

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

330171-00-30-10-02-BR

QUARTER-INCH THREADED 5 MM PROXIMITY PROBE

Used with the applicable 3300 5 mm Proximity Transducer System system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official pages follow this cover with source pagination retained.

172036 Rev. T

3300 5 mm Transducer System

Datasheet

Cordant™

172036 Rev. T

Description

Transducer System

The 3300 5 mm Proximity Transducer System consists of:

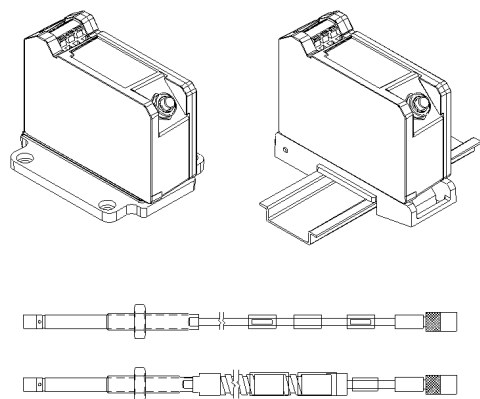
- a 3300 5 mm probe ^{1, 2}
- a 3300 XL extension cable (ref 141194-01)
- a 3300 XL Proximitor Sensor ^{3, 4, 5} (ref 141194-01)

When combined with a 3300 XL Proximitor Sensor and XL extension cable, the system provides an output voltage that is directly proportional to the distance between the probe tip and the observed conductive surface. The system can measure both static (position) and dynamic (vibration) data. Its primary use is in vibration and position measurement applications on fluid-film bearing machines, as well as Keyphasor measurement and speed measurement applications⁶.

The system provides an accurate, stable signal output over a wide temperature range. All 3300 XL Proximity Transducer Systems achieve this level of performance with complete interchangeability of probe, extension cable, and Proximitor sensor, eliminating the need for individual component matching or bench calibration.

Proximity Probe

The 3300 5 mm probe improves upon previous designs. A patented TipLoc molding method provides a more robust bond between the probe tip and the probe body. The 3300 5 mm system is orderable with Fluidloc cable options for preventing oil and other liquids from leaking out of the machine through the cable's interior.



Baker Hughes 

Ordering Information



For the detailed listing of country and product-specific approvals, refer to the [Approvals Quick Reference Guide \(108M1756\)](#).

For additional technical documentation, please log in to bntechsupport.com and access the Bently Nevada Media Library.

3300 5mm Proximity Probes

330171 3300 5mm Probe, 1/4-28 UNF thread, without armor

330172 3300 5mm Probe, 1/4-28 UNF thread, with armor

Part Number-AA-BB-CC-DD-EE

A: Unthreaded Length Option



Unthreaded length must be at least 0.8 in. less than the case length. Order in increments of 0.1 in.

Length configurations: Maximum unthreaded length:

8 8 = 8.8 in. Minimum unthreaded length:

0 0 = 0.0 in.

Example: 0 4 = 0.4 in.

B: Overall Case Length Option

Order in increments of 0.1 in. **Threaded Length configurations:**

Maximum unthreaded length: **9 6** = 9.6 in.

Minimum unthreaded length: **0 8** = 0.8 in.

Example: 2 4 = 2.4 in.

C: Total Length Option

0 5	0.5 meter (1.6 feet)
1 0	1.0 metre (3.3 feet)

2 0	2.0 metres (6.6 feet)
5 0	5.0 metres (16.4 feet) ¹
9 0	9.0 metres (29.5 feet)

D: Connector Option

0 1	Miniature coaxial ClickLoc connector with connector protector, standard cable
0 2	Miniature coaxial ClickLoc connector, standard cable
1 1	Miniature coaxial ClickLoc connector with connector protector, FluidLoc cable
1 2	Miniature coaxial ClickLoc connector, FluidLoc cable

E: Agency Approval Option

0 0	Agency Approval Option
0 5	Multiple Approvals

3300 5mm Proximity Probes, Metric

330173 3300 5mm Probe, M8 x 1 thread, without armor

330174 3300 5mm Probe, M8 x 1 thread, with armor

Part Number-AA-BB-CC-DD-EE

A: Unthreaded Length Option



Unthreaded length must be at least 20mm less than the case length. Order in increments of 10mm.

Length configurations: |

Maximum unthreaded length: **2 3** = 230mm

Minimum unthreaded length: **0 0** = 0.0mm

Example: 0 6 = 60mm

B: Overall Case Length Option

Order in increments of 10mm

Metric thread configurations:

Maximum unthreaded length: **2 5** = 250mm

Minimum unthreaded length: **0 2** = 20mm

Example: **0 6** = 60mm

C: Total Length Option

0 5	0.5 meter (1.6 feet)
1 0	1.0 metre (3.3 feet)
2 0	2.0 metres (6.6 feet)
5 0	5.0 metres (16.4 feet) ¹
9 0	9.0 metres (29.5 feet)

D: Connector Option

0 1	Miniature coaxial ClickLoc connector with connector protector, standard cable
0 2	Miniature coaxial ClickLoc connector, standard cable
1 1	Miniature coaxial ClickLoc connector with connector protector, FluidLoc cable
1 2	Miniature coaxial ClickLoc connector, FluidLoc cable

