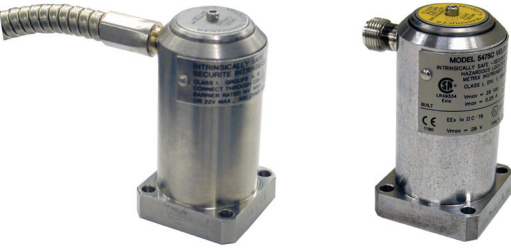


# Velocity Sensor

## 5485C (375°C) High Temperature

fixed cable version

connector version



By employing a zero friction coil suspension, these sensors provide accurate, repeatable vibration measurements over wide ranges of amplitude and frequency. They are constructed for continuous operation at elevated temperatures. The coil bobbin is suspended by two non-twisting, circular spider springs that provide a clean frequency response. Damping is electromagnetic and purely viscous. No friction prone air damping is employed. This allows the detection of small vibrations at low frequencies. Available with fixed armored cable or 2 pin connector (requires mating Model 4850-XXX cable), the sealed stainless steel case and rugged internals insure durability in the most hostile environments.

### Features

- Self generating, no power required
- Stainless steel housing
- Zero friction - infinite resolution

### Applications

- Large industrial gas turbines
- Furnace fan monitoring
- Hazardous areas

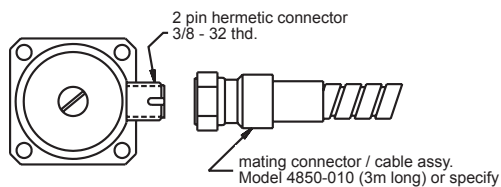
**5485** is UL intrinsically safe for Class 1, Grps (A-D), Div. 1; Non-incendive for: Class 1, Grps. (A-D), CSA Explosion-proof for: Class 1, Grps, (A-D), Div. 1; IEC intrinsically safe for: EEx nA IIC T6 Tamb: -54°C to 375°C.

### Specifications

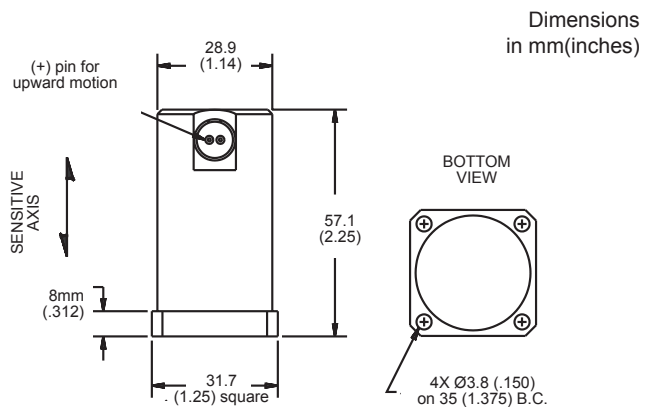
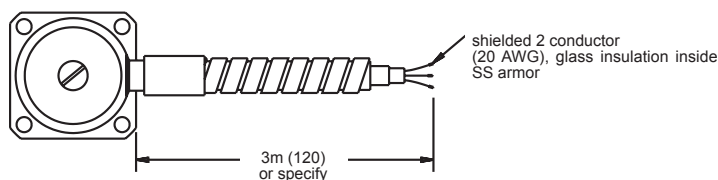
<b>Axis Orientation:</b>	Any
<b>Sensitivity:</b>	See "How to Select"
<b>Sensitivity vs. Temp:</b>	less than .02%/°C
<b>Cross Axis Sensitivity:</b>	less than 10%
<b>Service Temperature:</b>	See How To Select
<b>Frequency Response:</b>	15 Hz to 2000 Hz
<b>Acceleration Limits:</b>	0 to 50 g
<b>Displacement Limits:</b>	1.8 mm (70 mils) pk-pk
<b>Case To Coil Isolation:</b>	
at 20°C:	100 megohms, min.
at 200°C:	10 megohms, min.
at 375°C:	1.0 megohm, min.
<b>Case:</b>	Stainless steel; sealed

### Weights, Dimensions & Wiring

#### CONNECTOR CONFIGURATION



#### FIXED CABLE CONFIGURATION



#### Weights:

Connector version: 0.2 kg (0.5 lb)  
for Fixed Cable: add 0.2 kg/m (0.5 lb/3 ft)

### How To Select...Connector Versions\*

**A**

5485C -

**A**

OUTPUT CODE			OUTPUT ± 5%	COIL OHMS	SERVICE TEMP.
0	0	2	105 mV/ips	73	+ 375°C to -54°C
0	0	4	145 mV/ips	102	
0	0	6	200 mV/ips	135	
0	0	8	150 mV/ips	105	

### How To Select...Fixed Cable Versions\*\*

**A**

5485C -

**B**

**A**

**B**

OUTPUT CODE			CABLE LENGTH (IN FEET)	OUTPUT ± 5%	COIL OHMS	SERVICE TEMP.
0	0	1	X X X	105 mV/ips	73	+ 375°C to -54°C
0	0	3	example: 010 = 10 ft.	145 mV/ips	102	
0	0	5	(3 m)	200 mV/ips	135	
0	0	7	60 FT. (18.3 m) MAX.	150 mV/ips	105	

**\*REQUIRES MODEL 4850-XXX** High Temp Armored Cable Assembly (375 °C max.). Specify -XXX length in feet. Example: 4850-010 = 10 FT (3 m) Cable. Lengths above 20 feet must be in even increments ONLY. Example: 4850-022, 4850-024, etc.

**\*\*Cable lengths must be even increments only (002, 004, etc).**

### Mounting Adapters

STUD	BUSHING
8531-001	1/4"-28 mount adaptor - loose with screws and stud (0.2 kg)
8531-002	Same as -001 except shipped attached to sensor.