

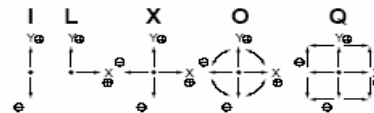
L90LA

New Product

New Inductance Type
Contactless Potentiometer inside-incorporated

Nomenclature

- S means special mechanical specifications not applicable to our standards.
- L means contactless potentiometer used and there are two kinds.
L : Larger output at plus output side.
- 90 means approx. size of base housing in mm.
- J means joystick controller.
- A means kind of type :
A : Available with 1 and 2-dimensional coordinates. Potentiometer outside-mounted type.
- M : means round type.
- 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)
I : I-figure (Y) direction only operating type.
L : L-figure direction only operating type.
X : Cross direction of X and Y only operating type.
Q : 360° square-directionally operating type.



S L 90 J A M - 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.

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...others.

With spring return device. (L90JA standard option) ●

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

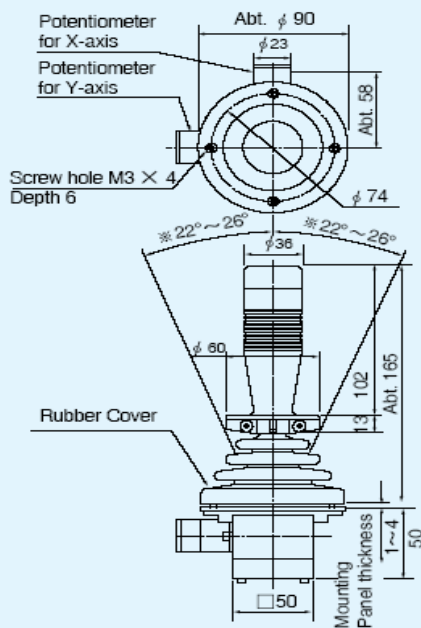
R2 : with spring return device for 2-dimensional coordinate.

Mounting accessories : G : with dust proof rubber cover. (L90JA standard option) P : with sub-panel for mounting. ●

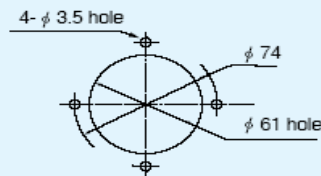
Special part number basing on customer's specifications with 4 digits number. ●

Standard Dimensions

Model L90JA



Panel Arrangements (Common to models L90JA)



- Note : 1) In case of Q and U type, the operating angle of mark "※" shall be ±15°~±20° from the center position, 360° square-directionally.
2) 4 pcs. of mounting screws (M3 × 10) are attached.

(Unit : mm)

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



L90JAM-YO-20R2G
(standard)
(2-dimensional coordinate type)

STANDARD SPECIFICATIONS

Model L90JA Series
(Larger output at plus output side)

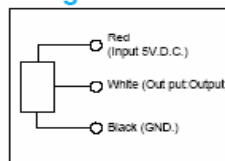
● **Mechanical Performances**

- **Controlling range of operating lever :**
2-dimensional coordinate type : Omni-directionally $\pm 22^\circ \sim \pm 26^\circ$ operation from center position.
- **Operating force :** With standard automatically center returning operating force : With standard automatically center returning spring return device (omni-directional type) : X,Y directions : Approx. 2 ~ 12N(200 ~ 1,200gf)
- **Operating temperature range :** $-20^\circ\text{C} \sim +65^\circ\text{C}$
- **Vibration :** 10 ~ 55Hz 98m/s² (10G)
- **Shock :** 294m/s² (30G)
- **Life expectancy :** Approx. 10,000,000 operations
- **Mass :** 2-dimensional coordinate type : Approx. 650g.

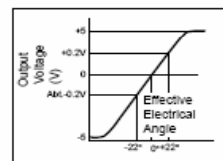
● **Electrical Performances**

- **Potentiometer mounted :** SKSM22EI-5, inductance type contactless potentiometer.
- **Applied voltage :** 5V.D.C
- **Effective output :** Approx. 1.52V ~ 3.48V
- **Independent linearity tolerance :** $\pm 0.5\%$
- **Load resistance :** over 10K Ω
- **Resolution :** Infinitesimal.
- **Dielectric strength :** 1 minute at 250V.A.C
- **Insulation resistance :** Over 100M Ω at 250V.D.C.

● **Terminal Connection Diagram**



● **Output Characteristic Diagram**



● **Special Specifications Available**

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

■ **Specially Ordered Joysticks** (With switch inside incorporated knob)

SL90JAM-YO-21R2G
(With push-button switch)



With knob type 105

SL90JAM-YO-21R2G
(With locker-switch)



With knob type 106