

Remote sensor system
24 signal transmission / Compact shape
24V1A type

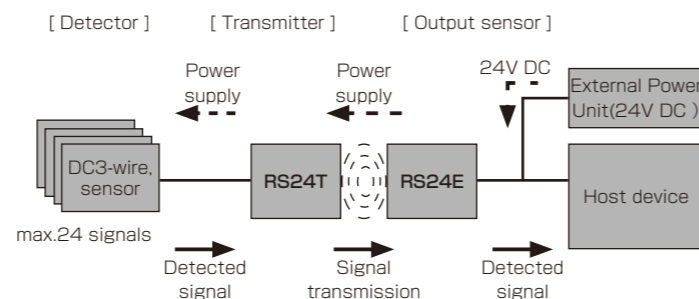
Output sensor : **RS24E-424N-PU-__ (NPN)**
RS24E-424P-PU-__ (PNP)
Transmitter : **RS24T-424-PU-__**



Safety Considerations

Please read carefully before using and full attention to Safety Considerations. (See the attached T318501)

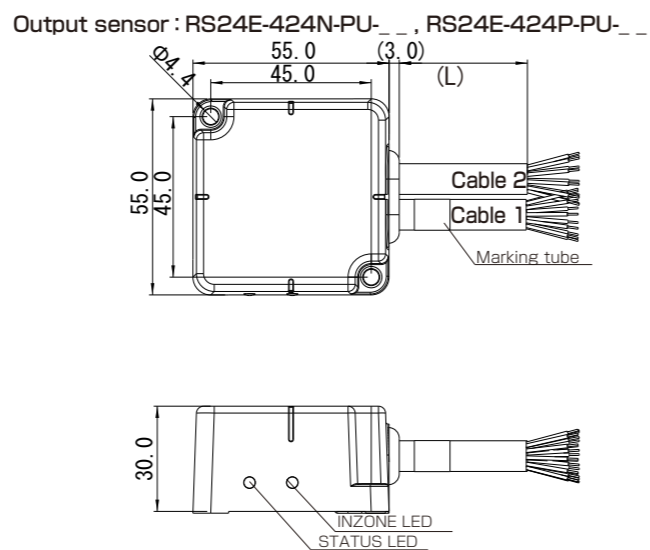
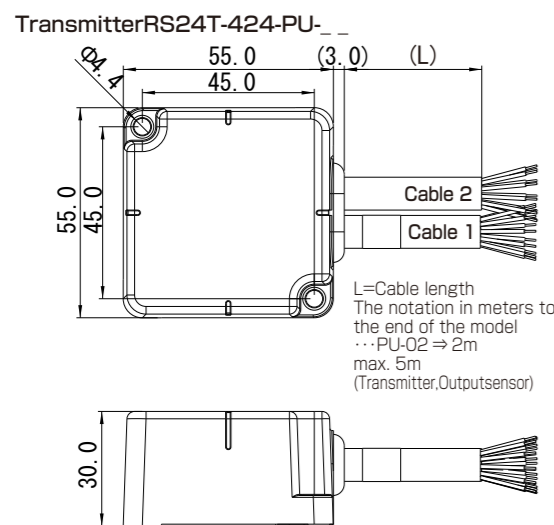
System configuration



[Function of each component]

- Detector :** Connects Detector sensor (max.24) 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.

