

INDUSTRIAL AUTOMATION PRODUCT

330876-03-10-00-00

3300 XL 50 mm smooth 1.99 in diameter side-exit proximity probe

Large-range non-contact eddy-current displacement signal

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	3300 XL 50 mm Proximity Transducer System
Part number	330876-03-10-00-00
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	330876
Probe case	Smooth 1.99 in diameter side-exit
Total probe length	1.0 m (3.3 ft)
Probe cable	High-temperature FluidLoc
Armor	No
Agency approval option	Not required
Probe tip material	PPS
Probe case material	AISI 304 stainless steel
Probe cable impedance	75 Ohm
Power without barriers	-17.5 to -26 V DC; 12 mA maximum
Power with barriers	-23 to -26 V DC

PARAMETER	VALUE
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	27.9 mm (1100 mils)
Linear-range limits	1.3 to 29.2 mm (50 to 1150 mils)
Average scale factor	394 mV/mm (10 mV/mil)
Deviation from straight line	<+/-0.74 mm (+/-29 mils)
Minimum target diameter	102 mm (4.0 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 50 mm Proximitor Sensor
Companion hardware	matched extension cable when required
Field connection	102 mm or larger steel target
Primary system function	Uses the documented smooth 1.99 in diameter side-exit body
Controlled acceptance duty	Turbine differential expansion

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System Role and Architecture

Large-range non-contact eddy-current displacement signal

FUNCTION 1
Uses the documented smooth 1.99 in diameter side-exit body

FUNCTION 2
Carries the signal over a 1.0 m (3.3 ft) FluidLoc lead

FUNCTION 3
Provides the large-range 50 mm sensing interface

FUNCTION 4
Operates only as part of a matched 3300 XL 50 mm system

Matched system components

- 3300 XL 50 mm Proximitor Sensor
- matched extension cable when required
- 102 mm or larger steel target
- compatible displacement monitor

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3300 XL 50 mm Proximitor Sensor
Companion hardware	matched extension cable when required
Field connection	102 mm or larger steel target
Primary system function	Uses the documented smooth 1.99 in diameter side-exit body
Controlled acceptance duty	Turbine differential expansion

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Applications and Engineering Context

Turbine differential expansion

Uses the documented smooth 1.99 in diameter side-exit body

Large axial-position measurement

Carries the signal over a 1.0 m (3.3 ft) FluidLoc lead

Valve and rotor travel monitoring

Provides the large-range 50 mm sensing interface

50 mm transducer-loop renewal

Operates only as part of a matched 3300 XL 50 mm system

TECHNICAL NOTE

Confirm the smooth 1.99 in diameter side-exit body, 1.0 m (3.3 ft) lead, no and not required; match the probe and extension cable to the Proximitor system length before full-travel calibration.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	330876-03-10-00-00 / 330876-03-10-00-00 recorded
Physical interface	3300 XL 50 mm Proximitor Sensor
Companion check	matched extension cable when required
Functional proof	Uses the documented smooth 1.99 in diameter side-exit body
Application test	Turbine differential expansion

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Engineering Precautions

- 1 Verify the complete 330876-03-10-00-00 marking and Smooth 1.99 in diameter side-exit 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 (3.3 ft) 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
3500-53M-286566-01	Related Bently Nevada product	View 3500-53M-286566-01 page
330103-00-05-50-12-00	Related Bently Nevada product	View 330103-00-05-50-12-00 page
330703-000-040-10-02-00	Related Bently Nevada product	View 330703-000-040-10-02-00 page
330130-075-00-00	Related Bently Nevada product	View 330130-075-00-00 page
330103-07-18-10-02-00	Related Bently Nevada product	View 330103-07-18-10-02-00 page
330103-00-07-10-02-00	Related Bently Nevada product	View 330103-00-07-10-02-00 page
330103-00-08-05-02-00	Related Bently Nevada product	View 330103-00-08-05-02-00 page
330103-00-03-05-02-00	Related Bently Nevada product	View 330103-00-03-05-02-00 page

MANUFACTURER SOURCE RECORD

Bently Nevada 3300 XL 50 mm Proximity Transducer System Datasheet

174014 Rev. L

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