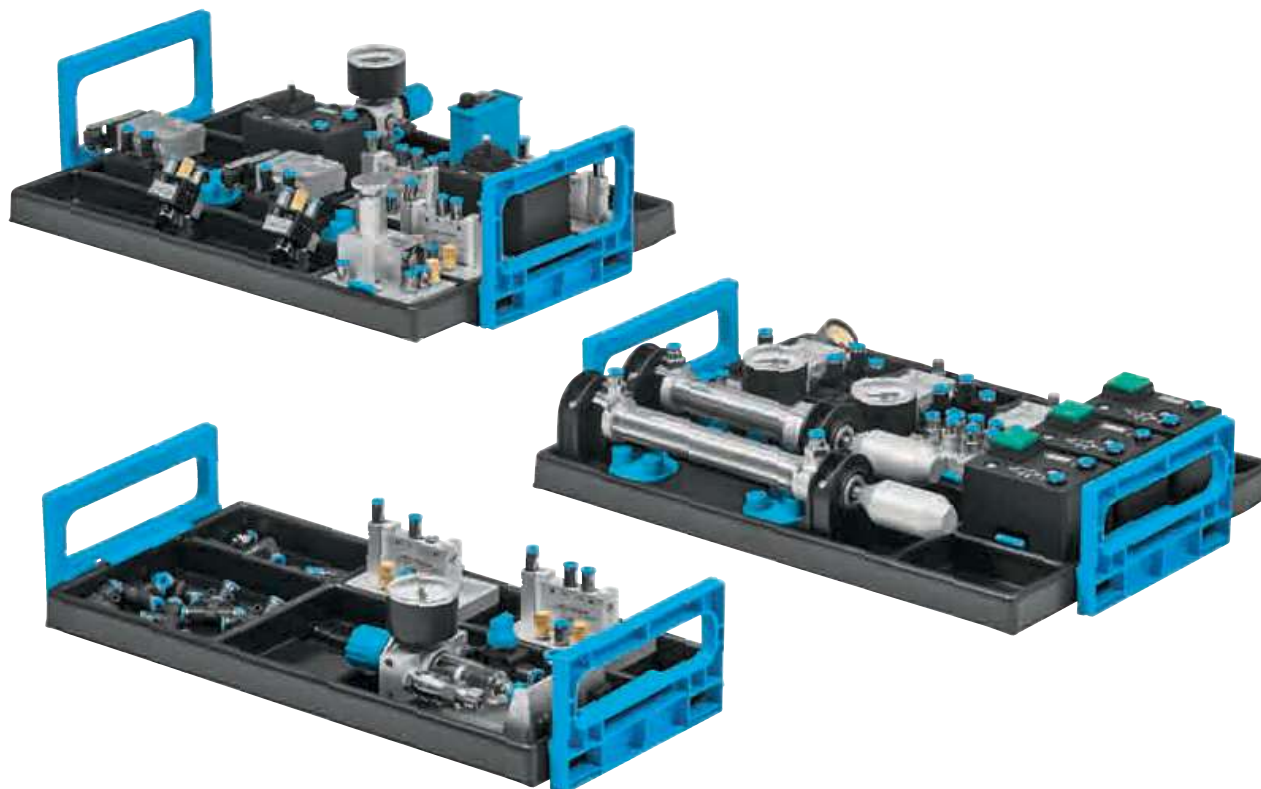


Equipment set TP 101 – Basic level

Basic pneumatics training



Pneumatics, Basic level – The fully revised classic

Further enhanced and updated according to the lessons learned from over 1,000 seminars on pneumatics.

- Brand-new components enable you to teach tomorrow's industrial standard today.
- The workbook contains a series of progressively complex project exercises based on actual industrial applications, an enhanced section on fundamentals, and a multimedia CD-ROM.

The number of components and the design are specially tailored to the projects contained in the workbook so that the main fundamentals can be imparted with little outlay. Delivered in practical, Systainer-compatible equipment trays.

Training aims

- Structure, function, and application of single-acting and double-acting cylinders
- Calculating basic parameters
- Direct and indirect actuation
- Application and function of 3/2 and 5/2-way valves
- Methods of actuation of directional control valves
- Analyzing circuits
- Options for pressure measurement
- Pressure-dependent control systems
- Distinguishing flow control methods and applying them appropriately
- Explaining and building latching circuits
- Logic operations: explaining and implementing AND/OR/NOT operations
- Combining logic operations
- Function and application of limit switches
- Time delay valves
- Realizing oscillating movement
- Economic considerations of using pneumatic components

Performance through close proximity

For optimum performance, switches and valves should be mounted as close to the actuator as possible. With the addition of new components, you can now apply the same principle when designing your circuits. This approach also provides you with an easy way of demonstrating the performance of a one-way flow control valve. You can even record the measured values and analyze the results, for example, using the TP 210!

The next generation of valves

The new generation of valves allows the operation of various pressure zones – so nothing stands in the way of an efficient use of energy. In addition, the position of connection was optimized so that differences between the circuit symbol and the valve can be avoided.

Pneumatic timer

The easy-to-read pneumatic timer can be precisely adjusted. Pressure changes do not alter the set delay time. Pneumatics at its best.

Complete equipment set TP 101 in equipment tray

540710

The most important components at a glance :

1	2x 3/2-way valve with pushbutton actuator, normally closed	152860
2	1x 3/2-way valve with pushbutton actuator, normally open	152861
3	1x 5/2-way valve with selector switch	152862
4	1x 3/2-way valve with selector switch, normally closed	152863
5	2x 3/2-way roller lever valve, normally closed	152866
6	2x Proximity sensor, pneumatic, with cylinder attachment	2764815
7	1x Pneumatic timer, normally closed	540694
8	1x Pressure sequence valve	152884
9	1x 3/2-way valve, pneumatically actuated at one end	576302
10	1x 5/2-way valve, pneumatically actuated at one end	576307
11	3x 5/2-way double pilot valve, pneumatically actuated at both ends	576303
12	1x Shuttle valve (OR)	539771
13	2x Dual-pressure valve (AND)	539770
14	1x Quick-exhaust valve	539772
15	2x One-way flow control valve	193967
16	1x Single-acting cylinder	152887
17	1x Double-acting cylinder	152888
18	1x Start-up valve with filter control valve	540691
19	1x Pressure regulator valve with gauge	539756
20	2x Pressure gauge	152865
21	1x Manifold	152896
22	2x Plastic tubing, 4 x 0.75 silver 10 m	151496

Accessories, also order:

Aluminum profile plate → Page 39

Compressor → Page 136

Also order:

Workbook



Nineteen project-orientated exercises, increasing in complexity and suitable for equipment set TP 101, are the ideal introduction to pneumatics. Real problem descriptions with positional sketch, concrete project tasks, and detailed aids for professional implementation provide the ideal preparation for the real-life industrial environment.

The workbook includes:

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

Campus license (→ Page 19):

de	540671
en	541088
es	542503
fr	542507

Supplementary media

- Design and simulation using FluidSIM®
- WBT Pneumatics
- Textbook: Basic principles of pneumatics and electropneumatics
- Cutaway model case

