FLANGED ELECTROMAGNETIC FLOWMETERS
CODE 0901-□□□□□□□□□□□□

CUSTOMIZABLE

- Suitable for flow measurement of conductive liquids in petroleum, chemical, metallurgical, light textile, papermaking, environmental protection and food industries
- Adopts dual-frequency excitation mode, immune to power frequency and various on-site stray interference, with stable and reliable operation
- No moving parts or flow resistance inside the measuring tube, no pressure loss
- Measurement accuracy is unaffected by variations in medium temperature, pressure, density, viscosity and conductivity
- Independent of flow direction, it can measure forward and reverse flow accurately
- Measures and displays instantaneous flow, flow velocity and totalized flow
- Flow accumulation function: forward total, reverse total, difference total
- High and low limit alarm function
- Empty pipe alarm function



0901-A1B7C3D1E1F1G1H1J1K1L1M1

Code explanation:

0901-A□B□C□D□E□F□G□H□J□K□L□M□

- A: accuracy
- B: nominal diameter
- C: nominal pressure
- D: liner material
- E: electrode material
- F: communication
- G: housing material
- H: transmitter
- J: structure
- K: protection grade
- L: power supply
- M: matching flanges and fasteners

Code example:

0901-A1B7C3D1E1F1G1H1J1K1L1M1	**A1-**accuracy: ±0.5%
	B7-nominal diameter: DN50
	C3-nominal pressure: DIN PN16
	D1-liner material: PTFE
	E1-electrode material: SUS316L
	F1-communication: RS485
	G1-housing material: carbon steel
	H1-transmitter: round
	J1-structure: integrated
	K1-protection grade: IP65 transmitter+IP65 sensor
	L1-power supply: AC220V/50Hz
	M1-matching flanges and fasteners: not required

STANDARD DELIVERY

Main unit	1 pc
Grounding electrode	1 pc

SPECIFICATION

Structure	integrated	separated (standard cable length 10m, customizable up to 100m)
Applicable medium	various electrically conductive fluids (conductivity of conventional liquids>5μS/cm, deionized water>20μS/cm)	
Accuracy	±0.5%, ±0.2% (optional)	
Nominal diameter	DN10~DN3000	
Nominal pressure	DIN PN6/PN10/PN16/PN25/PN40/PN63/PN100 ANSI 150#/300#/600# JIS 5K/10K/20K/30K/40K (optional, other pressures are customizable)	
Liner material	PTFE, PFA, FEP, neoprene, hard rubber, polyurethane (optional)	
Electrode material	SUS316L, hastelloy B, hastelloy C, titanium, tantalum, platinum-iridium, stainless steel coated with tungsten carbide (optional)	
Medium temperature	-20°C~60°C	-10°C~80°C (neoprene, hard rubber, polyurethane) -10°C~160°C (PTFE, PFA, FEP)
Velocity	0.5m/s~15m/s	
Signal output (volumetric flow)	current: 4mA~20mA (4-wire), frequency: 1Hz~5000Hz, pulse	
Communication	RS485, HART (optional)	
Display	128mm×128mm LCD display, 3-Line menu with 4 operation keys	
Connection type	flange	
Housing material	carbon steel, SUS304, SUS316 (optional)	
Protection grade	IP65 transmitter+IP65 sensor	IP65 transmitter+IP65 sensor IP65 transmitter+IP68 sensor IP68 transmitter+IP68 sensor (IP68 transmitter only uses 3.6V lithium battery) (optional)
Power supply	AC220V/50Hz, DC20V~36V, 3.6V battery (optional)	
Power	<20W	
Operation condition	temperature: -20°C~60°C, humidity: 5%RH~95%RH	

ACCURACY

A1	±0.5%
A2	±0.2%

CALIBER SIZE

B1	DN10	B13	DN200	B25	DN1100
B2	DN15	B14	DN250	B26	DN1200
B3	DN20	B15	DN300	B27	DN1400
B4	DN25	B16	DN350	B28	DN1500
B5	DN32	B17	DN400	B29	DN1600
B6	DN40	B18	DN450	B30	DN1800
B7	DN50	B19	DN500	B31	DN2000
B8	DN65	B20	DN600	B32	DN2200
B9	DN80	B21	DN700	B33	DN2400
B10	DN100	B22	DN800	B34	DN2600
B11	DN125	B23	DN900	B35	DN2800
B12	DN150	B24	DN1000	B36	DN3000

NOMINAL PRESSURE

C1	DIN PN6
C2	DIN PN10
C3	DIN PN16
C4	DIN PN25
C5	DIN PN40
C6	DIN PN63
C7	DIN PN100
C8	ANSI 150#
C9	ANSI 300#
C10	ANSI 600#
C11	JIS 5K
C12	JIS 10K
C13	JIS 20K
C14	JIS 30K
C15	JIS 40K

LINER MATERIAL

D1	PTFE
D2	PFA
D3	FEP
D4	neoprene
D5	hard rubber
D6	polyurethane

ELECTRODE MATERIAL

E1	SUS316L
E2	hastelloy B
E3	hastelloy C
E4	titanium
E5	platinum-iridium
E6	tantalum
E7	stainless steel coated tungsten carbide

