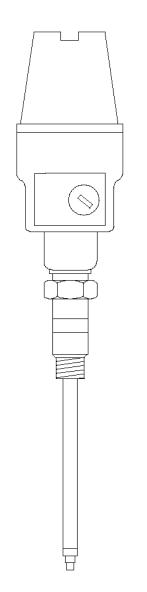
# 21000 and 24701 Proximity Probe Housing Assemblies

# Datasheet

Bently Nevada Machinery Condition Monitoring

141600 Rev. Y



# Description

To externally mount proximity probes, use one of these allmetal Proximity Probe Housing Assemblies:

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

The21000 and 24701 Proximity Probe Housing Assembliesconsist 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).

The21000 and 24701 Proximity Probe Housing Assembliesare available with Canadian Standards Association (CSA) approvals. They are rated explosion proof for hazardous areas.





21000 and 24701 Proximity Probe Housing Assemblies Datasheet

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 InstallationUser Guide (document 146255)
- Radiation Resistant Probe and Proximitor System(document TW8029407)



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# 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 bod with 304 stainless stee 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



# Compliance and Certifications RoHS

European Community Directive:

RoHS Directive 2011/65/EU

## **Hazardous Area Approvals**

For the detailed listing of country and product-specific approvals, refer to the *Approvals Quick Reference Guide* (108M1756).

For additional technical documentation, please log in to <u>bntechsupport.com</u> and access the Bently Nevada Media Library.

### 21000 and 24701

CA21000 and CA24701 housings are certified by CSA for explosion-proof applications in the following areas:

North America	Class I Divisions 1 and 2 Groups C and D
	Class II Divisions 1 and 2 Groups E, F, and G
	Circuit is non-incendive when connected per drawing 140979
	Class III
	Enclosure Type 4
	T5 @ Ta = -50°C to +40°C T4 @ Ta = -50°C to +80°C

CA housings can only be ordered for North American End Users. For all other end user countries, housings 21000 and 24701 must be ordered.



For the detailed listing of country and product-specific approvals, refer to the *Approvals Quick Reference Guide* (108M1756).

For additional technical documentation, please log in to bntechsupport.com and access the Bently Nevada Media Library.

#### Proximity Probe Housing Assemblies

#### 21000-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, selectable hazardous area approvals	
28	3300 XL 8mm probe, selectable hazardous area approvals	
29	3300 XL 11mm probe	
30	3300 XL 11mm probe, selectable hazardous area approvals	
31	3300 XL NSv probe with connector protector	
32	3300 XL NSv probe with connector protector, selectable hazardous area approvals	
33	3300 XL 8mm probe with connector protector	
34	3300 XL 8mm probe with connector protector, selectable hazardous area approvals	

35	3300 XL 11mm probe with connector protector	
36	3300 XL 11mm probe with connector protector, selectable hazardous area approvals	
37	3300 XL 8mm probe, ETR, selectable hazardous area approvals (available for 21000 only)	
B: Probe	e Cable Length	
00	Probe cable not required	
05	0.5 m (20 in)	
10	1.0 m (39 in)	
12	12.0 in	
18	18.0 in	
24	24.0 in	
30	30.0 in	
36	36.0 in	
C. Stand	doff Adapter (Option C Dimension)	
C. Stand		
15	Minimum length 1.5 in (38 mm)	
15	Minimum length 1.5 in (38 mm)	
15	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm)	
15	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) Recommendation	
15	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) <b>Recommendation</b> Order in increments of 0.5 in (13 mm)	
15 75	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) Recommendation Order in increments of 0.5 in (13 mm) Examples 1.5 in (38 mm) = 15	
15 75	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) <b>Recommendation</b> Order in increments of 0.5 in (13 mm) <b>Examples</b> 1.5 in (38 mm) = <b>15</b> No standoff adapter = <b>00</b>	
15 75 D: Probe	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) Recommendation Order in increments of 0.5 in (13 mm) Examples 1.5 in (38 mm) = 15 No standoff adapter = 00 Penetration (Option D Dimension)	
15 75 D: Probe	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) Recommendation Order in increments of 0.5 in (13 mm) Examples 1.5 in (38 mm) = 15 No standoff adapter = 00 Penetration (Option D Dimension)	
15 75 D: Probe	Minimum length 1.5 in (38 mm) Maximum length 7.5 in (191 mm) <b>Recommendation</b> Order in increments of 0.5 in (13 mm) <b>Examples</b> 1.5 in (38 mm) = <b>15</b> No standoff adapter = <b>00</b> <b>Penetration (Option D Dimension)</b> Minimum length 1.0 in (25.4 mm)	



