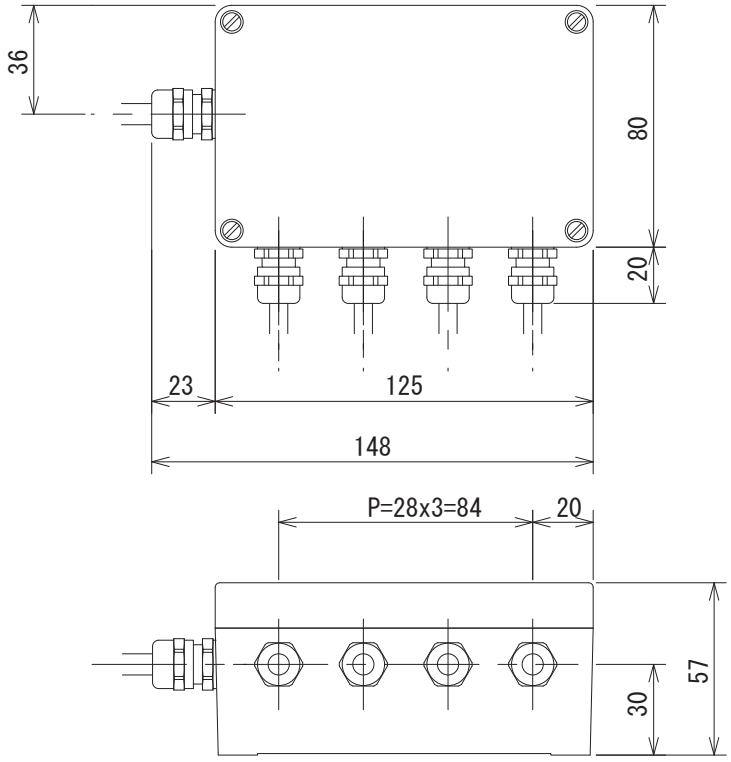
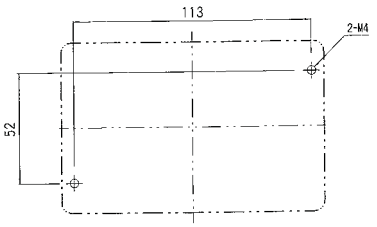
Terminal Box for Remote Sensor **RPK-2102**	User's guide	Read this guide before installation and operation. Handle the Terminal Box properly.

◆ Dimension

RPK-2102



Mounting note



◆ Specification

Protection Class		IP 65
Material		Housing: Aluminum Die Casting Paking:Neoprene
Terminal Block		Terminal Block with 6 poles x 2 Terminal Block with 8 poles x 3
Mounting		by two M4 screws
Cable Gland	Transmitter	PG 9 (O-ring attached) 1pc. (Mounted on the Terminal Box)
	Detector	PG 7 (O-ring attached) 4pcs. Suitable cable outer diameter:φ2. . . 6.5mm (Mounted on the Terminal Box) Blank Plug: BP0525 4pcs. (Supplied together with the Terminal Box)

Attention
for Safty

[Planning the system]

- ◆ The Terminal Box for the Remote Sensor is an enclosure which connects the Detectors with the Transmitter of the Remote Sensor and transmits the detected signals. The Terminal Box should only be used for this purpose.
- ◆ Plan the system to work safely if the Terminal Box should be damaged.

[Handling the Terminal Box]

- ◆ Make the correct wiring and connect as referred to the wiring diagram of this manual. Wiring errors may cause system failure.
- ◆ Make sure that the power is turned off, when start the installation process.
- ◆ Never take the device apart or modify.
- ◆ Dispose of the device as an industrial waste.

Important

● Wiring should be done before mounting the Terminal Box on the machine.
If the wiring is done after mounting, Cable Glands can not be tightened properly.

● Since the protection Class of the Terminal Box is IP65, protection with a cover is required if the Terminal Box will be exposed to water.

