

Single Axis Joystick Controller - Hall Effect

Series JL30H



- **Single Axis**
- **Spring Return or Position Hold**
- **Hall Effect Sensor**
- **Directional Micro-switch Options**
- **IP65* Protection Grade**
- **5 mio. operations life**
- **✓RoHS**



Electrical Data (Note 1)	
Electrical Travel	approx. 40° (±20° from center)
Supply Voltage	5VDC ±10%
Output	0.5 ~ 4.5VDC (2.5VDC center)
Load Resistance	>10kΩ
Independent Linearity Tolerance	±3%
Current Consumption	ca. 6mA
Resolution	Infinite
Temperature Drift Center Position	< 0.5% Vout full scale
Dielectric Strength	250VAC, 1 minute
Insulation Resistance	> 1000MΩ at 250VDC
Micro-Switches Specifications (optional)	30VDC / 100mA (center detect or directional) SPDT

• **Special Specifications Available**
 Axis driven micro-switches (center detect, directional), position hold (friction increases), special cabling, potentiometer version (see JL30 series for separate datasheet), other customizations to your request.

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.

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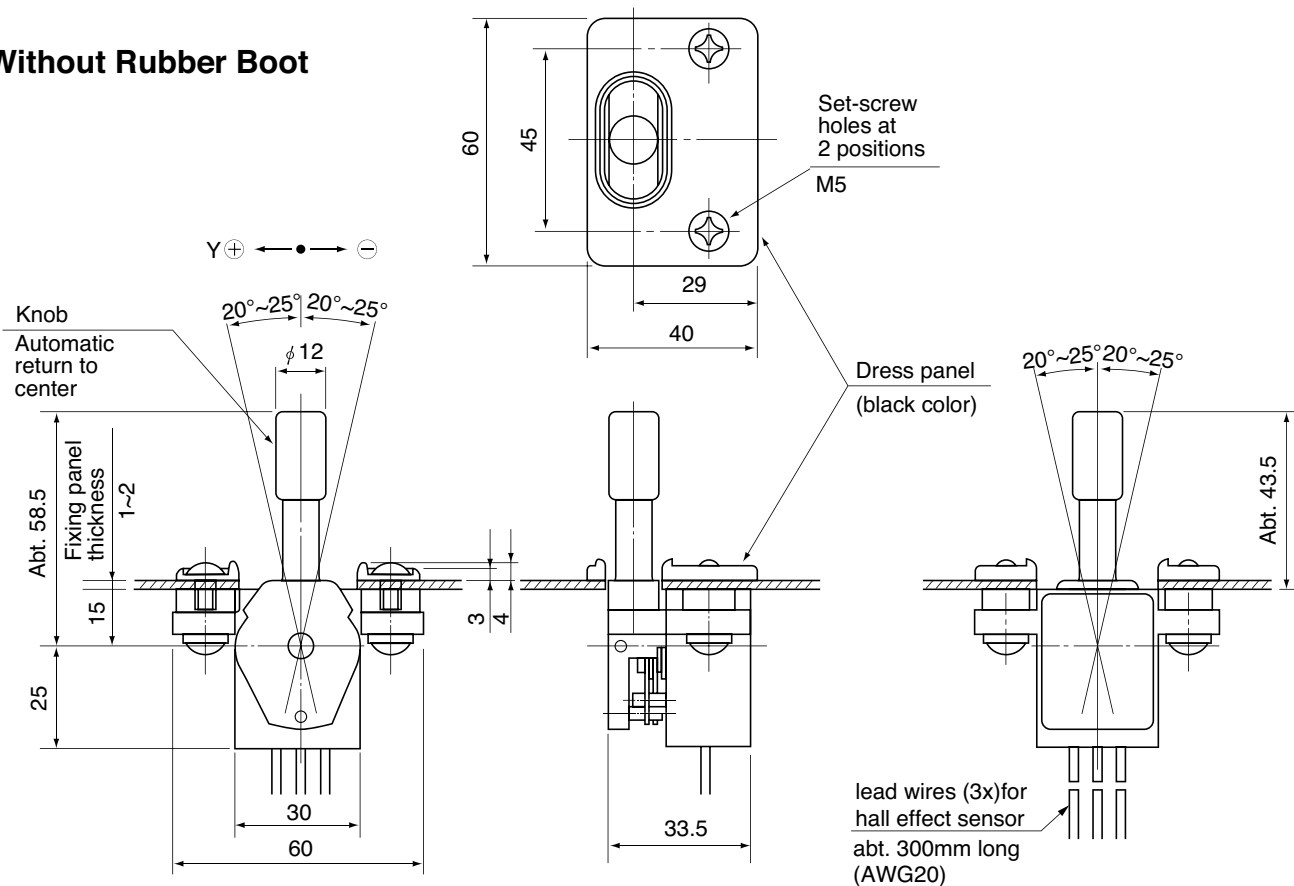
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Mechanical / Environmental Data (Note 1)

