

APTER POWER

COMPLETE PRODUCT INFORMATION

330102-03-20-10-02-05

3300 XL 8 mm Armored Proximity Probe

330102-03-20-10-02-05 senses shaft-to-bearing relative displacement without mechanical contact and passes the probe signal to a matched Proximitor Sensor for machinery-monitoring measurement.

PRODUCT SNAPSHOT

BRAND

Bently Nevada

FAMILY

Bently Nevada 3300 XL 8 mm Proximity Trans

PART

330102-03-20-10-02-05

ORIGIN / HS

USA / 8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE

+86 180 3023 5313

EMAIL

sales13@apterpower.com

WEBSITE

www.apterpower.com



PRODUCT OVERVIEW

330102-03-20-10-02-05 senses shaft-to-bearing relative displacement without mechanical contact and passes the probe signal to a matched Proximitior Sensor for machinery-monitoring measurement.

1

Uses the with armor probe construction selected by 330102-03-20-10-02-05

2

Fits the documented 3/8-24 UNF mounting thread

3

Carries the eddy-current signal through the selected standard cable lead

4

Forms the sensing element of a matched 3300 XL 8 mm transducer system

SYSTEM COMPONENTS

3300 XL 8 mm Proximitior Sensor

Matched 3300 XL extension cable when required

AISI 4140 steel target or validated equivalent

Compatible Bently Nevada monitor channel

TECHNICAL NOTE

Match 330102-03-20-10-02-05 to a 3300 XL 8 mm Proximitior Sensor and the approved total system length. Set the static gap in the linear region, route the probe lead without tensile loading, and verify polarity and response before enabling protection logic.

TECHNICAL DATA

PARAMETER	VALUE
Complete order number	330102-03-20-10-02-05
Probe construction	With armor
Thread	3/8-24 UNF
Unthreaded length	0.3 in
Case length	2.0 in
Total probe length	1.0 m
Connector option	Miniature coaxial ClickLoc
Probe-cable type	Standard cable
Approval option	CSA, ATEX and IECEx
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

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
330130-080-02-05	3300 XL extension cable	View 330130-080-02-05 page
330850-50-00	3300 XL NSv extension cable	View 330850-50-00 page
330171-00-12-50-01-05	3300 XL 5/8 mm proximity probe	View 330171-00-12-50-01-05 page
330171-00-12-05-01-05	3300 XL 5/8 mm proximity probe	View 330171-00-12-05-01-05 page
330171-00-33-50-01-05	3300 XL 5/8 mm proximity probe	View 330171-00-33-50-01-05 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

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Radial shaft-vibration measurement

Uses the with armor probe construction selected by 330102-03-20-10-02-05

Axial position and thrust monitoring

Fits the documented 3/8-24 UNF mounting thread

Machine shaft centerline observation

Carries the eddy-current signal through the selected standard cable lead

Probe replacement in a matched 3300 XL 8 mm loop

Forms the sensing element of a matched 3300 XL 8 mm transducer system

PRODUCT PRECAUTIONS

- 1 Verify the full 330102-03-20-10-02-05 marking and the 2.0 in 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 3/8-24 UNF 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.
- 6 Confirm the installed Proximitior Sensor and total system length match the probe configuration.
- 7 Set the static gap within the documented linear region before enabling dynamic measurements.
- 8 Prove polarity, vibration response and alarm action before returning the protection channel to service.

ENGINEER FAQ

Q1 Does 330102-03-20-10-02-05 match 3300 XL 8 mm Proximator Sensor in a Radial shaft-vibration measurement installation?

Verify the complete 330102-03-20-10-02-05 marking, the documented Bently Nevada 3300 XL 8 mm Proximity Transducer System position and the installed 3300 XL 8 mm Proximator Sensor before fitting the assembly.

Q3 Which Bently Nevada 3300 XL 8 mm Proximity Transducer System records should be captured before removing 330102-03-20-10-02-05?

Record the as-found wiring, installed position, active configuration and diagnostic state associated with 330102-03-20-10-02-05 before disconnection.

Q5 Which Matched 3300 XL extension cable when required condition should be checked when 330102-03-20-10-02-05 reports an abnormal state?

Check the Matched 3300 XL extension cable when required supply, seating and connection first, then compare channel diagnostics with the recorded 330102-03-20-10-02-05 baseline.

Q7 What maintenance evidence is required after 330102-03-20-10-02-05 is used for Machine shaft centerline observation?

Retain the nameplate record, corrective action, final diagnostics and a controlled machine shaft centerline observation functional-test result for 330102-03-20-10-02-05.

Q2 How should 330102-03-20-10-02-05 be wired when it must uses the with armor probe construction selected by 330102-03-20-10-02-05?

Isolate the circuit, identify every terminal and reproduce the approved polarity, shield and channel assignment for 330102-03-20-10-02-05; then continuity-test the affected path.

Q4 What controlled test confirms that 330102-03-20-10-02-05 can fits the documented 3/8-24 unf mounting thread?

Apply the approved field or simulated stimulus, observe the Bently Nevada 3300 XL 8 mm Proximity Transducer System indication and confirm the intended response without bypassing the normal interlocks.

Q6 Can 330102-03-20-10-02-05 be moved directly into Axial position and thrust monitoring without validating Compatible Bently Nevada monitor channel?

No. Confirm the Compatible Bently Nevada monitor channel, revision, connection scheme and Bently Nevada 3300 XL 8 mm Proximity Transducer System configuration before transferring 330102-03-20-10-02-05 to that duty.

Q8 How should 330102-03-20-10-02-05 be returned to service in Probe replacement in a matched 3300 XL 8 mm loop?

Restore power under control, verify carries the eddy-current signal through the selected standard cable lead, exercise the intended signal path and release 330102-03-20-10-02-05 only after the Bently Nevada 3300 XL 8 mm Proximity Transducer System remains in its approved operating state.

SOURCE Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet | 141194 Rev. AM

+86 180 3023 5313 | sales13@apterpower.com | www.apterpower.com