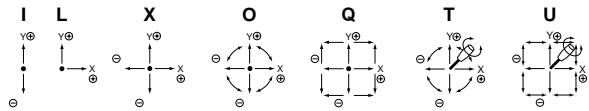


For multi-functional control & with cobra head shaped knob

C90JAM • C90JBM

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 direction of lever operation as below illustration.**
(Standard version)
T : 360° omni-directionally operating type. and in addition, 3-dimensional coordinate operation is possible by the lever mounting a knob incorporated pot.
(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.
O : In addition to 360° omni-directional operation. 3-dimensional coordinate operation is possible by rotating knob in which a potentiometer is mounted.
U : In addition to "O operation" 3-dimensional coordinate operation is possible by rotating knob in which a potentiometer is mounted.



S **C** **90** **J** **A** **M** - **4** **T** - **4** **5** **R4** **GP** - **0000**

Number of potentiometers to be mounted.

- 4...4 potentiometers mounted.
- 1...1 potentiometers mounted.
- 2...2 potentiometers mounted.
- 3...3 potentiometers mounted.

Number of switches to be mounted.

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

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.

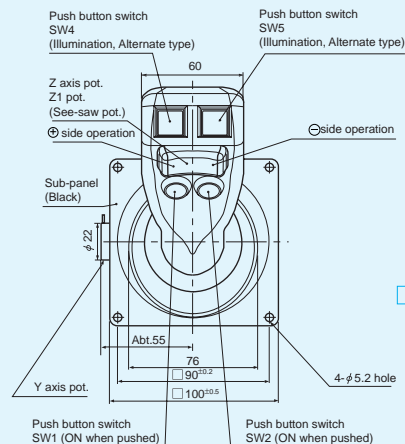
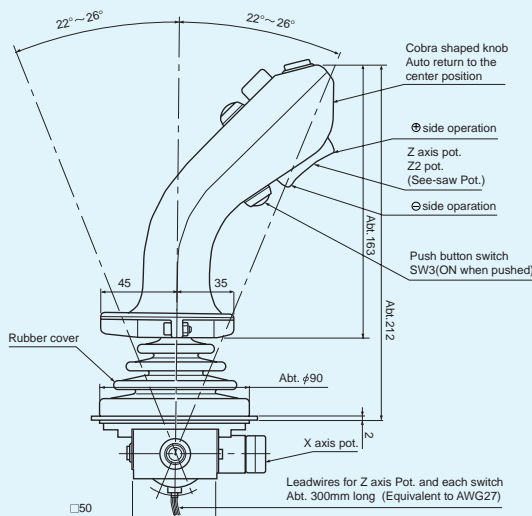
Mounting accessories : **G** : with dust proof rubber cover. **P** : with sub-panel for mounting

(C90TAM C90JBM standard options)

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

Standard Dimensions(In case of model C90JAM)

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



(Unit : mm)

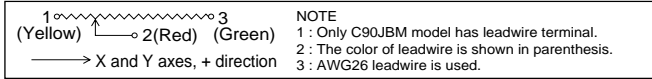
This unique lever mounted cobra head shaped knob can offer your operations of complex controls in wide range. The cobra head shaped knob incorporates some push-button switches and see-saw type potentiometer, which enables such multi-functional operations.



SC90JAM-4U-46R4GP

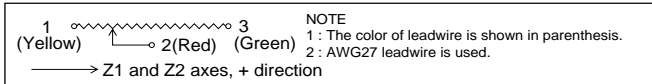
[The specs. of pot. and switches used]

- 1: Specs. of X and Y axes pots..
(C90JA type: SFCP22E outside mounted)
(C90JB type: Special resistance element exclusively used for C90JB series is incorporated)
- 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



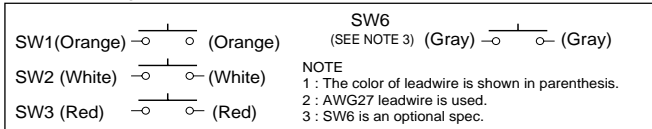
2: Specs. of Z1 and Z2 axes pots..

- 1) Model No. : SFCP30A (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 : 0.2W
- 7) Life expectancy : Approx. 2,000,000 operations
- 8) Terminal connection diagram



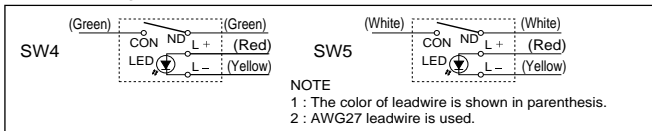
3: Specs. of push button switch (SW1, 2, 3 and 6)

- 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



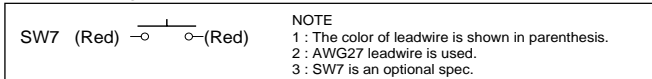
4: Specs. of illumination push button switch(SW4 & SW5)

- 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

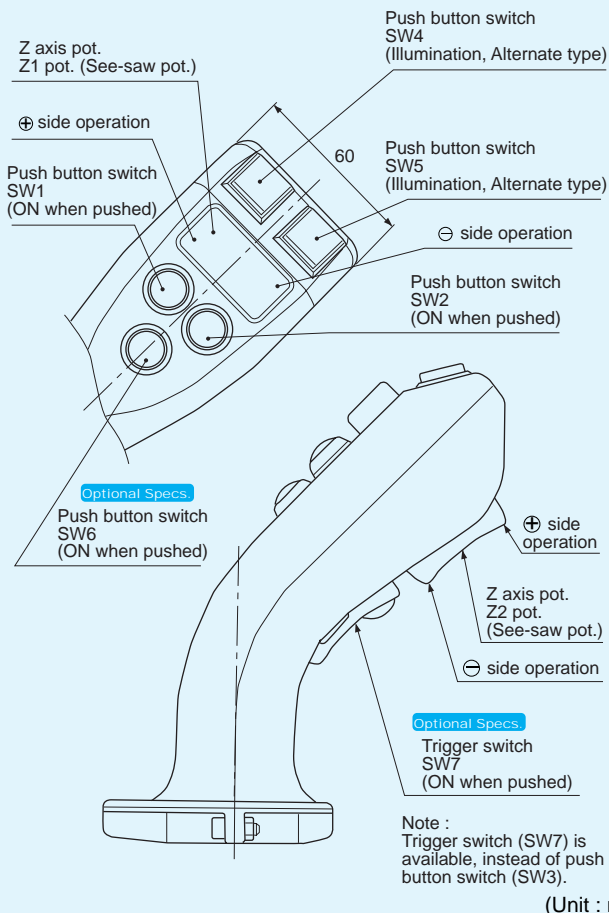


6: Others

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 of models C90JAM and C90JBM)



(Unit : mm)