

APTER POWER PRODUCT TECHNICAL REFERENCE

144181-51-05

3300 XL 8 mm Proximitior Sensor

This is a 3300 XL 8 mm Proximitior Sensor configuration used as the signal-conditioning element of a Bently Nevada eddy-current proximity transducer system.

It conditions the probe response for radial vibration and shaft position measurement channels, giving machinery monitoring hardware a usable proximity signal.

Document field	Value
Manufacturer	Bently Nevada
Prepared by	Apter Power
Document ID	AP-BN-02-144181-51-05-TR-R2
Revision	R2
Issue date	2026-08-31

APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Three interface paths, one controlled configuration.

WHATSAPP / PHONE

EMAIL

WEBSITE

+86 180 3023 5313

sales13@apterpower.com

www.apterpower.com



SCAN FOR PRODUCT & QUOTE

144181-51-05

1. Product Overview and Identity

This is a 3300 XL 8 mm Proximitor Sensor configuration used as the signal-conditioning element of a Bently Nevada eddy-current proximity transducer system.

It conditions the probe response for radial vibration and shaft position measurement channels, giving machinery monitoring hardware a usable proximity signal.

Model Configuration

Field	Verified value
Complete model	144181-51-05
Manufacturer	Bently Nevada
Product description	3300 XL 8 mm Proximitor Sensor

Key Features

- Exact product identifier: 144181-51-05
- The -51 arrangement is a 5.0 m system length with DIN-rail mounting. It operates with the matched 3300 XL 8 mm probe and extension cable as a complete transducer system.
- DIN-rail mounting suits dense machinery-monitoring panels serving fluid-film bearing machines, compressors, pumps and turbines.
- Match the total probe and extension-cable length to the 5.0 m sensor system length before commissioning.

2. Technical Specifications

Technical data for 144181-51-05 is organized below for engineering review and configuration control.

Parameter	Technical value
System length	5.0 m
Mounting	35 mm DIN rail
Agency approvals	CSA; ATEX; IECEX
Operating temperature	-52 to +100 C
Storage temperature	-52 to +105 C

Configuration Control

Match the total probe and extension-cable length to the 5.0 m sensor system length before commissioning.

3. Functions, Applications and Components

Core Function

144181-51-05 is the signal-conditioning element of the proximity transducer loop. It excites the matched probe and presents the conditioned displacement signal to the machinery monitoring input.

Application Areas

Application	System role
Radial vibration	144181-51-05 supports shaft-motion measurement in the matched proximity loop.
Axial position	The transducer chain can track static movement relative to the probe tip.
Rotating equipment	Typical measurement points occur on turbines, compressors, pumps and motors.
Machinery protection	The conditioned signal is connected to the configured monitor channel.

Compatible Components

- Matched proximity probe from the specified system family
- Extension cable completing the configured electrical length
- DIN or panel hardware defined by the model code
- Monitor channel accepting the conditioned proximity signal

4. Installation Precautions

- Mount 144181-51-05 in the arrangement identified by its configuration.
- Confirm probe and extension cable belong to the correct sensor family.
- Verify total electrical length before applying power.
- Terminate power, common and output conductors at the monitoring panel.

Engineering FAQ - Questions 1 to 4

What engineering function does 144181-51-05 perform in its monitoring loop?

144181-51-05 is the signal-conditioning element of the proximity transducer loop. It excites the matched probe and presents the conditioned displacement signal to the machinery monitoring input.

Which system length applies to 144181-51-05?

The configured system length for 144181-51-05 is 5.0 m.

What mounting must be checked when specifying 144181-51-05?

Use 35 mm DIN rail for the mounting when reviewing this complete model.

How does the agency approvals selection affect 144181-51-05?

This configuration identifies agency approvals as CSA; ATEX; IECEx; include that value in the installation record.

Manufacturer Technical Source

3300 XL 8 mm Proximity Transducer System Datasheet 141194