Bently Nevada 330102&330103&104 Series Service Manual

330102-00-12-90-02-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No.330102-00-12-90-02-05

Product type : 3300 XL 8 mm Proximity Probes

Made in U.S.A

330102 = 3300 XL 8 mm Probe, 3/8-24 UNF thread, with armor

Unthreaded Length Option : 00=0.0 in

Overall Case Length Option : 12= 1.2 in

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

3-meter length option is only
available on 330101 probes, and is
designed for use with the 9 meter
Proximitor sensor only.
5-meter probes are designed for
use with the 5 meter Proximitor
sensor only.

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

Agency Approval Option :05 = CSA, ATEX, IECEx Approvals

Nominal Probe DC Resistance
Resistance (RPROBE) from Center Conductor
to Outer Conductor
Probe
Length (m) 9.0
RPROBE(Ω)
9.87 ± 0.50

Probe Case Thread 3/8-24

Maximum Length of Thread
Engagement
0.563 in

Probe Tip Material : Polyphenylene sulfide (PPS).

Probe Case Material : AISI 303 or 304 stainless steel (SST).

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.

Unless otherwise noted, the following
specifications are for a 3300 XL 8 mm
Proximitor Sensor, extension cable and 8 mm
probe between +18°C and +27°C (+64°F to
+80°F) at a maximum altitude of 2000 meters,
with a -24 Vdc power supply, a 10 kΩ load, an
AISI 4140 steel target, and a probe gapped at
1.27 mm (50 mils). Performance characteristics
apply to systems that consist solely of 3300 XL 8
mm components. The system accuracy and
interchangeability specifications do not apply
to transducer systems that are calibrated to
any target other than our AISI 4140 steel target.

Electrical
Proximitor
Sensor Input
Accepts one non-contacting
3300-series 5 mm, 3300 XL 8
mm Proximity Probe and
Extension Cable.

Power
Requires -17.5 Vdc to -26 Vdc
when installed with nonincendive circuit connected
per installation drawing 140979
at 12 mA maximum
consumption, -23 Vdc to -26
Vdc with barriers. Operation at

a more positive voltage than
-23.5 Vdc can result in reduced
linear range.
Supply
Sensitivity
Less than 2 mV change in
output voltage per volt change
in input voltage.
Output
Resistance 50 Ω
Mechanical
Probe Tip
Material Polyphenylene sulfide (PPS).
Probe Case
Material
AISI 303 or 304 stainless steel
(SST).
ia
When installed
with
intrinsically
safe zener
barriers per
drawing 141092
or when
installed with
galvanic
isolators.
Class I, Zone 0: AEx/Ex ia IIC T5...T1 Ga;
Class 1, Groups A, B. C, and D,
Class II, Groups E, F, and G,
Class III;
nA, ec
When installed
with nonincendive
circuit
connected per
drawing
140979.
Class I, Zone 2: AEx/Ex nA IIC T5...T1 Gc;
Class 1, Division 2, Groups A, B, C, D;
Class 1, Zone 2: AEx/Ex ec IIC T5...T1 Gc;
Class I, Division 2, Groups A, B, C, and
D;
Temperature Schedule
Temperature
Classification
Ambient Temperature
(Probe Only)
For EPL Ga and Gc
T1 -55°C to +232°C
T2 -55°C to +177°C
T3 -55°C to +120°C
T4 -55°C to +80°C
T5 -55°C to +40°C
For EPL Dc
T280°C @ Ta -55°C to +232°C
T225°C @ Ta -55°C to +177°C
T170°C @ Ta -55C to +120°C

T130°C @ Ta -55°C to +80°C

T105°C @ Ta -55°C to +100°C

T90°C @ Ta -55°C to +40°C