

Remote Sensor System

8 signal transmission type
Temperature rated (+80 deg.C.)

Transmitter : RS08TA-018D-PU-__
RS08TA-003D-PU-__
Output Sensor: RS08EA-018N/P-PU-__
RS08EA-030N/P-PU-__

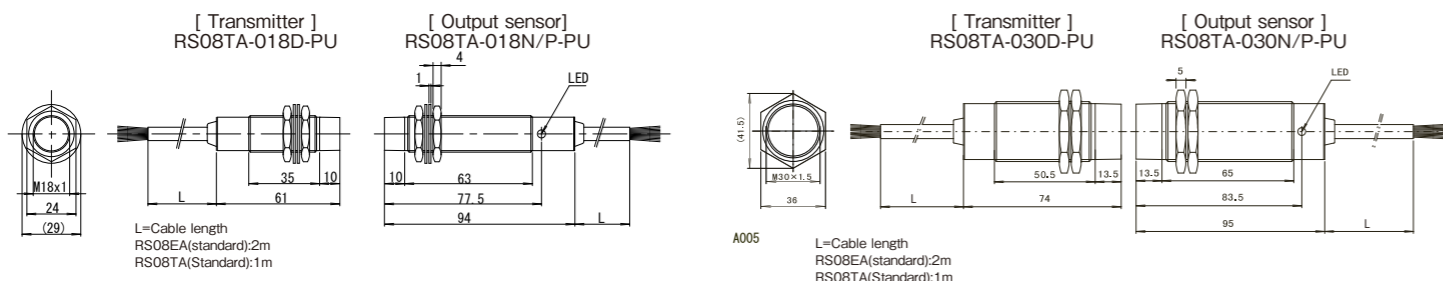
Attention for Installation

(Read this section thoroughly before installation.)

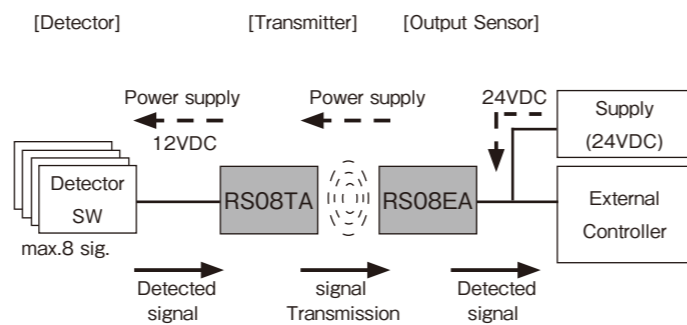
Before using the Remote Sensor, read this manual carefully.
During installation and operation, pay close attention to the safety aspect.

- ◆ 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.
- ◆ To avoid malfunction caused by induction noise, cable should be kept apart from motor or other power cable.

Dimension



Construction of the system

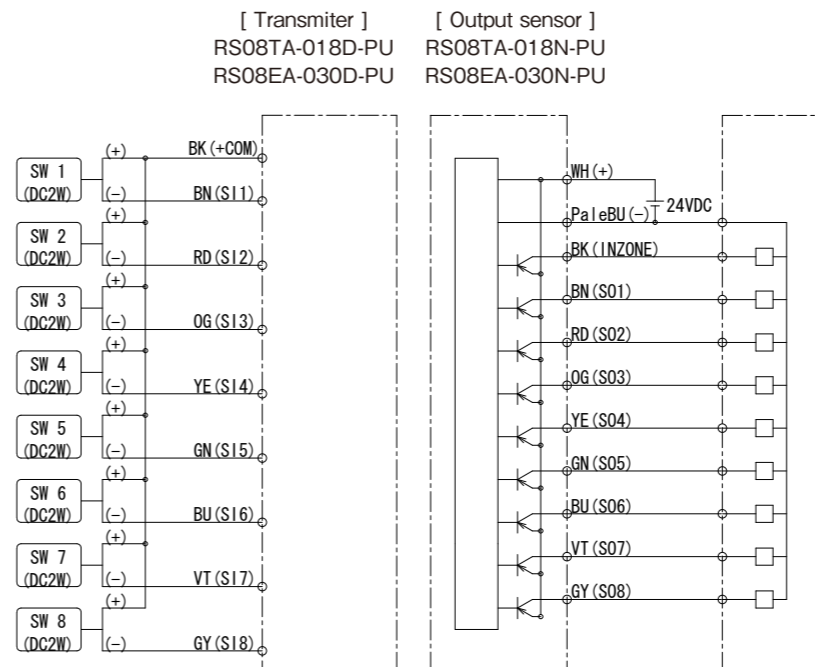


[Function of each component]

