



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





T1-AB-JS

Mechanical and Electrical Specifications

Poles and Circuits: SPST (ON/OFF)
 Max Current: 0.25 A Resistive
 Max Voltage: 30VDC
 Max Power: 0.25 W Resistive
 Mechanical Life: 1 million operations (Typical)
 Angles of Operation: ON= 180° (+/- 4°)
 OFF= 180°(+/- 4°)

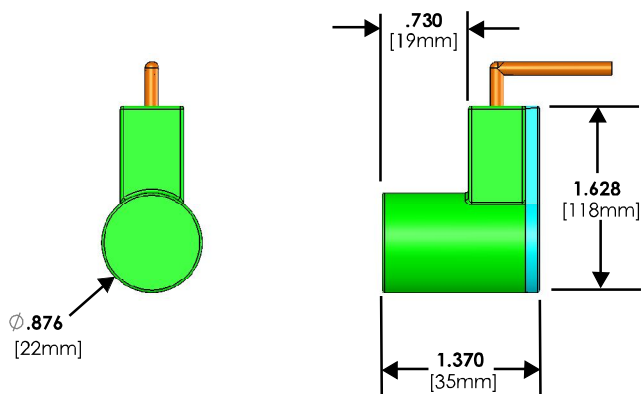
Materials

Housing: ABS
Wire Leads: JACKETED 22/2 ASG 0.11" OD x12"

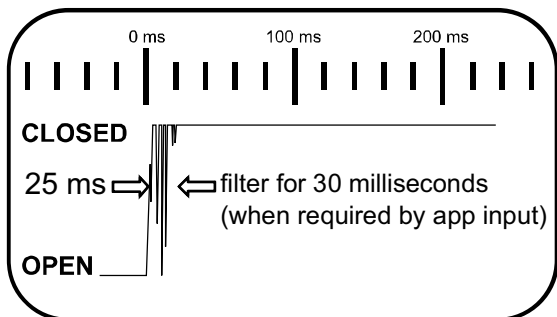
Environmental Specifications

Operating Temperature Range:
 -40°F/-40°C to 185°F/85°C
Humidity: N/A (Sealed Construction)
Magnet Field: Performs normally in weak or absent magnetic fields. Operation is not affected by ferrous environments.

Dimensions



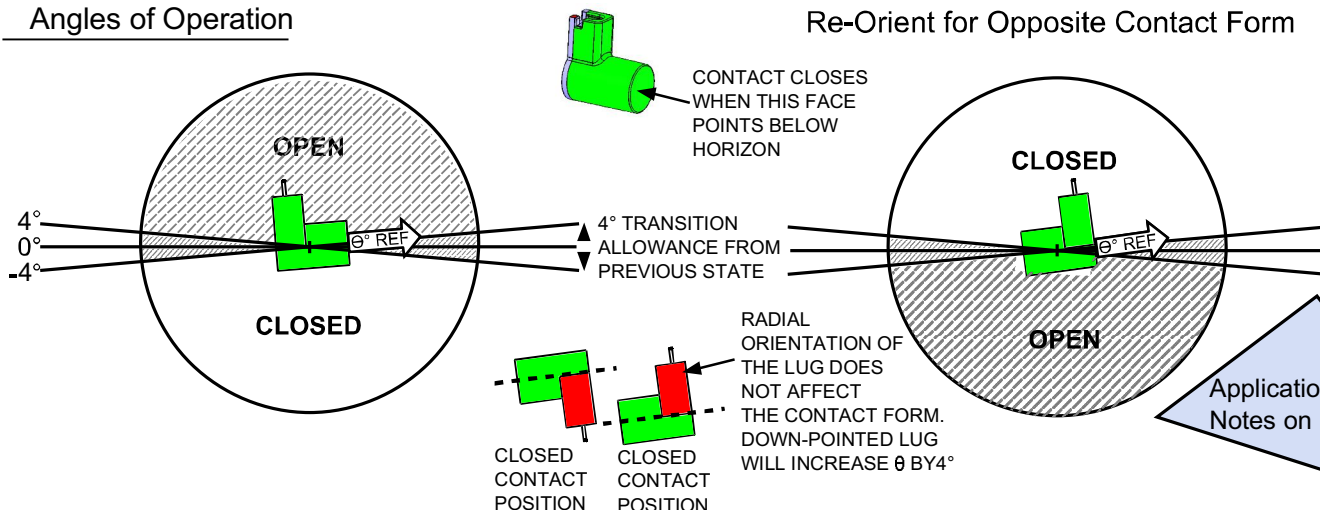
Signal Debounce



Features

1. RoHS Compliant
2. Non-Mercury Switch
3. Contact Form B or Form A
4. Industrial Grade
5. No standby power consumption
6. Precision switching range
7. Hysteresis <10 Degrees (included angle for on/off)
8. Chemically Inert
9. Sealed from atmosphere and water
10. Magnetic switching improves vibratory contact stability over non-mercury alternates

Angles of Operation



Application Notes on Page 2

Ready to install "as-is" for industrial environments

Mounting

- Grip the 7/8" diameter by using a clamp:
- P-Clamp
 - Pipe Mounting/Routing Clamp
 - Rubber Bushing in a panel or plate
 - Vibration-Damping Clamp (or clamping U-Bolt) for applications with excessive vibration
- Universal mounting bracket(s) sold separately (p/n:1608)

Mounting Site

Mounting the switch close to the center of rotation will provide the most responsive reading. Mounting the switch far from the center of rotation will increase undesired centrifugal effects on the switch in quick-moving applications.

