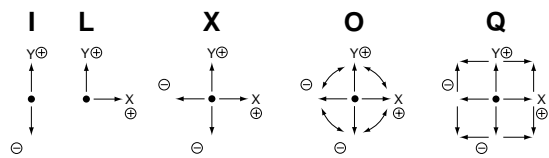


# 50JC

## 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.

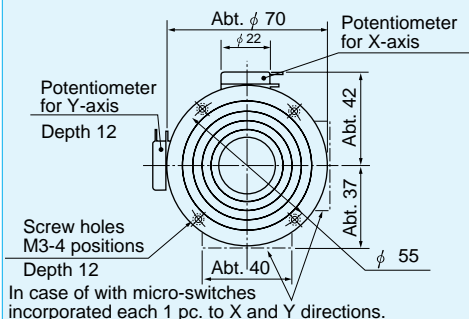
### With spring return device : (50JC standard option)

- R1: with spring return device for 1-dimensional coordinate.
- R2: with spring return device for 2-dimensional coordinate.

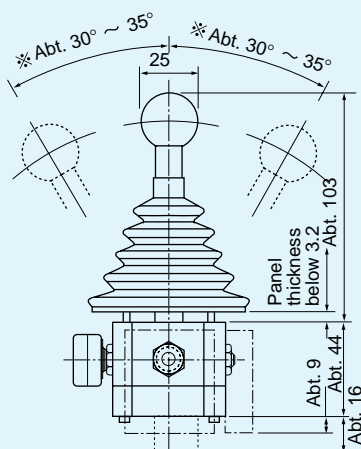
**Mounting accessories** : **G**: with dust proof rubber cover.(50JC standard option) **P**: with sub-panel for mounting.

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

## Standard Dimensions



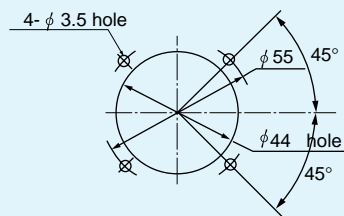
In case of with micro-switches incorporated each 1 pc. to X and Y directions.



In case of with a switch incorporated for detecting center position.

## 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)

## 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 :** SFCP22E 10k $\Omega$  $\pm$ 15%, 0.2W, independent linearity tolerance $\pm$ 3% (conductive plastic resistive element). (Electrical rotating angle : Approx. 60 $^\circ$ )

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

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

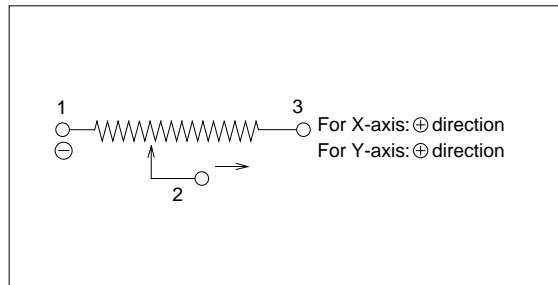
**Contact resistance variation :** Below 5% C.R.V.

**Resolution :** Essentially infinite

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

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

### ●Terminal Connection Diagram

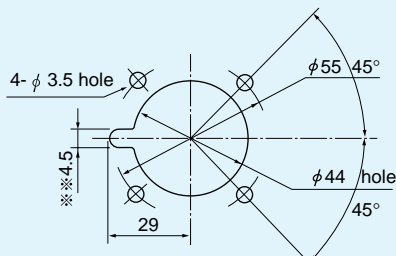


### ●Special Specification Available

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

### ■Panel Arrangements

(in case of with knob type 102)



Note : 1) In case of type Q, the angle of mark "※" becomes 360 $^\circ$  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 SFCP22E, are mounted, the position of mark "※" may change to other position.

3) 4 pcs. of mounting screws (M3  $\times$  14) are attached.

(Unit : mm)