

3300 XL 8mm Proximity Transducer System

Bently Nevada* Asset Condition Monitoring

Description

The 3300 XL 8 mm Proximity Transducer System consists of:

- One 3300 XL 8 mm probe,
- One 3300 XL extension cable¹, and
- One 3300 XL Proximitor* Sensor².



The system provides an output voltage that is directly proportional to the distance between the probe tip and the observed conductive surface and can measure both static (position) and dynamic (vibration) values. The system's primary applications are vibration and position measurements on fluid-film bearing machines, as well as Keyphasor* reference and speed measurements³.

The 3300 XL 8 mm system delivers the most advanced performance in our eddy current proximity transducer systems. The standard 3300 XL 8 mm 5-metre system also fully complies with the American Petroleum Institute's (API) 670 Standard (4th Edition) for mechanical configuration, linear range, accuracy, and temperature stability. All 3300 XL 8 mm proximity transducer systems provide this level of performance and support complete interchangeability of probes, extension cables, and Proximitor sensors, eliminating the need to match or bench calibrate individual components.

Each 3300 XL 8 mm Transducer System component is backward-compatible and interchangeable⁴ with other non-XL 3300 series 5 mm and 8 mm transducer system components⁵. This compatibility includes the 3300 5 mm probe, for applications in which an 8 mm probe is too large for the available mounting space^{6,7}.

Proximitor Sensor

The 3300 XL Proximitor Sensor incorporates numerous improvements over previous designs. Its physical packaging allows you to use it in high-density DIN-rail installations. You can also mount the sensor in a traditional panel mount configuration, where it shares an identical 4-hole mounting "footprint" with older Proximitor Sensor designs. The mounting base for either option provides electrical isolation and eliminates the need for separate isolator plates. The 3300 XL Proximitor Sensor is highly immune to radio frequency interference, allowing you to install it in fiberglass housings without adverse effects from nearby radio frequency signals. The 3300 XL Proximitor Sensor's improved RFI/EMI immunity satisfies European CE mark approvals without requiring special shielded conduit or metallic housings, resulting in lower installation costs and complexity.

The 3300 XL's SpringLoc terminal strips require no special installation tools and facilitate faster, more robust field wiring connections by eliminating screw-type clamping mechanisms that can loosen.



imagination at work

Specifications and Ordering Information
Part Number 141194-01
Rev. AA (01/16)

3300 XL 8 mm Extended Temperature Range (ETR) Reverse Mount Probes

330195-02-12-CXX-DXX, 3/8-24 UNF threads

330196-05-30-CXX-DXX, M10 x 1 threads

C: Total Length Option

05	0.5 metre (1.6 feet)
10	1.0 metre (3.3 feet)
15	1.5 metre (4.9 feet)
20	2.0 metres (6.6 feet)
50	5.0 metres (16.4 feet)

Note: 5-metre probes are designed for use with the 5-metre Proximitor sensor only.

90	9.0 metres (29.5 feet)
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D: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

3300 XL 8 mm Extended Temperature Range (ETR) Proximity Probes, Smooth Case:

330197 3300 XL 8 mm Probe without armor¹

330198 3300 XL 8 mm Probe with armor¹

Part Number-AXX-BXX-CXX

A: Overall Case Length Option

Order in increments of 0.5 in

Length configurations:

Maximum length: 9.5 in

Minimum length: 1.0 in

Example: 3 5 = 3.5 in

B: Total Length Option

05	0.5 metre (1.6 feet)
10	1.0 metre (3.3 feet)
15	1.5 metres (4.9 feet)
20	2.0 metres (6.6 feet)
50	5.0 metres (16.4 feet)

Note: 5-metre probes are designed for use with the 5-metre Proximitor sensor only.

90	9.0 metres (29.5 feet)
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C: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

Aluminum probe clamp bracket¹

137491-AXX

A: Mounting screw option

01	10-24 UNC-2A mounting screws
02	M5 x 0.8-6g mounting screws

The aluminum clamp bracket is an unthreaded mounting bracket designed for use with the smooth case probes (330140, 330141, 330197 and 330198). After gapping the probe, tighten the clamp bracket by tightening the screws. The mounting screws have pre-drilled holes for safety wire.

Aluminum probe threaded mounting bracket

137492-AXX

A: Thread size

01	3/8-24
04	M10 x 1

The aluminum probe threaded mounting bracket is the standard mounting bracket for most 3300 and 3300 XL probe installations. The **-01** option includes two 10-24 UNC-2A mounting screws. The **-04** option includes two M5 x 0.8-6g mounting screws. The mounting screws have pre-drilled holes for safety wire.

Phenolic threaded probe mounting bracket

27474-AXX

A: Thread size

01	3/8-24
04	M10 x 1

We recommend the phenolic threaded mounting bracket if your application requires additional electric isolation from the mounting location (as in some generator and electrical motor bearing locations). The **-01** option includes two 10-24 UNC-2A mounting screws. The **-04** option includes two M5 x 0.8-6g mounting screws. The mounting screws have pre-drilled holes for safety wire.