● Use the device properly as refer to in the following points.
If tightening of the Cable Gland is done improperly, it may have influence on its watertight quality.

Mounting Procedure and Hints

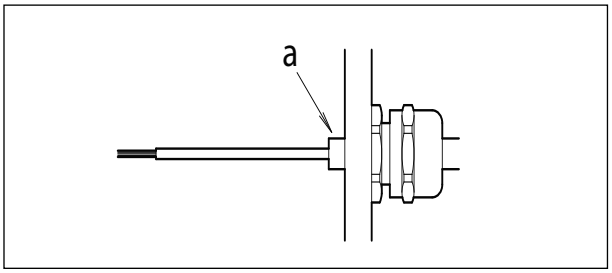
【Connection of the Transmitter and the Detector】

● Measure of Stripping Cables
① Strip outer sheathes of each cable at the required point.
② Strip insulations of cores.

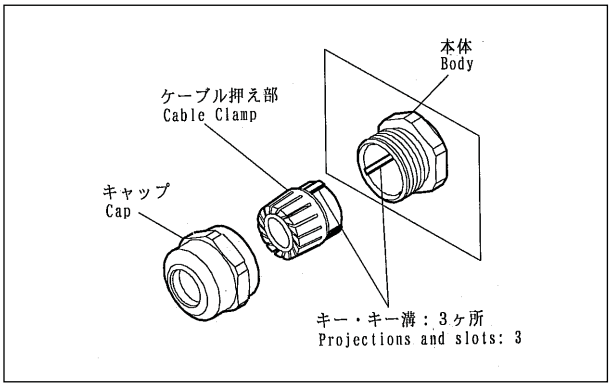
● Fastening Position of Cable <figure 1-a>
Make sure that outer sheath of cable is positioned inside of the Terminal Box properly in tightening cable.

● Fixing of the Cable Gland <figure 2>
Make sure that a projection of cable-holder must be adjusted on a groove of cabel gland base.
Waterproofness is spoiled when not attached correctly.

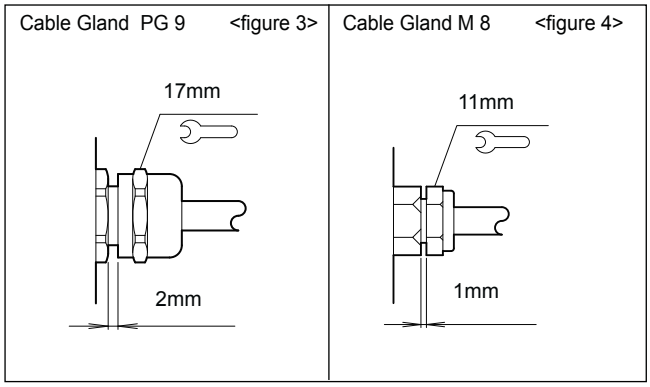
● Measure of Stripping Insulations / Position of Tightenig <figure 1>



