Bently Nevada 21000-28-05-15-039-03-02

Apter Power installation and commissioning guide

Bently Nevada 21000-28-05-15-039-03-02 is a 21000 aluminum body proximity probe housing assembly configured with a 3300 XL 8 mm probe with selectable approvals and 0.5 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 with selectable approvals
Probe lead	0.5 m
Standoff option	1.5 in standoff adapter
Penetration option	3.9 in probe penetration

System position

Boundary	Installed-system relationship
Machine-case context	The 21000-28-05-15-039-03-02 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 with selectable approvals, 0.5 m lead and 3/4-14 NPT mounting thread only with a verified machine opening and compatible transducer chain.

02 / Before installation

The 28 probe option selects 3300 XL 8 mm probe with selectable approvals; option 05 supplies a 0.5 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	0.5 m
Standoff option	1.5 in standoff adapter
Penetration option	3.9 in probe penetration
C plus D selection	5.4 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 15 specifies 1.5 in standoff adapter, and 039 specifies 3.9 in probe penetration. Their selected C plus D reach is 5.4 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 5.4 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 21000-28-05-15-039-03-02 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 21000-28-05-15-039-03-02?	Code 28 selects 3300 XL 8 mm probe with selectable approvals; the probe is a component of the housing assembly.
How long is the probe lead specified for 21000-28-05-15-039-03-02?	Code 05 selects 0.5 m of probe cable. Check the remaining transducer-system length with the installed extension cable and Proximitor sensor.
How does 21000-28-05-15-039-03-02 establish its standoff position?	Code 15 specifies 1.5 in standoff adapter. The actual machine position also depends on penetration option 039.
What penetration is encoded in 21000-28-05-15-039-03-02?	Option 039 denotes 3.9 in probe penetration; the C plus D selection totals 5.4 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 21000-28-05-15-039-03-02?	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 21000-28-05-15-039-03-02?	Code 02 specifies 3/4-14 NPT mounting thread; do not substitute a different thread or sleeve arrangement.
When does the sleeve of 21000-28-05-15-039-03-02 need additional support?	The manufacturer calls for support when the C plus D reach exceeds 12 in. This configuration selects 5.4 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 31000-16-10-15-040-03-02	Separate catalogue reference
Bently Nevada 31000-16-05-00-033-03-02	Separate catalogue reference
Bently Nevada 330801-28-20-050-03-02	Separate catalogue reference
Bently Nevada 330880-01-20-058-03-02	Separate catalogue reference
Bently Nevada 330880-00-00-000-03-02	Separate catalogue reference
Bently Nevada 330880-16-00-021-03-02	Separate catalogue reference
Bently Nevada 21504-000-040-10-02	Separate catalogue reference

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