Bently Nevada 31000-28-10-15-040-03-02

01 Function and selected configuration

Product function

Bently Nevada 31000-28-10-15-040-03-02 allows access to a radially mounted proximity probe from outside the machine case so gap adjustment and replacement can be performed without dismantling the machine housing.

Selected configuration

The 28 probe selection is the 3300 XL 8 mm configuration. The 10 cable selection gives 1.0 m, the 15 standoff gives 1.5 inches and the 040 penetration gives 4.0 inches; penetration is an installation dimension, not the sensing gap.

Functional path

Machine casing	NPT standoff and sleeve	8 mm probe	External cable connection

Probe family	3300 XL 8 mm
Probe cable length	1.0 m
Standoff length	1.5 in

The 03 fitting arrangement includes two plugs, a 3/4-14 NPT fitting, a 3/4-14 to 1/2-14 NPT stainless-steel reducer and a cable seal grip. The 02 mounting option is 3/4-14 NPT and is required with the selected standoff.

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02 Technical operating envelope

Probe family	3300 XL 8 mm
Probe cable length	1.0 m
Standoff length	1.5 in
Probe penetration	4.0 in
Penetration adjustment	±0.5 in
Mounting thread	3/4-14 NPT

Conduit fitting	3/4-14 NPT
Reducer	3/4-14 to 1/2-14 NPT
Cable entry	Seal grip with selectable grommets
Housing material	PPS
Other assembly elements	Corrosion-resistant stainless steel

The technical values apply to this model in the specified installation and configuration.

Signal interpretation

The 03 fitting arrangement includes two plugs, a 3/4-14 NPT fitting, a 3/4-14 to 1/2-14 NPT stainless-steel reducer and a cable seal grip. The 02 mounting option is 3/4-14 NPT and is required with the selected standoff.

Interface boundary

The PPS housing and corrosion-resistant metal components provide mechanical and environmental protection. This housing is not an explosion-proof enclosure. For radial vibration, the machine casing must be affixed to the bearing so the relative-vibration measurement remains meaningful.

Why does 31000-28-10-15-040-03-02 use the 3/4-14 NPT mounting option?

That mounting option is required with the selected 1.5 inch standoff adapter.

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03 System integration and applications

External radial-probe access

Adjust or replace the probe from outside the machine case.

Radial vibration mounting

Support the selected 8 mm transducer where casing-to-bearing attachment is appropriate.

Keyphasor measurement mounting

Provide a mechanically protected radial probe position for a configured Keyphasor application.

Conduit and sealed cable entry

Connect the selected NPT fittings and seal grip to the installed cable route.

System and supply context

The probe housing assembly is applied in the Machine casing / NPT standoff and sleeve / 8 mm probe / External cable connection arrangement. Select associated equipment for the actual channel or installation.

Application boundary

The technical values apply to this model in the specified installation and configuration. The examples below address the stated product function.

Which probe and lead are selected in 31000-28-10-15-040-03-02?

The assembly is configured for a 3300 XL 8 mm probe with a 1.0 m cable.

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04 Engineering selection decisions

Does the 4.0 inch penetration of 31000-28-10-15-040-03-02 mean a 4.0 inch sensing gap?

No. Penetration is a mounting dimension through the machine case. The probe-to-target gap must be set separately for the matched transducer system.

How much penetration adjustment is available on 31000-28-10-15-040-03-02?

The sleeve adjustment range is ±0.5 inch around the selected penetration dimension.

Is 31000-28-10-15-040-03-02 an explosion-proof enclosure?

No. It provides mechanical and environmental protection. Hazardous-area use requires the appropriate approved transducer system and installation arrangement.

Can 31000-28-10-15-040-03-02 be used as the dual-probe axial-position housing?

The 31000 family is intended principally for radial installations. The separate 21022 housing is specified for dual-probe shaft axial-position measurement.

Retain the eight-millimetre probe chain	Identify the installed 3300 XL 8 mm probe and its 1 m cable, then check the associated extension and Proximitor.
Restore the selected fitting set	Check the two plugs, NPT fitting, reducer and cable seal grip against the installed entry arrangement.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 31000-28-10-15-040-03-02 is unconfirmed.

Replacement assessment

Preserve probe family 3300 XL 8 mm, probe cable length 1.0 m, standoff length 1.5 in. Check probe family and probe cable length against the installed configuration.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; use it together with the applicable manufacturer instructions.

Technical basis

Bently Nevada 31000 and 32000 Proximity Probe Housing Assemblies, 141610 Rev. R.

Related product navigation

- Bently Nevada 330103-00-04-10-02-00
- Bently Nevada 330103-00-06-10-02-00

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries