# Bently Nevada 100630-00-43-05-01

Engineering installation and verification guide

Bently Nevada 100630-00-43-05-01 is a 3/8-24 UNF 3300 XL 8 mm underwater proximity probe with a sealed case, Tefzel tubing, 4.3 in overall case and 0.5 m lead.

## 01 / Establish the installed identity

Compare the full offered model and any visible revision or approval marks with the removed item, machine drawing and monitor configuration. Capture the original measured baseline before changing the sensing chain.

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| **Probe family** | 3300 XL 8 mm underwater |
| **Mounting thread** | 3/8-24 UNF |
| **Unthreaded length** | 0.0 in (00 option) |
| **Overall case length** | 4.3 in |
| **Total probe length** | 0.5 m |
| **Connector option** | Miniature coaxial ClickLoc with protector (01) |
| **Cable type** | Standard cable inside Tefzel tubing |

## 02 / Engineering interface map

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| **1 / machine target** | Start from the actual installed application. |
| **2 / probe** | Confirm fit and identity before energizing. |
| **3 / matched extension / lead** | Confirm fit and identity before energizing. |
| **4 / Proximitor** | Confirm fit and identity before energizing. |
| **5 / monitor** | Confirm fit and identity before energizing. |

## 03 / Installation decisions

**Dry connector zone**

The probe body may be immersed; the ClickLoc connector end must not be submerged.

**Process compatibility**

AISI 304 is not suitable for salt water; evaluate the actual liquid before installation.

**Pressure containment**

Treat the 34 bar nitrogen tip-to-case rating as a seal limit, not a vessel rating.

**Tubing attachment**

Do not loosen the factory tubing fitting on the sealed probe case.

**Matched chain**

Use the 3300 XL 8 mm extension and Proximitor for the selected total length.

**After installation**

Record connector position, seal inspection, static gap and channel trend.

## 04 / Acceptance sequence

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| **Isolate and inspect** | Apply site isolation and inspect the physical part, contacts, seal or route as applicable. |

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| **Fit and connect** | Use the verified mounting and electrical interface; preserve the installed channel design. |
| **Prove response** | Check the relevant gap, bias, pressure or velocity output against the approved site procedure. |
| **Record as left** | Save complete markings, test results, configuration and operating trend before release. |

## 05 / Fault isolation by symptom

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| **Can the connector end of 100630-00-43-05-01 be immersed with the probe case?** | No. The body and protected cable route are designed for fluid exposure, but the connector end is not liquid-sealed and must remain dry. |
| **What pressure boundary must be checked for 100630-00-43-05-01 before installation?** | The tip-to-case interface is rated to seal 34 bar nitrogen. Confirm actual process pressure, fluid compatibility and the machine mounting seal separately. |
| **Why is salt-water exposure a problem for 100630-00-43-05-01?** | The standard case is AISI 304 stainless steel, which the manufacturer excludes for salt-water duty. Obtain an approved alternative configuration for that environment. |
| **What happens if 100630-00-43-05-01 is paired with an 11 mm underwater Proximitor?** | The underwater probe families use different calibrated sensor chains. Match the 100630 8 mm probe with its 8 mm extension and Proximitor instead. |

## 06 / Engineering review before release

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| **How should the tubing connection on 100630-00-43-05-01 be handled during service?** | Keep the factory tubing fitting intact; loosening it can compromise the protected route. Inspect the external seal and tubing condition without disturbing the factory joint. |
| **What could cause a shifted reading from 100630-00-43-05-01 without a probe fault?** | Target alloy, adjacent metal, gap, fluid-related connector contamination and a mismatched extension can each change the system response. Isolate these causes before condemning the probe. |
| **Where should the connector protector of 100630-00-43-05-01 be located?** | Place the protected ClickLoc joint outside the submerged zone in a maintainable location, and check that liquid cannot migrate into the mating surfaces. |
| **Which measurements should be recorded after commissioning 100630-00-43-05-01?** | Record the complete order code, extension and Proximitor markings, observed gap voltage, process medium, connector location and operating signal baseline. |

## Technical basis

Bently Nevada 3300 XL Underwater Probes, 175852 Rev. G

Discuss the complete marking and installed application with Apter Power.
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