Remote System
User's Guide

Remote power supply system
30W Power Supply only type / Charging type

Base part : RVE-210-2-PU-_ _
Remote part : RVT-210-102-PU-_ _ (Power Supply only type)
RVT-210-502-PU_ _
(Charging type, Lead battery exclusive use)

Attention for Installation

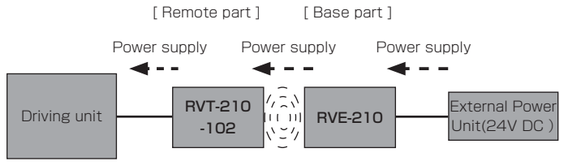
(Read this section thoroughly before installation.)

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

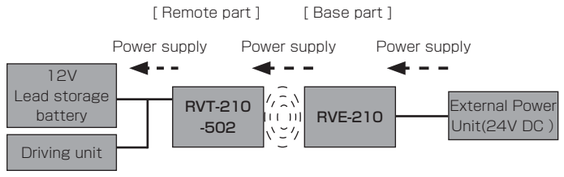
- ◆ Ensure the power is switched off during installation or maintenance operations.
- ◆ Use a regulated power supply, e.g. switch-model type. Simpler power supplies, such as a full-wave rectification type, will cause the permissible ripple rating to be exceed and may cause malfunction.
- ◆ Ensure correct 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.
- ◆ When the resin (ABS or ABS + PBT) is used to the case or the transmission surface, please be sure to avoid organic solvent or liquid containing them to splash over.
- ◆ Please install cable end "wiring part" in so that there is no water and cutting fluid.(Water is transmitted to the internal from the cable core, there is a possibility of causing a problem such as short circuit or corrosion.)
- ◆ Please do not face the output sensor to a metal at all times to avoid metal overheating or damage of the components.

System configuration

■ Power Supply only type



■ Charging type



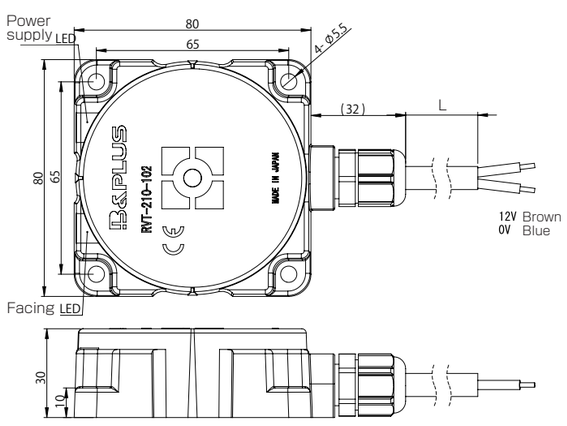
【Function of each component】

Remote part : It will supply power to the drive unit or lead batteries.

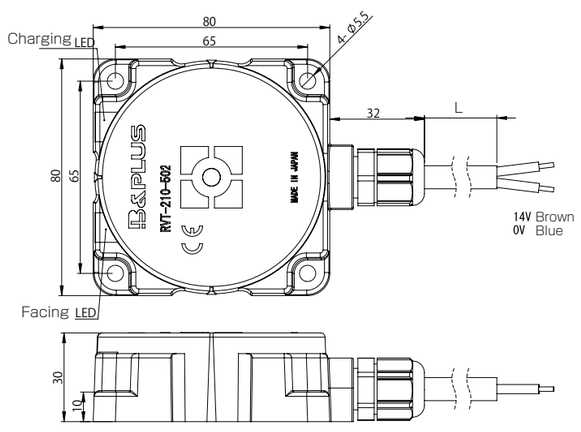
Base part : It supplies a movement power supply necessary for the remote part.

Dimension

Remote part : Power Supply only type
RVT-210-102-PU-_ _



Remote part : Charging type (Lead battery exclusive use)
RVT-210-502-PU-_ _



Specification of the System

Type code	RVT-210-102-PU-_ _
Operating distance	4...10mm
Center off-set	± 5mm
Drive voltage	12V ± 5%
Drive current	2.5A
LED	It represents the state of the power supply and facing in the LED
Operating temperature	0...+50℃
Protection class	IP67
Cable	PUR φ 7.8 / 2x1.5
Material	PTB
Weight	280 g+82g/m(cable)

Type code	RVT-210-502-PU-_ _
Operating distance	4...10mm
Center off-set	± 5mm
Drive voltage	14.4V CV Control the upper limit voltage
Drive current	2A CC Control current
LED	It represents the state of the charger and facing with LED
Operating temperature	0...+50℃
Protection class	IP67
Cable	PUR φ 7.8 / 2x1.5
Material	PTB
Weight	280 g+82g/m(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.

