DATASHEET

Flow

Target Flow Meter
Model PWF-TF

Description

PWF-TF intelligent target flowmeter is a new type of force sensing target flowmeter developed on the basis of the measurement principle of traditional target flowmeter, making full use of its best features, combining new sensor technology and modern digital technology.

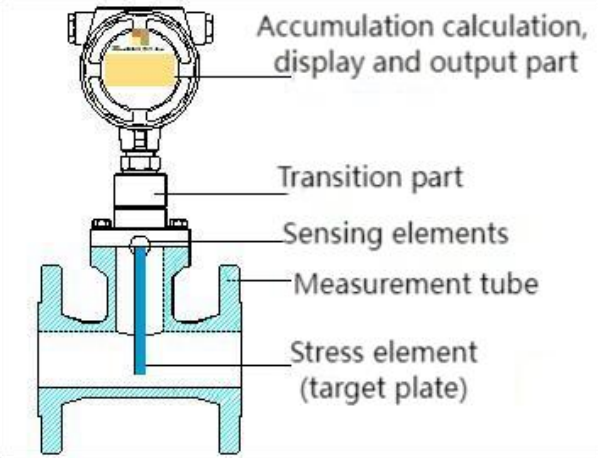
It has the characteristics of no moving parts of traditional target, orifice plate, vortex flowmeter, etc., and has the measurement accuracy comparable to that of volumetric flowmeter. In addition, it has unique anti-interference and anti-impurity performance, light and reliable characteristics, and is widely used in various fields such as petroleum, chemical industry, energy, food, environmental protection, water conservancy, etc. Judging from the effect after its use, the intelligent target intelligent flowmeter has extremely broad applicability.

Features

- Measurable medias: liquids, gases, steam, viscous media and various fluid media under various normal temperature, high temp. &low temp. conditions
- High sensitivity, can measure ultra-small flow, can measure the lowest flow velocity of 0.08m/s
- No moving parts, safe and reliable to use
- Accurate measurement and high precision 0.2%
- Wide measurement range, max can be 1:30
- Good repeatability, generally 0.1~0.08%
- Small pressure loss, only about 1/2△P of standard orifice plate
- Dry calibration method, that is, weight hanging method
- The force-bearing element can be replaced according to actual needs to change the measurement flow range
- Can read the value on site, and can also transmit and send signals
- Simple and convenient installation, easy maintenance

