# Study of Proximity Sensors Scientech 2313



Scientech 2313 provides fundamental study of Magnetic, Optical, Inductive and Capacitive Proximity Sensors which are widely used in industries for applications such as object counting, length counting in Roller Coasters, Conveyor Systems, etc.

#### **Features**

- Inductive Proximity Sensor
- Capacitive Proximity Sensor
- Magnetic Sensor
- Optical Sensor
- Audio and LED indicator for the object detection
- Easy to operate and carry
- Exhaustive Learning material

## **Scope of Learning**

#### Study and use of:

- Inductive Proximity Sensor.
- Capacitive Proximity Sensor.
- Magnetic Sensor.
- Optical Sensor.



## **Study of Proximity Sensors**

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### **Technical Specifications**

Optical Sensor : Transmitter- IR LED

Wavelength : 940nm

IR Receiver-Phototransistor

Wavelength : 940nm

Operating input voltage- 5V DC

Output signal-TTL

Sensing range- 0-10 mm

Magnetic Sensor : Operating input voltage- 5V DC

Output voltage- 5V DC

Sensing range-0-20mm

Inductive Proximity Sensor : Operating input voltage- 12V DC

Sensor type-PNP

Output voltage- 12V DC Sensing range- 0-10 mm

Switch type- 1NO

**Body-Cubical** 

Capacitive Proximity Sensor : Operating input voltage- 12V DC

Sensor type-PNP

Output voltage- 12V DC

Sensing range- 0-10 mm

Switch type- NO

**Body-Cubical** 

Output Circuit : LED and Buzzer

Test Points : 8 nos

Dimensions (mm) : W 326 x D 252 x H 52

Power Supply :  $110V - 260V \pm 10\%$ , 50/60Hz

Weight : 1.5 Kg. (approximately)

Operating Conditions : 0-40°C, 80% RH

#### **List of Included Accessories**

- Patch Cord 16" (2mm)-2 Nos.
- Inductive Proximity Sensor (with DIN connector)
- Capacitive Proximity Sensor (with DIN connector)
- Bar Magnet, Mains cord-1 No.(each)