



POSITION CONTROLLER MP 100 MICROPOS

- 99 positions in internal memory
- External selection of up to 31 positions
- Absolute and relative positioning
- Alphanumeric display
- Decoded text error diagnosis
- Membrane keyboard with tactile acknowledgement
- Digital setting of all parameters
- External selection of operating mode
- Digital position controller built-in
- Fast 16-Bit microcontroller
- Regulating time < 1 ms
- $\sin^2$ acceleration possible
- Online RS 232 - interface
- Incremental, absolute (SSI) or magnetostrictive transducer
- Optional analog measurement system input (14 bit)
- Single 24V DC supply required
- Monitoring of external and internal operating voltages
- Plug-in PCB 100 x 160 mm
- Synchronous run of up to 4 MP100 possible



MICROPOS MP 100

The MP 100 is a positioning unit for universal applications featuring simple and comfortable operation. A position and speed control is integrated. The use of latest technology renders the MP100 a very compact device.

The fast 16 bit microcontroller stands for high efficiency of the system and enables regulating times quicker than 1 ms!

Programming

99 records (power fail safe)

- position (absolute/relative)
- velocity
- M-function
- delay-time (between records)

Direct programming at the front panel
Programming through serial interface
Programming using a digi-switch

Program execution

Single execution (Auto-Single)
Continuous execution (Auto-Cycle)
Automatic status reports:

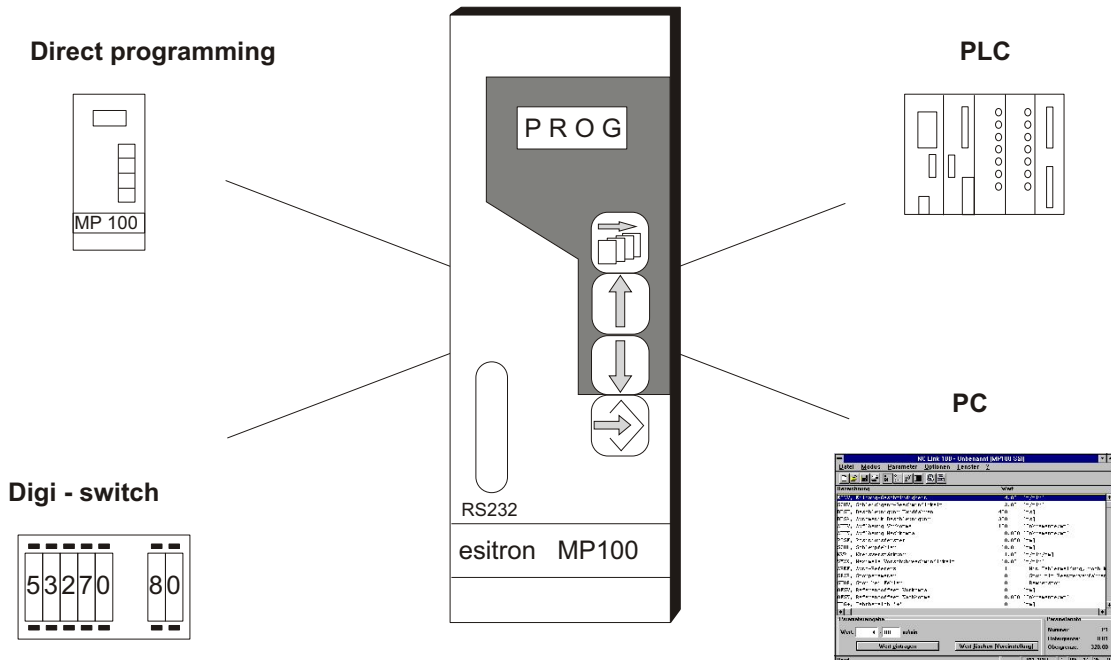
- Position reached
- Programm end
- Fault / ready

External selection of records (5 digital Inputs)
External handling through serial interface

Programming facilities

Frontpanel programming
with integrated keyboard
and decoded text display

Online-operation with PLC or PC.
Data interchange, commands
status and position report
through serial interface.

