Bently Nevada 330905-00-18-05-02-05

01 Function and selected configuration

Product function

Bently Nevada 330905-00-18-05-02-05 reaches a restricted measurement location with an extended metric case while preserving the small-target characteristics of the NSv system.

Selected configuration

The NSv system is intended for measurement locations where target size or radial clearance restricts the use of larger transducers. The selected probe has a long metric case and a short integral lead, separating the mounting geometry from the cable extension needed by the system.

Functional path

Conductive target	Proximity probe	Matched cable	Proximitor output

Mounting	M10 x 1; 180 mm case; 0 mm unthreaded
Lead configuration	0.5 m; unarmored standard cable
Matched-system scale	7.87 V/mm

The 180 mm case uses M10 x 1 threads and no unthreaded section. Its 0.5 m standard lead terminates in a miniature ClickLoc connector and must remain matched to the NSv extension cable and Proximitor.

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02 Technical operating envelope

Mounting thread	M10 x 1
Unthreaded section	0 mm
Case length	180 mm
Probe length	0.5 m
Cable construction	Standard, unarmored
Connector	Miniature coaxial ClickLoc

System linear range	1.5 mm
System scale factor	7.87 V/mm
Reference gap	1.0 mm
Minimum flat target	8.9 mm diameter
Recommended flat target	At least 13 mm diameter

System values require the matching transducer components and specified target. The selected 0.5 m probe length must be treated as part of the calibrated electrical chain.

Signal interpretation

The 1.5 mm linear range and 7.87 V/mm scale factor belong to the complete matched system; the probe alone does not establish these ratings.

Interface boundary

The reference gap is 1.0 mm. Confirm target material, available travel and correct total electrical length before using the nominal calibration.

What flat-target diameter is recommended for 330905-00-18-05-02-05?

The recommended minimum is 13 mm. The 8.9 mm absolute minimum can involve a change in scale factor.

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03 System integration and applications

Small conductive targets

Apply NSv measurement with target-size-dependent calibration limits.

Restricted radial space

Fit a sensing location where larger probe geometries are unsuitable.

Extended case reach

Use the 180 mm case where the mechanical mounting design requires it.

Closely spaced channels

Assess probe separation and cross-talk in compact machine arrangements.

System and supply context

The probe works with the corresponding extension cable and Proximitor; the supplied item does not include the complete measurement channel.

Application boundary

Apply the M10 x 1 installation to its intended target and keep the selected 0.5 m probe length in the electrical-length calculation.

How long is the case on 330905-00-18-05-02-05?

The selected metric case is 180 mm long with no unthreaded section.

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04 Engineering selection decisions

Why is 330905-00-18-05-02-05 suited to restricted target locations?

The NSv system accommodates smaller targets and constrained clearances; target size and adjacent-probe spacing still determine measurement accuracy.

Does the 0.5 m lead of 330905-00-18-05-02-05 define the entire system length?

No. Add the compatible extension cable length and match the sum to the NSv Proximitor calibration.

How can nearby probes affect 330905-00-18-05-02-05?

Electromagnetic cross-talk can distort the reading; preserve the required probe-tip separation and assess small-shaft geometry.

Is the standard lead of 330905-00-18-05-02-05 protected by armor?

No. The 330905 construction uses an unarmored lead, so route and secure it against mechanical damage.

Target calibration	Assess target material and clearance before applying nominal sensitivity.
Gap setting	Establish the gap using the complete energized measurement chain.

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05 Configuration boundary and references

Lifecycle and support

The current production and factory-support status of 330905-00-18-05-02-05 is unconfirmed.

Replacement assessment

Retain the matched transducer family, total electrical length and target calibration. Recheck the channel response after replacing a component.

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; it does not replace manufacturer instructions.

Technical basis

Bently Nevada 3300 XL NSv Proximity Transducer System, 147385 Rev. R.

Related product navigation

- Bently Nevada 330103-00-07-05-02-00
- Bently Nevada 330103-00-09-10-02-00

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

Product enquiries