

Electromagnetic Flow Meter

with Infrared Touch Buttons

Model: L-MAG-D

04. Optional Functions



Features

- ◆ No moving parts, no pressure loss.
- ◆ self-diagnosis, empty pipe alarm, exciting alarm. high and low flow alarm
- ◆ Infrared telecontrol keyboard
- ◆ Recording time when power off, record power broken time automatically.
- ◆ Dual frequency excitation and stable zero point.
- ◆ Precision coil winding technology, makes magnetic field more uniform.
- ◆ Built-in reference electrodes, no need to connect ground ring
- ◆ Measure forward and reverse direction flows
- ◆ High accuracy: $\pm 0.5\%$ of reading, $\pm 0.2\%$ optional, velocity > 0.3 m/s.

Specifications

- | | | | |
|-----------------------|--|----------------------|---|
| • Size | : DN3-DN3000mm (1/8"~120") | • Velocity | : 0.1 m/s ~ 15 m/s |
| • Accuracy | : $\pm 0.5\%$ of reading,
$\pm 0.2\%$ optional, velocity > 0.3 m/s | • Nominal Pressure | : 4.0 MPa (DN3-DN150)
1.6 MPa (DN200-DN600)
1.0 MPa (DN700-DN1000)
0.6 MPa (DN1200-DN3000) |
| • Conductivity | : Normal liquid $> 5 \mu\text{S/cm}$,
DI water $> 20 \mu\text{S/cm}$ | • Frequency Output | : 1~5000 Hz |
| • Protection Grade | : IP65, IP68 optional | • Language | : English, Chinese
Other languages are available |
| • Electrode | : SS316L, Hastelloy C, Hastelloy B,
Titanium, Tantalum, Platinoidium | • Flange Standard | : EN1092-1
PN10, PN16, PN25, PN40
ANSI BS16.5 Class 150, 300, 600
JIS2220 10K, 20K, 40
AS2129 Table D, Table E
AS4087 PN16, PN21, PN35 |
| • Power Supply | : AC85~250V, DC20V~36V | • Exciting Current | : 125mA, 187mA, 250mA, 500mA |
| • Power Consumption | : $< 20\text{W}$ | • Exciting Frequency | : 3.12Hz, 4.16Hz, 6.25Hz
12.5Hz, 25Hz, 30Hz |
| • Signal Output | : 4~20 mA, pulse | • Body Material | : Carbon Steel (standard)
Stainless Steel 304 (optional)
Stainless Steel 316 (optional) |
| • Communication | : RS485 Modbus, Hart, Profitbus | • Certificates | : CE-EMC, CE, LVD, Atex |
| • Display | : LC Display, 128X128mm
Three lines, 4 buttons | | |
| • Ambient Temperature | : $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ | | |
| • Relative Humidity | : 5%~95% | | |
| • Liner Material | : PTFE ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN15-DN1600)
FEP ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN25-DN1800)
PFA ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN3-DN800)
PU ($-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$, DN40-DN1600)
CR ($-10^{\circ}\text{C} \sim 80^{\circ}\text{C}$, DN40-DN3000) | | |

ELECTROMAGNETIC FLOW METER



PRODUCT FEATURES

01.

LCD Display
LCD backlight makes it easy to read day and night

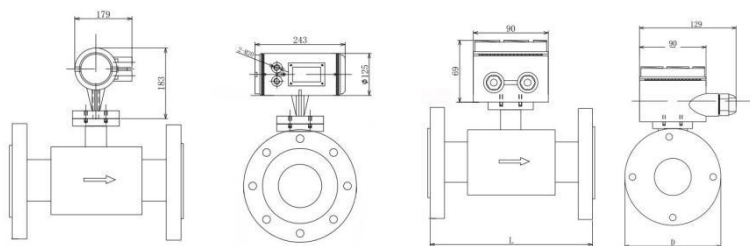


MAS TECHNOLOGIES

EFM - Electromagnetic Flow Meter
DN3-DN3000mm / Flange Connection

Demension

Nominal Diameter	External Dimension (mm)		Weight
mm	L	D	Kg
3	200	90	4
6	200	90	5
10	200	90	6
15	200	95	8
20	200	105	10
25	200	115	12
32	200	140	13
40	200	150	14
50	200	165	15
65	200	185	18
80	200	200	20
100	250	235	25
125	250	270	28
150	300	300	30
200	350	340	50
250	450	405	70
300	500	460	95
350	550	520	120
400	600	580	140
450	600	640	160
500	600	715	200
600	600	840	280
700	700	895	350
800	800	1015	400
900	900	1115	480
1000	1000	1230	550
1200	1200	1405	660
1400	1400	1630	750
1600	1600	1830	850
1800	1800	2045	980
2000	2000	2265	1200
2200	2200	2475	1600
2400	2400	2685	2000
2600	2600	2905	2400
2800	2800	2905	2700
3000	3000	3315	2900



