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(Ω) 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

75Ω 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

75Ω triaxial, perfluoroalkoxy

(PFA) insulated probe cable in

the following total probe

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

meters.

Armor

(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 -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

Effects of 60 Hz Magnetic Fields Up to 300 Gauss

Output Voltage in Mil pp/Gauss

Gap:10

5 or 1-meter Proximitor Sensor: 0.0119

9 meter Proximitor Sensor: 0.0247

Probe : 0.0004

Ext.Cable: 0.0004

Gap:50

5 or 1-meter Proximitor Sensor: 0.0131

9 meter Proximitor Sensor: 0.0323

Probe : 0.0014

Ext.Cable: 0.0014

Gap:90

5 or 1-meter Proximitor Sensor: 0.0133

9 meter Proximitor Sensor: 0.0348

Probe : 0.0045

Ext.Cable: 0.0045

Probe Case Thread M10x1

Maximum Length of ThreadEngagement 15 mm