

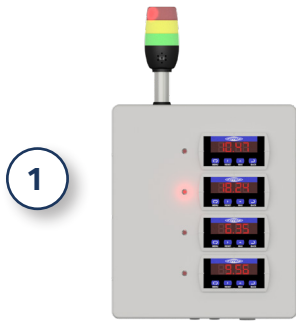


TurboDefense™

Turbine Monitoring Kit

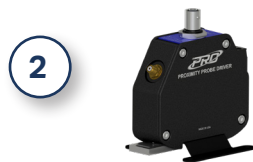
CTC introduces its innovative TurboDefense™ Turbine Monitoring Solution which integrates the advanced features of the PXD Series Proximity Probe Driver Relay & Display Enclosure with a newly-added stack light feature. This comprehensive solution harnesses the power of CTC's PRO Line Proximity Probe Systems and converts the data into a 4-20 mA output signal that can be displayed and alarmed for automated journal bearing monitoring. In the world of turbo machine monitoring, most automated solutions require extremely expensive machine monitoring systems. Our TurboDefense™ breaks barriers as an easy, cost-effective solution for enhancing equipment reliability by alerting you before it's too late.

Kit Components



PXD Series Proximity Probe Driver Enclosure with Stack Light

Factory configurable for 1 to 4 Proximity Probe Drivers. Options for red light or tricolor stack light.



PRO Proximity Probe Drivers

Select from our best-in-class drivers:

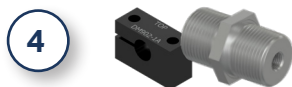
First, select your compatible system - 5 mm FFv, 8 mm, or 11 mm proximity probe compatible drivers.

Then select your desired driver type - 4-20 mA overall, 4-20 mA axial, or 4-20 mA radial.



PRO Proximity Probe (with Optional Extension Cables)

Select from the industry's most durable proximity probe offerings for 5 mm FFv, 8 mm, and 11 mm proximity probes with a wide variety of system lengths with optional armor jacketing.



PRO Proximity Probe Mounting Hardware

Select from a wide variety of mounting accessories including mounting blocks, mounting bushings, and reverse mount housings.

How It Works

The PRO 4-20 mA Current Driver Series from CTC is a two or four-wire device that can be used with 5 mm FFv, 8 mm, and 11 mm Proximity Probe Systems. It is a cost-effective solution for turbines, compressors, fans, pumps, or motors, and anyone who would prefer to trend a simple 4-20 mA process signal proportional to vibration when larger machine protection or rack-based systems are not feasible.

The Probe Driver conditions the standard dynamic output of the probe system into a process signal without the need for any additional hardware. Utilizing PRO 4-20 mA Drivers in conjunction with a PXD Series Proximity Probe Driver Enclosure with stack light enables the overall value to be displayed via screens on the front of the enclosure and alarmed via the internal relays. When ordered together, all PRO Drivers come prewired into the PXD Enclosure.

