

Single Axis Joystick Controller - Potentiometer

Series JL30



- **Single Axis**
- **Spring Return or Position Hold**
- **Handle Variations**
- **Directional Micro-switch Options**
- **IP65* Protection Grade**
- **2 mio. operations life**
- **✓RoHS**



Electrical Data (Note 1)	
Electrical Travel	approx. 40° (±20° from center)
Resistance Value	10kΩ ±20%
Independent Linearity Tolerance	±5%
Resolution	Infinite
Output Smoothness	<0.2% against applied voltage
Contact Resistance Variation	<6% C.R.V.
Dielectric Strength	500VAC, 1 minute
Insulation Resistance	>1000MΩ at 500VDC
Rated Power	0.1W
Center Tap (optional)	Current Tap Type (approx. 3°)
Micro-Switches Specifications (optional)	30VDC / 100mA (center detect or directional) SPDT

• **Special Specifications Available**
Special resistance values, intermediate tap, axis driven micro-switches (center detect, directional), position hold (friction increases), special cabling, hall effect version (see JL30H 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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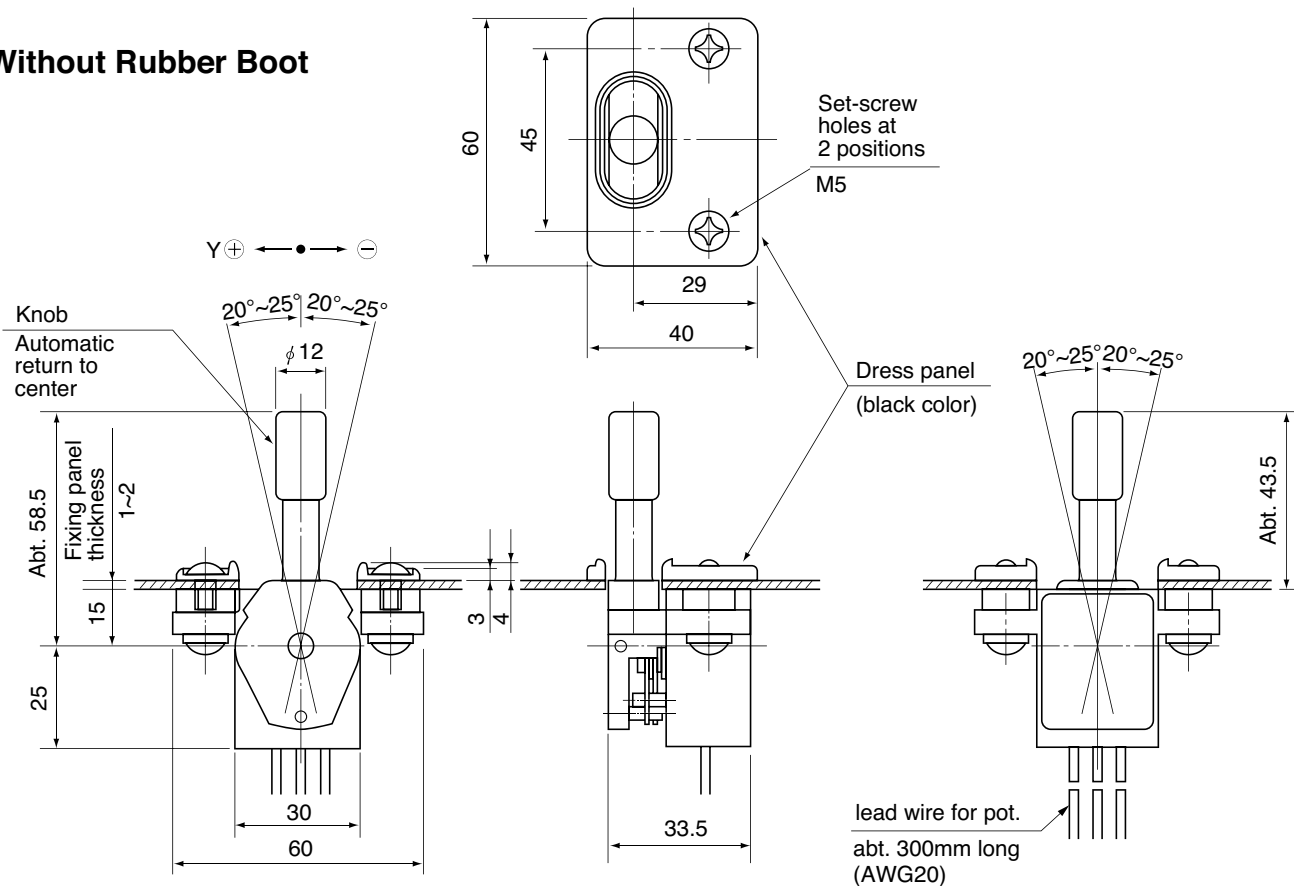
Series JL30

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	> 2 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)

