



FLANGED ELECTROMAGNETIC FLOWMETERS
PART NO. 0901-□□□□□□□□□□-U

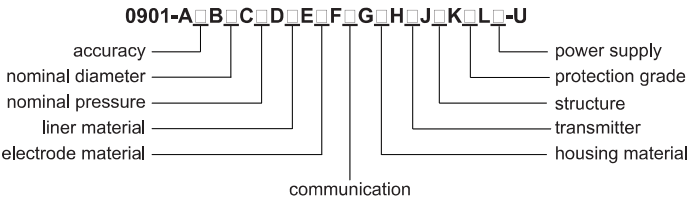
CUSTOMIZABLE

- 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-A1B7C1D1E1F1G1H1J1K1L1-U

Part No. explanation:



Part No. example:

0901-A1B7C1D1E1F1G1H1J1K1L1-U	A1-accuracy: ±0.5%
	B7-nominal diameter: 2"
	C1-nominal pressure: ANSI 150#
	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: AC110V/60Hz

STANDARD DELIVERY

Main unit	1 pc
Grounding electrode	1 pc

OPTIONAL ACCESSORY

Matching flanges and fasteners	0901-MF01
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SPECIFICATION

Structure	integrated	separated (standard cable length 32.8ft, customizable up to 328ft)
Applicable medium	various electrically conductive fluids (conductivity of conventional liquids>5μS/cm, deionized water>20μS/cm)	
Accuracy	±0.5%, ±0.2% (optional)	
Nominal diameter	3⁄8"~118"	
Nominal pressure	ANSI 150#/300#/600# DIN PN6/PN10/PN16/PN25/PN40/PN63/PN100 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	-4°F~140°F	14°F~176°F (neoprene, hard rubber, polyurethane) 14°F~320°F (PTFE, PFA, FEP)
Velocity	1.64ft/s~49.2ft/s	
Signal output (volumetric flow)	current: 4mA~20mA (active output), frequency: 1Hz~5000Hz, pulse (passive output)	
Communication	RS485, HART (optional)	
Display	5.04"×5.04" 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	AC110V/60Hz, DC20V~36V, 3.6V battery (optional)	
Power	<20W	
Operation condition	temperature: -4°F~140°F , humidity: 5%RH~95%RH	

ACCURACY

A1	±0.5%
A2	±0.2%

CALIBER SIZE

B1	3⁄8"	B13	8"	B25	44"
B2	1⁄2"	B14	10"	B26	48"
B3	3⁄4"	B15	12"	B27	56"
B4	1"	B16	14"	B28	60"
B5	1¼"	B17	16"	B29	64"
B6	1½"	B18	18"	B30	72"
B7	2"	B19	20"	B31	80"
B8	2½"	B20	24"	B32	88"
B9	3"	B21	28"	B33	96"
B10	4"	B22	32"	B34	102"
B11	5"	B23	36"	B35	110"
B12	6"	B24	40"	B36	118"

NOMINAL PRESSURE

C1	ANSI 150#
C2	ANSI 300#
C3	ANSI 600#
C4	DIN PN6
C5	DIN PN10
C6	DIN PN16
C7	DIN PN25
C8	DIN PN40
C9	DIN PN63
C10	DIN PN100
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	AC110V/60Hz
L2	DC20V~36V
L3	3.6V battery

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 ₂ SO 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

Velocity (ft/s) Flow(GPM) Size(in/mm)	1.6	3.3	13.1	32.8	39.4	49.2
3/8" (10 mm)	.6	1.2	5.0	12.5	15.0	19.0
1/2" (15 mm)	1.4	2.8	11.2	28.0	33.6	42.1
3/4" (20 mm)	2.5	5.0	19.9	49.8	59.7	74.7
1" (25 mm)	3.9	7.8	31.1	77.8	93.3	117
1 1/4" (32 mm)	6.4	12.7	51.0	127	153	191
1 1/2" (40 mm)	9.9	19.9	80	199	239	301
2" (50 mm)	15.6	31.1	126	311	373	467
2 1/2" (65 mm)	26.3	52.6	209	522	631	789
3" (80 mm)	39.8	80	319	796	955	1195
4" (100 mm)	62.3	125	500	1250	1492	1867
5" (125 mm)	97.2	196	777	1945	2332	2917
6" (150 mm)	140	280	1121	2801	3360	4198
8" (200 mm)	249	498	1993	4979	5972	7467
10" (250 mm)	389	777	3110	7772	9334	11685
12" (300 mm)	560	1119	4501	11197	13438	16788
14" (350 mm)	762	1526	6096	15249	18276	22866
16" (400 mm)	996	1990	7961	19901	23900	30038
18" (450 mm)	1259	2519	10073	25180	30238	37789
20" (500 mm)	1556	3113	12500	31127	37368	46661
24" (600 mm)	2240	4478	17909	44776	53954	67343
28" (700 mm)	3048	6096	24492	60952	73194	91222
32" (800 mm)	3982	7963	31905	79632	95572	119484
36" (900 mm)	5041	10080	40310	100799	121171	151369
40" (1000 mm)	6228	12500	49977	124995	149244	186603
48" (1200 mm)	8940	17909	71674	179092	214910	268638
56" (1400 mm)	12136	24492	97966	244915	293898	367372
64" (1600 mm)	15921	31905	127620	319048	382858	478572
72" (1800 mm)	20158	40310	161241	403097	483716	603896
80" (2000 mm)	24881	49977	199909	499773	599728	749660
88" (2200 mm)	30216	60432	241728	604399	725279	906599
96" (2400 mm)	36133	72266	289064	722660	867192	1083990
102" (2600 mm)	41918	83836	335344	838360	1006032	1257540
110" (2800 mm)	48742	97484	389936	974840	1169808	1462260
118" (3000 mm)	56160	112320	449280	1123200	1347840	1684800