Application

◆ For measurement of high flows of cold potable water passing through the pipeline.

Working Conditions

◆ Water temperature: ≤40℃.

◆ Water pressure: ≤1600kpa.

Construction

◆ The meter consists of a main body, a measuring mechanism and several connecting pieces.

Working Principle

◆ The meter uses a woltman-type plastic impeller mounted inside the flow pipe.
The flowing water causes the impeller to rotate continuously, which in turn is connected to a register through magnetic linkages.
The volume of water which has passed the impeller is then indicated on the register.

Indication

◆ Cubic meter(m^3) for selecting.

Features

◆ Magnetic drive, lower transmission resistance.

◆ Sealed dry dial register ensures clear reading.

◆ Register can rotate 360°.

◆ The body is made of special cast iron coated with epoxy varnish treatment.

◆ Low pressure loss.

◆ Long working life.

◆ Can be equipped with reed switch option(register can not rotate).

Compliance with Standard

◆ Technical data conforms to ISO 4064 Class B Standard.

Attachment

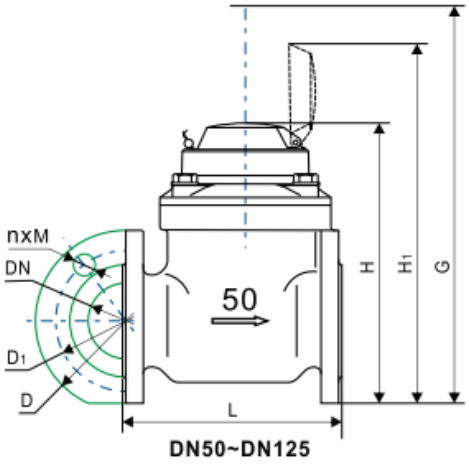
◆ With every water meter, there will be with two flange gaskets.

OMEGA Removable Element Woltman Water Meter

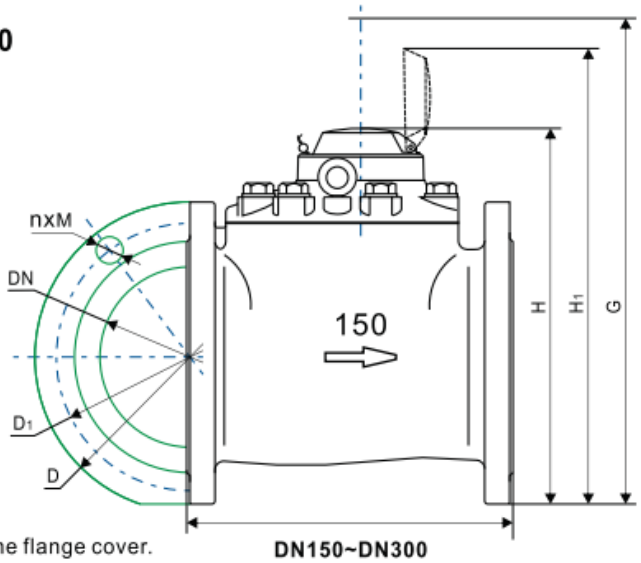
Dimensions and Weights for pressure rating PN16

Nominal diameter		DN	50	65	80	100	125	150	200	250	300	400	500
Length	mm	L	200	200	225	250	250	300	350	450	500	600	800
Height	mm	H	256	266	276	286	299	345.5	375.5	494	521	638.5	762.5
Working height	mm	H_1	328	338	348	358	371	417.5	447.5	566	593	710.5	834.5
Height	mm	G	400	400	400	400	400	500	500	730	730	830	931
Outside diameter	mm	D	165	185	200	220	250	285	340	405	460	580	715
Circle diameter	mm	D_1	125	145	160	180	210	240	295	355	410	525	650
Connecting bolt quantity		nxM	4xM16		8xM16			8xM20	12xM20	12xM24		16xM27	20xM30
Meter weight	Kg		12	13	16	18	20	42	64	94	114	199	340

Dimension Picture of DN50~DN300



DN50~DN125



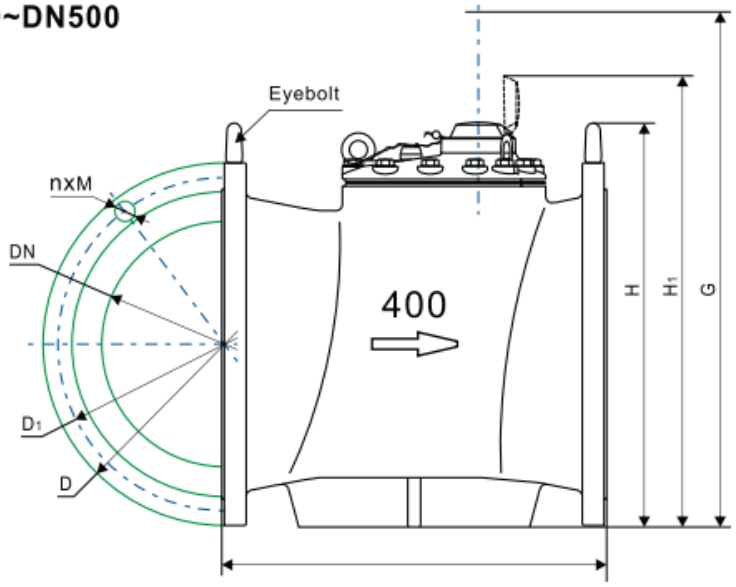
DN150~DN300

- DN150~DN300: there are two eyebolts fixed in the flange cover.
- Nominal diameter and arrow are indicated on the both sides of the meter body.
- The height "G" is necessary for removing the measuring element.
- The lid can open 180°.

