System configuration

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<th>[Detector]</th>
<th>[Transmitter]</th>
<th>[Output Sensor]</th>
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<tr>
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<td>power supply</td>
<td>24VDC</td>
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<tr>
<td>switch signal</td>
<td>switch signal</td>
<td>switch signal</td>
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<tr>
<td>Detected signal</td>
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<td>Detected signal</td>
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[Function of each component] Detectors: 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.

Dimension

Transmitter: RPT8-TSLOT-PU
Output Sensor: RPE8-TSLOT-PU (NPN output)

Weight Body 130g + Cable 70g/m
Cable PUR / φ7.7, 2x21AWG+9x25AWG
Protection class IP67

Service

Type code | DC 3-wire RPT8-TSLOT-PU
---|---
Drive voltage | 24V DC ± 1.5V
Drive current | ≤ 150mA
Input signals | 8 signals
Operating distance | 2...5mm
Permissible center off-set | ≤ ± 3mm
Operating temperature | 0...+50℃
Protection class | IP67
Material: Main part case | PBT
Weight | Body 130g + Cable 70g/m

Wiring diagram

RPT8-TSLOT-PU
RPE8-TSLOT-PU
RPE8-TSLOTN-PU

Output sensor: Puts out detected signal to external controller, also sends.
Transmitter: Provides power for Detector, also passes detected signals to Transmitter.
Detector: Connects detector switches (max. 8) and transmits the detected signals to Transmitter.

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

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

Installation
The minimum bending radius for the sensors is 50mm. Never pull the cable strong in installing.

The tightening torque of the screws:

RPT8-TSLOT-PU
RPE8-TSLOT-PU

Type code | A (mm) B (mm) C (mm)
---|---|---|---
RPT8-TSLOT-PU | 5 10 20
RPE8-TSLOT-PU | 30 30 30
RPE8-TSLOTN-PU | 30 30 30

※ For the output sensor, I will omit for T-slot mounted the premise.

Transmitting area diagram

Example: Supply voltage at 24V DC

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

Drive current
≤ 150mA

Operating area