

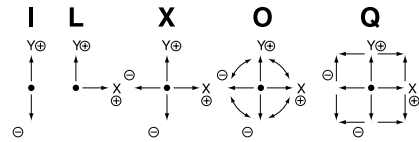
# L50JA

New Product

New Inductance Type  
Contactless Potentiometer inside-incorporated

## Nomenclature

- **S** means special mechanical specifications not applicable to our standards.
- **L** means contactless potentiometer mounted as well as larger output at plus output.
- **50** means approx. size of base housing in mm.
- **J** means joystick controller.
- **A** means type available with 1- and 2-dimensional coordinates and potentiometers outside-mounted type.
- **K** means square shape.
- **Y** means kind of mechanism: **X** means 1-dimensional coordinate. **Y** means 2-dimensional coordinate.
- **Available directions of lever operation as below illustration.**  
(Standard Version)  
  - : Omni-directionally 360° operating type.
 (Special Version)  
  - ⊥ : I figure (Y) direction only operating type.
  - L : L figure (+Y, +X only) direction operating type.
  - X : Cross direction (+) of X and Y operating type
  - Q : Square-directionally 360° operating type.
  - S : Special operating directions except the above-mentioned types.



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

**Number of potentiometers to be mounted.**

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

**Number of switches to be mounted.**

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

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

This new model offers long life expectancy, vibration proof, high reliability and safety.



**L50JAK-YO-20**  
(standard)  
(2-dimensional coordinate type)

**STANDARD SPECIFICATIONS**

● **Mechanical Performances**

**Controlling range of operating lever** : 2-dimensional coordinate type : Omni-directionally  $\pm 18^\circ \sim \pm 22^\circ$ , operation from center position.

**Operating force** : With spring return device (subject to directivity)

X, Y directions : Approx. 0.8 ~ 1.5N (80 ~ 150gf)

**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. 10,000,000 operations

**Mass** : 2-dimensional coordinate type : Approx. 280g

● **Electrical Performances**

**Potentiometers mounted** : SKSM22E-5

● Applied voltage : 5V.D.C.

● Effective output : Approx. 1.7V ~ 3.3V

● Independent linearity tolerance :  $\pm 3\%$

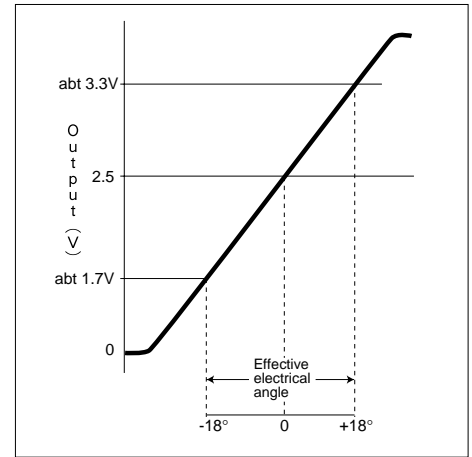
● Load resistance : Over 10K $\Omega$

**Resolution** : Infinitesimal

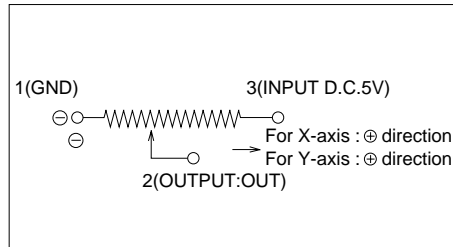
**Dielectric strength** : 1 minute at 250V.A.C.

**Insulation resistance** : Over 100M $\Omega$  at 250V.D.C.

● **Output Characteristic**



● **Terminal Connection Diagram**

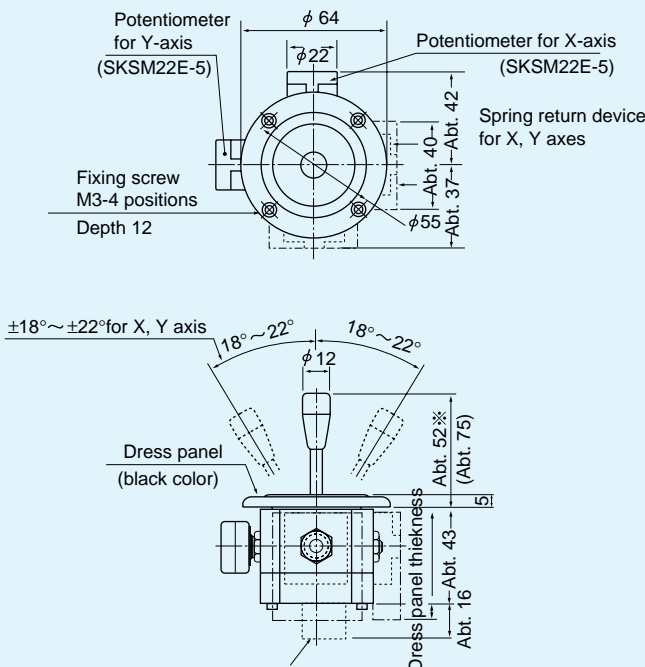


● **Special Specifications Available**

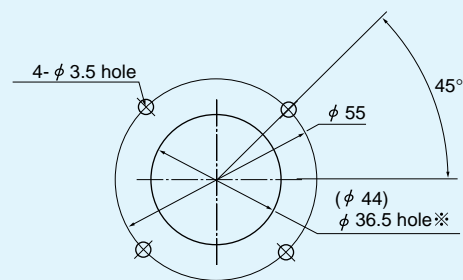
Please see page 41, a table of "Standard and Special Specifications Available".

Another applied voltage is also available.

**Standard Dimensions**



■ **Panel Arrangements**



Note : In case of with dust proof rubber cover, the dimensions of "※" part changes to  $\phi 44$  mm. hole.

- Note: 1) In case of with dust-proof rubber cover, the dimensions of dress panel and "※" part dimension shall change to numbers in parentheses.  
 2) Both type YO and YQ have same operating angle.  
 3) 4 pcs. of mounting screws (M3  $\times$  14) are attached.

(Unit : mm)