

Bently Nevada 330730&330930 Series Service Manual

330730-040-13-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. :330730-040-13-05

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 : 13 Armored FluidLoc cable with
connector protector

Agency Approval Option : 05 Multiple Approvals

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

Extension Cable Material: 75 ? triaxial, fluoroethylene propylene (FEP) insulated.

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)

The 3300 XL 11 mm probe comes in varying
probe case configurations, including armored
and unarmored ½-20, 5/8 -18, M14 X 1.5 and M16
X 1.5 probe threads. The reverse mount 3300 XL
11 mm probe comes standard with either 3/8-24
or M10 X 1 threads. All components of the
transducer system have gold-plated brass
ClickLoc connectors. ClickLoc connectors lock
into place, preventing the connection from
becoming loose. The patented TipLoc molding
method provides a robust bond between the
probe tip and the probe body. The probe cable
is securely attached to the probe tip utilizing
our patented CableLoc design that provides
330 N (75 lb) pull strength.

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 protection². Additionally, the
3300 XL 11 mm probe comes standard with a
locknut with pre-drilled safety wire holes.

Notes:

1. Proximity Sensors are supplied by
default from the factory calibrated to AISI
4140 steel. Calibration to other target
materials is available upon request.

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

Proximitior 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)

Mechanical

Probe Tip

Material Polyphenylene sulfide (PPS).

Probe Case

Material AISI 304 stainless steel (SST).

Probe Cable

Specification

75 Ω triaxial, fluoroethylene

propylene (FEP) insulated

probe cable in the following

total probe lengths: 1, 5 or 9

meters.

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

Armored

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

Extension Cable Temperature Range

Operating and

Storage

Temperature

-52°C to +177°C (-62°F to

+351°F)

Extension Cable

Material

75 Ω triaxial, fluoroethylene

propylene (FEP) insulated.

Extension Cable

Aarmor

(optional)

Flexible AISI 302 SST with FEP

outer jacket.

