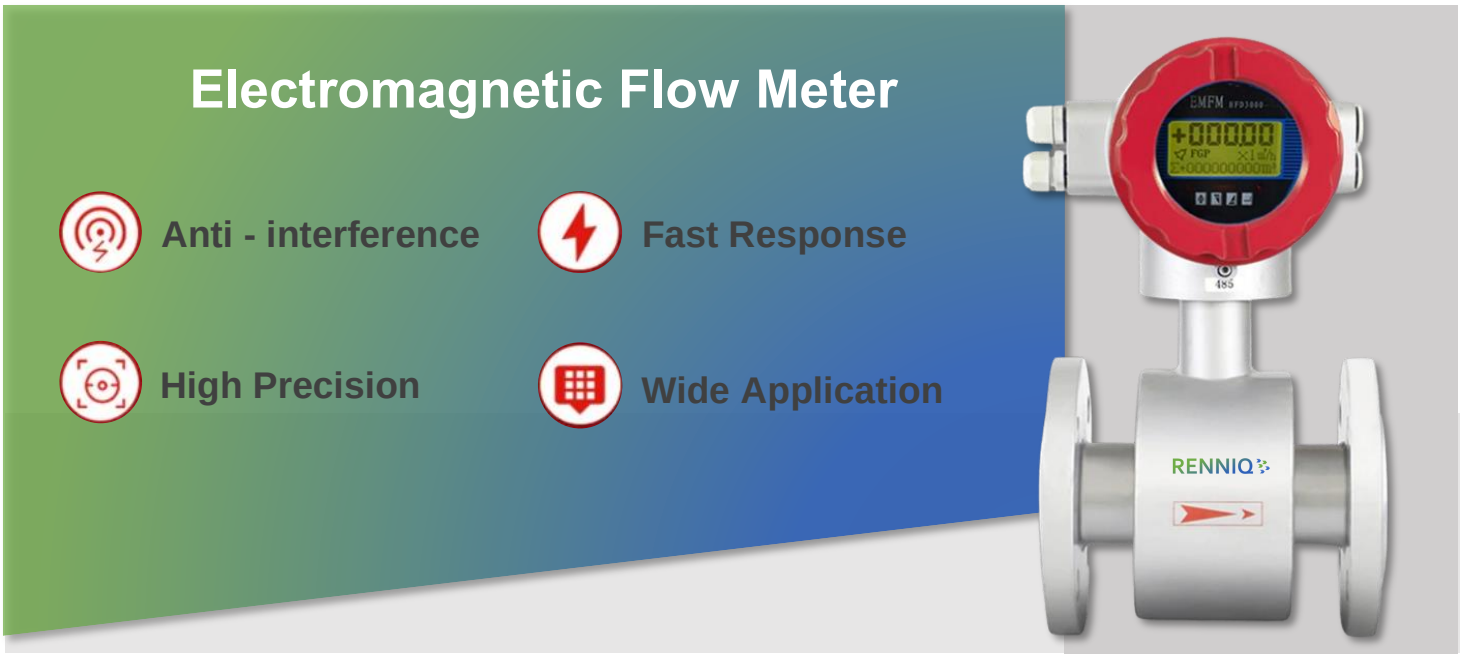
RENNIQ
FLOW PRESSURE LEVEL Expert

Smart Magnetic Flow Meter

FWN Series - RS-485



PRODUCT PARAMATER

Basic Parameter

Nominal diameter (mm)	Pipe PTFE lining : DN10~DN600
	Pipeline rubber lining : DN40~DN2000
Flow direction	Forward and reverse flow
Repeatability error	Measured value ±1.0%
Precision level	±0.5%, ±1.0%
The temperature of the measured medium	Conventional rubber lining : -20℃~+120℃
	High-temperature rubber lining : -20℃~+90℃
	PTFE lining : -20℃~+120℃
	High PTFE lining : -20℃~+180℃
Rated working pressure (high pressure can be customized)	DN10~DN25 ≤4.0MPa
	DN32~DN150 ≤ 1.6MPa
	DN200~DN600 ≤1.0MPa
	DN700~DN2000 ≤0.6MPa
Velocity range	0.3~15m/s
Conductivity range	≥5μs/cm
Signal output	4 ~ 20 mA(0 ~ 750 Ω load resistance), pulse, control level
The communication output	RS485(Modbus-RTU), HART protocol, Profibus protocol
Power supply	AC220V; DC24V; DC12V; Battery

