Bently Nevada 330140&330141 Series Service Manual

330141-08-50-01-00

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada
Product No. :330141-08-50-01-00
Product Type : 330141 3300 XL 8 mm Probe with armor
Made in U.S.A
Overall Case Length 08=0.8in
Total Length Option: 50 5.0 meters (16.4 feet)
5-meter probes are designed for
use with the 5 meter Proximitor
sensor only.
C: Connector and Cable-Type Option
01
Miniature coaxial ClickLoc
connector with connector
protector, standard cable
Agency Approval Option
00 Not required
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.
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.
Nominal Probe DC Resistance
Resistance (RPROBE) from Center Conductor
to Outer Conductor
Probe
Length (m)
RPROBE(Ω)
5.0 8.73 ± 0.50
Incremental Scale Factor (ISF)
Standard 5 or 1
meter System
7.87 V/mm (200 mV/mil) ±
5% including
interchangeability error
when measured in
increments of 0.25 mm (10
mils) over the 80 mil linear
range from 0°C to +45°C
(+32°F to +113°F).

Standard 9
meter System
7.87 V/mm (200 mV/mil)
± 6.5% including
interchangeability error
when measured in
increments of 0.25 mm (10
mils) over the 80 mil linear
range from 0°C to +45°C
(+32°F to +113°F).
Extended
Temperature
Range (ETR) for 5
and 9 Meter
Systems
7.87 V/mm (200 mV/mil) ±
6.5% including
interchangeability error
when measured in
increments of 0.25 mm (10
mils) over the 80 mil linear
range from 0°C to +45°C
(+32°F to +113°F).
Deviation from best fit straight line (DSL)
Standard 5 or 1
meter System
Less than ±0.025 mm (±1
mil) with components at
0°C to +45°C (+32°F to
+113°F).
Standard 9
meter System
Less than ±0.038 mm (±1.5
mil) with components at
0°C to +45°C (+32°F to
+113°F).
Extended
Temperature
Range 5 and 9
meter Systems
Less than ±0.038 mm (±1.5
mil) with components at
0°C to +45°C (+32°F to
+113°F).
Probe Tip
Material Polyphenylene sulfide (PPS).
Probe Case
Material
AISI 303 or 304 stainless steel
(SST).
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.

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.