

AMIKON TECHNICAL DOCUMENTATION

Installation Instructions

Bently Nevada 330102-00-80-10-01-05

3300 XL 8 mm standard-mount proximity probe, 3/8-24 UNF-2A, with armor

THREAD	LENGTH	CASE	ARMOR
3/8-24 UNF	1.0 m	8.0 in	Armored

For qualified personnel. This reference does not replace controlled manufacturer instructions, site safety procedures, approved circuit drawings or the actual unit certificate.

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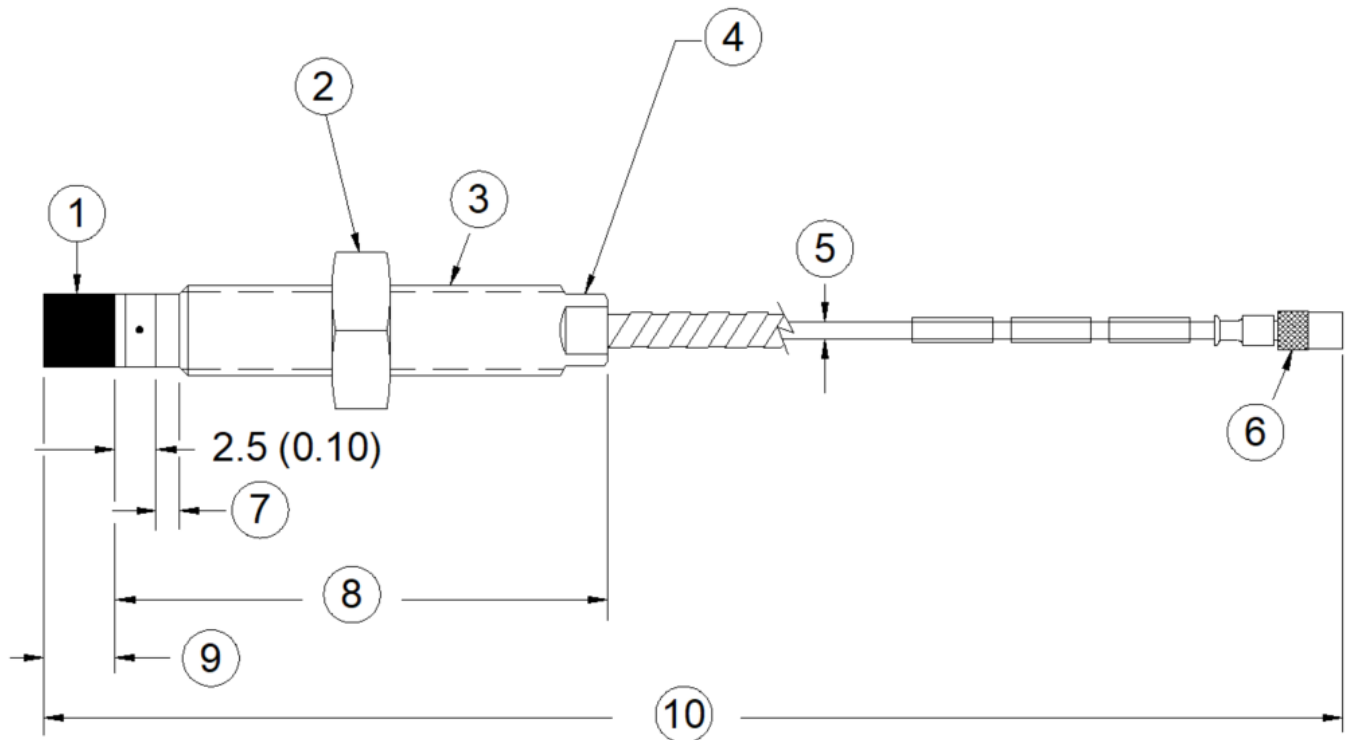
CONFIRM ORDERED CONFIGURATION

Mounting thread	3/8-24 UNF-2A
Unthreaded length	0.0 in
Overall case length	8.0 in
Total probe length	1.0 m
Cable armor	Armored
Connector package	Miniature coaxial ClickLoc with connector protector

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MECHANICAL INSTALLATION CONTROLS

- For 3/8-24 UNF-2A, the maximum specified thread engagement is 0.563 in. Overall case length is not permitted engagement depth.
- Probe case torque: 11.2 N m for standard forward mounting; 7.5 N m for the first three threads (141194 p. 7).
- Maintain at least 25.4 mm cable bend radius. Read the applicable original probe drawing and notes on the following two pages.



