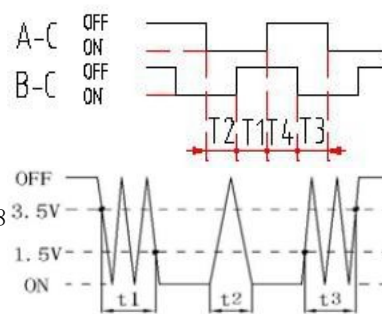
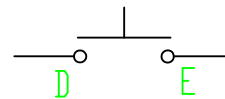


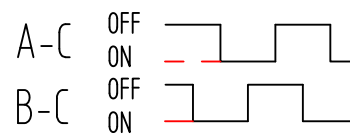
EC11 Series Specification

EC11E20-20P20C-SW	
Mechanical Characteristics	
ITEM	SPECIFICATION
Total Rotational Angle	360°
Rotantional Torque	<input type="checkbox"/> 20≈200gf.cm
Click pull-out Torque	<input type="checkbox"/> 20≈150gf.cm
Shaft push-pull Strength	8.0kgf-8.0kgf Min at 8sec
Shaft Wobble Strength	0.7xL/30 mm P-P max L:shaft length
Number of Click	<input checked="" type="checkbox"/> 20 clicks Step Angle:18° ±2° <input type="checkbox"/> 30 clicks Step Angle:12° ±2°
Bushing-nut tightening strength	7.0kgf.cm Min
Shaft rotational gap	0.4mm Max
Shaft play in rotational wobble	5° Max
Electrical Characteristics	
ITEM	SPECIFICATION
Power rated	DC 5V, A、B lead 5mA Max, C lead 10mA Max
Output signal	A、B 2 signals
Resolution	<input checked="" type="checkbox"/> 20 pulses/360° <input type="checkbox"/> 15 pulses/360°
Contact resistance between pins	1 Ω Max
Phase difference	T1、T2、T3、T4≥0.08
Rotation noise	t1, t3≤3mS t2≤2mS
Insulation resistance	100MΩ Min at DC 250V
Dielectric	1 minute at AC 300V
Endurance characteristics	
ITEM	SPECIFICATION
Rotational life	<input type="checkbox"/> 30,000±200 cycles ≤100gf.cm <input type="checkbox"/> 15,000±200 cycles ≥100gf.cm
Storage temperature range	-40℃≈+85℃
Operating temperature range	-30℃≈+80℃
Soldering characteristic	dipping in soldering≤206℃±5° ,within 3S solder by hand:≤300℃±5° ,within 3S






Technical drawing of a rectangular plate with dimensions and hole locations. The overall width is 12.2 and the overall height is 18. The distance between the centers of the two holes is 5. The distance from the left edge to the center of the left hole is 2.2. The distance from the right edge to the center of the right hole is 7.5. The distance from the bottom edge to the center of the holes is 7. The holes are labeled A, C, B, D, and E. A note indicates 5-Ø1.2.



L	15	20	23.5
L1	7.5	12.5	16
F	7	10	12
N	7	7	7

2				5			
1				4			
	DATE	REVISION	APPROVED	3			
2016.12.10	2016.12.10	2016.12.10	MODEL: EC11E20-20P20C-SW				
							
DWN	DHKD	APPD					