

Wire-saving Y type connector SFB-WY1, SFC-WY1

MJE-SFBWY1 No.0061-53V

Thank you very much for purchasing Panasonic products.
Please read this Instruction Manual carefully and thoroughly for the correct and optimum use of this product.
Kindly keep this manual in a convenient place for quick reference.

1 PRODUCT OUTLINE

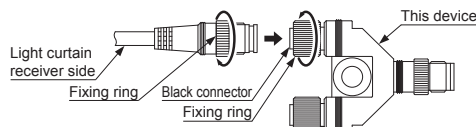
- This device is connector which can organize a emitter and a receiver cables of the light curtain. When connecting the light curtain to a control unit **SF-C13** or a safety PLC, it is allowed to connect as wire-saving.
- SFB-WY1** must be used in combination with **SF4D** or **SF4B/SF4B<V2>** series and 8-core cable.
- SFC-WY1** can be used for **SF4C-H□-J05**.

Note: For the synchronization of **SF4D** series, set the unit for line synchronization (default setting).
For more details, refer to the "SF4D Series User's Manual".

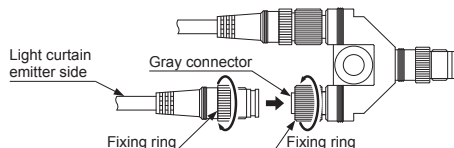
2 MOUNTING

<Connecting method>

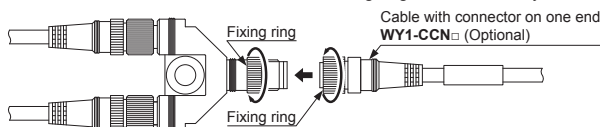
- Insert a connector of light curtain receiver to a black connector of light curtain side of this device and twist the fixing ring to be fixed firmly.



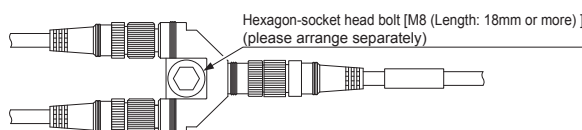
- Insert a connector of light curtain emitter to a gray connector of light curtain side of this device and twist the fixing ring to be fixed firmly.



- Insert a cable with connector on one end, **WY1-CCN□** (optional), to a connector of control unit side of this device and twist the fixing ring to be fixed firmly.

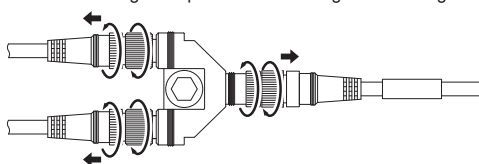


- In case mounting this device, a hexagon-socket head bolt [M8 (Length: 18mm or more) (please arrange separately)] is used. The tightening torque should be 5.5 N·m.



<Removing method>

- loosen the each fixed rings and pull out with holding the fixed ring.



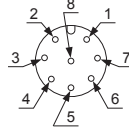
CAUTION

- When removing, confirm that the fixed ring is completely loosened. And pull out. If pull out with excessive power when the fixed ring is tightened, it may break.
- When mounting this device with a hexagon-socket head bolt, tightening with excessive power makes it break.
- When mounting this device with a hexagon-socket head bolt, be sure not to apply any stresses to cables of the light curtain. The connector may breaks.

3 TERMINAL ARRANGEMENT

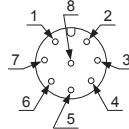
- Wire-saving Y type connector / **SFB-WY1□SFC-WY1**

Terminal No.	Description	
	SFB-WY1	SFC-WY1
1	Control output 2 (OSSD 2)	Control output 2 (OSSD 2)
2	+V	+V
3	Control output 1 (OSSD 1)	Control output 1 (OSSD 1)
4	Not to be used	Not to be used
5	Not to be used	Large multi-purpose indicator input 1
6	Not to be used	Large multi-purpose indicator input 2
7	0V	0V
8	Output polarity setting wire	Output polarity setting wire



- Cable with connector on one end / **WY1-CCN□** (optional)