#### 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 21000/CA21000 Dimensions on page 1.

#### 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
	One 3/4-14 NPT plug One 3/4-14 to 1/2-14 NPT reducer
03	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	
02	3/4-14 NPT Must be ordered if Standoff Adapter Length option is <b>not</b> 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		<b>Recommendation</b>
36	3300 XL 11mm with connector protector and approval option		Order in increments of 0.1 in (3 mm)
37	3300 XL 8mm ETR, with approval option	Probe P/N and S/N may be displayed on a flag label fo combinations of the C plus	
B: Probe (	Cable Length		options where only a small section of the probe cable is visible.
00	Probe cable not required		
05	20 in (0.5 m)		For probe penetration lengths
10	39 in (1.0 m)	e	between 1.0 and 2.0 inches, it may be necessary to counter bore the
12	12.0 ft (3.6 m)		machine case to reduce probe side view or rear view effects.
18	18.0 ft (3.6 m)		
24	24.0 ft (7.3 m)		If you select a probe penetration
30	24.0 ft (7.3 m)	e	length (C plus D) greater than 300 mm (12 in), you must add sleeve
36	36.0 ft (10.9 m)		support near the probe to prevent resonance from occurring.
C: Stando	off Adapter (Option C Dimension)		Adjustment range of probe
15	Minimum length 1.5 in (38 mm)		penetration option D is 13 mm ( $\pm$ 0.5 in). For the maximum value of C plu
75	Maximum length 7.5 in (191 mm)		D, <u>see 21000/CA21000 Dimensions</u> on page 1.
	Examples	E: Fittings	
	1.5 in (38 mm) = <b>15</b> No standoff adapter = <b>00</b>	00	Without fittings
	Recommendation	01	One 3/4-14 NPT explosion-pro fitting
	Order in increments of 0.5 in (13 mm)		One 3/4-14 NPT plug
D: Probe I	Penetration (Option D Dimension)	02	Two 3/4-14 NPT explosion-pro fittings
010	Minimum length 1.0 in (25.4 mm)		
Other	See 21000/CA21000 Dimensions on page 1.		
	Example		
	3.7 in (94 mm) = <b>037</b> 22.4 in (569 mm) = <b>224</b>		



	One 3/4-14 NPT plug One 3/4-14 to 1/2-14 NPT reducer		
03	One cable seal grip with grommets for the following cable sizes:		
	<ul> <li>1/8 to 3/16 inches</li> <li>1/4 to 5/16 inches</li> <li>5/16 to 3/8 inches</li> </ul>		
04	One 3/4-14 NPT plug only		
CA CA as e orde	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:04options.		
F: Mounting	Thread		
01	As cast without threads		
02	3/4-14 NPT (see note [1] below) Must be ordered if Standoff Adapter Length Option is <b>not</b> 00.		
03	1-11 1/2 NPT (see note [1] below)		
04	1/2-14 BSP		
05	7/8-14 UNF-2A		
<ul> <li>(1) For CA21000 housing, option F must be 02. Options 02 and 03 for mounting threads have more threads than standard NPT threads. They have been machined to have approximately 5-7 full threads to increase mounting strength and stiffness.</li> </ul>			

### Explosion-Proof Housing Assemblies

For CA21000 housing, option F must be 02. Options 02 and 03 for mounting threads have more threads than standard NPT threads. They have been machined to have approximately 5-7 full threads to increase mounting strength and stiffness.

