CONVEYOR BELTS FOR THE STUDY OF PLC PROGRAMMING AND SENSOR
DL IND-02

The system allows for programming studies, operation studies and sensor detection, as well as practices with I/O ports, Modbus protocol and local and remote motor activation.

ABOUT THE PRODUCT

The product has a motorized conveyor belt capable of detecting moving pieces. Three types of pieces (plastic, aluminum, iron) are supplied and routed to a collection box. The pieces act on three types of sensors - normally used in automation – which are: One optical, one capacitive and one inductive, which by means of programming allow to separate and count, by type of material of the piece.

PRODUCT FEATURES

A PLC with 8 digital inputs and 8 digital outputs is incorporated in the unit and allows the carrying out of various activities to study the operation control of the conveyor and sensors, such as motor command, activation time, selective counting of pieces, etc.

The product has input and output ports on its panel that allow its use via I-O and has a Modbus communication port to communicate with the serial route, reducing the number of connections. In addition, 24Vcc is available on the keyboard. The sensor information can be used in the application software. Twelve ports, in 2 mm terminal blocks, are available for the interface and seven LED-signaled digital outputs for status display. The internal source allows the use of the digital ports. The conveyor speed is obtained with a direct current yaw gear with a speed of 47 rpm.

DIDACTIC ACTIVITY

This input and output flexibility allows the use of the product with various control and command activities, study of generic PLC programming, in addition to those already available related to the operational analysis of sensors and belt drives. By accessing RS485 communication with MODBUS protocol, the student can create his or her own supervision.

The system is supplied with communication cables, programming cable, ladder application and exercise manual. Approximate dimensions are: L=600mm; A=240mm; P=350 mm