

# Bently Nevada 200155-20-05 Manual

Brand	Bently Nevada
Product Series	200150&200151
Product Type	Low Frequency Trendmaster Pro

## Description

"Manufacturer : Bently Nevada

Product No. :200155-20-05

Product Type : Low Frequency Trendmaster Pro  
Accelerometer

Made in U.S.A

MOunting stud option :20 = 3/8-24 thread, 1 magnetic  
mount base

stud

Approvals : 05 = Multiple Approvals (CSA, ATEX, and IECEx)

Accelerometer 200155

Used with ProTIM Option Low Frequency Accelerationto-Velocity channel type (-05)

Type of Application Fin-Fan, slow rotating shafts

### Specifications

All specifications are at +25°C (+77°F), unless  
otherwise specified.

#### Electrical

Sensitivity @

80 Hz ( $\pm 12\%$ )

10.2 mV/(m/s<sup>2</sup>) (100 mV/g)

Measurement Range

Accelerometer 200155

Measurement Range in m/s<sup>2</sup> (g)  $\pm 196$  ( $\pm 20$ )

Frequency Range Referenced to 80Hz

( $\pm 10\%$ )

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Accelerometer 200155

Frequency Range in Hz

(cpm) 1.5 to 10,000 (90 to 600,000)

Mounted

Resonant

Frequency

>20 kHz (>1200 kcpm)

Amplitude

Linearity

(1 to 10g pk)

±2%

Transverse

Sensitivity

≤7%

Settling Time (Within 5% of Bias)

Accelerometer Settling Time (ms)

200155 ≤2000

Excitation

Voltage

4.7 to 5.5 Vdc

Polarity

(Acceleration

from Base to

Connector)

SIG+ positive with respect to

SIG-.

Quiescent

Current

<800 μA

Output Bias

Voltage

+2.5 ± 0.23 Vdc

[www.AutoDCSTech.com](http://www.AutoDCSTech.com)

Accelerometer 200155

Measurement Range in mm/s<sup>2</sup> (mg) 24.5 (2.5)

Environmental

Axial Shock

Limit

49,050 m/s<sup>2</sup> pk (5,000 g pk)

Temperature

Range

-40 °C to +105 °C (-40 °F to +221

°F)

Sealing

(Hermetic)

5X10<sup>-8</sup> atm•cc/s (3.1X10<sup>-9</sup>

atm•in<sup>3</sup>/s), maximum

Relative

Humidity

100% relative, condensing,  
non-submerged

Physical

Size (Hex x  
Height)

17.5 mm x 45.7 mm (11/16 in x 1.8  
in)

Weight 58 g (2.0 oz), typical

Mounting

Thread

3/8-24 female

Mounting

Torque

2.7 to 6.8 N•m (2 to 5 ft•lbf)

Sensing

Element

Ceramic

Sensing

Geometry

Shear

Housing and connector material

200155 316L stainless steel

Temperature

Range

-55 °C to +121 °C (-67 °F to +250  
°F)

Cure Time 24 hours

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