

OVERVIEW

The SV6300 is capable of sensing a wide range of vibration frequencies, this velocity sensor is ideal for use on a variety of machines and can replace a moving coil velocity transducer with a solid-state sensor. A built-in amplifier provides a high-level, low-impedance output for connection to a signal conditioner for a 4-20 mA output or to a vibration monitor. The SV6300 consists of a temperature stabilized piezo-electric sensor and amplifier, packaged in a stainless steel case designed to operate continually in a wet, corrosive environment. The sensing circuit is electrically isolated to 500V_{RMS}. Each unit is shipped with a 1/4-28 and M6 mounting stud.



FEATURES AND BENEFITS

- Highly insensitive to cross axis vibration
- Mount in any axis
- No phase shift for balancing
- Solid-state velocity output

APPLICATIONS

- Motors
- Gear Boxes
- Pumps
- Fans
- Cooling Tower
- Engines

SPECIFICATIONS

Dynamics	
Sensitivity (10%)	100 mV/ips (3.94 mV/mm/s)
Frequency Response	2 Hz- 8 KHz
Resonant Frequency	20 kHz
Cross Axis Sensitivity	<5%
Mechanical	
Case Material	316 Stainless Steel
Connector Type	2-pin Hermetic Plug
Hermetic Seal	Welded
Mounting Stud	1/4-28 UNF to M6 x 1.0
Electrical	
Case Isolation	10 ⁸ Ω
Excitation Current	2 to 10 mA
Excitation Voltage	18 to 28 VDC, Polarity Indifferent
Full Scale Output Voltage	±5 volts
Output Bias	8 to 14 volts
Settling Time	10 seconds max.
Protection	RFI & ESD
Environmental	
Shock Limit	5,000 g
Temperature Range	-54°C to +121°C (-65.2F° to +249.8°F)
Radiation Exposure Limit	1.5 x 10 ⁶ Rads (expected 30-yr dose)
Hazard Rating	CSA, ATEX and IECEx

HOW TO ORDER

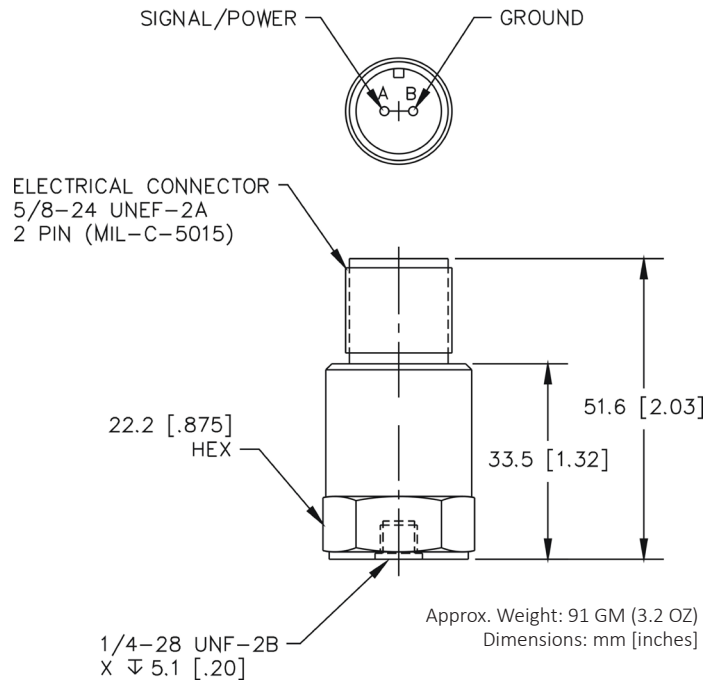
SV6300 - **A** - **B** - **C**

A	Hazardous Area Certification
0	None
5	CSA US/CA Class I Div 2, Grps A-D, T4 (non incandive) CSA US/CA Class I Div 1, Grps A-D, T4 (I.S. w/barrier) ATEX/IECEX Ex nA IIC T4 Gc (non incandive) ATEX/IECEX Ex ia IIC T4 Ga (I.S. w/barrier)

B	Mounting Stud
5	1/4 x 28 UNF & M6 x 1.0

C	Connector Type
1	2-pin Hermetic Plug

WEIGHT & DIMENSIONS



ACCESSORIES



8978-111-XXXX, Splash proof Cable Assembly

Two (2) pin socket connector with integral, molded splash proof boot with 6.4 mm (0.25") diameter polyurethane jacketed cable with twisted shielded pair wires. XXX.X = Cable length in meters.



9334-111-XXXX-YYYY, Splash proof Cable Assembly with SS armor

Two (2) pin socket connector with integral, molded splash proof boot with 7.1 mm (0.28") diameter, SST armored jacket with cable, twisted shielded pair wires. XXX.X = Cable length in meters. YYYY = Armor length in meters.



8978-211-XXXX, Cable Assembly

Two (2) pin socket connector with cable strain relief with 6.4 mm (0.25") diameter polyurethane jacketed cable with twisted shielded pair wires. Note: All 8978 connector/cable assemblies rated to 121°C (250°F) max. XXX.X = Cable length in meters.



9334-211-XXXX-YYYY, Cable Assembly with SS Armor

Two (2) pin socket connector with 7.1 mm (0.28") diameter, SST armored jacket with cable, twisted shielded pair wires. XXX.X = Cable length in meters. YYYY = Armor length in meters.



8978-200-0000, Connector Assembly

Two (2) pin socket connector with cable strain relief, no cable.

Note: Metrix is continuously improving our products. Please refer to our website to download the latest version of this document.

All trademarks used in this document belong to Metrix.

© 2025, Metrix Instrument Company, L.P. All rights reserved.