

APTER POWER PRODUCT MANUAL

330101-00-20-90-02-05

3300 XL 8 mm 3/8-24 UNF Proximity Probe

The 330101-00-20-90-02-05 is a Bently Nevada 3300 XL 8 mm non-contacting eddy-current probe with a 3/8-24 UNF threaded case, no armor, 0.0 in unthreaded length, 2.0 in overall case length, 9.0 m (29.5 ft) standard cable, a miniature ClickLoc connector without a protector, and the CSA, ATEX, and IECEx approvals option.

With a correctly matched 330130 extension cable and 3300 XL Proximito Sensor, it converts probe-to-target distance into a proportional voltage for shaft vibration, shaft position, Keyphasor, and speed measurement on fluid-film-bearing machinery.

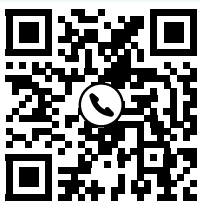
Manufacturer	Bently Nevada / verify where stated
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APTER POWER SALES TEAM

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Long Lead. Matched System. Continuous Shaft Awareness.

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SCAN FOR PRODUCT & QUOTE
330101-00-20-90-02-05

1. Product Identity and Model Configuration

The 330101-00-20-90-02-05 is a Bently Nevada 3300 XL 8 mm non-contacting eddy-current probe with a 3/8-24 UNF threaded case, no armor, 0.0 in unthreaded length, 2.0 in overall case length, 9.0 m (29.5 ft) standard cable, a miniature ClickLoc connector without a protector, and the CSA, ATEX, and IECEx approvals option.

With a correctly matched 330130 extension cable and 3300 XL Proximito Sensor, it converts probe-to-target distance into a proportional voltage for shaft vibration, shaft position, Keyphasor, and speed measurement on fluid-film-bearing machinery.

Model Configuration

Code	Confirmed definition
330101	3/8-24 UNF 3300 XL 8 mm probe without armor.
00	0.0 in unthreaded length.
20	2.0 in overall case length.
90	9.0 m (29.5 ft) total probe length.
02	Miniature ClickLoc connector without protector; standard cable.
05	CSA, ATEX, and IECEx approvals option.

Key Features

- The 2.0 in case provides the ordered insertion geometry.
- 9.0 m (29.5 ft) probe lead supports No extension cable; connect the 9.0 m probe directly to a 9.0 m 3300 XL Proximito Sensor..
- Unarmored standard cable permits flexible routing when mechanically protected.
- ClickLoc connection is designed for finger-tight assembly.

2. Technical Specifications

Published values and exact-code limitations are reproduced or summarized from the source named below. Unpublished values are not inferred.

Parameter	Confirmed value
Product Type	3300 XL 8 mm unarmored proximity probe
Mounting Thread	3/8-24 UNF
Aarmor	None
Unthreaded Length	0.0 in
Overall Case Length	2.0 in
Total Probe Length	9.0 m (29.5 ft)
Connector and Cable	ClickLoc without protector; standard cable
Approval Option	05 - CSA, ATEX, IECEx
Probe Tip Diameter	8.0 mm (0.31 in)
System Linear Range	2.0 mm (80 mil)
System Scale Factor	7.87 V/mm (200 mV/mil); tolerance depends on 1 m, 5 m, or 9 m system
Recommended Radial Gap	Approximately 1.27 mm (50 mil), -9 Vdc
Frequency Response	0 to 10 kHz, +0/-3 dB
Probe Tip Material	Polyphenylene sulfide (PPS)
Probe Case Material	AISI 303 or 304 stainless steel
Standard Probe Cable	75 ohm triaxial FEP-insulated cable
Probe Temperature	-52 C to +177 C (-62 F to +350 F)
Minimum Cable Bend Radius	25.4 mm (1.0 in)
Minimum Flat Target	15.2 mm (0.6 in) diameter

Technical Note

The probe length plus extension-cable length must equal the selected Proximity Sensor system length. Verify the nameplate and current approval documents before use.

3. Functions, Applications and Components

Core Functions

- Measures non-contacting distance between the probe tip and a conductive target.
- Supports dynamic radial shaft-vibration measurement in a matched transducer system.
- Supports static and axial shaft-position measurement.
- Supports Keyphasor reference and speed measurement with a compatible monitoring channel.

Application Areas

Application	System role
Fluid-Film-Bearing Machinery	Provides shaft vibration and position measurements at 3/8-24 UNF locations on rotating machinery.
Radial Shaft Vibration	Measures dynamic shaft motion relative to the probe mounting point.
Static Shaft Position	Measures the static distance between the probe tip and a conductive shaft or target.
Axial or Thrust Position	Supports axial displacement measurement when the target and mounting geometry meet official requirements.
Keyphasor Reference	Supports phase-reference measurement with the correct target geometry and monitoring input.
Speed Measurement	Supports rotational-speed measurement when the matched system and monitoring channel meet manufacturer requirements.

Compatible Components

- No extension cable; connect the 9.0 m probe directly to a 9.0 m 3300 XL Proximity Sensor.
- A 3300 XL 8 mm Proximity Sensor with the same total electrical length.
- 3/8-24 UNF probe mounting hardware installed to official engagement and torque limits.
- Bently Nevada monitoring channels that accept the matched Proximity Sensor output.

Lifecycle Status

Baker Hughes currently publishes Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AM and lists every standard option position used in 330101-00-20-90-02-05. No separate lifecycle status is published for the complete suffix.

4. Installation Precautions

- Use no extension cable; connect the 9.0 m probe directly to a 9.0 m 3300 xl proximitor sensor.
- Maintain the published 25.4 mm minimum cable bend radius and protect the unarmored lead.
- Verify case insertion depth, side-view clearance, target size, and shaft diameter before mounting.
- Set the final gap using the complete matched system and the actual target material.
- Confirm the 05 approval marking and applicable installation drawing before hazardous-area use.

STOP - Verify before installation

The probe length plus extension-cable length must equal the selected Proximitor Sensor system length. Verify the nameplate and current approval documents before use.

Use the physical nameplate and current original-manufacturer documents as the controlling records.

5. Source and Use Notice

Technical source

Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AM

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/330101-00-20-90-02-05>

Use Notice

This is an original Apter Power product-specific reference prepared from the source named above. It is not a Bently Nevada publication and does not replace the original datasheet, nameplate, certification, installation drawing, or safety instructions. Confirm current manufacturer documentation before purchase, installation, or replacement.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com.