Bently Nevada 330901-00-90-05-02-00

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330901-00-90-05-02-00 is a long-case NSv probe for restricted mounting and small-target measurement in a matched proximity transducer chain.

01 Job scope and identity

Complete model	330901-00-90-05-02-00
Product type	3300 XL NSv proximity probe
Manufacturer	Bently Nevada
Technical source	Bently Nevada 3300 XL NSv Proximity Transducer System Datasheet, 147385 Rev. R

Field decisions

1 Establish identity

Capture the full marking, installed companion components and baseline before disconnection.

2 Inspect interfaces

Verify mounting, cable, connector, armor, approval and environmental boundaries.

3 Fit the exact chain

Preserve the documented probe-cable-Proximitor or sensor-monitor relationship.

4 Prove response

Use the approved stopped-machine and operating acceptance procedure.

5 Record as left

Save markings, configuration, test values and operating observations.

Installation relationships

Mechanical relationship	The 1/4-28 mounting, 9.0 in case and target clearance control probe position.
System relationship	The 0.5 m probe lead must be combined with the correct NSv extension cable and Proximitor total-length option.
Technical reference	Bently Nevada 3300 XL NSv Proximity Transducer System Datasheet, 147385 Rev. R.

Pre-work evidence

Installed drawing	Record the approved cabinet, rail, slot, terminal, cable and system references that govern 330901-00-90-05-02-00.
Complete marking	Capture the complete order identity and every revision or approval marking on the delivered item.
Mechanical reference	Record mounting position, fasteners, connector orientation, access clearance and support points.
Electrical interfaces	Confirm supply, signal, bus, terminal and protective-conductor assignments against the installed drawing.
Configuration state	Record jumpers, switches, addresses, firmware or project settings that apply to this hardware.

02 Pre-installation readiness

Model-specific installation decisions

Exact identity

330901-00-90-05-02-00 and every delivered revision or approval marking must be recorded before removal.

Installed system

3300 XL NSv proximity transducer system companion components, channel assignment and approved machine reference must remain traceable.

Mechanical baseline

Record the as-found mounting datum, reach, lock position, target clearance, routing and connector support.

Electrical baseline

Record the applicable stopped-machine gap, bias, continuity or channel value together with test conditions.

As-left configuration

Document the final mechanical position, cable protection, connector condition and complete companion-component identities.

Functional release

Compare the final monitor indication and controlled operating response with the approved baseline before handover.

Installation precautions

Confirm the complete marking

Match every field of 330901-00-90-05-02-00 with the installed spare-parts and channel records.

Protect the sensing face

Prevent impact, metal-particle contact and contamination at the probe tip during handling.

Preserve the mechanical datum

Record thread engagement, reach, lock position, target relationship and as-found gap or bias before removal.

Control the cable route

Maintain the approved bend radius, connector protection and independent strain relief; do not twist the probe lead.

Restore the operating point

Use the approved stopped-machine procedure to restore the documented gap or bias.

Prove the matched channel

Verify as-left electrical indication and controlled machine response against the accepted baseline.

Companion and baseline records

Companion hardware	Record the connected drive, rack, motor, transducer, I/O base or control unit as applicable.
As-found baseline	Capture relevant voltages, currents, states, counts, fault history or channel response before removal.
Operating baseline	Record the controlled functional result after the complete system is returned to service.

Pre-installation release gates

Identity gate	The delivered marking is 330901-00-90-05-02-00 and all visible revision or approval details have been photographed.
Drawing gate	The installed asset, channel, mounting reference and companion-component assignments are identified on the approved record.
Mechanical gate	Mounting surface, thread or support points, access clearance and target relationship are suitable for the selected configuration.
Interface gate	Connector, conductor, shield, terminal and protective-conductor condition have been inspected before connection.
Route gate	Cable or lead routing preserves bend radius, strain relief, contamination protection and separation from damaging surfaces.
Baseline gate	The applicable stopped-machine reading and operating observation have been captured with units and test conditions.

03 Installation and commissioning

Controlled installation sequence

01 Isolate	Place the monitored machine and channel in the approved maintenance state; prove the required isolation.
02 Photograph	Capture 330901-00-90-05-02-00, 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.

