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

Complete Product Information

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 Configuration dashboard

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

Order-code interpretation

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

Installed signal path



The short-lead 330101-00-30-05-02-00 configuration is intended for a nearby extension-cable junction where the 3/8-24 mounting datum and 3.0 in insertion geometry are already defined.

02 Mechanical and electrical evidence

Probe family	3300 XL 8 mm
Mounting thread	3/8-24 UNF-2A
Mounting form	forward mount
Cable armor	No armor
Unthreaded length	0.0 in
Overall case length	3.0 in
Total probe length	0.5 m
Connector and cable	Miniature coaxial ClickLoc, standard cable

Approval selection	No agency approval
Nominal probe resistance	7.45 ±0.50 ohm
Recommended radial gap	Approximately 1.27 mm at -9 V DC
Matched-system frequency response	0 to 10 kHz, +0/-3 dB
Minimum flat target diameter	15.2 mm
Probe cable impedance	75 ohm triaxial
Probe tip material	PPS
Probe case material	AISI 303 or 304 stainless steel

Engineering interpretation

The zero-unthreaded 3/8-24 body places the full 3.0 in case at the threaded mounting reference. Thread engagement and available back clearance therefore control whether the sensing face reaches the recorded shaft target without bottoming the case.

A 0.5 m standard FEP lead minimizes probe-side cable length but requires a compatible extension cable to complete the installed 3300 XL 8 mm electrical length. The unarmored lead needs independent support between the probe body and the protected ClickLoc junction.

For the complete matched chain, the published 2.0 mm range and 7.87 V/mm scale assume an AISI 4140 target and the stated calibration conditions. Re-establish the recorded gap or bias and compare the returned channel response rather than accepting the probe from resistance alone.

Evidence boundary

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.

03 Application decisions and release controls

Close-junction radial vibration
Use where the bearing housing provides a 3/8-24 port and the extension-cable junction is positioned within the 0.5 m probe lead.

Compact axial-position point
Apply to a documented thrust target when the full 3.0 in threaded case reaches the target without exceeding permitted engagement.

Once-per-turn reference
Use only with an approved keyway or projection target and a channel configured for phase reference, not continuous displacement scaling.

Like-for-like probe renewal
Retain the short unarmored lead and standard connector option when replacing an installed 330101-00-30-05-02-00.

Product-specific precautions

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.

Engineering decision matrix

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.

04 Installed-base record and support

Lifecycle context

Configuration status	The present manufacturing phase of complete order code 330101-00-30-05-02-00 is not confirmed independently of the 3300 XL 8 mm platform.
Installed-base relevance	The 3/8-24 body and 0.5 m lead remain useful only where the existing extension cable and Proximitor preserve the approved total electrical length.
Replacement review	A candidate replacement must reproduce the 3.0 in case, zero unthreaded reach, standard unarmored lead and no-approval selection before fit is accepted.
Supply boundary	Availability of this exact marking is confirmed in quotation separately from any manufacturer lifecycle classification.

Verified related product references

Bently Nevada 330704-000-060-90-02-CN	3300 XL 11 mm proximity probe
Bently Nevada 330104-00-10-20-12-05	3300 XL 8 mm proximity probe
Bently Nevada 330703-020-110-10-01-05	3300 XL 11 mm proximity probe

Available unit details

Offered reference	Bently Nevada 330101-00-30-05-02-00, forward-mount 3300 XL 8 mm probe.
Identity check	Confirm 3/8-24 UNF-2A, 00/30 geometry, 05 lead length, 02 cable option and final 00 approval code on the item.
Included items	One unarmored probe is included; extension cable, Proximitor Sensor, monitor and mounting hardware require separate confirmation.

Additional exact-model decisions

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.

Diagnostic interpretation

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 evidence

Mechanical evidence	3/8-24 UNF-2A forward mount with 0.0 in unthreaded reach and a 3.0 in case. Record the final installed datum.
Lead evidence	0.5 m standard 75 ohm triaxial lead, unarmored, with miniature ClickLoc termination. Retain route and termination photographs.
Functional evidence	Confirm the short-lead junction, full thread engagement and restored channel response before release.

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

sales13@apterpower.com | +86 18030235313