SHD -SE16 Series Slurry Magnetic Flow Meter Sensors

Overview



Electro-Magnetic Flow Meter sensor is manufactured according to Faradays law in which an electric voltage is induced in a conductor moving through a magnetic field. SHD-SE16 Series Slurry Magnetic Flow Meter is designed for stable flow measurement in the most difficult high-noise slurry fluids or adhesive fluids; it is the most accurate and abrasion-resistant flow sensors for sludge, slurries and solids. This type mag meter is widely used in the pulp and paper, mining industries. Slurries occur in many different guises in several industries. Mining slurries are the most common, but fruit juice, paper pulp, alumina, sewage, fly ash in suspension, are among the many products considered as slurries.

Features

It can accurately measure the speed of slurry with good stability and fast response.
It can even measure slurry with concentrations up to 50% (solid).
It has digital display, 4~20mA output, pulse output, RS485 and Hart Communication options.
Liner: Polyurethane rubber option which is suitable for pulp and slurry flow measurement.
Electrodes Material: Tungsten carbide option with excellent abrasion resistance

Technical Specifications

Medium	Conductive medium in slurry state, Conductivity ≥ 5μs/cm
Accuracy	±0.5%
Size	DN10~DN2000
Medium Temperature	-25°C ~ 60 °C
Velocity can be detected	0.5 m/s ~ 10 m/s
Flow Direction	Forward / Reversed
Electrodes material	Tungsten carbide
Liner material	Polyurethane rubber
Process Connection	Flange
Protection level	IP65,IP68
Output	4-20mA,Pulse
Communication	Hart Protocol,Modbus
Environment Temperature	-20°C ~ 60 °C
Relative Humidity	5% ~90%

Nominal Diameter, Pressure & Flow Range

Size(DN)	Pressure	Min flow range velocity(0-0.5)m/s	Max Flow range velocity(0-10)m/s
10	4.0 Mpa	(0-2.25)L/min	(0-45)L/min
15	4.0 Mpa	(0-5)L/min	(0-100)L/min
20	4.0 Mpa	(0-7.5)L/min	(0-150)L/min
25	4.0 Mpa	(0-10L)/min	(0-200)L/min
32	4.0 Mpa	(0-20L)/min	(0-400)L/min
40	4.0 Mpa	(0-30L)/min	(0-600)L/min
50	4.0 Mpa	(0-3)m^3/h	(0-60)m^3/h
65	4.0 Mpa	(0-6)m^3/h	(0-120)m^3/h
80	4.0 Mpa	(0-9)m^3/h	(0-180)m^3/h
100	1.6 Mpa	(0-12)m^3/h	(0-240)m^3/h
125	1.6 Mpa	(0-21)m^3/h	(0-420)m^3/h
150	1.6 Mpa	(0-30)m^3/h	(0-600)m^3/h
200	1.6 Mpa	(0-54)m^3/h	(0-1080)m^3/h
250	1.6 Mpa	(0-90)m^3/h	(0-1800)m^3/h
300	1.0 Mpa	(0-120)m^3/h	(0-2400)m^3/h
350	1.0 Mpa	(0-165)m^3/h	(0-3300)m^3/h
400	1.0 Mpa	(0-225)m^3/h	(0-4500)m^3/h
500	1.0 Mpa	(0-330)m^3/h	(0-6600)m^3/h
600	1.0 Mpa	(0-480)m^3/h	(0-9600)m^3/h
700	1.0 Mpa	(0-660)m^3/h	(0-13200)m^3/h
800	1.0 Mpa	(0-900)m^3/h	(0-18000)m^3/h
900	1.0 Mpa	(0-1200)m^3/h	(0-24000)m^3/h
1000	1.0 Mpa	(0-1350)m^3/h	(0-27000)m^3/h
1200	0.6 Mpa	(0-2100)m^3/h	(0-42000)m^3/h
1400	0.6 Mpa	(0-2700)m^3/h	(0-54000)m^3/h
1600	0.6 Mpa	(0-3600)m^3/h	(0-72000)m^3/h
1800	0.6 Mpa	(0-4500)m^3/h	(0-90000)m^3/h

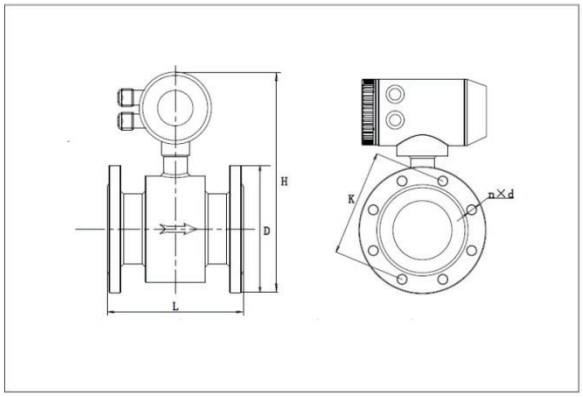
2000	0.6 Mpa	(0-5700)m³/h	(0-114000)m³/h