RENNIQ
FLOW PRESSURE LEVEL Expert

Smart Magnetic Flow Meter

FWN Series - RS-485

PRODUCT PARAMATER

Basic Parameter

The length of the straight pipe is required	Upstream ≥5DN, downstream ≥2DN
Connection mode	Flange connection, Threaded connection, Sanitary clamp connection
Protection grade	IP65, It can be customized IP68
The environment temperature	-25℃~60℃
Power consumption	≤20W

Lining Parameter

Lining material	Main Performance	Applications
PTFE	1. The most steady material in plastics which is resistible to boiling hydrochloric acid, as well as strong alkali and organic, impregnates. 2. Not be perfect in abrasion resistance.	Strong corrosive mediums such as strong acid and alkali
PFA	Having the same abrasion resistance with PTFE. Having a strong ability to load pressure resistance.	Applicable in state of load pressure
F46	1. Have the same abrasion resistance with PTFE. 2. Resistible for low abrasion. 3. Having strong resistance to load pressure.	1. The same as PTFE.2.Applicable in mediums of low abrasion.
Neoprene	1. Be of good elasticity, retractility, and abrasion resistance. 2. Be resistant to low acid, alkali, and salt but not for oxidation mediums.	Water, sewage and slurry, mineral serosity of low abrasion.
Polyurethane	1. Be of good abrasion resistibility. 2. Not be perfect in acid/alkali resistance. 3. It can't be used for water mixed with organic impregnants.	Applicable in mineral serosity, slurry and coal slurry of high abrasion.

