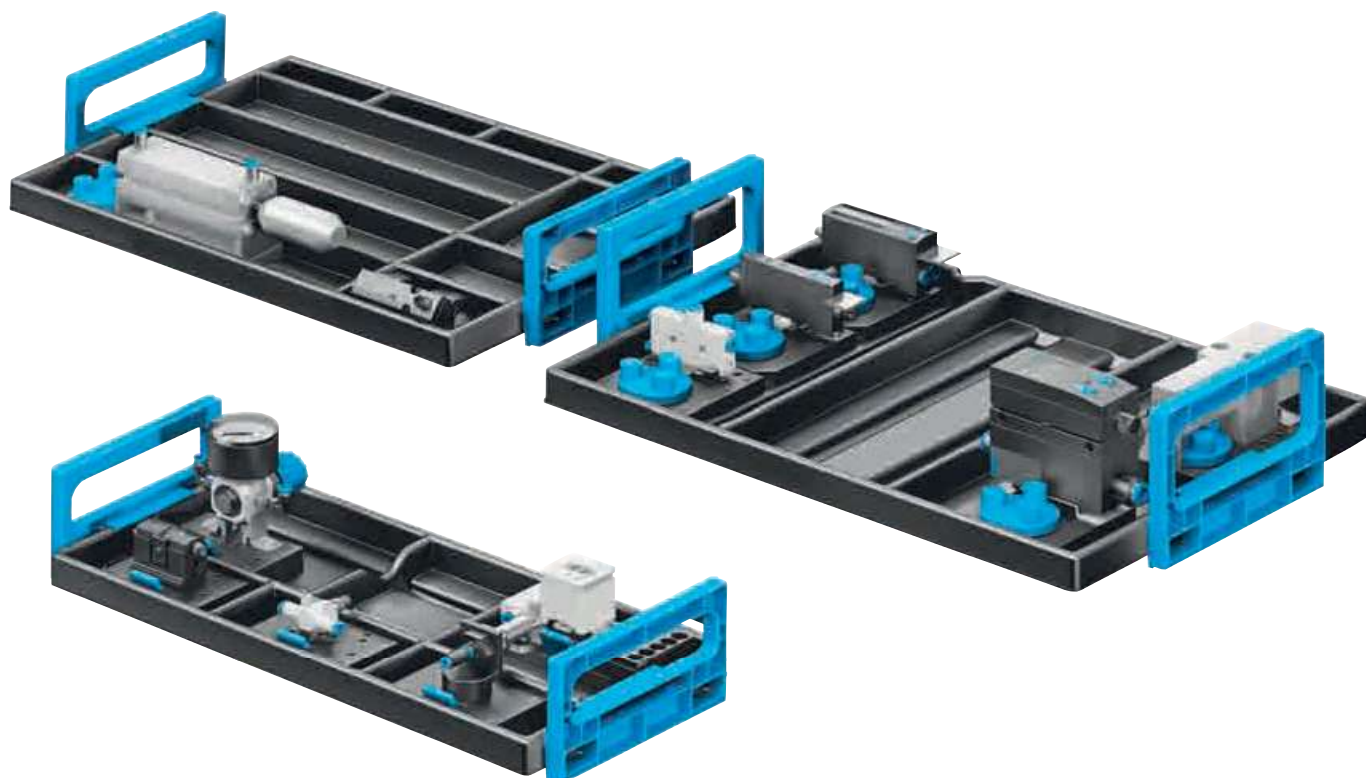


Equipment set TP 240 – Advanced level

Sensors in pneumatics



The purpose of a pneumatic control system

By using the TP 240 equipment set, you can expand the course topics of the TP 201 training package to include the topic of sensors in pneumatics.

With topics such as the application of pressure and flow rate sensors, the use of analog position transmitters including the integration of signal converters, and sensors for vacuum technology – the special requirements of sensors in pneumatic control-system environments are covered extensively.

Components from the TP 201 are required to carry out the projects.

