

Magnetostrictive Level Transmitter

Model: MGT-6000

For Magnetic Liquid Level Indicators



Description

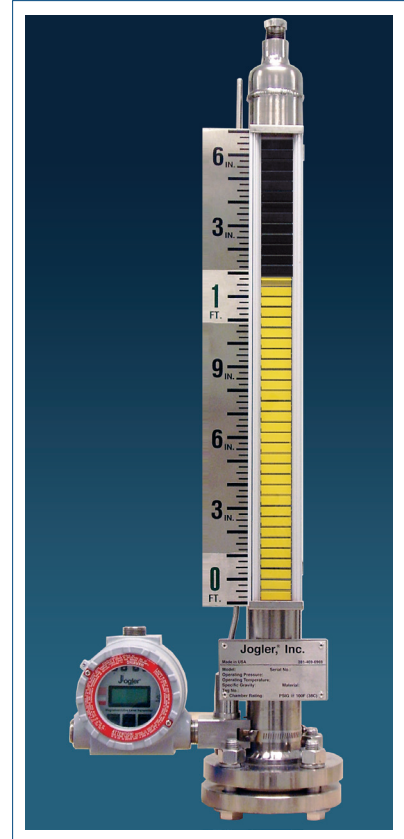
Jogler's MGT-6000 series liquid level transmitter is the latest development in magnetostrictive liquid level sensing technology that is designed exclusively for magnetic level indicators. The MGT-6000 contains a low profile waveguide that is mounted away from the level gage chamber. This design isolates the dual sealed waveguide from excessive vibration and temperature. From enhanced sensor technology, the output signal is very sensitive, fast, stable and accurate. The MGT-6000 can be mounted and retrofitted to most magnetic liquid level indicators.

Technology

The **MGT-6000** contains three elements; the transmitter head, sensor pickup and waveguide probe. It uses the magnetic field that emanates from the internal float to produce an electronic level signal output. A low energy pulse generated by the transmitter electronics spans the waveguide probe and determines a base time-of-flight interval. As the internal float reacts to liquid level fluctuations within the chamber, the magnetic field deflects the waveguide sensing wire. When this occurs, the time-of-flight interval changes which is detected by the transmitter sensor pickup and converts the deflection to an electrical signal. The transmitter electronics recalculates a proportional signal output relative to the level elevation. The primary benefits are the entire transmitter assembly remains non-invasive to process conditions and can be field checked without disruptions or exposure to operations.

Standard Features

- 24 VDC nominal, two wire, loop powered
- LCD display in 4-20 mA, in/cm and/or percent output signal
- Local and remote detection for total or interface elevations
- HART protocol field communication
- Local programmability allows for easy parameter changes
- Quick-Cal function for simple recalibration to any span
- Non wetted, dual sealed 316 SS low profile waveguide
- Isolated from excessive process temperature & vibration
- Top, bottom or remote transmitter head mounting locations
- Short offset mounting dimension of 7.00 inches
- Accuracy of 0.01% of total span from enhanced sensitivity
- Very durable with a strong, stable & noise free output
- State of the art sensor and transmitter electronics
- Unique transmitter puck design for ease of installation
- Maximum transmitter length of 20 feet
- Will retrofit to most magnetic level indicators
- Capable of extreme process operating temperatures
- Explosion proof housing, NEMA Type 4X
- Class I, Division 1, Groups B, C, D
- Class II, Division 1, Groups E, F, G: Class III



Magnetostrictive Level Transmitter

Model: MGT-6000

For Magnetic Liquid Level Indicators



Specifications:

Performance

- Accuracy +/- 0.015 inches
- Repeatability 0.001% of full span
- Linearity 0.020% of full span
- Refresh Rate 10x per second
- Initiation 0.00 seconds
- Damping 0.00 to 1.00 @ 0.01 seconds
- 1.00 to 25.0 @ 1.00 seconds
- Upper 3.00 inch @ probe end
- Lower 7.00 inch (Head Inclusive)

Electrical

- Input 12-30 VDC (24 VDC nominal)
- Output 4-20 mA, percent, and/or height in/cm
- Resistance 600 Ohms (max) @ 24 VDC
- Power 0.66 watts (30 VDC x 0.022 amps)
- Error Signal 3.60 mA (low) or 22.0 mA (high)
- Interface 3 button keypad
- Software HART or PACT
- Display 2 line, 8 character LCD
- Connection 0.75 inch FNPT (Conduit)

Ratings

- MAWP: Not applicable (non-invasive)
- Ambient Temp. -40° to +160° F (-40° to +71° C)
- Process Temp. -150° to +400° F (-100° to +204° C)
- Area Rating: Class I, Division 1, Groups B, C, D
- Class II, Division 1, Groups E, F, G
- Class III
- Enclosure: NEMA Type 4X

Ordering Information

Model Number: MGT6-CL-MP-X

CL Connection or Span Length (inches/cm)

MP Mounting Position (TM = Top, BM = Bottom,

RM = Remote)

X Options

