


# JB40 Series

## Multi-Axis Joystick Controller (Potentiometer)



- Single or Dual Axis
- Handle Pattern Options
- Spring Return or Position Hold
- Pushbutton Handle Option
- Wide Angle - 60° ( $\pm 30^\circ$  from Center)
- > 5mio. operations life
-  RoHS

### Electrical Data (Note 1)

Electrical Travel	60° ( $\pm 30^\circ$ from center)
Resistance Value	10k $\Omega$ $\pm 15\%$ (other resistance values optional)
Independent Linearity Tolerance	$\pm 3\%$
Output Smoothness	< 0.2% against input voltage
Contact Resistance Variation	< 5% C.R.V.
Resolution	Infinite
Center Return Accuracy	50% $\pm 2\%$
Power Rating	0.1W
Resistance Temperature Coefficient	$\pm 400$ p.p.m/ $^\circ$ C
Insulation Resistance	> 1000M $\Omega$ at 500VDC
Dielectric Strength	500VAC, 1 minute

### Mechanical Data (Note 1)

Mechanical Travel	$\pm 30^\circ \sim \pm 35^\circ$ ( $\pm 20^\circ \sim \pm 25^\circ$ for Q pattern)
Operating Force	0.2 ~ 0.6N (20 ~ 60gf) standard w/out spring return 0.7 ~ 1.5N (70 ~ 150gf) high torque type 0.6 ~ 3N (60 ~ 300gf) with spring return
Operating Temperature	-20 $^\circ$ C ~ +65 $^\circ$ C
Vibration	10 ~ 55Hz 98m/s $^2$ (10G)
Shock	30G
Life Expectancy	> 5,000,000 random operations
Protection Grade	IP40 (IP54 with rubber boot, above panel only)
Weight	approx. 170g

#### • Special Specifications Available

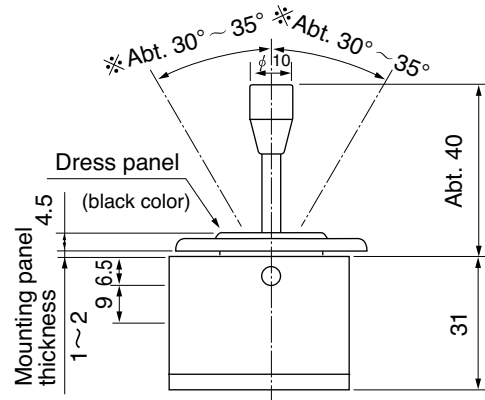
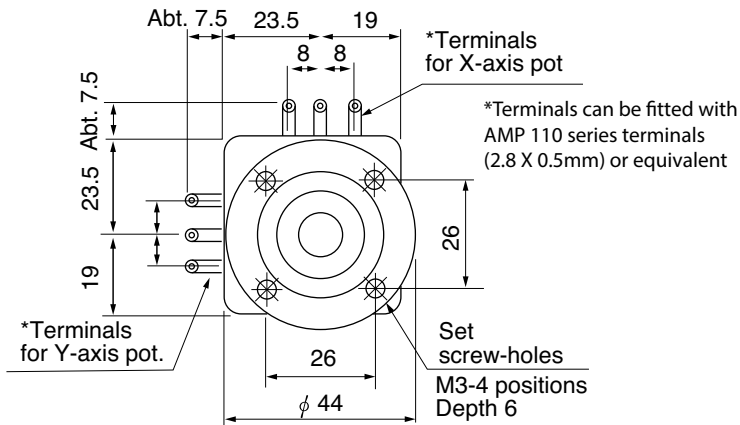
High torque operation, pushbutton knob, center tap of potentiometer, customized knobs, special resistance value, center position detect micro-switch, other customization to suit.

Note 1: Customers should test and verify device performance in any given application. Specifications are subject to change without notice.

