

990 Vibration Transmitter

Datasheet

Cordant™

141612 Rev. W

Description

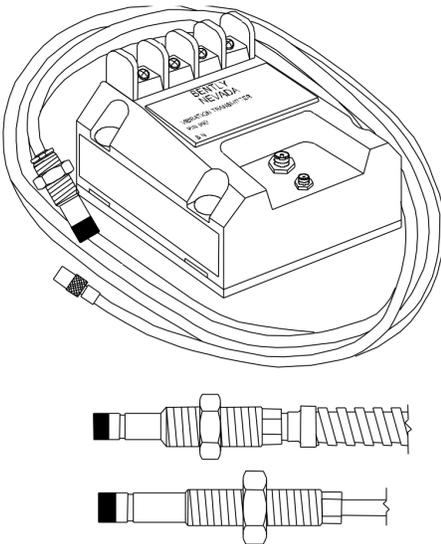
The 990 Vibration Transmitter is intended primarily for the original equipment manufacturers (OEMs) of centrifugal air compressors or small pumps, motors, or fans who prefer to provide a simple 4 to 20 mA proportional vibration signal as the input to their machinery control system.

The transmitter is a two-wire, loop-powered device that accepts input from our 3300 NSv proximity probe and its matching extension cable (available in 5 m and 7 m system length options).

The transmitter conditions the signal into appropriate peak-to-peak vibration amplitude engineering units, and provides this value as a proportional 4 to 20 mA industry-standard signal as the input to the control system where machinery protection alarming and logic occurs.¹

The 990 transmitter provides the following notable features:

- Integrated Proximitor Sensor requires no external unit
- Non-isolated PROX OUT and COM terminals plus a coaxial connector to provide a dynamic vibration and gap voltage signal output for diagnostics.²
- Non-interacting zero and span potentiometers under the Transmitter label supports loop adjustment.
- Test Input pin for quick verification of loop signal output, using a function generator as the input.
- A Not OK/Signal Defeat circuit prevents high outputs or false alarms due to a faulty proximity probe or loose connection.
- Choice of DIN-rail clips or bulkhead mounting screws as standard options simplifies mounting.



Ordering Information



For the detailed listing of country and product-specific approvals, refer to the [Approvals Quick Reference Guide \(108M1756\)](#).

For additional technical documentation, please log in to bntechsupport.com and access the Bently Nevada Media Library.

990-AA-BB-CC-DD

A: Full-scale Option

| | |
|-----------|----------------------------|
| 04 | 0-4 mils pp (0-100 μm pp) |
| 05 | 0-5 mils pp (0-125 μm pp) |
| 08 | 0-8 mils pp (0-200 μm pp) |
| 10 | 0-10 mils pp (0-250 μm pp) |

B: System Length Option

| | |
|-----------|------------------------|
| 50 | 5.0 meters (16.4 feet) |
| 70 | 7.0 meters (23.0 feet) |

C: Mounting Option

| | |
|-----------|----------------------|
| 01 | 35 mm DIN rail clips |
| 02 | Bulkhead screws |
| 03 | DIN clips and screws |

D: Agency Approval Option

| | |
|-----------|---|
| 00 | Not required |
| 01 | CSA Division 2 |
| 05 | CSA Division 2, ATEX Zone 0, ATEX Zone 2 and includes ABS maritime approval |

3300 NSv Proximity Probes, Standard

Part Number-AA-BB-CC-DD-EE

| | |
|---------------|---|
| 330901 | 3300 NSv Probe, 1/4-28 UNF thread, without armor. |
| 330902 | 3300 NSv Probe, 1/4-28 UNF thread, with armor. |
| 330908 | 3300 NSv Probe, 3/8-24 UNF thread, without armor. |
| 330909 | 3300 NSv Probe, 3/8-24 UNF thread, with armor. |

A: Unthreaded Length Option



Unthreaded length must be at least 0.7 inches less than the case length.

