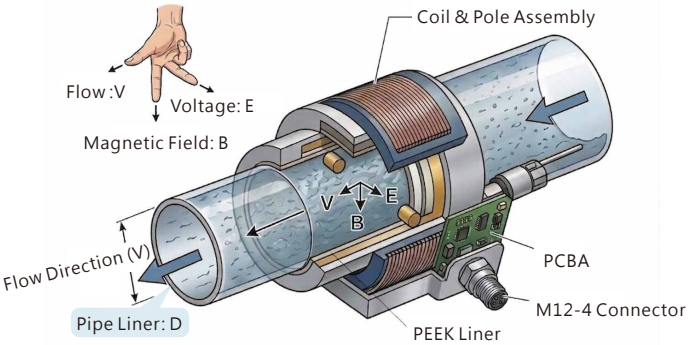
EPD2 Compact Electromagnetic Flow Meter



INTRODUCTION

The Electromagnetic Flowmeter is a high-precision flow measurement instrument manufactured using the latest international technology. It is widely used in industries such as papermaking, chemical processing, power generation, metallurgy, water supply and drainage, wastewater treatment, high-pressure liquid metering, pharmaceuticals, food processing, and environmental protection.

It is designed to measure the flow rate of conductive, non-magnetic liquids and slurries in closed pipelines.



SPECIFICATIONS

Specifications	Standard type	High temp. type
Power supply	18~36VDC	
Fluid conductivity	> 2 uS/cm	
Lining material	PEEK	
Nominal diameter	DN6 ~ DN65	DN6 ~ DN200
Operating pressure	-1 ~ 16kg/cm²	
Ambient temp.	-25~75°C	
Operating temp.	-40~90°C	-40~125°C
Accuracy	Flow:±0.5% 、Temp.:±0.5°C Pressure:±0.08kg/cm²	
Electrode material	SUS316L	
Body material	SUS304	
Connection type	Clamp(ISO 2852)	
Pressure range	0~16kg/cm²	
Temperature range	-40~120°C	
Output signal	4~20mA (Max. Load:500Ω)	
Communication	RS-485 、IO-Link	
Turndown ratio	1:150	
Electrical connection	M12-4-pin Connector	
Power consumption	<5W	
Protection rating (IP)	IP67	

Key Highlights

- Ultra-Compact Design
  Featuring an innovative zero straight-pipe-run installation, it is ideal for high-density piping layouts and AI liquid cooling systems.
- Three Functions in One
  Simultaneously and accurately measures flow rate, temperature, and pressure, eliminating the need for multiple instruments.
- Smart Configuration
  The display automatically rotates 90° for optimal viewing and supports IO-Link and Bluetooth for remote parameter configuration.
- Exceptional Durability
  The one-piece PEEK injection-molded lining provides superior resistance to demanding conditions, while built-in self-diagnostic functions ensure reliable operation even under negative-pressure environments.

APPLICATION

- Municipal Water Treatment
- Seawater Desalination Systems
- AI Cooling Systems
- Food Manufacturing Industry
- Pharmaceutical Machinery
- PCB Wet Process
- Steel Industry
- HVAC (Heating, Ventilation, and Air Conditioning)

FEATURES

On-Site: Simplified Installation and Maintenance

No Straight Pipe Requirement
Eliminates the need for straight pipe sections, saving installation space and significantly reducing construction costs.

90° Automatic Display Rotation
The color LCD automatically rotates according to the installation angle, providing clear readability in both horizontal and vertical mounting orientations.

Active Self-Diagnostics
Continuously monitors empty pipe conditions, electrode contamination, and excitation abnormalities to prevent unexpected shutdowns.

System Integration: Seamless Communication

Multiple Communication Support
Fully supports RS-485, IO-Link, 4–20 mA, and digital input/output (DI/DO) interfaces for flexible system integration.

Non-Contact Configuration
Parameters can be quickly configured via Bluetooth, infrared remote control, or IO-Link, providing convenient and efficient operation.

Measurement Core: Stability and High Accuracy

Industrial-Grade Processing Core
Equipped with high-resolution signal processing technology to ensure accurate and stable measurement even under complex operating conditions.

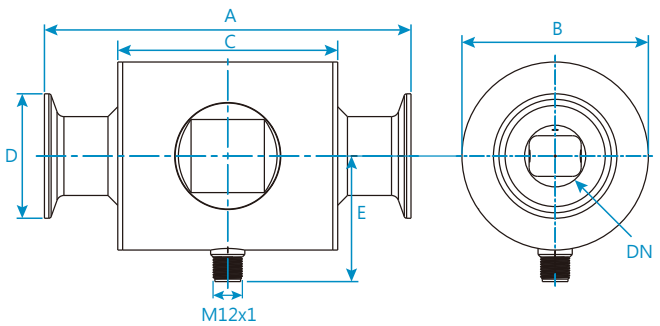
Multi-Parameter Measurement in One Device
Simultaneously measures and outputs flow rate, temperature, and pressure with fast response time and low power consumption.

