

BENTLY NEVADA TECHNICAL DOCUMENT

Product Data Sheet

330851-04-000-030-10-01-05

01

PRODUCT IDENTIFICATION

Manufacturer	Bently Nevada
Model	330851-04-000-030-10-01-05
Family	3300 XL Proximity Transducer
Product type	XL 25 mm Proximity Probe

02

VERIFIED TECHNICAL DATA

Probe case type option	04: smooth 1.06 in diameter; side exit
Unthreaded length option	000: 0.0 in, as required for smooth cases
Overall case length option	030: 3.0 in (76.2 mm)
Total probe length option	10: 1.0 m
Armor option	01: stainless steel armor
Agency approval option	05: multiple approvals
Probe tip material	Polyetheretherketone (PEEK)
Probe case material	AISI 304 stainless steel

03 REMAINING TECHNICAL DATA

Probe cable construction	75-ohm triaxial; PFA-insulated FluidLoc
Probe DC resistance at 1 m	6.2 +/-0.5 ohms, center to outer conductor
Connector configuration	High-temperature ClickLoc with supplied protector
Compatible system linear range	12.7 mm; complete XL 25 mm system under specified conditions

04 TECHNICAL AND APPLICATION NOTES

Bently Nevada 330851-04-000-030-10-01-05 is a 3300 XL 25 mm proximity probe with a smooth 1.06-inch-diameter side-exit case. The order specifies a 3.0-inch case, a 1.0 m total probe length, stainless steel armor and the multiple-approvals option. This probe belongs to the XL 25 mm differential-expansion system used on medium-to-large steam turbine generators. Its FluidLoc lead and high-temperature ClickLoc connector are standard family features; measurement range and scaling apply to the compatible complete probe, extension-cable and Proximitor system.

05 APPLICATIONS

- Observe one side of a turbine collar: The manufacturer describes two transducers on the same collar side as a preferred arrangement when sufficient target height is available. They provide redundant differential-expansion measurements. Check the actual smooth-case mounting adapter, target area and expected axial travel.
- Monitor opposite collar faces: Two complementary transducers can observe opposite sides of the collar to effectively double the measurable differential-expansion distance. Coordinate the pair with the monitor and mounting geometry; the probe order alone does not configure the complementary measurement.
- Extend the measured expansion distance: A ramp-viewing probe can be paired with a second transducer observing another ramp or rotor location to compensate radial motion. The manufacturer notes that this arrangement can cover a longer distance but adds measurement error. Engineering review of the actual targets remains essential.

06 INSTALLATION CONTROL

Verify the smooth side-exit case and 3.0-inch ordered length against Figure 14. Verify the supplied approval documents and the complete installation instructions.