

Yekan MS60/ Mechanical Vibration Switch

Datasheet

Rev. V2.2



Description

Yekan's Mechanical Switch, designed specifically for demanding environments where reliability and precision are paramount. This high-performance switch is engineered to operate within a broad explosion-proof range, safeguarding against the risks associated with vibration exposure. Our Mechanical Switch stands out for its robust construction, ensuring longevity and consistency under the most challenging conditions. With an operating range efficiently set between -40°F and +194°F (-40°C and +90°C), it adapts seamlessly to diverse temperature fluctuations. The unique design allows for precise set points within the range of 0 to 5 g, making it an ideal choice for various applications requiring accurate vibration detection. This switch is not only reliable but also easy to integrate into existing systems, enhancing operational safety without compromising performance. Furthermore, this switch is designed for both vertical and horizontal mounting.

Ordering Information

MS60 Mechanical Vibration Switch

MS60–ABC–DD

Designation	Description
MS60	Mechanical Switch Amplitude Range 0 - 5 g

A: Relay Contacts

1	SPDT, Silver
2	DPDT, Silver

B: Reset / Startup Delay Coil Voltage

1	None
2	110 - 115 - 120 VAC
3	220 - 230 - 240 VAC
4	24 VDC
5	48 VDC
6	110 - 115 - 120 VDC

C: Wiring Entry

1	3/4" NPT
2	1/2" NPT
3	M20 x 1.5

DD: Mounting Hole Pattern

01	Default Yekan
02	Robershaw 365
03	Robershaw 366
04	Metrix 5550 (5173 or 5175)
05	Metrix 5550 (5097)
06	Metrix 5550 (5078)
07	Metrix or PMC-BETA 440
08	Murphy VS2
09	Murphy VS2EX
10	PVTVM PT500-13
11	PVTVM PT500-14
12	SAMI VBS
13	FFE 3171

Specifications

Amplitude Range	0 - 5 g pk
Frequency Range	0-300 Hz (0-18000 rpm)
Setpoint Adjustment	Location: Externally Accessible
	Resolution: ± 0.2 g
Local Reset	Manual plunger-style pushbutton on switch housing
Temperature Limits	-40°F to +194°F (-40°C to +90°C)
Accuracy	$\pm 5\%$ of full range at frequencies up to 300 Hz
Contact Arrangements	SPDT or DPDT
Contact Ratings	Designation "SPDT": Noninductive: 15A max 125,250 OR 480 VAC. 2A max at 24 VDC, 1A max at 48 VDC, 0.5A max at 120 VDC. Designation "DPDT": Noninductive: 3A max at 250 VAC. 5A max at 125 VAC. 4A max at 24 VDC, 3A max at 48 VDC, 0.4A max at 120 VDC. Inductive: 1/4 HP at 250 VAC. 1/5 HP at 125VAC.
Reset Coil Power	24 VDC, 0.6A $\pm 5\%$ 48 VDC, 0.4A $\pm 5\%$ 120 VDC, 0.5A $\pm 5\%$ 120 VAC, 0.5A $\pm 5\%$ 240 VAC, 0.45A $\pm 5\%$
Weight	Net..... 5 lbs. Shipping..... 5.5 lbs.
Housing	Meets Class I, Div. 1, Groups C & D, and Class II, Div. 1, Groups E, F, & G, hazardous classification
Mounting direction	Vertical and Horizontal
Casa Material	CAST ALUMINIUM 365-T6 (COPPER FREE)
Accessory Equipment (Optional)	Control Units are available which offer "Starting Time Delays" and "Monitoring Time Delays" to prevent false shutdown or alarm conditions.

