

Feature

1. Compact and highly accurate sliding contact type Encoder
2. 0.5mm travel push switch with compliance to 4.5mm height
3. Incremental type 4. Long Life Type Available.

F11ET Series Rotary Encoder

Electrical characteristics

- Rated Power.....DC5V, 10mA(1mA Min.)
- Fluttering(Contact)..... $t_1 \cdot t_3 \leq 3\text{ms}$
- Sliding Noise $t_2 \leq 2\text{ms}$
- Phase-Difference..... $\Delta T \geq 0.08T$
- Insulation Resistance More than 100M Ω at DC250V, 1mA.
- Withstand Voltage.....300V AC, 1A for 1min.
- Resolution.....Each output channel 15 pulses/ 360°

Mechanical characteristics

- Total Rotation Angle 360°(Endless)
- Detent Torque 30~100 gf.cm (0.3~1N.m)
- Number and Position of Detents 30 detents(Step angle:12° $\pm$ 3°)
- Push-pull Strength of Shaft..... 10Kgf Min. for 10 Sec.
- Shaft play in axial direction 0.4mm Max.
- Rotation Play at the Click Position..... 4°Max.

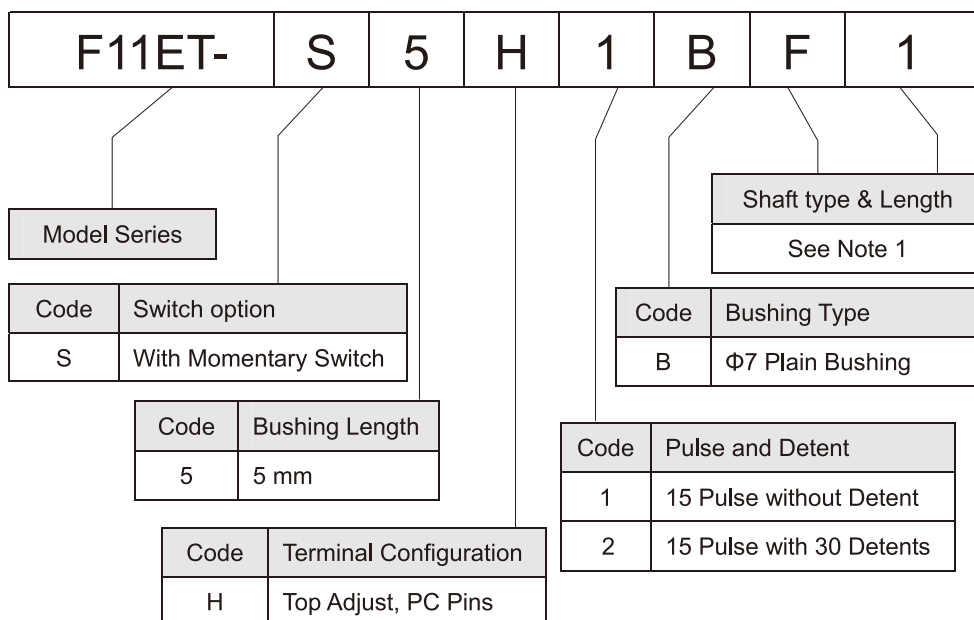
Endurance characteristics

- Rotational Life..... 30,000 cycles Min
- Operating Temperature..... -40°C ~ +85°C
- Dry Heat..... 85 $\pm$ 3°C for 240 $\pm$ 10hr.
- Cold..... -40 $\pm$ 3°C for 240 $\pm$ 10hr.
- Damp Heat 40 $\pm$ 2°C, 90~95% RH, 240 $\pm$ 10hr.
- Resistance to Soldering Heat..... Dip soldering: preheat within 100°C for 2Min.,
soldering Temp. is 260 $\pm$ 5°C for 5 sec.
Manual Soldering: 300 $\pm$ 5°C for 3 sec.

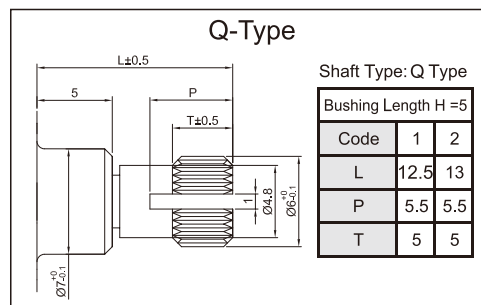
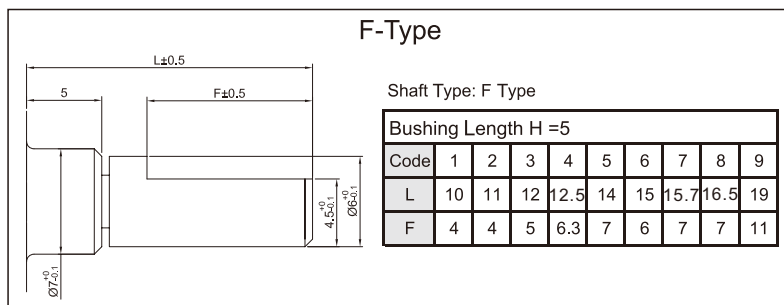
Switch characteristics

- Contact Resistance..... 100 m Ω Max. at 5V DC, 1 mA.
- Switch Rating DC 16V 0.5A (1 mA Min.)
- Switching Travel..... 0.5 $\pm$ 0.3mm
- Operating Force 6 $\pm$ 2.5/-2N (610 $\pm$ 255/-200 gf)
- Insulation Resistance More than 100M Ω at DC250V, 1mA.
- Withstand Voltage..... 300V AC, 1mA for 1min.
- Switch Life 20,000 Cycles Min.
- Operating Temperature Range..... -10°C ~ +70°C

HOW TO ORDER



Note 1: Shaft Type & Shaft Length:



F11ET-S5H1BF

With Switch, 5mm Bushing Length, Top Adjust
PC Pins, 15 Pulses with 30 Detents, Φ7 Plain
Pushing, F-Type Shaft

