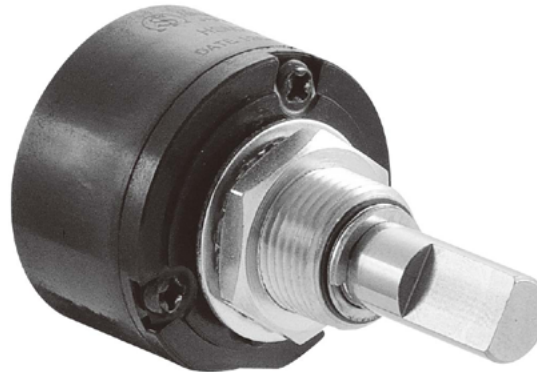


HSM22 Hall Effect Rotary Position Sensor



For more information about this product, visit our website at: www.potentiometers.com



HSM22 Hall Effect Rotary Position Sensor

Features

- Contactless Single Turn Rotary Position Sensor
- 360° Electrical Rotation Angle (Endless)
- Single, Dual, or Dual Independent Output
- 50 million operations life expectancy
- RoHS compliant

Electrical Specifications

360° Electrical Rotation Angle (Endless)
Independent Linearity Tolerance: $\pm 0.5\%$ FS (FS=360°)
Applied Voltage: 5VDC $\pm 10\%$
Load Resistance: 10K ohms min.
Effective Output: 10% $\pm 3\%$ to 90% $\pm 3\%$ Vin
Current Consumption: Single output: Approx. 16mA
Dual output: Approx 32mA
Output Temp. Characteristics: Within $\pm 0.3\%$ Vout * FX

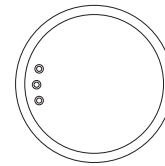
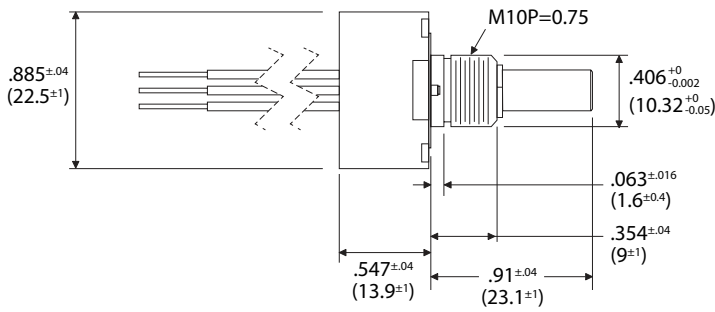
Mechanical Specifications

360° Mechanical Rotation Angle (Endless)
Rotating Torque: Within 5mN m (within 50gf cm)
Mass: Approx. 20g
Rotational Life: 5,000,000 revolutions

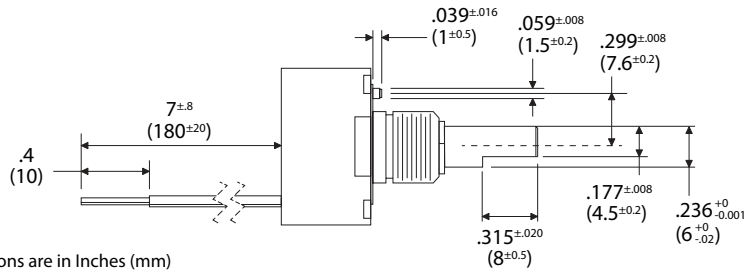
Environmental Specifications

Operating/Storage Temperature: -40°C to +105°C
Thermal Shock: -40°C to +105°C 5 cycles
Low Temp Exposure: 24 hours at -40°C
High Temp Exposure: 1,000 hours at +105°C
Vibration: 10HZ to 2,000HZ 196m/s² 12 hours
Shock: 980m/s² 6 ms (18 times)
EMS Tolerance: 100V/m (80MHz to 1GHz
1kHz Sinewave 80% Amplitude Modulation)
ESD Durability: ± 8 kV contact discharge
 ± 15 kV aerial discharge

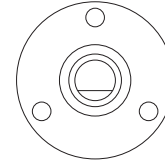
HSM22 Hall Effect Potentiometer



Rear View



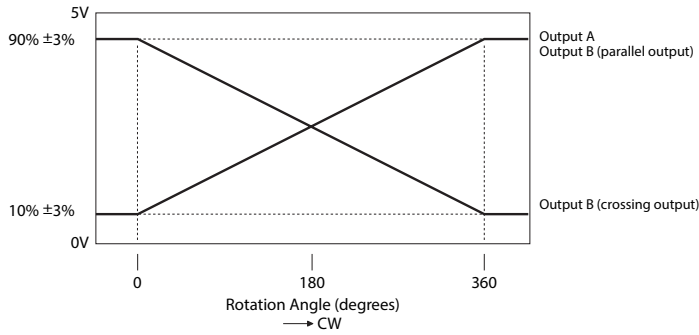
Dimensions are in Inches (mm)



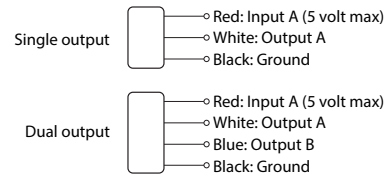
Note:
Shaft flat is shown at
50% rotation

Front View

Output:



Connections:



Lead wire (AWG24)

Output unit - 3 wires
Dual Output unit - 4 wires

Ordering Information

Example Part Number: **HSM22-S**

HSM22 **S**
| |
Model **Output**

HSM22 **S** = Single output
 P = Dual Parallel output
 X = Dual Cross output

Note: 1 piece each of lockwasher and hex nut included

For more information about this product,
visit our website at: www.potentiometers.com



© State Electronics

36 State Route 10, STE 6 • East Hanover, NJ 07936-0436
973-887-2550 • Toll Free 1-800-631-8083 • Fax 973-887-1940
<http://www.potentiometers.com>