



## 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

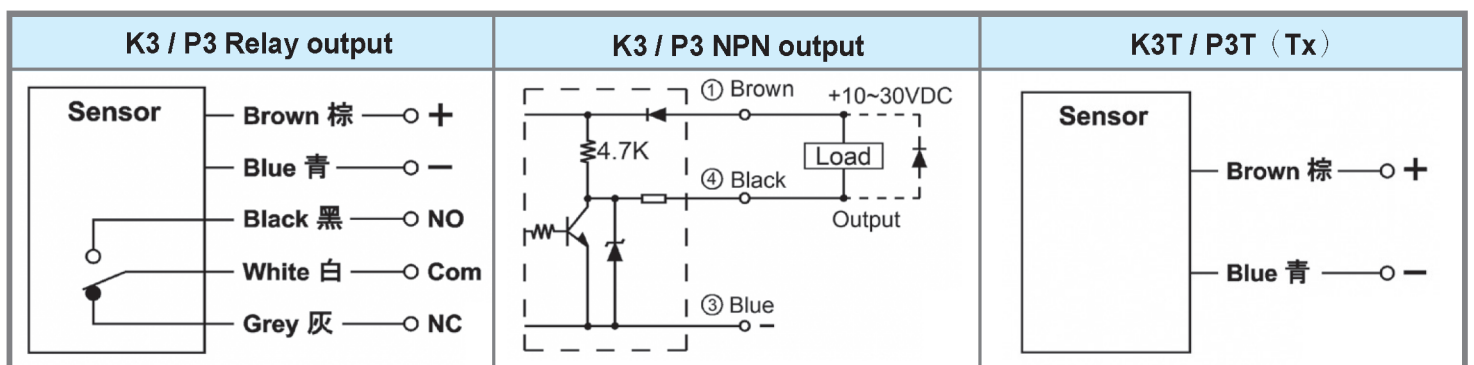
### K3 series

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 <sup>8</sup> operations min.	
Relay life of electrical	電氣壽命	5 × 10 <sup>5</sup> 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)
P3-BR-2 (Optioned)	P3-BR-3 (Optioned)

## ● Reflex mirror / 反射鏡片

MR-1 (for K3G)	MR-2 (Optioned)	MR-3 (for P3G)

## ● Notice / 注意事項

<p><b>Warning</b></p>	<p>These series products are not designed for personal safety protection, Please do not apply for such as purpose.</p> <p>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！</p>
<p><b>Caution</b></p>	<ol style="list-style-type: none"> <li>1&gt; Please assure the correct voltage of power supply.</li> <li>2&gt; Please do not directly expose these products to fluorescent lamp or sunlight, to avoid from making malfunction.</li> <li>3&gt; Please do not use these products under the oil or chemical environment.</li> <li>4&gt; Please do not clean these products with organic solvent such as thinner or strong alkali or acid.</li> </ol> <p>1&gt; 請確認提供正確的電源電壓。</p> <p>2&gt; 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。</p> <p>3&gt; 本系列產品請勿使用在有油污或化學氣體的環境。</p> <p>4&gt; 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。</p>