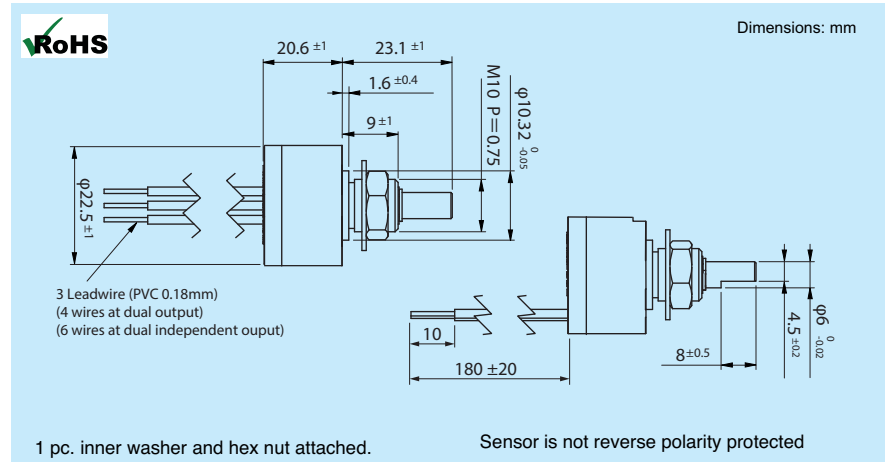


MTHE2210 Series

Multi-Turn Contactless Potentiometer (Hall Effect)

MTHE2210: 10 turns
 MTHE2205: 5 turns
 MTHE2203: 3 turns



• 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	3600° ±7° (10 turns)
Applied Voltage	5V ±10% (12V, 24V option)
Load resistance	10kΩ min
Effective Output	5% ±3% ~ 95% ±3% V _{in}
Output Temperature Characteristics	Within ±0.3% V _{out} /FS
Operating Temperature Range	-40°C ~ +85°C (Note)
Storage Temperature Range	-40°C ~ +85°C
Mass	Approx. 35g
Rotating Torque	Within 5mN · m (within 50gf · cm)
Backlash	Within 10°
Protection Grade	IP50 (IP65 internal PCB)

• Environmental Specifications

Thermal Shock	5 cycles -40°C ~ +85°C
Exposure at Low Temperature	24 hours at -40°C
Exposure at High Temperature	1,000 hours at +85°C
Vibration	10 to 2,000Hz 196m/s ² 12 hours
Shock	490m/s ² (18 times)
Rotational Life Expectancy	Approx. 20,000,000 (no load)
EMS Tolerance	100V/m (80MHz~1GHz 1KHz Sinwave 80% Amplitude Modulation)
ESD Tolerance	±8kV contact discharge /±15kV aerial discharge
Dielectric Strength	1 minute at 500 VAC
Insulation Resistance	> 1,000 MΩ at 500 VDC

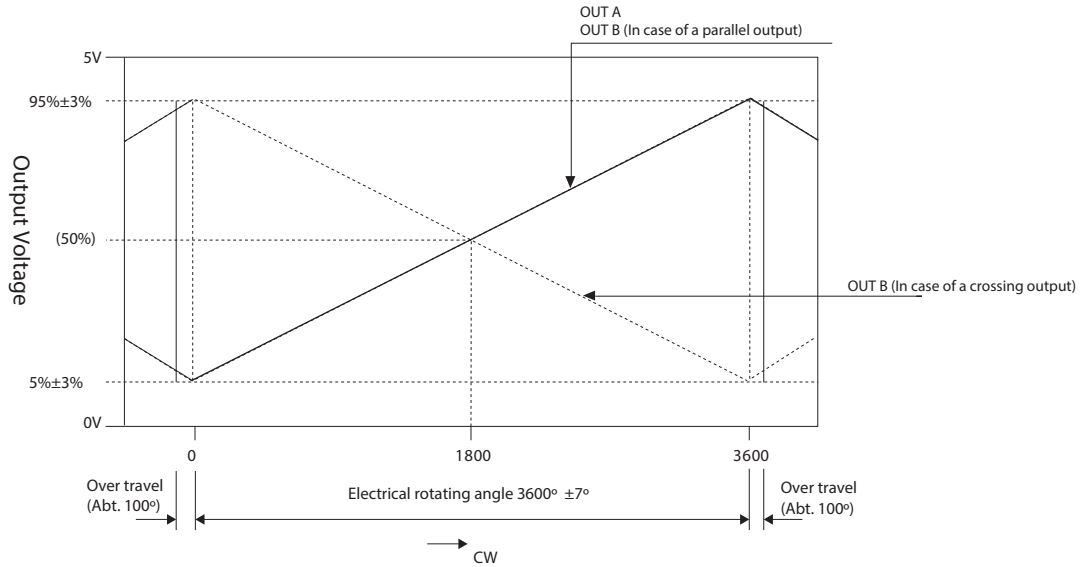
• Special Specifications Available

Optional 3 turn or 5 turns, Special output (Cross, parallel, Dual independent output), Applied voltage of 12V or 24V, PWM output, special machining on the shaft.

MTHE2210 Series

Multi-Turn Contactless Potentiometer (Hall Effect)

Output Characteristics



Terminal Connection Diagram

