

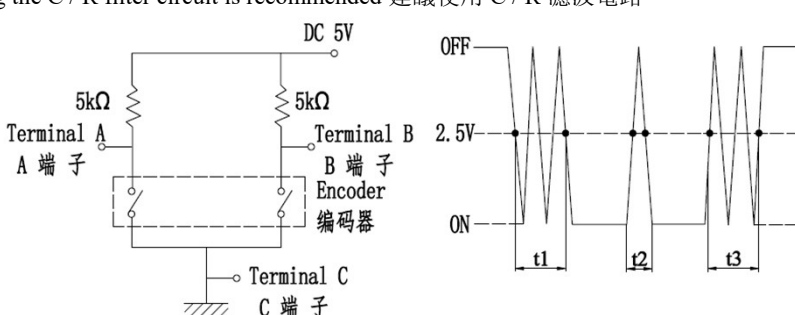
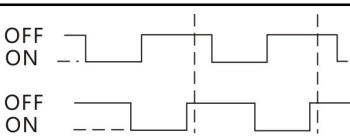


ISO 9001 國際品質認證
ISO 9001 CERTIFICATE

松暉電機工業股份有限公司
SONG HUEI ELECTRIC CO., LTD.
佛山市松暉電機科技有限公司
FOSHAN SONG HUEI ELECTRIC CO., LTD.

客戶 Customer :

規格型號 Model : EC040S-8P-16C

一般事項 General	
使用溫度範圍 Operating temperature	-30 °C ~ 80 °C
儲存溫度 Storage temperature	-40 °C ~ 85 °C
電氣特性 Electrical Characteristics	
額定功率 Power rating	DC 5 V 10 mA
絕緣阻抗 Insulation resistance	$\geq 100 \text{ M}\Omega$ at DC 250 V
耐電壓 Withstand voltage	For 1 minute or more (at AC 300 V)
滑動雜訊 Sliding noise	$t_1, t_3 \leq 3 \text{ ms}$, $t_2 \leq 2 \text{ ms}$ (Test conditions 測試條件: $360^\circ/\text{s}$) Using the C / R filter circuit is recommended 建議使用 C / R 濾波電路 
分解能力 Resolution	8 pulses / 360 ° for each phase 每相 8 脈衝 / 360 °
相位差 Phase difference	$\Delta T = 0.25 \pm 0.17 \text{ T}$
輸出信號和旋轉方向 Output signal and rotational direction	順時針方向 A Signal C.W direction B Signal 
機械特性 Mechanical Characteristics	
全回轉角度 Total rotational angle	360 °
全回力矩 Rotational torque	150 ~ 350 gf.cm
定位點數及位置 Number and position detent	16 detents (Step angle: $22.5^\circ \pm 2^\circ$)
回轉壽命 Rotational life	每小時 600 圈的速度測試 30,000 cycles at a speed of 600 cycles per hour
焊錫耐熱性 Soldering heat resistance	手焊: 350 °C 以下, 3 秒以內。 自動或半自動機台焊錫條件: 預熱基板表面溫度 100 °C 以下, 時間 1 分以內, 焊接溫度 $260 \pm 5^\circ\text{C}$ 以下, 時間 3 秒以內。 Manual soldering: less than 350 °C and within 3 seconds. For automated or semi-automated soldering equipments: Preheating surface temperature of board: less than 100 °C and within 1 min. Solder temperature: $260 \pm 5^\circ\text{C}$ or less. Immersion time: within 3s.

