

## Vibration Switch (Model VSW 150)



Vibration Switch provides essential protection for critical fans, pumps, motors and other industrial machines. It measures the vibration to which it is exposed and generates relay output when vibration exceeds the preset threshold values.

The Vibration Switch is well equipped for rotating machine protection applications. It offers bright 3½ digit display, precise 4-20mA analog output and one relay out put with status indicator resulting in three-in-one product. Set point setting for relay output is user configurable. Remote sensor mounting gives better performance and higher temperature compliance.

Reliability is ensured by our ISO 9001 approved quality control system from UL labs. Masibus is quality manufacturer of vibration switch having various features and ranges.

Vibration Switch is a strategic tool for protection of machines which measures online vibration and provides relay output for operator alarm or machine trip purpose. Vibration is displayed and alarm is generated when vibration is abnormal. Once alarm is generated, machine data can be analyzed for the root cause of increased vibration. This provides an opportunity for early fault detection.

Vibration is monitored in terms of r.m.s. and peak. When overall vibration is to be measured, r.m.s. and peak measurement technique is considered best for general machine health.

Vibration Switch makes online vibration monitoring cost-effective with its optional retransmission analog output which can be connected to plant RTU / PLC / DCS systems.

Masibus has a proven track record of manufacturing online process monitoring instruments for over 3 decades.

## Features

- *3 in 1 Vibration Transmitter - Display - Switch*
- *Bright 3½ - digit LED display*
- *Vibration range available upto 50mm/S*
- *Relay & analog output*
- *Excellent long-term stability*
- *Easy configuration from front keys*
- *Set value switch*
- *Local/ Remote mounting provision for high temperature application*

VSW 150

**masibus**  
Advanced Automation - Sure Solutions

# Vibration Switch (Model VSW 150)

VSW 150

## HARDWARE SPECIFICATIONS

VSW 150

<b>Mounting</b>	Remote sensor mounting Vibration sensor is mounted on bearing (surface where vibration measurement is required) and connected to Vibration switch. Switch takes analog signal proportional to 0-25mm/S from vibration sensor.
<b>Sensor Mounting</b>	Stud / Pad mounting
<b>Electrical Connection</b>	Screw type for power and relay output connection that can accept up to 2.5mm <sup>2</sup> wire.
<b>Vibration Range</b>	upto 50mm/S
<b>Display</b>	Display type: 3½ digit seven segment LED (Height of LED: 7.62mm) Display Resolution: 0.01% F.S. Display Unit: mm/S
<b>Turn ON time</b>	120 sec
<b>Power Source</b>	90 to 270 V AC / 120 to 385 V DC
<b>Power Consumption</b>	Less than 7 VA
<b>Comparator Output</b>	Relay Output: 230 VAC, 2 A Hysteresis: Settable via trim port upto 1.0mm/s Relay can be set to NO or NC. (Factory Set, Default Setting- NC)
<b>Retransmission Output</b>	4 - 20mA DC
Accuracy	± 5% of Full span
Load	Max. 450Ω
Frequency range	10 Hz to 1 KHz
<b>Indications</b>	
Power On	Red Led
Relay On	Green Led
<b>Insulation Resistance</b>	Greater than 50M
<b>Insulation to Withstand Voltage</b>	1000VAC for one minute, between supply to internal circuits.
<b>Zero &amp; Span</b>	Trim pot variation ±5% accessible on the Front of the module.
<b>Ambient Temperature</b>	0 to 50°C
<b>Storage Temperature</b>	0 to 80°C
<b>Operating Humidity Range</b>	20 to 95% RH non-condensing
<b>Case Material</b>	ABS plastic enclosure
<b>Construction &amp; Size</b>	80mm x 82mm x 85mm
<b>Sensor Operating Temperature</b>	- 50 to 121 °C
<b>Sensor Type</b>	PZT ceramic
<b>Weight</b>	<400 grams approx.

## ORDERING CODE

Model	Vibration range		AO	Mounting	
<b>VSW 150</b>	XX		X		X
	1R	0-12.5	m	N	None
	2R	0-25	g	1	4-20mA
	3R	0-50			
	1P	0-12.5			
	2P	0-25			
	3P	0-50			

R - RMS measurement      m - mm/S  
P - Peak measurement      g - 9.81 m/S<sup>2</sup>  
X - Specify from table