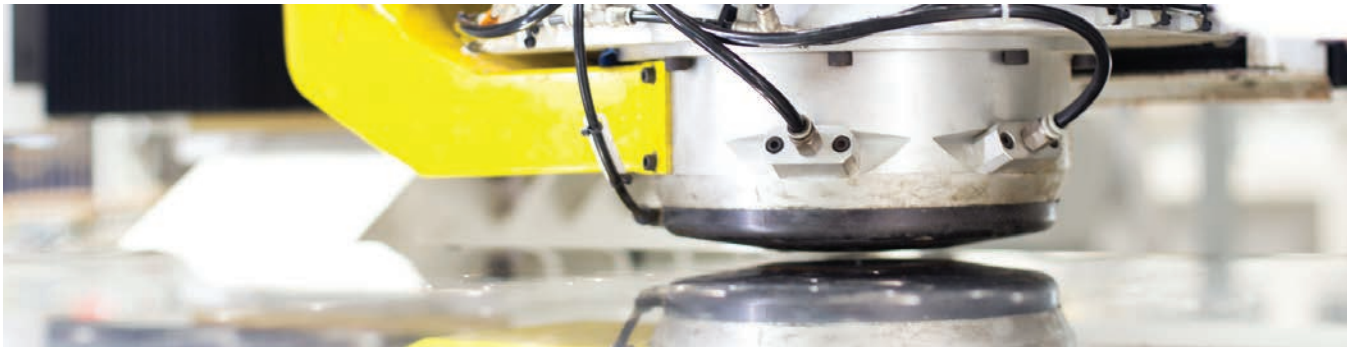
PCB PIEZOTRONICS
MTS SYSTEMS CORPORATION



SERIES **RHM240A0X**
MODEL **410C01**

SIMPLE ASSEMBLY FORCE MONITORING SYSTEM

- Indirectly monitors force during manufacturing processes
- Avoids damage & detects tool wear
- Monitors process deviations
- Provides data for quality assurance
- Single screw installation, onto machine structure

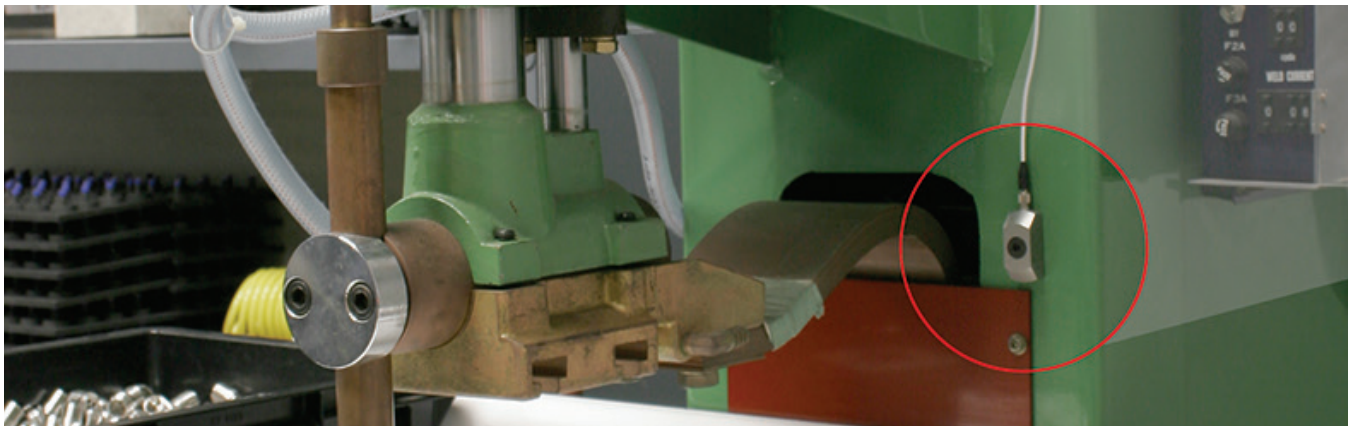
CE

DO YOUR CUSTOMERS DEMAND ZERO DEFECTS?

