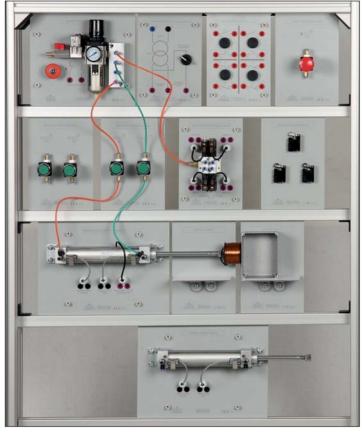
## Study of pneumatic components



ref. QUICK-PN1

Supplied without frame - See frames on last page

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.



### **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 I/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/Weight: 385 x 205 x 325mm / 8.4kg

ref. PRESS-35

## Choice of frames



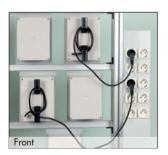
- Wheeled frame.
- Takes 20 modules (W-166mm x H-250mm)
- Dimensions: H-1610 x W-940 x D-500mm
- Power supply panel + rack for leads



- Wheeled frame.
- Takes 40 modules (W-166mm x H-250mm)
- Wood shelf 150 x 35cm, easy height adjustment
- Dimensions : H-2040 x W-1620 x D-650mm
- Power supply panel + rack for leads



- Frame for attaching to a table. (table not supplied)
- Takes 24 modules (W-166mm x H-250mm)
- Dimensions (without table): H-1100mm x W-1500 x D-500mm
- Depth adjustable using 2 slides attached to your table.
  Horizontal travel 250mm.
- Power supply panel + rack for leads





## COMMON ELEMENTS TO THE FRAME MODELS MODULO-1 / 2 / 3 $\,$

## Power supply panel

Front

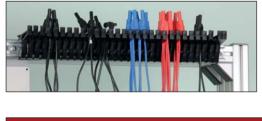
- 1 16A thermal magnetic circuit breaker
- 1 Emergency stop button
- 1 Pushbutton + ON indicator light
- 1 Mains output 230V+E on 4-mm safety terminals
- 2 Mains sockets 2P+E 230VAC

Rear

• 10 Mains sockets 2P+E 230VAC



- Length: 50cm.
- 30 fingers.
- The assembly can be moved longitudinally over the whole width of the frame.
- Positioned at the back of the frame.





## Portable frame 6 modules

- Dimensions H 610mm x L 590mm x I 310mm
- takes 6 modules (W-166mm x H-250mm)

ref. SUP-AK



# Portable frame 9 modules

- Dimensions H 910mm x L 590mm x I 310mm
- takes 9 modules (W-166mm x H-250mm)

ref. SUP-AK9