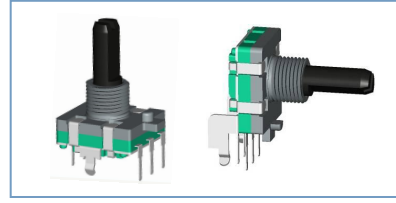
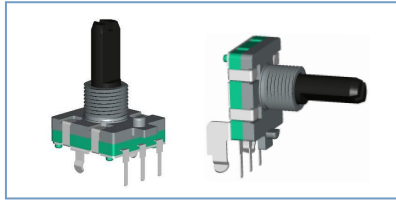
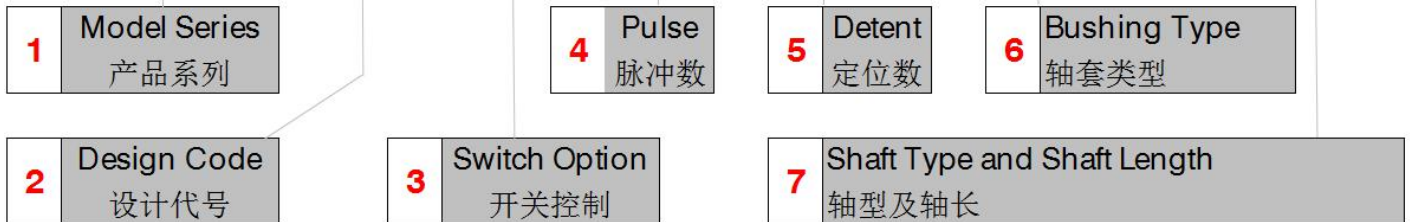


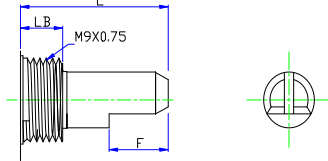
# ED16 Series Rotary Encoder



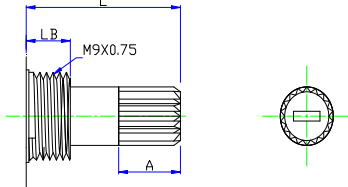
ED16 — 12 — S — 24P — 24LC — M9B5 — F15A7



Ordering Information 订货说明		Code 代码				
1	Moder Series 产品系列	ED16				
2	Design Code 设计代号		<b>See Note 1 (ED16 Series Dimensions)</b> <b>附件 1 (ED16 系列产品图)</b>			
3	Switch Option 开关控制	S	With Momentary Switch 带瞬时接触开关			
			No Switch 不带开关			
4	Pulse 脉冲数	12P	12 脉冲			
		24P	24 脉冲			
5	Detent 定位数	0	12 Pulse Without Detent 12 脉冲不带定位	Code 代码	Detent torque 定位扭矩	
		12	12Pulse With 12 Detent 12 脉冲带 12 定位		LLC	20 ± 10gf.cm
		0	24 Pulse Without Detent 24 脉冲不带定位	LC	50 ± 20gf.cm	
		24	24 Pulse With 24 Detent 24 脉冲带 24 定位	HHC	90 ± 20gf.cm	
6	Bushing Type 轴套类型	M9B5	M9 Threaded Bushing, Bushing Length 5mm / 7mm M9 螺纹, 轴套长度可选 5mm / 7mm			
		M9B7				
7	Shaft Type and Shaft Length 轴型及轴长	<b>See Note 2</b> <b>附表 2</b>				

**Note 2: Shaft Type and Shaft Length 轴型及轴长**
**F 轴**


成品长	F15	F20	F25	F30
LB	5	7	7	7
L	15	20	25	30
F	7	12	12	12

**Y 轴**


成品长	Y15	Y20	Y25	Y30
LB	5	7	7	7
L	15	20	25	30
A	7	7	10	10

**MECHANICAL SPECIFICATION 机械性能**

Operating Temperature 工作温度	-20°C ~ +70°C
Shaft Rotation Force 操作力矩	20gf.cm ~ 200gf.cm
Soldering Heat 焊接温度	260°C , 3~5sec
Push-pull Strength 轴推拉强度	5 Kgf.cm
Total Rotation Angle 全回转角度	360°

