

INDUSTRIAL AUTOMATION PRODUCT

330851-01-000-020-10-00-00

3300 XL 25 mm 1 1/4-12 threaded proximity probe

Large-range non-contact eddy-current displacement signal

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	3300 XL 25 mm Proximity Transducer System
Part number	330851-01-000-020-10-00-00
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 model	330851
Probe case	1 1/4-12 threaded
Unthreaded length	0
Overall case length	2.0 in
Total probe length	1.0 m (3.3 ft)
Aarmor	No
Agency approval option	Not required
Probe tip material	PEEK
Probe case material	AISI 304 stainless steel
Probe cable	75 Ohm PFA FluidLoc
Probe operating temperature	-35 to +200 degC
Short-term probe temperature	+250 degC maximum for less than 24 h
Power without barriers	-17.5 to -26 V DC; 12 mA maximum

PARAMETER	VALUE
Power with barriers	-23 to -26 V DC
Supply sensitivity	<2 mV/V
Output resistance	50 Ohm
Field-wire conductor range	0.2 to 1.5 mm ² (16 to 24 AWG)
Maximum field-wire length	305 m (1000 ft)
Linear range	12.7 mm (500 mils)
Linear-range limits	0.63 to 13.33 mm (25 to 525 mils)
Average scale factor	0.787 V/mm (20 mV/mil)
Frequency response	0 to 2.7 kHz; +0/-3 dB
Minimum target diameter	61 mm (2.4 in)
Extension-cable capacitance	69.9 pF/m typical
Minimum bend radius	25.4 mm (1.0 in)

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	3300 XL 25 mm Proximitor Sensor
Companion hardware	matched 25 mm extension cable
Field connection	61 mm or larger steel target
Primary system function	Uses the documented 1 1/4-12 threaded case
Controlled acceptance duty	Steam-turbine differential expansion

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System Role and Architecture

Large-range non-contact eddy-current displacement signal

FUNCTION 1

Uses the documented 1 1/4-12 threaded case

FUNCTION 2

Provides a 2.0 in case with a one-metre lead

FUNCTION 3

Uses a PEEK sensing tip for the large target range

FUNCTION 4

Forms the probe element of a matched 25 mm measurement system

Matched system components

- 3300 XL 25 mm Proximator Sensor
- matched 25 mm extension cable
- 61 mm or larger steel target
- compatible displacement monitor

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3300 XL 25 mm Proximator Sensor
Companion hardware	matched 25 mm extension cable
Field connection	61 mm or larger steel target
Primary system function	Uses the documented 1 1/4-12 threaded case
Controlled acceptance duty	Steam-turbine differential expansion

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Applications and Engineering Context

Steam-turbine differential expansion

Uses the documented 1 1/4-12 threaded case

Large-shaft axial position

Provides a 2.0 in case with a one-metre lead

Rotor travel observation

Uses a PEEK sensing tip for the large target range

25 mm probe-loop replacement

Forms the probe element of a matched 25 mm measurement system

TECHNICAL NOTE

Confirm the 1 1/4-12 threaded case, 2.0 in length, one-metre FluidLoc lead and complete five- or nine-metre matched system before setting the operating gap.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	330851-01-000-020-10-00-00 / 330851-01-000-020-10-00-00 recorded
Physical interface	3300 XL 25 mm Proximitior Sensor
Companion check	matched 25 mm extension cable
Functional proof	Uses the documented 1 1/4-12 threaded case
Application test	Steam-turbine differential expansion

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Engineering Precautions

1

Verify the complete 330851-01-000-020-10-00-00 marking and 1 1/4-12 threaded execution before work.

2

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

3

Protect the sensing tip, threads and mounting surface from impact, burrs and contamination.

4

Route and support the 1.0 m lead without sharp bends, crushing, tensile load or contact with moving parts.

5

Keep coaxial connector faces clean, dry and mechanically unloaded during handling.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
330104-19-25-10-11-05	Related Bently Nevada product	View 330104-19-25-10-11-05 page
330104-00-10-10-02-05	Related Bently Nevada product	View 330104-00-10-10-02-05 page
330103-00-18-05-02-05	Related Bently Nevada product	View 330103-00-18-05-02-05 page
133396-01	Related Bently Nevada product	View 133396-01 page
125768-01	Related Bently Nevada product	View 125768-01 page
125760-01	Related Bently Nevada product	View 125760-01 page
125720-01	Related Bently Nevada product	View 125720-01 page
3500-22M-138607-01	Related Bently Nevada product	View 3500-22M-138607-01 page

MANUFACTURER SOURCE RECORD

Bently Nevada 3300 XL 25 mm Proximity Transducer System Datasheet

163236 Rev. M

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