Remote System
User's Guide

Remote Sensor System
Switch Signal / 8 signal transmission type

Transmitter :RGPT-9012-V2430
Output Sensor :RGPE-9012-V2430N-PU_ _
RGPE-9012-V2430P-PU_ _

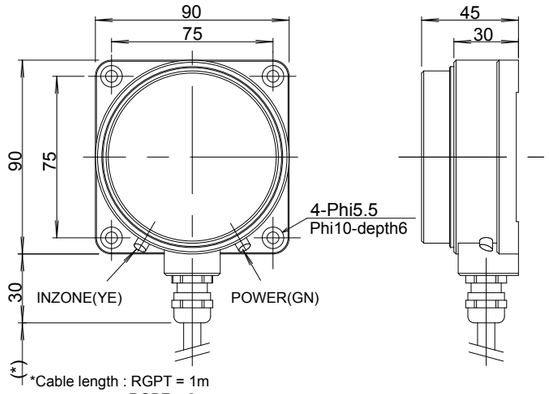
Attention for Installation

(Read this section thoroughly before installation.)

Before using the Remote Sensor, read this manual carefully.
During installation and operation, pay close attention to the safety aspect.

- ◆ Ensure the power is switched off during installation or maintenance operations.
- ◆ Use a regulated power supply, e.g. switch-model type. Simpler power supplies, such as a full-wave rectification type, will cause the permissible ripple rating to be exceed and may cause malfunction.
- ◆ Ensure correct connections by reference to the wiring diagram.
- ◆ To avoid malfunction caused by induction noise, cable should be kept apart from motor or other power cable.
- ◆ Please note that the signal may become unstable (false signal or chattering) when the transmission distance and the center offset are outside the specification range.
- ◆ The inzone signal is a preliminary signal for confirming that the output signal is established within the specification range. Please note that it does not guarantee signals output outside the specification range.

Dimension



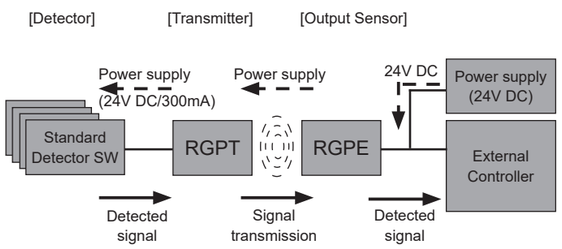
Transmitter : **RGPT-9012-V2430-PU_ _**
Output Sensor: **RGPE-9012-V2430N-PU_ _ (NPN)**
RGPE-9012-V2430P-PU_ _ (PNP)

Specification

Type number	RGPT-9012-V2430-PU_ _	RGPE-9012-V2430N-PU_ _ RGPE-9012-V2430N-PU_ _
Rated transmitting distance	4...12mm	
Senter off-set	≦ ±7mm	
Drive current	≦ 300mA	
Drive voltage	24V DC±1.5V	
Supply voltage		24V DC±10%(incl. ripple)
Current consumption		≦ 1A

- ◆ Total current consumption of detectors must not exceed the rated drive current. Reduce the switches when the total current consumption exceeds the drive current.
- ◆ The drive current is dependent on the transmission distance between Transmitter and Output Sensor the degree of off-set between them, refer to Transmitting area diagram.
- ◆ Wrong signal could be output when operating distance or center offset is out of specification range.

Construction of the system



【Function of each component】

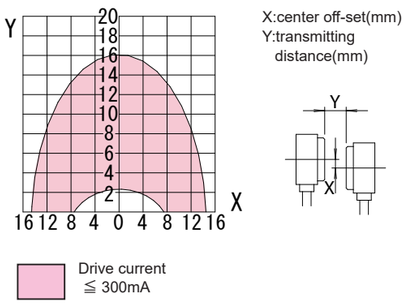
Detector : Connects detector switches (max.8) and transmits the detected signals to Transmitter.

Transmitter : Provides power for Detector, also passes detected signals from Detector to Output Sensor.

Output Sensor: Puts out detected signal to external controller, also sends power for operating of Detector and Transmitter.

