IMI SENSORS
A PCB PIEZOTRONICS DIV.

SERIES **603**

603 SERIES LOW COST ICP® ACCELEROMETERS

- Multiple sensitivity options available for both slow speed and impacting high speed applications.
- Integral polyurethane cable options available for submersible applications.
- Intrinsically safe and armored cable options available for hazardous environments.
- Dual output options available for simultaneous monitoring of both vibration and temperature.

APPLICATIONS

Industrial, permanent-mount applications:

- Vibration monitoring on plant and process machinery, including motors, pumps, gearboxes and bearings.

VERSATILE ACCELEROMETERS DESIGNED FOR INDUSTRIAL APPLICATIONS

IMI Sensors has developed the 603 Series, a line of ICP® accelerometers for industrial vibration monitoring applications. All of the sensors in the product line include a shear-mode ceramic element housed in a rugged hermetically-welded stainless steel enclosure. All models include case-isolated electronics to eliminate noise issues.

HAZARDOUS AREA APPROVALS (EX / CS VERSIONS):

CSA (Canada & US)

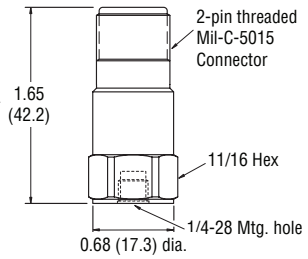
- AEx ia IIC T4 Class I, Division 1, Groups A, B, C, D
- AEx ia IIC T4 Class II, Division 1, Groups E, F, G
- AEx ia IIC T4 Class III, Division 1
- AEx nA IIC T4 Class I, Division 2, Groups A, B, C, D
- Ex ia IIC T4 Class I, Division 1, Groups A, B, C, D
- Ex ia IIC T4 Class II, Division 1, Groups E, F, G
- Ex ia IIC T4 Class III, Division 1
- Ex nL IIC T4 Class I, Division 2, Groups A, B, C, D

CSA (Canada & US)

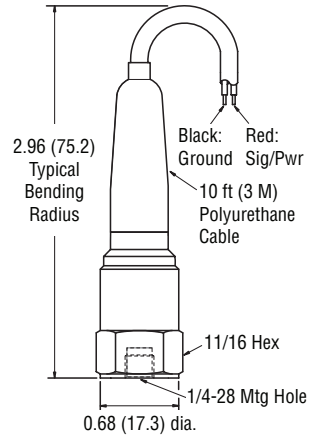
- Ex ia IIC T4
- Ex ia IIC T4 Ga
- Ex nA IIC T4 Gc
- Ex nL IIC T4
- Eex ia IIC T4
- Eex nL IIC T4

SPECIFICATIONS

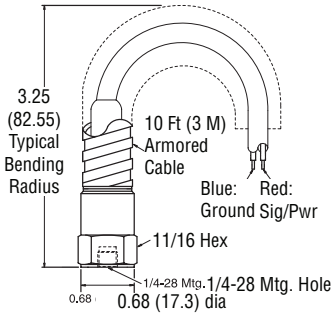
Model Number	603C00	603C05	603C01	603C11	603C61	603C02
Performance						
Sensitivity	10 mV/g	50 mV/g	100 mV/g			500 mV/g
	1.02 mV/(m/s²)	5.1 mV/(m/s²)	10.2 mV/(m/s²)			51.0 mV/(m/s²)
Measurement Range	±500 g	±100 g	±50 g			±10 g
	±4905 m/s²	±981 m/s²	±490 m/s²			±98 m/s²
Frequency Range (±3 dB)	0.5 to 10000 Hz	1.2 to 10000 Hz	0.5 to 10,000 Hz			0.5 to 3000 Hz
Resonant Frequency	25000 Hz					
Broadband Resolution	2000 µg	750 µg	350 µg			300 µg
	19620 µm/s²	7358 µm/s²	3434 µm/s²			2943 µm/s²
Non-Linearity	±1%					
Transverse Sensitivity	≤7%					
Environmental						
Overload Limit (Shock)	5000 g pk					
	49050 m/s² pk					
Temperature Range	-65 to +250 °F					-65 to +200 °F
	-54 to +121 °C					-54 to +93 °C
Enclosure Rating	IP68					
Electrical						
Settling Time	≤ 3.0 sec	≤ 2.0 sec	≤ 2.0 sec			≤ 5.0 sec
Discharge Time Constant	≥ 0.4 sec		≥ 0.3 sec			
Excitation Voltage	18 to 28 VDC					
Constant Current Excitation	2 to 20 mA					
Output Impedance	< 150 ohm					< 500 ohm
Output Bias Voltage	8 to 12 VDC					
Spectral Noise (10 Hz)	85.0 µg/√Hz	18.0 µg/√Hz	8.0 µg/√Hz			
Spectral Noise (100 Hz)	20.0 µg/√Hz	10.0 µg/√Hz	5.0 µg/√Hz			3.0 µg/√Hz
Spectral Noise (1 kHz)	5.0 µg/√Hz	7.0 µg/√Hz	4.0 µg/√Hz			3.0 µg/√Hz
Electrical Isolation (Case)	>10⁸ ohm					
Physical						
Sensing Element	Ceramic					
Sensing Geometry	Shear					
Housing Material	Stainless Steel					
Sealing	Welded Hermetic					
Mounting Thread	1/4-28 Female					
Mounting Torque	2 to 5 ft lb					
	2.7 to 6.8 N-m					
Electrical Connector	2-pin MIL-C-5015			Pigtails	Pigtails	2-pin MIL-C-5015
Electrical Connector Position	Top			N/A		Top
Cable Type	N/A			Polyurethane	Armored Polyurethane	N/A
Cable Length	N/A			10 ft		N/A
	N/A			3.0 m		N/A
Size (Hex x Height)	0.69 x 1.65 in			0.69 x 4.70 in		0.69 x 1.65 in
	18.0 x 42.2 mm			18.0 x 119.0 mm		18.0 x 42.2 mm
Weight (without cable)	1.8 oz					
	51 gm					
Similar Models						
Hazardous Area Approved	EX603C00	EX603C05	CS603C01 EX603C01	EX603C11	EX603C61	EX603C02
Dual Output	N/A	N/A	TO603C01	TO603C11	N/A	TO603C02



Models 603C0X



Model 603C11



Model 603C61

IMI SENSORS
A PCB PIEZOTRONICS DIV.

3425 Walden Avenue, Depew, NY 14043-2495 USA
Toll-Free in the USA: **1 800 959 4464**
Phone: **1 716 684 0003** | Email: **imi@pcb.com**

IMI Sensors, a division of PCB Piezotronics, Inc. manufactures industrial vibration monitoring instrumentation, such as accelerometers, vibration transmitters and switches that feature rugged stainless steel housings and survive in harsh environments like paper and steel mills, mines, gas turbines, water treatment facilities and power plants. Integrating with portable analyzers and PLC's, IMI instrumentation helps maintenance departments reduce downtime and protect critical machinery. Visit IMI Sensors at www.pcb.com. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corporation. Additional information on MTS can be found at www.mts.com.

IMI-VIB-608A11-0919

MTS SENSORS

MTS Sensors, a division of MTS Systems Corporation (NASDAQ: MTSC), vastly expanded its range of products and solutions after MTS acquired PCB Piezotronics, Inc. in July, 2016. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corp.; IMI Sensors and Larson Davis are divisions of PCB Piezotronics, Inc.; Accumetrics, Inc. and The Modal Shop, Inc. are subsidiaries of PCB Piezotronics, Inc.