Bently Nevada 330180-52-05

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 330180-52-05 is a 3300 XL 8 mm proximity transducer system Proximitor Sensor configured for a 5.0 m transducer chain. It converts the matched probe/cable impedance into a proportional measurement signal and gap information.

01 Work package

Complete model	330180-52-05
Product type	3300 XL 8 mm proximity transducer system Proximitor Sensor
Manufacturer	Bently Nevada
Supply condition	New, original product
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.

02 Interface and configuration map

Product type	3300 XL 8 mm proximity transducer system Proximitor Sensor
Selected system length	5.0 m
Mounting hardware	DIN mounting, no mounting hardware included
Approval selection	CSA, ATEX and IECEx selection
Matched-system scale factor	7.87 V/mm (200 mV/mil) under the stated conditions
Matched-system linear range	2.0 mm linear range
Power input	Requires compatible monitor/system power and wiring

Signal outputs	Proportional displacement output and gap/bias information within the matched system
Calibration boundary	Use only with the matching probe and extension cable family
Reference target	AISI 4140 steel unless separately characterized

03 Installation workflow

Confirm the complete marking

Match every field of 330180-52-05 with the installed record before removal or installation.

Protect sensing and interfaces

Keep the sensing face, connector and cable free from impact, moisture, metal chips and unsupported loading.

Preserve the mechanical datum

Record reach, thread engagement, locknut position and target relationship before disturbing the installed component.

Control the cable route

Maintain approved bend radius, separation and strain relief; do not twist or crush the coaxial path.

Restore the operating point

Use the approved stopped-machine procedure and confirm expected target travel remains in the documented working region.

Prove the complete channel

Verify the as-left electrical reading, monitor indication and operating response before return to service.

Application checks

Radial shaft vibration

Use the approved bearing location and matched transducer chain to observe shaft motion relative to the probe mounting.

Axial position

Orient the probe toward a suitable conductive thrust target and keep expected travel inside the calibrated working region.

Speed or phase reference

Use an approved target feature and monitor configuration when the channel provides a once-per-turn reference.

Maintenance replacement

Preserve the exact mechanical identity, cable construction, system length and approval selection recorded for the installed channel.

04 Diagnostic decision table

How is the correct probe and cable combination selected for 330180-52-05?	Match the family and verify that probe lead plus extension cable equals the selected 5.0 m system length. Do not use connector fit as evidence of calibration.
What should be checked at the power and common terminals of 330180-52-05?	Confirm supply polarity, voltage, common reference and shield termination against the approved system drawing before connecting the transducer chain.
How should the output of 330180-52-05 be proved without disturbing machine protection?	Use the approved test arrangement, record gap or bias at the stopped machine, and compare monitor indication and buffered output with the accepted channel baseline.
What can cause an offset after replacing 330180-52-05?	A mismatched chain length, different target material, connector contamination, wiring error or changed mechanical gap can shift output. Verify the complete chain before calibration changes.

Release review

Electrical relationship	Use only with the matching 3300 XL 8 mm proximity transducer system probe and cable combination for 5.0 m.
Installation boundary	Verify power, common, shield, environment and mounting against the approved drawing.
Technical reference	Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet, 141194 Rev. AL.

Engineering questions

How is the correct probe and cable combination selected for 330180-52-05?	Match the family and verify that probe lead plus extension cable equals the selected 5.0 m system length. Do not use connector fit as evidence of calibration.
What should be checked at the power and common terminals of 330180-52-05?	Confirm supply polarity, voltage, common reference and shield termination against the approved system drawing before connecting the transducer chain.
How should the output of 330180-52-05 be proved without disturbing machine protection?	Use the approved test arrangement, record gap or bias at the stopped machine, and compare monitor indication and buffered output with the accepted channel baseline.
What can cause an offset after replacing 330180-52-05?	A mismatched chain length, different target material, connector contamination, wiring error or changed mechanical gap can shift output. Verify the complete chain before calibration changes.
How should the complete marking of 330180-52-05 be recorded before removal?	Photograph the full order identity, installed position, companion components and cable route. Save the stopped-machine baseline so the replacement can be returned to the same documented configuration.
Which compatibility check is most important before installing 330180-52-05?	Confirm that every companion component belongs to the documented 3300 XL 8 mm proximity transducer system. Connector fit alone does not establish electrical calibration or mechanical compatibility.
How should cable and connector integrity be tested for 330180-52-05?	Isolate the channel, inspect contacts for moisture, contamination and damage, verify continuity and insulation with an approved method, and support the cable so the connector carries no tensile load.
What commissioning evidence should be retained for 330180-52-05?	Retain full markings, mechanical datum, companion identities, wiring or chain-length checks, as-left measurements and the operating response accepted by the maintenance authority.

Acceptance and support

Retain the full marking, installed-chain identities, test readings and approved machine configuration. Confirm the exact offered item and included scope in the written quotation.

Discuss the exact marking and installed application with Apter Power.
sales13@apterpower.com | +86 18030235313

Verified related product references

Related product	330980-70-CN
Related product	330930-040-03-00

Related product	84661-96
Related product	330102-00-28-10-02-05

Commissioning record template

Installed asset	Machine, bearing, channel or cabinet reference
Companion identities	Probe, cable, sensor, interface or monitor markings
Mechanical datum	Mounting reference, reach, alignment or sealing condition
Electrical datum	Chain length, connector, shield, supply or input assignment
Before-work baseline	Gap, bias, vibration, continuity or channel observation
As-left result	Final measured value and functional proof
Approval basis	Applicable drawing, control requirement or site procedure
Handover	Technician, date, revision and maintenance-record location

Handover note

A replacement is complete only after the installed identity, physical interfaces, measured response and configuration record agree. Escalate any mismatch before the channel returns to protection or monitoring service.

Release checklist

Identity accepted	Complete marking agrees with the order, photographs and installed asset record.
Interfaces accepted	Mechanical fit, connector, wiring and companion components match the approved design.
Environment accepted	Temperature, contamination, vibration and route protection remain inside documented limits.
Configuration accepted	Hardware assignment, chain length or supply settings agree with the installed configuration.
Static proof accepted	Gap, bias, output voltage, channel state or continuity result is recorded as applicable.