

Start Here, Make Difference, Only T Type Water Meter,
Licensed Technology by Timely Co. www.timelycn.com

Volumetric Rotary Piston AntiSlip AntiMagnetic Dry Dial WATER METER
Model: TVP-15E~20E cold water meter

Bronze Meter Body

Meter body is made of commercial bronze, an alloy of copper and zinc with $\geq 57\%$ copper and 40% Zinc.

- Inbuilt with AntiSlip mechanism for application lifetime;
- AntiMagnetic Volumetric Rotary Piston dry dial meter for cold water;
- Nominal flow rate Q_n 1.5 to 2.5 m^3/h ;
- Meter start flow reading even at flow rate 1.12ml/sec;
- Approval metrological ISO4064 class C;
- Good readability even at extreme operational conditions;
- Hermetically sealed register, none foggy water meter;
- Marking: 1. Individual serial number in barcode mode (year+serial number) and identification model engraved indelibly on dial; 2. Flank arrow indicating flow direction, nominal size and manufacturer's name cast on the body.



PHOTO FOR REFERENCE ONLY

Model TVP-15E~20E water meter for Cold water

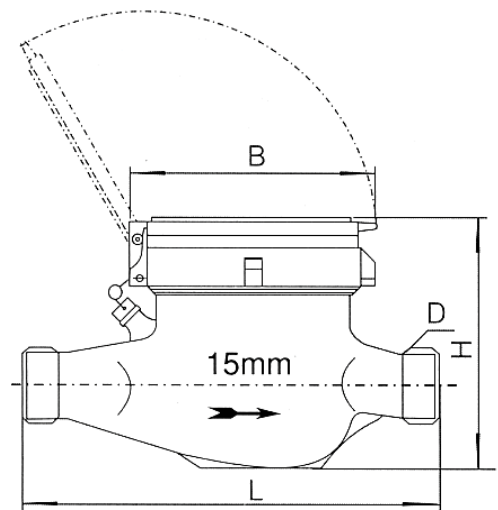
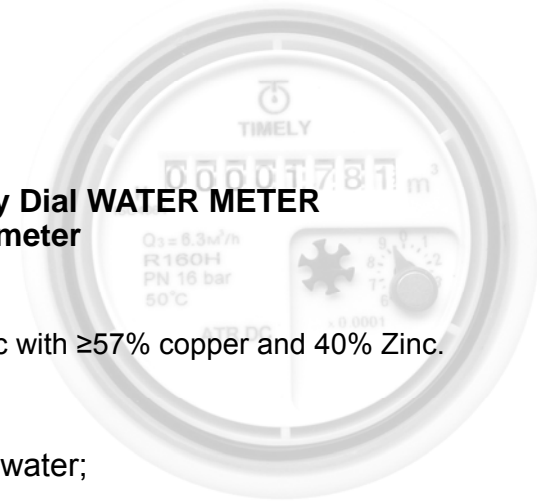
Is designed by Timely Co. engineer seasoned in water meter and manufactured by using advanced technology, in which, the register device is combined pointers and rolling counters which is convenient, clear and correct for reading as well as nice appearance.

The register system is designed by means of low speed magnetic-drive avoiding magnetic coupling slip in high flow rate however remaining high sensitivity in low flow rate, hermetically sealed in vacuum condition, completely separated with pipeline water.

The T type water meters are high accuracy of measurement, steady error curve of whole range flow rate, the performance is more advanced than existing traditional design water meter.

APPLICATION:

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



FEATURES:

External adjusting, Dry Dial, None foggy register, AntiMagnetic and AntiSlip, Low speed magnetic drive, pointer-roller indicator, easy and long term clear reading, long work life etc. Inlet strainer and Outlet non return valve, Available with remote output by pulse on request. Preparation for pulse 1litres/pulse.

WORKING CONDITION:

Water temperature: $\leq 50^{\circ}\text{C}$ for cold water meter

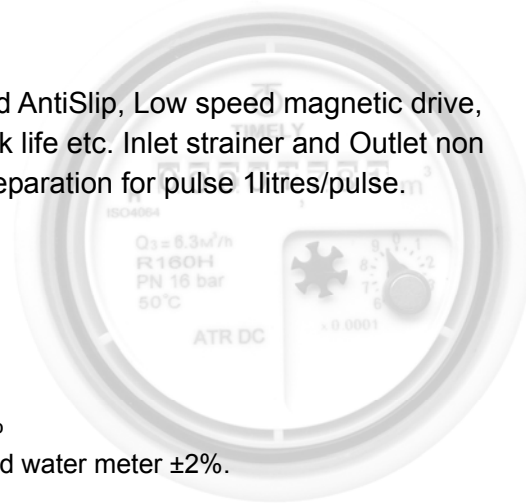
Water pressure: $\leq 1.6\text{Mpa}$

MAXIMUM PERMISSIBLE ERROR:

In the lower zone from Q_{\min}/Q_1 inclusive up to but excluding Q_t/Q_2 is $\pm 5\%$

In the upper zone from Q_t/Q_2 inclusive up to and including Q_{\max}/Q_4 is cold water meter $\pm 2\%$.

