# Basic Sensors Configuration Training

# SICK LifeTime Services Training Course



## **Description**

This course will use a combination of presentations to cover the technologies followed by demonstrations of products. Products examined include inductive, magnetic, capacitive, cylinder and photo sensors. Participants will learn which technology best suits different applications. During this course important functions of each product will be examined and configured. The instructor will share presentations and product demonstrations using either an online meeting tool, or when delivered at customer site or at the SICK North American Training Center, a hands on learning experience. Exercise tasks will be used to monitor participant's competency as the training progresses.

#### **Objectives**

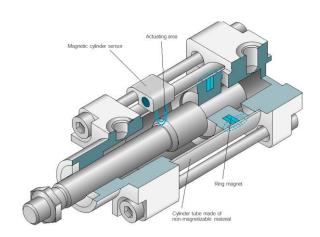
- Acquire the knowledge to correctly wire PNP and NPN type sensors
- Compare and contrast the capabilities of inductive, magnetic, cylinder and capacitive types of sensors
- Compare and contrast the capabilities of standard photo sensors – reflex, proximity, background suppression, thru-beam, and fiber optic
- Correctly implement ultrasonic sensors
- Identify how external light and reflective objects can affect photoelectric sensors
- Develop basic sensor troubleshooting skills

#### **Course Benefits**

- Participants will acquire the knowedge to wire both a PNP and NPN type sensor to a mechanical relay or PLC input
- Participants will develop the skills to install and apply each sensor type correctly
- Participants will develop the knowledge to troubleshoot and diagnose standard sensor problems, correct and test for proper functionality
- Through hands-on exercises participants will develop the application knowledge to choose and apply different standard sensors – learning the differences and best applications for each sensor type







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# **SICK LifeTime Services Training Course**



### **Target Audience**

Technical staff, Maintenance Engineers, Integrators and Plant Engineers, Technical Sales Personnel

## **Prerequisites**

None

#### **Recommended Additional Course**

None

#### **Duration**

4 hours

#### **Class Size**

Maximum of 8

#### **Where Offered**

- Customer site
- SICK North American Training Center
- Online meeting

#### **Format**

Presentation, demonstration, and exercises/quizzes

## **Testing Available**

Yes

### **Customer Required Materials**

For training at customer site, at a minimum, for every two participants:

- PC with SOPAS <u>installed</u> prior to attending
- Minimum of two (2) 110 VAC outlets For virtual training:
- PC with SOPAS <u>installed</u> prior to attending Online meeting tool <u>installed</u> (if necessary) prior to attending

#### **Logistics**

The following must be made available for the duration of the training:

- A suitable training room/area
- For in-person training at customer site or at the SICK North American Training Center, SICK provides hardware workstations for the hands-on experience

Failure to have the customer required material and/or logistics available may lead to ineffective training and may result in the class not being able to achieve the described objectives and course benefits.

#### **Part Number**

1612207

Travel expenses additional. Please contact SICK for information.

#### **SICK Training & Education**

From product training, start-up assistance, and engineering and consulting services — SICK provides the necessary support before and after field installation through an established network of field personnel. Training, service and support programs from SICK help you reach your goals with our innovative, cost-effective solutions.

SICK offers several types of training programs to help you learn more about our innovative products and systems. Many of our training modules offer hands-on, real-world application examples and problem-solving experiences. Please visit our website at <a href="http://www.sickusa.com">http://www.sickusa.com</a> for more information.

