# 330703-000-050-10-11-05

3300 XL 11 mm Proximity Probe

Bently Nevada 330703-000-050-10-11-05 is a metric 3300 XL 11 mm proximity probe for long-range non-contacting vibration and displacement measurement.

## Executive product dashboard

### Extended measurement reach

The 11 mm transducer family provides a 4.0 mm linear range for applications that exceed the standard 8 mm range.

### Fluid-control cable path

FluidLoc construction reduces migration through the probe lead in oil-exposed machinery locations.

### Metric machine interface

The M14 x 1.5 case supports documented metric probe ports while retaining a finger-tight ClickLoc connection.

## Exact order-code identity

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| **Probe family** | 3300 XL 11 mm |
| **Mounting thread** | M14 x 1.5 |
| **Armor** | Without armor |
| **Unthreaded length** | 0 mm |
| **Overall case length** | 50 mm |
| **Total probe length** | 1.0 m |
| **Connector and cable option** | 11 - ClickLoc with protector, FluidLoc cable |
| **Agency approval option** | 05 - Multiple approvals |

The 330703 metric probe uses an M14 x 1.5 case and an 11 mm sensing tip. Its 50 mm case and zero unthreaded reach must be checked against the installed sleeve, locknut position and target clearance before removal.

# Configuration and technical capability map

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| **System linear range** | 4.0 mm (160 mils) | **System scale factor** | 3.94 V/mm (100 mV/mil) |
| **Recommended gap** | 2.5 mm (100 mils) | **Frequency response** | 0 to 8 kHz, +0/-3 dB typical |
| **Probe material** | PPS tip; AISI 304 stainless-steel case | **Recommended case torque** | 21.1 N m for M14 x 1.5 |
| **Minimum cable bend radius** | 25.4 mm | **Probe temperature** | -52 to +177 deg C |

## Installed signal or connection path




## System interpretation boundary

Option 11 combines a miniature coaxial ClickLoc connector, connector protector and FluidLoc cable. The 1.0 m probe lead is used in a matched 3300 XL 11 mm chain with the appropriate extension cable and Proximitor Sensor.

Published range, scale and frequency values apply to the complete calibrated 11 mm system under the stated target, gap, supply and temperature conditions. Commissioning therefore compares gap voltage, runout and monitor indication after the whole channel is restored.

# Applications and installed-fit decisions

### Long-range shaft displacement

Use the 4.0 mm system range where an 8 mm transducer does not provide sufficient travel.

### Metric bearing-housing ports

Match the M14 x 1.5 thread and allowable engagement with the installed probe mounting.

### Oil-exposed probe routing

Use the FluidLoc lead where process fluid migration through the cable core must be controlled.

### Matched-system service

Retain the 11 mm probe, extension cable and Proximitor Sensor identities as one calibrated chain.

## Engineering decision matrix

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| **Why does 330703-000-050-10-11-05 use the 11 mm transducer family?** | The 11 mm family provides a 4.0 mm linear range and 3.94 V/mm scale factor for applications needing more travel than the 8 mm system. |
| **How should the M14 x 1.5 mounting port be checked for 330703-000-050-10-11-05?** | Confirm thread condition, available 50 mm case depth and no more than 21 mm thread engagement before installation. |
| **What does option 11 change on 330703-000-050-10-11-05?** | It selects a miniature ClickLoc connector with protector and a FluidLoc probe cable. |
| **Which Proximitor system length matches 330703-000-050-10-11-05?** | The 1.0 m probe lead must be combined with the selected extension cable so the total electrical length matches the 11 mm Proximitor Sensor. |

Applications must be evaluated against the exact installed machine drawing, target, companion hardware and receiving channel. Related product references do not imply substitution.

# Product precautions and maintenance logic

### Verify the full 330703 code

Confirm 000, 050, 10, 11 and 05 against the installed marking.

### Check thread engagement

Do not exceed the documented 21 mm engagement limit for M14 x 1.5.

### Protect the sensing face

Prevent impact, metal chips and side loading on the 11 mm tip.

### Respect the bend radius

Route the lead without bends tighter than 25.4 mm or load on the connector.

### Set gap from live voltage

Establish the operating point with the matched system energized and the approved target.

### Prove the complete channel

Compare gap, runout, vibration or position response with the accepted baseline.

## Additional technical questions

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| **How is the operating point established for 330703-000-050-10-11-05?** | Use the approved AISI 4140 target and set the matched system near the documented 2.5 mm recommended gap while observing live gap voltage. |
| **What cross-talk check is relevant to 330703-000-050-10-11-05?** | Review target diameter, shaft diameter and spacing to adjacent probes; below the recommended geometry, reduce gap only within the required measurement range. |
| **Can 330703-000-050-10-11-05 be evaluated as a probe alone?** | Mechanical identity can be checked alone, but published range, scale and linearity apply to the complete matched 11 mm transducer chain. |
| **What should be recorded before removing 330703-000-050-10-11-05?** | Record full marking, insertion position, locknut datum, cable route, companion extension cable and Proximitor Sensor, gap voltage and baseline response. |

## Technical notes

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| **Exact configuration** | M14 x 1.5 standard-mount probe, 0 mm unthreaded length, 50 mm case, 1.0 m FluidLoc lead, connector protector and multiple-approval option |
| **System boundary** | Published performance belongs to a matched 3300 XL 11 mm probe, extension cable and Proximitor Sensor under the stated calibration conditions |
| **Technical reference** | Bently Nevada 3300 XL 11 mm Proximity Transducer System Datasheet 146256 Rev. T |

# Source record, related portfolio and contact

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|---|---|
| **Manufacturer reference** | Bently Nevada 3300 XL 11 mm Proximity Transducer System Datasheet 146256 Rev. T |
| **Applicability** | Facts are limited to the exact order-code selections and stated matched-system conditions. |
| **Public page** | Exact product page linked from the first-page model title |
| **Evidence boundary** | No neighboring-model option or unsupported lifecycle conclusion is assigned to this product. |

## Verified related product references

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|---|---|
| Recommended product | Bently Nevada 330980-70-05 |
| Recommended product | Bently Nevada 330425-01-00 |
| Recommended product | Bently Nevada 330500-07-00 |
| Recommended product | Bently Nevada 330706-005-046-10-02-00 |
| Recommended product | Bently Nevada 200355-00-00-00 |



**Discuss the exact marking and installed relationship with Apter Power.**
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Use the complete marking, installed relationship, photographs and measured baseline as the service record for 330703-000-050-10-11-05.