MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

330103-10-13-05-02-00

3300 XL 8 MM PROXIMITY PROBE

Used with the applicable 3300 XL 8mm Proximity Transducer configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194; probe construction, ordering and connection sections.

Effects of 60 Hz Magnetic Fields Up to 300 Gauss				
Output Voltage in Mil pp/Gauss				
Gap	5 or 1-meter Proximitor Sensor	9 meter Proximitor Sensor	Probe	Ext. Cable
10	0.0119	0.0247	0.0004	0.0004
50	0.0131	0.0323	0.0014	0.0014
90	0.0133	0.0348	0.0045	0.0045

Mechanical

Probe Tip Material	Polyphenylene sulfide (PPS).
Probe Case Material	AISI 303 or 304 stainless steel (SST).
Probe Cable Specifications	
Standard cable	75Ω triaxial, fluoroethylene propylene (FEP) insulated probe cable in the following total probe lengths: 0.5, 1, 1.5, 2, 3, 5, or 9 meters.
Extended Temperature Range cable	75Ω triaxial, perfluoroalkoxy (PFA) insulated probe cable in the following total probe lengths: 0.5, 1, 1.5, 2, 5, or 9 meters.
Armor (optional on both)	Flexible AISI 302 or 304 SST with FEP outer jacket.
Tensile Strength (Maximum Rated)	330 N (75 lbf) probe case to probe lead. 270 N (60 lbf) at probe lead to extension cable connectors.
Connector Material	Gold-plated brass or gold-plated beryllium copper.

Probe Case Torque		
Probe Type	Maximum Rated	Recommended
Standard forward mounted probes	33.9 N•m (300 in•lbf)	11.2 N•m (100 in•lbf)
Standard forward-mount probes - first three threads	22.6 N•m (200 in•lbf)	7.5 N•m (66 in•lbf)
Reverse-mount probes	22.6 N•m (200 in•lbf)	7.5 N•m (66 in•lbf)
Extension Cable Material		
Standard cable	75 Q triaxial, fluoroethylene propylene (FEP) insulated	
Extended Temperature Range cable	75Ω triaxial, perfluoroalkoxy (PFA) insulated.	
Minimum Cable Bend Radius	25.4 mm (1.0 in)	

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 gold-plated beryllium copper.
Maximum Connector Torque	0.565 N•m (5 in•lbf)

Ordering Information

For the detailed listing of country and product-specific approvals, refer to the *Approvals Quick Reference Guide (108M1756)*.

For additional technical documentation, please log in to bntechsupport.com and access the Bently Nevada Media Library.

Ordering Information for Probes

3300 XL 8 mm Proximity Probes:

330101 3300 XL 8 mm Probe, 3/8-24 UNF thread, without armor(2)

330102 3300 XL 8 mm Probe, 3/8-24 UNF thread, with armor(2)

Part Number-AA-BB-CC-DD-EE

A: Unthreaded Length Option	
Unthreaded length must be at least 0.8 in. less than the case length.	
Order in increments of 0.1 in. **Length configurations:** Maximum unthreaded length: 8.8 in. Minimum unthreaded length: 0.0 in. Example: **0 4** = 0.4 in.	
B: Overall Case Length Option	
Order in increments of 0.1 in. **Standard thread configurations:** Maximum case length: 9.6 in. Minimum case length: 0.8 in. Example: **2 4** = 2.4 in.	
C: Total Length Option	
05	0.5 meter (1.6 feet)
10	1.0 meter (3.3 feet)
15	1.5 meter (4.9 feet)
20	2.0 meters (6.6 feet)
30	3.0 meters (9.8 feet)
50	5.0 meters (16.4 feet)
90	9.0 meters (29.5 feet)

3-meter length option is only available on 330101 probes, and is designed for use with the 9 meter Proximitor sensor only.

5-meter probes are designed for use with the 5 meter Proximitor sensor only.

D: Connector and Cable-Type Option	
01	Miniature coaxial ClickLoc connector with connector protector, standard cable
02	Miniature coaxial ClickLoc connector, standard cable
11	Miniature coaxial ClickLoc connector with connector protector, FluidLoc cable
12	Miniature coaxial ClickLoc connector, FluidLoc cable
E: Agency Approval Option	
00	Not required
05	CSA, ATEX, IECEx Approvals

3300 XL 8 mm Proximity Probes, Metric:

330103 3300 XL 8 mm Probe, M10 x 1 thread, without armor (2)

330104 3300 XL 8 mm Probe, M10 x 1 thread, with armor (2)

Part Number-AA-BB-CC-DD-EE

A: Unthreaded Length Option

Unthreaded length must be at least 20 mm less than the case length.

