

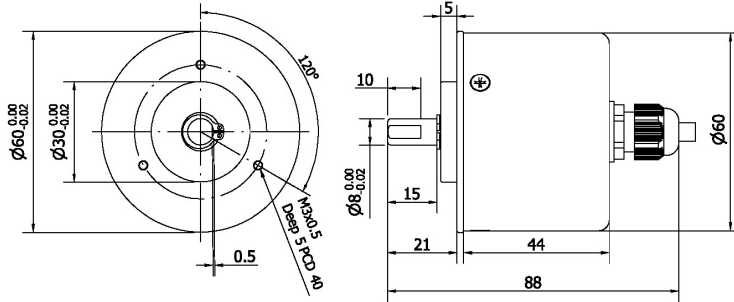
# MRA-6A

**MAGNETIC SENSOR**  
**SINGLE TURN**  
**Analog Output**  
**角度感測器**



- Output Type 輸出種類: 4-20 mA / 0-5V / 0-10V
- High Resolution 高解析值: 12 bit
- Application 適合: 角度 Angle、位置 Position  
張力 Tension、速度 Speed

## DIMENSION



## ORDERING INFORMATION

MRA-6A -	Measuring Range 量測範圍	Signal Output 輸出信號	Signal Sequence 輸出方向
	04: angle 45°	420: 4-20 mA	*W: Reversed
	09: angle 90°	5V: 0-5V	
	18: angle 180°	10V: 0-10V	* OPTION
	36: angle 360°	(Standard Sequence)	

## ELECTRICAL SPEC.

Power Supply 供應電源	[4-20 mA / 0-5V] DC 12~28V; [0-10V] DC 15~28V
Output Type 輸出信號	[standard] 4-20mA / 0-5V / 0-10V(increasing); [option] 20-4mA / 5-0V / 10-0V(decreasing)
Sensor Resolution 解析	12 bit (4096)
Response Time 輸出反應時間	20 ms (0~90%)
Output Loading 輸出負載	[4-20 mA] RL ≤ 750Ω, RL: (V-12)/20 mA; [0-5V / 0-10V] Iout ≥ 1 mA, RL ≥ 10KΩ
Insulation Strength 耐壓強度(Vrms)	1KV / min.
Insulation Resistance 絕緣阻抗(MΩ min.)	100 MΩ / 500 Vdc
Temp. Coefficient 溫度系數(ppm/°C)	250 ppm/°C

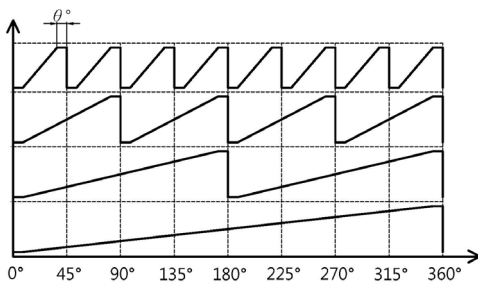
## MECHANICAL SPEC.

Shaft Diameter 軸徑	8 mm
Shaft Loading 軸荷重	Axial 軸向 4 Kg, Radial 徑向 8 Kg
Starting Torque (at 25°C) 起動轉矩	260 gf-cm or less
Mechanical Angle 機械迴轉角度	360° continuous 連續
Mechanical Life 機械迴轉壽命	1X10 <sup>9</sup> cycles
Max. Speed 最大容許速度(rpm)	60 rpm
Vibration 震動	10-55 Hz/1.5 mm Vpp, 10G (max.)
Shock 衝擊	50g per 11 ms
Cable 電線	Ø4.5, 1000 mm long
Weight 重量	< 320 g

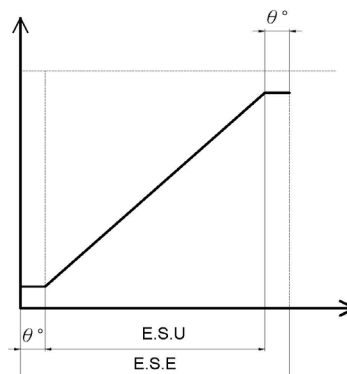
## ENVIRONMENTAL SPEC.

Operating Temp. 操作溫度 / 濕度	-10°C ~ 70°C RH 35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	-20°C ~ 80°C
Protection 保護等級	IP 64: Dust & Dripping Proof

## Output Curve



E.S.E.有效電子角度	45°	90°	180°	360°
E.S.U.使用電子角度	2° ~ 43°	2° ~ 88°	2° ~ 178°	2° ~ 358°
Nonlinear Error 非線性誤差	±0.50%FS	±0.40%FS	±0.40%FS	±0.30%FS
Repeatability Error 重覆性誤差	±0.45%FS	±0.25%FS	±0.20%FS	±0.15%FS



## Electrical Connection

