Bently Nevada 330102&330103&104 Series Service Manual

330104-00-08-50-01-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No.330104-00-08-50-01-05

Product type : 3300 XL 8 mm Proximity Probes

Made in U.S.A

330104 3300 XL 8 mm Probe, M10 x 1 thread, with armor

Unthreaded Length Option :00=00 mm

Overall Case Length Option :08=80mm

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

5-meter probes are designed for

use with the 5 meter Proximitor

sensor only.

Connector and Cable-Type Option :01

Miniature coaxial ClickLoc

connector with connector

protector, 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)

RPROBE(Ω)

5.0 8.73 ± 0.50

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