



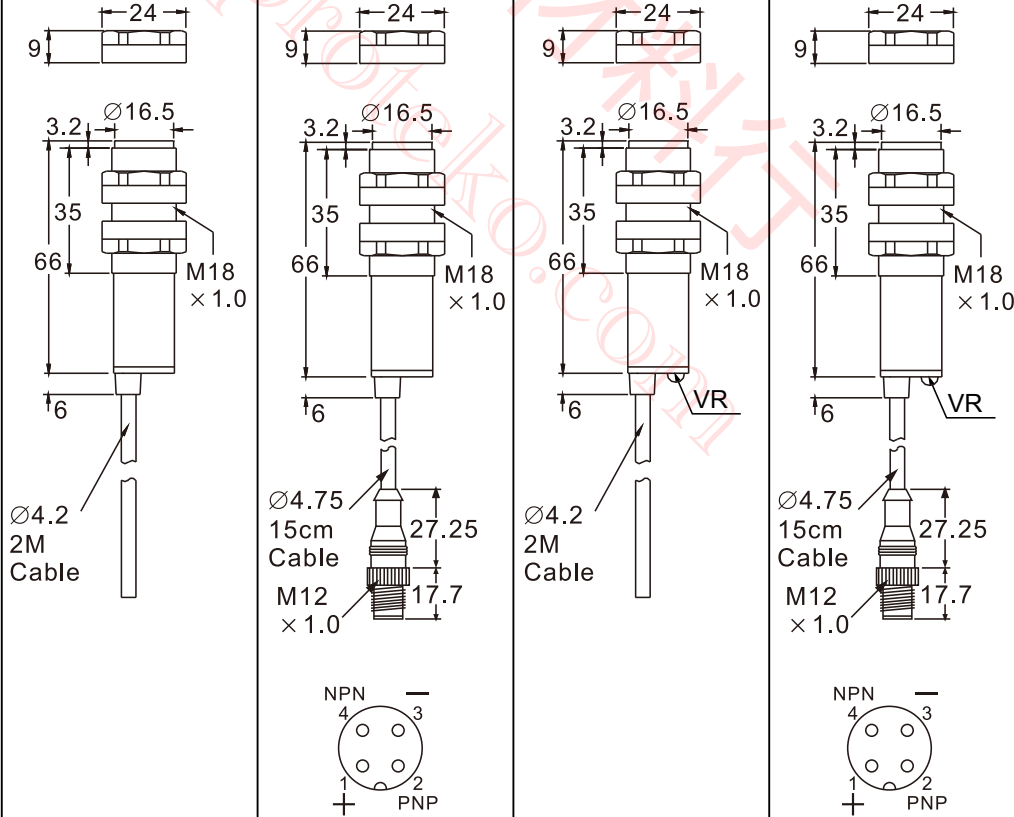


# Tubular Photo Sensor



<p>◆Shape/外觀 :</p> <p>◆Specifications / 規格表 :</p>				
Model / 型號	<b>RMF-10KP2</b>	<b>RMF-10KP2K</b>	<b>RMF-DU30KP2</b>	<b>RMF-DU30KP2K</b>
Sensing type / 檢出方式	Through beam / 對照式		Diffuse reflection / 擴散反射式	
Sensing distance / 檢出距離	10M		30 cm	
Emitting light / 發光源	Infrared LED 850 nm		Infrared LED 875 nm	
Operating voltage / 工作電壓	DC12 ~ 24 V			
Current Consumption / 消耗電流	45 mA Max./Each side		30 mA Max.	
Load current / 負載電流	100mA Max. at DC24V			
Output type / 輸出模式	NPN N.O./N.C.		PNP N.O./N.C.	
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	IP66			
Material / 外觀材質	ABS			
Wiring method / 出線方式	Pre-wired Ø5.2 x 2 M / 4-wires	M12 pigtailed type / M12 接頭15cm電線式	Pre-wired Ø4.2 x 2M / 4-wires	M12 pigtailed type / M12 接頭15cm電線式
Weight / 重量	Approx.160g	Approx.60g	Approx.80g	Approx.40g
◆Dimensions/尺寸圖 :				

Fiber  
Photo Sensor  
Area Sensor  
Ultrasonic Sensors  
Inductive Proximity Sensor  
Capacitive Proximity Sensor  
Timer / Counter  
Others  
Accessories

