



## SERIES (EX)685AX9

# MECHANICAL VIBRATION SWITCH

- Linear trip adjustment throughout entire range of sensitivity adjustment knob
- More equal sensitivity on all three axes compared to traditional mechanical vibration switches
- Dual SPDT Form C relays to trigger to two simultaneous actions
- 24 VDC, 120 VAC and 240 VAC remote reset models available

### **APPLICATIONS**

- Cooling Towers
- Evaporative Condensers
- Steam Condensers

CE

- Air-Cooled Heat Exchangers (Fin-Fans<sup>®</sup>)
- Large Blowers and Fans



### PATENTED LINEAR ADJUST DESIGN PROVIDES MORE LINEAR CONTROL OF TRIP SENSITIVITY

The Linear Adjustable Mechanical Vibration Switch (Models [EX]685AX9) is uniquely designed to provide 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, the Linear Adjust Mechanical Vibration Switch is more cost competitive than any other existing mechanical vibration switches in the industry, including OEM volume pricing.



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#### PATENTED **LINEAR ADJUST SENSING ELEMENT**

**IMI SENSORS** 

A PCB DIVISION



Magnet in "Open" Position



Magnet in "Closed" Position

Technical Specifications								
Model Number	685A09	685A19	685A29	685A39	EX685A09	EX685A19	EX685A29	EX685A39
Performance								
Measurement Range	7 g pk 68.7 m/s² pk							
Frequency Range	0 to 100 Hz							
Relay	Two SPDT Form C							
Relay Contacts	Normally Open or Normally Closed							
Control Interface								
Manual Reset Function	Pushbutton							
Remote Reset Function	N/A	24 VDC	120 VAC	240 VAC	N/A	24 VDC	120 VAC	240 VAC
Environmental								
Temperature Range (Operating)	-40 to 140 °F -40 to 60 °C							
Enclosure Rating	IP66							
Hazardous Area Approvals	N/A				CSA, ATEX, IECEx			
Physical								
Sensing Element	Magnet with Linear Adjustment Technology							
Sensing Geometry	Inertial Element							
Housing Material	Aluminum Alloy							
Electrical Connector	Screw Terminals							
Screw Terminal Wire Size	24-14 AWG							
Cable Input	3/4-14 NPT							
Mounting Hole	0.25 in 6.4 mm				0.34 in 8.7 mm			
Size (width x height x depth)	4.35 in x 3.30 in x 4.35 in 110.5 mm x 83.8 mm x 4.35 110.5 mm				6.38 in x 4.18 in x 6.38 in 162.1 mm x 106.3 mm x 162.1 mm			
Weight	2.5 lb 1.1 kg		2.8 lb 1.3 kg		6.1 lb 2.7 kg		6.4 lb 2.9 kg	



Model [EX]685A09 Linear Adjust Mechanical Vibration Switch with Manual Reset



Model [EX]685A19 Model [EX]685A29 Model [EX]685A39 Linear Adjust Mechanical Vibration Switch with Manual and Remote Reset

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