Bently Nevada 330101-00-10-10-02-05

8 mm Proximity Probe

Engineering installation, diagnostic and acceptance guide

01 Work scope / XL 8 mm bearing sensing datum

Check whether a shallow port gives the short body enough reach and retention, while protecting the tip and close-housing lead exit.

Follow the approved machine isolation and release procedure.

Measurement task	XL 8 mm bearing sensing datum
Controlled item	330101-00-10-10-02-05
Evidence basis	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN

02 Selected installation values

Sensing tip diameter	8 mm
Case thread	3/8-24 UNF-2A
Unthreaded length	0 in
Overall case length	1 in
Total probe length	1 m
Probe cable impedance	75 ohm
Probe DC resistance	7.59 +/-0.50 ohm

Geometry and probe resistance describe this selected assembly. Span, sensitivity and gap refer to the complete 3300 XL 8 mm chain under the target, temperature, supply and load conditions in Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN.

03 Fit the short body in a shallow bearing port

Check shallow-port reach before insertion	Compare the one-inch case with port depth and required gap. Establish that the locknut remains correctly retained when the tip reaches its working position.
Keep the sensing face away from the shaft	Engage the body without using target contact as the installation stop. Recover the final gap through the approved stopped-machine procedure.
Inspect the close-housing cable turn	Provide clearance at the case exit and keep the unarmored lead free of sharp bending or rubbing against the nearby housing.
Read the direct-driver or extension arrangement	A probe-only one-metre installation requires its documented one-metre driver. If an extension is present, identify the actual five- or nine-metre chain instead.
Recheck the compact sensing field	Review nearby counterbore metal and the shaft surface even though the body is short; compact fit does not remove side-view or target effects.

04 Diagnose insufficient reach and tip-contact errors

Gap can be reached only with poor thread retention	The shallow-port/body relationship is unsuitable. An extension cable or monitor adjustment cannot supply missing mechanical reach.
The tip has contacted the shaft	Inspect the sensing face and validate response under the approved procedure. A continuity pass alone does not clear an impacted probe.
A large offset appears after startup	Compare final port datum, shaft rest position and connector condition with the as-found record before treating the entire offset as machine movement.
A one-metre lead is mistaken for a one-metre system	Trace the driver and any extension. The probe length alone does not identify the complete calibration arrangement.

05 Qualify the compact one-inch installation

Short-body retention demonstrated	Record port depth, final nut position and the remaining adjustment at the operating gap.
No target-contact damage accepted	Retain the sensing-face inspection and any required response verification after a suspected rub.
Housing clearance is visible	Photograph the lead exit with its supported turn and surrounding machine surfaces.
Actual driver length established	Identify whether this is the documented direct one-metre chain or an extension-based arrangement.
Startup comparison retained	Keep final gap, channel polarity and the comparable operating response before releasing the measurement.

Supplementary acceptance values

Minimum cable bend radius	25.4 mm
Recommended case torque	11.2 N m
Maximum connector torque	0.565 N m
Maximum thread engagement	0.563 in
Matched-system linear span	2.0 mm
Matched-system sensitivity	7.87 V/mm
Recommended system gap	1.27 mm / -9 V DC

Related product references

These are separate product references; compatibility is assessed for each installed application.

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Bently Nevada 330703-000-050-10-01-00

Engineering contact

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