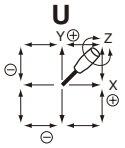
H30JH

● 3-dimensional coordinate ● With a hall effect IC

● Nomenclature

S means special mechanical specifications not applicable to our standard.
H means hall effect IC type resistive element incorporated.
30 means approx. size of base housing in mm.
J means joystick controller.
Kind of types
H means 3-dimensional coordinate and low-cost type.
K means square shape.
Mechanism
Z means 3-dimensional coordinate.
Available directions of lever operation
U: In addition to 360° square-directionally operation, 3-dimensional coordinate operation is possible by the rotating knob in which a potentiometer is incorporated.

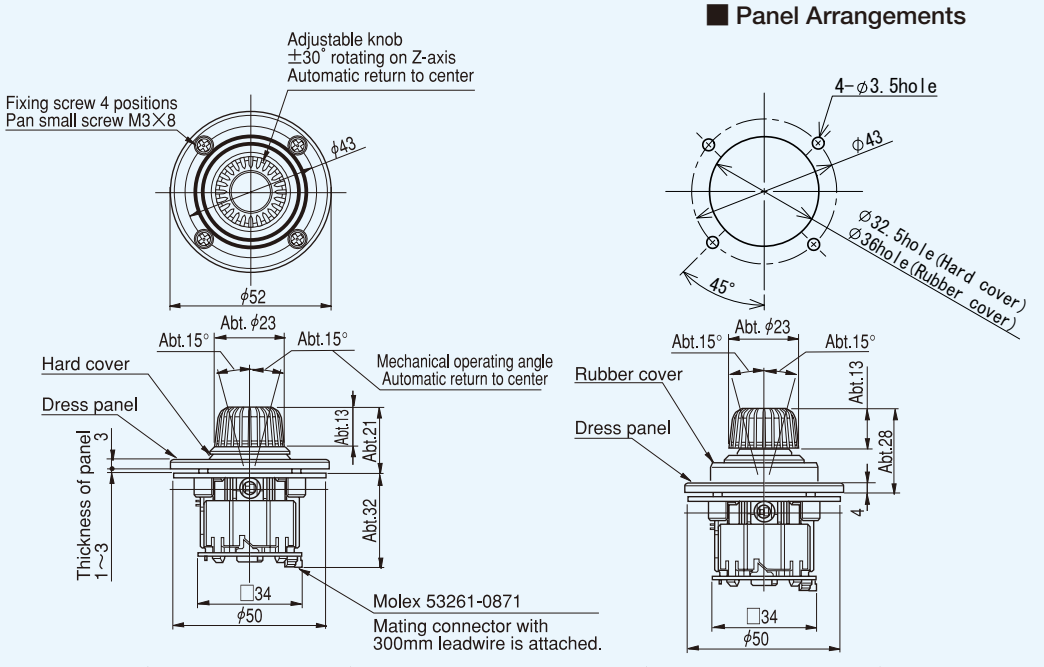


S H 30 J H K - Z U - 3 S R3 G - 00000

Number of potentiometers to be incorporated
0···no potentiometer incorporated. **1**···1 potentiometer incorporated.
2···2 potentiometers incorporated. **3**···3 potentiometers incorporated.
Number of output and kind of output characteristic
S···single output. **X**···dual cross output. **P**···dual parallel output.
With spring return device:
R3 : with spring return device for 3-dimensional coordinate type.
Mounting accessories:
G : with dust proof rubber cover. **P** : with sub-panel for mounting.
Special part number:
In the case we produce customized products, we add 4 or 5-digit branch number.

● Standard Dimensions

■ Panel Arrangements



(Hard cover type)

(Rubber cover type)

(Unit : mm)

H30JHK-ZU-3SR3
(Hard cover type)

H30JHK-ZU-3SR3G
(Rubber cover type)

STANDARD SPECIFICATIONS

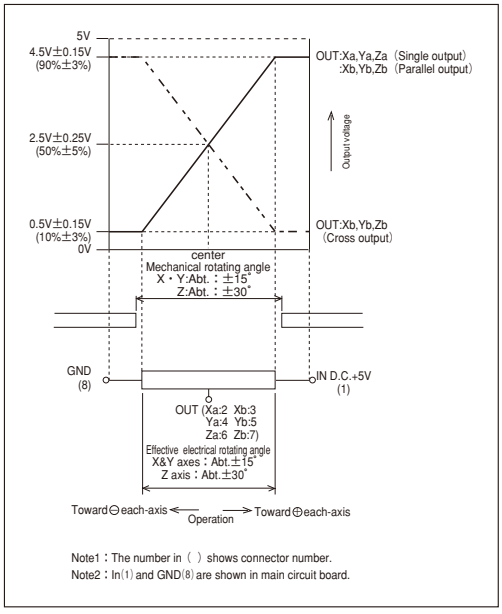
Mechanical Performance

Controlling range of operating lever	3-dimensional coordinate type X and Y directions: Approx. ±15° from center position Z directions: Approx. ±30° from center position
Operating force **(Standard spring return device : Automatically return to center)**	X and Y directions: Approx.1.5～3N(150～300gf) (X and Y directions with rubber cover: Approx.1.5～3.5N(150～350gf)) Z direction:Approx.10～30mN～m(100～300gf·cm)
Operating temperature range	–20°C～＋60°C
Vibration	10～55Hz 98m/s²
Shock	294m/s²
Life expectancy	Approx.1,000,000 operations.
Mass	Approx. 50g

Electrical Performance

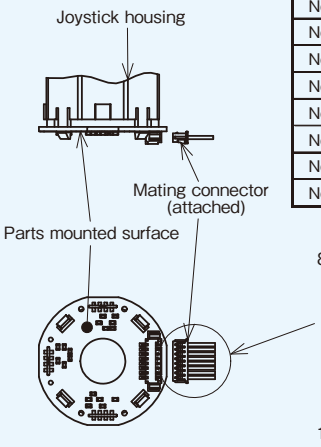
Hall effect IC type resistive element incorporated	●Applied voltage: 5V±10% D.C. ●Effective output: Approx.0.5V～4.5V ●Electrical rotating angle: X and Y-axis: Approx.±15° Z-axis: Approx.±30° ●Independent linearity tolerance: ±3% ●Load resistance: over 10KΩ
Dielectric strength	1 minute at 250V.A.C.
Insulation resistance	Over 100MΩ at 250V.D.C.
EMS tolerance	50V/m (80MHz～1GHz 1KHz sine-wave 80%AM modulation)

Terminal Connection Diagram



Note1：The number in ( ) shows connector number.
Note2：In(1) and GND(8) are shown in main circuit board.

H30JHK
Connection diagram



Pin No.	Standard	Cross or paralled output
No.8 (Gray)	GN	GND
No.7 (Purple)	———	Z OUT-B
No.6 (Blue)	Z OUT-A	Z OUT-A
No.5 (Green)	———	Y OUT-B
No.4 (Yellow)	Y OUT-A	Y OUT-A
No.3 (Orange)	———	X OUT-B
No.2 (Red)	X OUT-A	X OUT-A
No.1 (Brown)	IN D.C+5	IN D.C+5