NOTE: Technical data conform to International Standard ISO4064.



Volumetric Rotary Piston meter T Type

Typical performance characteristics metrological class C/R160.

Performance characteristics	15mm	20mm
Starting flow for Class C/R160	l/h 5.5	10
Flow capacity at 1 bar pressure loss	m ³ /h 3.3	5.5

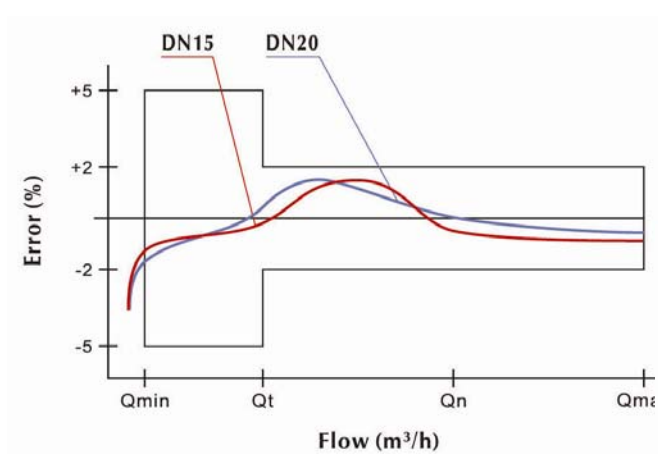
MAIN TECHNICAL DATA

Type	Size mm	Class H	Q_{\max}/Q_4	Q_n/Q_3	Q_t/Q_2	Q_{\min}/Q_1	Min. Reading	Max. Reading
			Max. Flow	Nominal Flow	Transitional Flow	Min.Flow		
			m ³ /h		L/h		m ³	
TVP-15E	15 (1/2")	C	3	1.5	22.5	15	0.0001	99999
TVP-20E	20 (3/4")	C	5	2.5	37.5	25	0.0001	99999

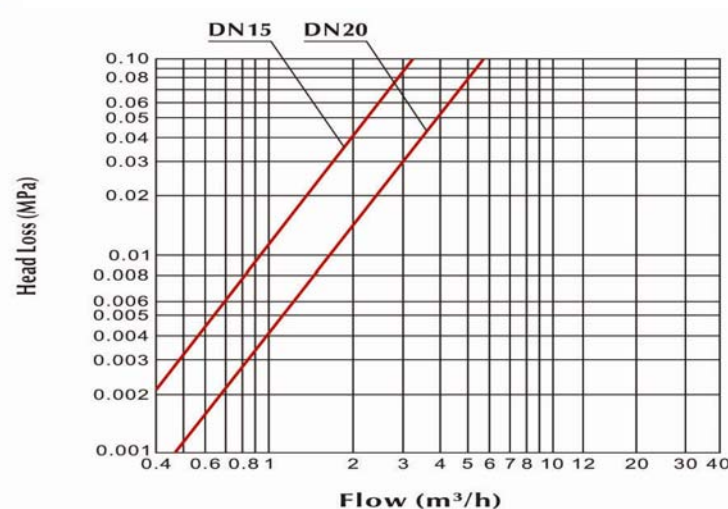
DIMENSIONS AND WEIGHT

Type	Size	Length	Width	Height	Connecting Thread D	Weight (kg)
	mm					
TVP-15E	15	165	99	104	G 3/4B	B1.4
TVP-20E	20	190	99	106	G 1B	B1.6

