

- 高可靠度
High Reliability
- 高抗干擾力
High Noise Resistance
- 廣泛工作電壓範圍
Wild operating voltage
- 低耗電高效能
Low current consumption
- 適用於惡劣環境不怕粉塵
Harsh circumstances suitable



Guiding of model 型號索引

Ex MES - 2500 D - E - 8Φ - M12
1 2 3 4 5 6

Product (產品代號) :

- 1 「MES」=40 Φ Magnetic Incremental Encoder
「MET」=50 Φ Magnetic Incremental Encoder
「MEN」=30 Φ Magnetic Incremental Encoder
「MEP」=Plate type Magnetic Incremental Encoder

Resolution (解析度) : 4PPR~2500PPR

- 2 「05」= 5 PPR 「500」= 500 PPR
「2500」= 2500 PPR

Output method (輸出方式) :

- 3 「Non」= NPN+PNP (Push-Pull)
「D」= Line driver
「N」= NPN
「P」= PNP

Structure strength MET type only

- 4 「E」: Heavy duty type
「Non」: Standard type

Shaft diameter (轉軸外徑) :

- 5 「Non」= 6.0 mm 「8Φ」=8.0 mm
「H8」=Hole shaft 8.0 mm
「H10」=Hole shaft 10.0 mm

Option (附加功能) :

- 6 「Non」= Cable lead wire
「PG」= M12 Lead wire
「M12」= M12 connection MET type only
「Z L」=Z Phase low level output
「MW」=Meter wheel type

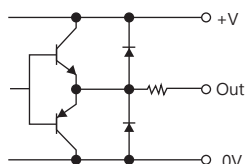
1>Pulse per Revolution (PPR)

Note 5,10,20,30,40,50,60,100,120,150,180,200,250,300,360,400,500,512,600,720,800,1000,1024,1200,1500,1800,2000,2048,2500

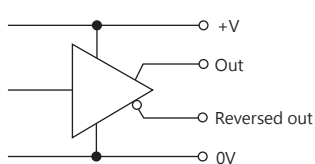
2>It is accepted to manufacture for special resolution. 可接受訂製非規格的解析度。

Output circuit 輸出回路

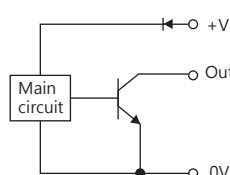
Push-Pull



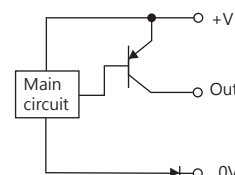
Line driver



NPN



PNP



Note

「Z phase」 standard output level is 「High level」 if require 「Low level」 output, Please order 「Z L」 type.

標準「Z phase」輸出準為是「高準位」，如果要「低準位」輸出請訂「Z L」形式。

Electrical Specification 電氣規格

Output model	輸出型式	Push-Pull	NPN	PNP	Line Driver
Operating voltage	工作電壓	5~30VDC	5~30VDC	5~30VDC	5VDC±10%
Output method	輸出方式	NPN+PNP	NPN	PNP	Line driver IC
Response frequency	響應頻率	30K~120K Hz			
Current consumption	耗電流	40mA max.			
Ripple of power	電源漣波	10 peak to peak			
Output current	輸出電流	100mA max.			20mA max.
Protection circuit	保護回路	Short circuit & polarity reversed			Polarity reversed
Voltage drop	輸出壓降	0.6V max.			
Residual voltage	殘餘電壓	0.1V max.			
Leakage current	洩漏電流	0.1mA max.			
Noise resistance	抗干擾	2kv/1μs			
Dielectric strength	電介強度	2.5kv/1 minute min.			
Insulation strength	絕緣強度	100 MΩ / 500vdc			
Approval	安規	CE / RoHS			

Mechanical Data & Environment Data 環境規格 & 機械規格

Type	Standard type				Heavy duty
Outline	30Φ	40Φ	50Φ		50Φ
Model	MEN	MES	MET		MET-□□□-E
Starting torque	起動力矩	20 gf-cm max.	30 gf-cm max.	30 gf-cm max.	260 gf-cm max
Shaft moment of inertial	慣性力矩	6g-cm ² max	8g-cm ² max.	8g-cm ² max.	68g-cm ² max
Shaft loading(Radial)	轉軸負載	1kg max.	2kg max.	2kg max.	10 kg max.
Shaft loading(Axial)	轉軸負載	0.5 kg max.	1kg max.	1kg max.	5 kg max.
Rotational speed max.	最大轉速	6000 RPM			
Housing material	外殼材質	Intensive PPS			
Shaft material	轉軸材質	SUS-316			
Vibration resistance	抗振動	10~55Hz / 1.5mm ; 2Hr/ X.Y.Z direction each			
Shock resistance	抗沖擊	490m/s ² with 11ms in X.Y.Z direction 3times each			
Operating circumstance	工作環境	-25°C~+70°C ; 85%RH max.			
Protection class	保護等級	IP-64			

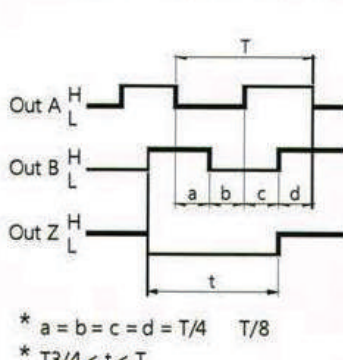
Connections 接線圖

Push-Pull (推拉式)			
Connector No.	Color	Description	
#1	Brown	+ V 1	
#3	Blue	0 V 3	
#4	Black	Phase A 4	
#2	White	Phase B 2	
#5	Yellow	Phase Z 5	
Non	Grey	Phase T 6	

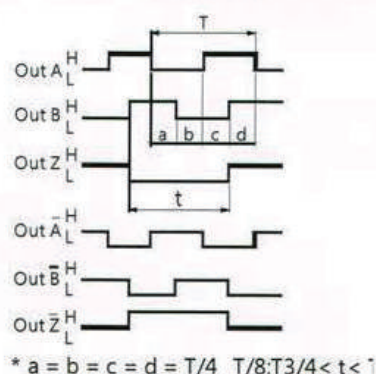
Line driver (差動式)			
Color	Description	Color	Description
Brown	+ V(1)	Blue	0 V(3)
Black	Phase A (4)	Blue/Red	Phase A(9)
White	Phase B (2)	White/Red	Phase B(10)
Yellow	Phase Z (5)	Yellow/Red	Phase Z(11)

Output timing chart 輸出時序圖

Push-Pull / NPN / PNP

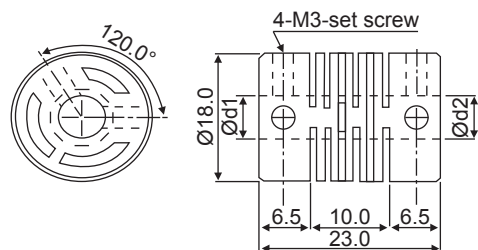


Line driver



Electrical Specification 電氣規格

Model	型號	G2J-66	G2J-68	G2J-88
Diameter d1	軸徑	6.0mm	6.0mm	8.0mm
Diameter d2	軸徑	6.0mm	8.0mm	8.0mm
Outline diameter	外徑	18.0mm		
Outline length	長度	23.0mm		
Set screw	固定螺絲	M3 x 4		
Material	材質	Intensive Polyimide		



Outline dimension 外形圖

