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 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. This is a result of EMC directive. The surge test to an output sensor is not carried out. 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.

At least 5cm to 10cm minimum spacing should be kept among sensors, keep minimum spacing as described below:

Simpler power supplies, such as a full-wave rectification type, cause malfunction. Use a regulated power supply, e.g. switch-model type.

Maintenance operations.
Ensure the power is switched off during installation or maintenance operations.
During installation and operation, pay close attention to the safety aspect.
Before using the Remote Sensor, read this manual carefully.

【Specification】

<table>
<thead>
<tr>
<th>Transmitter</th>
<th>Type number</th>
<th>RPT-1202D</th>
<th>RPT-1202D</th>
<th>RPT-1804P/D</th>
<th>RPT-1804N/P</th>
<th>RPT-3008P/D</th>
<th>RPT-3008N/P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated transmitting distance</td>
<td>0 ~ 4mm</td>
<td>0 ~ 3mm</td>
<td>0 ~ 2.5mm</td>
<td>0 ~ 4mm</td>
<td>0 ~ 4mm</td>
<td>0 ~ 4mm</td>
<td></td>
</tr>
<tr>
<td>Drive current</td>
<td>5mA</td>
<td>2~20mA</td>
<td>5mA</td>
<td>2~20mA</td>
<td>5mA</td>
<td>2~20mA</td>
<td></td>
</tr>
<tr>
<td>Drive voltage</td>
<td>DC 12 ± 1.5V</td>
<td>DC 12 ± 1.5V</td>
<td>DC 12 ± 1.5V</td>
<td>DC 12 ± 1.5V</td>
<td>DC 12 ± 1.5V</td>
<td>DC 12 ± 1.5V</td>
<td></td>
</tr>
</tbody>
</table>

【Transmitting area diagram】

- 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.
- 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.
- The drive current is dependent on the transmission distance between Transmitter and Output Sensor.
- The drive current is dependent on the transmission distance between Transmitter and Output Sensor. Refer to Transmitting area diagram.
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【Construction of the system】

[Detector] [Transmitter] [Output Sensor]

Power supply 12VDC 24VDC

【Wiring diagram】

Connecting NPN type switch
[Detector] [Transmitter] [Output Sensor]

Connecting PNP type switch
[Detector] [Transmitter] [Output Sensor]

Connecting DC 2W type switch (incl. mechanical limit switches)
[Detector] [Transmitter] [Output Sensor]

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.

【Dimensions】

Dimensions of the system

X: center off-set (mm)
Y: transmitting distance (mm)

【Function of each component】

Detector: Provides power for Detector, also passes detected signals from Detector to Output Sensor.

Transmitter: Puts out detected signal from external controller, also sends power for operating of Detector and Transmitter.

Output Sensor: Puts out detected signal to external controller, also sends power for operating of Detector and Transmitter.

【Attention for Installation】

- In order to prevent mutual interference between parallel-mounted sensors, keep minimum spacing as described below;
- At least 5cm to 10cm minimum spacing should be kept among sensors, keep minimum spacing as described below:
- The minimum bending radius for these sensors is 50mm.

【Installation】

Tightening torque for attached nut A = M12:10Nm (100kgf-cm) M18/M30:20Nm (200kgf-cm)

Never pull the cable strong in installing.

B & PLUS K.K.
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