330102-00-25-10-02-05

3300 XL 8 mm Proximity Probe

Bently Nevada 330102-00-25-10-02-05 is an armored 3/8-24 UNF 3300 XL 8 mm proximity probe with a 2.5 in case and 1.0 m lead.

Executive product dashboard

Armored lead protection

Flexible stainless-steel armor adds mechanical protection along the probe cable route.

Compact American-thread fit

A 3/8-24 UNF case with no unthreaded reach suits established probe ports and brackets.

Interchangeable XL chain

Correctly matched 3300 XL 8 mm components can be exchanged without individual bench calibration.

Exact order-code identity

Probe family	3300 XL 8 mm
Mounting thread	3/8-24 UNF-2A
Armor	With armor
Unthreaded length	0.0 in
Overall case length	2.5 in
Total probe length	1.0 m
Connector and cable option	02 - ClickLoc, standard cable
Agency approval option	05 - CSA, ATEX and IECEx

This 330102 execution combines a 3/8-24 UNF case, zero unthreaded reach and a 2.5 in overall case. Flexible stainless-steel armor protects the standard FEP-insulated triaxial lead while the sensing tip remains the documented 8 mm PPS construction.

Configuration and technical capability map

Probe tip material	Polyphenylene sulfide (PPS)
Cable construction	75 ohm triaxial, FEP insulated
System scale factor	7.87 V/mm (200 mV/mil)
Frequency response	0 to 10 kHz, +0/-3 dB
Minimum cable bend radius	25.4 mm

Probe case material	AISI 303 or 304 stainless steel
System linear range	2.0 mm (80 mils), matched 3300 XL 8 mm system
Recommended radial-vibration gap	-9 V DC; approximately 1.27 mm
Standard probe temperature	-52 to +177 deg C

Installed signal or connection path

Machine target > **330102-00-25-10-02-05** > **Extension cable** > **Proximitor Sensor** > **Monitor channel**

System interpretation boundary

The 1.0 m probe connects through the miniature ClickLoc interface without a factory-installed connector protector. Extension-cable selection must preserve the total electrical length required by the 3300 XL Proximitor Sensor.

System performance is specified for a matched 3300 XL 8 mm chain and an AISI 4140 target. After installation, set gap from live voltage and verify runout, dynamic response and monitor indication against the approved machine baseline.

Applications and installed-fit decisions

Armored machine routing

Use the protected lead where mechanical contact risk is higher along the installed cable path.

Radial shaft vibration

Gap the probe in the documented linear range and retain the required target diameter and probe spacing.

Axial position monitoring

Check available travel, target flatness and tip-to-tip clearance before accepting the mounting geometry.

Phase-reference pickup

Confirm target feature, speed range and receiving-channel settings before commissioning.

Engineering decision matrix

How does the armor affect installation of 330102-00-25-10-02-05?	It protects the cable mechanically but does not permit twisting, sharp bending or pulling on the armor ferrule during routing.
Why must the 2.5 in case length of 330102-00-25-10-02-05 be retained?	It fixes the threaded reach and locknut position relative to the machine target; a different case can change the installed gap range.
Does 330102-00-25-10-02-05 include a connector protector?	No. Code 02 selects the standard ClickLoc cable without a factory-installed protector; a separate protector may be specified where required.
Which total electrical length applies to 330102-00-25-10-02-05?	Its probe lead is 1.0 m. The extension cable and Proximitor Sensor must be selected so the complete chain has the required system length.

Applications must be evaluated against the exact installed machine drawing, target, companion hardware and receiving channel. Related product references do not imply substitution.

Product precautions and maintenance logic

Match every option block

Verify 00, 25, 10, 02 and 05 on the supplied marking.

Control armor termination

Do not twist the probe lead or use the armor as a pulling point.

Limit thread engagement

Keep 3/8-24 engagement within the documented 0.563 in limit.

Protect the open connector

Keep mating surfaces clean and dry; fit the specified protector when the route requires it.

Preserve system length

Probe and extension-cable lengths must agree with the Proximitor Sensor.

Verify the operating response

Check gap voltage, runout and dynamic signal after the complete chain is reconnected.

Additional technical questions

How should 330102-00-25-10-02-05 be tightened in a 3/8-24 port?	Use the documented probe-case torque and keep thread engagement within 0.563 in; do not load the cable or armor while tightening.
What target is used for published performance of 330102-00-25-10-02-05?	Published values use an AISI 4140 steel target under the stated supply, load, gap and temperature conditions.
How is 330102-00-25-10-02-05 checked after replacement?	Set the gap near -9 V DC, then compare slow-roll runout, vibration or position response and monitor indication with the accepted baseline.
What does approval code 05 mean for 330102-00-25-10-02-05?	It selects the documented CSA, ATEX and IECEx approval option; the installed circuit still has to follow the applicable approved drawing.

Technical notes

Exact configuration	Armored 3/8-24 UNF probe, 0.0 in unthreaded length, 2.5 in case, 1.0 m lead, standard ClickLoc cable and multiple approvals
System boundary	Range, scale and linearity are matched-system values, not standalone probe outputs
Technical reference	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN

Source record, related portfolio and contact

Manufacturer reference	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN
Applicability	Facts are limited to the exact order-code selections and stated matched-system conditions.
Public page	Exact product page linked from the first-page model title
Evidence boundary	No neighboring-model option or unsupported lifecycle conclusion is assigned to this product.

Verified related product references

Recommended product	Bently Nevada 330980-70-05
Recommended product	Bently Nevada 330425-01-00
Recommended product	Bently Nevada 330500-07-00
Recommended product	Bently Nevada 330706-005-046-10-02-00
Recommended product	Bently Nevada 200355-00-00-00

Discuss the exact marking and installed relationship with Apter Power.
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Use the complete marking, installed relationship, photographs and measured baseline as the service record for 330102-00-25-10-02-05.