

MCG 2420 Transmitter

Easy Retrofit Capability

The MCG 2420's versatile design allows it to be easily installed into existing applications. The MCG 2420 can easily couple to the Shand & Jurs Model 92302 Liquid Level Indicator. The MCG 2420 can also couple to the Varec 6700 Liquid Level Indicator. Depending on which option is chosen, the MCG 2420 will come with the appropriate adapter kit for that specific liquid level indicator.

Patented Technology

The MCG 2420 utilizes absolute magnetic encoding which is the next step in L&J's patented absolute encoding technology which has been used on the MCG 2000S, MCG 2000SS, MCG 2000SSI, MCG 2000SFI and MCG 2000MAX. L&J has replaced the foot and inch optical discs with foot and inch magnetics which provide much greater accuracy and reliability and also allows for the option of using a much smaller housing than previous offerings. The MCG 2420 now has an expanded range of 0-128 feet. By using absolute magnetic encoding the number of parts required is greatly lowered in turn providing unmatched reliability. Just as with the previous generations of L&J transmitters, the MCG 2420 is completely unaffected by power failures in your tank farm without the use of batteries. When power is restored the transmitter will accurately reflect the current level, even if it has changed, without the need for additional calibration.

Accuracy

The MCG 2420 is a cost-saving and easy-to-install transmitter. It can display level with a resolution of 1/32" (standard) for up to 85 feet of product. Data can be read via an optional remote LCD display or transmitted directly back to a control room. The remote display can be mounted tankside or in a remote location. Changes in liquid level are output to a 4-20 mA and/or digital signal.

Function

The MCG 2420 is designed to connect to most standard float gauges. It utilizes L&J Engineering's revolutionary Absolute Magnetic Encoding for level detection and consumes very little power during operation.



Features

- Use on Gauge Boards
- Ultra Low Power
- Absolute Magnetic Encoding for Level Detection
- Advanced Flash Memory Technology
- No Batteries or EPROMS
- 2-Wire Loop Powered
- Remote Digital Display (Optional)

Applications

- Couple to gauge boards from Shand & Jurs and other Manufacturers
- Converts mechanical level measurements into electronic data
- Installed in bulk liquid storage vessels for the Petroleum, Petrochemical, Chemical, Pharmaceutical, Food & Beverage, and Water Treatment Industries

Specifications:

Accuracy (Over Full Range):

1/32" (0.8mm) Standard
1/64" Opt.

Range:

0-85 feet (0-26M)

Digital Conversion:

Absolute Magnetic Encoding

Power Consumption:

0.04W

Power Options:

24 - 220 VAC, 12 - 70 VDC, 24 VDC Loop Power,
Battery

Lightning Protection:

Comprehensive Surge Protection

I/O Option:

4-20 mA Output

Field Wires:

2-Field Wires, 4-20 Loop Powered
4-Field Wires, L&J Tankway
20AWG Minimum

Digital Protocol:

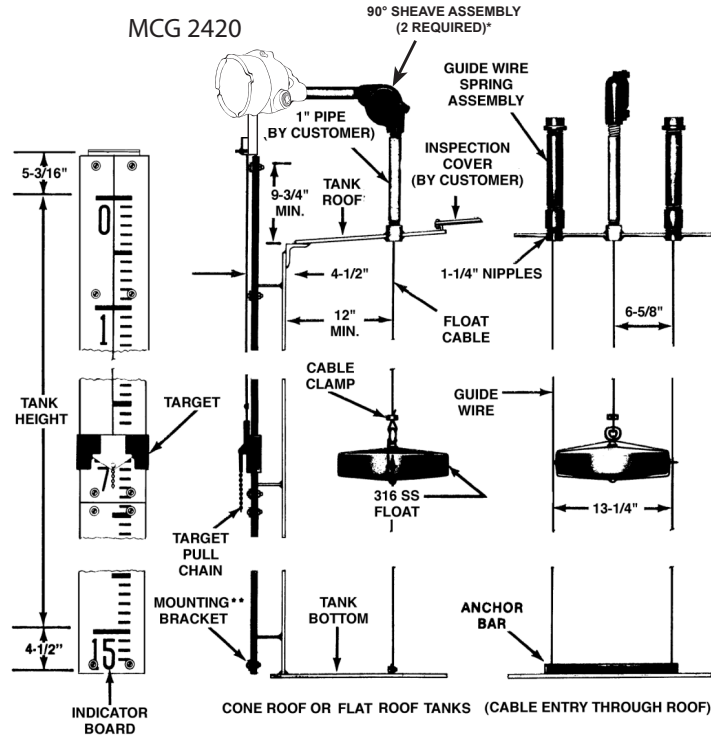
L&J Tankway, HART*

*Other Protocols Available, Consult Factory

Enclosure Rating:

UL - Class I, Groups B, C, & D,
Class II Groups E, F, & G; Class III

Dimensions



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

MCG 2420 Ordering Guide

MCG 2420 Transmitter

Includes: Absolute Magnetic Encoding, Comprehensive Lightning Protection

MCG 2150 Remote Calibrator

(One Required)

Model Number Selection:

The model number will consist of a base number **MCG 2420** followed by 6 digits. These digits will represent 4 sets of option tables:

MCG 2420 - AB - CD - EF - G

A - Encoder Type	
0	Standard encoder

B - Coupling	
0	S&J 92302 / 92303 (With New 92302)*
1	S&J 92302 / 92303 (Existing Installation)**
2	Varec 6700

* Must purchase 92302 with Kit No. 8A.

** Must use tape entirely and no leader cable.

CD - Reserved	
00	Reserved

EF - Output*	
00	4-20 mA Output (2-Wire Loop Powered)
01	L&J Tankway (4-Wire 48V DC Powered)
02	HART (2-Wire Loop Powered)

*Other outputs available, Consult Factory.

G - Calibration Display*	
0	With Calibration Display
1	Without Calibration Display

811693 - Calibration Display Only

*Calibration display needed to calibrate gauge.