

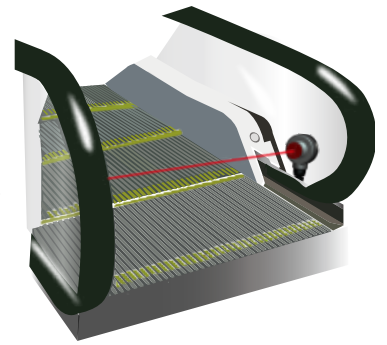
# Superior Waterproof T-style Photo Sensor **PTQ18**

## ◆ Introduction / 介紹:



◆ The brightly worked sidelights enhanced the sensor.  
/ 亮度增強的側面燈光，使感應器更具吸引力。

◆ Better curvature. / 彎曲性佳  
The wire of PTQ18 is designed for better bending resistance, which is easier mounted in different environments. / PTQ18接線採用耐繞曲設計，以增加彎曲性，更利於裝設在不同的環境。

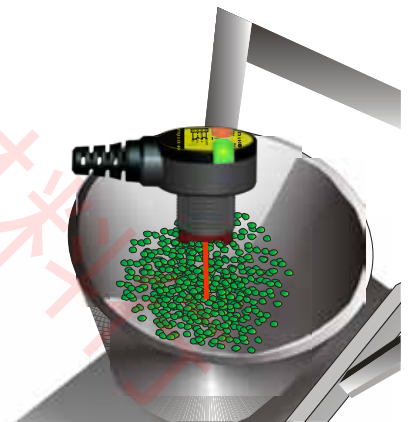
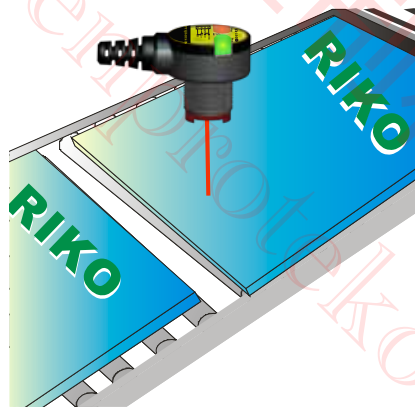
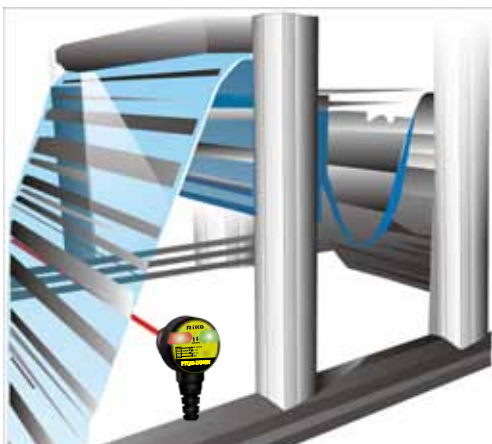


## ◆ Application / 應用例

• Controlling surface tension and a scroll.  
/ 張力與捲軸控制

• Detecting the planks. / 板材測量

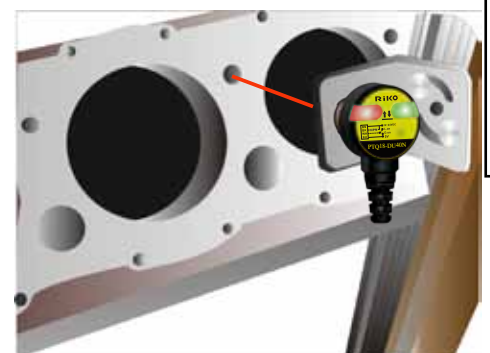
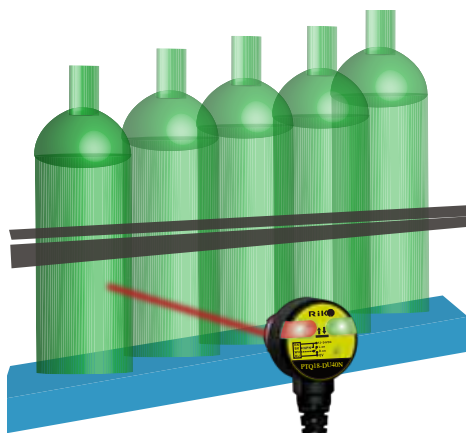
• Controlling the positions of objects.  
/ 料位控制



