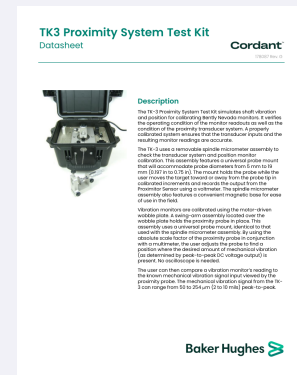


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Bently Nevada 177313-02-02-00

Proximity System Test Kit



PRODUCT	177313-02-02-00
FAMILY	TK-3 Proximity System
FUNCTION	Proximity System Test Kit
STATUS	Verify exact configuration

Prepared by Amikon Limited from Bently Nevada 178087 Rev. G. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Drive configuration	177313: electric TK-3e
Scale units option	02: metric
Power cord option	02: European
Agency approval option	00: none
Electric supply specification	95-125 or 190-250 V AC; 50/60 Hz; 1 A minimum; verify unit configuration
Vibration amplitude range	50-254 micrometres peak-to-peak
Spindle micrometer range	0-25.4 mm

02 MOUNTING AND CONNECTION

- Verify the electric TK-3e identity and metric scale.
- Check the actual voltage configuration before connecting the European power cord.
- Secure the probe mount and all mounting screws.
- Keep clear of rotating components and avoid loose clothing or objects.
- Use safety glasses and the specified guards.

TK3 Proximity System Test Kit

Datasheet

Cordant™

178087 Rev. G



Description

The TK-3 Proximity System Test Kit simulates shaft vibration and position for calibrating Bently Nevada monitors. It verifies the operating condition of the monitor readouts as well as the condition of the proximity transducer system. A properly calibrated system ensures that the transducer inputs and the resulting monitor readings are accurate.

The TK-3 uses a removable spindle micrometer assembly to check the transducer system and position monitor calibration. This assembly features a universal probe mount that will accommodate probe diameters from 5 mm to 19 mm (0.197 in to 0.75 in). The mount holds the probe while the user moves the target toward or away from the probe tip in calibrated increments and records the output from the Proximity Sensor using a voltmeter. The spindle micrometer assembly also features a convenient magnetic base for ease of use in the field.

Vibration monitors are calibrated using the motor-driven wobble plate. A swing-arm assembly located over the wobble plate holds the proximity probe in place. This assembly uses a universal probe mount, identical to that used with the spindle micrometer assembly. By using the absolute scale factor of the proximity probe in conjunction with a multimeter, the user adjusts the probe to find a position where the desired amount of mechanical vibration (as determined by peak-to-peak DC voltage output) is present. No oscilloscope is needed.

The user can then compare a vibration monitor's reading to the known mechanical vibration signal input viewed by the proximity probe. The mechanical vibration signal from the TK-3 can range from 50 to 254 μm (2 to 10 mils) peak-to-peak.

Baker Hughes 

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04

CABLE ROUTING AND CONNECTION

- Check the actual voltage configuration before connecting the European power cord.
- Secure the probe mount and all mounting screws.
- Keep clear of rotating components and avoid loose clothing or objects.
- Use safety glasses and the specified guards.
- For extended continuous testing, keep the ambient temperature at or below 40 degrees C.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Check the exact configuration against the controlled site requirements.
- Verify the measurement using the complete equipment instructions.
- Record the complete model and the installed measurement arrangement.

06

CONTROLLED DOCUMENTS

Official source	Bently Nevada 178087 Rev. G
Product record	177313-02-02-00
Manufacturer	Bently Nevada
Support	INFO@AMIKON.CN