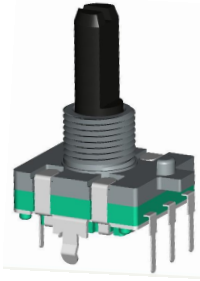
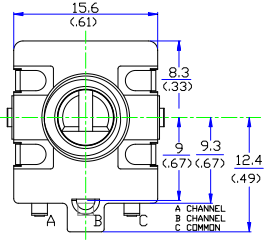
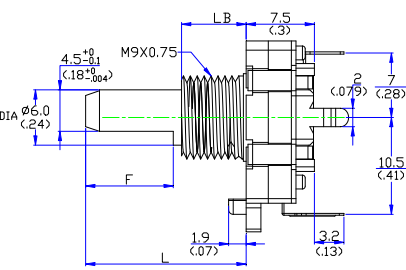
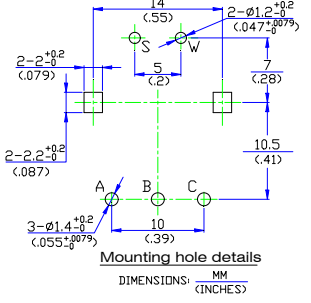
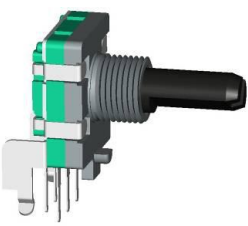
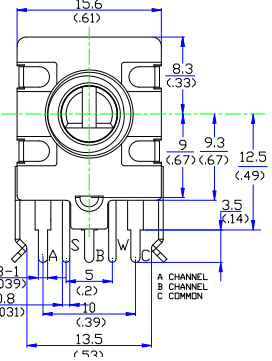
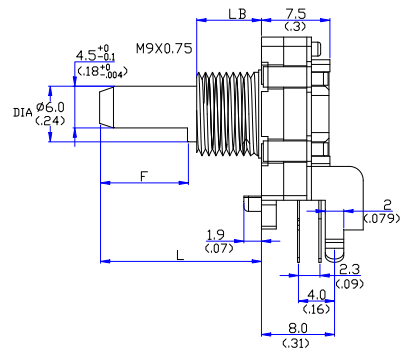
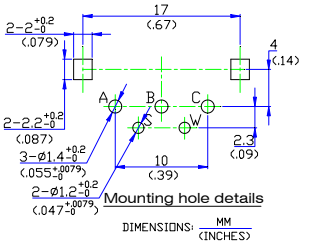
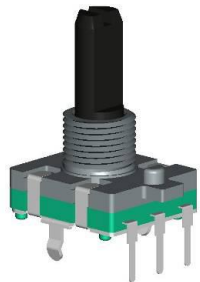
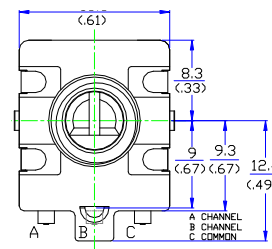
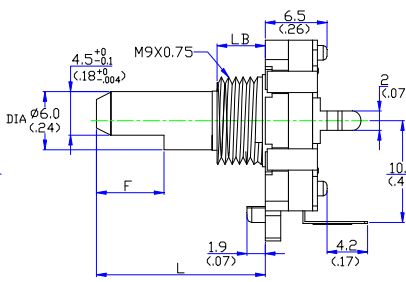
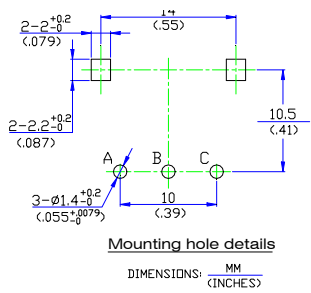
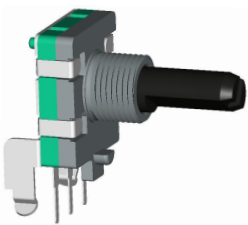
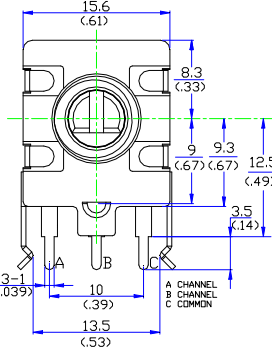
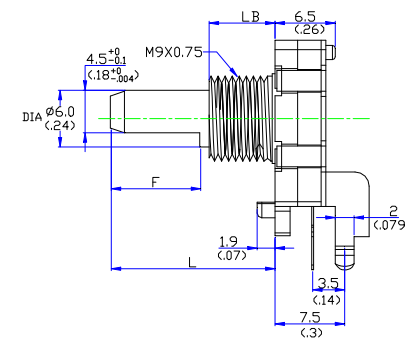
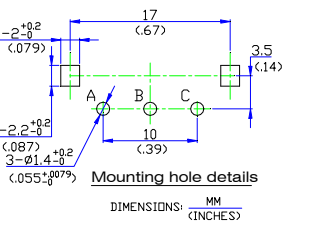
**ELECTRICAL SPECIFICATION 电气性能**

Power Rating 额定功率	DC5V 10mA(Each Bit)
Output Signals 输出信号	12pulses/24pulses, 360°
Locate Point 定位点	12detent points/ 24detent points 360°
Phase-Difference $\Delta T$ 相位差	0.08T Min. (Measurement shall be made under the condition which the shaft is rotated in 360°/S)
Insulation resistance 绝缘电阻	More than 100M $\Omega$ (AT 50V DC)
Contact resistance 接触电阻	1 $\Omega$ Max
Withstand Voltage 耐电压	For 1 minute at 100V AC
Rotational life 回转寿命	30,000 cycles

