



Feature

1. Dust proof construction protects the interior from dust, which maintains stable characteristics.
2. Compliant to reflow high peak temperature lead free soldering
3. Excellent resistance materials and high reliability wiper achieves 1,000,000 cycles.
4. Ultra-thin size. (2.2mm height)

Typical Applications

- Animal Robot Joint Controller
- HAVC Sensor
- Motor Drive Unit
- Electric Motor-Driven Bicycle
- Rotary Angle Sensor

FSE11 Series Position Sensor

Electrical characteristics

- Resistance Range..... 1K~ 100K
- Total Resistance Tolerance..... $\pm 20\%$
- Taper Style..... B taper
- Power Rated..... 0.1W
- Linearity $>200^\circ \pm 2\%$
 $\leq 200^\circ \pm 3\%$
- Rotational Noise Less than 80mv
- T.C.R..... $\pm 500 \text{ppm}/^\circ\text{C}$

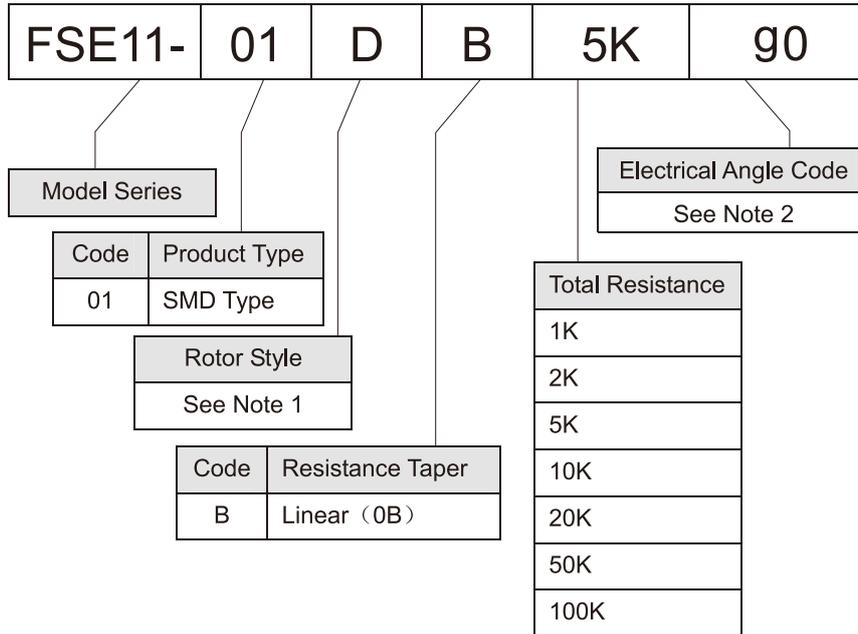
Mechanical characteristics

- Effective electrical Angle $333 \pm 3^\circ$
- Rotational Torque..... 0~30gf.cm
- Push-pull Strength of Shaft..... Over 1.0kgf for 10 seconds min
- Total Rotational Angle 360° (Endless)

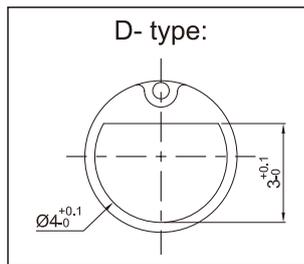
Environmental characteristics

- Storage Temperature..... -40°C to $+120^\circ\text{C}$
- Operating Temperature..... -40°C to $+120^\circ\text{C}$
- Life Cycles..... 1,000,000 Cycles Min
- Dry Heat..... $120 \pm 3^\circ\text{C}$, $250 \pm 8\text{H}$
 $\Delta\text{TR}: \pm 20\%$, Linearity: $\pm 2\%$
- Cold..... $-40 \pm 3^\circ\text{C}$, $168 \pm 4\text{H}$
 $\Delta\text{TR}: \pm 20\%$, Linearity: $\pm 2\%$
- Humidity..... $60 \pm 2^\circ\text{C}$, 90~95RH, $250 \pm 8\text{H}$
 $\Delta\text{TR}: \pm 20\%$, Linearity: $\pm 2\%$
- Temperature Cycles..... $-40^\circ\text{C} \sim +120^\circ\text{C}$, 5cycles
 $\Delta\text{TR}: \pm 20\%$, Linearity: $\pm 2\%$

HOW TO ORDER



Note 1: Rotor style

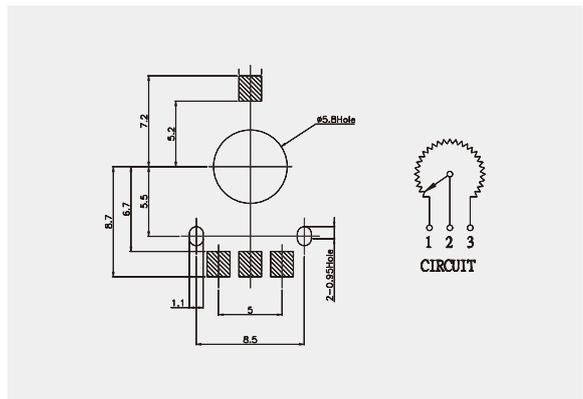
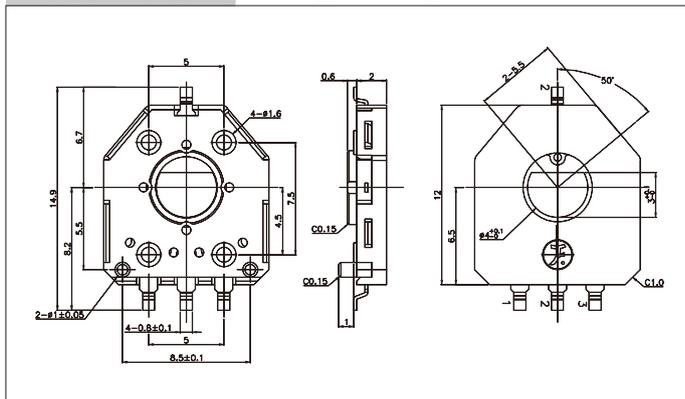


Note 2: Code of Electrical Angle

Code	P0	W0	g0	h3
Angle	180°	250°	320°	333°

FSE11-01D

SMD Type with D Type Rotor



Sensor