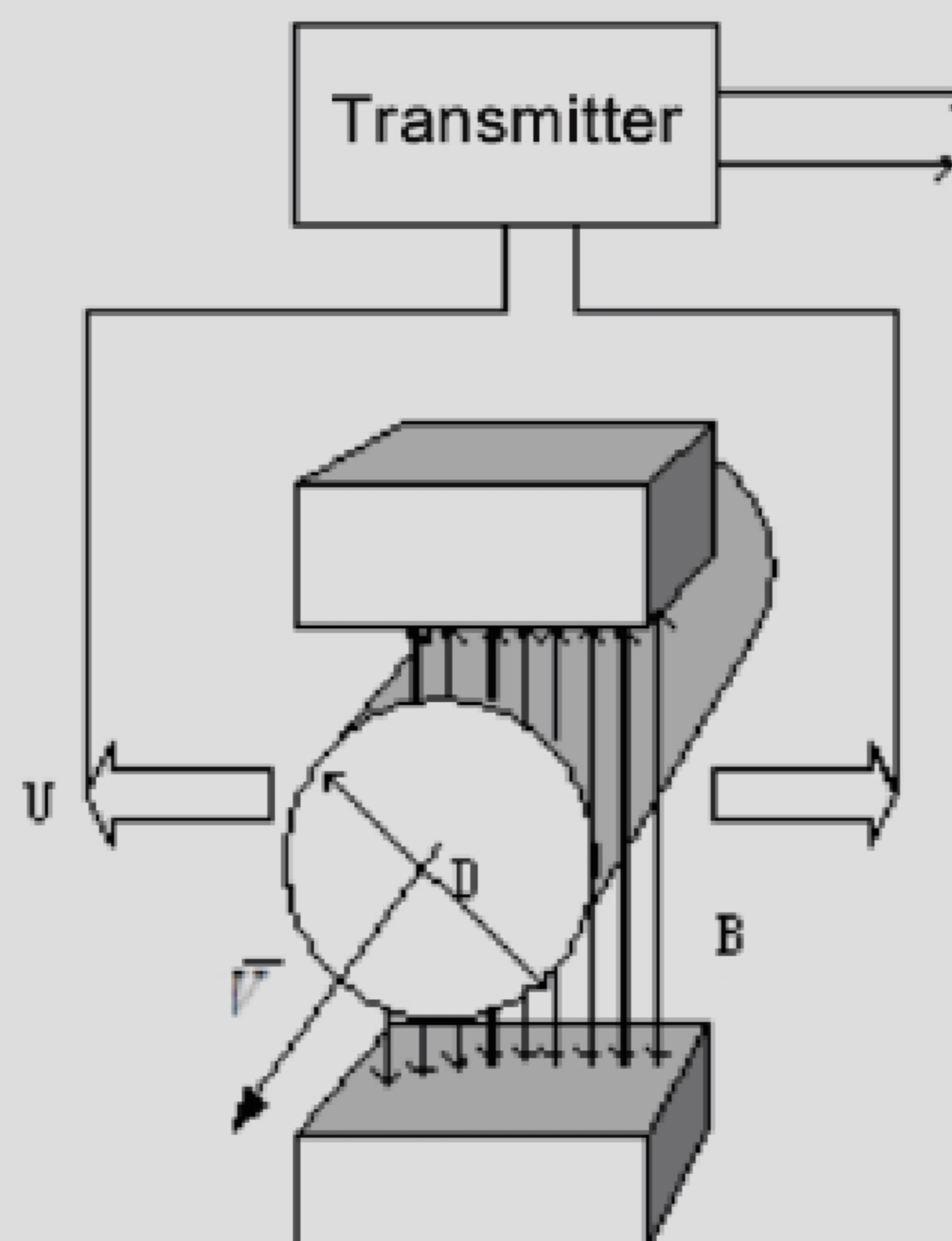


PMF Series

Electromagnetic Flow Meter

Working Principle >>>



Electromagnetic flow meter principle is based on Faraday's Law of Electromagnetic Induction. Faraday's Law states that electromotive force will be induced in a conductor (water or other conductive liquid) when it passes through a magnetic field (generated by the meter), and the induced electromotive force will be directly proportional to the velocity of the conductor. A pair of electrode is mounted in a tube (inner diameter D) with the magnetic flux density B(T). When conductive fluid pass through the tube with average velocity V(m/s), then the electrode generate the electromotive force(E).

