Bently Nevada 330101-00-30-05-02-00

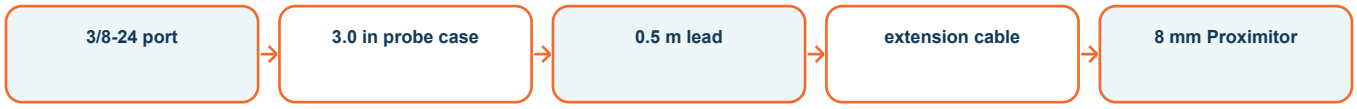
Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330101-00-30-05-02-00 is an inch-thread, unarmored 3300 XL 8 mm probe with a 3.0 in case and a short 0.5 m standard lead for close-coupled machinery monitoring.

01 Job boundary

Exact product	Bently Nevada 330101-00-30-05-02-00
Documented role	3300 XL 8 mm proximity probe
Configuration question	How does a zero-standoff inch body reach the target without bottoming?
System family	3300 XL 8 mm proximity transducer system

Configuration chain



This short unarmored inch-thread probe suits documented bearing or thrust locations with a nearby protected connector junction and an existing 3300 XL 8 mm companion chain.

Before work starts

Insertion datum
The 3.0 in case has no unthreaded reach allowance; compare thread depth and back clearance with the installed bracket before removal.

Short-lead junction
Support the 0.5 m standard lead and locate its miniature ClickLoc joint in a clean, dry and mechanically protected area.

System acceptance
Use the 7.45 +/-0.50 ohm probe reading as an identity diagnostic, then restore gap and prove the complete channel under controlled motion.

02 Pre-installation identity and fit

Decode every segment before disturbing the installed channel; the sequence below is specific to this order code.

330101	3/8-24 forward probe without armor
00	0.0 in unthreaded reach
30	3.0 in overall case
05	0.5 m integral lead
02	standard cable, miniature ClickLoc
00	no agency approval option

Release gates before removal

Marking	Read the complete 330101-00-30-05-02-00 identity and every approval or revision mark.
Mechanical datum	3/8-24 UNF-2A forward mount with 0.0 in unthreaded reach and a 3.0 in case.
Lead architecture	0.5 m standard 75 ohm triaxial lead, unarmored, with miniature ClickLoc termination.
Companion chain	Order fields and probe resistance are taken from Bently Nevada datasheet 141194 Rev. AL. Range and scale remain properties of the complete matched 3300 XL 8 mm system.
Baseline	Record the as-found gap or bias and monitor indication before disconnection.

Hold point

Stop when any order-code segment, installed datum or companion identity cannot be reconciled with the maintenance record.

03 Controlled installation sequence

Step 1	Measure the port Record usable thread depth and back clearance before removing the installed probe.
Step 2	Position the junction Confirm the extension-cable joint is reachable within the 0.5 m unarmored lead.
Step 3	Seat to datum Engage the 3/8-24 case without bottoming and restore the mechanical reference.
Step 4	Set the operating point Restore the documented gap or accepted static bias.
Step 5	Prove the channel Compare Proximitor voltage and monitor response with the accepted baseline.

Installation-specific cautions

Measure available thread depth
The zero-unthreaded geometry can bottom in a shallow port; compare the 3.0 in case with the installed mechanical drawing.

Protect the unarmored lead
Provide strain relief and abrasion protection from the probe exit to the nearby ClickLoc junction.

Keep the joint dry
Inspect both miniature coaxial contacts and the surrounding enclosure before mating the standard-cable connector.

Observe the 25.4 mm bend radius
Route the 0.5 m lead without a sharp turn at the case or connector.

Confirm the approval marking
The order code ends in 00; do not substitute an approval claim from another 330101 configuration.

Prove more than continuity
After mechanical fit, restore the recorded operating point and verify Proximitor and monitor response against the machine baseline.

04 Commissioning and fault isolation

Use the first observable symptom to choose the next check; do not replace the Proximitor or monitor before isolating the probe-side configuration.

Observed condition	Model-specific next check
Cannot reach target gap	Check blind-port depth, case bottoming and bracket datum.
Intermittent output near junction	Inspect the short unarmored lead, ClickLoc contacts and strain relief.
Resistance outside tolerance	Isolate the probe and compare with 7.45 ±0.50 ohm before testing electronics.
Stable bias but wrong motion response	Review target material, companion length and monitor scaling.

Acceptance questions

Why does thread depth matter especially for 330101-00-30-05-02-00?	Its 0.0 in unthreaded option places the 3.0 in case at the threaded datum, so a shallow or blind port can stop the probe before the required target gap is reached.
How should the short lead of 330101-00-30-05-02-00 change the junction layout?	Place the extension-cable junction within the 0.5 m lead, support the unarmored cable independently and keep the ClickLoc connection inside a clean protected area.
What does the final 00 code mean when accepting 330101-00-30-05-02-00?	It selects no agency approval option; compare the delivered marking with the project requirement rather than applying an approval carried by another order code.
When is a resistance check useful for 330101-00-30-05-02-00?	A center-to-outer reading near 7.45 ±0.50 ohm helps identify lead or connector faults, but it does not prove gap, scale factor or monitor calibration.
Which companion length decision is required before connecting 330101-00-30-05-02-00?	Combine the 0.5 m probe lead only with the extension cable and Proximitor option documented for the installed total electrical length.
How can an engineer prevent case bottoming with 330101-00-30-05-02-00?	Measure usable thread depth and back clearance, compare them with the 3.0 in case, and set the final gap from the approved mechanical datum.

What functional evidence releases 330101-00-30-05-02-00 after replacement?	Record the as-left gap or bias, Proximitor output and monitor response while applying the site-approved controlled shaft or target check.
Which substitution differences are unacceptable for 330101-00-30-05-02-00?	A different thread, case length, unthreaded reach, armor, lead length, connector option or approval code requires a new mechanical and electrical review.

05 Handover package

Complete marking	330101-00-30-05-02-00
Mechanical result	3/8-24 UNF-2A forward mount with 0.0 in unthreaded reach and a 3.0 in case.
Lead or interface result	0.5 m standard 75 ohm triaxial lead, unarmored, with miniature ClickLoc termination.
Static datum	Record final gap or bias with machine state and instrument.
Functional proof	Record Proximitor output and monitor response during the approved controlled test.
Deviation record	List any variance, responsible reviewer and release decision.
Maintenance evidence	Attach photographs, measurements and the final companion-component identities.

Model-specific closeout limits

Port thread	3/8-24 UNF-2A
Case geometry	0.0 in unthreaded / 3.0 in case
Probe lead	0.5 m standard unarmored
Diagnostic resistance	7.45 ±0.50 ohm
Release proof	Restored gap plus channel response

Verified related product references

Bently Nevada 330703-020-110-10-01-05	3300 XL 11 mm proximity probe
Bently Nevada 330103-00-03-05-01-05	3300 XL 8 mm proximity probe
Bently Nevada 330701-00-40-10-11-05	3300 XL 11 mm proximity probe
Bently Nevada 330780-91-CN	3300 XL 11 mm Proximitor Sensor

Engineering contact
Discuss the exact marking, installed geometry and companion chain with Apter Power.

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