# RMF

## Tubular Photo Sensor

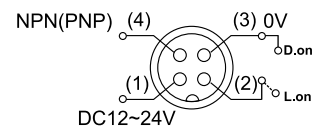
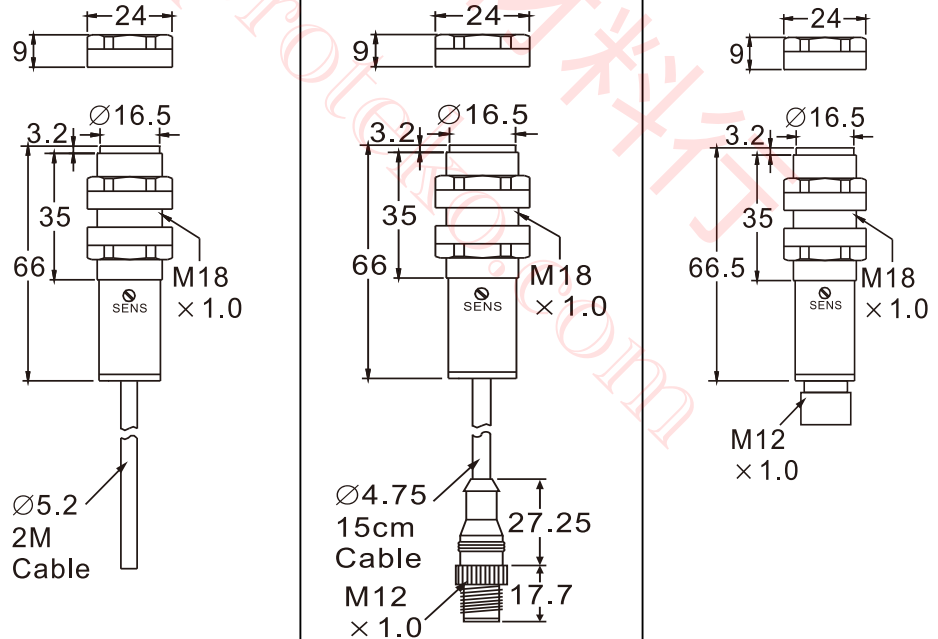
### ◆Shape/外觀：



### ◆Specifications / 規格表：




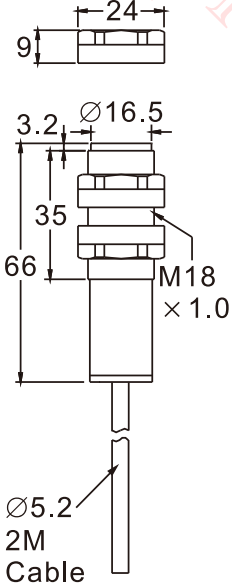
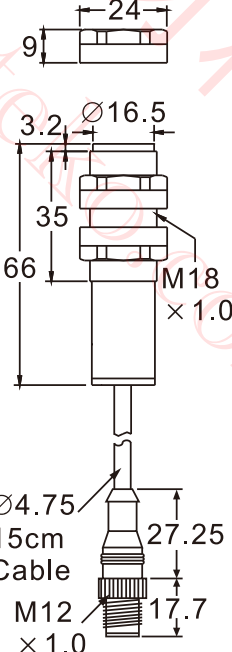
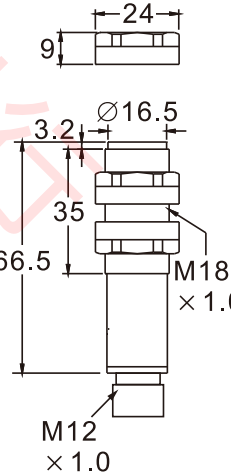
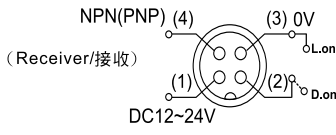
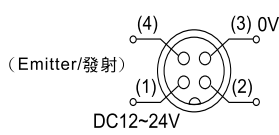
Model / 型號	<b>RMF-DU10</b> □ <b>RMF-DU40</b> □	<b>RMF-DU10</b> □ <b>K</b> <b>RMF-DU40</b> □ <b>K</b>	<b>RMF-DU10</b> □ <b>K1</b> <b>RMF-DU40</b> □ <b>K1</b>
Sensing type / 檢出方式	Diffuse reflection / 擴散反射式		
Sensing distance / 檢出距離	10 cm 40 cm		
Emitting light / 發光源	Infrared LED 875 nm		
Operating voltage / 工作電壓	DC12 ~ 24 V		
Current Consumption / 消耗電流	25 mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Output type / 輸出模式	[N] : NPN L.on/D.on / [P] : PNP L.on/D.on		
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	IP66		
Material / 外觀材質	ABS		
Wiring method / 出線方式	Pre-weird Ø5.2 x 2 M / 4-wires	M12 pigtailed connector type / M12 接頭15cm電線式	M12 plug-in connector type / M12 接頭
Weight / 重量	Approx.85g	Approx.35g	Approx.20g

