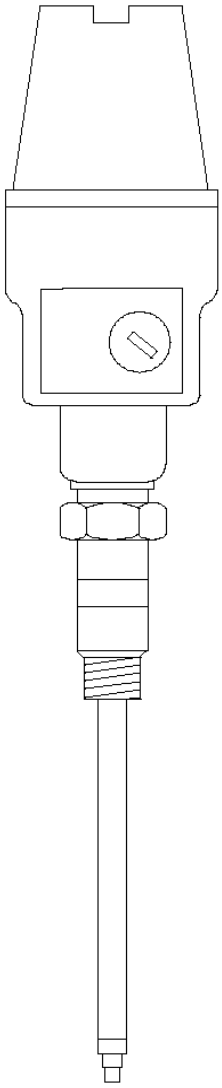
21000, 24701, and 164818 Proximity Probe Housing Assemblies

Datasheet

Cordant™

141600 Rev. AC



Description

To externally mount proximity probes, use one of these all-metal Proximity Probe Housing Assemblies:

- 21000 aluminum probe housing assembly
- 24701 stainless steel probe housing assembly

The 21000, 24701, and 164818 Proximity Probe Housing Assemblies consist of the following parts:

- A dome cover that screws into the body of the housing
- Threaded ports for conduit connections
- A probe sleeve of optional length
- O-rings
- A reverse mount proximity probe
- A thread seal
- Optional conduit fittings
- An optional standoff adapter

A newer 31000/32000 proximity probe housing assembly is available with more flexible mounting options, better environmental resistance, and other improved features. We recommend this proximity probe housing assembly for installations where an explosion proof housing is not required. See 31000 and 32000 Proximity Probe Housings product datasheet (document 141610).

The 21000, 24701, and 164818 Proximity Probe Housing Assemblies are available with Canadian Standards Association (CSA) approvals. They are rated explosion proof for hazardous areas.

C US

Baker Hughes

You can order hazardous area approved proximity probes with 21000 aluminum and 24701 stainless steel housings for intrinsically safe applications. Both housings are certified as CSA Type 4 enclosures and are fully compliant with the American Petroleum Institute's (API) 670 Standard for externally mounted proximity probe housings.

The 164818 Compact Proximity Probe Housing is also available for applications with space restrictions. Ceramic capped probes are available with the 164818 housing.

Sleeve length is determined by the location in which the probe and housing are installed. The probe lead must be longer than the sleeve. Sleeve lengths longer than 304 mm (12 inches) require additional sleeve support to reduce the vibration associated with unsupported long sleeve lengths.

Bently Nevada offers a probe support and oil seal (part number 37948-01) for long sleeves that must go through an inner bearing housing. We also make custom sleeve supports.

Related Documents

For probe information, refer to the following manuals:

- *3300 XL 8mm & 3300 5mm Proximity Transducer System User Guide* (document 141078)
- *3300 XL NSv Proximity Transducer System User Guide* (document 147357)
- *3300 XL 11mm Proximity Transducer System Installation* User Guide (document 146255)
- *Radiation Resistant Probe and Proximitor System* (document TW8029407)

Specifications

Environmental

Temperature Range

3300 XL 8mm Probe	
Operating and storage	-51°C to +177°C (-60°F to +351°F)
3300 XL 11mm Probe	
Operating and storage	-51°C to +177°C (-60°F to +351°F)
3300 NSv Probe	
Operating	-34°C to +177°C (-30°F to +351°F)
Storage	-51°C to +177°C (-60°F to +351°F)

