## WOLTMAN WATER METER



## *intellimeter*

Innovative Metering Solutions



Horizontal Woltman meters are available in 2", 2-1/2", 3", 4", 6", 8", 10", and 12" diameters (DN50, DN65, DN80, DN100, DN125, DN150, DN200, DN250, DN300) with ANSI Flanges connection and a removable insert.

It includes a Sealed Counter mechanism coupled magnetically, which completely separates the register system and the water. The Dial provides a direct reading on numerical rolls capable of rotating 360°. The Woltman meter is suitable for industrial, domestic and irrigation applications. It is supplied with a dry-contact pulse switch that can be mountable even after installation.

This type of water meter is a high accuracy measurement instrument with a steady error curve at different flow rates. All the technical figures are in conformance with the ISO4064 Standard class B, and the GB/T 778.1-3-1996.

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### **Dimensions:**



Туре	Size (mm)	Length (mm)	Height H (mm)	Outer Diameter D1	Bolt Circle Diameter D2	Connecting Bolt n-Md	Weight (kg)
ICI22WM-50mm	50	200	247	165	125	4-M16	12
ICI22WM-65mm	65	200	260	185	155	4-M16	13
ICI22WM-80mm	80	225	265	200	160	8-M16	15
ICI22WM-100mm	100	250	272	220	180	8-M16	19
ICI22WM-125mm	125	250	295	250	210	8-M16	23
ICI22WM-150mm	150	300	302	285	240	8-2-	30
ICI22WM-200mm	200	350	359	340	295	8-M20(1.0MPa) 12-M20(1.6MPa)	42
ICI22WM-250mm	250	450	470	395 405	350 355	12-M20(1.0MPa) 12-M24(1.6MPa)	94
ICI22WM-300mm	300	500	492	445 460	400 410	12-M20(1.0MPa) 12-M24(1.6MPa)	97 114

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#### **Working Condition:**

Water temperature:

- Minimum temperature 5°C
- Cold water type ≤30°C;
- Hot water type 90°C.
- Water Pressure ≤1MPa (PN:1.6MPa/16bar)
- ΔP≤0.1MPa

#### Accuracy:

- From minimum flow- rate (qmin) inclusive, to transitional flow- rate(qt) exclusive: ±5%
- From transitional flow- rate (qmin) inclusive, to transitional flow- rate(qt) exclusive: ±2% (For Hot Water meters ±3% at high temperature)

Size (mm)	Class of Measurement	Maximum Flow (Qs)	Nominal Flow (Qp)	Transitional Flow (Qt)	Minimum Flow (Qmin)	Minimum Reading (min)	Maximum Reading (max)
		m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup>
50	В	30	15	3.0	0.45	0.002	9,999,999
65	В	50	25	5.0	0.75	0.002	9,999,999
80	В	80	40	8.0	1.2	0.002	9,999,999
100	В	120	60	12	1.8	0.002	9,999,999
125	В	200	100	20	3.0	0.02	99,999,999
150	В	300	150	30	4.5	0.02	99,999,999
200	В	500	250	50	7.5	0.02	99,999,999
250	В	800	400	80	12	0.02	99,999,999
300	В	1200	600	120	18	0.02	99,999,999

#### Main Technical Data:

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#### Head Loss Curve:



#### Error Curve:





#### **Pre-Installation and Selection instructions:**

Select the water meter based on the nominal or permanent flow. *Do not* select the meter directly from the pipe size diameter.

Notice that the error is larger at the minimum flow. Choosing a larger meter may increase the error if it operates in the low flow range.

When installing the meter, ensure that the meter is installed with the arrow pointing the direction of flow, and that the meter is installed in the horizontal position. **If you need to install the meter vertically or in a sloped position, please choose an ultrasonic meter.** 

It is recommended to install a filter upstream from the meter to guarantee the cleanliness of the water going through the meter, fibers, and debris suspended in the water can accumulate in the main shaft and over time prevent the proper functioning of the meter. It is also recommended to install a back-flow preventer (check valve) downstream from the meter to avoid fluid oscillations within the meter and avoid incorrect measurements.

The meter should be installed in a dry place, preferably indoors away from freezing conditions, flooding, steam of extreme heat.

The meter should be installed in lower position than the distribution pipe and the pipe outlets, to avoid air penetration into flow chamber of the meter.

To ensure the proper functionality of the meter, it should be installed in between two straight sections of pipe equal to ten diameters long. This ensures a laminar flow inside the meter, and ensures the meter accuracy.

For instillation support email service@intellimeter.ca