



Basic manipulator– ROBOT



TRAINING OBJECTIVES

Basic manipulator developed for teaching, demonstration, practical training and planning according to the mechatronic, automation and information technology principles.

Through this product, it is possible to understand the mechanical structure of the robots used in the industrial sectors, to design and execute debugging procedures for the control of the system and to analyze and solve problems that occur in an actual operating process.

Based on the order code, it is possible to change the control unit choosing between a microcontroller or a PLC.

TECHNICAL SPECIFICATIONS

- 6-axis connection controlled by MIC
- 3-axis connection controlled by PLC
- Servo driven axis, long term
- Position accuracy: 0.1 degree
- Power supply: single-phase by network
- Axes range:
 - 1° axis: 180°
 - 2° axis: 180°
 - 3° axis: 145°
 - 4° axis: 180°
 - 5° axis: 180°
 - 6° axis: Adjustment of the clamp
- Work range: 400mm
- Max. speed per axis: 180 degrees/s
- Max. load: 250 g

ORDER CODE

- **DL ROBOT-PLC**
(controlled by PLC)
 - PLC - 2080-LC30-48QVB: 28DI, 20DO, 3PTO
 - Manual control panel
- **DL ROBOT-MIC**
(controlled by microcontroller)
 - ARM Cortex: M3, 8DI, 8DO, 6PTO
 - Manual control panel

EXPERIMENTS

- Software programming–learning
- Single axis control
- 6-axes combined control (MIC)
- 3-axes combined control (PLC)
- Building blocks
- Soldering simulation