

INDUSTRIAL AUTOMATION PRODUCT

330850-91-05

3300 XL 25 mm din-rail 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	330850-91-05
Country	USA
HS code	8537101190

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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	DIN-rail
Agency approval option	Multiple approvals
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 din-rail 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 din-rail 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 din-rail configuration
Controlled acceptance duty	Differential-expansion monitoring

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Applications and Engineering Context

Differential-expansion monitoring

Uses a nine-metre din-rail 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, din-rail hardware and multiple approvals; restore supply polarity, shield termination, scale and full-travel alarm settings.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	330850-91-05 / 330850-91-05 recorded
Physical interface	3300 XL 25 mm probe
Companion check	matched 25 mm extension cable
Functional proof	Uses a nine-metre din-rail configuration
Application test	Differential-expansion monitoring

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Engineering Precautions

1

Verify 330850-91-05, nine-metre system length and din-rail 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
3500-05-01-02-00-00-01	Related Bently Nevada product	View 3500-05-01-02-00-00-01 page
990-04-70-02-00	Related Bently Nevada product	View 990-04-70-02-00 page
3500-25-149369-01	Related Bently Nevada product	View 3500-25-149369-01 page
133819-01	Related Bently Nevada product	View 133819-01 page
TM0180-A08-B00-C02-D10	Related Bently Nevada product	View TM0180-A08-B00-C02-D10 page
TM0180-08-00-15-10-02	Related Bently Nevada product	View TM0180-08-00-15-10-02 page
JNJ5300-08-045-00-00	Related Bently Nevada product	View JNJ5300-08-045-00-00 page
JNJ5300-08-06-005-030-05...	Related Bently Nevada product	View JNJ5300-08-06-005-030-05... page

MANUFACTURER SOURCE RECORD

Bently Nevada 3300 XL 25 mm Proximity Transducer System Datasheet

163236 Rev. M

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