

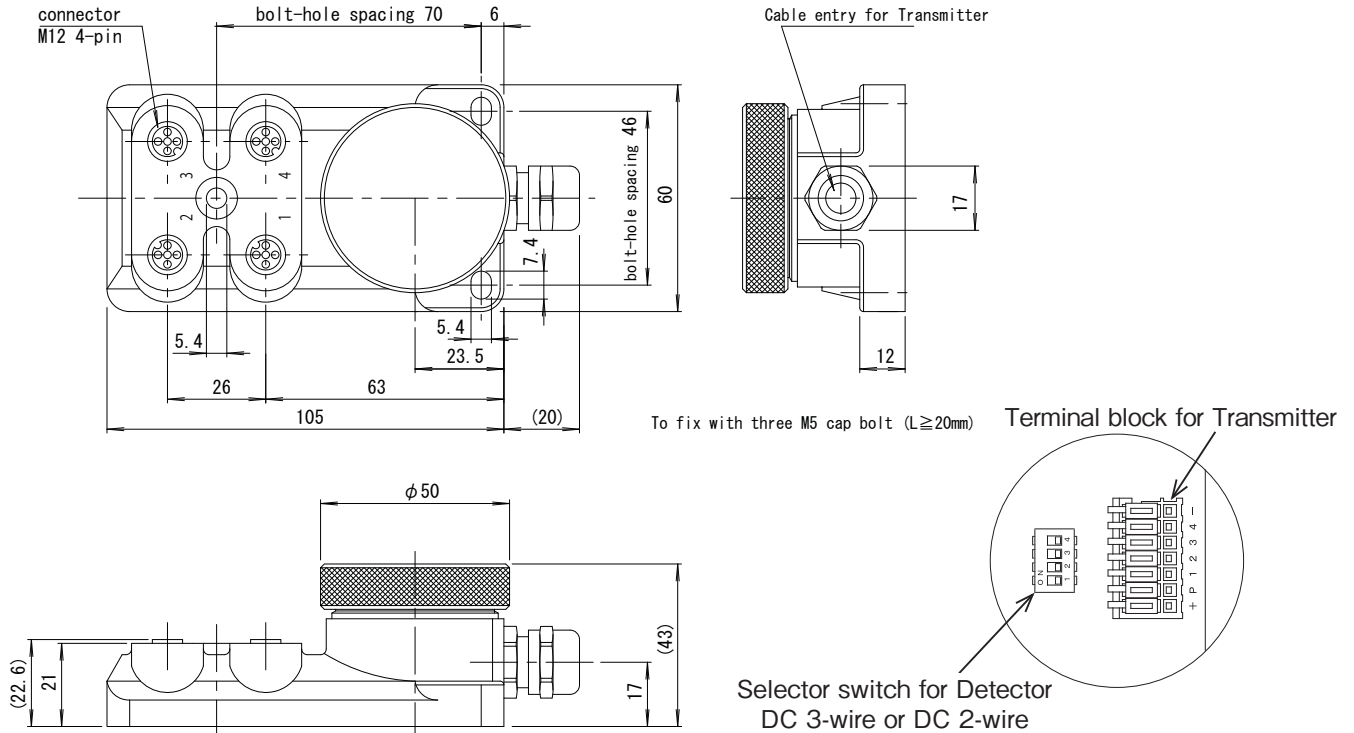
Terminal Box for Remote sensor

# RPK-4C01-N RPK-4C01-P

User's guide

Read this guide before installation and operation.  
Handle the Terminal Box properly.

## [ Dimension ]



## [ Specification ]

Type code	DC 3-wire/NPN DC 3-wire/PNP	RPK-4C01-N RPK-4C01-P
Material	Housing	Aluminum sandmold casting
	Lid	Aluminum cutting
	Packing	Viton
Protection class		IP67
Terminal block	Transmitter	7 poles crewless terminal block
	Detector	4 poles connector ( M12 x 4 )
Cable gland	Transmitter	PG9 x 1
DC 3-wire/2-wire Selector		4 pole switch
Mounting		M5 allen screw x 3
Blank plug		VA-OT5 ( 2 pieces are supplied with Terminal Box)

## [ Transmitter and Terminal box (selector for applicable detectors)]

Set a built-in selector switch according to the table.

The selector should be switched to ON when using DC 2-wire detectors with the Transmitter for DC 3-wire sensor.

Transmitter	Terminal box	Selector	Applicable Detector sensor
RPT4-1803D-PU、RPT4-3005D-PU	RPK-4C01-N	OFF	Non-polarized DC 2-wire
	RPK-4C01-P		Polarized DC 2-wire
RPTA-1803-PU、RPTA-3005-PU	RPK-4C01-N	OFF	NPN DC 3-wire
		ON	Non-polarized DC 2-wire
	RPK-4C01-P	OFF	PNP DC 3-wire
		ON	Polarized DC 2-wire

## Connection of the Transmitter to the Terminal Box

Connect the Transmitter to the Terminal Box in accordance with the following procedure.

