

PICK&PLACE MODULE

Mod. MCE-710/EV

Mod. MCE-710/EV transfers pieces on a circular area. It includes a cylinder for up/down movements, a second cylinder for forward/backward movements, a suction cup to hold the piece, and a DC geared motor with encoder for the rotations. The magnetic sensors on the cylinders and the two signals from the encoder control the movement of the device.

The module is assembled on a sectioned aluminium base, and it can be easily moved around the laboratory.

Mod. MCE-710/EV can be fully controlled using a PLC module or an Arduino microprocessor. Thanks to the PLC or Arduino programming software, a wide range of exercises regarding the automation of the module in a working cycle or in stand-alone mode can be developed.

TRAINING PROGRAM

- Fundamentals of Electro-pneumatics
- Piece transfer methods
- Operating a "Pick / Place" unit with suction cup
- Operating an electrovalve
- Operating a set of automated sensors
- Operating a pneumatic cylinder
- Operating a gear motor
- PLC control
- Microprocessor control

TECHNICAL SPECIFICATIONS

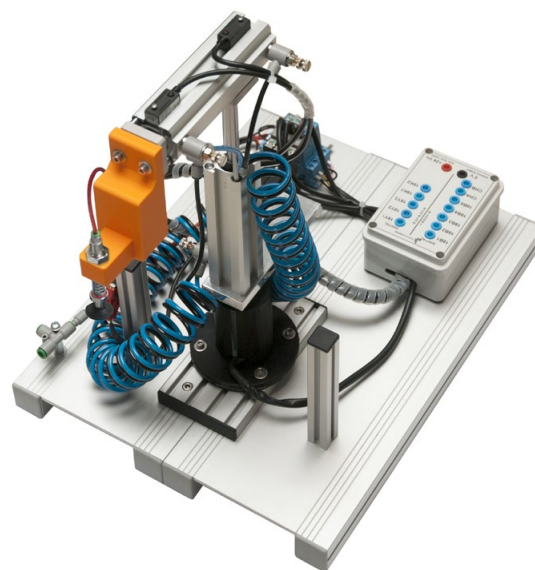
Modular unit assembled on a sectioned aluminium structure. It includes an I/O interface box with Ø 2 mm terminals that, besides working as control board for the module, enables the students to carry out electrical measurements on its components.

The module can be operated using:

- No. 1 PLC training panel mod. PLC-V8/EV, or
- No. 1 Arduino training panel mod. MPC-18/EV

Power supply (24 Vcc) is provided by the PLC itself or using a MPC-18/EV module.

Sensors and actuators:



- No. 4 Magnetic sensors
- No. 1 Micro-switch
- No. 3 Monostable electrovalves
- No. 2 Cylinder
- No. 1 Vacuum generator (suction cup)
- No. 1 Gear motor with 2-channel encoder

Module inputs and outputs:

- No. 7 Digital inputs
- No. 5 Digital outputs

Dimensions: 320 x 400 x 470 mm

Weight: approx. 5 kg

REQUIRED

UTILITIES (PROVIDED BY THE CUSTOMER)

- Compressed air supply: 5...6 bar

SUPPLIED WITH

THEORETICAL-EXPERIMENTAL HANDBOOK

Presentation of the equipment, experiments, technical specifications with electric and pneumatic diagrams, use and maintenance.

