

APTER POWER

PRODUCT REFERENCE MANUAL

330104-01-08-05-11-05

Bently Nevada 3300 XL 8 mm Proximity Probe

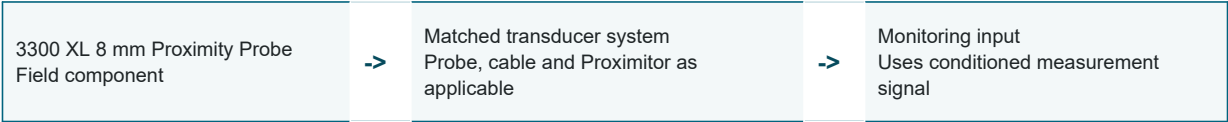
This Apter Power reference manual explains the supplied model, published system function, configuration status, technical data, compatible components and installation checks. It uses manufacturer-published information only.

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1. Product Overview

330104-01-08-05-11-05 is a Bently Nevada 3300 XL 8 mm non-contacting eddy-current probe with an M10 x 1 threaded armored case, 10 mm unthreaded length, 80 mm case length, 0.5 m FluidLoc cable, ClickLoc connector with protector, and the multiple-approvals option.

Connected through a correctly matched 4.5 m extension cable to a 5.0 m 3300 XL Proximitor Sensor, it detects the distance to a conductive target and supports static shaft position, dynamic shaft vibration, Keyphasor reference, and speed measurements on fluid-film-bearing machinery.



2. Model Configuration

330104	Metric M10 x 1 probe with stainless-steel armor.
01	10 mm unthreaded length.
08	80 mm overall case length.
05	0.5 m total probe length.
11	ClickLoc connector with protector and FluidLoc cable.
05	CSA, ATEX, and IECEx approvals option; verify the nameplate and installation drawing.

The 05 suffix is defined as the CSA, ATEX, and IECEx option; exact certification and safe-use conditions must be confirmed from the nameplate and current documents.

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
Spare Part Number	330104-01-08-05-11-05
Product Type	3300 XL 8 mm Proximity Probe
Probe Tip Diameter	8.0 mm (0.31 in)
Mounting Thread	M10 x 1
Armor	Stainless-steel armor
Unthreaded Length	10 mm
Overall Case Length	80 mm
Total Probe Length	0.5 m (1.6 ft)
Connector and Cable	ClickLoc with protector; FluidLoc cable
System Linear Range	2.0 mm (80 mil)
System Scale Factor	7.87 V/mm (200 mV/mil) ±5%
Recommended Radial Gap	1.27 mm (50 mil), approximately -9 Vdc
Frequency Response	0 to 10 kHz, +0/-3 dB
Probe Temperature	-52°C to +177°C (-62°F to +350°F)
Minimum Bend Radius	25.4 mm (1.0 in)
Maximum M10 Thread Engagement	15 mm
Minimum Flat Target	15.2 mm (0.6 in)
Approval Option	05 — CSA, ATEX, IECEx

4. Compatible Components

- 330130-045-10-05 4.5 m FluidLoc extension cable for a 5.0 m total system.
- 330180-50-05 / 330180-51-05 / 330180-52-05 5.0 m Proximity Sensor mounting options.
- 137492-04 aluminum M10 x 1 probe mounting bracket.
- 27474-04 phenolic M10 x 1 mounting bracket for electrical isolation.

5. Core Functions and Applications

Fluid-Film-Bearing Machinery Provides non-contacting vibration and position measurements on rotating machinery equipped with fluid-film bearings.	Radial Shaft Vibration Measures dynamic shaft motion relative to the armored M10 probe mounting location.
Static Shaft Position Measures the static gap to a conductive shaft or target through the complete transducer output.	Oil-Exposed Cable Routes FluidLoc cable is intended to reduce oil or liquid migration through the cable interior.
Keyphasor Reference Supports phase-reference measurement when target geometry and monitoring input meet official requirements.	Machinery Protection Feeds a correctly conditioned vibration or position signal to compatible Bently Nevada monitoring systems.

6. Installation and Commissioning Checklist

- Use a 4.5 m compatible extension cable to form the required 5.0 m total system.
- Maintain the 25.4 mm minimum bend radius and do not crush the armor or FluidLoc cable.
- Do not exceed 15 mm M10 x 1 thread engagement; follow official torque guidance.
- Gap the complete system near -9 Vdc using the intended target material.
- Verify the 05 approval marking and applicable hazardous-area drawing before installation.

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 330104-01-08-05-11-05?

It is an armored M10 x 1 3300 XL 8 mm probe with 10 mm unthreaded length, an 80 mm case, 0.5 m FluidLoc cable, connector protector, and multiple approvals.

2 What does its ordering code mean?

330104 is the armored metric probe; 01 is 10 mm unthreaded; 08 is 80 mm case; 05 is 0.5 m; 11 is protected ClickLoc with FluidLoc cable; final 05 is the approvals option.

3 Which extension cable is required for a 5 m system?

Use a compatible 4.5 m 330130 FluidLoc extension cable so the 0.5 m probe and cable add to 5.0 m.

4 What signals can the system measure?

It supports dynamic shaft vibration, static or axial position, Keyphasor reference, and speed measurements with the matched Proximity Sensor.

5 What is FluidLoc cable for?

The manufacturer states that FluidLoc construction prevents oil and other liquids from leaking through the cable interior.

6 What is the nominal range and scale factor?

The complete 5 m 3300 XL 8 mm system provides a 2.0 mm range and 7.87 V/mm scale factor $\pm 5\%$ under published conditions.

7 What installation limits matter?

Observe the 25.4 mm bend radius, 15 mm maximum M10 thread engagement, target and shaft limits, official torque, and the recommended -9 Vdc gap.

8 Does suffix 05 remove the need to verify certification?

No. It is the official CSA, ATEX, and IECEx option, but the physical marking, current certificate, barriers, and installation drawing remain controlling.

8. Lifecycle and Approval Status

Baker Hughes publishes datasheet 141194 Rev. AM and lists the 330104 family and the exact option positions used by this model. No separate lifecycle phase is published for the complete suffix.

The 05 suffix is defined as the CSA, ATEX, and IECEx option; exact certification and safe-use conditions must be confirmed from the nameplate and current documents.

9. Official Manufacturer Sources

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>

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/330104-01-08-05-11-05
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Quotation note	Confirm nameplate, condition, included accessories and approval requirement.

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