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CE RoHS

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FOTEK CONTROLS
EST. 1985

K3 / P3 series

Water proof Long distance Photoelectric sensor

K3 / P3 系列

**防水型長距離
光電傳感器**

IP 67 CE Rohs



K3 series

- High Noise Resistance
高抗干擾力
- High Illumination Resistance
高抗外亂光
- Longer sensing distance
更長的檢測安裝距離
- High protection class IP 67
高防水等級 IP 67



P3 series

*Relay is Conformed
to Bellcore specification and FCC Part 68*

K3 /P3 Series

Long distance Photoelectric sensor

IP 67
CE Rohs

- Relay is Conformed to Bellcore specification and FCC Part 68
- High compact
- High Reliability
- High Noise Resistance
- High Illumination Resistance
- More reliable relay
- Longer sensing distance
- More performance optical property
- High protection class IP 67
- 堅固耐用
- 高穩定性
- 高抗干擾力
- 高抗外亂光
- 更可靠的繼電器
- 更長的檢測安裝距離
- 更佳光學特性
- 高防水等級 IP 67



Model / 型號

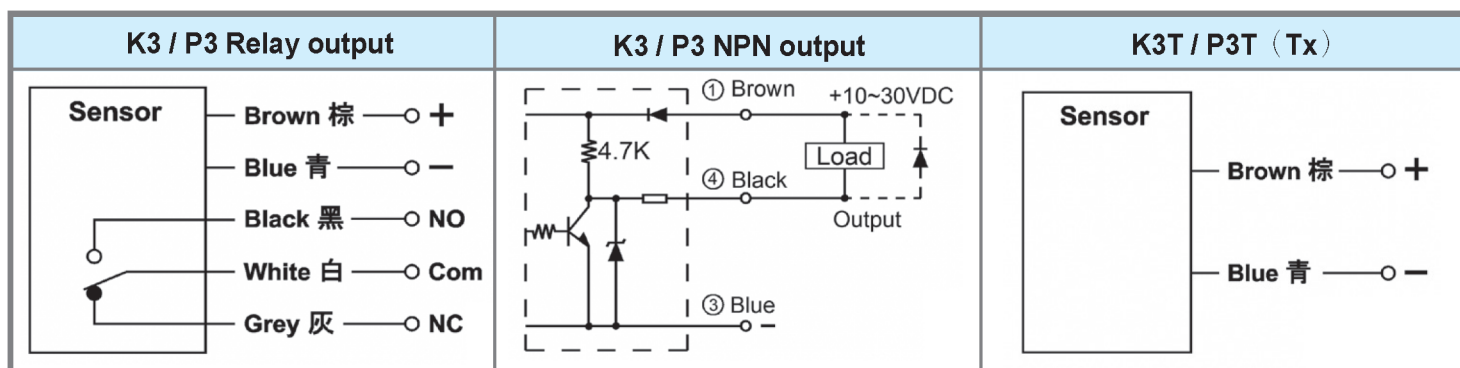
K3 series

Type	Model 型號	Output status 輸出狀態	Output method 輸出方式	Output current 輸出電流	Setting distance 安裝距離
Thru beam type	K3T-10MR	Dark ON	Relay	2A/30VDC	10 m
	K3T-10MRB	Light ON			
	K3T-10MN	Dark ON	NPN	100mA	
	K3T-10MNB	Light ON			
	K3T-30MR	Dark ON	Relay	2A/30VDC	30 m
	K3T-30MRB	Light ON			
	K3T-30MN	Dark ON	NPN	100mA	
	K3T-30MNB	Light ON			
	K3T-40MR	Dark ON	Relay	2A/30VDC	40 m
	K3T-40MRB	Light ON			
	K3T-40MN	Dark ON	NPN	100mA	
	K3T-40MNB	Light ON			
	K3T-60MR	Dark ON	Relay	2A/30VDC	60 m
	K3T-60MRB	Light ON			
	K3T-60MN	Dark ON	NPN	100mA	
	K3T-60MNB	Light ON			
	K3T-80MR	Dark ON	Relay	2A/30VDC	80 m
	K3T-80MRB	Light ON			
	K3T-80MN	Dark ON	NPN	100mA	
	K3T-80MNB	Light ON			
Mirror reflex	K3G-10MR	Dark ON	Relay	2A/30VDC	10 m with MR-1
	K3G-10MRB	Light ON			
	K3G-10MN	Dark ON	NPN	100mA	
	K3G-10MNB	Light ON			
Polarized Mirror reflex	K3G-8MRE	Dark ON	Relay	2A/30VDC	8 m with MR-1
	K3G-8MRBE	Light ON			
	K3G-8MNE	Dark ON	NPN	100mA	
	K3G-8MNBE	Light ON			