### CA21000-AA-BB-CC-DDD-EE-F02

Options **A:00** and **B:00** are linked. If you choose **A:00**, you must also select **B:00**.

#### A: Probe with Connector

00	Probe not required
01	190 series, CSA, BNPS connector
02	190 series, CSA, API connector
27	3300 XL NSv, multiple approval
28	3300 XL 8mm, multiple approval
30	3300 XL 11mm, multiple approval
32	3300 XL NSv with connector protector, multiple approval
34	3300 XL 8mm with connector protector, multiple approval
36	3300 XL 11mm with connector protector, multiple approval
B: Probe Cab	le Length
05	0.5 meter (20 inches)
10	1.0 meter (39 inches)
C: Standoff A	dapter (Option C Dimension)
15	Minimum length 1.5 in (38 mm)



75	Maximum length 7.5 in (191 mm)	
	Example	
	1.5 in (38 mm) = <b>15</b>	
	No Standoff adapter <b>= 00</b>	
	Recommendation	
	Order in increments of 0.5 in (13 mm)	
D: Probe Pei	netration (Option D Dimension)	
010	Minimum length 1.0 in (25.4 mm)	
Other	See 21000/CA21000 Proximity Probe Housing Assembly on page 16.	
	Example	
	3.7 in (94 mm) = <b>037</b>	
	22.4 in (569 mm) = <b>224</b>	
	Recommendation	
	Order in increments of 0.1 in (3 mm)	

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	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, <u>see 21000/CA21000 Dimensions</u> on page 1.				
E: Fittir	ngs				
00		Without fittings			
01	One 3/4-14 NPT explosion-pro- 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:			
		<ul> <li>1/8 to 3/16 inches</li> <li>1/4 to 5/16 inches</li> <li>5/16 to 3/18 inches</li> </ul>			

	• 5/16 to 3/8 inches
04	One 3/4-14 NPT plug only
	K



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.

When ordering a proximitor and an extension cable with the housing, choose a probe with matching approval options.

You can only order probes for CA21000 or CA24701 with multiple approvals. To order CA versions with no probe, select the A:00 option.

### CA24701-AA-BB-CC-DDD-EE-FF

A: Probe with Connector		
00	Probe not required	
01	190 series, CSA, BNPS connector	
02	190 series, CSA, API connector	
27	3300 XL NSv , multiple approval	
28	3300 XL 8mm, multiple approval	
30	3300 XL 11mm, multiple approval	
32	3300 XL NSv with connector protector, multiple approval	
34	3300 XL 8mm with connector protector, multiple approval	
36	3300 XL 11mm with connector protector, multiple approval	
B: Probe Cab	le 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)	

18.0 ft (3.6 m)	
24.0 ft (7.3 m)	
24.0 ft (7.3 m)	
36.0 ft (10.9 m)	
Adapter (Option C Dimension)	
Minimum length 1.5 in (38 mm)	
Maximum length 7.5 in (191 mm)	
Examples	
1.5 in (38 mm) = <b>15</b> No standoff adapter = <b>00</b>	
Recommendation	
Order in increments of 0.5 in (13 mm)	
etration (Option D Dimension)	
Minimum length 1.0 in (25.4 mm)	
See 24701/CA24701 Proximity Probe Housing Assembly on page 17.	
Example	
3.7 in (94 mm) = <b>037</b> 22.4 in (569 mm) = <b>224</b>	
Recommendation	
Order in increments of 0.1 in (3	



