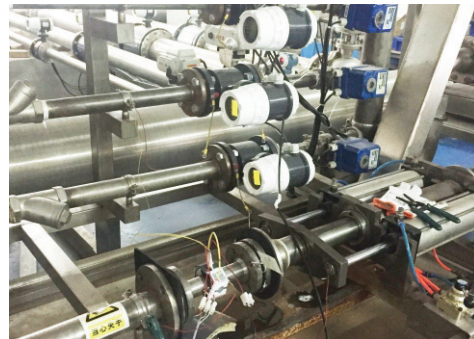


Application



Magnetic flowmeter in calibration



Liquid turbine flowmeter in food and beverage industry



Oval gear flowmeter in petrochemical industry



Magnetic flowmeter in under well field



Gas turbine flow meter in nature gas filling field



Ultrasonic flow meter for clean water measurement



Turbine flowmeter in water supply field



Gas roots flowmeter in gas mixture field



Liquid turbine flowmeter in water supply plant



Vortex flowmeter in oxygen measurement



Rotameter system for mixed gas measurement



Vortex flowmeter in boiler system for steam measurement

Electromagnetic Flow Meter

LDG-B series



Description

The magnetic flow meter is one of the most flexible and universally applicable flow measurement systems available. It is a volumetric flow meter which does not have any moving parts and is ideal for waste water applications or any dirty liquid which is conductive or water based. Magnetic flow meter is also ideal for the applications where low pressure drop and low maintenance are required.

Application

- Waster water industry: transport networks sewage treatment plants, sludges
- Chemical industry: acids alkalis, dosing applications, abrasive or corrosive mediums
- Metal & mining industry: mediums with a high solid content, like ore or excavator mud
- Water industry: Revenue metering, district metering water abstraction, leakage detection
- Pulp & paper industry: pulp, pastes, sludges & other caustic mediums, liquor, additives, bleaches, colourants
- Food & beverage industry: mixing, dosing and filling of drinks under hygienic conditions filling systems applications

LDG-T series



Operating Principle

Following Faraday's law of magnetic induction, a voltage is induced in a conductor moving through a magnetic field. In the electromagnetic measuring principle, the following medium is the moving conductor. The voltage induced is proportional to the flow velocity and is supplied to the amplifier by means of two measuring electrodes. The flow volume is calculated by means of the pipe cross section area.

Technical Data

Certification	ISO9001:2008; CE
Diameter	PTFE: DN6-DN600 Hard rubber: DN50-DN2200
Flow Direction	Positive; Negative
Repeatability Error	±0.1%
Accuracy	±0.5% of rate & ±0.2% of rate
Medium Temperature	Hard rubber liner: -20...+60°C High-temp rubber liner: -20...+90°C PTFE liner: -20...+120 °C High-temp PTFE liner: -20...+160°C PFA: -20...+180°C
Nominal Working Pressure	DN10-DN25≤4.0Mpa DN32-DN150≤1.6Mpa DN200-DN600≤1.0Mpa DN700-DN2200≤0.6Mpa
Velocity	0.3-10m/s
Ambient Temperature	-20...+60 °C
Relative Humidity	5%~95%
Consumed Power	<20W

Flow Range

Diameter		Flow Rate (m³/h)		
		V=0.3m/s	V=6m/s	V=10m/s
mm	Inch	Min	Calibrated	Max
6	1/4"	0.0306	0.611	1.018
10	3/8"	0.0849	1.696	2.827
15	1/2"	0.1909	3.817	6.362
20	3/4"	0.3393	6.786	11.31
25	1"	0.5301	10.60	17.67
32	1-1/4"	0.8686	17.37	28.95
40	1-1/2"	1.357	27.14	45.24
50	2"	2.121	42.14	70.69
65	2-1/2"	3.584	71.68	119.5
80	3"	5.429	108.6	181.0
100	4"	8.482	169.6	282.7
125	5"	13.25	265.1	441.8
150	6"	19.09	381.7	636.2
200	8"	33.93	678.6	1131
250	10"	53.01	1060	1767
300	12"	76.34	1527	2545
350	14"	103.9	2078	3465
400	16"	135.7	2714	4524
450	18"	171.8	3435	5726
500	20"	212.1	4241	7069
600	24"	305.4	6107	10179
700	28"	415.6	8310	13850
800	32"	542.9	10860	18100
900	36"	662.8	13740	22900
1000	40"	848.2	16962	28270

