Bently Nevada 330104-01-08-50-01-05

01 Function and selected configuration

Product function

Bently Nevada 330104-01-08-50-01-05 combines a protected five-metre probe lead with a partially unthreaded metric case for the matching 5 m measurement system.

Selected configuration

This probe carries the complete 5.0 m probe cable selection and is designed for a 5 m Proximitor. Its length must not be extended to create a 9 m system merely because the connector can be joined to another cable.

Functional path

Conductive target	Proximity probe	Matched cable	Proximitor output

Mounting	M10 x 1; 80 mm case; 10 mm unthreaded
Lead configuration	5.0 m; armored standard cable with connector protector
Matched-system scale	7.87 V/mm

The 80 mm metric case includes a 10 mm unthreaded section. Armor protects the standard cable, and the selected miniature ClickLoc connection includes a connector protector for the intended joint arrangement.

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02 Technical operating envelope

Tip diameter	8 mm
Mounting thread	M10 x 1
Case length	80 mm
Unthreaded section	10 mm
Probe length	5.0 m
Lead protection	Armor and connector protector

Compatible system length	5 m only
Probe resistance	8.73 ohm ±0.50 ohm
System linear range	2 mm
System scale factor	7.87 V/mm
Reference gap	1.27 mm

System values require the matching transducer components and specified target. The selected 5.0 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 probe resistance is expected from 330104-01-08-50-01-05?

The nominal resistance for a 5.0 m probe is 8.73 ohm ±0.50 ohm between center and outer conductor.

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03 System integration and applications

Direct five-metre chain

Connect the selected 5 m probe to its matching Proximitor.

Protected cable route

Use armor and the connector protector in the intended machine installation.

Partial-thread mounting

Retain the 10 mm unthreaded section and 80 mm case geometry.

Radial vibration channel

Set the energized gap and check the matched-system output.

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 5.0 m probe length in the electrical-length calculation.

What are the threaded and unthreaded selections on 330104-01-08-50-01-05?

The case is 80 mm overall with a 10 mm unthreaded section and M10 x 1 mounting.

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04 Engineering selection decisions

Can 330104-01-08-50-01-05 be used with a 9 m Proximitor by adding an extension?

No. The 5 m probe execution is designed for the 5 m Proximitor only.

Does 330104-01-08-50-01-05 include both armor and a connector protector?

Yes. The 330104 construction adds armor and option 01 selects the standard ClickLoc connector with protector.

What gap reference is used for radial vibration with 330104-01-08-50-01-05?

The XL 8 mm reference is approximately 1.27 mm, corresponding to about -9 V under the specified calibration conditions.

Which target check matters before using nominal sensitivity with 330104-01-08-50-01-05?

Confirm the actual target material and geometry against the AISI 4140 steel calibration assumptions before applying the 7.87 V/mm scale.

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 330104-01-08-50-01-05 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 3500/77M 143737-01
- Bently Nevada 3500/77M 176449-07

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

Product enquiries