Remote sensor system
Switch signal specification DC 3-wire
8 signal transmission
TSLOT type

Transmitter : RPT8-TSLOTD-PU_ _
Output Sensor : RPE8-TSLOTP-PU_ _
Output Sensor : RPE8-TSLOTN-PU_ _

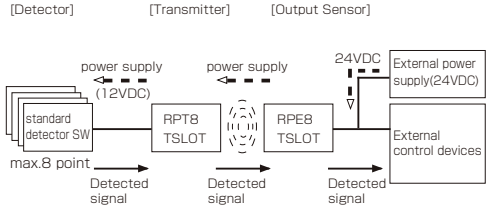
Attention for Installation

(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.
◆ In order to avoid malfunction due to induced noise, away from the high-voltage power lines and equipment, please wiring 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.

Construction of the system



【Function of each component】

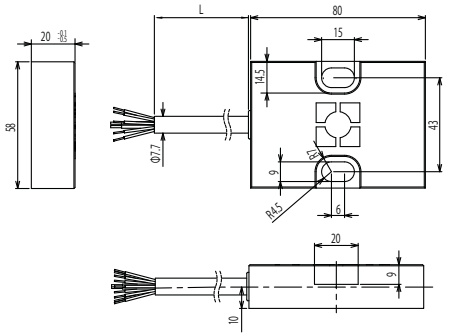
Detector : Connects detector switches (max.8) and transmits the detected signals to Transmitter.

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

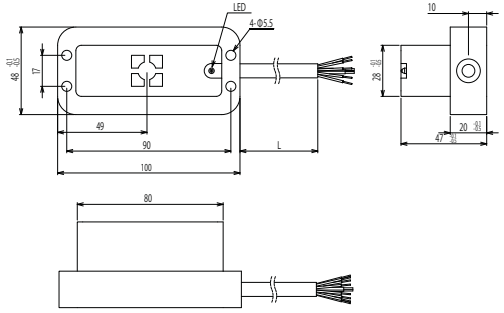
Output Sensor: Puts out detected signal to external controller, also sends.

Dimension

Transmitter : RPT8-TSLOT-PU_ _



Output Sensor : RPE8-TSLOTN-PU_ _(NPN output)
RPE8-TSLOTP-PU_ _ (PNP output)



Specification

Transmitter	
Type code DC 3-wire	RPT8-TSLOTD-PU_ _
Drive voltage	12V 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
Cable	PUR / φ 7.7 , 2x21AWG+9x25AWG
Material Main part case	PBT
Weight	Body 130g + Cable 70g/m

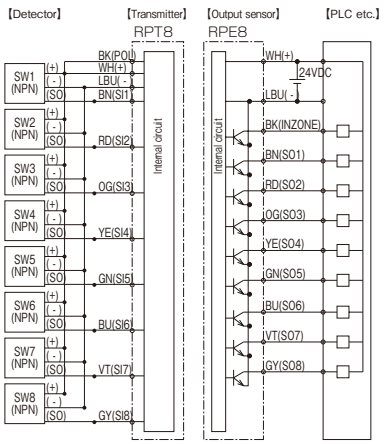
Output Sensor		
Type code	NPN output	RPE8-TSLOTN-PU_ _
	PNP output	RPE8-TSLOTP-PU_ _
Operating voltage		24V DC ± 10% (incl.ripple)
Current consumption		≦ 400mA
Output signals		8 signals + 1 signal (Inzone)
Load current		max.50mA per output
Frequency response		60Hz
LED display		Inzone
Operating temperature		0...+50℃
Protection class		IP67
Cable		PUR / φ 7.7 , 2x21AWG+9x25AWG
Material Main part case		PBT
Weight		Body 250g + Cable 70g/m

2017. 03. 27 No.T315A03B

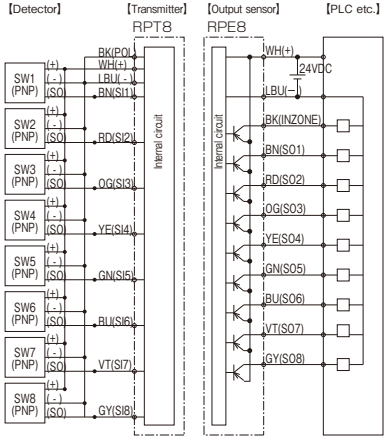
Wiring

DC3W type switch connection specification

■ NPN

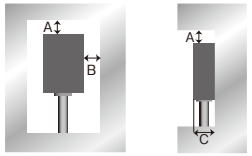


■ PNP



Influence of surrounding metal

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

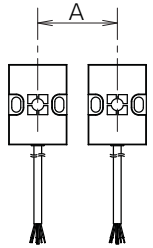


Type code	A (mm)	B (mm)	C (mm)
RPT8-TSLOT-PU_ _	5	16	20

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

Mutual interference

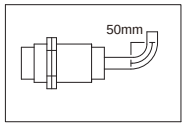
In order to prevent mutual interference between parallel-mounted sensors, keep minimum spacing as described below.



Type code	A (mm)
RPT8-TSLOT-PU_ _	200
RPE8-TSLOTP-PU_ _	
RPE8-TSLOTN-PU_ _	

Installation

The minimum bending radius for thesensors are 50mm.
Never pull the cable strong in installing.



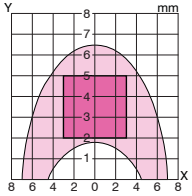
The tightening torque of the screws
⇒ RPT8-TSLOT-PU M8x2 6.15N·m
RPE8-TSLOTN/P-PU M5x4 2.98N·m

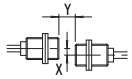
(Note)

· 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.

Transmitting area diagram

【Example: Supply voltage at 24V DC】





X:center off-set(mm)
Y:transmitting distance(mm)

Drive current ≦ 150mA

Rated value

B & PLUS K.K. (Former NIHON BALLUFF co., Ltd.)
http://www.b-plus-kk.jp/ E-mail b-plus@b-plus-kk.jp