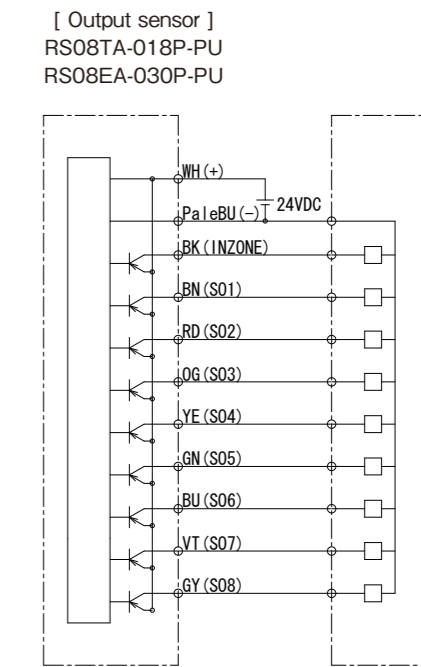
Detector : Connects detector switches (max.8) and transmits the detected signals to Transmitter.
Transmitter : Provides power for Detector, also passes detected signals from Detector to Output Sensor.
Output Sensor: Puts out detected signal to external controller, also sends power for operating of Detector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

Wiring

■ NPN type



■ PNP type

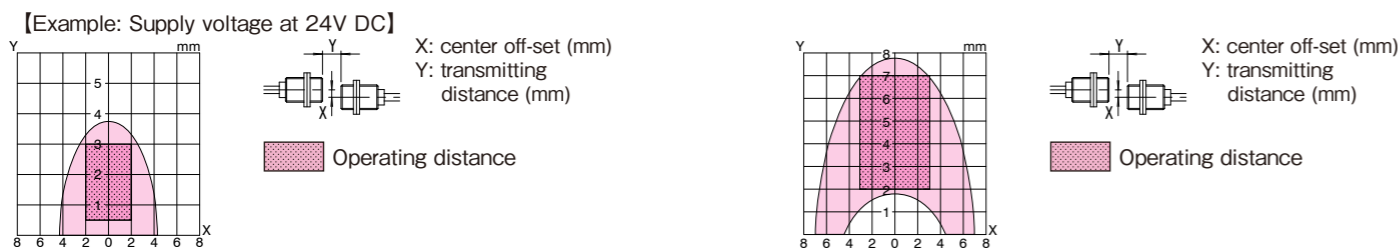


Specification of Remote sensor system

Type code	Transmitter	RS08TA-018D-PU-__	Type code	Transmitter	RS08TA-030D-PU-__	
Output sensor	NPN	RS08EA-018N-PU-__	Output sensor	NPN	RS08EA-030N-PU-__	
	PNP	RS08EA-018P-PU-__		PNP	RS08EA-030P-PU-__	
Drive Voltage	12V DC ± 1.5V		Drive Voltage	12V DC ± 1.5V		
Drive Current	5mA (1 signal)		Drive Current	5mA (1 signal)		
Transmission distance and Center offset	Transmission distance	0.5...3mm	Transmission distance	2...7mm	Center offset	± ± 2.5mm
	Center offset	± ± 2.5mm	Center offset	± ± 3mm		
Only Output sensor	Supply voltage	24V DC ± 10%(incl. ripple)	Only Output sensor	Supply voltage	24V DC ± 10%(incl. ripple)	
	Current consumption	≤ 150mA		Current consumption	≤ 150mA	
Applicable Detector switch	Supply voltage	12V DC	Applicable Detector switch	Supply voltage	12V DC	
	Load current	Max. 5mA		Load current	Max. 5mA	
	Residual voltage	min. 3.5V		Residual voltage	min. 3.5V	
	Leakage current	Max. 1mA		Leakage current	Max. 1mA	

□ 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.

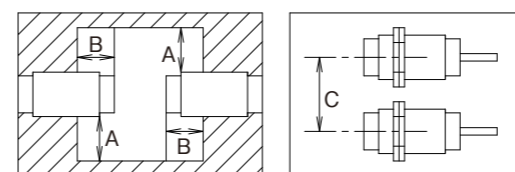
Transmitting area diagram



- ◆ The drive current is dependent on the transmission distance between Transmitter and Output Sensor the degree of off-set between them-refer to Transmitting area diagram.
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Influence of surrounding metal and Mutual interference

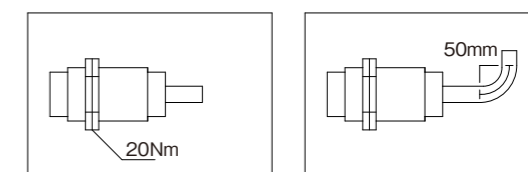
In order to avoid mutual interference between parallel-mounted sensors ,or to avoid influence of surrounding metal,when sensor is mouted in metal ,keep the minimum space as described below.



Type code	A(mm)	B(mm)	C(mm)
RS08TA-018D-PU-__	18	18	110
RS08EA-018N/P-PU-__			
RS08TA-030D-PU-__	30	20	200
RS08EA-030N/P-PU-__			

Bending radius of cable

The minimum bending radius for these sensors are 50mm.



* Never pull the cable strongly in installing.

<NOTES>

This product is in conformity with EMC directive and indicated CE marking. Appropriate measure should be taken to avoid excessive surge when the cable length between RS08EA and a power unit is longer than 10m because it is not taken procedure to surge.



Don't touch RS08_A directly after having used it at high temperature for many hours, or you will burn yourself. Maintenance work should not be carried out before RS08_A cools down.