

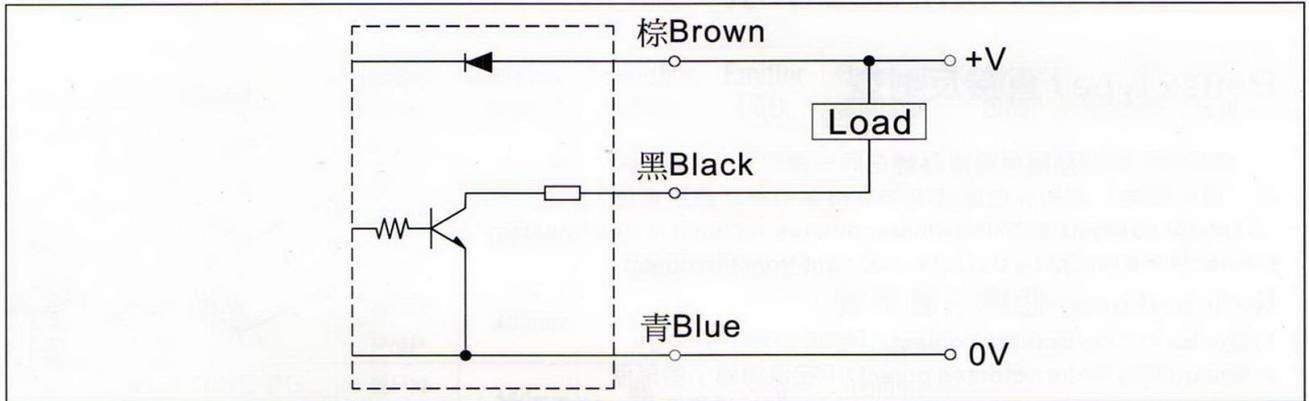
- Solid compact structure :
7 Φ x 43 mm
M8 x 43 mm
- Protection class : IP-67
- High reliability :
Output short circuit protection
High noise resistance



