QTLD/T Tri-clamp Electromagnetic Flow Meter

Description

QTLD/T tri-clamp magnetic flow meter is designed for sanitary applications, size is DN15-DN200, the sensor is SS304 or SS316 and lined with PFA. With tri-clamp, the magnetic flow meter can be installed and torn down easily to clear, it meet the strict requirements of food-processing and pharmaceutical industries.

Industries

Food Processing CIP/SIP

Industries Process or Industry

Pharmaceutical Industry

Food and Beverage Industry

Filling and metering of infusion products such as saline and glucose water.

Filling and metering of liquid foods such as vegetable juice, juice, beer.

Features

- Tri-clamp electromagnetic flow meter is easy to be installed and dismantled.
- It adopts harmless food grade stainless steel as raw material, so it can contact with food directly.
- It is easy to clean, customer just need open the tri-clamp and dismantle the flow meter.
- It has current output and pulse output for connecting with PLC or other devices. And user can also read flow measurement by RS485/HART/Profibus.
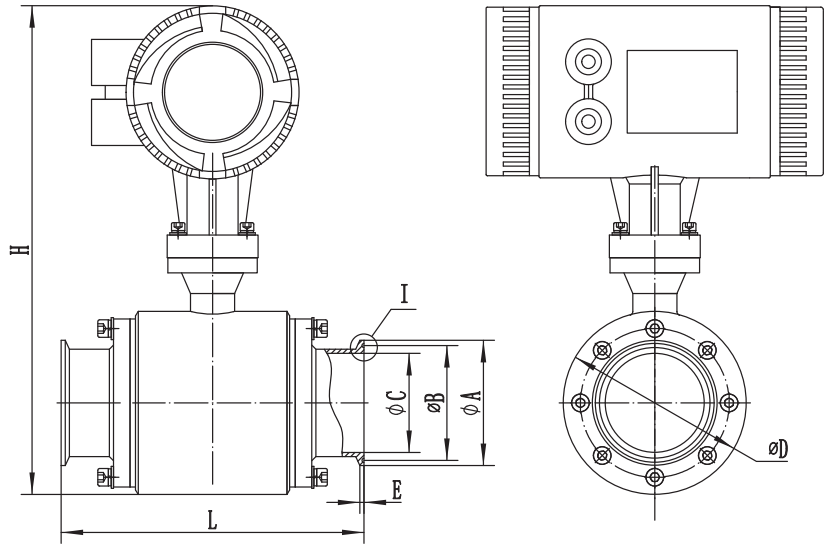- Stainless steel material has long service life, and it can be used to measure most of drinks.

Technical Data

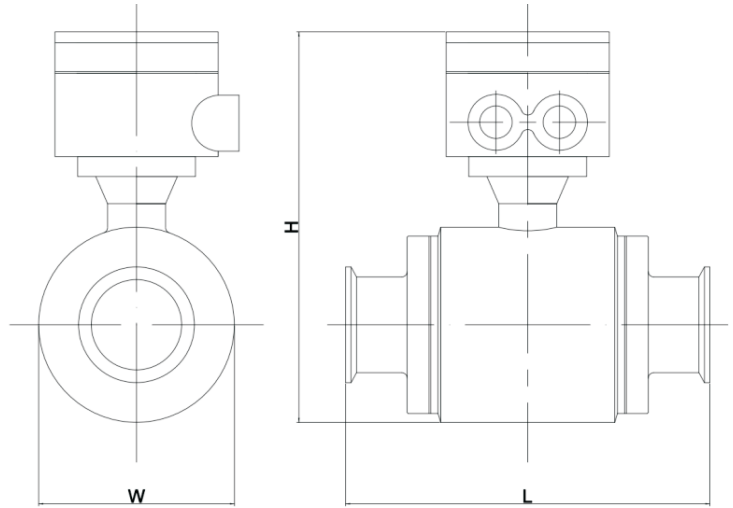|		
Size	DN15-DN200 (1/2"-8")	
Accuracy	±0.5% of reading at flow rate ⩾ 0.5m/s, ±0.2% optional at flow velocity ⩾ 0.5m/s	
Velocity	0.1~15 m/s	
Repeatability	⩽0.17%	
Structure	Compact / remote, cable length 10m standard, 100m max	
Conductivity	> 5 µS/cm, demineralized water > 20 µS/cm	
Protection Grade	Transmitter: IP65 standard, IP67 optional	
	Sensor: IP65 std, IP68 (submersible, only available for remote type)	
Electrode	SS316L	
Power Supply	85~250 VAC (50/60 HZ), 20~36 VDC	
Power Consumption	<20W	
Signal Output	Analog	4~20mA (load resistor 0~750Ω)
	Frequency	Forward & reverse flow output with a frequency range of 1~5000Hz
	Alarm	Two isolated open collector transistor (OCT) outputs for alarm signals
Communication	RS485 MODBUS standard, HART, GPRS, PROFIBUS optional	
Display	LCD Display,128X128mm, three lines, 4 buttons	
Ambient Temperature	-20℃~60℃	
Fluid Temperature	Compact: -20℃~80℃, Remote: -20℃~120℃	
Liner material	PFA	
Sensor Material	Measuring tube: SS304	
	Tri-clamp & housing: SS304 standard, SS316 optional	
Transmitter Material	Aluminium alloy with epoxy painting	
Nominal Pressure	1.6 Mpa	
Display	Instantaneous flow, total flow, flow velocity	
Function	High and low alarm, empty pipe alarm, exciting alarm, self-diagnosis	
Totalizer	Three built-in totalizers: forward flow, reverse flow and net flow	
Display Unit	L/s, L/m, L/h, m³/s, m³/m, m³/h, UKG, USG, gal/s, gal/m, gal/h, kg/s, kg/m, kg/h, t/s, t/m, t/h	
Language	English, Chinese, Italian, Portuguese, French, Spanish, Korean	

