

Equipment set TP 201 – Basic level

Basic electropneumatics training



Electropneumatics, Basic level.
The most important basic principles in one compact book.

Top solenoid valves for training

Easy connection of the solenoid coils via 4 mm safety sockets with LED indicator for actuation. The manual override latches and allows very easy error simulation. The port pattern is as per the current symbols to DIN ISO 1219. The newest valve technology is compact, sturdy, and inexpensive with the Didactic-Plus, and of course comes with the reliable Quick-Fix mounting system.

Electronic proximity sensors – compatible and reliable

These proximity sensors are based on the same slot mounting system as the pneumatic proximity sensors in TP 101. We opted for short circuit-proof, electronic proximity sensors due to their long service life in training applications.

Logic programming? That's logical.

The basic principles are established with relay control systems and the new supplementary equipment sets "Controllers for fluid engineering" are used according to individual requirements.

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 solenoid valves
- Analyzing circuits
- Options for pressure measurement
- Pressure-dependent control systems
- Latching circuits
- Logic operations: AND/OR/NOT
- Combining logic operations
- Function and application of limit switches
- Time-delay valves
- End-position monitoring using electronic proximity sensors
- Realizing oscillating movement

- Economic considerations of using pneumatic components
- Troubleshooting simple electro-pneumatic circuits

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 foundation for competent training. Place your order now!

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

Also order:

Workbook



Campus license (→ Page 19):

de	540673
en	541090
es	542505
fr	542509

Supplementary media

- FluidSIM® Pneumatics
- WBT Electropneumatics
- Textbook: Basic principles of pneumatics and electropneumatics
- Transparency set, Electropneumatics

Complete equipment set TP 201 in equipment tray 540712

The most important components at a glance:

1	1x Signal input, electrical	162242
2	2x Relay, three-fold	162241
3	1x Limit switch, electrical, left-actuated	183322
4	1x Limit switch, electrical, right-actuated	183345
5	1x Proximity sensor, optical, M12	572744
6	2x Proximity sensor, electronic, with cylinder mounting	2344752
7	1x 2 x 3/2-way solenoid valve with LED, normally closed	567198
8	1x 5/2-way solenoid valve with LED	567199
9	2x 5/2-way double solenoid valve with LED	567200
10	1x Pressure sensor with display	572745
11	4x One-way flow control valve	193967
12	1x Single-acting cylinder	152887
13	2x Double-acting cylinder	152888
14	1x Start-up valve with filter control valve	540691
15	1x Manifold	152896
16	1x Plastic tubing, 4 x 0.75 silver 10 m	151496

Accessories, also order:

Aluminum profile plate → Page 39
Compressor → Page 136
Tabletop power supply unit → www.festo-didactic.com
Power supply unit for mounting frame → Page 159
4 mm Safety laboratory cables → Page 159

Supplementary equipment set to upgrade from Pneumatics, Basic level TP 101 to Electropneumatics, Basic level TP 201

Supplements the Pneumatics, Basic level TP 101 equipment set to form a complete Electropneumatics, Basic level TP 201 equipment set.

Recommended training media and accessories: See TP 201

Complete supplementary equipment set TP 101 – TP 201 in equipment tray 540717

The most important components at a glance:

1	1x Signal input, electrical	162242
2	2x Relay, three-fold	162241
3	1x Limit switch, electrical, left-actuated	183322
4	1x Limit switch, electrical, right-actuated	183345
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9	2x 5/2-way double solenoid valve with LED	567200
10	1x Pressure sensor with display	572745
11	2x One-way flow control valve	193967
13	1x Double-acting cylinder	152888

