

INDUSTRIAL AUTOMATION PRODUCT

21000-16-10-15-102-03-02

21000 Aluminum Proximity Probe Housing Assembly

Bently Nevada 21000-16-10-15-102-03-02 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 10.2 in penetration option. It supports pro

| IDENTITY      | VERIFIED VALUE                                                    |
|---------------|-------------------------------------------------------------------|
| Manufacturer  | Bently Nevada                                                     |
| System family | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies    |
| Part number   | 21000-16-10-15-102-03-02                                          |
| Product role  | Provides an external protective enclosure for the proximity probe |
| Lifecycle     | Installed product record                                          |

DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

MODEL-SPECIFIC ENGINEERING NOTE

Mount 21000-16-10-15-102-03-02 through the documented 3/4-14 NPT machine-case connection and preserve the 1.5 in standoff and 10.2 in probe-penetration setting. Support the sleeve when required, route and seal the 1.0 m lead,

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# Technical Specifications

Technical values below are limited to the named Bently Nevada product record and directly applicable manufacturer documentation.

| PARAMETER              | VALUE                    | PARAMETER                               | VALUE                                                              |
|------------------------|--------------------------|-----------------------------------------|--------------------------------------------------------------------|
| Complete order number  | 21000-16-10-15-102-03-02 | Probe penetration option                | 10.2 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                   |                                         |                                                                    |

## Verified Product Record

| DATA GROUP                 | VERIFIED VALUE                                                                                                                                                                                                                    |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installed host / carrier   | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies                                                                                                                                                                    |
| Primary system role        | Provides an external protective enclosure for the proximity probe                                                                                                                                                                 |
| Connection boundary        | Mount 21000-16-10-15-102-03-02 through the documented 3/4-14 NPT machine-case connection and preserve the 1.5 in standoff and 10.2 in probe-penetration setting. Support the sleeve when required, route and seal the 1.0 m lead, |
| Controlled acceptance duty | Bearing-case proximity probe mounting                                                                                                                                                                                             |

### ENGINEERING BOUNDARY

Confirm 21000-16-10-15-102-03-02, 21000 aluminum housing, 3300 XL 8 mm probe option, 1.0 m cable, 1.5 in standoff, 10.2 in penetration, 3/4-14 NPT mounting thread, fitting set, sleeve support, O-rings, conduit sealing, target clearance, grounding, monitor configuration, static gap and

## Pre-Installation Checks

|   |                                                                                              |   |                                                                                                  |
|---|----------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------|
| 1 | Confirm the full 21000-16-10-15-102-03-02 marking and the 102 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.          |

## Documented Service Record

| RECORD ITEM        | REQUIRED ENTRY                                                 |
|--------------------|----------------------------------------------------------------|
| As-found article   | 21000-16-10-15-102-03-02                                       |
| Installed host     | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies |
| Connection record  | Capture before removal                                         |
| Controlled release | Diagnostics and functional proof                               |

## System Role and Architecture

Bently Nevada 21000-16-10-15-102-03-02 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 10.2 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

### Matched System Components

| NO. | DOCUMENTED COMPONENT / ROLE                                                                                                                                                                                                       |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies                                                                                                                                                                    |
| 2   | 21000                                                                                                                                                                                                                             |
| 3   | Bearing-case proximity probe mounting                                                                                                                                                                                             |
| 4   | Mount 21000-16-10-15-102-03-02 through the documented 3/4-14 NPT machine-case connection and preserve the 1.5 in standoff and 10.2 in probe-penetration setting. Support the sleeve when required, route and seal the 1.0 m lead, |

### System Integration Record

| INTEGRATION ITEM       | DOCUMENTED ROLE                                                                                                                                                                                                                        |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host identity          | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies                                                                                                                                                                         |
| Interface role         | Provides an external protective enclosure for the proximity probe                                                                                                                                                                      |
| Field / power 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 evidence | Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release.                                                                                                                                |

### Installation and Connection Checks

1

Verify the 3/4-14 NPT mounting thread, standoff adapter and conduit fitting arrangement.

2

Support long sleeves as required and keep the probe lead longer than the installed sleeve.

3

Set the 3300 XL 8 mm probe gap while maintaining shaft and target clearances.

4

Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release.

#### MANUFACTURER SOURCE RECORD

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

# Applications and Engineering Context

**Bearing-case proximity probe mounting**  
  
Supports medium-depth machine-case access 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.

## TECHNICAL NOTE

Mount 21000-16-10-15-102-03-02 through the documented 3/4-14 NPT machine-case connection and preserve the 1.5 in standoff and 10.2 in probe-penetration setting. Support the sleeve when required, route and seal the 1.0 m lead,

## Model-Specific Acceptance Evidence

| CHECK              | ACCEPTANCE CONDITION                                                                                    |
|--------------------|---------------------------------------------------------------------------------------------------------|
| Identity           | 21000-16-10-15-102-03-02 recorded                                                                       |
| Host / carrier     | Bently Nevada 21000 / 24701 Proximity Probe Housing Assemblies                                          |
| Physical interface | Provides an external protective enclosure for the proximity probe                                       |
| Configuration      | Set the 3300 XL 8 mm probe gap while maintaining shaft and target clearances.                           |
| Functional proof   | Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release. |

## IMPORTANT NOTICE

Confirm 21000-16-10-15-102-03-02, 21000 aluminum housing, 3300 XL 8 mm probe option, 1.0 m cable, 1.5 in standoff, 10.2 in penetration, 3/4-14 NPT mounting thread, fitting set, sleeve support, O-rings, conduit sealing, target clearance, grounding, monitor configuration, static gap and

## Controlled Release Summary

| RELEASE ITEM     | MODEL-SPECIFIC CONDITION                                                                                |
|------------------|---------------------------------------------------------------------------------------------------------|
| Article identity | 21000-16-10-15-102-03-02                                                                                |
| Approved role    | Bearing-case proximity probe mounting                                                                   |
| Final validation | Seal the conduit, restore the signal loop and prove polarity, response and alarm action before release. |

# Engineering Precautions

- 1

Confirm the full 21000-16-10-15-102-03-02 marking and the 102 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.

## Related Products on Apter Power

| MODEL                    | SYSTEM ROLE                   | APTER POWER PAGE                                   |
|--------------------------|-------------------------------|----------------------------------------------------|
| 330130-080-00-00         | extension cable               | <a href="#">View 330130-080-00-00 page</a>         |
| 330180-50-00             | Proximito sensor              | <a href="#">View 330180-50-00 page</a>             |
| 3500/40M                 | 176449-01 proximity monitor   | <a href="#">View 3500/40M page</a>                 |
| 3500/42M                 | 176449-02 seismic monitor     | <a href="#">View 3500/42M page</a>                 |
| 21000-16-10-15-057-03-02 | aluminum probe housing        | <a href="#">View 21000-16-10-15-057-03-02 page</a> |
| 21000-16-10-15-114-03-02 | aluminum probe housing        | <a href="#">View 21000-16-10-15-114-03-02 page</a> |
| 21000-16-10-15-144-03-02 | aluminum probe housing        | <a href="#">View 21000-16-10-15-144-03-02 page</a> |
| 24701-34-05-00-041-03-02 | stainless-steel probe housing | <a href="#">View 24701-34-05-00-041-03-02 page</a> |

## MANUFACTURER SOURCE RECORD

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