Dimension

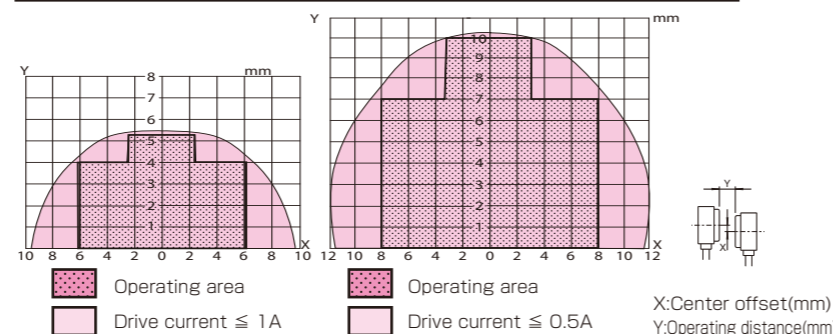


Specification of the System

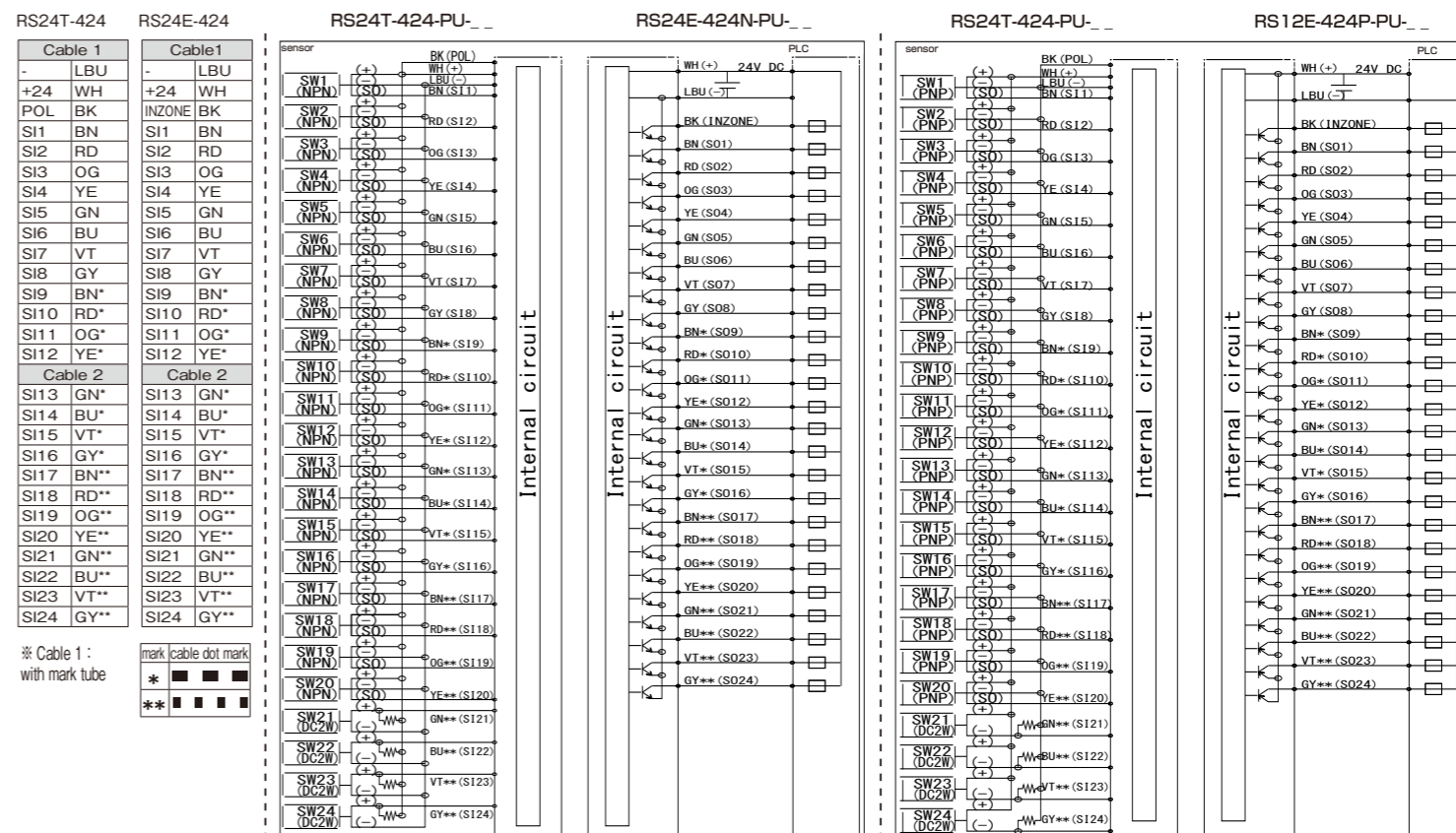
Type	RS24T-424-PU-__	Type	NPN PNP	RS24E-424N-PU-__ RS24E-424P-PU-__
Applicable sensor	DC 3-wire sensor	Supply voltage		24 V DC ± 5 % (include ripple)
Drive voltage	24V ± 1.5V DC	Current active		Max 1.5 A (with 1A drive)
Drive current	≤ 1A	consumption static		Max 0.1 A (when not facing)
Input signals	24	Number of output signals		24+1 (INZONE)
Operating distance	0...5.5mm (in the case of 1A) 0...1.0mm (in the case of 0.5A)	Load current		≤ 50mA/ 1 output
Center offset (1A)	Transmission distance is within 4mm: ± 6mm Transmission distance 4 ... 5.5mm: ± 2.5mm	Frequency of operation		300Hz
Center offset(0.5A)	Transmission distance is within 7mm: ± 8mm Transmission distance 7 ... 10mm: ± 3mm	LED indication		Status (Green), Signal (Orange)
Operating temperature	0...+50°C	Operating temperature		0...+50°C
Protection class	IP67	Protection class		IP67
Cable	PUR φ 8.6x2(2x0.5mm ² +13x0.18 mm ²)+(12x0.18 mm ²)	Protection circuit		Short circuit protection , Overtemperature protection, Converse protection , Output surge suppression, overheating protection when facing metal *1
Material Case	Polyurethane (surface treatment: two-pack acrylic urethane)	Cable		PUR φ 8.6x2(2x0.5mm ² +13x0.18 mm ²)+(12x0.18 mm ²)
Heat sink	Aluminum	Material Case		Polyurethane (surface treatment: two-pack acrylic urethane)
Weight	Body 165g +Cable 105g/m x2pcs.	Heat sink		Aluminum
		Weight		Body 165g+ Cable 105g/m x 2pcs.

