

FOTEK

High compact

Magnetic Sensor

- High compact
- High Reliability
- High Noise Resistance
- Short circuit protection
- High protection class IP-67
- 堅固耐用
- 高穩定性
- 高抗干擾力
- DC type附短路保護
- 高防水等級IP-67

CE RoHS



Model guiding / 型號索引

Ex. **FC-20 R-H-2M**
 1 2 3 4 5

1 Series(系列名稱)	「FC」: Magnetic sensor 「MS」: M8 Tubular type
2 Model(形式)	「20」: Plastic housing 「11」: Plastic housing 「05」: Plastic housing 「08」: M8
3 Output method (輸出方式)	「R」: Reed contact 「RE」: Output protection 「RN」: Reed contact NPN 「RP」: Reed contact PNP 「N」: NPN output 「P」: PNP output 「D」: Two wire solid state output
4 Sensitivity(感度) / Output status	「Non」: Standard sensitivity (<80 Gauss) 「H」: High sensitivity (<40 Gauss) 「L」: Low sensitivity (<120 Gauss) 「B」: NC type
5 Connection(出線方式)	「2M」: 2m cable/ 「1M」: 1m cable/ 「4M」: 4m cable/ 「PG」: M8 connector Lead wire/ 「PE」: Plastic connector Lead wire

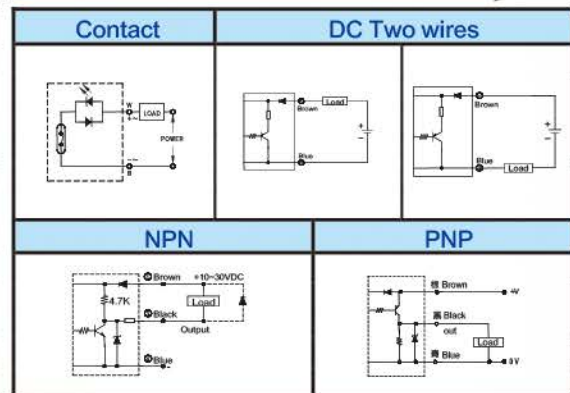
※ Notice for use / 選型使用注意事項 (*)

- 所有型號都有輸出短路及極性保護，除「FC-xxR」沒輸出短路保護。
- 請配合氣缸磁環選用適當感度的機型。「感度太高」動作點會提前或易受帶磁外物干擾，「感度太低」無動作或訊號漏失。
- 「2線式」最好不要超過2個以上串聯使用以免無法推動負載。(因沒每個都有輸出壓降約3.0V)
- 「FC-xxR」及「FC-xxRE」極性反接仍可感應輸出但指示燈不會亮，須更換極性即可正常動作，其他型極性反接則無動作。
- All model with Output short circuit & Polarity reversed protection, excepted 「FC-xxR」.
- Optimum sensitivity of sensor is required, if it is too high to be turned on too early or be interrupted, if it is too low to lose signal.
- It maybe cannot operate the load, if series connection over 2 pieces of 「2 wire type」 sensor.
- 「FC-xxR」 & 「FC-xxRE」 may turn on load but cannot turn on operating LED, other type don't work, if power polarity is reversed.

General data / 共同規格

Specification	規格	Data	
Sensor	感應器	Reed sensor	Hall sensor
Contact rated	接點功率	10W max.	---
Output current	輸出電流	50mA or 150mA or 500mA max.	50mA or 150mA max.
Current consumption	消耗電流	non	8mA max.
Output protection	輸出保護	*	Short circuit & Polarity reversed
Protection class	保護等級	IP-67 (IEC-60529)	
Vibration resistance	耐震動	300m/S ² / (55 ~ 2000 Hz) (IEC-60068-2-6)	
Shock resistance	耐衝擊	300m/S ² with 11ms (IEC-60068-2-27)	
EMC Interference	電磁相容	IEC 61000-6-4	
Dielectric strength	電介強度	2.5kv / 1 minute min.	
Insulation strength	絕緣強度	100 MΩ / 500vdc	
Operation circumstance	工作環境	-25°C ~ +85°C ; 100%RH max. (Condensation permitted)	

