Bently Nevada 200157-07-05 Manual

Brand	Bently Nevada
Product Series	200150&200151
Product Type	Enveloping Trendmaster Pro

Description

"Manufacturer : Bently Nevada

Product No. :200157-07-05
Product Type : Enveloping Trendmaster Pro
Accelerometer

Made in U.S.A

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MOunting stud option : 07 3/8-24 to 3/8 NPT, 3/4 in, 1 hex
stud

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

Accelerometer 200157
Used with ProTIM Option : Standard Accelerationto-Velocity with Acceleration
Enveloping channel type (-06)

Type of Application : Roller element bearing and certain types of cavitation effects

Specifications
All specifications are at +25°C (+77°F), unless
otherwise specified.
Electrical
Sensitivity @
80 Hz (± 12%)
10.2 mV/(m/s2) (100 mV/g)
Measurement Range
Accelerometer 200157
Measurement Range in m/s2 (g) ±245 (±25)

Frequency Range Referenced to 80Hz
(±10%)
Accelerometer 200157
Frequency Range in Hz
(cpm) 10 to 10,000 (600 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)
200157 ≤300
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

Accelerometer 200157
Measurement Range in mm/s2 (mg) 14.7 (1.5)

Environmental
Axial Shock
Limit
49,050 m/s2 pk (5,000 g pk)
Temperature
Range
-40 ºC to +105 ºC (-40 ºF to +221
ºF)
Sealing
(Hermetic)
5X10-8 atm•cc/s (3.1X10-9
atm•in3/s), maximum
Relative
Humidity
100% relative, condensing,
non-submerged

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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 ºC to +121 ºC (-67 ºF to +250
ºF)
Cure Time 24 hours
"

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