

INDUSTRIAL AUTOMATION PRODUCT

330850-90-00

3300 XL 25 mm panel Proximitior Sensor

Conditioned voltage proportional to large target displacement

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	3300 XL 25 mm Proximity Transducer System
Part number	330850-90-00
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

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



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Technical Specifications

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

PARAMETER	VALUE
Sensor model	330850
System length	9.0 m (29.5 ft)
Mounting	Panel
Agency approval option	Not required
Sensor material	A380 aluminum
Probe and cable system length	9.0 m
Power without barriers	-17.5 to -26 V DC; 12 mA maximum
Power with barriers	-23 to -26 V DC
Supply sensitivity	<2 mV/V
Output resistance	50 Ohm

PARAMETER	VALUE
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 probe
Companion hardware	matched 25 mm extension cable
Field connection	negative DC supply and field wiring
Primary system function	Uses a nine-metre panel configuration
Controlled acceptance duty	Differential-expansion monitoring

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System Role and Architecture

Conditioned voltage proportional to large target displacement

FUNCTION 1

Uses a nine-metre panel configuration

FUNCTION 2

Drives the matched 25 mm eddy-current probe

FUNCTION 3

Linearizes the large-range displacement response

FUNCTION 4

Supplies the conditioned signal to a compatible monitor

Matched system components

- 3300 XL 25 mm probe
- matched 25 mm extension cable
- negative DC supply and field wiring
- compatible displacement monitor

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3300 XL 25 mm probe
Companion hardware	matched 25 mm extension cable
Field connection	negative DC supply and field wiring
Primary system function	Uses a nine-metre panel configuration
Controlled acceptance duty	Differential-expansion monitoring

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Applications and Engineering Context

Differential-expansion monitoring

Uses a nine-metre panel configuration

Large axial-position channel

Drives the matched 25 mm eddy-current probe

Rotor and valve travel measurement

Linearizes the large-range displacement response

25 mm electronics renewal

Supplies the conditioned signal to a compatible monitor

TECHNICAL NOTE

Confirm the nine-metre system, panel hardware and not required; restore supply polarity, shield termination, scale and full-travel alarm settings.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	330850-90-00 / 330850-90-00 recorded
Physical interface	3300 XL 25 mm probe
Companion check	matched 25 mm extension cable
Functional proof	Uses a nine-metre panel configuration
Application test	Differential-expansion monitoring

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Engineering Precautions

1

Verify 330850-90-00, nine-metre system length and panel execution before work.

2

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

3

Isolate negative DC power and label power, common and output conductors.

4

Record probe, extension-cable and monitor identities before disconnecting the sensor.

5

Use ESD controls and protect the terminals and mounting pad from damage.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
330130-040-02-05	Related Bently Nevada product	View 330130-040-02-05 page
330180-90-00	Related Bently Nevada product	View 330180-90-00 page
125840-01	Related Bently Nevada product	View 125840-01 page
3500-32-125712-01	Related Bently Nevada product	View 3500-32-125712-01 page
330780-50-00	Related Bently Nevada product	View 330780-50-00 page
330130-080-00-00	Related Bently Nevada product	View 330130-080-00-00 page
330103-00-06-10-02-00	Related Bently Nevada product	View 330103-00-06-10-02-00 page
330180-90-05	Related Bently Nevada product	View 330180-90-05 page

MANUFACTURER SOURCE RECORD

Bently Nevada 3300 XL 25 mm Proximity Transducer System Datasheet

163236 Rev. M

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