

# Bently Nevada 330190 Series Service Manual

330190-080-00-05

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## 1. Description

Manufacturer : Bently Nevada

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## 3. Product Information

[www.AutoDCSTech.com](http://www.AutoDCSTech.com)

Manufacturer : Bently Nevada  
Manufacturer : Bently Nevada  
Product No. :330190-080-00-05  
Product Type : 3300 XL Extended Temperature Range (ETR) Extension Cable  
Cable Length Option : 080 --8.0 meters (26.2 feet)  
Cable Option : 00 --Standard cable  
Agency Approval Option : 05- CSA, ATEX, IECEx Approvals  
Nominal Extension Cable DC Resistance  
Resistance (RCORE) from Center Conductor  
to Center Conductor  
Length of Extension Cable (m) 8.0 meters (26.2 feet)  
RCORE ( $\Omega$ ) 1.76  $\pm$  0.26  
Resistance (RJACKET ) from Outer Conductor  
to Outer Conductor  
Length of Extension Cable (m) 8.0 meters (26.2 feet)  
RJACKET ( $\Omega$ ) :0.53  $\pm$  0.11  
Extension Cable Capacitance 69.9 pF/m (21.3 pF/ft) typical  
Field Wiring  
0.2 to 1.5 mm<sup>2</sup> (16 to 24  
AWG). Recommend using  
3 conductor shielded triad  
cable and tinned field  
wiring. Maximum length of  
305 meters (1,000 feet)  
between the 3300 XL  
Proximito Sensor and the  
monitor. See the frequency  
response graphs, Figures  
10 and 12, for signal rolloff  
at high frequencies when  
using longer field wiring  
lengths.  
Linear Range  
2 mm (80 mils). Linear  
range begins at  
approximately 0.25 mm (10  
mils) from target and is  
from 0.25 to 2.3 mm (10 to  
90 mils) (approximately -1  
to -17 Vdc).  
Recommended  
Gap Setting for  
Radial Vibration  
-9 Vdc [approximately 1.27  
mm (50 mils)]  
Extension Cable Material  
Standard  
cable  
75  $\Omega$  triaxial, fluoroethylene  
propylene (FEP) insulated  
Extended  
Temperature  
Range cable  
75 $\Omega$  triaxial, perfluoroalkoxy  
(PFA) insulated.  
Minimum  
Cable Bend  
Radius  
25.4 mm (1.0 in)

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3300 XL 8 mm components are both electrically and physically interchangeable with non-XL 3300 5 mm and 8 mm components when minimum permissible cable bend radius is observed.

Connector

Material

Gold-plated brass or goldplated beryllium copper.

Maximum

Connector

Torque

0.565 N•m (5 in•lbf)

Extension

Cable 34 g/m (0.4 oz/ft)

Armored

Extension

Cable

103 g/m (1.5 oz/ft)

Extension Cable Temperature Range

Operating and Storage Temperature

Standard

Cable

-52°C to +177°C

(-62°F to +350°F)

Extended

Temperature

Range Cable

-52°C to +260°C (-62°F to

+500°F)

Compliance and Certifications

FCC

This device complies with part 15 of the

FCC Rules. Operation is subject to the

following two conditions:

I This device may not cause harmful interference.

I This device must accept any interference received, including interference that may cause undesired operation.

EMC

European Community Directive:

EMC Directive 2014/30/EU

Standards

EN 61000-6-2; Immunity for

Industrial Environments

EN 61000-6-4; Emissions for

Industrial Environments

RoHS

European Community Directive:

RoHS Directive 2011/65/EU

Maritime

2019 Rules for Conditions of Classification,

Part 1, 1-1-1/7.7, 1-1-A3, 1-1-A4

2019 Rules for Conditions of Classification,

Part 1, Offshore Units and Structures

1-1-4/9.7, 1-1-A2, 1-1-A3

Functional Safety

[www.AutoDCSTech.com](http://www.AutoDCSTech.com)

Website: [www.AutoDCSTech.com](http://www.AutoDCSTech.com) Email: [sales@AutoDCSTech.com](mailto:sales@AutoDCSTech.com)

SIL 2, HFT = 0  
SIL 3, HFT = 1

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