

# 330500-04-00

## Velomitor Piezo-velocity Sensor

### PRODUCT TECHNICAL REFERENCE

Bently Nevada 330500-04-00 is a solid-state Velomitor piezo-velocity sensor supplied with a 1/4-20 UNC mounting-thread adaptor and no agency-approval option. It measures absolute bearing-housing, casing or structural vibration for machinery monitoring.

#### OFFICIAL SOURCE

330500 Velomitor Piezo-velocity Sensor Datasheet | 141632 Rev. V

# Verified technical profile

Velomitor Piezo-velocity Sensor

|                          |                                  |
|--------------------------|----------------------------------|
| Sensor type              | Piezo-velocity accelerometer     |
| Sensitivity              | 3.94 mV/mm/s (100 mV/in/s) +/-5% |
| Frequency response       | 4.5 Hz-5 kHz +/-3.0 dB           |
| Velocity range           | 1270 mm/s (50 in/s) peak         |
| Output bias              | -12 +/-3.0 Vdc                   |
| Dynamic output impedance | <2400 ohm                        |
| Grounding                | Case isolated                    |
| Operating temperature    | -55 to 121 deg C                 |
| Connector                | 2-pin MIL-C-5015                 |
| Mounting adaptor         | 1/4-20 UNC                       |
| Agency approval option   | Not required                     |
| Maximum cable length     | 305 m (1000 ft)                  |

Dimensions and weight are intentionally excluded from the product fields for this batch.

# System role and engineering boundaries

Bently Nevada 330500-04-00 is a solid-state Velomitor piezo-velocity sensor supplied with a 1/4-20 UNC mounting-thread adaptor and no agency-approval option. It measures absolute bearing-housing, casing or structural vibration for machinery monitoring.

1

Measures absolute vibration at the machine housing or structural mounting point

2

Uses solid-state integrated electronics with no moving sensing parts

3

Permits vertical, horizontal or other approved mounting orientation

4

Provides a case-isolated dynamic velocity signal for monitoring

## ENGINEERING NOTE

Mount 330500-04-00 firmly on the bearing housing or machine casing using the supplied 1/4-20 UNC adaptor and the documented torque range. Confirm cable loading, case isolation and signal polarity before accepting the vibration channel.

# Industrial application matrix

Four source-supported operating contexts for this exact product.

|                                                                                                                                                                   |                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div><b>Bearing-housing vibration protection</b></div><div>Measures transmitted casing vibration where rotor motion reaches the bearing housing.</div></div> | <div><div><b>Machine-casing condition trending</b></div><div>Supplies a velocity signal for detecting changes associated with imbalance or misalignment.</div></div> |
| <div><div><b>Structural vibration assessment</b></div><div>Supports measurement on a rigid structural point selected for meaningful machine response.</div></div> | <div><div><b>Generator stator-frame monitoring</b></div><div>Can support documented Velomitor measurements on generator frame or core structures.</div></div>        |

# Related-series navigation

Eight verified Apter Power product pages, kept separate from the manufacturer source record.

| RELATED APTER POWER SERIES PAGES |                                           |
|----------------------------------|-------------------------------------------|
| 01                               | 330901-00-14-10-02-00 NSv proximity probe |
| 02                               | 330909-00-60-10-01-00 armored NSv probe   |
| 03                               | 330180-12-05 Proximitor sensor            |
| 04                               | 190501-10-00-00 Velomitor CT              |
| 05                               | 9200-06-01-11-04 Seismoprobe transducer   |
| 06                               | 330780-90-05 11 mm Proximitor sensor      |
| 07                               | 3500/50 tachometer module                 |
| 08                               | 3500/42M 176449-02 seismic monitor        |

Navigation links only - not manufacturer evidence for technical parameters.

## SOURCE RECORD

330500 Velomitor Piezo-velocity Sensor Datasheet | 141632 Rev. V

### APTER POWER SALES TEAM

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