COMPLETE PRODUCT INFORMATION

31000-16-10-15-040-03-02

Assembly configuration

Bently Nevada 31000-16-10-15-040-03-02 combines an external probe housing, 3300 XL 8 mm probe and 1.0 m cable. It has a 1.5 in standoff and 4.0 in probe penetration.

Item	Configuration / requirement
Assembly type	31000 English proximity probe housing
Installed probe	3300 XL 8 mm probe (option 16)
Probe cable length	1.0 m (39 in)
Standoff adapter	1.5 in (38 mm)
Nominal probe penetration	4.0 in (101.6 mm)
Penetration adjustment	+/-0.5 in (13 mm)
Fittings	Two plugs; 3/4-14 NPT fitting; SST reducer; cable seal grip and grommets
Reducer thread	3/4-14 NPT to 1/2-14 NPT

The complete order string identifies the supplied mechanical arrangement. The configured probe remains part of a matched transducer system with an appropriate extension cable and Proximitor.

Read the six option groups together

The code uses AA for the probe, BB for probe cable, CC for standoff, DDD for penetration, EE for fittings and FF for mounting thread. Retain the leading zeros in every group; the housing number by itself does not define the assembled configuration.

Item	Configuration / requirement
AA / BB	16 / 10 - probe selection and its cable length
CC / DDD	15 / 040 - mounting reach
EE / FF	03 / 02 - fittings package and machine interface

Technical reference: Bently Nevada 141610 Rev. R. Apter Power compilation, 28 October 2026.

PRODUCT SUPPORT

Confirm the complete configuration and supplied documentation.

sales13@apterpower.com

+86 180 3023 5313

SCAN TO CONTACT

COMPLETE PRODUCT INFORMATION

Materials and operating boundaries

Item	Configuration / requirement
Mounting thread	3/4-14 NPT
Housing material	Conductive glass-reinforced PPS
Probe sleeve and chain	AISI 304 stainless steel
Outer sleeve and screws	AISI 303 stainless steel
Enclosure protection	Type 4X; IP66
Retaining-nut torque	29.4 N m (260 in-lb)
Probe temperature range	-51 to +177 deg.C (operating and storage)

Environmental and pressure boundaries

The PPS housing protects the connection against the specified environmental exposure; it is not designed to withstand internal or external pressure. Keep process leakage contained independently of the enclosure.

Long contact with hot water or condensing steam can reduce housing strength. Apply the probe temperature range to the probe only, and separately assess enclosure, seal and cable exposure.

The retaining-nut torque applies to that nut alone. Hole-plug nuts use a separate 0.5 N m (5 in-lb) value. Inspect each fastener and sealing component before service.

Mechanical test conditions

In the typical housing-strength test, the outer sleeve was horizontal and the housing mounted through an end opening. With the cover fastened and grounding liner installed, the assembly supported 912 N applied about 38 mm from the unsupported end. This is a test configuration, not an allowable field design load.

Impact testing covers two separate 4 J impacts at -39 deg. C and 115 deg. C, and a 7 J impact at ambient temperature under the respective test approvals. Inspect a housing after impact rather than using these figures to accept visible damage.

Technical reference: Bently Nevada 141610 Rev. R. Apter Power compilation, 28 October 2026.

PRODUCT SUPPORT

Confirm the complete configuration and supplied documentation.

sales13@apterpower.com

+86 180 3023 5313

SCAN TO CONTACT

COMPLETE PRODUCT INFORMATION

Applications and configuration review

Use	Installation context
Standoff installation	The 1.5 in adapter separates the housing from the machine surface. Check the adapter engagement, service clearance and sleeve position against the mounting drawing.
Radial probe support	The housing carries the probe through the machine case for radial measurements. A rigid bearing-related reference is necessary to distinguish shaft motion from mounting movement.
Reference pulse channels	With a suitable machine target and configured transducer system, the probe can serve a Keyphasor measurement. The housing protects and positions the probe but does not process the pulse.
Accessible maintenance	The removable cover exposes the cable junction for inspection or probe replacement. Restore seals and connector protection after work, then verify the channel response before restart.

System selection

Match the probe, extension cable and Proximitor to the intended monitoring channel. Mechanical fit and similar connector appearance do not establish electrical compatibility. Keep the complete assembly marking in the equipment record.

Use the applicable 3300 XL 8 mm probe instructions, machine mounting drawing and site test procedure for the actual gap setting and return-to-service decision.

