Bently Nevada 330703-020-110-10-01-05

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330703-020-110-10-01-05 is an unarmored M14 x 1.5 probe with a 20 mm unthreaded standoff, 110 mm case and protected 1.0 m standard lead.

01 Job boundary

Exact product	Bently Nevada 330703-020-110-10-01-05
Documented role	3300 XL 11 mm proximity probe
Configuration question	How does the 20 mm smooth standoff establish the correct sensing datum?
System family	3300 XL 11 mm proximity transducer system

Configuration chain



This metric 11 mm probe fits installations that intentionally use a 20 mm smooth standoff ahead of an M14 x 1.5 mounting boss and a protected standard-cable junction.

Before work starts

Standoff match
Compare the 20 mm unthreaded section with the bracket recess and target datum; do not infer fit from the M14 x 1.5 thread alone.

Engagement control
Keep metric thread engagement within 21 mm and confirm that the 110 mm case remains supported and clear.

Protected standard joint
Seat the protector over a clean ClickLoc interface and support the 1.0 m unarmored standard lead independently.

02 Pre-installation identity and fit

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

330703	M14 x 1.5 probe without armor
020	20 mm unthreaded standoff
110	110 mm overall case
10	1.0 m integral lead
01	standard cable with protector
05	multiple approvals

Release gates before removal

Marking	Read the complete 330703-020-110-10-01-05 identity and every approval or revision mark.
Mechanical datum	M14 x 1.5 thread with 20 mm unthreaded length and 110 mm overall case.
Lead architecture	1.0 m unarmored standard cable with ClickLoc connector protector.
Companion chain	Bently Nevada datasheet 146256 Rev. T supports the 020/110 metric geometry, protected standard lead and 11 mm system conditions. Full performance requires the matched chain.
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	Map the standoff datum Photograph and measure the bracket recess that receives the 20 mm smooth section.
Step 2	Limit thread engagement Keep M14 x 1.5 engagement within the documented 21 mm limit.
Step 3	Support the long metric case Check stiffness and clearance along the 110 mm body.
Step 4	Protect the standard joint Seat the option 01 protector without loading the unarmored lead.
Step 5	Verify bilateral travel Confirm usable displacement on both sides of the restored 2.5 mm gap.

Installation-specific cautions

Preserve the 20 mm standoff
Do not clamp or bury the smooth section in a way that changes the designed sensing-face position.

Limit M14 engagement
Thread engagement beyond 21 mm can bind the case and invalidate the mounting datum.

Support the 110 mm body
Verify bracket stiffness and clearance before applying final torque.

Inspect protector seating
Keep both ClickLoc contacts clean and make sure the protector closes without pinching the cable.

Check target geometry
Confirm the large 11 mm target area and adjacent-probe spacing before gap adjustment.

Validate travel about the datum
Prove the expected displacement span on both sides of the restored 2.5 mm gap or accepted bias.

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
Correct thread but wrong tip position	Compare the installed standoff with the selected 020 unthreaded section.
Case binds before the datum	Measure M14 engagement and keep it within 21 mm.
Gap shifts after protector closure	Relieve cable load and verify connector alignment.
Travel clips on one side	Recheck standoff position, target datum and expected machine motion.

Acceptance questions

What does the 020 segment change on 330703-020-110-10-01-05?	It selects a 20 mm unthreaded section that establishes a mechanical standoff and must match the installed bracket recess.
Why is matching only the M14 x 1.5 thread insufficient for 330703-020-110-10-01-05?	Another probe can share the thread but have a different standoff or case length, moving the sensing face relative to the target.
How much thread engagement is permitted for 330703-020-110-10-01-05?	Use no more than the documented 21 mm M14 x 1.5 engagement and confirm free travel before final tightening.
What must be checked around the connector protector of 330703-020-110-10-01-05?	Verify clean contacts, complete protector seating, removal clearance and independent support for the 1.0 m unarmored lead.
Which resistance value can support fault isolation on 330703-020-110-10-01-05?	A nominal 5.9 ±0.5 ohm probe reading can distinguish an open or damaged lead, but the complete chain still needs a response test.
How should target travel be assessed for 330703-020-110-10-01-05?	Start from the documented 2.5 mm gap or accepted bias and confirm that expected motion remains inside the usable 11 mm system region.
Which pre-installation evidence is critical for 330703-020-110-10-01-05?	Capture the bracket recess, standoff position, engagement depth, target geometry and companion-component markings before removal.
What closes the replacement record for 330703-020-110-10-01-05?	Retain final standoff and engagement measurements, protector condition, gap or bias and verified Proximitor-to-monitor response.

05 Handover package

Complete marking	330703-020-110-10-01-05
Mechanical result	M14 x 1.5 thread with 20 mm unthreaded length and 110 mm overall case.
Lead or interface result	1.0 m unarmored standard cable with ClickLoc connector protector.
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

Thread	M14 x 1.5; 21 mm maximum engagement
Standoff	20 mm unthreaded
Case	110 mm overall
Lead	1.0 m standard with protector
Acceptance	Preserved datum and bilateral travel

Verified related product references

Bently Nevada 330101-00-30-05-02-00	3300 XL 8 mm proximity probe
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 21747-085-01	7200 Series armored extension cable

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

sales13@apterpower.com | +86 18030235313