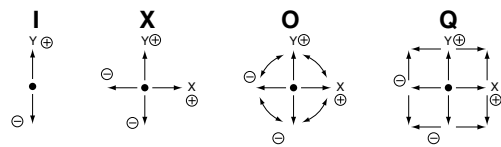


40JB

Potentiometer with a conductive plastic resistive element

Nomenclature

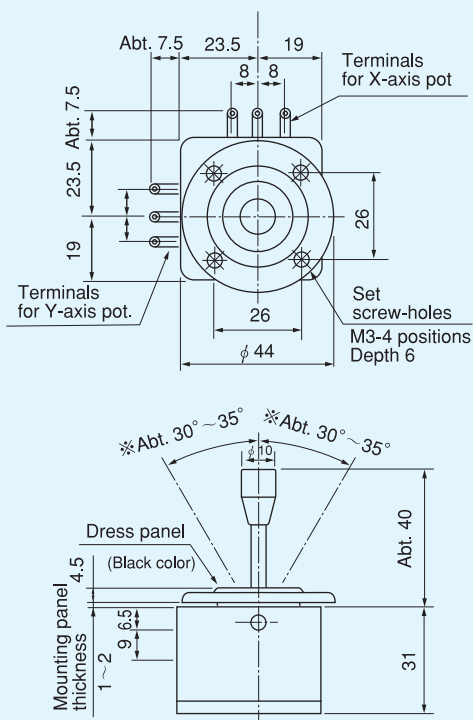
- **S** means special mechanical specifications not applicable to our standard.
- **40** means approx. size of base housing in mm.
- **J** means joystick controller.
- **Kind of types**
B means 1- or 2-dimensional coordinates is available and also means potentiometer is incorporated inside housing case.
- **K** means square shape.
- **Mechanism**
X means 1-dimensional coordinate.
Y means 2-dimensional coordinate.
- **Available directions of lever operation Standard version:**
O: Omni-directional 360° operating type.
Special version:
I: I figure (Y) directional operating type.
X: Cross direction of X and Y operating type.
Q: Square-directional 360° operating type.



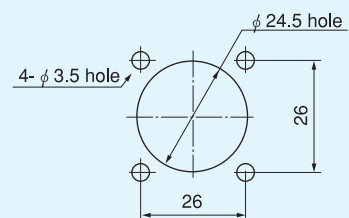
S **40** **J** **B** **K**-**Y** **O**-**2** **0** **R2** **G** - **00000**

- **Number of potentiometers to be incorporated.**
 1...1 potentiometer incorporated.
 2...2 potentiometers incorporated.
- **Number of switches to be incorporated.**
 0...no switch incorporated. 1...1 switch incorporated.
- **With spring return device :**
R1 : with spring return device for 1-dimensional coordinate.
R2 : with spring return device for 2-dimensional coordinate.
- **Mounting accessories :**
G : with dust proof rubber cover.
P : with sub-panel for mounting.
- **Special part number :**
 In case we produce customized products, we add 4-digit or 5-digit branch number.

Standard Dimensions



Panel Arrangements



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

(Unit : mm)



40JBK-YO-20
(Standard)
(2-dimensional coordinate type)



40JBK-YO-20R2G
(2-dimensional coordinate type
with dust proof rubber cover
and spring return device)

STANDARD SPECIFICATIONS

●Mechanical Performance

Controlling range of operating lever :

- 2-dimensional coordinate type.
Omni-directionally approx. $\pm 30^\circ \sim \pm 35^\circ$ from center position.

Operating force :

- Standard : Approx. 0.2~0.6N (20~60gf.)
- High torque type : Approx.0.7~1.5N (70~150gf.)
- With spring return device (omni-directional type) : Approx. 0.6~3N (60~300gf.)

Operating temperature range : $-20^\circ\text{C} \sim +65^\circ\text{C}$

Vibration : 10~55Hz 98m/s²

Shock : 294m/s²

Life expectancy : Approx. 5,000,000 operations.

- Mass : Without spring return device : Approx. 160g
- With spring return device : Approx. 180g

●Electrical Performance

Potentiometers incorporated : Special conductive plastic resistive element is exclusively used for 40JB series.

Total resistance value : $10\text{k}\Omega \pm 15\%$

Rating : 0.2W

Electrical rotating angle : Approx. 60°

Independent linearity tolerance $\pm 3\%$

[All terminals can be fitted with AMP110 series fasten receptacle ($2.8 \times 0.5\text{mm}$) or equivalents]

Output smoothness : Below 0.2% against input voltage.

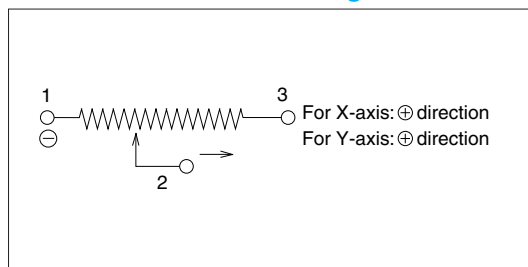
Contact resistance variation : Below 5% C.R.V.

Resolution : Essentially infinite

Dielectric strength : 1 minute at 500V.A.C.

Insulation resistance : Over 1,000M Ω at 500V. D.C.

●Terminal Connection Diagram



●Special Specifications Available

Please see page 47, a table of "Standard and Special Specifications Available".