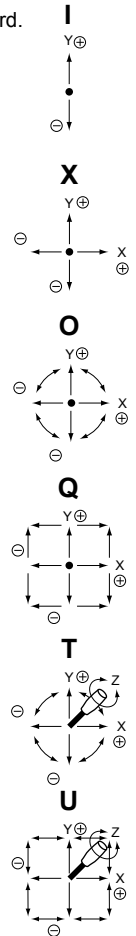
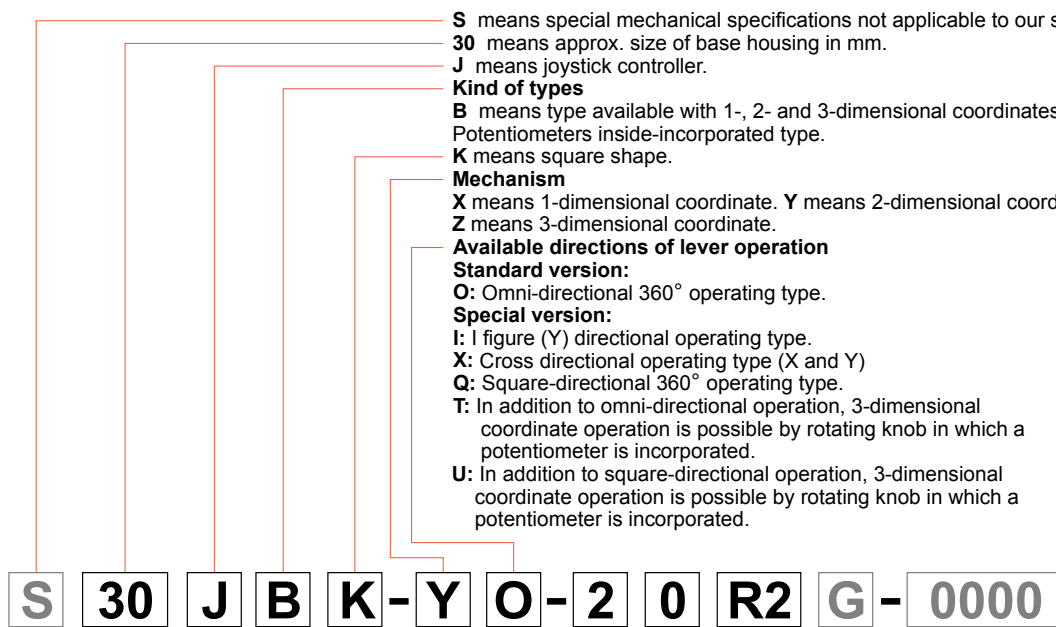




# Model 30JB

Potentiometer with a conductive plastic resistive element (Potentiometer incorporate type)

## Nomenclature



### Number of potentiometers to be incorporated only for 30JBK.

0 potentiometer incorporated. 1 potentiometer incorporated.  
 2 potentiometers incorporated. 3 potentiometers incorporated.

### Number of switches to be incorporated.

0 switch incorporated. 1 switch incorporated.  
 2 switches incorporated.

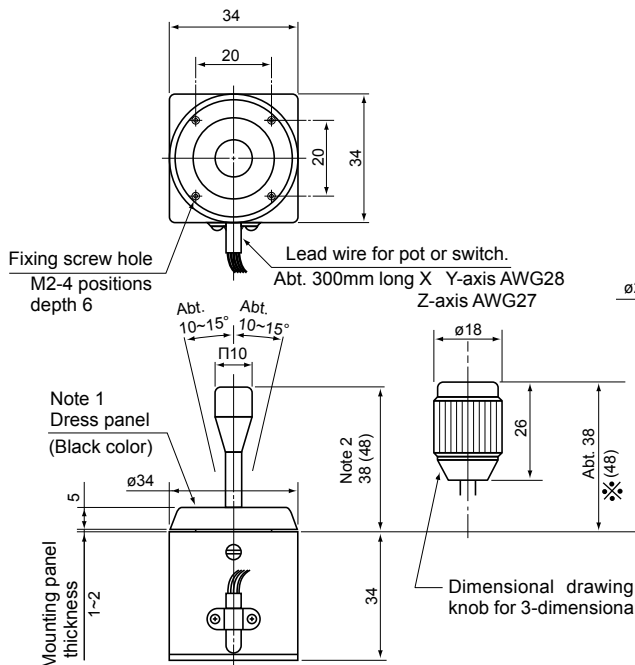
**With spring return device :** **R1:** with spring return device for 1-dimensional coordinate.  
**R2:** with spring return device for 2-dimensional coordinate.  
**R3:** with spring return device for 3-dimensional coordinate.