Debounce Techniques

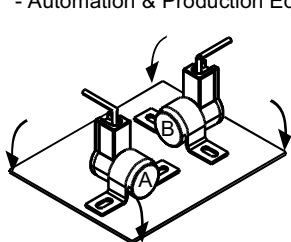
Some applications may require contact debounce filtering, necessary for coping with the contact bounce of nearly any mechanical switch or pushbutton. For digital inputs, a debounce filter may be applied via software programming or by using a hardware low-pass filter. Please check your controller documentation; debounce filtering may already be available as a default. For analog applications, a hardware filter can be included in the circuit. Many detailed resources can be found online by searching using terms: CONTACT DEBOUNCE FILTER CIRCUIT

Application Notes

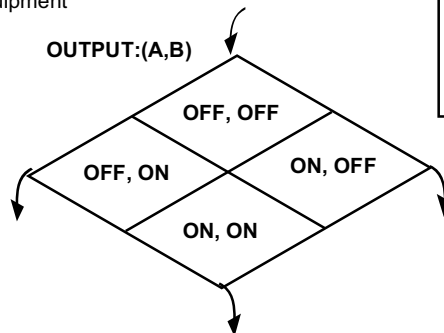
1. Magnasphere's tilt sensor is a switch, which provides great potential for power savings to wireless devices and stand-by systems.
2. This switch is constructed to be install-ready for industrial and outdoor equipment.
3. Any angle of tilt can be sensed by simply mounting the switch's axis to the desired angle. **
4. Bidirectional tilt sensing can be achieved using two switches on the same circuit.
5. Control loads above the maximum ratings by using a diode-protected or solid-state relay.
6. Tilt switch should be biased above or below the horizontal plane by at least 4 degrees. **

Ideal Uses Include:

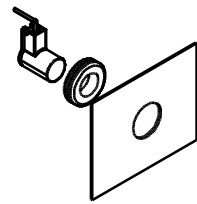
- Aerial Lifts and Aerial Booms
- Powered Access Ramps and Lifts
- Ports, Hatches, Industrial & Overhead Doors
- Appliance and Equipment Tip-Over
- Agricultural and Road Equipment Extensions
- Vehicle Trunk & Hood
- ATMs & Vending Machines
- Generators
- Safety Shutoff
- Automation & Production Equipment



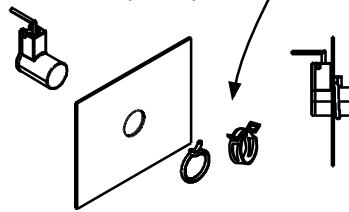
DIGITAL QUADRANT TILT SENSING



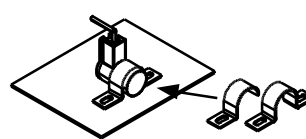
PANEL MOUNT BY GROMMET



PANEL MOUNT BY SPRING (HOSE) CLIP



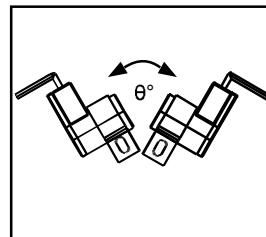
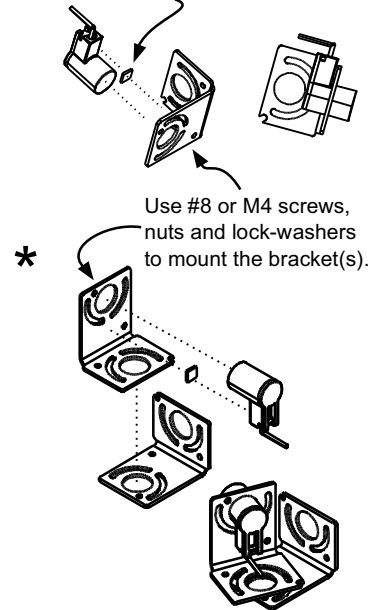
MOUNT BY U-CLAMP OR P-CLAMP



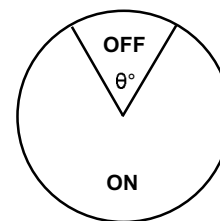
UNIVERSAL BRACKET(s) - P/N: 1608 (sold separately)

For complex mounting scenarios use universal brackets (p/n: 1608 sold separately). * Two brackets can be used to achieve rotation in 3 axes, to nearly any compound angle.

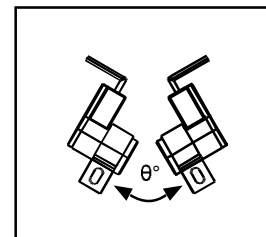
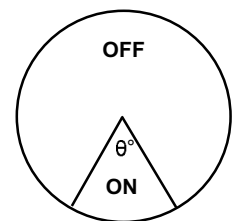
- Tilt switch should be mounted using:
1. Panel Mount Grommet
 2. Spring (Hose) Clip
 3. Weather-Proof Double Sided Tape



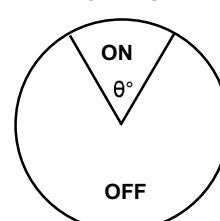
2 SWITCHES IN PARALLEL



2 SWITCHES IN SERIES



2 SWITCHES IN SERIES



2 SWITCHES IN PARALLEL