Nominal Pressure	Caliber (mm)	D (mm)	K (mm)	Φ (mm)	N (mm)	C (mm)
4.0 Mpa	3	90	60	14	4	14
	6	90	60	14	4	14
	10	90	60	14	4	14
	15	95	65	14	4	14
	20	105	75	14	4	16
	25	115	85	14	4	16
	32	140	100	18	4	18
	40	150	110	18	4	18
	50	165	125	18	4	20
	65	185	145	18	8	22
	80	200	160	18	8	24
	100	235	190	22	8	26
	125	270	220	26	8	28
	150	300	250	26	8	30
	200	340	295	22	12	26
1.6 MPa	250	405	355	26	12	28
	300	460	410	26	12	32
	350	520	470	26	16	35
	400	580	525	30	16	38
	450	640	585	30	20	42
	500	715	650	33	20	46
	600	840	770	36	20	52
	700	895	840	30	24	30
1.0 MPa	800	1015	950	33	24	32
	900	1115	1050	33	28	34
	1000	1230	1160	36	28	34
	1200	1405	1340	33	32	28
0.6 MPa	1400	1630	1560	36	36	32
	1600	1830	1760	36	40	34
	1800	2045	1970	39	44	36
	2000	2265	2180	42	48	38
	2200	2475	2390	42	52	42
	2400	2685	2600	42	56	44
	2600	2905	2810	48	60	46
	2800	3115	3020	48	64	48
	3000	3315	3220	48	68	50

Multiple Flow Units Selectable

- Instantaneous Flow
- Flow Unit
 - Flow Velocity (FLS)
 - Flow Percentage (FQP)
 - Ratio of Emptiness (MTP)
 - Forward And Reverse Integrated Volumes
 - Forward/Reverse Flow Difference
 - Alarm

01

FLOW SENSOR



Flow Range Table

Size	Flow Range & Velocity Table (m/s)							
mm	0.1	0.2	0.5	1	4	10	12	15
3	0.003	0.005	0.013	0.025	0.102	0.254	0.305	0.382
6	0.01	0.02	0.051	0.102	0.407	1.017	1.221	1.526
10	0.028	0.057	0.0130.141	0.283	1.13	2.826	3.391	4.239
15	0.064	0.127	0.318	0.636	2.543	6.359	7.630	9.538
20	0.113	0.226	0.565	1.130	4.522	11.304	13.56	16.956
25	0.177	0.353	0.883	1.766	7.065	17.663	21.2	26.494
32	0.289	0.579	1.447	2.894	11.575	28.938	34.73	43.407
40	0.452	0.904	2.261	4.522	18.086	45.216	54.26	67.824
50	0.707	1.413	3.533	7.065	28.26	70.65	84.78	105.98
65	1.19	2.39	5.97	11.94	47.76	119.4	143.3	179.10
80	1.81	3.62	9.04	18.09	72.35	180.86	271	271.30
100	2.83	5.65	14.13	28.26	113.04	282.6	339.1	423.90
125	4.42	8.83	22.08	44.16	176.63	441.56	529.9	662.34
150	6.36	12.72	31.79	63.59	254.34	635.86	763	953.78
200	11.3	22.61	56.52	113.04	452.16	1130.4	1356	1696
250	17.66	35.33	88.31	176.53	706.5	1766.25	2120	2649
300	25.43	50.87	127.2	254.34	1017	2543.4	3052	3815
350	34.62	69.24	173.1	346.19	1385	3461.85	4154	5193
400	45	90	226.1	452	1809	4522	5426	6782
450	57	114	286.1	572	2289	5723	6867	8584
500	71	141	353.3	707	2826	7065	8478	10598
600	102	203	508.7	1017	4069	10174	12208	15260
700	138	277	692.4	1385	5539	13847	16617	20771
800	181	362	904.3	1809	7235	18086	21704	27130
900	229	458	1145	2289	9056	22891	27469	34336
1000	283	565	1413	2826	11304	28260	33912	42390
1200	407	814	2035	4069	16278	40694	48833	61042
1400	554	1108	2769	5539	22156	55390	66468	83084
1600	723	1447	3617	7235	28938	72346	86815	108518
1800	916	1831	4578	9156	36625	91562	109875	137344
2000	1130	2261	5652	11304	45216	113040	135648	169560
2200	1368	2736	6839	13678	54711	136778	164134	205168
2400	1628	3256	8139	16278	65111	162778	195333	244166
2600	1910	3821	9552	19140	74615	191038	229245	286556
2800	2216	4431	11078	22156	88623	221558	265870	332338
3000	2543	5087	12717	25434	101736	254340	305208	381510

QTLTD Electromagnetic Flow Meter S DN15-DN200mm / Tri-clamp Connection

Description-A

Sanitary Flow Meter uses a new type of sanitary lining material and lining technology, which meets the sanitary requirements of the food industry. It uses a stainless steel shell and stainless steel clamp connection. It is convenient for the quick disassembly and cleaning of the electromagnetic flow meter. Magnetic flow meter in a sanitary version which meets the strict requirements of the food-processing and bio-technology/ pharmaceutical industries.

