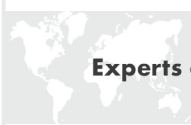


Non Mercury Switches



DESCRIPTION

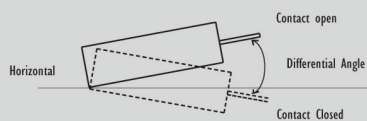
The products included in this catalogue are all designed to detect motion or movement. Forms of movement are: Tilt, Rotation, Vibration, Shock or Acceleration. Many of these can also be supplied for surface mount applications.

Tilt Switches

These operate when tilted from the horizontal position. The switch movement required to cause contact change is called the differential angle. It is very important when designing a tilt switch to allow for the differential angle and understand that when in the horizontal position the switch contact may be open or closed.

Tilt Switch Modules

A Tilt Switch can be located inside a sealed (usually plastic) enclosure. Flying leads are provided for easy connection.

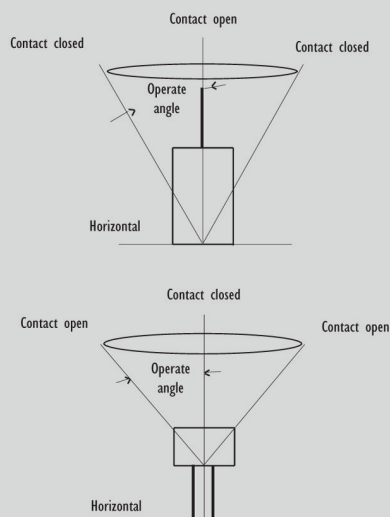


Tip-Over Switches

These operate when the switch is tilted from the vertical position. The angle through which the switch has to move before operating is called the operating angle. Many of these switches are omni-directional. Please state whether you require normally open or closed when ordering.

Tip-Over Switch Modules

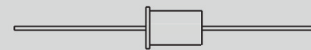
A Tip-Over Switch can be located inside a sealed (usually plastic) enclosure. Flying leads are provided for easy connection.



Acceleration Sensors

These switches can have a normally open, or normally closed contact which will open or close when the switch reaches the acceleration activation level.

Direction of acceleration to close contacts



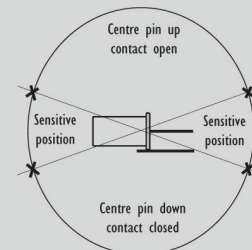
Movement and Vibration Switches

When correctly positioned the switch contacts will react by giving an intermittent change of state when subjected to movement or vibration.

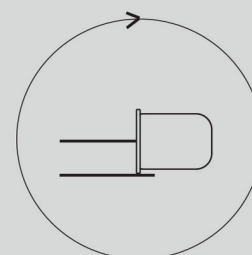
Movement and Vibration Switch Modules

A Movement or Vibration switch can be located in a sealed (usually plastic) housing.

Position Sensitive



Non Position Sensitive

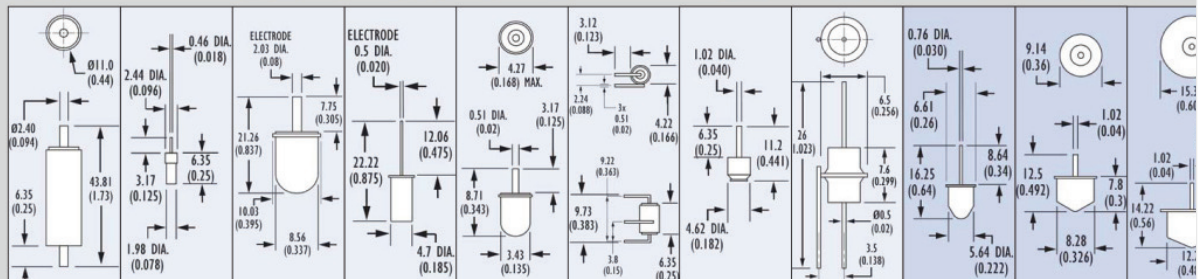


Switch mounted in any position.

All dimensions are nominal, in millimetres unless otherwise stated. If further information is required, individual datasheets are available on our websites, and on CD. As part of the group's policy of continued product improvement, specifications may change without notice. Our sales office will be pleased to help you with the latest information on our products.