COMMUNICATION

F1	RS485
F2	HART

HOUSING MATERIAL

G1	carbon steel
G2	SUS304
G3	SUS316

TRANSMITTER

H1	round
H2	square

STRUCTURE

J1	integrated
J2	separated

PROTECTION GRADE

K1	IP65 transmitter+IP65 sensor
K2	IP65 transmitter+IP68 sensor
K3	IP68 transmitter+IP68 sensor

POWER SUPPLY

L1	AC220V/50Hz
L2	DC20V~36V
L3	3.6V battery

MATCHING FLANGES AND FASTENERS

M1	not required
M2	required

ELECTRODE MATERIAL SELECTION

SUS316L	applicable to industrial/municipal water, wastewater and low-corrosive media
Hastelloy B	strong resistance to hydrochloric acid below the boiling point; it also resists oxidizing acids, alkalis, and non-oxidizing salts, for example, sulfuric acid, phosphoric acid, hydrofluoric acid, and organic acids
Hastelloy C	exceptional resistance to strong solutions of oxidizing salts and acids, for example, Fe^{3+}, Cu^{2+}, nitric acid, mixed acids
Titanium	titanium can withstand corrosive mediums such as seawater, chloride salt solutions, hypochlorite salts, oxidable acids (including fuming nitric acid), organic acids, and alkali. not resistant to high-purity reducing acids, such as sulfuric acid, hydrochloric acid
Platinum-iridium	resistant to nearly all chemical media; not applicable to aqua regia, ammonium salts, and certain halogen-containing solutions
Tantalum	highly resistant to corrosive mediums; applicable to most chemical media except hydrofluoric acid, oleum and alkalis
Stainless steel coated tungsten carbide	applicable for non-corrosive and highly abrasive media

LINER MATERIAL SELECTION

Material	Main performance	Scope of application
PTFE	1. one of the most chemically stable plastics,resistant to boiling HCl, H_2SO_4, aqua regia, and concentrated alkalis 2. poor wear resistance 3. low negative pressure resistance, liner deformation/rupture risk	1. concentrated acids, alkalis and other highly corrosive media 2. for non-negative pressure service
PFA	1. good hydrophobicity, non-stick and high temperature resistance 2. excellent corrosion resistance; capable of withstanding strong acids, strong alkalis, organic solvents and various salt solutions 3. good negative pressure resistance; internal metal mesh optional for higher negative pressure requirements 4. poor wear resistance	1. suitable for non-severe abrasion media
FEP	1. hydrophobic and non-stick performance 2. corrosion resistance ranks only below PFA 3. good negative pressure resistance. for high negative pressure working conditions, internal metal mesh reinforcement can be adopted to improve negative pressure endurance 4. poor wear resistance	1. suitable for non-severe abrasion media
Neoprene	1. resistant to oil, solvents and oxidation; compatible with common acidic, alkaline and salt media 2. excellent elasticity and wear resistance, with inferior cold resistance	1. suitable for media without strong acid, strong alkali and strong oxidizing property 2. suitable for measuring sewage and slurry
Hard Rubber	1. excellent oil resistance, high wear resistance and good heat resistance 2. poor low-temperature resistance and poor ozone resistance	1. suitable for abrasive media such as slag flushing water
Polyurethane	1. excellent wear resistance and elasticity 2. poor acid and alkali resistance	1. neutral high-abrasion ore pulp, coal slurry and slurry

FLOW RANGE

Flow(m^3/h) / Velocity (m/s) / Size(mm)	0.5	1	4	10	12	15
10	0.141	0.283	1.13	2.826	3.391	4.239
15	0.318	0.636	2.543	6.359	7.63	9.538
20	0.565	1.13	4.522	11.304	13.56	16.956
25	0.883	1.766	7.065	17.663	21.2	26.494
32	1.447	2.894	11.575	28.938	34.73	43.407
40	2.261	4.522	18.086	45.216	54.26	67.824
50	3.533	7.065	28.26	70.65	84.78	105.98
65	5.97	11.94	47.76	119.4	143.3	179.1
80	9.04	18.09	72.35	180.86	217	271.3
100	14.13	28.26	113.04	282.6	339.1	423.9
125	22.08	44.16	176.63	441.56	529.9	662.34
150	31.79	63.59	254.34	635.85	763	953.78
200	56.52	113.04	452.16	1130.4	1356	1696
250	88.31	176.53	706.5	1766.25	2120	2649
300	127.2	254.34	1017	2543.4	3052	3815
350	173.1	346.19	1385	3461.85	4154	5193
400	226.1	452	1809	4522	5426	6782
450	286.1	572	2289	5723	6867	8584
500	353.3	707	2826	7065	8478	10598
600	508.7	1017	4069	10174	12208	15260
700	692.4	1385	5539	13847	16617	20771
800	904.3	1809	7235	18086	21704	27130
900	1145	2289	9156	22891	27469	34336
1000	1413	2826	11304	28260	33912	42390
1200	2035	4069	16278	40694	48833	61042
1400	2769	5539	22156	55390	66468	83084
1600	3617	7235	28938	72346	86815	108518
1800	4578	9156	36625	91562	109875	137344
2000	5652	11304	45216	113040	135648	169560
2200	6839	13678	54711	136778	164134	205168
2400	8139	16278	65111	162778	195333	244166
2600	9552	19104	76415	191038	229245	286556
2800	11078	22156	88623	221558	265870	332338
3000	12717	25434	101736	254340	305208	381510