High Interference Resistance and Negative Pressure Protection
The electrodes and PEEK lining are integrally injection-molded, ensuring measurement stability unaffected by fluid density or temperature variations. It also maintains reliable operation under negative-pressure conditions.

DIMENSIONS

(Unit: mm)

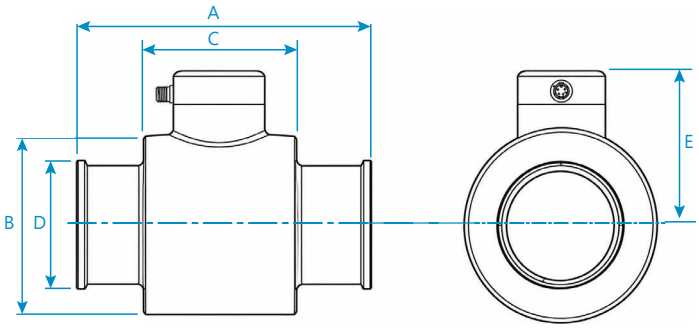
Standard type



DN	A	B	C	D	E
6	150	70	90	50.5	48
10	150	70	90	50.5	48
15	150	70	90	50.5	48
20	150	70	90	50.5	48
25	150	76	90	50.5	51
32	150	76	100	50.5	51
40	200	89	100	64	57.5
50	200	95	100	77.5	60.5
65	200	95	100	91	60.5

Sanitary stainless steel clamp connection with dimensions based on ISO 2852:1993

High temperature type



DN	A	B	C	D	E
6	150	76	90	50.5	85
10	150	76	90	50.5	85
15	150	76	90	50.5	85
20	150	76	90	50.5	85
25	150	76	90	50.5	85
32	150	76	90	50.5	85
40	200	89	100	64	92
50	200	102	100	77.5	98
65	200	102	100	91	98
80	200	178	100	106	145
100	250	178	130	119	145
125	250	220	114	155	164
150	300	245	154	183	170
200	350	300	200	233.5	197

FLOW & VELOCITY RANGE

Standard type

DN Size	Flow range	Velocity range
DN6	0.01~0.75M³/H	0.1~7.36 M/S
	0.17~13L/min	
DN10	0.02~1.5M³/H	0.07~5.3 M/S
	0.33~25L/min	
DN15	0.035~5M³/H	0.05~7.85 M/S
	0.58~83L/min	
DN20	0.04~6M³/H	0.03~5.3 M/S
	0.67~100L/min	
DN25	0.1~15M³/H	0.05~ 8.48 M/S
	1.67~250L/min	
DN32	0.15~20M³/H	0.05~6.9 M/S
	2.50~333L/min	
DN40	0.25~38M³/H	0.05~8.39 M/S
	4.17~633L/min	
DN50	0.4~60M³/H	0.05~8.48 M/S
	6.67~1000L/min	
DN65	0.5~75M³/H	0.04~6.27 M/S
	8.33~1250L/min	

High temperature type

DN Size	Flow range	Velocity range
DN6	0.01~0.75M³/H	0.1~7.36 M/S
	0.17~13L/min	
DN10	0.02~1.5M³/H	0.07~5.3 M/S
	0.33~25L/min	
DN15	0.035~5M³/H	0.05~7.85 M/S
	0.58~83L/min	
DN20	0.04~6M³/H	0.03~5.3 M/S
	0.67~100L/min	
DN25	0.1~15M³/H	0.05~ 8.48 M/S
	1.67~250L/min	
DN32	0.15~20M³/H	0.05~6.9 M/S
	2.50~333L/min	
DN40	0.25~38M³/H	0.05~8.39 M/S
	4.17~633L/min	
DN50	0.4~60M³/H	0.05~8.48 M/S
	6.67~1000L/min	
DN65	0.5~75M³/H	0.04~6.27 M/S
	8.33~1250L/min	
DN80	1.0~150M³/H	0.05~8.28 M/S
	16.66~2500L/min	
DN100	1.5~225M³/H	0.05~7.95 M/S
	25~3750L/min	
DN125	2.2~330M³/H	0.049~7.46 M/S
	36.66~5500L/min	
DN150	3.0~450M³/H	0.047~7.07 M/S
	50~7500L/min	
DN200	5.5~825M³/H	0.048~7.29 M/S
	91.6~13750L/min	

ORDER INFORMATION

EPD 2 ⑤⑥ 00 - A ⑩⑪⑫ I00A0

⑤⑥ Model

05: Standard type (DN6-65)
25: High temperature type (DN6-200)

⑩⑪⑫ Nominal Diameter

006: 6mm	032: 32mm	100: 100mm
010: 10mm	040: 40mm	125: 125mm
015: 15mm	050: 50mm	150: 150mm
020: 20mm	065: 65mm	200: 200mm
025: 25mm	080: 80mm	

FineTek
No.16, Tzuchiang St., Tucheng, District New Taipei City, Taiwan.
TEL : 886 2 22696789 | FAX : 886 2 22686682 | http://www.fine-tek.com
Email: info@fine-tek.com