Model Selection

Model	Suffix Code											Description
LDG-	①	②	③	④	⑤	⑥	-⑦	⑧	⑨	⑩	⑪	Electromagnetic Flowmeter
Type	B											B type
	T											T type(DN15- DN100 only)
Diameter		XXXX										Stand for diameter 0006: DN6; 0015: DN15 0100: DN100; 2200: DN2200
Structure			S									Compact Type with local display
			L									Remote Type; 10 meters cable default
				M								SS316L
				T								Titanium
Electrode Material				D								Tantalum
				H								Hastelloy Alloy C
				P								Platinum-Iridium
Signal Output					0							No Output
					1							4-20mA / Pulse
						X						Hard Rubber
						P						Propylene Oxide
Liner Material						F						PTFE
						A						PFA
							-0					110-240Vac
Power Supply							-1					24V DC (20-36V DC)
							-2					Battery Power Supply
								0				No Communication
								1				Modbus RS485
Communication								2				HART
								3				GPRS
								4				Profibus DP
									0			No Grounding
Sensor Grounding									1			Grounding Ring
									2			Grounding Electrode
										DXX		D16: DIN PN16 Flange ; D25: DIN PN25 Flange...
										AXX		A15: ANSI150# Flange; A30: ANSI 300# Flange...
Connection										JXX		J10: JIS 10K Flange; J20: JIS 20K Flange...
										XXX		On request
											CS	Carbon Steel
Body Material											S4	Stainless Steel 304
											S6	Stainless Steel 316



Example:

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪
Model Code: LDG B 0150 S M 1 F -0 1 2 A15 CS

- ① B: B Type

② 0150: DN150

③ S: Compact type with local display

④ M: SS316L electrode

⑤ 1: 4-20mA / Pulse output

⑥ F: PTFE liner
- ⑦ 0: 110-240Vac power supply

⑧ 1: Modbus RS485 Communication

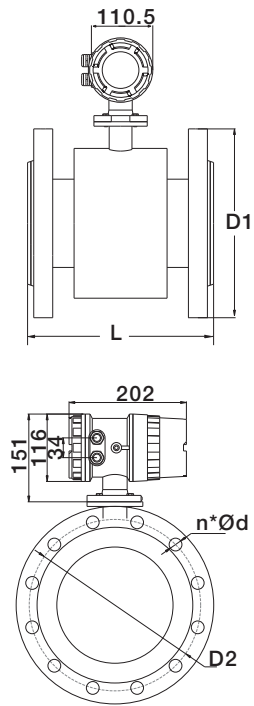
⑨ 2: Grounding electrode

⑩ A15: Flange ANSI 150#

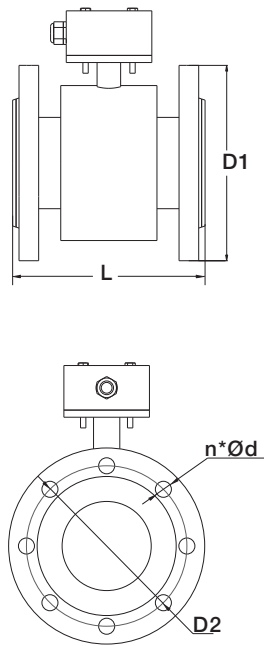
⑪ CS: Carbon steel body

Dimensions:

Notice: The dimensions in table below are based on DIN PN16 Flange. Please consult the factory for other flanges: ANSI or JIS.



Compact Type



Remote Type

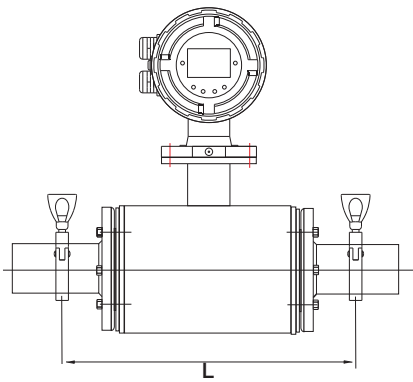
Flange DIN PN16						
Diameter (mm)	B Type L (mm)	T Type L (mm)	D (mm)	D1 (mm)	D2 (mm)	n*Ød
10	160/120	120	90	60	41	4*14
15	160/200	200	95	65	45	4*14
20	165/200	200	105	75	58	4*14
25	200	200	115	85	68	4*14
32	200	200	140	100	78	4*18
40	200	200	150	110	88	4*18
50	200	200	165	125	102	4*18
65	250	200	185	145	122	4*18
80	250/200	200	200	160	138	8*18
100	250/200	250	220	180	158	8*18
125	250	NA	250	210	188	8*18
150	300	NA	285	240	212	8*22
200	350	NA	340	295	268	12*22
250	450	NA	405	355	320	12*22
300	500	NA	460	410	375	12*22

Notice: Two length are available for B type DN10, DN15, DN20, DN80, DN100

Sanitary Magnetic Flow Meter

Description

The sanitary magnetic flow meter is specifically designed for measurement of food liquids like milk, cream, juice of various fruits, pharma liquids etc. It is available with compact or remote version of transmitter can be installed either horizontally or vertically with a variety of optional end-fittings to meet your requirements.



