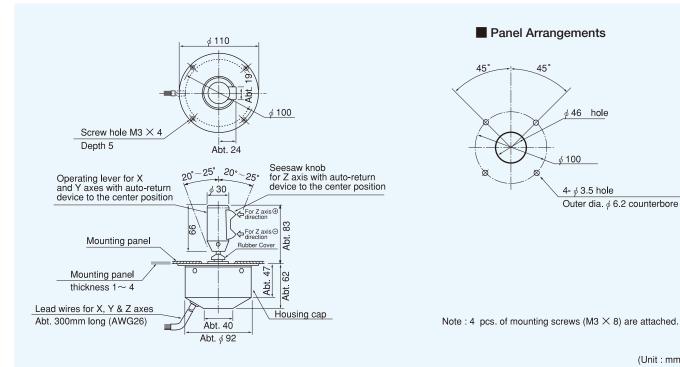


In the case we produce customized product, we add 4-digit or 5-digit branch number.

# Standard Dimensions





¢46 hole

4- ∮ 3.5 hole

Outer dia. ø 6.2 counterbore

φ **100** 



**100JBM-ZU-30R3G** (Standard 3-dimensional coordinate type)

# STANDARD SPECIFICATIONS

# Mechanical Performance

Controlling range of operating lever	<ul> <li>2-dimensional coordinate type : Omni-directionally approx. ±20° ~ ±25° operation from center position.</li> <li>3-dimensional coordinate type : Approx. ±15° ~±19° operation from the center position of the seesaw knob, in addition to the controlling range of 2-dimensional coordinate type.</li> </ul>	
Operating force	Standard spring return device : Automatically return to center.	
X, Y directions	Approx. 0.8~2.3N (80~230gf.) [with 2 springs(with directive feeling)as standard version]	
Z direction	Approx. 24~30mN·m (240~300gf·cm)	
Operating temperature range	−20°C~+65°C	
Vibration	10~55Hz 98m/s <sup>2</sup>	
Shock	294m/s <sup>2</sup>	
Life expectancy	Approx. 5,000,000 operations for X and Y axes. Approx. 2,000,000 operations for Z axis.	
Mass	3-dimensional coordinate type : Approx. 410g	

#### Electrical Performance

Potentiometers mounted	<ul> <li>For X and Y axes: SFCP22E, 10kΩ±15%, 0.13W (conductive plastic resistive element) Independent linearity tolerance ±3% Electrical rotating angle : Approx. 40°</li> <li>For Z axis: Special potentiometer RMP30AY is exclusively used for seesaw knob 10kΩ±15% 0.1W Independent linearity tolerance ±3% Electrical rotating angle: Approx. 30°</li> </ul>	
Output smoothness	Below 0.2% against input voltage.	
Contact resistance variation	Below 5% C.R.V.	
Resolution	Essentially infinite	
Dielectric strength	1 minute at 500V.A.C.	
Insulation resistance	Over 1,000MΩ at 500V.D.C.	

# Terminal Connection Diagram

1 (Yellow)	3 (Green)		
⊖o—\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
2 (Red)	→ For X-axis : ⊕ direction For Y-axis : ⊕ direction For Z-axis : ⊕ direction		

Note:1) Terminals shall be lead-wire terminals with approx. 300mm long.(AWG26)

# Special Specifications Available

Please see page 55, a table of "Special Specifications Available".