

**Assembly instructions tangential turbine WARF**

Tangential turbine water meter, for medium dirty water, specifically developed for industrial applications. Water meter suitable for process control and billing of water consumption.

Choice of water meter

Before installing the meter, check the correct selection of the size, the nominal flow rate, the temperature and the pressure in accordance with the operating conditions.

Transport and storage

Water meters are precision instruments: protect from shocks and vibrations.

Store the meters away from frost; Any potential thawing operation must be undertaken with caution.

Store the meters in a dry place at a temperature between 0 and 50 ° C. Avoid the direct exposure to sunlight.

Recommendations for the installation

Before the installation verify that the two sections of the pipe are in axis to avoid mechanical stresses, wipe them with the utmost care (especially in the case of the empty pipes) and allow the water to run for some time using a pipe socket instead of the meter.

Install the counter sheltered from frost (possibly protecting with insulating material) and in the lowest part of plant, so to avoid air accumulations.

Install the meter away from impacts or tampering, in a position where reading is easy.

Install the meter so that flow direction is same as the arrow on the body.

Install upstream and downstream of the meter suitable interception devices for the flow of water to allow maintenance and checking of the meter, control of the water supply and sealing of the plant.

Installation position

Observe the indications on the dial or on the metal plat on the flange (letters H and V):

- H the counter must be positioned with the horizontal dial
- V the counter must be positioned with the vertical dial
- V and H the counter can be installed with the dial in both positions
- Anyway vertical installations with downward flow or with facedown dial are to avoid

Straight sections and thread straighteners

For straight sections, upstream and / or downstream of the meter, refer to the U and D letters printed on the dial; if the letters U and / or D are followed by the S, a thread rectifier must be installed.

Allowed water pressure (ISO 4064-1)

The maximum permissible pressure (MAP) is 16 bar and is shown on the dial display.

When not indicated on the dial, it must be 10 bar. These values must never be exceeded.

The minimum allowable pressure (mAP) downstream of the meter must be greater than or equal to 30 kPa (0.3 bar).

Functioning

Before putting into operation the meter, discharge completely the air from the network and from the meter itself (by turning it if necessary).

During the operation, interception/adjust devices must be fully open.

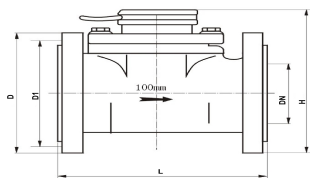
Seals

A seal is applied to the meter: it is not possible to open the instrument without breaking it.

Any intervention must therefore be carried out by a center authorized by the manufacturer.

Pulse emitter

On the counter can be installed a pulse emitter (for the installation see manual supplied with pulse emitter).



Dati tecnici – DN mm	50	65	80	100	125	150	200	250	300
L) Lunghezza (mm)	200	200	2225	250	250	300	350	450	450
H) Altezza (mm)	257	267	277	287	297	375	400	484	506
D) Diametro max di ingombro (mm)	165	185	200	220	245	285	340	405	460
D1) Interasse fori flangia (mm)	125	145	160	180	210	240	295	355	410
Peso (kg)	12	13	15	19	22	47	48	110	115