## **MEP050**



# ELECTRO-PNEUMATICS TRAINING MACHINE



#### **Experimental capabilities**

- Identification of components
- Creation of diagram with implementation of the circuit (Piping and connection via banana plug)
- Implementation of integrated circuits control / pre-actuators / actuators / sensors
- Visualization of the effects of a pneumatic or mechanical electrical control

### **MEP050**



#### Operating principle

The MEP 050 bench is a benchtop bench designed for the study of electro-pneumatic action chains. It helps to understand the structure type of action chains: detectors, actuators, pre-actuators and controls.

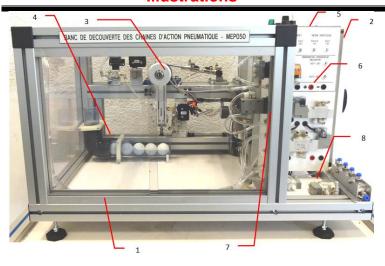
The operative part of the bench is supported on a gripping device and ball transfer with the aid of 3 actuators.

The robust design of this equipment makes it perfectly suited for use in schools (cell structure in anodized aluminum with carrying handle, protective casing and pneumatic supply wrench, lockable switch).

It consists of actuators, pre-actuators, controls and various detectors to discover various technologies used in the chains of

- · Actuators: single-acting cylinder iso + the same in double effect interchangeable, mounted on articulated fasteners, compact double acting cylinder with hollow stem associated with a suction cup and a venturi
  - · Part command: push buttons, electrical and pneumatic switches
- Pre-actuators: distributor 5/2 mono and bistable electrically controlled, distributors mono 3/2 and 5/2 bistable pneumatically controlled
- Detections: Type ILS limit switch detectors with integrated LED, electrical sensors and mechanical pneumatics with roller, configurable pressure sensor, usable in pressure switch or vacuum switch

#### Illustrations



#### **Technical details**

- 1. Aluminum frame mounted on 4 rubber feet and equipped with two handles to allow easy transportation
- 2. Electrical cabinet being control desk office
- 3. Operative part consists of actuators cited and protected by a cover. Ensemble accessible through sliding doors with key lock
- 4. Piping being circuit office closed for the circulation of the balls
- 5. View from above of the cabinet where is situated the connections of buttons, switches and sensors with roller 6. Side view of the cabinet where the connections of ILS sensors, vacuum switch / pressure switch and electrically operated distributors
- 7. Side view of the operative part where is situated the actuator connections and pneumatic components
- 8. Location of pneumatic control distributors and of pneumatic manifold with self-sealing couplings
- 9. Filter regulator with manometer and lockable block valve

#### Services required

- Power supply: 230 V 50 Hz 4 A
- Electrical supply Type: Phase + Neutral + Earth.
- Compressed air supply: 6-8 bars (dry air / free of oil)
- Dimensions: (LxWxH mm): 800 x 500 x 400
- weight (Kg): 32

Note: if the equipment installation is operated by our staff, all supplies and exhaust ctions required must stand at less than 2m from the machine

#### **Documentation**

- User's manual
- Pedagogical manual Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

#### **Options**

Silent compressor 9 liters 0.34 kw

Ref: UAP 020