• Detecting the positions of cars.  
/ 洗車設備定位

• Counting clear bottles moving on a high-speed conveyor.  
/ 檢測高速行進的瓶子

• Thread hole inspection. / 檢查螺絲孔



Fiber

Photo Sensor

Area Sensor

Ultrasonic Sensors

Inductive Proximity Sensor

Capacitive Proximity Sensor

Timer / Counter

Others

Accessories

# PTQ18

## Superior Waterproof T-style Photo Sensor

### ◆Characteristic / 特點 :

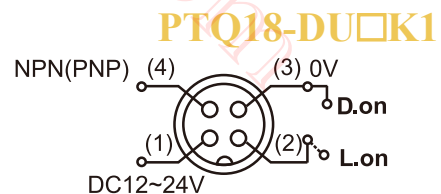
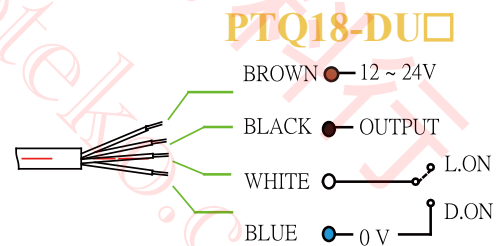
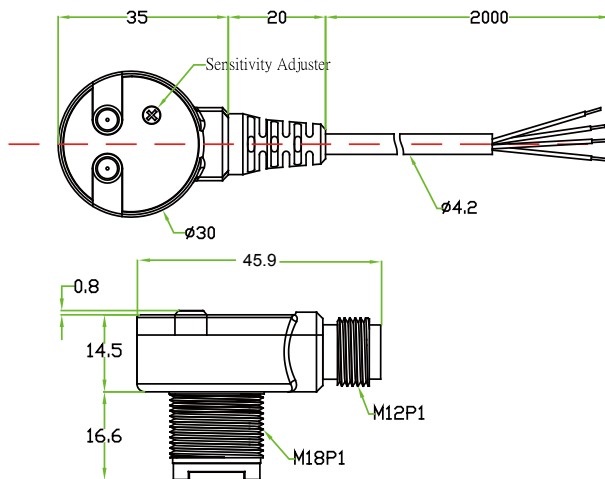
- T-shaped housing design, saving space. / T型設計可省空間
- N.O./N.C. function switchable by different wires. / N.O./N.C.可用選擇線切換
- Easy to install. / 體積小(30x45.9x31.9mm)安裝容易
- Special design for bending resistance. / 接線使用特殊材質耐彎曲
- Superior waterproof IP67.



### ◆Specifications / 規格表 :

Model / 型號	NPN L.on/D.on	PTQ18-DU10/40N	PTQ18-DU10/40NK1
	PNP L.on/D.on	PTQ18-DU10/40P	PTQ18-DU10/40PK1
Sensing type / 檢出方式	Diffuse reflection/擴散反射式		
Sensing distance / 檢出距離	10cm / 40cm , white paper 10 x 10 (10/40cm)		
Emitting light / 發光源	Infrared LED 850nm		
Operating voltage / 工作電壓	DC12~24V		
Current Consumption / 消耗電流	20mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Response time / 反應時間	1.5 ms Max.		
Insulation resistance / 隔離阻抗	20MΩ min. (DC500V)		
Voltage withstandability / 絕緣耐壓	AC1000V 60Hz for 60 Sec.		
Operating temperature/工作溫度	- 25 °C ~ + 60 °C		
Ambient humidity / 工作溼度	35% ~ 85% RH		
Protection degree / 防水等級	IP67		
Material / 外觀材質	ABS		
Wiring method / 出線方式	Pre-wired Ø4.2 x 2 M / 3-wires 出線	M12 plug-in connector type / M12接頭	
Weight / 重量	Approx.68.5g		Approx.18g

### ◆Dimensions/尺寸圖 :



# Superior Waterproof T-style Photo Sensor

# PTQ18

## ◆Characteristic / 特點 :

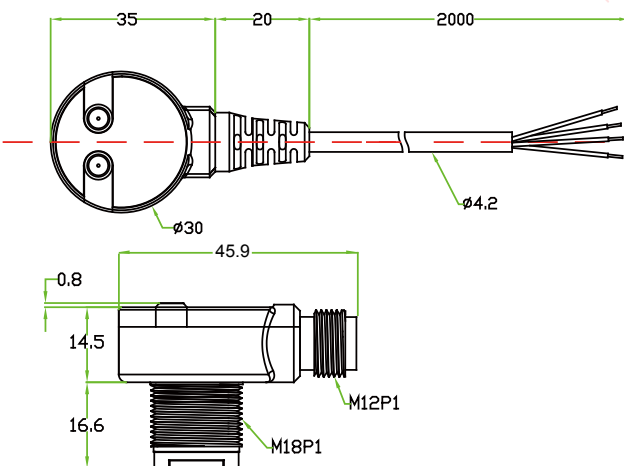
- High brightness dual LED makes you easy to know the current operating situation.  
/高亮度雙LED指示燈，讓您可以很快的了解感應器的使用狀態
- L.on/D.on Switch function.  
/有L.on/D.on兩種輸出型態的選擇
- Easy to install. /體積小(30x45.9x31.9mm)安裝容易
- Special design for bending resistance. /接線使用特殊材質耐彎曲
- Superior waterproof IP67.



