

# Bently Nevada 200155-03-05 Manual

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

## Description

"Manufacturer : Bently Nevada

Product No. : 200155-03-05

Product Type : Low Frequency Trendmaster Pro  
Accelerometer

Made in U.S.A

MOunting stud option : 03= 3/8-24 to 1/2-20 UNF 1-3/8 inch  
hex plate 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

( $\pm 10\%$ )

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)  
 $\pm 2\%$   
Transverse  
Sensitivity  
 $\leq 7\%$   
Settling Time (Within 5% of Bias)  
Accelerometer Settling Time (ms)  
200155  $\leq 2000$   
Excitation  
Voltage  
4.7 to 5.5 Vdc  
Polarity  
(Acceleration  
from Base to  
Connector)  
SIG+ positive with respect to  
SIG-  
Quiescent  
Current  
<800  $\mu\text{A}$   
Output Bias  
Voltage  
 $+2.5 \pm 0.23$  Vdc

Accelerometer 200155  
Measurement Range in  $\text{mm/s}^2$  (mg) 24.5 (2.5)

Environmental  
Axial Shock  
Limit  
49,050  $\text{m/s}^2$  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

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