

## VOLUMETRIC ROTARY PISTON COLD WATER METER MODEL: LXH-15B;



### Application

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

### Working Conditions

- ◆ Water temperature:  $\leq 40^{\circ}\text{C}$ .
- ◆ Water pressure:  $\leq 1.6\text{MPa}$ .

### Construction

- ◆ The meter mainly consists of a lower body, a measuring unit, a transmission assembly, a register, an upper body, a retaining ring and others. The retaining ring secures the internal parts.

### Working Principle

- ◆ The working principle is based on a calibrated chamber of known capacity and a rotary piston activated by the energy of the flow that passing through.
- ◆ The piston rotates while the chamber fills up and empties with a constant volume of water. By counting these cycles, the register indicates the total volume that has been register.

### Indication

- ◆ Cubic meter( $\text{m}^3$ ) and U.S.gallon(USG) for selecting.

### Features

- ◆ Ensures high sensitivity and accurate registration throughout a wide flow range.
- ◆ Magnetic drive, lower transmission resistance.
- ◆ Corrosion resistant body.
- ◆ Liquid-sealed register.
- ◆ Easy reading and long term clear reading.
- ◆ Low starting flow rate.
- ◆ Internal non-return valve.
- ◆ Internal strainer.
- ◆ Can be equipped with reed switch option.

### Compliance with Standard

- ◆ Technical data conforms to class C of the ISO 4064 standards.

### Attachment

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

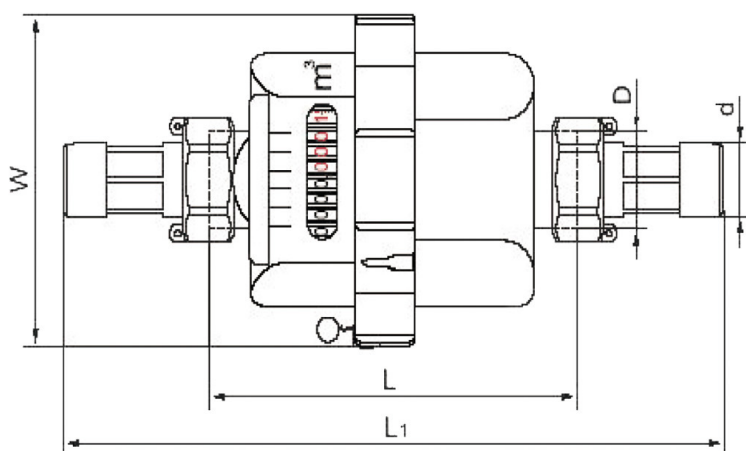
Note: To protect the meter spud threads, store the meter with thread protectors in place.

## Dimensions and Weights

<b>Nominal diameter</b>	<b>DN</b>	<b>15</b>
Body thread	D	G3/4B
Connector thread	d	R1/2
Body length	mm	L
Overall length	mm	L <sub>1</sub>
Width	mm	W
Weight without connectors	Kg	0.76
Weight with connectors	Kg	1.06

◆ "L<sub>1</sub>" is the total length when coupling gaskets without compression.

## Dimension Picture



## Main Technical Data

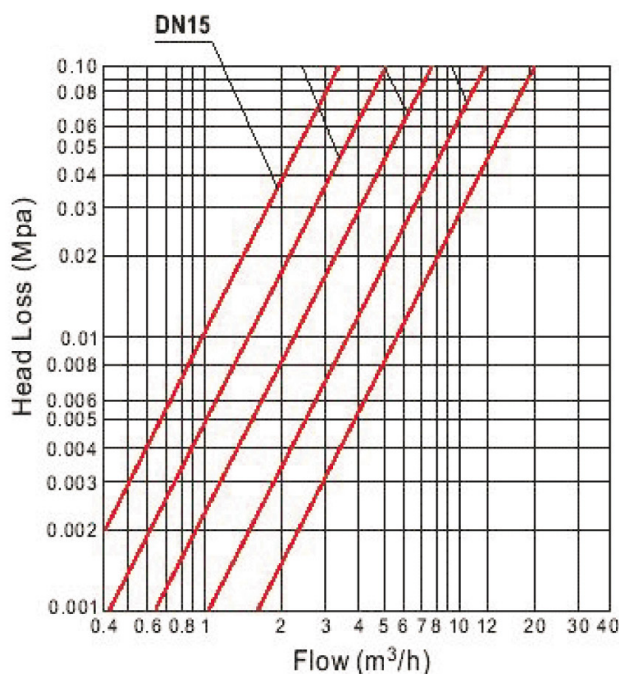
<b>Nominal diameter</b>	<b>DN</b>	<b>15</b>
Maximum flow rate	m <sup>3</sup> /h	Q <sub>max</sub>
Nominal flow rate	m <sup>3</sup> /h	Q <sub>n</sub>
Transition flow rate	l/h	Q <sub>t</sub>
Minimum flow rate	l/h	Q <sub>min</sub>
Maximum reading	m <sup>3</sup>	9999
Minimum reading	m <sup>3</sup>	

◆ Maximum Permissible Error:

