HFM100 Electromagnetic Flow meter





Nanjing Hangjia Electronic Technology Co., Ltd.

Product Overview:

HFM100 Electromagnetic Flow meter is made of a sensor and a converter. It works base on Faraday's law of electromagnetic induction to measure conductivity of liquid or liquid-solid medium. It requires the conductivity should be greater than 5μ S/CM (the conductivity of tap water and raw water is $100\text{-}500\mu$ S/CM). It can be used for many mediums like acid, alkali, saline solution, paper pulp, ore pulp etc but the medium can not much conclude ferromagnetic substance or a mass of bubbles. This product is a main flow instrument for measuring conducting liquid, which can be widely used for flow measurement in the fields of water conservancy, municipal administration, chemical, food, pharmacy, papermaking, metallurgy, electric power, environment protection, etc.

Features:

- ·Clear LCD display screen, display instantaneous flow and cumulative flow respectively
- ·Advanced excitation technology, brief excitation circuit with stability and reliability
- ·Pioneering fuzzy algorithm technology applies to measurement of electromagnetic

flowmeter with the performance of artificial intelligence

- ·Empty and full pipe measurement technique to avoid false alarms
- ·With low conductivity measurement function
- ·Prompt response design for high resistance, undistorted collection of weak signals and

prompt reaction for flow change, the range rate can achieve 100:1

·Various optional output communication interfaces

Parameters:

Aperture Diameter	DN10-DN2400				
Flange	GB/T9119-2000standard carbon steel (stainless steel optional), other standards can be customized				
Rated Pressure Grade	DN10~DN600, 1.0 1.6 2.5 4.0MPa; DN700~DN2000, 0.6 1.0 1.6MPa				
Lining Material	Chloroprene Rubber (CR), Teflon (PTFE), Polyurethane Rubber (PU), Polyethylene (PE), PFA, etc.				
Electrode	Default Stainless steel 316L, Hastelloy (HB and HC), Titanium, Ttantalum, Platinum optional				
Ingress Protection	IP68, IP65 for Customized				
Accuracy Grade	0.5 grade				
Medium Temperature	Sensor: -25 \sim 180 $^{\circ}$ C , Transmitter: -10 \sim 80 $^{\circ}$ C				
Measuring Flow Velocity	Less than 20m/s				
Supply Voltage	24VDC, 220VAC				
Output	Current 4 \sim 20mA, Pulse, RS485 and HART optional				

Ordering Guide:

Item NO.		Code	Illustration
HFM100	 		Electromagnetic Flowmeter
Installment Way	D-		Flange Type Camping Type Inserted Type
Inside Nominal Diameter	20	5	DN15 DN20 DN2400
Electrode Fo		F	Standard Fixation
Electrode Material		S6	Stainless Steel 316L Hastelloy C Titanium

-	^							Tantalism	
''	-							Tantalum Tungsten carbide Electrode	
								Chloroprene Rubber	
Lining Material								Teflon	
	PU -						Polyurethane		
	S4							Stainless Steel 304	
Measuring Tube	S6	S6						Stainless Steel 316L	
Material	TG	TG						Carbon Steel	
		S4					Stainless Steel 304		
Flange Material		S6						Stainless Steel 316L	
riange material		TG						Carbon Steel	
		Ť						Stainless Steel 304	
		S4					Stainless Steel 316L		
Cover Material			-					Carbon Steel with Stoving	
		TG					Varnish		
			0 -					Without	
Paired Flange	е		1					With	
			1-					Without	
Ground Rir	ng		0					With	
	_		1						
								10bar	
Rated Pres	ssure			16				16bar	
								40bar	
-						Less than 80°C			
Medium Ter	Medium Temperature						Less than 180 $^{\circ}$ C (Separated		
								Type)	
C	. .				1-			Integrated Type	
Convertor Type D						Separated Type			
					-	P		Pulse	
						Α		4 ~ 20mA	
Out	Output Signal F					Frequency			
J							RS485		
	N							No output signal	
0						220V AC			
Supply Voltage 1					24V DC				
2					2	Battery Powered			
Evaluation proof Crade					0	Non-explosionproof			
Ехріс	Explosion-proof Grade Exd						Explosion-proof Type		
Reference Item: HFM2	Reference Item: HFM100-S-20-F-S6-FE-S4-S4-TG-0-0-16-E-I-A-0-0								