Bently Nevada 330104-00-14-05-02-00

01 Armored Eddy-Current Proximity Probe / system role

Product function

Bently Nevada 330104-00-14-05-02-00 places a short armored lead at the measurement location while the extension and conditioner establish the calibrated system.

Selected configuration

The ordered mechanical arrangement has a 140 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 0.5 m integral lead is combined with a compatible extension cable to establish the selected system electrical length. The probe cable length is not the total system length, and a mechanically matching extension does not establish electrical compatibility.

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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	140 mm
Integral lead length	0.5 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.

Why should 330104-00-14-05-02-00 cable armor not be used as a pulling handle?

Mechanical loading can stress the cable termination and probe assembly. Support and route the lead without transmitting installation force through the sensing element. Recheck response after fastening and routing are complete.

Does 330104-00-14-05-02-00 measure shaft vibration without a Proximitor Sensor?

No. The probe operates within a compatible transducer chain whose conditioner provides the measurement output. The probe alone is not a standalone voltage or current transmitter.

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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

330104-00-14-05-02-00 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.

How can bracket metal disturb the reading from 330104-00-14-05-02-00?

Conductive material near the probe tip can influence the sensing field. Compare the mounted response with the approved target and mounting arrangement. A satisfactory bench check does not rule out interference introduced by the installed bracket.

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04 Engineering selection decisions

Why does the half-metre lead of 330104-00-14-05-02-00 still require an electrical-length check?

The lead is only one part of the calibrated transducer chain. Add the matching extension cable and compare the result with the Proximitor system length. Mechanical reach and calibrated electrical length are separate acceptance criteria.

What separates incorrect gap from a damaged 330104-00-14-05-02-00 probe?

Check the complete matched chain and observe output while changing the target gap in a controlled fixture. A stable but offset response suggests a different issue from an open or intermittent connection. Do not diagnose from one installed voltage alone.

How should a shaft-material change be assessed for 330104-00-14-05-02-00?

The standard calibration uses AISI 4140 steel. A different conductive target can change scale and linearity. Verify the complete system against the actual target material before relying on the nominal measurement sensitivity.

What confirms that 330104-00-14-05-02-00 stayed correctly gapped after locknut tightening?

Recheck the output against the controlled gap after the final mounting operation. Mechanical movement during tightening can shift the sensing position. Record the final reading rather than relying on the pre-tightening setting.

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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 330104-00-14-05-02-00 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 330130-080-00-00
- Bently Nevada 330130-040-02-05
- Bently Nevada 330130-085-02-05

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

Product enquiries