P3 series

Type	Model 型號	Output status 輸出狀態	Output method 輸出方式	Output current 輸出電流	Setting distance 安裝距離
Thru beam type	P3T-10MR	Dark ON	Relay	2A/30VDC	10 m
	P3T-10MRB	Light ON			
	P3T-10MN	Dark ON	NPN	100mA	
	P3T-10MNB	Light ON			
	P3T-30MR	Dark ON	Relay	2A/30VDC	30 m
	P3T-30MRB	Light ON			
	P3T-30MN	Dark ON	NPN	100mA	
	P3T-30MNB	Light ON			
	P3T-40MR	Dark ON	Relay	2A/30VDC	40 m
	P3T-40MRB	Light ON			
	P3T-40MN	Dark ON	NPN	100mA	
	P3T-40MNB	Light ON			
	P3T-60MR	Dark ON	Relay	2A/30VDC	60 m
	P3T-60MRB	Light ON			
	P3T-60MN	Dark ON	NPN	100mA	
	P3T-60MNB	Light ON			
	P3T-80MR	Dark ON	Relay	2A/30VDC	80 m
	P3T-80MRB	Light ON			
	P3T-80MN	Dark ON	NPN	100mA	
	P3T-80MNB	Light ON			
Mirror reflex	P3G-12MR	Dark ON	Relay	2A/30VDC	12 m with MR-3
	P3G-12MRB	Light ON			
	P3G-12MN	Dark ON	NPN	100mA	
	P3G-12MNB	Light ON			
Polarized Mirror reflex	P3G-10MRE	Dark ON	Relay	2A/30VDC	10 m with MR-3
	P3G-10MRBE	Light ON			
	P3G-10MNE	Dark ON	NPN	100mA	
	P3G-10MNBE	Light ON			

Connection diagram / 接線圖



General specification / 基本規格

Output method	輸出方式	Relay output / 繼電器輸出	NPN Transistor output / 電晶體輸出
Power supply	工作電壓	10-30VDC	
Current consumption	耗電流	Tx : 10mA max. ; Rx : 40mA max.	Tx : 10mA max. ; Rx : 30mA max.
Response time	反應時間	15 ms max.	5 ms max
Output current	輸出電流	100 mA max.	
Contact rated	接點容量	2A/30VDC max.	
Relay life of mechanical	機械壽命	1 × 10 ⁸ operations min.	
Relay life of electrical	電氣壽命	5 × 10 ⁵ operations. min. (1 A 30 VDC)	
Protection circuit	保護迴路	Power polarity reversed protection	Power polarity reversed & Output short circuit protection
Min. sensible object	最小檢測物	50 Φ Opaque object	
Illumination resistance	耐外亂光	Sunlight > 30,000 Lux. ; Lamplight > 10,000 Lux.	
Noise resistance	抗干擾	2kv / 1 μs	
EMC Immunity	電磁相容	ESD : 8 KV Air Discharge (Level3) / EN-61000-4-2 ; RF Interference : 10V / M / ENV-50140 ; Burst test : 2KV / EN61000-4-4	
Dielectric strength	電介強度	2.5kv / 1 minute min.	
Insulation strength	絕緣強度	100 MΩ / 500vdc	
Vibration resistance	耐震動	10-55Hz / 1.5mm, 2 hours in X/Y/Z directions	
Approval	安規	CE / RoHS	
Housing material	外殼材質	Housing : Intensive ABS (94V0) ; Lenz : PMMA	
Protection	防水等級	IP-67	
Connection method	出線方式	5 Φ × 0.5m or 5 Φ × 2m	
Operating circumstance	工作環境	- 25°C ~ +80°C ; 35% ~ 85% RH	
Connection	接線方式	Emitter (Tx) : 2 wires (Brown=+V ; Blue=0V) NPN : 3 wires (Brown=+V ; Blue=0V ; Black=NPN) Relay : 5 wires (Brown=+V ; Blue=0V ; White=COM ; Black=NO ; Grey = NC)	

