MW05 MagWave Magnetic Level Gauge

Dual chamber level system K-TEK Products



Multiple Chamber Styles

- 24 Preconfigured Styles Plus Custom Styles
- Left Hand or Right Hand Mounted Secondary Chambers
- Capped or Flanged Secondary Chamber Connections
- 2, 3, or Multiple Process Connections

Secondary Chamber Sizes to Suit the Application

- 1-1/2 inch Schedule 10 Standard
- 2, 2-1/2, 3 and 4 inch Sizes
- Schedule 10, 40 or 80 Welded or Seamless

Variety of Chamber Materials

- 304SS, 316SS, Hastelloy C-276, Alloy 20, Other Nonmagnetic Metals
- Teflon "S" Coated Chambers for Slip Resistance.

Chamber Configurations to Fit Process Connections

- Custom Manufactured for Every Installation
- Side Side
- Top Side
- Side Bottom
- Top Bottom

Unlimited Range of Connection Sizes and Ratings

- 1/2 inch Threaded Half Couplings to 2-1/2 inch 1500#
 Flanges and Beyond
- ANSI, DIN and Other Flanges
- Matched to Customer Specified Connections
- Carbon Steel Flanges on Stainless Steel Chambers

Highly Visible Indicators

- Fluorescent and High Temperature Shuttle Indicators
- Yellow & Black Magnetic Bargraphs
- Red & White Magnetic Bargraphs

Made to Order Rulers

- Foot and Inch
- Running Inches
- Negative to Positive Numbering
- Meter / centimeter
- Custom Made for Percent or Volume

Custom Built Lengths

- Connection Centers to 40 feet (12.2 meters)
- No "Off the Shelf" systems
- Full Measurement Range

Accessories

- Magnetically Actuated Switches
- Magnetostrictive Transmitters
- High Temperature Insulation Blankets
- Cryogenic Insulation
- Vent, Drain, and Isolation Valves
- Electric and Steam Tracing



Power and productivity for a better world™ **Compact Close Coupled Chambers**



2 MW05 Magnetic Level Gauge | Data sheet

MagWave

No Need For Coaxial Probes

- A Single Probe in the 1-1/2 inch Secondary Chamber provides the same measurement capabilities as a coaxial probe
- The small internal space of a coaxial style probe is very susceptible to fouling in dirty fluid
- Coaxial probes have small holes that are prone to fouling causing false level readings
- If the single probe does encounter build up, it can be easily removed from the chamber for cleaning

Why Separate Chambers?

Putting a GWR and a float in a single chamber requires larger pipe sizes, larger flange sizes, and a separation plate between the float and the GWR coaxial probe.

Single Chambers result in:

- Extra parts in the float chamber which can obstruct float travel
- Increased "footprint" of the entire system
- Increased cost of the system
- Increased weight of the system
- Remote mounting of GWR electronics when top connections to the system are required
- Limited access to the float's magnetic field





MagWave



Guided Wave Radar

Multiple Wetted Part Materials

- Standard 316SS
- Hastelloy C-276
- Hastelloy B3
- Monel
- Titanium

Couplers Suited to the Process

- Standard
 1500 psi @ 100 F (103bar @ 38 C)
 600 psi @ 400 F (41 bar @ 204 C)
- High Pressure 3000 psi @ 100 F (207bar @ 38 C) 1200 psi @ 400 F (83bar @ 204 C)
- High Pressure/Temperature
 5000 psi @ 100 F (344bar @ 38 C)
 1500 psi @ 800 F (103bar @ 427 C)
- Saturated Steam
 2000 psi @ 635 F (138bar @ 335 C)

Modular Electronics

- LCD Display
- HART Communications
- Honeywell DE
- Level and Interface Measurement

Dual Compartment Housings

- Powder Coated Aluminum Standard
- Stainless Steel
- Solid Covers or Viewing Windows
- Built in RFI Protection

Single Probe Waveguides

- 3/16 inch Cables
- 1/4 inch and 1/2 inch Rigid Rods

Hazardous Area Approvals

• FM Factory Mutual

XP / I / 1 / ABCD / T6 DIP / II, III / 1 / EFG / T6 IS / I / 1 / CD / T4 NI / I / 2 / ABCD / T4 Type 4X

- Ta = 77C Ta = 77C Ta = 77C - ELE1014 Ta = 77C
- CSA Canadian Standards Association
 XP CL1 Div 1 GP ABCD
 - CL II GP G & Coal Dust (Exia) Associated Equip., Provides I.S. Output to Sensor IS CL I Div 1 GP CD T4
 - CLI Div 2 GP ABCD CLII Div 2 GP G & Coal Dust when installed per ELE1014

ATEX Flameproof

II 1/2 GD EExd IIC T6 (80°C) Tamb +66°C; 02 ATEX 131713

• ATEX Intrinsically Safe II 1 GD EEx ia IIB T6 (80°C) Tamb +66°C; 02 ATEX 131712

WE'VE GOT





P12 Probe

C2 Coupler

Contact us

ABB Inc.

18321 Swamp Road Prairieville, LA 70769 USA Phone: +1 225 673 6100 Service: +1 225 677 5836 Fax: +1 225 673 2525 Service e-mail: service@us.abb.com

www.abb.com/level

Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts - is forbidden without prior written consent of ABB.

Copyright© 2012 ABB All rights reserved



