# Bently Nevada 330103-00-11-10-02-05

## 01 Function and selected configuration

### Product function

Bently Nevada 330103-00-11-10-02-05 brings the XL 8 mm sensing element to a deeper metric mounting point without changing the one-metre probe lead arrangement.

### Selected configuration

The selected 110 mm case and M10 x 1 thread provide the mechanical reach for the sensing point. Its entire case selection is independent of the 1.0 m total probe length used in the electrical system.

### Functional path

| Conductive target | Proximity probe | Matched cable | Proximitor output |
|---|---|---|---|

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|---|---|
| Mounting | M10 x 1; 110 mm case; 0 mm unthreaded |
| Lead configuration | 1.0 m; unarmored standard cable |
| Matched-system scale | 7.87 V/mm |

The unarmored standard cable uses a miniature ClickLoc connector. A 4.0 m compatible extension forms a 5.0 m chain with this probe; a different total length requires the corresponding Proximitor calibration.

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## 02 Technical operating envelope

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| Tip diameter | 8 mm |
| Mounting thread | M10 x 1 |
| Case length | 110 mm |
| Unthreaded section | 0 mm |
| Probe length | 1.0 m |

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|---|---|
| Probe resistance | 7.59 ohm ±0.50 ohm |
| System linear range | 2 mm |
| System scale factor | 7.87 V/mm |
| Reference gap | 1.27 mm |
| Calibration target | AISI 4140 steel |

System values require the matching transducer components and specified target. The selected 1.0 m probe length must be treated as part of the calibrated electrical chain.

### Signal interpretation

The 2 mm linear range and 7.87 V/mm scale factor belong to the complete matched system; the probe alone does not establish these ratings.

### Interface boundary

The reference gap is 1.27 mm (approximately -9 V for radial vibration). Confirm target material, available travel and correct total electrical length before using the nominal calibration.

### What thread pitch must match 330103-00-11-10-02-05?

The metric interface is M10 x 1; an M10 thread with a different pitch is not interchangeable.

### What output change should a 0.1 mm target movement produce with 330103-00-11-10-02-05?

The nominal 7.87 V/mm matched-system scale corresponds to approximately 0.787 V, subject to calibration and operating conditions.

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## 03 System integration and applications

### Long metric mount

Reach the sensing point with the selected 110 mm case.

### Five-metre chain

Combine the 1 m probe with a matched 4 m extension.

### Shaft movement

Measure target position and dynamic vibration in an XL 8 mm channel.

### Resistance diagnosis

Compare probe continuity with the 1 m resistance reference.

### System and supply context

The probe works with the corresponding extension cable and Proximitor; the supplied item does not include the complete measurement channel.

### Application boundary

Apply the M10 x 1 installation to its intended target and keep the selected 1.0 m probe length in the electrical-length calculation.

### Which extension length pairs with 330103-00-11-10-02-05 in a 5 m system?

A compatible 4.0 m extension plus the 1.0 m probe makes the 5.0 m chain.

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## 04 Engineering selection decisions

### How does the 110 mm case of 330103-00-11-10-02-05 affect installation?

It determines the physical reach and threaded engagement; it does not change the selected 1.0 m electrical probe length.

### What resistance is nominal for the probe in 330103-00-11-10-02-05?

The 1.0 m probe has nominal center-to-outer-conductor resistance of 7.59 ohm ±0.50 ohm.

### Does 330103-00-11-10-02-05 include a connector protector in option 02?

Option 02 is the standard miniature coaxial ClickLoc connection without the option-01 connector protector.

### Why check the final gap after locking 330103-00-11-10-02-05?

Tightening and securing the installation can shift the probe; verify the energized channel remains at the intended reference position.

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|---|---|
| Target calibration | Assess target material and clearance before applying nominal sensitivity. |
| Gap setting | Establish the gap using the complete energized measurement chain. |

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## 05 Configuration boundary and references

### Lifecycle and support

The current production and factory-support status of 330103-00-11-10-02-05 is unconfirmed.

### Replacement assessment

Retain the matched transducer family, total electrical length and target calibration. Recheck the channel response after replacing a component.

### Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; it does not replace manufacturer instructions.

### Technical basis

Bently Nevada 3300 XL 8 mm Proximity Transducer System, 141194 Rev. AN.

### Related product navigation

- Bently Nevada 990-05-70-01-00
- Bently Nevada 990-05-70-03-05

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries