

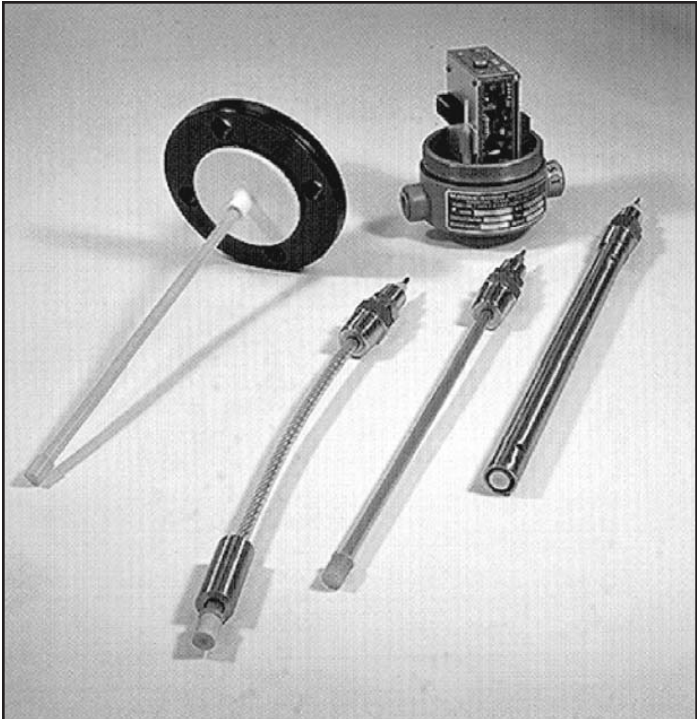


Specialists in Liquid Level Indication

Installation, Operation and Maintenance for

300 Series RF Capacitance Level Transmitter

Section: JS100
Bulletin: JS100.42
Date: 10/1/04



OPERATION

The 300 Series RF level transmitter is designed for continuous level measurement in conductive and non-conductive liquids, slurries, interface applications, and is ideal for measuring granular materials.

Standard features include adjustable output dampening and coating rejection circuitry. The adjustable dampening feature stabilizes the output in demanding turbulent applications. The 300 Series utilizes phase shift circuitry to minimize the effects of conductive processes that have a tendency to coat the sensing probe causing measurement errors. The zero span adjustments are non-interacting for easier calibration and the 4-20mA output is field-selectable for direct or reverse acting operations.

The 300 Series may be used within any Jerguson rigid probe or flex-probe. The transmitter is usually supplied integral to the level probe, but for high vibration or extreme temperatures conditions, the transmitter electronics may be remotely mounted up to 25 feet from the level probe. FM or CSA certification options are available only when used with an insulated level probe. See Level Probe brochure for further details.

FEATURES

- Isolated 4-20mA Output
- Coating Rejection Circuitry
- Conductive & Non-Conductive Liquids
- Explosion Proof Enclosure
- Field Selectable Direct or Reverse Acting
- Integral or Remote Mounting
- FM and CSA Available

SPECIFICATIONS

- Operational:**
- Measurement RF Capacitance
 - Span Range..... 10 to 10,000 pF
 - Zero Range 0 to 500pF
 - Temperature Range-40 to 160°F electronics;
..... Wetside -40 to 450°F
 - Pressure Rating..... 1000 PSIG @ 68°F
 - Protection RFI, EMI, and static discharge
 - Power Requirements ... 120 or 240 VAC±10%; 50-60 Hz
..... 18-35 VDC; 0.6 watts
 - Analog Output..... Isolated 4-20mA field-selectable
..... direct or reverse acting
- Output Load:**
- AC line powered..... 600Ω max. load
 - DC line powered 550Ω max. @ 24 vdc
..... 1100Ω max. @ 35 vdc
- Anti-Coat Circuitry Phase shift type

Performance:

- Temperature Stability .. 0.01pF or 0.01% or span /°F
- Linearity 0.5% of full scale
- Output Dampening..... 0.1 to 10 seconds