CAUTION

EQUIPMENT DAMAGE

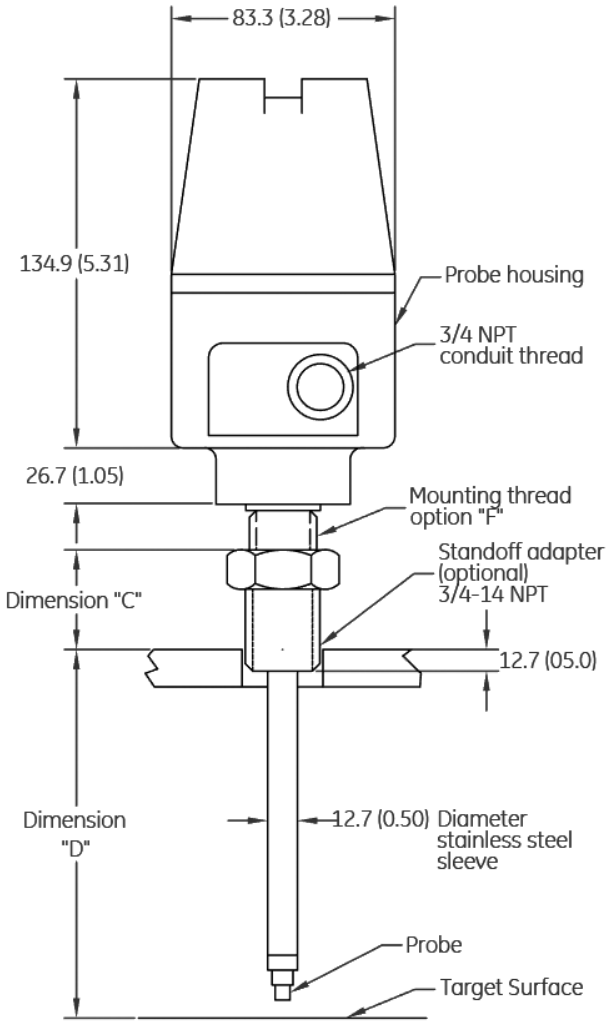
Exposing 3300 XL or 3300 NSv probes to temperatures below -34°C (-30°F) may cause premature failure of their pressure seals.

Mechanical

Material	
21000	Aluminum body with 304 stainless steel sleeve
24701	303 stainless steel body, with 304 stainless steel sleeve
Mass (Weight)	
21000	1.1 kg (2.4 lb) typical, without fittings
24701	1.8 kg (4.1 lb) typical, without fittings

Monitor Module	1 full-height front slot
I/O Modules	1 full-height rear slot

Graphs and Figures



Probe Cable Length	Maximum (C) + (D) with visible probe (P/N and S/N)	Maximum (C) + (D) Dimension
12 in	Not visible	5.0 in (12.7 cm)
18 in	4.0 in (10.1 cm)	10.5 in (26.6 cm)
24 in	9.7 in (24.6 cm)	16.1 in (40.9 cm)
30 in	15.4 in (39.1 cm)	21.7 in (51.1 cmm)
36 in	21.1 in (53.6 cm)	27.3 in (69.3 cm)
0.5 m	Not visible	13.5 in (34.3 cm)
1.0 m	17.0 in (43.18 cm)	32.9 in (83.5 cm)

Figure 1: 21000/CA21000 Proximity Probe Housing Assembly

Dimensions are in millimeters (inches).

Tables

Table 1: For Figure 1, Dimensions in mm (inches).

Catalog Number	Dimension			
	A	**B**	**C and D**	**E**
21000	83.3 (3.28)	161.6 (6.36)	See Ordering Option C & D	26.7 (1.05)
24701	78.2 (3.08)	151.9 (5.97)	See Ordering Option C & D	27.9 (1.10)

Table 2: Maximum Length of C and D Dimension for Proximity Probes

Probe Cable Length	Maximum C and D Dimension
0.5 meter (3300 Series)	343 mm (13.5 in)
1.0 meter	742 mm (29.2 in)

Table 3: Maximum C and Dimension with Standard P/N and S/N Label (non-flag label)

Probe Cable Length	Maximum C and D Dimension
0.5 meter	Not visible
1.0 meter	432 mm (17 m)