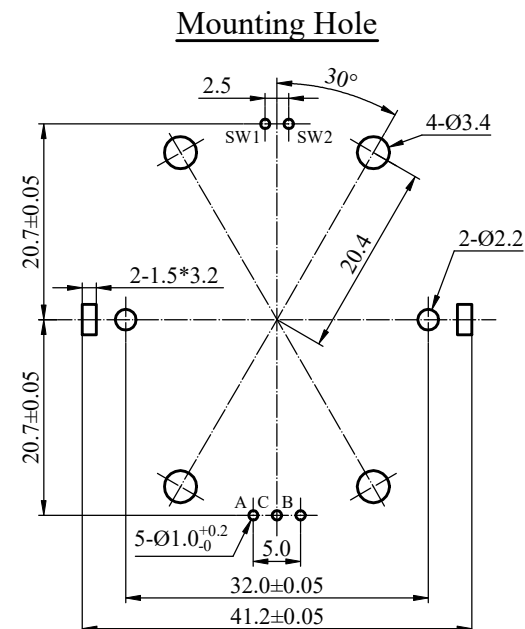
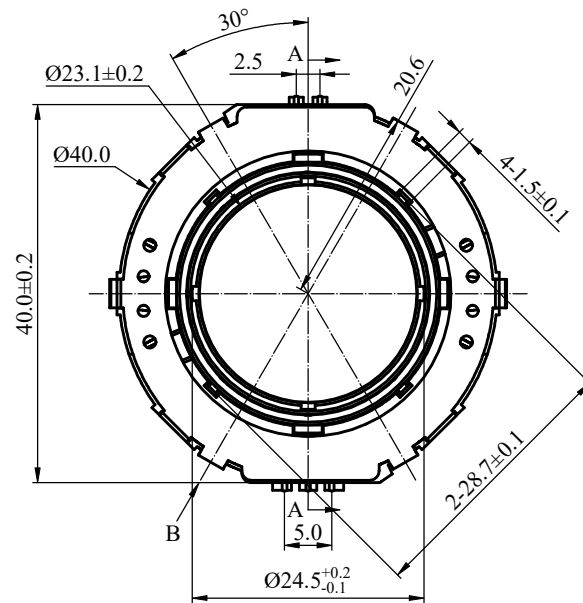
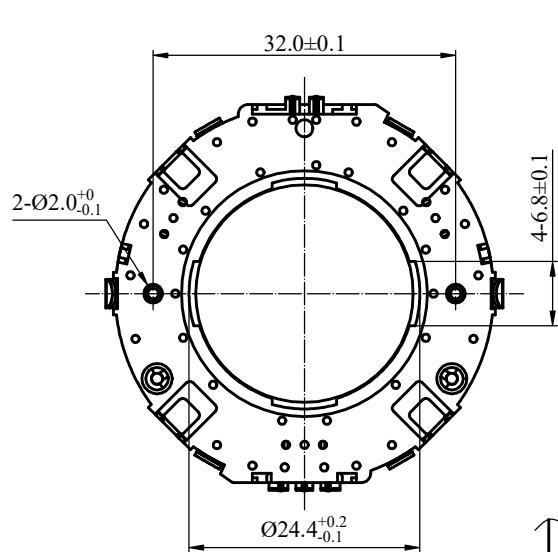


ISO 9001 國際品質認證
ISO 9001 CERTIFICATE

松 暉 電 機 工 業 股 份 有 限 公 司
SONG HUEI ELECTRIC CO., LTD.
佛 山 市 松 暉 電 機 科 技 有 限 公 司
FOSHAN SONG HUEI ELECTRIC CO., LTD.

