

EC11 12 S - 20P - 20LC - M7B7 - F15A7

1 Model Series
產品系列

3 With Switch
帶開關

5 Detent and Torque
定位數及扭矩

7 Shaft Type and Shaft Length
軸型及軸長

2 Design Code
設計代號

4 Output Signal
輸出信號

6 Bushing Type
軸套類型

应用于：汽车音响、汽车空调、汽车导航、调音台、多媒体音响及功放、家用电器

Application: car audio, car air conditioning, car navigation, mixing station, multimedia audio and power amplifier, household appliances

主要功能：调频、调节音量、调节温度、功能切换等。

Main functions: frequency modulation, volume adjustment, temperature adjustment, function switching, etc.

Ordering Information 訂貨說明		Code 代碼	Specification 規格參數			
1	Model Series 產品系列	EC11	See EC11 Series Dimensions 見 EC11 系列產品圖			
2	Design Code 設計代號	12				
3	With Switch 帶開關	S	With Momentary Switch 帶瞬时接觸開關			
			No Switch 無開關			
4	Pulse 脈衝數	15P	15 Pulse 15 脈衝			
		16P	16 Pulse 16 脈衝			
		20P	20 Pulse 20 脈衝			
5	Detent and Torque 定位數及扭矩	0	No Detent 無定位	Torque 扭矩	LLC	40±20gf.cm
		16	16 Detent 16 定位		LC	60±20gf.cm
		20	20 Detent 20 定位		HC	100±20gf.cm
		30	30 Deten 30 定位		HHC	150±30gf.cm
6	Bushing Type 軸套類型	M7B5	M7 Threaded Bushing, Bushing Length 5mm/7mm/10mm M7 螺紋，軸套長度可選 5mm/7mm/10mm			
		M7B7				
		M7B10				
		B5	Φ7 Plain Bushing, Bushing Length 5mm/7mm/10mm Φ7 無螺紋，軸套長度可選 5mm/7mm/10mm			
		B7				
7	Shaft Type and Shaft Length 軸型及軸長	F15A7	See EC11 axis dimension table 見 EC11 軸型尺寸表			

MECHANICAL SPECIFICATION 機械性能

Operating Temperature 工作溫度	-20℃~+70℃
Shaft Rotation Force 操作力矩	20gf.cm~200gf.cm
Soldering Heat 焊接溫度	260℃, 3~5sec
Push-pull Strength 軸推拉強度	8.1Kgf.cm
Total Rotation Angle 全回轉角度	360°

ELECTRICAL SPECIFICATION 電氣性能

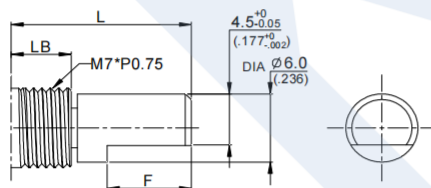
Power Rating 額定功率	DC 5V Each lead: 0.5mA(Max 5mA;Min 0.5mA) Common lead:1mA(Max 10mA;Min 0.5mA)
Insulation resistance 絕緣電阻	More than 100MΩ(AT 250V DC)
Contact resistance 接觸電阻	1Ω Max
Withstand Voltage 耐電壓	For 1 minute at 300V AC
Rotational life 回轉壽命	100,000 cycles

PUSH-ON SWITCH SPECIFICATION 推動開關

Switch Travel 開關工作行程	0.5±0.3mm or 1.5±0.3mm
Switch Operating Force 開關作動力	610±306gf.cm
Switch Power Rating 開關額定功率	DC 5V 10mA(1mA MIN.)
Switch Contact Resistance 開關接觸阻抗	300mΩ Max
Switch Life 開關壽命	30,000 Cycles

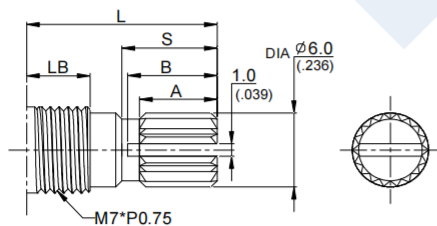
SHAFT TYPE AND SHAFT LENGTH 軸型及軸長 (ED11 Series)

F 軸



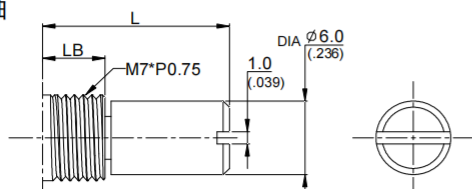
Length	F10	F11	F12	F13	F15	F17	F20	F25	F30
L	10	11	12	13	15	17	20	25	30
LB	5	5	5	5	5	7	7	7	7
F	4	5	5	5	7	7	10	12	12

