Remote System
User's Guide

Power Remote Sensor System
RP Series 15 signal transmission type

M30 Transmitter: RPT15-3005D-PU
Output Sensor: RPE15-3000N / P-PU

Attentition for installation
(Read this section thoroughly before installation.)

Before using the Remote Sensor, read this manual carefully.

- Ensure the power is switched off during installation or maintenance operations.
- Use a regulated power supply, e.g. switch-model type.
- 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.

Specification

<table>
<thead>
<tr>
<th>Type number</th>
<th>RPT15-3005D-PU</th>
<th>RPE15-3000N/P-PU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated transm. distance</td>
<td>5 ± 2.5mm</td>
<td>200 ± 10mm</td>
</tr>
<tr>
<td>Center offset</td>
<td>5 ± 2.5mm</td>
<td>15 ± 2mm</td>
</tr>
<tr>
<td>Power supply</td>
<td>12V ± 1.5V DC</td>
<td>24V ± 10% (incl. ripple)</td>
</tr>
<tr>
<td>Drive current</td>
<td>3.0...6.0mA</td>
<td>400mA</td>
</tr>
<tr>
<td>Current consumption</td>
<td>50mA</td>
<td></td>
</tr>
</tbody>
</table>

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.

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 influence 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.

Construction of the system

【Transmitter】 【Output sensor】 【PLC】

24V DC

【Transmitting area diagram】

Example: Supply voltage at 24 DC

Influence of surrounding metal and Mutual interference

In order to avoid mutual interference between parallel-mounted sensors or to avoid influence of surrounding metal when sensor is mouted in metal keep the minimum space as described below.

Installation

Tightening torque for attached nut is 20Nm(200kgf·cm)
The minimum bending radius for the sensors is 50mm.

Wiring diagram

Connecting DC2W type switch (incl. mechanical limit switch)

NPN Type: RPT15-3005D-PU → RPE15-3000N-P-PU

PNP Type: RPT15-3005D-PU → RPE15-3000P-PU

【Wiring diagram】