Bently Nevada 21747-045-00

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 21747-045-00 is a 4.5 m unarmored extension cable for a documented legacy 7200 proximity transducer chain.

01 Job scope and identity

Complete model	21747-045-00
Product type	7200 Series extension cable
Manufacturer	Bently Nevada
Technical source	Bently Nevada 7200 Proximity Transducer Systems technical and ordering information

Field decisions

1 Establish identity

Capture the full marking and baseline before disconnection.

Installation relationships

Legacy electrical length	Use the 4.5 m cable only where probe lead plus extension agrees with the installed 7200 Proximitor record.
Unarmored route	Provide external abrasion and strain protection and verify both legacy coaxial connectors before connection.
Acceptance datum	Record isolated continuity, restore the documented gap or bias and prove the assigned monitor response.

Pre-work evidence

Installed drawing	Record the approved cabinet, rail, slot, terminal, cable and system references that govern 21747-045-00.
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

21747-045-00 and every delivered revision or approval marking must be recorded before removal.

Installed system

legacy 7200 Series 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 the legacy chain

Do not connect until the probe lead, 4.5 m cable and Proximitor identity agree with the installed record.

Protect the unarmored route

Prevent abrasion, crushing and tensile loading along the full 4.5 m path.

Inspect both connectors

Keep the legacy coaxial interfaces clean and dry and never pull by a connector.

Isolate before continuity testing

Place the channel and machine in the approved maintenance state before resistance or continuity checks.

Avoid transferred ratings

Do not apply adjacent 3300 XL resistance, scale or connector data to this legacy cable.

Prove the complete channel

Restore gap or bias and compare the legacy monitor response with the accepted baseline.

Pre-installation release gates

Identity gate	The delivered marking is 21747-045-00 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 21747-045-00, 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	4.5 m 21747 extension cable without armor. Confirm the installed datum and available target travel before final tightening.
Lead or interface fit	Completes the probe-to-Proximitor path in a documented 7200 chain. Inspect the mating interface and provide independent route support.
System position	The offered item is the 4.5 m unarmored cable; exact connector interfaces and the installed 7200 companion chain govern compatibility.
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.

04 Diagnostics and escalation

What length is selected by 21747-045-00?	The 045 field selects a 4.5 m extension cable in the legacy 21747 family.
Is armor selected for 21747-045-00?	No; the final 00 field selects an unarmored cable, so the installed route must provide external protection.
Which companion components are required for 21747-045-00?	Use the matching legacy 7200 probe, Proximitor and monitor channel recorded for the machine.
How is total electrical length checked for 21747-045-00?	Add the installed probe lead to 4.5 m and compare the total with the recorded 7200 Proximitor configuration.

Additional diagnostic decisions

How is continuity checked on 21747-045-00?	Isolate the channel, inspect both coaxial interfaces and perform the approved center-and-shield test before reconnecting.
Can 3300 XL values be applied to 21747-045-00?	No; do not transfer modern 3300 XL resistance, scale, connector or calibration data without an approved conversion.
When must 21747-045-00 be withheld from service?	Withhold release if marking, connectors, total length, route, continuity or returned response differs from the approved record.
What handover evidence is required for 21747-045-00?	Retain the full marking, companion identities, continuity results, route inspection, gap or bias and monitor response.

05 Handover and evidence package

Model-specific handover evidence

Traceability	Each value is tied to 21747-045-00, 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	4.5 m
Mechanical protection	Without armor
Required companions	Matching 7200 probe and Proximitor
Route control	External abrasion protection
Acceptance	Continuity, restored gap or bias and monitor response

Verified related product references

Related product	Bently Nevada 84661-96
Related product	Bently Nevada 330102-00-28-10-02-05
Related product	Bently Nevada 330104-00-16-10-02-00
Related product	Bently Nevada 330500-00-01

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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