

Bently Nevada 330105&330106 Series Service Manual

330106-05-30-90-02-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. :330106-05-30-90-02-05

Product Type : 3300 XL 8 mm Reverse Mount Probes

Made in U.S.A

330106-05-30-CC-DD-EE M10 x 1 threads

Total length option : 90 = 9.0 meters (29.5 feet)

Connector option :

02 = Miniature ClickLoc coaxial connector

Agency approval option : 05 = CSA, ATEX, IECEx Approvals

Probe tip material : Polyphenylene sulfide (PPS).

Probe case material : AISI 303 or 304 stainless steel (SST).

Nominal Probe DC Resistance

Resistance (RPROBE) from Center Conductor

to Outer Conductor

Probe Length (m) 9.0

RPROBE(Q) 9.87 ± 0.50

Mechanical

Probe Tip

Material Polyphenylene sulfide (PPS).

Probe Case

Material

AISI 303 or 304 stainless steel

(SST).

Probe Cable Specifications

Standard

cable

75 Ω triaxial, fluoroethylene

propylene (FEP) insulated

probe cable in the following

total probe lengths: 0.5, 1, 1.5, 2,

3, 5, or 9 meters.

Extended

Temperature

Range cable

75 Ω triaxial, perfluoroalkoxy

(PFA) insulated probe cable in

the following total probe

lengths: 0.5, 1, 1.5, 2, 5, or 9

meters.

Aarmor

(optional on

both)

Flexible AISI 302 or 304 SST

with FEP outer jacket.

Tensile

Strength

(Maximum

Rated)

330 N (75 lbf) probe case to

probe lead.

270 N (60 lbf) at probe lead to

extension cable connectors.

Connector

Material

Gold-plated brass or goldplated beryllium copper.

Probe Case Thread M10x1

Maximum Length of Thread Engagement 15 mm

Probe 323 g/m (11.4 oz)

Probe Temperature Range

Operating and Storage Temperature

Standard

Probe

-52°C to +177°C (-62°F to +350°F)

Extended

Temperature

Range Probe

-52°C to +218°C (-62°F to +425°F) for the probe tip; -

51°C to +260°C (-60°F to +500°F) for the probe cable and connector.

Exposing the probe to temperatures below -34°C (-30°F) may cause premature failure of the pressure seal.

Probe Pressure

3300 XL 8 mm 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.

Probe Relative Humidity

Less than a 3% change in Average Scale Factor (ASF) when tested in 93% humidity in accordance with IEC standard 68 2 3 for up to 56 days.

Temperature Schedule

Ambient Temperature

(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 -55°C 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

Effects of 60 Hz Magnetic Fields Up to 300 Gauss

Output Voltage in Mil pp/Gauss

Gap:10

5 or 1-meter Proximitior Sensor: 0.0119

9 meter Proximitior Sensor: 0.0247

Probe : 0.0004

Ext.Cable: 0.0004

Gap:50

5 or 1-meter Proximitior Sensor: 0.0131

9 meter Proximitior Sensor: 0.0323

Probe : 0.0014

Ext.Cable: 0.0014

Gap:90

5 or 1-meter Proximity Sensor: 0.0133

9 meter Proximity Sensor: 0.0348

Probe : 0.0045

Ext.Cable: 0.0045

Probe Case Thread M10x1

Maximum Length of ThreadEngagement 15 mm

