



LINEARADJUST



Mechanical Vibration Switch

The new patent pending design innovation provides superior control over trip sensitivity than any other mechanical vibration switch in the industry.

Highlights

- Economical protection for critical machinery
- Outperforms traditional mechanical vibration switches
- Linear trip adjustment (~1/4 turn per g)
- Better sensitivity repeatability on reset
- Dual SPDT Form C relays
- 120, 240 VAC or 24 VDC remote reset models available

Typical Applications

- Cooling towers
- HVAC systems
- Motors & pumps
- Blowers
- Fin fans
- Large exhaust and vent fans
- 24/7 protection

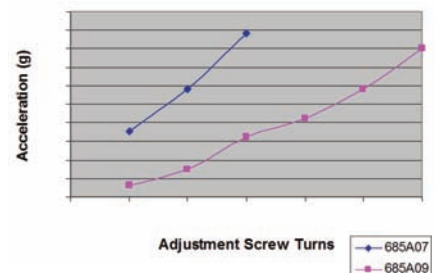


Series 685A
Linear Adjust Mechanical Vibration Switch

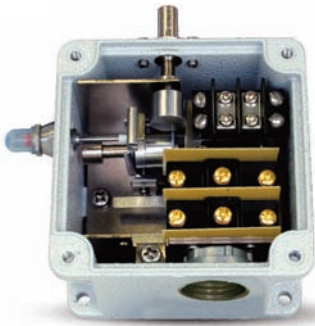
IMI Sensors the leader in industrial sensing technology has developed a new innovative design (patent pending) mechanical vibration switch solution. The 685A Series Linear Adjustable Vibration Switch encompasses a unique design that provides improved sensitivity adjustment compared to current designs within the industry. The end result allows the user superior control of the trip level set within the switch and improving the protection of their rotating asset (reference sensitivity testing below).

Additionally, due to its innovative design and manufacturing process, IMI's 685A Series is more cost competitive than any other existing mechanical vibration switches in the industry, including OEM volume pricing.

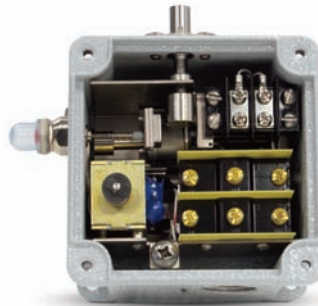
Switch Sensitivity



Linear Adjust Mechanical Vibration Switch



Model 685A09
Linear Adjust
Mechanical Vibration Switch

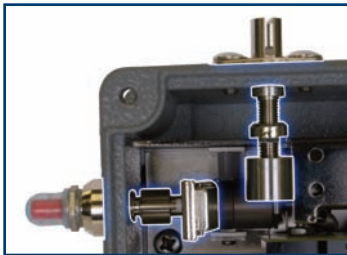


NEW!

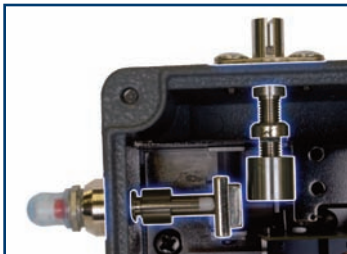
**Remote Reset
Option Available!**

Model 685A19
Model 685A29
Model 685A39
Linear Adjust Mechanical Vibration Switch
with Remote Reset

The Innovative, Patent Pending Linear Adjust Sensing Element



Magnet in "Open" Position



Magnet in "Closed" Position

Technical Specifications

Model Number	685A09	685A19	685A29	685A39
Performance				
Measurement Range	7 g pk 68.7 m/s ² pk			
Frequency Range	0 to 6,000 cpm 0 to 100 Hz			
Relay	Two SPDT Form C			
Relay (Contacts) (DPDT)	Normally Open / Closed			
Control Interface				
Reset Function	Momentary Pushbutton Switch			
Remote Reset	N/A	+/- 24 VDC	120 VAC	240 VAC
Environmental				
Temperature Range (Operating)	-13 to 140 °F -25 to 60 °C			
Enclosure Rating	IP66			
Physical				
Size (width x height x depth)	4.35 in x 3.30 in x 4.35 110.5 mm x 83.8 mm x 4.35 110.5 mm			
Weight	2.5 lb 1132 gm	2.8 lb 1271 gm	2.75 lb 1251 gm	
Sensing Element	Magnet with Linear Adjustment Technology			
Housing Material	Aluminum Alloy			
Electrical Connector	Screw Terminals			
Screw Terminal Wire Size	24-14 AWG 0.2 - 2.5 mm ²			
Cable Input	3/4-14 NPT			
Mounting Hole	0.25 in 6.4 mm			
Sensing Geometry	Inertial Element			
All specifications are at room temperature unless otherwise specified				



3425 Walden Avenue, Depew, NY 14043-2495 USA

Toll-Free in the USA 800-959-4464

24-hour SensorLineSM 716-684-0003

Fax 716-684-3823 ■ Email imi@pcb.com

Website www.imi-sensors.com

ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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IMI-685A09-1115

Printed in U.S.A.



IMI Sensors designs and manufactures a full line of accelerometers, sensors, vibration switches, vibration transmitters, cables and accessories for predictive maintenance, continuous vibration monitoring, and machinery equipment protection. Products include rugged industrial ICP[®] accelerometers, 4-20 mA industrial vibration sensors and transmitters for 24/7 monitoring, electronic and mechanical vibration switches, the patented Bearing Fault Detector, high temperature accelerometers to +1300 °F (+704 °C), 2-wire Smart Vibration Switch, and the patented Reciprocating Machinery Protector. CE approved and intrinsically safe versions are available for most products.

Visit www.imi-sensors.com to locate your nearest sales office.