Bently Nevada 330180&330780&330980 Series Service Manual

330780-080-01-05

1. Description

Manufacturer : Bently Nevada

3. Product Information

Manufacturer : Bently Nevada

Product No. :330780-080-01-05

Product Type : 3300 XL 11 mm Extension Cable

Made in U.S.A

Cable Length Option : 080 = 8.0 metres (26.2 feet)

Connector and Cable Option : 01 Armored cable

Agency Approval Option : 05 Multiple Approvals

Extension cable capacitance: 69.9 pF/m (21.3 pF/ft) typical

Extension Cable Material: 75 ? triaxial, fluoroethylene propylene (FEP) insulated.

Extension Cable Armor (optional): Flexible AISI 302 SST with FEP outer jacket.

Operating and Storage Temperature: -51°C to +177°C (-60°F to +351°F)

The 3300 XL 11 mm probe comes in varying probe case configurations, including armored and unarmored ½-20, 5⁄8 -18, M14 X 1.5 and M16 X 1.5 probe threads. The reverse mount 3300 XL 11 mm probe comes standard with either 3⁄8-24 or M10 X 1 threads. All components of the transducer system have gold-plated brass ClickLoc connectors. ClickLoc connectors lock into place, preventing the connection from becoming loose. The patented TipLoc molding method provides a robust bond between the probe tip and the probe body. The probe cable is securely attached to the probe tip utilizing our patented CableLoc design that provides 330 N (75 lb) pull strength.

3300 XL Probes and Extension Cables can also be ordered with a FluidLoc cable option. This option prevents oil and other liquids from leaking out of the machine through the cable’s interior. The connector protector option provides additional protection of the connectors in a humid or moist environment. Connector protectors are recommended for all installations and provide increased environmental protection2. Additionally, the 3300 XL 11 mm probe comes standard with a locknut with pre-drilled safety wire holes.

Notes:

1. Proximitor Sensors are supplied by default from the factory calibrated to AISI 4140 steel. Calibration to other target materials is available upon request.

2. Silicone tape is also provided with each 3300 XL extension cable and can be used instead of connector protectors. Silicone tape is not recommended in applications where the probe-to-extension cable connection will be exposed to turbine oil.

Extension Cable dc Resistance

Length of Extension Cable (m)	Resistance from Center Conductor to Center Conductor (RCORE)

(ohms)
Resistance
from Coaxial
Conductor to
Coaxial
Conductor
(RJACKET)
(ohms)
8.0 2.0 ± 0.5 0.6 ± 0.2
Extension cable
capacitance
69.9 pF/m (21.3 pF/ft)
typical
Field wiring
0.2 to 1.5 mm2 (16 to 24
AWG) [0.25 to 0.75 mm2 (18
to 23 AWG) with ferrules].
Recommend using threeconductor shielded triad
cable. Maximum length of
305 meters (1,000 feet)
between the 3300 XL
Proximitor Sensor and the
monitor. See the frequency
response graph for signal
rolloff at high frequencies
when using longer field
wiring lengths.
Linear Range
4.0 mm (160 mils). Linear
range begins at
approximately 0.5 mm (20
mils) from target and is
from 0.5 to 4.5 mm (20 to
180 mils) (approximately –1
to –17 Vdc). Extended
Deviation from Straight
Line (DSL) range is from
approximately 0.5 to 5.0
mm (20 to 200 mils) (–1 to
–19 Vdc). The extended DSL
range is not applicable
when using zener barriers.
Recommended
Gap Setting 2.5 mm (100 mils)
Mechanical
Probe Tip
Material Polyphenylene sulfide (PPS).
Probe Case
Material AISI 304 stainless steel (SST).
Probe Cable
Specification
75 Ω triaxial, fluoroethylene
propylene (FEP) insulated
probe cable in the following
total probe lengths: 1, 5 or 9
meters.
Extension Cable 45 g/m (0.5 oz/ft)
Armored
Extension Cable 140 g/m (1.5 oz/ft)

Extension Cable Temperature Range Operating and Storage Temperature	-52°C to +177°C (-62°F to +351°F)
Extension Cable Material	75 Ω triaxial, fluoroethylene propylene (FEP) insulated.
Extension Cable Armor (optional)	Flexible AISI 302 SST with FEP outer jacket.