

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

21747-040-01

## 1. Description

Part Number: 21747-040-01

## 3. Product Information

Part Number: 21747-040-01

Model: Extension Cable

Manufacturer: Bently Nevada

Condition: New & Original in Factory Packing

Factory Warranty: 12 Months

Ordering Information

Model: 21747 - Extension Cable

Cable Length Option: 040 - 4 metres (157 inches)

Armor Option: 01 - With armor

The combination of probe with

integral lead and extension cable is

designed to achieve a system length of

either five or nine metres from probe tip

to Proximitors. Probes are available with

integral leads of various lengths to

match the average extension cable

lengths. Probes and cables of the same

length, and Proximitors with the same

part number, are completely

interchangeable.

For added protection, stainless steel

armor is available. It provides improved

resistance to physical abuse.

INPUT

Power: -17.5 Vdc to -26 Vdc at 12 mA maximum 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:

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

Probe and Extension Cable: -30°F to +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-ethyl ketone) or DMF (Dimethylformamide).

