

INDUSTRIAL AUTOMATION PRODUCT

330104-03-06-10-02-00

3300 XL 8 mm Armored Metric Proximity Probe

330104-03-06-10-02-00 senses shaft-to-bearing relative displacement without mechanical contact and passes the probe signal to a matched Proximity Sensor for machinery-monitoring measurement.

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	Bently Nevada 3300 XL 8 mm Proximity Transducer System
Part number	330104-03-06-10-02-00
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



2

Technical Specifications

Technical values below are limited to the named Bently Nevada product record.

PARAMETER	VALUE
Complete order number	330104-03-06-10-02-00
Probe construction	With armor
Thread	M10 x 1
Unthreaded length	30 mm
Case length	60 mm
Total probe length	1.0 m
Connector option	Miniature coaxial ClickLoc
Probe-cable type	Standard cable
Approval option	Not required
Probe-tip diameter	8.0 mm
System linear range	2.0 mm (80 mils)
Approximate linear-range limits	0.25 to 2.3 mm
Approximate output span	-1 to -17 V DC
Recommended gap	1.27 mm (50 mils)

PARAMETER	VALUE
Nominal output at recommended gap	-9 V DC
Incremental scale factor	7.87 V/mm (200 mV/mil)
Frequency response	0 to 10 kHz, +0/-3 dB
Minimum flat-target diameter	15.2 mm
Minimum shaft diameter	50.8 mm
Recommended shaft diameter	76.2 mm
Probe-cable impedance	75 ohm
Standard probe-cable temperature	-52 to +177 degC
Proximito Sensor supply	-17.5 to -26 V DC
Proximito Sensor current	12 mA maximum
Proximito Sensor output resistance	50 ohm
Field-wiring conductor range	0.2 to 1.5 mm ² (16 to 24 AWG)
Maximum field-wiring length	305 m

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	Matched 3300 XL 8 mm Proximito Sensor
Companion hardware	Compatible machinery-protection monitor channel
Field connection	AISI 4140 steel target or manufacturer-approved calibration target
Primary system function	Detects shaft-to-bearing relative position without mechanical contact
Controlled acceptance duty	Steam-turbine radial shaft-vibration measurement

3

System Role and Architecture

330104-03-06-10-02-00 senses shaft-to-bearing relative displacement without mechanical contact and passes the probe signal to a matched Proximitor Sensor for machinery-monitoring measurement.

FUNCTION 1
Detects shaft-to-bearing relative position without mechanical contact

FUNCTION 2
Forms the sensing input of a matched eddy-current transducer loop

FUNCTION 3
Supports radial-vibration, axial-position and shaft-centerline measurements

FUNCTION 4
Protects the integral probe lead along exposed machinery routing

Matched system components

- Matched 3300 XL 8 mm Proximitor Sensor
- Compatible machinery-protection monitor channel
- AISI 4140 steel target or manufacturer-approved calibration target
- Metric probe bracket with supported armored-lead routing

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	Matched 3300 XL 8 mm Proximitor Sensor
Companion hardware	Compatible machinery-protection monitor channel
Field connection	AISI 4140 steel target or manufacturer-approved calibration target
Primary system function	Detects shaft-to-bearing relative position without mechanical contact
Controlled acceptance duty	Steam-turbine radial shaft-vibration measurement

4

Applications and Engineering Context

Steam-turbine radial shaft-vibration measurement

Detects shaft-to-bearing relative position without mechanical contact

Compressor thrust and axial-position monitoring

Forms the sensing input of a matched eddy-current transducer loop

Machine shaft centerline observation during run-up

Supports radial-vibration, axial-position and shaft-centerline measurements

Armored metric probe renewal in a matched 3300 XL loop

Protects the integral probe lead along exposed machinery routing

TECHNICAL NOTE

Install 330104-03-06-10-02-00 at the documented 30 mm unthreaded reach and 60 mm case depth while supporting the armored lead. After connection, establish the static gap in the linear region and prove polarity and dynamic response before enabling protection logic.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	330104-03-06-10-02-00 / 330104-03-06-10-02-00 recorded
Physical interface	Matched 3300 XL 8 mm Proximitior Sensor
Companion check	Compatible machinery-protection monitor channel
Functional proof	Detects shaft-to-bearing relative position without mechanical contact
Application test	Steam-turbine radial shaft-vibration measurement

5

Engineering Precautions

1

Verify the full 330104-03-06-10-02-00 marking and the 60 mm case length before disturbing the bracket.

2

Place the monitored machine and associated protection channel in the approved maintenance state.

3

Protect the 8 mm PPS probe tip and keep the M10 x 1 thread free from burrs and contamination.

4

Route the 1.0 m standard cable probe lead without sharp bends, crushing or tensile loading.

5

Secure the miniature coaxial clickloc connection and keep exposed coaxial interfaces clean and dry.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
330171-00-08-10-01-05	3300 XL 5/8 mm proximity probe	View 330171-00-08-10-01-05 page
330172-00-08-10-01-05	3300 XL 5/8 mm armored proximity probe	View 330172-00-08-10-01-05 page
330103-00-04-10-02-00	3300 XL 8 mm metric proximity probe	View 330103-00-04-10-02-00 page
330103-00-12-10-02-00	3300 XL 8 mm metric proximity probe	View 330103-00-12-10-02-00 page
330103-00-16-10-02-05	3300 XL 8 mm metric proximity probe	View 330103-00-16-10-02-05 page
330106-05-30-05-02-00	3300 XL 8 mm reverse-mount probe	View 330106-05-30-05-02-00 page
330130-045-00-00	3300 XL standard extension cable	View 330130-045-00-00 page
330130-080-02-05	3300 XL extension cable	View 330130-080-02-05 page

MANUFACTURER SOURCE RECORD

Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet

141194 Rev. AM

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com

