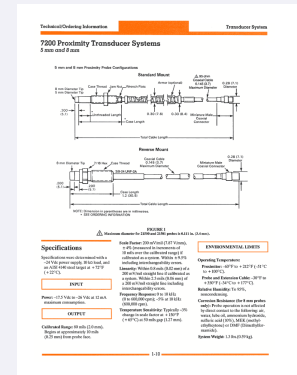


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Bently Nevada 21504-00-20-10-02

8 mm Standard Mount Probe



PRODUCT	21504-00-20-10-02
FAMILY	7200 Proximity Transducer Systems
FUNCTION	8 mm Standard Mount Probe
STATUS	Verify exact configuration

Prepared by Amikon Limited from Bently Nevada 7200 Proximity Transducer Systems Technical/Ordering Information, pages 1-9 to 1-12. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Mounting configuration	Standard mount
Probe tip diameter	8 mm
Case thread	3/8-24 UNF
Lead armor	No
Unthreaded length	0.0 inches
Overall case length	2.0 inches
Total cable length	1.0 metre

02 MOUNTING AND CONNECTION

- Confirm the complete order number before installation.
- Verify the 3/8-24 UNF mounting thread and ordered case length.
- Protect the probe tip, integral cable, and miniature coaxial connector.
- Route the signal cable away from high-voltage power conductors.
- Match the total electrical length of the probe, extension cable, and Proximitior.

Technical/Ordering Information

Transducer System

7200 Proximity Transducer Systems
5 mm and 8 mm

5 mm and 8 mm Proximity Probe Configurations

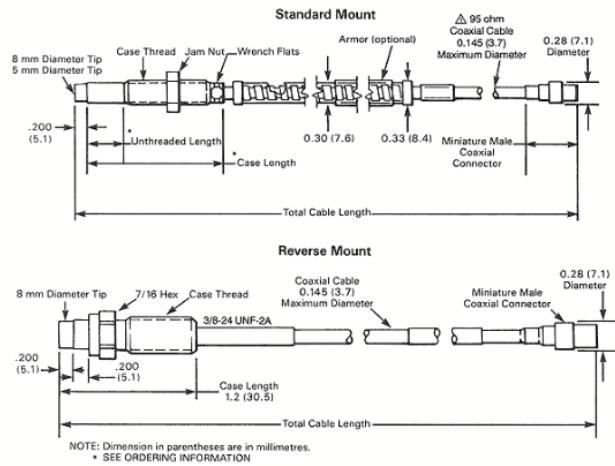


FIGURE 1
Maximum diameter for 21500 and 21501 probes is 0.111 in. (3.4 mm).

Specifications

Specifications were determined with a -24 Vdc power supply, 10 k Ω load, and an AISI 4140 steel target at +72°F (+22°C).

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); $\pm 5\%$ at 10 kHz (600,000 cpm).

Temperature Sensitivity: Typically $\pm 3\%$ 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 probes 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).

04

CABLE ROUTING AND CONNECTION

- Verify the 3/8-24 UNF mounting thread and ordered case length.
- Protect the probe tip, integral cable, and miniature coaxial connector.
- Route the signal cable away from high-voltage power conductors.
- Match the total electrical length of the probe, extension cable, and Proximitor.
- Verify gap voltage and channel response before returning the machine to service.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Confirm normal indications and fault-contact state after commissioning.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	Bently Nevada 7200 Proximity Transducer Systems Technical/Ordering Information, pages 1-9 to 1-12
Product record	21504-00-20-10-02
Manufacturer	Bently Nevada
Support	INFO@AMIKON.CN