


**Triple Axis Low Profile Joystick Controller - Hall Effect**

**Series JH30H**



- Triple Axis
- Low Profile
- Spring Return to Center
- Hall Effect - Contactless
- Dual Parallel or Cross Outputs
- >1 mio. Operations Life
-  RoHS

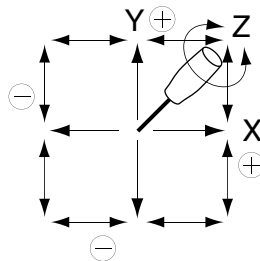
**Electrical Data (Note 1)**

Electrical Travel	X & Y Axis: $\pm 15^\circ$ from center (30° overall) Z Axis: $\pm 30^\circ$ from center (60° overall)
Supply Voltage	5VDC $\pm 10\%$
Output Voltage	0.5V ~ 4.5V (2.5V center) / (0~5V, 0.25~4.75V optional)
Independent Linearity Tolerance	$\pm 3\%$
Center Return Accuracy	50% $\pm 5\%$
Load Resistance	>10k $\Omega$ (> 100k $\Omega$ recommended)
Current Consumption	abt. 18mA
Dielectric Strength	250VAC, 1 minute
Insulation Resistance	>100M $\Omega$ at 250VDC
EMC Durability	50 V/m (80 MHz..1 GHz 1 kHz 80% AM, IEC/EN61000-4-3)
ESD	IEC/EN61000-4-2, 5 kV

**Hard Cover Version**



**Operating Pattern**



**Rubber Boot Version**



**Special Specifications Available**

Dual axis version, special outputs, special cabling, special knob shapes, to your specifications (please consult us).

Note 1: Customers should test and verify device performance in any given application. General specifications values are measured at temperatures of +15°C ~ +35°C. Specifications are subject to change without notice.

## Triple Axis Low Profile Joystick Controller - Hall Effect

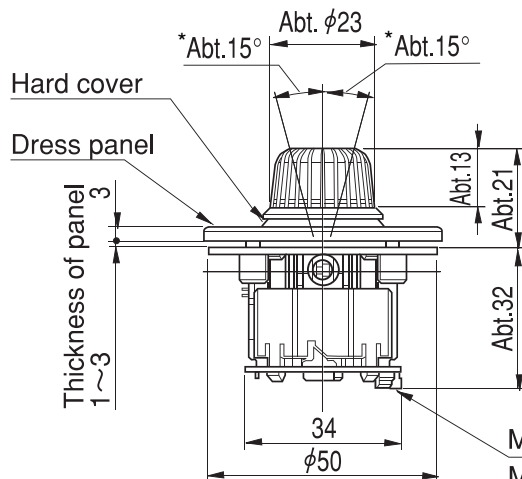
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### Mechanical / Environmental Data (Note 1)

Mechanical Travel	X & Y Axis: $\pm 12.5^\circ \sim \pm 17.5^\circ$ from center Z Axis: $\pm 27.5^\circ \sim \pm 32.5^\circ$ from center
Expected Life	> 1 million operations
Operating Force	X and Y Axis; 1.5 ~ 3N (150 ~ 300gf) Z Axis; 10 ~ 30N · m (100 ~ 300gf · cm)
Maximum Vertical Load	200N (45lbf) force applied to top of castle cap
Operating Temperature	-20°C to +60°C
Storage Temperature	-40°C to +65°C
Protection Grade	IP40 (IP54 with rubber boot [above panel])
Vibration	10 ~ 55Hz 98m/s <sup>2</sup> (10G)
Shock	294m/s <sup>2</sup> (30G)
Weight	approx. 50g

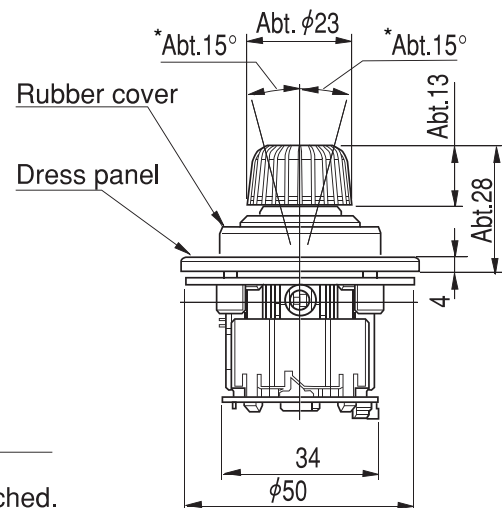
### Dimensions (mm)

