Bently Nevada 330103-00-05-10-02-05

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330103-00-05-10-02-05 is a compact 50 mm M10 x 1 probe with a 1.0 m unarmored standard lead and multiple-approval option.

01 Job scope and identity

Complete model	330103-00-05-10-02-05
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 50 mm metric seating while preserving locknut, tool and connector-exit clearance in the compact bracket.

2 Inspect the selected body

A 40 or 60 mm case or a forced lead exit changes the sensing datum or loads the connector even though the M10 thread matches.

3 Rebuild the lead route

Dress and support the 1.0 m unarmored lead with a neutral bend immediately behind the short body.

4 Close the coaxial joint

Keep the unprotected miniature ClickLoc dry and accessible, with strain relief outside its load zone.

5 Demonstrate the channel

Compare bias before and after cable dressing, then prove the monitor response after the compact assembly is fully secured.

Installation relationships

Mechanical datum	Match 0 mm unthreaded reach and 50 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 330103-00-05-10-02-05, measure the installed locknut or bracket datum and record probe position before loosening it.
Port evidence	Reproduce the 50 mm metric seating while preserving locknut, tool and connector-exit clearance in the compact bracket.
Lead evidence	Dress and support the 1.0 m unarmored lead with a neutral bend immediately behind the short body.
Connector evidence	Keep the unprotected miniature ClickLoc dry and accessible, with strain relief outside its load zone.
Baseline evidence	Compare bias before and after cable dressing, then prove the monitor response after the compact assembly is fully secured.

02 Pre-installation readiness

Model-specific installation decisions

Exact identity

330103-00-05-10-02-05 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

Confirm the 50 mm locknut envelope

The compact case leaves limited space for thread engagement, adjustment and connector exit.

Do not borrow a 40 or 60 mm datum

Adjacent metric case codes move the sensing face relative to the bracket.

Set a neutral lead exit

Route the unarmored cable without a tight bend directly behind the compact body.

Add local strain relief

Support the 1.0 m lead before it can pull on the unprotected ClickLoc.

Read the delivered approval label

Multiple approvals are an order selection; project acceptance still depends on the actual marking.

Check bias after cable dressing

Any shift after securing the lead requires gap, connector and strain to be rechecked.

Pre-installation release gates

Geometry gate	A 40 or 60 mm case or a forced lead exit changes the sensing datum or loads the connector even though the M10 thread matches.
Route gate	Dress and support the 1.0 m unarmored lead with a neutral bend immediately behind the short body.
Joint gate	Keep the unprotected miniature ClickLoc dry and accessible, with strain relief outside its load zone.
Companion-chain gate	The marked probe lead, extension cable and Proximitor system-length option reconcile to the installed record.
Return-to-service gate	Compare bias before and after cable dressing, then prove the monitor response after the compact assembly is fully secured.

03 Installation and commissioning

Controlled installation sequence

01 Record	Capture the complete 330103-00-05-10-02-05 marking, port datum, companion identities and pre-work channel value.
02 Compare	A 40 or 60 mm case or a forced lead exit changes the sensing datum or loads the connector even though the M10 thread matches.
03 Position	Reproduce the 50 mm metric seating while preserving locknut, tool and connector-exit clearance in the compact bracket.
04 Route	Dress and support the 1.0 m unarmored lead with a neutral bend immediately behind the short body.
05 Connect	Keep the unprotected miniature ClickLoc dry and accessible, with strain relief outside its load zone.
06 Prove	Compare bias before and after cable dressing, then prove the monitor response after the compact assembly is fully secured.

Commissioning acceptance criteria

Mechanical result	Reproduce the 50 mm metric seating while preserving locknut, tool and connector-exit clearance in the compact bracket.
Cable result	Dress and support the 1.0 m unarmored lead with a neutral bend immediately behind the short body.
Connector result	Keep the unprotected miniature ClickLoc dry and accessible, with strain relief outside its load zone.
Electrical-length result	Probe lead plus extension cable agrees with the installed Proximitor system-length selection.
Functional result	Compare bias before and after cable dressing, then prove the monitor response after the compact assembly is fully secured.

04 Diagnostics and escalation

How does the 50 mm case of 330103-00-05-10-02-05 affect service access?	The short body compresses the locknut and lead-exit envelope, so confirm tool clearance and connector access before final seating.
Why is the cable exit direction important for 330103-00-05-10-02-05?	A tight bend behind the 50 mm case can load the unprotected ClickLoc or rotate the probe as the lead is secured.
Can a 60 mm case replace 330103-00-05-10-02-05 in the same bracket?	Only after a mechanical redesign review; the extra 10 mm changes the sensing-face datum and available thread/locknut position.

What should be checked on the approval label of 330103-00-05-10-02-05?	Match the delivered marks to the approved project record and do not infer a specific approval solely from the multiple-approval order field.

Additional diagnostic decisions

How is cable strain detected after fitting 330103-00-05-10-02-05?	Observe bias before and after dressing the unarmored lead; a shift calls for connector, gap and strain-relief inspection.
Where should strain relief be placed for 330103-00-05-10-02-05?	Place it close enough to protect the ClickLoc but far enough to avoid forcing a bend at the compact probe body.
How is 330103-00-05-10-02-05 commissioned in a compact bracket?	Verify the 50 mm datum and lead exit, restore gap or bias, then compare static output and controlled monitor response with the baseline.
What makes the handover record for 330103-00-05-10-02-05 complete?	Include the exact label, 50 mm bracket datum, approval marking, cable-exit and strain-relief photographs, as-left bias and channel proof.

05 Handover and evidence package

Model-specific handover evidence

Identity	Photographs of the complete 330103-00-05-10-02-05 marking and delivered connector end.
Mechanical	Reproduce the 50 mm metric seating while preserving locknut, tool and connector-exit clearance in the compact bracket.
Route	Dress and support the 1.0 m unarmored lead with a neutral bend immediately behind the short body.
Signal path	Probe, extension cable, Proximitor and monitor-channel identities recorded as one chain.
Acceptance	Compare bias before and after cable dressing, then prove the monitor response after the compact assembly is fully secured.

Model-specific application limits

Mounting	M10 x 1; 0 mm / 50 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 330980-70-CN
Related product	Bently Nevada 330930-040-03-00
Related product	Bently Nevada 84661-96
Related product	Bently Nevada 330102-00-28-10-02-05

Engineering contact



Discuss the exact marking and installed application with Apter Power.
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