# 30JB 

## Nomenclature



## Number of potentiometers to be mounted only for 30JBK.

0...no potentiometer mounted. 1...1 potentiometer mounted.
2... 2 potentiometers mounted. 3... 3 potentiometers mounted.

Number of switches to be mounted.
0...no switch mounted. 1...1 switch mounted.
2... 2 switches mounted.

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 basing on customer's specifications with 4 digits number.



30JBK-YO-20R2
(standard)
(2-dimensional coordinate type)


30JBK-ZT-30R3
(standard)
(3-dimensional coordinate type)

## STANDARD SPECIFICATIONS

## Model 30JB Series

(Potentiometer inside-incorporated type)

## OMechanical Performances

## Controlling range of operating lever :

$X$ and $Y$ directions : Approx. $\pm 10^{\circ} \sim \pm 15^{\circ}$ from center position.(Omni-directionally)
$Z$ direction : Approx. $\pm 30^{\circ} \sim \pm 35^{\circ}$ from center position.
Operating force (With standard automatically center returning spring return device)(Omni-directionally)
$X$ and $Y$ directions : Approx.0.8~2N (80~200gf)
Z direction : Approx. $15 \sim 60 \mathrm{mN} \cdot \mathrm{m}(150 \sim 600 \mathrm{gf} . \mathrm{cm})$
Operating temperature range : $-20^{\circ} \mathrm{C} \sim+65^{\circ} \mathrm{C}$
Vibration : $10 \sim 55 \mathrm{~Hz} 98 \mathrm{~m} / \mathrm{s}^{2}$ (10G)
Shock : $294 \mathrm{~m} / \mathrm{s}^{2}$ (30G)
Life expectancy : Approx. 5,000,000 operations
Mass : 2-dimensional coordinate type : Approx. 80g
3-dimensional coordinate type : Approx. 100g

## -Electrical Performances

Potentiometers mounted : Special conductive plastic resistive element exclusively used for 30JB series is incorporated.
( X and Y axes pots)
Resistance value : $10 \mathrm{k} \Omega \pm 15 \%$
Rating: 0.1W
Electrical rotating angle : Approx. $20^{\circ}$
Independent linearity tolerance : $\pm 3 \%$
(Z axis pot.)
Resistance value : $10 \mathrm{k} \Omega \pm 15 \%$
Rating: 0.04W
Electrical rotating angle : Approx. $60^{\circ}$
Independent linearity tolerance : $\pm 3 \%$

Output smoothness : Below $0.2 \%$ against input voltage
Contact resistance variation : Below 6\% C.R.V
Resolution : Essentially infinite
Dielectric strength : 1 minute at 500 V.A.C.
Insulation resistance : Over $1,000 \mathrm{M} \Omega$ at 500 V .D.C.
-Terminal Connection Diagram


Note: 1) Terminals shall be lead-wire terminals with approx. 300 mm long. (AWG28)
2) Standard version is with a current center tap (for all X, Y, Z-axes)
3) Markings of $X, Y, Z$ on lead-wire terminals are made on the tag, respectively.

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

