

APTER POWER PRODUCT MANUAL

21000-28-05-00-035-01-02

Bently Nevada 21000 proximity-probe housing assembly

The 21000-28-05-00-035-01-02 is a Bently Nevada 21000 all-metal external proximity-probe housing assembly. This exact code specifies 3300 XL 8 mm probe with selectable hazardous-area approvals, 0.5 m (20 in) probe cable, no standoff adapter, 3.5 in (89 mm) probe penetration, one 3/4-14 npt explosion-proof fitting and one 3/4-14 npt plug, and 3/4-14 NPT mounting thread. The assembly provides a protective externally mounted enclosure, conduit interfaces, an adjustable probe sleeve, seals, and probe-mounting geometry for rotating-machinery measurements.

Installed on a machine casing or bearing housing, it supports a reverse-mount proximity probe and positions the probe tip over the shaft target while protecting the probe connection and cable transition. The installed probe system measures shaft vibration or position and connects to the matched extension cable, Proximitor Sensor, and monitoring channel.

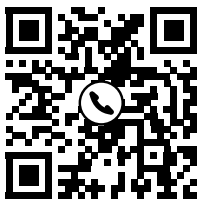
Manufacturer	Bently Nevada
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

External access. Controlled probe geometry.

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SCAN FOR PRODUCT & QUOTE
21000-28-05-00-035-01-02

1. Product Overview and Identity

The 21000-28-05-00-035-01-02 is a Bently Nevada 21000 all-metal external proximity-probe housing assembly. This exact code specifies 3300 XL 8 mm probe with selectable hazardous-area approvals, 0.5 m (20 in) probe cable, no standoff adapter, 3.5 in (89 mm) probe penetration, one 3/4-14 npt explosion-proof fitting and one 3/4-14 npt plug, and 3/4-14 NPT mounting thread. The assembly provides a protective externally mounted enclosure, conduit interfaces, an adjustable probe sleeve, seals, and probe-mounting geometry for rotating-machinery measurements.

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Model Configuration

Code	Official configuration
21000	Aluminum body with 304 stainless-steel sleeve proximity-probe housing assembly.
28	3300 XL 8 mm probe with selectable hazardous-area approvals
05	0.5 m (20 in) probe cable
00	no standoff adapter
035	3.5 in (89 mm) probe penetration
01	one 3/4-14 NPT explosion-proof fitting and one 3/4-14 NPT plug
02	3/4-14 NPT mounting thread

Key Features

- The lightweight aluminum 21000 body is configured with an approved 3300 XL 8 mm probe, 0.5 m lead, and sealed NPT conduit hardware.
- All-metal body, screw-on dome cover, conduit ports, O-rings, probe sleeve, and thread seal form the external assembly.
- The ordered sleeve geometry combines no standoff adapter and 3.5 in (89 mm) probe penetration.
- one 3/4-14 NPT explosion-proof fitting and one 3/4-14 NPT plug and 3/4-14 NPT mounting thread define the external conduit and machine interface.

2. Technical Specifications

Only manufacturer-published information is stated. A value absent for the exact complete suffix is identified rather than inferred.

Parameter	Verified value
Product Type	21000 external proximity-probe housing assembly
Housing Material	Aluminum body with 304 stainless-steel sleeve
Typical Mass	1.1 kg (2.4 lb) typical without fittings
Probe Configuration	3300 XL 8 mm probe with selectable hazardous-area approvals
Probe Cable Length	0.5 m (20 in) probe cable
Standoff Adapter	no standoff adapter
Probe Penetration	3.5 in (89 mm) probe penetration
Conduit Fittings	one 3/4-14 NPT explosion-proof fitting and one 3/4-14 NPT plug
Mounting Thread	3/4-14 NPT mounting thread
Published Body Dimensions	A 83.3 mm; B 161.6 mm; ordered C+D 88.9 mm; E 26.7 mm
Environmental Enclosure	CSA Type 4 family configuration; confirm approval marking for the supplied assembly

Verification Note

The 21000 housing positions and protects a probe; measurement performance depends on the complete matched probe, extension cable, Proximitar Sensor, target, mounting, and monitoring channel.

3. Functions, Applications and Components

Core Functions

- Provides an externally mounted protective enclosure for a reverse-mount proximity probe.
- Positions the probe tip relative to the shaft target using the ordered sleeve and penetration dimensions.
- Routes the probe lead into field conduit through the ordered fittings.
- Supports shaft vibration, position, Keyphasor, or speed measurement when the installed probe system is correctly matched.

Application Areas

Application	System role
Turbine and Compressor Casings	Provides an external access point for a shaft proximity probe.
Fluid-Film Bearings	Supports shaft-relative vibration and position measurements.
Hazardous-Area Machinery	Can support certified installations only when the exact housing, fittings, probe, nameplate, and drawing are approved.
Retrofit Probe Access	Adds an adjustable externally mounted sleeve where internal probe access is limited.
Keyphasor and Speed Locations	Supports phase-reference or speed probes when target geometry and monitoring requirements are satisfied.
API 670 Installations	The housing family is designed for externally mounted proximity-probe applications addressed by API 670.

Compatible Components

- 3300 XL 8 mm probe with selectable hazardous-area approvals and the probe cable specified by this complete ordering code.
- The matching Bently Nevada extension cable and Proximito Sensor for the installed probe family and total system length.
- 3/4-14 NPT mounting thread machine interface and the ordered conduit hardware.
- Bently Nevada monitoring channels configured for the installed proximity transducer system.

Lifecycle Status

Baker Hughes currently publishes Datasheet 141600 for the 21000 housing family. The manufacturer recommends the newer 31000/32000 family where an explosion-proof housing is not required, but does not publish a separate lifecycle phase for 21000-28-05-00-035-01-02.

4. Installation Precautions

- Verify every ordering segment against the housing nameplate and the machine drawing before machining or installation.
- Confirm that the ordered no standoff adapter plus 3.5 in (89 mm) probe penetration places the probe within its adjustment range without side-view or rear-view interference.
- Sleeve lengths over 304 mm (12 in) require additional support; shorter configurations still require stiffness and resonance review.
- Seal conduit entries and the dome cover in accordance with the applicable enclosure and hazardous-area instructions.
- Use only the reverse-mount probe, cable length, fittings, thread seal, and mounting interface defined by the official ordering code.

STOP - Verify before installation

The 21000 housing positions and protects a probe; measurement performance depends on the complete matched probe, extension cable, Proximity Sensor, target, mounting, and monitoring channel.

Use the physical nameplate and current Bently Nevada documents as the controlling records.

5. Official Source and Use Notice

Official source

Baker Hughes / Bently Nevada 21000, 24701, and 164818 Proximity Probe Housing Assemblies Datasheet 141600 - <https://dam.bakerhughes.com/m/10dc6008c2654db1/original/21000-and-24701-Proximity-Probe-Housing-Assemblies-Datasheet-141600-pdf.pdf>

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/21000-28-05-00-035-01-02>

Use Notice

This original Apter Power product-specific reference is prepared from the named Bently Nevada source. It is not a Bently Nevada publication and does not replace the original datasheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.