### ◆Dimensions/尺寸圖：



# Tubular Photo Sensor



<p>◆Shape/外觀 :</p> <p>◆Specifications / 規格表 :</p>				Fiber	Photo Sensor	Area Sensor	Ultrasonic Sensors	Inductive Proximity Sensor	Capacitive Proximity Sensor	Timer / Counter	Others	Accessories
Model / 型號	<p><b>RMF-10□</b> <b>RMF-20□</b></p>	<p><b>RMF-10□K</b> <b>RMF-20□K</b></p>	<p><b>RMF-10□K1</b> <b>RMF-20□K1</b></p>									
Sensing type / 檢出方式	Through beam / 對照式											
Sensing distance / 檢出距離	<p>10 M 20 M</p>											
Emitting light / 發光源	Infrared LED 850 nm											
Operating voltage / 工作電壓	DC12 ~ 24 V											
Current Consumption / 消耗電流	45 mA Max.											
Load current / 負載電流	100mA Max. at DC24V											
Output type / 輸出模式	<p>□N : NPN L.on/D.on / □P : PNP L.on/D.on</p>											
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 ~ + 55°C											
Ambient humidity / 工作溼度	35% ~ 85% RH											
Protection degree / 防水等級	IP66											
Material / 外觀材質	ABS											
Wiring method / 出線方式	<p>RX:Pre-wired / 4-wire Ø5.2 x 2 M TX:Pre-wired / 2-wire Ø5.2 x 2 M</p>	<p>M12 pigtailed connector type / M12 接頭15cm電線式</p>	<p>M12 plug-in connector type / M12 接頭</p>									
Weight / 重量	Approx.165g	Approx.70g	Approx.40g									
<p>◆Dimensions/尺寸圖 :</p>	 <p>Ø5.2 2M Cable</p>	 <p>Ø4.75 15cm Cable M12 × 1.0</p>	 <p>M12 × 1.0</p>									
 <p>(Receiver/接收)</p> <p>DC12~24V</p>		 <p>(Emitter/發射)</p> <p>DC12~24V</p>										

# RMF

## Tubular Photo Sensor

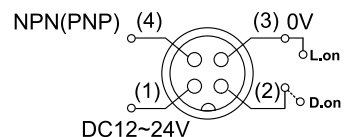
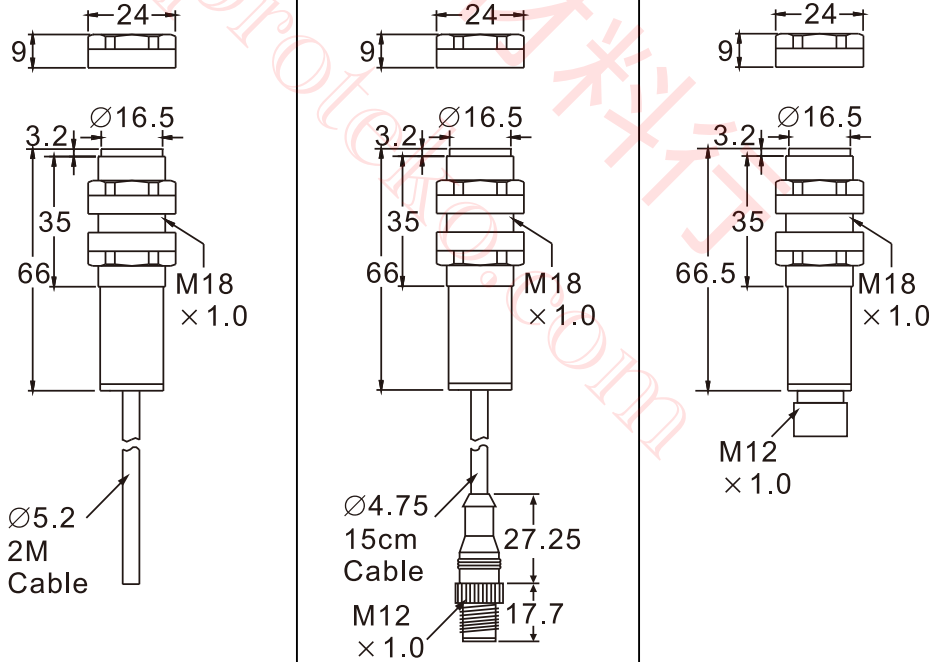
### ◆Shape/外觀：



