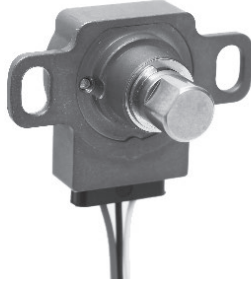


# MODEL HSM14F

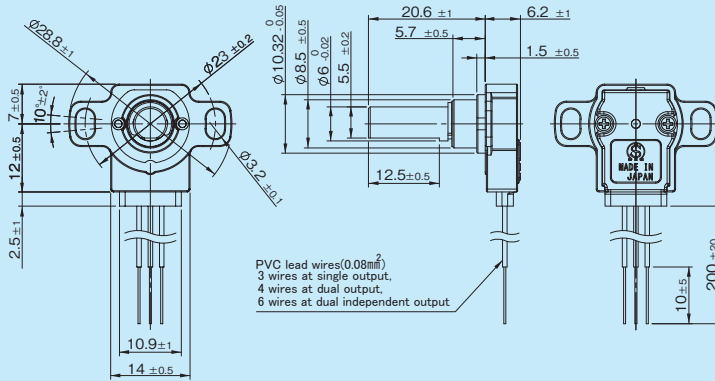
- Hall effect IC
- Flange mount
- RoHS Compliant

## ● Standard Dimensions



Model HSM14

### ■ Model HSM14F



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

1-Turn ▶ Contactless type ▶ Hall effect IC

## ● General Specifications

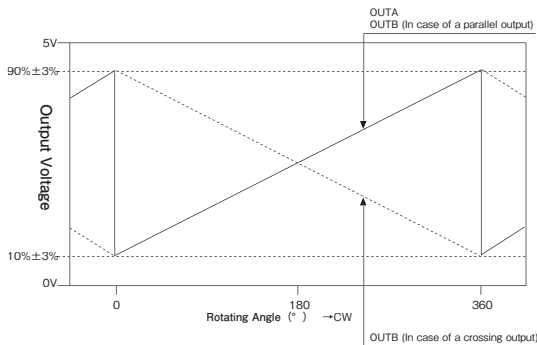
Current Consumption	Single output: Max. 16mA Dual output: Max. 32mA
Independent Linearity Tolerance	$\pm 1\%FS (FS=360^\circ)$
Mechanical Rotating Angle	360° (Endless)
Electrical Angle	360°
Applied Voltage	5V $\pm 10\%$ D.C.
Load resistance	10k $\Omega$ min
Effective Output	10%Vin $\pm 3\%$ Vin ~ 90%Vin $\pm 3\%$ Vin
Output Temperature Characteristics	Within $\pm 0.3\%$ 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)
Protection Grade(IP)	IP65

## ● Environmental Specifications

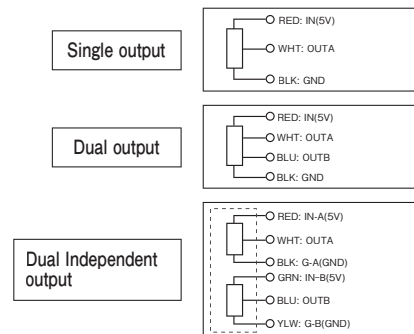
Thermal Shock	5 cycles -40°C ~ +105°C
Exposure at Low Temperature	24 hours at -40°C
Exposure at High Temperature	1,000 hours at +105°C
Vibration	10 to 2,000Hz 196m/s <sup>2</sup> 12 hours
Shock	980m/s <sup>2</sup> 6ms (18 times)
Rotational Life Expectancy	Approx. 100,000,000 shaft revolutions
Radiated Electromagnetic Field Immunity	100V/m (80MHz ~ 6GHz ISO11452-1 ~ -3)
ESD immunity	$\pm 8kV$ contact discharge $\pm 15kV$ 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

- 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)

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

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.