Select the housing for the duty

Item	Configuration / requirement
Dual axial measurement	For shaft axial position with dual probes, use the dedicated 21022 arrangement rather than assuming this radial housing is equivalent.
Explosion-proof duty	This PPS housing does not provide explosion-proof protection. A separately engineered assembly is required for that duty.
Process chemistry	High- or low-pH media can erode a probe tip assembly. Provide safe containment and assess the actual process exposure.

Technical reference: Bently Nevada 141610 Rev. R. Apter Power compilation, 28 October 2026.

PRODUCT SUPPORT

Confirm the complete configuration and supplied documentation.

sales13@apterpower.com

+86 180 3023 5313

SCAN TO CONTACT

COMPLETE PRODUCT INFORMATION

Technical questions and answers

How does the standoff affect installation of 31000-16-10-15-040-03-02?

The 15 option provides a 1.5 in standoff, and the 040 option provides 4.0 in nominal probe penetration. Use the assembly drawing to position the housing and probe; the combined C plus D reach is 5.5 in.

Is the 1.0 m probe cable in 31000-16-10-15-040-03-02 the total transducer-system length?

No. It is the probe cable length selected by option 10. The extension cable and Proximitor must be selected as part of the complete matched transducer system; housing selection does not establish that electrical system length.

Does 31000-16-10-15-040-03-02 meet the sleeve-support length condition?

Its combined standoff and penetration is 5.5 in, below the 12 in threshold that requires additional support near the probe. The installed mounting must still be rigid and suitable for the machine vibration environment.

Where can conduit enter the housing on 31000-16-10-15-040-03-02?

There are four openings in the housing base, one on each side, which accept the sleeve, conduit fittings or cable glands. Choose the route around the installed sleeve, fit the supplied seals and close unused openings.

Cable-seal grip selection

The option 03 grommets cover the following cable-size groups. Choose by the actual cable outside diameter and fit the seal correctly; a loose or mismatched grommet defeats the sealed entry.

Grommet range	Cable outside diameter
Small cable group	1/8 to 3/16 in
Intermediate group	1/4 to 5/16 in
Larger cable group	5/16 to 3/8 in

Keep the reducer, cable grip and plugs associated with this fitting package. Their sealing role is separate from the probe sleeve and from the external conduit support.

Technical reference: Bently Nevada 141610 Rev. R. Apter Power compilation, 28 October 2026.

PRODUCT SUPPORT

Confirm the complete configuration and supplied documentation.

sales13@apterpower.com

+86 180 3023 5313

SCAN TO CONTACT

COMPLETE PRODUCT INFORMATION

Operating and purchasing questions

Which temperature limit applies to the probe supplied with 31000-16-10-15-040-03-02?

The 3300 XL 8 mm probe operating and storage range is -51 to +177 degrees C. Assess housing materials, seals, cable routing and process exposure separately before applying that probe rating to the complete installation.

What happens to the probe connection when servicing 31000-16-10-15-040-03-02?

The external housing provides access to the probe cable and extension-cable connection. Follow the safe work procedure, preserve the matched cable chain, restore the connector protection and cover, and verify the sensing gap before return to service.

Can the quotation for 31000-16-10-15-040-03-02 include a specific documentation requirement?

Yes. State the required inspection records, certificates and unit-identification photos when requesting the offer. Their availability and inclusion must be confirmed for the offered unit before the order is accepted.

What information helps prevent an incorrect order for 31000-16-10-15-040-03-02?

Provide the full code without dropping leading zeros, together with the installed assembly label and mounting drawing. Confirm the 1.0 m cable, standoff, penetration and fittings against the offered configuration, then agree quantity, condition and delivery terms in writing.

Related housing configurations

These are separate configurations to review, not confirmed interchangeable replacements.

Product page	Selection note
Bently Nevada 31000-00-00-15-051-01-02	Open this complete configuration and compare all ordering options.
Bently Nevada 31000-00-00-15-023-01-02	Open this complete configuration and compare all ordering options.
Bently Nevada 31000-00-00-15-035-01-02	Open this complete configuration and compare all ordering options.

Technical reference: Bently Nevada 141610 Rev. R. Apter Power compilation, 28 October 2026.

PRODUCT SUPPORT

Confirm the complete configuration and supplied documentation.

sales13@apterpower.com

+86 180 3023 5313

SCAN TO CONTACT