# Bently Nevada 330701&330702&707&708 Series Service Manual

330702-00-30-50-02-00

## 1. Description

Manufacturer : Bently Nevada

## 3. Product Information

Manufacturer : Bently Nevada

Product No. : 330702-00-30-50-02-00

Product type : 3300 XL 11 mm Proximity Probes

Made in U.S.A

330702 = 3300 XL 11 mm Probe, 1/2-20 UNF

thread, with armor

Unthreaded Length Option : 00= 0.0 in

Overall Case Length Option :30 =3.0 in

Total Length Option : 50 = 5.0 meters (16.4 feet)

Five meter probes are designed for use with the five meter Proximitor Sensor only

Connector and Cable-Type Option : 02 = Miniature coaxial ClickLoc

connector, standard cable

Agency Approval Option : 00 = Not required

Probe Tip Material: Polyphenylene sulfide (PPS).

Probe Case Material: AISI 304 stainless steel (SST).

Probe Cable Specifications: 75 Ω triaxial, fluoroethylene propylene (FEP) insulated probe cable in the following total probe lengths: 1, 5 or 9 metres.

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

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

Shipping weight : 0.17 Kg

Probe dc Resistance

Probe

Length (m) 5.0

Resistance from the Center

Conductor to the Outer

Conductor (RPROBE) (ohms)

7.2 ± 0.8

Probe Case Thread 1/2-20

Maximum Length of Thread Engagement 0.750 in

Probe Case Torque

1/2-20 and 5/8-18 probe cases

Maximum Rated 45.2 N•m (400 in•lb)

Recommended 15.2 N•m (133 in•lb)

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.

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

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.

Effects of 60 Hz Magnetic Fields Up to 300 Gauss (5 meter system)

Output voltage in mil pp/gauss

Gap  0.5 mm (20 mil)

Proximitor Sensor  0.006

Probe  0.001

Ext. Cable 0.001

Gap  2.5 mm (100mil)

Proximitor Sensor  0.033

Probe  0.009

Ext. Cable 0.005

Gap  4.6 mm (180 mil))

Proximitor Sensor  0.033

Probe  0.027

Ext. Cable 0.007

Probe Case Thread 1/2-20

Maximum Length of Thread Engagement 0.750 in

Gold-plated brass

Probe case torque: ½-20 and 5⁄8 -18 probe cases

Maximum Rated 45.2 N•m (400 in•lb)

Recommended 15.0 N•m (133 in•lb)

Temperature Schedule

(Probe Only)

For EPL Ga and Gc

Temperature Classification T1 Ambient Temperature -55°C to +232°C

Temperature Classification T2 Ambient Temperature -55°C to +177°C

Temperature Classification T3 Ambient Temperature -55°C to +120°C

Temperature Classification T4 Ambient Temperature -55°C to +80°C

Temperature Classification T5 Ambient Temperature -55°C to +40°C

For EPL Dc

Temperature Classification T280°C @ Ta Ambient Temperature -55°C to +232°C

Temperature Classification T225°C @ Ta Ambient Temperature -55°C to +177°C

Temperature Classification T170°C @ Ta Ambient Temperature -55C to +120°C

Temperature Classification T130°C @ Ta Ambient Temperature -55°C to +80°C

Temperature Classification T105°C @ Ta Ambient Temperature -55°C to +100°C

Temperature Classification T90°C @ Ta Ambient Temperature -55°C to +40°C