

SINGLE AXIS ACCELEROMETER

ST703-1C Capacitive Accelerometer

The ST703-1C Series single axis accelerometer is a force feedback design featuring variable capacitance, MEMS and ASIC technology, which combined form a very low noise and low distortion sensor with excellent bandwidth, dynamic range, stability and robustness. These performance parameters are unmatched by any other commercially viable accelerometer. The benefits realized are increased end-user uptime with a reduction in maintenance costs and safety risks.

KEY FEATURES

- ◆ Responds to DC and AC
- ◆ Very low noise
- ◆ High resolution
- ◆ Low power consuming
- ◆ Compact, stainless steel design
- ◆ Stud or magnetic mounting
- ◆ Hermetically sealed components

SPECIFICATIONS

Performance	Units	/7	/6	/5	/4
Sensitivity ($\pm 20\%$)	mV/g	1500	1333	1333	750
Measuring Range	\pm g pk	2.5	1.5	1.5	2.7
Frequency Response (-3dB)	Hz	0-7000	0-400 ⁽¹⁾	0-50 ⁽¹⁾	0-400 ⁽¹⁾
Environmental					
Shock Limit	\pm g pk	1500	20000		
Temperature range	$^{\circ}$ C	-40 to +85	-55 to +125		
Electrical					
Supply Voltage	V	± 6 to 12	+5		
Voltage Output	\pm V	± 3.5	2.5 ± 2		
Mechanical					
Size (diameter x height)	inch	1.375 x 2.125			
Sensing Element Material	Type	MEMS		CAP	
Housing Material	Type	Stainless Steel, encapsulated			
Electrical Connector	Type	6 Pin, M12 thread			
Mounting thread	Type	1/4 x 20 UNC			
Optional magnetic base	ST705	Flat or curved surface, 55 lb force			

Note 1. (-3dB point), the output has true DC (0Hz) response.

ST703-1C Accelerometer
(Stud or Magnetic Mount Design)



Complete with industrial rated cables, available in many lengths

BENEFITS

- ◆ Very low noise – ideal condition monitoring
- ◆ Cost effective machinery monitoring
- ◆ Proven technology
- ◆ Rugged design to withstand harsh conditions

OPTIONAL ACCESSORIES

- ◆ ST705-1 Magnetic base
- ◆ Cables (custom lengths)

Typical Amplitude Response

