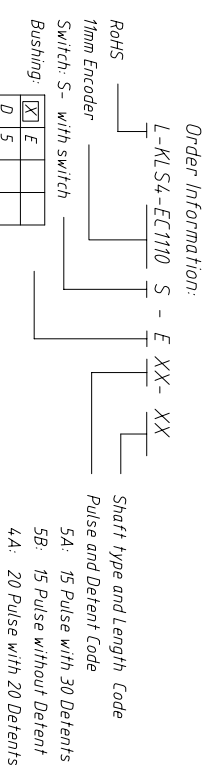
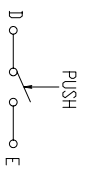
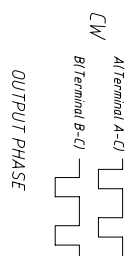
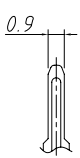
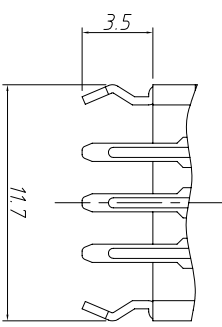


Electrical Characteristics

- Rated Power: DC5V 5mA Max.
- Output signal: A \ B 2signals
- Resolution: 15 Pulses 360°
- Phase difference: 20 Pulses 360°
- Sliding noise: 9 Pulses 360°
- Phase difference: 0.08T Min.
- Sliding noise: 3mS Max.
- Contact Resistance: 1 Ω Max.
- Insulation resistance: 100MΩ Min. at DC 250V
- Withstand voltage: AC300V / 1min

Mechanical

- Total rotation angle: 360°
- Rotational Torque: 20 ~ 200 gf.cm Max
- Click Torque: 20 ~ 150 gf.cm
- Push-pull Strength of Shaft: 8.0kgf Min.
- Number of Detents: 30 detents Step angle: 12°±2°
- 20 detents Step angle: 18°±2°
- 18 detents Step angle: 20°±2°
- Without detents
- Rotational Life: 30000±200 cycles per 100gf.cm Min.
- Temp. Range: -30 ° C ~ + 80 ° C
- Soldering: 250 ° C 3Sec. Max.



PCB LAYOUT

Order Information:

- L-KLS4-EC1110 S - E XX- XX
- Shaft type and Length Code
- Pulse and Detent Code
- 5A: 15 Pulse with 30 Detents
- 5B: 15 Pulse without Detent
- 4A: 20 Pulse with 20 Detents
- 4B: 20 Pulse without Detent
- 3A: 9 Pulse with 18 Detents
- 3B: 9 Pulse without Detents

Shaft type		F Shaft				
L	10	10.5	11	13	15	
F	3.5	4	5	6	7	

GENERAL TOLERANCE		ANGLE TOLERANCE		PROJECTION		Description:	
X	±0.50	X	±5°	UNIT	mm	11MM Encoder with Switch	
X	±0.38	X	±3°	SHEET SIZE	A4	KLS4-EC1110S-EXX-XX	
XX	±0.25	XX	±2°	KLS P/N			
Draw by: Date		2017-09-01					
Check by: Date		2017-09-05					
SCALE		SHEET	OF				

KLS ELECTRONIC CO., LTD.