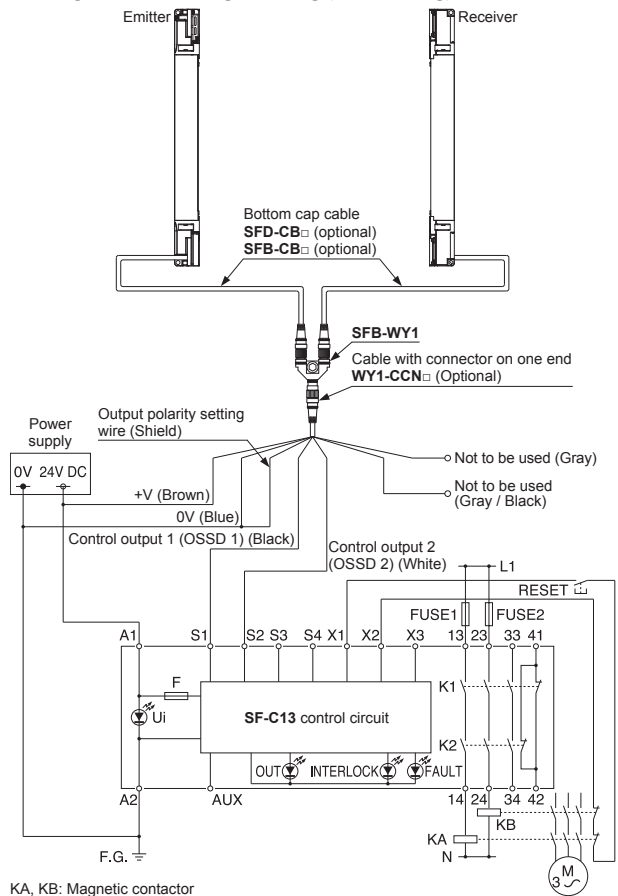
Terminal No.	Color code	Description	
		Connecting to SFB-WY1	Connecting to SFC-WY1
1	White	Control output 2 (OSSD 2)	Control output 2 (OSSD 2)
2	Brown	+V	+V
3	Black	Control output 1 (OSSD 1)	Control output 1 (OSSD 1)
4	—	Not to be used	Not to be used
5	Gray	Not to be used	Large multi-purpose indicator input 1
6	Gray / Black	Not to be used	Large multi-purpose indicator input 2
7	Blue	0V	0V
8	Shield	Output polarity setting wire	Output polarity setting wire



4 WIRING EXAMPLE

In case wiring **SF4D** series, **SF4B** / **SF4B<V2>** series to **SF-C13**

<Wiring for the minus grounding (PNP setting)>



KA, KB: Magnetic contactor

- Notes: 1) The circuit diagram shown above is for manual reset. In case using it as an auto reset, rewrite the wire connecting X2 to X3. In this case, a reset button is not needed.
2) Use a switch of momentary type for the reset button.
3) Make sure to insulate the ends of the unused lead wires.

Got questions on connecting to your SF4 series safety light curtain?

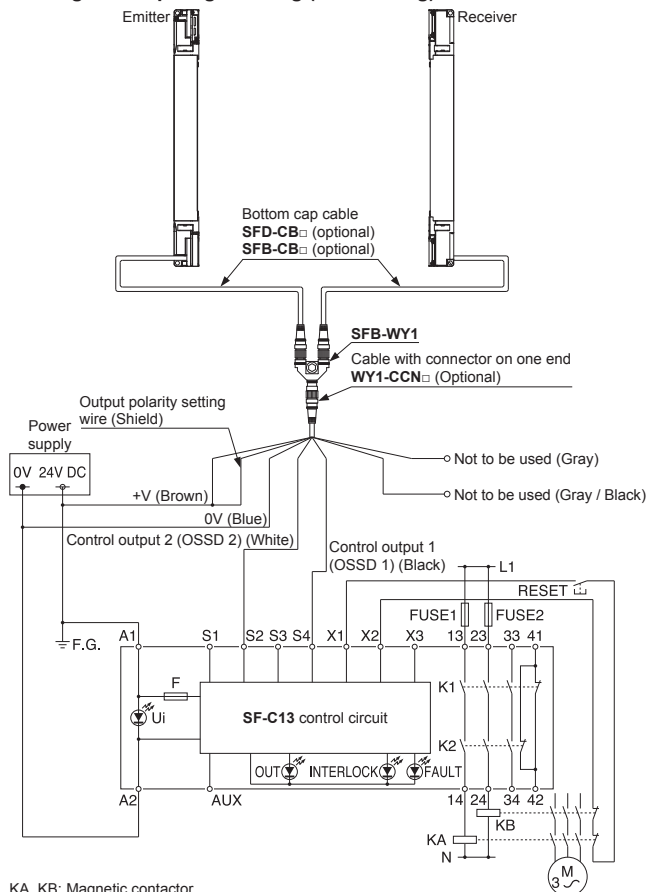
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Toll Free at (800) 280-6933

