

Item No.: SO4204-7F

Course - Automotive 6: Sensors in motor vehicles

Includes:

- 1 experiment board with real automotive sensors
 - Inductive rpm sensor
 - Phase pickup sensor,
 - Throttle-valve switch,
 - MAP sensor,
 - Knock sensor,
 - NTC and PTC temperature sensors that can be heated
 - Operational model of an intake duct with throttle valve, fan, throttle-valve potentiometer and air-flow meter
- CD-ROM with Labsoft browser and course software

Course contents:

- Instrumentation and process control technology
- Physical variables to be measured
- Induction
- Hall effect
- Piezo effect
- Semiconductors
- Absolute and relative pressure
- Inductive rpm sensors
- Hall-type speed sensors
- Throttle-valve position measurement with throttle valve switch
- Throttle-valve position measurement with throttle-valve potentiometer
- Air-flow measurement with hot-wire and hot film sensors
- Pressure measurement in the intake duct
- Detecting ignition timing with knock sensor
- Temperature measurement with NTC and PTC temperature sensor technology
- Fault simulation (8 simulated faults individually activated via relays)
- Course duration: approx. 10 h (of which approx. 2 h fault simulation)

