

APTER POWER PRODUCT MANUAL

330102-00-25-10-02-00

Bently Nevada 3300 XL 8 mm armored proximity probe

The 330102-00-25-10-02-00 is a Bently Nevada 3300 XL 8 mm non-contacting eddy-current proximity probe with 3/8-24 UNF mounting threads, stainless steel armor, 0.0 in unthreaded length, a 2.5 in overall case, a 1.0 m (3.3 ft) standard lead, and a ClickLoc connector without a protector. The final 00 code selects no agency approval option.

In a correctly matched 3300 XL 8 mm transducer system, the probe detects distance to a conductive shaft and the Proximitor Sensor converts that gap into a voltage used for shaft vibration, position, phase-reference, and speed measurements on rotating machinery.

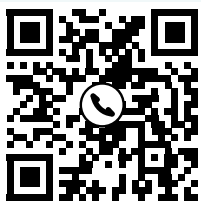
Manufacturer	Bently Nevada
Prepared by	Apter Power
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330102-00-25-10-02-00

1. Product Overview and Identity

The 330102-00-25-10-02-00 is a Bently Nevada 3300 XL 8 mm non-contacting eddy-current proximity probe with 3/8-24 UNF mounting threads, stainless steel armor, 0.0 in unthreaded length, a 2.5 in overall case, a 1.0 m (3.3 ft) standard lead, and a ClickLoc connector without a protector. The final 00 code selects no agency approval option.

In a correctly matched 3300 XL 8 mm transducer system, the probe detects distance to a conductive shaft and the Proximitor Sensor converts that gap into a voltage used for shaft vibration, position, phase-reference, and speed measurements on rotating machinery.

Model Configuration

Code	Official configuration
330102	3/8-24 UNF 3300 XL 8 mm probe, armored.
00	0.0 in unthreaded length.
25	2.5 in overall case length.
10	1.0 m (3.3 ft) total probe length.
02	Miniature ClickLoc connector without protector; standard cable.
00	Agency approval not required.

Key Features

- The armored construction protects the 1.0 m probe lead in exposed routing while the 2.5 in case sets the insertion geometry.
- 2.5 in ordered case length and 0.0 in unthreaded section define the mounting geometry.
- 1.0 m (3.3 ft) lead is selected for a matched 5 m or 9 m electrical system.
- The 00 ordering option does not request an agency approval configuration.

2. Technical Specifications

Only manufacturer-published information is stated. A value absent for the exact complete suffix is identified rather than inferred.

Parameter	Verified value
Product Type	3300 XL 8 mm armored proximity probe
Mounting Thread	3/8-24 UNF
Armor	Stainless steel armor
Unthreaded Length	0.0 in
Overall Case Length	2.5 in
Total Probe Length	1.0 m (3.3 ft)
Connector and Cable	ClickLoc without protector; standard cable
Approval Option	00 - not required
Published Probe Weight Reference	323 g/m (11.4 oz); exact configured shipping mass is not separately published
Probe Tip Diameter	8.0 mm (0.31 in)
Matched-System Linear Range	2.0 mm (80 mil)
Nominal Matched-System Scale Factor	7.87 V/mm (200 mV/mil); tolerance depends on system length
Frequency Response	0 to 10 kHz, +0/-3 dB
Probe Tip Material	Polyphenylene sulfide (PPS)
Probe Case Material	AISI 303 or 304 stainless steel
Probe Cable	75 ohm triaxial FEP-insulated cable
Probe Operating Temperature	-52 C to +177 C (-62 F to +350 F)
Minimum Cable Bend Radius	25.4 mm (1.0 in)
Recommended Minimum Flat Target	15.2 mm (0.6 in) diameter

Verification Note

Match the probe and extension cable to the Proximity Sensor system length. Verify 3/8-24 UNF engagement, final gap, target geometry, and the physical ordering code before commissioning.

3. Functions, Applications and Components

Core Functions

- Measures non-contacting distance between the probe tip and a conductive shaft or target.
- Supplies a proportional voltage through the matched Proximitor Sensor for dynamic radial vibration.
- Supports static or axial shaft-position measurement when mounting and target geometry are suitable.
- Supports Keyphasor phase-reference and speed measurement with a compatible monitoring channel.

Application Areas

Application	System role
Fluid-Film-Bearing Machinery	Provides non-contacting shaft vibration and position measurement at 3/8-24 UNF armored installations.
Radial Shaft Vibration	Measures dynamic shaft motion relative to the probe mounting location.
Static Shaft Position	Measures probe-to-target distance through the complete transducer-system output.
Axial or Thrust Position	Supports axial displacement measurement when the target and mechanical geometry meet the manufacturer limits.
Keyphasor Reference	Generates phase-reference information with the correct target notch or projection and monitoring input.
Speed Measurement	Supports rotational-speed measurement when the system, target geometry, and monitoring channel are correctly matched.

Compatible Components

- Use a 4.0 m 330130 extension cable with a 5.0 m Proximitor Sensor, or an 8.0 m extension cable with a 9.0 m Proximitor Sensor.
- A 3300 XL 8 mm Proximitor Sensor with the same total electrical length.
- 3/8-24 UNF mounting hardware installed within the official engagement and torque limits.
- Bently Nevada monitoring channels configured for the matched Proximitor Sensor output.

Lifecycle Status

Baker Hughes currently publishes the 3300 XL 8 mm datasheet and lists every standard ordering field used in 330102-00-25-10-02-00. No separate lifecycle statement is published for this complete suffix.

4. Installation Precautions

- Use a 4.0 m 330130 extension cable with a 5.0 m Proximitior Sensor, or an 8.0 m extension cable with a 9.0 m Proximitior Sensor.
- Verify the 3/8-24 UNF mounting hole, side-view clearance, insertion depth, and case-thread engagement before installation.
- Maintain the published 25.4 mm minimum cable bend radius and protect the lead from crushing, sharp edges, and oil paths.
- Gap the complete matched system against the intended target material; do not set the final gap from mechanical distance alone.
- Do not infer hazardous-area approval from the family name; final code 00 does not request an approval option.

STOP - Verify before installation

Match the probe and extension cable to the Proximitior Sensor system length. Verify 3/8-24 UNF engagement, final gap, target geometry, and the physical ordering code before commissioning.

Use the physical nameplate and current Bently Nevada documents as the controlling records.

5. Official Source and Use Notice

Official source

Baker Hughes / Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AM - <https://dam.bakerhughes.com/m/23d2a1de24360b13/original/3300-XL-8mm-Proximity-Transducer-System-Datasheet-141194-pdf.pdf>

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/330102-00-25-10-02-00>

Use Notice

This original Apter Power product-specific reference is prepared from the named Bently Nevada source. It is not a Bently Nevada publication and does not replace the original datasheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.