

INDUSTRIAL AUTOMATION PRODUCT

330102-00-40-05-01-05

3300 XL 8 mm Proximity Probe

Bently Nevada 330102-00-40-05-01-05 is a configured 3300 XL 8 mm eddy-current proximity probe. It senses shaft displacement for a matched Proximitor Sensor and machinery-protection channel.

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	3300 XL 8 mm Proximity Transducer System
Part number	330102-00-40-05-01-05
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

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Technical Specifications

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

PARAMETER	VALUE
Probe body thread	3/8-24 UNF
Mechanical protection	Flexible stainless-steel armor
Unthreaded length	0.0 in
Overall case length	4.0 in
Integral lead length	0.5 m
Connector execution	ClickLoc with protector
Cable execution	Standard FEP
Agency approval option	CSA, ATEX and IECEx
Transducer series	3300 XL 8 mm
Matched-system linear range	2.0 mm
Incremental scale factor	7.87 V/mm nominal

PARAMETER	VALUE
Frequency response	0 to 10 kHz, +0/-3 dB
Recommended operating gap	1.27 mm approximately
Recommended gap voltage	-9 Vdc approximately
Probe tip material	Polyphenylene sulfide (PPS)
Probe case material	AISI 303 or 304 stainless steel
Probe cable impedance	75 Ohm triaxial
Minimum cable bend radius	25.4 mm
Minimum flat target diameter	15.2 mm
Minimum shaft diameter	50.8 mm
Recommended shaft diameter	76.2 mm

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	3300 XL 8 mm Proximito Sensor
Companion hardware	matched extension cable when required
Field connection	compatible machinery-protection monitor
Primary system function	Detects shaft-to-bearing relative displacement without mechanical contact
Controlled acceptance duty	Radial shaft-vibration measurement

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System Role and Architecture

Bently Nevada 330102-00-40-05-01-05 is a configured 3300 XL 8 mm eddy-current proximity probe. It senses shaft displacement for a matched Proximitor Sensor and machinery-protection channel.

FUNCTION 1

Detects shaft-to-bearing relative displacement without mechanical contact

FUNCTION 2

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

FUNCTION 3

Carries the eddy-current probe signal through the configured triaxial lead

FUNCTION 4

Supports controlled static-gap and dynamic-response verification

Matched system components

- 3300 XL 8 mm Proximitor Sensor
- matched extension cable when required
- compatible machinery-protection monitor
- AISI 4140 steel target

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3300 XL 8 mm Proximitor Sensor
Companion hardware	matched extension cable when required
Field connection	compatible machinery-protection monitor
Primary system function	Detects shaft-to-bearing relative displacement without mechanical contact
Controlled acceptance duty	Radial shaft-vibration measurement

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Applications and Engineering Context

Radial shaft-vibration measurement

Detects shaft-to-bearing relative displacement without mechanical contact

Axial position and thrust monitoring

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

Machine shaft centerline observation

Carries the eddy-current probe signal through the configured triaxial lead

Bearing-clearance and rotor-position trending

Supports controlled static-gap and dynamic-response verification

TECHNICAL NOTE

Mount 330102-00-40-05-01-05 to the documented mechanical reach and route its 0.5 m lead without violating the published bend radius. Match total system length, establish the static gap, and prove channel polarity before service.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	330102-00-40-05-01-05 / 330102-00-40-05-01-05 recorded
Physical interface	3300 XL 8 mm Proximitior Sensor
Companion check	matched extension cable when required
Functional proof	Detects shaft-to-bearing relative displacement without mechanical contact
Application test	Radial shaft-vibration measurement

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Engineering Precautions

1

Verify the complete 330102-00-40-05-01-05 marking and 4.0 in case execution before work.

2

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

3

Protect the probe tip and keep the 3/8-24 UNF mounting thread free of burrs and contamination.

4

Route the 0.5 m lead without sharp bends, crushing, abrasion, or tensile loading.

5

Keep the clickloc with protector connection clean, dry, and finger-tight.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
330171-00-12-05-01-05	3300 XL proximity probe	Open product page
200150-09-CN	General-purpose accelerometer	Open product page

MANUFACTURER SOURCE RECORD

3300 XL 8 mm Proximity Transducer System Datasheet

141194 Rev. AM

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