

- ※ HIGH SPEED RESPONSE : 5 KHz
- ※ EASY TO SET OPTIMUM DETECTING STATUS WITH SENSITIVITY & EMITTING AUTOTUNNING
- ※ WHITE LIGHT EMITTER EASY TO DETECT THE RED OR GREEN MARK
- ※ CO-AXIAL DETECTOR DETECTS THE MARK MORE STABLE
- ※ DARK ON/LIGHT ON CHANGEABLE
- ※ NPN & PNP TWO OUTPUT







## ■ Specification

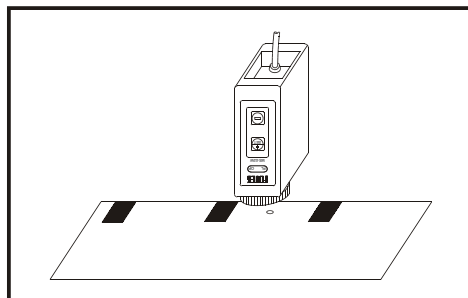
Type	型式	LEAD WIRE		M12 CONNECTER	
Model	型號	MS-02W	MS-02W-H	MS-02W-M12	MS-02W-H-M12
Response time	應答時間	0.2 mS	0.1 mS	0.2 mS	0.1 mS
Setting distance	設定距離	25.0±2.0 mm			
Emitter	發射光源	White Light Led			
Light spot	光點	2.0 φ			
Operating voltage	工作電壓	10-30 VDC; Ripple < 20% of peak to peak			
Current consumption	消耗電流	40 mA max.			
Output method	輸出方式	NPN & PNP two output			
Output status	輸出狀態	NO or NC Changeable			
Output current	輸出電流	150 mA max.			
Leakage current	漏電流	0.8 mA max.			
Residual voltage	殘留電壓	0.8 V max.			
Protection circuit	保護電路	Short Circuit & Polarity Reversed Protection			
Illumination	耐外亂光	Lamplight <5,000Lux; Sunlight < 10,000Lux			
Connection method	接線方式	4C/5.0 φ ×2m		M12 x 1.0	
Housing material	外殼材質	Intensive PBT			
Protection class	保護等級	Ip-65			
Circumstance	工作環境	-20°C ~+ 60°C ; 35% ~ 85 % RH			

## ■ Setting of Sensitivity / 感度設定



### Setting On Background/背景動作設定



After PRESSING The  Key , The LED " PL " Flicks Slowly ,  
Then Please Press The  Key to Finish The Setting Of Sensitivity  
< LED " PL " & " OP " Turn On >

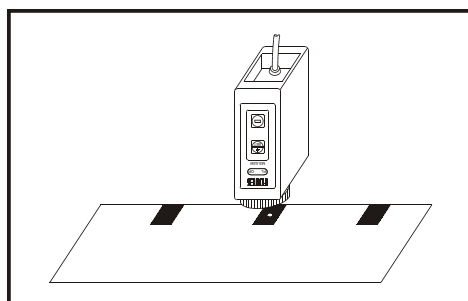
按住  鍵 3 秒後 , " PL " LED 會慢閃  
再按  鍵即可完成感度設定  
< " PL " 及 " OP " LED 都會亮著 >




### Setting On Mark Point/標誌點動作設定



After PRESSING The  Key , The LED " PL " Flicks Slowly ,  
Then Please Press The  Key to Finish The Setting Of Sensitivity  
< LED " PL " Turn On , LED " OP " Off >

按住  鍵 3 秒後 , " PL " LED 會慢閃  
再按  鍵即可完成感度設定  
< " PL " LED 亮著 " OP " LED 熄滅 >



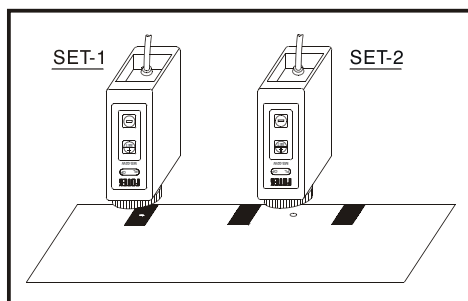
### Setting On Two Position/兩點設定

SET 1 : On the Mark Point , After Pressing The  Key 3 Sec. ,  
The LED " PL " Flicks Slowly

