Bently Nevada 146054 146055 Series Service Manual

146054-08-10-01-05

1. Description

Part Number: 146054-08-10-01-05

3. Product Information

Part Number: 146054-08-10-01-05

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: -08=0.8 in

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

C: Connector and Cable-Type Option: 01=

Miniature coaxial ClickLoc connector with connector protector, 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