

Remote sensor system
15 signal transmission / Ring shape

Output sensor : RS15E-R03N-PU-__ (NPN)
RS15E-R03P-PU-__ (PNP)
Transmitter : RS15T-R03D-PU-__

Attention for Installation

(Read this section thoroughly before installation.)

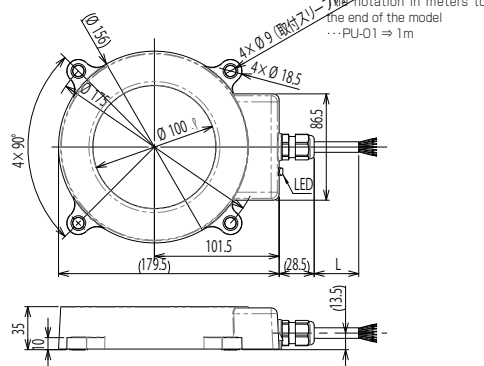
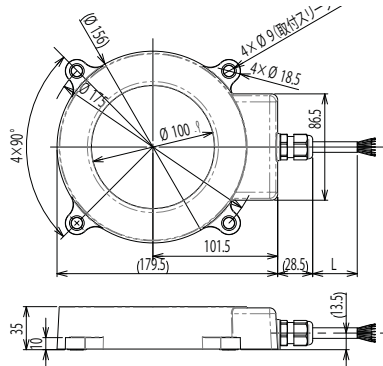
Before using the Remote Sensor, read this manual carefully. During installation and operation, pay close attention to the safety aspect.

- ◆ 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 exceeded 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 : RS15T-R03D-PU-__

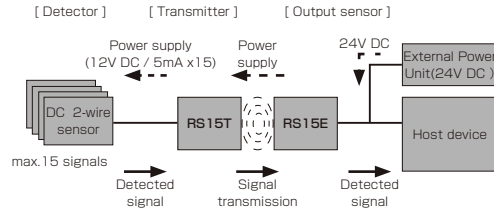
Output sensor : RS15E-R03N-PU-__ , RS15E-R03P-PU-__



Specification of the System

Type code	RS15T-R03D-PU-__	Type	NPN output	RS15E-R03N-PU-__
Applicable sensor	DC 2-wire sensor	code	PNP output	RS15E-R03P-PU-__
Drive voltage	12V ± 1.5V DC	Supply voltage	24V DC ± 10% (incl.ripple)	
Drive current	≤ 5 mA / 1 signal	Current consumption	≤ 500mA	
No. of Input signals	15 signals	No. of Output signals	15 + 1 (Inzone)	
Installation	Setting : Non metal metal shaft : shaft	Load current	≤ 50mA/1 output	
Operating distance	0...7mm	LED indication	Inzone(Green)	
Center offset	± 3mm	Circuit protection	Short circuit protection , Converse protection , Surge suppression	
Operating temperature	0...+50°C	Operating temperature	0...+50°C	
Protection class	IP67	Protection class	IP67	
Cable	PUR φ8.6 / 2x0.5mm ² +16x0.18mm ²	Cable	PUR φ 8.6 2x0.5mm ² +16x0.18mm ²	
Case material	PUR	Material	PUR	
Weight	690 g+110g/m(cable)	Weight	680g + 110g/m(cable)	
Note	CE is not acquired	Note	CE is not acquired	

System configuration



[Function of each component]

- Detector : Connects Detector sensor (DC-2 wire or Mechanical switch) 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 host device, also sends power for operating of Detector and Transmitter.

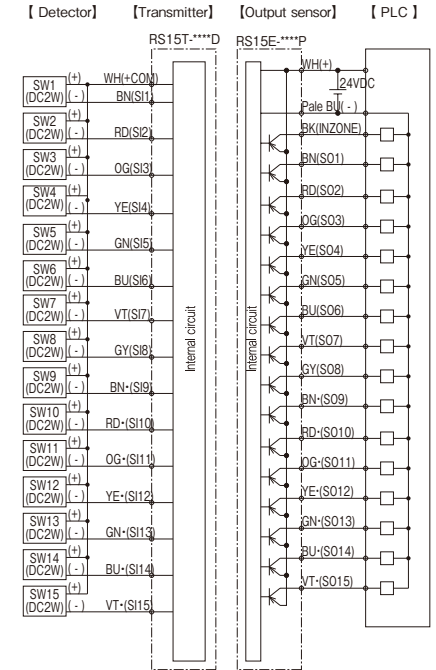
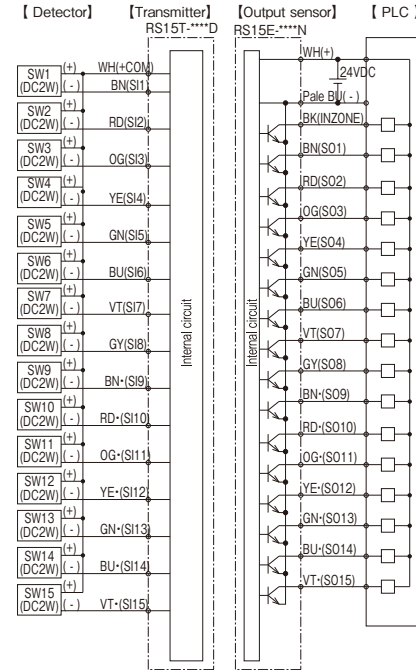
Wiring diagram

■ RS15T-R03D-PU-__

■ RS15E-R03N-PU-__ (NPN)

■ RS15T-R03D-PU-__

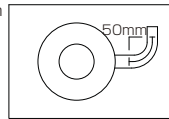
■ RS15E-R03P-PU-__ (PNP)



- Wire unused cable core is cut when the factory. (only Transmitter)
- Core wire that is not used and to shorten the cable is exposed. Please do not short-circuit.
- Cable core color is [Pale blue] and [Black].

Bending radius of Cable

The minimum bending radius for these sensors are 50mm.



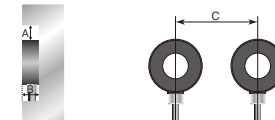
* Never pull the cable strongly installing

Installation notes

In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted sensors, keep the minimum free zone as described below.

■ Surrounding metal ■ Parallel installation

Type code	A	B	C
RS15T-R03D-PU-__	200	35	400
RS15E-R03N-PU-__ , RS15E-R03P-PU-__			(mm)



Typical Transmitting Diagram (Supply voltage at 24V / non-flush mount)

