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Leader In Manufacturing Automation Instruments

Preface

For many years, FineTek has been committed to the continuous development of its R&D team. The company has international R&D centres in Shanghai and Germany, focusing on developing the company's core technologies. Every year, various patents and industrial certifications are also applied. FineTek's flow laboratory received the ISO/IEC17025:2017 certification (certification number: 3086) from the Taiwan Accreditation Council. The company has also won awards such as the National Quality Award and the National Award for Outstanding SMEs. In 2017, FineTek was the only company in ASIA to receive the OIML International Metrology certification for electromagnetic flowmeters.

Introduction

Water flows past and rotates an impeller; the impeller's movement speed is then recorded by an indicator through an electronic sensing and metering device which then displays the water flow rate.

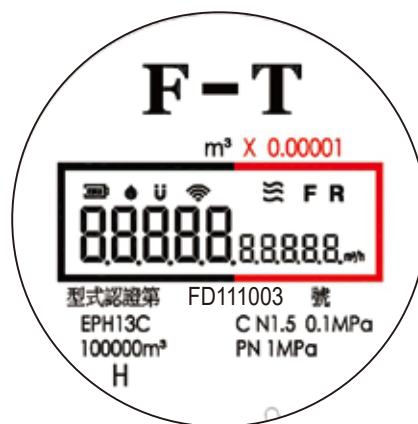
Specification

Screen size	LCD 420*130 mm
Applicable diameter	DN13 – DN50
Pipe requirements	The amount of water entering the pipe is at least 10xD (measure the pipe inner diameter). The straight section of the outlet is at least 2xD.
Ambient temp.	-25°C~70°C
Input pwer	Built-in 3.6VDC high-efficiency lithium battery.
Power consumption	<132μW
Cable connector	M12 Cable (optional)
Protection level	IP68
Operating pressure	16kg/cm ²
EMC specification	IEC 61326
Digital communication	An Extra transmission interface device is required device is required to convert to RS-485, NB-IOT outputs.

Features

- The design complies with the design standard of OIML-R49 Accurate measurement with high sensitivity.
- Compared with B-level meters, C-level meters can measure a lower minimum flow rate. With increased sensitivity, errors are reduced.
- LCD electronic display, able to intuitively measure water cumulative flow rate, has multiple smart management alarm functions, can be connected to an external transmitter to obtain various information such as water analysis data, water leakage etc.
- Uses non-magnetic transmission, therefore will not be affected by external magnetic fields.
- LCD display module displays information such as total cumulative amount, instantaneous flow and operating days.
- Built in lithium battery with high efficiency and lifespan of more than 8 years.

Panel



Application

Suitable for installation in residential buildings, campuses, dormitories and rentals houses to measure tap water, manage energy-saving and detect water leakage.

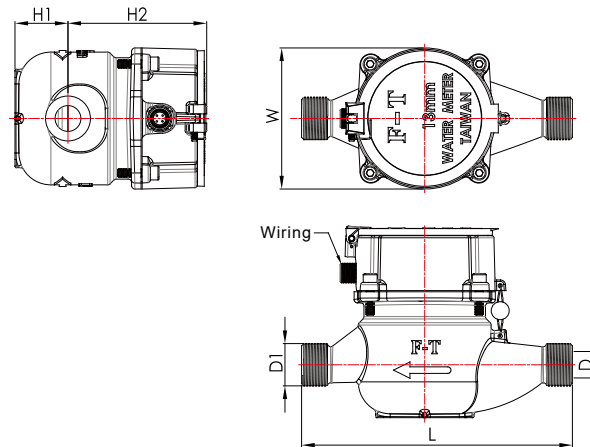
Measurement range

Classification	Diameter mm	m³/hr	Minimum Flow qmin	Maximum Flow qmin
C	13(15)		0.015	3
	20		0.025	5
	25		0.035	7
	40		0.1	20
	50		0.09	30

Measurement accuracy range

Minimum Diameter(mm)	13(15)	20	25	40	50
Flow Range ±2%	0.0225 ~ 3	0.0375 ~ 5	0.0525 ~ 7	0.15 ~ 20	0.225 ~ 30
Flow Range ±5%	0.015 ~ 0.0225	0.025 ~ 0.0375	0.035 ~ 0.0525	0.1 ~ 0.15	0.09 ~ 0.225

Outer Size/Diameter



Minimum Diameter (D)	Full Width (L ± 5)	Total Width (W ± 2)	Bottom to Cener Radius (H1 ± 2)	Top to Center Radius (H2 ± 2)	Outer Diameter Thread (D1 ± 0.3)	Groove Distance (grooves / inch)
13(15)	165	Ø86	32.3	84.5	Ø25.8	14
20	190	Ø86	35.5	84.7	Ø33	14
25	210	Ø89	38.6	84.7	Ø39	14
40	245	Ø108	46	92.7	Ø56	11
50	270	Ø118.5	46	95.2	Ø67.6	11

Comparison Of Part Numbers

Order Number	Specification	Note
EPHAM1S-0413MG001	Accessories set for DN13 copper pipe	2 sets of Union Connector(Copper) + Gasket+ Copper pipe
EPHAM1S-041323001	Accessories set for DN13 PVC pipe	2 sets of Union Connector(Copper) + Gasket+ PVC pipe
EPHAM1S-0420MG001	Accessories set for DN20 copper pipe	2 sets of Union Connector(Copper) + Gasket+ Copper pipe
EPHAM1S-042023001	Accessories set for DN20 PVC pipe	2 sets of Union Connector(Copper) + Gasket+ PVC pipe
EPHAM1S-0425MG001	Accessories set for DN25 copper pipe	2 sets of Union Connector(Copper) + Gasket+ Copper pipe
EPHAM1S-042523001	Accessories set for DN25 PVC pipe	2 sets of Union Connector(Copper) + Gasket+ PVC pipe
EPHAM1S-0440MG001	Accessories set for DN40 copper pipe	2 sets of Union Connector(Copper) + Gasket+ Copper pipe
EPHAM1S-044023001	Accessories set for DN40 PVC pipe	2 sets of Union Connector(Copper) + Gasket+ PVC pipe
EPHAM1S-0450MG001	Accessories set for DN50 copper pipe	2 sets of Union Connector(Copper) + Gasket+ Copper pipe
EPHAM1S-045023001	Accessories set for DN50 PVC pipe	2 sets of Union Connector(Copper) + Gasket+ PVC pipe

Comparison Of Part Numbers

Model Number	Order Number
EPH13C	EPH100M0-013XAA1X0350MGM
EPH20C	EPH100M0-020XAA2E0350MGM
EPH25C	EPH100M0-025XAA2L0350MGM
EPH40C	EPH100M0-040XAA3D0350MGM
EPH50C	EPH100M0-050XAA3Q0350MGM

Order Information

EPH 1 0 0 M 0 - ⁰⁹ ¹⁰ ¹¹ X A A ¹⁵ ¹⁶ 0 3 5 0 ²¹ ²² M

⁰⁹ ¹⁰ ¹¹ Diameter

013: 13mm
020: 20mm
025: 25mm
040: 40mm
050: 50mm

¹⁵ ¹⁶ Size

1X: 25.1~26.0 (Estimated 13mm)
2E: 32.1~33.0 (Estimated 20mm)
2L: 38.1~39.0 (Estimated 25mm)
3D: 55.1~56.0 (Estimated 40mm)
3Q: 67.1~68.0 (Estimated 50mm)

²¹ ²² Material

MG: Copper Alloy

Application of Smart Meter in Homes

Data communication: Cat M1/NB-IOT dual mode communication

