# Bently Nevada 330730&330930 Series Service Manual

330730-040-02-05

## 1. Description

Manufacturer : Bently Nevada

## 3. Product Information

Manufacturer : Bently Nevada

Product No. : 330730-040-02-05

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 : 02 Standard cable with connector protector

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) |