


FULLKON

Special characteristics

- No moving parts: Reliable, simple structure.
- Plug-in design: Easy install and maintain, no water shutdown.
- Stable accuracy: Unaffected by medium physical parameters (conductivity $>5\mu\text{S/cm}$).
- Low energy consumption

Features

- Wide nominal diameter range from DN100 ~ 3000mm
- The full-scale flow rate in the pipeline under test can be arbitrarily set from 1m / s to 10m / s
- Zero stability, strong anti-interference ability and reliable work.
- Multiple output options: 0 ~ 10mA(DC), 4 ~ 20mA (DC) and 1 ~ 5kHz frequency

Measuring principle

The plug-in electromagnetic flow sensor uses Faraday's law, measuring the volume flow of various conductive liquids in the conveying pipeline.



Recorder



Flow



Temp



Analyzer



Level



Pressure

The plug-in electromagnetic flow sensor (sensor for short) and electromagnetic flow converter (converter for short) are matched to form a plug-in electromagnetic flow meter (flow meter for short) for measuring the volume flow of various conductive liquids in the conveying pipeline.

Preferred areas of use are



Widely used in chemical industry, chemical fiber, metallurgy, chemical fertilizer, paper making, water supply and drainage, sewage treatment, etc. and in automatic

Material and test



Parameters

Converter	Compact Type	IP65
	Remote Type	IP65 for transmitter (IP65/IP68 for sensor)
Nominal Diameter	DN15-DN1200	
Flange	In line with GB/T9119-2000 standard carbon steel (Optional stainless steel flanges), other standard flange can be customized	
Pressure rating (High pressure can be customized)	DN15 - DN250, PN≤1.6MPa	
	DN300~DN1000, PN≤1.0MPa	
	DN1200~DN2000, PN≤0.6MPa	
Lining Material	Neoprene (CR), Polyurethane (PU) PTFE (F4), PFEP (F46), PFA	
Electrode Material	316L Stainless Steel, Hastelloy C, Hastelloy B, Ti, Ta, Pt	
IP Rate	IP65 for converter, IP68 for sensor	IP65
Medium temperature	Neoprene: -10℃ ~ +60℃	Neoprene: -10℃ ~ +60℃
	Polyurethane: -10℃ ~ +60℃	Polyurethane: -10℃ ~ +60℃
	PTFE/FEP: -10℃ ~ +120℃	PTFE/FEP: -10℃ ~ +120℃
	PFA: -10℃ ~ +180℃	PFA: -10℃ ~ +120℃
Buried depth	Not deeper than 5 meters (only for remote type sensors with IP68 protection)	
Immersion depth	Not deeper than 3 meters (only for remote type sensors with IP68 protection)	
Communications	Serial communications	RS-485, HART, RS-232
	Output	Current (4-20 mA) , pulse , frequency , state switch
	Function	Empty pipe recognition, electrode contamination
Graphic display	Monochrome LCD, white backlight; Size: 128*64 pixels	
Display function	2 measurement value pictures (measurements, condition, etc)	
Language	Chinese/ English/Spanish (Spanish version can be customizable)	
Unit	You can configure the menu to select the unit Refer to "6.5 Configuration details" --- "flow units 1-1"	

Operating unit	4 Mechanical keys (Compact Type) or 4 touch key (Remote Type)	
Max measuring error	Flow meter	Measurement value $\pm 0.5\%$ (Flow speed $> 1\text{m/s}$) ; Measurement value $\pm 0.5\% \pm 2\text{mm/s}$ (Flow speed $< 1\text{m/s}$)
	BTU meter	2%
Repetitiveness	0.16%	
Temperature sensor measuring range	$-20^{\circ}\text{C} \sim 120^{\circ}\text{C}$	
Maximum measurement error	$\pm 0.1^{\circ}\text{C}$ (Within the measuring range of temperature sensor)	
Environment Temperature	$-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$ for Compact-Type Flowmeter	
	$-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$ for Converter of Remote-Type Flowmeter $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$ for Converter of Remote-Type Flowmeter	
Storage	$-40^{\circ}\text{C} \sim 65^{\circ}\text{C}$	
Electric Conductivity	Water	Min. $20\mu\text{S/cm}$ (Actual electric conductivity should be greater than $50\mu\text{S/cm}$)
	Other	Min. $5\mu\text{S/cm}$ (Actual electric conductivity should be greater than $50\mu\text{S/cm}$)
Material	Sensor housing	Carbon steel, stainless steel 304, stainless steel 316L
	Converter	Standard painted die cast aluminum
	Cable gland	(M20*1,5.) Polyamide
	Cable material	Polyurethane
Electrical Connections	Power supply	85-245 VAC, 50/60 Hz, 22-26 VDC
	Power consumption	Max 15W
	Insulation resistance	$\geq 20\text{M}\Omega$
	Signal cable	Apply only to remote type
	Shielded cable	Signal section, wire: 0.5mm^2 Cu /AWG20

