

◆ Characteristic / 特點 :

- Small size, 10 mm thickness, can be mounted in a small space. Several amplifiers can be mounted side by side.
/ 體積薄，厚度只有10mm，使用空間小，多個併排安裝。
- 20-Turns Sensitivity Adjuster. The optimum sensitivity can be set easily.
/ 多迴轉(20 TURNS)靈敏度調整。
- Long (Long distance) : 8~11cm/ Middle (Middle distance) : 4~6cm selectable.
/ 可選擇Long/ Middle檢測距離。



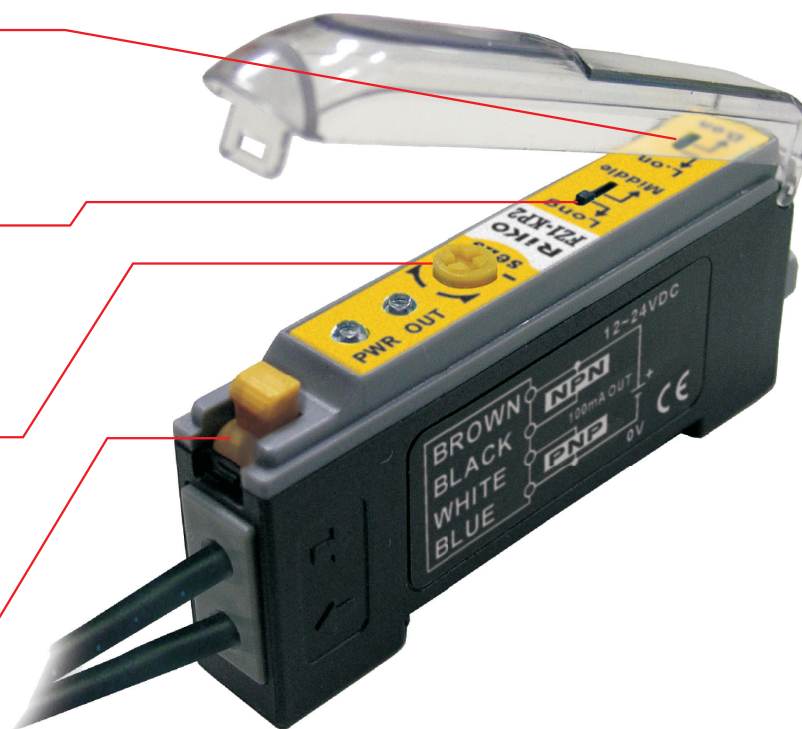
• FZ1-KP2

L.on/D.on Switch
Easy selection to switch the output operation as either Light-ON or Dark-ON.

Sensing Distance Switch
Long, Middle selectable.

20-turn Sensitivity Adjuster
Users can adjust the sensitivity more optimum according to different objects.

Fiber Lock Lever
Special design for fiber cables fixed. Simple operation and easy maintenance.

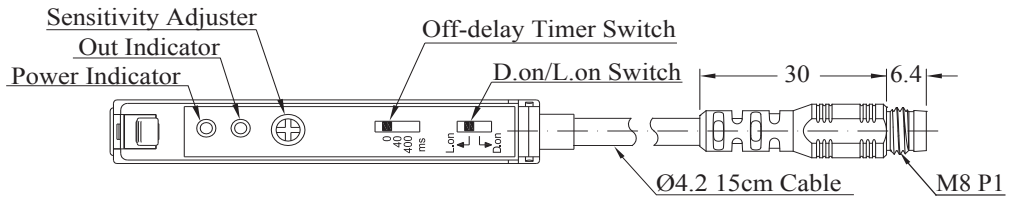


◆ Specifications / 規格表 :