**Mounting accessories :** **G:** with dust proof rubber cover. **P:** with sub-panel for mounting.

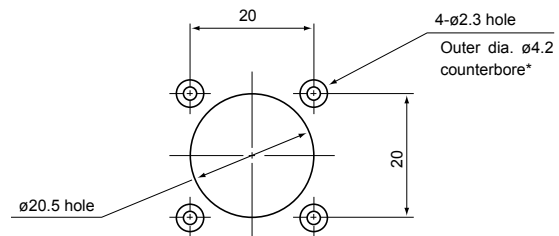
### Special part number :

In case we produce customized products, we add 4-digit branch number.

## Standard Dimensions



## Panel Arrangements



Note: 1) In case JC with a dust-proof rubber cover, the counterbore-work (\*part) is not necessary.  
 2) 4 pcs. of mounting screw (M2 X 6) are attached.

Note: In case JC with a dust-proof rubber cover, the shape of dress panel shall be changed.  
 \* Numerical in parentheses shows dimensions of Dust-proof rubber cover.

(Unit : mm)

## ■ Standard Specifications

### Model 30JB Series (Potentiometer inside-incorporated type)

#### Mechanical Performance

##### Controlling range of operating lever :

X and Y directions : Approx.  $\pm 10^\circ \sim \pm 15^\circ$  from center position. (Omni-directionally)  
Z direction: Approx.  $\pm 30^\circ \sim \pm 35^\circ$  from center position.

##### Operating force (Standard spring return device): Automatically return to center)(Omni-directionally)

X and Y directions : Approx. 0.8~2N (80~200gf)  
Z direction : Approx. 15~60mN·m (150~600gf.cm)

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

Vibration : 10~55Hz 98m/s<sup>2</sup>

Shock : 294m/s<sup>2</sup>

Life expectancy : Approx. 5,000,000 operations

Mass : 2-dimensional coordinate type : Approx. 80g  
3-dimensional coordinate type : Approx. 100g

#### Electrical Performance

**Potentiometers mounted :** Special conductive plastic resistive element is exclusively used for 30JB series.

(X and Y axes pots)

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

Rating : 0.1W

Electrical rotating angle : Approx.  $20^\circ$

Independent linearity tolerance :  $\pm 3\%$

(Z axis pot.)

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

Rating : 0.04W

Electrical rotating angle :

Approx.  $60^\circ$

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

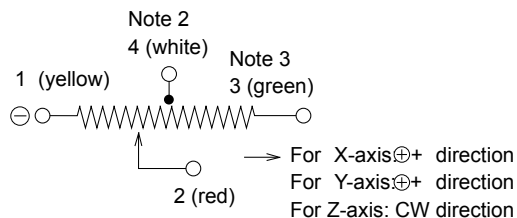
**Contact resistance variation :** Below 6% C.R.V

**Resolution :** Essentially infinite

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

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

#### Terminal Connection Diagram



- Note: 1) Terminals shall be lead-wire terminals with approx. 300mm long. (AWG28)  
2) Current center tap shall be applied to all X.Y and Z axes as standard.  
3) Markings of X, Y, Z on lead-wire terminals are made on the tag, respectively.



**30JBK-YO-20R2**  
(standard)  
(2-dimensional coordinate type)



**30JBK-ZT-30R3**  
(standard)  
(3-dimensional coordinate type)

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