Length

DN10-DN20: L=200mm
DN32-DN100: L=300mm

Model	Suffix Code									Description
LDGS-	1	2	3	4	5	-6	7	8	9	Sanitary Magnetic Flowmeter
Diameter	XXXX									Stand for diameter 0010: DN10 0100: DN100
Structure		S								Compact Type with local display
		L								Remote Type; 10 meters cable default
Electrode Material			M							SS316L
			T							Titanium
			D							Tantalum
			H							Hastelloy Alloy C
			P							Platinum-Iridium
Signal Output				0						No Output
				1						4-20mA / Pulse
Liner Material					F					PTFE
					A					PFA
Power Supply						-0				110-240Vac
						-1				24V DC (20-36V DC)
						-2				Battery Power Supply
Communication							0			No Communication
							1			Modbus RS485
							2			HART
							3			GPRS
							4			Profibus DP
Sensor Grounding								0		No Grounding
								1		Grounding Ring
								2		Grounding Electrode
Body Material								S4		Stainless Steel 304
								S6		Stainless Steel 316

Insertion Magnetic Flow Meter

Simple Type series



Ball Valve Type series



Description

SURE Insertion Magnetic Flowmeter is designed for measurement of the velocity of liquid. It can be installed in any pipeline of internal diameter from 200mm (8in) to 3000mm (120in), through a small tapping. The complete lack of moving parts of this insertion flow sensor is the source of its reliability. There is no rotor to stop turning in dirty water and there are no bearings to wear out.

Reverse flow output are optional. A rapidly reversing magnetic field is produced in the lower housing. As the fluid moves through this field, a voltage is generated that is measured and translated into a frequency signal proportional to flow rate. This square wave signal can be sent directly to a PLC, control or converted to 4 to 20 mA

Technical Data

Diameter	200-3000mm	
Velocity	0.1-10m/s	
Accuracy	0.1-0.5m/s	±2% FS
	0.5-10m/s	±1.5% FS
	0.1-10m/s	±2.5% FS
Liquid Conductivity	>5µS/cm	
Straight Pipe	5D(D means diameter) for inlet; 3D for outlet	
Liquid Temperature	-20...+150°C	
Ambient	-20...+60°C	
Pressure	1.6Mpa	
Protection	IP65(compact type) ; IP68(remote type)	
Signal Output	4-20mA / Pulse	
Communication	RS485; Hart	
Power Supply	24V DC; 110-240Vac; Battery	

Flow Range

Diameter (mm)	Flow Rate(m³/h)			
	V=0.5m/s	V=1m/s	V=6m/s	V=10m/s
300	127	254	1526	2545
350	173	346	2077	3464
400	226	452	2713	4523
450	286	572	3434	5725
500	353	707	4239	7069
600	509	1017	6104	10180
700	692	1385	8308	13847
800	904	1809	10852	18086
900	1145	2289	13734	22891
1000	1413	2826	16956	28260
1200	2035	4069	24417	40694
1400	2769	5539	33234	55390
1600	3617	7235	43407	72346
1800	4578	9156	54937	91562
2000	5652	11304	67824	113040
2200	6839	13678	82067	136778
2400	8139	16278	97667	162778
2600	9552	19104	114623	191038
2800	11078	22156	132935	221558
3000	12717	25434	152604	254340