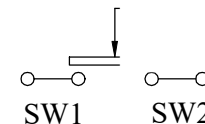
濕度測試 Humidity test	溫度 $60 \pm 2^{\circ}\text{C}$, 濕度90 ~ 95%的恒溫恒濕槽中放置 96 ± 10 小時後, 在常溫、常濕中放置1.5小時後測試。 The encoder shall be stored at temperature of $60 \pm 2^{\circ}\text{C}$ with relative humidity of 90% to 95% for $96 \pm 10\text{h}$ satisfied in a thermostatic chamber. And the encoder shall be subjected to standard atmospheric conditions for 1.5h. After which measurements shall be made.
高溫測試 Heat test	溫度 $85 \pm 3^{\circ}\text{C}$ 的恒溫箱中放置 96 ± 10 小時後, 在常溫、常濕中放置1.5小時後測試。 The encoder shall be stored at temperature of $85 \pm 3^{\circ}\text{C}$ for $96 \pm 10\text{h}$ satisfied in a thermostatic chamber. And the encoder shall be subjected to standard atmospheric conditions for 1.5h. After which measurements shall be made.
低溫特性 Cold test	溫度 $-40 \pm 3^{\circ}\text{C}$ 的恒溫箱中放置 96 ± 4 小時後, 在常溫、常濕中放置1.5小時後測試。 The encoder shall be stored at temperature of $-40 \pm 3^{\circ}\text{C}$ for $96 \pm 4\text{h}$ satisfied in a thermostatic chamber. And the encoder shall be subjected to standard atmospheric conditions for 1.5h. After which measurements shall be made.
推動開關規格 Push-on Switch Specific Ations	
開關電路 Switch circuit	Single pole and single throw (push on) 單極單投 (推動)
開關工作行程 Switch travel (mm)	$1.5 \pm 0.5\text{mm}$
開關作動力 Switch operating force	$300 \pm 200\text{ gf}$
開關額定功率 Switch rating power	DC 5 V 1mA
開關接觸阻抗 Switch contact resistance	第一個週期：100 mΩ, 在有效的壽命範圍結束後 200 mΩ。 First period 100 mΩ ; 200 mΩ after the end of useful life is reached.
開關按壓壽命 Switch push life	50,000 cycles (600 cycles / h, shaft push load 1 kgf max ; 按壓力 1 kg 以下, 600 次 / h)

核 准 Approval	審 核 Auditing	校 對 Checked	制 作 Projected

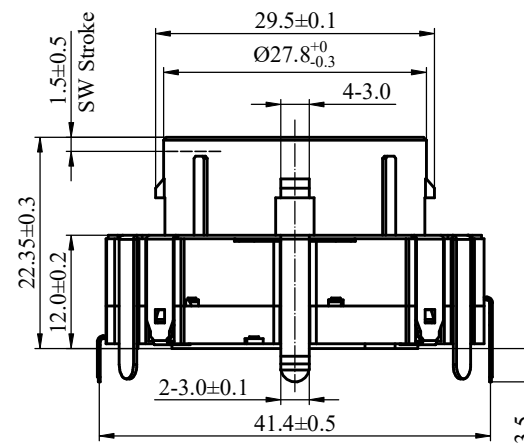
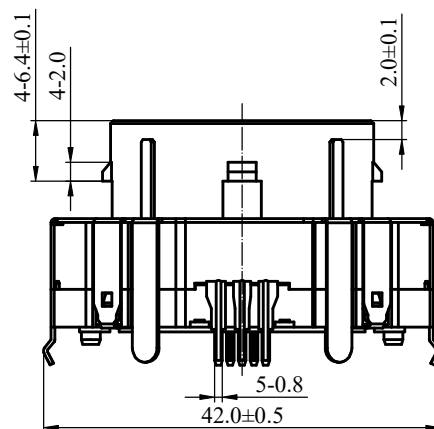
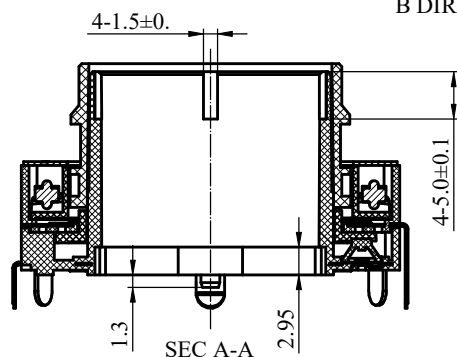


SWITCH

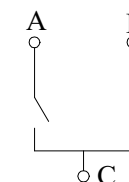
PUSH



4-3.0±0.1
B DIRECTION



CIRCUIT



Non notation tolerance

< 10	±0.3
10 ~ 100	±0.5
> 100	±0.8



SONG HUEI ELECTRIC CO., LTD.
FOSHAN SONG HUEI ELECTRIC CO., LTD.

MODEL: EC040S/0496

Approval



Checked



Drawn



UNIT

mm

SCALE

1.5:1

VERSION

1.0

DATE

2025.06.03

DRAWING NO.

ED-143



△			
△			
△			
△			
ISSUE	SUBJECT	NAME	DATE

RECORD