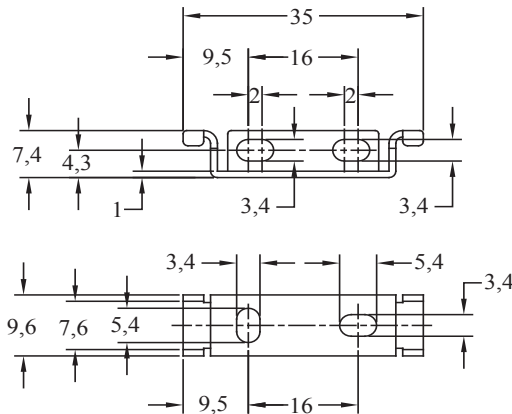
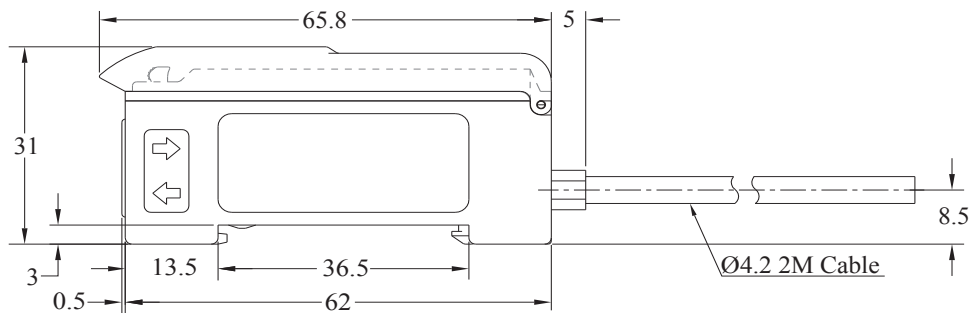
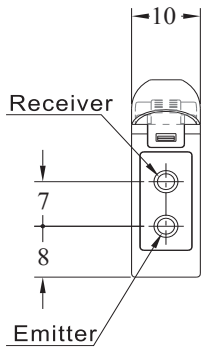
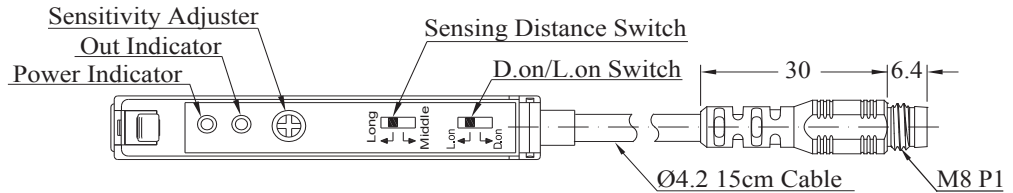
| Model / 型號 | NPN L.on / D.on | FZ1-N | FZ1-ND | FZ1-NI |
|---------------------------------|--|--------------------------------------|-------------|--------------------------------|
| | PNP L.on / D.on | FZ1-P | FZ1-PD | FZ1-PI |
| | NPN L.on / D.on PNP D.on / L.on | FZ1-KP2 | FZ1-KP2B | - |
| Emitting light / 發光源 | Red LED 680 nm | | | Infrared LED 850nm |
| Operating voltage / 工作電壓 | DC12~24V ± 5% | | | |
| Current Consumption / 消耗電流 | 40mA Max. | | | |
| Load current / 負載電流 | 100mA Max.at DC24V | | | |
| Protection circuit / 保護電路 | Reversed polarity protection, over-current protection | | | |
| Response time / 反應時間 | on 1 ms, off 1ms | | | |
| Indicators/指示燈 | Output indicator : Red LED, Power indicator : Green LED | | | |
| Sensitivity adjusrment/靈敏度功能 | 20 turns trimmer | | | |
| Insulation resistance / 隔離阻抗 | 20MΩ min. (DC500V) | | | |
| Voltage withstandabiligy / 絕緣耐壓 | AC500V 60Hz for 60 Sec. | | | |
| Operating temperature/工作溫度 | - 10 °C ~ + 60 °C | | | |
| Ambient humidity / 工作溼度 | 35% ~ 85% RH | | | |
| Protection degree / 防水等級 | IP64 | | | |
| Material / 外觀材質 | ABS | | | |
| Wiring method / 出線方式 | N/P : Pre-wired Ø4.2 x 2 M / 3-wires KP2 : Pre-wired Ø4.2 x 2 M / 4-wires | M8 pigtailed type / M8 接頭 15cm電線式 | | Pre-wired Ø4.2 x 2 M / 3-wires |
| Weight / 重量 | Approx. 65g | | Approx. 35g | Approx. 65g |

◆ Dimensions / 外型尺寸圖 : (unit:mm)

• FZ1-N/P

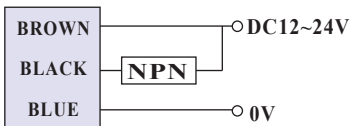


• FZ1-KP2

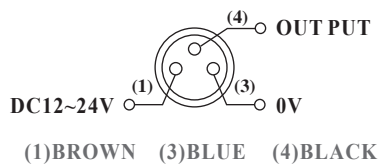


◆ Wiring diagrams / 接線圖 :

