Bently Nevada 330525-01

01 Housing measurement point and connector

1 Choose a representative housing point

Locate the sensor where machine vibration is transmitted through a rigid housing path. Avoid a loose cover or flexible mounting that introduces its own response.

2 Match the weatherproof connection

Inspect the mating extension-cable assembly and connector seals. The environmental installation rating depends on this connection being complete and correctly fitted.

Connector	2-pin MIL-C-26482
Case material	316L stainless steel

02 Negative supply and velocity convention

1 Confirm the negative supply

Verify the −22 to −30 V DC supply arrangement and the receiving circuit's 2.5–6.0 mA bias capability. Keep polarity consistent with the sensor wiring.

2 Retain the motion convention

Record the measurement direction and pin-A polarity convention. This is important when comparing phase or motion direction with another channel.

Supply	−22 to −30 V DC
Bias current	2.5–6.0 mA

03 Sensitivity setup and static bias

1 Set the velocity sensitivity

Configure the monitor for 100 mV/in/s or 3.94 mV/mm/s as appropriate. Keep the selected engineering units and amplitude convention with the channel record.

2 Check the static bias

Measure powered bias and assess it against the −12 ±3 V DC specification over temperature. Resolve a supply or cable fault before dynamic testing.

Sensitivity	3.94 mV/mm/s (100 mV/in/s), ±5%
Output bias	−12 ±3 V DC over temperature, referenced to pin A
Dynamic impedance	<2,400 Ω

04 Response band and field cable condition

1 Test within the response band

Use a defined verification frequency and amplitude. Apply the appropriate response tolerance, particularly near the lower-frequency boundary.

2 Inspect cable routing

Maintain the specified cable bend allowance and protect the joint from mechanical load. Keep the connection intact in wet or dusty locations.

Frequency response	4.5–2000 Hz, ±3 dB
Flat-response band	6–1000 Hz, ±0.9 dB
Velocity amplitude	1,270 mm/s peak
Amplitude linearity	±2% to 152 mm/s peak

05 Installed signal and environmental record

1 Compare the installed vibration signal

Verify the sensor and receiving channel against a suitable reference at the same location and direction. Investigate mounting resonance before changing calibration values.

2 Retain the environmental boundary

Save mounting position, cable assembly, electrical measurements and verification conditions. Confirm that the application remains non-submerged and within the operating-temperature range.

Technical basis: Bently Nevada 330525 Velomitor XA Piezo-velocity Sensor, 141633 Rev. M.

Related product navigation

Bently Nevada 330180-50-00

Bently Nevada 330103-00-14-10-01-00

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