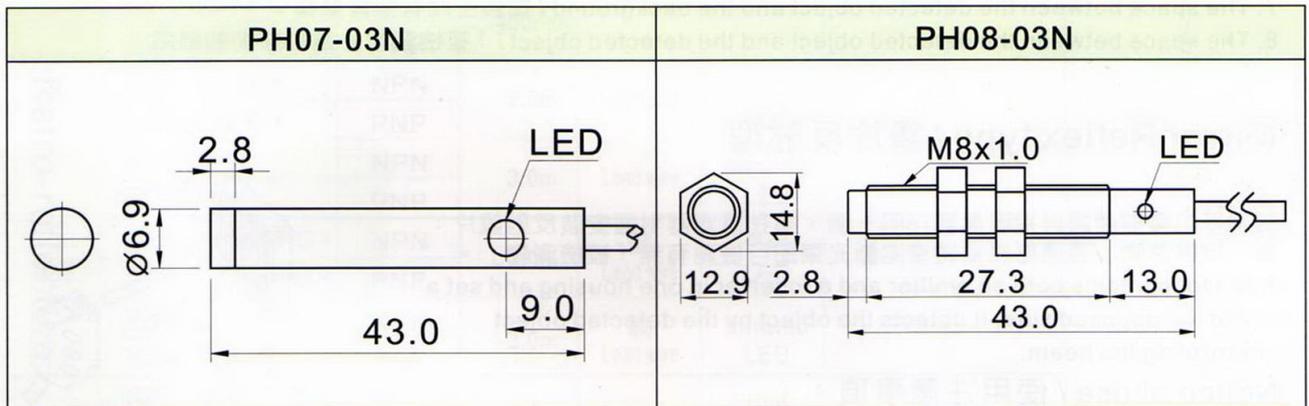
◆ General Specification / 共同規格

Outline	外形	$\Phi 7$	M8
Model	型號	PH07-03N	PH08-03N
Sensing distance		45.0 mm	45.0 mm
Emitter		Infrared LED	
Response time		1.0 ms max.	
Operating voltage	工作電壓	10 ~ 30VDC	
Ripple of power	電源漣波	20% peak to peak	
Current consumption		15.0 mA max.	
Output method	輸出方式	NPN open collector	
Output current	輸出電流	150mA max.	
Pilot LED	指示燈	Green : Power pilot ; Yellow : Operating pilot	
Output Status	輸出狀態	Standard : NO ; Appended with 「B」 : NC	
Residual voltage	殘留電壓	0.1V max.	
Leakage current	洩露電流	0.8mA max.	
Protection circuit	保護電路	Short circuit & polarity reversed protection	
Housing material	外殼材質	Cu plated Ni ; Lenz : PMMA	
Illumination	耐外亂光	Lamp light < 10,000Lux ; Sunlight < 20,000Lux	
Noise resistance	抗干擾	2kv/1	
Dielectric strength	電介強度	2.5kv / 1 μ minute min.	
Insulation strength	絕緣強度	100 M Ω / 500vdc	
Operating circum.	工作環境	-25 $^{\circ}$ C ~ +80 $^{\circ}$ C ; 35% ~ 85% RH	
Protection class	保護等級	IP-67	
Approval	認證	CE	

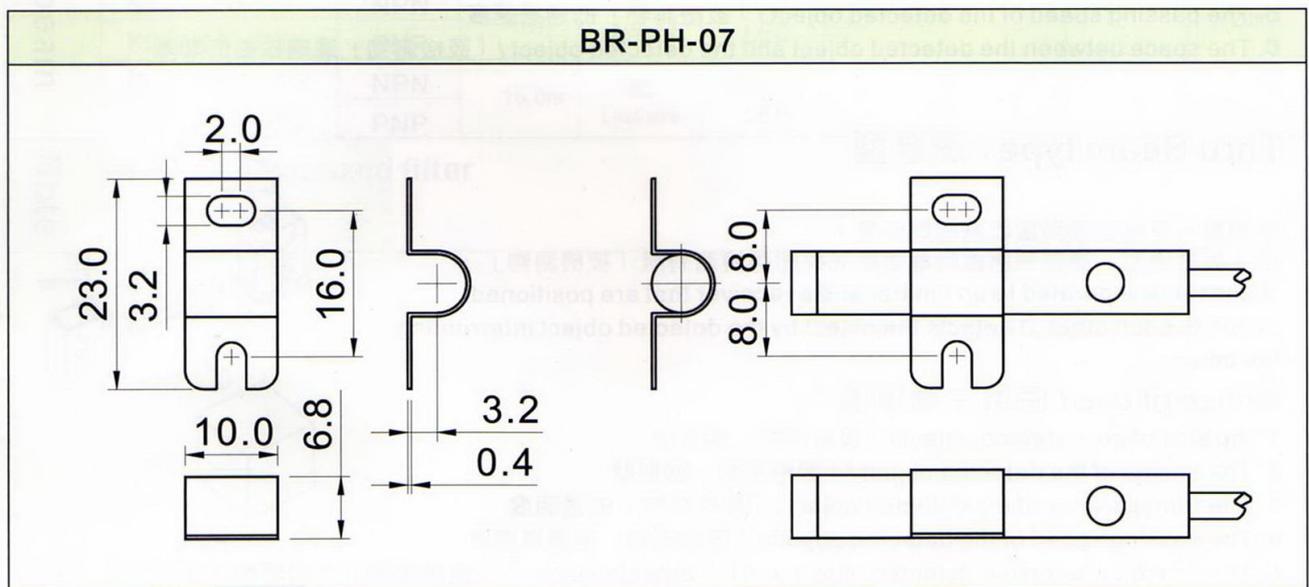
◆ Output circuit & Connection diagram / 輸出回路及接線圖



◆ Dimension / 外形尺寸圖



◆ Fixed bracket / 固定架



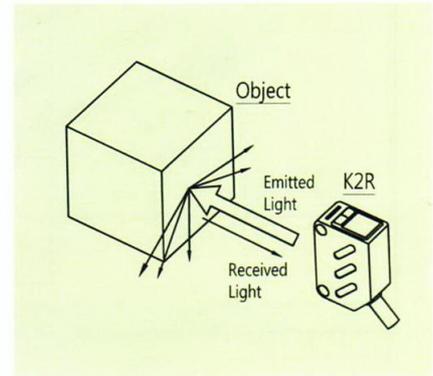
◆ Notice of use / 使用注意事項：

Reflex type / 直接反射型

感測器的發射晶體與接收晶體在同一側，依「被檢測物」反射光強弱或有無來檢測有無「被檢測物」。
A sensor contains both the emitter and the receiver in one housing, It detects the object by the reflected light from the object