Model Selection

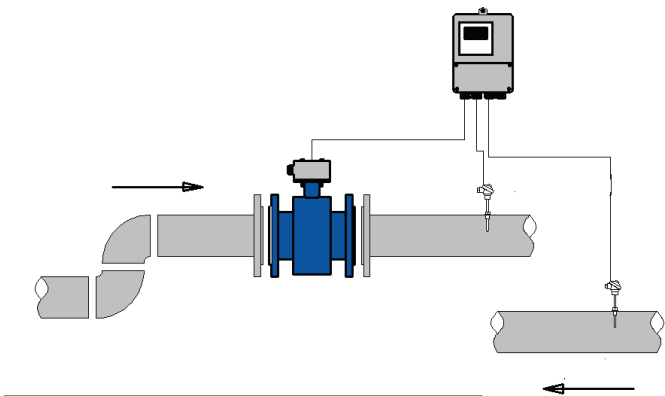
Model	Suffix Code							Description
LDGC-	①	②	③	④	⑤	⑥	⑦	Insertion Magnetic Flowmeter
Diameter	XXXX							Stand for diameter 0200: DN200 3000: DN3000
Structure		S						Compact type
		L						Remote type
Electrode Material			M					SS316L
			T					Titanium
			D					Tantalum
			H					Hastelloy Alloy C
			P					Platinum-Iridium
Signal output				0				No Output
				1				4-20mA / Pulse
Power Supply					-0			110-240Vac
					-1			24V DC (20-36V DC)
					-2			Battery Power Supply
Communication						0		No Communication
						1		Modbus RS485
						2		Hart
						3		GPRS
						4		Profibus DP
Connection							S	Simple Type
							B	Ball Valve Type



Electromagnetic Heat Meter

Description

Electromagnetic heat meter is a thermal conversion system contains the heat released by the hot fluid measurement instruments measure. It uses a high precision, high reliability magnetic flow meter with platinum RTD for temperature so that the heat meter has very excellent measurement performance. It can be widely used in metering residential quarters office building s and enterprises, centra heating, heating, air conditioning heat.



Model	Suffix Code											Description
LDGH-	①	②	③	④	⑤	⑥	-⑦	⑧	⑨	⑩	⑪	Magnetic Heat Meter
Type	Pt100											Pt100 temperature sensors
	Pt1000											Pt1000 temperature sensors
Diameter	XXXX											Stand for diameter 0006: DN6 2200: DN2200
Structure		S										Compact Type with local display
		L										Remote Type; 10 meters cable default
Electrode Material			M									SS316L
			T									Titanium
			D									Tantalum
			H									Hastelloy Alloy C
			P									Platin-Iridium
Signal Output					0							No Output
					1							4-20mA / Pulse
Liner Material						X						Hard Rubber
						P						Propylene Oxide
						F						PTFE
						A						PFA
Power Supply							-0					110-240Vac
							-1					24V DC (20-36V DC)
							-2					Battery Power Supply
Communication								0				No Communication
								1				Modbus RS485
								2				HART
								3				GPRS
								4				Profibus DP
Sensor Grounding								0				No Grounding
								1				Grounding Ring
								2				Grounding Electrode
Connection									DXX			D16: DIN PN16 Flange; D25: DIN PN25 Flange ...
									AXX			A15: ANSI 150# Flange; A30: ANSI 300# ...
									JXX			J10: JIS 10K Flange; J20: JIS 20K Flange...
									XXX			On request
Body Material										CS		Carbon Steel
										S4		Stainless Steel 304
										S6		Stainless Steel 316

Liquid Turbine Flow Meter

LWGY-N1 series



LWGY-N2 & A series



LWGY-E series



Operating Principle

Fluid entering the meter first passes through an inlet flow straightener that reduces its turbulent flow pattern. Fluid then passes through the turbine, causing the turbine to rotate at a speed proportional to fluid velocity. As each turbine blade passes through the magnetic field generated by the meter's magnetic pickup, an AC voltage pulse is generated. These pulses provide an output frequency that is proportional to volumetric flow.

Technical Data

- Output: Pulse / 4-20mA
- Accuracy:±1.0 of Rate / ±0.5% of Rate
- Operating Temp.: -20...+60°C
- Fluid Temp.: -20...+150°C
- Body Material: SS304 / SS316
- Rotor Material: 2Cr13 / CD4MCu
- Bearing Material: Tungsten Carbide

Flow Range

Diameter (mm)	Standard Range (m³/h)	Extended Range (m³/h)
4	0.04-0.25	0.04-0.4
6	0.1-0.6	0.06-0.6
10	0.2-1.2	0.15-1.5
15	0.6-6	0.4-8
20	0.8-8	0.45-9
25	1-10	0.5-10
32	1.5-15	0.8-15
40	2-20	1-20
50	4-40	2-40
65	7-70	4-70
80	10-100	5-100
100	20-200	10-200
125	25-250	13-250
150	30-300	15-300
200	80-800	40-800

Description

The liquid turbine flow meter in the series LWGY are specially designed for usage in water, diesel, gasoline and other fluid measurement and control systems. They operate according to the turbine principle, i.e. the speed of an impeller turning in the fluid flow is measured and converted into pulse or 4-20mA signals

