Bently Nevada 990-05-70-01-05

01 NSv electrical length and amplitude units

1. ### Match the 7 m NSv chain

   Identify the probe and extension combination before connecting the transmitter. Keep the selected total electrical length consistent with the 70 configuration.

2. ### Retain peak-to-peak scaling

   Configure the controller input for the 0–5 mil peak-to-peak range. Do not treat the loop value as RMS vibration or an instantaneous waveform.

Full-scale vibration	0–5 mil pp (ordering range: 0–125 µm pp)
NSv system length	7 m

02 Rail mounting and loop burden

1 Check DIN-rail retention

Install the selected 35 mm DIN-rail arrangement securely and provide access to the terminals. Keep the transmitter within its −35 to +85 °C operating environment.

2 Calculate the loop burden

Measure the available supply and total receiver/cable resistance. The 1,000-ohm maximum is associated with 35 V DC and must not be applied at a lower voltage without calculation.

Loop output	4–20 mA, two wire
Terminal supply	+12 to +35 V DC
Maximum loop resistance	1,000 Ω at 35 V DC
Mounting	35 mm DIN-rail clips

03 Probe condition and startup inhibit

1 Verify the normal probe gap

Set the probe gap within the applicable NSv/transmitter range using the prescribed procedure. Confirm the static signal before interpreting the vibration amplitude.

2 Allow the startup inhibit

Observe the initial Not OK output for the expected 2–3 seconds. Investigate a persistent low-current state rather than masking it in the controller logic.

Startup inhibit	2–3 s
Transmitter temperature	−35 to +85 °C

04 TEST input and dynamic signal output

1 Use TEST input for loop checks

Apply the approved test-signal procedure to verify the transmitter and receiver scaling. Keep the TEST-input accuracy separate from the probe-chain calibration contribution.

2 Isolate dynamic test equipment

Use the applicable test adapter when connecting grounded AC-powered instruments to PROX OUT. Preserve the isolation of the machinery loop during diagnostic work.

Loop accuracy	±1.5% FS from TEST input, additional to probe scale-factor error
PROX OUT impedance	10 kΩ, calibrated for 10 MΩ load

05 Fault-current response and channel record

1 Verify fault and recovery behavior

Under an approved maintenance condition, check the expected Not OK indication and recovery. Confirm that the controller distinguishes a fault current from a valid low-vibration reading.

2 Retain the amplitude-channel record

Save the 7 m chain identity, loop supply and burden, scaling, startup behavior and diagnostic connection method. Release only after normal and fault indications are both understood.

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

Related product navigation

- Bently Nevada 330180-90-05
- Bently Nevada 330103-00-06-10-02-00

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