

Bently Nevada 330876 Series Service Manual

330878-51-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. :330878-51-05

Product Type : 3300 XL 50 mm Proximity Sensor

Made in U.S.A

Total Length and Mounting Option : 50 = 5.0 metres (16.4 feet) system length, panel mount

Agency Approval Option : 0 5 Multiple Approvals

The 3300 XL 50 mm Proximity Sensor has the same advanced features as all 3300 XL

Proximity Sensors. Its thin design allows it to be

mounted in either a high-density DIN-rail

installation or a more traditional panel mount

configuration. Improved RFI/EMI immunity

allows the 3300 XL Proximity Sensor to achieve

European CE mark approvals without any

special mounting considerations. This RFI

immunity prevents the transducer system from

being adversely affected by nearby high

frequency radio signals. SpringLoc terminal

strips on the Proximity Sensor require no

special installation tools and facilitate faster,

highly robust field wiring connections.

Proximity Sensors are supplied by

default from the factory calibrated to

AISI 4140 steel. Calibration to other

target materials is available upon

request.

Proximity

Sensor Input

Accepts one noncontacting 3300 XL 50 mm

Proximity Probe and

Extension Cable.

Power

Requires -17.5 Vdc to -26

Vdc without barriers at 12

mA maximum

consumption, -23 Vdc to -

26 Vdc with barriers.

Operation at a more

positive voltage than -23.5

Vdc can result in reduced

linear range.

Output

resistance 50 Ω

Extension cable

capacitance

69.9 pF/m (21.3 pF/ft)

typical

Proximity

Sensor Material A380 aluminum

Operating

Temperature

-51°C to +100°C (-60°F to

+212°F)

Storage

Temperature

-51°C to +105°C (-60°F to

+221°F)

Hazardous Area Approvals

3300 XL Proximity Sensor

ia

When installed

with

intrinsically

safe zener

barriers per

drawing 141092

or when

installed with

galvanic

isolators.

Class I, Zone 0: AEx/Ex ia IIC T4/T5 Ga;

Class I, Groups A, B, C, and D,

Class II, Groups E, F and G,

Class III;

T5 @ $T_a = -55^{\circ}\text{C}$ to $+40^{\circ}\text{C}$.

T4 @ $T_a = -55^{\circ}\text{C}$ to $+80^{\circ}\text{C}$.

nA, ec

When installed

with nonincendive

circuit

connected per

drawing

140979.

Class I, Zone 2: AEx/Ex nA IIC T4/T5 Gc;

Class I, Division 2, Groups A, B, C, and

D;

Class I, Zone 2: AEx/Ex ec IIC T4/T5 Gc;

Class I, Division 2, Groups A, B, C, and

D;

T5 @ $T_a = -55^{\circ}\text{C}$ to $+40^{\circ}\text{C}$

T4 @ $T_a = -55^{\circ}\text{C}$ to $+80^{\circ}\text{C}$

Temperature Schedule

Ambient Temperature

(Probe Only)

For EPL Ga and Gc

Temperature Classification T1 Ambient Temperature -55°C to $+232^{\circ}\text{C}$

Temperature Classification T2 Ambient Temperature -55°C to $+177^{\circ}\text{C}$

Temperature Classification T3 Ambient Temperature -55°C to $+120^{\circ}\text{C}$

Temperature Classification T4 Ambient Temperature -55°C to $+80^{\circ}\text{C}$

Temperature Classification T5 Ambient Temperature -55°C to $+40^{\circ}\text{C}$

For EPL Dc

Temperature Classification T280°C @ T_a Ambient Temperature -55°C to $+232^{\circ}\text{C}$

Temperature Classification T225°C @ T_a Ambient Temperature -55°C to $+177^{\circ}\text{C}$

Temperature Classification T170°C @ T_a Ambient Temperature -55°C to $+120^{\circ}\text{C}$

Temperature Classification T130°C @ T_a Ambient Temperature -55°C to $+80^{\circ}\text{C}$

Temperature Classification T105°C @ T_a Ambient Temperature -55°C to $+100^{\circ}\text{C}$

Temperature Classification T90°C @ T_a Ambient Temperature -55°C to $+40^{\circ}\text{C}$

