

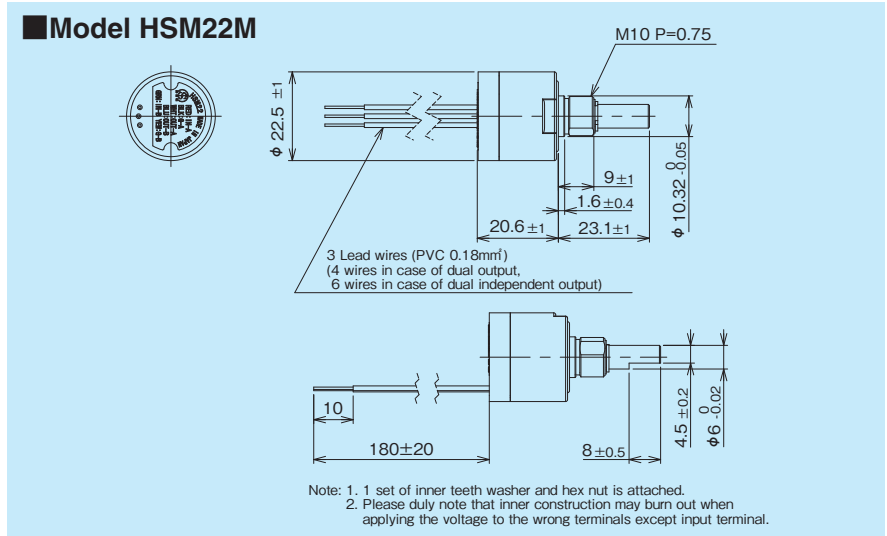
MODEL HSM22M

- Hall effect IC
- Bushingmount
- RoHS Compliant

● Standard Dimensions



Model HSM22M



● General Specifications

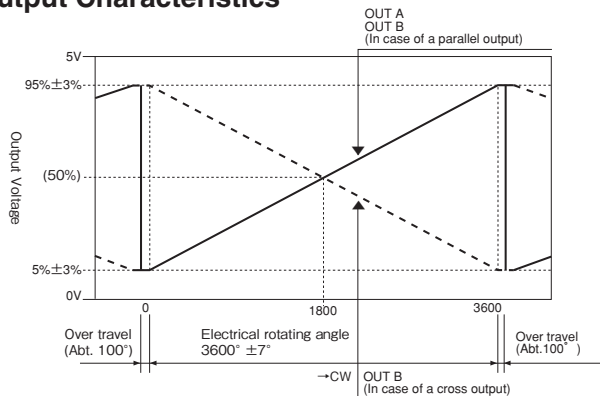
Current Consumption	Single output: Max. 16mA Dual output & dual independent output: Max. 32mA
Independent Linearity Tolerance	$\pm 0.5\%$ FS
Mechanical Rotating Angle	360° (Endless)
Effective Electrical Angle	3600° $\pm 7^\circ$
Applied Voltage	5V $\pm 10\%$ D.C.
Load resistance	10k Ω min
Effective Output	5% $\pm 3\%$ ~ 95% $\pm 3\%$ V_{in}
Output Temperature Characteristics	Within $\pm 0.3\%$ V_{out}/FS
Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C
Mass	Approx. 35g
Rotating Torque	Within 5mN · m (within 50gf · cm)
Backlash	Within 10°
Dielectric Strength	1 minute at 500 V.A.C.
Insulation Resistance	Over 1,000 M Ω at 500 V.D.C.
Index Protection	IP50 (IP65 for the incorporated PCB part only)

● Environmental Specifications

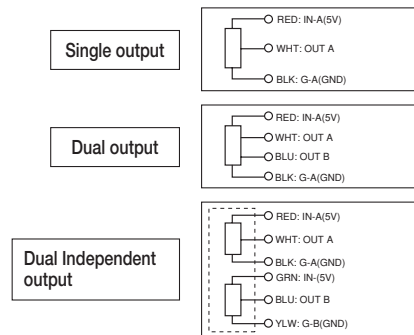
Thermal Shock	5 cycles -40°C ~ +85°C
Exposure at Low Temperature	24 hours at -40°C
Exposure at High Temperature	1,000 hours at +85°C
Vibration	10 to 2,000Hz 196m/s ² 12 hours
Shock	490m/s ² within 18 times
Rotational Life Expectancy	Approx. 20,000,000 shaft revolutions
EMS Tolerance	100V/m(80MHz~1GHz 1kHz Sinwave80% Amplitude Modulation)
ESD Tolerance	± 8 kV contact discharge ± 15 kV air discharge (Based on IEC 61000-4-2)

Note: Rotational Life Expectancy may differ from the specifications depending on status of use.

● Output Characteristics



● Terminal Connection Diagram



● Special Specifications Available

(In the case of the potentiometer with special specifications, the general specifications and environmental specifications may change. Please consult us in advance.)

- Special effective electrical angle (1080°, 1800°, 2880° - arbitrary angles)
- Special machining on the shaft
- Special output (Cross, parallel, Dual independent output)
- Special applied voltage (12V, 24V)
- PWM output
- Low current consumption in slow mode