

# 330851-02-000-050-90-00-CN

## 3300 XL 25 mm Proximity Probe

Bently Nevada 330851-02-000-050-90-00-CN is the documented 3300 XL 25 mm proximity probe for a matched differential-expansion transducer loop.

|       |                            |             |                                                                     |
|-------|----------------------------|-------------|---------------------------------------------------------------------|
| BRAND | Bently Nevada              | FAMILY      | Bently Nevada 3300 XL 25 mm Proximity Transducer System             |
| PART  | 330851-02-000-050-90-00-CN | SYSTEM ROLE | Exact article identity: Bently Nevada<br>330851-02-000-050-90-00-CN |

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330851-02-000-050-90-00  
-CN

### MANUFACTURER SOURCE RECORD

3300 XL 25 mm Proximity Transducer System Datasheet  
163236 Rev. M

# Product Overview

## SYSTEM FUNCTION

Bently Nevada 330851-02-000-050-90-00-CN is the documented 3300 XL 25 mm proximity probe for a matched differential-expansion transducer loop.

## FUNCTION 1

Exact article identity: Bently Nevada 330851-02-000-050-90-00-CN

## FUNCTION 2

Documented component: 3300 XL 25 mm Proximity Probe

## FUNCTION 3

Installed family: Bently Nevada 3300 XL 25 mm Proximity Transducer System

## FUNCTION 4

Controlled replacement and verification workflow

# System Components

| COMPONENT           | DOCUMENTED ROLE                                                                                                                                                                     |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host / carrier      | Bently Nevada 3300 XL 25 mm Proximity Transducer System                                                                                                                             |
| Primary interface   | Exact article identity: Bently Nevada 330851-02-000-050-90-00-CN                                                                                                                    |
| Engineering context | Use 330851-02-000-050-90-00-CN only with the documented Bently Nevada host system and matched interfaces. Preserve the as-found configuration during replacement and commissioning. |
| Commissioning duty  | Complete a controlled response and alarm test before service release.                                                                                                               |

## TECHNICAL NOTE

Preserve the documented case, lead, connector and mounting arrangement. Match the extension cable and Proximitior Sensor, then verify gap and controlled differential-expansion response.

Technical Data

| PARAMETER             | VALUE                      | PARAMETER           | VALUE                                        |
|-----------------------|----------------------------|---------------------|----------------------------------------------|
| Complete order number | 330851-02-000-050-90-00-CN | Armor option        | No armor                                     |
| Probe case type       | M30 x 2 threaded case      | Approval option     | China country-specific ordering option       |
| Mounting interface    | M30 x 2                    | Probe tip material  | PEEK                                         |
| Unthreaded length     | 0 mm                       | Probe case material | AISI 304 stainless steel                     |
| Overall case length   | 50 mm                      | Probe cable         | 75 ohm triaxial PFA-insulated FluidLoc cable |
| Total probe length    | 9.0 m                      |                     |                                              |

Related Products on Apter Power

| MODEL                               | SYSTEM ROLE           | APTER POWER PAGE                                              |
|-------------------------------------|-----------------------|---------------------------------------------------------------|
| Bently Nevada 330102-00-70-10-01-05 | Bently Nevada product | <a href="#">View Bently Nevada 330102-00-70-10-01-05 page</a> |
| Bently Nevada 330102-00-80-10-01-05 | Bently Nevada product | <a href="#">View Bently Nevada 330102-00-80-10-01-05 page</a> |
| Bently Nevada 330101-00-35-10-01-05 | Bently Nevada product | <a href="#">View Bently Nevada 330101-00-35-10-01-05 page</a> |
| Bently Nevada 330104-06-14-10-02-00 | Bently Nevada product | <a href="#">View Bently Nevada 330104-06-14-10-02-00 page</a> |
| Bently Nevada 330101-00-12-10-02-05 | Bently Nevada product | <a href="#">View Bently Nevada 330101-00-12-10-02-05 page</a> |
| Bently Nevada 330101-00-39-10-02-05 | Bently Nevada product | <a href="#">View Bently Nevada 330101-00-39-10-02-05 page</a> |
| Bently Nevada 330105-02-12-10-12-RU | Bently Nevada product | <a href="#">View Bently Nevada 330105-02-12-10-12-RU page</a> |
| Bently Nevada 330130-040-10-00      | Bently Nevada product | <a href="#">View Bently Nevada 330130-040-10-00 page</a>      |

ENGINEERING BOUNDARY

Confirm 330851-02-000-050-90-00-CN, host identity, hardware execution, interfaces, wiring, shielding, grounding, configuration, accessories and controlled functional-test results before commissioning.