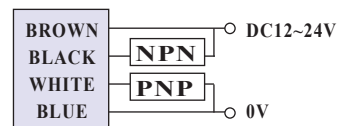
NPN Output



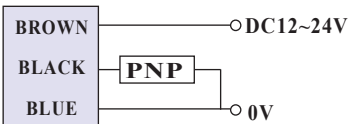
D Type Output



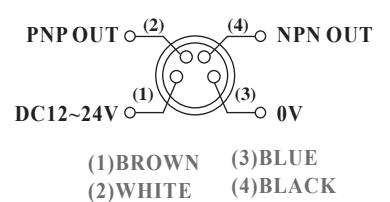
KP2 Output



PNP Output

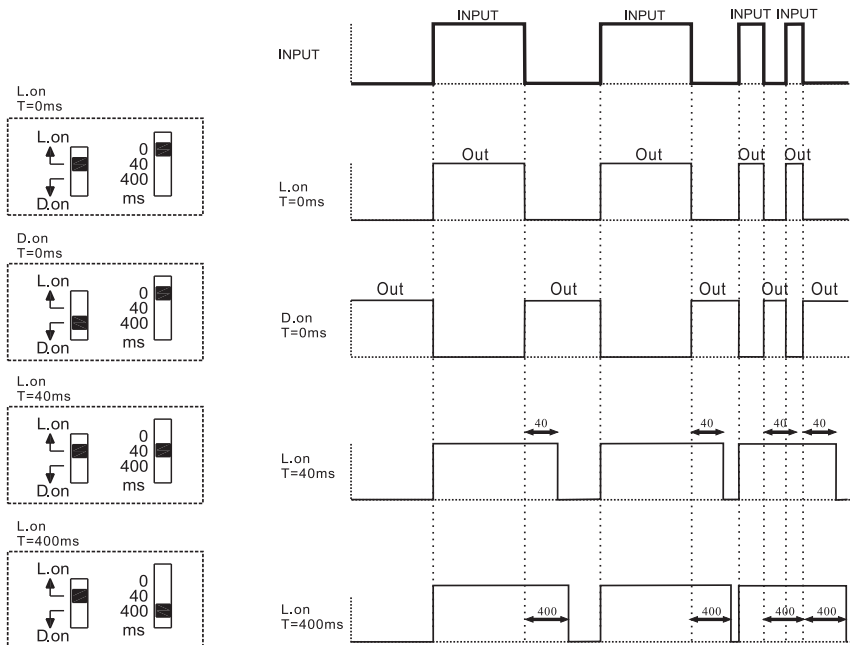
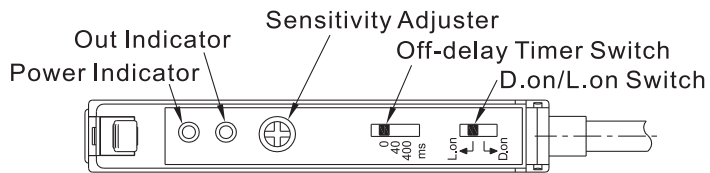


KP2B Output



- Fiber Sensor
- FZ1
- BR1 /BR2 /BR3
- PR /PT
- FR /FT
- Glass Fiber
- Light Guide
- Silica Fiber
- Acc.

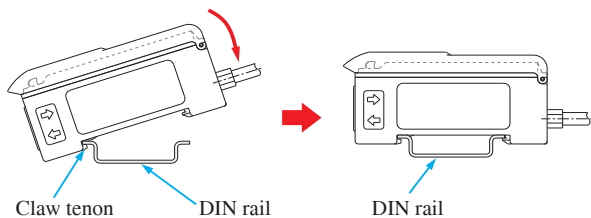
◆ FZ1-N/P Operation timing chart :



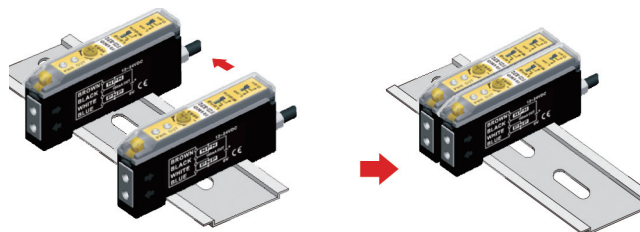
◆ Fiber amplifier mounting/detaching operation :

1. Mounting / 安裝

(1) To mount each amplifier to the attached mounting bracket or DIN rail in sequence.



(2) To connect two amplifiers close together by sliding the amplifier bodies.



2. Detaching / 卸下

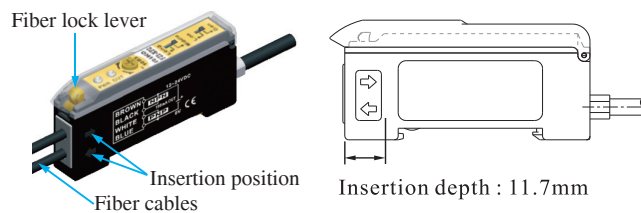
*To detach the amplifiers in sequence by sliding the amplifier bodies. Don't detach two amplifiers at a time.

⚠ Be sure to switch off the power supply when mounting or detaching the amplifier.

◆ Fiber cables fixing operation :

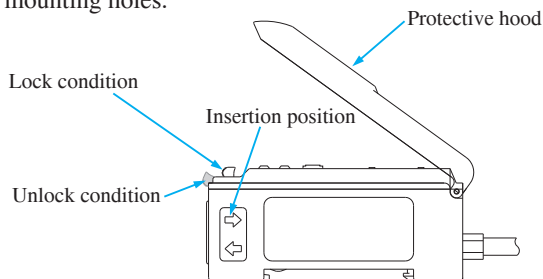
1. Insert the fiber cables / 插入光纖

*Open the protective hood and tilt the fiber lock lever to release the lock condition. Referring to the side seal of insertion position, fully insert the fiber cables into the mounting holes until the limit. Pull the fiber lock lever back to lock the cables.



2. Pull out the fiber cables / 拔出光纖

*Open the protective hood and tilt the fiber lock lever to release the lock condition. Pull the fiber cables straight out from the mounting holes.



⚠ 1. To protect the fiber cables from incorrect operation, be sure to tilt the fiber lock lever to release the lock condition before pulling out the fiber cables.
2. Pull up the protective hood forcefully may damage the fixing pin of the hood (**not exceed 90 degrees**).