# 21000-16-10-15-144-03-02

## 21000 Aluminum Proximity Probe Housing Assembly

Bently Nevada 21000-16-10-15-144-03-02 is a 21000 aluminum external proximity-probe housing configured with a 3300 XL 8 mm probe, 1.0 m probe cable, 1.5 in standoff adapter and 14.4 in penetration option. It supports pro

| | | | |
|---|---|---|---|
| **BRAND** | Bently Nevada | FAMILY | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies |
| **PART** | 21000-16-10-15-144-03-02 | SYSTEM ROLE | Provides an external protective enclosure for the proximity probe |

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**21000-16-10-15-144-03-02**

## MANUFACTURER SOURCE RECORD

21000, 24701, and 164818 Proximity Probe Housing Assemblies Datasheet
Baker Hughes document 141600 Rev. AC

# Product Overview

## SYSTEM FUNCTION

Bently Nevada 21000-16-10-15-144-03-02 is a 21000 aluminum external proximity-probe housing configured with a 3300 XL 8 mm probe, 1.0 m probe cable, 1.5 in standoff adapter and 14.4 in penetration option. It supports pro

## FUNCTION 1

Provides an external protective enclosure for the proximity probe

## FUNCTION 2

Allows controlled adjustment of the installed probe position

## FUNCTION 3

Routes the probe lead through a sealed conduit interface

## FUNCTION 4

Supports API 670-style externally mounted probe arrangements

## System Components

| COMPONENT | DOCUMENTED ROLE |
|---|---|
| **Host / carrier** | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies |
| **Primary interface** | Provides an external protective enclosure for the proximity probe |
| **Engineering context** | The assembly mounts externally to the machine case through the selected 3/4-14 NPT thread. Its aluminum body, stainless-steel sleeve, standoff adapter, adjustable penetration and conduit fittings protect the probe installation; co |
| **Commissioning duty** | Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release. |

## TECHNICAL NOTE

Mount 21000-16-10-15-144-03-02 through the documented 3/4-14 NPT machine-case connection and preserve the 1.5 in standoff and 14.4 in probe-penetration setting. Support the sleeve when required, route and seal the 1.0 m lead,

# Technical Data

| PARAMETER | VALUE | PARAMETER | VALUE |
|---|---|---|---|
| **Complete order number** | 21000-16-10-15-144-03-02 | Probe penetration option | 14.4 in |
| **Housing series** | 21000 | Fittings option | One 3/4-14 NPT plug; 3/4-14 to 1/2-14 NPT reducer; cable seal grip |
| **Housing body** | Aluminum | Mounting thread | 3/4-14 NPT |
| **Probe sleeve** | 304 stainless steel | Adjustment range | ±0.5 in |
| **Installed probe option** | 3300 XL 8 mm probe | Probe operating and storage temperature | -51 to +177 °C |
| **Probe cable length** | 1.0 m | Enclosure | CSA Type 4 |
| **Standoff adapter** | 1.5 in | | |

## Related Products on Apter Power

| MODEL | SYSTEM ROLE | APTER POWER PAGE |
|---|---|---|
| **3500/40M** | 176449-01 proximity monitor | View 3500/40M page |
| **3500/42M** | 176449-02 seismic monitor | View 3500/42M page |
| **21000-16-10-15-057-03-02** | aluminum probe housing | View 21000-16-10-15-057-03-02 page |
| **21000-16-10-15-102-03-02** | aluminum probe housing | View 21000-16-10-15-102-03-02 page |
| **21000-16-10-15-114-03-02** | aluminum probe housing | View 21000-16-10-15-114-03-02 page |
| **24701-34-05-00-041-03-02** | stainless-steel probe housing | View 24701-34-05-00-041-03-02 page |
| **31000-27-05-15-040-03-02** | probe housing assembly | View 31000-27-05-15-040-03-02 page |
| **330103-00-04-10-02-00** | matching XL 8 mm probe | View 330103-00-04-10-02-00 page |

### ENGINEERING BOUNDARY

Confirm 21000-16-10-15-144-03-02, 21000 aluminum housing, 3300 XL 8 mm probe option, 1.0 m cable, 1.5 in standoff, 14.4 in penetration, 3/4-14 NPT mounting thread, fitting set, sleeve support, O-rings, conduit sealing, target clearance, grounding, monitor configuration, static gap and

# Applications and Precautions

## Common Applications

### Bearing-case proximity probe mounting

Supports deep machine-case penetration for relative shaft measurement.

### External radial-vibration sensing

Houses the probe and protects its lead at a documented radial location.

### Axial-position probe access

Provides an adjustable external mounting path where the approved machine design requires it.

### Probe replacement without case entry

Allows the sleeve and probe arrangement to be serviced from outside the machine case.

## Product Precautions

1. Confirm the full 21000-16-10-15-144-03-02 marking and the 144 penetration code.
2. Place the monitored machine and associated protection channel in the approved maintenance state.
3. Isolate connected circuits and use ESD controls while handling the probe lead and connector.
4. Inspect the aluminum body, dome cover, O-rings, stainless-steel sleeve and thread seal.
5. Verify the 3/4-14 NPT mounting thread, standoff adapter and conduit fitting arrangement.
6. Support long sleeves as required and keep the probe lead longer than the installed sleeve.
7. Set the 3300 XL 8 mm probe gap while maintaining shaft and target clearances.
8. Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release.

## IMPORTANT NOTICE

Confirm 21000-16-10-15-144-03-02, 21000 aluminum housing, 3300 XL 8 mm probe option, 1.0 m cable, 1.5 in standoff, 14.4 in penetration, 3/4-14 NPT mounting thread, fitting set, sleeve support, O-rings, conduit sealing, target clearance, grounding, monitor configuration, static gap and

| ACCEPTANCE CHECK | REQUIRED EVIDENCE |
|---|---|
| **Identity** | 21000-16-10-15-144-03-02 |
| **Configuration** | Set the 3300 XL 8 mm probe gap while maintaining shaft and target clearances. |
| **Functional release** | Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release. |

# Engineer FAQ

**Q1** **What exact function does 21000-16-10-15-144-03-02 perform as a 21000 Aluminum Proximity Probe Housing Assembly?**

It externally houses and positions the selected 3300 XL 8 mm probe while routing its lead through the conduit fittings.

**Q2** **Which host system must be confirmed before installing 21000-16-10-15-144-03-02?**

Confirm the documented Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies host and the complete 21000-16-10-15-144-03-02 marking before work.

**Q3** **Which connection checks are required for 21000-16-10-15-144-03-02?**

Inspect the mounting thread, sleeve, standoff, O-rings, dome cover, fittings and lead route.

**Q4** **How should the installed configuration for 21000-16-10-15-144-03-02 be preserved?**

Retain the documented standoff, penetration, fittings and matched proximity-transducer loop.

**Q5** **Which diagnostic evidence should be reviewed for 21000-16-10-15-144-03-02?**

Review static gap, signal polarity, baseline, conduit sealing and monitor-channel diagnostics.

**Q6** **What must be recorded before replacing 21000-16-10-15-144-03-02?**

Record the complete order code, 144 penetration option, installed thread, sleeve support and signal-loop components.

**Q7** **How should 21000-16-10-15-144-03-02 be commissioned after installation?**

Seal the conduit, establish the linear-region gap and prove monitor response and alarm action under control.

**Q8** **Which model-specific limitation applies to 21000-16-10-15-144-03-02?**

The sleeve must be supported when the installed C plus D length exceeds the manufacturer threshold, and the probe lead must remain longer than the sleeve.

## MANUFACTURER SOURCE RECORD

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