APTER POWER

PRODUCT REFERENCE MANUAL

330851-02-00-080-10-00-00

Bently Nevada 3300 XL 25 mm Proximity Probe — Code Verification

This Apter Power reference manual explains the supplied model, published system function, configuration status, technical data, compatible components and installation checks. It uses manufacturer-published information only.

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1. Product Overview

330851-02-00-080-10-00-00 is a supplied Bently Nevada 3300 XL 25 mm probe identifier. Its confirmed options indicate an M30 x 2 case, 80 mm overall case, 1.0 m total length, no armor, and no approvals; however, the supplied unthreaded-length segment is 00 while the current official format requires three digits (BBB), so the exact code needs nameplate verification.

In a correctly matched 5.0 m 3300 XL 25 mm system, the probe senses axial movement of a conductive collar or ramp for differential-expansion measurement on mid-size and large steam turbine generators. It can be used in single, redundant, complementary-input, or ramp-compensated arrangements described by the manufacturer.

3300 XL 25 mm Proximity Probe — Code Verification Field component	->	Matched transducer system Probe, cable and Proximitor as applicable	->	Monitoring input Uses conditioned measurement signal

2. Model Configuration

330851	3300 XL 25 mm proximity probe.
02	M30 x 2 threaded case.
Supplied 00	Unthreaded-length segment is two digits; current official format requires BBB, for example 000 for 0 mm. Verify the nameplate; do not silently normalize.
080	80 mm overall case length.
10	1.0 m total probe length.
00	No armor.
Final 00	No approvals.

Final 00 means no approvals in the current datasheet. The shortened supplied BBB segment remains unconfirmed and must be checked from the nameplate.

3. Technical Specifications

Values below are manufacturer-published. System-level values apply only to the complete correctly matched system under the official test conditions.

Manufacturer	Bently Nevada
Product Category	Machinery Monitoring System
Supplied Identifier	330851-02-00-080-10-00-00
Product Type	3300 XL 25 mm Proximity Probe
Probe Tip Diameter	25 mm nominal system family
Case Type	M30 x 2 thread
Unthreaded Length Code	Supplied 00; current format requires three digits
Overall Case Length	80 mm
Total Probe Length	1.0 m (3.3 ft)
Armor	No armor
Approval Option	00 — No approvals
System Linear Range	12.7 mm (500 mil)
System Scale Factor	0.787 V/mm (20 mV/mil) nominal
System Linear Interval	Approximately 0.63 to 13.33 mm
Reference Gap	7.0 mm under datasheet test conditions
Frequency Response	0 to 2.7 kHz, +0/-3 dB
Probe Cable	High-temperature FluidLoc, standard on 25 mm probes
Probe Continuous Temperature	Up to 200°C described in manufacturer overview
Probe Intermittent Temperature	Up to 250°C described in manufacturer overview
Configuration Status	Verify the shortened BBB segment from nameplate

4. Compatible Components

- 330854-040-24-00 4.0 m high-temperature FluidLoc extension cable for a 5.0 m system, subject to exact code verification.
- 330850-50-00 or 330850-51-00 5.0 m panel or DIN Proximitor Sensor.
- 330853 sliding bracket selected for single or complementary-input DE applications.
- 163854 dial indicator verification kit selected in English or metric units.

5. Core Functions and Applications

Steam Turbine Differential Expansion
Measures the difference in thermal growth between the turbine rotor and casing on mid-size and large generators.

Single-Collar Measurement
One probe observes a conductive collar where the expected axial movement fits the published linear range.

Redundant Collar Measurement
Two probes can observe the same collar side when sufficient collar height is available.

Complementary Input DE
Two probes observe opposite sides of a collar to increase the measurable differential-expansion range.

Ramp Target Measurement
A probe can view a rotor ramp while a second probe compensates for radial movement at another location.

Turbine Upgrade Projects
The 25 mm family can replace earlier 7200 25 mm, 7200 35 mm, and 25 mm DE Integral systems when all three transducer components are replaced.

6. Installation and Commissioning Checklist

- Verify the full model from the physical nameplate, especially the shortened unthreaded-length segment.
- Use a 4.0 m 330854 cable with a 1.0 m probe to form a 5.0 m system.
- Replace probe, extension cable, and Proximitor Sensor together when upgrading from older 25 or 35 mm systems.
- Align the probe perpendicular to the collar or ramp and verify movement using the official procedure and suitable bracket.
- Do not use the no-approvals option in a hazardous area.

> This Apter Power manual is a selection aid. It does not replace manufacturer installation drawings, certification documents, site procedures or qualified engineering review.

7. Model-Specific FAQ

1 What is the Bently Nevada 330851-02-00-080-10-00-00?

It is a supplied 3300 XL 25 mm probe identifier indicating an M30 x 2 case, 80 mm case length, 1.0 m cable, no armor, and no approvals, with one shortened code segment requiring verification.

2 Which code segment needs verification?

The unthreaded-length option is supplied as 00, but the current official format requires three digits, such as 000. The physical nameplate must determine the exact string.

3 What does the 25 mm system measure?

It measures turbine differential expansion: axial displacement caused by the different thermal growth rates of the rotor and casing.

4 Which extension cable matches a 1 m probe?

A 4.0 m 330854 high-temperature FluidLoc extension cable forms the required 5.0 m system with a matching 5 m Proximitor Sensor.

5 What is the nominal system range?

The complete 25 mm system has a 12.7 mm linear range and a nominal 0.787 V/mm scale factor under manufacturer conditions.

6 Can it replace older 7200 or integral DE systems?

Yes, the family is designed for physical replacement, but the probe, extension cable, and Proximitor Sensor must all be replaced with 3300 XL 25 mm components.

7 What measurement arrangements are supported?

The manufacturer describes single, redundant same-side collar, complementary opposite-side collar, and ramp arrangements with radial compensation.

8 Does final 00 permit hazardous-area use?

No. The current datasheet defines 00 as no approvals; do not install it in a hazardous area based on that option.

8. Lifecycle and Approval Status

Baker Hughes publishes datasheet 163236 Rev. M and lists the 330851 family. The supplied two-digit unthreaded-length segment does not match the current three-digit format, so lifecycle and availability for the exact string require nameplate or legacy-record confirmation.

> Final 00 means no approvals in the current datasheet. The shortened supplied BBB segment remains unconfirmed and must be checked from the nameplate.

9. Official Manufacturer Sources

Bently Nevada 3300 XL 25 mm Proximity Transducer System Datasheet, 163236 Rev. M
https://dam.bakerhughes.com/m/69ee6d965e942dae/original/3300-XL-25mm-Proximity-Transducer-System-Datasheet-163236-pdf.pdf

Source-access date: 12 August 2026. Manufacturer document revisions may change. Confirm the current revision before use.

10. Apter Power Support

Seller	Apter Power
Website	https://www.apterpower.com
Product page	https://www.apterpower.com/Bently-Nevada/330851-02-00-080-10-00-00
Email	sales13@apterpower.com
Phone / WhatsApp	+86 180 3023 5313
Quotation note	Confirm nameplate, condition, included accessories and approval requirement.