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

Complete Product Information

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 Configuration dashboard

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

Order-code interpretation

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

Installed signal path



The 20 mm smooth standoff is the defining feature of 330703-020-110-10-01-05, separating its target position from otherwise similar M14 x 1.5 long-case probes.

02 Mechanical and electrical evidence

Probe family	3300 XL 11 mm
Mounting thread	M14 x 1.5
Cable armor	No armor
Unthreaded length	20 mm
Overall case length	110 mm
Total probe length	1.0 m
Connector	ClickLoc with connector protector, standard cable
Approval selection	Multiple approvals

Nominal probe resistance	5.9 ±0.5 ohm
Recommended gap	2.5 mm (100 mil)
Matched-system frequency response	0 to 8 kHz, +0/-3 dB typical
Probe cable impedance	75 ohm triaxial
Reference target	AISI 4140 steel, 31 mm diameter or larger
Minimum bend radius	25.4 mm
Probe temperature	-52 to +177 deg C operating and storage

Engineering interpretation

The 20 mm unthreaded section creates a deliberate standoff between the threaded boss and sensing-end geometry. It must match the installed bracket recess and cannot be replaced by a zero-standoff probe merely because both use M14 x 1.5 threads.

A 110 mm overall case leaves 90 mm of threaded-case relationship beyond the selected unthreaded section. Limit M14 x 1.5 engagement to 21 mm, confirm target clearance and support the body so tightening does not change the intended axial position.

The 1.0 m standard FEP lead terminates through a connector protector and has a nominal 5.9 ±0.5 ohm resistance. Combine it with the documented extension cable and Proximitor, then prove the recommended 2.5 mm gap and required measurement travel.

Evidence boundary

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.

03 Application decisions and release controls

Standoff-defined radial point
Use where the machine drawing specifies a 20 mm smooth section between mounting boss and sensing geometry.

Metric thrust measurement
Apply to an axial target when the 110 mm case and standoff preserve the required 11 mm probe travel region.

Protected standard-cable junction
Use where the option 01 protector remains accessible and the unarmored route has external support.

Geometry-controlled replacement
Select this full code when thread alone is insufficient and the installed bracket depends on the 020/110 dimensions.

Product-specific precautions

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.

Engineering decision matrix

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.

04 Installed-base record and support

Lifecycle context

Order-specific phase	The current lifecycle phase of 330703-020-110-10-01-05 is not confirmed by treating all M14 x 1.5 probes as one item.
Standoff dependency	Installed-base support depends on preserving the 20 mm unthreaded section and 110 mm case used to set the sensing-face position.
Electrical dependency	The 1.0 m protected standard lead must remain within the recorded 11 mm companion chain.
Supply boundary	Exact-marking availability and included scope are confirmed in quotation separately from lifecycle status.

Verified related product references

Bently Nevada 330130-070-02-05	3300 XL 8 mm extension cable
Bently Nevada 330103-00-03-05-01-05	3300 XL 8 mm proximity probe
Bently Nevada 330101-00-30-05-02-00	3300 XL 8 mm proximity probe

Available unit details

Offered reference	Bently Nevada 330703-020-110-10-01-05 metric 3300 XL 11 mm probe.
Identity check	Confirm 020 standoff, 110 case, 10 lead, option 01 protected standard cable and final 05 marking.
Included items	One unarmored probe is included; extension cable, Proximitor Sensor, monitor and mounting parts are separately defined.

Additional exact-model decisions

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.

Diagnostic interpretation

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 evidence

Mechanical evidence	M14 x 1.5 thread with 20 mm unthreaded length and 110 mm overall case. Record the final installed datum.
Lead evidence	1.0 m unarmored standard cable with ClickLoc connector protector. Retain route and termination photographs.
Functional evidence	Confirm the 20 mm standoff, 21 mm engagement limit and usable travel about the restored gap.

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

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