

Remote Sensor System Switch signal / 8 signal transmission type

Standard Remote part : RPT8-3007D-PU__
Base part : RPE8-3000N-PU__
RPE8-3000P-PU__
Weld-spatter-immune type
Remote part : RPT8-TF3007D-PU__
Base part : RPE8-TF3000N-PU__
RPE8-TF3000P-PU__

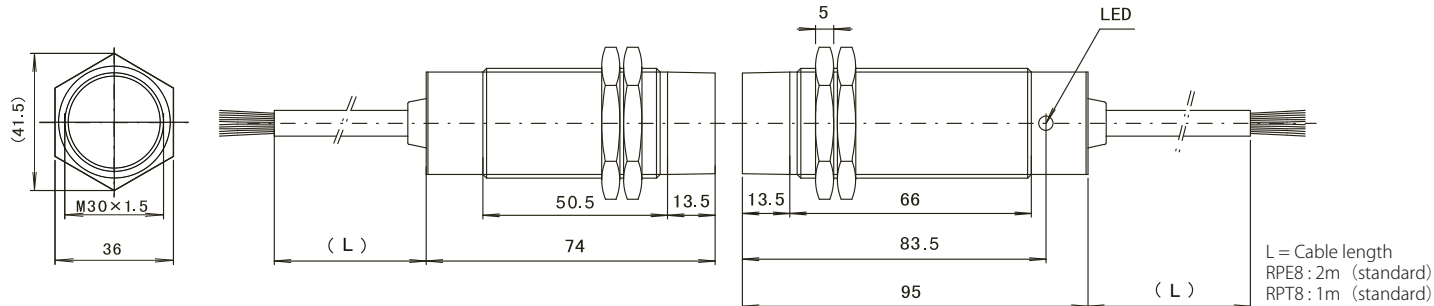
* Please turn over for Japanese guide.



Safety Considerations

Please read carefully before using and full attention to Safety Considerations. (T318501)

Dimension



Specification of Remote sensor system

| Remote part | Standard | Weld-spatter-immune |
|------------------------|---|--|
| Type number | RPT8-3007D-PU__ | RPT8-TF3007D-PU__ |
| Output voltage | 22 V +4/-2 V DC | |
| Output current | 5mA per sensor | |
| Number of input signal | 8 signals | |
| Operating distance | 2 ... 7 mm | |
| Center offset | ≤ ± 3 mm | |
| Operating temperature | 0 ... +50°C | |
| Protection class | IP67 | |
| Cable | PUR/ φ 7.7, 2x0.5mm ² + 9x0.18mm ² | |
| Material | Nickel plated brass (Houseing) Nylon 12(active surface) | Fluorine resin coated brass (houseing) Fluorine resin(active surface) |
| Weight | Body 150g + cable 75g/m | |

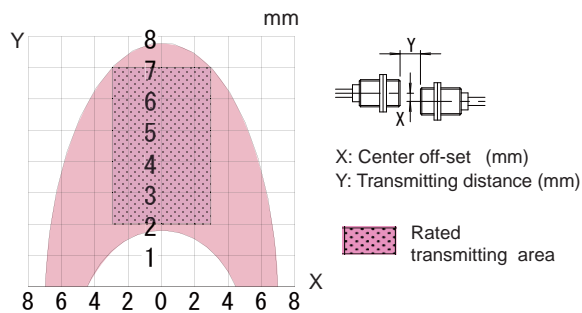
| Base part | Standard | Weld-spatter-immune |
|--------------------------------|---|---|
| Type number | NPN RPE8-3000N-PU__ PNP RPE8-3000P-PU__ | RPE8-TF3000N-PU__ RPE8-TF3000P-PU__ |
| Supply voltage (input voltage) | 24V DC ± 10%(incl. ripple) | |
| Current consumption | ≤ 400mA | |
| Number of output signal | 8 signals +1 (In-zone) | |
| Load current | 50mA per 1 output | |
| Frequency of operation | 60Hz | |
| LED indicatio | In-zone | |
| Operating temperature | 0 ... +50°C | |
| Protection class | IP67 | |
| Cable | PUR/ φ 7.7, 2x0.5mm ² + 9x0.18mm ² | |
| Material | Nickel plated brass (Houseing) Nylon 12(active surface) | Fluorine resin coated brass(houseing) Fluorine resin(active surface) |
| Weight | Body 190g + cable 75g/m | |

Applicable sensor

| DC 2-wire sensor | |
|----------------------|--------|
| Supply voltage | 24V DC |
| Residual voltage | ≤ 6V |
| Minimum load current | ≤ 5mA |
| Leakage current | ≤ 1mA |

Use a sensor that operates correctly within the conditions shown in the left table.