Description-1

Electromagnetic flowmeter consists of sensors and converters in two parts. The product is based on Faraday's law of electromagnetic induction, used to measure the conductance greater than 5 $\mu\text{S} / \text{cm}$ volume of conductive liquid flow, In addition to measuring the general volume of conductive liquid flow, but also can be used to measure strong acid, alkali and other strong corrosive liquids and mud, pulp, pulp and other liquid-solid two-phase suspension of uniform volume flow.

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 touch with food directly
- ◆ It is easy to clean, customer just need open the tri-clamp and dismantle the flow meter, then can start cleaning
- ◆ It has multiple output signals for choose. It has current output and pulse output for connecting with PLC or other devices. And you can also read flow measurement by RS485/HART/Profibus.
- ◆ Stainless steel material has long service life, and SS316 is a kind of anti-corrosive stainless steel, so it can be used to measure most of drinks.

Specifications

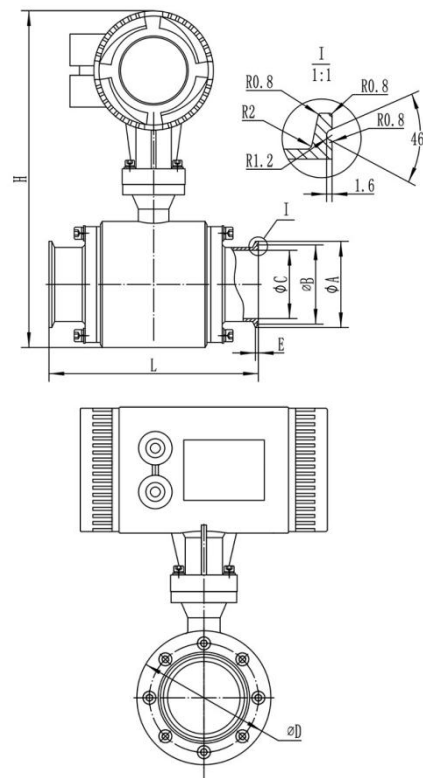
● Size	: DN15-DN200	● Relative Humidity	: 5%~95%
● Accuracy	: $\pm 0.5\%$ of reading, $\pm 0.2\%$ optional, velocity $> 0.3 \text{ m/s}$	● Liner Material	: PFA ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN3-DN800)
● Conductivity	: Normal liquid $> 5 \mu\text{S/cm}$, DI water $> 20 \mu\text{S/cm}$	● Velocity	: $0.1 \text{ m/s} \sim 15 \text{ m/s}$
● Protection Grade	: IP65, IP68 optional	● Nominal Pressure	: 1.6 MPa
● Electrode	: SS316L, Hastelloy C,	● Frequency Output	: 1~5000 Hz
● Power Supply	: AC85~250V, DC20V~36V	● Language	: English, Chinese Other languages are available
● Power Consumption	: $< 20\text{W}$	● Flange Standard	: EN1092-1
● Signal Output	: 4~20 mA, pulse	● Exciting Current	: 125mA, 187mA, 250mA
● Communication	: RS485/Modbus, Hart, Profitbus	● Exciting Frequency	: 3.12Hz, 4.16Hz, 6.25Hz 12.5Hz, 25Hz, 30Hz
● Display	: LC Display, 128X128mm Three lines, 4 buttons	● Body Material	: Stianless steel 304 Stainless Steel 316 (optional)
● Ambient Temperature	: $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$	● Certificates	: CE-EMC, CE-LVD, Atex

MAS TECHNOLOGIES

QTLTD Electromagnetic Flow Meter S **DN15-DN200mm / Tri-clamp Connection**

Demension

Diameter	Φa (mm)	φB (mm)	φC (mm)	φD (mm)	φE (mm)	H (mm)	L (mm)
DN15	50.5	43.5	16	76	2.85	303	200
DN20	50.5	43.5	19	83	2.85	310	200
DN25	50.5	43.5	24	83	2.85	310	200
DN32	50.5	43.5	31	94	2.85	321	200
DN40	50.5	43.5	35	94	2.85	321	200
DN50	64	56.5	45	108	2.85	335	200
DN65	77.5	70.5	59	115	2.85	342	250
DN80	91	83.5	72	135	2.85	362	250
DN100	119	110	98	159	2.85	386	250
DN125	145	136	129	183	3.6	410	300
DN150	183	174	150	219	3.6	446	300
DN200	233.5	225	199	261	3.6	488	350



