Bently Nevada 330903-00-05-10-02-00

Complete Product Information

Bently Nevada 330903-00-05-10-02-00 is a M8 x 1 unarmored NSv probe with 0 mm unthreaded reach, a 50 mm case and 1.0 m total length. It is intended for a matched NSv eddy-current measurement chain.

01 Product identity and verified data

Complete model	330903-00-05-10-02-00
Product type	3300 XL NSv proximity probe
Manufacturer	Bently Nevada
Technical source	Bently Nevada 3300 XL NSv Proximity Transducer System Datasheet, 147385 Rev. R
Probe family	3300 XL NSv
Thread	M8 x 1
Cable armor	No armor
Unthreaded length	0 mm
Overall case length	50 mm
Total probe length	1.0 m
Connector	Miniature coaxial ClickLoc without connector protector
Approval selection	No agency approval selected

Engineering purpose

The complete 330903-00-05-10-02-00 identity fixes the offered mechanical and cable configuration; installed performance still depends on the documented companion components, target and monitoring channel.

02 Additional technical specifications

Nominal probe DC resistance	4.2 +/- 0.5 ohm
Matched-system linear range	1.5 mm (60 mil)
Matched-system scale factor	7.87 V/mm (200 mV/mil)
Recommended gap	1.0 mm (40 mil)
Matched-system frequency response	0 to 10 kHz, +0/-3 dB typical
Proximitor supply	-17.5 to -26 V DC; 12 mA maximum without barriers
Reference target	AISI 4140 steel, 31 mm diameter or larger for stated system data

Evidence boundary

Exact order fields are decoded only where the cited manufacturer ordering table supports them. System performance values apply to the complete matched transducer chain under the stated reference conditions.

03 Engineering overview

330903-00-05-10-02-00 is an NSv sensing element for restricted counterbore, side-view or small-target installations. Compare its M8 x 1 body, 0 mm reach and 50 mm case with the machine drawing before removal.

The 1.0 m lead uses miniature coaxial clickloc without connector protector. Confirm the NSv extension cable and Proximitor identity, preserve total electrical length, and protect both coaxial interfaces from moisture and strain.

NSv scale, linear range and frequency response belong to the matched system. Commissioning must also verify target size, probe spacing, restored gap or bias and the operating response accepted for the machine.

Application map

Radial shaft vibration

Use a documented bearing location and matched transducer chain to measure shaft motion relative to the probe mounting.

Axial position

Aim the probe at an approved conductive thrust target and keep the full expected travel inside the characterized working region.

Phase or speed reference

Use only with an approved once-per-turn target feature and a monitoring channel configured for phase or speed reference.

Installed-channel maintenance

Preserve the exact probe, cable, Proximitor, mounting geometry and machine baseline recorded for the existing channel.

Installed-chain controls

Installed drawing	Record the drawing, machine location and channel designation that govern 330903-00-05-10-02-00.
Probe marking	Capture the complete order identity and any tag or revision visible on the delivered item.
Mechanical reference	Record thread or sleeve datum, insertion depth, lock position and expected target travel.
Cable identity	Confirm lead construction, connector condition, routing, strain relief and electrical-length relationship.
Companion electronics	Record the matching extension cable, Proximitor or signal conditioner and monitor channel.
Target condition	Confirm target material, width, runout surface and clearance from nearby conductive material.
Static baseline	Record stopped-machine gap or bias and compare it with the approved maintenance baseline.
Operating baseline	Record monitor indication and expected response after the complete channel is returned to service.

Interpretation boundaries

Probe-only limit	Do not present complete-system range, scale or linearity as a standalone output of 330903-00-05-10-02-00.
Target influence	Material, geometry, finish and nearby conductive surfaces can change the installed response.
Length influence	Probe lead and extension cable form part of the calibrated electrical relationship.
Temperature influence	Apply component temperature limits at their actual locations and compare with process transients.
Mechanical influence	Thread engagement, rigidity, target travel and cable support affect repeatability and service life.
Acceptance rule	Use the approved machine baseline and maintenance procedure for the final as-left decision.

04 Installation and product precautions

Confirm the complete marking

Match every field of 330903-00-05-10-02-00 with the installed spare-parts record before removal or installation.

Protect the sensing face

Keep the probe tip, connector and cable free from impact, moisture, metal chips and unsupported loading.

Preserve the mechanical datum

Record reach, thread engagement, lock position and target relationship before disturbing the installed component.

Control the cable route

Maintain the approved bend radius, separation and strain relief; do not twist, kink or crush the coaxial path.

Restore the operating point

Use the approved stopped-machine procedure to restore gap or bias and verify expected target travel.

Prove the complete channel

Verify the as-left electrical reading, monitor indication and operating response before return to service.

Technical notes

Installation relationship	The M8 x 1 mounting, 0 mm reach and 50 mm case define the mechanical position.
Small-target boundary	Verify target size, side-view clearance and adjacent-probe spacing before setting the operating gap.
Technical reference	Bently Nevada 3300 XL NSv Proximity Transducer System Datasheet, 147385 Rev. R.