$$E = KB \cdot D \cdot V$$

K : proportional coefficient

Summary >>>

PMF series is highly accurate and stable electromagnetic flow meter. It's widely applied in petrochemical, metallurgy, mining, water supply and drainage, paper-making, food, textile, irrigation, agriculture, municipal environmental protection and other fields.

PMF Series

Electromagnetic Flow Meter



Technical Features >>>

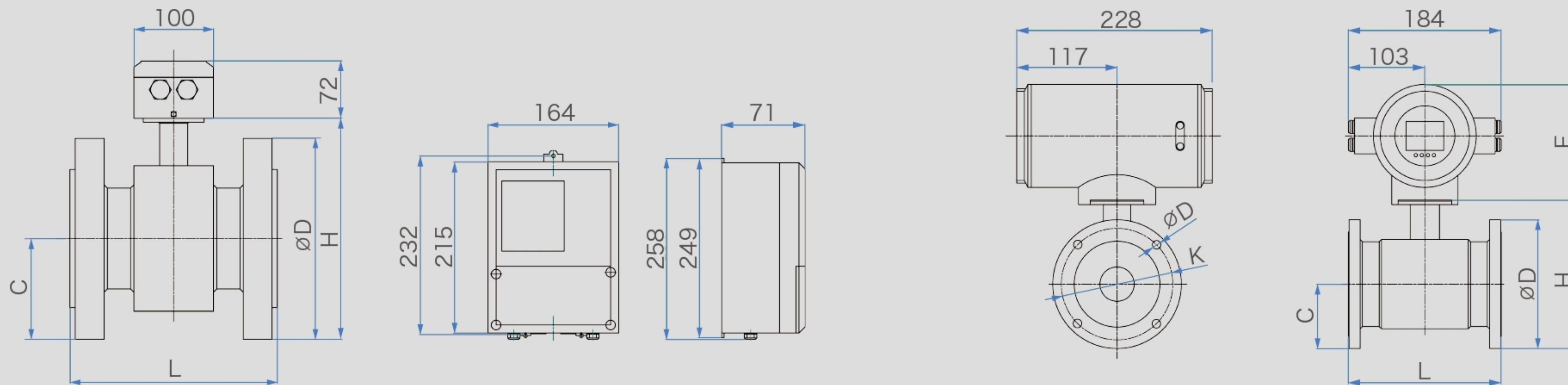
- High Accuracy $\pm 0.5\%$, Satisfied For Billing System
- IP68 Protection Class, Sealed Sensor Ensures Long Term Under Water Working
- Full Digital Processing, Fast Calculation Speed, Strong Anti-interference
- Advanced Ground Electrode Structure Eliminates The Influence Of Electrical Noise

Specification >>>

Nominal Diameter	DN15 ~ DN2000
Electrode Material	316L, Hb, Hc, Ti, Ta, Pt
Power Supply	AC: 90VAC ~ 260VAC/47Hz ~ 63Hz, power consumption $\leq 20VA$ DC: 16VAC ~ 36VDC, power consumption $\leq 16VA \pm 0.5\%R$, $\pm 1.0\%R$
Lining material	CR, PU, FVMQ, F4/PTFE, F46/PFA
Electrical Conductivity	$\geq 5 \mu S/cm$
Accuracy Class	$\pm 0.5\%R$, $\pm 1.0\%R$
Velocity	0.05m/s ~ 15m/s
Fluid Temperature	$-40^{\circ}C \sim 70^{\circ}C$
Pressure	0.6MPa ~ 1.6MPa (depends on pipe size)
Type	Integrated or Separated (flange connection)
Enclosure Material	Carbon steel, Stainless steel 304 or 316
Installation	Flange connection