Structure

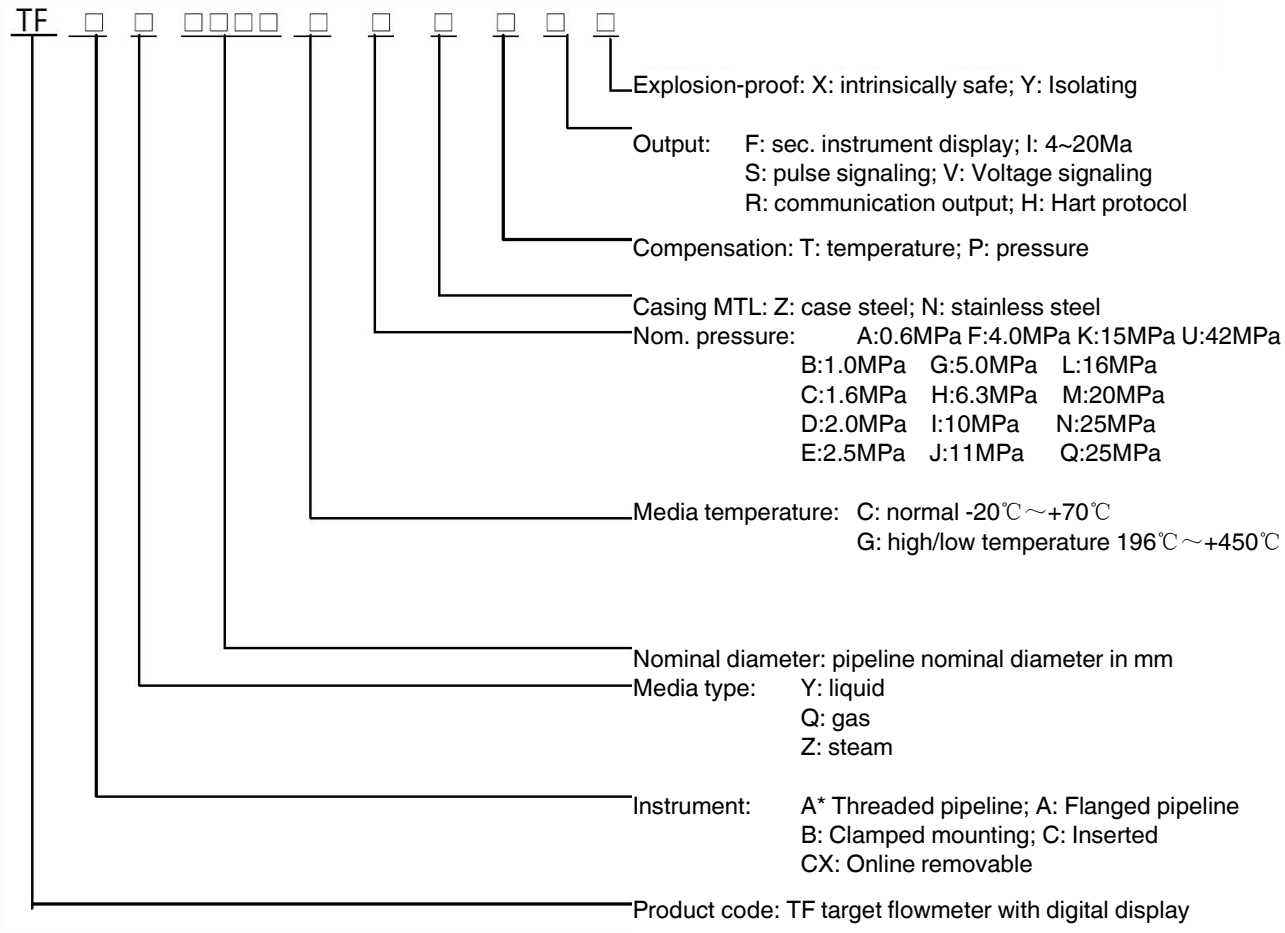
PWF-TF intelligent target flow meter is mainly composed of a measuring tube (shell), a force-bearing element, a sensing element (force sensor, pressure sensor, temperature sensor), a transition component (increases or decreases according to temperature and pressure), an integrated display and an output part. Its structure is as the figure shown:



Specifications

Parameters	Specification				
Measuring Medium	Liquid, gas, steam				
Meter Diameter	Piping type DN4～300		Wafer type DN4～600	Insertion type DN100～2000	
	Cone thread type DN4-80	Flanged DN4-300			
Nominal Pressure	0.6～42MPa				
Medium Temperature	-20℃～+70℃（Standard type） -196℃～+450℃(Low&high Temperature type)				
Accuracy	±0.2%	±0.5%	±1.0%	±1.5%	±2.5%
Range Ratio	1:3	1:5	1:10	1:10(gas)	1:10(steam)
Compensation Type	Temperature compensation; Pressure compensation				
Repeatability	0.1%~0.08%				
Power Supply	Internal Power: Built in 3.6V lithium battery External Power: 24VDC; Optional 220VAC only available for split type with LED Segment Displays.				
Signal Output	Reading value on site; Pulse; 4-20mA 2 wire; 0~10V, RS232/RS485 optional; HART				
Measuring Tube Material	Carbon steel, SUS304, 316L, or others				
Explosion-proof Mark	Intrinsically safe type: ExiaIICT4 Explosion-proof type: ExdIICT4				
Flange Standard	GB/T9115.1～9115.4-2000; Or other standard by customized				
Protection Class	IP65; IP67; IP68				

How to Order



Attention for Parts

TF target flowmeter is applicable to various situations and various media. In order to ensure satisfactory operation, the following are recommended for part selection:

1) Determine required normal flow, and hence maximum flow as 1.5~2.5 times of normal flow.
2) Clearly specify standard and sealing mode of mounting flanges, and especially special installation requirements.
3) Specify measured media and provide media density.
4) If special media are measured, in addition to materials of measurement tube provided by us, you can directly recommend required measurement tube material.