ROBOTIC ARM
Mod. NDIDA/EV

The NDIDA/EV robotic arm is designed for take and release of a piece in different positions.

It consists on a series of stepper motors that moves the body on 6 axes of space. There are also low voltage servomotors to control the rotating gripper.

The device is controlled by a onboard microprocessor.

For a simple approach a graphical interface is provided to control the module. It is also possible to implement the robotic arm into several Elettronica Veneta automated lines: in this case, sufficient digital resources must be made available from an external controller; the communication API and the source file are supplied.

TRAINING PROGRAM

- Implementation of a process scheme
- List sequence steps
- Definition of system inputs/outputs
- Construction of the logical scheme
- Analysis of potential problems
- Writing the program in C/C++
- Principles of electronics
- Principles of robotics

TECHNICAL SPECIFICATIONS

- Arduino Mega 2560 board
- Arduino programmed (IDE)
- 5 stepper motors with drivers
- 5 stepper motor fans (12V)
- 3 servomotors (5V) for actuator movement
- Gripper with suction cup and specific servomotor
- 4 limit microswitches
- Power supply unit 12 V, 120 W
- Supplied accessories: USB and power cable
- Robot features
  - Number of axes: 6
  - Max load: 0,1 kg
  - Max distance: 440 mm
  - Range: 120° (horizontal plane)
  - Repeatability: ± 1 mm

Interoperability with the PLC is ensured by:

- 0 - 5 V input for consent/enabling
- NO/NC output via dry contact

Power supply: 230 Vac 50 Hz single phase
(Other voltage and frequency on request)
Dimensions: 320 x 320 x 900 mm
Weight: 10 kg

OPTIONAL

GRIPPER FOR ROBOTIC ARM
Mod. GRIP/EV

SUPPLIED WITH

THEORETICAL – EXPERIMENTAL HANDBOOK WITH SYSTEM PRESENTATION AND OPERATIONAL INSTRUCTIONS