

# VOLUMETRIC ROTARY PISTON COLD WATER METER MODEL: LXH-15A~20A/ LXH-15E~20E



#### accuracy.

## Robust, leak-proof construction

1. The use of advanced engineering plastics for the meter's measuring chamber significantly reduces wear and helps maintain reliable, accurate measurement over all operating conditions. Solid particles are gathered by a large surface area strainer, Further preventing damage, and its advanced design ensures that partial obstruction of the strainer will have no ill effect on the accuracy of the meter's registration.

# Easy to read register 'O' ring seal Optional non-return valve Crooved piston design gives long working life and reduces blockages

2. A body 'O' ring seal between the measuring chamber and meter body ensures that internal leaks which could by-pass the measuring chamber are eliminated.

**INTRODUCTION:** 

at the lowest flow rate.

The meter can be installed in any

with no loss of

position: horizontally, vertically or inclined pipelines, maintaining optimum performance

◆Model LXH-15、20 is the world's favourite domestic water meter, with over 50 million already in service in over 100

countries, and offers accuracy, long life, low maintenance and tamperproof operation. Available in sizes 15mm and 20mm, it

◆Unrivaled accuracy in any position, for any flow Due to the volumetric rotary piston measurement principle, its range can achieve the highest levels of reading accuracy even

offer unrivaled performance to ISO4064 Class C or D.

## Easy to read

The counter is fully sealed, liquid filled using a vacuum and offers simple, straight-reading presentation. The number rollers are completely immersed in a lubricating non-toxic liquid, and a sac attached to the counter casing. Acts as a balancing membrane, ensuring the pressure of the liquid in the counter equals that of the external water. The counter window is inside the meter body in the direction of flow for simplified reading.

## Tamperproof operation

1. The model LXH-15,20 offers unrivaled resistance to illegal tampering: its unique conical body-half design eliminates the risk of disassembly whilst in service and the mechanically driven cyclometer-type counter is resistant to magnetic interference.

## Revolutionary grooved piston

Meter stoppages are substantially reduced, durability enhanced and performance improved as a result of a uniquely-designed grooved piston within the meter measuring chamber, increasing applications flexibility (available in 15mm and 20mm sizes).

## Relative motion of the grooved piston.

Its action, with the stationary chamber wall, creates small flow eddies which hold solids in suspension until flushed out, reducing meter stoppages.



#### **APPLICATION:**

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

## **FEATURES:**

- ◆ The world's biggest-selling domestic water meter;
- Optimum accuracy and performance at all times, in any position;
- ◆ Revolutionary grooved piston for improved, durability and performance;
- ◆ Durable tamperproof construction;
- ◆ Pulse output available providing access to management information;
- Volumetric meter, on principle of piston rotation, accurate measurement, easy and long term clear reading, etc.

#### WORKING CONDITION:

- ♦ Water temperature: ≤40°C
- ♦ Water pressure: ≤1MPa or 1.6MPa optional

(10bar or 16bar optional)

## **MAXIMUM PERMISSIBLE ERROR:**

- In the lower zone from  $q_{min}$  inclusive up to but excluding  $q_t$  is  $\pm 5\%$
- In the upper zone from  $q_t$  inclusive up to and including  $q_s$  is  $\pm 2\%$

#### ACCESSORIES

# one meter with 2 pcs tubes,2 pcs nuts and 2 pcs gastkets for coupling.

#### NOTE:

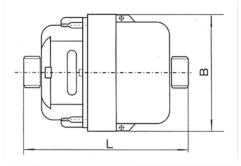
◆Technical data conform to International Standard ISO4064

#### MAIN TECHNICAL DATA

Туре	Size (mm)	Class	q <sub>s</sub> Max. Flow	q <sub>p</sub> Nominal Flow	Q <sub>t</sub> Transitional Flow	q <sub>min</sub> Min.Flow	Min.Reading	Max.Reading
	(11111)	m³/h		L/h		m³		
LXH-15A	15	С	3	1.5	22.5	15	0.0001	9999
LXH-20A	20	С	5	2.5	37.5	25	0.0001	9999

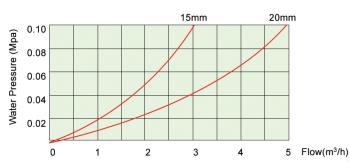
#### **DIMENSIONS AND WEIGHT**

Туре	Size Length Width Height		Height	Connecting Thread D	Weight kg		
Type	mm					Weight Kg	
LXH-15A	15	110	85		G3/4B	1.1	
LXH-20A	20	130	85		G1B	1.3	

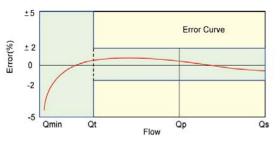




#### PRESSURE LOSS CURVE



#### FLOW ERROR CURVE



## PULSE TRANSMITTING WATER METER APPLICATION AND FEATURES

◆ Applied for remote automatic reading system.

♦ Meter with pulse output: Available 1L, 10L, 100L or 1000L per pulse for choice.

♦ Water meter equipped with a Reed Switch Pulser which can be connected to remote reading systems. The Reed Switch Pulser emits signal to collector, a single signal means a certain quantity of water.

◆ Different option of water quantity per pulse is alternative and data refers to the mentioned table format below.

LXH-15A、20A

## **REED-SWITCH ELECTRIC DATA**

Switch voltage: 24VAC/ DC Switch current: 0.01A max OUTPUT DATA:

Size	Pulse output					
	1L/Pulse	10L/Pulse	100L/Pulse	1000L/Pulse		
15mm	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
20mm	$\checkmark$					





## LXH-15A-20A

# EXPLODED VIEW LXH-15A~20A

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No.	Name	QTY	Material	
1	Hinge pin	1	H62	
2	Lid	1	ABS	
3	Seal lead	1	T3 , Pb	
4	Top cover 上	1	HPb59-1	
5	Moveable clamp	1	РОМ	
6	Spring	1	1Cr18Ni9	
7	Clamp	1	РОМ	
8	Register	1	Subassembly	
9	O-ring O	1	Rubber	
10	Decelerate device	1	Subassembly	
11	Transmission shaft	1	РОМ	
12	Seal plate	1	Subassembly	
13	Dial fork	1	РОМ	
14	Piston	1	Polystyrene	
15	Bush	1	Nylon	
16	Flashboard	1	РОМ	
17	Register body	1	Subassembly	
18	Strainer	1	ABS	
19	Non return valve	1	Subassembly	
20	O-ring	1	Rubber	
21	Lower cover	1	HPb59-1	
22	Joint washer	2	Rubber	
23	Coupling	2	ZCuZn40Pb2	
24	Coupling nut	2	ZCuZn40Pb2	