PRODUCT PARAMATER

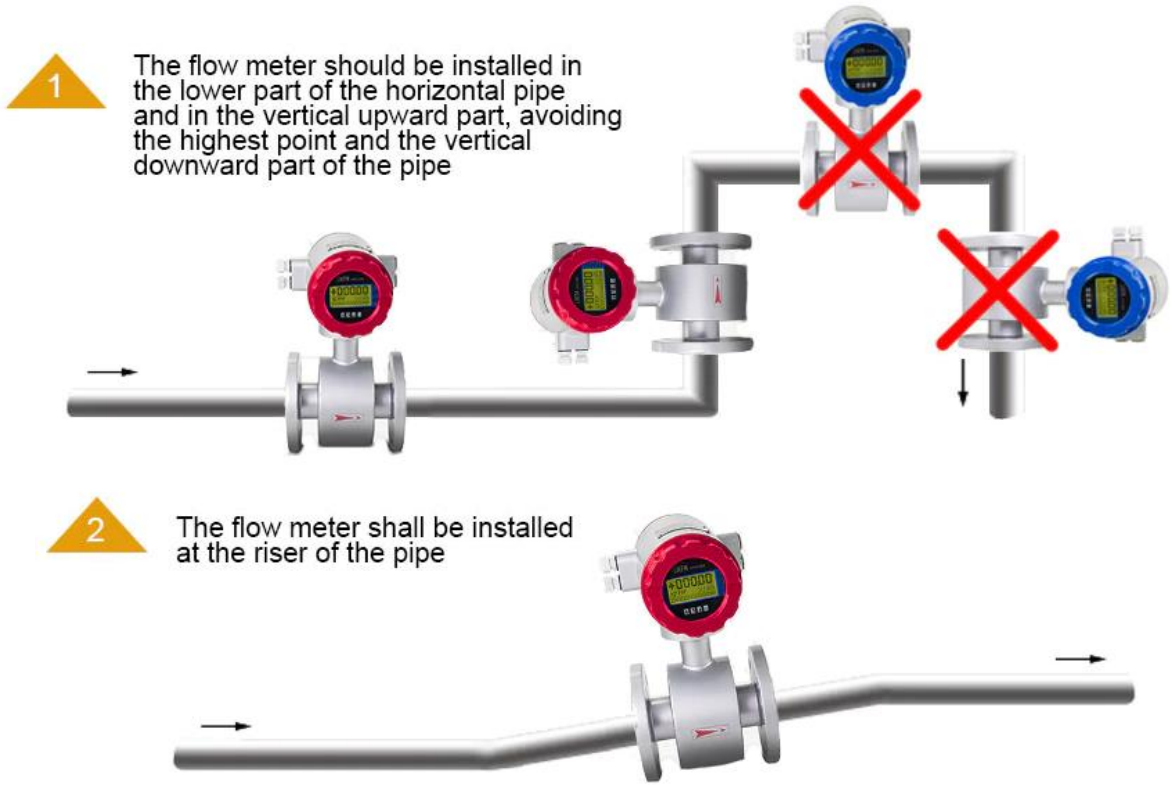
Electrode Parameter

Smart Magnetic Flow Meter

FWN Series - RS-485

Electrode material	Applications
Stainless steel SS316	Applicable in water, sewage, and corrosive mediums. Widely used in industries of petrol, chemistry, carbamide, etc
Stainless steel covered with tungsten carbide	Applicable in mediums of no corrosive and low abrasion.
Hastelloy B (HB)	Having strong resistance to hydrochioric acid of any consistency which is below boiling point. Also resistible against vitriol, phosphate, hydrofluoric acid, organic acid, etc which are oxidable acid, alkali, and non-oxidable salt.
Hastelloy C (HC)	Be resistant to oxidable acid such as nitric acid, mixed acid as well as oxidable salt such as Fe^{3+}, Cu^{2+} and seawater
Titanium	Applicable in seawater, and kinds of chloride, hypochlorite salt, oxidable acid (including fuming nitric acid), organic acid, alkali, etc. Not resistant to a pure reducing acid (such as sulphuric acid, hydrochloric acid) corrosion. But if acid contains antioxidant (such as Fe^{3+}, Cu^{2+}) is greatly reduce corrosion.
Ta	In addition to hydrofluoric acid, fuming sulfuric acid, alkali remaining outside chemicals, including boiling hydrochloric acid
Platinum-iridium	Almost be applicable in all chemical mediums except for aqua fortis, ammonium salt.

