



WP-D

woltman water meter

This type of water meter is used for measuring total flow of cold water for industry and water supply facilities

DESCRIPTION

INSA WP-D is TURBINE Woltman water meter with magnetic transmission, super dry type register for Industrial and Irrigation application has the sizes from Dn40 to Dn500 designed by INSA and meets to the requirements of Directive 2014/32/EU on measuring instruments (MID) and of European Standard EN14154.

CHARACTERISTICS:

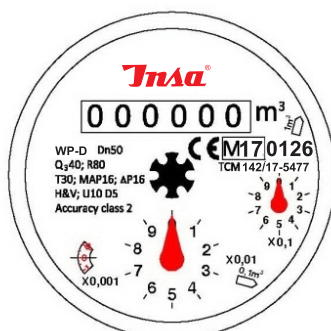
All the materials in contact with water, consciously selected by the known resistance to corrosion;

- Iron body with inside and outside epoxy coating for protecting the corrosion;
- The **ROTATING** indicator register for the most comfortable reading position;
- The copper can super dry register with IP68 protection;
- The interchangeable, removable measuring mechanism can be easily removed from the body for checking, maintaining and replacing, no need to dismantle the body from the pipe;
- Suitable for any position installation;
- Low pressure loss;
- Not affected by external magnetic fields;
- Pulse output always ready, and Pulse output **AS OPTION**:
 - The Pulse Output Device consists of a plastic housing with a Reed Switch, and 1,5 m cable with 2 cores in Red and Black.
 - Electric Data: $V_{max}=24AC/DC$; $I_{max}=0,01A$
 - Capacity of the Pulse Emitter:

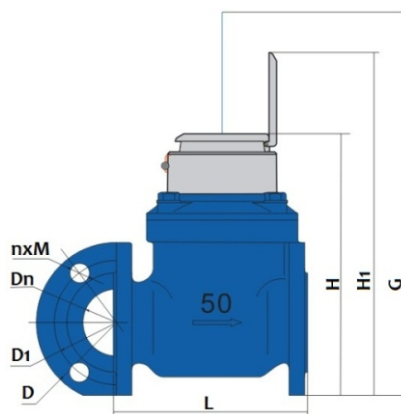
Size	m ³ /pulse	
Dn40 to Dn125	0.1	1
Dn150 to Dn200	1	10
Dn250 to Dn500	10	100



DIAL PLATE DESIGN



DIMENSIONS



The Flange Standard under ISO 7005-2:1998(E) PN16 as:

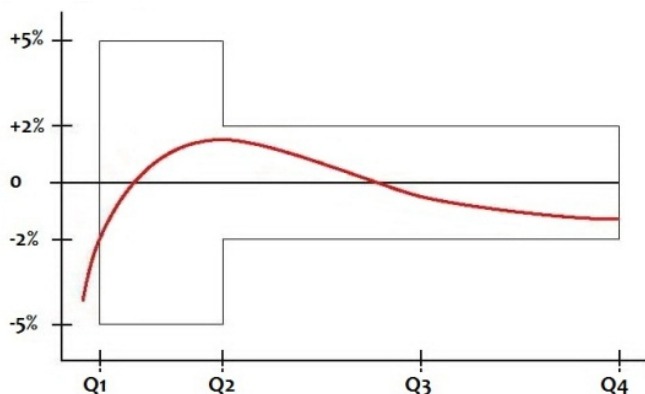
Dn	40	50	65	80	100	125	150	200	250	300	350	400	500	
L	260	200	200	225	250	250	300	350	450	500	500	600	800	
H	225	252	262	272	282	297	341	371	480	516	560	647	785	
H1	303	339	349	359	369	384	428	458	576	603	603	723	838	
G	360	400	400	400	400	400	500	500	710	730	730	830	930	
D	150	165	185	200	220	250	285	340	405	460	520	580	715	
D1	110	125	145	160	180	210	240	295	355	410	470	525	650	
nxM	4xM16		8xM16		8xM20		12xM20		12xM24		16xM24		20xM30	

*Different Flange Standard for selecting such as: ISO 7005-2: 1998(E) PN10, ASME B16.1-Class 125 working for B16.5-Class 150...

