Remote Sensor System
G-Power Remote Sensor System
RGP series / 8 signal transmission type
Transmitter: RGPT-3005-V1215
Output Sensor: RGPE-3005-V1215N / P

Attention for Installation
(Read this section thoroughly before installation.)

Before using the Remote Sensor, read this user's guide 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 exceeded 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.
- 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 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.

Dimension
Transmitter: RGPT-3005-V1215
Output Sensor: RGPE-3005-V1215N (NPN)
RGPE-3005-V1215P (PNP)

Specication
Type number
RGPT-3005-V1215
RGPE-3005-V1215N/P
Rated transmitting distance
2  5mm
Senser offset
0 ± 3mm
Drive current
≤ 150mA
Drive voltage
DC 12 ± 1.5V
Supply voltage
DC 24V ± 10%(incl. ripple)
Current consumption
≤ 400mA

Total current consumption of detectors must not exceed the rated drive current. Reduce the switches when the total current consumption exceeds the drive current.

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.

Note
Please note that the cable length of an output sensor may not longer than 10m. The CE marking verifies that our products comply with the requirements of EMC directive. The surge test to an output sensor is not carried out. When using an output sensor with cable length longer than 10m, a measure to protect the sensor from surge current should be taken.

Transmitting area diagram
Example: Supply voltage at 24V DC

Wiring diagram
Connecting NPN type switch

Influence of surrounding metal
To avoid interference or transmitting metal, keep minimum spacing as described below;

Mutual interference
In order to prevent mutual interference between parallel-mounted sensors, keep minimum spacing as described below;

Installation

Never pull the cable strong in installing.

Table:

<table>
<thead>
<tr>
<th>Type number</th>
<th>A (mm)</th>
<th>B (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGPT-3005-V1215</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>RGPE-3005-V1215P</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

* The minimum bending radius for the sensors are 50mm.

Note
(-) line of Transmitter and (+) line of Detectors should be connected together with a resistor of 1-2ohm.