

# **Inductive Proximity Sensor/Switch Datasheet**

### CD-E3JK-DS30D/J Angular Column Type Relay Built-In

#### **Photoelectric Sensor**

#### Introduction

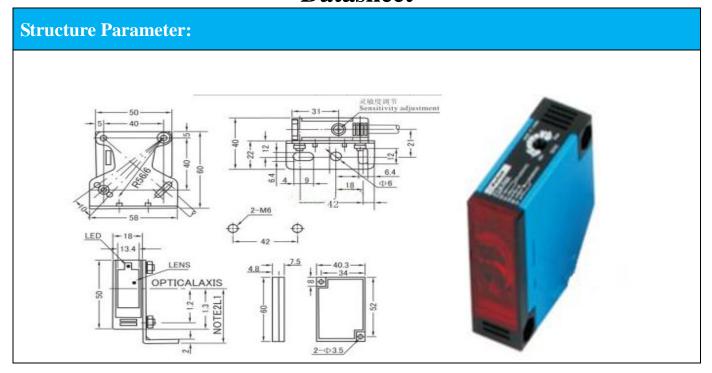
- Photoelectric sensor is a piece of equipment used to discover the distance, absence, or presence of an object by using a light transmitter, often <u>infrared</u>, and a photoelectric receiver. There are three different useful types: through beam, diffused and retro-reflective.
- Through-beam type photoelectric switch is designed that via the light beam between opposite-mounted transmitter and receiver, the object passing through these two devices will interrupt the light beam and start the receiver. The detection range of this type is up to 50M from 5M.
- Diffuse reflection type photoelectric switch integrates the transmitter and the receiver. Light reflected by the photoelectric switch is reflected back to the receiver by the detected object. Normally the detection range of this type is from 10cm to 1M.
- Retro-reflective type photoelectric switch also integrates the transmitter and the receiver. Its difference from other models is that reflector is used to reflect light to the photoelectric switch. The detection range of this type is up to 2M.

#### **Features:**

- ◆ All-purpose type ,which can directly substitute the same type of P+F and OMRON
- Multiple functions ,built-in relay ,can drive high current load
- ◆ Cabling type and connection terminal type
- ◆ Long service life ,high reliability and strong resistance property to environment
- Red LED indicates that it's available to detect the sensor operating state
- ◆ Countermeasure to improve the housing intensity and to solve disconnection
- ◆ Can provide time-delay output type
- ◆ IP67 protection structure (IEC specification)



## Inductive Proximity Sensor/Switch Datasheet



| Technical Parameter:       |  |                    |
|----------------------------|--|--------------------|
| Model number               | CD-E3JK-DS30D                                    | CD-E3JK-DS30J      |
| Output way                 | Relay output DC NO                               | Relay output AC NO |
| Supply voltage             | DC10-48V   | AC90-250V          |
| Detection method           | Diffuse Reflection Type                          |                    |
| Detection range            | 30 cm  |                    |
| Detection target           | Transparent/opaque objects                       |                    |
| Detection range regulation | Sensitivity adjuster                             |                    |
| Response frequency         | 25 Hz  |                    |
| Working current            | 5 A  |                    |
| Power current              | 3VA below  |                    |
| Control output             | 2A below(contact service life:0.1 million times) |                    |
| Insulation impedance       | 50 MΩ  |                    |
| environment temperature    | -20°C~70°C (248-343K)                            |                    |
| Connection form            | 2m, PVC  |                    |
| Protection grade           | IP65   |                    |