330102-00-25-10-02-05

3300 XL 8 mm Proximity Probe

Apter Power field guide covering identity capture, installed relationships, controlled replacement, commissioning and handover.

Installed probe identity

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.

Complete identity record

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

Installed relationship

Range, scale and linearity are matched-system values, not standalone probe outputs

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.

Evidence boundary

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

Mechanical and electrical readiness

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.

Readiness checks

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.

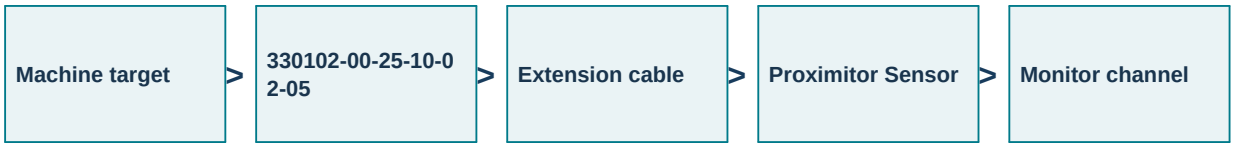
Verify the operating response

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

Technical values used for fit decisions

Probe tip material	Polyphenylene sulfide (PPS)
Probe case material	AISI 303 or 304 stainless steel
Cable construction	75 ohm triaxial, FEP insulated
System linear range	2.0 mm (80 mils), matched 3300 XL 8 mm system
System scale factor	7.87 V/mm (200 mV/mil)
Recommended radial-vibration gap	-9 V DC; approximately 1.27 mm
Frequency response	0 to 10 kHz, +0/-3 dB
Standard probe temperature	-52 to +177 deg C
Minimum cable bend radius	25.4 mm

Installed signal or connection path



Readiness boundary

Application scope: Apply the probe to non-contacting radial-vibration, axial-position or phase-reference duty within the documented 8 mm system geometry.

Controlled probe replacement

01 Capture	Photograph the complete marking, installed position, connections and companion hardware before disturbance.
02 Isolate	Apply the approved machine or system isolation and prove the required de-energized state.
03 Compare	Check every order-code value and mechanical interface against the offered item and approved drawing.
04 Remove	Release connectors and supports without twisting, pulling or loading the sensing face, cable or armor.
05 Install	Verify 00, 25, 10, 02 and 05 on the supplied marking. Do not twist the probe lead or use the armor as a pulling point.
06 Reconnect	Keep 3/8-24 engagement within the documented 0.563 in limit. Keep mating surfaces clean and dry; fit the specified protector when the route requires it.
07 Energize	Use the approved staged procedure and monitor the expected static state before functional testing.
08 Prove	Check gap voltage, runout and dynamic signal after the complete chain is reconnected.

Field decisions

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.

Further model-specific decisions

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.

Channel proof and handover

Identity accepted	Complete order code and supplied execution agree with the approved record.
Mechanical acceptance	Mounting, insertion, routing, support and connector condition match the documented arrangement.
Electrical acceptance	Continuity, static bias or gap and receiving-channel state are within the approved baseline.
Functional acceptance	Representative measurement or connection response agrees with the recorded machine condition.
Handover record	Retain photographs, as-left values, companion identities, deviations and responsible release.

Release record

As-found evidence	Complete marking, installed position, connection map and baseline readings retained.
As-left evidence	Installed identity, mechanical datum, static reading and functional result retained.
Approval basis	Site procedure, applicable manufacturer document and responsible release recorded.

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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