Model Selection

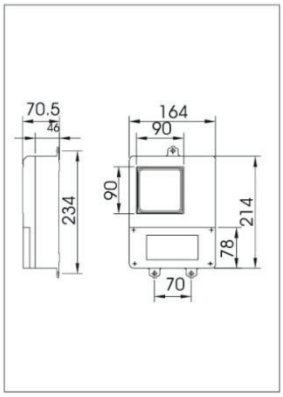
Item	Code	Description				
Factory Mark	SHD	Silver Automation Instruments				
Meter Type	SE16	Slurry Magnetic Flowmeter				
Size	-xxx	10~2000mm				
Electrodes Material	E0	316L SS				
	E1	Hastelloy B				
	E2	Hastelloy C				
	E3	Titanium				
	E4	Tantalum				
	E5	Pt/iridium alloy				
	E6	Tungsten carbide				
Liner	L1	Teflon/PTFE				
	L2	F46/FEP				
	L3	PFA				
	L4	Hard Rubber				
	L5	Polyurethane rubber				
Rated Pressure	1G	GB 1.6Mpa	1D	DIN PIN16	1A	ANSI 150LB
	2G	GB 2.5 Mpa	2D	DIN PIN25	2A	ANSI 300LB
	3G	GB 4.0 Mpa	3D	DIN PN40	3A	ANSI 600LB
	S	Special				
Working Temp	E	<60 °C				
	H	60 °C~160 °C				
Protection Grade	P0	Ip65				
	P2	Ip68(only for remote version, sensor IP68,converter IP65)				
Converter	0	Compact				
	1	Remote (standard cable 10m)				
Output & Communication	S0	4~20mA				
	S1	RS-485				
	S2	HART				
	S3	Profibus-DP				
	S4	Pulse output				
Housing Material	H0	Carbon steel				
	H1	304 SS				
	H2	Special				
Flange Material	F0	Carbon steel				
	F1	304				
	F2	Special				
Power Supply	G0	220V AC (85~256V,45~63Hz)				
	G1	24V DC(18~36V)				

	G2	Battery supply (no output)
Explosion Proof	0	Non

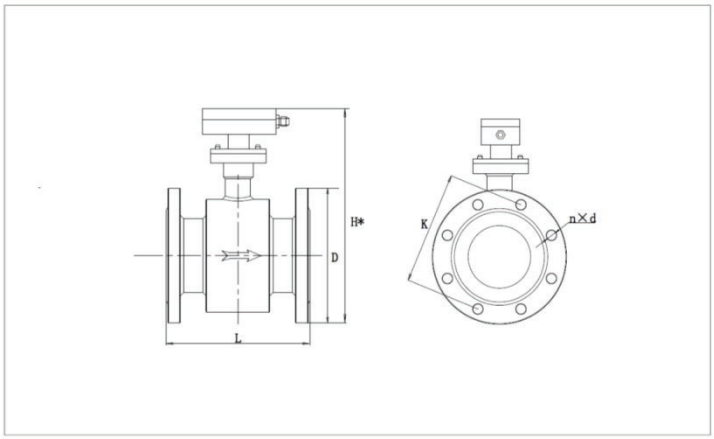
Dimensions



DN10~DN2000 Electromagnetic Flow meter



Remote Version Converter



DN10~DN2000 Remote Version Electromagnetic Flow meter

Size(mm)	L(mm)	D(mm)	K(mm)	H(mm)	H*(mm)	nxd(mm)	Pressure
10	200	90	60	310	220	4x14	4MPa
15	200	95	65	310	220	4x14	
20	200	105	75	315	225	4x14	
25	200	115	85	325	235	4x14	
32	200	140	100	325	235	4x18	1.6MPa
40	200	150	110	340	250	4x18	
50	200	165	125	355	265	4x18	
65	200	185	145	375	285	4x18	
80	250	200	160	385	295	8x18	
100	250	220	180	415	325	8x18	
125	250	250	210	445	355	8x18	
150	300	285	240	475	385	8x22	
200	350	340	295	505	415	12x22	
250	450	395	350	590	500	12x22	1.0MPa

300	500	445	400	645	555	12x22	
350	500	505	460	695	605	16x22	
400	500	565	515	745	655	16x26	
450	550	615	565	825	735	20x26	
500	550	670	620	878	788	20x26	
600	600	780	725	988	898	20x30	
700	700	860	810	1095	1005	24x30	0.6MPa
800	800	975	920	1208	1118	24x34	
900	900	1075	1020	1310	1220	28x34	
1000	1000	1175	1120	1413	1323	28x36	
1200	1200	1450	1340	1525	1435	32x33	
1400	1400	1630	1560	1735	1645	36x36	
1600	1600	1830	1760	1965	1875	40x36	
1800	1800	2045	1970	2155	2065	44x39	
2000	2000	2265	2180	2365	2275	48x42	