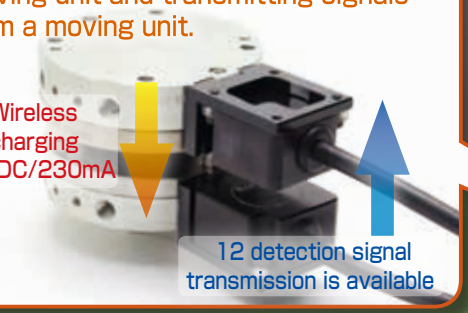
Remote Sensor system
Compact shape / 12 signals

The best solution for robot hands and tool changers.

We achieved wireless charging to a moving unit and transmitting signals from a moving unit.



■ Output sensor
RS12E-422N-PU
RS12E-422P-PU

■ Transmitter
RS12T-422-PU

Water/dustproof design

More compact than a conventional product.

Compact shape! 45x45x25mm!

Introduction advantages of Remote System

The remote system enables to send power and transmit the signals without a contact.
It can provide many advantages when a conventional connector, which connects a moving unit and a fixed unit, will be wireless.

For example

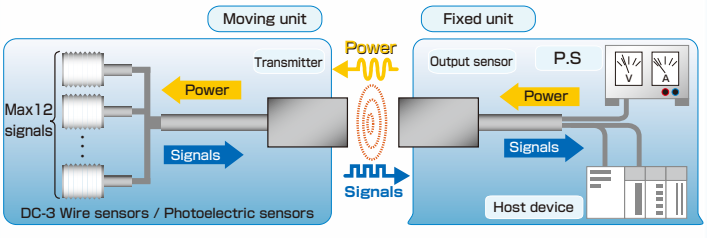
■ Compare to a connector

- ○ No need to detach a connector. It achieves labor-saving.
- ○ Untroubled conditions such as a pin breaking.
- ○ Reducing of maintenance costs.

■ Compare to a cable

- ○ A curl cord isn't necessary because of no extension parts.
- ○ No cable disconnection troubles with a cable deterioration.

Construction of the system



An output sensor in fixed unit connects a power supply and external control devices such as a PLC.
A transmitter in moving unit connects detection sensors.

■ Output sensor → Transmitter
The remote system enables to supply power wirelessly to detection sensors which are connected to a transmitter.

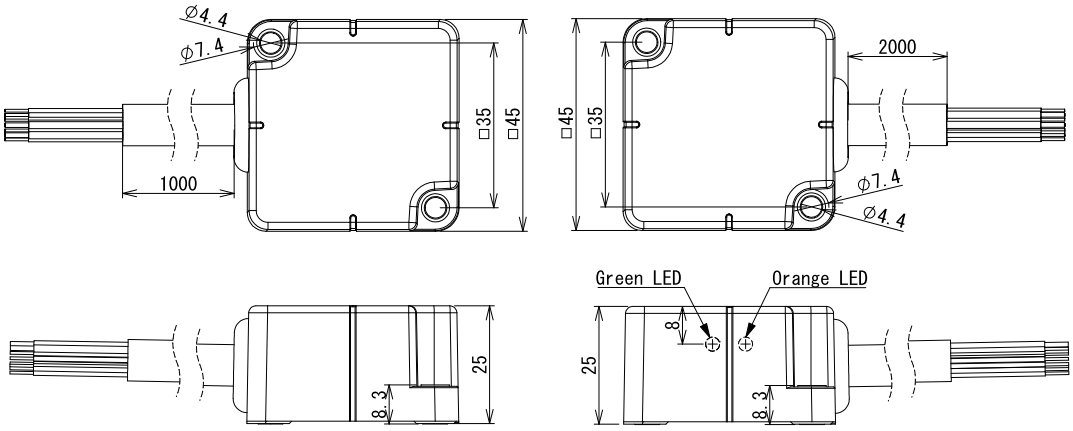
■ Transmitter → Output sensor
The remote system enables to transfer max 12 on/off signals from a transmitter to a PLC.

Prodct News

DC 3-wire Detection sensor type

Size 45 x 45 | Operating distance 2...5mm

Transmitter Output sensor



	Transmitter
Type code DC 3-wire	RS12T-422-PU-01
Drive voltage	12V ± 1.5V DC
Drive current	≦ 230 mA
No. of Input signals	12 signals
Operating distance	2...5mm
Center offset	± 3mm
Drive current	230 mA
Operating temperature	0...+50℃
Protection class	IP67
Cable	PUR / ϕ 8.6 , 2x0.5mm^2 + 13+x0.18mm^2
Material Housing	ABS
Weight	Body 75 g + Cable 105 g x 1m
Remark	

	Output sensor
Type code NPN	RS12E-422N-PU-02
code PNP	RS12E-422P-PU-02
Operating voltage	24V DC ± 10% (incl.ripple)
Current consumption	≦ 600mA
No. of output signal	12 signals
Load current	max.50mA（1 signal.）
Frequency of operation	60Hz
LED	Status LED (Green) , Output LED (Orange)
Operating temperature	0...+50℃
Protection class	IP67
Cable	PUR / ϕ 8.6 , 2x0.5mm^2 + 13+x0.18mm^2
Material Housing	ABS
Weight	Body 80 g + Cable 105 g x 2m
Remark	

If you use a DC-2 wire sensor, wire through a 1 to 2 K Ω resistance.

Applicable sensor

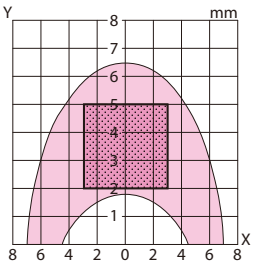
Supply voltage	12V DC
Total current consumption*	less than 230 mA
Residual voltage	less than 3.5V
Load current	---

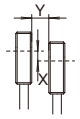
Use detection sensors which meet conditions in the left table.

*Total consumption current of connected sensors.

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

RS12T-422-PU / RS12E-422N-PU、RS12E-422P-PU





X:Center offset (mm)
Y:Operating distance (mm)

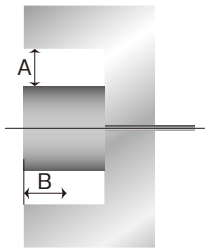
Operating area

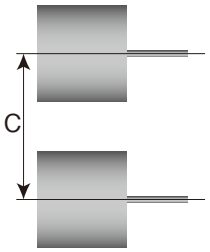
Drive current ≦ 230mA

Installation notes

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

■ Surrounding metal ■ Parallel installation





Type code	A*	B	C
RS12T-422-PU	30	23	250
RS12E-422N-PU			
RS12E-422P-PU			

(mm)

* When you install it, a metal can have contact with one side of the body except for the sensing surface.

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* Contents is subject to change without notice.