# 330103-00-22-10-12-05

3300 XL 8 mm Proximity Probe

Bently Nevada 330103-00-22-10-12-05 is a M10 x 1 3300 XL 8 mm proximity probe with 220 mm case length and 1 m lead.

## 330103-00-22-10-12-05 configuration dashboard

### Installed geometry control

0 mm reach and a 220 mm body preserve the documented target position when the mounting datum is recorded.

### Flexible lead routing

The unarmored FEP-insulated lead supports a compact route and must be protected from abrasion, pulling and unsupported loading.

### Fluid-migration control

The FluidLoc lead is selected to reduce fluid migration through the cable core in suitable oil-exposed installations.

### Exact order-code identity

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| **Probe family** | 3300 XL 8 mm |
| **Base probe number** | 330103 |
| **Mounting thread** | M10 x 1 |
| **Lead protection** | Without armor |
| **Unthreaded length** | 0 mm |
| **Overall case length** | 220 mm |
| **Total probe length** | 1 m |
| **Connector and cable option** | 12 - ClickLoc connector, FluidLoc cable |

330103-00-22-10-12-05 decodes to M10 x 1, unarmored, 0 mm unthreaded reach, 220 mm case. This exact reach and case combination must be checked against the installed sleeve, thread engagement, locknut datum and target clearance before the original probe is moved.

# 3300 XL 8 mm Proximity Probe technical capability map

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| **Agency approval option** | 05 - Multiple approvals |
| **Probe case material** | AISI 303 or 304 stainless steel |
| **Matched-system linear range** | 2.0 mm (80 mils), matched 3300 XL 8 mm system |
| **Recommended operating gap** | Approximately 1.27 mm at -9 V DC |
| **Reference target** | 15.2 mm flat target minimum; AISI 4140 reference steel |
| **Minimum cable bend radius** | 25.4 mm |

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| **Probe tip material** | Polyphenylene sulfide (PPS) |
| **Cable construction** | 75 ohm triaxial, FEP insulated |
| **Matched-system scale factor** | 7.87 V/mm (200 mV/mil) |
| **Frequency response** | 0 to 10 kHz, +0/-3 dB |
| **Probe temperature range** | -52 to +177 deg C |

## Installed signal or connection path

**Machine target** > **330103-00-22-10-12-05** > **Extension cable** > **Proximitor Sensor** > **Monitor channel**

## System interpretation boundary

The unarmored FEP-insulated lead supports a compact route and must be protected from abrasion, pulling and unsupported loading. The FluidLoc lead is selected to reduce fluid migration through the cable core in suitable oil-exposed installations. The order code does not include a factory-installed connector protector, so joint protection must follow the approved installation plan.

Published range, scale and frequency data apply to the complete matched 3300 XL 8 mm probe, extension cable and Proximitor Sensor under the stated target and calibration conditions. Commissioning therefore includes live gap, runout and receiving-channel response checks.

# Application fit decisions for 330103-00-22-10-12-05

### Radial shaft vibration

Use 330103-00-22-10-12-05 where the M10 x 1 body and 220 mm case reproduce the documented bearing-housing geometry.

### Axial position measurement

Confirm target flatness, available travel and the 0 mm reach before setting the operating gap.

### Protected internal routing

Shield the unarmored lead from abrasion, sharp edges and unsupported weight.

### Oil-exposed probe ports

Use the FluidLoc execution where the approved installation requires resistance to fluid migration.

## Engineering decision matrix

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| **How should the 0 mm reach of 330103-00-22-10-12-05 be reproduced?** | Record the installed datum and locknut position before removal, then confirm the 220 mm case places the tip at the same approved target gap. |
| **What does the M10 x 1 execution of 330103-00-22-10-12-05 require at the machine port?** | Inspect thread form, engagement, sleeve clearance and target alignment; matching nominal diameter alone is not sufficient. |
| **How does the unarmored lead affect routing of 330103-00-22-10-12-05?** | Protect the FEP lead from abrasion and tensile load while maintaining at least the documented bend radius. |
| **What connection protection is selected on 330103-00-22-10-12-05?** | Option 12 does not include a factory-installed protector; use the approved site protection only where required. |

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

# 330103-00-22-10-12-05 service controls and maintenance logic

### Verify the complete order code

Photograph 330103-00-22-10-12-05 and confirm every option block before removal.

### Preserve the mechanical datum

Record 0 mm reach, 220 mm case, insertion position and locknut location.

### Control cable loading

Do not pull on the lead or exceed the documented 25.4 mm bend radius.

### Protect the ClickLoc joint

Keep mating faces clean and add only the approved environmental protection required by the installation.

### Preserve total electrical length

Combine the 1 m probe lead only with the extension cable and Proximitor Sensor selected for the intended system length.

### Prove the restored channel

Set live gap and compare static bias, runout and measurement response with the accepted baseline.

## Additional technical questions

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| **How is total electrical length controlled for 330103-00-22-10-12-05?** | The probe contributes 1 m; add only the documented extension cable that matches the intended Proximitor Sensor system length. |
| **Which target assumptions apply to 330103-00-22-10-12-05?** | Published performance uses the stated AISI 4140 reference target; verify target size, material, flatness and nearby conductive geometry for the actual machine. |
| **How should 330103-00-22-10-12-05 be checked after installation?** | Set the approved live gap, confirm stable bias, then compare slow-roll runout and the intended vibration, position or phase response with the accepted record. |
| **What does approval option 05 mean for 330103-00-22-10-12-05?** | The order code selects the documented multiple-approval execution; the installed circuit must still follow the applicable certified drawing. |

## Technical notes

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| **Exact configuration** | M10 x 1, unarmored, 0 mm unthreaded reach, 220 mm case; 1 m lead; ClickLoc connector, FluidLoc cable; multiple approvals |
| **System boundary** | Range, scale and frequency values belong to the complete matched 3300 XL 8 mm transducer chain, not the probe alone |
| **Technical reference** | Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN |

# 330103-00-22-10-12-05 source record and supported references

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|---|---|
| **Manufacturer reference** | Bently Nevada 3300 XL 8 mm Proximity Transducer System Datasheet 141194 Rev. AN |
| **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 330103-00-22-10-12-05.