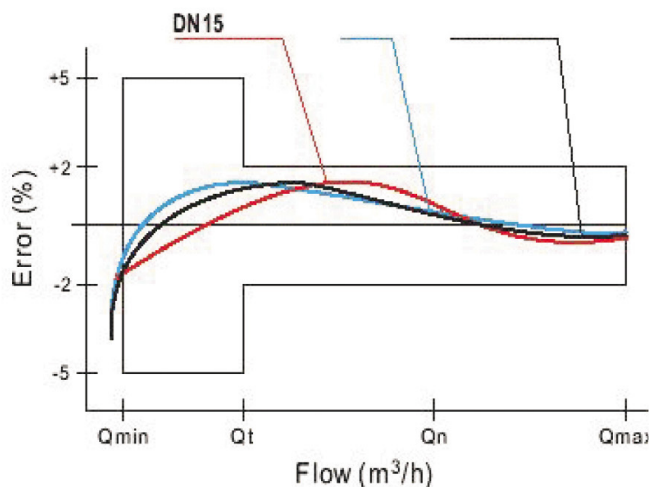
In the lower zone from Q<sub>min</sub> inclusive up to but excluding Q<sub>t</sub> is  $\pm 5\%$

In the upper zone from Q<sub>t</sub> inclusive up to and including Q<sub>max</sub> is  $\pm 2\%$ .

## Head Loss Curve

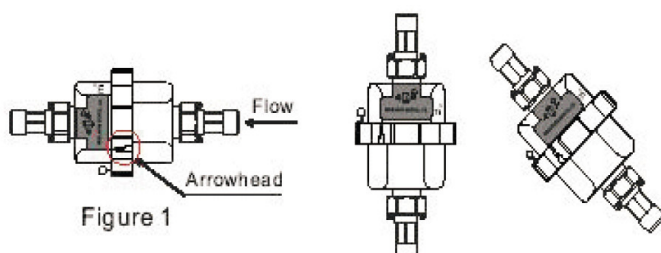


## Accuracy Curve



## Installation

- ◆ The meter can be installed in any position:



- ◆ The meter must be installed with the direction of the flow as indicated by the arrow cast in the meter body (see figure 1).
- ◆ 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.
- ◆ Attention should be paid that the cold water meter must not be used for hot water.



## With Reed Switch Option



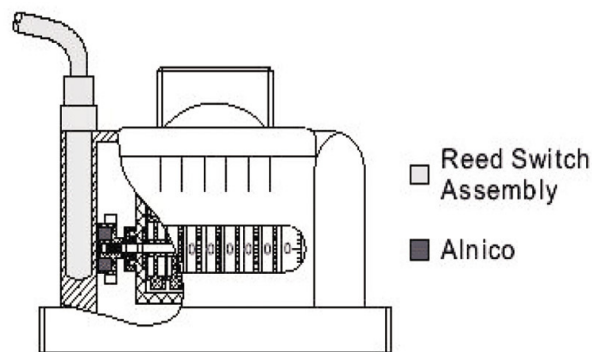
### Features

- ◆ The special version **LXH-15B~40B Water Meter** is equipped with a reed switch assembly which can be connected to remote reading systems without breaking the meter seal.
- ◆ The reed switch pulser sends out electric signals
- ◆ The reed switch pulser sends out electric signals per a preset water quantity requiring power from an external source.
- ◆ The special meter has all advantages of the common LXH-15B~40B water meter.
- ◆ Dimensions and technical data are the same as the common LXH-15B~40B water meter.

### Working Conditions

- ◆ Water temperature:  $\leq 40^{\circ}\text{C}$ .
- ◆ Water pressure:  $\leq 1.6\text{MPa}$ .
- ◆ Attention should be paid that the special meter can't be immersed into water.

### Working Diagram



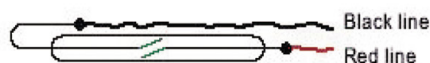
### Reed Switch Assembly

- ◆ The reed switch pulser consists of a plastic housing with a reed switch to read the total consumption of water.
- ◆ Pulser wiring: cable.
  - ① 2 core, 1.5 meter long, 3.5mm diameter.
  - ② Red-black: pulse team.
- ◆ Reed switch: single.
- ◆ Electric data:

$V_{\text{max}}: 24\text{AV/DC}$ ,

$I_{\text{max}}: 0.01\text{A}$ .

- ◆ Drawing:



### Data Output Options

- ◆ The special meter comes in one model variation, which indicate pulse rates.

Reed switch pluse	pulse
DN	1 Liter
15	◆



No.	Name	QTY	Material
1	Coupling nut	2	2CuZn40Pb2
2	Coupling	2	2CuZn40Pb2
3	Joint washer	1	Rubber
4	Seal lead	1	T3 , Pb
5			
6	Outer brass ring	1	HPb59-1
7	Lower cover	1	HPb59-1
8	O-ring	1	Rubber
9	Non return valve	1	Subassembly
10	Measure box	1	Subassembly
11	Moveable clamp	1	POM
12	Spring	1	1Cr18Ni9
13	Clamp	1	POM
14	Decelerate device	1	Subassembly
15	register	1	Subassembly
16	roter	1	Subassembly
17	Top cover	1	HPb59-1
18	Lid	1	ABS
19	Joint washer	1	Rubber
20	Pulse wire	1	
21	pin	2	
10F	Seal plate	1	Seal plate
10E	Piston	1	Piston
10D	Flashboard	1	POM
10C	Bush	1	Bush
10B	Measure box	1	Subassembly
10A	Strainer	1	ABS