Bently Nevada 146054 146055 Series Service Manual

146054-040-10-02-05

1. Description

Part Number: 146054-040-10-02-05

3. Product Information

Part Number: 146054-040-10-02-05

Model:3300 Ceramic Capped Proximity Probes

Manufacturer: Bently Nevada

Condition: New & Original in Factory Packing

Factory Warranty: 12 Months

Ordering Information

146054-AA-BB-CC-DD

146054 :3300 Ceramic Capped Probe, 3/8-24 UNF thread, without armor

A: Overall Case Length Option: -040=4.0 in

B: Total Length Option: -10=1.0 meter (3.3 feet)

C: Connector and Cable-Type Option: 0 2=

Miniature coaxial ClickLoc

connector, standard cable

D: Agency Approval Option: -05=CSA, ATEX, IECEx

Probe Case Thread:3/8-24

Maximum Length of Thread

Engagement

0.563 in

Probe Nominal DC Resistance

Probe Length 1.0

Resistance from the Center

Conductor to the Outer

Conductor (ohms)

7.59 ± 0.50

Unless otherwise noted, the following

specifications are for a 3300 5 mm system

including Proximitor Sensor, extension cable

and probe between +18°C and +27°C (+64°F to

+80°F), with a -24 Vdc power supply, a 10 kW

load, and an AISI 4140 steel target. Performance

characteristics apply to systems that consist

solely of 3300 XL components. The system

accuracy and interchangeability specifications

do not apply when using a transducer system

calibrated to any target other than our AISI 4140

steel target.

Linear Range

1.52 mm (60 mils). Linear

range begins at

approximately 0.25 mm (10

mils) from target and is

from 0.25 to 1.78 mm (10 to

70 mils) (approximately –4

to –16 Vdc).

Incremental Scale Factor (ISF)

Standard

5-metre or

9-metre 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 60 mil linear

range from 0°C to +45°C

(+32°F to +113°F).

Mechanical

Probe Tip

Material

Alumina ceramic (Al2O3
)
Probe Case
Material AISI 304 stainless steel.
Probe Cable Specifications
Standard
cable
75 Ω coaxial, fluoroethylene
propylene (FEP) insulated probe
cable in the following total
probe lengths: 0.5, 1, 2, 5, or 9
meters.
Probe Temperature Range
Operating and
Storage
Temperature
-51°C to +177°C (-60°F to
+351°F)
Probe
Pressure
Rated to seal 34 Bar (500 psi)
nitrogen. Modifications are
available for higher-pressure
applications. Contact our
custom design department if
you require a test of the
pressure seal for your
application.
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