threading connection)/H(Removable Flange)/G(Fixed Flange)

Transducer Structure type: D(Ejection Type)/F(Reflection Type)

Products Models: Network ultrasonic water meter has model1, 2, 6 and Model 9

Example:

**MTW-1-DG4-DN65-KB** stands for **Model 1-DN65 quad channels Infrared ultrasonic water meter with ejection type transducer and fixed flange**