01 INSTALLATION & COMMISSIONING

Bently Nevada 330130-070-00-00

01 / PLAN THE NINE-METRE ROUTE

Identify this cable

Bently Nevada 330130-070-00-00 is a 7 m standard extension cable without armor or an included connector protector. It joins a 2 m probe to a matched 9 m 3300 XL 8 mm Proximitor channel.

Read the length and option code

330130	3300 XL standard extension cable
AAA070	7 m electrical cable length
BB00	Standard cable; no armor or protector
CC00	Agency approval not required
Selected chain	2 m probe + 7 m cable = 9 m system

Choose the complete chain

Probe	Extension	Proximitor
Selected 2 m sensing lead	330130 cable: 7 m	9 m electrical system

01 Read the Proximitor marking

Select a 9 m conditioner and a 2 m probe. Add the probe lead and this extension to check the complete electrical length before routing. A 7 m cable cannot form the 1 m probe-only channel or fit a 5 m channel.

02 Separate the field circuit

The Proximitor-to-monitor path is separate from the coaxial extension. Use the documented three-conductor shielded triad with tinned field wiring and the specified conductor range. The published response curves show the effect of longer field circuits; the 305 m maximum does not mean all lengths have identical high-frequency response.

03 Verify the installed approval

The final CC00 selection means approval not required. Inspect the actual component markings and installed circuit when the measurement point requires approved hardware; another option in the family does not confer certification on this cable.

Connect with ApterPower

Phone: +86 180 3023 5313

Email: sales13@apterpower.com

www.apterpower.com

02 / ROUTE AND JOIN THE EXTENSION

04 Route the standard cable

Apply the 25.4 mm minimum bend radius. Protect the unarmored jacket from crushing, sharp edges and persistent pull at either service junction. Plan accessible service connections and keep the routed cable supported.

Hardware to recognize

Minimum Cable Bend Radius	25.4 mm
Cable Impedance	75 ohm triaxial
Cable Insulation	Fluorinated ethylene propylene (FEP)
Connector Material	Gold-plated brass or beryllium copper
Two XL ClickLoc Connection	Finger tight
Maximum Connector Torque	0.565 N m

05 Join clean XL connectors

Inspect both mating contacts for dirt, oil or damage. Two XL gold ClickLoc connectors are joined finger tight. Keep the mixed non-XL/XL instruction separate from the two-XL instruction.

06 Protect the completed junctions

BB00 supplies standard cable without an included protector. The manufacturer recommends connector protection for installations. Silicone tape is supplied with XL extension cables, but is not recommended where the probe-to-extension connection is exposed to turbine oil. Select protection for the actual environment and insulate the junction from ground.

Distinct ordering options

BB00	Standard cable
BB01	Armored cable
BB02	Standard cable with connector protector
BB10	FluidLoc cable

Mechanical handoff

Proceed only with supported routing, fully seated connectors and suitable environmental protection. A good mechanical connection alone does not confirm electrical continuity or correct total channel length.

Connect with ApterPower
Phone: +86 180 3023 5313
Email: sales13@apterpower.com
www.apterpower.com

03 / CHECK THE ISOLATED CABLE

Expected component readings

Nominal Center-Conductor Resistance	1.54 +/- 0.23 ohm; 7 m extension
Nominal Outer-Conductor Resistance	0.46 +/- 0.09 ohm; 7 m extension
Cable Capacitance	69.9 pF/m typical

07 Disconnect before measurement

Isolate the channel under the equipment procedure, disconnect the extension from the energized transducer chain and identify the two conductor paths. Measure cable end-to-end continuity; do not interpret a connected probe, sensor and monitor as an isolated extension.

Conductor checks and evidence

Center-conductor check	Measure end-to-end center conductor on the isolated cable
Outer-conductor check	Measure end-to-end outer conductor separately
Mechanical condition	Inspect supported routing, jacket damage and junction seating
Channel acceptance	Verify selected length, DC gap and intended dynamic response

08 Interpret a questionable reading

Inspect accessible contacts and jacket condition before reconnecting a cable whose reading falls outside its documented component tolerance. A nominal resistance reading supports a cable check but does not establish the assembled channel calibration.

