



VVM3 Multi jet water meter with wet mechanism

Compliant according to standard: ISO 4064 Class B

This class of meter is used to measure the volume of clean water, temperatures up to 40°C and pressure up to 16 bars.

DESCRIPTION AND PURPOSE

Insa's Multi Jet, wet propeller, water meter is produced in accordance to international standards - ISO 4064. Accuracy classes are available in B.

A primary characteristic of these meters is the dial mechanism submerged in water. Meters of this type are designed to measure the volume of consumed pure water, with temperatures up to 40° C and pressure up to 16 bars.

Our VVM 3 type gauge is generally called: multi jet - propeller water meter with wet mechanism.

The smallest dial the "liter wheel" contains a small metal plate that is used to generate pulses in the electronic device for remote readout. This device can be mounted on the meter. This type of water meter is suitable for remote sensing based on the need for AMR technology, whereby the pulse generator is mounted on the "liter wheel". The dial gauge contains a security hologram with serial number. (This type of water meter without the need for dismantling or disassembly.)

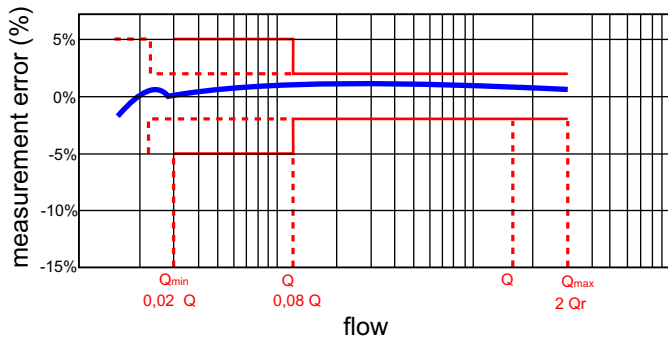
MECHANISM CHARACTERISTICS

- The mechanism is compatible with currently produced water meters.
- The mechanism housing has a square shaped intake and exit opening. This type of opening provides for much better water flow and causes a more favorable error curve.
- By changing the design and materials used in production of the propeller and mechanism, sensitivity and life of the gauge are significantly increased.
- The dial includes a fifth red hand which enables precise readout of deciliters.
- This water meter with this type of mechanism is approved by the Federal Bureau for Measures and Precious Metals, (Document dated 19.06.2009. with an official label Z-14-108), in Serbia.

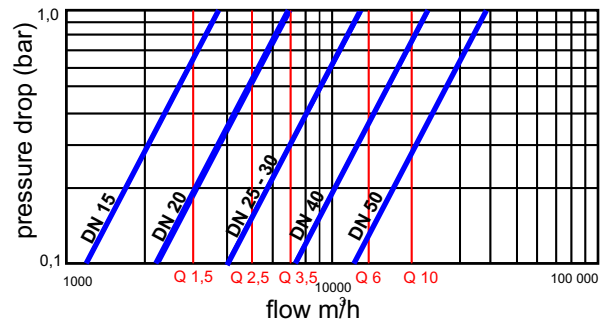
INSTRUCTIONS FOR INSTALLATION AND USE

- Before installation of the meter, the water supply network should be flushed with water, to remove any debris.
- The filter should be installed at the entrance of the water meter.
- The direction of the arrow on the meter should follow the direction of the water flow through the supply network.
- Water meter should be placed horizontally with the dial facing up.
- Be sure to protect the water meter from freezing. Any use of open flame for warming the water meter is prohibited.

TYPICAL ERROR CURVE



TYPICAL PRESSURE DROP CURVE



METEOROLOGICAL CHARACTERISTICS

Diameter DN	mm	15	20	25	30	40	50
Class		B	B	B	B	B	B
Qmax	m³/h	3	5	10	10	20	30
Qn	m³/h	1,5	2,5	5	5	10	15
Qt	l/h	120	200	400	400	800	1200
Qmin	l/h	15	25	100	100	200	300
Initial flow	l/h	<10	<15	<20	<20	<20	<20
Max reading	m³	99.999	99.999	99.999	99.999	999.999	999.999
Min reading	litar	0,05	0,05	0,05	0,05	0,5	0,5
PN	bar	16	16	16	16	16	16
Pressure drop at Qmax	bar	<0,4	<0,4	<0,4	<0,4	<0,4	<0,4

DIMENSIONS

Water meter	Unit	Horizontal					Vertical	
		13	20	25	30	40	13	
Diameter	mm/ inch	13 ½"	20 ¾"	25 1"	30 5/4"	40 6/4"	13 ½"	
Lenght	L	mm	165	190	260	300	105	
Height	H	mm	115	120	130	130	160	121
Thread diameter	D	inch	¾"	1"	5/4"	6/4"	2"	¾"
Weight	kg		1,75	2,00	2,70	2,70	6,20	1,80

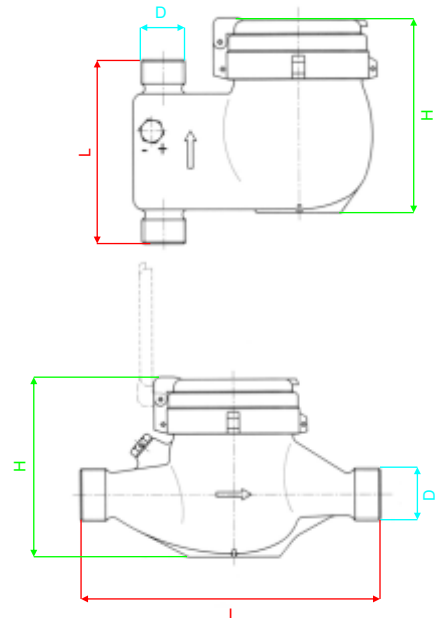
REMOTE READOUT SYSTEM



ADO OPTIONS

The VVM3 series of water meters are ready to be upgraded for remote readout. Upgrade consists of replacement of the "deciliter" hand with an by replacing the old glass with a new one. The new glass contains two fixing points for ADO devices.

* compatible devices are ADO-RF24/RF868 and ADO M-Bus



A.D. INSA - MANUFACTURER OF MEASUREMENT INSTRUMENTS

Trščanska 21
11080 Belgrade - Zemun
Republic of Serbia



www.insa.rs



+ 381 (11) 3713 - 600

+ 381 (11) 3713 - 607

Fax:

+ 381 (11) 2614 - 330

E-mail:

office@insa.rs

info@insa.rs