

P85/87/88 - Compact Position Controllers

- Easy operating and handling
- Manual operation mode
- Relay- or digital outputs (+24 V-PNP) possible
- PID-Analog output available (P85 and P87)
- 200 lines program memory (P87 and P88)

Differences:

P8511 - single axis controller without program memory

P8721 - single axis controller with program memory

P8822 - two axes controller with program memory

Standard functions

- Adjustable output signals (3 different speed rates)
- Absolute - or incremental positioning
- Datum value and gauging
- Inch/mm - switchover
- Pulse factor and multi edge counter
- Tolerance window
- Incremental error compensation
- Loop operation
- Saw blade/tool compensation
- Encoder monitoring
- Batch counter (only P8511 and P8721)
- Manual operation mode

The single axis controller of **P8511** series will be applicable to easy standard positioning tasks. An important feature is primary the easy structured function menu. It allows, quickly and comfortable, to set the target value and if necessary, a specific quantity of desired pieces in the batch counter window. Target value, actual value and quantity will be displayed on the front panel. All values and parameters can be programmed via numeric keypad on front. Additional keys starts or stops the positioning procedure.

P8721 is identical to P8511 with an additional program memory of 200 different lines.

P8822 is a 2 axes controller and fulfills except for few restrictions the whole functional range of P8721.

Three different kinds of output signals are available for the positioning:

- Digital transistor outputs for frequency inverters
- Potential free shutter relays for pole changing break motors
- PID-Analog output* for servo systems (*in preparation for P8822)

A 24 VDC- or 115 / 230 VAC-power pack is integrated in the unit. An optional serial interface allows data transmission and communication with a superior system.

Applications

- Wood working machines
- Band sawing machines
- Grinding machines
- Metal shear machines
- Movable stops
- Beveling machines
- ...and many other tasks

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Technical specifications

Displays	Red 7-segment LED, 8 mm high
Power supply	24 VDC, max. 200 mA 115/230 VAC, max. 20 VA (unloaded status and de-energized relays)
Encoder supply	24 VDC out, max. 130 mA
Connectors	D-Sub -plug connectors or RIA-plug connectors
Accuracy of the system	+/- 1 increment
Power down memory	min. 10 years service life (EE-Prom)
Counting frequency	20 KHz
Operating temperature	0 - 50 °C
Store temperature	0 - 70 °C
Humidity	not condense max. 80 %
Altitude	max. 2000 m
Housing	black, metal panel housing
Dimensions of housing	144 x 144 mm
Cut out	138 x 138 mm
Install depth	75 mm 83 mm with RIA-Connectors 110 mm with D-SUB-Connectors
Keypad	Membrane keypad
Protection class	IP 43 (installed status)

Inputs

Static input signals: PNP (Option -EN: NPN), 300 ms min. pulse time/Pin, max. 10 mA input current/Pin

Start, Stop, Datum, Incremental minus, Incremental plus, Retract, Fix position, Batch counter up/down, End switch minus, End switch plus, Reset-System *)

Outputs

Output signals push/pull, conditional short cut proofed, max. 10 mA output current, integrated recovery diodes (at Option -R potential free shutter relays, max. 5 A at 230 VAC resp. max. 2 A at 24 VDC)
Speed signals, Position reached, Drive enable, Quantity reached, Reference run active, Manual mode, Single mode*)

Type designation

For Orderings, please use the following code:

P8511
P8721
P8822 - - - - - - - - - -
AAA - BBB - C - DDDDD

Examples:

P8511-000-024-1

P8721-000-230-0-P

P8822-000-024-2-R-S

A

Version
000 Elgo Standard

B

Power supply
024 24 VDC
115 115 VAC
230 230 VAC

C

Signal inputs of the measuring system			
Channel		Supply/Output level	Counting frequency
0	A, B	24 V / 24 V	20 kHz
1	A, B, 0	24 V / 24 V	20 kHz
2	A/A', B/B'	24 V / TTL	100 kHz
3	A/A', B/B', Z/Z'	24 V / TTL	100 kHz
8	A, B (NPN)	24 V / 24 V	20 kHz

D

Options
-P PID-Analog output (+/- 10 V) (in preparation for P8822)
-R Relay outputs (7 Shutters)
-S Serial interface RS232
-EN All inputs NPN (incl. Index pulse)





P85, P87 and P88 series

1...2 axes compact
Position Controllers