Bently Nevada 330130-085-00-02

Installation, integration and commissioning field workflow

3300 XL 8 mm Extension Cable. Bently Nevada 330130-085-00-02 is an 8.5 m standard extension cable for a matched 3300 XL 8 mm proximity transducer chain.

01 Exact work package

Complete model	330130-085-00-02
Engineering role	3300 XL 8 mm Extension Cable
Installed-system check	Match the complete marking and host arrangement
Cable family	3300 XL 8 mm standard extension
Selected cable length	8.5 m (085)
Cable construction	Standard cable (00); no armor
Matching example	0.5 m probe + 8.5 m cable = 9 m chain
Center-conductor resistance	1.87 ±0.28 Ω at 8.5 m
Shield-conductor resistance	0.56 ±0.11 Ω at 8.5 m

Before work starts

Confirm the installed drawing, complete supplied code, actual connector and approved monitoring arrangement before isolating the channel. Record the as-found state for a comparable as-left check.

02 Fit and interface

Extension capacitance	69.9 pF/m typical
Extension temperature	-52 to +177 °C
Matched 9 m system linear span	2.0 mm; approx. 0.25–2.3 mm gap
Matched 9 m system ISF	7.87 V/mm ±6.5% at 0–45 °C
Matched-system gap reference	Approx. 1.27 mm or -9 Vdc
Field-wire recommendation	Three-conductor shielded triad
Proximitor-to-monitor field wire	Maximum 305 m; frequency response varies
Terminal approval suffix	02; confirm actual marking and site approval

The 8.5 m extension sets most of the electrical length of a 9 m sensing chain. Verify the installed probe lead and Proximitor length together; a connector that physically mates does not establish the calibrated chain.

The manufacturer provides separate center and shield resistance guidance for this length. A controlled disconnected-cable check can distinguish a damaged conductor or contaminated joint from a sensor or monitor fault.

System and application map

Long cable run

Bridge the machine-mounted probe to a remote Proximitor location while preserving the 9 m electrical length.

Radial-vibration channel

Carry the gap-dependent probe signal to the sensor on a radial shaft measurement point; route away from moving machinery.

Axial-position channel

Retain the selected length while a thrust-position probe is connected; verify the target and monitor scale separately.

Cable-fault isolation

Use disconnected center and shield resistance checks to identify a conductor fault before replacing the probe or sensor.

03 Fit, connect and prove

Marking and approval	Match the full offered order code and any approval mark to the approved site drawing.
Mechanical fit	Check the actual mounting reach, route and clearance before energizing the channel.
Connector integrity	Inspect both mating surfaces, strain relief and shield path; isolate the circuit before resistance checks.
Electrical matching	Confirm the probe, extension and sensor length as one calibrated chain, or the documented cable-to-transmitter arrangement.
Target and baseline	Use the installed target material and approved channel record when evaluating a changed indication.
As-left acceptance	Document the component identities, wiring checks and operating result before release.

Acceptance sequence

01 Identify

Compare complete marking and supplied suffixes.

02 Fit

Check connector, mounting or cable route against the installed drawing.

03 Prove

Check the connected channel and document the as-left result.

04 Engineering questions

How is 330130-085-00-02 matched to the installed Proximitor length?	Add its 8.5 m electrical length to a compatible 0.5 m probe lead and compare the total with the 9 m Proximitor marking. Do not treat a physically mating connector as proof of a matched chain.
What can cause a gap shift after installing 330130-085-00-02?	A damaged center conductor, contaminated coaxial contact, changed target or incorrect chain length can shift the DC gap. Isolate the cable, inspect both ends and compare continuity with the manufacturer resistance guidance before adjusting the probe.

How should the connector of 330130-085-00-02 be checked before service?	Inspect the coaxial center contact, outer contact and mating surfaces for damage or contamination. The standard 00 cable option has no connector protector. Reconnect according to the manufacturer procedure and recheck the static gap voltage.
Why can 330130-085-00-02 affect high-frequency response while DC output remains plausible?	The cable contributes to the tuned probe-chain electrical length. A wrong extension, changed field wiring or load can alter frequency response; compare the complete chain with the installed monitor configuration.
How should 330130-085-00-02 be routed beside other instrument wiring?	Protect the cable from crushing, sharp edges, heat and conductive contamination. Preserve shielding and separation required by the machine drawing, then inspect the full route after fastening.
Can 330130-085-00-02 be interchanged with an adjacent proximity-system family?	Do not mix 3300 XL 8 mm, NSv or 7200 components solely because connectors mate. Match the exact probe family, extension and Proximitor design and confirm the channel calibration before commissioning.
What check distinguishes a cable fault from a sensor fault on 330130-085-00-02?	With the channel safely isolated, measure continuity and shield path on the disconnected extension and compare the result with the length-specific manufacturer guidance. Reconnect a verified cable and repeat the gap test before replacing the Proximitor.
What should be recorded after replacing 330130-085-00-02?	Record its complete order code, mated probe and Proximitor identities, cable route, continuity result and the before/after gap voltage. Compare the running channel trend with the approved baseline.

Handover evidence

As-found identity	Record the complete marked code and installed location
Interface evidence	Photograph the fitted connector, mounting and cable route
Pre-work channel	Retain the baseline signal and monitoring configuration
As-left channel	Record the connection check and operating indication
Release decision	Compare the result with the approved machine record

Discuss the complete model and fitted revision with Apter Power.
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Technical basis

Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet, 141194 Rev. AN.

Other Bently Nevada references

Bently Nevada 330103-00-16-50-02-00 | Bently Nevada 330903-00-04-05-02-05 | Bently Nevada 330930-045-03-05