Bently Nevada 330104-00-25-50-02-CN

01 Armored Eddy-Current Proximity Probe / system role

Product function and operating context

Bently Nevada 330104-00-25-50-02-CN uses its five-metre probe lead as the electrical-length element of a matching five-metre transducer arrangement.

The ordered mechanical arrangement has a 250 mm case with a 0 mm unthreaded section. Compare this geometry with the bracket and target position so that the probe can be secured without forcing its cable or shifting the intended sensing direction.

Integration checkpoints

- Fluid-film bearing monitoring
- Static position measurement
- Reference-pulse sensing
- Probe replacement service

Measurement role	Non-contact shaft position and vibration
Cable construction	Armored standard coaxial lead
Signal path	Matched probe, cable arrangement and Proximitor

The five-metre probe lead is intended for a five-metre Proximitor system without an added extension. Cable reach must be planned around this calibrated arrangement; the supplied lead is not a general-purpose cable that can be cut to suit.

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02 Technical operating envelope

Sensing principle	Non-contact eddy current
Tip diameter	8 mm
Mounting thread	M10 x 1
Unthreaded section	0 mm
Case length	250 mm
Integral lead length	5.0 m

Lead construction	Armored standard coaxial cable
Connector	Miniature coaxial ClickLoc
Nominal system sensitivity	7.87 V/mm (200 mV/mil)
System linear range	2 mm (80 mils)
Standard calibration target	AISI 4140 steel

Probe configuration follows the metric ordering table; stated system performance requires a matched transducer chain and the specified target conditions.

Can excess lead on 330104-00-25-50-02-CN be shortened to simplify routing?

No. Shortening or splicing alters the calibrated cable assembly. Retain its supplied length and route the excess appropriately, preserving the approved bend and environmental conditions.

Why must 330104-00-25-50-02-CN be tested with the actual conductive target?

System sensitivity depends on target material and geometry. Verify response over the intended operating gap with the installed or representative target. A calibration made against a different metal cannot automatically establish field accuracy.

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03 System integration and applications

Fluid-film bearing monitoring

Measure shaft motion with a compatible proximity channel.

Static position measurement

Observe conductive target position within the matched-system range.

Reference-pulse sensing

Support a properly configured Keyphasor or speed-reference arrangement.

Probe replacement service

Match mounting geometry and electrical length to the installed chain.

System and supply context

330104-00-25-50-02-CN belongs to the 3300 XL 8 mm system installation described by the technical reference. Connected equipment and accessories must be included explicitly in the configured assembly.

Application boundary

The following uses describe supported engineering roles; they do not establish interchangeability with another model or remove application-specific validation.

Why is connector protection important when routing 330104-00-25-50-02-CN through a cabinet?

The coaxial connection must remain clean and mechanically secure. Contamination or strain can introduce unstable readings. Plan the cable route and protection before installation, then inspect the connection after routing.

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04 Engineering selection decisions

Can a standard extension cable be added to the five-metre lead of 330104-00-25-50-02-CN?

The five-metre probe is intended for a five-metre Proximitor system. Adding an extension changes the calibrated electrical length. Use the supported complete-chain arrangement rather than adding cable merely to obtain more reach.

How should the long case of 330104-00-25-50-02-CN be supported during mounting?

Use the intended threaded mounting arrangement without bending or forcing the probe into misalignment. Check the target relationship after the assembly is secured. Mechanical case length is not additional sensing range.

What can make 330104-00-25-50-02-CN readings change when nearby wiring is moved?

An insecure connector, cable strain or coupling into the installation can create an intermittent response. Inspect the coaxial path and field wiring arrangement, then repeat the controlled test without changing the target gap.

What should be verified before returning a channel using 330104-00-25-50-02-CN to protection service?

Confirm the matched conditioner, final gap and monitor scaling, then test the required indication and alarm path. Restore maintenance inhibits only after the full measurement chain responds as intended.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and manufacturer-support stage for this exact model is not confirmed.

Replacement assessment

Compare the complete 330104-00-25-50-02-CN identity, installed connections and configuration before selecting a replacement. The conditioner output represents both static gap and dynamic target motion. Target material, mounting geometry and receiver configuration must remain within the intended measurement design. Armor protects the routed lead but does not replace proper support or connector protection.

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; use it together with the applicable manufacturer instructions.

Technical basis

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

Related product navigation

- Bently Nevada 330130-040-00-05
- Bently Nevada 330130-045-00-05
- Bently Nevada 330130-080-00-CN

Related products for separate application assessment; verify the platform and interface. No interchangeability is implied.

Product enquiries