Commissioning acceptance criteria

Mechanical fit	1/4-28 UNF-2A; 0.0 in unthreaded; 9.0 in case. Confirm the installed datum and available target travel before final tightening.
Lead or interface fit	0.5 m lead; Miniature coaxial ClickLoc, standard cable. Inspect the mating interface and provide independent route support.
System position	The offered item is a 1/4-28 unarmored NSv probe; target geometry, probe spacing, extension cable, Proximitor and monitor assignment govern application.
As-found reference	Record the applicable stopped-machine reading and the exact companion-component identities before disconnection.
Static acceptance	Restore the documented gap, bias, continuity or channel value with the machine in the approved test state.
Functional acceptance	Compare local indication, monitor response and the controlled operating observation with the accepted machine baseline.
Deviation control	Withhold release when the delivered marking, mounting datum, interface, system length or response differs from the approved record.
Release evidence	Retain the complete marking, test conditions, measured results, photographs, reviewer and maintenance-record reference.

Acceptance test points

After mechanical fit	Record final mounting datum, engagement, lock position, target clearance and route support.
After interface connection	Confirm contact seating, conductor or shield assignment and continuity or bias as applicable.
Before energization	Reconcile companion identities, total chain configuration and monitor or collector channel assignment.
Initial energized state	Observe the local channel value and status without declaring acceptance from open-circuit voltage alone.
Controlled functional proof	Compare the returned indication and machine response with the approved operating baseline.
Final record	Attach photographs, measured values, deviations, approvals and the maintenance-record location.

04 Diagnostics and escalation

How should the installed port be checked before fitting 330901-00-90-05-02-00?	Compare the 1/4-28 thread, 0.0 in unthreaded reach and 9.0 in case with the machine drawing, record the as-found datum and verify that expected target travel will remain clear before the old probe is moved.
Which companion electronics must be retained with 330901-00-90-05-02-00?	Keep 330901-00-90-05-02-00 inside the documented 3300 XL NSv proximity transducer system; confirm the extension-cable and Proximitor identities and the selected total system length.
What connector inspection is required for 330901-00-90-05-02-00?	The selected interface is Miniature coaxial ClickLoc, standard cable. Isolate the channel, inspect mating surfaces for moisture, contamination and damage, then seat and support the connection without lead strain.
How is the operating point restored after installing 330901-00-90-05-02-00?	Use the approved stopped-machine method to restore the recorded gap or bias, then perform target-size, bias and monitor-response checks against the accepted baseline.

Additional diagnostic decisions

How should target material be handled when accepting 330901-00-90-05-02-00?	Use the documented target material and geometry for the installed machine; a different alloy, curvature or target area can change scale and linearity.
What check helps separate a probe fault from a monitor fault on 330901-00-90-05-02-00?	Compare the stopped-machine gap or bias at the Proximitor with the local monitor indication, then inspect the probe and cable path before substituting electronics.
When must 330901-00-90-05-02-00 be withheld from service?	Do not release the channel if identity, mounting geometry, connector, companion electronics, target relationship or controlled response differs from the approved record.
What as-left evidence should be retained for 330901-00-90-05-02-00?	Retain the full marking, small-target geometry, companion identities, probe spacing, as-left gap or bias and operating response.

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 330901-00-90-05-02-00.
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.

05 Handover and evidence package

As-left verification worksheet

Exact delivered marking	330901-00-90-05-02-00; 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.

Evidence quality controls

Traceability	Each value is tied to 330901-00-90-05-02-00, the asset location, test state, instrument and date.
Repeatability	The same approved method and comparable operating state are used for before-and-after readings.
Resolution	Recorded precision does not exceed the capability of the instrument or source document.
Reference state	Stopped, energized, loaded and process-running observations are clearly distinguished.
Change control	Every changed setting, connection or mechanical datum has an approved reason and reviewer.
Retention	Evidence remains accessible with the maintenance record for future troubleshooting and replacement review.

Verified related product references

Related product	Bently Nevada 330500-00-01
Related product	Bently Nevada 330980-70-CN
Related product	Bently Nevada 330930-040-03-00
Related product	Bently Nevada 84661-96

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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