

Remote sensor system  
15 signal transmission / Ring shape

Output sensor : RS15E-R02N-PU-\_\_ (NPN)  
RS15E-R02P-PU-\_\_ (PNP)  
Transmitter : RS15T-R01D-PU-\_\_

**Attention for Installation**

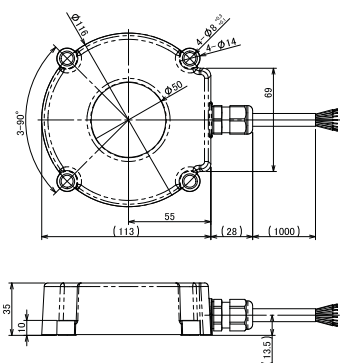
(Read this section thoroughly before installation.)

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

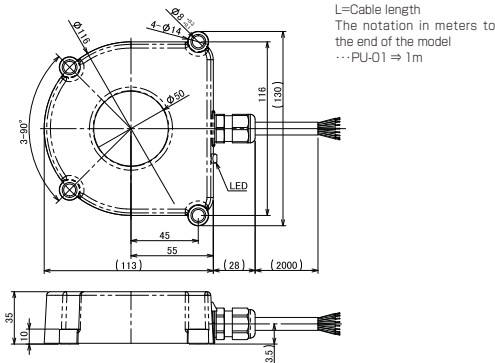
- ◆ Ensure the power is switched off during installation or maintenance operations.
- ◆ Use a regulated power supply, e.g. switch-model type. Simpler power supplies, such as a full-wave rectification type, will cause the permissible ripple rating to be exceeded and may cause malfunction.
- ◆ Ensure correct 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-R01D-PU-\_\_



Output sensor : RS15E-R02N-PU-\_\_ , RS15E-R02P-PU-\_\_

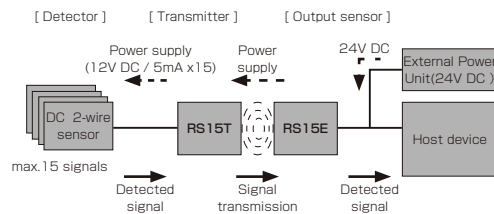


L=Cable length  
The notation in meters to the end of the model  
...PU-01 → 1m

**Specification of the System**

Type code	RS15T-R01D-PU-__	Type	NPN output	RS15E-R02N-PU-__
Applicable sensor	DC 2-wire sensor	code	PNP output	RS15E-R02P-PU-__
Drive voltage	12V ± 1.5V DC	Supply voltage	24V DC +10% -20% (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...5mm / 0...6.5mm	LED indication	Inzone(Green)	
Center offset	± 5mm / ± 6.5mm	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 <sup>2</sup> +16x0.18mm <sup>2</sup>	Cable	PUR φ 8.6 2x0.5mm <sup>2</sup> +16x0.18mm <sup>2</sup>	
Case material	PUR	Material	PUR	
Weight	410 g+110g/m(cable)	Weight	460g + 110g/m(cable)	
Note	CE is not acquired	Note	CE is not acquired	

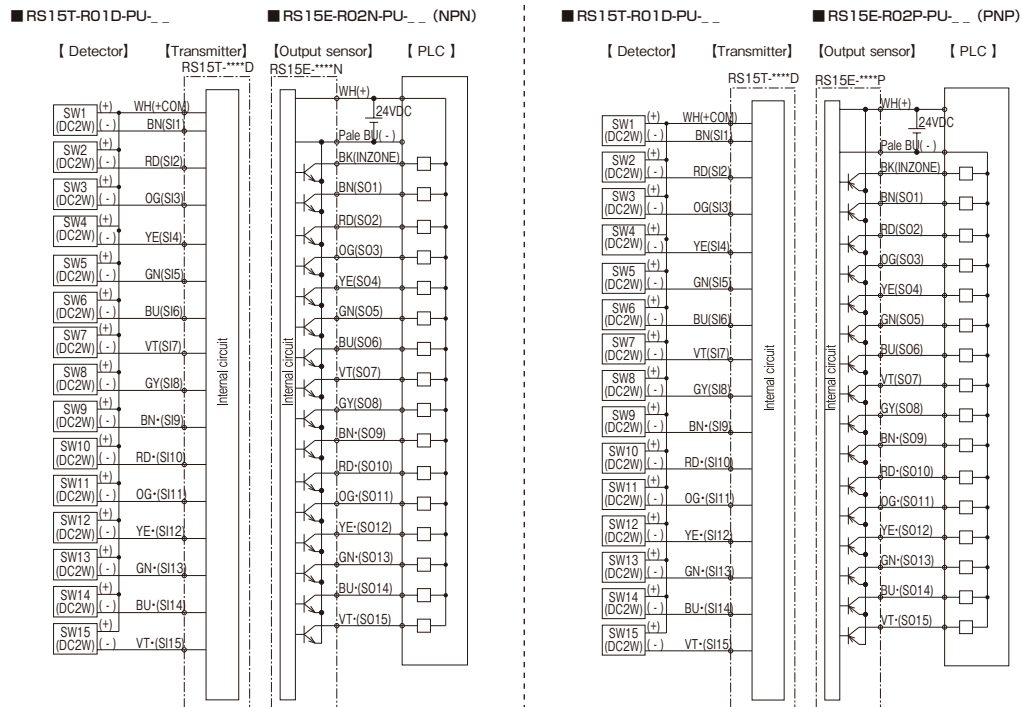
**System configuration**



**[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**



- 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].

**Installation notes**

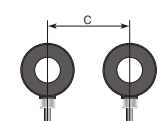
In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted sensors, keep the minimum free zone as described below.

Type code	A	B	C
RS15T-R01D-PU-__	100	35	300
RS15E-R02N-PU-__ , RS15E-R02P-PU-__			

(mm)

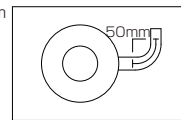
■ Surrounding metal

■ Parallel installation



**Bending radius of Cable**

The minimum bending radius for thesensors are 50mm.



\* Never pull the cable strongin installing

**Applicable sensor**

Supply voltage	12V DC	Please sure to use applicable detector switch according to the specification on left.
Leakage current	≤ 1mA	
Residual voltage	≤ 3.5V	
Load current	≤ 5mA	

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