Order in increments of 10 mm
Length configurations:
Maximum unthreaded length: 230 mm
Minimum unthreaded length: 0 mm
Example: **0 6** = 60 mm

B: Overall Case Length Option

Order in increments of 10 mm
Metric thread configurations:
Maximum case length: 250 mm
Minimum case length: 20 mm
Example: **0 6** = 60 mm

C: Total Length Option

05	0.5 meter (1.6 feet)
10	1.0 meter (3.3 feet)
15	1.5 meter (4.9 feet)
20	2.0 meters (6.6 feet)
50	5.0 meters (16.4 feet)
90	9.0 meters (29.5 feet)

5-meter probes are designed for use with the 5 meter Proximitor sensor only.

D: Connector and Cable-Type Option

01	Miniature coaxial ClickLoc connector with connector protector, standard cable
02	Miniature coaxial ClickLoc connector, standard cable
11	Miniature coaxial ClickLoc connector with connector protector, FluidLoc cable
12	Miniature coaxial ClickLoc connector, FluidLoc cable

E: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

3300 XL 8 mm Reverse Mount Probes

330105-02-12-CC-DD-EE3/8-24 UNF threads(2)

330106-05-30-CC-DD-EE M10 x 1 threads(2)

Option Descriptions

C: Total Length Option

05	0.5 meter (1.6 feet)
10	1.0 meter (3.3 feet)
15	1.5 meter (4.9 feet)
20	2.0 meters (6.6 feet)
50	5.0 meters (16.4 feet)
90	9.0 meters (29.5 feet)

5-meter probes are designed for use with the 5 meter Proximitor sensor only.

D: Connector and Cable-Type Option

02	Miniature ClickLoc coaxial connector
12	Miniature ClickLoc coaxial connector , FluidLoc cable

The FluidLoc cable option –12 is not necessary on the vast majority of 330105 and 330106 installations due to the presence of the probe sleeve. Consider carefully the application before ordering the FluidLoc cable option for these probes.

E: Agency Approval Option

00	Not required
05	CSA, ATEX, IECEx Approvals

148722-01	3300 XL test plug. The 3300 XL Test Plug contains 3 small test pins attached to 3 color-coded 1-meter wires, each terminated in a banana plug. The 3-pin adapter plugs into the test pin holes on 3300 XL-style Proximitor sensors. You can use this test plug to check the performance of the Proximitor sensor from the test pin holes in the terminal strip without removing the field wiring.
04310310	3300 XL Proximitor Sensor panel-mount screw. One 6-32 UNC thread forming mounting screw. Four screws are required for each Proximitor sensor. (Screws supplied standard with Proximitor housings [3300 XL panel-mount option]).
03200006	Silicone self-fusing tape. A 9.1-meter (10-yard) roll of silicone tape to protect connectors. This tape is easy to install and provides excellent electrical isolation and protection from the environment. We do not recommend using this tape inside the casing of the machine.
40113-02	Connector Protector Kit. Connector Protector Kit for 3300 XL 8 mm probes and extension cables, including connector protectors and installation tools.
136536-01	Connector protector adapter. This allows you to use connector protector installation tools manufactured prior to 1998 with 75Ω ClickLoc connectors.
40180-02	Connector protectors. Package contains 10 pairs of connector protectors for 3300 XL 8 mm probes and extension cables.
03839410	75Ω triaxial male connector protector. Male connector protectors install onto the extension cable and attach to the female connector protector on the probe, providing environmental protection of connectors.
03839420	75Ω triaxial female connector protector. Female connector protectors install onto the probe lead and attach to the male connector protector on the extension cable, providing environmental protection of connectors. You can also place the connector protector onto the extension cable to slide over the connection to the Proximitor sensor to protect that connection from the environment.
04301007	3/8-24 probe lock nut with safety wire holes. Single probe lock nut with 2 holes drilled through the nut in order to secure the lock nut in place with safety wire.
04301008	M10 x 1 probe lock nut with safety wire holes. Single probe lock nut with 2 holes drilled through the nut in order to secure the lock nut in place with safety wire.
330153-01	3300 XL connector kit. Used on 3300 XL 8 mm probes and extension cables. Contains 1 pair each of male and female ClickLoc connectors, 2 color-coded sleeves, 2 pieces of slit FEP tubing, and 1 strip of silicone tape.