



# Eclipse® 706 Guided Wave Radar Level Application Questionnaire

(Please complete both pages.)

**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 6 — 5       —       Quantity: \_\_\_\_\_

Sensor/Probe 7     —         —       —     —      

Notes: 1. When single rod probe models 7yF, 7yM, 7yN, 7y1, 7y2, 7y5, and 7y7 are ordered, Figures 4 must be completed.  
 2. Torque tube replacements must confirm flange dimensions in Figure 2.  
 3. Customer is responsible for material compatibility.

**PROCESS DATA - NOTE: FOR COMPLETE PRE-CONFIGURATION SHADED AREAS MUST BE COMPLETED**

Process Name/Description: \_\_\_\_\_  
 Process Media: \_\_\_\_\_  
 Steam present:  Yes  No If yes, use Aegis PF128 O-ring or 7yS 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: \_\_\_\_\_ Construction Code:  Industrial  ASME B31.1  ASME B31.3  
 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  
 Does the process contain higher dielectric "water-bottoms that need to be ignored?"  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: \_\_\_\_\_

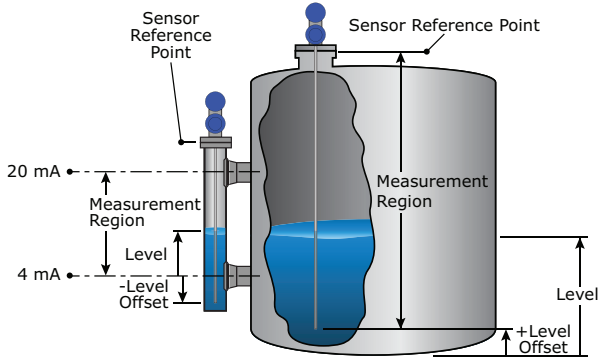
**PERFORMANCE**

Measurement requirement (with respect to the bottom of the vessel):  
 What is the maximum level height of the material?: \_\_\_\_\_ 4mA (0%) point is: \_\_\_\_\_  
 What is the minimum level height of the material?: \_\_\_\_\_ 20mA (100%) point is: \_\_\_\_\_  
 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**

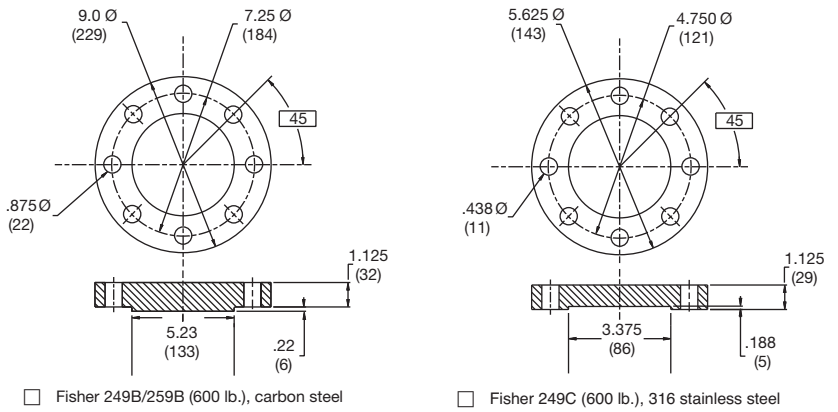
Special consideration is necessary in any application for High Level Shutdown/Overfill protection. To ensure highest measurement, accuracy, use an Overfill capable probe, or install all other probes so the maximum overfill level is a minimum of 6" (150mm) below the process connection. This may include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

**FIGURE 1**



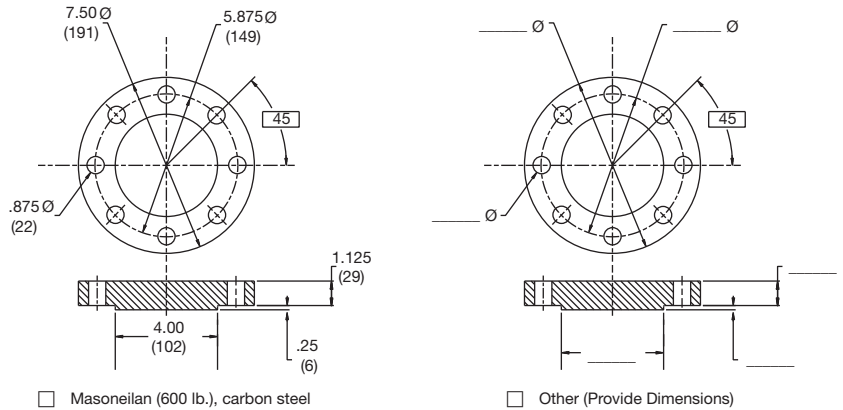
**FIGURE 2 - NON-ANSI FLANGES**

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



Masonellan (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**