Outline dimension / 外形尺寸

K3T	K3G	K3G-□□□E
P3T	P3G	P3G-□□□E

● Fixed bracket / 固定腳架

K3-BR-1 (Standard)	P3-BR-1 (Standard)
Technical drawing of K3-BR-1 (Standard) showing front and side views. Dimensions include: 9.2, 5.6, 36.2, 58.3, 40.0, 6.4, 8.5, 6.6, 12.5, 10.0, 22.5, 40.0, 59.5, 4.2, t=1.50, Ø4.2.	Technical drawing of P3-BR-1 (Standard) showing front and side views. Dimensions include: t=1.5, Ø6.4, 25.0, 40.0, 9.5, 5.0, 22.0, 25.3, 16.0, 7.5, 9.0, 30.0, 10.0, 15.0, 72.0, 29.0, 40.0, Ø4.2.
P3-BR-2 (Optioned)	P3-BR-3 (Optioned)
Technical drawing of P3-BR-2 (Optioned) showing front and side views. Dimensions include: 6.4, 11.0, 18.0, 64.0, 50.0, 30.0, 5.5, 25.0, 14.5, 45.0, 4.8, 9.5, 29.5, 11.0, 18.0, 6.0, 64.0, Ø4.2, t=1.5.	Technical drawing of P3-BR-3 (Optioned) showing front and side views. Dimensions include: 10.0, 15.0, 25.0, t=2.0, 40.0, 25.0, 6.0, 6.4, 12.0, 30.0, 50.0, 74.0, 90.0, 104.0, 5.0, 18.0, 40.0.

● Reflex mirror / 反射鏡片

MR-1 (for K3G)	MR-2 (Optioned)	MR-3 (for P3G)
Technical drawing of MR-1 (for K3G) showing front and side views. Dimensions include: 6.0, 3.0, 2-Ø4.2, 46.0, 42.0, 86.0, 74.0, 65.0, 60.0.	Technical drawing of MR-2 (Optioned) showing front and side views. Dimensions include: 8.0, 5.0, 35.0, 31.0, 25.0, 2-Ø3.5, 42.0, 34.0, 30.0, 4.0.	Technical drawing of MR-3 (for P3G) showing front and side views. Dimensions include: 8.3, 5.6, 4.5, 51.5, 47.5, 40.0, 2-Ø4.5, 61.0, 51.5, 47.5.

● Notice / 注意事項

Warning	These series products are not designed for personal safety protection, Please do not apply for such as purpose. 本系列產品不是設計使用在人員安全防護，請勿使用在此用途上！
Caution	1> Please assure the correct voltage of power supply. 2> Please do not directly expose these products to fluorescent lamp or sunlight, to avoid from making malfunction. 3> Please do not use these products under the oil or chemical environment. 4> Please do not clean these products with organic solvent such as thinner or strong alkali or acid. 1> 請確認提供正確的電源電壓。 2> 本系列產品請勿直接暴露在螢光燈或太陽光直接照射的環境。 3> 本系列產品請勿使用在有油污或化學氣體的環境。 4> 本系列產品請勿使用溶劑擦拭，如松香稀釋劑或強酸強鹼的液體。