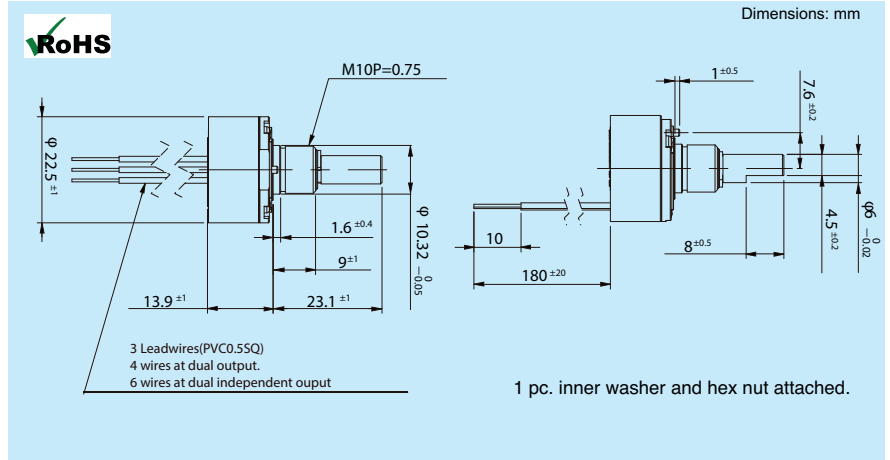


STHE22 Series

Single Turn Contactless Potentiometer (Hall Effect)



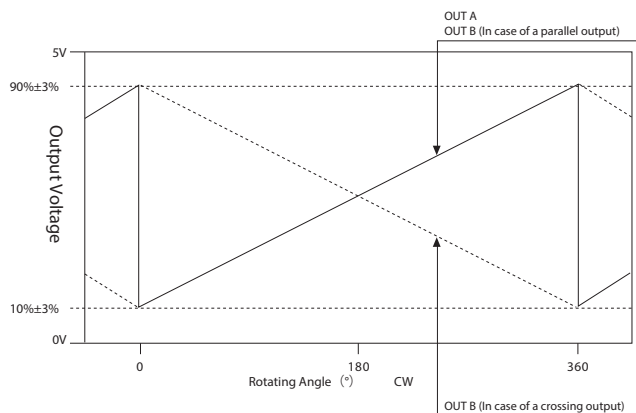
• General Specifications (Note)

Current Consumption	Single output: Approx. 16mA Dual output: Approx. 32mA
Independent Linearity Tolerance	±0.5%FS (FS=360°)
Mechanical Rotating Angle	360° (continuous)
Effective Electrical Angle	360° (fractional possible)
Applied Voltage	5V ±10% (12V, 24V possible)
Load resistance	10kΩ min
Effective Output	0.5V ±3% ~ 4.5V ±3%
Output Temperature Characteristics	Within ±0.3% Vout/FS
Operating Temperature Range	-40°C ~ +105°C (Note)
Storage Temperature Range	-40°C ~ +105°C
Mass	Approx. 20g
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. 50,000,000 (no load)
EMS Tolerance	100V/m (80MHz~1GHz 1KHz Sinwave 80% Amplitude Modulation)
ESD Tolerance	±8kV contact discharge /±15kV aerial discharge

• Output Characteristics



Available Options

- Special Effective Electrical Angle (90°, 180°, 270° - arbitrary angles)
- Special machining on the shaft
- Redundant output (Cross, Parallel, Dual independent)
- 0 - 10V output, PWM output

• Terminal Connection Diagram