Selection Table

Model QTLTD									
Caliber	DN3-DN3000								
Structure	Compact	C							
	Remote	R							
Electrodes	SS316		S						
	Hastelloy C		B						
Body Material	SS304			S4					
	SS316			S6					
Accuracy	±0.5% of reading				A5				
	±0.2% of reading				A2				
Signal Output	4~20 mA					A			
	Pulse					P			
Communication	RS485 Modbus RTU						R4		
	HART						H		
	Profitbus						P		
	RS232						R2		
Protection Grade	IP65 Convertor + IP65 Transmitter							5	
	IP68 Convertor + IP65 Transmitter							8	
Power Supply	8 ~ 36 Vdc								DC
	85 ~ 265 Vac								AC
	3.6 V lithium battery								BP



QTLD Electromagnetic Flow Meter W DN15-DN200mm / Wafer Connection

Description

Wafer electromagnetic flow meter is a kind of volume flow meter. It uses a new generation of special high-quality lining technology and a special mirror-polished PFA lining, which is especially suitable for the measurement of viscous pulp and gypsum slurry. Its detachable electrode makes maintenance more convenient.

Features

- ◆ Wafer electromagnetic flow meter has short body, it can be installed in narrow areas such as well, ditch, irrigation pipe, etc.
- ◆ It matches all flanges like ANSI, DIN, JIS, etc. So if you don't know the flange standards, you can choose this type.
- ◆ And wafer electromagnetic flow meter adopts harmless and durable stainless steel as raw material(SS304 or SS316), so it can be used for drinking water, underground water, etc. For food grade measurement, we suggest customer use SS316 material.
- ◆ Wafer Electromagnetic flow meter is also very cheap, normally it is cheaper 10% than same diameter electromagnetic flow meter with flange connection.
- ◆ Wafer electromagnetic flow meter is easy to delivery, save your freight fee. Not only its body is short and thin, but its weight is also very light.
- ◆ It has multiple output signals for choose. It has current output and pulse output for connecting with PLC or other devices. And you can also read flow measurement by RS485/HART/Profibus

Specifications

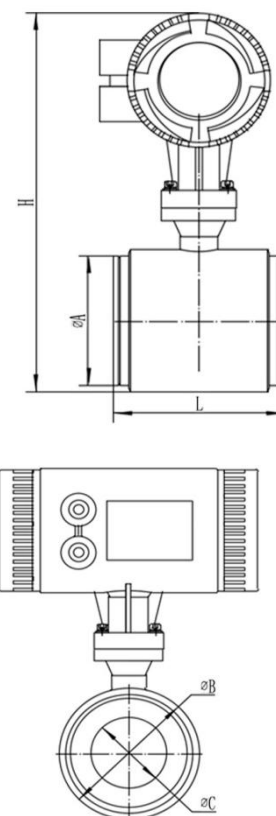
● Size	: DN15-DN200	● Ambient Temperature	: -20℃~60℃
● Accuracy	: ±0.5% of reading, ±0.2% optional, velocity >0.3 m/s	● Relative Humidity	: 5%~95%
● Conductivity	: Normal liquid >5 μS/cm, DI water >20 μS/cm	● Liner Material	: PFA (-20℃~120℃, DN3-DN800)
● Protection Grade	: IP65, IP68	● Velocity	: 0.1 m/s ~ 15 m/s
● Electrode	: SS316L, Hastelloy C,	● Nominal Pressure	: 1.6 MPa (DN200-DN600)
● Power Supply	: AC85~250V, DC20V~36V	● Frequency Output	: 1~5000 Hz
● Power Consumption	: <20W	● Language	: English, Chinese Other languages are available
● Signal Output	: 4~20 mA, pulse	● Flange Standard	: EN1092-1
● Communication	: RS485/Modbus, Hart, Profibus	● Exciting Current	: 125mA, 187mA, 250mA
● Display	: LC Display, 128X128mm Three lines 4 internal push buttons	● Exciting Frequency	: 3.12Hz, 4.16Hz, 6.25Hz 12.5Hz, 25Hz, 30Hz
		● Material	
		Measuring Tube	: Stainless Steel 316 (optional)
		● Certificate	: Atex, CE-EMC, CE-LVD

MAS TECHNOLOGIES

QTLD Electromagnetic Flow Meter W DN15-DN200mm / Wafer Connection

Demension

Diameter	φA(mm)	φB(mm)	φC(mm)	H(mm)	L(mm)
DN25	60.5	68	22	295	100
DN32	68.5	76	30	303	100
DN40	74.5	89	36	316	100
DN50	90.8	102	48	329	100
DN65	109.8	119.5	64	346.5	150
DN80	120.7	133	77	360	150
DN100	150.2	159	102	386	150
DN125	174.8	190	121	417	200
DN150	204.7	219	147	446	200
DN200	257.8	273	207	500	200



