



Special characteristics

- Unaffected by changes in fluid density, viscosity, temperature, pressure, and conductivity
- Built-in measurement with signal output.
- The electrode and liner are formed in a single molding process, ensuring excellent stability and reliability.

Features

- Electrode and liner are single-molded for superior stability and reliability.
- High-resolution OLED display with Chinese/English menus for easy operation.
- Built-in self-check and self-diagnostic functions.
- Infrared handheld operator enables non-contact remote operation at 38 kHz.

Measuring principle

The electromagnetic flowmeter operates on Faraday's law of electromagnetic induction, using low-frequency square wave excitation to generate a magnetic field via two coils. When a conductive fluid flows through the field, induced electromotive force is detected by electrodes on the tube wall.



Recorder



Flow



Temp



Analyzer



Level



Pressure

Compact electromagnetic flowmeters integrate transmitter and sensor into one unit with infrared remote control. They are widely used across industries to measure volumetric flow rate of conductive liquids ($>2 \mu\text{S/cm}$).

Preferred areas of use are



Widely used across various industries, it measures the volumetric flow rate

Material and test



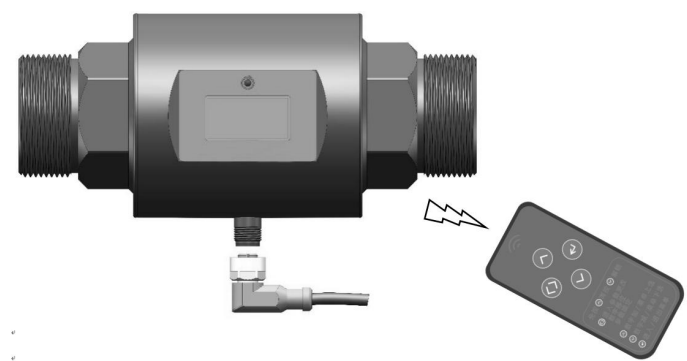
Parameters

Measured Variables	Direct measurement variable: flow rate Calculated value of measured variable: volumetric flow	
Nominal diameter	DN6 ~ DN65	
Measurement range	See Table 2	
Transmitter output	(4 ~ 20) mA, output load $\leq 500\Omega$	
Communication output	RS485 interface	MODBUS-RTU communication protocol
Power Supply	(18-36) VDC	
Power consumption	< 5W	
Electrical interface	M12-4 core connector	
Accuracy	$\pm 0.5\%$	
Repeatability	$\leq 0.16\%$	
Medium temperature	0°C ~ 80°C	
Process pressure	-0.1 MPa ~ 6.3 MPa	
Electrical conductivity	$\geq 2 \mu\text{S/cm}$	
Ambient temperature	-20°C ~ 60°C	
Storage temperature	-25°C ~ 85°C	
Relative humidity	5% ~ 95%	
Level of protection	IP67	

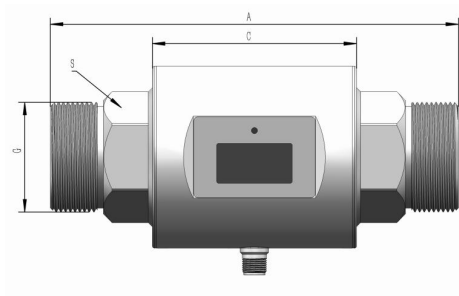
■ Dimension

Product Size

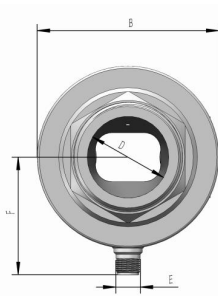
The sensor and converter of the magmeter are integrated into one unit and operated by an infrared



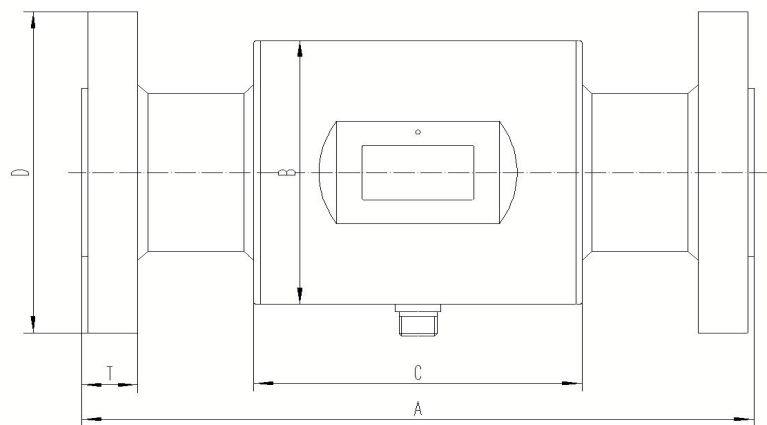
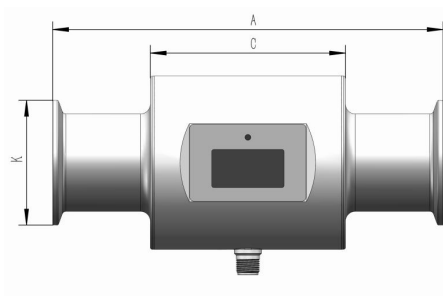
Product diagram



Threaded connection (G thread)



Clamp connection (ISO2852 Clamp)



Flange-connected type (HG/T20592)

■ Ordering Code

FK-FMX240-06-I-C-M1-K-S9-M3-NZ-3-02														Description
FMX240	-	-	-	-	-	-	-	-	-	-	-	-	-	Compact Electromagnetic Flowmeter
Nominal Diameter	06													DN6(1/8")
	10													DN10(3/8")
	15													DN15(1/2")
	20													DN20(3/4")
	25													DN25(1")
	32													DN32(1.25")
	40													DN40(1.5")
	50													DN50(2")
	65													DN65(2.5")
	XX													Others
Process connection	I													ISO2852 clamps
	B													G thread
	U													NPT thread
	H													HG/T 20592 flange
	D													GB/T9124 flange
	X													Others
Nominal pressure		C												PN16
		D												PN25
		X												Others
Process connection material and body material			M1											304SS
			XX											Other
Accuracy				K										Level 0.5
Output and Power Supply					S9									4-20mA/RS485, 24VDC
Electrode Material						M3								316LSS
Lining material							NZ							PEEK
Housing material and protection level									3					304SS, IP65
Cable length										02				2m
										10				10m
										20				20m
										XX				Others