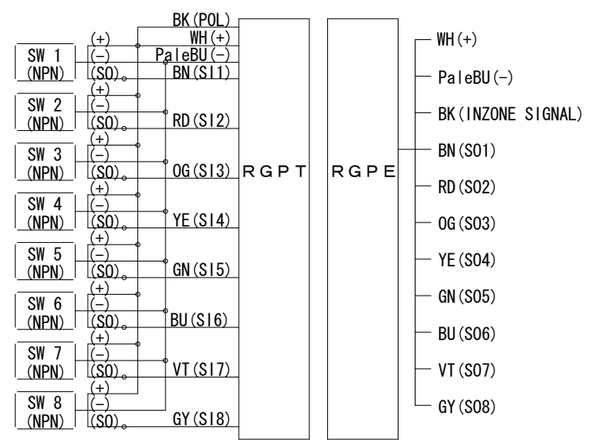
Transmitting area diagram

【Example: Supply voltage at 24V DC】

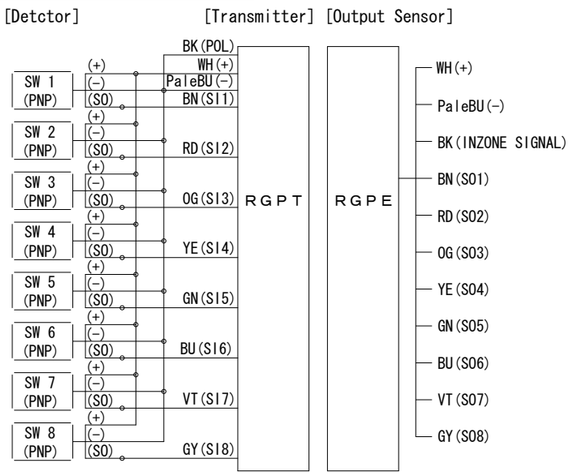


Wiring diagram

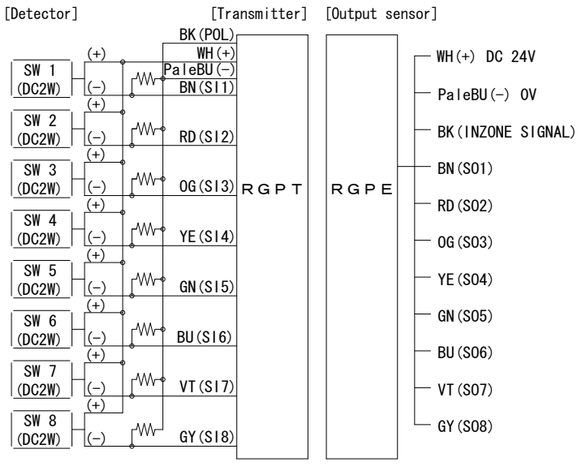
Connecting NPN type switch



Connecting PNP type switch



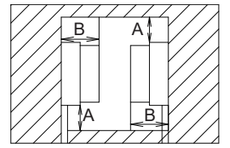
Connecting DC 2W type switch (incl. mechanical limit switches)



- ◆ (-) line of Transmitter and (-) line of Detectors should be connected together with a resistor of 1-2kohm.

Influence of surrounding metal

To avoid influence of surrounding metal, keep minimum spacing as described below;

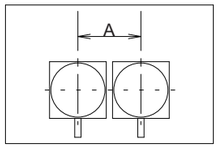


Non-flush mounting

Type number	A (mm)	B (mm)
RGPT-9012-V2430	50	45
RGPE-9012-V2430N/P		

Mutual interference

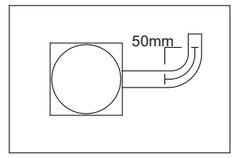
In order to prevent mutual interference between parallel-mounted sensors, keep minimum spacing as described below;



Type number	A (mm)
RGPT-9012-V2430	300
RGPE-9012-V2430N/P	

Bending radius of Cable

The minimum bending radius for thesensors are 50mm.



∗ Never pull the cable strong in installing.

Note
Please note that the cable length of an output sensor may not longer than 10m. The CE marking verifies that our products comply with the requirements of EMC directive. The surge test to an output sensor is not carried out.
When using an output sensor with cable length longer than 10m, a measure to protect the sensor from serge current should be taken.

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