Y 軸



Length	Y10	Y11	Y12	Y13	Y15	Y18	Y20	Y25	Y30
L	10	11	12	13	15	18	20	25	30
LB	5	5	5	5	5	7	7	7	7
A	4	5	5	5	6	7	10	10	12
S	4	5	5.5	5.5	6.5	8	10.5	11	13
B	4.4	5	5.5	6	7	9	11	12	14

R 軸



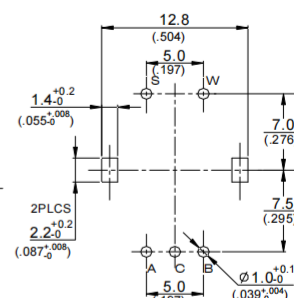
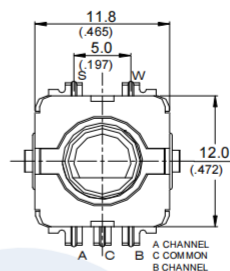
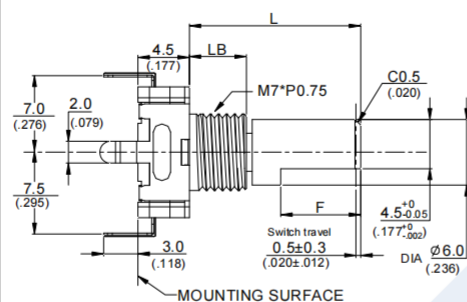
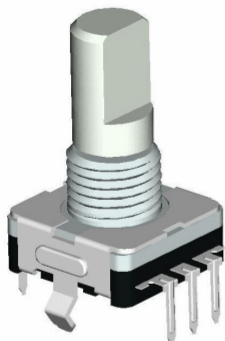
Length	R10	R11	R12	R13	R15	R17	R20	R25	R30
L	10	11	12	13	15	17	20	25	30
LB	5	5	5	5	5	7	7	7	7

EC11 Series Dimensions

MODEL

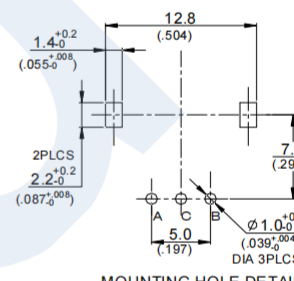
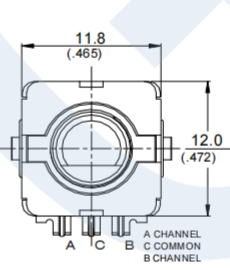
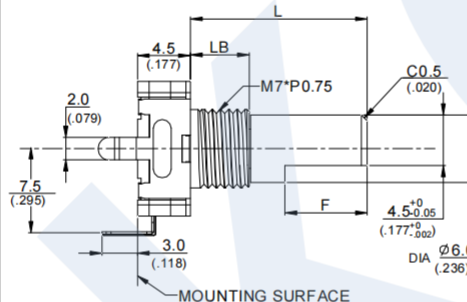
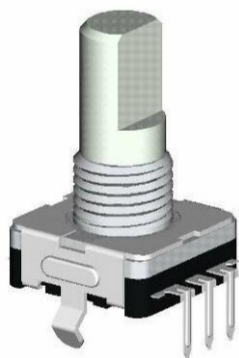
DIMENNSIONS

EC1112S



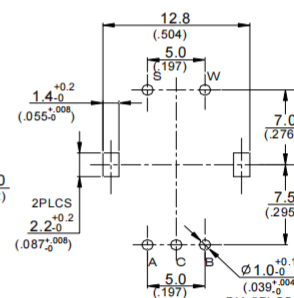
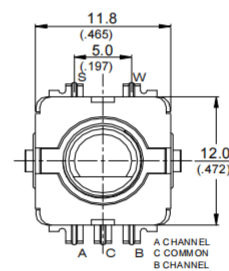
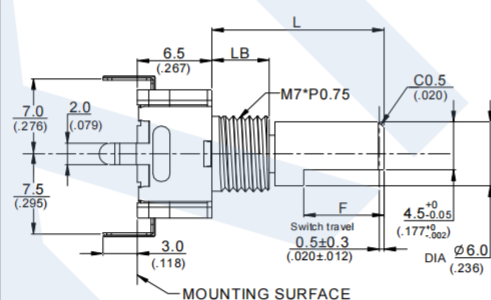
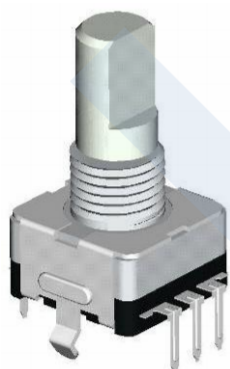
MOUNTING HOLE DETAILS
DIMENSIONS: MM (INCHES)

