

# MVS1110 Mechanical vibration switch

## 1. Overview

MVS1110 mechanical vibration switch with features of small size, low price, strong anti-interference capability and convenient installation, can meet all requirements where vibration to be measured. It consists of a simple and reliable over-center pivoting mechanism and a tension spring, providing the most economical protection for low-to medium- speed machinery. If the vibration level in line with the direction of sensitive axis of the switch exceeds an adjustable setpoint, the pivoting mechanism of the switch snaps to a stable tripped position where it contacts the relay and output discrete signal used for interlock or alarm. After the switch assumes its tripped position, it must be reset manually by means of external reset plunger or by means of a remote electrical reset.

A single set of SPDT relay contacts are provided as standard for connecting to a machine control or alarm circuit. And an option for two sets of SPDT contacts is also available for DPDT needs and the setpoints of the two must be identical.

## 2. Features

- Accommodate all needs where a mechanical switch mounted
- Water-proof & explosion-proof housing
- Local reset
- Optional remote reset
- SPDT or DPDT contacts
- NEPSI&IECEEx,Exd IIC T6,IP66 explosion-proof approvals

## 3. Applications

- Centrifugal
- Cooling tower fans
- Engines
- Reciprocating compressors
- Motors
- Pump

## 4. Technical Specifications

**Functions:** The setpoint is adjustable between zero and the full scale range via an adjustment screw

**Measurement range:** See the selection guide A

**Frequency response range:** 0-100Hz

**Setpoint adjustment:** 0-100% adjustable, externally adjustable

**Reset:** Local reset and remote reset via an optional reset coil

**Startup time delay:** Applying specified voltage across the reset coil maintains the switch in an untripped position for 20-30 sec. and allows the machine to run up to operating speed and normal vibration during startup. The electrical reset option is required.

**Temperature range:** -55°C- +70°C

**Case material:** Cast aluminum

**contacts: Silver-plated, 15A@115-480VAC**

0.5A@115VDC

0.25A@250VDC

**Gold-plated: 1A@115VAC**

**Hazardous rating:** See selection guide C

## 5. Selection guides

MVS1110-ABC-DE

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<b>A</b>		<b>Measurement range</b>			
	0	2g		2	NEPSI, Exd IIB+H <sub>2</sub> T6
	1	5g		3	NEPSI, Exd IIC T6
	2	10g		4	IECEX, Exd IIC T6
<b>B</b>		<b>contacts</b>	<b>D</b>		
	1	SPDT, plating silver, 15A		0	no
	2	DPDT, plating silver, 15A		1	115VAC
	3	SPDT, plating gold, 1A		2	230VAC
	4	DPDT, plating gold, 1A		3	24VDC
				4	115VDC
<b>C</b>		<b>Hazardous area level</b>	<b>E</b>		
	0	General application		1	3/4"NPT
	1	NEPSI, Exd IIB T6		2	M20*1.5

**6. Dimensions: unit: mm (in)**