OMEGA Removable Element Woltman Water Meter

Dimension Picture of DN400~DN500

- There are two eyebolts fixed in the flange cover and two eyebolts fixed in the flange ends of the meter body.
- Nominal diameter and arrow are indicated on the both sides of the meter body.
- The height "G" is necessary for removing the measuring element.
- The lid can open 180°.



Description of the Register

Nominal diameter		DN50/65/80/100/125	DN150/200	DN250/300/400/500
Number of black numbered roller		6	6	6
Number of red numbered roller		0	0	0
Number of black pointer		0	1	2
Number of red pointer		2	1	0
Maximum reading	m^3	999999.99	9999999.9	99999999
Minimum reading	m^3	0.01	0.1	1
Minimum graduation	L	1	10	100

Main Technical Data

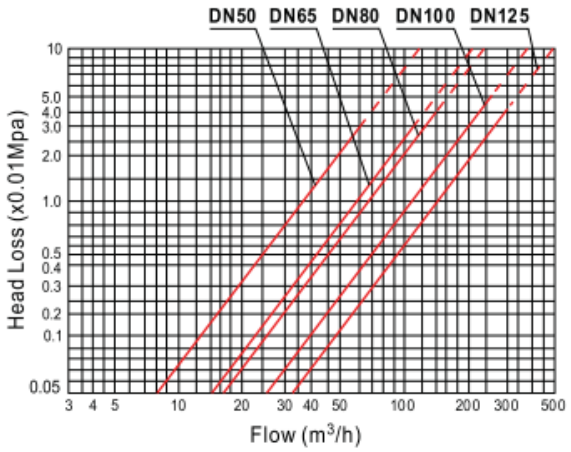
Nominal diameter	DN	50	65	80	100	125	150	200	250	300	400	500
Maximum flow rate m^3/h	Qmax	30	50	80	120	200	300	500	800	1200	2000	3000
Nominal flow rate m^3/h	Qn	15	25	40	60	100	150	250	400	600	1000	1500
Transition flow rate m^3/h	Qt	3.0	5.0	8.0	12	20	30	50	80	120	200	300
Minimum flow rate m^3/h	Qmin	0.45	0.75	1.2	1.8	3.0	4.5	7.5	12	18	30	45

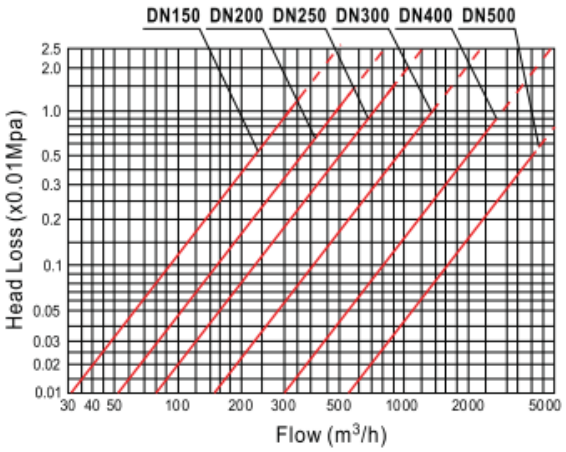
- Maximum Permissible Error:

  In the lower zone from Qmin inclusive up to but excluding Qt is ±5%.

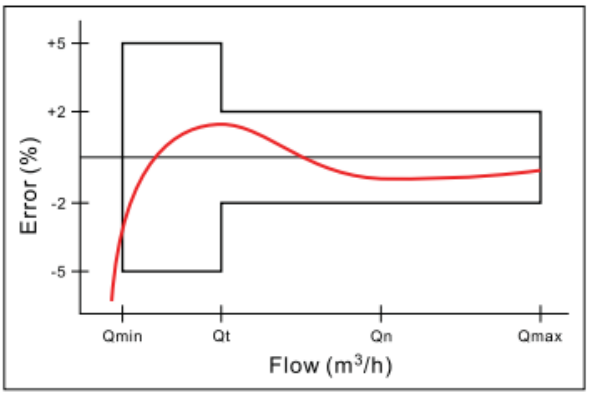
  In the upper zone from Qt inclusive up to and including Qmax is ±2%.

Head Loss Curve



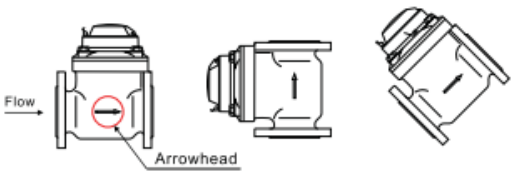


Accuracy Curve



Installation

◆ The meter can be installed in any position:



◆ A horizontal position with the register face upwards is recommended.

◆ The meter must be installed with the direction of the flow as indicated by the arrow cast in the meter body.

◆ In order to keep the water meter in good working, the pipeline should be clear up before install the meter.

◆ The meter must have 10 diameters straight pipe ahead of the meter and 5 diameters straight pipe after to insure proper flow through the meter.

◆ The valves must be installed in the front and the back of the water meter.

◆ Attention should be paid that the cold water meter must not be used for hot water.

◆ AVFI recommends the installation of a strainer before the meter.

◆ Meter is designed and manufactured for use with clean water.