	displ coml optic	e P/N and S/N may be ayed on a flag label for some binations of the C plus D ons where only a small section e probe cable is visible.		are c CA v as ex orde	ough explosion-proof fittings available for all housings, only ersions of the housing are rated cplosion-proof by CSA when red with the E:00, E:01, E:02, or options.
	betw be ne mac	robe penetration lengths reen 1.0 and 2.0 inches, it may ecessary to counter bore the hine case to reduce probe side or rear view effects.	cable v	with the ing app You o CA21	g a proximitor and an extension e housing, choose a probe with proval options. can only order probes for 000 or CA24701 with multiple
	lengt mm supp	a select a probe penetration th (C plus D) greater than 300 (12 in), you must add sleeve port near the probe to prevent nance from occurring.	F: Mou	nop	rovals. To order CA versions with robe, select the A:00 option. Thread
	Adjus	stment range of probe	01		As cast without threads
penetration option D is 13 mm (± 0.5 in). For the maximum value of C plus D, <u>see 21000/CA21000 Dimensions</u> on page 1.		02		3/4-14 NPT (see note [1] below).          Must be ordered if         Standoff Adapter	
E: Fittin 00	gs	Without fittings			Length Option is <b>not</b> 00.
		One 3/4-14 NPT explosion-proof	03		1-11 1/2 NPT (see note [1] below)
01		fitting One 3/4-14 NPT plug	04		1/2-14 BSP

01	One 3/4-14 NPT explosion-proof fitting One 3/4-14 NPT plug
02	Two 3/4-14 NPT explosion-proof fittings
	One 3/4-14 NPT plug One 3/4-14 to 1/2-14 NPT reducer
03	One cable seal grip with grommets for the following cable sizes:
	<ul> <li>1/8 to 3/16 inches</li> <li>1/4 to 5/16 inches</li> <li>5/16 to 3/8 inches</li> </ul>
04	One 3/4-14 NPT plug only

(1) For CA21000 housing, option F must be 02. Options 02 and 03 for mounting threads have more threads than standard NPT threads. They have been machined to have approximately 5-7 full threads to increase mounting strength and stiffness.

7/8-14 UNF-2A





### 164818 Compact Proximity Probe Housing

### 164818-AA-BB-CCC-DD-EE-FF-GG

A: Probe with Connector		
00	No probe	
01	3300 XL NSv probe	
02	3300 XL 8mm probe	
03	3300 XL 11mm probe	
04	3300 8mm ceramic-capped probe	
05	3300 XL NSv probe with multiple approvals	
06	3300 XL 8mm probe with multiple approvals	
07	3300 XL 11mm probe with multiple approvals	
08	3300 8mm Ceramic Capped Probe with multiple approvals	
12	3300 XL 8mm probe with connector protector	
16	3300 XL 8mm probe with connector protector, multiple approvals	
B: Cap	) Height	
20	2.0 inches	
40	4.0 inches	
60	6.0 inches	
C: Sleeve Length		
016	Minimum length 1.6 in (40.6 mm)	
292	Maximum length 29.2 in (741.7 mm)	
_	Examples	
	3.0 in (76.2mm) = <b>030</b> 22.4 in (569 mm) = <b>224</b>	

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	Recommendation
	Order in increments of 0.1 in (3 mm)
D: Mou	inting Thread
01	3/4-14 NPT
02	G 3/4 (3/4-14 BSPP)
03	M24 x 1.5
E: O-ri	ng Option
01	Viton
02	Neoprene
03	Ethylene propylene
F: Rear	<sup>r</sup> Thread Type
01	1/2-14 NPT
02	M16 x 1.5
03	M20 x 1.5
G: Prok	be Cable Length
05	0.5 meter (20 in)
10	1.0 meter (39 in)

# Accessories

Part Number	Description
37948-01	Probe Support / Oil Seal Recommended for sleeves longer than 305 mm (12 in)

#### Individual Probe Sleeve for 21000/24701 Proximity Probe Housings 44382-AAA

#### A: Measured Probe Sleeve Length

Recommendation
Order in increments of 0.1 in (3 mm)