Controlled installation sequence

01 Isolate	Place the monitored machine and channel in the approved maintenance state; prove the required isolation.
02 Photograph	Capture 330903-00-05-10-02-00, the installed datum, connector, route and companion-component markings.
03 Measure	Record mechanical position and the applicable stopped-machine electrical reading before removal.
04 Compare	Check delivered identity, interfaces and evidence against the approved drawing and spare-parts record.
05 Install	Fit without twisting the lead; preserve thread engagement, target clearance, bend radius and strain relief.
06 Set point	Establish the operating gap or datum only with the approved stopped-machine procedure.
07 Prove	Compare local reading, monitor indication and controlled operating response with the accepted baseline.
08 Handover	Record as-left values, photographs, deviations, responsible technician and release approval.

Engineering questions

Which companion components are required for 330903-00-05-10-02-00?	Use 330903-00-05-10-02-00 with the documented NSv extension cable and NSv Proximitor whose total system length matches the installed channel.
How should small-target effects be reviewed for 330903-00-05-10-02-00?	Check shaft diameter, flat-target size, side-view clearance and nearby conductive surfaces; small targets can change scale factor and require a documented application review.
How should cross-talk be assessed around 330903-00-05-10-02-00?	Confirm probe-tip separation and target geometry, then observe adjacent channels during a controlled target movement before accepting the installation.
What proves the operating gap of 330903-00-05-10-02-00 is acceptable?	Use the approved stopped-machine method to restore the documented 1.0 mm reference gap or accepted bias, then verify the full expected target travel remains inside the characterized region.
What evidence should be captured before removing 330903-00-05-10-02-00?	Photograph the complete 330903-00-05-10-02-00 marking, installed datum, connector, cable route and companion electronics. Record the stopped-machine baseline for the 3300 XL NSv proximity probe.
How should connector integrity be checked on 330903-00-05-10-02-00?	Isolate the channel, inspect the coaxial contacts for moisture and damage, verify continuity only with an approved method, and provide strain relief so the connector carries no cable load.
What commissioning record is required for 330903-00-05-10-02-00?	Retain the exact markings, mechanical datum, companion-component identities, as-left gap or bias, monitor indication and the accepted operating response.
When should 330903-00-05-10-02-00 be withheld from service?	Do not release the channel if the complete identity, mechanical fit, cable construction, connector, approval marking or measured response differs from the approved installed record.

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.
sales13@apterpower.com | +86 18030235313

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

Release checklist

Identity accepted	Complete marking agrees with the order, photographs and installed asset record.
Interfaces accepted	Mechanical fit, connector, wiring and companion components match the approved design.
Environment accepted	Temperature, contamination, vibration and route protection remain inside documented limits.

Configuration accepted	Hardware assignment, chain length or supply settings agree with the installed configuration.
Static proof accepted	Gap, bias, output voltage, channel state or continuity result is recorded as applicable.
Operating proof accepted	The returned channel response agrees with the approved machine or system baseline.

As-left verification worksheet

Exact delivered marking	330903-00-05-10-02-00; photograph and record any additional label detail.
Installed asset reference	Machine, bearing, train, channel and drawing identifiers.
Mechanical as found	Reach, lock position, gap reference, cable route and connector support.
Static reading as found	Gap, bias, continuity or channel value appropriate to the installed system.
Companion identities	Extension cable, Proximitor or conditioner and monitor channel markings.
Mechanical as left	Final reach, lock position, target clearance and route protection.
Static reading as left	Final gap, bias, continuity or channel value with test conditions.
Operating proof	Monitor response and machine observation accepted by the responsible authority.
Deviation record	Any difference from drawing or baseline, disposition and approval reference.
Release signatures	Technician, reviewer, operations owner and date.

Escalation triggers

Identity conflict	Stop if the complete marking, suffix, revision or approval identity differs from the approved record.
Host mismatch	Escalate if the rack, carrier, backplane, terminal unit or controller assignment is not documented for 330903-00-05-10-02-00.
Interface damage	Do not energize with bent contacts, damaged insulation, loose retainers, contamination or heat discoloration.
Environmental breach	Review any exposure beyond the documented temperature, vibration, humidity, contamination or enclosure boundary.
Unapproved substitution	Do not transfer ratings or compatibility from an adjacent order code without manufacturer evidence.
Configuration conflict	Stop if hardware settings, firmware, channel assignment or project configuration disagree with the installed record.
Unstable measurement	Investigate noise, drift, intermittent status or inconsistent readings before replacing another component.
Failed functional proof	Keep the asset in the approved maintenance state until the complete acceptance sequence is passed and recorded.

Evidence package

Nameplate evidence	Overall and close photographs showing 330903-00-05-10-02-00, revision, approval and serial details where present.
Installation evidence	Views of the rack position, mechanical datum, terminal assignment, cable route and strain relief.
Configuration evidence	Export or screenshots identifying the approved hardware assignment and parameters without exposing credentials.
Baseline evidence	As-found readings with units, test conditions, machine state and the instrument used.
Inspection evidence	Connector, contact, insulation, fastener, contamination and heat-condition observations.
Functional evidence	As-left readings and the controlled input, output or channel response used for acceptance.
Change evidence	Any wiring, setting, firmware or mechanical change linked to its approved work reference.
Release evidence	Technician, reviewer, date, asset reference and the maintenance-record location for traceability.