



得豐實業有限公司

Df Wisdom Industrial CO., LTD

MRA-1A / 1B 角度感測器 (Magnetic Sensor) Analog Output

• Application 適合: Tension 張力

• Output Type 輸出種類: 0.2 ~ 4.8V

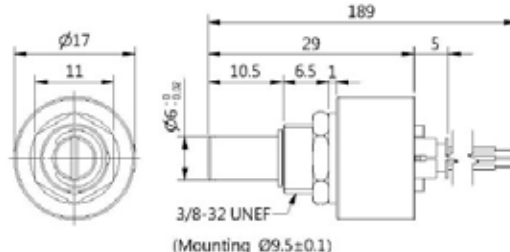
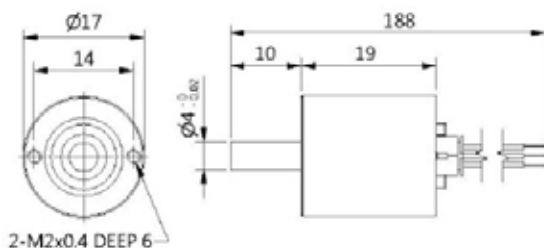


MRA-1A



MRA-1B

DIMENSION



ELECTRICAL SPEC 電器規格

Detection System	Absolute
Power Supply 供應電源	DC 5V $\pm 10\%$
Output 輸出	0.2 ~ 4.8V $\pm 0.5\%$ (4 ~ 96% $V_{in} \pm 0.5\%$)
Current Consumption 消耗電流	≤ 15 mA
Output Capacity 輸出容量	Current ≤ 1.2 mA
Output Load 輸出負載	> 5 K Ω
Response Time 輸出反應時間	V_{out} 0 ~ 90 % ≤ 10 ms
Insulation Resistance 絕緣阻抗(Ω min)	100 M Ω / 500 Vdc
Insulation Strength 耐壓強度(Vrms)	1KV / min

MECHANICAL SPEC 機械規格

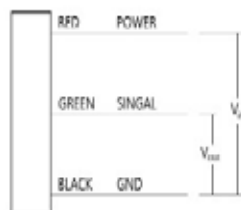
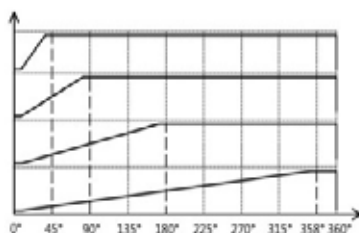
	MRA-1A	MRA-1B
Shaft Diameter 軸徑	4mm	6mm
Shaft Loading 軸荷重	Axial 軸向: 1kg, Radial 徑向: 2kg	< 0.5 kg
Mechanical Life 機械迴轉壽命	1×10^9 cycle	1×10^7 cycle
Max. Speed 最大機械許速度(rpm)	600 rpm	100 rpm
Starting Torque (at 25°C) 起動轉距	≤ 10 gf - cm or less	
Vibration 震動	10 - 55 Hz / 1.5 mm V_{pp} , 10G (max.)	
Shock 衝擊	50g per 11 ms X / Y / Z	
Cable 電線	150 cm long	
Weight 重量	< 20 g	

ENVIRONMENTAL SPEC 環境規格

Operating Temp. 容許操作溫度	-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 50: Dust Proof (only for sensor housing)

OUTPUT CURVE 輸出曲線

F.S.E.有效電子角度	45°	90°	180°	355°
E.S.U.使用電子角度	1° ~ 44°	1° ~ 89°	1° ~ 179°	1° ~ 354°
Angular Error 角度誤差	$\pm 0.15^\circ$ FS	$\pm 0.30^\circ$ FS	$\pm 0.50^\circ$ FS	$\pm 1.00^\circ$ FS
Repeatability Error 重複性誤差	$\pm 0.06^\circ$	$\pm 0.05^\circ$	$\pm 0.10^\circ$	$\pm 0.20^\circ$



Specifications Model 規格 型號

MRA-1A - [] - []

1B Measuring Range 量測範圍
Signal Sequence 輸出方向

045: angle 45°
090: angle 90°
180: angle 180°
355: angle 355°

* w * Reversed
*OPTION

*Other angle degree by request.
(angle range 45° ~ 355°)