Remote Sensor System
1 signal transmission / Flat type

Transmitter : RPT-F0D-PU-__
Output sensor : RPE-F0N-PU-__ RPE-F0P-PU-__

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 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.
- 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 and "wiring part" so that there is no water and cutting fluid. (Water is transmitted from 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.
- 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.

Specification

<table>
<thead>
<tr>
<th>Part</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center offset (mm)</td>
<td>0 ± 1.5mm</td>
</tr>
<tr>
<td>Operating distance</td>
<td>0...1.5mm</td>
</tr>
<tr>
<td>Voltage</td>
<td>12V ± 1.5V DC</td>
</tr>
<tr>
<td>Type code</td>
<td>RPT-F0D-PU-__</td>
</tr>
<tr>
<td>Drive current</td>
<td>5mA</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0...+50°C</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP67</td>
</tr>
<tr>
<td>Cable</td>
<td>PUR / φ 4.5 , 2x0.54mm²</td>
</tr>
<tr>
<td>Material</td>
<td>ABS</td>
</tr>
<tr>
<td>Weight</td>
<td>20 g + 30 g/m (Cable)</td>
</tr>
</tbody>
</table>

Construction of the system

- [Detector]: Connects detector switch and transmits the detected signal to Transmitter.
- [Transmitter]: Provides power for Detector, also passes detected signal from Detector to Output Sensor.
- [Output Sensor]: Puts out detected signal to external controller, also sends power for operating of Detector and Transmitter.

Wiring

- [Detector]: Connects detector switch and transmits the detected signal to Transmitter.
- [Transmitter]: Provides power for Detector, also passes detected signal from Detector to Output Sensor.
- [Output sensor]: Outputs signal to external controller (include Mechanical switch).

Typical Transmitting Diagram

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

Mounting

- Method of fixation
  - It is recommended to install RPT/RPE on metal in order to reduce the influence of self-heating.
  - The torque of a screw(M4) is 1.2Nm.
  - Minimum bending radius secure bend radius more than 50mm.

Combination of RPE-1202 □-PU and RPT-1202D-PU

This product is compatible with the M12 type (RPE-1202 □-PU and RPT-1202D-PU), it can also be used in the following combinations.

<table>
<thead>
<tr>
<th>Type code</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPT-F0D-PU-__</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>RPT-1202D-PU-__</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Examples of usage

- Do not pull the cable strongly.
- Do not face the output sensor to a metal at all times to avoid metal overheating or damage of the components.