

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

BENTLY NEVADA

135826-01

MOUNTING STUD ADAPTER FOR SEISMIC TRANSMITTER INSTALLATION

Used with the applicable 177230 Seismic Transmitter system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official pages follow this cover with source pagination retained.

177232 Rev. T

177230 Seismic Transmitter

Datasheet

Bently Nevada Machinery Condition Monitoring

177232 Rev. T



Description

The 177230 Seismic Transmitter is a simple, loop-powered device that can be quickly and easily installed. It can be integrated into your programmable logic controller (PLC) or controls system linked to a plant asset condition monitoring solution. Its simple design reduces training, maintenance, and service costs. The transducer helps you better manage downtime, optimize maintenance planning, and avoid unforeseen catastrophic failures of machinery assets.

The 177230 Seismic Transmitter incorporates robust CM design for reliability and implements an industry-standard 4 to 20 mA loop-powered transmitter.

Easily Installed and Integrated

- Interfaces with PLCs and control systems (including DCS and SCADA).
- Requires only a short learning curve for operations and maintenance, through a familiar interface similar to that for connecting other PLC or control system inputs.
- Requires no field configuration or adjustments.
- Needs few additional parts for a complete system.
- Includes technical support for customers on how to monitor their equipment.
- Includes self-test.
- Incorporates protected interface.
- Supports a variety of interface cables.

Data Quality

- Provides accurate and repeatable data.
- Uses simple data format.
- Provides raw vibration signal for verification and analysis.



Hazardous Area Approvals



For the detailed listing of country and product-specific approvals, refer to the [Approvals Quick Reference Guide \(108M1756\)](#).

For additional technical documentation, please log in to bntechsupport.com and access the Bently Nevada Media Library.

cNRTLus

Ex nL IIC T4:
AEx nA IIC T4:
Class I, Div 2, Groups A, B, C, D.

Ex ia IIC T4:
AEx ia IIC T4:
Class I, Div 1, Groups A, B, C, D;
Class II, Div 1, Groups E, F, G;
Class III, Div 1

Install per drawing 177234

T4 @ Ta ≤ 80°C

ATEX/IECEx

177230	 II 1 G Ex ia IIC T4 Ga												
	 II 3 G Ex na IIC T4 Gc T4@ Ta = -40°C to 80°C												
Entity Parameters	<table><tr><th>Zone 0/1</th><th>Zone 2</th></tr><tr><td>Ui= 28 V</td><td>Ui= 28 V</td></tr><tr><td>Ii= 120 mA</td><td>Ii= 120 mA</td></tr><tr><td>Pi= 1 W</td><td>Pi= 1 W</td></tr><tr><td>Ci=0</td><td></td></tr><tr><td>Li=121.06 μh</td><td></td></tr></table>	Zone 0/1	Zone 2	Ui= 28 V	Ui= 28 V	Ii= 120 mA	Ii= 120 mA	Pi= 1 W	Pi= 1 W	Ci=0		Li=121.06 μh	
Zone 0/1	Zone 2												
Ui= 28 V	Ui= 28 V												
Ii= 120 mA	Ii= 120 mA												
Pi= 1 W	Pi= 1 W												
Ci=0													
Li=121.06 μh													

Hazardous Area Conditions of Safe Use

ATEX/IECEx

Zone 0/1:

Equipment must be connected to equipment, which meets the above listed entity parameters.

The cables type A or B (in compliance with EN 60079-25) must respect the cable parameters listed with the entity parameters.

Zone 2:

The supply electrical parameters shall not exceed the values mentioned in the tables above.

Ordering Accessories

You can order these accessories from the vendors named. Contact the vendor with the part number and ask for their part that fits your application.

3-Pin Connector (MIL-C-5015)

Base	Cannon (ITT industries) ittcannon.com P/N: CA3106R-10SL-3S F97 or P/N: MS3106R-10SL-3S
Shell	Sunbank Co. sunbankcorp.com Glennair, Inc. glennair.com
Wire (3-wire with shield)	Three-conductor 18 to 22 AWG cables with a 0.01" minimum outer jacket and inner wire insulation, and 80% minimum coverage shield. Insulation rating should be 600 V minimum.
Mil-W-16878/4 (Type E)	Sonic/Thermax thermaxcdt.com 18 AWG - P/N: 18-TE-1930 (3) SXE 22 AWG - P/N: 22-TE-1934 (3) SXE
	Standard Wire and Cable Co. std-wire.com 18 AWG - P/N: 1100-88T 22 AWG - P/N: 1100-66T
	Belden belden.com 18 AWG - P/N: 83336 22 AWG -P/N: 83334

