Bently Nevada 330130-070-02-05

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330130-070-02-05 is a 7.0 m standard triaxial extension cable with connector protection for a matched 3300 XL 8 mm proximity transducer chain.

01 Job scope and identity

Complete model	330130-070-02-05
Product type	3300 XL 8 mm extension cable
Manufacturer	Bently Nevada
Technical source	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet, 141194 Rev. AL

Field decisions

1 Establish identity

Capture the full marking, installed companion components and baseline before disconnection.

2 Inspect interfaces

Verify mounting, cable, connector, armor, approval and environmental boundaries.

3 Fit the exact chain

Preserve the documented probe-cable-Proximitor or sensor-monitor relationship.

4 Prove response

Use the approved stopped-machine and operating acceptance procedure.

5 Record as left

Save markings, configuration, test values and operating observations.

Installation relationships

Electrical length	Add the 7.0 m cable to the marked probe lead and match the installed Proximitor total-length option.
Route protection	Maintain 25.4 mm bend radius and provide abrasion and strain protection because stainless-steel armor is not selected.
Connector protection	The 02 option provides a connector protector; inspect its seating and keep the internal ClickLoc interface dry.

Pre-work evidence

Installed drawing	Record the approved cabinet, rail, slot, terminal, cable and system references that govern 330130-070-02-05.
Complete marking	Capture the complete order identity and every revision or approval marking on the delivered item.
Mechanical reference	Record mounting position, fasteners, connector orientation, access clearance and support points.
Electrical interfaces	Confirm supply, signal, bus, terminal and protective-conductor assignments against the installed drawing.
Configuration state	Record jumpers, switches, addresses, firmware or project settings that apply to this hardware.

02 Pre-installation readiness

Model-specific installation decisions

Exact identity

330130-070-02-05 and every delivered revision or approval marking must be recorded before removal.

Installed system

3300 XL 8 mm proximity transducer system companion components, channel assignment and approved machine reference must remain traceable.

Mechanical baseline

Record the as-found mounting datum, reach, lock position, target clearance, routing and connector support.

Electrical baseline

Record the applicable stopped-machine gap, bias, continuity or channel value together with test conditions.

As-left configuration

Document the final mechanical position, cable protection, connector condition and complete companion-component identities.

Functional release

Compare the final monitor indication and controlled operating response with the approved baseline before handover.

Installation precautions

Confirm total length

Do not connect until probe lead plus 7.0 m cable equals the installed Proximitor option.

Protect the unarmored route

Prevent abrasion, crushing, heat exposure and tensile loading; support the cable independently.

Inspect the protector

Confirm protector seating and a clean, dry ClickLoc interface before mating.

Maintain bend radius

Keep bends at or above 25.4 mm and never use a connector as a pulling point.

Isolate before testing

Disconnect by the approved maintenance procedure before resistance or continuity checks.

Prove the matched chain

Restore probe gap or bias and compare Proximitor and monitor readings with the baseline.

Companion and baseline records

Companion hardware	Record the connected drive, rack, motor, transducer, I/O base or control unit as applicable.
As-found baseline	Capture relevant voltages, currents, states, counts, fault history or channel response before removal.
Operating baseline	Record the controlled functional result after the complete system is returned to service.

Pre-installation release gates

Identity gate	The delivered marking is 330130-070-02-05 and all visible revision or approval details have been photographed.
Drawing gate	The installed asset, channel, mounting reference and companion-component assignments are identified on the approved record.
Mechanical gate	Mounting surface, thread or support points, access clearance and target relationship are suitable for the selected configuration.
Interface gate	Connector, conductor, shield, terminal and protective-conductor condition have been inspected before connection.
Route gate	Cable or lead routing preserves bend radius, strain relief, contamination protection and separation from damaging surfaces.
Baseline gate	The applicable stopped-machine reading and operating observation have been captured with units and test conditions.

03 Installation and commissioning

Controlled installation sequence

01 Isolate	Place the monitored machine and channel in the approved maintenance state; prove the required isolation.
02 Photograph	Capture 330130-070-02-05, the installed datum, connector, route and companion-component markings.
03 Measure	Record mechanical position and the applicable stopped-machine electrical reading before removal.
04 Compare	Check delivered identity, interfaces and evidence against the approved drawing and spare-parts record.
05 Install	Fit without twisting the lead; preserve thread engagement, target clearance, bend radius and strain relief.
06 Set point	Establish the operating gap or datum only with the approved stopped-machine procedure.
07 Prove	Compare local reading, monitor indication and controlled operating response with the accepted baseline.
08 Handover	Record as-left values, photographs, deviations, responsible technician and release approval.

Commissioning acceptance criteria

Mechanical fit	7.0 m standard 3300 XL 8 mm extension cable. Confirm the installed datum and available target travel before final tightening.
Lead or interface fit	Connector protector selected; no stainless-steel armor. Inspect the mating interface and provide independent route support.
System position	The 7.0 m cable is part of the calibrated probe-extension-Proximitor relationship; total electrical length and route protection govern application.
As-found reference	Record the applicable stopped-machine reading and the exact companion-component identities before disconnection.
Static acceptance	Restore the documented gap, bias, continuity or channel value with the machine in the approved test state.
Functional acceptance	Compare local indication, monitor response and the controlled operating observation with the accepted machine baseline.