The special feature

The new advanced level is all about the subject of sensors in pneumatic control systems.

Hands-on experience plays a decisive role in teaching the contents. Examples are used to demonstrate the general operational principles of different sensors. Special attention is paid to the selection of the right sensor, its connection, the correct setting, and functional checking.

With the TP 240 a basic knowledge of sensors in pneumatics can be thoroughly conveyed.

Course topics

- Basic principles of connection and circuit technology
- Basic principles of measured data acquisition and processing
- Configuration, function, and application options of the sensors used
- Selecting appropriate sensors by taking into account certain parameters
- Various methods of pressure and flow measurement
- Differences between absolute, relative, and differential pressure measurement
- Setting and checking sensors
- Using signal converters

Complete equipment set TP 240 in equipment tray 566908

The most important components at a glance :

1	1x Position transmitter, 0 – 50 mm, analog	560124
2	1x Signal converter for position transmitter	548621
3	1x Electronic pressure sensor, 0 – 10 bar	548622
4	1x Flow sensor, 0.5 – 50 l/min, analog	8036235
5	1x Pressure switch, 0 – -1 bar	548624
6	1x Vacuum generator	548628
7	1x Suction gripper, 10 mm diameter	560158
8	1x One-way flow control valve	560159
9	1x Pressure regulator valve with gauge	539756
10	1x Stop, 35 mm adjustment path	548630
11	1x Double-acting profile cylinder	549832

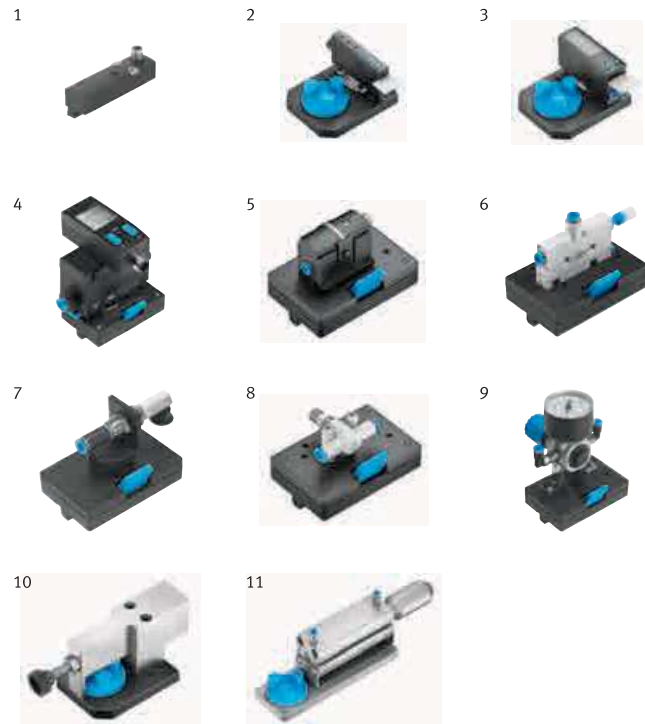
Accessories, also order:

Aluminum profile plate → Page 39

Tabletop power supply unit → www.festo-didactic.com

Power supply unit for mounting frame → Page 159

4 mm Safety laboratory cables → Page 159



Also order:

Workbook


Ten projects based on industrial examples, suitable for equipment set TP 240, each including problem descriptions, parameters, and project tasks, deal in detail with the specific subject of sensors in pneumatic control-system environments. The topics of pressure sensors, flow sensors, analog position transmitters for pneumatic cylinders, signal converters, and sensors for vacuum technology are covered comprehensively.

The workbook includes:

- Sample solutions
- Training notes
- Multimedia CD-ROM with graphics, photos of industrial applications, animations
- Exercise sheets for trainees

Campus license (→ Page 19):

de	566909
en	566910
es	566912
fr	566913

Supplementary media

- WBT sensor technology 1
- Textbook: Proximity switches
- Design and simulation using FluidSIM®
- Measurement and control using FluidLab®
- Set of posters on pneumatics