



MCG 8190A Rigid Magnetostrictive Level Probe with Pressure Sensor

An Integrated Approach

The MCG 8190A Rigid Magnetostrictive Level Probe is a highly accurate, continuous measurement device that is easy to install and maintain. The compact design allows for the collection and transmission of an impressive amount of data. In addition to measuring two levels (product and interface or two interfaces), five (5) temperature sensors are embedded in the probe at different levels to provide average temperature measurement of the product.

Density Calculation

The MCG 8190A is a specialized version of the MCG 8150B, adding the ability to measure the density of the stored product and use this information to accurately calculate corrected volume. The density measurement is gathered by a pressure sensor mounted directly to the stainless steel housing of the probe itself. The collected data is then analyzed to provide the most comprehensive and accurate measurement available.

Proven Technology

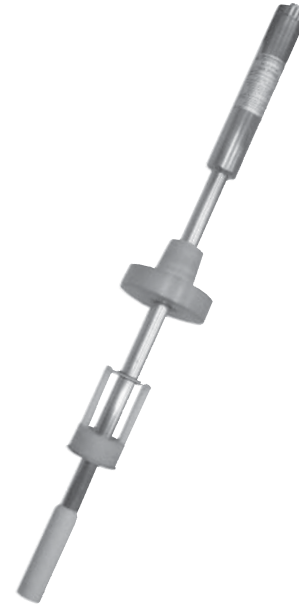
The magnetostrictive technology that is employed in the MCG 8190A has been proven to be extremely reliable. The probe is comprised of a wave guide, one or two floats with permanently-embedded magnets, a motion or stress sensing device, and a probe housing. Together, these components measure the level of product in a vessel through a simple physical property known as the Wiedemann Effect.

Versatility

With rigid probes available in lengths up to 24 feet (7.2 m), the MCG 8190A probe can be installed in nearly any type of storage or process vessel; aboveground or underground. Standard Mounting Options can accommodate 2", 3", and 4" openings. Flanged connections are also available.

Level Measurement & Point Switch...All in One

Because of the probe's packaging and its high degree of resolution (+/- .001"), the MCG 8190A can provide both level gauging data and act as a point switch for process vessels or overspill alarms.



Features

- Meets States EPA Requirements For Underground Storage Tanks
- High Resolution of +/- .001"
- Two Separate Levels Simultaneously Measured
- Density Measurement with Integral Pressure Transducer
- Average Temperature with Internal Sensors

Applications

- Can be used in various types of storage or process vessel; above or underground
- Custody transfer on products such as diesel fuel
- Level measurement on food and beverage process tanks
- Level control on chemical process vessels

MCG 8190A

Rigid Magnetostrictive Level Probe with Pressure Sensor



L&J engineering
evolving at every level

Specifications:

Operating Principle:
Magnetostrictive Sensing

Communication:
L&J Tankway

Resolution Level:
.001 inch

Temperature Sensing:
Average Temperature (5 Internal RTD's)

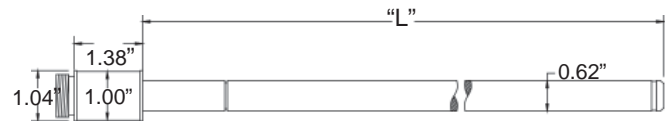
Temperature Resolution:
.01°F

Approvals:
UL Listed

Floats:
2" or 3" Polyurethane or Stainless Steel Floats available

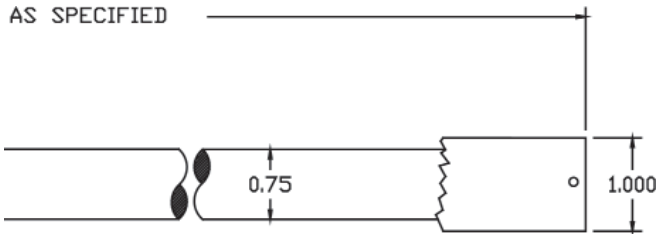
Probe Material:
316SS

Dimensions

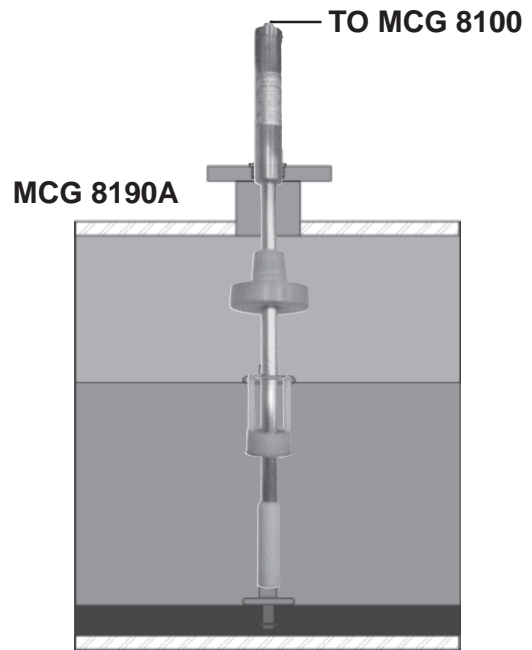


MCG 8190A

AS SPECIFIED



Typical System Layout



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

MCG 8190A Ordering Guide

MCG 8190A Rigid Magnetostrictive Level Probe with Pressure Sensor

Includes: Rigid 316 stainless steel magnetostrictive probe with integrated pressure sensor and 5 RTDs. Up to 24 feet (7.3m). Mounts into 2", 3" or 4" opening.

Model Number Selection:

The model number will consist of a base number **MCG 8190A** followed by 6 digits. These digits will represent 4 sets of option tables:

MCG 8190A - AB - CD - EF

AB - Tank Height in Feet	
AB	Rigid Probes (2'-24')
02	2' Tank (0.6 m)
04	4' Tank (1.2 m)
05	5' Tank (1.5 m)
06	6' Tank (1.8 m)
07	7' Tank (2.1 m)
08	8' Tank (2.1 m)
09	9' Tank (2.7 m)
10	10' Tank (3.0 m)
11	11' Tank (3.3 m)
12	12' Tank (3.6 m)
13	13' Tank (3.9 m)
14	14' Tank (4.2 m)
15	15' Tank (4.5 m)
16	16' Tank (4.8 m)
17	17' Tank (5.1 m)
18	18' Tank (5.4 m)
19	19' Tank (5.7 m)
20	20' Tank (6.0 m)
21	21' Tank (6.3 m)
22	22' Tank (6.6 m)
23	23' Tank (6.9 m)
24	24' Tank (7.2 m)

CD - Level / Interstitial Capabilities	
00	Pressure Interface (Standard)

EF - Float Size / Type*	
03	3" Polyurethane Float (Standard)
12	2.05" Stainless Steel Float

*For other materials, consult factory.

GH - Connection / Opening	
00	4" Riser (Standard)