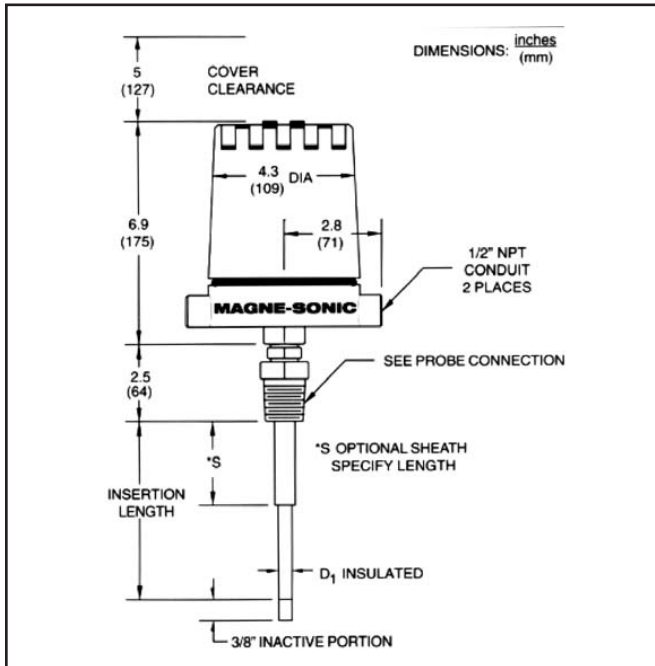
Mechanical:

- Enclosure Cast aluminum, urethane finish
..... Cl. I, Div. 1, Grp. A, B, C & D
- Conduit Connection ... 1/2" NPT 2 places
- Net Weight..... 3.6 lbs. (1.6 kg) approximately

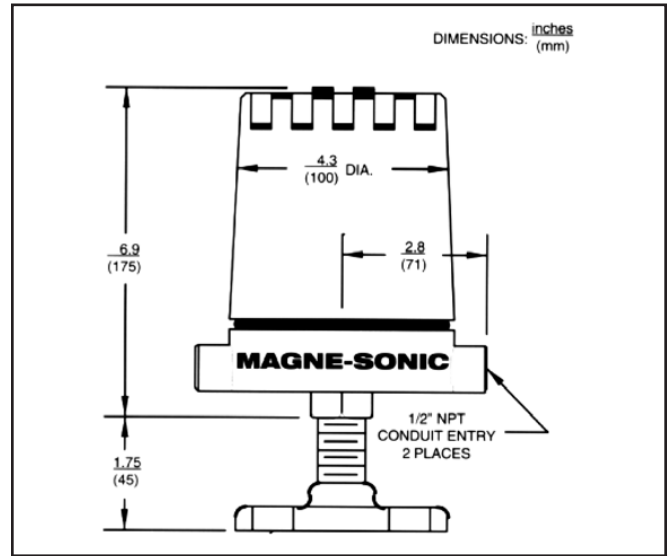


JERGUSON® GAGE AND VALVE
A Division of The Clark • Reliance® Corporation
16633 Foltz Industrial Parkway • Strongsville, OH 44149 USA
Telephone: (440) 572-1500 • Fax: (440) 238-8828

INTEGRAL MOUNTING



REMOTE MOUNTING



CODE	REMOTE ELECTRONIC OPTIONS
JRL99	Low temp. (160°F max.) – specify in feet
JRH99	High temp. (450°F max.) – specify in feet

MODEL SELECTION GUIDE

CODE	ELECTRONICS						
31	Capacitance Transmitter, 115 VAC 50/60 Hz Powered, Isolated 4-20mA Output						
34	Capacitance Transmitter, 24 VDC Three Wire, Isolated 4-20mA Output						
CODE	ELECTRONIC OPTIONS						
0	None – For use with standard electronics above						
CODE	PROBES	CONNECTION	D ₁				
G	General Purpose	3/4" NPT	3/8"				
H	Heavy Duty	1" NPT	5/8"				
E	Enhanced High Gain Probe, PTFE Insulated	3/4" NPT	9/16"				
F	Flex-Probe, Flexible Cable	3/4" NPT	1/2"				
CODE	WETTED MATERIAL						
S	316 Stainless Steel – NPT Connection and Probe						
H	Hastelloy – NPT Process Connection						
CODE	INSULATION MATERIAL						
T	Teflon – For most applications						
K	Kynar – Increased gain for low dielectric service						
CODE	PROBE INSERTION LENGTH						
99	Specify in inches ("F" probes specify in feet)						
CODE	MOUNTING						
00	Standard NPT as noted above (flanges available)						
CODE	OPTIONS						
	Add Options as Required						
J34	0	G	S	T	48	00	TYPICAL MODEL NUMBER