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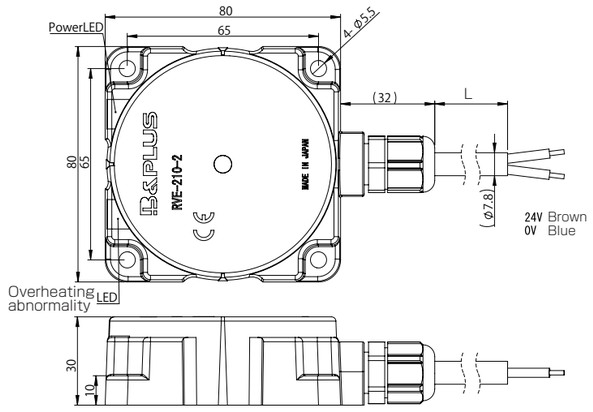
Dimension

Base part : RVE-210-2-PU-_ _



Specification of the System

Type code	RVE-210-2-PU-_ _
Supply voltage	24V DC ± 10%(incl.ripple)
Current consumption	≦ 2A
LED	It shows the power supply and overheating in the LED lighting
Operating temperature	0...+50℃
Protection class	IP67
Cable	PUR φ 7.8 / 2x1.5
Material	PTB
Weight	280 g+82g/m(cable)

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

A base pert and a metal, Please do not face at all times.Heating of the metal, or, there is a possibility of damage to the internal elements.

Installation notes

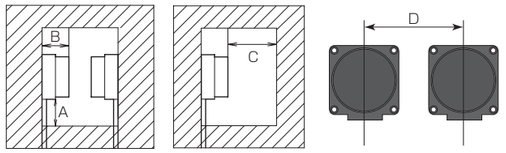
In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted sensors, keep the minimum free zone as described below.

■ Surrounding metal ■ Parallel installation

Tightening torque ⇒ 0.63N·m

Type code	A*	B	C	D
RVE-210-2-PU-_ _	50	30	30	300
RVT-210-102-PU-_ _、RVT-210-502-PU-_ _				

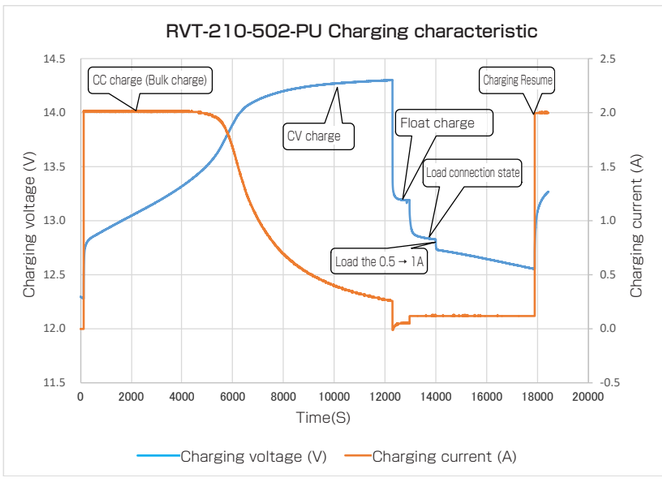
(mm)



LED indication

RVE-210-2-PU-_ _			RVT-210-102-PU-_ _			RVT-210-502-PU-_ _		
LED	Status	Coloer	LED	Status	Coloer	LED	Status	Coloer
Power LED	During power supply supply	Lighting up (green)	Power supply LED	When you are Power supply	Lighting up (yellow)	Charging LED	When it is charging	Lighting up (yellow)
Overheating abnormality LED	When the internal element overheating	Lighting up (yellow)	Facing LED	When you are facing	Lighting up (green)	Facing LED	When you are Power supply	Lighting up (green)

Charging Characteristics



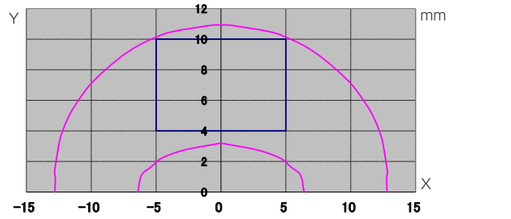
PE12V12 (manufactured by GS Yuasa) after a 50% discharge, evaluate the charging characteristics of a combination of PVE-210-2-PU / RVT-210-502-PU. RVT-210-502-PU operation at 4 Step 3 stage lead battery profile.

Notes

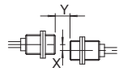
· In the over-discharge state (about 10V or less battery voltage), to limit the charging current to about 130mA. Usually return to the charging cycle when it exceeds approximately 10V.
· Voltage restart the charge from the float charge is about 12.6V.

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

RVE-210-2-PU-_ _ / RVT-210-102-PU-_ _, RVT-210-502-PU-_ _



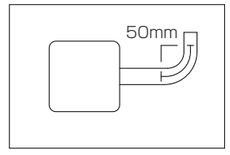
Operating distance	Center offset	Drive current
4...10mm	± 5mm	≦ 2.5A (RVT-210-102)
4...10mm	± 5mm	≦ 2.0A (RVT-210-502)



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

Bending radius of Cable

The minimum bending radius for thesensors are 50mm.



∗ Never pull the cable strongin installing

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