





11mm Rotary type Encoders-With Switch

1. PUSH-ON SWITCH SPECIFICATIONS

Switch Circuit	Single Pole and Single Throw (push on)
Switch Travel(mm)	0.5 ^{+0.4} / _{-0.3} mm
Switch Operating Force	500 ⁺³⁰⁰ / ₋₃₀₀ gf.
Switch Rating Power	DC 5V 10mA (minimum ratings :DC 5V 1mA)
Switch Contact Resistance	First period : 100mΩ, 200mΩ after the end of useful life is reached 200mΩ
Switch Push Life	20,000 Cycles (500cycles/H, shaft push load 1kgf. Max.)

2. Electrical Characteristics

Power Rating	DC 5V 0.5mA
Insulation Resistance	More than 10 MΩ at DC 250V 1 Minute
Withstand Voltage	1 Minute at AC 50V
Sliding Noise	t1,t3 ≤3mS (Test conditions :360°/S); t2 ≤2mS Using the C/R filter circuit is Recommended
Resolution	20 Pulses/360° for each phase /360° Output signal is 1 pulse per 2 detents
Phase Difference	ΔT=0.25±0.17T
Output Signal And Rotational Direction	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;">A Signal</div> <div style="margin-right: 20px;">OFF ON</div>  </div> <div style="margin-top: 10px;"> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;">C.C.W direction B Signal</div> <div style="margin-right: 20px;">OFF ON</div>  </div> </div>
Working Temperature	-10°C ~ 70°C
Storage Temperature	-40°C ~ 85°C

3. Mechanical Characteristics

Total Rotational Angle	360 °
Rotational Torque	30~200 gf.cm (Shaft Rota table at -10°C ~ +5°C)
Shaft Push-Pull Strength	5.1 Kgf.
Number and Position Detent	20 detents (Step angle:18°±3°) ; 30 detents (Step angle:12°±3°)
Shaft Play in Axial Direction	0.4mm Max.
Rotational Life	30,000 Cycles Min. at a speed of 600 cycles/H
Resistance To soldering Heat	Manual Soldering: Less than 300°C and quicker than 3 seconds.

NOTE: When the products without switch, the above one items must be cancelled.