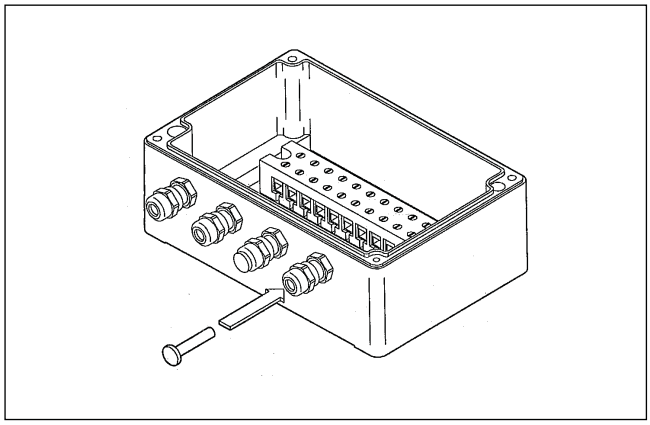
● Mounting Cable Gland <figure 2>



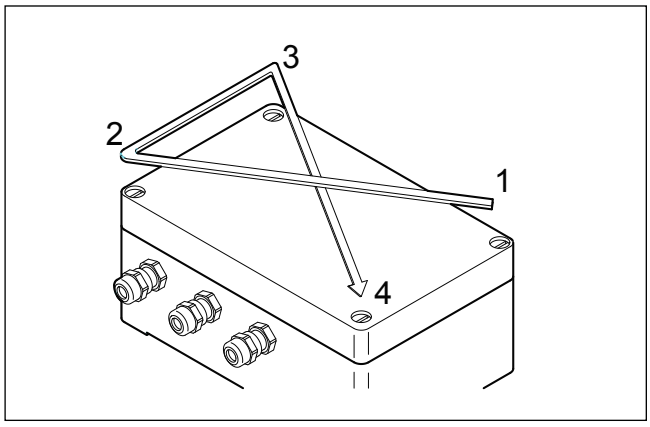
● Tightening the Cable Gland <figure 3,4>



● Measure for unused Cable Gland <figure 5>



● Measure of putting on the lid <figure 6>



● Tightening of the Cable Gland <figure 3, 4>

Tighten the cap of the Cable Gland for the Transmitter.
(Spanner caliber; 17mm) <figure 2>
Tighten the cap of the Cable Gland for the Detectors.
(Spanner caliber; 14mm) <figure 3>

● Measure for unused Cable Gland <figure 5>

Insert the blank plug(s) supplied with the Terminal Box into any unused cable entrance(s) of the Cable Gland and stop it.

① Insert the blank plug.
② Tighten the cable gland.
(Refer to Tightening of the Cable Gland)

● Connecting to terminal block <see P.4>

In accordance with the connection diagram, connect the core to each appropriate terminal.
Tightening torque value of terminal screw is 0.5Nm.

● Measure of putting on the lid of the Terminal Box <figure 6>

Tighten screws indicated on the diagram .
Be sure all the screws are tightened equally. When the screws are not tightened with equal strength, the lid might be warped and the packing in the lid will not cling to the Terminal Box.

【Installation for Terminal Box】

① Attach the Terminal Box fasten with 2 Allen screws.
Size; M4 Length ;longer than 15mm
② To avoid unfastening of screws, application of adhesive for tightening screws is recommended.

[Replacement of Cable Glands]

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

■ Wiring diagram

NPN type

■ Terminal block

CN1,CN2 : Wiring the Transmitter
CN3 : +
CN4 : SI1...4 } Connecting Detection switches
CN5 : -
* Gray parts on the unused

■ DIP SW Setting

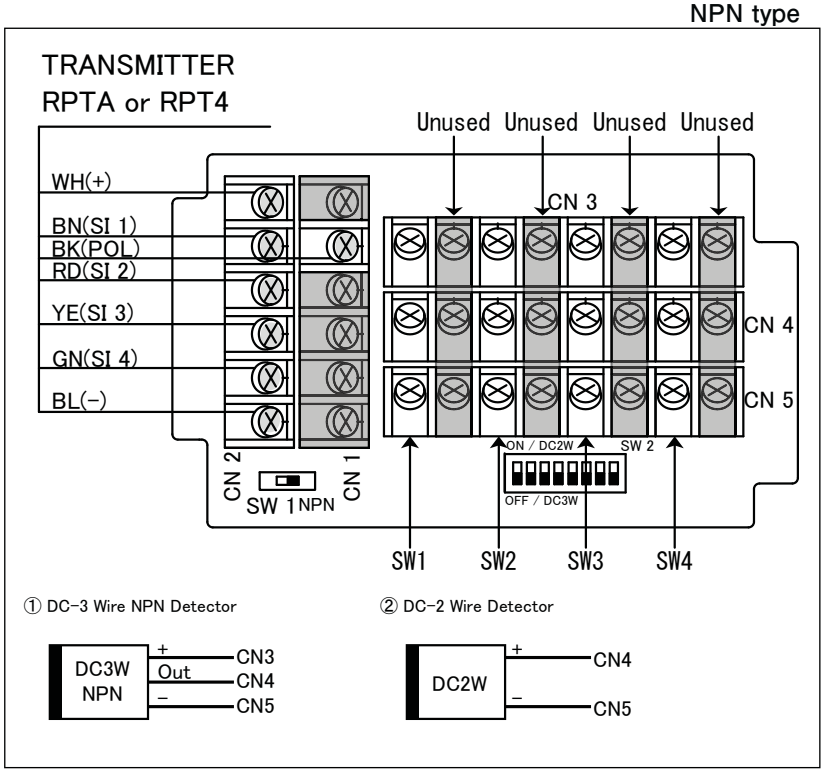
SW1 : Change over switch DC2W/DC3W
RPTA , RPT4 → NPN

