

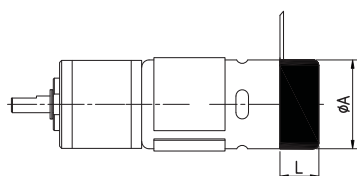
# Magnetic Encoders

Two Channel Hall Effect Encoder 雙向霍爾作用編碼器

One Channel Hall Effect Encoder 單向霍爾作用編碼器



## 馬達外徑 & 長度/



Motor	CAP	Counts poles of per turn (PPR)		Diagram
		Current	limit.	
Ø 12	6.5	2, 6 (1, 3)	6 (3)	<p>JST ZHR-6 P=1.5-6P 1 2 3 4 5 6 UL1061 AWG26 100mm</p>
Ø 15.4	6.5	2, 6 (1, 3)	6 (3)	
Ø 20.3	8.5	2, 6 (1, 3)	6 (3)	<p>JST PHR-6 P=2.0-6P 6 5 4 3 2 1 UL1007 AWG24 100mm</p>
Ø 30.0	12.6	2, 6, 14 (1, 3, 7)	14 (7)	
Ø 32	14.3	14 (7)	14 (7)	
Ø 36	13.5	14 (7)	14 (7)	<p>Molex 09-50-3021 P=3.96-2P 6 5 4 3 2 1 UL 1007 AWG24 UL 1007 AWG18 100mm</p>
Ø 42.5	15.5	2, 10 (1, 5)	10 (5)	
Ø 52 & Ø 54	18.0	2, 10 (1, 5)	10 (5)	

### Two Channel Encoder Connections

1. Black : - Motor
2. Red : + Motor
3. Brown : Hall Sensor Vcc
4. Green : Hall Sensor GND
5. Blue : Hall Sensor A Vout
6. Purple : Hall Sensor B Vout

### One Channel Encoder Connections

1. Black : - Motor
2. Red : + Motor
3. Brown : Hall Sensor Vcc
4. Green : Hall Sensor GND
5. Blue : Hall Sensor A Vout
6. Purple : Hall Sensor B Vout

## 電氣特性/ Electrical Characteristics

規格特性 Characteristics	代號 Symbol	測試條件 Test conditions	極小 Min.	基準 Ref.	最大 Max.	單位 Units
輸入電壓 Supply voltage	Vcc	--	3.5	-	20	V
輸出飽和電壓 Output saturation voltage	Vce (sat)	Vcc = 14V ; IC = 20mA	-	300	700	mV
輸出漏電流 Output leakage current	Icex	Vcc = 14V ; Vcc = 14V	-	<0.1	10	µA
輸入電流 Supply current	Ice	Vcc = 20V Output open	-	5	10	mA
輸出上升時間 Output rise time	tr	Vcc = 14V ; RL = 820 Ω ; CL = 20pF	-	0.3	1.5	µS
輸出下降時間 Output fall time	tr	Vcc = 14V ; RL = 820 Ω ; CL = 20pF	-	0.3	1.5	µS

**輸出電路**  
Output circuit

需外加電阻才能產生訊號  
Extra Resistor(1kΩ)  
required for signal.

**輸出波形**  
Output wave

90° ± 1/6 T

- 使用相對溼度：20%~85%RH  
Operating relative humidity
- 使用度範圍：-10°C~+60°C  
Operating temperature range