Studs and Adapters

Part No.	Description
89139-01	M-M ¼-28 UNF to ⅜-24 UNF standard stud
128038-01	M-M ¼-28 UNF to ⅜-24 hex plate stud (1-⅜" X 0.25")
146396-01	F-M ¼-18 NPT to ¼-28 adapter
146394-01	F-M ¼-28 UNF to ¼-18 NPT adapter
37439-01	F-M ¼-28 UNF to ¼-28 UNF mounting base
164373	M-M ¼-28 UNF to ¼-28 UNF standard stud with brass tip
135826-01	M-M ¼-28 UNF to M10 X 1.0 standard stud

Graphs and Figures



Dimensions shown in mm (inches) except as noted.

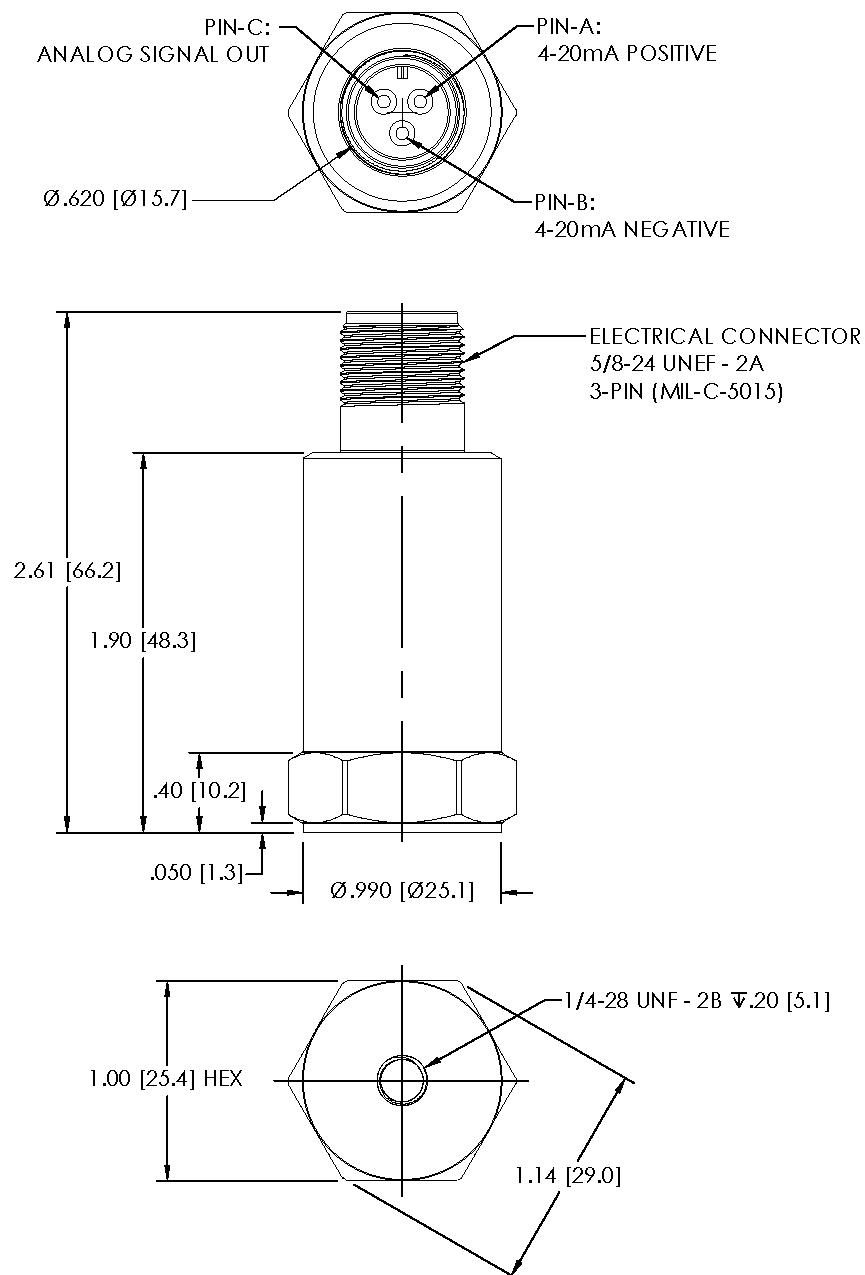


Figure 1: Transducer Mechanical Outline and Dimensions