TECHNICAL DATA

Size	mm	40	50	65	80	100	125	150	200	250	300	350	400	500	
R=Q3/Q1		50		80											
Q4	m ³ /h	31,325	50	78,75	78,75	125	200	312,5	500	787,5	1250	1250	2000	3125	
Q3	m ³ /h	25	40	63	63	100	160	250	400	630	1000	1000	1600	2500	
Q2	m ³ /h	0,8	0,8	1,26	1,26	2	3,2	5	8	12,6	20	20	32	50	
Q1	m ³ /h	0,5	0,5	0,7875	0,7875	1,25	2	3,125	5	7,875	12,5	12,5	20	31,25	
Max. Reading	m ³	999999,999						9999999,99			99999999,9				
Min. Reading	m ³	0,0005						0,005			0,05				
Pressure Loss	ΔP	10	16	10	10	10	16	10	10	10	10	10	10	10	
Max. Pressure	MAP	MAP16													
Max. Temperature	°C	T30 or T50													

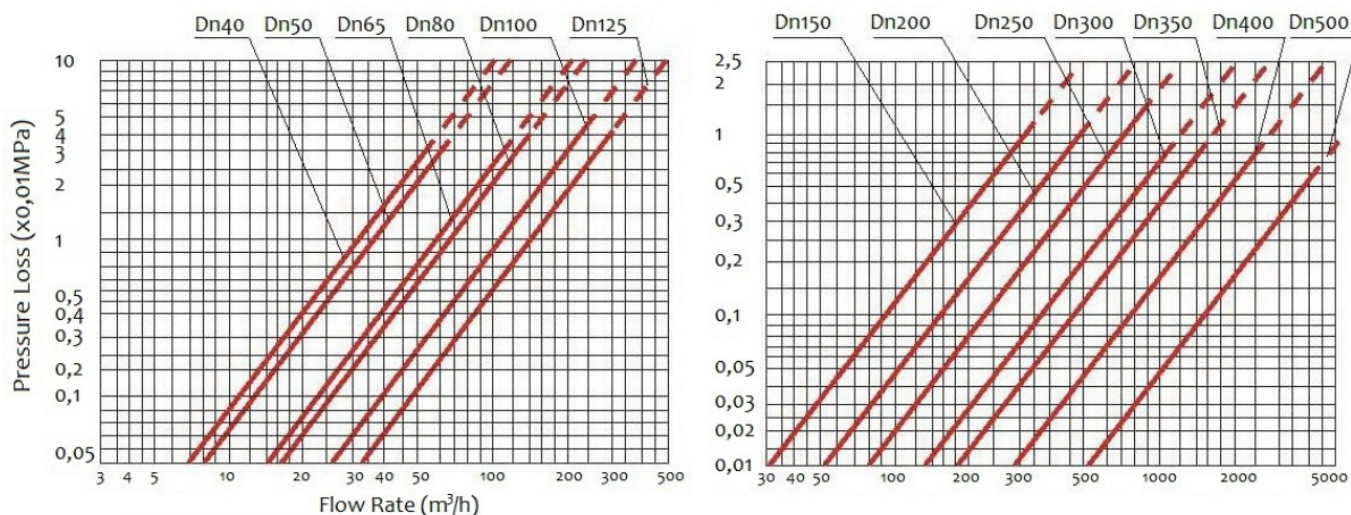
MEASUREMENT ERROR CURVE



Max. Permission Error:

From Q1 inclusive up to but excluding Q2 is ± 5%;
From Q2 inclusive up to and including Q4 is ± 2% for T30 and ± 3% for T50;

PRESSURE LOSS CURVE



INSTALATION REQUIREMENTS

- The water meter could be install in any position,for non horizontal positions the flow shall be upwards.
- The meter shall be full of water while in operation.
- Prior to installation of a meter,the pipeline shall be thoroughly flushed.
- Straight pipe section of the same diameter D as the meter,having length of 10D and 5D shall be installed upstream and downstream of the meter respectively.

A.D. INSA - MANUFACTURER OF MEASUREMENT INSTRUMENTS

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