# **CROSS SMART SENSOR**

# **MI7: Insertion Magnetic Flow**

Digital technology for optimized measures

# **FEATURES & BENEFITS**

- Unique streamlined sensor design
- Very sensitive to low velocity down to ± 0.13 ft/s (0.04 m/s)
- Bi-directional flow measurement
- Optional Hot-tap installation without interrupting service
- Applicable for wide range size of pipes
- Suitable for retrofits and sites never metered before.
- Robust construction with no moving parts
- Optional watertight (IP68) model
- Optional integral display, 4-20 mA and pulse output
- Fully compatible with PC software Delta-Phase View<sup>™</sup>
- Low-cost for purchase, installation and ownership

## DESCRIPTION

The MI7 is an insertion-style magnetic flow sensor. It features a state-of-the-art electromagnetic sensor and an integral transmitter which provides RS485 Modbus RTU digital interface and optional 4-20mA & pulse outputs. The unique streamlined sensor design is available in corrosion resistant wetted materials such as POM/316L or Titanium. The MI7 can be installed quickly and securely into a wide selection of flow fittings in pipe sizes ranging from DN50 to DN2000 (2 in. to 78 in.). It delivers accurate flow measurement and long-term reliability that minimizes maintenance costs.

## **APPLICATION**

Water

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#### Distribution

Effluent

Wastewater

- Recycle / Reclaim
- Pumping Stations
- UV Dosing

Effluent

- Filter Balancing and Backwash
- Wells & Booster Stations

#### INDUSTRIAL FACILITIES

- Cooling Water
- Fire Water
- Feed Water
- Raw Water
- Inlet to Surge Basin
- Effluent Wastewater











## **SPECIFICATIONS**

MI7 Insertion Electromagnetic Flow Sensor	
Measuring Principle	Faraday's Law of induction
Measuring Range	0.13 ft/s to 33 ft/s (0.04 m/s to 10 m/s)20 μS/cm
Pipe size range	2" to 78" (DN50 to DN2000)
Accuracy	±1% from 1 ft/s to 32 ft/s (0.3 m/s to 10 m/s) ±2% from 0.3 ft/s to 1 ft/s (0.1 m/s to 0.3 m/s)
Linearity	1% of reading
Repeatability	±0.5% of reading
Units	Metric or English units selectable
Ambient Temp.	-40 to 158 °F (-40 to 70°C) without display
	14 to 158 °F (-10 to 70 °C) with display
Operating Pressure	150 psi @ 77 °F (10.3 bar @ 25 °C)
Wetted Materials	POM and 316L, optional Titanium
Protection Rating	IP65, optional IP68 (without display)
Power Supply	24VDC (18-36VDC)
Digital Interface	RS485 Modbus RTU
Output & Display	Optional 4-20mA plus pulse outputs & integral LCD display
Mounting	1-1/2" NPT compression fitting or Retractor Assemblies
Insertion length	1/8" to 1/6" I.D based on application
Weight	3.75 lbs. (1.7 kg) for 12 inch sensor

#### ORDER CODE





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