330102-00-40-10-02-00

3300 XL 8 mm Proximity Probe

Bently Nevada 330102-00-40-10-02-00 is a mechanically protected 3/8-24 UNF-2A 3300 XL 8 mm proximity probe with 4 in case length and 1 m lead.

330102-00-40-10-02-00 configuration dashboard

Installed geometry control

0 in reach and a 4 in body preserve the documented target position when the mounting datum is recorded.

Protected lead routing

Flexible stainless-steel armor adds mechanical protection along the probe lead while still requiring independent routing support.

Matched signal path

The calibrated probe lead remains an electrical component of the complete transducer system.

Exact order-code identity

Probe family	3300 XL 8 mm
Base probe number	330102
Mounting thread	3/8-24 UNF-2A
Lead protection	Flexible stainless-steel armor
Unthreaded length	0 in
Overall case length	4 in
Total probe length	1 m
Connector and cable option	02 - ClickLoc connector, standard cable

330102-00-40-10-02-00 decodes to 3/8-24 UNF-2A, armored, 0 in unthreaded reach, 4 in case. This exact reach and case combination must be checked against the installed sleeve, thread engagement, locknut datum and target clearance before the original probe is moved.

3300 XL 8 mm Proximity Probe technical capability map

Agency approval option	00 - Not required
Probe case material	AISI 303 or 304 stainless steel
Matched-system linear range	2.0 mm (80 mils), matched 3300 XL 8 mm system
Recommended operating gap	Approximately 1.27 mm at -9 V DC
Reference target	15.2 mm flat target minimum; AISI 4140 reference steel
Minimum cable bend radius	25.4 mm

Probe tip material	Polyphenylene sulfide (PPS)
Cable construction	75 ohm triaxial, FEP insulated
Matched-system scale factor	7.87 V/mm (200 mV/mil)
Frequency response	0 to 10 kHz, +0/-3 dB
Probe temperature range	-52 to +177 deg C

Installed signal or connection path

Machine target > **330102-00-40-10-02-00** > **Extension cable** > **Proximitor Sensor** > **Monitor channel**

System interpretation boundary

Flexible stainless-steel armor adds mechanical protection along the probe lead while still requiring independent routing support. The standard FEP-insulated triaxial lead preserves the documented electrical relationship within the matched transducer chain. The order code does not include a factory-installed connector protector, so joint protection must follow the approved installation plan.

Published range, scale and frequency data apply to the complete matched 3300 XL 8 mm probe, extension cable and Proximitor Sensor under the stated target and calibration conditions. Commissioning therefore includes live gap, runout and receiving-channel response checks.

Application fit decisions for 330102-00-40-10-02-00

Radial shaft vibration

Use 330102-00-40-10-02-00 where the 3/8-24 UNF-2A body and 4 in case reproduce the documented bearing-housing geometry.

Axial position measurement

Confirm target flatness, available travel and the 0 in reach before setting the operating gap.

Mechanically exposed routing

Support the armored lead independently through exposed machine areas.

Matched-system maintenance

Retain the probe, extension cable and Proximitor Sensor identities as one calibrated chain.

Engineering decision matrix

How should the 0 in reach of 330102-00-40-10-02-00 be reproduced?	Record the installed datum and locknut position before removal, then confirm the 4 in case places the tip at the same approved target gap.
What does the 3/8-24 UNF-2A execution of 330102-00-40-10-02-00 require at the machine port?	Inspect thread form, engagement, sleeve clearance and target alignment; matching nominal diameter alone is not sufficient.
How does the armored lead affect routing of 330102-00-40-10-02-00?	Support the armor independently, avoid ferrule loading and do not use the armor as a pulling member.
What connection protection is selected on 330102-00-40-10-02-00?	Option 02 does not include a factory-installed protector; use the approved site protection only where required.

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

330102-00-40-10-02-00 service controls and maintenance logic

Verify the complete order code

Photograph 330102-00-40-10-02-00 and confirm every option block before removal.

Preserve the mechanical datum

Record 0 in reach, 4 in case, insertion position and locknut location.

Control cable loading

Do not twist, pull or suspend the probe by its armor or ferrule.

Protect the ClickLoc joint

Keep mating faces clean and add only the approved environmental protection required by the installation.

Preserve total electrical length

Combine the 1 m probe lead only with the extension cable and Proximitor Sensor selected for the intended system length.

Prove the restored channel

Set live gap and compare static bias, runout and measurement response with the accepted baseline.

Additional technical questions

How is total electrical length controlled for 330102-00-40-10-02-00?	The probe contributes 1 m; add only the documented extension cable that matches the intended Proximitor Sensor system length.
Which target assumptions apply to 330102-00-40-10-02-00?	Published performance uses the stated AISI 4140 reference target; verify target size, material, flatness and nearby conductive geometry for the actual machine.
How should 330102-00-40-10-02-00 be checked after installation?	Set the approved live gap, confirm stable bias, then compare slow-roll runout and the intended vibration, position or phase response with the accepted record.
What does approval option 00 mean for 330102-00-40-10-02-00?	The order code does not request an agency-approval option; confirm the actual installation classification before use.

Technical notes

Exact configuration	3/8-24 UNF-2A, armored, 0 in unthreaded reach, 4 in case; 1 m lead; ClickLoc connector, standard cable; not required
System boundary	Range, scale and frequency values belong to the complete matched 3300 XL 8 mm transducer chain, not the probe alone
Technical reference	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN

330102-00-40-10-02-00 source record and supported references

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 330102-00-40-10-02-00.