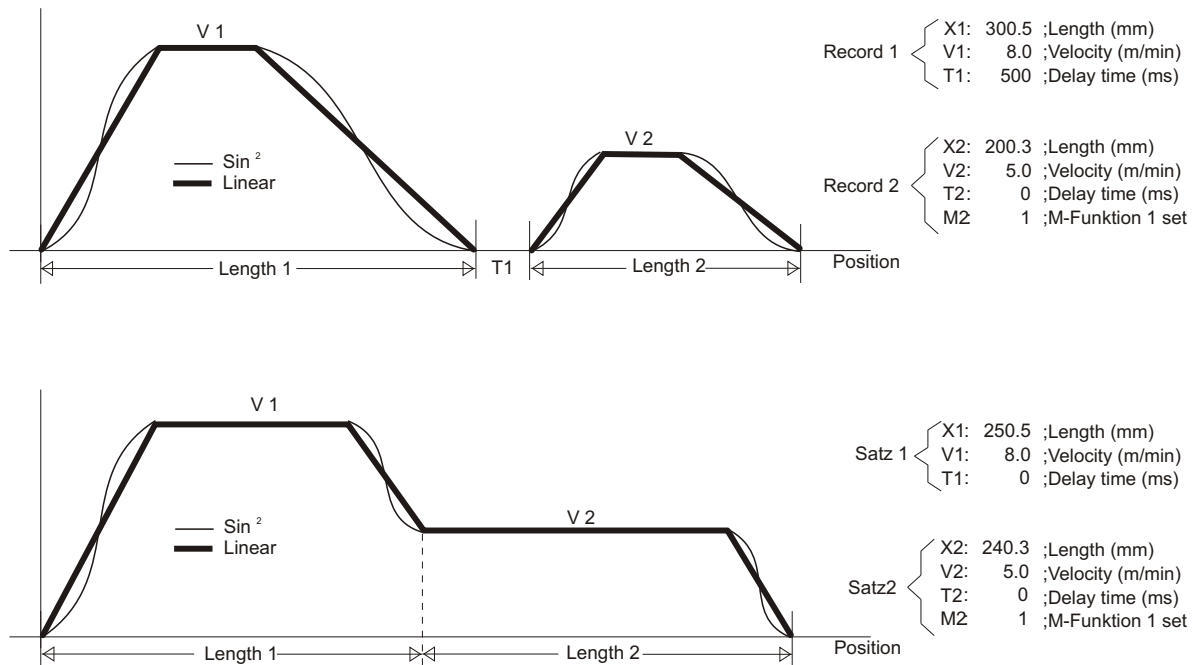


Programming of position
with a digi-switch connected
to the serial interface.

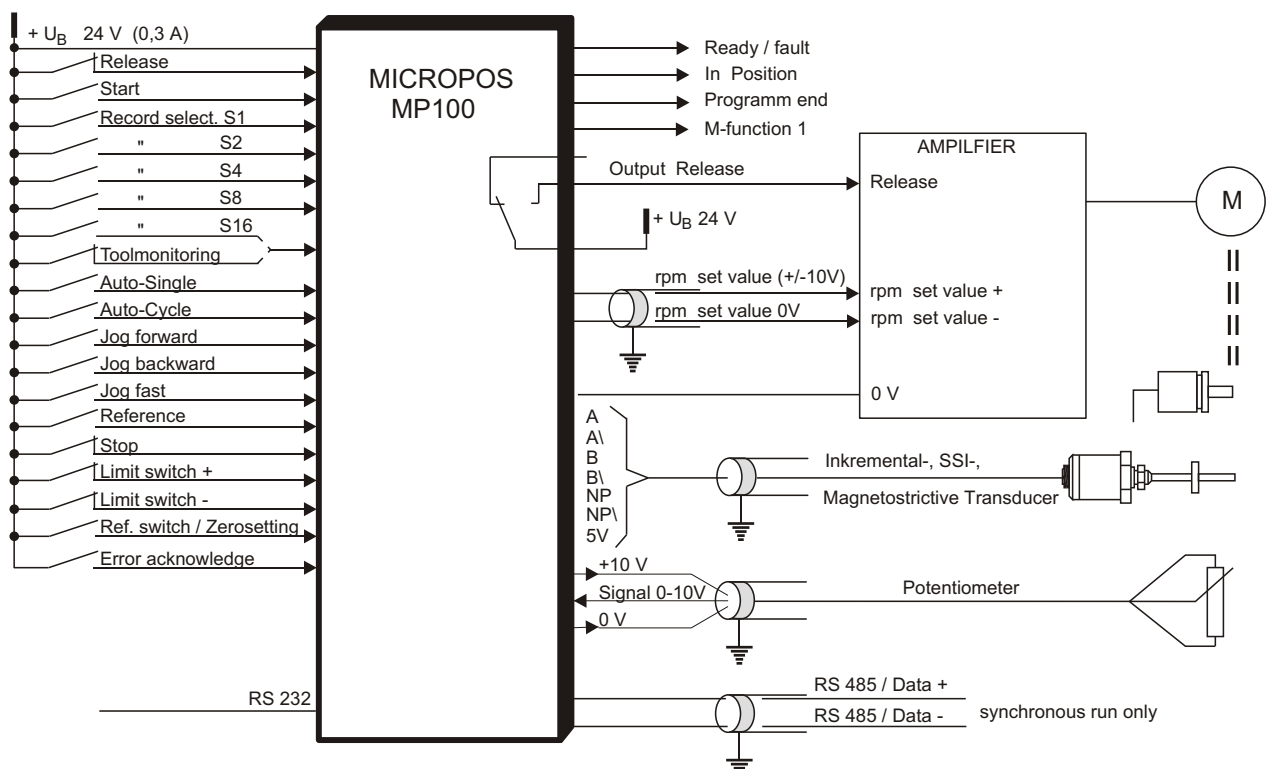
Programming on a PC.
Transmission of program and parameters
through serial interface.
Option: Comfortable programming
software with online-diagnosis running
under Windows™ (NC-Link 100).
Online positioning is possible.

