



Pre-attached grounding rings included

Highlights

- Measurement is independent of fluid density, viscosity, temperature, pressure, and conductivity
- Two measuring points inside the meter with no moving parts to eliminate pressure drop
- Capable of measuring electric conductive liquid and fluids with low solid contents
- Reference Accuracy: $\pm 0.2\%$ of reading
- Output signal options:
RS485 Modbus / 4-20 mA / 2-8 KHz Pulse Output
- Wide measurement range & high efficiency
- Minimal upstream/downstream piping requirements:
5 pipe diameters upstream
2 pipe diameters downstream
- Backlit LCD with integral push button interface
- Advanced features including smart self-detection and self-diagnosis for checking magnetized signal, empty pipe, and contaminated electrode
- Provides best-in-class PTFE lining material
- Provides various options of electrode materials, grounding options, and more
- Low power consumption
- Operating/ambient temperature:
-40 to 70 °C (-40 to 158 °F)
LCD: -20 to 70 °C (-4 to 158 °F)
- Process/lining temperature:
-20 to 120 °C (-4 to 248 °F)
- IP67 protection, robust construction and materials

Measure Flow with Confidence

Ordering Information

H E F M 0 1 - 0 3 0 A C - L D 2 L

Tube Size

015 = 1.5" / 40 mm 040 = 4" / 100 mm
 020 = 2" / 50 mm 050 = 5" / 125 mm
 025 = 2.5" / 65 mm 060 = 6" / 150 mm
 030 = 3" / 80 mm For larger sizes, please contact
 an OleumTech representative.

Process Connection Type

A = ANSI B16.5 Class 150
 B = ANSI B16.5 Class 300

Connection Material

A = 304 SS
 C = Carbon Steel (Default)
 L = 316L SS

Grounding Material

H = Hastelloy Alloy (C-276)
 L = 316L SS

Power Supply

A = 100-240 Vac, 50/60 Hz
 D = 24 Vdc

Electrode Material

H = Hastelloy Alloy (C-276)
 L = 316L SS

Technical Specifications

HARDWARE

Device Functionality	· Electromagnetic Flow Meter (RS485 Modbus, 4-20 mA, or 2-8 KHz Pulse Output)
Configuration	· Integral LCD with Push Button Interface or Modbus
Accuracy	· $\pm 0.2\%$
Fluid Conductivity	· $> 5 \mu\text{S/cm}$ (AC Power), $> 20 \mu\text{S/cm}$ (24 Vdc)
Measuring Scope	· 0.328 ft/sec (0.1 meters/sec) to 32.8 ft/sec (10 meters/sec)
Current Output Accuracy	· 0.1% of Pulse Output Accuracy; Temperature Coefficient (0.01 %/°C or 0.0056 %/°F)
Maximum Operating Pressure	· 1.5" to 3": 569 psi · 4" to 6": 227 psi The final pressure rating depends on the flange type, whichever is less. Refer to ANSI B16.5 Class 150 or 300 specification.
Current Output Mode	· Active (Loop Power is Not Required)
Analog Output	· 4-20 mA
Maximum Load of Current Output	· $< 700 \Omega$
Alarming Current	· 3.6 mA or 22 mA
Frequency Output Scope	· 2-8 KHz
Pulse Width	· Automatic (Pulse Width 50 %)
Pulse Mode	· NPN Transistor Output 32 Vdc/200 mA
Damping Time	· 1-100 s
Control Output (DO)	· NPN Transistor Output 32 Vdc/200 mA; 2-CH
Control Input (DI)	· Dry Contact ON $< 200 \Omega$; 1,000 Ω $<$ OFF; 1-CH
Interface / Baud Rate	· RS485 Modbus / 1200-57,600 bps
Local LCD Display	· 128 x 64 Pixel Backlit Type
Lining Material	· PTFE (-20 to 120 °C / -4 to 248 °F)

CERTIFICATIONS & COMPLIANCE

Safety - IECEx (Pending)	· Ex db eb [ia] IIC T4 Gb
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MECHANICAL/PACKAGING SPECIFICATIONS

Mechanical (WxDxH) / Package (WxDxH) / Gross Weight (Per Tube Size)	· 1.5": 5" x 7.9" x 12.1" / 14.2" x 15.4" x 20.9" / 37.5 lbs (17 kg)
	· 2": 6" x 7.9" x 12.6" / 14.2" x 15.4" x 20.9" / 44.1 lbs (20 kg)
	· 2.5": 7" x 7.9" x 13.5" / 14.2" x 15.4" x 20.9" / 50.7 lbs (23 kg)
	· 3": 7.5" x 7.9" x 13.8" / 14.2" x 15.4" x 20.9" / 57.3 lbs (26 kg)
	· 4": 9" x 9.8" x 15.5" / 16.5" x 16.9" x 28.4" / 77.2 lbs (35 kg)
	· 5": 10" x 9.8" x 16" / 16.5" x 16.9" x 28.4" / 114.6 lbs (52 kg)
· 6": 11" x 11.8" x 18.3" / 16.5" x 16.9" x 28.4" / 121.3 lbs (55 kg)	

Connection Fitting	· Two 1/2" NPT Female
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Enclosure Casing Material	· Aluminum; IP67
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ELECTRICAL SPECIFICATIONS (Specify When Ordering)

AC Power Input / Consumption	· AC 100 to 240 V / < 10 VA Max
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DC Power Input / Consumption	· DC 24 Vdc / RS485: 3 W; 4-20 mA: 3.8 W
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GENERAL SPECIFICATIONS

Operating Conditions	· Ambient Temperature: -40 °C to 70 °C (-40 °F to 158 °F)
	· LCD Screen -20 °C to 70 °C (-4 °F to 158 °F)
	· Humidity: 0 to 99 %, Non-Condensing
Warranty	· 2-Year Parts and Labor