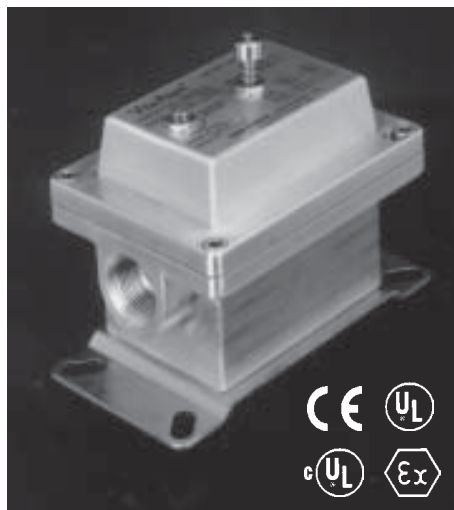




# Vibralert® Mechanical Switch

## Model 5550



APPLICATION TIPS	BASIC MODEL NUMBER
-Lowest cost vibration protection; -Baseplates available to accomodate most previous Metrix or competitor's switch models for easy retrofit. -Watertight & optional hazardous area rated enclosure -Options for built-in start up trip delay and/or remote reset.	<b>5550</b>

The Model 5550 vibration switch is designed to meet all requirements for mechanical switches in a single, affordable package. This unit provides economical vibration protection for low to medium speed machinery. An inertia sensitive mechanism activates an snap-action switch with SPDT output contacts if the vibration exceeds an adjustable setpoint. The Model 5550 contacts can be used to activate an alarm or initiate equipment shutdown. The housing is weatherproof with an optional hazardous area rating. Electrical (remote) reset with start-up time delay and a second set of SPDT output contacts to accomodate DPDT needs (e.g. separate trip and trip light circuits) are available.

### Features

- Meets all requirements for mechanical switches in one package
- Weatherproof and optional hazard area rating
- Local and optional remote reset with startup delay
- SPDT or (2)SPDT switch output contacts

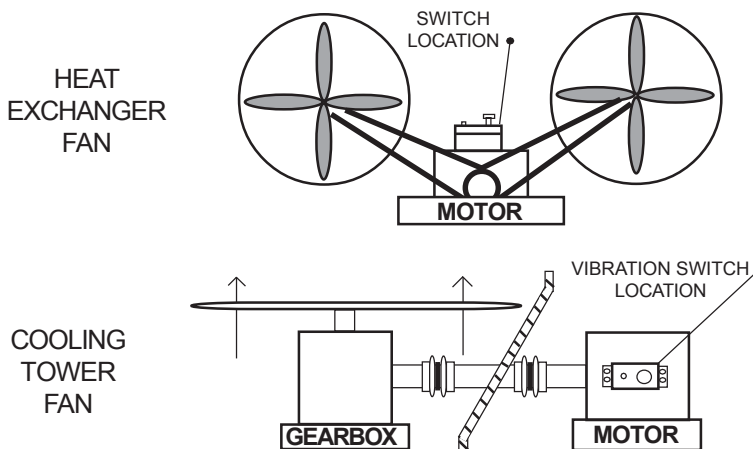
### Applications

- Heat Exchanger Fans
- Cooling Tower Fans
- Recip Engines
- Recip Compressors

### Application Note:

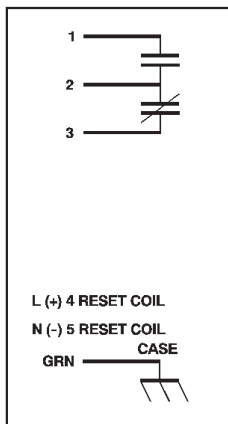
For an upgrade to velocity (ips or mm/s) monitoring or for dual limits (i.e. separate alarm and trip setpoints), see SW Series electronic switches.

### Typical Installation Diagrams

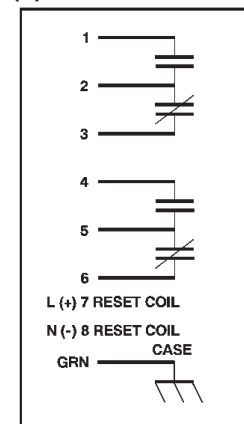


### User Wiring Diagrams

#### SPDT CONTACTS



#### (2) SPDT CONTACTS



NOTE:  
(2) SPDT contacts and reset coil optional



# VibrAlert® Mechanical Switch

## Model 5550

### Specifications

**Function:** Armature mechanism trips on high vibration and operates snap action switch(es).

**Vibration Range:** See How to Select "C"

**Frequency Range:** 0 to 3600 RPM

**Set Point Adjust:** 0 to 100% of range. External set point adjustment.

**Reset:** Local reset, plus optional remote reset electrical coil. See How to Select.

**Start Delay:** Applying reset coil voltage at start up holds mechanism from tripping for 20-30 seconds, after which the switch is automatically activated. Requires electric reset option (D\*0).

