



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):

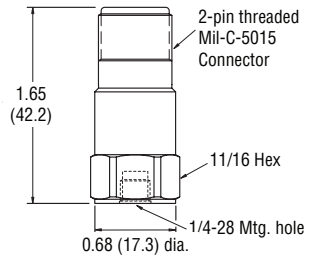
CSA (Canada & US)

- 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

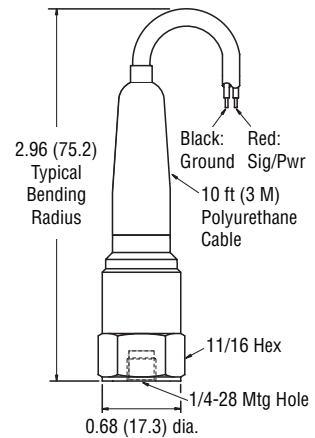
CSA (Canada & US)

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

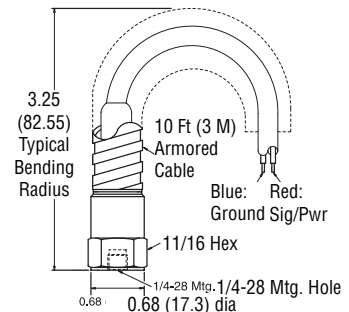
SPECIFICATIONS						
Model Number	603C00	603C05	603C01	603C11	603C61	603C02
Performance						
Sensitivity	10 mV/g 1.02 mV/(m/s ²)	50 mV/g 5.1 mV/(m/s ²)		100 mV/g 10.2 mV/(m/s ²)		500 mV/g 51.0 mV/(m/s ²)
Measurement Range	±500 g ±4905 m/s ²	±100 g ±981 m/s ²		±50 g ±490 m/s ²		±10 g ±98 m/s ²
Frequency 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 19620 µm/s ²	750 µg 7358 µm/s ²		350 µg 3434 µm/s ²		300 µg 2943 µm/s ²
Non-Linearity				±1%		
Transverse Sensitivity				≤7%		
Environmental						
Overload Limit (Shock)				5000 g pk 49050 m/s ² pk		
Temperature Range				-65 to +250 °F -54 to +121 °C		-65 to +200 °F -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)				>10 ⁸ 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 3.0 m		N/A	
Size (Hex x Height)	0.69 x 1.65 in 18.0 x 42.2 mm		0.69 x 4.70 in 18.0 x 119.0 mm		0.69 x 1.65 in 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 603C00



Model 603C11



Model 603C61



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.

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IMI-VIB-608A11-0919



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.