Mechanical Travel	$\pm 20^\circ \sim \pm 25^\circ$ from center
Operating Force	1 ~ 2.5N (100 ~ 250gf)
	1 ~ 5N (100 ~ 550gf) w/Rubber Boot
Expected Life	> 5 million operations
Center Return Accuracy	50% $\pm 5\%$
Operating Temperature	-20°C to +60°C
Storage Temperature	-40°C to +65°C
Protection Grade	IP65 (*optional micro-switches are IP40)
Micro-Switch Life	> 100,000 operations
Vibration	10 ~ 55Hz 98m/s ² (10G)
Shock	294m/s ² (30G)
Weight	approx. 100g

Dimensions (mm)

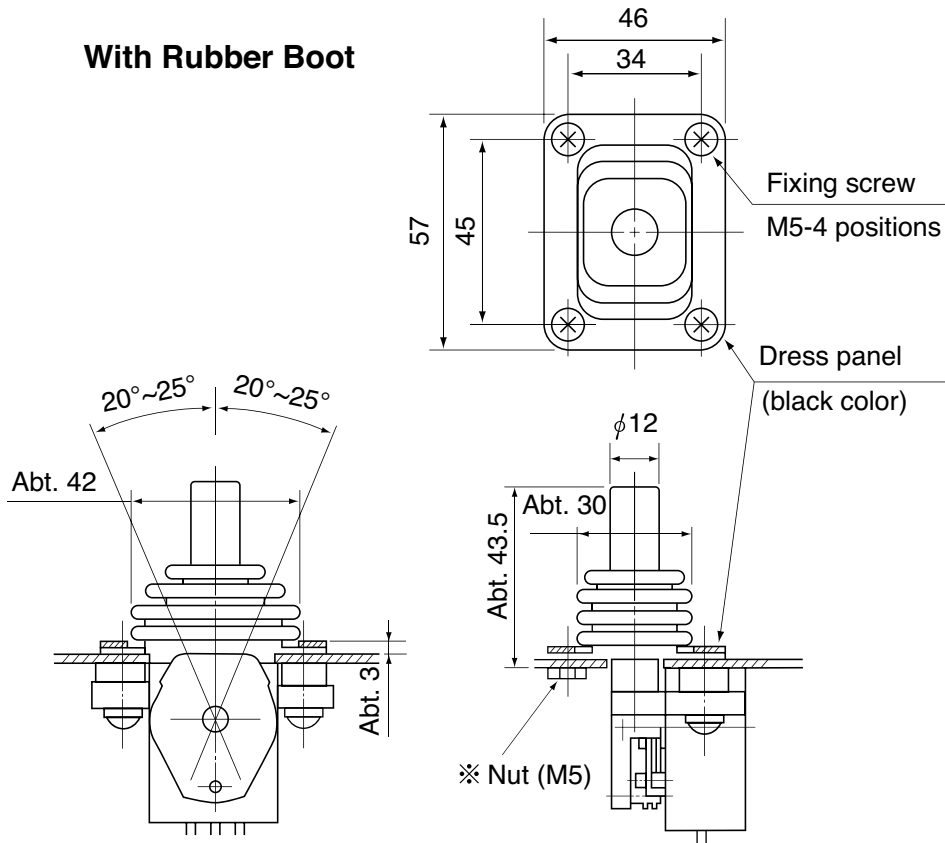
Without Rubber Boot



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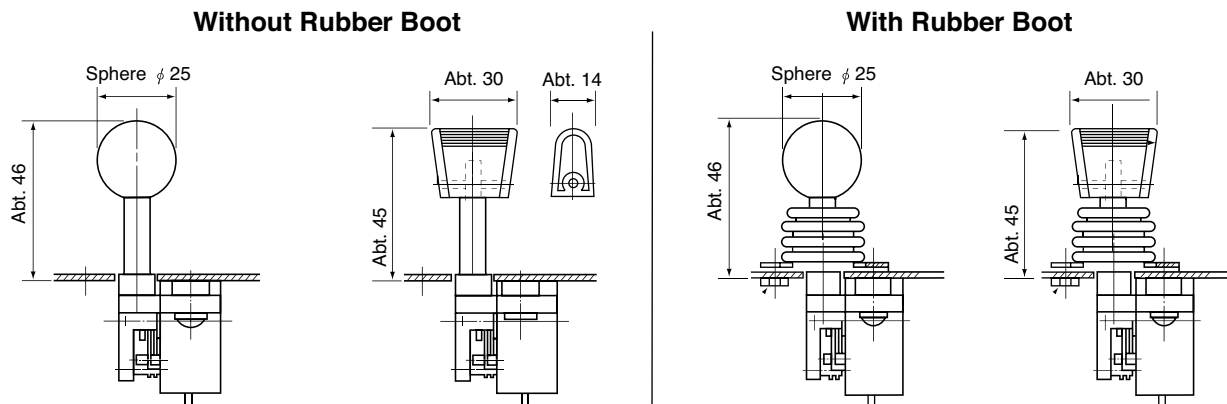
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Dimensions (mm)



Note : 1) 4 pcs. of mounting screws (M5 × 12) are attached.
 2) 2 pcs. of the attached nut (M5) “※” use for mounting of the one side.

Optional Handle Dimensions (mm)



