

# 330104-10-15-10-01-05

## 3300 XL 8 mm Proximity Probe

Bently Nevada 330104-10-15-10-01-05 is a configured 3300 XL 8 mm proximity probe. It detects shaft displacement for a matched Proximitor Sensor and machinery-monitoring channel.

| Manufacturer      | Bently Nevada                                                       |
|-------------------|---------------------------------------------------------------------|
| Product family    | 3300 XL 8 mm Proximity Transducer System                            |
| Part number       | 330104-10-15-10-01-05                                               |
| Country of origin | USA                                                                 |
| Source            | 3300 XL 8 mm Proximity Transducer System Datasheet — 141194 Rev. AM |

### Product role

- 1

Senses shaft-to-bearing displacement without physical contact
- 2

Forms the probe element of a matched eddy-current transducer loop
- 3

Carries the probe signal through the specified triaxial lead and connector
- 4

Combines extended metric reach with armored lead protection

### Document purpose

| Technical review     | Model identity and manufacturer-published values      |
|----------------------|-------------------------------------------------------|
| Installation review  | Mounting, connection and companion-hardware checks    |
| Commissioning review | Controlled signal, diagnostic and functional response |

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# 1. Technical specifications

The following values are transcribed only from the manufacturer records named in this document.

| Mounting execution           | Forward mount with armor                         |
|------------------------------|--------------------------------------------------|
| Probe body thread            | M10 x 1                                          |
| Unthreaded length            | 100 mm                                           |
| Overall case length          | 150 mm                                           |
| Total probe length           | 1.0 m                                            |
| Connector execution          | Connector protector included                     |
| Cable execution              | Standard FEP with flexible stainless-steel armor |
| Agency approval option       | CSA, ATEX and IECEx                              |
| Nominal probe DC resistance  | 7.59 +/-0.50 Ohm                                 |
| Probe series                 | 3300 XL 8 mm                                     |
| Matched-system linear range  | 2 mm                                             |
| Incremental scale factor     | 7.87 V/mm nominal                                |
| Frequency response           | 0 to 10 kHz, +0/-3 dB                            |
| Recommended operating gap    | 1.27 mm approximately                            |
| Recommended gap voltage      | -9 Vdc approximately                             |
| Probe tip material           | Polyphenylene sulfide (PPS)                      |
| Probe case material          | AISI 303 or 304 stainless steel                  |
| Probe cable impedance        | 75 Ohm triaxial                                  |
| Minimum cable bend radius    | 25.4 mm                                          |
| Minimum flat target diameter | 15.2 mm                                          |
| Minimum shaft diameter       | 50.8 mm                                          |
| Recommended shaft diameter   | 76.2 mm                                          |

## Configuration identity checks

| Complete model    | 330104-10-15-10-01-05                    |
|-------------------|------------------------------------------|
| Manufacturer part | 330104-10-15-10-01-05                    |
| Installed family  | 3300 XL 8 mm Proximity Transducer System |
| Record authority  | 141194 Rev. AM                           |

## 2. System function and integration

Bently Nevada 330104-10-15-10-01-05 is a configured 3300 XL 8 mm proximity probe. It detects shaft displacement for a matched Proximitor Sensor and machinery-monitoring channel.

### Compatible installation elements

| Component 1 | 3300 XL 8 mm Proximitor Sensor                  |
|-------------|-------------------------------------------------|
| Component 2 | matched extension cable when required           |
| Component 3 | compatible machinery-protection monitor channel |
| Component 4 | AISI 4140 steel reference target                |

### Engineered application matrix

| Armored metric probe installation  | Senses shaft-to-bearing displacement without physical contact              |
|------------------------------------|----------------------------------------------------------------------------|
| Radial shaft-vibration measurement | Forms the probe element of a matched eddy-current transducer loop          |
| Axial position monitoring          | Carries the probe signal through the specified triaxial lead and connector |
| Shaft centerline observation       | Combines extended metric reach with armored lead protection                |

