System configuration

[Remote] [Base]

12V lead battery
Power supply (24V DC)

Remote part: It will supply power to the lead batteries.
Base part: It supplies a movement power supply necessary for the remote part.

Safety Considerations

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

Dimention and specification of RVE-433-2-PU-

- Type code: RVE-433-2-PU-
- Supply voltage: 24V DC ±10%/no polarity
- Current consumption: ≤8A
- LED: Green (Lighting by energization) / Orange: Inzone
- Operating temperature: 0...+50℃
- Protection class: IP65/IP67
- Protection function: Battery unconnected protection / reverse connection protection
- LED Green: Power (Among the output)
- Drive current: ≤8.5A
- Drive voltage: ≤14.8V
- Center off-set: ±4mm
- Operating distance: 0...10mm
- Protection function Battery reverse connection or non-connection error
- Battery type: Lead battery
- Specification of battery
  - Voltage: 12V DC
  - Charging current: Max 8A
  - Battery voltage: 24V DC
  - Protection function
    - Battery reverse connection or non-connection error
    - Battery conformity detection

RVT-433-508-PU-

- Type code: RVT-433-508-PU-
- Operating distance: 100mm
- Center off-set: ±4±4mm
- Protection function: Battery reverse connection or non-connection error
- Battery type: Lead battery
- Protection function
    - Battery reverse connection or non-connection error
    - Battery conformity detection

Dimension and specification of RVT-433-508-PU-

- Type code: RVT-433-508-PU-
- Operating distance: 100mm
- Center off-set: ±4±4mm
- Protection function: Battery reverse connection or non-connection error
- Battery type: Lead battery
- Protection function
    - Battery reverse connection or non-connection error
    - Battery conformity detection

Installation note

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.

Tightening torque ⇒ 3.5N・m

Please set axial misalignment between RVE and RVT within X and Y respectively within 4 mm

[Attention about the installation]

1. When facing a remote part and a base part a bit away from the transmitting area, the built-in relay in RVT-433 might repeatedly open and close. When both parts remain facing condition, we recommend to use within rated transmitting area to prevent to shorten their life.
2. Since this product is a natural air cooling type, please consider natural convection not keep the heat.
3. Because this product is to prevent malfunction or failure due to noise, please be attached so that the heat sink is grounded to the frame ground.
Charging Characteristics

After discharging UI-36 NE made by KUNG LONG BATTERIES INDUSTRIAL, evaluate the charging characteristics in the combination of the RVE-433-2-PU / RVT-433-508-PU.

Attention
- In the over-discharge state (below the battery voltage of about 10V), to limit the charging current to about 2.5A. Usually returns to the charge cycle and when it is more than about 10V.
- When the output current from the RVT-433-508-PU is less than or equal to about 0.8A, it will transition to float charge.
- When the output current from the RVT-433-508-PU is more than about 1.7A, to migrate from the float charge to the normal state of charge.
- Battery voltage is about 8.5V or less, or if you have connected the about 16V or more of the battery even when the opposing state does not start charging operation.

Typical Transmitting Diagram (Supply voltage at 21.6V / non-flush mount)

Drive voltage is specified with cable length 0 m. Since the resistance value per cable length used in this product is 30 mΩ / m, consider the voltage drop in actual use.

Bending radius of Cable
The minimum bending radius for the sensor is 50mm.

- Never pull the cable strongly in installing.

Wiring
1) In order to meet the EMC (IEC61000-4-3: Radiation radio frequency electromagnetic field immunity) standards, the ferrite core clamp of bundled, please attach two clamps within 20cm from the body. The number of turns is two turns.
2) If you want to extend the cable in consideration of the voltage drop, please use a sufficiently thick cable.

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