Bently Nevada 146054 146055 Series Service Manual

330750-80-05

1. Description

330750-80-05

3. Product Information

330750-80-05 | Bently Nevada | High Temperature Velomitor System

Manufacturer : Bently Nevada

Product No. : 330750-80-05

Product type : High Temperature Velomitor System

Made in U.S.A

Ordering Information

330750-AA-BB

Length : 80 = 8 metres

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

Case material : 300 series stainless steel

Connector : 2-pin Mil-C-5015 receptacle, hermetically-sealed, 304 stainless steel shell.

Relative humidity : To 100% non-submerged; case is hermetically sealed.

Electrical

Sensitivity 5.7 mV/mm/s (145 mV/in/s)

±5%

Frequency

Response

15 to 2000 Hz (900 to 120,000

cpm) ± 3.0 dB;

20 to 1000 Hz (1,200 to 60,000

cpm) ± 0.9 dB

Transient

Temperature

Sensitivity

0.0762 mm/s/°C (0.003

in/s/°C), typical, as defined

in ISO 5347-18:1993(E)

Amplitude

Range

635 mm/s (25 in/s) peak

below 680 Hz.

2940 m/s2 (300 g) peak

above 680 Hz.

Vibration at frequencies

above 2 kHz decreases this

range.

Transverse

Sensitivity Less than 5% of Sensitivity

Amplitude

Linearity

±2% to 152 mm/s (6 in/s)

peak

Mounted

Resonant

Frequency

Greater than 5 kHz

Output Bias

Voltage -12 ±2.0 VDC

Broadband

Noise Floor

(15Hz to 2kHz)

0.127 mm/s (0.005 in/s) rms

nominal

Grounding Case Isolated

Maximum

Cable Length

305 meters (1000 feet) with

no degradation of signal.

Environmental Limits

Operating and Storage Temperature Range

Sensing Head

Maximum mounted surface temperature -55°C to +400°C (-67°F to +752°F)

Integral Hardline Cable

-55°C to +400°C (-67°F to +752°F)

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

Shock

Survivability 24,535 m/s2 (2500 g) peak

Relative Humidity

To 100% non-submerged; case is hermetically sealed.

Maximum Use

Altitude

2000 meters (6561 ft) above sea level

Outdoor Use

Standard installation for these sensors is in a protected enclosure with wiring protected in conduit. Splash boots can be added for additional protection if needed by customer's requirements.

Physical

Weight (typical)

8 meters 1,111 grams (2.45 lb)

Case 300 series stainless steel

Connector

2-pin Mil-C-5015 receptacle, hermetically-sealed, 304 stainless steel shell.

Polarity

When the applied velocity is from the base to the top of the transducer, Pin A becomes positive with respect to Pin B.

Bend Radius Minimum bend radius of 51mm (2.0in)

Compliance and Certifications

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

I This device may not cause harmful interference.

I This device must accept any interference received, including interference that may cause undesired operation.

EMC

EMC Directive 2014/30/EU

RoHS

RoHS Directive 2011/65/EU

ATEX

60079-01

60079-07

60079-11

60079-15

ATEX Directive 2014/34/EU

Temperature

Class Temperature Range

T4 -40°C to +100°C

T1 -40°C to +400°C