Bently Nevada 330105&330106 Series Service Manual

330105-02-12-05-02-CN

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. : 330105-02-12-05-02-CN

Product Type : 3300 XL 8 mm Reverse Mount Probes

Made in U.S.A

330105-02-12-CC-DD-EE3/8-24 UNF threads

Total length option : 0.5 =7.45 ± 0.50

Connector option :

02 =Miniature ClickLoc coaxial

connector

Agency approval option : CN =Country Specific

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) 0.5

RPROBE(Ω)

7.45 ± 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 3/8-24

Maximum Length of Thread
Engagement
0.563 in
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.
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
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