

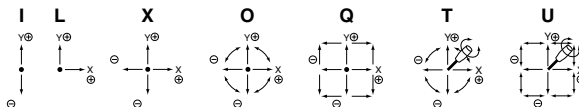
For multi-functional control & with cobra head shaped knob

C90JAM · C90JBM

Potentiometer with a conductive plastic resistive element

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.
 - Available directions of lever operation as below illustration
- Standard version:**
 O : Omni-directional 360° operating type.
- Special version:**
 I : I figure (Y) directional operating type.
 L : L figure (+Y, +X only) directional operating type.
 X : Cross direction of X and Y operating type.
 Q : Square-directional 360° operating angle.
 T : In addition to omni-directional 360° operation, this type is 3-dimensional coordinate operation by rotating knob in which a potentiometer is incorporated.
 U : In addition to square-directional 360° operation, this type is 3-dimensional coordinate operation by rotating knob in which a potentiometer is incorporated.
 S : Special operating directions other than the above-mentioned types.



S C 90 J A M - 4 T - 4 5 R4 GP - 00000

Number of potentiometers to be incorporated.

- 4...4 potentiometers incorporated.
- 1...1 potentiometers incorporated.
- 2...2 potentiometers incorporated.
- 3...3 potentiometers incorporated.

Number of switches to be incorporated.

- 4...4 switches incorporated.
- 5...5 switches incorporated.
- 6...6 and over 6 switches incorporated.
- 9...other 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.

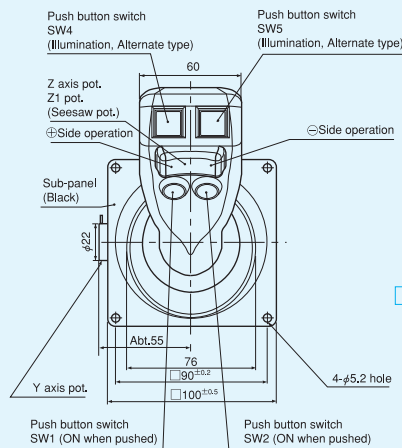
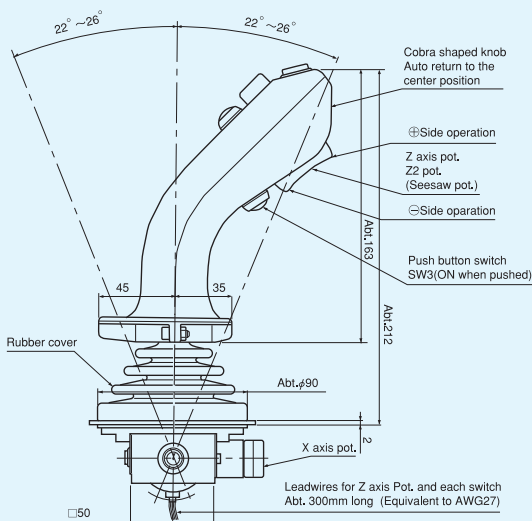
Mounting accessories : G: with dust proof rubber cover. P: with sub-panel for mounting (C90TAM C90JBM standard)

Special part number :

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

Standard Dimensions (In case of model C90JAM)

The dimensions on the knob part are the same for model C90JBM in common.



Direction of lever operation



(Unit : mm)

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



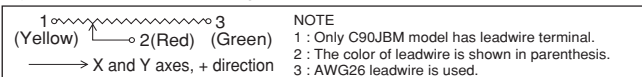
SC90JAM-4U-46R4GP

[The specs. of pot. and switches used]

1: Specs. of X and Y axes pots..

