330908-22-31-10-01-05

3300 XL NSv Proximity Probe

Apter Power field guide covering identity capture, installed relationships, controlled replacement, commissioning and handover.

NSv mounting identity

The 330908 body uses a 3/8-24 UNF thread without armor. This order code provides 2.2 in of unthreaded reach inside a 3.1 in case, so the installed sleeve and target clearance must be recorded before the probe is disturbed.

Complete identity record

Probe family	3300 XL NSv
Unthreaded length	2.2 in
Overall case length	3.1 in
Total probe length	1.0 m
Connector and cable option	01 - ClickLoc with protector, standard cable
Agency approval option	05 - Multiple approvals
Probe thread	3/8-24 UNF-2A
Probe construction	Standard mount, without armor

Installed relationship

Published values apply to the matched NSv probe, extension cable and Proximitor Sensor

Small-shaft radial vibration

Use the documented target and spacing limits when the shaft is below standard 8 mm-system geometry.

Restricted counterbores

Check counterbore diameter and operating gap before finalizing the installed position.

Axial-position targets

Maintain target flatness and adequate tip separation for the required travel.

Keyphasor duty

Confirm the target feature and receiving-channel settings for phase-reference or speed use.

Evidence boundary

Exact configuration	3/8-24 UNF NSv probe without armor, 2.2 in unthreaded length, 3.1 in case, 1.0 m standard lead, connector protector and multiple approvals
System boundary	Published values apply to the matched NSv probe, extension cable and Proximitor Sensor
Technical reference	Bently Nevada 3300 XL NSv Proximity Transducer System Datasheet 147385 Rev. R

Small-target and clearance readiness

A 1.0 m standard FEP-insulated triaxial lead terminates in a ClickLoc connector with protector. The probe is one element of an NSv system that also requires the correct extension cable and Proximitor Sensor electrical length.

Readiness checks

Retain the 2.2 in reach

Measure the original insertion datum and locknut position before removal.

Check the 3.1 in case fit

Verify the complete port and bracket depth, not only the thread size.

Protect the narrow tip

Keep the sensing face free from impact, contamination and side loading.

Control probe spacing

Review adjacent probe geometry to limit cross-talk on small shafts or axial targets.

Preserve connector protection

Seat the ClickLoc joint finger-tight and refit the protector without pinching the cable.

Commission the NSv chain

Set live gap and compare the restored channel with its accepted baseline.

Technical values used for fit decisions

Cable construction	75 ohm triaxial, FEP insulated
System linear range	1.5 mm (60 mils), matched NSv system
System scale factor	7.87 V/mm (200 mV/mil)
Recommended gap	1.0 mm (40 mils)
Frequency response	0 to 10 kHz, +0/-3 dB typical
Recommended flat target	13 mm diameter minimum
Minimum cable bend radius	25.4 mm

Installed signal or connection path



Readiness boundary

Application scope: Use the probe where small target geometry or restricted side-view clearance makes the documented NSv system appropriate.

Probe replacement sequence

01 Capture	Photograph the complete marking, installed position, connections and companion hardware before disturbance.
02 Isolate	Apply the approved machine or system isolation and prove the required de-energized state.
03 Compare	Check every order-code value and mechanical interface against the offered item and approved drawing.
04 Remove	Release connectors and supports without twisting, pulling or loading the sensing face, cable or armor.
05 Install	Measure the original insertion datum and locknut position before removal. Verify the complete port and bracket depth, not only the thread size.
06 Reconnect	Keep the sensing face free from impact, contamination and side loading. Review adjacent probe geometry to limit cross-talk on small shafts or axial targets.
07 Energize	Use the approved staged procedure and monitor the expected static state before functional testing.
08 Prove	Set live gap and compare the restored channel with its accepted baseline.

Field decisions

When is 330908-22-31-10-01-05 preferable to a standard 8 mm probe?

Use it where counterbore, side-view, rear-view or target-size restrictions require the smaller NSv geometry.

How is the 2.2 in unthreaded reach of 330908-22-31-10-01-05 verified?

Record the installed datum, locknut position and target distance before removal, then reproduce them with the 3.1 in case.

What target diameter should be planned for 330908-22-31-10-01-05?

A 13 mm flat target is the recommended minimum; smaller targets can alter scale factor and require application review.

How should adjacent 330908-22-31-10-01-05 probes be spaced?

Use the NSv guidance for tip separation and shaft geometry; small shafts may require axial offset to limit cross-talk.

Further model-specific decisions

What is protected by option 01 on 330908-22-31-10-01-05?	The ClickLoc probe-to-extension connection receives a connector protector over the standard cable joint.
Can the 1.5 mm range of 330908-22-31-10-01-05 be assigned to the probe alone?	No. It is a matched-system value under the documented target, gap, supply and temperature conditions.
How is 330908-22-31-10-01-05 commissioned in a restricted counterbore?	Set the live gap, check available travel, and compare runout and dynamic response while confirming the counterbore does not distort the far-gap response.
Which order-code elements must be photographed on 330908-22-31-10-01-05?	Capture 22, 31, 10, 01 and 05 with the full base number, plus the installed orientation and companion cable identities.

Gap, cross-talk and response proof

Identity accepted	Complete order code and supplied execution agree with the approved record.
Mechanical acceptance	Mounting, insertion, routing, support and connector condition match the documented arrangement.
Electrical acceptance	Continuity, static bias or gap and receiving-channel state are within the approved baseline.
Functional acceptance	Representative measurement or connection response agrees with the recorded machine condition.
Handover record	Retain photographs, as-left values, companion identities, deviations and responsible release.

Release record

As-found evidence	Complete marking, installed position, connection map and baseline readings retained.
As-left evidence	Installed identity, mechanical datum, static reading and functional result retained.
Approval basis	Site procedure, applicable manufacturer document and responsible release recorded.

Verified related product references

Recommended product	Bently Nevada 330980-70-05
Recommended product	Bently Nevada 330425-01-00
Recommended product	Bently Nevada 330500-07-00
Recommended product	Bently Nevada 330706-005-046-10-02-00
Recommended product	Bently Nevada 200355-00-00-00

Discuss the exact marking and installed relationship with Apter Power.
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