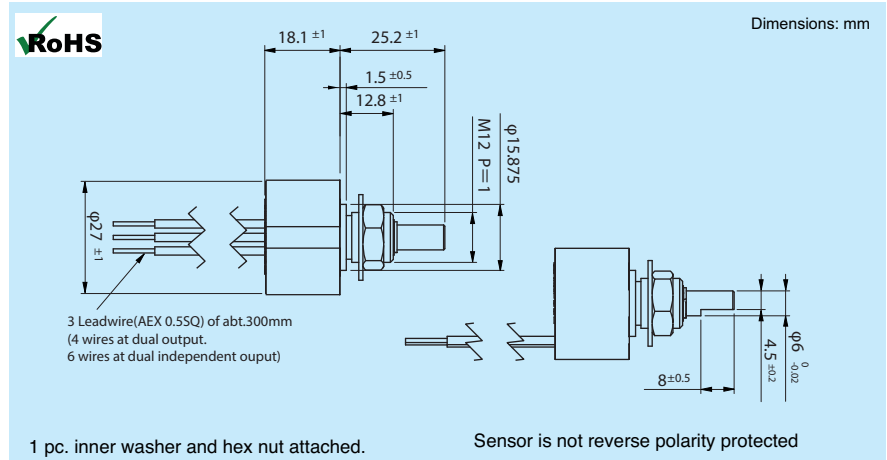


STHE30 Series

Single Turn Contactless Potentiometer (Hall Effect)



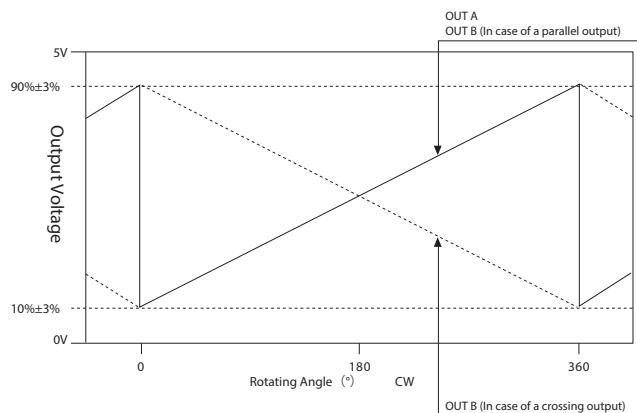
• General Specifications (Note)

Current Consumption	Single output: Approx. 16mA Dual output: Approx. 32mA
Independent Linearity Tolerance	$\pm 0.5\%FS$ ($FS=360^\circ$)
Mechanical Rotating Angle	360° (continuous)
Effective Electrical Angle	360° (fractional possible)
Applied Voltage	$5V \pm 10\%$ (12V, 24V possible)
Load resistance	10k Ω min
Effective Output	$0.5V \pm 3\% \sim 4.5V \pm 3\%$
Output Temperature Characteristics	Within $\pm 0.3\%$ V_{out}/FS
Operating Temperature Range	$-40^\circ C \sim +105^\circ C$ (Note)
Storage Temperature Range	$-40^\circ C \sim +105^\circ C$
Mass	Approx. 20g
Rotating Torque	Within 5mN · m (within 50gf · cm)

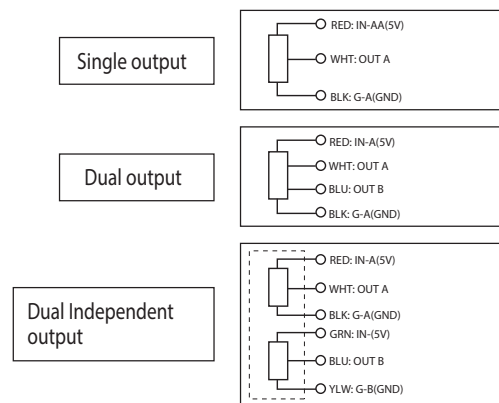
• Environmental Specifications

Thermal Shock	5 cycles $-40^\circ C \sim +105^\circ C$
Exposure at Low Temperature	24 hours at $-40^\circ C$
Exposure at High Temperature	1,000 hours at $+105^\circ C$
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 \sim 1GHz 1KHz Sinwave 80% Amplitude Modulation)
ESD Tolerance	$\pm 8kV$ contact discharge / $\pm 15kV$ aerial discharge

• Output Characteristics



• Terminal Connection Diagram



Note: Customers should test and verify device performance in any given application. Shaft modifications are possible, please consult us. Specifications subject to change without notice.