Selection Table

Model QTLD									
Caliber	DN15-DN200								
Structure	Compact	C							
	Remote	R							
Electrodes	SS316		S						
	Hastelloy C		B						
Body Material	SS304				S4				
	SS316				S6				
Accuracy	±0.5% of reading					A5			
	±0.2% of reading					A2			
Signal Output	4~20 mA					A			
	Pulse					P			
Communication	RS485 Modbus RTU						R4		
	HART						H		
	Profitbus						P		
	RS232						R2		
Protection	IP65 Convertor + IP65 Transmitter							5	
Grade	IP68 Convertor + IP65 Transmitter							8	
Power Supply	8 ~ 36 Vdc								DC
	85 ~ 265 Vac								AC
	3.6 V lithium battery								BP



QTLD Electromagnetic Flow Meter D DN10-DN2000mm / Battery-powered

Description

Battery-powered magnetic flow meter can be used in remote area where don't have power grid . It is widely used for all conductive liquids in every industry, such as water, acid, alkali, milk, slurry etc. Since founded in 2005, Q&T has been focused in magnetic flow meter manufacturing for more than 15 years. More than 600 thousand mag meters had been provided to clients all over the world for different work conditions.

Features

- ◆ It has a long life span, standard battery can work for 3-6 years, determined by the excitation current.
- ◆ Dual power supply: it's equipped with external power supply interface, which can be powered by external 12-24vdc power supply, enabling users to have a variety of power options
- ◆ Multiple network interfaces: W803 has GPRS, RS485, HART and other network communication for users.
- ◆ Multiple work mode: W803E has 'Flow Only' mode, 'Flow + Pressure' mode, 'Flow + Temperature' mode for users.

Specifications

● Size	: DN10-DN3000mm	PU	(-10℃~60℃,DN40-DN1600)
● Accuracy	: ±0.5% of reading ±0.2% optional,velocity >0.3 m/s	CR	(-10℃~80℃,DN40-DN3000)
● Conductivity	: Normal liquid >5 μS/cm, DI water >20 μS/cm	FLS	(-10℃~200℃,DN40-DN3000)
● Protection Grade	: IP65, IP68 optional	● Velocity	: 0.1 m/s ~ 15 m/s
● Electrode	: SS316L, Hastelloy C, Hastelloy B, Titanium,Tantalum, Platinoiridium	● Nominal Pressure	: 4.0 MPa (DN3-DN150) 1.6 MPa (DN200-DN600) 1.0 MPa (DN700-DN1000) 0.6 MPa (DN1200-DN3000)
● Power Supply	: 3.6V lithium, 3.6V + DC20V~36V (optional)	● Frequency Output	: 1~5000 Hz
● Power Consumption	: <20W	● Language	: English,Chinese Other languages are available
● Signal Output	: 4~20 mA,pulse	● Connection	: Flange, tri-clamp, thread, Wafer, insertion
● Communication	: RS485/Modbus,Hart,Profitbus	● Exciting Current	: 125mA, 187mA, 250mA
● Display	: LC Display,128X128mm Three lines, 4 buttons	● Exciting Frequency	: 3.12Hz, 4.16Hz, 6.25Hz 12.5Hz, 25Hz, 30Hz
● Ambient Temperature	: -20℃~60℃	● Body Material	: Carbon Steel Stainless Steel 304 Stainless Steel 316
● Relative Humidity	: 5%~95%	● Certificate	: Atex, CE-EMC, CE-LVD
● Liner Material	: PTFE (-20℃~120℃, DN15-DN1600) FEP (-20℃~120℃,DN25-DN1800) PFA (-20℃~120℃,DN3-DN800)		

MAS TECHNOLOGIES

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QTLD Electromagnetic Flow Meter D
DN10-DN2000mm / Battery-powered

Selection Table

Model QTLD										
Caliber	DN10-DN2000									
Structure	Compact	C								
	Remote	R								
Electrodes	SS316		S							
	Hastelloy B		B							
	Hastelloy C		C							
	Titanium		T							
	Tantalum		A							
	Platinum-iridium		P							
Liner	PTFE			T						
	PFA			P						
	Neoprene			N						
	Hard Rubber			H						
	Polyurethane			P						
	Ceramic			C						
Body Material	Carbon Steel with epoxy painting				CS					
	SS304				S4					
	SS316				S6					
Signal Output	No Output					NS				
	4~20 mA					A				
	Pulse					P				
Communication	No communication						NC			
	RS485 Modbus RTU						R4			
	Pulse						P			
	HART						H			
Procession Connection	Flange							F		
	Tri-clamp							C		
	thread							T		
	wafer							W		
	Insertion							I		
Power Supply	3.6V lithium								B	
	3.6V lithium + 24 Vdc								E	



Battery Without Output



Battery with Pulse Output



Battery with RS485 Output



Battery with GPRS

Description

Insertion type electromagnetic flow meter is a type of electromagnetic flow meter has been used throughout industries for more than 50years. Insertion type electromagnetic flow meter comprise an electromagnetic sensing probe in ABS or Polypropylene mounted on the end of a support rod. Q&T is a company that design and manufacture flowmeters with more than 15 years of experience. One piece Q&T insertion type electromagnetic flow meter can be used for pipe sizes between DN100mm and DN3000mm. It is an economic option for large pipeline applications. With hot-tap structure, it can achieve online installation easily.