E: Agency Approval Option

0 0	Agency Approval Option
0 5	Multiple Approvals

Ordering Information for Proximitor Sensor

3300 XL Proximitor Sensor

330180-AA-BB

A: Total Length and Mounting Option

10	1.0 meter (3.3 feet) system length, panel mount
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11	1.0 meter (3.3 feet) system length, DIN mount
12	1.0 meter (3.3 feet) system length, no mounting hardware
50	5.0 meters (16.4 feet) system length, panel mount
51	5.0 meters (16.4 feet) system length, DIN mount
52	5.0 meters (16.4 feet) system length, no mounting hardware
90	9.0 meters (29.5 feet) system length, panel mount
91	9.0 meters (29.5 feet) system length, DIN mount
92	9.0 meters (29.5 feet) system length, no mounting hardware

B: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

Ordering Information for Extension Cables

3300 XL Standard Extension Cable

330130-AAA-BB-CC



Make sure that the extension cable length and the probe length, when added together, equal the Proximitor Sensor total length.

A: Cable Length Option

030	3.0 meters (9.8 feet)
035	3.5 meters (13.1 feet)
040	4.0 meters (11.5 feet)
045	4.5 meters (14.8 feet)

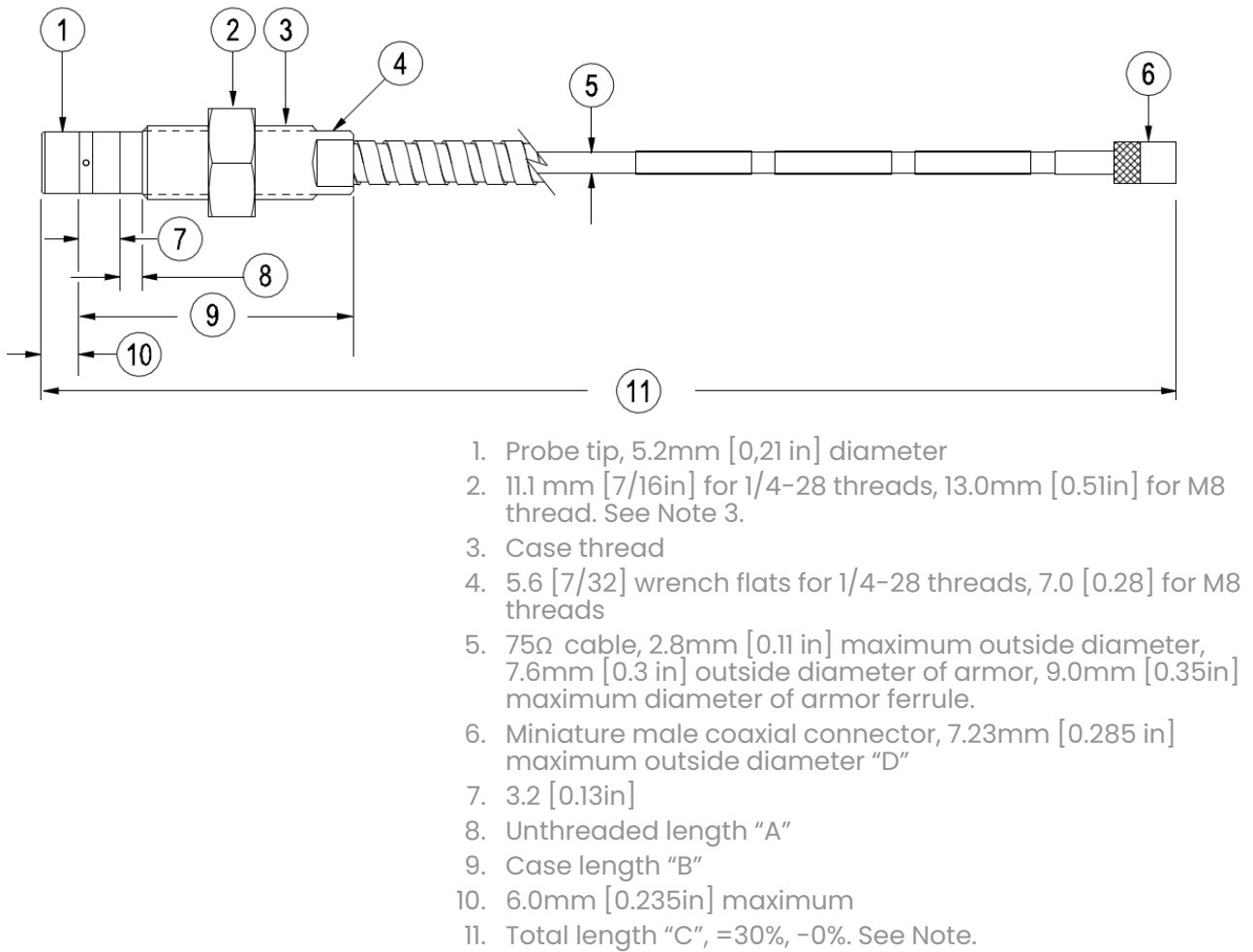


Figure 3: 3300 5mm Proximity Probes, Standard Mount3

330171, 1/4-28 UNF-2A, without armor⁷

330172, 1/4-28 UNF-2A, with armor⁶

330173, M8X1 thread, without armor⁷

330174, M8X1 thread, with armor⁶