Figures

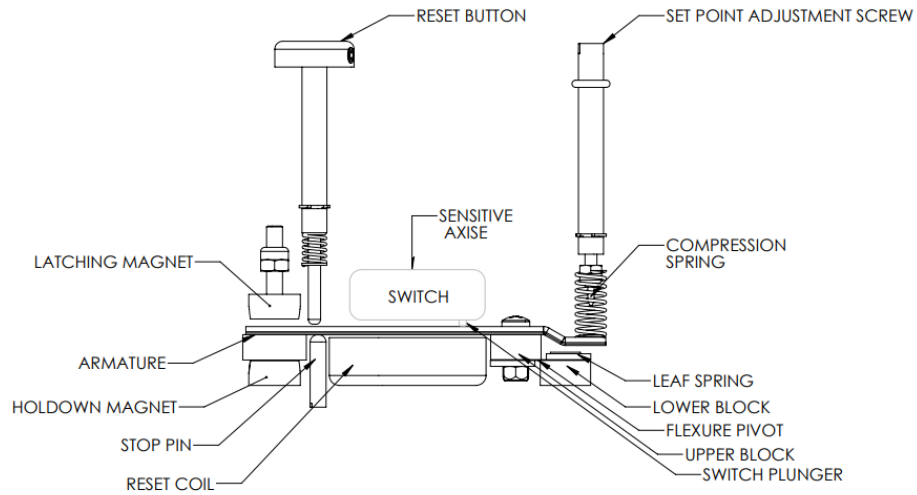


Figure 1. MS60 Mechanism

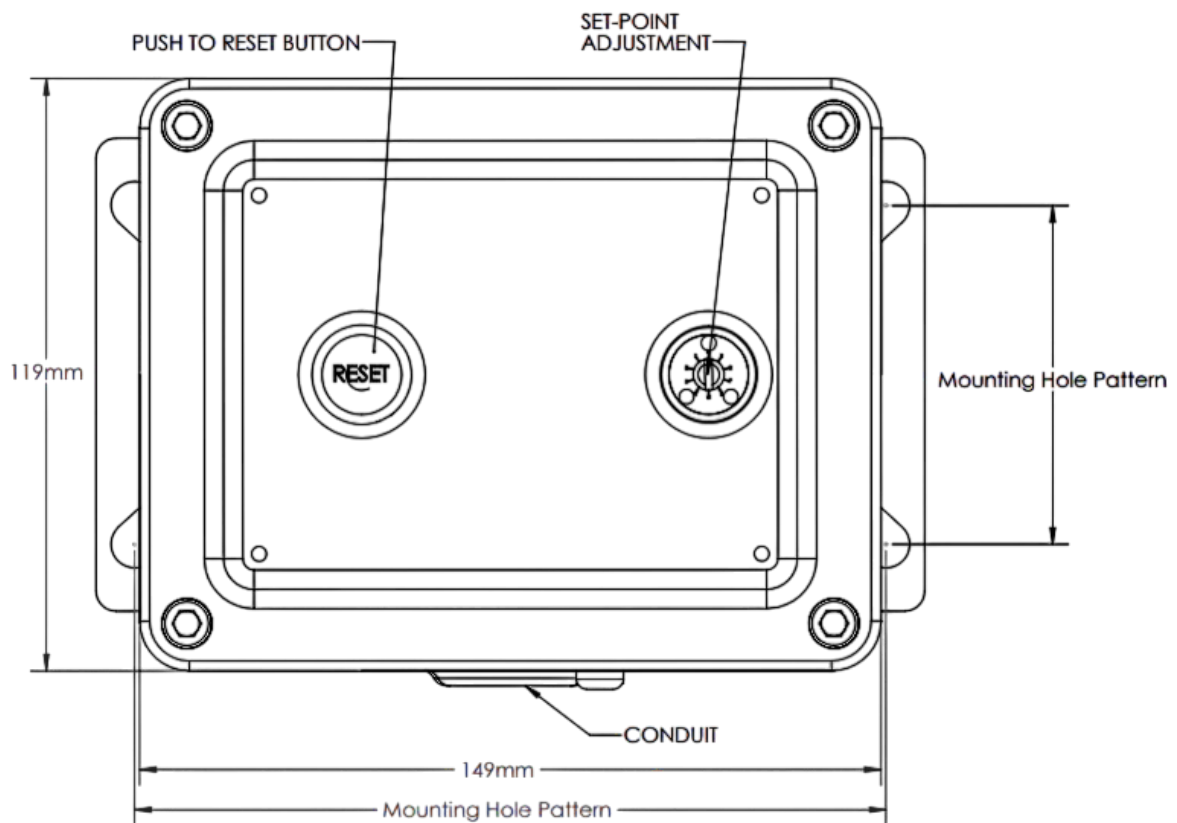


Figure 2. MS60 top view

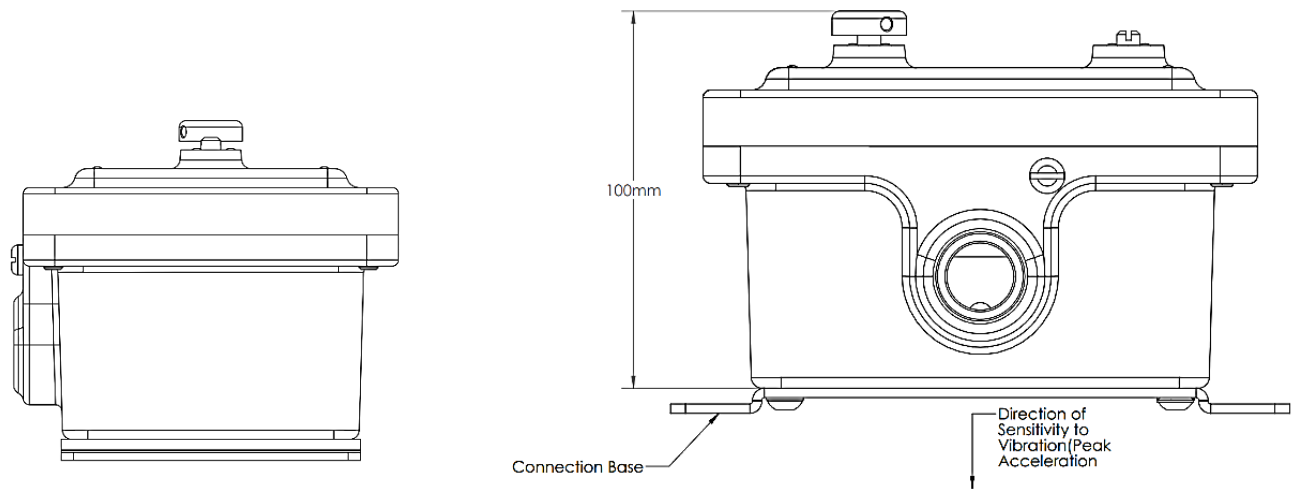


Figure 3. MS60 side view

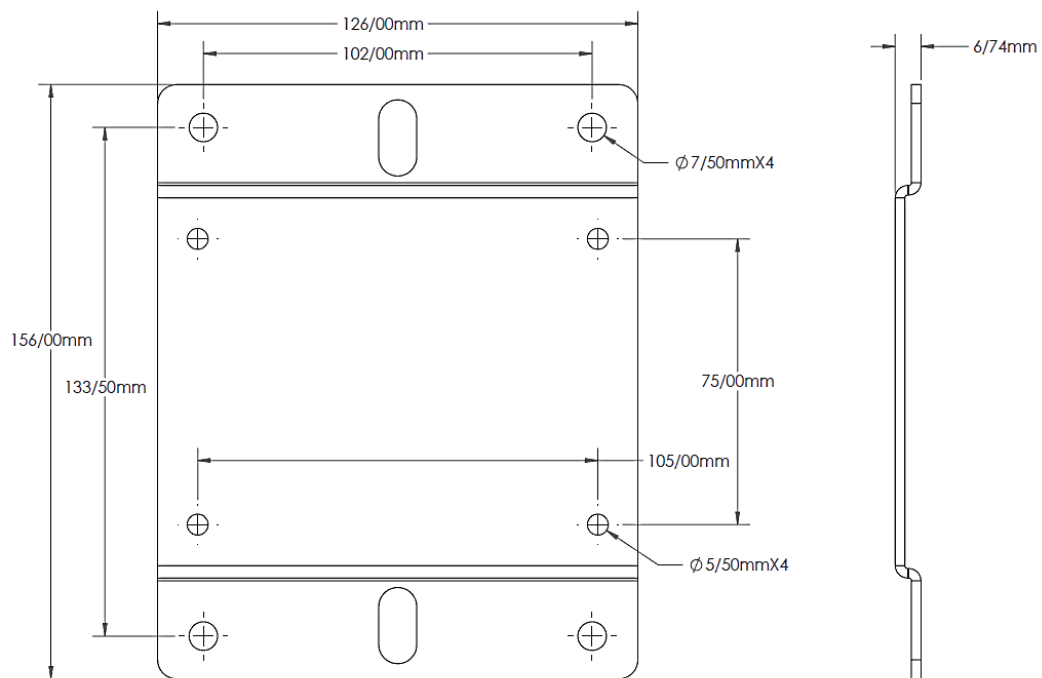


Figure 4. Default Yekan Mounting Hole Pattern "DD: 01"

Features & Benefits

Explosion Proof	EX db IIC T6 T5 T4 ; IP66
Self-Powered	Does not require external power to operate. (Except remote reset)
Acceleration Sensitive	Measures destructive forces.
Minimum Maintenance	No moving parts except at trip level.
Continuous Protection	No attention required after installation.
Ease of Installation	Requires no special training.
Long Life	Instrument is rugged and durable-no wear.
Ease of Adjustment	Set it and forget it-one adjustment.
Reset	Remote electrical or manual at unit.
AC or DC	Reset coil options. O-Ring Shaft Seals Standard

Copyright 2024 Yekan Company. All rights reserved.



Yekan Tajhiz company is acting in the field of supply, consulting and engineering services associated with vibration measurement and monitoring equipment and works as the middle east representative of Bently Nevada, Metrix and CTC brands.

Tehran, Iran
Phone: 021-88196217 or yekan-vibro.com/support