MAGNETROL®

Eclipse Guided Wave Radar Level Application Questionnaire

(Please fill out front and back.)

REFERENCE INFORMATION

Customer/Company: _____

City, State, Country: _____ SIC: _____ Date: _____

Contact/Title: _____

Phone: _____ Fax: _____ E-mail: _____

RFQ Number: _____ P. O. Number: _____

Tag Number(s): _____

Submitted by: Rep Agency and Salesperson _____ Rep Code: _____

FOR OFFICE USE:

INSTRUMENT

Model Number: Electronics 7 0 5 — 5 — Quantity: _____

Sensor/Probe 7 — —

When Probe Models 7XB, 7XF, 7XJ, 7X1, 7X2, 7X5, and 7X7 are ordered, Figures 1 & 4 on back must be completed. Torque tube replacements must confirm flange dimensions on back (Figure 2).

PROCESS DATA

Process Name/Description: _____

Process Media: _____

Steam present: ☐ Yes ☐ No If yes, use Aegis PF128 O-ring or 7XS steam probe

☐ Liquid: % Concentration _____ ☐ Slurry % Solids _____

Process Temperature: ☐ AMB _____ min. _____ max. ☐ ° F ☐ ° C ☐ Other

Process Pressure: ☐ ATMOS _____ min. _____ max. ☐ PSIG ☐ Bar ☐ KPA ☐ Other

Temperature at Instrument: ☐ AMB _____ min. _____ max. ☐ ° F ☐ ° C ☐ Other

Media Constants: Dielectric Constant: _____ Conductivity: _____ (µ siemen/cm) Varies? ☐ No ☐ Yes, from _____ to _____

☐ Interface Dielectric of lower material: _____ Emulsion Layer: ☐ No ☐ Yes (If yes, thickness: _____)

Viscosity: _____ Centipoise @ Temperature _____ ☐ °F ☐ °C

Will media coat probe? ☐ No ☐ Yes: ☐ Film or ☐ Bridging ☐ Solids % Moisture: _____ Bulk Density: _____

Environment: ☐ Normal ☐ Corrosive ☐ Salt ☐ Flood Maximum Viscosity: _____ centipoise

Agency: ☐ FM ☐ CSA Area Classification: ☐ General Purpose (Nema 4X) ☐ Hazardous: Cl_____ Div_____ Group ___

☐ ATEX EEx Hazardous Area Design: ☐ Explosion-proof ☐ Intrinsically Safe ☐ Nonincendive ☐ SIL 2 ☐ Other

Remote Instrument (if applicable): _____

Required Materials of Construction: _____

Vessel Type: ☐ Vertical Cylindrical ☐ Horizontal Cylindrical ☐ Sphere ☐ Sump/Pit ☐ O.C.F. ☐ Other _____

Vessel Size: Height _____ Width _____ Diameter _____ Unit of Measure _____

Tank Material of Construction: ☐ Metal Lined: ☐ Yes ☐ No Coated: ☐ Yes ☐ No ☐ Plastic ☐ Concrete

Type of Filling: ☐ Top ☐ Bottom ☐ Side (At what level? _____)

Liquid Surface: ☐ Calm ☐ Moderate Turbulence ☐ Vortex ☐ Flowing Foam Present: ☐ Yes ☐ No

Does liquid boil and/or flash: ☐ Yes ☐ No

Agitation: ☐ No ☐ Yes ☐ During Filling ☐ During Emptying ☐ Between Fill and Empty # and Size of Blades _____ RPM _____

Other Objects in Vessel: ☐ No ☐ Yes _____ (Include sketch on back.)

Minimum distance from probe rod to any metallic object (i.e., nozzle, tank wall, ladder, etc.): _____

Foundation Fieldbus Host System: _____

PERFORMANCE

Measurement requirement (with respect to the bottom of the vessel):

What is the maximum level height of the material?: _____ Unit of Measure: _____

What is the minimum level height of the material?: _____ Unit of Measure: _____

The typical operating level is _____ Unit of Measure: _____

Accuracy Required:

During filling: _____ % During emptying: _____ %

When level is stationary: _____ %

When level is stationary and agitated: _____ %

High Level Shutdown/Overfill Protection

Special consideration is necessary in any application for High Level Shutdown/Overfill protection. To ensure proper measurement, use the 7XR or 7XD probe, or install all other probes so the maximum overfill level is a minimum of 6" (150mm) below the process connection. This may include utilizing a nozzle or spool piece to raise the probe. Consult factory for further information.