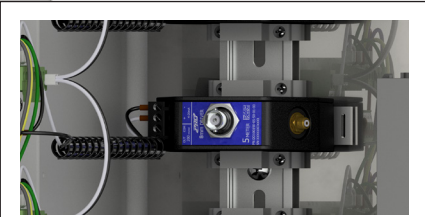
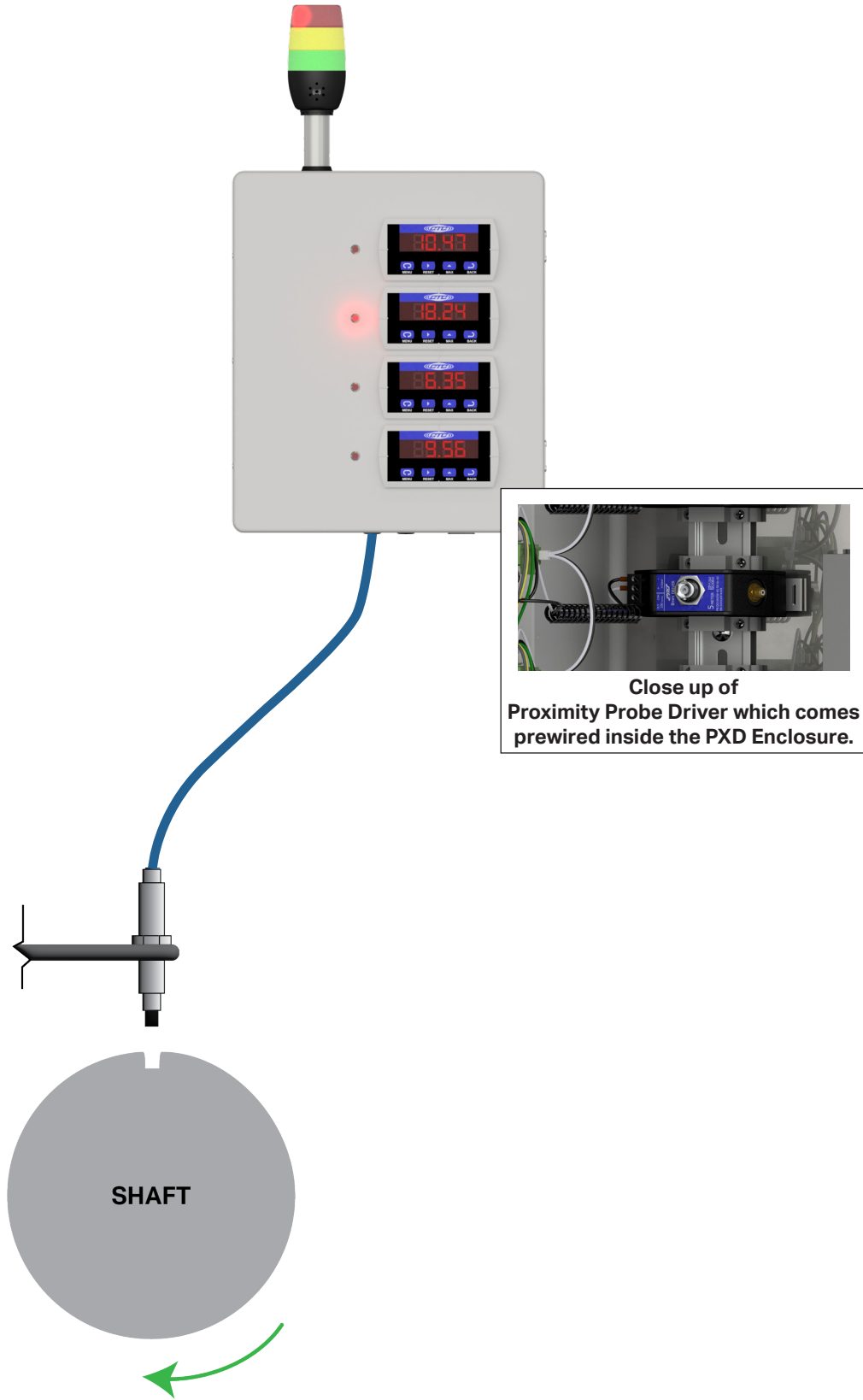
Selecting Your Proximity Probe Driver

CTC offers a selection of factory-configurable 4-20 mA Proximity Probe Drivers that can provide process control signal outputs proportional to radial vibration or axial position in addition to the standard API 670 compliant mV displacement signal without the need for any additional hardware or signal conditioners. 4-20 mA Proximity Probe Drivers are a cost-effective solution for small or medium sized machinery that can benefit from reliable process control signals and condition monitoring, where a full rack-based machine protection system may not be viable.

"90" Series 4-20 mA Radial Proximity Probe Drivers provide a 4-20 mA signal proportional to peak-to-peak vibration. This signal can be used to trigger peak vibration alarms or relays as well as trend overall vibration levels over time.

"70" Series 4-20 mA Output and "91" Series 4-20 mA Output Axial Proximity Probe Drivers provide a 4-20 mA process signal that is proportional to axial displacement between the probe tip and target material for position applications. This signal can be used for trending thrust bearing wear and thermal growth of casings and rotors. The 70 Series Driver has an output scaled to the full linear range of its DC gap voltage while the 91 Series has a tighter +/- 25 mil (0.6 mm) range from the midpoint of its linear range.

In addition to the 4-20 mA signal outputs available on the PRO 4-20 mA Driver Series, each probe driver is also capable of providing a dynamic mV reading as well, for machinery diagnostic or orbital analysis. This reading can also be used during installation to set the probe gap precisely. The dynamic displacement mV signal is available by measuring the voltage between the "COM" and "OUT" terminals, or by accessing the isolated female BNC connector located on the faceplate of the driver.



Close up of Proximity Probe Driver which comes prewired inside the PXD Enclosure.

Diagram showing a Proximity Probe mounted above rotating shaft on a machine, with cabling running into the bottom of the PXD Enclosure