Series P40-003

Application Thickenessers
Programmable single axis controller
General: The 1-axis positioning controller of the series P40 is used for various positioning. In the foreground is a simple, convenient and quick entry of nominal value, if necessary speed, a shift or a material level - offsetting factor. Thus, the P40 is ideal for the functions of planning machines and broadband grinders.

The front is clear and easy to use and offers kept function keys on the possibility of sub-menus. An additional feature can be pictograms that comply with the operator's handling of the device easier. The controller provides a fast counting input for distance measurement. The P40 has an internal program memory for a maximum of 500 sets. For the positioning, there are two different types of output signals available: switch off mode and PID analog output for servo control. The P40 is available with 24VDC or 24VAC supply. With the help of an interface the P40 can communicate with an overarching system.

Essential features:
- extensive software for wide belt sander and planning machines
- die height adjustment / speed control / Inputs for joystick movement
- Integrated digital outputs
- Switch-mode-positioning up to three speeds
- Integrated manual operation mode: using the keys F1 and F3 both directions can be driven manually
- 16 different adjustable offsets for different planning belts
- Clearly arranged menu navigation regarding programming and parameterisation

Application Thickenesser
- Height Control
- Pieces Counter
- PC-Communication
- Material list on request
- 20 tool offsets
- Inputs for Joystick-control

Standard functions
- Adjustable Position output signals (3 speed)
- Visualization of the actual and the programmed value
- Positioning absolute or incremental mode
- Reference and Reference drive
- mm/inch - Switch over
- Pulse Multiplication factor and edge triggering
- Tolerance window
- Software limit switch
- Backlash compensation
- Up to 500 Sets programmable
- Calculation of tool width
- Encoder monitoring
- Pieces Counter
- Manual mode
- 20 Tool offsets
- Retract function
- Memory for actual value
**Technical Data:**

- **Display**: LCD Point matrix with background lighting
- **Power Supply**: 24 VDC, max. 200 mA  
  24 VAC, max. 20 VA  
  At unloaded outputs and not active relays
- **Supply Encoder**: 24 VDC, max. 130 mA
- **Connection**: Plug In Connectors
- **System Accuracy**: +/- 1 Increment
- **Counting frequency**: 100 KHz
- **Operation temperature**: 0...+50 °C
- **Stock temperature**: 0...+70 °C
- **Humidity**: Not condensing, max. 80 %
- **Housing**: Aluminum, frame construction
- **Dimensions**: 144 x 144 mm
- **Panel outbreak**: 138 x 138 mm
- **Installation depth**: 75 mm (Standard)  
  83 mm with screw clamps  
  110 mm with D-Sub Connectors
- **Keyboard**: Film, short lift buttons
- **Protection Class**: IP 43 (installed)
- **Measuring systems**: 1 Measuring System (Standard)
- **Input signals static**: PNP (Option - EN-NPN), 300 ms Minimum-Pulse period/ PIN, max. 10 mA/ Input current/ Pin Start, Stop, Reference, retract, Fix position, Pieces counter add / subtract, End switches, System reset
- **Output Signals**: Push-Pull amplifier, conditionally short circuit proof, max. 10 mA output current, integrated Diodes
- **Analog Output**: +/- 10V for DC drives, 2-speed systems for AC motors, uni polar control with outputs for direction, drive signals, Position reached, Controller enable, , Reference run active, Operation mode “Manual” and “Single”

**Type Designation:**

For orders please use the following ordering code:

P40 - 0 0 3 - 0 2 4 - X - X - A A A - B B B - C C - D D - E E E E

A Version
003 Application Thickness Planers

B Power supply
024 24 VDC (+/- 20%)

C Signal inputs
X not assigned
0 A, B, (PNP) 24 VDC supply measuring system/ 24 VDC-100 KHz
1 A, B, Z (PNP) 24 VDC supply measuring system/ 24 VDC-100 KHz
2 A, A’, B’, Z’, Z 24 VDC supply measuring system/ 5V-TTL-100KHz
3 A, A’, B, B’, Z, Z’ 5 VDC supply measuring system/ 5V-TTL-100KHz

D Signal outputs
X not assigned
0 digital outputs (transistor outputs, PNP)
1 analog output +/- 10V (PID regulated)
- not possible with analog measuring input!

E Options
X not assigned
C Screw clamps
B 8 digital Inputs / 8 digital outputs
S RS232 Interface
N digital Inputs NPN

For example:

P40 - 0 0 3 - 0 2 4 - 1 X - 1 X - C S X X
A A A - B B B - C C - D D - E E E E

P40 - Application Thickness Planers with 24VDC supply, one input with A, B, Z signal with regulated analog output +/- 10V (PID regulated), connection with screw clamps and RS232 interface.

Your Order:

P40 - 0 0 3 - 0 2 4 - X - X - A A A - B B B - C C - D D - E E E E