Bently Nevada 330171-01-10-10-02-00

01 Establish the mounting position

1 Identify the 1/4-28 UNF installation

Use the complete 330171-01-10-10-02-00 marking to identify the intended machine position. Compare the holder thread and available reach before removing the installed probe. The selected case is 1.0 in, including 0.1 in unthreaded length; the lead is 1.0 m. Keep removed hardware and channel labels together so a probe cannot be assigned to an adjacent measurement point.

2 Prepare the measurement boundary

Place the affected monitoring channel and machine in the approved maintenance state. Record the existing DC gap, channel sensitivity, cable identities and alarm configuration before disconnection. These retained settings provide a comparison baseline; they do not substitute for checking the replacement chain. Keep the sensing tip away from rotating or moving parts throughout adjustment.

Holder thread	1/4-28 UNF
Case / smooth section	1.0 in / 0.1 in
Engagement ceiling	0.375 in
Retained baseline	Gap, channel settings and cable identities

330171-01-10-10-02-00 / Position and secure the probe

02 Position and secure the probe

1 Control mechanical engagement

Check that the mating thread is clean and undamaged, then establish the required probe projection without binding. For this 1/4-28 UNF case, keep engagement within 0.375 in. Case tightening and connector tightening have different limits. Use the probe-case instruction for the mount and never transfer that torque to the miniature coaxial joint.

2 Keep the target within usable travel

Adjust the gap while considering the full target movement, shaft runout and thermal growth. The nominal reference gap is 1.27 mm; the complete system linear span is approximately 0.25–2.3 mm. Verify actual channel response rather than accepting a mechanical gap alone, especially when the target material or mounting location has changed.

Recommended case torque	5.1 N·m
Maximum case torque	7.3 N·m
Nominal reference gap	1.27 mm
Tip condition	No contact damage or trapped debris

330171-01-10-10-02-00 / Route the lead and protect the joint

03 Route the lead and protect the joint

1 Preserve the electrical length

Trace the integral 1.0 m lead to the extension cable and check their combined length against the conditioner identification. A 4.0 m extension produces a 5.0 m chain; an 8.0 m extension produces a 9.0 m chain. Use compatible components throughout and retain the supplied cable length. Do not shorten a lead to make a route appear tidier.

2 Make a protected ClickLoc connection

Inspect both mating connectors before joining them. A gold XL ClickLoc pair is finger tightened to engage the locking action; the maximum connector torque is 0.565 N·m. Option 02 does not provide a factory-fitted connector protector. Provide suitable connection protection and strain relief, and maintain a cable bend radius of at least 25.4 mm.

Lead routing	No sharp edges, pinching or tensile loading
Connector inspection	Clean mating surfaces and engaged joint
Moisture protection	Compatible protector or approved arrangement
Cable pairing	Total length matches conditioner

330171-01-10-10-02-00 / Verify electrical and target response

04 Verify electrical and target response

1 Check continuity with the circuit isolated

With the probe disconnected from the electronics, compare center-to-outer-conductor resistance with the 1.0 m value of 7.59 ±0.50 ohm. Investigate open, shorted or unstable readings before reconnection. A resistance within this range is only a continuity check; it does not prove correct gap, target material or system calibration.

2 Observe the complete receiving channel

After controlled reconnection and energization, compare the DC gap with the retained baseline and apply an appropriate controlled target movement. The monitor should track the expected direction and scale without intermittent changes. Check nearby probes for interaction where clearances are limited. Retain the measured response and resolve unexplained differences before restoring the protection function.

Continuity result	Record isolated probe resistance
DC gap	Compare with baseline and usable range
Target response	Check direction, scale and stability
Adjacent probes	Assess cross-talk where applicable

330171-01-10-10-02-00 / Release the exact configured channel

05 Release the exact configured channel

1 Review the installation evidence

Confirm that 330171-01-10-10-02-00 occupies the intended position and that its 1/4-28 UNF mounting, 1.0 in case and 1.0 m lead match the channel design. Review connector protection, mounting security and cable routing with the recorded test results. A changed target material or electrical length requires the corresponding engineering review before the chain is accepted.

2 Retain a useful service baseline

Keep the final gap reading, controlled-response results, conditioner identity and monitor configuration with the machine record. Restore bypasses and alarms only through the approved site procedure after the complete signal path has passed. The related product links below support further identification; they are not an approved replacement list or a bill of materials.

Technical basis: Bently Nevada 3300 5 mm Transducer System, 172036 Rev. T.

Related product navigation

- Bently Nevada 330130-080-00-05
- Bently Nevada 330130-040-01-00
- Bently Nevada 330130-040-01-05

These are related references, not confirmed substitutes or an automatically approved assembly.