EC1112



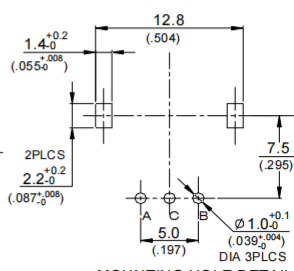
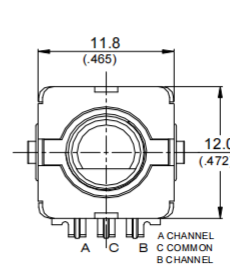
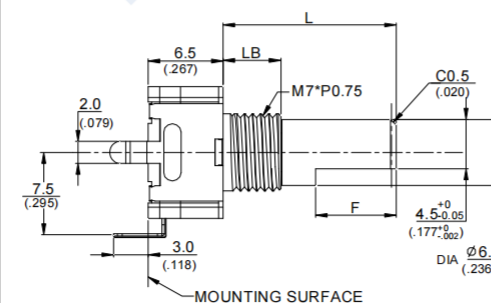
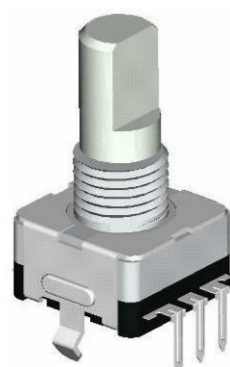
MOUNTING HOLE DETAILS
DIMENSIONS: MM (INCHES)

EC1122S



MOUNTING HOLE DETAILS
DIMENSIONS: MM (INCHES)

EC1122

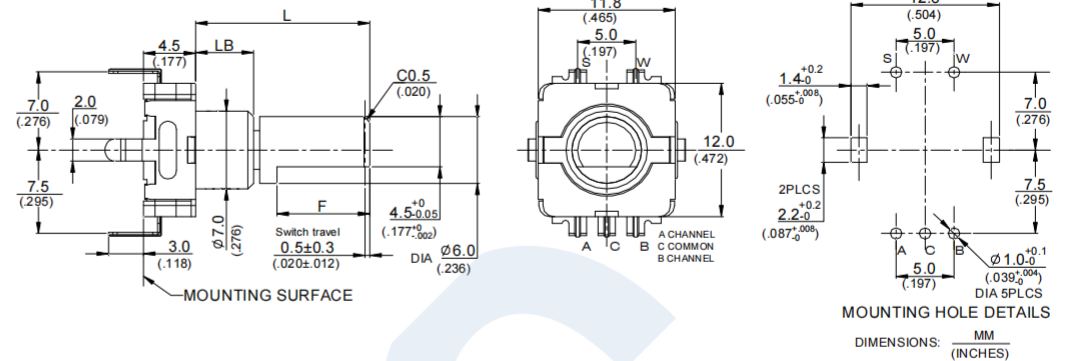
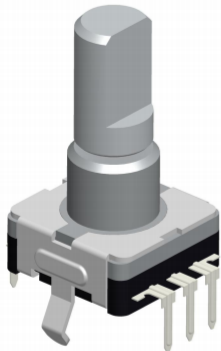


MOUNTING HOLE DETAILS
DIMENSIONS: MM (INCHES)

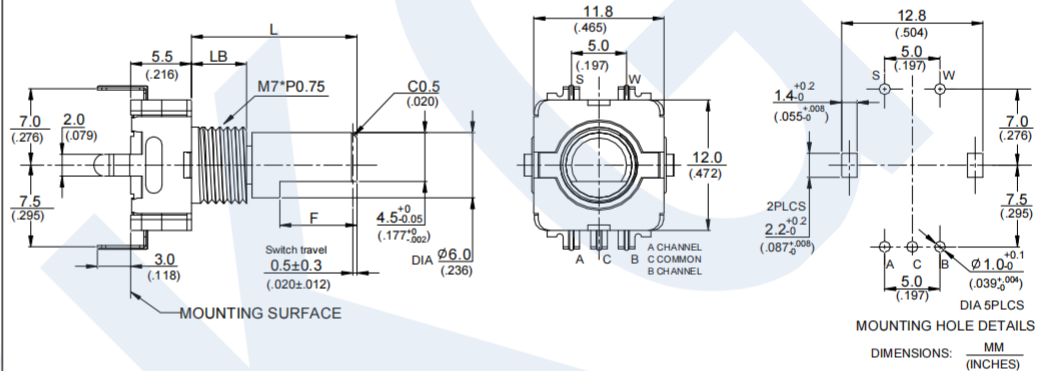
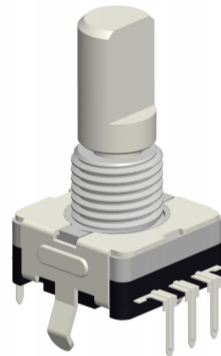
MODEL

