

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

HOW TO ORDER

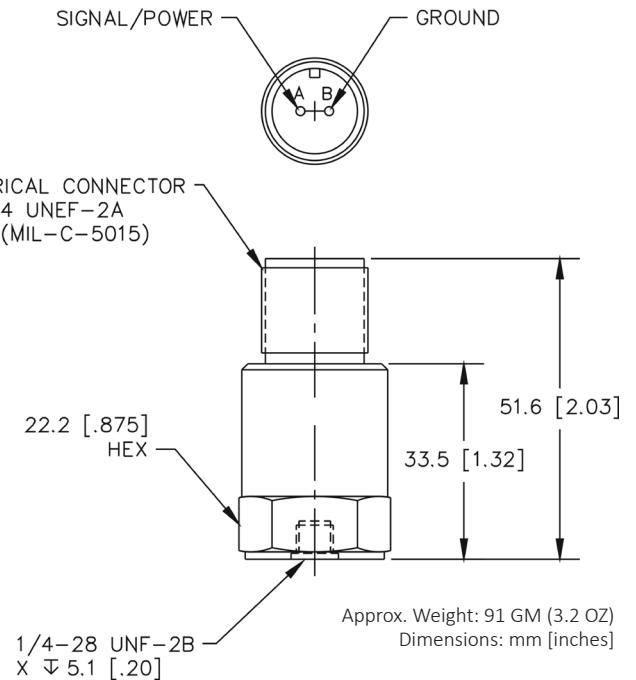
SV6300 - **A** - **B** - **C**

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