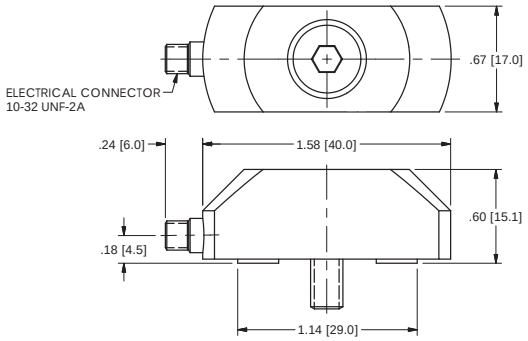
Simple, ready-to-use monitoring systems that use piezoelectric quartz ICP® strain sensors and signal conditioners are ideal for product quality assurance applications that require the measurement of repetitive cycles. ICP® strain sensors feature high stiffness, sensitivity stability, repeatability, high resolution, extremely long life, and robust packaging for harsh industrial environments.

Proper assembly force is vital to the strength of a formed metal part. An assembly force that is too low results in poor mechanical strength of the joint. A force that is too high causes excessive deformation, and can damage or reduce the fatigue life of a component. Assembly processes such as clinching, crimping, orbital forming, press-fit, riveting, and staking may be validated through installation of a RHM240A0X onto the machine's structural frame.

Strain sensor signals may also be used to protect machinery from excessive forces, trend tool wear, capture process deviations, and document the process to help ensure delivery of high quality parts with zero defects. As with all PCB® instrumentation, these products are complemented with toll-free applications assistance, 24-hour customer service, and are backed by a no-risk policy that guarantees satisfaction or your money refunded.



ICP® STRAIN SENSORS			
Model Number	**RHM240A01**	**RHM240A02**	**RHM240A03**
Performance			
Sensitivity (±20%)	100 mV/με	50 mV/με	10 mV/με
Measurement Range	50 pk με	100 pk με	300 pk με
Frequency Range (-5%)	0.015 to 2500 Hz	0.004 to 2500 Hz	0.004 to 2500 Hz
Broadband Resolution (1 to 10000 Hz)	0.0001 με	0.0002 με	0.001 με
Environmental			
Temperature Range (Operating)	-65 to +250 °F (-54 to +121 °C)		
Electrical			
Output Bias Voltage	8 to 14 VDC		
Discharge Time Constant	≥ 35 sec	≥ 150 sec	≥ 150 sec
Mechanical			
Sensing Element	Quartz		
Housing Material	Stainless Steel		
Electrical Connector	10-32 Coaxial Jack		
Sealing	Epoxy		
Mounting Torque	7.38 ft-lb (10 N-m)		
Size (Width x Length x Height)	0.67 x 1.81 x 0.6 in 17 x 46 x 15.2 mm		
Supplied Accessories			
Model M081A100 M6 x 1.00 flathead screw			



SPECIFICATIONS	
Model Number	**410C01**
Performance	**English (SI)**
Channels	1
Output Voltage (Instantaneous)	±10 V
Output Voltage (Peak)	0 to 10 V
High Frequency Response	10 kHz
Low Frequency Response, AC coupled (-5%)	0.5 Hz
Low Frequency Response, DC coupled	Governed by Sensor DTC
Voltage Gain (Incremental Steps)	x1, x2, x4, x8, x10, x16, x20
Environmental	
Temperature Range (Operating)	+60 to +110 °F (+15 to +45 °C)
Electrical	
Power Required (±10%)	24 VDC
Current Draw	200 mA
Broadband Electrical Noise (1 Hz to 10 kHz)	200 μV rms
Peak Hold Reset	Solid State Ready
Discharge Time Constant (AC coupled)	1 sec
Physical	
Size (Length x Height x Width)	4.46 x 3.9 x 1.78 in (113 x 99 x 45 mm)
Mounting	35 mm DIN Rail
Electrical Connector (Sensor Input)	BNC Jack
Electrical Connector (Analog Output, Peak Output, Power, Ground)	Removable Screw Terminals

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PCB Piezotronics, Inc. is a designer and manufacturer of microphones, vibration, pressure, force, torque, load, and strain sensors, as well as the pioneer of ICP® technology used by design engineers and predictive maintenance professionals worldwide for test, measurement, monitoring, and control requirements in automotive, aerospace, industrial, R&D, military, educational, commercial, OEM applications, and more. With a worldwide customer support team, 24-hour SensorLine℠, and a global distribution network, PCB® is committed to Total Customer Satisfaction. Visit www.pcb.com for more information. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corporation. Additional information on MTS can be found at www.mts.com.

TM-FTQ-240-410-1019