MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

100630-01-43-05-01

3300 XL 8 MM UNDERWATER 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 175852 Rev. F pp. 1, 2, 9, 12 and legacy Rev. C p. 3

3300 XL Underwater Probes

Datasheet

Cordant™

175852 Rev. G



Description

3300 XL underwater probes are designed specifically for applications involving constant exposure to liquids, such as those in hydroelectric plants or sewage treatment facilities. These designs also seal the probes against gases. All our underwater probes are rated to 500 psi (34 Bar) on the interface between the tip and probe casing. Contact a sales representative for applications that require higher pressure ratings.

All of the underwater probes are compatible with standard 3300 XL Proximitor Sensors and extension cables. Note that these probes each belong to a different family (8mm, 11mm, or 25mm) and consequently require different Proximitor Sensors and extension cables. Refer to the standard data product sheets to obtain ordering information for the 8mm, 11mm, and 25mm transducer systems.

The 100630, 148239, and 174985 probes were developed for applications in which the entire probe is submerged or exposed to fluids. Tubing attached to the probe case protects the probe cable, but the connector end of the probe is not sealed against liquids and must not be submerged. In addition, the probe case is made of 304 Stainless Steel and is not suitable for salt-water applications. Contact a sales representative if you have an application involving salt water.

Baker Hughes

Specifications

Electrical and Mechanical

The electrical and mechanical specifications for each of these probes are the same as standard product for the 8mm, 11mm, and 25mm systems.

Reference data sheets as follows for complete specifications

Probe 100630	3300 XL 8mm System datasheet document 141194.
Probe 148239	3300 XL 11mm System datasheet document 146256.
Probe 174985	3300 XL 25mm System datasheet document 163236

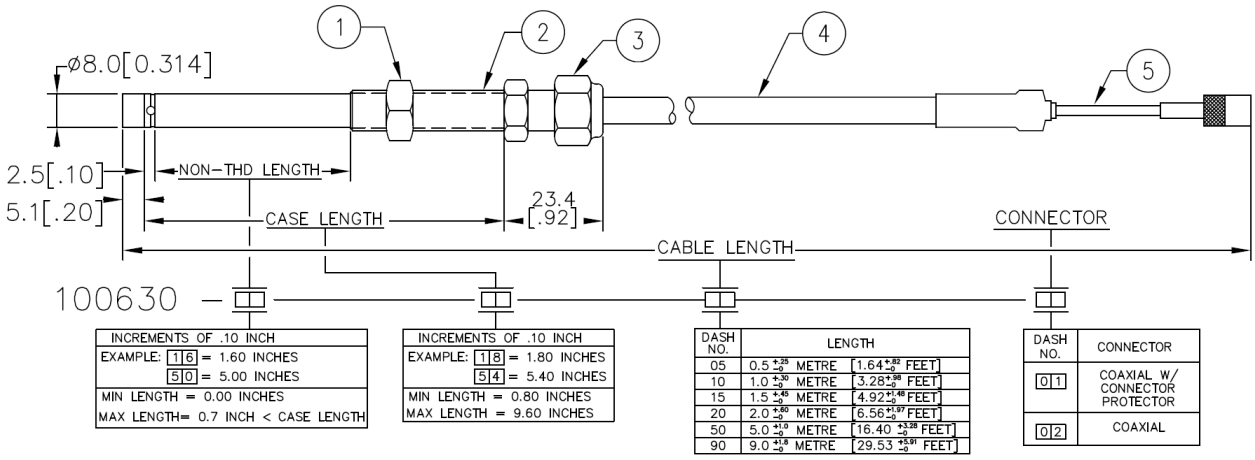
Environmental Limits

Probe Temperature Range

Operating and Storage Temperature	-51 °C to +177 °C (-60 °F to +351 °F)
Probe Pressure	Rated to seal 34 Bar (500 psi) Nitrogen. Modifications are available for applications involving higher pressures. Contact a Sales Representative if your application requires a test of the pressure seal.[1]

(1) It is the responsibility of the customer or user to ensure that all liquids and gases are contained and safely controlled should leakage occur from a proximity probe. Bently Nevada does not be held responsible for any damages resulting from leaking proximity probes.

