

MODEL HSM14F

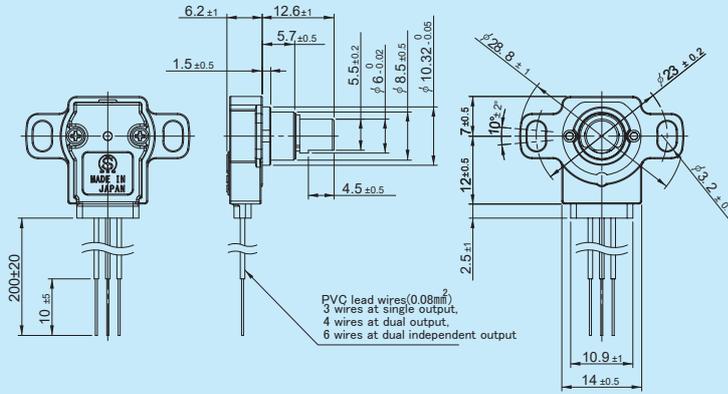
- Hall effect IC
- Flange mount
- RoHS Compliant

Standard Dimensions



Model HSM14

Model HSM14F



The drawings show the position of shaft flattened at the ratio value of 50%

1-Turn ▶ Contactless type ▶ Hall effect IC

General Specifications

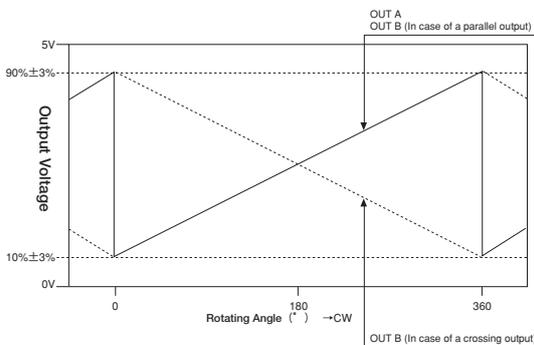
Current Consumption	Single output: Max. 16mA Dual output: Max. 32mA
Independent Linearity Tolerance	±1%FS(FS=360°)
Mechanical Rotating Angle	360° (Endless)
Electrical Angle	360°
Applied Voltage	5V±10%D.C.
Load resistance	10kΩmin
Effective Output	10%±3%~90%±3% Vin
Output Temperature Characteristics	Within ±0.3%Vout/FS
Operating Temperature Range	-40°C~+105°C
Storage Temperature Range	-40°C~+105°C
Mass	Approx. 11g
Rotating Torque	Within 5mN·m(within 50gf·cm)

Environmental Specifications

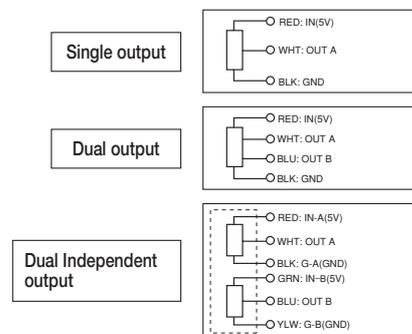
Thermal Shock	5 cycles -40°C~+105°C
Exposure at Low Temperature	24 hours at -40°C
Exposure at High Temperature	1,000 hours at +105°C
Vibration	10 to 2,000Hz 196m/s ² 12 hours
Shock	980m/s ² 6ms(18 times)
Rotational Life Expectancy	Approx. 100,000,000 shaft revolutions
EMS Tolerance	100V/m(80MHz~6GHz ISO11452-1~-3)
ESD Tolerance	±8kV contact discharge /±15kV 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 (90°, 180°, 270° - arbitrary angles)
- Special machining on the shaft
- PWM output
- Special output (Cross, parallel, Dual independent output)
- Low current consumption in slow mode (Within 11mA)

Use Caution: Organic solvents such as acetone oil or alcohol solutions such as ethanol droplet could leave chemical burn scars on plastic surfaces. Any environments where chemical proofs (Organic solvent resistance, alcohol resistance, etc.) are required, extra caution should be exercised.