Notice of use / 使用注意事項：

1. The size of the detected object / 「被檢測物」的大小
2. The outline of the detected object / 「被檢測物」的形狀
3. The transparency of the detected object / 「被檢測物」的透明度
4. The surface color of the detected object / 「被檢測物」的表面顏色
5. The passing speed of the detected object / 「被檢測物」的通過速度
6. The surface roughness of the detected object / 「被檢測物」的表面粗糙度
7. The space between the detected object and the background / 安裝空間有無背景物
8. The space between the detected object and the detected object / 「被檢測物」連續移動的間隔

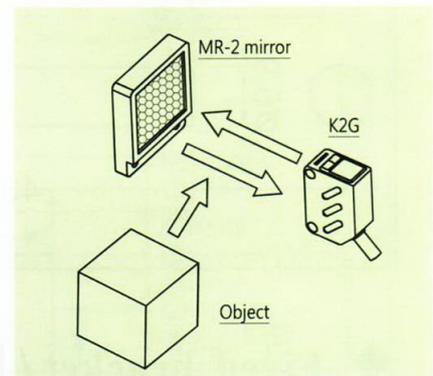


Mirror Reflex type / 鏡片反射型

感測器的發射晶體與接收晶體在同一側，須在感測器對面安裝反射鏡片；當「被檢測物」通過感測器時會遮斷光束即可檢測有無「被檢測物」。
A sensor contains both an emitter and a receiver in one housing and set a mirror on opposed side, It detects the object by the detected object interrupting the beam.

Notice of use / 使用注意事項：

1. The size of the detected object / 「被檢測物」的大小
2. The outline of the detected object / 「被檢測物」的形狀
3. The transparency of the detected object / 「被檢測物」的透明度
4. The shiny surface of the detected object / 「被檢測物」的表面亮度
5. The passing speed of the detected object / 「被檢測物」的通過速度
6. The space between the detected object and the detected object / 「被檢測物」連續移動的間隔

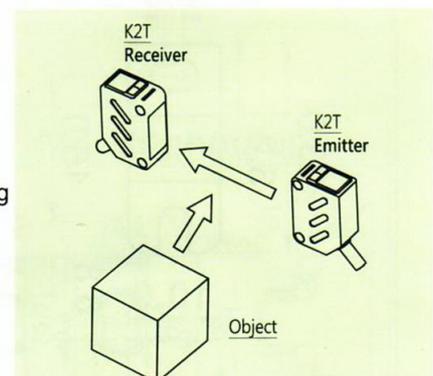


Thru Beam type / 透過型

感測器分成發射器與接收器相對安裝；當「被檢測物」通過感測器時會遮斷光束即可檢測有無「被檢測物」。
A sensor is separated to an emitter and a receiver that are positioned opposite each other, It detects the object by the detected object interrupting the beam.

Notice of use / 使用注意事項：

1. The size of the detected object / 「被檢測物」的大小
2. The outline of the detected object / 「被檢測物」的形狀
3. The transparency of the detected object / 「被檢測物」的透明度
4. The passing speed of the detected object / 「被檢測物」的通過速度
5. The space between the detected object and the detected object / 「被檢測物」連續移動的間隔



◆ Mirror/反射鏡片

Mirror / MR-1	Mirror / MR-2	Mirror / MR-3	Mirror / MR-4
<p>Fixed Hole $\varnothing 4.2 \times 2$</p>	<p>$\varnothing 3.5 \times 2$</p>	<p>$\varnothing 4.5 \times 2$</p>	<p>$\varnothing 3.2$</p>

◆ Connection cable

<h3>M8-4C-□M</h3>	<table border="1"> <thead> <tr> <th>4P PLUG</th> <th>COLOR</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BROWN</td> </tr> <tr> <td>2</td> <td>WHITE</td> </tr> <tr> <td>3</td> <td>BLUE</td> </tr> <tr> <td>4</td> <td>BLACK</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>規格</th> <th>"A"</th> <th>"B"</th> <th>"C"</th> </tr> </thead> <tbody> <tr> <td>M8-3m</td> <td>3m</td> <td>50±3mm</td> <td>5±1mm</td> </tr> <tr> <td>M8-5m</td> <td>5m</td> <td>50±3mm</td> <td>5±1mm</td> </tr> </tbody> </table>	4P PLUG	COLOR	1	BROWN	2	WHITE	3	BLUE	4	BLACK	規格	"A"	"B"	"C"	M8-3m	3m	50±3mm	5±1mm	M8-5m	5m	50±3mm	5±1mm	
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