# Bently Nevada 330730&330930 Series Service Manual

330730-040-11-05

## 1. Description

Manufacturer : Bently Nevada

## 3. Product Information

Manufacturer : Bently Nevada

Product No. : 330730-040-11-05

Product type : 3300 XL 11 mm Extension Cable

Made in U.S.A

Cable Length Option : 040 4.0 meters (13.1 feet)

Connector and Cable Option : 11 Armored FluidLoc cable

Agency Approval Option :05 Multiple Approvals

Extension cable capacitance: 69.9 pF/m (21.3 pF/ft) typical

Extension Cable Armor (optional): Flexible AISI 302 SST with FEP outer jacket.

Operating and Storage Temperature: -51°C to +177°C (-60°F to +351°F)

Extension Cable 45 g/m (0.5 oz/ft) 0.18kg

Armored

Extension Cable 140 g/m (1.5 oz/ft) 0.56kg

3300 XL Probes and Extension Cables can also be ordered with a FluidLoc cable option. This option prevents oil and other liquids from leaking out of the machine through the cable's interior. The connector protector option provides additional protection of the connectors in a humid or moist environment. Connector protectors are recommended for all installations and provide increased environmental protection. Additionally, the 3300 XL 11 mm probe comes standard with a locknut with pre-drilled safety wire holes.

Notes:

2. Silicone tape is also provided with each 3300 XL extension cable and can be used instead of connector protectors. Silicone tape is not recommended in applications where the probe-to-extension cable connection will be exposed to turbine oil.

Extension Cable dc Resistance

| Length of Extension Cable (m) | 4.0 |
|---|---|
| Resistance from Center Conductor to Center Conductor (RCORE) (ohms) | 1.0 ± 0.25 |
| Resistance from Coaxial Conductor to Coaxial Conductor (RJACKET) (ohms) | 0.3 ± 0.1 |
| Extension cable capacitance | 69.9 pF/m (21.3 pF/ft) typical |
| Field wiring | 0.2 to 1.5 mm2 (16 to 24 AWG) [0.25 to 0.75 mm2 (18 to 23 AWG) with ferrules]. |

Recommend using threeconductor shielded triad cable. Maximum length of 305 meters (1,000 feet) between the 3300 XL Proximitor Sensor and the monitor. See the frequency response graph for signal rolloff at high frequencies when using longer field wiring lengths.

Linear Range

4.0 mm (160 mils). Linear range begins at approximately 0.5 mm (20 mils) from target and is from 0.5 to 4.5 mm (20 to 180 mils) (approximately –1 to –17 Vdc). Extended Deviation from Straight Line (DSL) range is from approximately 0.5 to 5.0 mm (20 to 200 mils) (–1 to –19 Vdc). The extended DSL range is not applicable when using zener barriers.

Recommended Gap Setting 2.5 mm (100 mils)

ncremental Scale Factor (ISF)

3.94 V/mm (100 mV/mil) ±10% including interchangeability error when measured in increments of 0.5 mm (20 mils) over the 4.0 mm (160 mil) linear range.

Extension Cable Material

75 Ω triaxial, fluoroethylene propylene (FEP) insulated.

System Length 5 or 9 meters including extension cable

Extension Cable Armor (optional)

Flexible AISI 302 SST with FEP outer jacket.

Tensile Strength (maximum rated)

330 N (75 pounds) probe case to probe lead. 270 N (60 pounds) at probe lead to extension cable connectors.

Connector Material Gold-plated brass

Extension Cable Temperature Range

| | |
|---|---|
| Operating and Storage Temperature | -52°C to +177°C (-62°F to +351°F) |