Bently Nevada 330191&330195 Series Service Manual

330191-40-75-50-05

1. Description

Part Number:330191-40-75-50-05

3. Product Information

Part Number:330191-40-75-50-05

Model: Proximity Probes

Manufacturer: Bently Nevada

Condition: New & Original in Factory Packing

Factory Warranty: 12 Months

Ordering Number

Model: 330191 - 3300 XL 8 mm ETR Probe, 3/8-24 UNF thread, without armor

Unthreaded Length Option: 40 - 4.0 in

Overall Case Length Option: 75 - 7.5 in

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

5-meter probes are designed for

use with the 5 meter Proximitor

sensor only.

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

The 3300 XL probe and extension cable also

reflect improvements over previous designs. A

patented TipLoc molding method provides a

more robust bond between the probe tip and

the probe body. The probe’s cable incorporates

a patented CableLoc design that provides 330

N (75 lbf) pull strength to more securely attach

the probe cable and probe tip.

You can also order 3300 XL 8 mm probes and

extension cables with an optional FluidLoc

cable option. This option prevents oil and other

liquids from leaking out of the machine through

the cable’s interior.

One-meter systems do not use an extension

cable.

8 mm probes provide

a thicker encapsulation

of the probe coil in the molded PPS plastic

probe tip. This results in

a more rugged probe.

The larger diameter of the probe body also

provides

a stronger, more robust case. We

recommend that you use

8 mm probes when

possible to provide optimal robustness against

physical abuse.

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

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).
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.
Connector
Material
Gold-plated brass or goldplated beryllium copper.
Maximum
Connector
Torque
0.565 N•m (5 in•lbf)
Probe
Case
Thread
Maximum Length of Thread
Engagement
3/8-24 0.563 in
Probe 323 g/m (11.4 oz)
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

Probe entity parameters are met
when used with BN extension cables
and connected to BN Prox.

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