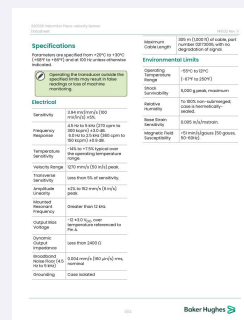


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

330500-01-01

Piezo-Velocity Vibration Sensor



PRODUCT	330500-01-01
DOCUMENT TYPE	Installation Instructions
PRODUCT FUNCTION	Piezo-Velocity Vibration Sensor
OFFICIAL SOURCE	Bently Nevada 330500 Velomitor datasheet 141632

Use this guide with the complete manufacturer documentation and the controlled site procedure. Isolate all energy sources, preserve the exact model identity and verify every connection before energising.

01

PRE-INSTALLATION VERIFICATION

- Confirm the complete 330500-01-01 identification and the documented piezo-velocity vibration sensor configuration.
- Record the installed position, connector orientation, cable routing, grounding and adjacent equipment before removal.
- Isolate electrical, pneumatic and stored energy sources using the approved site procedure.
- Use the official drawing and terminal information shown on the following page; do not infer connections from appearance.
- Inspect the replacement unit, mating hardware and environmental conditions before installation.

SENSOR MOUNTING AND SIGNAL CONNECTIONS

Official manufacturer installation material reproduced from Bently Nevada 330500 Velomitor datasheet 141632. The drawings retain their original aspect ratio and technical meaning.

330500 Velomitor Piezo-velocity Sensor Datasheet		140932 Rev. V	
Specifications Parameters are specified from +20°C to +30°C (+68°F to +86°F) and at 100 Hz unless otherwise indicated.		Maximum Cable Length 305 m (1000 ft) of cable, part number 02173006, with no degradation of signal.	
 Operating the transducer outside the specified limits may result in false readings or loss of machine monitoring.		Environmental Limits	
Electrical		Operating Temperature Range -55°C to 121°C (-67°F to 250°F)	
Sensitivity	3.54 mV/(mm/s) (100 mV/in/s) ±5%	Shock Survivability	5,000 g peak, maximum
Frequency Response	4.5 Hz to 5 kHz (270 cpm to 300 kcpm) ±3.0 dB. 6.0 Hz to 2.5 kHz (360 cpm to 150 kcpm) ±0.9 dB.	Relative Humidity	To 100% non-submerged; case is hermetically-sealed.
Temperature Sensitivity	-14% to +7.5% typical over the operating temperature range.	Base Strain Sensitivity	0.005 in/s/mstrain.
Velocity Range	1270 mm/s (50 in/s) peak.	Magnetic Field Susceptibility	<50 min/s/gauss (50 gauss, 50-60Hz).
Transverse Sensitivity	Less than 5% of sensitivity.		
Amplitude Linearity	±2% to 152 mm/s (6 in/s) peak.		
Mounted Resonant Frequency	Greater than 12 kHz.		
Output Bias Voltage	-12 ±3.0 V _{DC} over temperature referenced to Pin A.		
Dynamic Output Impedance	Less than 2400 Ω		
Broadband Noise Floor (4.5 Hz to 5 kHz)	0.004 mm/s (160 µin/s) rms, nominal		
Grounding	Case isolated		

3/3

Baker Hughes

330500 Velomitor Piezo-velocity Sensor Datasheet	140932 Rev. V
---	---------------

Graphs and Figures

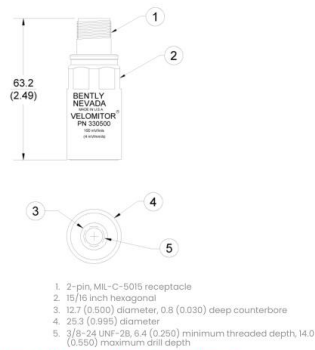


Figure 1: Velomitor Piezo-Velocity Sensor Dimensional Drawing

11/13

Baker Hughes

03

INSTALLATION AND CONNECTION CHECKS

- Install the unit only in the documented mounting position with the specified companion hardware.
- Match every keyed connector, terminal, conductor, shield and protective-earth point to the official drawing.
- Maintain the documented separation, bend radius, torque, cooling clearance and environmental limits that apply to the product.
- Before energising, perform continuity, polarity, insulation and mechanical-retention checks appropriate to the circuit.
- Do not bypass interlocks, diagnostics, protective devices or approved safety functions during commissioning.

04

INITIAL COMMISSIONING CHECKS

- Restore power or process connections in the approved sequence and observe startup diagnostics.
- Verify communications, channel status, sensor response, drive state or controller operation as applicable.
- Test the affected function at a safe operating point and confirm alarms, trips and feedback paths.
- Record the exact model, configuration, test results and final drawing references in the maintenance record.

05

CONTROLLED DOCUMENTS

Official source	Bently Nevada 330500 Velomitor datasheet 141632
Product record	330500-01-01
Document	Amikon Installation Instructions
Support	INFO@AMIKON.CN