Electronic Sensors Learning System

85-SN1









Learning Topics:

- Inductive Sensors
- Capacitive Sensors
- Measure and Analyze Sensor Performance
- Connect and Operate Sensors
- Magnetic Reed Sensors
- Hall Effect Sensors
- Photoelectric Sensors
- Sensor Applications
- Design Relay Circuits

Amatrol's Electronic Sensors Learning System (85-SN1) is a stand-alone system that teaches the operation of electronic non-contact sensors and their applications in industry, such as sensing movement, detecting metal versus non-metal, and determining speed. The 85-SN1 is small and light, yet offers a depth and breadth of knowledge and skills that far exceeds its physical size.

The 85-SN1 includes a variety of electronic sensors, such as capacitive proximity, inductive proximity, magnetic reed, and hall-effect. These sensors are used with a large array of test materials to show how each sensor completes industrial tasks in real-world environments. This system requires one of the following Amatrol Learning Systems: Electro-Fluid Power (85-EF), Electro-Hydraulics (85-EH), or Electro-Pneumatics (85-EP). Combined with Amatrol's world-class curriculum, this innovative product provides learners with a thorough understanding of electronic sensors and their applications.



Technical Data

Complete technical specifications available upon request

Carrying Case Slide Base Assembly **Inductive Proximity Sensor Capacitive Proximity Sensor** Magnetic Reed Sensor Hall Effect Sensor **Target Holder Assembly** Target Set **Power Supply Output Indicator and Lead Set** Interactive Multimedia Curriculum (MB837) Instructor's Guide (CB837) Installation Guide (DB837 Student Reference Guide (HB837) Additional Recommendation: Mobile Technology Workstation (82-610)

Utilities:

Electricity (120 VAC/60 Hz/1 phase)

Required:

One of the following Amatrol Learning Systems: 85-EF, 85-EH, or 85-EP

Electronic Sensor Training in a Flexible System

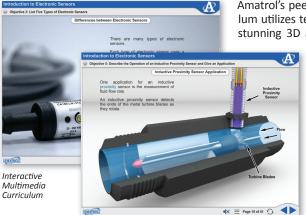
Electronic sensors are used in industrial applications for feedback from systems like electrical relay controls and programmable logic controllers. Learners practice real-world skills on standard industrialgrade components to gain practice and familiarize with actual components that they'll find on the job. As examples, the 85-SN1 allows learners to build relay circuits that separate non-metallic and metallic materials, design controls for a stamping machine, and use a sensor as a safety interlock.



Electronic Reed Sensor

World-Class Electronic Sensor Curriculum

Amatrol offers extensive, thorough, curriculum covering electronic sensor advantages, functions, and operation. The 85-SN1 curriculum covers five different electronic sensors and describes the characteristics that affect each sensor's performance. As an example, learners will study a Hall-Effect sensor and understand what the Hall-Effect is and how the sensors are utilized on conveyor belts and in computer keyboards. Learners will then test a Hall-Effect sensor's performance by sensing distance, hysteresis, and the ability to sense through different materials using supplied sensor targets.



Amatrol's peerless interactive multimedia curriculum utilizes text with voiceovers, pictures, videos, stunning 3D animations, and interactive quizzes

> and reviews that engage learners in theoretical knowledge and concepts. This thorough, detailed curriculum begins with the basics and advances to complex concepts. Through partnerships with key industry leaders and leading educators, Amatrol developed the right balance of knowledge to train learners to work in their chosen field.

Adds Sensors to Other Learning Systems

The 85-SN1 is fully equipped to be utilized as a stand-alone system that introduces learners to Electronic Sensors. However, this learning system is also designed to be integrated with Amatrol's 85-EF, 85-EH, or 85-EP to expand learning options and show how sensors are used in realworld applications with pneumatics, hydraulics, motors, and more.

Complimentary Student Reference Guide

A sample copy of the Electronic Sensors Learning System's Student Reference Guide is included with the system for your evaluation. Sourced from the Electronic Sensors multimedia curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfect-bound book. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.



