# Bently Nevada 21000-16-10-00-120-03-02

Apter Power installation and commissioning guide

Bently Nevada 21000-16-10-00-120-03-02 is a 21000 aluminum body proximity probe housing assembly configured with a 3300 XL 8 mm probe and 1.0 m probe lead.

## 01 / Work scope

This aluminum body housing gives external access to a reverse-mounted proximity probe at a machine casing.

## Selected assembly

| Parameter | Selected configuration |
| --- | --- |
| Assembly family | 21000 proximity probe housing |
| Housing construction | aluminum body |
| Probe selection | 3300 XL 8 mm probe |
| Probe lead | 1.0 m |
| Standoff option | no standoff adapter |
| Penetration option | 12.0 in probe penetration |

## System position

| Boundary | Installed-system relationship |
| --- | --- |
| Machine-case context | The 21000-16-10-00-120-03-02 housing positions a proximity probe through the machinery case for an externally accessible sensing point. |
| Compatibility boundary | Use the selected 3300 XL 8 mm probe, 1.0 m lead and 3/4-14 NPT mounting thread only with a verified machine opening and compatible transducer chain. |

## 02 / Before installation

The 16 probe option selects 3300 XL 8 mm probe; option 10 supplies a 1.0 m lead. Match the probe and extension cable to the installed 3300 XL 8 mm transducer system before assigning measurement performance.

| Parameter | Selected configuration |
| --- | --- |
| Probe lead | 1.0 m |
| Standoff option | no standoff adapter |
| Penetration option | 12.0 in probe penetration |
| C plus D selection | 12 in |
| Conduit fittings | plug, reducer and cable seal grip |
| Mounting option | 3/4-14 NPT mounting thread |

## Readiness checks

| Check | Reason or action |
| --- | --- |
| Isolation | Apply the site isolation procedure before opening the machine probe housing. |
| Mechanical fit | Check the 3/4-14 NPT mounting thread against the machined case opening before assembly. |
| Sleeve support | Support a selected C plus D length above 12 in to limit sleeve resonance. |
| Probe clearance | Check side-view and rear-view clearance at the chosen penetration and case geometry. |

Record the complete product marking and the installed machine drawing before removing an existing item.

## 03 / Mechanical and electrical fitting

Option 00 specifies no standoff adapter, and 120 specifies 12.0 in probe penetration. Their selected C plus D reach is 12 in. Establish the final probe gap from the machine drawing and the transducer procedure.

| Sequence | Installation action |
| --- | --- |
| 1. Isolation | Apply the site isolation procedure before opening the machine probe housing. |
| 2. Mechanical fit | Check the 3/4-14 NPT mounting thread against the machined case opening before assembly. |
| 3. Sleeve support | Support a selected C plus D length above 12 in to limit sleeve resonance. |
| 4. Probe clearance | Check side-view and rear-view clearance at the chosen penetration and case geometry. |
| 5. Sealing | Inspect the housing seals, conduit entries and probe pressure boundary before service. |
| 6. Commissioning | Set and verify the probe gap with the matched transducer components and machine stopped as required. |

## Configuration-specific notes

| Topic | Technical limit |
| --- | --- |
| Installation relationship | The selected C plus D reach is 12 in. Use the machine drawing and probe gap-setting procedure to establish the installed position. |
| Protection | Approval of a hazardous-area installation depends on the complete housing and transducer arrangement; do not infer it from a fitting alone. |

## 04 / Commissioning acceptance

Option 03 identifies plug, reducer and cable seal grip; option 02 identifies 3/4-14 NPT mounting thread. The conduit entry, sealing arrangement and case interface must match these selected pieces.

| Question | Engineering answer |
| --- | --- |
| What housing construction does 21000-16-10-00-120-03-02 use? | The 21000 assembly uses an aluminum body housing; match its body and sleeve to the installed machine environment. |
| Which probe option is selected on 21000-16-10-00-120-03-02? | Code 16 selects 3300 XL 8 mm probe; the probe is a component of the housing assembly. |
| How long is the probe lead specified for 21000-16-10-00-120-03-02? | Code 10 selects 1.0 m of probe cable. Check the remaining transducer-system length with the installed extension cable and Proximitor sensor. |
| How does 21000-16-10-00-120-03-02 establish its standoff position? | Code 00 specifies no standoff adapter. The actual machine position also depends on penetration option 120. |
| What penetration is encoded in 21000-16-10-00-120-03-02? | Option 120 denotes 12.0 in probe penetration; the C plus D selection totals 12 in. |

## Acceptance record

| Measurement use | Supported context |
| --- | --- |
| Radial measurement | Position the probe at a documented radial vibration or position location on the machine casing. |
| Gap access | Use the external housing access to adjust the installed probe gap without dismantling the machine. |

Accept the installation only after the installed system and target configuration have been checked against the machine procedure.

## 05 / Service handover

| Question | Engineering answer |
| --- | --- |
| Which conduit pieces are associated with 21000-16-10-00-120-03-02? | Option 03 selects plug, reducer and cable seal grip. Confirm that the offered hardware corresponds to the complete assembly. |
| What mounting interface is selected for 21000-16-10-00-120-03-02? | Code 02 specifies 3/4-14 NPT mounting thread; do not substitute a different thread or sleeve arrangement. |
| When does the sleeve of 21000-16-10-00-120-03-02 need additional support? | The manufacturer calls for support when the C plus D reach exceeds 12 in. This configuration selects 12 in, so assess the machine layout against that limit. |

## Service reference

Have Bently Nevada review the installed probe, sleeve, fitting and mounting configuration before selecting a service replacement.

## Related product references

| Related product | Selection note |
| --- | --- |
| Bently Nevada 330880-16-00-021-03-02 | Separate catalogue reference |
| Bently Nevada 21504-000-040-10-02 | Separate catalogue reference |
| Bently Nevada 330101-00-10-10-02-00 | Separate catalogue reference |
| Bently Nevada 330101-00-20-10-02-00 | Separate catalogue reference |
| Bently Nevada 21000-16-05-00-105-03-02 | Separate catalogue reference |
| Bently Nevada 31000-16-10-15-040-03-02 | Separate catalogue reference |
| Bently Nevada 31000-16-05-00-033-03-02 | Separate catalogue reference |

Technical reference: Bently Nevada 21000, 24701, and 164818 Proximity Probe Housing Assemblies, 141600 Rev. AC.