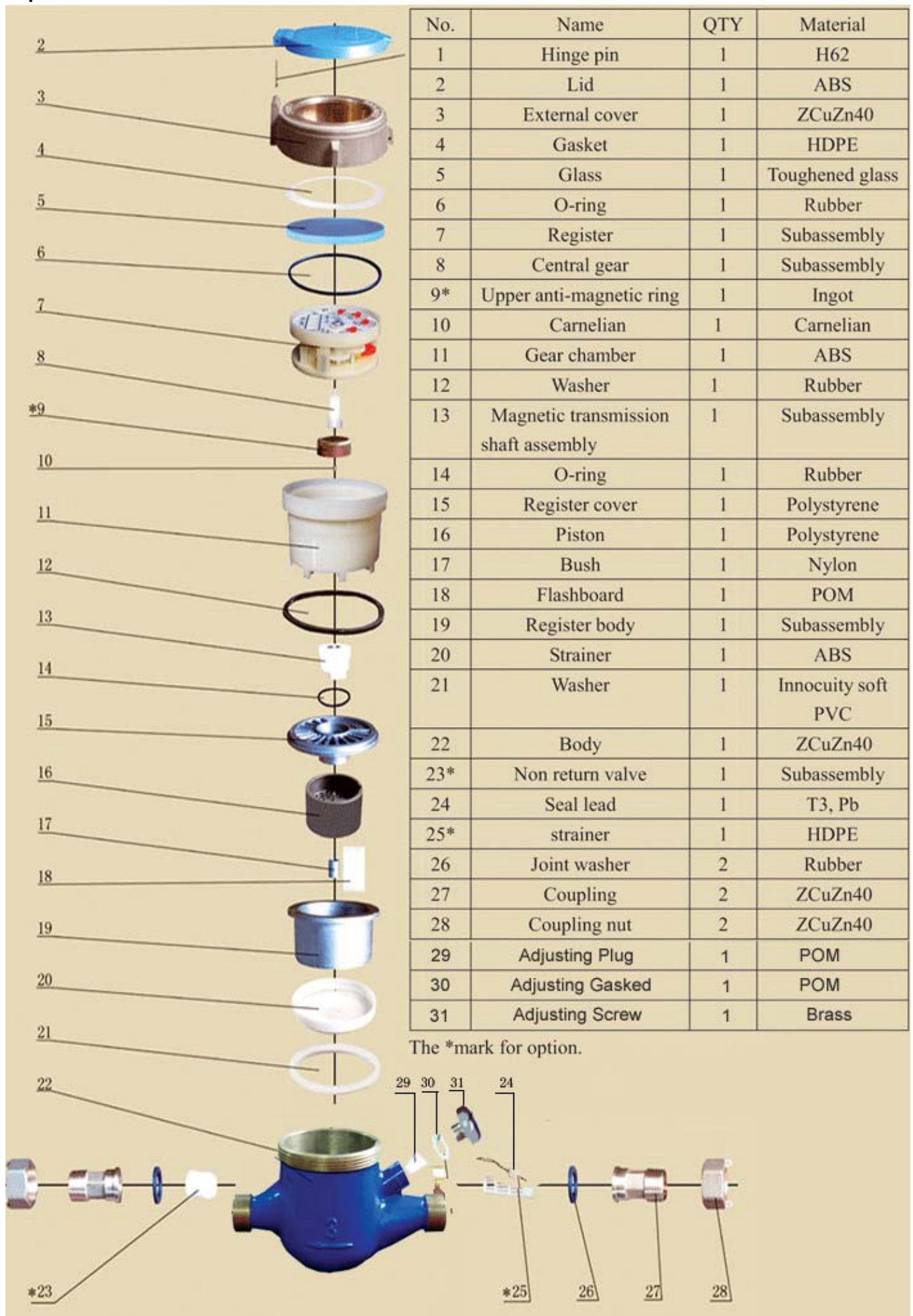
FLOW ERROR CURVE



PRESSURE LOSS CURVE



Exploded View:



No.	Name	QTY	Material
1	Hinge pin	1	H62
2	Lid	1	ABS
3	External cover	1	ZCuZn40
4	Gasket	1	HDPE
5	Glass	1	Toughened glass
6	O-ring	1	Rubber
7	Register	1	Subassembly
8	Central gear	1	Subassembly
9*	Upper anti-magnetic ring	1	Ingot
10	Carnelian	1	Carnelian
11	Gear chamber	1	ABS
12	Washer	1	Rubber
13	Magnetic transmission shaft assembly	1	Subassembly
14	O-ring	1	Rubber
15	Register cover	1	Polystyrene
16	Piston	1	Polystyrene
17	Bush	1	Nylon
18	Flashboard	1	POM
19	Register body	1	Subassembly
20	Strainer	1	ABS
21	Washer	1	Innocuity soft PVC
22	Body	1	ZCuZn40
23*	Non return valve	1	Subassembly
24	Seal lead	1	T3, Pb
25*	strainer	1	HDPE
26	Joint washer	2	Rubber
27	Coupling	2	ZCuZn40
28	Coupling nut	2	ZCuZn40
29	Adjusting Plug	1	POM
30	Adjusting Gasket	1	POM
31	Adjusting Screw	1	Brass

The *mark for option.

INSTALLING AND USING:

When using it, if there are impurities (cotton fibre, scraps of paper, silt, etc.) in the pipe, which make the inlet strainer easily stopped up. And if you find the water meter goes fast or slow, even stops, you should go to the Water authorities to have it overhauled regularly in one or two years.

1. Thoroughly flush the service line upstream of the meter to remove dirt and debris.
2. Remove meter spud thread protectors.

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

3. Set the meter in the line. Install the meter in a horizontal plane, with the register upright, in a location accessible for reading, service and inspection. Arrows on the side of the meter and above the outlet spud indicate the direction of flow.
4. Do not overtighten connections; tighten only as required to seal. Do not use pipe sealant or Teflon tape on meter threads.
5. If meter is equipped with an electrical contacting head register, line up molded tabs on inside of reed switch with corresponding indentions of receptacle on face of meter. Insert reed switch and turn 1/4 turn to lock in place.
6. Tie black and red wires on opposite end of reed switch to corresponding black and red water meter wires on controller. Insulate connection with water-proof wrapping.
7. With upstream shutoff valve only:

Open shutoff valve slowly, to remove air from the meter and service line. Open a faucet slowly to allow entrapped air to escape. Close the faucet.

With both upstream and downstream shutoff valves installed:

To test the installation for leaks: Close the outlet (downstream) shutoff valve. Open the inlet (upstream) shutoff slowly until meter is full of water.

Open the outlet (downstream) valve slowly until air is out of meter and service line. Open a faucet slowly to allow entrapped air to escape. Close the faucet.