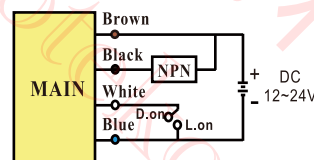
## ◆Specifications / 規格表 :

Model / 型號	NPN L.on/D.on	PTQ18-20N	PTQ18-20NK1
	PNP L.on/D.on	PTQ18-20P	PTQ18-20PK1
Sensing type / 檢出方式	Through beam/對照式		
Sensing distance / 檢出距離	20M		
Emitting light / 發光源	Infrared LED 850nm		
Operating voltage / 工作電壓	DC12~24V		
Current Consumption / 消耗電流	(Receiver)20mA Max. (Emitter)18mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Response time / 反應時間	7 ms Max.		
Insulation resistance / 隔離阻抗	20MΩ min. (DC500V)		
Voltage withstandability / 絕緣耐壓	AC1000V 60Hz for 60 Sec.		
Operating temperature/工作溫度	- 25 °C ~ + 60 °C		
Ambient humidity / 工作溼度	35% ~ 85% RH		
Protection degree / 防水等級	IP67		
Material / 外觀材質	ABS		
Wiring method / 出線方式	RX : Pre-wired Ø4.2 2M / 4-wires TX : Pre-wired Ø4.2 2M / 2-wires		M12 plug-in connector type / M12接頭
Weight / 重量	Approx.137g		Approx.36g

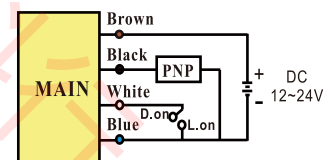
## ◆Dimensions/尺寸圖 :



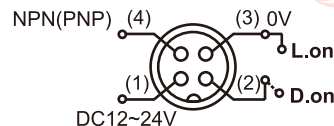
### NPN Type



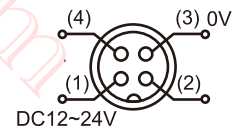
### PNP Type



### (Receiver/接收)



### (Emitter/發射)



# PTQ18

## Superior Waterproof T-style Photo Sensor

### ◆Characteristic / 特點 :

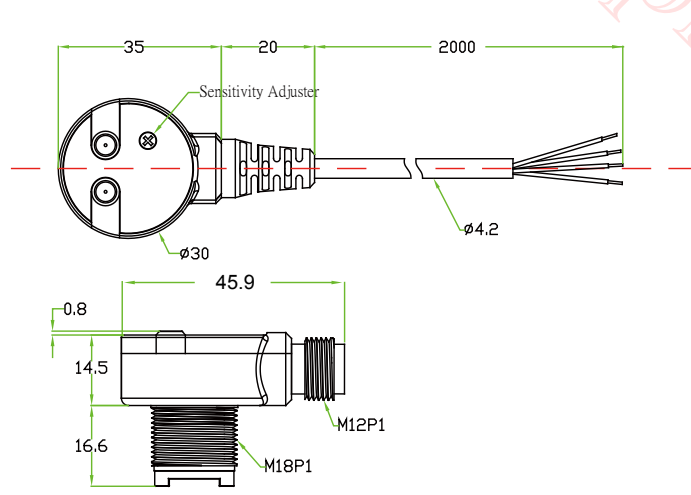
- L.on/D.on switches function. / 有L.on/D.on兩種輸出型態的選擇
- Easy to install. / 體積小(30x45.9x31.9mm)安裝容易
- Special design for bending resistance. / 接線使用特殊材質耐彎曲
- Superior waterproof IP67.



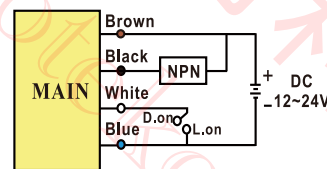
### ◆Specifications / 規格表 :

Model / 型號	NPN L.on/D.on	PTQ18-QR2N	PTQ18-QR2NK1	PTQ18-PR1N	PTQ18-PR1NK1
	PNP L.on/D.on	PTQ18-QR2P	PTQ18-QR2PK1	PTQ18-PR1P	PTQ18-PR1PK1
Sensing type / 檢出方式	Retroreflective/鏡片反射式			Polarizing Retroreflective/偏光鏡反射式	
Sensing distance / 檢出距離	2M			1M	
Emitting light / 發光源	Red LED 650nm			Red LED 650nm	
Operating voltage / 工作電壓	DC12~24V				
Current Consumption / 消耗電流	20mA Max.				
Load current / 負載電流	100mA Max. at DC24V				
Response time / 反應時間	1.5 ms Max.				
Insulation resistance / 隔離阻抗	20MΩ min. (DC500V)				
Voltage withstandability / 絕緣耐壓	AC1000V 60Hz for 60 Sec.				
Operating temperature/工作溫度	- 20 °C ~ + 60 °C				
Ambient humidity / 工作溼度	35% ~ 85% RH				
Protection degree / 防水等級	IP67				
Material / 外觀材質	ABS				
Wiring method / 出線方式	Pre-wired Ø4.2 x 2M / 4-wires	M12 plug-in connector type / M12接頭	Pre-wired Ø4.2 x 2M / 4-wires	M12 plug-in connector type / M12接頭	
Weight / 重量	Approx.68.5g	Approx.17.5g	Approx.68.5g	Appr ox.17.5g	

