

APTER POWER PRODUCT MANUAL

74712-03-11-02-00

Bently Nevada 74712 high-temperature Seismoprobe velocity transducer

The 74712-03-11-02-00 is a Bently Nevada 74712 high-temperature two-wire Seismoprobe velocity transducer calibrated for 90 +/-2.5 degrees from vertical, with a 4.5 Hz minimum operating frequency, an isolated circular M10 x 1 mounting base, a top-mount connector, and no agency approval option.

Mounted on a bearing housing or machine casing, its internal seismic mechanism produces a voltage proportional to casing vibration velocity. The two-wire signal is routed through a compatible high-temperature cable to a Bently Nevada monitor or vibration data-collection input for continuous condition monitoring of rotating equipment.

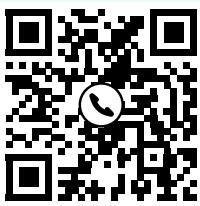
Manufacturer	Bently Nevada
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Right-angle calibration. High-temperature casing protection.

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SCAN FOR PRODUCT & QUOTE

74712-03-11-02-00

1. Product Overview and Identity

The 74712-03-11-02-00 is a Bently Nevada 74712 high-temperature two-wire Seismoprobe velocity transducer calibrated for 90 +/-2.5 degrees from vertical, with a 4.5 Hz minimum operating frequency, an isolated circular M10 x 1 mounting base, a top-mount connector, and no agency approval option.

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Model Configuration

Code	Official configuration
74712	High-temperature two-wire Seismoprobe velocity transducer.
03	90 +/-2.5 degree mounting orientation; 4.5 Hz minimum operating frequency.
11	Isolated circular base with M10 x 1 stud.
02	Top-mount connector.
00	No agency approvals ordered.

Key Features

- Factory orientation code 03 calibrates this unit for 90-degree mounting.
- The 74712 family operates continuously to +204 C for high-temperature casing measurements.
- The isolated M10 x 1 base helps break unwanted ground paths at the mounting interface.
- Top-mount connector geometry routes the separate cable axially from the sensor body.

2. Technical Specifications

Only manufacturer-published information is stated. A value absent for the exact complete suffix is identified rather than inferred.

Parameter	Verified value
Product Type	74712 high-temperature two-wire velocity transducer
Ordered Mounting Orientation	90 +/-2.5 degrees
Minimum Operating Frequency	4.5 Hz (270 cpm)
Frequency Response	4.5 to 1000 Hz, +0/-3 dB typical for this option
Sensitivity	20 mV/mm/s (500 mV/in/s), +/-5%
Calibration Load	10 kohm, output across pins A and B
Dynamic Displacement Range	2.54 mm (0.100 in) peak-to-peak maximum
Amplitude Linearity	+/-5% from 0.254 to 127 mm/s at 100 Hz
Coil Resistance	1.25 kohm +/-5%
Locked-Coil Inductance	125 mH typical
Operating and Storage Temperature	-29 C to +204 C (-20 F to +400 F)
Mounting Base	Isolated circular M10 x 1
Connector	Top mount
Recommended Mounting Torque	5.6 N m (50 in-lb)
Typical Dimensions	102 mm high x 41 mm diameter, depending on connector
Typical Weight	480 g (17 oz)
Approval Option	00 - no approvals

Verification Note

Preserve the ordered 90-degree orientation, rigid M10 x 1 mounting, top connector clearance, compatible high-temperature cable, 10 kohm load, and option-00 approval status.

3. Functions, Applications and Components

Core Functions

- Converts casing vibration velocity into a proportional two-wire voltage signal.
- Supports continuous housing-vibration trending and alarm inputs.
- Extends velocity measurement into high-temperature machine locations.
- Provides a direction-sensitive signal when installed at its specified orientation.

Application Areas

Application	System role
Steam Turbine Casings	Measures absolute casing vibration at elevated temperatures.
Gas Turbine Bearings	Monitors bearing-housing velocity where a high-temperature sensor is required.
Compressors	Tracks structural vibration transmitted to the machine case.
Large Pumps	Supports continuous velocity monitoring at bearing housings.
Fans and Blowers	Measures housing vibration for balance and mechanical-condition assessment.
Protected Enclosures	Standard installation uses a protected enclosure with field wiring in conduit.

Compatible Components

- An 84508, 84509, 84660, 84510, or 87143 high-temperature cable selected for the required termination and environment.
- A Bently Nevada 3300 or 3500 monitor input compatible with the Seismoprobe velocity signal.
- An M10 x 1 mounting point installed to the official torque and surface-preparation requirements.
- Optional 21128 or other approved protective housing when required by the environment.

Lifecycle Status

Baker Hughes currently publishes Datasheet 141626 Rev. V and lists every option used in 74712-03-11-02-00. No separate lifecycle phase is published for this exact suffix.

4. Installation Precautions

- Install the transducer at 90 +/-2.5 degrees from vertical as viewed from the driver end of the machine.
- Prepare a rigid flat mounting surface and tighten the M10 x 1 base to the published 5.6 N m torque.
- Route the separate high-temperature cable in protected conduit and keep connections dry and mechanically supported.
- Use a 10 kohm compatible input and verify polarity, shielding, frequency response, and channel scaling.
- Do not infer hazardous-area certification: final option 00 orders no agency approval.

STOP - Verify before installation

Preserve the ordered 90-degree orientation, rigid M10 x 1 mounting, top connector clearance, compatible high-temperature cable, 10 kohm load, and option-00 approval status.

Use the physical nameplate and current Bently Nevada documents as the controlling records.

5. Official Source and Use Notice

Official source

Baker Hughes / Bently Nevada 9200 and 74712 Seismoprobe Velocity Transducers Datasheet 141626 Rev. V - <https://dam.bakerhughes.com/m/7b3b66d04b57d922/original/9200-and-74712-Seismoprobe-Velocity-Transducers-Datasheet-141626-pdf.pdf>

Apter Power product page

<https://www.apterpower.com/Bently-Nevada/74712-03-11-02-00>

Use Notice

This original Apter Power product-specific reference is prepared from the named Bently Nevada source. It is not a Bently Nevada publication and does not replace the original datasheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.