

## MCG 1010M Magnetostrictive Receiver

### Multi-Purpose

The MCG 1010M Receiver harnesses the impressive accuracy and resolution of the MCG 1030 or MCG 8150 series Magnetostrictive Probes to provide continuous level measurement and local access to the data. The MCG 1010M is designed to provide reliable, low maintenance operation under even the most adverse of conditions. With a graphical LCD readout and infrared programming capabilities as standard features, the unit can be utilized as stand-alone gauge or be integrated as part of a complete gauging system.

### Compatibility

Like all L&J Gauges, the MCG 1010M communicates on the standard L&J Tankway. Intelligent modules to emulate nearly any other protocol or highway are also available and easily interchangeable. The unit may also be configured to accommodate temperature inputs (Spot or Average), relays (up to 4), 4-20mA inputs or outputs (up to 2), and discrete inputs or outputs (4). In addition to a level probe, the MCG 1010M accepts input from various L&J leak detection sensors (vapor and/or liquid). When used as a part of a multiple unit system, each receiver can be calibrated and configured for any or all of the available options.

### Convenient

Calibration can be accomplished via the MCG 2150 Remote Calibrator; eliminating the need to remove the cover from the gauge housing. Current level, temperature, volume, and bottom/sediment, or pressure information is easily accessible, right at the tank side. System configuration and parameters can also be continued from a MCG 3000 Series Gauging System. Comprehensive surge and lightning protection is also an integral part of the unit.



### Features

- High Accuracy, Continuous Online Measurement
- Supports Spot or Average Temperature
- Supports Dual 4-20mA Inputs & Outputs
- Local Graphical LCD Display
- Handheld Infrared Calibration
- Economical

### Applications

The MCG 1010M can be combined with a magnetostrictive probe as a stand-alone gauge or as part of a complete system.

The MCG 1010M is suitable for use in the following industries:

Petroleum	Petrochemical	Chemical
Food & Beverage	Water Treatment	Pharmaceutical

**Specifications:**

**Resolution:**

.001" (with MCG 8150 Series Probe)

**Housing:**

**Material:**

Aluminum (standard)

**Rating:**

Explosion Proof, Class I, Div. 1 Groups C&D

**Display:**

Graphical LCD backlit display

**Communication:**

L&J Tankway (standard), other protocols available

**Calibration Method:**

MCG 2150 Remote Calibrator (Intrinsically Safe)

**Operating Temp. Range:**

-30° to +160° F

**SCADA Options:**

- 2 Analog (4-20mA, 10-50mA Inputs)
- 2 Analog (4-20mA, 10-50mA Outputs)
- 2 Pulses (from Turbine Flow Meters)
- 4 Discrete Inputs
- 4 Discrete Outputs

**Power Sources:**

12 - 70 VDC, 24 VDC Loop Power

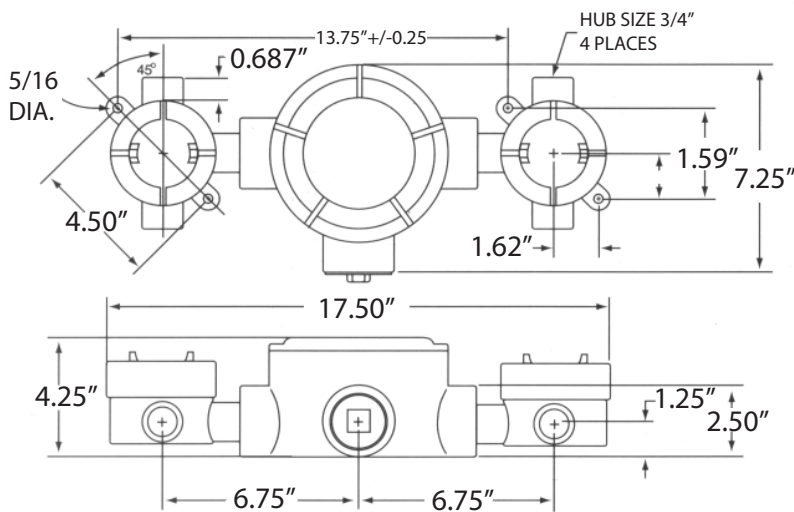
**Cable Length Local Readout to Probe:**

Up to 100 Feet (30.5 m)

**Local Readout to control room:**

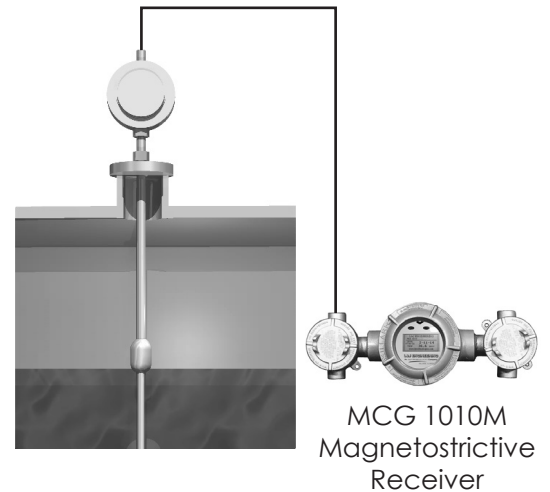
Up to 10 Miles (16093 m)

**Dimensions**



**Typical System Layout**

MCG 1030, 8150B, 8151 8190A  
Magnetostrictive Probe



All designs subject to change. Certified dimensions and specifications available upon request.

## MCG 1010M Ordering Guide

### MCG 1010M Magnetostrictive Receiver

(For use with MCG 1030, MCG 8150B, MCG 8151, or MCG 8190A - Magnetostrictive Probes Ordered Separately)

Includes: Local Readout, Capable of Displaying Two Items (Level & Temp., or Volume or BS&W), Explosion-Proof Housing, Infrared Programmable

### MCG 2150 Remote Calibrator

(One Required)

### Model Number Selection:

The model number will consist of a base number **MCG 1010M** followed by 6 digits. These digits will represent 3 sets of option tables:

### MCG 1010M - AB - CD - EF

AB – Signal/Output Options	
31	None
32	L&J Tankway
33	4-20 mA Analog Output
35	Dual 4-20 mA, Level & Temperature
36	GPE 31422, 31423
37	Varec 4-Wire
38	Varec Matrix
40	RS-232 Output
46	Enraf Interface
47	Dual 4-20 mA Output, Level and BS&W
48	Dual 4-20 mA Output, Level and Density
49	HART
50	Modbus on L&J Tankway
51	Modbus on RS-485 Highway (2-Wire)
52	Modbus on RS-485 Highway (4-Wire)
60	Ti-Way Interface
61	Profibus DP
62	WirelessHART

CD – Analog Input/Temperature/Relay	
02	None
03	Internal RTD* (1-5 Points)
06	Spot Temperature**
07	Average Temperature***
15	Internal RTD* (1-5 Points), 4 Relays
18	Spot Temperature**, 4 Relays
19	Average Temp.*** (Up to 14 Points), 4 Relays

\* Only available with MCG 8150B, MCG 8151 or MCG 8190A Probe.

\*\* RTD Probe must be ordered separately.

\*\*\* Requires MCG 2350 Average Temperature Assembly and Average Temperature bulb (ordered separately).

EF – Power Supply	
21	48 VDC - Standard (12-70 VDC)