

C90JAM · C90JBM

● For multi functional control & with cobra head shaped knob
● C90JA: Potentiometer outside-mounted
● C90JB: Potentiometer incorporated Nomenclature S means special mechanical specifications not applicable to our standards. C means with cobra shaped knob. 90 means approx. size of base housing in mm. **J** means joystick controller. A means type available. A : Potentiometers outside-mounted type. **B**: Potentiometers incorporated type. M means round type. 4 means kind of mechanism: more than 4-dimensional coordinates.

Standard version:

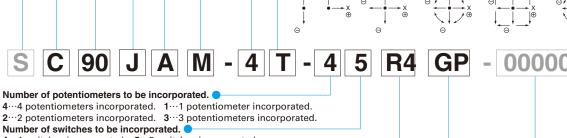
Special version:

L: L figure(+Y, +X only) directional operating type. X: Cross direction of X and Y operating type. Q: Square-directional 360° operating angle. ${f T}$: In addition to omni-directional 360° operation, this type is 3-dimensional coordinate operation by knob in which a see-saw potentiometer is incorporated. U: In addition to square-directional 360° operation, this type is 3-dimensional coordinate operation by knob in which a see-saw potentiometer is incorporated. S: Special operating directions other than the above-mentioned types.

O: Omni-directional 360° operating type.

I: I figure (Y) directional operating type.

Available directions of lever operation as below illustration



4···4 switches incorporated. 5···5 switches incorporated.

6...6 and over 6 switches incorporated.

With spring return device :

R4: with spring return device for 2-dimensional coordinate as well as for see-saw pot.

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 the case we produce customized product, we add 4-digit or 5-digit branch number.

Standard Dimensions

Standard Dimensions (In case of model C90JAM) The dimensions on the knob part are the same for model C90JBM in common. Push button switch Push button switch SW5 (Illumination, Alternate type) (Illumination, Alternate type) Cobra shaped knob Z axis pot. center position Z1 pot (Seesaw pot.) ⊖Side operation ⊕Side operation ⊕Side operation Z axis pot. Z2 pot. (Seesaw pot.) ⊖Side oparation φ25 Push button switch SW3(ON when pushed) Direction of lever operation ╗ Rubber cover 76 ⊒90± Y axis pot. Abt.∳90 _100[±] Leadwires for Z axis Pot. and each switch Abt. 300mm long (Equivalent to AWG27) (Unit: mm)



RoHS Compliant

This unique cobra head shaped knob can offer you various and complex controls in wide range. Some pushbutton switches and seesaw type potentiometer, which enables such multi-functional operations, are available.

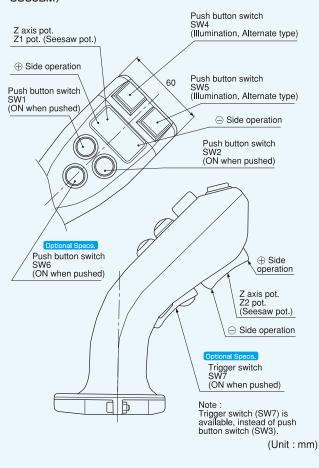


C90JBM-4T45R4GP (Standard)

SC90JAM-4U-46R4GP (Optional)

[Outer dimensions & Optional specs. on cobra shaped knob]

(Common dimensions for both model C90JAM and C90JBM)



Specification of X and Y axes potentiometers

(C90JA type: SFCP22E outside mounted)

(C90JB type: Special resistance element is exclusively used for C90JB series)

1) Total resistance value $10k\Omega\pm15\%$ 2) Independent linearity $10k\Omega\pm15\%$ 3) Electrical rotating angle $10k\Omega\pm15\%$ 4) Center return accuracy $10k\Omega\pm15\%$ 5) Power rating $10k\Omega\pm15\%$ $10k\Omega\pm15\%$ $10k\Omega\pm10\%$

6) Life expectancy : Approx. 5,000,000 operations

7) Terminal connection diagram

1 NOTE
(Yellow) 2 (Red) (Green)

3 NOTE
1: Only C90JBM model has leadwire terminal.
2: The color of leadwire is shown in parenthesis.
3: AWG26 leadwire is used.

Specs. of Z1 and Z2 axes potentiometers

1) Model No. : RMP30AF (Rocker switch unit)

2) Total resistance value $10k\Omega\pm15\%$ 3) Independent linearity $\pm3\%$ 4) Electrical rotating angle $30^{\circ}\pm5^{\circ}$ 5) Center return accuracy $50\%\pm3\%$ 6) Power rating $50\%\pm3\%$

7) Life expectancy : Approx. 2,000,000 operations

8) Terminal connection diagram

1 NOTE
(Yellow) 2(Red) (Green) 1: The color of leadwire is shown in parenthesis.
2: AWG27 leadwire is used.

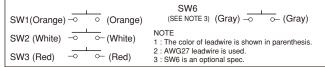
Specs. of push button switch (SW1, 2, 3 and 6)

1) Operating characteristics : Momentary type (ON when pushed)

2) Rating : 50VDC, 0.1A

2) Nating 3 (1) Dielectric strength (1) Insulation resistance (2) Life expectancy (2) Approx. 500,000 operations

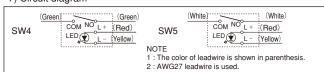
6) Circuit diagram



Specs. of illumination push button switch (SW4 & SW5)

Operating characteristics : Alternate type
 Rating : 30VDC, 5A
 Rating for illumination LED : 1.85VDC, 20mA
 Dielectric strength : 1 minute at 1,000V AC
 Insulation resistance : Over 200MΩ at 500V DC
 Life expectancy : Approx. 10,000 operations

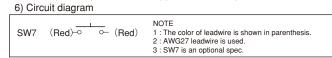
7) Circuit diagram



Note: The emission color of LED is red unless otherwise specified.

Specs. of trigger switch (SW7)

1) Operating characteristics
2) Rating
3) Dielectric strength
4) Insulation resistance
5) Life expects
2: Momentary type
3: 30VDC, 100mA
3: 1 minute at 600V AC
3: Over 100MΩ at 500V DC
3: Approx. 100,000 operations
3: Momentary type
3: 30VDC, 100mA
3: 10 minute at 600V AC
3: Over 100MΩ at 500V DC
3: Approx. 100,000 operations



Others

The mechanical performances on X and Y axes are the same as those of standard 90JA/90JB models respectively.