



MODELS (EX)637A06
& (EX)638A06

CRYOGENIC ICP® ACCELEROMETERS



- Specialized cryogenic circuitry & quartz sensing technology to promote survivability in extremely cold applications.
- Electrically-isolated housing to prevent noise issues without the addition of an isolation base.
- Welded, hermetically-sealed housing of 316L stainless steel & rugged two-pin MIL connector to withstand harsh industrial environments.
- Intrinsically safe versions available for use in potentially explosive environments.

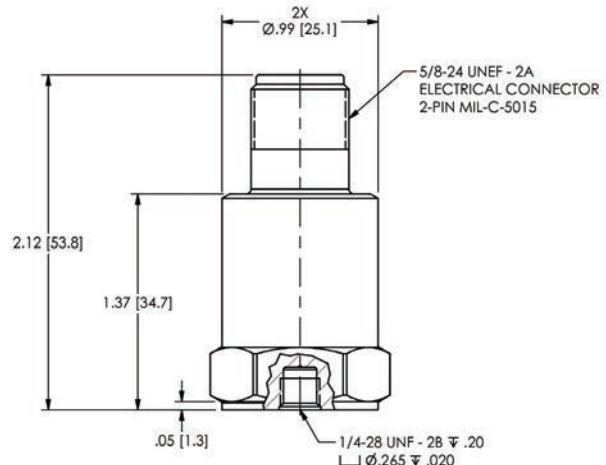
DESIGNED FOR USE IN INDUSTRIAL ENVIRONMENTS DOWN TO -320 °F

Cryogenic ICP® accelerometers are specifically designed to operate in environments down to -320 °F (-196 °C) F with the use of specialized, built-in, cryogenic circuitry and a quartz shear sensing technology. Each sensor is hermetically-sealed in a 316L stainless steel housing. They are individually tested to determine the thermal coefficient of sensitivity at -320 °F (-196 °C) ensuring reliable operation.

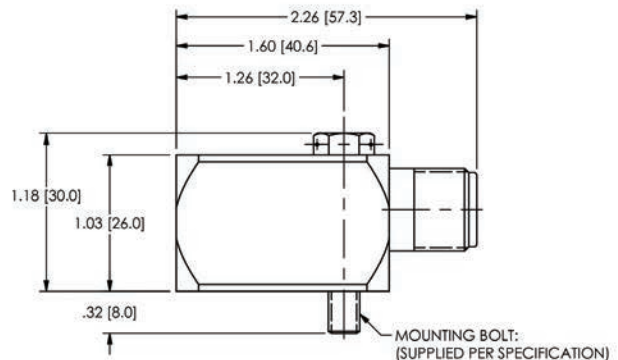
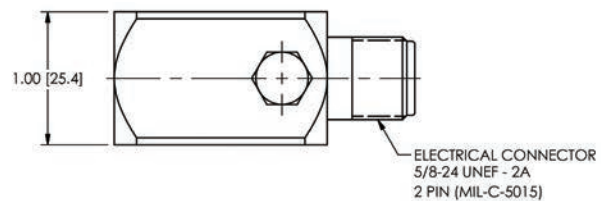
TYPICAL APPLICATIONS

- Cryogenic Centrifugal and Reciprocating Pumps for:
 - Liquefied natural gas (LNG) processing
 - Industrial gas processing
 - Pharmaceutical production
 - Frozen food production/storage

SPECIFICATIONS		
Model Number	(EX)637A06	(EX)638A06
Performance		
Sensitivity ($\pm 10\%$)	25 mV/g 2.54 mV/(m/s ²)	
Measurement Range	± 200 g pk ± 1962 m/s ²	
Frequency Range ($\pm 5\%$)	10 to 400 Hz	
Frequency Range (± 3 dB)	4 to 1500 Hz	
Resonant Frequency	≥ 20 kHz	
Broadband Resolution	1000 μ g 9800 μ m/s ²	
Non-Linearity	$\pm 1\%$	
Transverse Sensitivity	$\leq 5\%$	
Environmental		
Overload Limit (Shock)	± 1000 g pk ± 9810 g pk	
Temperature Range	-320 to +250 °F -196 to +121 °C	
Hazardous Area Approval	ATEX, ETL, IECEx (EX only)	
Electrical		
Settling Time	≤ 3 sec	
Discharge Time Constant	0.05 to 0.5 sec	
Excitation Voltage	18 to 28 VDC	
Constant Current Excitation	1.6 to 20 mA	
Output Impedance	≤ 100 Ohm	
Output Bias Voltage	7 to 11 VDC	
Spectral Noise (10 Hz)	120 μ g/ $\sqrt{\text{Hz}}$	
Spectral Noise (100 Hz)	36 μ g/ $\sqrt{\text{Hz}}$	
Spectral Noise (1 kHz)	25 μ g/ $\sqrt{\text{Hz}}$	
Electrical Isolation (Case)	10 ⁸ Ohm	
Physical		
Sensing Element	Quartz	
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 Nm	
Electrical Connector	2-pin MIL-C-5015	
Electrical Connector Position	Top	Side
Weight	3.3 oz 94 gm	6.4 oz 181 gm



Model (EX)637A06



Model (EX)638A06



3425 Walden Avenue, Depew, NY 14043-2495 USA

Toll-Free in the USA: 800 959 4464

Phone: 1 716 684 0001 | Email: info@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.

© 2019 PCB Piezotronics, Inc. In the interest of constant product improvement, specifications are subject to change without notice. PCB®, ICP®, Swiveler®, Modally Tuned®, and IMI® with associated logo are registered trademarks of PCB Piezotronics, Inc. in the United States. ICP® is a registered trademark of PCB Piezotronics Europe GmbH in Germany and other countries. UHT-12™ is a trademark of PCB Piezotronics, Inc. SensorLine™ is a service mark of PCB Piezotronics, Inc. SWIFT® is a registered trademark of MTS Systems Corporation in the United States.

IMI-VIB-637A06-638A06-0720

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.