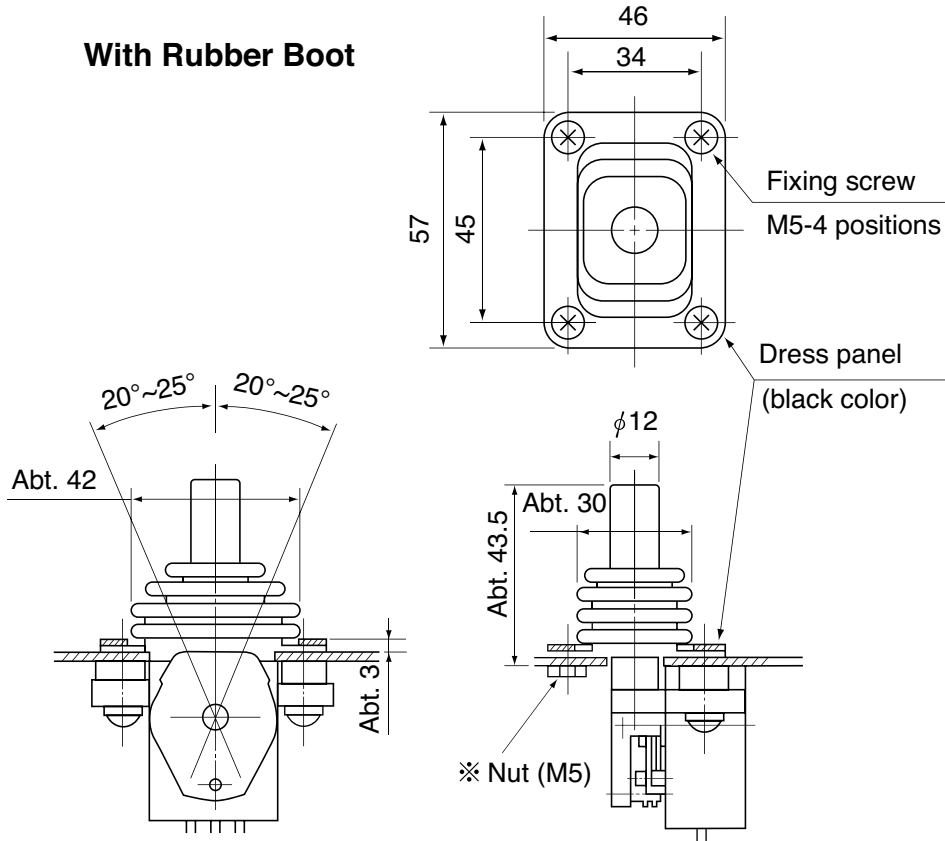
Without Rubber Boot



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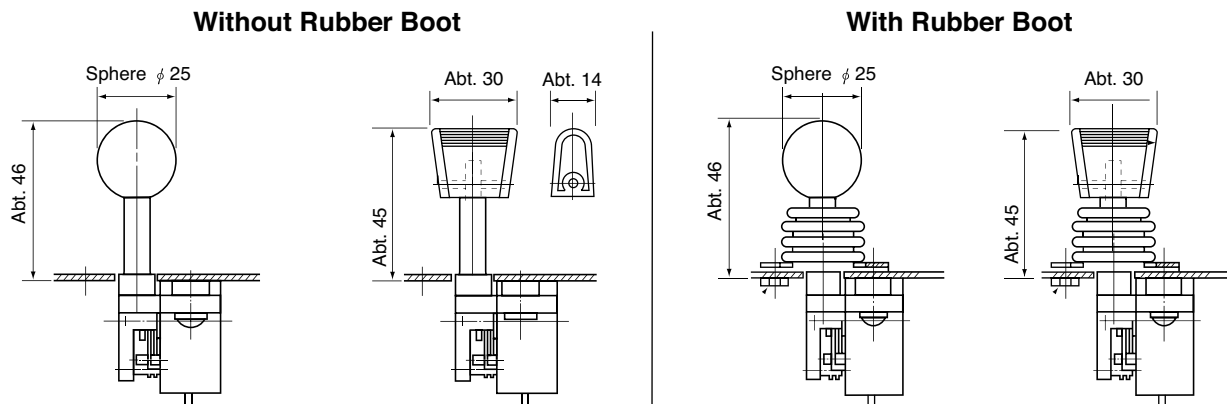
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Dimensions (mm)



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



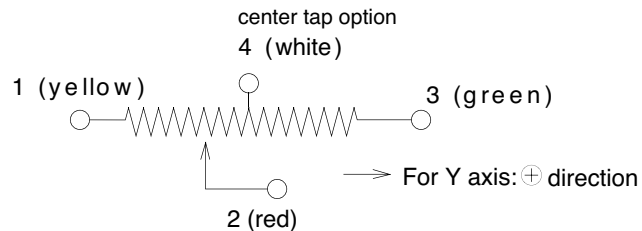
Center Detect Switch	Switch Type	SPDT (N.O. C N.C.)
	Electrical Rating	30VDC / 100mA
	Rated Life	> 100,000 operations
	Activation	ON @ center OFF @ $\pm 5^\circ$ from center

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

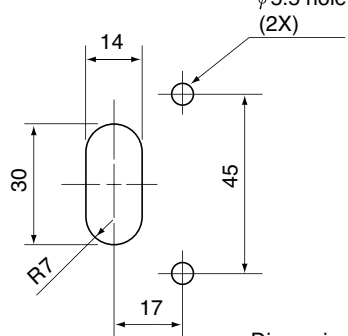
Wiring Details

Note: Terminals shall be lead-wire terminals with approx. 300 mm. long. (AWG20)

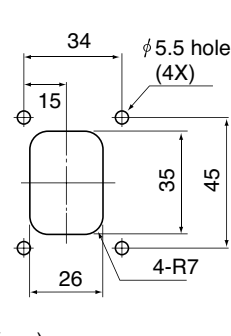


Mounting Details

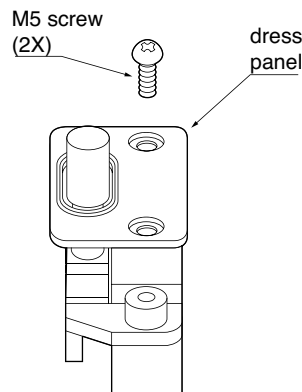
Panel Arrangements W/out Rubber Boot



Panel Arrangements W/ Rubber Boot



Dimensions (mm)



Mounting Panel (2mm thick) (optional)