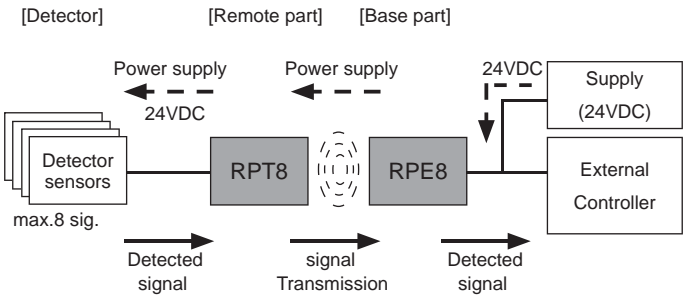
Transmitting area diagram [Example: Supply voltage at 24V DC]



X: Center off-set (mm)
Y: Transmitting distance (mm)

Rated transmitting area

Construction of the system



【Function of each component】

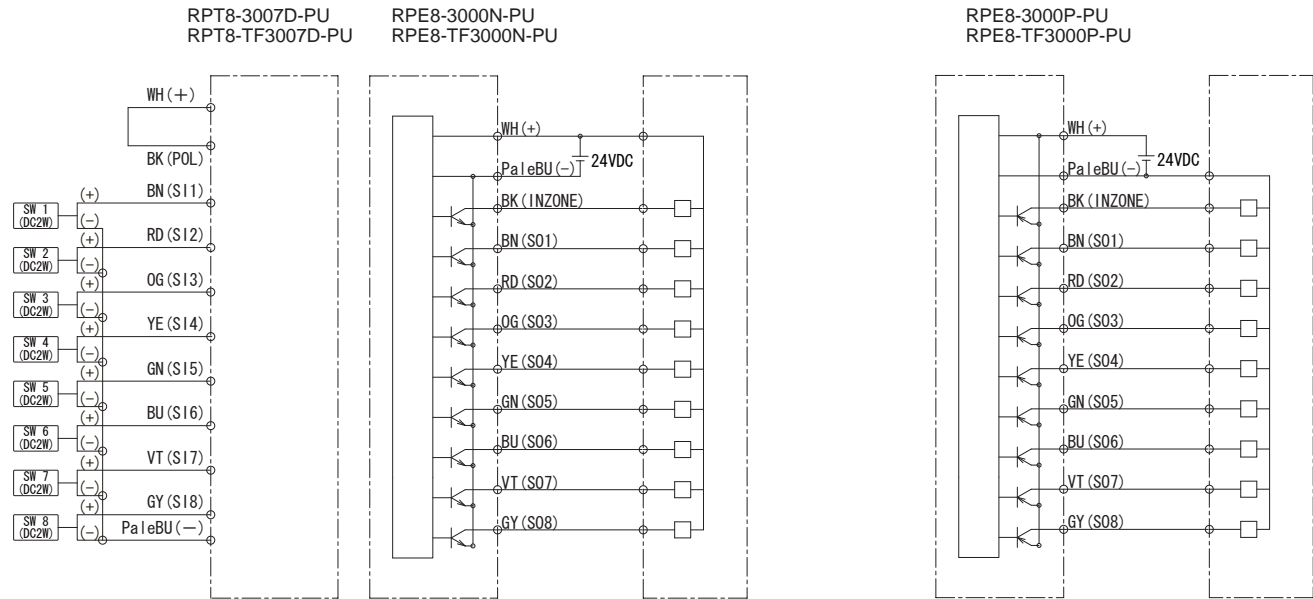
Detector : Connects detector switches (max.8) and transmits the detected signals to Remote part.

Remote part : Provides power for Detector, also passes the detected signals from Detector to Base part.

Base part : Puts out detected signal to external controller, also sends power for operating of Detector and Remote part.

Wiring

Connecting DC 2-wire sensors (incl. mechanical limit switch)



(Note)

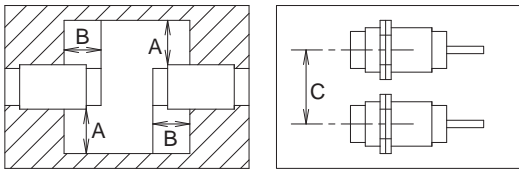
• Black (POL) and WH (+) of Remote part should be connected together.

• When using the terminal boxes (option) for connecting Detectors and Remote part, set the change over switches on the box as the following instruction.

Change over switch for 2 wire / 3 wire type switches - > OFF
Change over switch for PNP / NPN - > NPN

Influence of surrounding metal and Mutual interference

When installing the product, in order to avoid the influence of the surrounding metal, Be sure to provide a space more than the value shown in the table below. Also, when installing products in parallel, in order to avoid mutual interference between products, Be sure to leave a space greater than or equal to the value shown in the table below.

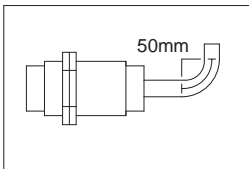
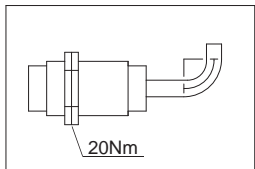


| Type number | A(mm) | B(mm) | C(mm) |
|--|-------|-------|-------|
| RPT8-3007D-PU__ RPT8-TF3007D-PU__ RPE8-3000N/P-PU__ RPE8-TF3000N/P-PU__ | 30 | 20 | 200 |

Installation

Tightening troque for attached nut is 20Nm(200kgf·cm).

The minimum bending radius for the cable is 50mm.



* Never pull the cable strong in installing.