Bently Nevada 330104-00-10-20-12-05

Complete Product Information

Bently Nevada 330104-00-10-20-12-05 is an armored M10 x 1 probe with a 100 mm case and 2.0 m FluidLoc lead for a 3300 XL 8 mm matched measurement chain.

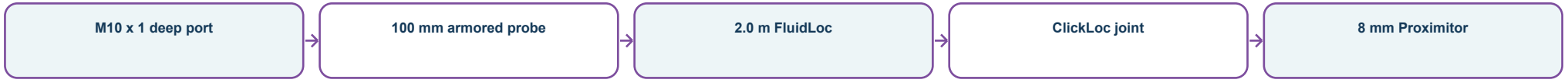
01 Configuration dashboard

Exact product	Bently Nevada 330104-00-10-20-12-05
Documented role	3300 XL 8 mm proximity probe
Configuration question	How are a 100 mm case and a two-meter armored FluidLoc route kept mechanically neutral?
System family	3300 XL 8 mm proximity transducer system

Order-code interpretation

330104	M10 x 1 forward probe with armor
00	0 mm unthreaded reach
10	100 mm overall case
20	2.0 m integral lead
12	FluidLoc cable, no connector protector
05	multiple approvals

Installed signal path



The defining choices for 330104-00-10-20-12-05 are its long metric case, integral armor and 2.0 m FluidLoc cable, which shift the review from compact fit to deep reach and protected routing.

02 Mechanical and electrical evidence

Probe family	3300 XL 8 mm
Mounting thread	M10 x 1
Mounting form	forward mount
Cable armor	Stainless-steel armor
Unthreaded length	0 mm
Overall case length	100 mm
Total probe length	2.0 m
Connector and cable	Miniature ClickLoc, FluidLoc cable without protector

Approval selection	Multiple approvals
Nominal probe resistance	11.4 ±0.5 ohm
Recommended radial gap	Approximately 1.27 mm at -9 V DC
Matched-system frequency response	0 to 10 kHz, +0/-3 dB
Minimum flat target diameter	15.2 mm
Probe cable impedance	75 ohm triaxial
Probe tip material	PPS
Probe case material	AISI 303 or 304 stainless steel

Engineering interpretation

The 100 mm M10 x 1 case provides substantially more insertion reach than compact metric probes. Verify port depth, unsupported case length and target travel so the long body neither bottoms in the mount nor introduces an unintended mechanical resonance.

Stainless-steel armor protects the 2.0 m FluidLoc lead against abrasion and liquid exposure, but it increases stiffness and does not serve as strain relief. Route the armored lead with the stated bend radius and support it before the unprotected miniature ClickLoc joint.

A 2.0 m probe lead has a nominal 11.4 ±0.5 ohm center-to-outer resistance for this selected construction. Final acceptance still depends on the matching extension cable and Proximitor, restored operating gap and the controlled 2.0 mm channel response.

Evidence boundary

Bently Nevada datasheet 141194 Rev. AL supports the 330104 metric armor, 100 mm case, 2.0 m FluidLoc option and resistance. System range and scale require the complete matched chain.

03 Application decisions and release controls

Deep bearing-housing reach
Use where the approved M10 x 1 port requires the 100 mm case to place the tip at the shaft target.

Fluid-exposed cable route
Select the FluidLoc lead for a documented route needing its cable construction while keeping the connector itself protected.

Abrasion-prone installation
Use the stainless armor where the machine design requires mechanical cable protection and provides adequate bend space.

Two-meter direct lead path
Apply where the probe-to-junction distance specifically matches the 2.0 m integral lead and companion electrical chain.