SET 2 : On the Background ,  
High Sensitivity To Press The  Key  
Low Sensitivity To Press The  Key

SET 1 : 再標誌點上按  鍵 3 秒 , " PL " LED 會慢閃

SET 2 : 在背景上高感度設定按  鍵 , 低感度設定按  鍵



### Remarks/備註



1 > If LED " PL " Flicks Fastly After Finishing Setting , It is The Maximun Sensitivity Condition.


完成設定後 " PL " LED 快閃 , 表示設定成最大感度狀態

2 > On The Decting Condition , If Pressing The  Key May Add The Sensitivity

Or Pressing The  Key May Reduce The Sensitivity

在檢測狀態 , 按  鍵可以增加感度 , 按  鍵可以減弱感度

3 > To Change The Output Status , Please Keep On Pressing The  Key And Pressing The  Key To Change The Output Status .

< If Keep On Pressing The  Key Over 3 Sec. Will Enter To The Setting Condition >

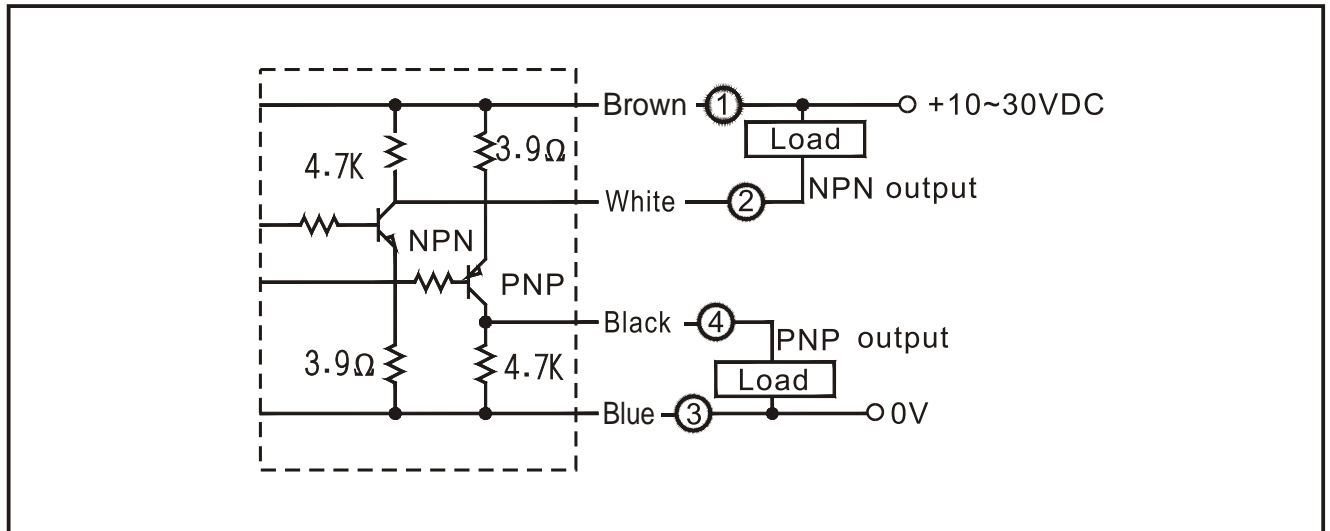
如果要改變輸出狀態 , 請按住  鍵再按  鍵即可改變輸出狀態。

< 注意,不要持續按  鍵超過3秒 , 否則會進入感度設定狀態 >

4 > On The Detecting Status , LED " PL " Is The Pilot Of Stability

在檢測狀態 , " PL " LED 是穩定指示燈

## Output Circuit/輸出迴路



## Dimension/尺寸圖

