



Mechanical Vibration Switch

The patented Linear Adjust design provides more linear control of trip sensitivity than any other mechanical vibration switch in the industry.

Highlights

- 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

Typical Applications

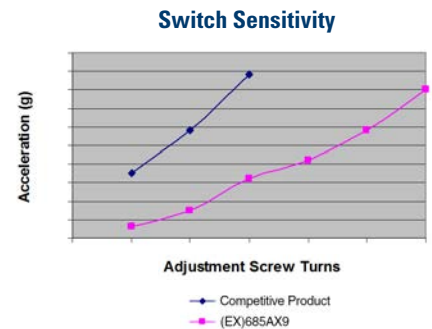
- Cooling Towers
- Evaporative Condensers
- Steam Condensers
- Air-Cooled Heat Exchangers (Fin-Fans®)
- Large Blowers and Fans



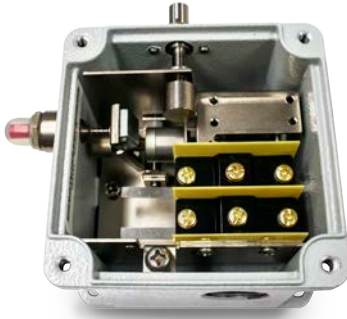
Series (EX)685AX9
Linear Adjust Mechanical Vibration Switch

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).

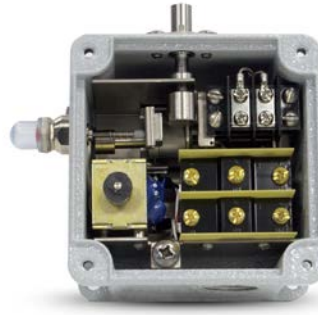
Additionally, due to its innovative design and manufacturing process, the Linear Adjust Mechanical Vibration Switch is more cost competitive than any other existing mechanical vibration switches in the industry, including OEM volume pricing.



Linear Adjust Mechanical Vibration Switch

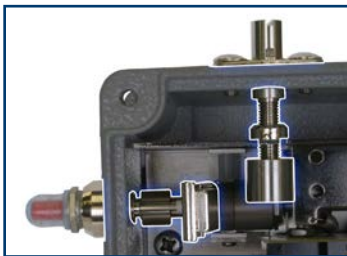


Model [EX]685A09
Linear Adjust
Mechanical Vibration Switch
with Manual Reset

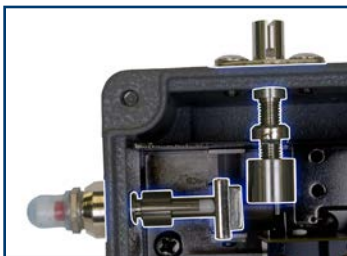


Model [EX]685A19
Model [EX]685A29
Model [EX]685A39
Linear Adjust Mechanical Vibration Switch
with Manual and Remote Reset

Patented Linear Adjust Sensing Element



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/s ² pk			
Frequency Range					0 to 100 Hz			
					0 to 6,000 cpm			
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)	-13 to 140 °F							
	-25 to 60 °C							
Enclosure Rating	IP66							
Hazardous Area Approvals	N/A				CSA, ATEX, IECEx Ex d			
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							
	0.2 - 2.5 mm ²							
Cable Input	3/4-14 NPT							
Mounting Hole	0.25 in				0.34 in			
	6.4 mm				8.7 mm			
Size (width x height x depth)	4.35 in x 3.30 in x 4.35				6.38 in x 4.18 in x 6.38 in			
	110.5 mm x 83.8 mm x 4.35 110.5 mm				162.1 mm x 106.3 mm x 162.1 mm			
Weight	2.5 lb		2.8 lb		6.1 lb		6.4 lb	
	1.1 kg		1.3 kg		2.7 kg		2.9 kg	



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ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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