Bently Nevada Service Manual

AP3500S2-Z1

1. Description

Dynamic

3. Product Information

Dynamic

Sensitivity, ± 5% @25°C 500 mV/g

Acceleration range 10 g peak

Amplitude nonlinearity 1%

Frequency response

±10% : 0.4-1,500

Hz

± 3 dB : 0.2-

3,700 Hz

Resonant frequency 18 kHz

Transverse sensitivity, max ±7% of axial

Temperature response

-50°C: -8%

+120°C: +5%

Electrical

Voltage source 18-30 Vdc

Current regulating diode 2-10 mA

Broadband electrical noise

@ 2.5 Hz to 25 kHz 12 µg

Spectral electrical noise @

10 Hz 2 µg/√Hz

Spectral electrical noise @

100 Hz 0.6 µg/√Hz

Spectral electrical noise @

1000 Hz 0.2 µg/√Hz

Output Impedance, max 100 Ω

Bias output voltage 10 Vdc

Grounding

case isolated,

internally

shielded

Environmental

Temperature range -50°C to 120°C

Vibration limit 250 g peak

Shock limit 2,500 g peak

Electromagnetic sensitivity,

equiv g, max

5 µg/gauss

Sealing Hermetic

Base strain sensitivity, max 0.001 g/µstrain

Physical

Sensing element design PZT ceramic /

shear

Weight 148 grams

Case material 316L Stainless

Steel

Mounting 1/4-28 captive

hex head screw

Connector

Side exit, 2-pin,

MIL-C-5015

style

Recommended cabling

shielded,

twisted pair, no

longer than 100

feet

Connections

Connector Pin Function

Shell ground

A power/signal

B common

Frequency response and spectral noise values are typical.