



PRODUCT OVERVIEW

FLOW MEASUREMENT

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LD300 Electromagnetic Flow Meter

PROFILE

LD300 electromagnetic flow meter is a kind of velocity instrument for measuring volume flow of conductive medium. While performing on-site detection and display, it can output standard current signal for recording, adjustment and control. It can realize automatic detection and long distance signal transmission.

It is widely used in the flow measurement of conductive liquids in industries such as environmental protection, steel, petroleum, chemical, coal, metallurgy, mining, papermaking, water supply and drainage, food, and medicine. It has integrate type, split type and insertion type.



LD300



LD300-S



LD300-P

FEATURES

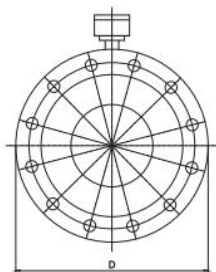
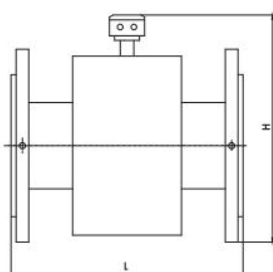
- ▲ There are no moving parts in measuring tube, convenient for maintenance; no blocking parts, no pressure loss;
- ▲ The minimum conductivity of the measured liquid is $\geq 20\mu\text{S}/\text{cm}$, and with various lining materials, it can be applied to the flow of various acids, alkalis, salt solutions, mud, pulp, paper pulp and other media;
- ▲ Measurement accuracy is not affected by changes in the density, viscosity, temperature, pressure and conductivity of the fluid. The sensor induced voltage signal has a linear relationship with the average flow rate, and the measurement accuracy is high;
- ▲ Low-frequency rectangular wave excitation is not affected by power frequency and various disturbances on site, and the work is stable and reliable;
- ▲ Not affected by the direction of the fluid, both forward and reverse can be accurately measured;
- ▲ LCD backlight display, parameters can be modified online, easy to operate;
- ▲ Forward total, reverse total, difference total and be recorded;
- ▲ With empty pipe measurement, alarm function, it can adapt to different fluid media.

TECHNICAL SPECIFICATION

Model Parameter	Integrated type: LD300 Split type: LD300-S Insertion type:LD300-P
DN size(mm)	DN6-3000mm(for LD300, LD300-S) DN100-3000mm(for LD300-P)
Maximum flow speed	0.5~10m/s
Output signal	Analog output 0~10mA, load resistance: 0~1.5K Ω 4~20mA, load resistance: 0~750 Ω Frequency output Alarm Output Pulse output RS232/RS485
Power Supply	AC power supply, voltage range: 85VAC~250VAC; DC 24V power supply, voltage range: 20VDC~36VDC; Self-powered 3.6V power supply
Working temperature	-20~60 $^{\circ}$ C
Accuracy	0.5% (for LD300, LD300-S) 1.5% (for LD300-P)
Conductivity of the measured medium	$\geq 20\mu\text{s/cm}$
Measuring parameters	Instantaneous flow, flow rate, forward and reverse accumulated flow Alarm display (excitation open circuit alarm, empty pipe alarm, flow over limit alarm). Four membrane touch switches for data setting
Network function	HART , MODBUS, GPRS, PROFIBUS optional
IP rating	IP65 standard IP 67, IP68 by customized for the transmitter of the separated versions only

DIMENSIONS

DN(mm)	Nominal pressure (MPa)	Dimension			Ref weight(Kg)
		Meter length (liner included)	D	H	
6	4.0	200	90	220	6
10		200	90	220	6
15		200	95	220	8
20		200	105	220	10
25		200	115	223	12
32		200	140	240	13
40		200	150	250	14
50		200	165	263	15
65	1.6	250	185	283	18
80		250	200	290	20
100		250	235	318	25
125		250	270	350	28
150		300	300	380	30
200		350	340	430	50
250		450	405	495	70
300	1.0	500	460	547	95
350		550	520	602	120
400		600	580	665	140
450		600	640	720	160
500		600	715	783	200
600		600	840	897	280
700		700	895	982	350
800		800	1015	1092	400
900		900	1115	1192	480
1000		1000	1230	1299	550
1200	0.6	1200	1405	1488	660
1400		1400	1630	1700	750
1600		1600	1830	1924	850
1800		1800	2045	2134	980
2000		2000	2265	2344	1200
2200		2200	2475	2549	1600
2400		2400	2685	2754	2000
2600		2600	2905	2964	2400
2800		2800	2905	3169	2700



