

APTER POWER PRODUCT MANUAL

330180-X1-05 MOD:145347-05

3300 XL 8 mm Proximitior Sensor - Special MOD Configuration

330180-X1-05 MOD:145347-05 is a Bently Nevada 3300 XL 8 mm Proximitior Sensor with approval option 05 and special modification identifier 145347-05.

The sensor conditions the signal from a correctly matched probe and extension cable and produces a voltage proportional to probe-to-target distance for vibration, position, Keyphasor and speed measurements.

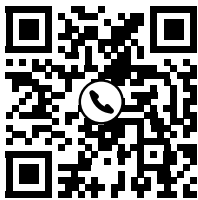
Manufacturer	Bently Nevada
Prepared by	Apter Power
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APTER POWER SALES TEAM

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Verified signal paths for dependable machinery protection

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330180-X1-05 MOD:145347-05

1. Identity and Special-Configuration Boundary

330180-X1-05 MOD:145347-05 is a Bently Nevada 3300 XL 8 mm Proximito Sensor with approval option 05 and special modification identifier 145347-05.

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Model Configuration

Code	Verified interpretation
330180	3300 XL Proximito Sensor family for the 3300 XL 8 mm proximity transducer system.
X1	Special/non-standard configuration code. It is not decoded by the current standard 330180 ordering table and must be controlled by the MOD drawing and physical nameplate.
05	CSA, ATEX and IECEx agency-approval option in the published 330180 ordering structure.
MOD:145347-05	Manufacturer modification identifier supplied with the unit; the public datasheet does not publish its detailed construction or mounting definition.

Important boundary

X1 is not decoded by the current public standard ordering table. Do not assign a 1 m, 5 m or 9 m system length, panel mount, DIN mount or no-hardware definition without the physical nameplate or MOD 145347-05 drawing.

2. Verified Technical Specifications

The following values are published for the 330180 family. MOD-specific values are explicitly identified rather than inferred.

Parameter	Verified value
Product Type	3300 XL 8 mm Proximitior Sensor - special MOD configuration
Base Family	330180
Confirmed Approval Option	05 - CSA, ATEX and IECEx approvals; verify the actual nameplate and applicable drawing
Accepted Transducer Input	One 3300-series 5 mm or 3300 XL 8 mm proximity probe and matching extension cable
Measurement Output	Voltage directly proportional to probe-tip distance from a conductive target
Supply Voltage	-17.5 to -26 Vdc for the published non-incendive installation; -23 to -26 Vdc with barriers
Maximum Current Consumption	12 mA
Output Resistance	50 ohm
Nominal Linear Range	2.0 mm (80 mil), approximately 0.25 to 2.3 mm from the target
Nominal Scale Factor	7.87 V/mm (200 mV/mil); published tolerance depends on the verified matched system length
Recommended Radial-Vibration Gap	Approximately 1.27 mm (50 mil), about -9 Vdc
Frequency Response	0 to 10 kHz, +0/-3 dB, with up to 305 m (1000 ft) of field wiring
Field Wiring	0.2 to 1.5 mm ² (16 to 24 AWG), three-conductor shielded triad recommended
Operating Temperature	-52 to +100 deg C (-62 to +212 deg F)
Storage Temperature	-52 to +105 deg C (-62 to +221 deg F)
Sensor Housing Material	A308 aluminum
Published Sensor Weight	246 g (8.67 oz)
Standard Family Envelopes	Panel mount: 81.3 x 61.0 x 63.5 mm; DIN mount: 89.4 x 35.1 x 70.8 mm. The exact X1 mounting envelope is not published.
Special Configuration Status	X1 / MOD 145347-05 details require the manufacturer MOD drawing or physical nameplate

3. Signal Path and Applications

Core Functions

- Energizes and conditions a compatible proximity probe and extension-cable loop.
- Converts probe-to-target gap into a voltage proportional to distance.
- Feeds radial-vibration or axial/static-position signals to compatible Bently Nevada monitoring channels.
- Supports Keyphasor reference and speed measurements when the probe geometry and monitor channel are correctly engineered.

Application Areas

Application	System role
Fluid-film-bearing machinery	Conditions non-contacting shaft-vibration and position signals on turbines, compressors, pumps and other rotating equipment.
Radial shaft vibration	Processes dynamic shaft-motion signals from a matched 3300 XL 8 mm probe system.
Axial or static position	Provides a proportional gap voltage for thrust-position and static-clearance monitoring.
Keyphasor and speed reference	Supports phase-reference and rotational-speed channels when target geometry and monitoring configuration meet the official requirements.

Compatible Components

- A 3300 XL 8 mm proximity probe and extension cable whose combined length matches the Proximitor Sensor system calibration stated on the physical unit.
- 3300-series 5 mm components where the manufacturer compatibility and complete system calibration are confirmed.
- Bently Nevada monitoring channels configured for the correct 3300 XL scale factor, polarity and measurement mode.
- Applicable barriers, field wiring and installation drawings required by the verified option-05 approval marking.

4. Installation Precautions

- Do not translate X1 into a standard 1 m, 5 m or 9 m system-length or mounting option without the MOD 145347-05 drawing or physical nameplate.
- Match the probe plus extension-cable length to the sensor calibration shown on the physical unit before energizing the loop.
- Use the published negative supply polarity and verify -17.5 to -26 Vdc, or the barrier-specific -23 to -26 Vdc requirement, before connection.
- Separate shielded signal wiring from power conductors and ground the shield according to the current Bently Nevada installation drawing.
- Confirm the option-05 certification marking, entity parameters, barrier, ambient rating and hazardous-area drawing before installation.

STOP - verify before installation

Treat X1 and MOD 145347-05 as controlled special-build identifiers. Verify system length, mounting, terminals, approval marking and drawing revision from the physical unit before matching probes, cables, barriers or monitor scaling.

Use the physical nameplate and current Bently Nevada documents as the controlling records.

Lifecycle Status

Bently Nevada lists the 330180 family in Datasheet 141194 Rev. AM. The public datasheet does not publish a separate lifecycle statement or availability status for X1 / MOD 145347-05; confirm the exact modified unit with the manufacturer record or physical nameplate.

5. Official Source and Use Notice

Official source

Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AM. The standard ordering table confirms the 330180 family and approval option 05; X1 and MOD 145347-05 require the physical nameplate or manufacturer modification drawing for exact special-build details.

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/330180-x1-05-mod-145347-05>

Use Notice

This original Apter Power product-specific reference is prepared from the named Bently Nevada source. It is not a Bently Nevada publication and does not replace the original datasheet, physical nameplate, MOD drawing, certificate, installation drawing, safety instructions or machine-builder documentation.

ASK FOR QUOTE

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