# Bently Nevada 330703&330704&330705&330709&330 Series Service Manual

330710-000-050-90-02-05

## 1. Description

Manufacturer : Bently Nevada

## 3. Product Information

Manufacturer : Bently Nevada

Product No. :330710-000-050-90-02-05

Product type : 3300 XL 11 mm Proximity Probes

Made in U.S.A

330710  3300 XL 11 mm Probe, M16 x 1.5 thread, with armor

Unthreaded Length Option : 000 = 0 mm

Overall Case Length Option  050 =50mm

Total Length Option : 90= 9.0 meters (29.5 feet)

Connector and Cable-Type Option : 02 = Miniature coaxial ClickLoc connector, standard cable

Agency Approval Option : 05 = Multiple Approvals

Probe dc Resistance

Probe

Length (m) 9.0

Resistance from the Center

Conductor to the Outer

Conductor (RPROBE) (ohms)

8.5 ± 1.1

Cross-talk Limitation:

Target Size - Flat Surface

Diameter

Recommended

Minimum 30.5 mm (1.2 in)

Shaft Diameter

Recommended

Minimum 152 mm (6.0 in)

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.

Probe Case Torque

M16x1.5 probe

cases

Maximum

Rated  63.3 N•m (560 in•lb)

Recommended 21.1 N•m (187 in•lb)

Connector-to-connector torque

Recommended

torque Finger tight

Maximum

torque 0.565 N•m (5 in•lb)

Minimum Bend

Radius (with or

without SST

armor)

25.4 mm (1.0 in)

Probe Case Thread M16x1.5

Maximum Length of Thread Engagement 24 mm

Effects of 60 Hz Magnetic Fields Up to 300

Gauss (5 meter system)

Output voltage in mil pp/gauss

Gap 0.5 mm (20mil)  Probe 0.001

Gap 2.5 mm (100 mil)  Probe 0.009

Gap 4.6 mm (180mil)  Probe 0.027

Probe Temperature Range

Operating and

Storage

Temperature

-52°C to +177°C (-62°F to

+351°F)

Exposing the probe to temperatures

below -34°C (30°F) may cause

premature failure of the pressure

seal.

torage

Temperature

-52°C to +105°C (-62°F to

+221°F)

Relative

Humidity

100% condensing, nonsubmersible when

connectors are protected.

Tested to IEC 68-2-3 damp

heat.

Probe

Pressure

3300 XL probes are designed

to seal differential pressure

between the probe tip and

case. The probe sealing

material consists of a Viton

O-ring. Probes are not

pressure tested prior to

shipment. Contact our

custom design department if

you require a test of the

pressure seal for your

application

Temperature Schedule

Temperature Classification

For EPL Ga and Gc

Temperature Classification T1 Ambient Temperature (Probe Only) -55°C to +232°C

Temperature Classification T2 Ambient Temperature (Probe Only)  -55°C to +177°C

Temperature Classification T3 Ambient Temperature (Probe Only) -55°C to +120°C

Temperature Classification T4 Ambient Temperature (Probe Only) -55°C to +80°C

Temperature Classification T5 Ambient Temperature (Probe Only) -55°C to +40°C

For EPL Dc

Temperature Classification T280°C @ Ta Ambient Temperature (Probe Only) -55°C to +232°C

Temperature Classification T225°C @ Ta  Ambient Temperature (Probe Only) -55°C to +177°C

Temperature Classification T170°C @ Ta Ambient Temperature (Probe Only) -55C to +120°C

Temperature Classification T130°C @ Ta Ambient Temperature (Probe Only) -55°C to +80°C

Temperature Classification T105°C @ Ta Ambient Temperature (Probe Only) -55°C to +100°C

Temperature Classification T90°C @ Ta Ambient Temperature (Probe Only) -55°C to +40°C