FLOWMETER INSTALLATION



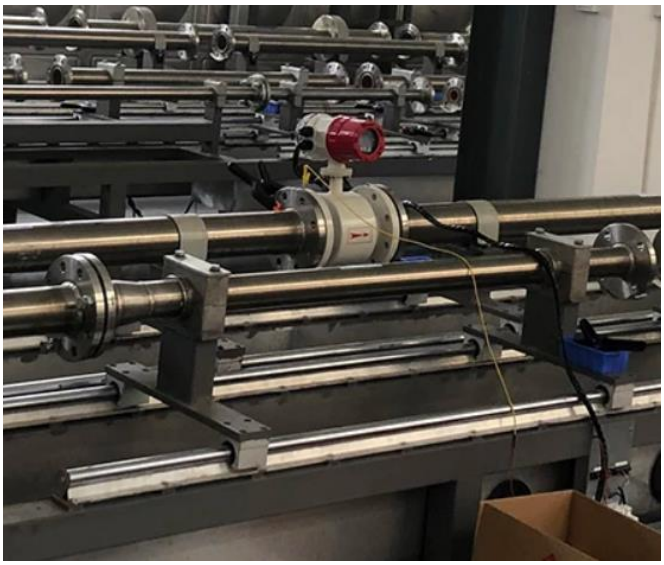
RENNIQ
FLOW PRESSURE LEVEL Expert

Smart Magnetic Flow Meter

FWN Series - RS-485

FLOW RANGE

Diameter (mm)	10	15	20	25	32	40	50	65
Qmin(m^3/h)	0.0283	0.0636	0.131	0.176	0.29	0.452	0.7	1.19
Qmax(m^3/h)	3.39	7.63	13.6	21	35	45	85	143
Diameter (mm)	80	100	125	150	200	250	300	350
Qmin(m^3/h)	1.8	2.82	4.42	6.36	11.3	17.7	25.4	34.6
Qmax(m^3/h)	217	339	530	763	1357	2120	3054	4157
Diameter (mm)	400	450	500	600	700	800	900	1000
Qmin(m^3/h)	45.2	57.3	70.7	102	139	181	229	283
Qmax(m^3/h)	5429	6871	8482	12216	16620	21720	27480	33924
Diameter (mm)	1200	1400	1600					
Qmin(m^3/h)	407	554	723					
Qmax(m^3/h)	48833	66468	86815					

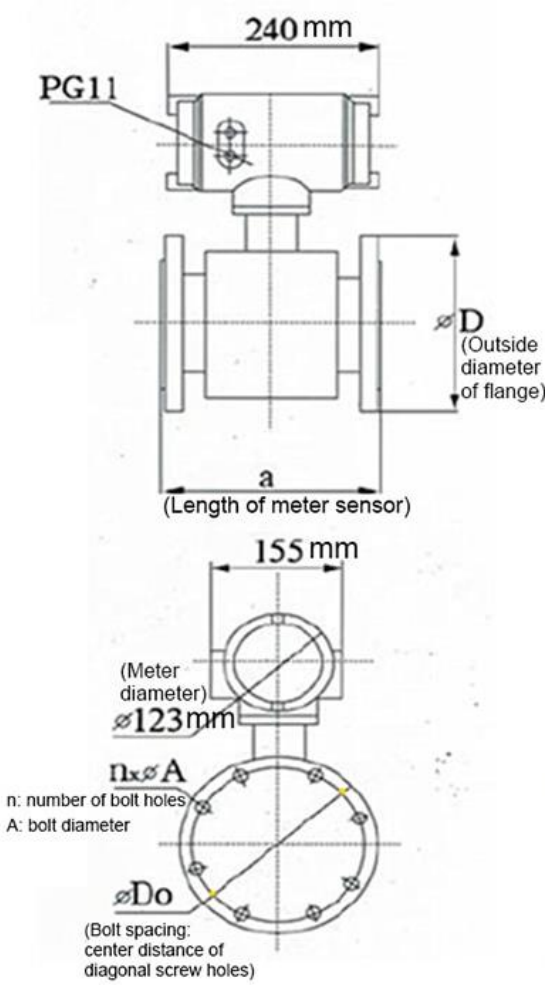


RENNIQ
FLOW PRESSURE LEVEL Expert

Smart Magnetic Flow Meter

FWN Series - RS-485

PRODUCT SIZE



DN	a	D	Do	n*A
10	200	90	60	4*14
15	200	95	65	4*14
20	200	105	75	4*14
25	200	115	85	4*14
32	200	140	100	4*18
40	200	150	110	4*18
50	200	165	125	4*18
65	250	185	145	4*18
80	250	200	160	8*18
100	250	220	180	8*18
125	250	250	210	8*18
150	300	285	240	8*22
200	350	340	295	8*22
250	450	395	350	12*22
300	500	445	400	12*22
350	550	505	460	16*22
400	600	565	515	16*26
450	600	615	565	20*26
500	600	670	620	20*26
600	600	780	725	20*30
700	700	895	840	24*30
800	800	1015	950	24*33
900	900	1115	1050	28*33
1000	1000	1230	1160	28*36
1200	1200	1405	1340	32*33
1400	1400	1630	1560	36*36
1600	1600	1830	1760	40*36
1800	1800	2045	1970	44*39
2000	2000	2265	2180	48*42
2200	2200	2405	2315	52*45