### Related products on Apter Power

| 330106-05-30-05-02-00 | 3300 XL 8 mm reverse-mount probe | <a href="#">Open product page</a> |
|-----------------------|----------------------------------|-----------------------------------|
| 330103-00-12-10-02-00 | 3300 XL 8 mm metric probe        | <a href="#">Open product page</a> |
| 330103-00-16-10-02-05 | 3300 XL 8 mm approved probe      | <a href="#">Open product page</a> |
| 330130-045-00-00      | 3300 XL extension cable          | <a href="#">Open product page</a> |

### 3. Installation and commissioning controls

Install 330104-10-15-10-01-05 with the documented mechanical reach and cable route, then verify total system length, static gap, polarity and monitor scaling before enabling protection.

- 1

Verify the complete 330104-10-15-10-01-05 marking and mounting geometry before work.
- 2

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

Keep the M10 x 1 mounting surface and PPS tip free from damage and contamination.
- 4

Preserve the 1.0 m integral lead and its published minimum bend radius.
- 5

Mate the Connector protector included connection cleanly without applying tensile load.
- 6

Match the probe, extension cable and Proximitior Sensor to the engineered system length.
- 7

Set static gap within the documented linear region while maintaining shaft clearance.
- 8

Prove polarity, dynamic response and alarm action before returning protection service.

#### Acceptance record

| Identity              | 330104-10-15-10-01-05 recorded                            |
|-----------------------|-----------------------------------------------------------|
| Mounting / connection | 3300 XL 8 mm Proximitior Sensor                           |
| Companion hardware    | matched extension cable when required                     |
| Functional duty       | Armored metric probe installation                         |
| As-left evidence      | Connections, diagnostics and controlled response recorded |

#### Return-to-service sequence

| 1 | Confirm physical security and connector condition            |
|---|--------------------------------------------------------------|
| 2 | Restore the documented channel or system configuration       |
| 3 | Observe stable diagnostics before applying a controlled test |
| 4 | Record the final process response and release authorization  |

## 4. Engineer FAQ and source record

|                                                                            |                                                                                                                                                                                                      |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| What maintenance evidence should be retained for 330104-10-15-10-01-05?    | Retain the full 330104-10-15-10-01-05 identity, as-left mounting and connections, continuity or bias checks, diagnostics and the final functional-test result.                                       |
| What should be verified before returning 330104-10-15-10-01-05 to service? | Confirm secure mounting, connector integrity, restored configuration, stable signal behavior and the intended response of the associated monitoring channel.                                         |
| What must be matched before replacing 330104-10-15-10-01-05?               | Match the complete 330104-10-15-10-01-05 marking, 3300 xl 8 mm proximity probe, installed mounting or connector execution and the approved equipment record before removal.                          |
| Which system components should be checked with 330104-10-15-10-01-05?      | Confirm the installed 3300 XL 8 mm Proximity Sensor, matched extension cable when required and the assigned monitoring or connection point are the documented combination for 330104-10-15-10-01-05. |
| How should wiring or cabling for 330104-10-15-10-01-05 be recorded?        | Record conductor identity, shield termination, connector orientation, cable route and the as-found diagnostic state before disconnecting 330104-10-15-10-01-05.                                      |
| What installation control is important for 330104-10-15-10-01-05?          | Use the model-specific mounting arrangement, protect mating surfaces and maintain the documented cable support and mechanical clearance for 330104-10-15-10-01-05.                                   |
| How is 330104-10-15-10-01-05 checked during commissioning?                 | Apply the approved controlled test for armored metric probe installation, verify polarity or direction where applicable, and compare the measured response with the configured channel.              |
| Can parameters from a similar model be used for 330104-10-15-10-01-05?     | No. Retain only values and configuration details that apply directly to the complete 330104-10-15-10-01-05 ordering code and installed system.                                                       |

### Manufacturer source identifiers

|                        |                                                    |
|------------------------|----------------------------------------------------|
| Document title         | 3300 XL 8 mm Proximity Transducer System Datasheet |
| Publication / revision | 141194 Rev. AM                                     |
| Manufacturer           | Bently Nevada / Baker Hughes                       |

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