Bently Nevada 330102-00-28-05-02-05

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330102-00-28-05-02-05 is a 2.8 in armored 3/8-24 probe with a short 0.5 m standard lead for a matched 3300 XL 8 mm chain.

01 Job scope and identity

Complete model	330102-00-28-05-02-05
Product type	3300 XL 8 mm proximity probe
Manufacturer	Bently Nevada
Technical source	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet, 141194 Rev. AL

Field decisions

1 Freeze the installed datum

Reproduce the measured 2.8 in sleeve engagement and locknut reference while preserving target clearance.

2 Inspect the selected body

A 2.0, 3.0 or 6.0 in case changes the sensing-face datum; armor does not make the ClickLoc environmentally sealed.

3 Rebuild the lead route

Form and support the 0.5 m armor so the first bend neither rotates the 3/8-24 body nor traps the connector in an inaccessible location.

4 Close the coaxial joint

Place the unprotected miniature ClickLoc in a clean, dry service envelope within the short lead reach.

5 Demonstrate the channel

Recheck the 2.8 in datum after clamping, restore gap or bias and compare the complete channel with the accepted baseline.

Installation relationships

Mechanical datum	Match 0.0 in unthreaded reach and 2.8 in case to the port depth, bracket position and expected target travel.
Electrical chain	Use the 0.5 m probe lead only with the extension cable and Proximitor that reproduce the installed total length.
Resistance and response	Use 7.45 +/-0.50 ohm only as an isolated diagnostic reference; gap and dynamic acceptance still require the complete channel.

Pre-work evidence

Removal reference	Photograph 330102-00-28-05-02-05, measure the installed locknut or bracket datum and record probe position before loosening it.
Port evidence	Reproduce the measured 2.8 in sleeve engagement and locknut reference while preserving target clearance.
Lead evidence	Form and support the 0.5 m armor so the first bend neither rotates the 3/8-24 body nor traps the connector in an inaccessible location.
Connector evidence	Place the unprotected miniature ClickLoc in a clean, dry service envelope within the short lead reach.
Baseline evidence	Recheck the 2.8 in datum after clamping, restore gap or bias and compare the complete channel with the accepted baseline.

02 Pre-installation readiness

Model-specific installation decisions

Exact identity

330102-00-28-05-02-05 and every delivered revision or approval marking must be recorded before removal.

Installed system

3300 XL 8 mm 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

Measure the 2.8 in datum

Record sleeve engagement and locknut position before the old probe is moved.

Plan the 0.5 m joint location

The short lead may place the ClickLoc close to heat, oil or restricted service space.

Neutralize the first armor bend

Do not let route stiffness turn the 3/8-24 body during final tightening.

Keep the unprotected joint dry

Armor does not provide environmental sealing for the ClickLoc.

Separate probe and chain diagnosis

Use the resistance reference only after isolating the probe from extension and Proximitor faults.

Recheck datum after clamping

Confirm the 2.8 in seating and bias have not moved when the armor support is complete.

Pre-installation release gates

Geometry gate	A 2.0, 3.0 or 6.0 in case changes the sensing-face datum; armor does not make the ClickLoc environmentally sealed.
Route gate	Form and support the 0.5 m armor so the first bend neither rotates the 3/8-24 body nor traps the connector in an inaccessible location.
Joint gate	Place the unprotected miniature ClickLoc in a clean, dry service envelope within the short lead reach.
Companion-chain gate	The marked probe lead, extension cable and Proximitor system-length option reconcile to the installed record.
Return-to-service gate	Recheck the 2.8 in datum after clamping, restore gap or bias and compare the complete channel with the accepted baseline.

03 Installation and commissioning

Controlled installation sequence

01 Record	Capture the complete 330102-00-28-05-02-05 marking, port datum, companion identities and pre-work channel value.
02 Compare	A 2.0, 3.0 or 6.0 in case changes the sensing-face datum; armor does not make the ClickLoc environmentally sealed.
03 Position	Reproduce the measured 2.8 in sleeve engagement and locknut reference while preserving target clearance.
04 Route	Form and support the 0.5 m armor so the first bend neither rotates the 3/8-24 body nor traps the connector in an inaccessible location.
05 Connect	Place the unprotected miniature ClickLoc in a clean, dry service envelope within the short lead reach.
06 Prove	Recheck the 2.8 in datum after clamping, restore gap or bias and compare the complete channel with the accepted baseline.

Commissioning acceptance criteria

Mechanical result	Reproduce the measured 2.8 in sleeve engagement and locknut reference while preserving target clearance.
Cable result	Form and support the 0.5 m armor so the first bend neither rotates the 3/8-24 body nor traps the connector in an inaccessible location.
Connector result	Place the unprotected miniature ClickLoc in a clean, dry service envelope within the short lead reach.
Electrical-length result	Probe lead plus extension cable agrees with the installed Proximitor system-length selection.
Functional result	Recheck the 2.8 in datum after clamping, restore gap or bias and compare the complete channel with the accepted baseline.

04 Diagnostics and escalation

How should the 2.8 in datum of 330102-00-28-05-02-05 be captured?	Measure sleeve engagement, locknut position and face-to-target reference before removal, then reproduce all three after seating the replacement.
Where should the ClickLoc of 330102-00-28-05-02-05 be located?	Choose a clean, dry and accessible point within the 0.5 m lead reach, with enough slack to disconnect without bending the armor sharply.
Why is a 3.0 in body not automatically equivalent to 330102-00-28-05-02-05?	The 0.2 in difference shifts the sensing face and can change sleeve engagement or target clearance in a fixed bracket.

How can armor movement affect 330102-00-28-05-02-05?	A poorly formed first bend can rotate the probe, shift the gap or load the miniature connector when clamps are tightened.

Additional diagnostic decisions

What does the resistance reference show for 330102-00-28-05-02-05?	A 7.45 +/-0.50 ohm isolated reading supports probe continuity assessment but does not prove the extension cable, Proximitor or calibration.
How is oil exposure managed around 330102-00-28-05-02-05?	The armor protects mechanically, but the unprotected ClickLoc still needs a dry enclosure or route away from direct oil spray.
What final movement check applies to 330102-00-28-05-02-05?	Recheck the 2.8 in seating and bias after the first armor clamp is secured, then perform the approved controlled response test.
What should the handover package show for 330102-00-28-05-02-05?	Show the -28 case code, sleeve datum, 0.5 m joint position, first armor bend, resistance result, as-left bias and returned channel response.

05 Handover and evidence package

Model-specific handover evidence

Identity	Photographs of the complete 330102-00-28-05-02-05 marking and delivered connector end.
Mechanical	Reproduce the measured 2.8 in sleeve engagement and locknut reference while preserving target clearance.
Route	Form and support the 0.5 m armor so the first bend neither rotates the 3/8-24 body nor traps the connector in an inaccessible location.
Signal path	Probe, extension cable, Proximitor and monitor-channel identities recorded as one chain.
Acceptance	Recheck the 2.8 in datum after clamping, restore gap or bias and compare the complete channel with the accepted baseline.

Model-specific application limits

Mounting	3/8-24 UNF-2A; 0.0 in / 2.8 in
Probe lead	0.5 m
Probe resistance	7.45 +/-0.50 ohm
Matched-system range	2.0 mm
Matched-system scale	7.87 V/mm

Verified related product references

Related product	Bently Nevada 330930-040-03-00
Related product	Bently Nevada 84661-96
Related product	Bently Nevada 330102-00-28-10-02-05
Related product	Bently Nevada 330104-00-16-10-02-00

Engineering contact

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