Bently Nevada 21000-33-10-00-070-04-02

ENGINEERING GUIDE / FIELD REPLACEMENT AND COMMISSIONING

Bently Nevada 21000-33-10-00-070-04-02 is a 21000 aluminum proximity probe housing assembly configured for a protected 3300 XL 8 mm probe and external machine mounting.

01 Job scope and safe-work boundary

The offered item is the configured housing assembly. Request photos and an itemized offer to confirm the probe, sleeve, cover, seals and separately supplied extension cable or sensor.

Complete marking	Check the six ordering groups of 21000-33-10-00-070-04-02: 33 / 10 / 00 / 070 / 04 / 02, including the 7.0 in penetration and single-plug fitting.
Installed-system context	The 21000 assembly places a proximity probe through the machine case while housing its external cable junction.
Pre-work record	Send the complete 21000-33-10-00-070-04-02 marking and installed-system identifiers for technical review.

Before work starts

Follow the approved site isolation and machinery protection procedure. Record the removed item, connected chain and original channel behavior before disconnecting anything.

Configuration limits

Housing family	21000 aluminum assembly
Probe option	33: 3300 XL 8 mm with connector protector
Probe cable	10: 1.0 m
Standoff adapter	00: none
Probe penetration	070: 7.0 in
Fitting option	04: one 3/4-14 NPT plug

02 Readiness and fit

Match six groups	Compare every group of 21000-33-10-00-070-04-02 with the installed housing and source drawing.
Support the sleeve	Inspect the actual insertion and sleeve support to avoid probe movement or resonance.
Protect the target	Confirm case thread, target clearance and gap adjustment without tip contact.
Seal the housing	Inspect cover, O-rings, conduit port and specified plug against site requirements.

Avoid rating inference	Use actual CA/agency markings and the site drawing to assess hazardous-area suitability.
Check the chain	Record probe, extension cable, sensor and monitor channel before energization.

Why these checks matter

Physical interface	Verify mounting thread, penetration and shaft target clearance before installation.
Complete-system match	Inspect dome cover, seals and conduit ports before closing the assembly.
Site approval	Use actual CA/agency markings and the site drawing to assess hazardous-area suitability.

03 Replacement sequence

01 Record baseline	Send the complete 21000-33-10-00-070-04-02 marking and installed-system identifiers for technical review.
02 Compare offered identity	Compare every order group of 21000-33-10-00-070-04-02 with the installed item and the applicable Bently Nevada system documentation.
03 Prepare interfaces	Inspect the actual insertion and sleeve support to avoid probe movement or resonance.
04 Fit and reconnect	Confirm case thread, target clearance and gap adjustment without tip contact.
05 Inspect connection	Inspect cover, O-rings, conduit port and specified plug against site requirements.
06 Prove operation	Record probe, extension cable, sensor and monitor channel before energization.
07 Keep as-left record	Keep photos of the full marking, housing/fitting contents, mounted penetration, probe chain and monitored acceptance result.

Installed-system relationship

Group 00 omits a standoff adapter, while 070 specifies 7.0 in nominal probe penetration. The source calls for sleeve support when C plus D exceeds 12 in; for this configuration compare actual installed support, side-view clearance and the shaft target before setting the gap.

Application checks

External shaft measurement	Verify mounting thread, penetration and shaft target clearance before installation.
Housing service	Inspect dome cover, seals and conduit ports before closing the assembly.
Probe-chain renewal	Confirm the 1.0 m probe lead and separately selected extension cable/sensor.

Fitting review	Verify the single plug and the site conduit/sealing design against the approved drawing.

04 Commissioning and acceptance

Identity and fit	Compare every order group of 21000-33-10-00-070-04-02 with the installed item and the applicable Bently Nevada system documentation.
Connection continuity	Inspect cover, O-rings, conduit port and specified plug against site requirements.
Configuration review	The 7.0 in penetration must be checked against the machine case and target; the housing alone does not define final gap.
Dynamic proof	Record probe, extension cable, sensor and monitor channel before energization.
Handover	Keep photos of the full marking, housing/fitting contents, mounted penetration, probe chain and monitored acceptance result.

Acceptance by application

External shaft measurement	Verify mounting thread, penetration and shaft target clearance before installation.
Housing service	Inspect dome cover, seals and conduit ports before closing the assembly.
Probe-chain renewal	Confirm the 1.0 m probe lead and separately selected extension cable/sensor.
Fitting review	Verify the single plug and the site conduit/sealing design against the approved drawing.

Engineering questions

How should the installed probe assembly be compared with 21000-33-10-00-070-04-02?	Compare all six groups, photos of the offered housing and probe, and the original drawing; nominal housing family alone is insufficient.
What can make 21000-33-10-00-070-04-02 unsuitable even when its mounting thread fits?	Penetration, sleeve support, probe target and conduit route may differ. Check these mechanical interfaces before installation.
How is the probe chain completed for 21000-33-10-00-070-04-02?	Identify the included 8 mm probe and 1.0 m lead, then select a matching extension cable and 8 mm Proximitor Sensor for the intended system length.
Why should sleeve support be reviewed for 21000-33-10-00-070-04-02?	Long insertion can allow movement or resonance. Compare the actual C plus D dimension and installed support against the manufacturer guidance.

05 Fault isolation and handover

Does the fitting group of 21000-33-10-00-070-04-02 establish an explosion-proof rating?	No. Assess the actual housing version, approval marking, fitted components and site drawing together; the source treats CA housing approvals separately.
What seals and closures should be inspected on 21000-33-10-00-070-04-02?	Inspect the dome cover, O-rings, thread seal, plug and conduit interfaces before closing the assembly.
How should the probe gap be accepted after fitting 21000-33-10-00-070-04-02?	Set the gap using the approved machine procedure and matched transducer chain, then record static output and controlled response.
What should be recorded when 21000-33-10-00-070-04-02 is handed over?	Keep photos of the full marking, housing/fitting contents, mounted penetration, probe chain and monitored acceptance result.

Final record

Keep photos of the full marking, housing/fitting contents, mounted penetration, probe chain and monitored acceptance result.

Evidence and applicability

Bently Nevada 21000, 24701, and 164818 Proximity Probe Housing Assemblies Datasheet, 141600 Rev. AC. Exact order groups decoded from the applicable manufacturer ordering table; system-level operating values apply only to a matched complete chain.

Related product references

Catalogue navigation only; compare the complete installed configuration before selection.

Bently Nevada 330101-04-36-05-02-05

Bently Nevada 330102-00-32-10-02-00

Bently Nevada 330909-00-30-10-02-00

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