SW2 : In the case of RPTA, please set the appropriate switches to each terminal box.
DC3W → OFF / DC2W → ON

(Example)In the case that DC2Wire sensors are connected to SW3 and SW4

*Gray parts on the unused

In the case of RPT4,please set all switches OFF



PNP type

■ Terminal block

CN1,CN2 : Wiring the Transmitter
CN3 : +
CN4 : SI1...4 } Connecting Detection switches
CN5 : -
* Gray parts on the unused

■ DIP SW Setting

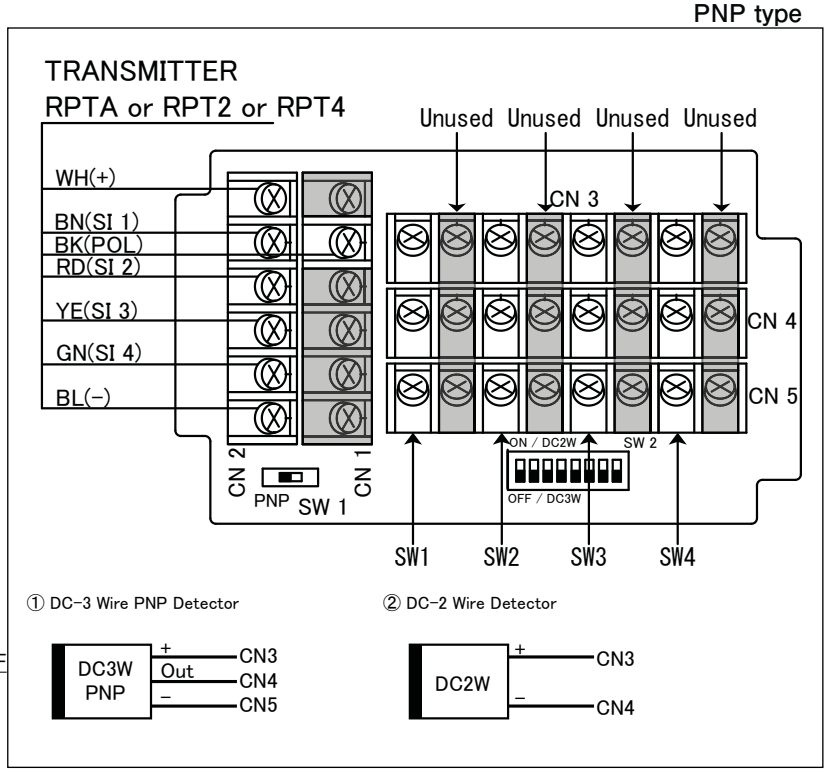
SW1 : Change over switch DC2W/DC3W
RPTA , RPT2 , RPT4 → PNP

SW2 : In the case of RPTA, please set the appropriate switches to each terminal box.
DC3W → OFF / DC2W → ON

(Example)In the case that DC2Wire sensors are connected to SW3 and SW4

*Gray parts on the unused

In the case of RPT2 , RPT4 , please set all switches OFF



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■ Specifcations are subject to change without notice.