

Bently Nevada 330730&330930 Series Service Manual

330730-040-03-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. : 330730-040-03-05

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 : 03 Armored 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) 1.0 ± 0.25 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)

Incremental

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)

