

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

24701-00-00-15-037-04-02

STAINLESS-STEEL PROXIMITY PROBE HOUSING ASSEMBLY WITHOUT PROBE

Used with the applicable 24701 Proximity Probe Housing Assembly system configuration.

REFERENCE PACKAGE

Selected official pages follow this cover with source pagination retained.

OFFICIAL DOCUMENT

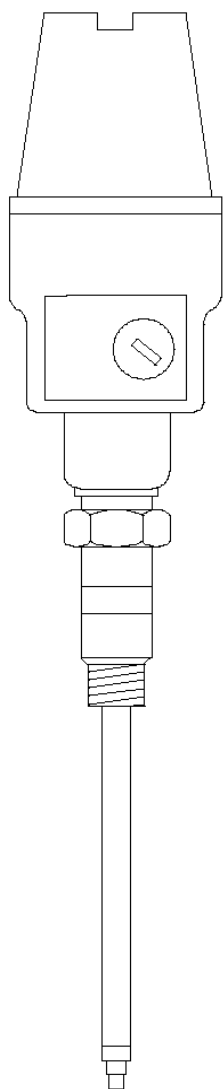
141600 Rev. AC

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.



Examples

3.7 in (94 mm) = **037**

22.4 in (569 mm) = **224**



Probe P/N and S/N may be displayed on a flag label for some combinations of the C plus D options where only a small section of the probe cable is visible.



For probe penetration lengths between 1.0 and 2.0 inches, it may be necessary to counter bore the machine case to reduce probe side view or rear view effects.



If you select a probe penetration length (C plus D) greater than 300 mm (12 in), you must add sleeve support near the probe to prevent resonance from occurring. Adjustment range of probe penetration option D is 13 mm (± 0.5 in). For the maximum value of C plus D, see [Figure 1: 21000/CA21000 Proximity Probe Housing Assembly on page 16](#).

E: Fittings

00	Without fittings
01	One 3/4-14 NPT explosion-proof fitting One 3/4-14 NPT plug
02	Two 3/4-14 NPT explosion-proof fittings
03	One 3/4-14 NPT plug One 3/4-14 to 1/2-14 NPT reducer One cable seal grip with grommets for the following cable sizes: • 1/8 to 3/16 inches • 1/4 to 5/16 inches • 5/16 to 3/8 inches
04	One 3/4-14 NPT plug only



Although explosion-proof fittings are available for all housings, only CA versions of the housing are rated as explosion-proof by CSA when ordered with the **E:00**, **E:01**, **E:02**, or **E:04** options.

F: Mounting Thread

01	As cast without threads
	3/4-14 NPT
02	Must be ordered if Standoff Adapter Length option is not 00 .
04	1/2-14 BSP

24701-AA-BB-CC-DDD-EE-FF

A: Probe with Connector

00	Probe not required
14	420 nuclear
16	3300 XL 8mm probe
26	3300 XL NSv probe
27	3300 XL NSv probe, with approval option
28	3300 XL 8mm, with approval option
29	3300 XL 11mm
30	3300 XL 11mm, with approval option
31	3300 XL NSv with connector protector
32	3300 XL NSv with connector protector and approval option
33	3300 XL 8mm with connector protector
34	3300 XL 8mm with connector protector and approval option

35	3300 XL 11mm with connector protector
36	3300 XL 11mm with connector protector and approval option
37	3300 XL 8mm ETR, with approval option

B: Probe Cable Length

00	Probe cable not required
05	20 in (0.5 m)
10	39 in (1.0 m)
12	12.0 ft (3.6 m)
18	18.0 ft (3.6 m)
24	24.0 ft (7.3 m)
30	24.0 ft (7.3 m)
36	36.0 ft (10.9 m)

C: Standoff Adapter (Option C Dimension)

15	Minimum length 1.5 in (38 mm)
75	Maximum length 7.5 in (191 mm)
	Examples 1.5 in (38 mm) = 15 No standoff adapter = 00
	Recommendation Order in increments of 0.5 in (13 mm)

D: Probe Penetration (Option D Dimension)

010	Minimum length 1.0 in (25.4 mm)
Other	See Figure 2: 24701/CA24701 Proximity Probe Housing Assembly on page 17 .

Example

3.7 in (94 mm) = **037**
22.4 in (569 mm) = **224**

Recommendation

Order in increments of 0.1 in (3 mm)



Probe P/N and S/N may be displayed on a flag label for some combinations of the C plus D options where only a small section of the probe cable is visible.



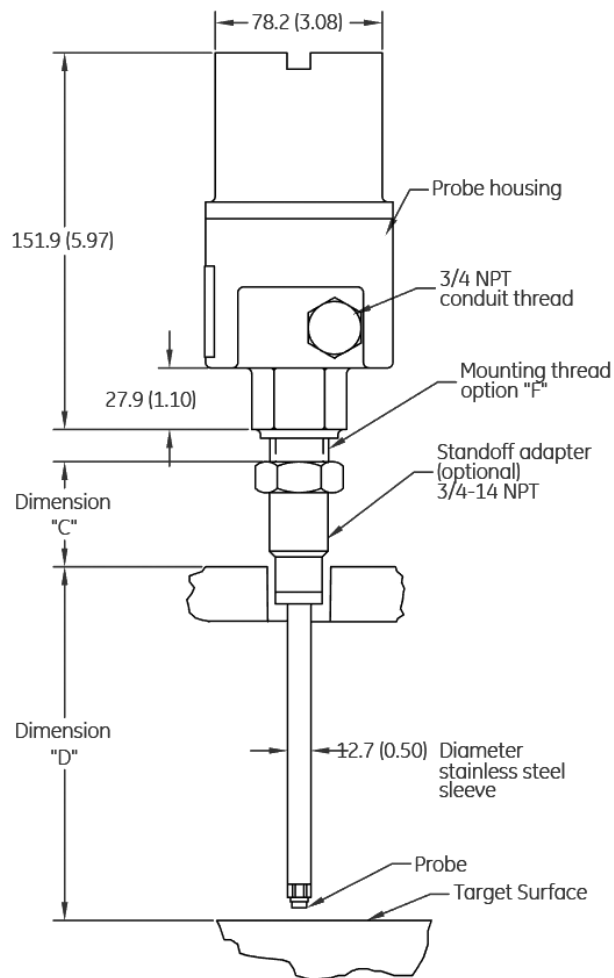
For probe penetration lengths between 1.0 and 2.0 inches, it may be necessary to counter bore the machine case to reduce probe side view or rear view effects.



If you select a probe penetration length (C plus D) greater than 300 mm (12 in), you must add sleeve support near the probe to prevent resonance from occurring. Adjustment range of probe penetration option D is 13 mm (± 0.5 in). For the maximum value of C plus D, see [Figure 2: 24701/CA24701 Proximity Probe Housing Assembly on page 17](#).

E: Fittings

00	Without fittings
01	One 3/4-14 NPT explosion-proof fitting One 3/4-14 NPT plug
02	Two 3/4-14 NPT explosion-proof fittings



24701/CA24701 Dimensions

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 mm)
18 in	4.0 in (10.1 cm)	10.5 in (26.6 mm)
24 in	9.7 in (24.6 cm)	16.1 in (40.9 mm)
30 in	15.4 in (39.1 mm)	21.7 in (51.1 mm)
36 in	21.1 in (53.6 mm)	27.3 in (69.3 mm)
0.5 m	Not visible	13.5 in (34.3 mm)
1.0 m	17.0 in (43.18 mm)	29.2 in (74.2 mm)

Figure 2: 24701/CA24701 Proximity Probe Housing Assembly

Dimensions are in millimeters (inches).