Product-specific precautions

Check unsupported case length A 100 mm body can amplify mechanical loading; verify bracket stiffness and final lock arrangement.	Do not pull on the armor Armor protects the cable surface but must not be used as a pulling member or connector strain relief.	Protect the unshielded joint Option 12 has no connector protector; place the ClickLoc interface in a clean, dry protected location.
Respect route stiffness Plan bends and clamps before seating the probe so the armored lead does not torque the M10 x 1 body.	Verify FluidLoc selection Do not replace the FluidLoc option with standard cable solely because the connector fits.	Complete a dynamic proof After the static gap is restored, verify the monitor response through the site's controlled operating check.

Engineering decision matrix

What installation risk is introduced by the 100 mm case on 330104-00-10-20-12-05?	The longer body increases the importance of thread depth, bracket stiffness and unsupported length; verify all three before final tightening.
How should the armor on 330104-00-10-20-12-05 be treated during routing?	Use it for surface protection only, maintain bend radius and add clamps so no tensile or torsional load reaches the probe or ClickLoc joint.
Why is the option 12 connector boundary important for 330104-00-10-20-12-05?	It combines FluidLoc cable with a miniature ClickLoc connector but no protector, so the cable route may be wet while the joint still requires a protected environment.
Which resistance result is expected when diagnosing 330104-00-10-20-12-05?	The selected 2.0 m armored probe has an 11.4 ±0.5 ohm nominal center-to-outer resistance; investigate a significant deviation before connecting electronics.

04 Installed-base record and support

Lifecycle context

Full-code phase	No separate lifecycle phase is assigned here to complete order code 330104-00-10-20-12-05.
Long-case installed base	Support planning must retain the M10 x 1 armored construction, 100 mm case and two-meter FluidLoc path used by the machine.
Change impact	Removing armor, shortening the case, changing FluidLoc to standard cable or adding a protector changes the ordered configuration.
Supply boundary	Quotation availability and included hardware are confirmed independently of the manufacturer lifecycle status.

Verified related product references

Bently Nevada 330780-91-CN	3300 XL 11 mm Proximitor Sensor
Bently Nevada 330703-020-110-10-01-05	3300 XL 11 mm proximity probe
Bently Nevada 330103-00-03-05-01-05	3300 XL 8 mm proximity probe

Available unit details

Offered reference	Bently Nevada 330104-00-10-20-12-05 armored metric 3300 XL 8 mm probe.
Identity check	Confirm 00/10 geometry, 20 lead length, 12 FluidLoc connector option, armor and final 05 approval code.
Included items	One armored FluidLoc probe is included; extension cable, Proximitor, clamps and monitor remain separate unless quoted.

Additional exact-model decisions

Can a shorter M10 x 1 probe replace 330104-00-10-20-12-05?	Not without a mechanical review because the 100 mm case establishes sensing-tip position and bracket engagement for the installed port.
How does the 2.0 m lead of 330104-00-10-20-12-05 affect companion selection?	The extension cable and Proximitor must complete the electrical length recorded for the installed channel; connector fit alone is insufficient.
What must be inspected after tightening 330104-00-10-20-12-05?	Confirm that the long case has not bottomed, the armor has not twisted the body, and the static gap voltage remains at the approved datum.
Which evidence completes commissioning of 330104-00-10-20-12-05?	Retain case-engagement details, route and clamp photographs, resistance, as-left gap or bias and a controlled monitor-response result.

Diagnostic interpretation

Static value changes with cable movement	Remove armor-induced torque and add route support.
Connector contamination	Clean and dry the unprotected option 12 joint before reconnection.
Probe resistance is abnormal	Compare the isolated result with 11.4 ±0.5 ohm and inspect the two-meter lead.
Unexpected high-frequency response	Check long-case support and bracket stiffness for mechanical resonance.

Acceptance evidence

Mechanical evidence	M10 x 1 forward mount with 0 mm unthreaded option and a 100 mm overall case. Record the final installed datum.
Lead evidence	2.0 m miniature ClickLoc FluidLoc cable with stainless-steel armor and no protector. Retain route and termination photographs.
Functional evidence	Confirm long-case support, armored FluidLoc routing and controlled channel response before release.

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

sales13@apterpower.com | +86 18030235313