Deviation control	Withhold release when the delivered marking, mounting datum, interface, system length or response differs from the approved record.
Release evidence	Retain the complete marking, test conditions, measured results, photographs, reviewer and maintenance-record reference.

Acceptance test points

After mechanical fit	Record final mounting datum, engagement, lock position, target clearance and route support.
After interface connection	Confirm contact seating, conductor or shield assignment and continuity or bias as applicable.
Before energization	Reconcile companion identities, total chain configuration and monitor or collector channel assignment.
Initial energized state	Observe the local channel value and status without declaring acceptance from open-circuit voltage alone.
Controlled functional proof	Compare the returned indication and machine response with the approved operating baseline.
Final record	Attach photographs, measured values, deviations, approvals and the maintenance-record location.

04 Diagnostics and escalation

Which probe lead completes the chain with 330130-070-02-05?	Add the marked probe lead to this 7.0 m cable and require the total to match the installed Proximitor option.
Is stainless-steel armor selected for 330130-070-02-05?	No; the selected 02 construction is standard FEP cable with a connector protector.
Which joint protection is selected for 330130-070-02-05?	A connector protector is selected; inspect its seating and the internal ClickLoc condition.
What resistance values apply to 330130-070-02-05?	Core resistance is 1.54 +/-0.23 ohm and jacket resistance is 0.46 +/-0.09 ohm.

Additional diagnostic decisions

What capacitance applies to 330130-070-02-05?	The manufacturer publishes 69.9 pF/m typical for the 3300 XL 8 mm extension cable.
How should 330130-070-02-05 be routed?	Maintain 25.4 mm minimum bend radius and protect the unarmored cable from abrasion, crushing and connector tension.
What proves the channel after replacing 330130-070-02-05?	Confirm total chain length, restore gap or bias and compare Proximitor and monitor response with the baseline.
What handover evidence is required for 330130-070-02-05?	Retain the marking, companion identities, resistance results, protector condition, route and returned response.

Escalation triggers

Identity conflict	Stop if the complete marking, suffix, revision or approval identity differs from the approved record.
Host mismatch	Escalate if the rack, carrier, backplane, terminal unit or controller assignment is not documented for 330130-070-02-05.
Interface damage	Do not energize with bent contacts, damaged insulation, loose retainers, contamination or heat discoloration.
Environmental breach	Review any exposure beyond the documented temperature, vibration, humidity, contamination or enclosure boundary.
Unapproved substitution	Do not transfer ratings or compatibility from an adjacent order code without manufacturer evidence.
Configuration conflict	Stop if hardware settings, firmware, channel assignment or project configuration disagree with the installed record.
Unstable measurement	Investigate noise, drift, intermittent status or inconsistent readings before replacing another component.
Failed functional proof	Keep the asset in the approved maintenance state until the complete acceptance sequence is passed and recorded.

05 Handover and evidence package

As-left verification worksheet

Exact delivered marking	330130-070-02-05; photograph and record any additional label detail.
Installed asset reference	Machine, bearing, train, channel and drawing identifiers.
Mechanical as found	Reach, lock position, gap reference, cable route and connector support.
Static reading as found	Gap, bias, continuity or channel value appropriate to the installed system.

Companion identities	Extension cable, Proximitor or conditioner and monitor channel markings.
Mechanical as left	Final reach, lock position, target clearance and route protection.
Static reading as left	Final gap, bias, continuity or channel value with test conditions.
Operating proof	Monitor response and machine observation accepted by the responsible authority.

Evidence quality controls

Traceability	Each value is tied to 330130-070-02-05, the asset location, test state, instrument and date.
Repeatability	The same approved method and comparable operating state are used for before-and-after readings.
Resolution	Recorded precision does not exceed the capability of the instrument or source document.
Reference state	Stopped, energized, loaded and process-running observations are clearly distinguished.
Change control	Every changed setting, connection or mechanical datum has an approved reason and reviewer.
Retention	Evidence remains accessible with the maintenance record for future troubleshooting and replacement review.

Model-specific application limits

Cable length	7.0 m
Core resistance	1.54 +/-0.23 ohm
Jacket resistance	0.46 +/-0.09 ohm
Capacitance	69.9 pF/m typical
Minimum bend radius	25.4 mm

Lifecycle and installed-base context

Order-code coverage	141194 Rev. AL defines 330130-070-02-05 as the 7.0 m standard-cable selection with connector protector and multiple approvals.
Installed-chain relationship	The cable remains serviceable only within the documented probe-extension-Proximitor total length.
Replacement boundary	A different cable length, armor or protector option changes the calibrated path or mechanical protection.
Release evidence	Confirm both companion identities, total electrical length, protected joints and returned Proximitor response.

Verified related product references

Related product	Bently Nevada 330104-00-16-10-02-00
Related product	Bently Nevada 330500-00-01
Related product	Bently Nevada 330980-70-CN
Related product	Bently Nevada 330930-040-03-00

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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