### ◆Specifications / 規格表：




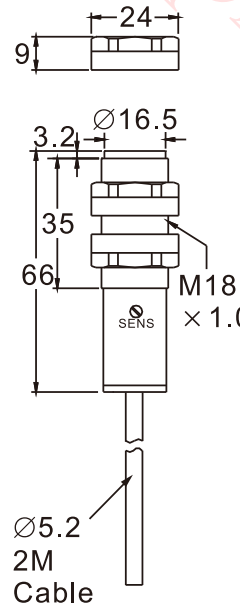
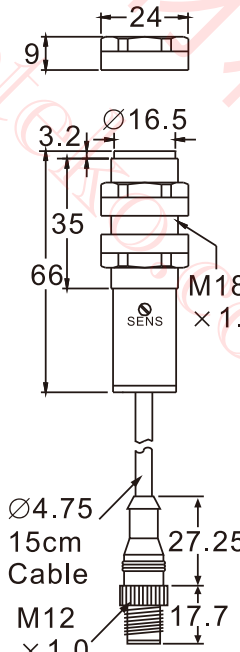
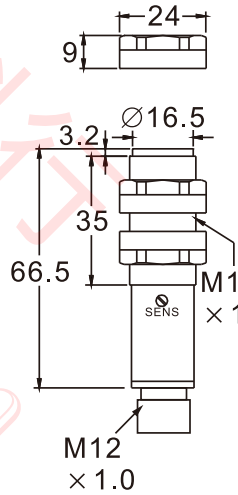
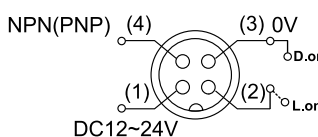
Model / 型號	RMF-CR2□	RMF-CR2□K	RMF-CR2□K1
Sensing type / 檢出方式	Retroreflective / 鏡片反射式		
Sensing distance / 檢出距離	2M		
Emitting light / 發光源	Infrared LED 940 nm		
Operating voltage / 工作電壓	DC12 ~ 24 V		
Current Consumption / 消耗電流	25 mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Output type / 輸出模式	□N : NPN L.on/D.on / □P : PNP L.on/D.on		
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	IP66		
Material / 外觀材質	ABS		
Wiring method / 出線方式	Pre-weird Ø5.2 x 2 M / 4-wires	M12 pigtailed connector type / M12 接頭15cm電線式	M12 plug-in connector type / M12 接頭
Weight / 重量	Approx.85g	Approx.35g	Approx.20g