FIGURE 1

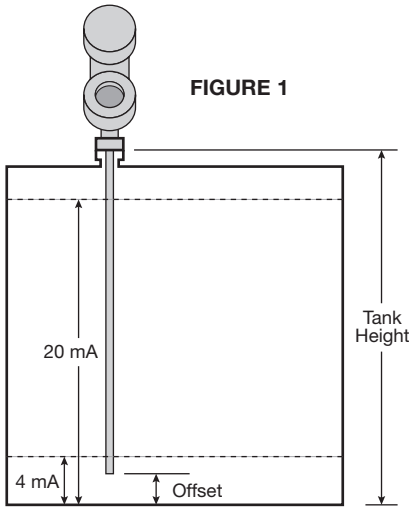
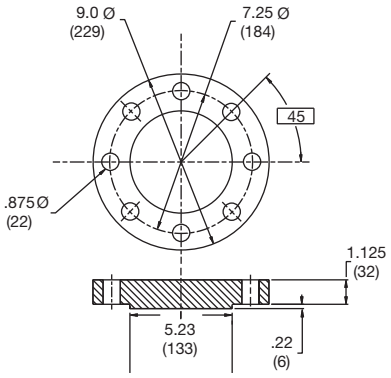
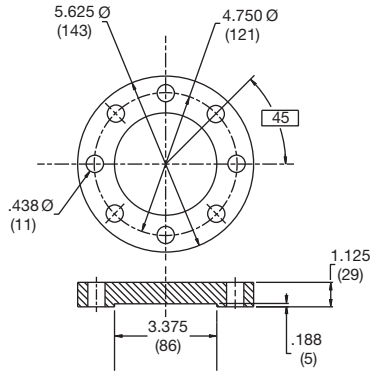


FIGURE 2 - NON-ANSI FLANGES

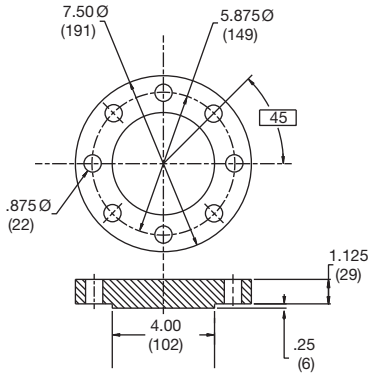
When attempting to mate to an existing torque tube transmitter cage flange, confirm flange dimensions below.



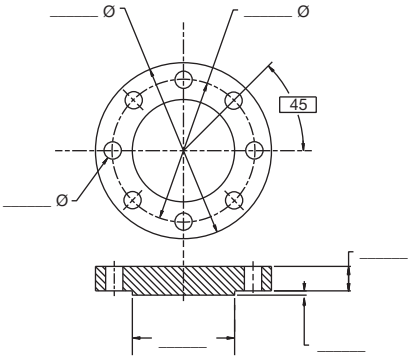
☐ Fisher 249B/259B (600 lb.), carbon steel



☐ Fisher 249C (600 lb.), 316 stainless steel



☐ Masoneilan (600 lb.), carbon steel

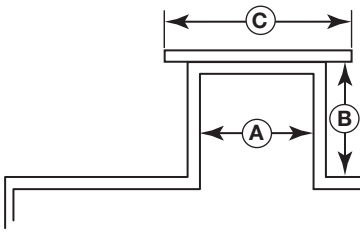


☐ Other (Provide Dimensions)

FIGURE 3 - RECOMMENDED SINGLE ROD PROBE CLEARANCE TABLE

Distance to Probe	Acceptable Objects
< 6"	Continuous, smooth, parallel conductive surface, for example a metal tank wall; important that probe does not touch wall
> 6"	<1" (25mm) diameter pipe and beams, ladder rungs
> 12"	<3" (75mm) diameter pipe and beams, concrete walls
> 18"	All remaining objects

FIGURE 4 - NOZZLES – Single Rod Probes



NOTES

1. **(A) divided by (B) should be ≥ 1 for optimum performance.**

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