Application

◆ Measuring the volume of cold potable water passing through the pipeline.

Working Conditions

◆ Water temperature: ≤ 40℃.

◆ Water pressure: ≤ 1600kpa.

Construction

◆ The meter consists of a body, a measuring unit, a register unit, a retaining ring and others. The retaining ring secures the internal parts.

Working Principle

◆ This is a multi-jet impeller meter with a drive magnet and a internal dry type register. The impeller movements is transferred by a magnetic coupling to the vacuumized and hermetically sealed register, which the reading is made.

Indication

◆ Cubic meter(m^3) for selecting.

Features

◆ With external regulating device.

◆ Magnetic drive, lower transmission resistance.

◆ Magnetic shield, use for external magnetic field protection.

◆ Evacuated and sealed dry dial register ensures clear reading.

◆ Internal strainer. inlet strainer for selecting.

◆ Meter for hot water is available.
(Refer to BETA-SDC-HOT page 5.)

◆ Can be equipped with reed switch option.

Compliance with Standard

◆ Technical data conforms to ISO 4064 Class B Standard for horizontal installation.

Attachment

◆ With every water meter, there will be with two couplings, two nuts, two coupling gaskets and two meter spud thread protectors.

Note: To protect the meter spud threads, store the meter with thread protectors in place.

Beta-SDC Multi-jet Dry Type Vane Wheel Water Meter

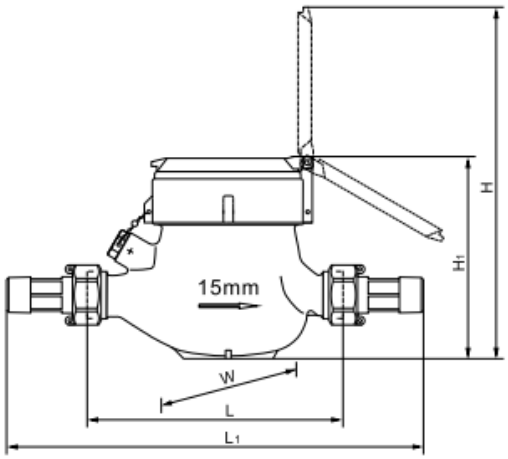
Dimensions and Weights

Nominal diameter		DN	15	20	25	32	40	50
Body thread		D	G3/4B	G1B	G1¼B	G1½B	G2B	G2½B
Connector thread		d	R1/2	R3/4	R1	R1¼	R1½	R2
Body length	mm	L	165	190	225	230	245	300
Overall length	mm	L_1	259	294	345	354	376	448
Width	mm	W	94	94	98	98	122	145
Meter height	mm	H	107.5	107.5	117.5	117.5	141.5	177
Working height	mm	H_1	191	191	206.5	206.5	256.5	292
Weight without connectors	Kg		1.5	1.6	2.4	2.9	5.1	8.5
Weight with connectors	Kg		1.68	1.88	2.92	3.69	6.14	10.22

Nominal diameter		DN	15					20
Body thread		D	G3/4B					G1B
Connector thread		d	R1/2					R3/4
Body length for selecting	mm	L	110	130	145	170	190	160
Overall length for selecting	mm	L_1	204	224	239	264	284	264

◆ "L_1" is the total length when coupling gaskets without compression.

Dimension Picture



Threaded ends

◆ Nominal diameter and arrow are indicated on the side of the body, which we can see from dimensions picture. Arrow are indicated on the other side. For example:

DN15:	DN50:

◆ The lid can open more than 180°.

Main Technical Data

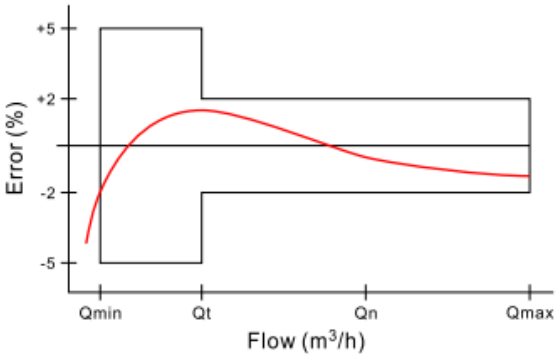
Nominal diameter		DN	15	20	25	32	40	50
Maximum flow rate	m^3/h	Qmax	3.0	5.0	7.0	12	20.0	30.0
Nominal flow rate	m^3/h	Qn	1.5	2.5	3.5	6.0	10.0	15.0
Transition flow rate	l/h	Qt	120	200	280	480	800	1200
Minimum flow rate	l/h	Qmin	30	50	70	120	200	300
Maximum reading		m^3	99999.9999				999999.9999/999999.999	
Minimum reading		m^3	0.0001				0.0001/ 0.001	
Minimum graduation		L	0.05				0.05 / 0.5	

◆ Maximum Permissible Error:

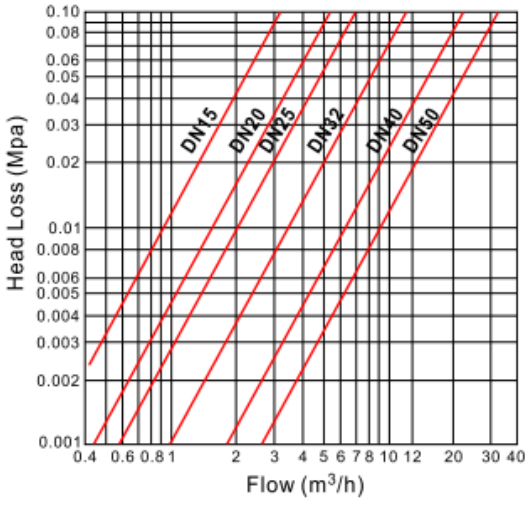
In the lower zone from Qmin inclusive up to but excluding Qt is ±5%.

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

Accuracy Curve



Head Loss Curve



Installation

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

◆ The nominal diameter of water meter should be selected according to the volume of water passing through the pipeline.

◆ The meter can be installed in one position:

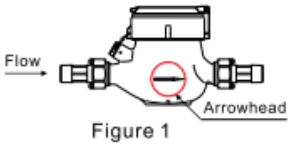


Figure 1

◆ The meter must be installed with the direction of the flow as indicated by the arrow cast in the meter body (see figure 1).

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

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

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

◆ The water meter should not be installed under the surface of water.

◆ Meter designed only for clean cold water and AVFI recommend the installation of a strainer before the meter.