Measure of strip cables (Fig. 1)

1. Strip outer sheathes of cable.
2. Strip insulations of cores.

Fastening position of cable (Fig. 2)

Make sure that outer sheath of cable is positioned inside of the Terminal Box properly in tightening cable.

Mounting of Cable <fig. 3>

Put a cap and sealing ring on cable, then insert the cable to the body.

Put a cap on the Cable Gland and tighten it with a spanner. ( Spanner caliber : 17mm )

Applicable cable diameter : 5.0...8.0mm

Tightening torque : 6Nm

The cap can be shut up tightly to the body.

Replace the sealing rings of Cable Glands when you change Transmitter in maintenance to avoid decline of its watertight quality.

Sealing ring Code : 991995008

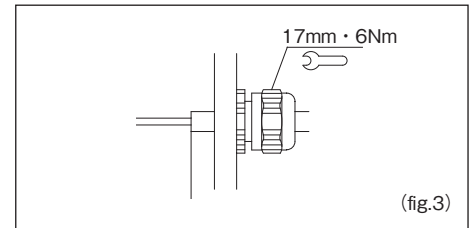
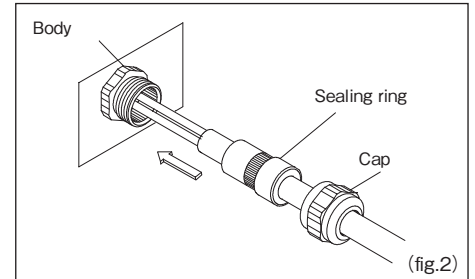
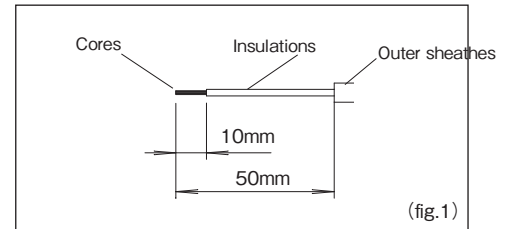
Type number : KBC-F2/E150P8

Connecting to Terminal block

Press the button with slotted screw driver (width of edge : 2.6mm) and connect the core.

Insert core to reach terminal sufficiently.

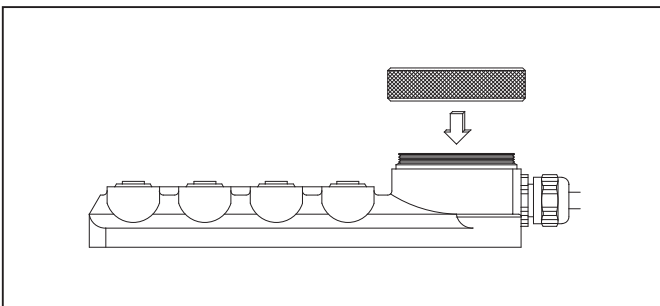
( If a core was inserted insufficiently, core may come out or cause short with adjoining cable. If a core was inserted exceedingly, the core cannot be connected sufficiently because of terminal catching insulations.)



## Install

Fix the Terminal Box with three M5 Allen screws (length : longer than 20mm).

Put on the lid on the Terminal Box horizontally and screw in the lid carefully or damaged thread of the lid, then insert and fasten it tightly.

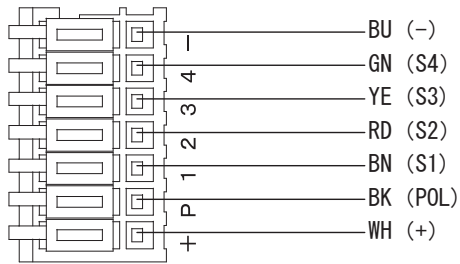


Unused connectors should be protected by blank plugs which supplied with box.

## Wiring & Selector switch

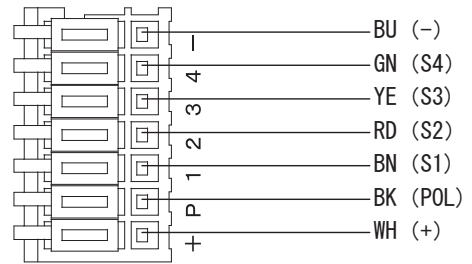
Transmitter : RPTA-1803-PU-\_\_ / RPTA-3005-PU-\_\_

### DC 3-wire Detector



Type code	Applicable Detector	Selector
RPK-4C01-N	DC 3-wire NPN type	OFF
RPK-4C01-P	DC 3-wire PNP type	OFF

