Bently Nevada 330103-00-11-10-02-CN

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330103-00-11-10-02-CN combines an M10 x 1 metric body, 110 mm case and 1.0 m unarmored standard lead with a CN approval suffix for a matched 3300 XL 8 mm channel.

01 Job scope and identity

Complete model	330103-00-11-10-02-CN
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 110 mm-case bracket datum while preserving target travel and port-bottom clearance.

2 Inspect the selected body

A 50 mm or other metric case changes the sensing-face position; the CN approval marking must also agree with the delivered project identity.

3 Rebuild the lead route

Support the 1.0 m unarmored lead along a protected route without transferring tensile load to the M10 body.

4 Close the coaxial joint

Accept the miniature ClickLoc only when both contacts are clean, dry, fully seated and accessible without a protector.

5 Demonstrate the channel

Restore the documented gap or bias, then compare Proximitor voltage and monitor response with the recorded pre-work channel baseline.

Installation relationships

Mechanical datum	Match 0 mm unthreaded reach and 110 mm case to the port depth, bracket position and expected target travel.
Electrical chain	Use the 1.0 m probe lead only with the extension cable and Proximitor that reproduce the installed total length.
Resistance and response	Use 5.9 +/-0.5 ohm only as an isolated diagnostic reference; gap and dynamic acceptance still require the complete channel.

Pre-work evidence

Removal reference	Photograph 330103-00-11-10-02-CN, measure the installed locknut or bracket datum and record probe position before loosening it.
Port evidence	Reproduce the measured 110 mm-case bracket datum while preserving target travel and port-bottom clearance.
Lead evidence	Support the 1.0 m unarmored lead along a protected route without transferring tensile load to the M10 body.
Connector evidence	Accept the miniature ClickLoc only when both contacts are clean, dry, fully seated and accessible without a protector.
Baseline evidence	Restore the documented gap or bias, then compare Proximitor voltage and monitor response with the recorded pre-work channel baseline.

02 Pre-installation readiness

Model-specific installation decisions

Exact identity

330103-00-11-10-02-CN 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 110 mm seating envelope

Confirm usable port depth and the removal datum before the long case is inserted.

Do not substitute the 50 mm body

A shorter metric case moves the sensing face and invalidates the recorded bracket position.

Protect the unarmored lead

Clamp the lead independently and keep it away from abrasion, hot surfaces and tensile load.

Reserve ClickLoc access

The unprotected joint must remain clean, dry and reachable after installation.

Verify the CN marking

Compare the delivered approval label with the approved project record rather than inferring suitability from the suffix.

Re-establish the operating datum

Restore the recorded gap or bias and compare the returned monitor indication with the pre-work baseline.

Pre-installation release gates

Geometry gate	A 50 mm or other metric case changes the sensing-face position; the CN approval marking must also agree with the delivered project identity.
Route gate	Support the 1.0 m unarmored lead along a protected route without transferring tensile load to the M10 body.
Joint gate	Accept the miniature ClickLoc only when both contacts are clean, dry, fully seated and accessible without a protector.
Companion-chain gate	The marked probe lead, extension cable and Proximitor system-length option reconcile to the installed record.
Return-to-service gate	Restore the documented gap or bias, then compare Proximitor voltage and monitor response with the recorded pre-work channel baseline.

03 Installation and commissioning

Controlled installation sequence

01 Record	Capture the complete 330103-00-11-10-02-CN marking, port datum, companion identities and pre-work channel value.
02 Compare	A 50 mm or other metric case changes the sensing-face position; the CN approval marking must also agree with the delivered project identity.
03 Position	Reproduce the measured 110 mm-case bracket datum while preserving target travel and port-bottom clearance.
04 Route	Support the 1.0 m unarmored lead along a protected route without transferring tensile load to the M10 body.
05 Connect	Accept the miniature ClickLoc only when both contacts are clean, dry, fully seated and accessible without a protector.
06 Prove	Restore the documented gap or bias, then compare Proximitor voltage and monitor response with the recorded pre-work channel baseline.

Commissioning acceptance criteria

Mechanical result	Reproduce the measured 110 mm-case bracket datum while preserving target travel and port-bottom clearance.
Cable result	Support the 1.0 m unarmored lead along a protected route without transferring tensile load to the M10 body.
Connector result	Accept the miniature ClickLoc only when both contacts are clean, dry, fully seated and accessible without a protector.
Electrical-length result	Probe lead plus extension cable agrees with the installed Proximitor system-length selection.
Functional result	Restore the documented gap or bias, then compare Proximitor voltage and monitor response with the recorded pre-work channel baseline.

04 Diagnostics and escalation

How should the 110 mm body of 330103-00-11-10-02-CN be positioned in a reused metric bracket?	Transfer the measured locknut or bracket datum from the removed probe, then confirm the tip remains clear of the port bottom and target travel.

Why is a 50 mm metric probe not a direct mechanical substitute for 330103-00-11-10-02-CN?	The 60 mm case-length difference moves the sensing face relative to the bracket and changes available thread engagement even when both bodies use M10 x 1.
What route protection is needed for the lead on 330103-00-11-10-02-CN?	The 1.0 m standard lead is unarmored, so use independent clamps, abrasion protection and strain relief without compressing the coaxial cable.
How is the unprotected ClickLoc joint on 330103-00-11-10-02-CN accepted?	Inspect both contacts, mate the joint dry and fully seated, support both sides and leave enough service clearance to disconnect it without twisting the cable.

Additional diagnostic decisions

What must be checked about the CN suffix on 330103-00-11-10-02-CN?	Compare the delivered label and approval marks with the project requirement; the suffix alone does not establish hazardous-area suitability.
Which resistance reading is useful when diagnosing 330103-00-11-10-02-CN?	With the chain isolated, 5.9 +/-0.5 ohm is a probe-level reference; a satisfactory resistance value does not prove gap, linearity or monitor scaling.
How is 330103-00-11-10-02-CN commissioned after the long-case datum is restored?	Set the approved gap or bias in the documented stopped-machine state, then compare Proximitor output and monitor indication with the accepted baseline.
What records should accompany 330103-00-11-10-02-CN at handover?	Keep the full label, CN marking, bracket datum, installed chain identities, route and ClickLoc photographs, as-left gap or bias and functional response.

05 Handover and evidence package

Model-specific handover evidence

Identity	Photographs of the complete 330103-00-11-10-02-CN marking and delivered connector end.
Mechanical	Reproduce the measured 110 mm-case bracket datum while preserving target travel and port-bottom clearance.
Route	Support the 1.0 m unarmored lead along a protected route without transferring tensile load to the M10 body.
Signal path	Probe, extension cable, Proximitor and monitor-channel identities recorded as one chain.
Acceptance	Restore the documented gap or bias, then compare Proximitor voltage and monitor response with the recorded pre-work channel baseline.

Model-specific application limits

Mounting	M10 x 1; 0 mm / 110 mm
Probe lead	1.0 m
Probe resistance	5.9 +/-0.5 ohm
Matched-system range	2.0 mm
Matched-system scale	7.87 V/mm

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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