Programming examples

Sinusoidal or linear ramp.
Change of speed with or without intermediate stop.
Separate acceleration and deceleration times.



Connecting diagram



Technical data MICROPOS MP 100

Modes of operation:	Reference run Jog forward/backward/fast Automatic Single/Cycle
Program input:	99 records, power fail safe through non volatile EEPROM. In each record: - absolute or relative position (-9999.999 ... +9999.999) i.e. mm - velocity (0.01 - 320 m/min) - machine function (set / clear) - delay time (0 ... 9999 ms)
External record selection:	Through RS232: all 99 positions, through digital inputs: up to 31 positions selectable
Parameter input:	Data specific to machine and motor, password protected
Tool correction:	correction value (-9999.999 ... +9999.999) i.e. mm or degree
Signal-inputs:	18 inputs: 24 V, $R_i = 15 \text{ k}\Omega$
Signal-outputs:	4 outputs: 24 V, 1 A
Set value output:	-10 V ... +10 V (12 bit resolution)
Release for amp:	Floating contact (changer), current max. 1 A
Position detection:	Inkremental: Level according to RS 422, 250 kHz, internal quadruplication (1 MHz), Power supply output 5 V / 300 mA for encoder Absolute: SSI-Interface, dataformat 8 - 31 bit, Gray-/Binary code Absolute: direct processing of magnetosrictive transducers or Absolute: Analog with 14 bit resolution with power supply for potentiometer
Data interface:	Online RS 232 C, Baudrate: 300 - 19200 Baud
Error diagnosis:	Decoded text error messages Monitoring of external and internal status Monitoring of power supply voltage
Power supply voltage:	24 V DC $\pm 20 \%$, approx. 0,3 A
Dimensions:	Plug-in PCB 100 mm x 160 mm Frontpanel 3 U x 10 HP (129 mm x 50 mm)
Connector:	48 way male multi-point connector strip DIN 41612 (type F)
Ambient temperature:	0 - 50 °C (32 ... 122°F)
Special applications:	Synchronous run with up to 4 MP100

Ordering data

MICROPOS MP100. ☐ 5 ☐ 1. ☐ ——— SY - Version for synchronous run systems

7 - for digital measurement system (inkremental, SSI, magnetostrictive transducer)

8 - for analog measurement system (potentiometer)

Accessories:	COM-DP	Communication modul profibus <> MP100
	701.01006-0	Card holder with plug-in connector block
	MRM100.1	Chassis, placement in cluster possible
	DEK.0500	Digi-switch for RS 232C
	611.2-0011	Programming set NC-Link 100

esitron-electronic GmbH

Ernst-Zimmermann-Str. 18
D-88045 Friedrichshafen
Internet: www.esitron.de

Tel. +49(0)7541-6000-0
Fax +49(0)7541-6000-11
E-Mail: info@esitron.de