#### Hard Cover Version

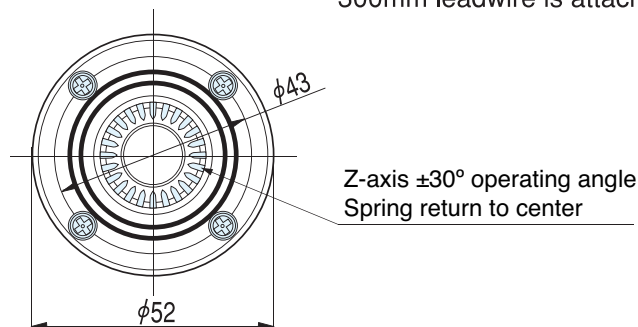


\* Operating angle

#### Rubber Boot Version



Molex 53261-0871  
Mating connector with  
300mm leadwire is attached.

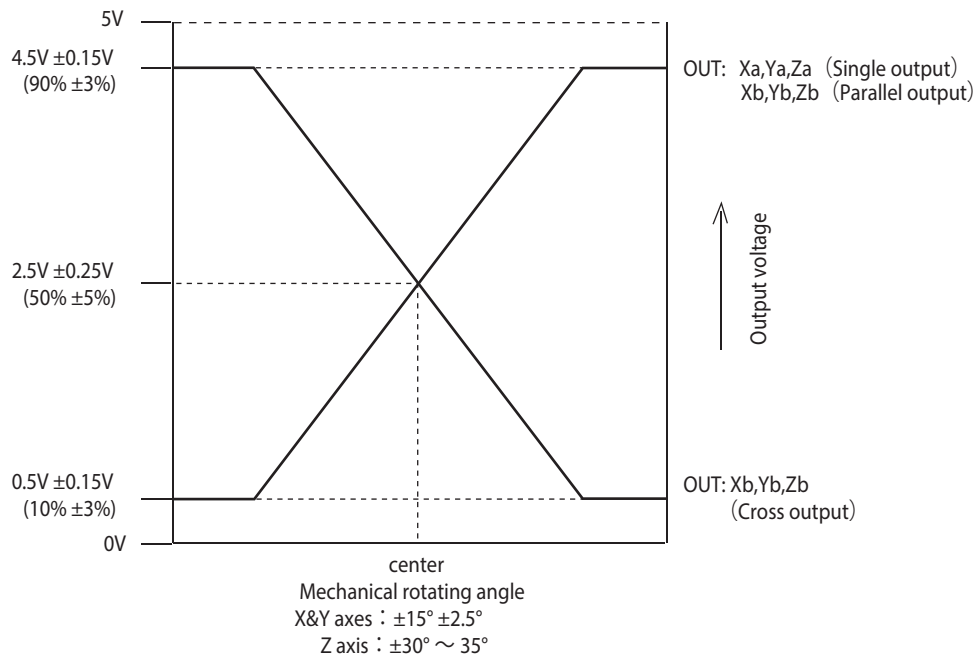


Z-axis  $\pm 30^\circ$  operating angle  
Spring return to center

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### Output Voltage Characteristics



### Wiring Details



1	Supply +5 VDC	brown
2	X-Axis	red
3	X-Axis Dual Output	orange
4	Y-Axis	yellow
5	Y-Axis Dual Output	green
6	Z-Axis	blue
7	Z-Axis Dual Output	purple
8	Ground	grey

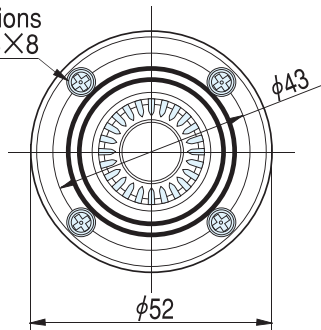
Wires AWG28, length ca. 300 mm, with connector MOLEX 51021-0800 included

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**Mounting Details**

Fixing screw 4 positions  
 Pan small screw M3×8



**Panel Arrangements**

