Remote System User’s Guide

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 operation.
- Use a regulated power supply, e.g., switch-mode type, which will ensure 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 noise 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 : RS15T-R03D-PU__
Output sensor : RS15E-R03N-PU__ , RS15E-R03P-PU__

Wire unused cable core is cut at the factory. (Only Transmitter) Core wire that is not used and to shorten the cable is exposed. Please do not short-circuit.

Cable core color is (Pale blue) and (Black).

Bending radius of Cable

The minimum bending radius for these sensors are 50mm.

Never pull the cable strongly installing

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.

Screwing torque: 0.3 Nm (2.4 oz-in)

Attaching location: To be used at room temperature (0°C to 50°C)

Note:
- CE is not acquired

Specification of the System

Type code: RS15T-R03D-PU__
Applicable sensor: DC-2 wire sensor
Wiring: 2 wire connection
The number of output signals: 16 signals
Installation: indoors, outdoor
Distance: 0 to 100m
Center offset: ±0.5m
Operating temperature: 0°C ~ 50°C
Protection class: IP67
Cable material: PVC
Cable: 2-E5x0.5mm² + 2-E1x0.1mm²
Material: PUR
Weight: 2.0kg
Note: CE is not acquired

Applicable sensor

Supply voltage: DC 12V
Output current: 10mA
Input current: 15mA
Lead current: 5mA

Typical Transmitting Diagram

Supply voltage 24V DC
Non metal shaft
Nylon mesh or metal mesh

RS15T-R03D-PU__ / RS15E-R03N-PU__ / RS15E-R03P-PU__

Detector: Connects Detector sensor (DC-2 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.

Wiring diagram

RS15T-R03D-PU__

RS15E-R03N-PU__ (NPN)

RS15E-R03P-PU__ (PNP)

RS15T-R03D-PU__

Medical and installation

Bending radius: 50mm

Center offset: ±0.5m

Non metal shaft

No metal shaft

Non metal shaft