Flow rate-Flow reference table								
Flow m ³ /h DN mm	Flowrate m/s	0.5	1	2	3	4	5	10
10		0.1414	0.2827	0.5654	0.8482	1.1309	1.4137	2.8271
15		0.3181	0.6362	1.2723	1.9085	2.5447	3.1809	6.3625
20		0.5655	1.1310	2.2619	3.3929	4.5239	5.6549	11.3103
25		0.8836	1.7671	3.5343	5.3014	7.0686	8.8357	17.6714
32		1.4476	2.8953	5.7906	8.6859	11.5812	14.4765	28.9533
40		2.2619	4.5238	9.0478	13.5717	18.0956	22.6195	45.2384
50		3.5343	7.0686	14.1372	21.2058	28.2743	35.3429	70.6862
65		5.9730	11.9459	23.8918	35.8377	47.7836	59.7295	119.4591
80		9.0478	18.0956	36.1911	54.2867	72.3823	92.4779	180.9563
100		14.1372	28.2743	56.5487	84.8230	113.0973	141.3717	282.7432
125		22.0893	44.1786	88.3573	132.5359	176.7146	220.8932	441.7861
150		31.8086	63.6173	127.2345	190.8518	254.4690	318.0863	636.1733
200		56.5487	113.0973	226.1947	339.2920	452.3893	565.4867	1130.9735
250		88.3573	176.7146	353.4292	530.1438	706.8583	833.5729	1767.1464
300		127.2345	254.4690	508.9380	763.4070	1017.8760	1272.3450	2544.6901
350		173.1803	346.3606	692.7212	1039.0818	1385.4424	1731.8030	3463.6063
400		226.1947	452.3893	904.7787	1357.1680	1809.5574	2261.9467	4523.8932
450		286.2776	572.5553	1145.1105	1717.6658	2290.2210	2862.7763	5725.5533
500		353.4292	706.8583	1413.7167	2120.5750	2827.4334	3534.2917	7068.5835
600		508.9380	1017.8760	2035.7520	3053.6281	4071.5041	5089.3801	10178.7601
700		692.7212	1385.4424	2770.8847	4156.3271	5541.7694	6927.2118	13854.4242
800		904.7787	1809.5574	3619.1147	5428.6721	7238.2295	9047.7868	18095.5741
900		1145.1105	2290.2210	4580.4421	6870.6631	9047.7868	11451.1052	22902.2102
1000		1413.7167	2827.4334	5654.8668	8482.3002	11309.7336	14137.1669	28274.3344
1200		2035.7520	4071.5041	8143.0082	12214.5122	16286.0163	20357.5204	40715.0412
1400		2770.8847	5541.7694	11083.5389	16625.3083	22167.0778	27708.8472	55417.6941
1600		3619.1147	7238.2295	14476.4589	21714.6884	28952.9179	36191.1474	72382.2951
1800		4580.4420	9160.8842	18321.7684	27482.6526	36643.5367	45804.4209	91608.8423
2000		5654.8667	11309.7336	22619.4671	33929.2007	45238.9342	56548.6678	113097.3363
2200		6842.3887	13684.7776	27369.5552	41054.3328	54739.1104	68423.8880	136847.7763
2400		8143.0080	16286.0163	32572.0326	48858.0490	65144.0653	81430.0816	162860.1631
2600		9556.7247	19113.4268	38226.8536	57340.2804	76453.7072	95567.1340	191134.2683
2800		11083.5387	22167.0774	44334.1548	66501.2322	88668.3095	110835.3869	221670.7741
3000		12723.4500	25446.9001	50893.8001	76340.7002	101787.6002	127234.5003	254469.0011

Model Code Selection Table

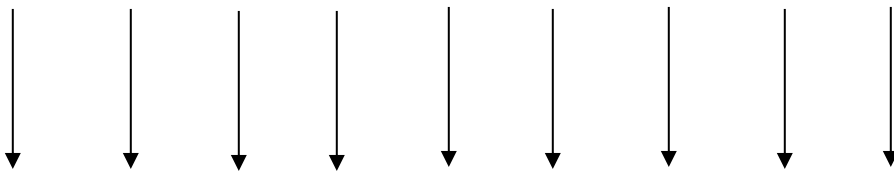
Product Code	Type			
LD300	Integrated Electromagnetic Flow Meter			
LD300-S	Split Electromagnetic Flow Meter			
LD300-P	Insertion Electromagnetic Flow Meter			
Code No.	Nominal Diameter	LD300	LD300-S	LD300-P
6	DN6mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	DN10mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15	DN15mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20	DN20mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25	DN25mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32	DN32mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
40	DN40mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
50	DN50mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
...	...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
100	DN100mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
200	DN200mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
250	DN250mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
300	DN300mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
...	...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2000	DN2000mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3000	DN3000mm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Code No.	Power Supply	LD300	LD300-S	LD300-P
A	85V~265V AC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D	DC 24V	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Code No.	Nominal Pressure	LD300	LD300-S	LD300-P
Y1	0.6MPa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Y2	1.0MPa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Y3	1.6MPa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Y4	2.5MPa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Y5	4.0MPa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Y7	16MPa(limited DN10-150)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Y8	20MPa(limited DN10-50)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Y9	25MPa(limited DN10-50)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Code No.	Communication Output	LD300	LD300-S	LD300-P
R	0~10mA.DC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
M	4~20mA.DC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C	Pulse+4-20mA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
T	RS485 MODBUS RTU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Q	RS-232C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A	4~20mA+RS485 MODBUS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H	4 ~ 20mA.DC HART protocol	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G	GPRS wireless communication	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Code No.	Lining Material			
X2	Soft rubber	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X3	Polychloroprene rubber	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X4	Polyurethane rubber	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X5	Teflon	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X6	F46 poly perfluoro ethylene ally	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Code No.	Electrode Material			
B1	Stainless steel containing molybdenum	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B2	Hastelloy B alloy (HB)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B3	Hastelloy C alloy (HC)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B4	Titanium Ti	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B5	Tantalum Ta	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B6	Platinum Pt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Code No.	Housing material			
F1	Carbon steel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F2	Stainless steel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F3	Other materials	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Code No.	IP Rating			
P1	IP65(standard)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
P2	IP68(By customized)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Selection code definition

Model Code: LD30050DY3MX5B1F1P1

LD300	50	D	Y3	M	X5	B1	F1	P1
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Type Diameter Supply Pressure Output Lining Electrode Housing IP

Note: "☑" means the option is available, "☐" mean not available.