Features

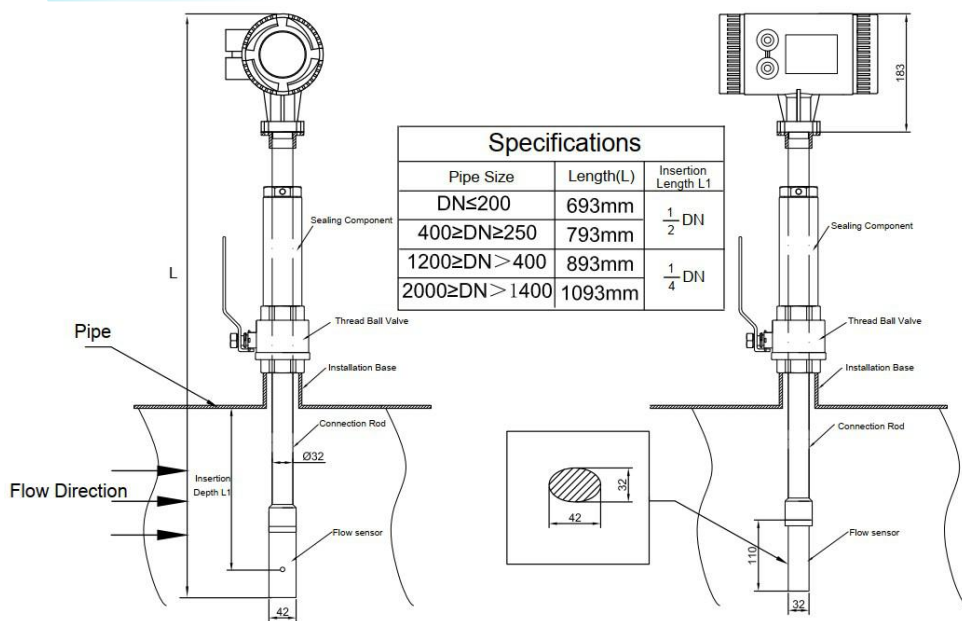
- ◆ No moving parts, no pressure loss and require very less maintenance.
- ◆ More economical option for large pipelines flow measurement,
- ◆ It can achieve hot-tapping online installation.

Specifications

● Size	: DN100-DN3000mm	● Velocity	: 0.1 m/s ~ 15 m/s
● Accuracy	: ±1.5% of reading	● Nominal Pressure	: 4.0 MPa (DN3-DN150) 1.6 MPa (DN200-DN600) 1.0 MPa (DN700-DN1000) 0.6 MPa (DN1200-DN3000)
● Conductivity	: Normal liquid >5 µS/cm, DI water >20 µS/cm	● Frequency Output	: 1~5000 Hz
● Protection Grade	: IP65	● Language	: English,Chinese Other languages are available
● Electrode	: SS316L, Hastelloy C, Hastelloy B, Titanium,Tantalum, Platinoiridium	● Connection	: Flange, tri-clamp, thread, Wafer, insertion
● Power Supply	: 220 Vac, 24 Vdc, 3.6V lithium,	● Exciting Current	: 125mA, 187mA, 250mA
● Power Consumption	: <20W	● Exciting Frequency	: 3.12Hz, 4.16Hz, 6.25Hz 12.5Hz, 25Hz, 30Hz
● Signal Output	: 4~20 mA,pulse	● Body Material	: Stainless Steel 304 Stainless Steel 316 optional
● Communication	: RS485/Modbus,Hart,Profitbus	● Certificate	: Atex, CE-EMC, CE-LVD
● Display	: LC Display,128X128mm Three lines 4 internal push buttons		
● Ambient Temperature	: -20℃~60℃		
● Relative Humidity	: 5%~95%		
● Sensor Material	: ABS		

DN100-DN3000mm / Insertion

Demension



Selection Table

Model QTLD											
Caliber	DN100-DN3000										
Structure	Compact	C									
	Remote	R									
Electrodes Material	SS316		S								
	Hastelloy B		B								
	Hastelloy C		C								
Probe Material	PTFE			T							
	PFA			P							
Body Material	SS304				S4						
	SS316				S6						
Signal Output	4~20 mA					A					
	Pulse					P					
Communication	RS485 Modbus RTU						R4				
	HART						H				
	Profitbus						P				
	RS232						R2				
Connection	Thread Ball Valve G2”							D			
	Flange Ball Valve DN50							A			
Protection	IP65 Convertor + IP65 Transmitter									5	
Grade	IP68 Convertor + IP65 Transmitter									8	
Power Supply	8 ~ 36 Vdc										DC
	85 ~ 265 Vac										AC
	3.6 V lithium										BP

Remarks:

Pls note that insertion depth has no relationship with pipe thickness.
For example: DN400 pipe thickness is 5mm, insertion depth should be 1/2 of 400mm, the L1 should be 200mm.