■ Dimension

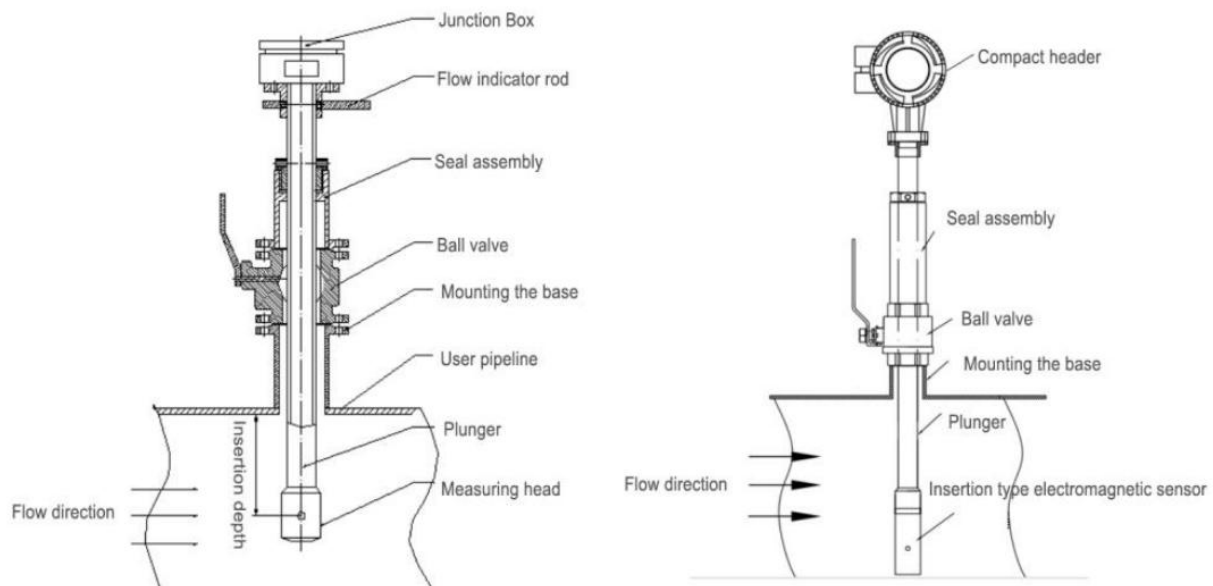


Table 38

Insertion length	
Size	Length
DN≤200	693mm
400≥DN≥250	793mm
1200≥DN > 400	893mm
2000≥DN > 1400	1093mm

■ Ordering Code

FK-LDGC-1C-Q3-M-AA-1-WA-00														Description
LDGC	-	-	-	-	-	-	-	-	-	-	-	-	-	Insertion electromagnetic flowmeter
Nominal Diameter	1C													DN100 (4 ")
	1E													DN125 (5 ")
	1G													DN150 (6 ")
	2C													DN200 (8 ")
	2G													DN250 (10 ")
	3C													DN300 (12 ")
	3G													DN350 (14 ")
	4C													DN400 (16 ")
	4G													DN450 (18 ")
	5C													DN500 (20 ")
	6C													DN600 (24 ")
	7C													DN700 (28 ")
	8C													DN800 (32 ")
	9C													DN900 (36 ")
	A0													DN1000 (40 ")
	A2													DN1200 (48 ")
	A4													DN1400 (55 ")
	A6													DN1600 (64 ")
	A8													DN1800 (72 ")
	B0													DN2000 (80 ")
Ball Valve and Mounting Base	Q3													G2 316SS threaded ball valve, 304SS mounting base
	Q4													DN50 carbon steel flange ball valve, 304SS mounting base
	XX													Others
Accuracy		M												Grade 1.5
Output and Power Supply				AA										4-20mA + Pulse + RS485, 220VAC
				AB										4-20mA + HART + pulse, 220VAC
				AM										4-20mA + Pulse + RS485, 24VDC
				AK										4-20mA + HART + pulse, 24VDC
Material of Insertion Electrode					1									Electrode 316LSS, detection head ABS plastic, insertion rod 304SS
Electrical Interface, Shell Material and Protection Level						WA								Integrated version, M20 × 1. 5 cable gland, aluminum alloy, IP65
						WC								Remote version, M20 × 1. 5

									cable gland, aluminum alloy, IP68
Cable Length for Remote Version		00							0m
		10							10m
		15							15m
		20							20m
		25							25m
		30							30m
		40							40m
		50							50m
		XX							Others