

APTER POWER PRODUCT MANUAL

330904-00-10-50-02-05

Bently Nevada 3300 XL NSv armored M8 x 1 proximity probe

The 330904-00-10-50-02-05 is a Bently Nevada 3300 XL NSv non-contacting eddy-current proximity probe. Its complete code specifies M8 x 1 standard mounting, stainless-steel armor, 0 mm unthreaded length, a 100 mm overall case, an integral 5.0 m (16.4 ft) standard cable, a ClickLoc connector without protector, and the multiple-approvals option.

Connected to the matching 330980 Proximitor Sensor, the probe detects the gap to a conductive shaft or target and the sensor converts that gap into a voltage. The compact NSv system supports radial vibration and position, axial thrust position, Keyphasor phase reference, tachometer, and zero-speed measurements on machines with limited side-view, rear-view, or target clearance.

Manufacturer	Bently Nevada
Prepared by	Apter Power
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APTER POWER SALES TEAM

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Five metres. M8 precision. Armored routing.

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SCAN FOR PRODUCT & QUOTE
330904-00-10-50-02-05

1. Product Overview and Identity

The 330904-00-10-50-02-05 is a Bently Nevada 3300 XL NSv non-contacting eddy-current proximity probe. Its complete code specifies M8 x 1 standard mounting, stainless-steel armor, 0 mm unthreaded length, a 100 mm overall case, an integral 5.0 m (16.4 ft) standard cable, a ClickLoc connector without protector, and the multiple-approvals option.

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Model Configuration

Code	Official configuration
330904	M8 x 1 3300 NSv standard-mount probe with armor.
00	0 mm unthreaded length.
10	100 mm overall case length.
50	5.0 m (16.4 ft) total probe length.
02	ClickLoc connector without protector; standard cable.
05	Multiple approvals ordering option.

Key Features

- 100 mm ordered case geometry distinguishes this configuration from other M8 x 1 NSv probes.
- 5.0 m (16.4 ft) integral lead eliminates an extension cable when paired with the same-length 330980 sensor.
- Armored construction adds mechanical protection for exposed cable routing.
- The compact NSv coil and target requirements suit restricted mounting locations and small shafts.

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 NSv armored M8 x 1 proximity probe
Mounting Thread	M8 x 1
Armor	Stainless steel armor with jacket
Unthreaded Length	0 mm
Overall Case Length	100 mm
Total Probe Length	5.0 m (16.4 ft)
Connector and Cable	ClickLoc without protector; standard cable
Approval Option	05 - multiple approvals
Matched-System Linear Range	1.5 mm (60 mil)
Recommended Gap	1.0 mm (40 mil)
Nominal Scale Factor	7.87 V/mm (200 mV/mil), with published tolerance
Frequency Response	0 to 10 kHz, +0/-3 dB typical
Probe Tip Diameter	5.3 mm (0.21 in) nominal family size
Recommended Minimum Flat Target	13 mm (0.5 in) diameter
Probe Operating Temperature	-52 C to +177 C (-62 F to +351 F)
Minimum Cable Bend Radius	25.4 mm (1.0 in)
Maximum Thread Engagement	12 mm for M8 x 1
Published Probe Weight	Approximately 14 to 150 g across standard configurations; exact suffix mass is not separately published

Verification Note

Match the integral 5.0 m (16.4 ft) probe directly to the same-length 330980 sensor. Verify M8 x 1 engagement, target geometry, final electrical gap, cable routing, and approval evidence.

3. Functions, Applications and Components

Core Functions

- Measures non-contacting probe-to-target distance.
- Provides dynamic shaft-vibration and radial-position information through the matched sensor.
- Supports static axial or thrust-position measurement.
- Supports Keyphasor, tachometer, and zero-speed signals with suitable targets and monitoring channels.

Application Areas

Application	System role
Compact Compressors	Fits restricted probe locations on centrifugal air, refrigeration, and process-gas compressors.
Small-Shaft Radial Vibration	Measures shaft motion where standard 8 mm probe clearance is limited.
Axial Position	Tracks thrust movement against a suitable flat target.
Keyphasor Reference	Provides phase reference from a suitable notch or projection.
Tachometer Service	Supports speed measurement with correct target geometry and monitor setup.
Zero-Speed Detection	Supports low-speed or stopped-shaft indication through a compatible monitoring channel.

Compatible Components

- Use a 5.0 m 330980 NSv Proximator Sensor; this integral 5.0 m probe connects directly without an extension cable.
- A 330980 NSv Proximator Sensor with option 05 or another approval code supported by the installation.
- M8 x 1 mounting hardware within the manufacturer thread-engagement limit.
- A Bently Nevada monitoring channel configured for the matched NSv system output.

Lifecycle Status

Baker Hughes currently publishes Datasheet 147385 Rev. R and lists every standard ordering field used in 330904-00-10-50-02-05. No separate lifecycle phase is published for this exact suffix.

4. Installation Precautions

- Use a 5.0 m 330980 NSv Proximity Sensor; this integral 5.0 m probe connects directly without an extension cable.
- Limit M8 x 1 engagement to 12 mm and follow the official mounting instructions.
- Maintain the 25.4 mm minimum cable bend radius and protect the armor, connector, and cable transition from impact or crushing.
- Set the final gap electrically against the actual target; do not rely only on the mechanical distance.
- Confirm the physical option-05 marking, current certificate, barriers, and installation drawing before hazardous-area use.

STOP - Verify before installation

Match the integral 5.0 m (16.4 ft) probe directly to the same-length 330980 sensor. Verify M8 x 1 engagement, target geometry, final electrical gap, cable routing, and approval evidence.

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 NSv Proximity Transducer System Datasheet 147385 Rev. R - <https://dam.bakerhughes.com/m/7a79b853504f738/original/3300-XL-NSv-Proximity-Transducer-System-Datasheet-147385-pdf.pdf>

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/330904-00-10-50-02-05>

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.