

QTLD / Electromagnetic Flow Meter

DN100-DN3000mm / Insertion Type

Description

Insertion electromagnetic flow meter is a new fluid flowmeter developed based on pipe-type electromagnetic flowmeter. Besides preserving the merits of pipe-type electromagnetic flowmeter and considering such defects of pipe-type electromagnetic flowmeter as difficult installation on large pipes and high cost, after technologies of hot tapping and installation under pressure are applied, the insertion electromagnetic flowmeter can be installed without conducting shutdown or cutting off water supply as well as on cast iron pipe or cement pipe.

Benefit

- ◆ Medium temperature :Max.80°C
- ◆ Integrated verification,diagnostic function and empty pipe detection.
- ◆ Measure forward and reverse direction flows.
- ◆ Easy to install and it can be installed without shutting down the process.
- ◆ Dual frequency excitation and stable zero point.
- ◆ Precision coil winding technology,makes magnetic field more uniform.
- ◆ High protection grade,IP65,IP68.
- ◆ No moving parts,no pressure loss.
- ◆ High accuracy: $\pm 1.5\%$ of reading



Thread Ball Valve Type

Flange Ball Valve Type

Standard Specification

- | | | | |
|---------------------|---|-----------------------|---------------------------------|
| ● Size | : DN100-DN3000mm | ● Language | : English |
| ● Accuracy | : $\pm 1.5\%$ of read,velocity >0.3 m/s | | Other language can be available |
| ● Velocity | : >20 $\mu\text{S/cm}$ | ● Display | : LCD Display,128X128mm |
| ● Protection Grade | : IP65,IP68 | | Three lines |
| ● Electrode | : SS316L,Hastelloy C,Hastelloy B, | | 4 internal push buttons |
| ● Power Supply | : AC85~250V, DC20V~36V | ● Ambient Temperature | : -25°C~60°C |
| ● Power Consumption | : <15W | ● Relative Humidity | : 5%~90% |
| ● Communication | : RS485/Modbus,Hart,Profitbus | | |

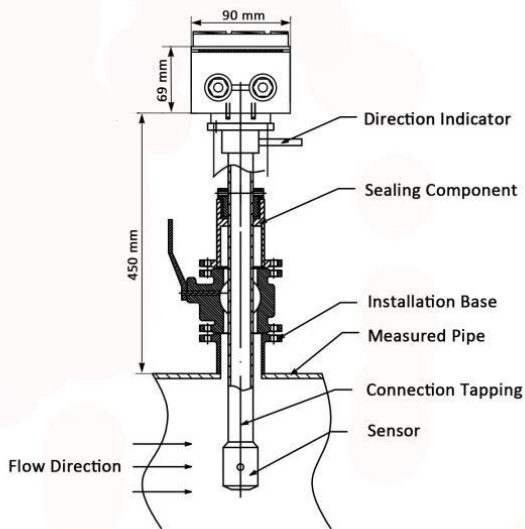
- Velocity : 1 m/s ~ 10 m/s
- Max Distance : 200m (sensor/ transmitter)
- Working Pressure : ≤ 1.6 MPa
- Flange Standard : DN50,PN16
- Transmitter Housing : ABS, Polypropylene
- Body Material : Carbon Steel (standard)
SS 304 (optional)
SS 316 (optional)

- Straight Pipe : Inlet Path $\geq 10D$
Outlet Path $\geq 5D$
- Connection : Thread Ball Valve,
Flange ball Valve
- Signal Output : 4~20 mA (Current)
0~5 KHz (Frequency)
- Grounding Resistance : $< 10 \Omega$
- Cable Entry : M20*1.5

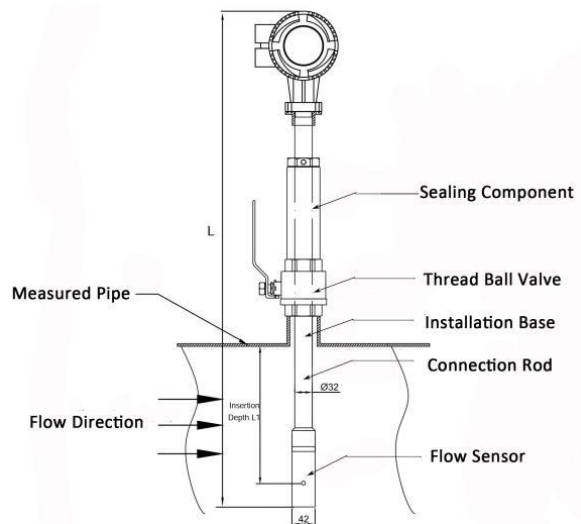
Electromagnetic Flow Meter

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Drawing Insertion Magnetic Flow Meter



