SHOWA

Vibro-Switch
Model-1500A

Detects unusually great vibrations and gives an alarm signal. Sensor, alarm setting and alarm contact are entirely united in one body for ease of operation.

● Compact design, low price and accurate vibration monitoring at 2 upper limits.

● Vibration modes for acceleration, velocity and displacement are selectable with internal switch.

● Drip-proof aluminum housing connectable with flexible conduits.

● Alarm level setting at a step of 1%　from 1 to 99%　with internal digital switch

● Two different alarming steps, one for self-holding operation and the other for automatic resetting operation are provided.

● Alarm delay of up to 60 seconds can be set to prevent misfunction.

● Low power consumption of 12mA(Typ) at 24V DC.

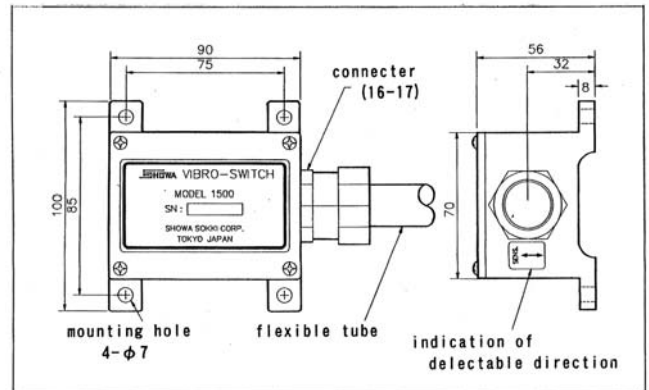● Usable for monitoring vibrations in motors, fans, piping,etc.

SPECIFICATIONS

Alarm setting range:	① Acceleration:	$1\sim99m/s^2(p)$
(Select 1,2 or 3.)	② Velocity:	$1\sim99mm/s(p)$
	③ Displacement:	$0.01\sim0.99mm(P-P)$
Frequency characteristics:	Acceleration:	$5\sim500Hz$
(+5%, -10%)	Velocity:	$10\sim500Hz$
	Displacement:	$10\sim500Hz$

Accuracy: Within 5% (25°C, 80Hz, $10m/s^2$ measurement of sinusoidal wave)

Linearity: Within 1% of full scale

Driving power supply: DC24V±0.5V, 12mA(Typ), 20mA(max)

Relay operation: Delay 0 to 60 sec variable
Self-holding operation and automatic resetting operation, make contact by MOSFET.
(Resetting by turning off driving power supply)
Contact rating AC/DC 125V, 0.5A

Housing construction: Material Aluminium(with neoprene packing)
Protection IP-64

Vibration resistance: $10m/s^2$ for vibration, $100m/s^2$ for shock

Dielectric strength: 1500V AC between relay contact and housing for 1 minute
1500V AC between relay contact and power supply (24V) for 1 minute
Power line is connected to housing at $0.1\mu F$

Applicable electric wire: $0.2\sim1.3mm^2(AWG24\sim16)$

Applicable conduit: Flexible conduit, 17mm ID, 23mm OD
Brand name HIFLEX WHITE PVC
(Made by MATSUSHITA DENKO)

DIMENSIONS

90
75
connecter (16-17)
100
85
SHOWA VIBRO-SWITCH
MODEL 1500
SN :
SHOWA SOKKI CORP, TOKYO JAPAN
mounting hole 4-φ7
flexible tube
56
32
8
70
indication of delectable direction

Example for built-in a machine

External connrction

① Vibration mode setting
② Alarm level setting(HH)
② Alarm level setting(H)
VEL 100mm/s(P)
ACC 100m/s²(P)   DISP 1mm(P-P)
HH PRESET(%)
X10 X1
HH DELAY
H PRESET(%)
X10 X1
H DELAY (CW: 60sec)
ON 1 2 3
+24V
0V
SUPPLY
HH
Ry OUT
Ry OUT
H
⑤ Relley out(HH) Self-holding
⑤ Relley out(H) Automatic resetting
④
Install a reset switch (or break contact).
+ DC24V Power -
AC Line
③ Delay time setting(HH)
③ Delay time setting(H)