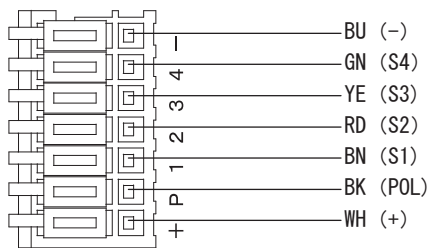
### DC 2-wire Detector



Type code	Applicable Detector	Selector
RPK-4C01-N	Non-polarized DC 2-wire	ON
RPK-4C01-P	Polarized DC 2-wire	ON

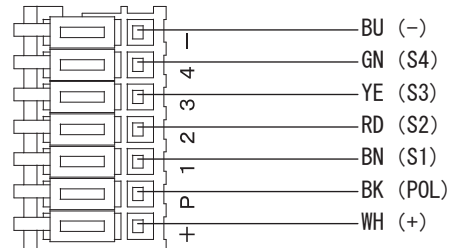
Transmitter : RPT4-1803D-PU-\_\_ / RPT4-3005D-PU-\_\_

### DC 2-wire Detector / Non-polarized Sensor



Type code	Applicable Detector	Selector
RPK-4C01-N	DC 2-wire & Mechanical Sensor	OFF
RPK-4C01-P	Mechanical Sensor	OFF

### DC 2-wire Detector / Polarized Sensor , RXD series



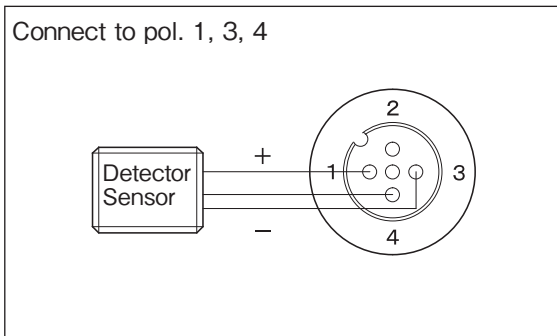
Type code	Applicable Detector	Selector
RPK-4C01-N	Mechanical Sensor	OFF
RPK-4C01-P	DC 2-wire & Mechanical Sensor	OFF

## Wiring to Connector

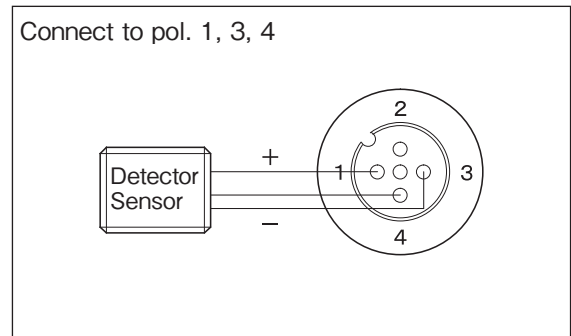
In accordance with the wiring diagram bellow, connect the wire of detectors to connectors.

### Case of DC 3-wire Detector Sensor

- NPN type sensor and RPK-4C01-N

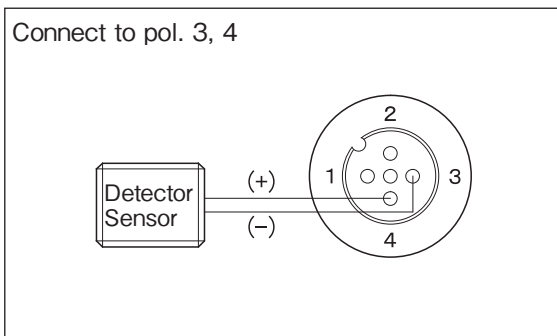


- PNP type sensor and RPK-4C01-P

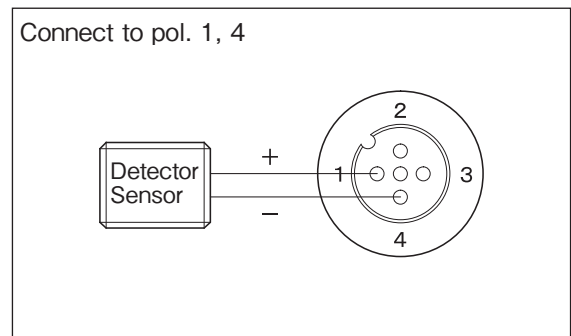


### Case of DC 2-wire Detector Sensor or Mechanical Sensor

- Non-polarized DC2-wire sensor and RPK-4C01-N



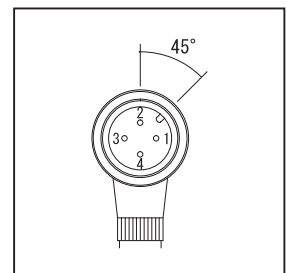
- Polarized DC2-wire sensor and RPK-4C01-P



## Connection of Angle Connectors

In using angle connectors, use a connector which a projection is positioned indicated in the right figure.

If you use different type connectors, connectors interfere each other and other connectors cannot connect into the contacts.



\*Use this type connector.