1. Probe tip, 8.0 mm (0.31 in) diameter
2. 9/16 in for 3/8-24 threads, M17 for M10 threads (see Note 2)
3. Case thread
4. 5/16 in wrench flats for 3/8-24 threads; 8mm wrench flats for M10 threads.
5. 75 Ω cable, 3.68 mm (0.145 in) maximum outside diameter, 3.94 mm (0.155 in) maximum outside diameter for FluidLoc cable, 7.67 mm (0.302 in) outside diameter of armor, 9.5 mm (0.38 in) maximum diameter of armor ferrule
6. Miniature male coaxial connector, 7.24 mm (0.285 in) maximum outside diameter "D"
7. Unthreaded length "A"
8. Case length "B"
9. 6.0 mm (0.235 in) maximum
10. Total length "C", +30%, -0%³

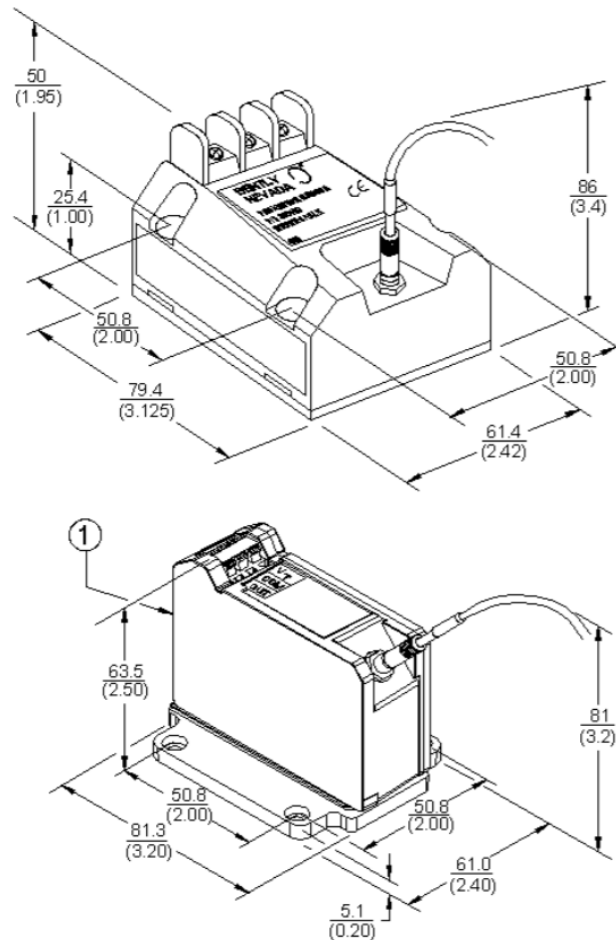
Figure 14: 3300 XL 8 mm Proximity Probes, Standard Mount

330101 and 330191, 3/8-24 UNF-2A, without armor ⁷

330102 and 330192, 3/8-24 UNF-2A, with armor ⁶

330103 and 330193, M10X1 thread, without armor ⁷

330104 and 330194, M10X1 thread, with armor ⁶



1. Mounting option "A", Options -50 or -90

Figure 21: Physical Mounting Characteristics Showing Interchangeability of 3300 and 3300 XL Proximitors Sensors when 4-hole Mounting Option Is Used⁸

Figure Notes:

1. All dimensions on figures are in millimeters (inches) unless otherwise noted.
2. Standard mount 8 mm probes supplied with M17 or 9/16 inch lock nut.
3. Probes ordered with 5 or 9 meter integral cables have a length tolerance of +20%, -0%.
4. Reverse mount probes not available with armor or connector protector options.
5. Letters inside quotation marks on figures refer to probe ordering options.
6. Stainless steel armor is supplied with FEP outer jacket for standard probes, PFA outer jacket for ETR probes.
7. FEP jacket is standard non-armored portion of the cable for standard probes, PFA jacket on non-armored portion for ETR probes.
8. Use M3.5 or #6 screws for panel-mount Proximitors Sensors (screws provided when purchasing Bently Nevada housings).

03 CONNECTION & SYSTEM CHECKS

Electrical chain	Match the 1.0 m probe to the documented Proximitor system. A one-metre XL 8 mm system uses no extension cable; other electrical lengths need the appropriate complete probe/cable/sensor arrangement.
Connector assembly	Two XL gold ClickLoc connectors: finger tight. A connection involving non-XL stainless-steel hardware has different instructions; identify both connector types first.
Target and calibration	The applicable system specifications use an AISI 4140 steel target. Other target materials need manufacturer calibration review; do not apply channel voltage or power directly to the probe.

04 ENVIRONMENT & APPROVAL REVIEW

- Probe temperature: -52 to +177 deg C; pressure-seal caveat below -34 deg C. Extended-temperature or other family ratings must not be substituted.
- Probes are not pressure tested before shipment. Verify safe process containment and leakage provisions; consult the manufacturer if a pressure-seal test is required.
- Confirm the actual 05 approval markings, certificate and complete circuit requirements before hazardous-area use.
- Verify target clearance and the complete measurement channel after installation. This sensing probe is not a standalone transmitter or an independently qualified overspeed protection system.

05 OFFICIAL DOCUMENTATION

Bently Nevada 141194 Rev. AM - complete manufacturer source

Basis: 141194 pp1-4,7-9,13; 108M1756 p26. Original drawing and figure notes remain unchanged between the two Amikon-authored pages. Full source cross-references and actual certificate conditions remain applicable.