Dimension

DN15-DN200 (1/2"-8") Sanitary (Tri-clamp) Electromagnetic Flow Meter Drawing (Compact)

Size		φA(mm)	φB(mm)	φC(mm)	φD(mm)	E(mm)	H(mm)	L(mm)
mm	Inch							
DN15	1/2"	50.5	43.5	16	76	2.85	303	200
DN20	3/4"	50.5	43.5	19	83	2.85	310	200
DN25	1"	50.5	43.5	24	83	2.85	310	200
DN32	1¼"	50.5	43.5	31	94	2.85	321	200
DN40	1½"	50.5	43.5	35	94	2.85	321	200
DN50	2"	64	56.5	45	108	2.85	335	200
DN65	2½"	77.5	70.5	59	115	2.85	342	250
DN80	3"	91	83.5	72	135	2.85	362	250
DN100	4"	119	110	98	159	2.85	386	250
DN125	5"	145	136	129	183	3.6	410	300
DN150	6"	183	174	150	219	3.6	446	300
DN200	8"	233.5	225	199	261	3.6	488	350

Dimension

DN15-DN200 (1/2"-8") Sanitary (Tri-clamp) Electromagnetic Flow Meter Drawing (Remote)

Size		H(mm)	L(mm)	W(mm)
mm	Inch			
DN15	1/2"	188	200	76
DN20	3/4"	191	200	83
DN25	1"	191	200	83
DN32	1¼"	202	200	94
DN40	1½"	202	200	94
DN50	2"	216	200	108
DN65	2½"	223	250	115
DN80	3"	243	250	135
DN100	4"	267	250	159
DN150	6"	327	300	219
DN200	8"	369	350	273

Selection Table

QTLD/T		X	X	X	X	X	X	X	X	X
Caliber size	DN15-DN200 (1/2"-8")									
Structure	Compact	1								
	Remote	2								
	Compact with explosion proof	3								
	Remote with explosion proof	4								
Accuracy	±0.5%		1							
	±0.2%		2							
	Others		3							
Electrode Material	SS316L			1						
	Hastelloy B			2						
	Hastelloy C			3						
	Others			4						
Sensor Material	SS304				1					
	SS316				2					
Power Supply	85~265 VAC					E				
	20~36 VDC					G				
	Others					X				
Signal Output /Communication	4~20 mA + Pulse + RS485 Modbus						A			
	4~20 mA + HART						B			
	4~20 mA + Profibus						C			
	GPRS						D			
Protection Grade	IP65 Transmitter + IP65 sensor							1		
	IP65 Transmitter + IP68 sensor (remote)							2		
Transmitter	Square								A	
	Round								B	