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The individual probe sleeve length does notinclude the distance from the end of the sleeve to the probe tip or the gap from the probe tip to the target material. If only the part number of the original housing is known, and the sleeve cannot be measured, use the following table to determine the sleeve length:

ΑΑΑ	Description
Standoff adapter option from original housing (21000, CA21000, 24701, or CA24701 option C)	All housing AAA options except NSv and 11mm probes (options other than A:06, A:12, A:26, A:27, A:29, A:30, A:31, A:32, A:35, or A:36)
plus	Example
Probe penetration option from original housing (21000,	Original part number 21000-16-10-15-035-03-02
CA21000, 24701, or CA24701 option D) <b>and</b> 045	<b>AAA</b> option for replacement sleeve (015 + 035 + 045) = <b>095</b>
Standoff Adapter Option from original housing (21000, CA21000, 24701, or CA24701 option C)	Housing AAA options for 3300 NSv probe options (A:26, A:27, A:31, or A:32
plus	Example
Probe penetration option from original housing (21000,	Original part number 24701-31-10-15-090-03-02
CA21000, 24701, or CA24701 option D) and046	<b>AAA</b> option for replacement sleeve (015 + 090+ 046) = <b>151</b>
Standoff Adapter Option from original housing (21000, CA21000, 24701, or CA24701 option C)	Housing AAA options for 3300 XL 11mm probe options (A:29, A:30, A:35, or A:36)
plus	Example
Probe penetration option from original housing (21000,	Original part number CA24701 -36-10-40-053- 02-02
CA21000, 24701, or CA24701 option D) and037	<b>AAA</b> option for replacement sleeve (040 + 053+ 037) = <b>130</b>

AAA	Description
Standoff Adapter Option from original housing (21000, CA21000, 24701, or CA24701 option C) <b>plus</b>	Housing AAA options for 7200 Series 11mm probe options (A:06 or A:12)
Probe penetration option from original housing (21000, CA21000, 24701, or CA24701 option D) <b>and</b> 039	Example Original part number CA24701 -12-10-30-113-01 - 02 AAA option for replacement sleeve (030 + 113+ 039) = <b>182</b>
Minimum Probe Sle	eve Length

For all probes except NSv and 11mm probes	5.5 in (140 mm) = 055
3300 XL NSv probe	5.5 in (142 mm) = 056
3300 XL 11mm probe	4.7 in (119 mm) = 047

#### **Maximum Probe Sleeve Length**

All 0.5 meter probes except NSv and 11mm probes	18.0 in (457 mm) = 180
3300 XL NSv 0.5 meter probe	18.1 in (460 mm) = 181
7200-series 0.5 meter 11mm probe	15.4 in (391 mm) = 154
All 1.0 meter probes except NSv and 11mm probes	33.7 in (856 mm) = 337
3300 XL NSv 1.0 meter probe	33.8 in (859 mm) = 338
3300 XL 1.0 meter 11mm probe	32.9 in (836 mm) = 329
7200 Series 1.0 meter 11mm probe	33.1 in (841 mm) = 331



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#### Individual Standoff Adapter 21003-AAA

A: Individual Standoff Adapter		
015		Minimum length 1.5 in (38 mm)
075		Maximum length 7.5 in (191 mm)
Recommendation		Order in increments of 0.5 in (13 mm)
		4.5 in (114 mm) = <b>045</b>
	length in), orc	sired probe penetration s of less than 25 mm (1.0 der a separate Individual off Adapter.
Example 1	The effective probe penetration length will then be reduced by the length of the Individual Standoff Adapter, <b>plus</b> an additional 13 mm (0.5 in) due to the NPT thread engagement.	

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To create a probe penetration length 13 mm (0.5 in), order a 21000 housing with DDD (probe penetration) option of 030 [76 mm (3 in)] and a separate individual standoff adapter that is 51 mm (2.0 in) in length (part number 21003-020).