PMF Series

Electromagnetic Flow Meter



Diameter		Pressure (Mpa)	Mounting Size (mm)			Bolt Hole Diameter (mm) K	Bolt Diameter (mm) A	Holes n	Flange Outside Diameter (mm) D
mm	in		L	C	H				
15	1/2"	1.6	200	48	149	65	14	4	95
20	3/4"		200	53	154	75	14	4	105
25	1"		200	58	159	85	14	4	115
32	1 1/4"		200	70	172	100	18	4	140
40	1 1/2"		200	75	189	110	18	4	150
50	2"		200	83	197	125	18	4	165
65	2 1/2"		200	93	220	145	18	8	185
80	3"		200	100	227	160	18	8	200
100	4"		250	118	257	180	18	8	235
125	5"		250	135	289	210	18	8	270
150	6"		300	150	318	240	22	8	300
200	8"	1.0	350	170	379	295	22	8	340
250	10"		450	203	429	350	22	12	395
300	12"		500	230	482	400	22	12	445
350	14"		550	260	534	460	22	16	505
400	16"		600	290	594	515	26	16	565
450	18"		600	320	649	565	26	20	615
500	20"		600	358	697	620	26	20	670
600	24"		600	420	799	725	30	20	780
700	28"		700	448	909	840	30	24	895
800	32"		800	508	1019	950	33	24	1015
900	36"	900	558	1119	1050	33	28	1115	
1000	40"	0.6	1000	615	1199	1120	33	28	1175
1200	48"		1200	728	1419	1340	33	32	1405
1400	56"		1400	815	1700	1560	35	36	1630
1600	64"		1600	915	1990	1760	35	40	1830
1800	72"		1800	1023	2110	1970	39	44	2045
2000	80"		2000	1133	2320	2180	42	48	2265

PMF Series

Electromagnetic Flow Meter

PMF	Electromagnetic Flow Meter
Pipe Size	
XXX	050-50mm, 300-300mm
Measuring Media	
1	Clean water
2	Sewage
3	Others
Structure Type	
C	Integrated (IP65)
R	Separated (IP68, std.cable length 10m, customized)
Power Supply	
A	85-265VAC
D	24VDC
Lining Material	
1	Neoprene [CR] ($\leq 80^{\circ}\text{C}$)
2	Polyurethane [PU] ($\leq 80^{\circ}\text{C}$)
3	FVMQ ($\leq 80^{\circ}\text{C}$)
4	F4/PTFE ($\leq 120^{\circ}\text{C}$)
5	F46/PFA ($\leq 120^{\circ}\text{C}$)
Media Temperature	
1	$\leq 80^{\circ}\text{C}$
2	$\leq 120^{\circ}\text{C}$
Electrode Material	
1	Stainless steel [316L]
2	Hastelloy C [Hc]
3	Hastelloy B [Hb]
4	Titanium [Ti]
5	Tantalum [Ta]
6	Platinum/Iridium Alloy [Pt]
Pressure	
1	0.6MPa
2	1.0MPa
3	1.6MPa
4	Others
Grounding and lining protection	
0	Flange grounding (DN15-DN1200)
1	Grounding ring [or lining protect the flange] (DN15-DN250)
2	Grounding electrode (DN25-DN1200)
Communication	
0	Basic Configuration (Current+Pulse+Alarm)
2	Basic Configuration + RS232
4	Basic Configuration + RS485
M	Basic Configuration + MODBUS
H	Basic Configuration + HART

For Example: PMF-050-1-C-A-1-1-1-3-1-0

Stands for: PMF electromagnetic flow meter, pipe size DN50, clean water, integrated, 220CVAC power supply, neoprene lining, temperature $\leq 80^{\circ}\text{C}$, electrode material stainless steel, pressure 1.6MPa, grounding ring, communication basic