

Bently Nevada 330173&330171 Series Service Manual

330171-20-55-05-02-CN

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. : 330171-20-55-05-02-CN

Product type : 330171 3300 5mm Probe, 1/4-28 UNF thread, without armor

Made in U.S.A

Unthreaded Length Option : 20 = 2.0 in

Overall Case Length Option : 55=5.5 in

Total Length Option : 0 5 0.5 meter (1.6 feet)

Connector Option : 0 2 Miniature coaxial ClickLoc connector, standard cable

Agency Approval Option : CN =Country Specific

Probe Tip Material: Polyphenylene sulfide (PPS).

Probe Case Material: AISI 304 stainless steel (SST).

Probe Case Thread 1/4-28

Maximum Length of Thread Engagement 0.375 in

When drilling and tapping a mounting hole for a 1/4-28 probe, a #3 or larger tap drill is recommended.

Weight : 0.323 Kg

Specifications

Unless otherwise noted, the following

specifications are for a proximity transducer

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

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

load, an AISI 4140 steel target, and a probe

gapped at 1.27 mm (50 mils).

Electrical

Power

Requires -17.5 Vdc to -26 Vdc at

12 mA maximum consumption.

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 W

Probe DC Resistance

Probe Length (m) 0.5

Resistance from the Center Conductor to the Outer Conductor (Ω) 7.45 ± 0.50

Probe Tip

Material Polyphenylene sulfide (PPS)

Probe Case

Material

AISI 303 or 304 stainless steel

(SST)

Probe Cable

75 Ω triaxial, fluoroethylene

propylene (FEP) insulated

probe cable in the following

lengths: 0.5, 1, 2, 5, or 9 meters

(1.6, 3.3, 16.4, or 29.5 feet)

5mm Probe

Tensile

Strength

222 N (50 lbf) probe case to

probe lead. 222 N (50 lbf)

probe lead to extension cable

connectors

Connector
material
Gold-plated brass or goldplated beryllium copper

Probe case
torque
5.1 N·m (45in·lb) recommended
7.3 N·m (65 in·lb) maximum

Connectortoconnector
torque
Refer to the table below:

Recommended Torque
Maximum torque 0.565 N·m (0.42 ft•lbf)
Minimum

Cable Bend
Radius
25.4 mm (1.0in)

Probe Temperature
Range
-35°C to +177°C (-
31°F to +351°F)

Exposing the probe to temperatures
below -34°C (-30°F) may cause
premature failure of the pressure
seal.