**PUSH-ON SWITCH SPECIFICATION 推动开关**

Switch Travel 开关工作行程	0.5±0.3mm
Switch Operating Force 开关作动力	610±306gf.cm
Switch Power Rating 开关额定功率	DC 12V 10mA
Switch Contact Resistance 开关接触阻抗	3 $\Omega$ Max
Switch Life 开关寿命	20,000 Cycles

**Note 1 : ED16 Series Dimensions**

<p>ED1612S-□P-□C-M9B□-□</p> 	 <p>15.6 (.61) 8.3 (.33) 9 9.3 (.67) (.67) 12.4 (.49) A CHANNEL B CHANNEL C COMMON</p>	 <p>LB 7.5 (.3) 4.5<sup>+0.1</sup><sub>(.18<sup>+0.004</sup>) M9X0.75 DIA <math>\phi</math>6.0 (.24) F 1.9 (.07) 3.2 (.13) 2 (.079) 7 (.28) 10.5 (.41)</sub></p>	 <p>14 (.55) 2-<math>\phi</math>1.2<sup>+0.2</sup><sub>(.047<sup>+0.0079</sup>) 7 (.28) 2-2.2<sup>+0.2</sup><sub>(.087)</sub> 5 (.2) 10.5 (.41) A B C 3-<math>\phi</math>1.4<sup>+0.2</sup><sub>(.055<sup>+0.0079</sup>)</sub> 10 (.39) Mounting hole details DIMENSIONS: MM (INCHES)</sub></p>
<p>ED1615S-□P-□C-M9B□-□</p> 	 <p>15.6 (.61) 8.3 (.33) 9 9.3 (.67) (.67) 12.5 (.49) 3.5 (.14) 3-1 (.039) 0.8 (.031) 5 (.2) 10 (.39) 13.5 (.53) A CHANNEL B CHANNEL C COMMON</p>	 <p>LB 7.5 (.3) 4.5<sup>+0.1</sup><sub>(.18<sup>+0.004</sup>) M9X0.75 DIA <math>\phi</math>6.0 (.24) F 1.9 (.07) 2.3 (.09) 4.0 (.16) 2 (.079) 8.0 (.31)</sub></p>	 <p>17 (.67) 2-<math>\phi</math>1.2<sup>+0.2</sup><sub>(.079)</sub> 4 (.14) 2-2.2<sup>+0.2</sup><sub>(.087)</sub> 3-<math>\phi</math>1.4<sup>+0.2</sup><sub>(.055<sup>+0.0079</sup>)</sub> 2-<math>\phi</math>1.2<sup>+0.2</sup><sub>(.047<sup>+0.0079</sup>)</sub> 10 (.39) 2.3 (.09) A B C Mounting hole details DIMENSIONS: MM (INCHES)</p>
<p>ED1612-□P-□C-M9B□-□</p> 	 <p>15.6 (.61) 8.3 (.33) 9 9.3 (.67) (.67) 12.4 (.49) A CHANNEL B CHANNEL C COMMON</p>	 <p>LB 6.5 (.26) 4.5<sup>+0.1</sup><sub>(.18<sup>+0.004</sup>) M9X0.75 DIA <math>\phi</math>6.0 (.24) F 1.9 (.07) 4.2 (.17) 2 (.079) 10.5 (.41)</sub></p>	 <p>14 (.55) 2-<math>\phi</math>1.2<sup>+0.2</sup><sub>(.079)</sub> 10.5 (.41) 2-2.2<sup>+0.2</sup><sub>(.087)</sub> A B C 3-<math>\phi</math>1.4<sup>+0.2</sup><sub>(.055<sup>+0.0079</sup>)</sub> 10 (.39) Mounting hole details DIMENSIONS: MM (INCHES)</p>
<p>ED1615-□P-□C-M9B□-□</p> 	 <p>15.6 (.61) 8.3 (.33) 9 9.3 (.67) (.67) 12.5 (.49) 3.5 (.14) 3-1 (.039) 10 (.39) 13.5 (.53) A CHANNEL B CHANNEL C COMMON</p>	 <p>LB 6.5 (.26) 4.5<sup>+0.1</sup><sub>(.18<sup>+0.004</sup>) M9X0.75 DIA <math>\phi</math>6.0 (.24) F 1.9 (.07) 3.5 (.14) 7.5 (.3) 2 (.079)</sub></p>	 <p>17 (.67) 2-<math>\phi</math>1.2<sup>+0.2</sup><sub>(.079)</sub> 3.5 (.14) 2-2.2<sup>+0.2</sup><sub>(.087)</sub> 3-<math>\phi</math>1.4<sup>+0.2</sup><sub>(.055<sup>+0.0079</sup>)</sub> 10 (.39) Mounting hole details DIMENSIONS: MM (INCHES)</p>