Bently Nevada 330140&330141 Series Service Manual

330141-08-20-01-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. :330141-08-20-01-05

Product Type : 330141 3300 XL 8 mm Probe with armor

Made in U.S.A

Overall Case Length 08=0.8in

Total Length Option: 20 2.0 meters (6.6 feet)

C: Connector and Cable-Type Option

01

Miniature coaxial ClickLoc

connector with connector

protector, standard cable

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.

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)

2.0 7.88 ± 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.