DIMENNSIONS

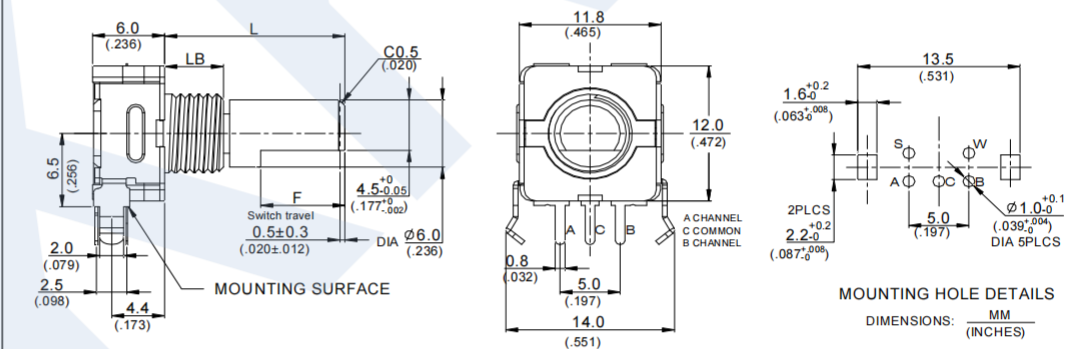
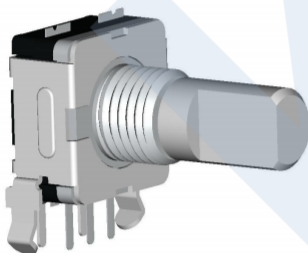
EC1112S-B5



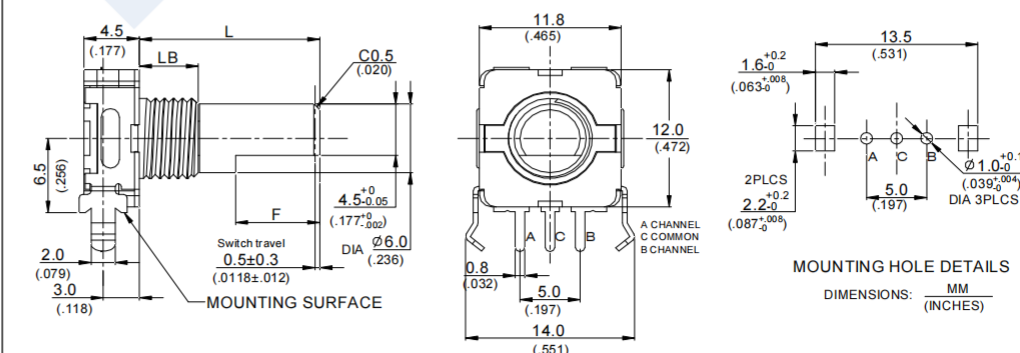
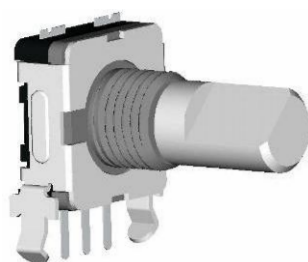
EC1155S



