VERITAS Engineering

Catalog
Of

Stepping Motor Linear Control Trainer

Brand: VERITAS

Model: VSTPMT-002

Features

- This unit is a stepping motor based linear motion control system, which covers basic application for programmable logic controller, stepping motor control technology and sensor technology

- It should be used as a separated demonstration unit with an existing PLC system or programming unit.

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Picture: Stepper Motor Trainer

List of Experiment:

- Stepping motor and driver

- Stepping motor rotary encoder positioning

- Proximity sensor and rotary encoder

- Stepping motor positioning

- Stepping motor proximity sensor positioning

Configuration:

❖ **Linear motion mechanism:**

- **Stepping motor and driver:**
- **Input:** 18 ~ 48VDC, max.4.2A, resolution 0.1A, subdivision 400 ~ 25600ppr.
- **Ball screw:** effective travel 310mm, lead 4mm
- **Rotary encoder:**
  Incremental, Resolution 720P/R, 40-dia. 5 to 24 VDC, NPN open collector, Pre- wired models
- **Proximity sensor x3:** DC 6-36V, detection distance 2mm, three-wire NPN NO.
- **Limit switch:** quantity 2
- **Mounting frame:** aluminium profile for ball screw and proximity sensor
- **Power supply unit:** AC 220V socket input, with three way DC24V output and short circuit protection
- **Indicators and buttons:** running, reset and stop indicators and buttons with 2mm sockets
- **Dial switch:** 2-bit with 8421 BCD
- **Experiment box and panel:** Complete frame made of grooved aluminium profile, detachable upper cover with transparent design, the panel adopts engraved and printed panel
- **Cable suite:** 2mm, conductor cross section: 0.5 mm2 SR wire, 500V CATII, with axial socket
- **Manual:** programming and wiring sample are provided, together with schematic diagrams.
- **PLC Unit:**
  - SIMATIC S7-200 SMART with 12 input/ 8 output, Transistor type
  - Power supply for PLC: 24VDC
  - Programming languages: STL/LAD/FBD
  - Ethernet / RS485 communication and an additional serial port
  - With power cord, programming software and cable
  - Dimensions: 250*165*90mm (approx.) with push type rotary lockers