Connection diagram / 接線圖



Fixed parts / 固定帶

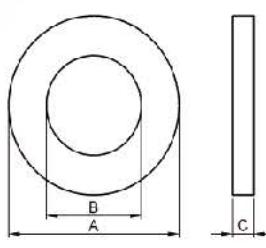
PNS/PNA (for FC-20)		BSS/BSA (for FC-48) / BES/BEA (for FC-04)		PH (for FC-20)																																																																			
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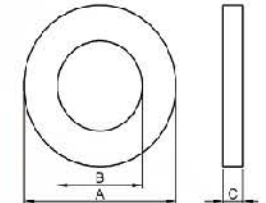
- 以滿足客戶需求追求『企業永續經營』
- 以使用者角度設計『實用耐用的電控產品』
- 以量產標準化製造『世界標準的電控產品』
- By satisfying customer's requirements, To manage company forever.
- On user's position, To develop more『Performance & Reliable controls』
- By mass-quantity producing, To produce『World standard controls』

Magnetic ring / 磁環

➔ RME series Rubber anisotropic magnetic ring

	Model	Dimension (mm)			Model	Dimension (mm)		
		A±0.3	B±0.2	C±0.1		A±0.3	B±0.2	C±0.1
	RME-164	15.5	8.3	4.0	RME-165	15.5	8.3	5.0
	RME-204	19.5	9.3	4.0	RME-205	19.5	9.3	5.0
	RME-254	24.5	13.3	4.0	RME-205L	19.5	12.3	5.0
	RME-254L	24.5	17.3	4.0	RME-255	24.5	13.3	5.0
	RME-304	29.5	21.3	4.0	RME-305	29.5	21.3	5.0
	RME-324	31.5	21.3	4.0	RME-325	31.5	21.3	5.0
	RME-404	39.5	22.3	4.0	RME-405	39.5	22.3	5.0
	RME-504	49.5	32.3	4.0	RME-505	49.5	32.3	5.0
	RME-634	62.5	42.3	4.0	RME-635	62.5	42.3	5.0
	RME-804	79.5	58.3	4.0	RME-805	79.5	58.3	5.0
	RME-1004	99.5	78.3	4.0	RME-1005	99.5	78.3	5.0
	RME-1254S	124.5	79.3	4.0				
	RME-1254	124.5	108.3	4.0				
	RME-1504	149.5	125.3	4.0				
	RME-2004	195.5	176.3	4.0				
使用環境溫度		-25°C ~ 80°C						
磁通密度		2,500~2,600 GAUSS						
保磁力 (iHC)		2,800~3,200 Oe						
保磁力 (bHC)		2,100~2,400 Oe						
最大磁積能		1.3 ~ 1.5 M Oe						
磁阻力		20~50kgf/cm ²						
延展性		10~20%						
硬度		30~50 HV						
材料密度		1.2~1.8 g/cm ³						

➔ PME series Plastic anisotropic magnetic ring

	Model	Dimension (mm)			Model	Dimension (mm)		
		A±0.3	B±0.2	C±0.1		A±0.3	B±0.2	C±0.1
	PME-204	19.5	9.3	4.0	PME-125	11.5	6.3	5.0
	PME-254	24.5	13.3	4.0	PME-165	15.5	8.3	5.0
	PME-304	29.5	21.3	4.0	PME-205	19.5	9.3	5.0
	PME-324	31.5	21.3	4.0	PME-255	24.5	13.3	5.0
	PME-404	39.5	22.3	4.0	PME-305	29.5	21.3	5.0
	PME-504	49.5	32.3	4.0	PME-325	31.5	21.3	5.0
	PME-634	62.5	42.3	4.0	PME-405	39.5	22.3	5.0
	PME-804	79.5	58.3	4.0	PME-505	49.5	32.3	5.0
	PME-1004	99.5	78.3	4.0	PME-635	62.5	42.3	5.0
					PME-805	79.5	59.3	5.0
					PME-1005	99.5	78.3	5.0
使用環境溫度		-40°C ~ 120°C						
磁通密度		2,800~3,000 GAUSS						
保磁力 (iHC)		3,000~3,600 Oe						
保磁力 (bHC)		2,400~2,600 Oe						
最大磁積能		1.8 ~ 2.0 M Oe						
磁阻力		70~80kgf/cm ²						
延展性		5~7%						
硬度		110~120 HV						
材料密度		3.8~4.0 g/cm ³						