# Applications and Precautions

## Common Applications

### Steam-turbine differential expansion

Tracks the difference between rotor growth and casing growth on mid-size to large turbine generators.

### Complementary-input measurement

Supports probes on opposite collar faces to extend the measurable differential-expansion range.

### Redundant collar observation

Supports two probes observing the same collar face for redundant differential-expansion measurement.

### Ramp-based compensated measurement

Supports an engineered ramp arrangement with a second probe used to compensate for radial movement.

## Product Precautions

- 1

Confirm the complete Bently Nevada 330851-02-000-050-90-00-CN marking and installed position.
- 2

Place the machine and protection channel in the approved maintenance state.
- 3

Isolate the circuit and apply ESD-safe handling controls.
- 4

Record connectors, terminals, cable route, shielding and grounding.
- 5

Verify the documented host, hardware execution and technical values.
- 6

Restore the approved interfaces and channel configuration.
- 7

Review bias, channel and monitor diagnostics after energization.
- 8

Complete a controlled response and alarm test before service release.

## IMPORTANT NOTICE

Confirm 330851-02-000-050-90-00-CN, host identity, hardware execution, interfaces, wiring, shielding, grounding, configuration, accessories and controlled functional-test results before commissioning.

| ACCEPTANCE CHECK   | REQUIRED EVIDENCE                                                     |
|--------------------|-----------------------------------------------------------------------|
| Identity           | 330851-02-000-050-90-00-CN                                            |
| Configuration      | Review bias, channel and monitor diagnostics after energization.      |
| Functional release | Complete a controlled response and alarm test before service release. |

# Engineer FAQ

**Q1** How is the 9.0 m lead execution of Bently Nevada 330851-02-000-050-90-00-CN matched to its Proximitior Sensor?

Match the complete 330851-02-000-050-90-00-CN marking to the 3300 XL 25 mm probe, extension cable and Proximitior Sensor records before work.

**Q3** How is the CN ordering suffix retained when identifying Bently Nevada 330851-02-000-050-90-00-CN?

Use the documented collar or ramp arrangement and maintain probe alignment perpendicular to the observed target.

**Q5** How should a collar or ramp target be selected for Bently Nevada 330851-02-000-050-90-00-CN?

Protect the FluidLoc cable, high-temperature ClickLoc connector and no armor from contamination, sharp bends and tensile loading.

**Q7** How is radio-frequency immunity preserved in the Bently Nevada 330851-02-000-050-90-00-CN installation?

Match the 9.0 m probe execution to the approved extension cable and 3300 XL 25 mm Proximitior Sensor system length; retain the exact china country-specific ordering option identity.

**Q2** What must be confirmed about the 50 mm M30 case before installing Bently Nevada 330851-02-000-050-90-00-CN?

Record the mounting position, M30 x 2 threaded case, target geometry, lead route, connector position, shielding and current static reading.

**Q4** Which bend and tensile controls protect the long lead on Bently Nevada 330851-02-000-050-90-00-CN?

The probe is rated -35 to +200 deg C continuously and up to +250 deg C for less than 24 hours.

**Q6** What gap-voltage span is expected from the matched system using Bently Nevada 330851-02-000-050-90-00-CN?

Move the approved sliding bracket through a controlled distance, confirm gap voltage and verify response across the required linear region.

**Q8** Which complementary-input test validates Bently Nevada 330851-02-000-050-90-00-CN?

Retain the full article check, as-left gap, static position, controlled movement response, channel diagnostics and alarm verification record.

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