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Axis Driven Micro-Switches

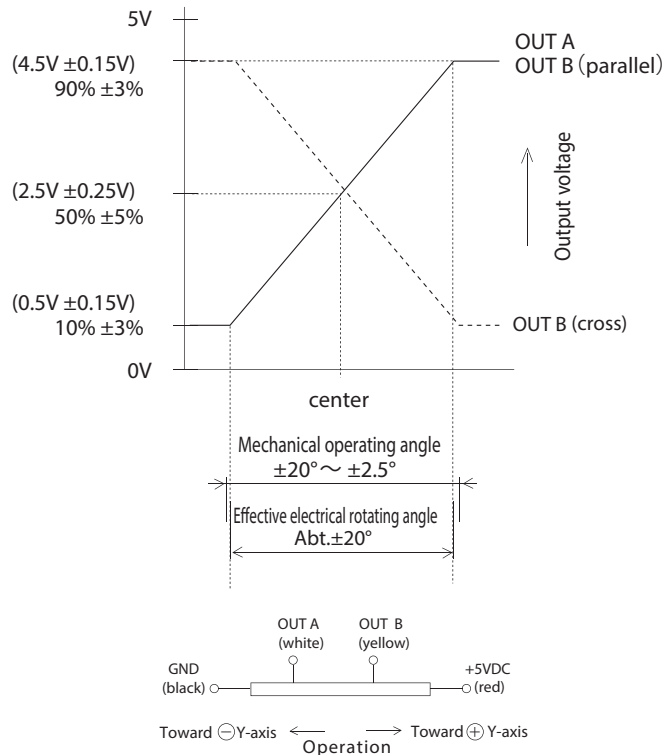


Center Detect Switch	Switch Type	SPDT (N.O. C N.C.)
	Electrical Rating	30VDC / 100mA
	Rated Life	> 100,000 operations
	Activation	ON @ center OFF @ $\pm 5^\circ$ from center

Directional Switch	Switch Type	SPDT (N.O. C N.C.)
	Electrical Rating	30VDC / 100mA
	Rated Life	> 100,000 operations
	Activation	OFF @ center *ON @ $\pm 5^\circ$ from center

* Customer can specify activation angle of switches

Output Voltage Characteristics / Wiring Color Code

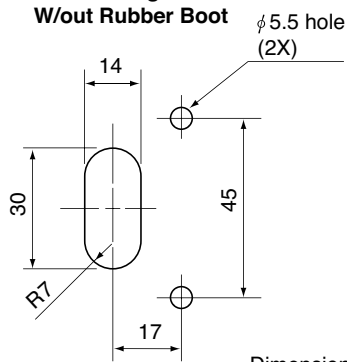


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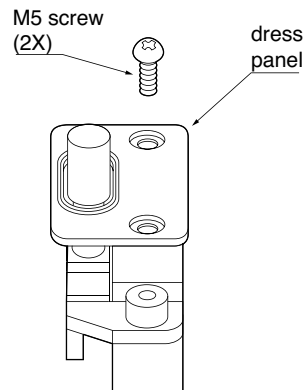
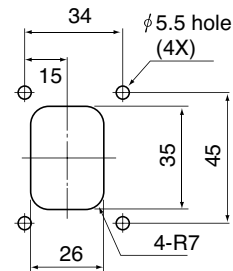
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Mounting Details

**Panel Arrangements
W/out Rubber Boot**



**Panel Arrangements
W/ Rubber Boot**



**Mounting Panel (2mm thick)
(optional)**

