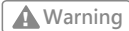




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## EPD34 Electromagnetic Flow Meter -Quick Start Guide-



### 01 Take Note Before Use

This guide provides basic information to help you get started. Please visit the website to download the full user manual for detailed installation and additional information. Incorrect operation may result in fatal or serious hazards.

Explosion hazard – If maintenance is required, the device must be removed from the hazardous area. To prevent ignition of flammable or combustible gases, disconnect the power supply before servicing.

Ensure that the installation of the equipment complies with the applicable national electrical code requirements. Installation of the equipment should only be performed by qualified personnel or factory representatives.



**Note:**

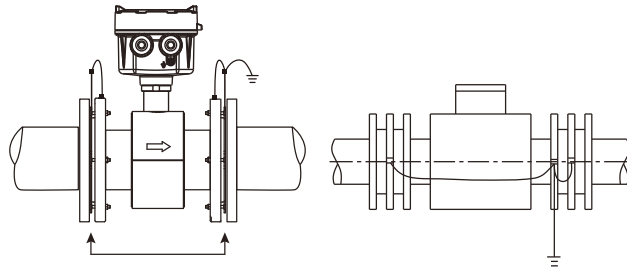
All junction box gaps must be completely sealed using sealing tape or sealant. Failure to seal all gaps may allow moisture to enter the equipment, potentially damaging internal components and voiding the warranty.

### 02 Product Specifications

100~240Vac 50/60Hz or 24Vdc  
4-20mA / Pulse :NPN 32Vdc /200mA

### 03 Grounding

The sensor and transmitter should be equipped with high-quality independent grounding wire (The section area of the copper core is 1.6mm<sup>2</sup>). The grounding resistance should be <10Ω. If the grounding is poor, it won't work normally. The grounding ring is needed if the pipe connecting with the sensor is insulating, and the material of the grounding ring should be the same as that of the electrode.



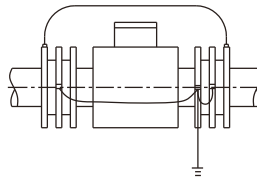
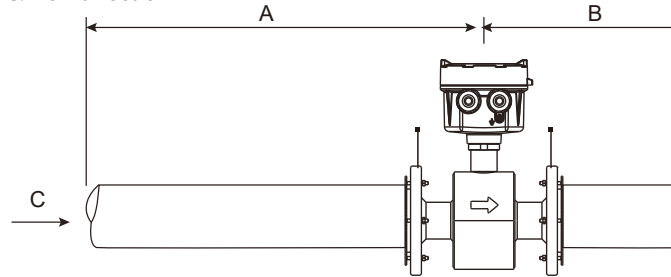
When the flow meter is installed on a plastic pipe with an insulating coating or lining, grounding rings should be installed on both sides of the sensor.

### 04 Installation

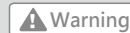
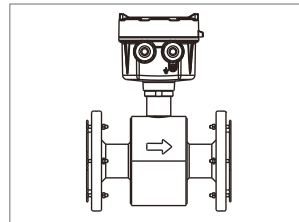
All enclosure covers must be securely fastened to prevent the influence of external environmental factors.

Minimum upstream/downstream pipeline requirements:

- A: Upstream – 5 times the pipe diameter
- B: Downstream – 2 times the pipe diameter
- C: Flow direction

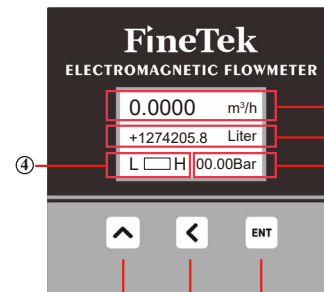


When installing the flow meter on the protective pipe of the cathode, the pipe with the protection of electrolytic corrosion generally has insulating walls and protruding sides. Thus, during installation, the grounding ring and the flanges on the pipe should be insulating.



