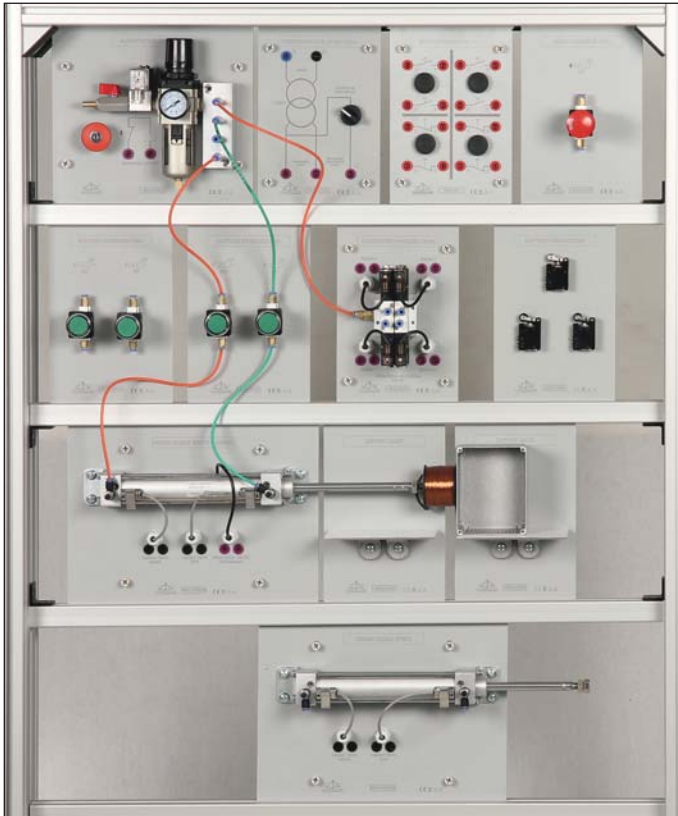


## STUDY OF PNEUMATIC COMPONENTS



ref. QUICK-PN1PLUS

ref. QUICK-PN1 without frame and console



Sockets on the back of the console for connecting the modules

Sets of modules (H 250mm) for studying pneumatic automation.

Comprised of cylinders, electropneumatic distributors, pneumatic controls that can be connected via pneumatic quick-fit connectors 4mm and safety terminals Ø4mm for electrical connection at 24V.

### EDUCATIONAL OBJECTIVES

- To study the symbols used to represent pneumatic components
- To study the operation of a double-acting cylinder
- To study the operation of a double-acting cylinder with electromagnet
- To study the wiring of pneumatic and electropneumatic automation

### TEACHING RESOURCES STUDENT & TEACHER

### Proposed Practical Works

- Creation of pneumatic automation diagram
- Study of the operation of a pneumatic double-acting cylinder, with pressure adjustment to optimize displacement.
- Study of the operation of a pneumatic cylinder with electromagnet.
- Study of a pneumatic and electropneumatic distributor.

### Comprises

- 1 pneumatic distributor module with 4 outputs, with manometer, filter, pressure regulator, coil 24VAC and emergency stop. Quick-fit connections for hose 4mm.
- 1 safety transformer module 220VAC/24VAC with on/off switch for electromagnet power supply.
- 1 pneumatic emergency stop module with quick-fit connections for hose 4mm.
- 2 modules of 2 pneumatic pushbuttons with quick-fit connections for hose 4mm.
- 1 module of 3 pneumatic limit switches with quick-fit connections for hose 4mm.
- 1 module of 2 electropneumatic distributors 5/2. Coils 24VAC with quick-fit connections for hose 4mm
- 2 part support modules with 1 metal box.
- 1 pneumatic double-acting cylinder module. With quick-fit connections with pressure variation for hose 4mm. 2 Position detectors.
- 1 pneumatic double-acting cylinder module. With quick-fit connections with pressure variation for hose 4mm. 2 Position detectors and one electromagnet 24VAC.
- 1 frame with wheels (H x W x D): 1610 x 940 x 500mm equipped with rack for cords (30 fingers)
- 1 single-phase power console:
  - 1 thermal magnetic circuit breaker (16A)
  - 1 Emergency stop push button with key
  - 1 Push button + LED indicator
  - 1 230V single-phase output on 4mm safety terminals
  - 2 230Vac sockets (2P + E) + 12 230Vac sockets (2P + E), at the back
- 1 set of safety leads for carrying out the different practical works.

### COMPRESSOR OPTION

Four oil-free cylinders compress clean air into a tank which maintains a stable steady pressure. Each cylinder has a filter. A regulator and pressure gauge enable service pressure adjustments from a few tenths of a bar to the maximum tank pressure. The latter can be selected between two values: 4 bars with motor shutdown by pressure switch or 6 bars in continuous operation. The compressor has thermal protection. Very low sound nuisance.

- Flow rate: 70 l/min
- Connection: 4mm
- Pressure adjustable from 0 to 6 bars
- Tank volume: 4 litres
- Power: 180W
- Sound level: 70dBA (very low sound nuisance)
- Power supply: 230V AC 50Hz
- Dimensions: 385 x 205 x 325mm - Weight: 8.4kg

ref. PRESS-35

