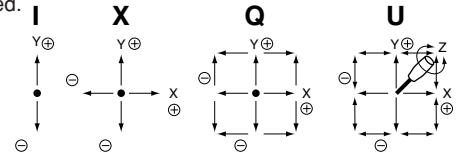


30JE

Nomenclature

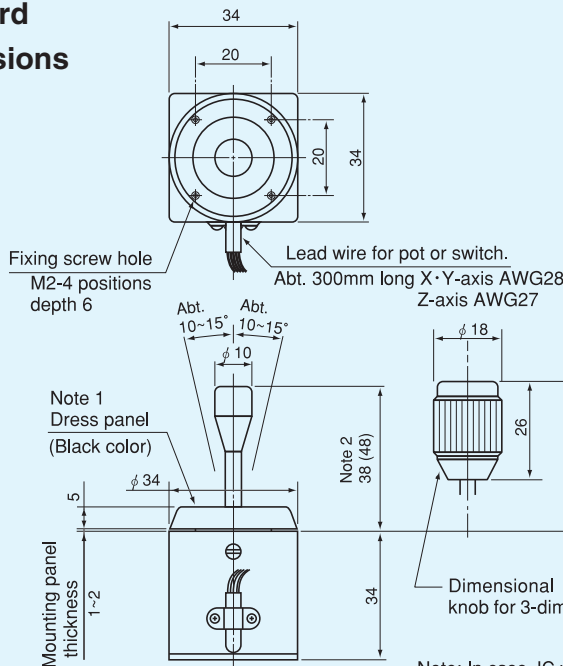
- **S** means special mechanical specifications not applicable to our standard.
- **30** means approx. size of base housing in mm.
- **J** means joystick controller.
- **Kind of types**
E means type available with 1-, 2- and 3-dimensional coordinates.
 Switches inside-incorporated type.
- **K** means square shape.
- **Mechanism**
X means 1-dimensional coordinate. **Y** means 2-dimensional coordinate.
Z means 3-dimensional coordinate.
- **Available directions of lever operation as below illustration**
Standard version:
Q: Square-directional 360° operating angle.
Special version
I: I figure (Y) directional operating type.
X: Cross directional operating type (X and Y)
U: In addition to square-directional operation, 3-dimensional coordinate operation is possible by rotating knob in which a potentiometer is incorporated.



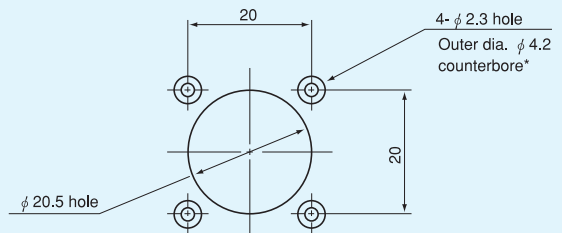
S **30** **J** **E** **K**-**Y** **Q**-**0** **4** **R2** **G**-**00000**

- **Number of potentiometers to be incorporated.**
 0...no potentiometer incorporated.
- **Number of switches to be incorporated.**
 1...1 switch incorporated. 2...2 switches incorporated. 3...3 switches incorporated.
 4...4 switches incorporated. 5...5 switches incorporated. 6...6 switches incorporated.
- **With spring return device :** **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 case we produce customized products, we add 4-digit or 5-digit branch number.

Standard Dimensions



Panel Arrangements



- Note: 1) In case JC with a dust-proof rubber cover, the counterbore-work (*part) is not necessary.
- 2) 4 pcs. of mounting screw (M2 X 6) are attached.

Note: In case JC with a dust-proof rubber cover, the shape of dress panel shall be changed.
 ※ Numerical in parentheses shows dimensions of Dust-proof rubber cover.

(Unit : mm)



30JEK-YQ-04R2
(Standard)

(2-dimensional coordinate type)



30JEK-ZU-06R3
(Standard)

(3-dimensional coordinate type)

STANDARD SPECIFICATIONS

Model 30JE Series
(Switch inside-incorporated type)

●Mechanical Performance

Controlling range of operating lever :

X and Y directions : Approx. $\pm 10^\circ \sim \pm 15^\circ$ from center position.

Z direction : Approx. $\pm 30^\circ \sim \pm 35^\circ$ from center position.

Operating force (Standard spring return device : Automatically return to center)

X and Y directions : Approx. 0.8~2N (80~200gf)

Z direction : Approx. 15~60mN · m (150~600gf.cm)

Operating temperature range : $-20^\circ\text{C} \sim +65^\circ\text{C}$

Vibration : 10~55Hz 98m/s²

Shock : 294m/s²

Life expectancy : Approx. 1,000,000 operations.

Mass : 2-dimensional coordinate type : Approx. 80g

3-dimensional coordinate type : Approx. 100g

●Electrical Performance

Switches used : Rating 24V.D.C., 50mA

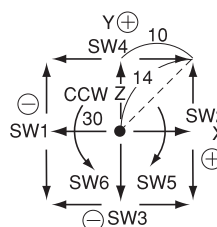
(Resistance load)

[In case of 3-dimensional coordinate and Z-axis switch-inside-knob incorporated type U, the ratings are 24V.D.C., 100mA.]

Dielectric strength : 1 minute at 500V.A. C.

Insulation resistance : Over 100M Ω at 250V.D.C.

●Terminal Connection Diagram



●Switches of each axis will be "on" at both end of each axis.

Note 1) Terminals shall be lead-wire terminals with approx. 300mm long. (AWG28)

2) Colors of micro-switch connection leads are shown in parenthesis.

(For X-axis) SW1 (green 2 leads): ON up to \ominus directional end from center position

SW2 (white 2 leads): ON up to \oplus directional end from center position

(For Y-axis) SW3 (yellow 2 leads): ON up to \ominus directional end from center position

SW4 (red 2 leads): ON up to \oplus directional end from center position

(For Z-axis) SW5 (orange 2 leads): ON up to CW directional end from center position

SW6 (gray 2 leads): ON up to CCW directional end from center position

●Special Specifications Available

Please see page 47, a table of "Standard and Special Specifications Available".