The sensor body and the liquid flow arrow in the pipeline are in the same direction. The sensor body and the liquid flow arrow in the pipeline are in the same direction. Rotating the junction box orientation on the sensor tube may damage the transmitter's wiring harness and internal circuitry, and void the warranty

### 05 Display Interface / Button Functions



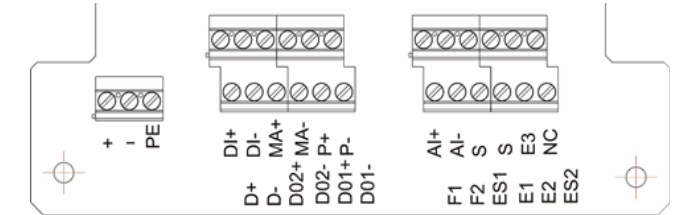
- ① Instantaneous flow rate
- ② Volume accumulation
- ③ Pressure in Tube
- ④ Percentage of measuring range
- ⑤ Number plus button
- ⑥ Left button/Return to the previous page
- ⑦ Confirm button (keep pressing)

⑤ ⑥ ⑦

### 06 Wiring

The wiring terminals can be seen after opening the outer cover. When leaving the factory, the cables are already fixed. If they need to be removed, the two multi-wire isolation cables must be locked onto the terminal block in the order of the outgoing wire numbers as shown in the figure.

#### Diagram of Transmitter Wiring Terminal

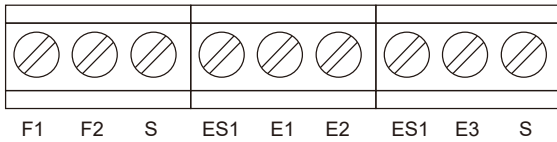


Power Cable of Excitation Signal		Signal Measurement Power Cable	
Terminal Name	Description	Terminal Name	Description
F1	Excitation Signal Wire	E1	Detection Signal Wire
F2	Excitation Signal Wire	ES1	E1 Detection Signal Shielded Wire
S	Signal Shielded Wire	E2	Detection Signal Wire
		ES2	E2 Detection Signal Shielded Wire
		S	Signal Shielded Wire

#### The description of Input / Output signal terminal

-	Power Input V-	D+	RS-485 +
+	Power Input V+	D-	RS-485 -
PE	GND	DO1+	Alarm Output 1+
		DO1-	Alarm Output 1-
DI+	Digital Input +	DO2+	Alarm Output 2+
DI-	Digital Input -	DO2-	Alarm Output 2-
MA+	4-20mA Output +	AI+	4-20mA Input +
MA-	4-20mA Output -	AI-	4-20mA Input -
P+	Pulse Output +		
P-	Pulse Output		

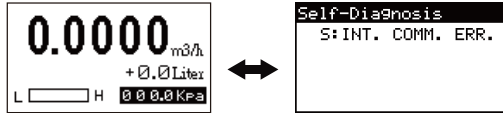
Diagram of Sensor Wiring Terminal



Power Cable of Excitation Signal	
Terminal Name	Description
F1	Excitation Signal Wire
F2	Excitation Signal Wire
S	Signal Shielded Wire

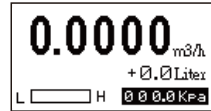
Signal Measurement Power Cable	
Terminal Name	Description
E1	Detection Signal Wire
ES1	E1 Detection Signal Shielded Wire
E2	Detection Signal Wire
ES2	E2 Detection Signal Shielded Wire
S	Signal Shielded Wire

### 06 Preset LCD screen

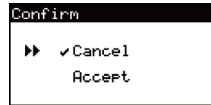


By default, the LED display will switch between the main measurement screen and the empty tube alarm screen.

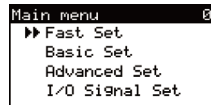
### 07 LED Menu System



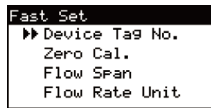
Press the ENT button until the operation screen appears.



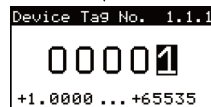
Press the up key to navigate to either "Cancel" or "Accept". Press the ENT button



Press the up button to move to the selected item in the menu. Press the ENT button



Press the up button to move to the selected item in the menu. Press the ENT button



Use the up and left buttons to adjust the value. Press the ENT button to save.