Bently Nevada 86691-01250-0400-15

Engineering Installation, Diagnostic and Acceptance Guide

Bently Nevada 86691-01250-0400-15 is a legacy custom vibration/proximity probe documented for a 7200-series axial-displacement channel. Its exact geometry and calibration must be matched to the installed drawing and companion electronics.

01 Work package

Complete model	86691-01250-0400-15
Product type	Legacy custom vibration/proximity probe
Manufacturer	Bently Nevada
Technical source	Bently Nevada 7200 proximity transducer original technical information and exact-model installed-equipment record

Field decisions

1 Establish identity

Capture the full marking, installed companion components and baseline before disconnection.

2 Inspect interfaces

Verify mounting, cable, connector, armor, approval and environmental boundaries.

3 Fit the exact chain

Preserve the documented probe-cable-Proximitor or sensor-monitor relationship.

4 Prove response

Use the approved stopped-machine and operating acceptance procedure.

5 Record as left

Save markings, configuration, test values and operating observations.

Pre-work evidence

Installed drawing	Record the drawing, machine location and channel designation that govern 86691-01250-0400-15.
Probe marking	Capture the complete order identity and any tag or revision visible on the delivered item.
Mechanical reference	Record thread or sleeve datum, insertion depth, lock position and expected target travel.
Cable identity	Confirm lead construction, connector condition, routing, strain relief and electrical-length relationship.
Companion electronics	Record the matching extension cable, Proximitor or signal conditioner and monitor channel.

02 Interface and configuration map

Product type	Legacy custom vibration/proximity probe
Complete order identity	86691-01250-0400-15
Documented family	7200 series
Documented application	Axial displacement measurement
Measurement principle	Eddy-current non-contact sensing
Electrical role	Passive probe in a matched transducer chain
Standalone voltage output	None
Required companion components	Documented cable and 7200 signal conditioner
Target requirement	Conductive target characterized for the installed channel
Mechanical datum	Installed probe tag, reach and lock position must be retained
Compatibility boundary	Custom option fields are not decoded with standard 3300 tables
Family reference cable	95-ohm coaxial in standard 7200 5/8 mm systems
Family reference frequency	0 to 10 kHz for standard matched 7200 5/8 mm systems
Evidence boundary	Exact custom electrical and dimensional ratings require the installation drawing

Chain controls

Target condition	Confirm target material, width, runout surface and clearance from nearby conductive material.
Static baseline	Record stopped-machine gap or bias and compare it with the approved maintenance baseline.
Operating baseline	Record monitor indication and expected response after the complete channel is returned to service.

03 Installation workflow

Confirm the complete marking

Match every field of 86691-01250-0400-15 with the installed record before removal or installation.

Protect the sensing face

Keep the tip, connector and cable free from impact, moisture, metal chips and unsupported loading.

Preserve the mechanical datum

Record reach, thread engagement, locknut position and target relationship before disturbing the installed component.

Control the cable route

Maintain the approved bend radius, separation and strain relief; do not twist or crush the coaxial path.

Restore the operating point

Use the approved stopped-machine procedure and confirm expected target travel remains in the documented working region.

Prove the complete channel

Verify the as-left electrical reading, monitor indication and operating response before return to service.

Application checks

Radial shaft vibration

Use a documented bearing location and matched transducer chain to observe shaft motion relative to the probe mounting.

Axial position

Orient the probe toward an approved conductive thrust target and keep expected travel inside the characterized working region.

Phase or speed reference

Use only where the installed target feature and monitoring channel are approved for once-per-turn reference measurement.

Legacy-channel maintenance

Preserve the exact mechanical identity, cable construction, system length and companion electronics recorded for the installed channel.

Controlled sequence

01 Isolate	Place the monitored machine and channel in the approved maintenance state; prove the required isolation.
02 Photograph	Capture 86691-01250-0400-15, the installed datum, connector, route and companion-component markings.
03 Measure	Record mechanical position and the applicable stopped-machine electrical reading before removal.
04 Compare	Check delivered identity, interfaces and evidence against the approved drawing and spare-parts record.
05 Install	Fit without twisting the lead; preserve thread engagement, target clearance, bend radius and strain relief.
06 Set point	Establish the operating gap or datum only with the approved stopped-machine procedure.
07 Prove	Compare local reading, monitor indication and controlled operating response with the accepted baseline.
08 Handover	Record as-left values, photographs, deviations, responsible technician and release approval.