### ◆Dimensions/尺寸圖：



# Tubular Photo Sensor

# MMF

<p>◆Shape/外觀 :</p> <p>◆Specifications / 規格表 :</p>				<p>Fiber</p> <p>Photo Sensor</p> <p>Area Sensor</p> <p>Ultrasonic Sensors</p> <p>Inductive Proximity Sensor</p> <p>Capacitive Proximity Sensor</p> <p>Timer / Counter</p> <p>Others</p> <p>Accessories</p>
<p>Model / 型號</p> <p>Sensing type / 檢出方式</p> <p>Sensing distance / 檢出距離</p> <p>Emitting light / 發光源</p> <p>Operating voltage / 工作電壓</p> <p>Current Consumption / 消耗電流</p> <p>Load current / 負載電流</p> <p>Output type / 輸出模式</p> <p>Response time / 反應時間</p> <p>Insulation resistance / 隔離阻抗</p> <p>Voltage withstandability / 絕緣耐壓</p> <p>Operating temperature/工作溫度</p> <p>Ambient humidity / 工作溼度</p> <p>Protection degree / 防水等級</p> <p>Material / 外觀材質</p> <p>Wiring method / 出線方式</p> <p>Weight / 重量</p>	<p><b>MMF-DU10□</b> <b>MMF-DU40□</b></p> <p>Diffuse reflection / 擴散反射式</p> <p>10 cm 40 cm</p> <p>Infrared LED 875 nm</p> <p>DC12 ~ 24 V</p> <p>25 mA Max.</p> <p>100mA Max. at DC24V</p> <p>□N : NPN L.on/D.on / □P : PNP L.on/D.on</p> <p>1.5 ms Max.</p> <p>20MΩ min. (DC500V)</p> <p>AC1000V 60Hz for 60 Sec.</p> <p>- 20 °C ~ + 60°C</p> <p>35% ~ 85% RH</p> <p>IP66</p> <p>Nickel plated brass</p> <p>Pre-wired Ø5.2 x 2 M / 4-wires</p> <p>Approx.105g</p>	<p><b>MMF-DU10□K</b> <b>MMF-DU40□K</b></p> <p>Diffuse reflection / 擴散反射式</p> <p>10 cm 40 cm</p> <p>Infrared LED 875 nm</p> <p>DC12 ~ 24 V</p> <p>25 mA Max.</p> <p>100mA Max. at DC24V</p> <p>□N : NPN L.on/D.on / □P : PNP L.on/D.on</p> <p>1.5 ms Max.</p> <p>20MΩ min. (DC500V)</p> <p>AC1000V 60Hz for 60 Sec.</p> <p>- 20 °C ~ + 60°C</p> <p>35% ~ 85% RH</p> <p>IP66</p> <p>Nickel plated brass</p> <p>M12 pigtailed connector type / M12 接頭15cm電線式</p> <p>Approx.50g</p>	<p><b>MMF-DU10□K1</b> <b>MMF-DU40□K1</b></p> <p>Diffuse reflection / 擴散反射式</p> <p>10 cm 40 cm</p> <p>Infrared LED 875 nm</p> <p>DC12 ~ 24 V</p> <p>25 mA Max.</p> <p>100mA Max. at DC24V</p> <p>□N : NPN L.on/D.on / □P : PNP L.on/D.on</p> <p>1.5 ms Max.</p> <p>20MΩ min. (DC500V)</p> <p>AC1000V 60Hz for 60 Sec.</p> <p>- 20 °C ~ + 60°C</p> <p>35% ~ 85% RH</p> <p>IP66</p> <p>Nickel plated brass</p> <p>M12 plug-in connector type / M12 接頭</p> <p>Approx.40g</p>	
<p>◆Dimensions/尺寸圖 :</p>	 <p>Ø5.2 2M Cable</p>	 <p>Ø4.75 15cm Cable</p>		
				

# MMF

## Tubular Photo Sensor

Fiber  
Photo Sensor  
Area Sensor  
Ultrasonic Sensors  
Inductive Proximity Sensor  
Capacitive Proximity Sensor  
Timer / Counter  
Others  
Accessories

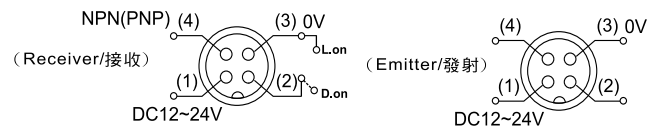
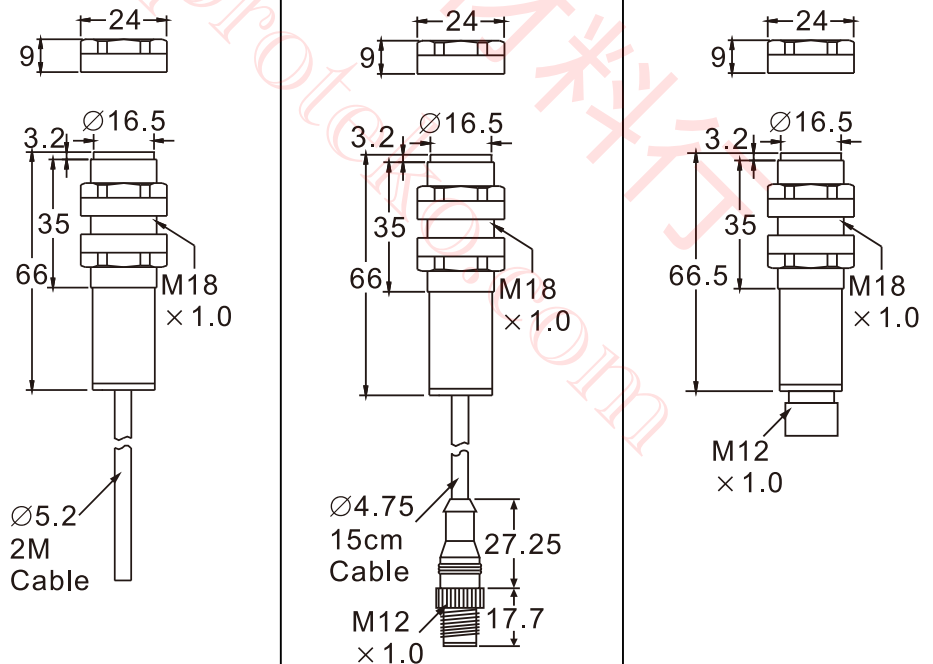
◆Shape/外觀 :