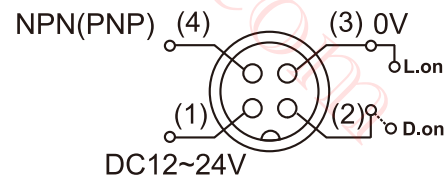
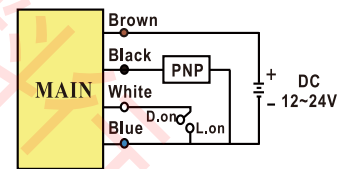
### ◆Dimensions/尺寸圖 :



#### NPN Type



#### PNP Type



# Superior Waterproof T-style Photo Sensor

# PTQ18

## ◆Characteristic / 特點 :

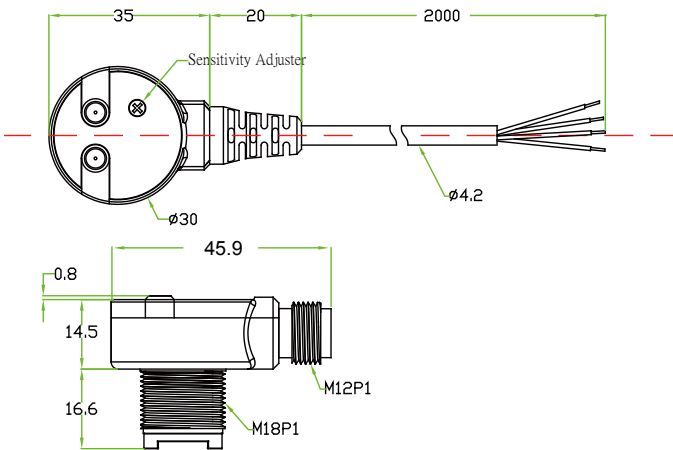
- L.on/D.on switches function. /有L.on/D.on兩種輸出型的選擇
- Easy to install. / 體積小(30x45.9x31.9mm)安裝容易
- Special design for bending resistance. / 接線使用特殊材質耐彎曲
- Superior waterproof IP67.



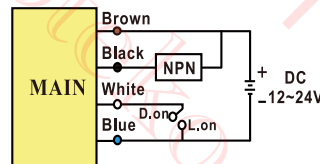
## ◆Specifications / 規格表 :

Model / 型號	NPN L.on/D.on	PTQ18-R2N	PTQ18-R2NK1
	PNP L.on/D.on	PTQ18-R2P	PTQ18-R2PK1
Sensing type / 檢出方式	Retroreflective/鏡片反射式		
Sensing distance / 檢出距離	2M		
Emitting light / 發光源	Infrared LED 850nm		
Operating voltage / 工作電壓	DC12~24V		
Current Consumption / 消耗電流	20mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Response time / 反應時間	1.5 ms Max.		
Insulation resistance / 隔離阻抗	20MΩ min. (DC500V)		
Voltage withstandability / 絕緣耐壓	AC1000V 60Hz for 60 Sec.		
Operating temperature/工作溫度	- 20 °C ~ + 60 °C		
Ambient humidity / 工作溼度	35% ~ 85% RH		
Protection degree / 防水等級	IP67		
Material / 外觀材質	ABS		
Wiring method / 出線方式	Pre-wired Ø4.2 x 2M / 4-wires	M12 plug-in connector type / M12接頭	
Weight / 重量	Approx.68.5g		Approx.18g

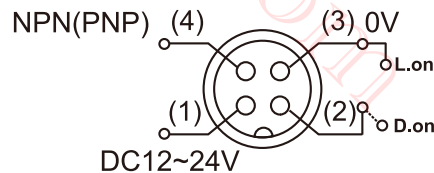
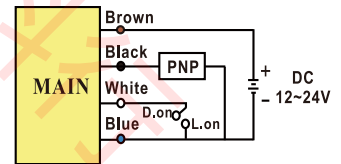
## ◆Dimensions/尺寸圖 :



### NPN Type



### PNP Type



Fiber

Photo Sensor

Area Sensor

Ultrasonic Sensors

Inductive Proximity Sensor

Capacitive Proximity Sensor

Timer / Counter

Others

Accessories