

# Bently Nevada 21504&21505&21508&21747 Series Service Manual

21504-00-52-05-02

## 1. Description

Part Number: 21504-00-52-05-02

## 3. Product Information

Part Number: 21504-00-52-05-02

Model: Probe Proximity Vibration

Manufacturer: Bently Nevada

Condition: New & Original in Factory Packing

Factory Warranty: 12 Months

Ordering Information

Model 21504 7200 Proximity Transducer Systems

Unthreaded Length Option 00 0mm

Overall Case Length Option 52 5.2in

Total Length Option 05 0.5 metre (20 inches).Tolerance: +.13 metre,-.05 metre(+ 5 inches, -2 inches).

Connector Option 02 With miniature male coaxial connector

TIP CONSTRUCTION

PART NO 21504-

DIAMETER 8 mm

CASE

CONFIGURATIONTYPE Standard

THREADS 3/8-24

LEAD ARMOR No

INPUT

Power: -17.5 Vdc to -26 Vdc at 12 mAmaximum consumption.

OUTPUT

Calibrated Range: 80 mils (2.0 mm).Begins at approximately 10 mils(0.25 mm) from probe face.

Scale Factor: 200 mV/mil (7.87 V/mm), $\pm 4\%$ (measured in increments of 10 mils over the calibrated range) if calibrated as a system, Within  $\pm 9.5\%$  including interchangeability errors.Linearity: Within 0.8 mils (0.02 mm) of a 200 mV/mil straight line if calibrated as a system. Within 2.3 mils (0.06 mm) of a 200 mV/mil straight line including interchangeability errors.Frequency Response: 0 to 10 kHz(0 to 600,000 cpm); -5% at 10 kHz(600,000 cpm).

Temperature Sensitivity: Typically -396 change in scale factor at + 150°F(+ 65°C) at 50 mils gap (1.27 mm).

ENVIRONMENTAL LIMITS

Operating Temperature:

Proximity: -60°F to +212°F(-51°C to +100°C).

Probe and Extension Cable: -30°F to 0+350°F(-34°C to +177°C)Relative Humidity: To 95%,noncondensing.

Corrosion Resistance (for 8 mm probe only): Probe operation is not affected by direct contact to the following: air,water, lube oil, ammonium hydroxide,sulfuric acid (10%), MEK(methyl-ethylketone)or DMF (Dimethylformamide).

System Weight: 1.3 lbs.(0.59 kg)