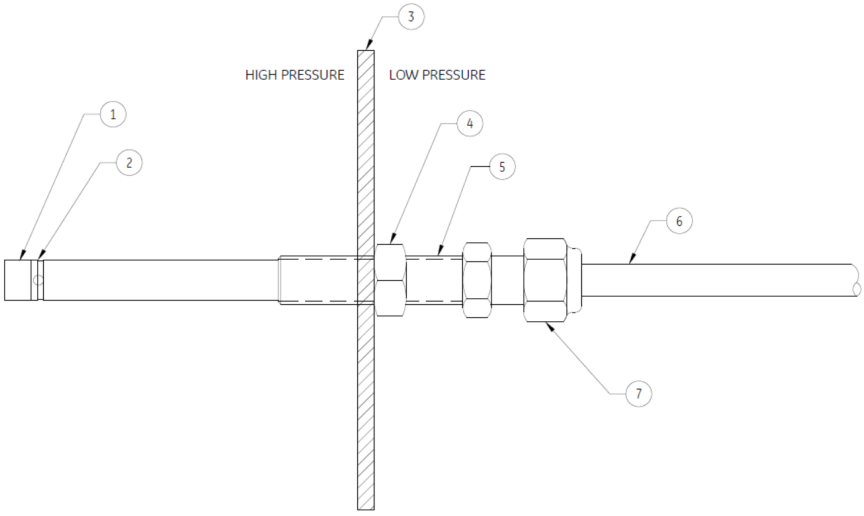
Graphs and Figures



1. Jam nut 9/16 inch wrench flats
2. Probe threads, 3/8-24 UNF 2A
3. Swagelok fitting, used to secure tubing to probe case. Do not loosen this fitting.
4. Tefzel tubing 0.25 inch outside diameter
5. Triaxial cable, 0.150 inch maximum diameter

Figure 1: Probe 100630, 3300 XL 8mm 3/8-24 Thread Forward Mount

Agency Approval Option	
00	Not Required
05	CSA, ATEX, IECEx Approvals



1. Probe tip
2. 500 PSI rated seal between tip and case
3. Machine casing
4. Jam nut
5. Swagelock fitting
6. Tefzel tubing
7. Swagelok and Tefzel seal designed for submersion but not pressure rated

Figure 4: Probe Pressure Rating Detail

All dimensions on figures are in millimetres [inches] unless otherwise noted.

IEC		
Ex ia IIC T4		
Electrical parameters	U_i= -28V I_i = 140mA P_i = 0.84W	C_i = 1.5nF L_i =200µH
Ex nA II		
Electrical parameters	U_i= -28V	

Ordering Information

For a detailed listing of country and product specific approvals, refer to the Approvals Quick Reference Guide (document 108M1756) located at the following website: www.GEmeasurement.com.

3300 XL 8mm Underwater Proximity Probe

100630 3300 XL 8mm Underwater Probe, 3/8-24 UNF thread, sealed case with Tefzel® Tubing

Part Number-AXX-BXX-CXX-DXX-EXX

A: Unthreaded Length Option

Note: Unthreaded length must be at least 0.7 in. less than the case length.

Order in increments of 0.1 in
Length configurations:

Maximum unthreaded length:
8 9 = 8.9 in

Minimum unthreaded length:
0 0 = 0.0 in

Example: 0 4 = 0.4 in

B: Overall Case Length Option

Order in increments of 0.1 in
Threaded Length configurations:

Maximum case length:
9 6 = 9.6 in

Minimum case length:
0 8 = 0.8 in

Example: 2 4 = 2.4 in

C: Total Length Option

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

D: Connector and Cable Type Option

01 Miniature coaxial ClickLoc™ connector with connector protector, standard cable
02 Miniature coaxial ClickLoc connector, standard cable

3300 XL 11mm Underwater Proximity Probe

148239 3300 XL 11mm Underwater Probe, 5/8-18 UNF thread, sealed case with Tefzel® Tubing

Part Number-AXX-BXX-CXX-DXX

A: Unthreaded Length Option

Note: Unthreaded length must be at least 1.0 in. less than the case length.

Order in increments of 0.1 in
Length configurations:

Maximum unthreaded length: 11.0 in

Minimum unthreaded length: 0.0 in

Example: 0 4 = 0.4 in