**Temperature Limit:** -40° to +70°C (-40° to +158° F)

**Enclosure:** Cast Aluminum

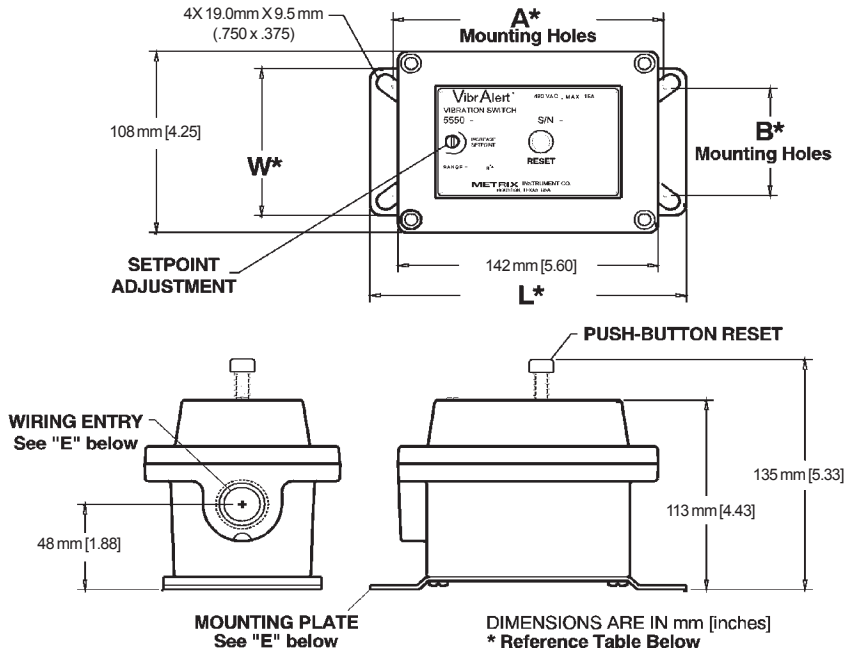
**Environmental Rating:** NEMA 4, IP 65 & CE mark

**Switch Contact(s) Rating:** 15 amps, 125, or 480 vac; 1/8 hp, 125 vac; 1/4 hp, 250 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc.

**Hazard Rating:** See How to Select "A"

**Weight:** 1.8 kg (4.0 lbs.)

### Model 5550 Weight & Dimensions



### How To Select...

MODEL **A** **B** **C** **D** **E** **F**  
**5550** -    -

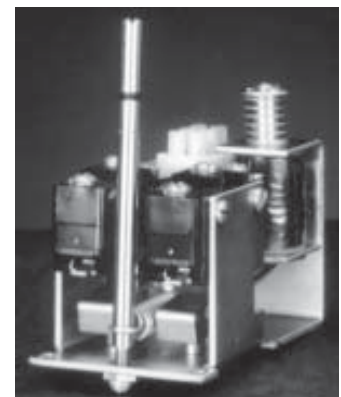
Standard  
**5550 - 0 1 1 - 0 1**

- A**  Hazard Area Rating
- 0= None
  - 1= UL, cUL Explosion Proof  
Class I, Groups C & D, Div 1  
Class II, Groups E, F & G, Div 1
  - 2= UL, cUL Explosion Proof  
Class I, Groups B, C & D, Div 1  
Class II, Groups E, F & G, Div 1
  - 3= CENELEC Flameproof  
EEx d IIB T6
  - 4= CENELEC Flameproof  
EEx d IIB+H<sub>2</sub> T6
- B**  Contacts
- 1= SPDT
  - 2= (2) SPDT (use for DPDT too)
- C**  Full Scale Vibration Range
- 1= 5 g
  - 2= 2 g
  - 3= 10 g

- D**  Reset Coil & Start Up Delay
- 0= None
  - 1= 115 VAC
  - 2= 230 VAC
  - 3= 24 VDC
  - 4= 115 VDC
- E**  Wiring Entry/Mounting Plate (See chart below for E)
- 1 = 3/4" NPT/Metrix 5173 or 5175
  - 2 = 3/4" NPT/Metrix 5097; VS-2-EX; 366
  - 3 = 3/4" NPT/Metrix 5078; 365
  - 4\* = M20 x 1.5/Metrix 5097; VS-2-EX; 366
  - 5\* = Same as option 4 above w/ epoxy coated mounting plate
  - 6\* = M20 x 1.5 / Metrix 5173 or 5175
  - 7 = 3/4" NPT / PMC/BETA 440
  - 8\* = M20 x 1.5 / Metrix 5078; 365

- F**  Environmental Rating
- 0= NEMA 4, IP 65, CE
  - 1= NEMA 4X, IP 65, CE
- If left blank, NEMA 4, IP 65, CE unit is provided.

\*Note: When option A1 or A2 is specified, options E4, E5, E6 and E8 are not allowed.



Internal Mechanism

CHART FOR HOW TO SELECT "E"	(L)	(W)	(A)	(B)
E = 1, 6	165 mm [6.50]	83 mm [3.25]	141 mm [5.56]	59 mm [2.33]
E = 2, 4, 5	152 mm [6.00]	121 mm [4.75]	118 mm [4.63]	79 mm [3.12]
E = 3, 8	165 mm [6.50]	121 mm [4.75]	136 mm [5.37]	92 mm [3.62]
E = 7	114 mm [4.50]	127 mm [5.00]	71 mm [2.80]	108 mm [4.25]