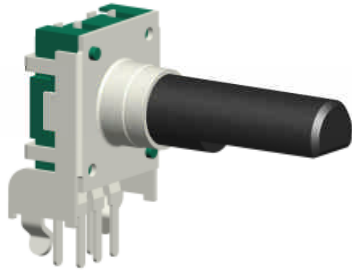




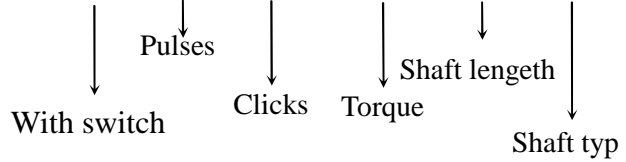
**12mm Rotary type Encoders With Push-On Switch**

**ED1211S**

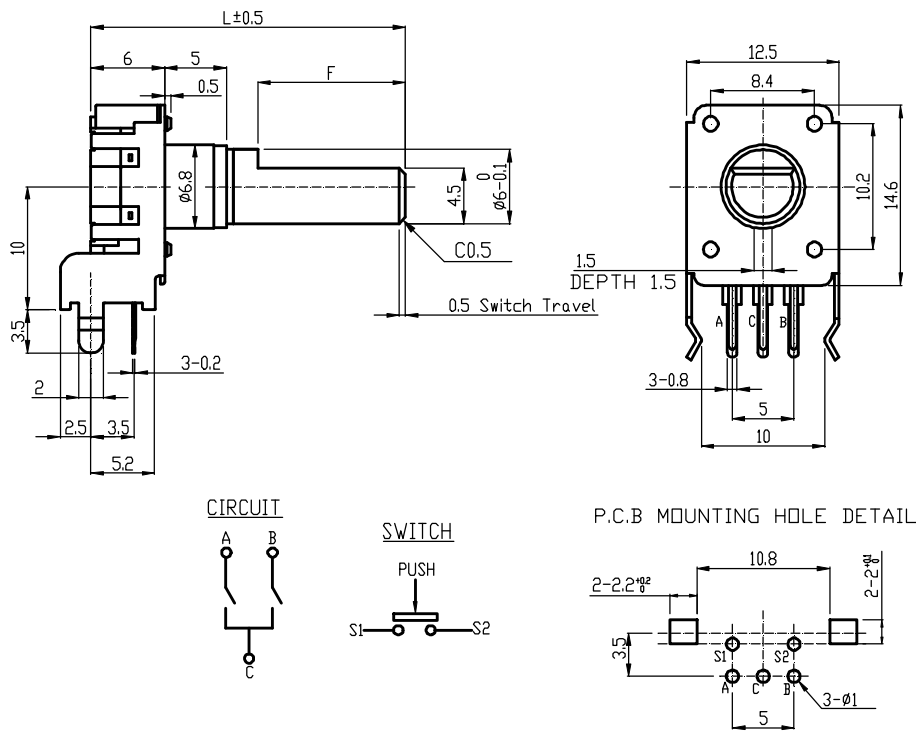


**Part Number**

**ED1211S - 24 - 24 LC - 25 F**



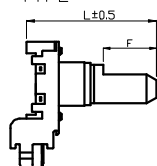
**Dimensions**



Available Clicks	0 clicks		12 clicks	24 clicks
Available Pulses	12 pulses	24 pulses	12 pulses	24 pulses

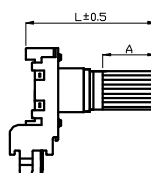
**Shaft Type**

F-TYPE



L	17.5	20	25	30
F	5	7	12	12

KC-TYPE



L	17.5	20	25	30
A	5	7	12	12



## 12mm Rotary type Encoders With Push-On Switch

### 1. Push-On Switch Specifications

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

### 2. Electrical Characteristics

Power Rating	DC 5V 0.5mA
Insulation Resistance	More than 10 MΩ at DC 50V 1 Minute
Withstand Voltage	1 Minute at AC 50V
Sliding Noise	3mS(Test conditions:360°/S) Using the C/R filter circuit is Recommended
Resolution	• 12    • 24                  Pulses/360°for each phase
Phase Difference	ΔT=0.25±0.17T
Output Signal and Rotational Direction	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>C.W direction</p> <p>A Signal</p> <p>B Signal</p> </div> </div>
Working Temperature	- 10 °C ~ 70 °C
Storage Temperature	-40 °C ~ 85°C

### 3. Mechanical Characteristics

Total Rotational Angle	360 °
Rotational Torque	• LC30~ 90gf.cm , • LLC 10~ 50gf.cm , • HC 90~ 150gf.cm ※(Shaft Rotatable at -10°C ~ 5°C)
Shaft Push-Pull Strength	• With switch 5.1 Kgf.                  • Without switch 10 Kgf.
Number and Position Detent	• 12 detents (Step angle:30°±3°) • 24 detents (Step angle:15°±3°) • 0 detents (Step angle:360°)
Rotational Life	30,000 Cycles Min. at a speed of 600cycles/H
Resistance To soldering Heat	Manual Soldering: Less than 300°C and within 3 seconds.