◆Specifications / 規格表 :




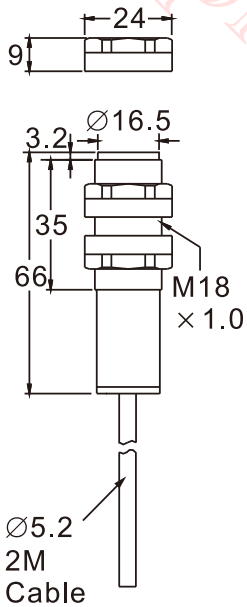
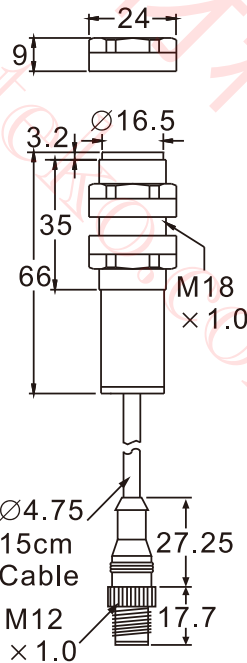
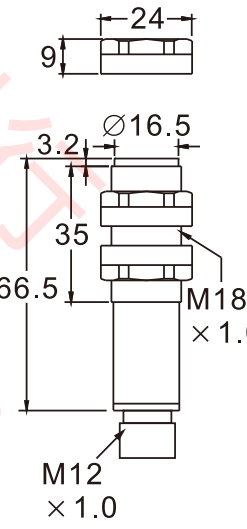
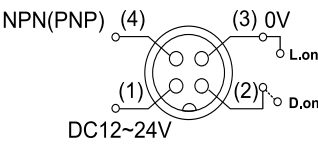
Model / 型號	<b>MMF-10</b> □ <b>MMF-20</b> □	<b>MMF-10</b> □ <b>K</b> <b>MMF-20</b> □ <b>K</b>	<b>MMF-10</b> □ <b>K1</b> <b>MMF-20</b> □ <b>K1</b>
Sensing type / 檢出方式	Through beam / 對照式		
Sensing distance / 檢出距離	10 M 20 M		
Emitting light / 發光源	Infrared LED 850 nm		
Operating voltage / 工作電壓	DC12 ~ 24 V		
Current Consumption / 消耗電流	45 mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Output type / 輸出模式	[N] : NPN L.on/D.on / [P] : PNP L.on/D.on		
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 ~ + 55 °C		
Ambient humidity / 工作溼度	35% ~ 85% RH		
Protection degree / 防水等級	IP66		
Material / 外觀材質	Nickel plated brass		
Wiring method / 出線方式	RX:Pre-wired / 4-wires Ø5.2x2 M TX:Pre-wired / 2-wires Ø5.2x2 M	M12 pigtailed connector type / M12 接頭15cm電線式	M12 plug-in connector type / M12 接頭
Weight / 重量	Approx.210g	Approx.100g	Approx.80g

◆Dimensions/尺寸圖 :