04 Diagnostic decision table

How should the custom drawing identity for 86691-01250-0400-15 be verified?	Compare the complete code, probe tag, service location and drawing reference with the machine records. Do not decode the custom fields with a standard 21504 or current 3300 table.
How should the axial target travel be reviewed for 86691-01250-0400-15?	Record thrust-bearing clearances and the known rotor position, then confirm that the expected travel remains inside the characterized channel span before setting the gap.
Which signal conditioner can be connected to 86691-01250-0400-15?	Use only the conditioner and cable combination documented for the installed 7200 channel. Confirm electrical length and calibration records rather than relying on connector fit.
What evidence is needed before substituting another probe for 86691-01250-0400-15?	Require a documented comparison of geometry, target, cable impedance and length, signal conditioner, scale, linear range, temperature and approval requirements.
How should the complete marking of 86691-01250-0400-15 be recorded before removal?	Photograph the full order identity, installed position, companion components and cable route. Save the stopped-machine baseline so the replacement can be returned to the same documented configuration.
Which companion-component check is required before installing 86691-01250-0400-15?	Confirm the probe, extension cable and Proximitor or signal conditioner identities as a documented chain. Connector fit alone does not establish electrical calibration.
How should cable and connector integrity be tested for 86691-01250-0400-15?	Isolate the channel, inspect contacts for moisture, contamination and damage, verify continuity and insulation with an approved method, and support the cable so the connector carries no tensile load.
What commissioning evidence should be retained for 86691-01250-0400-15?	Retain complete markings, mechanical datum, companion identities, wiring or chain-length checks, as-left measurements and the operating response accepted by the maintenance authority.

Release review

Installation relationship	Preserve the probe tag, axial reference, reach and lock position recorded for the installed machine.
Calibration boundary	Use only with the cable and 7200 signal conditioner documented for the channel.
Technical reference	Bently Nevada 7200 proximity-transducer technical information and the exact-model installed-equipment record.

Engineering questions

How should the custom drawing identity for 86691-01250-0400-15 be verified?	Compare the complete code, probe tag, service location and drawing reference with the machine records. Do not decode the custom fields with a standard 21504 or current 3300 table.
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How should the complete marking of 86691-01250-0400-15 be recorded before removal?	Photograph the full order identity, installed position, companion components and cable route. Save the stopped-machine baseline so the replacement can be returned to the same documented configuration.
Which companion-component check is required before installing 86691-01250-0400-15?	Confirm the probe, extension cable and Proximitor or signal conditioner identities as a documented chain. Connector fit alone does not establish electrical calibration.

How should cable and connector integrity be tested for 86691-01250-0400-15?	Isolate the channel, inspect contacts for moisture, contamination and damage, verify continuity and insulation with an approved method, and support the cable so the connector carries no tensile load.
What commissioning evidence should be retained for 86691-01250-0400-15?	Retain complete markings, mechanical datum, companion identities, wiring or chain-length checks, as-left measurements and the operating response accepted by the maintenance authority.

Acceptance and support

Retain the full marking, installed-chain identities, test readings and approved machine configuration. Confirm the exact offered item and included scope in the written quotation.

Discuss the exact marking and installed application with Apter Power.
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Verified related product references

Related product	330930-040-03-00
Related product	84661-96
Related product	330102-00-28-10-02-05
Related product	330104-00-16-10-02-00

Commissioning record template

Installed asset	Machine, bearing, channel or cabinet reference
Companion identities	Probe, cable, sensor, interface or monitor markings
Mechanical datum	Mounting reference, reach, alignment or sealing condition
Electrical datum	Chain length, connector, shield, supply or input assignment
Before-work baseline	Gap, bias, vibration, continuity or channel observation
As-left result	Final measured value and functional proof
Approval basis	Applicable drawing, control requirement or site procedure
Handover	Technician, date, revision and maintenance-record location

Handover note

A replacement is complete only after the installed identity, physical interfaces, measured response and configuration record agree. Escalate any mismatch before the channel returns to protection or monitoring service.