



Through our trainers, students have the possibility of studying a collection of main components, for a better understanding of pneumatics and electro-pneumatics techniques. A modular system provides teachers with the best tool for developing training courses related to both logics and pneumatics/electro pneumatics control techniques. It is a flexible system composed of a vertical frame where the modules are easily inserted for the execution and/or the demonstration of the pneumatic circuits; it also allows obtaining several sequential cycles, by following standard techniques and procedures.

Pneumatic connections are performed by means of pipes and fast release joints; electric connections are through 2 mm. cables, since the electric devices and components (sensors, coils, relays, etc.) need a low power consumption and, therefore, the supply voltage can be low and safe (24Vdc). The standard symbols of the different components are clearly shown on the modules, to facilitate the connection of both the air pipes and the electric cables, besides explaining the function of each component.

## PNEUMATICS



**DL 8110PB**

This trainer is composed as follows:

### **BASIC MODULES (DL 8110PB)**

- DL 8110P01: Slide valve, filter-regulator with manometer and distributor
- DL 8110P02: Hand operated 3/2 NC minivalve and 5/2 NC-NO minivalve, flat push-button
- DL 8110P03: Hand operated 3/2 NC minivalve, flat push-button, and 5/2 NC-NO minivalve with selector
- DL 8110P04: Hand operated 3/2 NC minivalves, flat and mushroom head push-button
- DL 8110P05: Pressure visualizers and one-way flow micro-regulator
- DL 8110P06: Manometers and two-way flow micro-regulator
- DL 8110P07: 3/2 pneumatic valves, NC (YES) and NO (NOT), with mechanical spring and filters
- DL 8110P08: 5/2 pneumatic valves, monostable (2) and bistable (2) with filters
- DL 8110P09: Valves AND (2) and OR (2)
- DL 8110P10: Timer (NO and NC) and silenced quick exhaust valve
- DL 8110P11: Simple effect (SE) magnetic cylinder with retracted piston rod and flow micro-regulator
- DL 8110P12: Double effect (DE) magnetic cylinder with flow micro-regulators (2) and roller lever minivalves
- DL 8110P13: Double effect (DE) magnetic cylinder with flow micro-regulators (2) and unidirectional and bidirectional roller lever minivalves

### **ADVANCED MODULES (OPTION: DL 8110PA)**

- DL 8110P14: 5/3 pneumatic valves with closed centers (1) and pressure centers (1) mechanical springs, both with filters
- DL 8110P15: 4 digit pneumatic pulse counter with reset
- DL 8110P16: Pneumatic amplifier with positive output
- DL 8110P17: Double effect (DE) cylinder with flow micro-regulators and weight (to be pulled or pushed according to its position)
- DL 8110P18: Pneumatic 4-module sequencer