Dual Axis Threshold Detector



The **SSY0272** series is a dual axis threshold detector with two dry contacts offers multiple configurations to detect tilt. The dry contacts can work with AC or DC voltage and provides a high isolation (>1000Mohm) between the power supply and the contacts. The trip angle can range from 60 degrees to 0.1 degrees. Higher resolutions are available on demand.

The IP66 aluminum alloy #ADC-12 enclosure guarantees a reliable working unit in tough outdoor environments. The unit has protection against reverse polarity and short circuit. The trip angles and trip delay can be adjusted at the factory or adjusted in the field with an SA40127 calibration board environments. In addition, the digital output signal is ideal for long cable runs, eliminating concerns over signal loss and noise.

Applications

- Safety Systems (Manlifts, Roll-over protection)
- Platform Monitoring and Control
- RV Leveling (Automatic and Manual Systems)
- Alarm Systems

General Specifications

Supply Voltage	
Idle Current Draw	
Contact Rating	max current 4 amps,
	max switching voltage 750 VA
Protection	Reverse Polarity,
	Open / Shorted Signal Leads
Accuracy	0.1 deg or trip angle divided by 200
	whichever is greater
Repeatability	Sensor and Range dependant
Hysteresis	Adjustable to 100% of the trip angle.

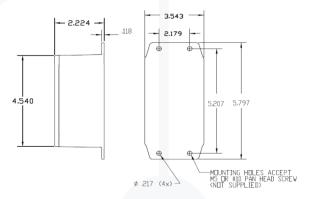
Environmental Features

Operating Temp	
Storage Temp	55 to 125 deg (C)
Housing	P66
ResistanceHumidity,	Water/Rain, Sun, UV Exposure

Adjustments/Features

Trip Angle0.1 deg to 60 deg	J
Trip Delay 0 to 10 second	5





Electrical Connections

7 Conductors 18 AWG Compliances: UL 1581, UL 1277

Electrical Connections

Red +10 to 30 VDC Black Gnd Blue Contact 1 Orange Contact 1 Yellow Contact 2 Brown Contact 2 Red with Black Stripe not used

Consult factory for further technical information!



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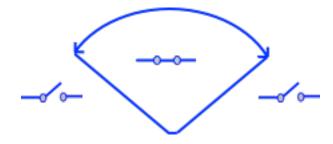
SSY0272 | SSY0272 Part Number nomenclature

Contact 1: R: Roll controls the contact, P: Pitch controls the contact RP: Roll and Pitch controls the contact	
Trip Angle Direction: CW: Clockwise CCW: Counter clockwise A: Either direction	
Trip Angle: Angle in 0.1° increments (1 degree = 10)	
Trip Angle Hysteresis: Angle in 0.1° increments (1 degree = 10) (must be smaller than trip angle)	
NC/NO: Normally closed / Normally open. (See example pictures below)	
Contact 2 (optional): R: Roll controls the contact, P: Pitch controls the contact RP: Roll and Pitch controls the contact	
Trip Angle Direction: CW: Clockwise CCW: Counter clockwise A: Either direction	
Trip Angle: Angle in 0.1° increments (1 degree = 10)	
Trip Angle Hysteresis: Angle in 0.1° increments (1 degree = 10) (must be smaller than trip angle)	
NC/NO: Normally closed / Normally open. (See example pictures on next page)	
Cable length: Designated in feet (Above 10 feet call the factory)	

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Dual Axis Threshold Detector





NC normally closed: The contact is closed before it reaches the trip point. Once the trip point has been reached the contact opens allowing the relay to send a message



NC normally opened: The contact is open before it reaches the trip point. Once the trip point has been reached the contact closes allowing the relay to send a message

Examples:

SSY272-R-CW10-2-NC-R-CCW10-2-NC-6

- Open contact 1 when roll CW is over 1 degree. Hysteresis is .2 degrees.
- Open contact 2 when roll CCW is over 1 degree. Hysteresis is .2 degrees.
- The cable length is 6 feet.

SS272-R-A20-4-NC-P-A20-4-NO-1

- Open contact 1 when roll CCW or CW is over 2 degrees. Hysteresis is .4 degrees.
- Close contact 2 when pitch CCW or CW is over 2 degrees. Hysteresis is .4 degrees.
- The cable length is 1 foot.

Examples:

SSY272-RP-A10-2-NO-3

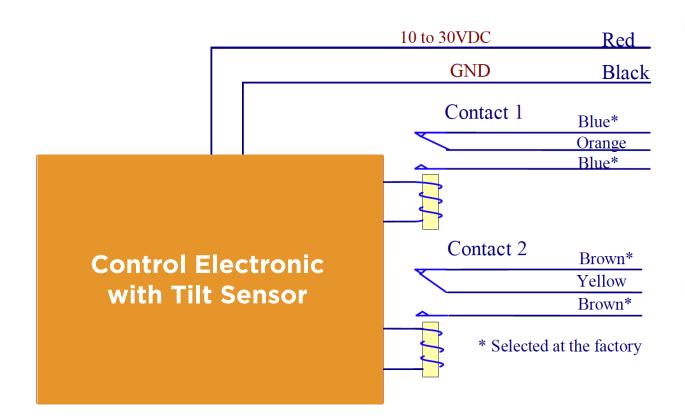
- Open contact 1 when roll or pitch CCW or CW is less than 1 degree. Hysteresis is .2 degrees.
- The cable length is 3 feet.

SSY272-RP-A350-10-NC-3

- Open contact 1 when roll or pitch CCW or CW is more than 35 degrees. Hysteresis is 1 degree..
- The cable length is 3 feet.



Block Diagram



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