

3300 XL 8 mm Proximity Transducer System

Datasheet

Cordant™

141194 Rev. AM



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-meter system also fully complies with the American Petroleum Institute's (API) 670 Standard 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}.



Baker Hughes 

D: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals


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

330193 3300 XL 8 mm Probe, M10 x 1 thread, without armor

330194 3300 XL 8 mm Probe, M10 x 1 thread, with armor

Part Number-AA-BB-CC-DD

A: Unthreaded Length Option

 Unthreaded length must be at least 20 mm less than the case length.

Order in increments of 10 mm

Length configurations:

Maximum unthreaded length: 230 mm

Minimum unthreaded length: 0 mm

Example: **0 6** = 60 mm

B: Overall Case Length Option

Order in increments of 10 mm

Metric thread configurations:

Maximum case length: 250 mm

Minimum case length: 20 mm

Example: **0 6** = 60 mm

C: Total Length Option

05	0.5 meter (1.6 feet)
10	1.0 meter (3.3 feet)
15	1.5 meter (4.9 feet)
20	2.0 meters (6.6 feet)
50	5.0 meters (16.4 feet)
90	9.0 meters (29.5 feet)



5-meter probes are designed for use with the 5 meter Proximitor sensor only.

D: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

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

330195-02-12-CC-DD 3/8-24 UNF threads

330196-05-30-CC-DD M10 x 1 threads

C: Total Length Option

05	0.5 meter (1.6 feet)
10	1.0 meter (3.3 feet)
15	1.5 meter (4.9 feet)
20	2.0 meters (6.6 feet)
50	5.0 meters (16.4 feet)
90	9.0 meters (29.5 feet)



5-meter probes are designed for use with the 5 meter Proximitor sensor only.

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 armor 1

330198 3300 XL 8 mm Probe with armor 1

Part Number-AA-BB-CC

A: Overall Case Length Option

Order in increments of 0.5 in.

Length configurations:

Maximum unthreaded length: 9.5 in.

Minimum unthreaded length: 1.0 in.

Example: **3 5** = 3.5 in.

B: Total Length Option

05	0.5 meter (1.6 feet)
10	1.0 meter (3.3 feet)
15	1.5 meter (4.9 feet)
20	2.0 meters (6.6 feet)
50	5.0 meters (16.4 feet)
90	9.0 meters (29.5 feet)



5-meter probes are designed for use with the 5 meter Proximator sensor only.

C: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

Aluminum probe clamp bracket¹

137491-AA

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-AA

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-AA

A: Thread size

01	3/8-24
04	M10 x 1

Bently Nevada recommends 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.

Probe Ordering Information Notes:

1. Mounting clamps must be ordered separately for 330140, 330141, 330197, and 330198.
2. For a shorter delivery time, order commonly stocked probes. The following part numbers are currently stocked probes: