Bently Nevada 330105-02-12-05-02-00

Complete Product Information

Bently Nevada 330105-02-12-05-02-00 is a reverse mount 3300 XL 8 mm proximity probe configured with 3/8-24 UNF-2A, 0.5 m integral lead and miniature clickloc coaxial connector. It is the passive sensing element in a matched non-contact vibration and position measurement chain.

01 Product identity and verified data

Complete model	330105-02-12-05-02-00
Product type	3300 XL 8 mm Proximity Probe
Manufacturer	Bently Nevada
Supply condition	New, original product
Technical source	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet, 141194 Rev. AL
Product type	Reverse-mount 3300 XL 8 mm proximity probe
Mounting arrangement	reverse mount
Case thread	3/8-24 UNF-2A
Armor	Stainless-steel armor
Unthreaded length	fixed reverse-mount geometry
Overall case length	fixed reverse-mount geometry
Integral lead length	0.5 m
Connector	Miniature ClickLoc coaxial connector

Engineering purpose

The complete 330105-02-12-05-02-00 order code fixes the probe's mechanical reach, cable construction and approval selection; integration depends on the matching extension cable, Proximitor Sensor, target and monitor channel.

02 Additional technical specifications

Cable option	Standard cable
Agency approval option	Not required
Probe family	3300 XL 8 mm proximity transducer system
Probe tip material	Polyphenylene sulfide (PPS)
Probe case material	AISI 304 stainless steel
Cable construction	75 ohm triaxial cable with FEP insulation
Connector material	Gold-plated brass miniature coaxial ClickLoc
Matched-system linear range	2.0 mm under the stated target and calibration conditions
Matched-system scale factor	7.87 V/mm (200 mV/mil) under the stated conditions
Matched-system frequency response	0 to 10 kHz typical
Reference target	AISI 4140 steel unless the installation is separately characterized
System-length rule	Probe lead plus extension cable must match the selected 5 m or 9 m Proximitor system

Evidence boundary

Order fields identify this probe's mounting, geometry, integral lead, connector and approval selection; electrical performance values apply to the complete matched transducer chain under the stated calibration conditions.

03 Engineering overview

330105-02-12-05-02-00 is the sensing-end component of a 3300 XL 8 mm eddy-current transducer chain. The reverse-mount body is intended for a compatible probe sleeve and the fixed 02-12 geometry must be preserved. Its mechanical order fields determine how the probe reaches and locks at the target; they do not change the requirement to use the matching extension cable and Proximitor Sensor.

The selected 0.5 m integral lead and miniature clickloc coaxial connector carry the probe impedance to the rest of the chain. Preserve the total electrical system length, keep the coaxial connection clean and fully seated, and route the cable without twist, crushing or a bend that loads the probe body.

The documented 2.0 mm linear range and 7.87 V/mm scale factor describe a calibrated matched system on the stated AISI 4140 reference target. Target alloy, geometry, cross-talk spacing, temperature and the installed monitor configuration can change the field result, so commissioning must restore the approved gap and compare the channel with its machine baseline.

Application map

Radial shaft vibration

Use the installed probe at the approved bearing location to observe shaft motion relative to the probe mounting.

Axial position

Apply the probe to a conductive thrust target only when the target travel remains inside the calibrated working region.

Speed or phase reference

Use an approved target feature and monitor configuration when the channel provides a once-per-turn reference.

Probe replacement

Retain thread, reach, lead, connector, approval and total-system length when replacing the installed sensing element.

04 Installation and product precautions

Confirm the complete marking

Match every field of 330105-02-12-05-02-00 with the installed record before removal or installation.

Protect the sensing tip

Keep the PPS tip away from impact, metal chips and solvents not approved for the installed procedure.

Control installation torque

Use the probe-family wrench flats and approved thread procedure; do not transmit torque through the cable.

Preserve the coaxial path

Keep ClickLoc contacts clean, aligned and dry, and protect the connection from cable strain.

Set the operating gap

Establish gap from the approved stopped-machine procedure and confirm target travel remains within the working region.

Prove the complete channel

Verify gap voltage, monitor indication and operating response before returning protection or monitoring to service.

Technical notes

Installation relationship	Use the 3/8-24 UNF-2A mounting and the documented fixed reverse-mount geometry / fixed reverse-mount geometry geometry to establish the approved installed position.
System boundary	Treat range, scale factor and frequency response as complete-chain values, not standalone probe output ratings.
Technical reference	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet, 141194 Rev. AL.

Engineering questions

How should the sleeve and reverse-mount position of 330105-02-12-05-02-00 be documented before removal?	Record the sleeve reference, retained hardware, cable exit, stopped-machine gap voltage and insertion relationship. Rebuild the same mechanical datum before setting the final electrical gap.
What confirms that 330105-02-12-05-02-00 is connected to the correct 5 m channel?	Trace the 0.5 m probe lead and extension cable to the Proximitor Sensor, then verify their combined length and sensor marking against the approved loop record.
How can connector contamination affect 330105-02-12-05-02-00 during commissioning?	Moisture or conductive debris changes the coaxial impedance and may shift gap voltage or noise. Inspect, clean and fully seat the ClickLoc connection before diagnosing the probe.

Why should the FluidLoc option not be assumed for 330105-02-12-05-02-00?	This order code selects the standard cable and the reverse-mount probe sleeve normally provides the intended protection. Compare the actual environment and marking before specifying a different cable construction.
What gap checks are needed after reinstalling 330105-02-12-05-02-00?	With the machine in the approved stopped condition, restore the mechanical reference, measure gap voltage and confirm expected target travel remains inside the channel's calibrated region.
How should a noisy channel using 330105-02-12-05-02-00 be isolated?	Separate mechanical looseness, target runout, connector contamination and cable routing from monitor faults. Compare stopped-machine noise and substitution results only with a verified matched component.
Can 330105-02-12-05-02-00 be exchanged with a standard-mount probe?	Not on order-code similarity alone. Reverse-mount hardware, sleeve geometry, cable route and the approved installed drawing must all support the proposed change.
What evidence should close a replacement of 330105-02-12-05-02-00?	Retain the full marking, sleeve and mounting record, connector inspection, total-system-length check, stopped-machine gap and operating channel response.

Acceptance and support

Retain the full marking, installed-chain identities, test readings and approved machine configuration. Confirm the exact offered item and included scope in the written quotation.

Discuss the exact marking and installed application with Apter Power.
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Verified related product references

Related product	330102-00-28-10-02-05
Related product	330104-00-16-10-02-00
Related product	330500-00-01
Related product	330980-70-CN

Commissioning record template

Installed asset	Machine, bearing, channel or cabinet reference
Companion identities	Probe, cable, sensor, interface or monitor markings
Mechanical datum	Mounting reference, reach, alignment or sealing condition
Electrical datum	Chain length, connector, shield, supply or input assignment
Before-work baseline	Gap, bias, vibration, continuity or channel observation
As-left result	Final measured value and functional proof
Approval basis	Applicable drawing, control requirement or site procedure
Handover	Technician, date, revision and maintenance-record location

Handover note

A replacement is complete only after the installed identity, physical interfaces, measured response and configuration record agree. Escalate any mismatch before the channel returns to protection or monitoring service.