EC1115S



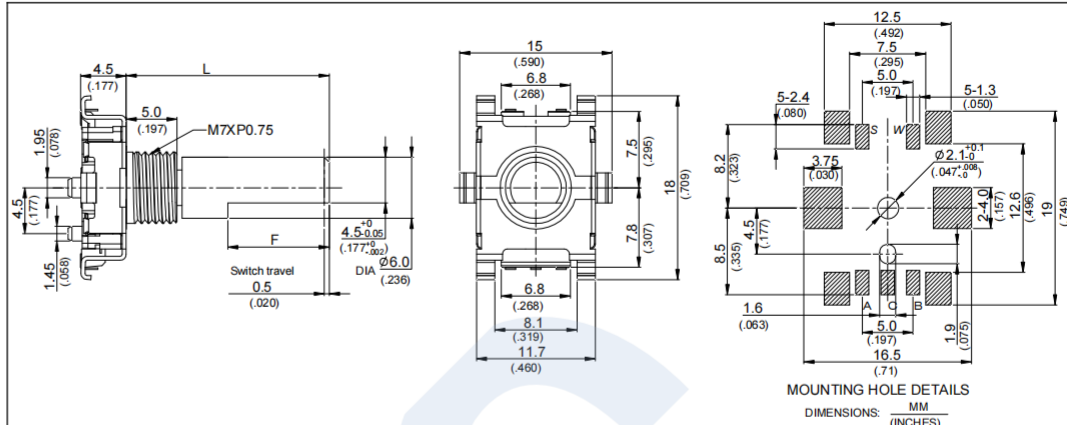
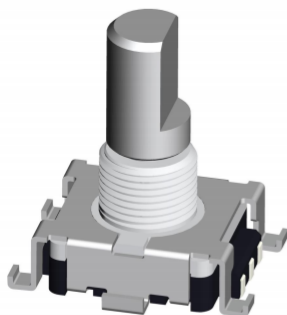
EC1115



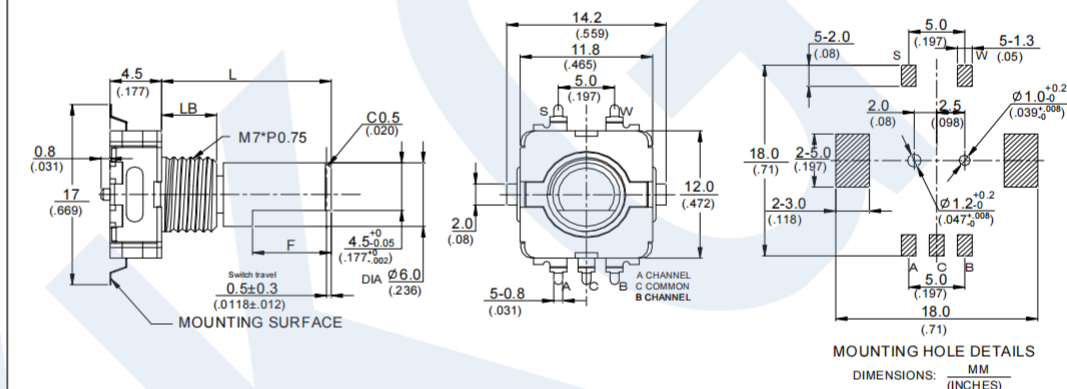
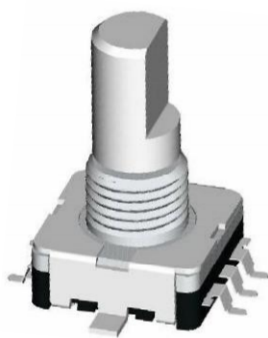
MODEL

DIMENSIONS

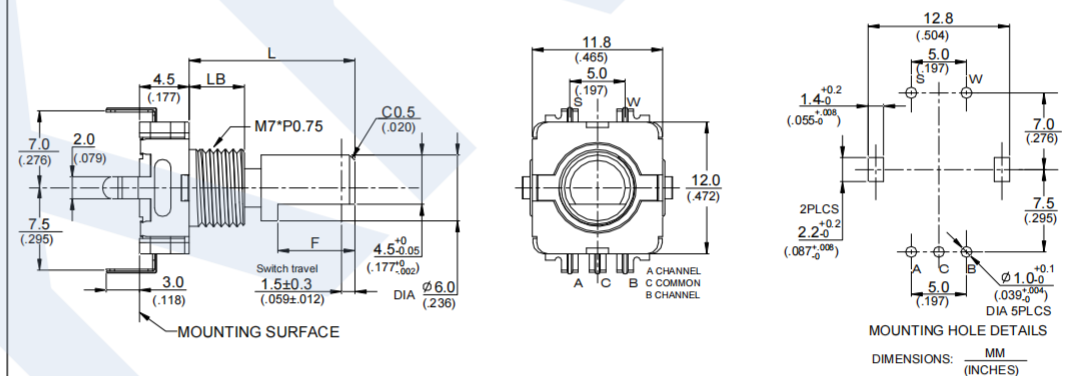
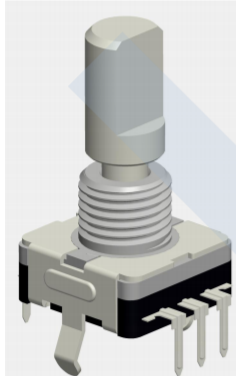
EC1115-M7B5



EC1112S-SMT-M7B5



EC1112G-M7B5



EC1112S-B2.2