* Metal protection is a function of metal heat prevention when metal opposed. Since it is not guaranteed to operate with all metals, please do not deliberately confront the metal against the communication surface.

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



Wiring diagram

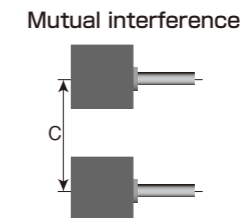
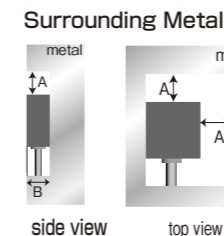


■ SW21...24 of the wiring diagram is an example of the DC-2 Wire sensor wiring. DC-3 wire Sensor can also be used.
■ The unused cable core is cut. In the case of cutting cable, the unused core cable will be exposed. In that case, please be sure to take measures against short-circuit.
Unused core : Cable 1(GN*,BU*,VT*) Cable 2(BN*,RD*,OG*,YE*,WH*,LBU*)

Installation notes

Type code	(mm)		
	A*	B	C
RS24T-424-PU-__	30	30	165
RS24E-424N-PU-__			
RS24E-424P-PU-__			

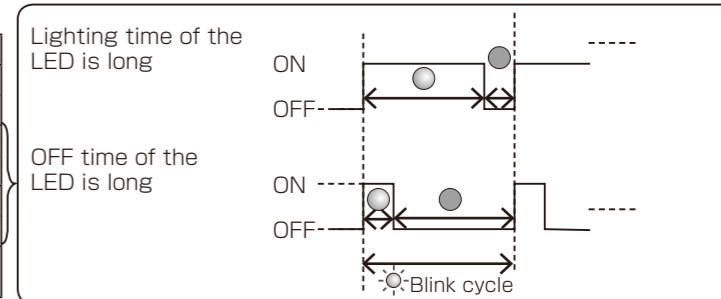
*The tightening torque when the fixing ⇒ 1.5N·m
* Besides the back side, only one side can be in contact with the metal.



LED indication

■ Status LED (Green)

LED	Blinking	Pattern	Meaning
ON	●	-	The power supply is supplied.
OFF	○	-	The power supply is not supplied.
Blink	○	Slow (1.5 sec)	Off time of the LED is long Lighting time of the LED is long Anomalous temperature Oscillation circuit overcurrent.
Blink	○	Mid.Speed (0.6 sec)	Off time of the LED is long Lighting time of the LED is long Supply voltage is high. Supply voltage is low.
Blink	○	High speed (0.2 sec)	The LED flashes at the same interval Short circuit protection.



■ Signal LED (Orange)

The in zone LED lights up when the transmission part and the output part are in a confronting state and communication is possible