Remote System
User's Guide

Remote sensor system
15 signal transmission / Ring shape
Output sensor : RS15E-R02N-PXU- __ (NPN)
RS15E-R02P-PXU- __ (PNP)
Transmitter : RS15T-R01D-PXU- __

Attention for 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-mode type. Simpler power supplies, such as a full-wave rectification type, will cause the permissible ripple ratio 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.
- Do not use this system in an environment where a high level of interference is expected.
- Please note that the output signal is established within the specified range. Please note that it does not guarantee signals output outside the specified range.

System configuration

- Detector : Connects Detector sensor (DC wire or Mechanical switch) and transmits the detected signals to Transmitter.
- Transmitter : Provides power for Detector, also passes detected signals from Detector to Output Sensor.
- Output Sensor : Puts out detected signal to host device, also sends power for operating of Detector and Transmitter.

Dimension
Transmitter : RS15T-R01D-PXU- __
Output sensor : RS15E-R02N-PXU- __, RS15E-R02P-PXU- __

L = Cable length
The notation in meters to the end of the model
P=0) = 1m

Wiring diagram

■ RS15T-R01D-PXU- __
■ RS15E-R02N-PXU- __ (NPN)
■ RS15E-R02P-PXU- __ (PNP)

Installation notes
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.

Non metal shaft
Setting metal shaft

Bending radius of Cable
The minimum bending radius for the sensors are 50mm.
- Never pull the cable strongly when installing.

Applicable sensor

Safely voltage 12V DC
Bake voltage ± 125V
Residue voltage ± 25V
Load current ± 0mA
Load current ± 5mA

Typical Transmitting Diagram
(Supply voltage at 24V, non-flush mount)

X (Center offset(mm))
Y (Operating distance(mm))

System configuration

Detector
Power supply (12V DC / 1mA x 15)

Transmitter
Power supply (24V DC)

Output sensor
External Power

[Function of each component]

Detector : Connects Detector sensor (DC wire or Mechanical switch) and transmits the detected signals to Transmitter.
Transmitter : Provides power for Detector, also passes detected signals from Detector to Output Sensor.
Output Sensor : Puts out detected signal to host device, also sends power for operating of Detector and Transmitter.

Specification of the System

Type code Type APP output
RS15T-R01D-PXU- __ CO-0 wire sensor
RS15E-R02N-PXU- __ DC-0 wire sensor
RS15E-R02P-PXU- __

Drift voltage 12V ± 15V DC
Drift current 0.5 mA ± 1.0 signal
No. of output signals 16 signals
No. of input signals 16 signals

Installation

Drift voltage 12V ± 15V DC
Drift current 0.5 mA ± 1.0 signal
No. of output signals 16 signals
No. of input signals 16 signals

Operating distance 1.5 m, 5.5 m
Center offset ± 5.5 mm, ± 8.5 mm
Opening temperature 0 ~ 55°C
Protection class IP67

Cable PUR 3 x (4/5 x 0.18) mm²
H x Ø x 0.18 mm³

Case material PUR
Weight 410 g ± 10%
Material PUR
Weight 410 g ± 10%

Note CE is not acquired
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(Supply voltage at 24V, non-flush mount)

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Non metal shaft
Setting metal shaft