# 330103-00-05-10-01-05

3300 XL 8 mm Proximity Probe

Apter Power field guide covering identity capture, installed relationships, controlled replacement, commissioning and handover.

## Installed probe identity

This 330103 configuration uses the metric M10 x 1 probe body without cable armor. Its zero-unthreaded execution and 50 mm case must match the installed thread depth, locknut arrangement and target position.

### Complete identity record

| | |
|---|---|
| **Probe family** | 3300 XL 8 mm |
| **Mounting thread** | M10 x 1 |
| **Armor** | Without armor |
| **Unthreaded length** | 0 mm |
| **Overall case length** | 50 mm |
| **Total probe length** | 1.0 m |
| **Connector and cable option** | 01 - ClickLoc with protector, standard cable |
| **Agency approval option** | 05 - CSA, ATEX and IECEx |

### Installed relationship

Use only within a correctly matched 3300 XL 8 mm transducer chain

**Metric shaft-vibration points**

Install in an approved M10 x 1 port with the required target geometry and system gap.

**Compact axial-position mounts**

Confirm the 50 mm case and zero-unthreaded geometry before reproducing the locknut datum.

**Protected connector routing**

Use the fitted protector where the probe-to-extension joint is exposed to the machinery environment.

**Interchangeable XL service**

Retain only approved 3300 XL 8 mm components in the calibrated signal chain.

### Evidence boundary

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|---|---|
| **Exact configuration** | M10 x 1 unarmored probe, 0 mm unthreaded length, 50 mm case, 1.0 m standard lead, connector protector and multiple approvals |
| **System boundary** | Use only within a correctly matched 3300 XL 8 mm transducer chain |
| **Technical reference** | Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN |

# Mechanical and electrical readiness

The 1.0 m FEP-insulated lead ends in a miniature ClickLoc connector with a protector. The standard cable must be routed within the documented bend radius and combined with the correct extension cable and Proximitor Sensor length.

## Readiness checks

### Verify the metric order code

Confirm 00, 05, 10, 01 and 05 with the full 330103 base number.

### Limit M10 engagement

Keep thread engagement at or below the documented 15 mm maximum.

### Support the unarmored lead

Prevent abrasion, tension and movement at the probe-case transition.

### Seat ClickLoc finger-tight

Clean both connector faces and confirm the locking click before fitting the protector.

### Preserve the electrical length

Match the probe, extension cable and Proximitor Sensor as one system.

### Record the restored baseline

Retain gap voltage, runout and channel response after commissioning.

## Technical values used for fit decisions

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|---|---|
| **Probe tip material** | Polyphenylene sulfide (PPS) |
| **Probe case material** | AISI 303 or 304 stainless steel |
| **Cable construction** | 75 ohm triaxial, FEP insulated |
| **System linear range** | 2.0 mm (80 mils), matched 3300 XL 8 mm system |
| **System scale factor** | 7.87 V/mm (200 mV/mil) |
| **Recommended radial-vibration gap** | -9 V DC; approximately 1.27 mm |
| **Frequency response** | 0 to 10 kHz, +0/-3 dB |
| **Standard probe temperature** | -52 to +177 deg C |
| **Minimum cable bend radius** | 25.4 mm |

## Installed signal or connection path




Readiness boundary

Application scope: Use it for documented 8 mm eddy-current measurement points with an M10 x 1 port and controlled unarmored lead routing.

# Controlled probe replacement

| | |
|---|---|
| **01 Capture** | Photograph the complete marking, installed position, connections and companion hardware before disturbance. |
| **02 Isolate** | Apply the approved machine or system isolation and prove the required de-energized state. |
| **03 Compare** | Check every order-code value and mechanical interface against the offered item and approved drawing. |
| **04 Remove** | Release connectors and supports without twisting, pulling or loading the sensing face, cable or armor. |
| **05 Install** | Confirm 00, 05, 10, 01 and 05 with the full 330103 base number. Keep thread engagement at or below the documented 15 mm maximum. |
| **06 Reconnect** | Prevent abrasion, tension and movement at the probe-case transition. Clean both connector faces and confirm the locking click before fitting the protector. |
| **07 Energize** | Use the approved staged procedure and monitor the expected static state before functional testing. |
| **08 Prove** | Retain gap voltage, runout and channel response after commissioning. |

## Field decisions

### Why is the zero-unthreaded geometry important for 330103-00-05-10-01-05?

It places the M10 x 1 thread immediately behind the sensing end, so the installed sleeve and locknut position must match the 50 mm case.

### What is the maximum thread engagement for 330103-00-05-10-01-05?

The documented maximum for the M10 x 1 case is 15 mm; longer engagement can bind the probe.

### How should the unarmored lead of 330103-00-05-10-01-05 be routed?

Maintain the 25.4 mm bend radius, provide strain relief and keep the lead away from abrasion and unsupported movement.

### What does connector option 01 provide on 330103-00-05-10-01-05?

It provides the miniature ClickLoc connection with a factory-installed protector over the standard cable joint.

## Further model-specific decisions

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|---|---|
| **Which approval set is selected by 330103-00-05-10-01-05?** | Code 05 selects the documented CSA, ATEX and IECEx option; installation remains subject to the approved circuit drawing. |
| **How is the 1.0 m lead of 330103-00-05-10-01-05 matched?** | Choose the extension cable and 3300 XL Proximitor Sensor so the complete electrical length equals the intended system length. |
| **What confirms correct gap after replacing 330103-00-05-10-01-05?** | Set the operating point near -9 V DC, then confirm available travel and compare runout or vibration response with the prior baseline. |
| **Which parts of 330103-00-05-10-01-05 should be photographed before removal?** | Capture the complete marking, locknut datum, thread engagement, cable route, protector and both companion-component labels. |

# Channel proof and handover

| | |
|---|---|
| **Identity accepted** | Complete order code and supplied execution agree with the approved record. |
| **Mechanical acceptance** | Mounting, insertion, routing, support and connector condition match the documented arrangement. |
| **Electrical acceptance** | Continuity, static bias or gap and receiving-channel state are within the approved baseline. |
| **Functional acceptance** | Representative measurement or connection response agrees with the recorded machine condition. |
| **Handover record** | Retain photographs, as-left values, companion identities, deviations and responsible release. |

## Release record

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|---|---|
| **As-found evidence** | Complete marking, installed position, connection map and baseline readings retained. |
| **As-left evidence** | Installed identity, mechanical datum, static reading and functional result retained. |
| **Approval basis** | Site procedure, applicable manufacturer document and responsible release recorded. |

## 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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