Order in increments of 0.1 in

Length configurations

Minimum length: 0 in

Maximum length: 9.2 in

Example: **04** = 0.4 in

B: Case Length Option

Order in increments of 0.1 in

Minimum length: 0.8 in

Maximum length: 9.9 in

Example: **35** = 3.5 in

C: Total Length Option

| | |
|-----------|------------------------|
| 05 | 0.5 meter (1.67 feet) |
| 10 | 1.0 meter (3.25 feet) |
| 50 | 5.0 meters (16.4 feet) |
| 70 | 7.0 meters (23 feet) |

D: Connector Option

| | |
|----------------------------------|--|
| 01 | Miniature coaxial ClickLoc connector with connector protector, standard cable |
| 02 | Miniature coaxial ClickLoc connector, standard cable |
| 11 | Miniature coaxial ClickLoc connector with connector protector, FluidLoc cable |
| 12 | Miniature coaxial ClickLoc connector, FluidLoc cable |
| E: Agency Approval Option | |
| 00 | Not required |
| 05 | Multiple Approvals (CSA NRTL/C and BASEEFA/CENELEC, which includes CSA Division 2) |

3300 NSv Probes, Metric

Part Number-AA-BB-CC-DD-EE

| | |
|---------------|--|
| 330903 | 3300 NSv Probe, M8 x 1 thread, without armor. |
| 330904 | 3300 NSv Probe, M8 x 1 thread, with armor. |
| 330905 | 3300 NSv Probe, M10 x 1 thread, without armor. |
| 330910 | 3300 NSv Probe, M10 x 1 thread, with armor. |

A: Unthreaded Length Option

 Unthreaded length must be at least 20 mm less than the case length.

Order in increments of 10 mm

Minimum length: 0 mm

Maximum length: 230 mm

Example **06** = 60 mm

B: Case Length Option

Order in increments of 10 mm

Minimum length: 20 mm

Maximum length: 250 mm

Example: **25** = 250 mm

C: Total Length Option

05 0.5 meter (1.67 feet)

10 1.0 meter (3.25 feet)

50 5.0 meters (16.4 feet)

70 7.0 meters (23 feet)

D: Connector Option

01 Miniature coaxial ClickLoc connector with connector protector, standard cable

02 Miniature coaxial ClickLoc connector, standard cable

11 Miniature coaxial ClickLoc connector with connector protector, FluidLoc cable

12 Miniature coaxial ClickLoc connector attached, FluidLoc cable

E: Agency Approval Option

00 Not required

05 Multiple Approvals (CSA NRTL/C and BASEEFA/CENELEC, which includes CSA Division 2)

3300 NSv Reverse Mount Probe

330906-02-12-CC-DD-EE 3/8-24 UNF threads

330907-05-30-CC-DD-EE M10 x 1 UNF threads

C: Total Length Option

| | |
|-----------|------------------------|
| 05 | 0.5 meter (1.67 feet) |
| 10 | 1.0 meter (3.25 feet) |
| 50 | 5.0 meters (16.4 feet) |
| 70 | 7.0 meters (23 feet) |

D: Connector Option

| | |
|-----------|---|
| 02 | Miniature coaxial ClickLoc connector, standard cable |
| 12 | Miniature coaxial ClickLoc connector attached, FluidLoc cable |

E: Agency Approval Option

| | |
|-----------|--|
| 00 | Not required |
| 05 | Multiple Approvals (CSA NRTL/C and BASEEFA/CENELEC, which includes CSA Division 2) |

Extension Cable

330930-AAA-BB-CC

A: Cable Length Option

| | |
|------------|------------------------|
| 040 | 4.0 meters (13.1 feet) |
| 045 | 4.5 meters (14.8 feet) |
| 060 | 6.0 meters (19.7 feet) |
| 065 | 6.5 meters (21.3 feet) |

B Armor Option

| | |
|-----------|-------------------------------|
| 00 | Without stainless steel armor |
|-----------|-------------------------------|

| | |
|-----------|--|
| 01 | With FEP covered stainless steel armor |
| 02 | With stainless steel armor |
| 03 | Without stainless steel armor, with connector protector |
| 04 | With FEP covered stainless steel armor and connector protector |
| 05 | With stainless steel armor and connector protector |

C: Agency Approval Option

| | |
|-----------|--|
| 00 | Not Required |
| 05 | Multiple Approvals (CSA NRTL/C and BASEEFA/CENELEC (which includes CSA Division 2) |