

**CMCP-DVS**  
Digital Vibration Switch



**Features:**



- Programmable
- 2-2,000 Hz Frequency Range
- 2 Levels of Alarm (Alert and Danger)
- Daylight Visible Red LED Display
- 5 Amp, 230VAC Rated Relays
- Adjustable Time Delay
- Internal IEPE Accelerometer
- True RMS Velocity
- FM Class I Division 1 Approved
- ATEX/IECEx Ex db Approved
- IP68 Housing

**Description:**

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.

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 Specifications:**

Measurement Type:	Velocity RMS
Frequency Response:	2Hz to 2,000Hz
Full Scale Range:	See Ordering Information
Accuracy:	±5% of Full Scale
Display:	4 Digit, 0.50" (12.5mm) LED
Memory:	Non-Volatile
Response Time:	Typically 200ms
Output:	4-20mA
OK Circuit:	Fail Low/High
Conduit Entry:	Three (3), 3/4" NPT

**Alarms:**

Alarms:	Two (2) Programmable Alarms, Latching or Non-Latching
Alarm Indication:	Front Panel LED's
Alarm Time Delay:	Programmable, 0 to 99 Seconds
Relays:	2 SPDT
Relay Rating:	5 Amps, 250VAC

**Power:**

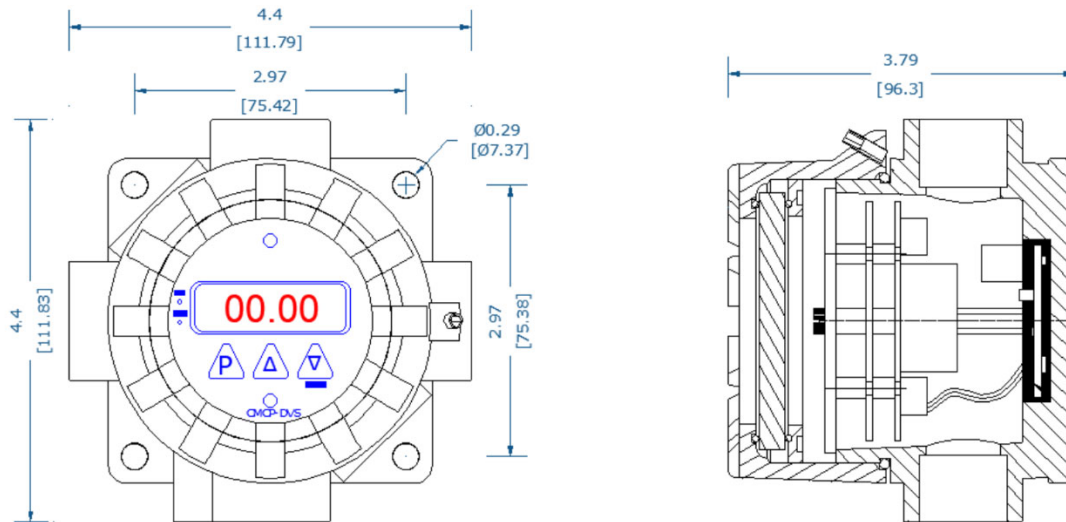
Voltage: +24VDC ±20%  
 Current: <50mA

**Environmental:**

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

**Approvals:**

FM: Class I Division 1, Group B,C and D  
 Class II/III Division 1, Group E, F and G  
 ATEX/IECEx: Ex db IIC T6 Gb  
 Ex tb IIIC T85°C Db  
 Ta = -40°C to +75°C  
 IP Rating: IP68

**Dimensions:****Ordering Information:**

CMCP-DVS	-XX	-XX	Description
	-E1		0-1.00 in/s Measurement Range
	-E2		0-2.00 in/s Measurement Range
	-M1		0-25 mm/s Measurement Range
	-M2		0-50 mm/s Measurement Range
	-00		Without External Reset Switch
	-RST		With External Reset Switch

Example: CMCP-DVS-E1-RST  
 Digital Vibration Switch  
 0-1.00 in/s Range  
 With External Reset Switch