Bently Nevada 990-05-70-03-05

01 Establish the measurement boundary

1 Retain the receiver scale

Identify 990-05-70-03-05 and record the 0-5 mils peak-to-peak scale in the controller. Keep peak-to-peak displacement units distinct from RMS or velocity scaling.

2 Identify the complete transducer chain

Record probe and extension markings and confirm their combined 7.0 m electrical length. Preserve the existing calibrated chain; do not shorten or splice its coaxial cable.

Input chain	One compatible 3300 NSv probe plus extension
Mounting	DIN clips and screws
Measurement	Radial vibration

02 Prepare the loop and mounting

1 Put protection in a controlled state

Place the affected machinery protection loop in its approved maintenance condition before disconnecting the transmitter. Confirm that test currents will not cause an unintended alarm action.

2 Check terminal power and burden

Verify the power-source polarity and total receiver-plus-cable burden. The transmitter terminals require +12 to +35 VDC; the 1000-ohm maximum applies at 35 VDC.

Power path	Two-wire loop
Full-scale current	20 mA
Zero-scale current	4 mA

03 Reconnect the calibrated system

1 Seat the probe connection

Inspect coaxial connectors and protect them from contamination. Retain the selected mounting and secure the probe/extension connection without modifying the calibrated cable.

2 Protect the diagnostic reference

Treat PROX OUT and COM as non-isolated. Use the prescribed test adapter for grounded AC-powered instruments; do not introduce an unintended ground path through the test equipment.

Electrical length	7.0 m
PROX OUT loading	10 kilohms output; calibrated for 10 megohms
BNC test lead	3 m maximum

04 Verify the proportional signal

1 Apply a controlled test input

Use a AC signal generator through the designated TEST input. Compare loop current and controller indication at the appropriate points across the 0-5 mils peak-to-peak span.

2 Separate transient and fault states

Observe the approximately 2-3 second initial inhibit and fault-recovery delay. Below 3.6 mA must be interpreted as Not OK rather than a valid low measurement.

Output test	Receiver and measured current agree
Adjustment	Non-interacting zero and span
Fault recovery	Stable reading after corrected connection

05 Return the measurement to service

1 Restore the actual probe input

Remove the test stimulus using the approved procedure and reconnect the real measurement path. Verify the physical signal and receiver indication before enabling the protection function.

2 Retain the calibration evidence

Record 990-05-70-03-05, the 7.0 m chain, selected mounting, actual approval marking and loop results. Clear only the maintenance bypasses authorized for this task after all checks are satisfactory.

Technical basis: Bently Nevada 990 Vibration Transmitter, 141612 Rev. Y.

Related product navigation

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