

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

74712-03-11-02-00

HIGH-TEMPERATURE TWO-WIRE SEISMOPROBE VELOCITY TRANSDUCER

Used with the applicable 9200 and 74712 Seismoprobe Velocity Transducers system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official pages follow this cover with source pagination retained.

141626 Rev. V

9200 and 74712 Seismoprobe Velocity Transducers

Datasheet

Cordant™

141626 Rev. V



Description

Bently Nevada™ Seismoprobe Velocity Transducer Systems are designed to measure absolute (relative to free space) bearing housing, casing, or structural vibration. The two-wire systems consist of a transducer and appropriate cable.

The Seismoprobe family of velocity transducers is a two-wire design that uses moving-coil technology. It provides a voltage output directly proportional to the transducer's vibration velocity.

Moving-coil transducers are less sensitive to impact or impulsive excitation than solid-state velocity transducers, which are inherently accelerometers with embedded integration electronics.

Moving-coil transducers are less sensitive to impact or impulsive excitation and can represent a good choice for certain applications. Because they don't require external power, they are convenient for portable measurement applications.



For most installations, Bently Nevada's Velomitor family of velocity transducers, which incorporate solid-state technology, provide improved performance and ruggedness for casing velocity measurement applications.



Ordering Information



For the detailed listing of country and product specific approvals, refer to the Approvals Quick Reference Guide (document 108M1756) at Bently.com.



An isolated base ('06' thru '09', or '11', '12' in Mounting Base Option) is required when '04' Agency Approval Option is selected.

Two-wire Transducer

9200-AA-BB-CC-DD

A: Transducer Mounting Angle/Minimum Operating Frequency Option

01	0 ±2.5, 4.5 Hz (270 cpm)
02	45 ±2.5, 4.5 Hz (270 cpm)
03	90 ±2.5, 4.5 Hz (270 cpm)
06	0 ±100, 10 Hz (600 cpm)
09	0 ±180, 15 Hz (900 cpm)

B: Connector/Cable Option

01	Top Mount (no cable)
02	Side Mount (no cable)
05	Terminal block top mount (no cable)

10 through 50

Integral hardline cable (see Figure 7 for example). Option number corresponds to cable length in feet. Standard cable lengths are shown below. Other cable lengths between 7 feet and 50 feet may be available through custom products. When ordering for hazardous area

10	10 feet (3.0 meter)
15	15 feet (4.6 meter)

22	22 feet (6.7 meter)
32	32 feet (9.8 meter)
50	50 feet (15.2 meter)

C: Mounting Base Option

01	Circular; 1/4-20 UNC stud
02	Circular; 1/4-28 UNF stud
03	Rectangular flange
04	Circular; with three 8-32 threaded studs on a 44 mm (1.75 in) diameter bolt circle
05	No base; 1/2-20 UNF-3A stud
06	Isolated circular 1/4-20 UNC stud
07	Isolated circular 1/4-28 UNF stud
08	Isolated rectangular flange
09	Isolated circular 5/8-18 UNF stud
10	Circular; M10X1 stud
11	Isolated circular M10X1
12	Isolated circular 1/2-20 UNF-2A

D: Agency Approval Option

00	No Approvals
01	CSA
04	ATEX/IECEx

High-temperature Two-wire Transducer

Standard Temperature -20°F to +400°F (-29°C to +204°C)

74712-AA-BB-CC-DD

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07	Isolated circular 1/4-28 UNF stud
08	Isolated rectangular flange
09	Isolated circular 5/8-18 UNF stud
10	Circular; M10X1 stud
11	Isolated circular M10X1
12	Isolated circular 1/2-20 UNF-2A

C: Connector Option

02	Top Mount
03	Terminal block top mount
04	Side mount

D: Agency Approval Option

00	No Approvals
01	CSA
04	ATEX/IECEX

Interconnection Cables

The standard cable lengths below are available. You can order custom cable lengths in increments of one foot at additional cost. Some cables have a minimum and maximum length. For details, see each part description below.

Standard Cable Lengths

Feet	Meters (approximate)
6 ft	1.8 m
8 ft	2.4 m
10 ft	3.0 m
12 ft	3.6 m
15 ft	4.5 m
17 ft	5.0 m
20 ft	6.0 m
25 ft	7.6 m
30 ft	9.0 m
33 ft	10.0 m
50 ft	15.2 m
99 ft	30.0 m

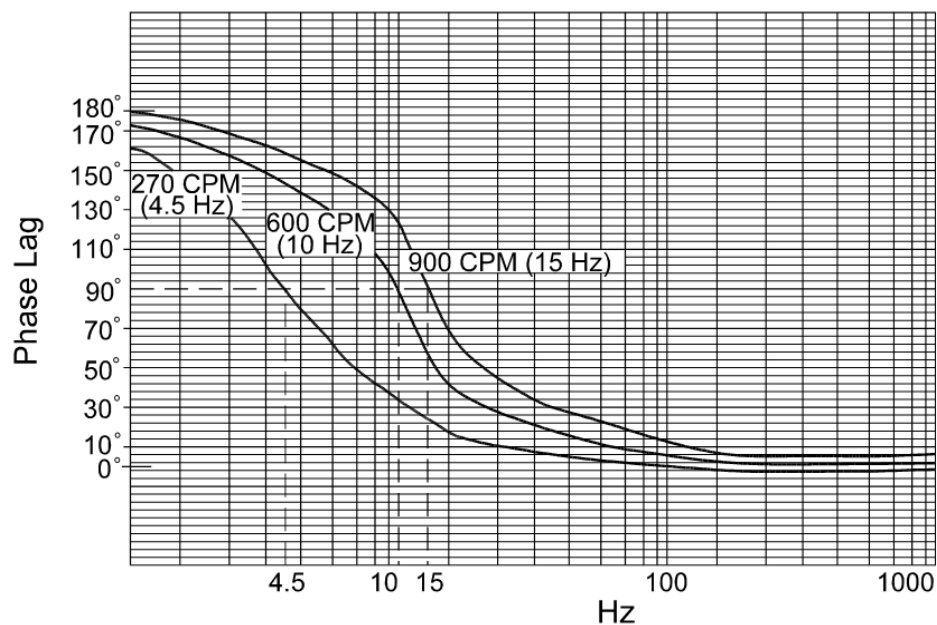
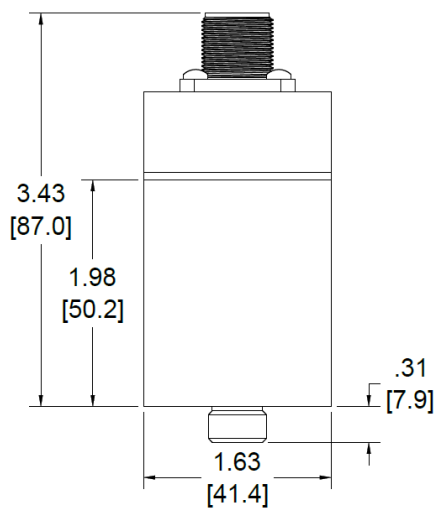


Figure 3: Theoretical Phase Shift between Output and Case Velocity



All dimensions are shown in inches [millimeters].



-01

Figure 4: Top Mounted Connector

(9200 Option B-01 or 74712 Option C-02)