How are the two conductor resistance checks different for 330130-070-00-00?

The 7 m center conductor is 1.54 +/-0.23 ohm and the outer conductor is 0.46 +/-0.09 ohm. These are separate end-to-end cable checks, measured with the extension disconnected.

Why is the 25.4 mm routing radius relevant to 330130-070-00-00?

It is the specified minimum extension-cable bend radius. Use a supported route that respects this limit instead of folding or tightly bending the cable to absorb spare length.

Connect with ApterPower

Phone: +86 180 3023 5313

Email: sales13@apterpower.com

www.apterpower.com

04 / COMMISSION THE ASSEMBLED CHANNEL

09 Restore the selected chain

Reconnect the 2 m probe, 7 m extension and 9 m conditioner. Confirm the approved channel role and target calibration before setting gap or assessing amplitude.

Static and dynamic conditions

Matched System Linear Range	2 mm; approximately 0.25 to 2.3 mm
Matched System Nominal Scale Factor	7.87 V/mm (200 mV/mil)
Matched Radial-Vibration Gap	-9 VDC nominal
Matched 9 m System ISF	+/-6.5% at 0 to +45 deg C
Matched 9 m System DSL	Less than +/-0.038 mm at 0 to +45 deg C

10 Assess the correct performance row

A completed 9 m standard XL 8 mm system has ISF within +/-6.5% and DSL below +/-0.038 mm for the 0 to +45 deg C performance row. When the probe is -35 to +120 deg C and the sensor and extension remain 0 to +45 deg C, the 9 m row changes to ISF within +/-18% and DSL within +/-0.152 mm. These are channel conditions, not independent extension-cable accuracy ratings.

11 Inspect field-circuit response

The Proximitor-to-monitor path is separate from the coaxial extension. Use the documented three-conductor shielded triad with tinned field wiring and the specified conductor range. The published response curves show the effect of longer field circuits; the 305 m maximum does not mean all lengths have identical high-frequency response.

12 Check each component location

The standard cable operates and stores at -52 to +177 deg C. The companion Proximitor operates at -52 to +100 deg C and stores at -52 to +105 deg C. Apply those limits to their separate locations.

Release condition

Accept the completed channel through the machine-specific functional test after static gap, intended dynamic response, monitor interpretation and documented system length agree. Keep the existing protection settings under the equipment procedure.

Connect with ApterPower
Phone: +86 180 3023 5313
Email: sales13@apterpower.com
www.apterpower.com

05 / SERVICE REVIEW AND RELATED CABLES

Does BB00 supply armor or connector protectors with 330130-070-00-00?

BB00 selects standard cable. Armored cable and standard cable with connector protector use separate options; they are not supplied by this code.

Which component temperature governs the conditioner used with 330130-070-00-00?

The standard extension operates and stores at -52 to +177 deg C, while the Proximitor operates to +100 deg C and stores to +105 deg C. Evaluate each component at its actual location.

Related extension-cable portfolio

Bently Nevada 330130-080-12-05	Related 3300 XL cable; compare complete execution
Bently Nevada 330130-080-00-05	Related 3300 XL cable; compare complete execution
Bently Nevada 330130-045-00-05	Related 3300 XL cable; compare complete execution
Bently Nevada 330130-070-00-05	Related 3300 XL cable; compare complete execution
Bently Nevada 330130-045-03-05	Related 3300 XL cable; compare complete execution
Bently Nevada 330130-035-00-00	Related 3300 XL cable; compare complete execution

Replacement review

Keep the complete 330130-070-00-00 identifier in the service record. A matching base family alone does not establish the correct extension length, jacket execution, protector or installed approval.

Manufacturer reference

3300 XL 8 mm Proximity Transducer System | Datasheet 141194 Rev. AN. Extension ordering: pp. 18-19; conductor resistance and capacitance: pp. 4-5; cable materials and bend radius: p. 7; connector practice: p. 8; standard extension and conditioner temperatures: p. 9. This ApterPower reference organizes selected facts and installation checks; use the equipment instructions for the installed channel.

Connect with ApterPower
Phone: +86 180 3023 5313
Email: sales13@apterpower.com
www.apterpower.com