

APTER POWER PRODUCT MANUAL

330703-000-090-50-02-00

Bently Nevada 3300 XL 11 mm metric proximity probe

The 330703-000-090-50-02-00 is a Bently Nevada 3300 XL 11 mm non-contacting eddy-current proximity probe with M14 x 1.5 threads, no armor, 0 mm unthreaded length, a 90 mm case, a 5 m standard lead, a ClickLoc connector without protector, and no agency approval option.

Connected directly to a 5 m 330780 Proximitor Sensor, this probe forms the extended-range 11 mm system that converts shaft or target displacement into a proportional voltage. It supports axial or thrust position, ramp differential expansion, rod position or rod drop, radial vibration, Keyphasor, tachometer, and zero-speed measurements.

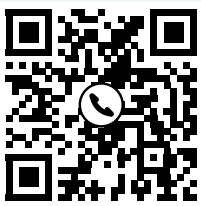
Manufacturer	Bently Nevada
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Longer range. Direct five-metre connection.

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



SCAN FOR PRODUCT & QUOTE
330703-000-090-50-02-00

1. Product Overview and Identity

The 330703-000-090-50-02-00 is a Bently Nevada 3300 XL 11 mm non-contacting eddy-current proximity probe with M14 x 1.5 threads, no armor, 0 mm unthreaded length, a 90 mm case, a 5 m standard lead, a ClickLoc connector without protector, and no agency approval option.

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Model Configuration

Code	Official configuration
330703	M14 x 1.5 3300 XL 11 mm probe without armor.
000	0 mm unthreaded length.
090	90 mm overall case length.
50	5.0 m total probe length.
02	ClickLoc connector without protector; standard cable.
00	Agency approval not required.

Key Features

- The 90 mm metric case provides 64 mm more case length than the 26 mm minimum used in the published mass formula.
- The integral 5 m lead connects directly to a 5 m 330780 Proximitor Sensor without an extension cable.
- The 11 mm tip and 4.0 mm system range support larger displacement measurements than the standard 8 mm family.
- Final option 00 explicitly omits an agency approval selection.

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 11 mm metric unarmored proximity probe
Mounting Thread	M14 x 1.5
Armor	None
Unthreaded Length	0 mm
Overall Case Length	90 mm
Total Probe Length	5.0 m (16.4 ft)
Connector and Cable	ClickLoc without protector; 75 ohm triaxial FEP cable
Approval Option	00 - not required
Calculated Typical Probe Mass	Approximately 0.320 kg using the manufacturer-published case-length and 5 m lead additions
Linear Range	4.0 mm (160 mil), approximately 0.5 to 4.5 mm gap
Recommended Gap	2.5 mm (100 mil)
Nominal Scale Factor	3.94 V/mm (100 mV/mil)
Frequency Response	0 to 8 kHz, +0/-3 dB typical
Minimum Cable Bend Radius	25.4 mm (1.0 in)
Maximum Thread Engagement	21 mm for M14 x 1.5
Recommended Case Torque	21.1 N m (187 in-lb) for M14 x 1.5
Probe Tip / Case Material	PPS tip; AISI 304 stainless-steel case

Verification Note

Use only a 5 m 330780 Proximity Sensor, observe M14 engagement and torque, protect the 5 m lead, and verify the actual target and final electrical gap.

3. Functions, Applications and Components

Core Functions

- Measures non-contacting shaft or target displacement over the 11 mm system range.
- Supports axial thrust position and ramp differential expansion measurements.
- Supports reciprocating-compressor rod position or rod-drop measurement.
- Supports radial vibration, Keyphasor, tachometer, and zero-speed signals with compatible channels.

Application Areas

Application	System role
Steam Turbine Differential Expansion	Measures ramp differential expansion where the longer linear range is required.
Axial Thrust Position	Tracks rotor axial position relative to the probe.
Reciprocating Compressors	Supports rod position or rod-drop measurements.
Radial Vibration	Measures shaft motion on fluid-film-bearing machines.
Keyphasor Reference	Provides phase-reference measurement with suitable target geometry.
Tachometer and Zero Speed	Supports rotational-speed measurements with compatible monitoring channels.

Compatible Components

- A 5 m 330780 XL 11 mm Proximitor Sensor; no extension cable is used with this 5 m integral probe.
- M14 x 1.5 mounting hardware with maximum 21 mm thread engagement and correct torque.
- A flat AISI 4140 target at least 30.5 mm diameter for published performance conditions.
- Monitoring channels configured for the 3300 XL 11 mm transducer system.

Lifecycle Status

Baker Hughes currently publishes Datasheet 146256 Rev. T and lists every ordering value used in this exact complete model. No separate lifecycle status is stated for this suffix.

4. Installation Precautions

- Connect the 5 m probe directly to a 5 m 330780 Proximitor Sensor; do not add an extension cable.
- Limit M14 x 1.5 thread engagement to 21 mm and follow the published 21.1 N m recommended case torque.
- Maintain the 25.4 mm minimum bend radius and allow for the positive cable-length tolerance during routing.
- Set the system gap near 2.5 mm using the actual target and monitor voltage; verify target diameter and shaft cross-talk limits.
- Do not infer hazardous-area certification: final option 00 means agency approval was not requested.

STOP - Verify before installation

Use only a 5 m 330780 Proximitor Sensor, observe M14 engagement and torque, protect the 5 m lead, and verify the actual target and final electrical gap.

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 11 mm Proximity Transducer System Datasheet 146256 Rev. T - <https://dam.bakerhughes.com/m/27a2d91f28aadd41/original/3300-XL-11mm-Proximity-Transducer-System-Datasheet-146256-pdf.pdf>

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/330703-000-090-50-02-00>

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.