MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

330903-00-05-10-02-00

3300 XL NSV PROXIMITY PROBE

Used with the applicable 3300 XL NSV Proximity Transducer configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Bently Nevada 3300 XL NSv Proximity Transducer System Datasheet 147385; probe construction, ordering and connection sections.

Counterbore	Minimum: 9.5 mm (0.375 in) Recommended minimum: 13 mm (0.5 in) Counterbores smaller than 13 mm (0.5 in) generally result in a change in scale factor at far gaps. Reducing the gap between the probe and the target will allow the transducer system to maintain its Average Scale Factor (ASF) over a reduced linear range. See Figure 9 for additional information.

Effects of 60 Hz Magnetic Fields Up to 300 Gauss (5 meter system)			
Output voltage in mil pp/gauss			
Gap	Proximitor Sensor	Probe	Ext. Cable
0.25 mm (10 mils)	0.006	0.001	0.001
1.0 mm (40 mils)	0.007	0.002	0.001
1.75 mm (70 mils)	0.008	0.002	0.003

Mechanical

Probe Tip Material	Polyphenylene sulfide (PPS).
Probe Case Material	AISI 304 stainless steel (SST).
Probe Cable Specifications	75 Ω coaxial, fluoroethylene propylene (FEP) insulated probe cable in the following total probe lengths: 0.5, 1, 5, or 7 meters.
Extension Cable Material	75 Ω coaxial, fluoroethylene propylene (FEP) insulated.
Proximitor Sensor Material	A380 aluminum
System Length	5 or 7 meters including extension cable
Extension Cable Armor (optional)	Flexible AISI 302 SST with/without FEP outer jacket.
Tensile Strength (maximum rated)	220 N (50 lb) probe case to probe lead. 220 N (50 lb) at probe lead to extension cable connectors. 220 N (50 lb) probe case to stainless steel armor.
Connector material	Gold-plated brass

Connector-to-connector Torque		
Probe Case Torque	**Maximum Rated**	**Recommended**
1/4-28 or M8X1 probe cases	7.3 N•m (65 in•lb)	5.1 N•m (45 in•lb)
3/8-24 or M10X1 probe cases	33.9 N•m (300 in•lb)	11.3 N•m (100 in•lb)
3/8-24 or M10X1 probe cases – first three threads	22.6 N•m (200 in•lb)	7.5 N•m (66 in•lb)
Reverse mount probes	22.6 N•m (200 in•lb)	7.5 N•m (66 in•lb)

Recommended torque	Finger tight
Maximum torque	0.56 N•m (5 in•lb)

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.

3300 NSv Proximity Probes

330901 3300 NSv Probe, 1/4-28 UNF thread, without armor
330902 3300 NSv Probe, 1/4-28 UNF thread, with armor
330908 3300 NSv Probe, 3/8-24 UNF thread, without armor
330909 3300 NSv Probe, 3/8-24 UNF thread, with armor
Part Number-AA-BB-CC-DD-EE
A: Unthreaded Length Option

	Unthreaded length must be at least 0.7 inch less than the case length. Order in increments of 0.1 in Length configurations: Maximum unthreaded length: 9.2 in Minimum unthreaded length: 0.0 in Example: **04** = 0.4 in

B: Overall Case Length Option

	Order in increments of 0.1 in Threaded length configurations: Maximum case length: 9.9 in Minimum case length: 0.8 in Example: **2 4** = 2.4 in

C: Total Length Option	
05	0.5 meter (20 in)
10	1.0 meter (39 in)
50	5.0 meters (16.4 feet)
70	7.0 meters (23.0 feet)
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	Multiple Approvals

3300 NSv Proximity Probes, Metric

330903 3300 NSv Probe, M8X1 thread, without armor
330904 3300 NSv Probe, M8X1 thread, with armor
330905 3300 NSv Probe, M10X1 thread, without armor

330910 3300 NSv Probe, M10X1 thread, with armor	
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 configuration: Maximum unthreaded length: 230 mm Minimum unthreaded length: 0 mm Example: **06** = 60 mm
B: Overall Case Length Option	
	Order in increments of 10 mm. Metric thread configurations: Maximum length: 250 mm Minimum length: 20 mm Example: **06** = 60 mm
C: Total Length Option	
05	0.5 meter (20 in)
10	1.0 meter (39 in)
50	5.0 meters (16.4 feet)
70	7.0 meters (23.0 feet)
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	Multiple Approvals

3300 NSv Reverse Mount Probe

330906-02-12-CC-DD-EE 3/8-24 UNF threads	
330907-05-30- CC-DD-EE M10X1 threads	
C: Total Length Option	
05	0.5 meter (20 in)
10	1.0 meter (39 in)
50	5.0 meters (16.4 feet)
70	7.0 meters (23.0 feet)
D: Connector Option	
02	Miniature coaxial ClickLoc connector, standard cable
12	Miniature coaxial ClickLoc connector, FluidLoc cable
E: Agency Approval Option	
00	Not required