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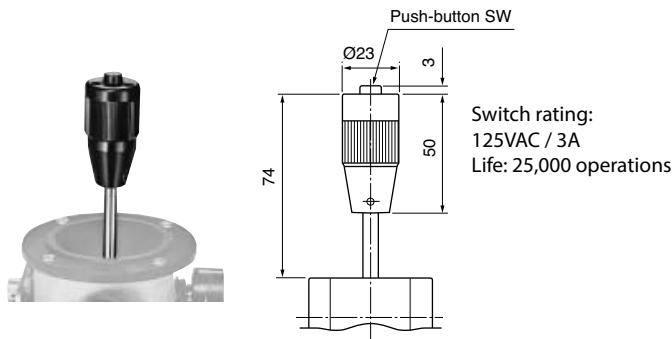
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### Dimensions (mm)

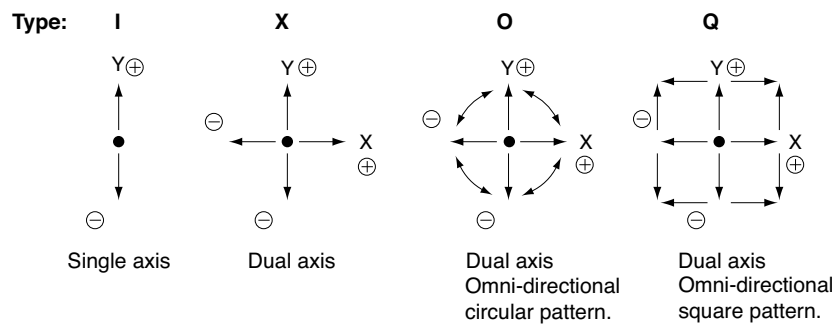


Note : 1) In case of type Q pattern, the angle of mark "\*" becomes 360° square-directionally and  $\pm 20^\circ \sim \pm 25^\circ$  from center position.  
2) 4 pcs. of mounting screws (M3 X 8) are attached.

### Optional Pushbutton Handle



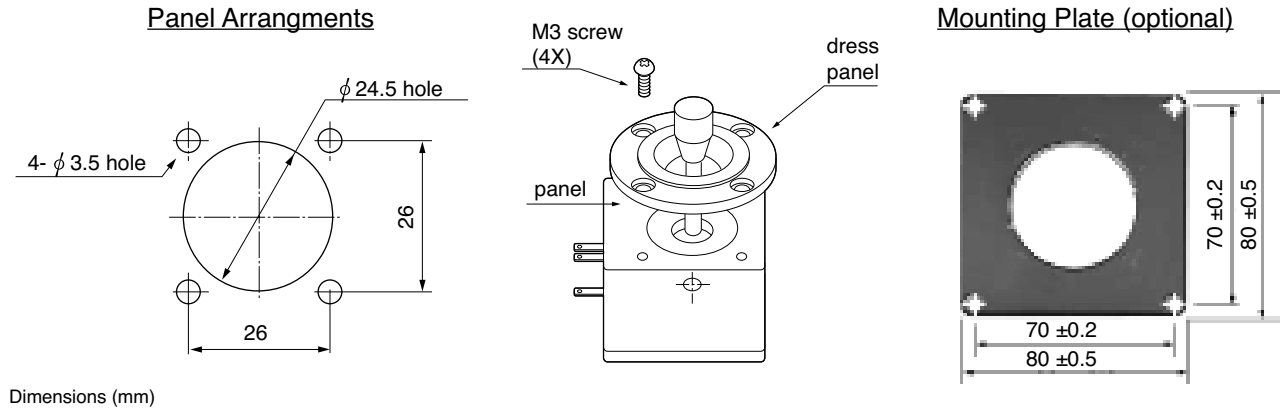
### Handle Operating Patterns



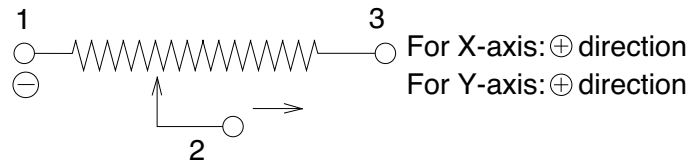
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### Mounting Details



### X and Y Axis Potentiometer Schematic



All terminals can be fitted with AMP 110 series connectors (2.8 X 0.5mm) or equivalent