

SWIVEL ARM MODULE

Mod. MCE-510/EV

Mod. MCE-510/EV transfers pieces from a modular station to the next one. It consists of a rotary pneumatic cylinder adjustable within a 180° angle. The transfer is performed by a vacuum suction cap connected to an ejection system controlled by an electrovalve. The limit switches of the cylinder are controlled by magnetic sensors.

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

Mod. MCE-510/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
- Operating a pneumatic rotary cylinder
- Operating a "Pick / Place" unit with suction cup
- Operating a bistable electrovalve
- Operating a set of automated sensors
- Electropneumatic positioning systems
- 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. 2 Magnetic sensors
- No. 1 Monostable electrovalve
- No. 1 Bistable electrovalve
- No. 1 Rotary cylinder

Module inputs and outputs:

- No. 2 Digital inputs
- No. 3 Digital outputs

Dimensions: 160 x 400 x 270 mm

Weight: approx. 4 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.