Description

Partially filled pipe electromagnetic flow meter is a kind of volume flow meter. It was specially designed for partially filled pipe. It can measure liquid volume from 10% level of the pipe to 100% level of the pipe. It's accuracy can reach to 2.5%, very accurate for irrigation and waste water liquid measurement. It use remote LCD display so users can read the flow measurement easily. We also provide solar power supply solution for some remote areas where has no power supply.

Features

- ◆ Partially filled pipe electromagnetic flow meter can measure partially filled pipe liquid flow, it is very popular in irrigation.
- ◆ Its can use solar power supply, this type is very suitable for remote areas where has no industrial power supply.
- ◆ It adopts safe and durable material, service life is longer than normal products. Normally, it can work at least 5-10 years or longer.
- ◆ And we have already got food grade certificate for its liner so it can be used for drinking water, underground water, etc. Many drinking water company use this type in their big size pipeline.
- ◆ We use an accurate mini ultrasonic level meter for its liquid level measurement then the flow meter will record the liquid level and use this parameter to measure liquid flow. This ultrasonic level meter's blind area is very small and its accuracy can reach to $\pm 1\text{mm}$.

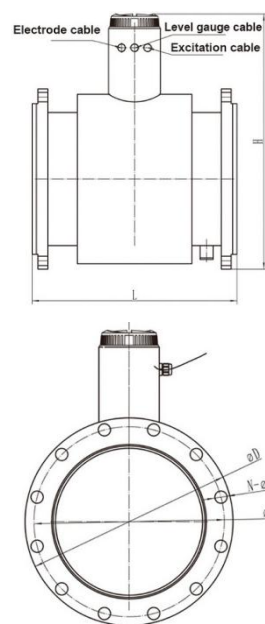
Specifications

● Size	: DN200-DN3000mm	● Nominal Pressure	: 4.0 MPa (DN3-DN150) 1.6 MPa (DN200-DN600) 1.0 MPa (DN700-DN1000) 0.6 MPa (DN1200-DN3000)
● Accuracy	: $\pm 2.5\%$ of reading,	● Frequency Output	: 1~5000 Hz
● Conductivity	: Normal liquid $>5 \mu\text{S/cm}$, DI water $>20 \mu\text{S/cm}$	● Language	: English, Chinese Other languages are available
● Protection Grade	: IP65, IP68	● Flange Standard	: EN1092-1 PN10, PN16, PN25, PN40 ANSI BS16.5 Class 150, 300, 600 JIS2220 10K, 20K, 40 AS2129 Table D, Table E AS4087 PN16, PN21, PN35
● Electrode	: SS316L, Hastelloy C, Hastelloy B, Titanium, Tantalum, Platinoidium	● Exciting Current	: 125mA, 187mA, 250mA
● Power Supply	: AC85~250V, DC20V~36V	● Exciting Frequency	: 3.12Hz, 4.16Hz, 6.25Hz 12.5Hz, 25Hz, 30Hz
● Power Consumption	: $<20\text{W}$	● Material	
● Signal Output	: 4~20 mA, pulse	Measuring Tube	: Stainless Steel 304
● Communication	: RS485/Modbus, Hart, Profibus	Flange	: Carbon Steel (standard) Stainless Steel 304 (optional) Stainless Steel 316 (optional)
● Display	: LC Display, 128X128mm Three lines, 4 buttons	● Certificate	: Atex, CE-EMC, CE-LVD
● Ambient Temperature	: $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$		
● Relative Humidity	: 5%~95%		
● Liner Material	: PTFE ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN15-DN1600) FEP ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN25-DN1800) PFA ($-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$, DN3-DN800) PU ($-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$, DN40-DN1600) CR ($-10^{\circ}\text{C} \sim 80^{\circ}\text{C}$, DN40-DN3000) FLS ($-10^{\circ}\text{C} \sim 200^{\circ}\text{C}$, DN40-DN3000)		
● Velocity	: 0.1 m/s ~ 15 m/s		