The standoff adapter covers 38 mm (2.0 in) of the probe sleeve **plus**an additional 13 mm (0.5 in).

Therefore, the effective probe penetration length drops to 13 mm (0.5 in).

> If you use effective penetration lengths of less than 1.0 inches, signal effects are likely due to probe side view or rear view of metal components.

#### Spare 3300 XL 8mm Reverse Mount Probe, 3/8-24 UNF threads

### 330105-02-12-CC-DD-EE

Example 2

A: Total Length		
05	0.5 meter (1.6 feet)	
10	1.0 meter (3.3 feet)	
15	1.5 meter (4.9 feet)	
20	2.0 meter (6.6 feet)	
50	5.0 meter (16.4 feet)	
90	9.0 meter (29.5 feet)	
B: Conne	ector	
00	Connector not installed	
02	Miniature ClickLoc coaxial connector	



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#### **Agency Approval**

00	Not required
05	Multiple approvals

### Spare 3300 NSv Reverse Mount Probe, 3/8-24 UNF threads

#### 330906-02-12-CC-DD-EE

C: Total Length		
05	0.5 meter (1.6 feet)	
10	1.0 meter (3.3 feet)	
50	5.0 meter (16.4 feet)	
70	7.0 meter (23.0 feet)	
D: Conn	ector	
00	Connector not installed	
02	Miniature ClickLoc coaxial connector	
E: Agen	cy Approval	
00	Not required	
05	Multiple approvals	
	1	

### Spare 3300 XL 11mm Reverse Mount Probe, 3/8-24 UNF threads

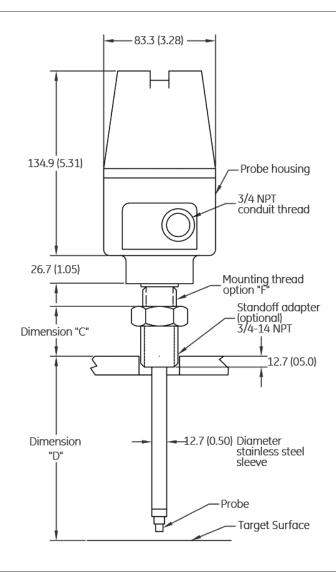
#### 330705-02-18-CC-DD-EE

C: Total Length	
10 0.5 meter (1.6 feet)	
50	5.0 meter (16.4 feet)
<b>90</b> 9.0 meter (29.5 feet)	
D: Connector	

00	Without connector		
02	02 With miniature male coaxial connector		
E: Ager	ncy Approval		
00	Not required		



# **Graphs and Figures**

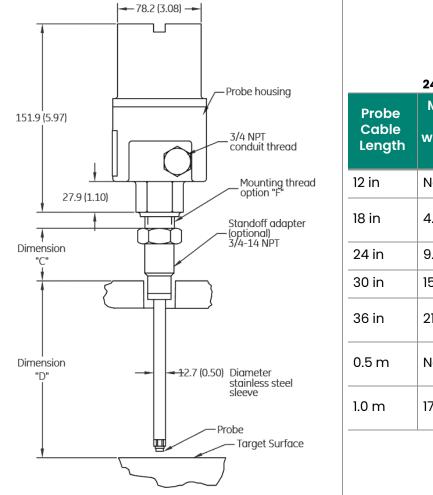


Probe Cable Length	Maximum (C) + (D) with visible probe (P/N and S/N)	Maximum (C) + (D) Dimension
12 in	Not visible	5.0 in (12.7 cm)
18 in	4.0 in (10.1 cm)	10.5 in (26.6 cm)
24 in	9.7 in (24.6 cm)	16.1 in (40.9 cm)
30 in	15.4 in (39.1 cm)	21.7 in (51.1 cmm)
36 in	21.1 in (53.6 cm)	27.3 in (69.3 cm)
0.5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





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).



### **Tables**

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

Catalog Number	Dimension			
	Α	В	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)	



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