# Bently Nevada 991&990 Series Service Manual

990-10-50-03-00

## 1. Description

Manufacturer : Bently Nevada

## 3. Product Information

Manufacturer : Bently Nevada

Product No. : 990-10-50-03-00

Product Type : 990 Vibration Transmitter

Made in U.S.A

Full-scale Option : 10 0-10 mils pp (0-250 µm pp)

System Length Option : 50 5.0 meters (16.4 feet)

Mounting Option : 03 DIN clips and screws

Agency Approval Option : 00 Not required

Input : Accepts 1 non-contacting 3300 NSv Proximity Probe and extension cable.

Power : Requires +12 to +35 Vdc input at the transmitter terminal.

Maximum Loop Resistance : 1,000 Ω including cable at 35 Vdc.

Current Limiting : 23 mA typical.

Transmitter

weight 0.43 kg (0.9 lbm).

Input

Accepts 1 non-contacting 3300

NSv Proximity Probe and

extension cable.

Power Requires +12 to +35 Vdc input at

the transmitter terminal.

4 to 20 mA

signal output

4 to 20 mAdc over specified fullscale range in 2-wire

configuration.

4 to 20 mA loop

accuracy

Within ±1.5% over specified fullscale range. Accuracy is rated

from the TEST signal input to the

voltage measured across a 250 Ω

loop resistance. The ±1.5% error is

in addition to the Prox Out

Incremental Scale Factor.

Probe gap

Probe must be gapped between

0.5 and 1.75 mm (20 and 55 mils)

from target to ensure full scale

range.

Maximum loop

resistance 1,000 Ω including cable at 35 Vdc.

Current limiting 23 mA typical.

Zero and span

Non-interacting external

adjustments.

NOT OK/signal

defeat

Signal output will go to less than

3.6 mA within 100 µs after a Not

OK condition occurs. Signal

output is restored within 2-3

seconds after the Not OK

condition is removed.

Frequency

response

5 Hz to 6,000 Hz +0, 3 dB.

Minimum

target size 9.5 mm (0.375 in) diameter.

Leadwire

length

Maximum for Proximitor Sensor

Output (BNC connector),
maximum cable distance is 3
meters (10 feet).
NonHazardous,
Zone 2 or Div 2
Hazardous
area locations
Power Supply: 28 V