NON MERCURY SWITCHES

*use either part number
**more detailed information over page



Options / Features	• Hermetically Sealed • Change-over • Make before break	• Hermetically Sealed • Inert gas filled	• Automotive Lamp Switch	• CW1300-0 (1 Electrode) • CW1300-1 (2 Electrodes) • Surface mount version available	• CW1600-0 (1 Electrode) • CW1600-3 (2 Electrodes)	• Change-over contacts	• Use also as a Movement / Vibration sensor	• Hermetically Sealed • Inert gas filled	• Omni-Directional	• Omni-Directional	• Omni-Directional
Description	Tilt Switch								Tip-Over Switch		
Type	AG1020-0	AU2100-0	AG3011-0	CW1300-0	CW1600-0	CW1620-3	CW1800-0	S1234	AG1260-0	CW1430-0	CW1711-0
Contact Form / Style	Change-over SPDT break before make	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Change-over	Dependent on mounting	Change-over break before make	Normally Open	Normally Open	Normally Open
Switching Voltage Max.	24VDC	50VAC	24VDC	60VDC/AC	60VDC/AC	60VAC	60VDC/AC	60VAC	60VAC	60VAC	60VAC
Switching Current Max. A	1 at 6 - 24VDC	0.15	1 at 6 - 24VDC	0.25	0.10	0.10	0.10	0.2	0.25	0.1	0.25
Switching Capacity Max. VA	25	2.0	25	3	3	0.3	3	3	3	3	3
Switching Angle (Tilt Switches) Max. °	15	15	15	15	15	-	15	35	60	60	18
Differential Angle (Tip-Over Switches) Max. °											
Activation level (Acceleration Switches) Max. g											
Contact Resistance Max. Ohms	10	30	3	30	100	400	100	10	5	5	15
Operating Temperature Max. °C	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100	-37 +100
Storage Temperature Max. °C	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125	-40 +125
Case Material	Steel Tin Plated	Nickel Gold Plated	Steel Tin Plated	Nickel Tin Plated	Nickel Tin Plated	Steel Tin Plated	Steel Tin Plated	Steel Gold Plated	Nickel Tin Plated	Steel Tin Plated	Steel Tin Plated
Mounting Clip / Cable	-	-	-	1A	-	-	-	-	33	-	-

AWG to mm² Cross Reference table

AWG	mm ²
36	0.05
34	0.08
32	0.14
30	0.25
28	0.34
26	0.48
24	0.65
22	0.88
20	1.18
18	1.58
16	2.08
14	2.68
12	3.38
10	4.24
8	5.26
6	6.45
4	7.92
2	9.74
1	12.67
3/0	15.88
2/0	20.11
1/0	25.23
4/0	31.37
350MCM	150
350MCM	185



Options / Features		• Gold plated contacts • Omni-Directional • 2 ball version available (less sensitive) • Silver available	• Encapsulated	• With steel mounting bracket	• Encapsulated	• Robust construction	• Robust construction	Adjustable to minimise contact bounce	• Low cost compact size	• 1 Amp switching	• Low cost easy fitting	• Omni
Description		Movement / Vibration Switch	Tilt Module									
Type		MS24M/AU2401-1*	AG3011-70	AG3011-90	CN111-70	CN111-90	S1039CW/CW1300-90*	**CW60A/30	CW60S/15	S1016CW	TSW 30/60	CV
Contact Form / Style		Non position sensitive	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Dependent on mounting	Norm
Switching Voltage	Max.	24VDC	24VDC	24VDC	60VDC	60VDC	60VAC	60VAC	60VDC/AC	120VAC	60VAC	
Switching Current	Max. A	0.20	1	1	1	1	0.25	0.25	0.1	1.0	0.25	
Switching Capacity	Max. VA	5	25	25	14	14	3	3	3	25	3	
Switching Angle (Tilt Switches)	Max. °	0.4G	20	10	10	10	15	15	15	15	16	
Differential Angle (Tip-Over Switches)	Max. °											
Activation level (Acceleration Switches)	G											
Contact Resistance	Max. Ohms	Less than 10	3	3	-	-	10	10	10	3	10	
Operating Temperature	Max. °C	-37 +100	-20 +70	-20 +70	-40 +100	-40 +100	-20 +70	-20 +70	-20 +85	-20 +70	-20 +85	
Storage Temperature	Max. °C	-40 +125	-25 +70	-25 +70	-40 +100	-40 +100	-20 +75	-25 +70	-20 +105	-25 +75	-20 +105	
Case Material		Steel Gold Plated	ABS	ABS	ABS	ABS	ABS	Polypropylene	Polypropylene	ABS	Nylon 66	
Mounting Clip / Cable		3B	2 x 18 AWG Neoprene insulated	2 x 18 AWG Neoprene insulated	2 x 26 AWG PVC insulated	2 x 26 AWG PVC insulated	2 x 0.14mm ² PVC insulated	3 x 0.14mm ² PVC insulated	2 x 0.22mm ² PVC insulated	2 x 0.52mm ² round Silicone (with eyelets)	2 x 0.14mm ² PVC insulated	2 x 1 Rubl

We are here for you. Addresses and Contacts.

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