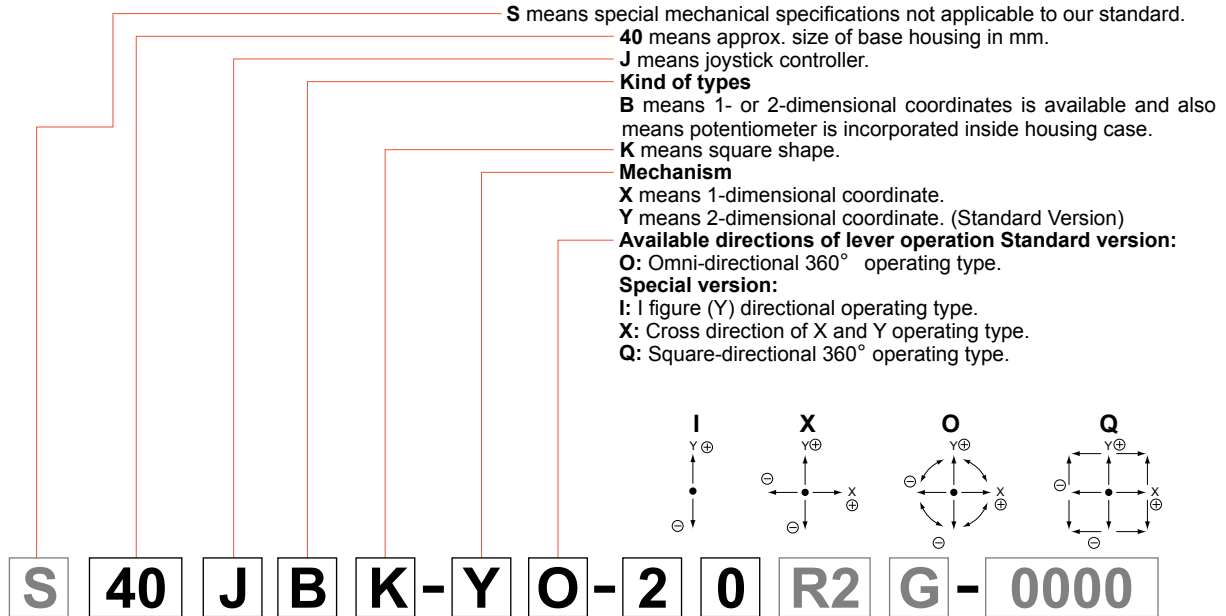




# Model 40JB Potentiometer inside-corporated type

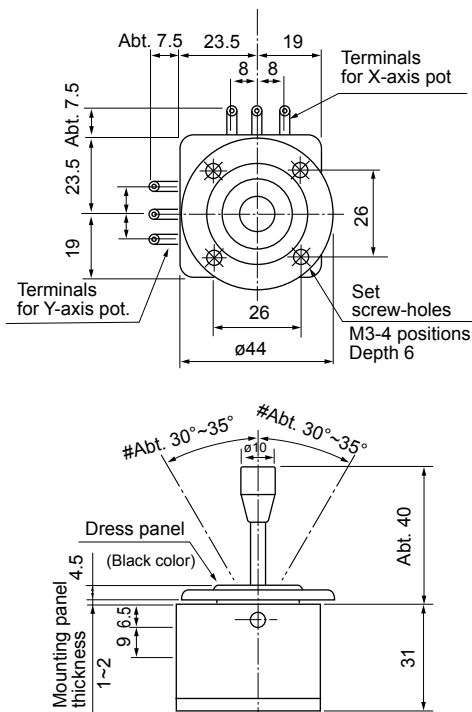
## Potentiometer with a conductive plastic resistive element

### Nomenclature

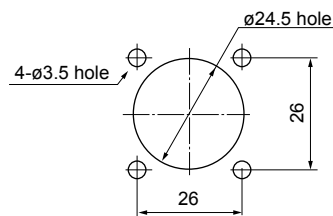


- Number of potentiometers to be incorporated.**  
 1 potentiometer incorporated.  
 2 potentiometers incorporated.
- Number of switches to be incorporated.**  
 0 no switch incorporated. 1 switch incorporated.
- With spring return device :**  
**R1 :** with spring return device for 1-dimensional coordinate.  
**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 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)

## ■ 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  $98\text{m/s}^2$

**Shock :**  $294\text{m/s}^2$

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

**Mass :** Without spring return device : Approx. 160g

With spring return device : Approx. 180g



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

### 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.  $60^\circ$

Independent linearity tolerance  $\pm 3\%$

[All terminals can be fitted with AMP110 series fasten receptacle (2.8 X 0.5mm) or equivalents]

**Output smoothness :** Below 0.2% against input voltage.

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

**Resolution :** Essentially infinite

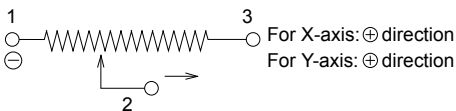
**Dielectric strength :** 1 minute at 500V.A.C.

**Insulation resistance :** Over 1,000M $\Omega$  at 500V. D.C.



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

### Terminal Connection Diagram



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