# DORGEAN
Beijing Dorgean Electronic Technology Co.,Ltd

**Instrument Expert
Original factory
packaging**
www.dorgean.com

# PULSAR
MEASUREMENT

Greyline

# ISM 5.0

## Technical Specifications:

The Greyline ISM 5.0 Insertion Magmeter senses flow using a low maintenance electromagnetic design with no moving parts. The dual-electrode sensor and continuous auto-zero function provides high accuracy – even at low-flow rates.
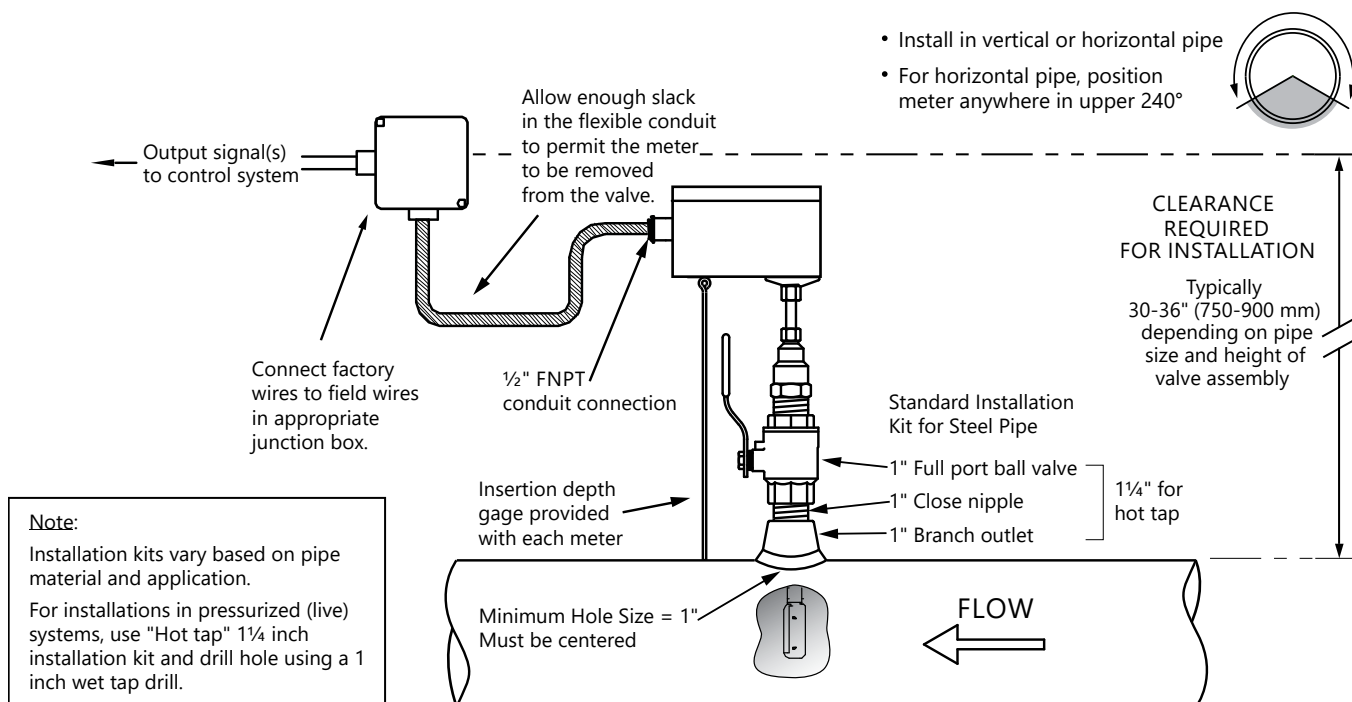
## GENERAL SPECIFICATIONS

| | |
|---|---|
| **Flow Measurement Range:** | 0.031 m/s to 6.2 m/s (0.1 ft/s to 20 ft/s), 200:1 turndown |
| **Accuracy:** | • ±1.0% of reading from 0.61 m/s to 6.2 m/s (2 ft/s to 20 ft/s)<br>• ±0.0061 m/s (0.2 ft/s) below 0.61 m/s (2 ft/s) |
| **Nominal Pipe Diameter:** | 76.2 mm to 1.8 m (3 in to 6 ft) |
| **Liquid Temperature Range:** | -26 °C to +121°C (-15 °F to +250 °F) |
| **Operating Temp. (Electronics):** | -28 °C to +65°C (-20 °F to +150°F) |
| **Maximum Operating Pressure:** | 14 bar (200 psi) |
| **Pressure Drop:** | Less than 0.007 bar (0.1 psi) at 3.6 m/s (12 ft/s) |
| **Conductivity Range:** | 20-60,000 µSiemens/cm |
| **Power Input:** | 20-28 V DC, 250mA at 24 V DC (6 Watts) 20-28V AC, 50-60Hz, 8VA |
| **Analog Output:** | Selectable 4-20mA, 0-5 V or 0-10 V |
| **Frequency Output:** | 0-15 V peak pulse, 0-500 Hz |
| **Scalable Pulse Output:** | • Isolated solid state dry contact rated 50 V DC, 100mA<br>• maximum Pulse duration: 0.5 sec, 1 sec, 2 sec, or 6 sec |
| **Signal Cable Length:** | 7.6 m (25 ft) PVC jacketed multi-conductor |
| **Electronics Enclosure:** | IP68 powder-coated cast aluminum |
| **Wetted Materials:** | 316 L stainless steel, polypropylene |
| **Approximate Shipping Weight:** | 2.7 kg (6 lb) |

## POPULAR OPTIONS

| | |
|---|---|
| **Model ISM 5.0-B:** | For bi-directional flow |
| **Extra Sensor Cable:** | Separate length 7.6 m, 15.2 m, or 30.5 m (25 ft, 50 ft, or 100 ft) PVC jacketed multi-conductor |
| **Standard Installation Hardware Kit:** | Threaded branch outlet, close nipple, 1 in full port isolation valve |
| **Hot Tap Installation Hardware Kit:** | 31.8 mm (1.3 in) branch outlet, close nipple, 31.8 mm (1.3 in) full port ball valve |
| **Grounding Rings:** | ANSI Class 150, 316 Stainless Steel from 76.2 mm to 1.1 m (3 in to 3.5 ft) nominal size |
| **Grounding Probes:** | Hot Tap, stainless steel |
| **Remote Displays:** | • D-100-MOD rate/total display with 2 analog inputs, Modbus RTU or TCP/IP<br>• DB-1201-01 LCD with flow direction LED's |

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Output signal(s) to control system

Allow enough slack in the flexible conduit to permit the meter to be removed from the valve.

Connect factory wires to field wires in appropriate junction box.

½" FNPT conduit connection

- Install in vertical or horizontal pipe
- For horizontal pipe, position meter anywhere in upper 240°

CLEARANCE REQUIRED FOR INSTALLATION

Typically 30-36" (750-900 mm) depending on pipe size and height of valve assembly

Standard Installation Kit for Steel Pipe

1" Full port ball valve
1" Close nipple
1" Branch outlet

1¼" for hot tap

Insertion depth gage provided with each meter

Minimum Hole Size = 1" Must be centered

FLOW

Note:

Installation kits vary based on pipe material and application.

For installations in pressurized (live) systems, use "Hot tap" 1¼ inch installation kit and drill hole using a 1 inch wet tap drill.

# Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

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