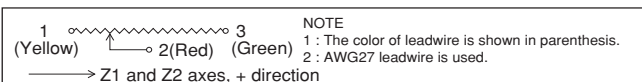
(C90JA type: SFCP22E outside mounted)
(C90JB type: Special resistance element is exclusively used for C90JB series)

- 1) Total resistance value : 10kΩ±15%
- 2) Independent linearity : ±3%
- 3) Electrical rotating angle : 44° ±5°
- 4) Center return accuracy : 50%±1.5%
- 5) Power rating : 0.2W
- 6) Life expectancy : Approx. 5,000,000 operations
- 7) Terminal connection diagram



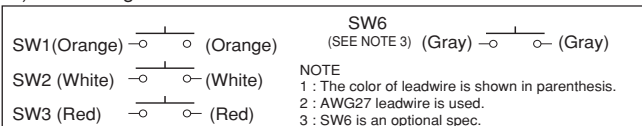
2: Specs. of Z1 and Z2 axes pots..

- 1) Model No. : RMP30AF (Rocker switch unit)
- 2) Total resistance value : 10kΩ±15%
- 3) Independent linearity : ±3%
- 4) Electrical rotating angle : 30° ±5°
- 5) Center return accuracy : 50%±3%
- 6) Power rating : 0.1W
- 7) Life expectancy : Approx. 2,000,000 operations
- 8) Terminal connection diagram



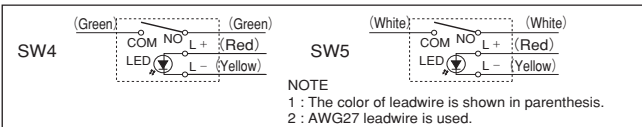
3: Specs. of push button switch (SW1, 2, 3 and 6)

- 1) Operating characteristics : Momentary type (ON when pushed)
- 2) Rating : 50VDC, 0.1A
- 3) Dielectric strength : 1 minute at 1,000V AC
- 4) Insulation resistance : Over 1,000MΩ at 500V DC
- 5) Life expectancy : Approx. 500,000 operations
- 6) Circuit diagram



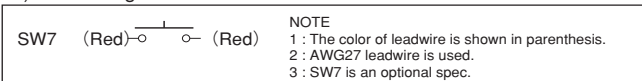
4: Specs. of illumination push button switch(SW4 & SW5)

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



5: Specs. of trigger switch (SW7)

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

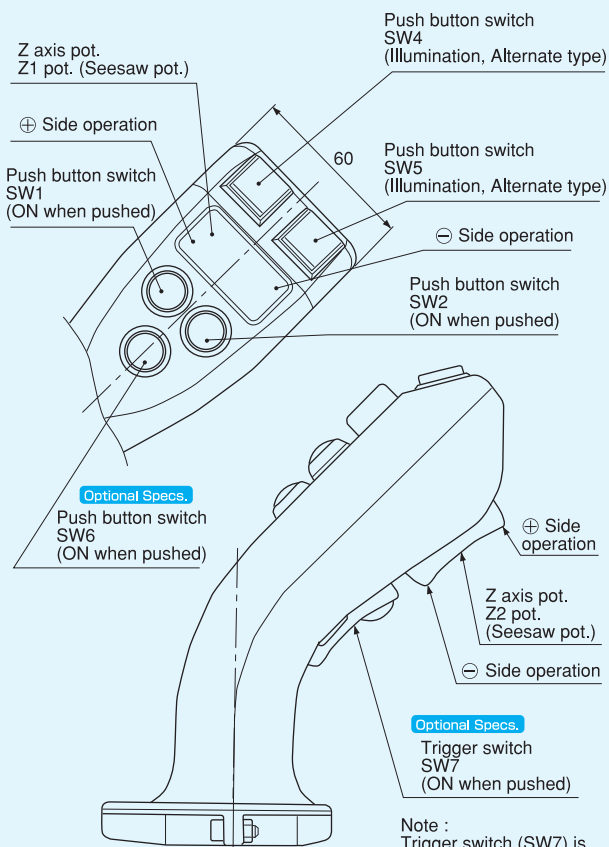


6: Others

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

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

(Common dimensions for both model C90JAM and C90JBM)



(Unit : mm)