# Tubular Photo Sensor



<p>◆Shape/外觀 :</p> <p>◆Specifications / 規格表 :</p>				Fiber
Model / 型號	MMF-CR2□	MMF-CR2□K	MMF-CR2□K1	Photo Sensor
Sensing type / 檢出方式	Retroreflective / 鏡片反射式			Area Sensor
Sensing distance / 檢出距離	2M			Ultrasonic Sensors
Emitting light / 發光源	Infrared LED 940 nm			Inductive Proximity Sensor
Operating voltage / 工作電壓	DC12 ~ 24 V			Capacitive Proximity Sensor
Current Consumption / 消耗電流	25 mA Max.			Timer / Counter
Load current / 負載電流	100mA Max. at DC24V			Others
Output type / 輸出模式	<input type="checkbox"/> N : NPN L.on/D.on / <input type="checkbox"/> P : PNP L.on/D.on			Accessories
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	IP66			
Material / 外觀材質	Nickel plated brass			
Wiring method / 出線方式	Pre-wired Ø5.2 x 2 M / 4-wires	M12 pigtailed connector type / M12 接頭15cm電線式	M12 plug-in connector type / M12 接頭	
Weight / 重量	Approx.105g	Approx.50g	Approx.40g	
<p>◆Dimensions/尺寸圖 :</p>	 <p>Ø5.2 2M Cable</p>	 <p>Ø4.75 15cm Cable M12 × 1.0</p>	 <p>M12 × 1.0</p>	
				

# MMF

## Tubular Photo Sensor

Fiber  
Photo Sensor  
Area Sensor  
Ultrasonic Sensors  
Inductive Proximity Sensor  
Capacitive Proximity Sensor  
Timer / Counter  
Others  
Accessories

### ◆Characteristic / 特點 :

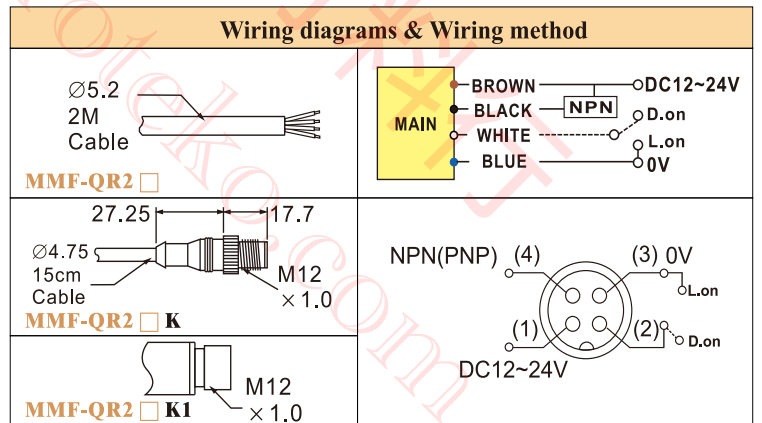
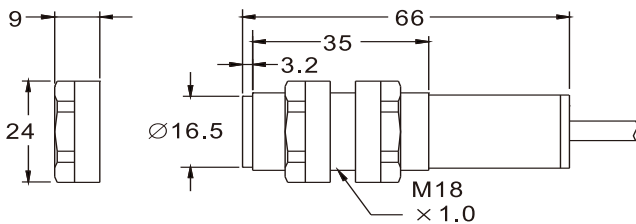
- Using high brightness red LED, its light-spot is visible and clear.  
/採用超高亮度紅色發光LED，光點清晰可見。
- It is easy to detect transparent objects.  
/易於簡單辨別透明物體檢出。



### ◆Specifications / 規格表 :

Model / 型號	MMF-QR2□	MMF-QR2□K	MMF-QR2□K1
Sensing type / 檢出方式	Retroreflective(Red LED) / 鏡片反射式(紅光)		
Sensing distance / 檢出距離	2M		
Emitting light / 發光源	Red LED 650 nm		
Operating voltage / 工作電壓	DC12 ~ 24 V		
Current Consumption / 消耗電流	25 mA Max.		
Load current / 負載電流	100mA Max. at DC24V		
Output type / 輸出模式	□N : NPN L.on/D.on / □P : PNP L.on/D.on		
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	IP66		
Material / 外觀材質	Nickel plated brass		
Wiring method / 出線方式	Pre-wired Ø5.2 x 2 M / 4-wires	M12 pigtailed connector type / M12 接頭15cm電線式	M12 plug-in connector type / M12 接頭
Weight / 重量	Approx.105g	Approx.50g	Approx.40g

### ◆Dimensions/尺寸圖 :



### ◆Clearly visible red LED / 清晰可見的紅光LED

The visible red LED is available at the distance of 40cm. It is easy for your installation and detection.  
/使用紅光LED，即使在40cm的距離，一樣可以清楚的看見紅光，讓您在安裝檢測時更方便。

