3300 XL 25 mm Transducer

To meet the needs of steam turbines in power generation services, Bently Nevada developed the 3300 XL 25 mm Transducer System that builds on over 20 years of Turbine Supervisory Instrumentation (TSI) experience. Bently Nevada’s previous 25 mm and 35 mm Differential Expansion (DE) Transducers are an integral part of the DE measurement on many mid- to large-sized steam turbine generators.

This critical measurement is used to ensure that the case and rotor grow and contract at the same rate when starting or stopping a steam turbine, preventing rotor-to-stator rubs. In addition to the need for a transducer with an extended linear measurement range, the wet steam environment surrounding DE measurements necessitates an extremely robust transducer that can withstand elevated temperatures and high levels of humidity. Our customers asked us to develop a transducer that was better able to survive in these environments during the five or more years that is typical between machine overhauls. They also told us to improve the system’s performance while making it simple to retrofit. The result is our new 3300 XL 25 mm proximity transducer system. Incorporating the performance found in our latest XL technology probe systems, the system is physically compatible with older DE transducer mounting systems and requires no modifications to the monitoring system, making retrofits a snap.

The transducer system consists of a probe, extension cable, and Proximitron® sensor, and is the most robust technology we have ever offered for Differential Expansion measurement. Contact your Bently Nevada Sales Professional for more information on this product as well as our comprehensive installation service capabilities.

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**Features**

- 3300 XL features standard on every probe and cable, including Fluidloc™ triaxial cable, Clickloc™ connectors (on probe, too), and connector protectors.
- Full compatibility with previous 7200 25 mm, 7200 35 mm, and integral 25 mm DE installations:
  - Probe available with all standard 25 mm and 35 mm case designs.
  - DIN or Panel-mount Proximitron® Sensor with identical footprint as 7200-series Proximitron Sensors and as terminal mounting block supplied with 25 mm Integral Transducer System.
  - Monitors configured for 25 mm or 35 mm Transducer Systems require no configuration changes.

**Benefits**

- High reliability. Increased survivability in high-temperature, high-humidity locations. Probe operating range up to 200 °C (392 °F), survivability up to 250 °C (482 °F) for up to 24 hours.
- Easier installation and verification. New sliding DE installation bracket and verification kit reduces the time required for installation and verification of the transducer signal.
- Performance. Reduced susceptibility to radio frequency emissions from cell phones and hand-held radios.