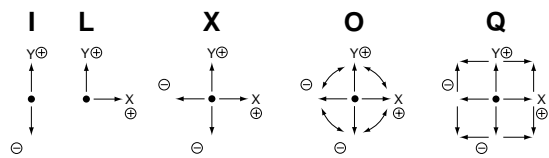


# 50JC

## Nomenclature

- **S** means special mechanical specifications not applicable to our standards.
- **50** means approx. size of base housing in mm.
- **J** means joystick controller.
- **C** means type available with 1 and 2-dimensional coordinates. Potentiometers outside-mounted type. With dust-proof rubber cover and spring return device as standard version.
- **K** means square shape.
- **Y** means kind of mechanism:  
**X** : 1-dimensional coordinate. **Y** : 2-dimensional coordinate.
- **Available directions of lever operation as below illustration.**  
 (Standard Version)  
**O** : 360° omni-directionally operating type.  
 (Special Version)  
**Q** : 360° Square-directionally operating type.  
**X** : Cross direction of X and Y only operating type.  
**I** : I-figure (Y) direction only operating type.  
**L** : L-figure direction only operating type.  
**S** : Special directions of lever operation other than above mentioned types.



**S** **50** **J** **C** **K**-**Y** **O**-**2** **0** **R2** **G**-**0000**

### Number of potentiometers to be mounted.

- 0...no potentiometer mounted. 2...2 potentiometers mounted.
- 1...1 potentiometer mounted. 3...3 potentiometers mounted.

### Number of switches to be mounted.

- 0...no switch mounted. 4...4 switches mounted.
- 1...1 switch mounted. 5...5 switches mounted.
- 2...2 switches mounted. 6...6 and over 6 switches mounted.
- 3...3 switches mounted. 9...other switches to your special request.

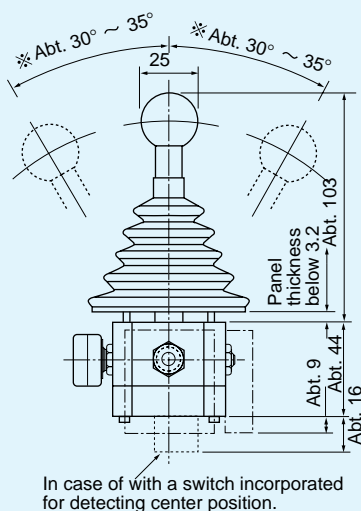
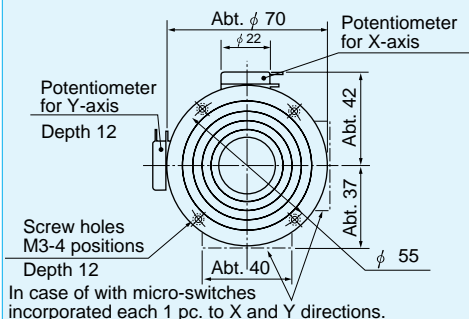
### With spring return device : (50JC standard option)

- 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.(50JC standard option) P: with sub-panel for mounting.

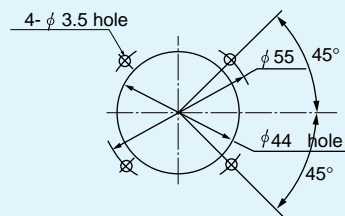
### Special part number basing on customer's specifications with 4 digits number.

## Standard Dimensions



## Panel Arrangements

(In case of 1 and 2-dimensional coordinates)



(Unit : mm)



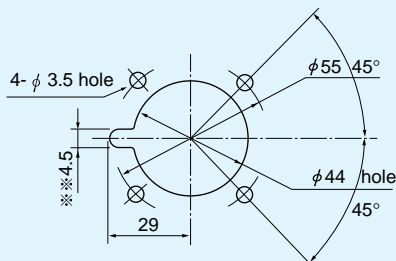
**50JCK-YO-20R2G**  
(standard)  
(2-dimensional coordinate type)



**S50JCK-YO-25R2G**  
(With 5 micro-switches and 1 of them is for detecting the center position)

### ■Panel Arrangements

(in case of with knob type 102)



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) In case of with knob type 102, if other components except our standard pot model SFPC22E ,are mounted, the position of mark " ※ " may change to other position.

3) 4 pcs. of mounting screws (M3 × 14) are attached.

(Unit : mm)

## STANDARD SPECIFICATIONS

### ●Mechanical Performances

**Controlling range of operating lever :**

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

**Operating force :** With standard automatically center returning spring return device (omni-directional type)

Approx. 3 ~ 15N (300 ~ 1,500gf.)

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

**Vibration :** 10 ~ 55Hz 98m/s<sup>2</sup> (10G)

**Shock :** 294m/s<sup>2</sup> (30G)

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

**Mass :** Approx. 350g

### ●Electrical Performances

**Potentiometers mounted :** SFPC22E 10k $\Omega$  $\pm$ 15%, 0.2W, independent linearity tolerance $\pm$ 3% (conductive plastic resistive element). (Electrical rotating angle : Approx. 60°)

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

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

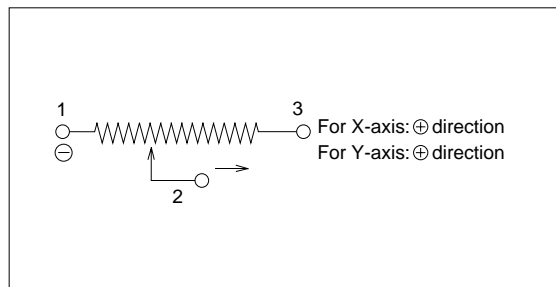
**Contact resistance variation :** Below 5% C.R.V.

**Resolution :** Essentially infinite

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

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

### ●Terminal Connection Diagram



### ●Special Specification Available

Please see page 41, a table of "Standard and Special Specifications Available".