Flange Ball Valve Separated Insertion Type



Thread Ball Valve Integrated Insertion Type

Measuring Tube/Sensor: It's used to measure the velocity of medium, two electrodes are installed in it.


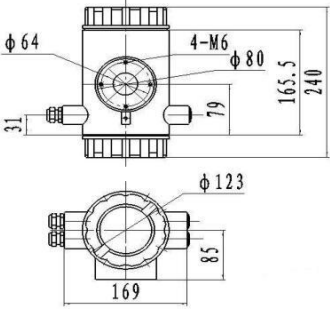
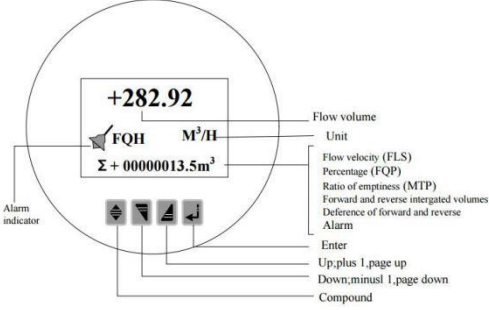

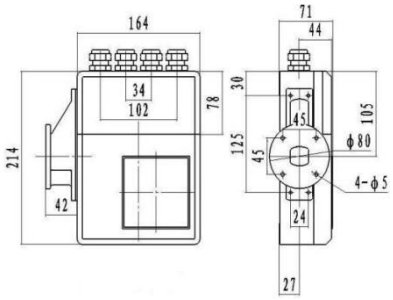
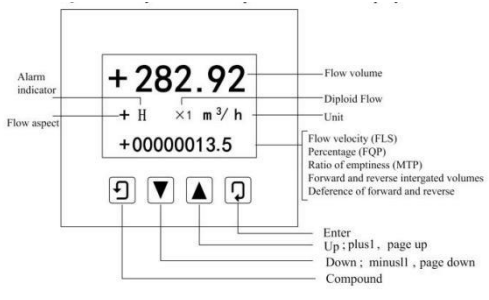
Exciting System: It can produce magnetic field, it is composed by exciting coils and iron core, it is sealed in the measuring tube.

Connection Rod: Measuring tube is fixed in it.

Installation Base: It will be welded in the measuring pipe.

Seal Component: Consists of screw seat, nut, rubber washer and dog screw.

Specifications		
Pipe Size	Length(L)	Insertion Length L1
DN≤200	693mm	1/2 DN
400≥DN≥250	793mm	
1200≥DN>400	893mm	1/4 DN
2000≥DN>1400	1093mm	

 <p>Compact Type Converter</p>	 <p>Drawing</p>	 <p>LCD Display</p>
 <p>Separated Type Converter</p>	 <p>Drawing</p>	 <p>LCD Display</p>

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Selection Table electromagnetic flow meter (Separated type,flange connection)

Selection Table for Insertion Electromagnetic Flow Meter										
Model	QTLD	XXX	X	X	X	X	X	X	X	
Caliber Size	DN100-DN3000mm									
Nominal pressure	1.6Mpa	3								
	Other	5								
Install Connection	Flange ball valve		1							
	Thread ball valve		2							
Sensor probe material	ABS			1						
	Polypropylene			2						
Electrode	316L				1					
	Hastelloy B				2					
	Hastelloy C				3					
Structure type	Integral type					1				
	Remote type					2				
Power Supply	220VAC 50HZ							E		
	24VDC							G		
Output/Communication	Flow volume 4~20m ADC/pulse								A	
	Flow volume 4~20m ADC/RS232C Communication								B	
	Flow volume 4~20m ADC/RS485 Communication								C	
	Flow volume HART output/with communication								D	
Converter figure	Square									A
	Circular									B