email us at nsales@ramcoi.com

<Wiring for the plus grounding (NPN setting)>

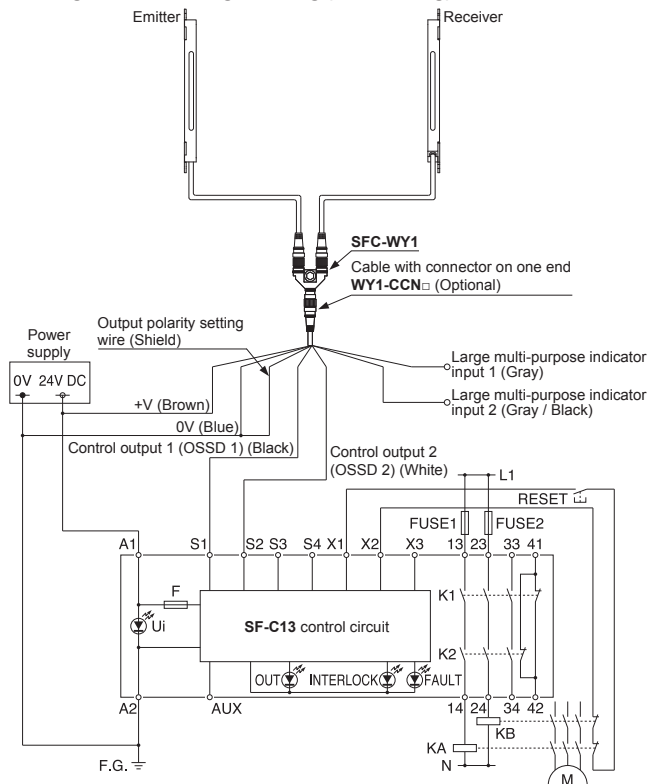


KA, KB: Magnetic contactor

- Notes: 1) The circuit diagram shown above is for manual reset. In case using it as an auto reset, rewire the wire connecting X2 to X3. In this case, a reset button is not needed.
2) Use a switch of momentary type for the reset button.
3) Make sure to insulate the ends of the unused lead wires.

In case wiring SF4C-H□-J05 to SF-C13

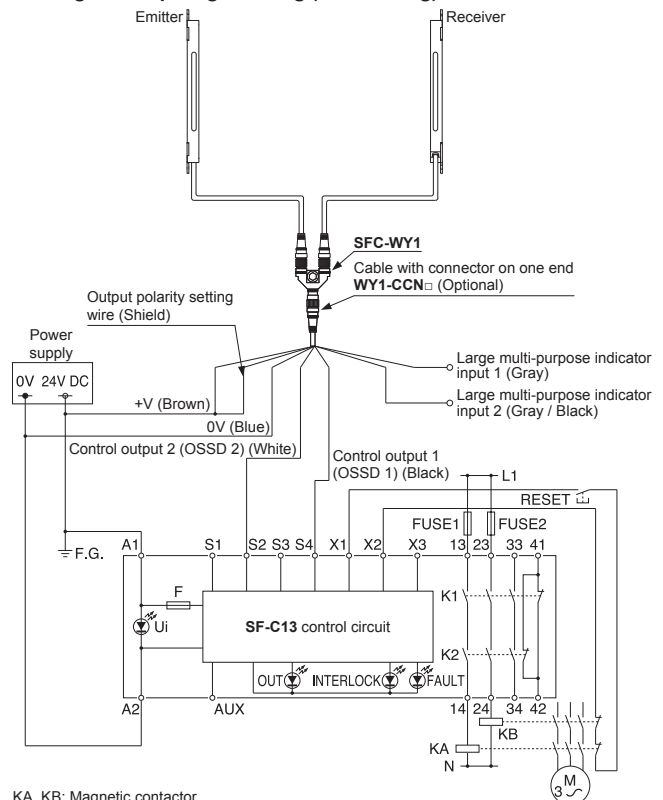
<Wiring for the minus grounding (PNP setting)>



KA, KB: Magnetic contactor

- Notes: 1) The circuit diagram shown above is for manual reset. In case using it as an auto reset, rewire the wire connecting X2 to X3. In this case, a reset button is not needed.
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<Wiring for the plus grounding (NPN setting)>

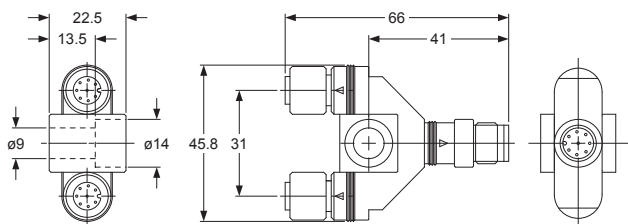


KA, KB: Magnetic contactor

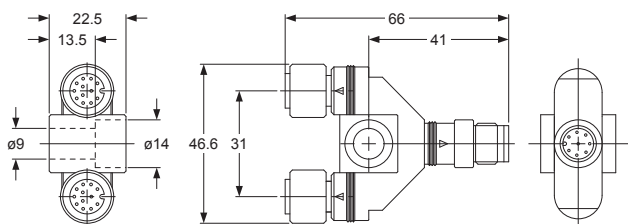
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3) Make sure to insulate the ends of the unused lead wires.

5 DIMENSIONS (Unit: mm)

• SFB-WY1



• SFC-WY1



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Overseas Sales Division (Head Office)

2431-1 Ushiyama-cho, Kasugai-shi, Aichi, 486-0901, Japan

Phone: +81-568-33-7861 FAX: +81-568-33-8591

For sales network, please visit our website.