QTLTD Electromagnetic Flow Meter P
DN200-DN3000mm / Partially-filled

Demension

Diameter (mm)	Nominal pressure	L(mm)	H	φA	φK	N-φh
DN200	0.6	400	494	320	280	8-φ18
DN250	0.6	450	561	375	335	12-φ18
DN300	0.6	500	623	440	395	12-φ22
DN350	0.6	550	671	490	445	12-φ22
DN400	0.6	600	708	540	495	16-φ22
DN450	0.6	600	778	595	550	16-φ22
DN500	0.6	600	828	645	600	20-φ22
DN600	0.6	600	934	755	705	20-φ22
DN700	0.6	700	1041	860	810	24-φ26
DN800	0.6	800	1149	975	920	24-φ30
DN900	0.6	900	1249	1075	1020	24-φ30
DN1000	0.6	1000	1359	1175	1120	28-φ30



Selection Table

Model QTLTD						
Caliber	DN200-DN3000					
Electrodes	SS316	S				
	Hastelloy B	B				
	Hastelloy C	C				
	Titanium	T				
	Tantalum	A				
	Platinum-iridium	P				
Body Material	Carbon Steel with epoxy painting		CS			
	SS304		S4			
	SS316		S6			
Signal Output	4~20 mA			A		
	Pulse			P		
Communication	RS485 Modbus RTU			R		
	HART			H		
Flange	D10: DIN PN10, D16: DIN PN16, D25: DIN PN25, D40: DIN PN40				D	
	A15: ANSI 150#, A30: ANSI 300#				A	
	J10: JIS 10K, J20: JIS 20K, J30: JIS 30K				J	
	AD: AS2129 Table D, AE: AS2129 Table E				T	
Protection Grade	IP65 Converter + IP65 Transmitter				5	
	IP68 Converter + IP65 Transmitter				8	
Power Supply	8 ~ 36 Vdc				DC	
	85 ~ 265 Vac				AC	
	3.6 V lithium				BP	



QTLTD Electromagnetic Flow Meter M **DN3, DN6, DN10, DN15 / Mini**

Description

The product is based on Faraday's law of electromagnetic induction, used to measure the conductance greater than 5 $\mu\text{s} / \text{cm}$ volume of conductive liquid flow, In addition to measuring the general volume of conductive liquid flow, but also can be used to measure strong acid, alkali and other strong corrosive liquids and mud, pulp, pulp and other liquid-solid two-phase suspension of uniform volume flow

Features

- ◆ Integrated verification, diagnostic function and empty pipe detection.
- ◆ Measure forward and reverse direction flows.
- ◆ RS485 interface supporting up to 2km distance at 14400 bps communication
- ◆ Programmable low frequency square wave field excitation, improving measurement stability and reducing power consumption
- ◆ Implementing 'Rate-Of-Change Limit' technology to eliminate sharp electrical noise contained in the flow signal and stabilize the display and outputs
- ◆ Optional real-time clock, power-failure and history data logging function, storing up to 30 days measurement records

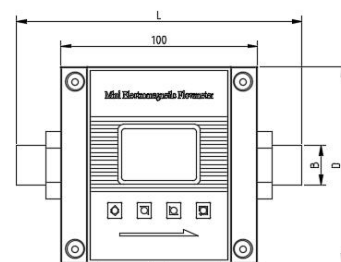
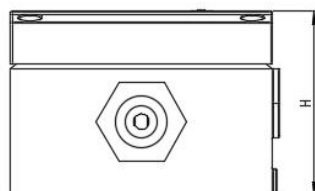


Specifications

- Size : DN3, DN6, DN10, DN15
- Accuracy : $\pm 0.5\%$ of reading
- Conductivity : Normal liquid $> 5 \mu\text{s}/\text{cm}$,
- Protection Grade : IP65
- Electrode : SS316L, Hastelloy C, Titanium
- Power Supply : AC85~250V, DC20V~36V
- Power Consumption : $< 10\text{W}$
- Display : LC Display, 128X128mm
 Three lines
 4 internal push button
- Relative Humidity : 5%~95%
- Ambient Temperature:-10~55 $^{\circ}\text{C}$
- Medium Temperature: -10 $^{\circ}\text{C}$ ~60 $^{\circ}\text{C}$
- Velocity : 0.1 m/s ~ 15 m/s
- Communication : RS232 / RS485 MODBUS
- Nominal Pressure : 1.6 Mpa
- Material : Peek
- Signal Output : 4~20 mA,pulse
- Connection : 1/2 NPT,BSP

Demension

Caliber (mm)	Pressure (MPa)	Dimension			
		L	D	H	B
3	0.6~1.6	135	100	70	G1/2"
6		145			G1/2"
10		145			G1/2"
15		155			G1/2"



DN (mm)	Flow Range (L/min)		Male Thread
	Standard	Special	
3	0.2~2	0.2~4	G1/2"
6	0.8~8	0.8~16	G1/2"
10	2~20	2~40	G1/2"
15	5~50	5~100	G1/2"

1. Connector
2. Shell
3. Excitation Coil
4. Pole Shoe
5. Magnet Yoke
6. Bracket Plate Assembly
7. Fixed Block
8. Measuring Tube
9. 9. Electrode-assembly

