

CMCP-DVS Digital Vibration Switch



Features:

- Programmable
- 2 to 2,000 Hz
- 2 levels of Alarm
- Red 0.5" LED Display
- 5 Amp 230 VAC Relays
- Programmable Time Delay
- Latching or Non Latching Alarms
- 3-Lug Mounting
- Internal IEPE Accelerometer
- True RMS Velocity
- Explosion Proof

The **CMCP-DVS** a single channel microprocessor controlled vibration switch with two (2) alarm levels with associated relays. Alarm levels are completely programmable and can be either latching or non-latching. It has a 4 Digit 0.5" high Red LED Display along with LED alarm indicators and is available in English or Metric units. Standard setup is 0 – 1.0 in/sec (0 – 25.4 mm/sec), Non-Latching and 3 second delay The Sensor module mounted in the bottom of the housing uses a 100 mv/g IEPE Accelerometer and converts the signal to True RMS Velocity.

It is designed to be mounted directly to rotating machinery and prevent catastrophic failure by shutting down the machine when vibration levels become excessive. Alarm time delay is programmable from 0 to 99 Seconds to prevent false shutdowns. The unit is mounted in a Explosion Proof Enclosure and is rated Class 1 Division 1 BCD. Mounting is by the three (3) 5/16" Lugs provided.

For Latching Alarms a reset switch on the front panel keypad is provided. An Optional external switch is available. Terminals are also available for wiring to a remote reset switch.

Technical:

Frequency Response: 2 Hz to 1,000 kHz
 Range: 0-1.00 in/sec or 0-25.4 mm/sec Programmable
 Accuracy: ±5% Full Scale
 Vibration Detection: True RMS Velocity
 Display: 4 Digit 0.50" (12.5mm) 7 Segment Red LED
 Memory: Non-Volatile
 Response Time: Typically 200ms
 Output: 4-20 mA
 OK Circuit: Sensor Module Signal Low/High

Alarms:

Alarms: Two (2) Programmable Alarms, Latching or Non-Latching
 Alarm Indication: Front Panel LEDs
 Alarm Time Delay: Programmable 0 to 99 Seconds
 Relays: 2 SPDT 5 Ampere 250 VAC Resistive
 Alarm Reset: Front Panel or Remote (Terminal Provided)

Electrical:

Power: +24VDC ±20%
 Current: <50 mA

Environmental:

Operating Temperature: -40° to 140° F (-20°C to +60°C)
Humidity: 0-95% Non-Condensing

Approvals:

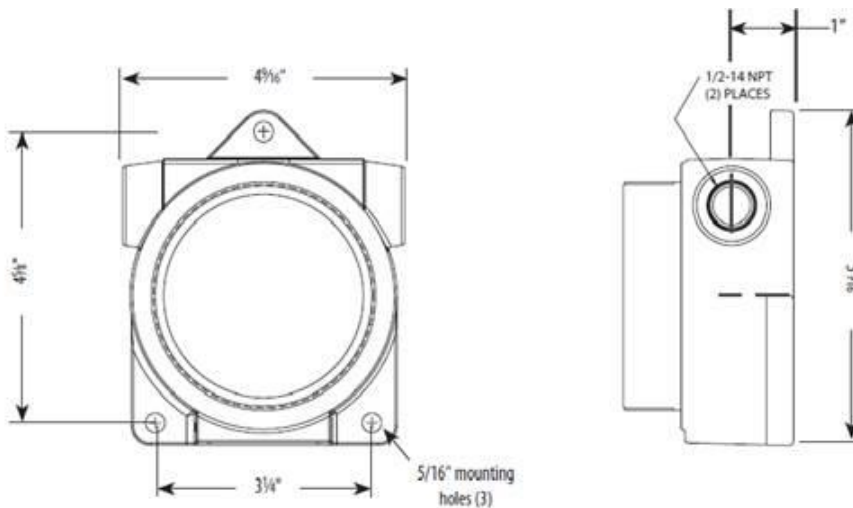
Class 1 Division 1 BCD (UL and CSA)
Type NEMA 4X

Mechanical:

Mounting: 3 each 5/16" (7.94 mm) Mounting Lugs
Dimensions: 4.57" W x 5.32" H x 4.13" D (116 x 135 x 105mm)
Weight: 3.72 lbs. (1.69 kilo)
Housing: Corrosion Resistant "Safety Blue" Polyester Powder Coating
Conduit Fittings: 1/2" NPT Conduit feed through hubs (2)
Window: 2.675" Tempered Glass Window

Mounting:

Drawing with Window Cover removed:



Ordering Information:

CMCP-DVS	-XX	-XX	Range
	-E1		0-1.0 in/sec
	-E2		0-2.0 in/sec
	-M1		0-25.4 mm/sec
	-M2		0-50.8n mm/sec
		-00	Without External Reset Switch
		-RST	With External Reset Switch

Set as Standard: 3.0 Second Delay, Non-Latching