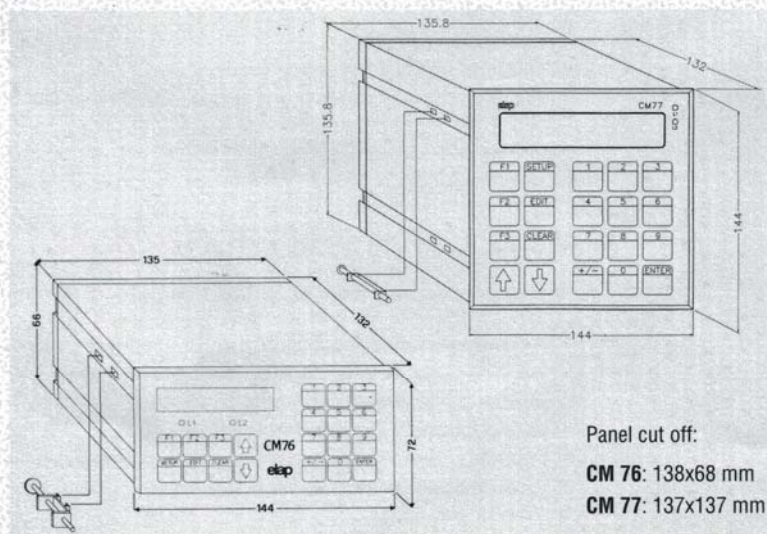




# ELAP CM76/77 MICROPROCESSOR SINGLE-AXIS POSITIONERS

ELAP CM76 and CM77 are freely programmable positioners with a fast count input for bidirectional incremental transducer (rotary encoders, linear scales, PD or PE). The analogue output with standard signal allows the direct control of drive systems to manage the actuators typically used in industrial automation, such as DC motors (traditional or brushless ones), AC motors, cylinders or hydraulic motors. By means of suitable acceleration and deceleration ramps, the closed loop analogue output enables to obtain highly accurate positionings in a peculiarly short time span, and to maintain the reached position. As an alternative to the analogue output, the version with on-off outputs is also available, for those systems using two-speed actuators; in this case the accuracy of the positioning is assured by specific parameters allowing the speed change and stop with inertia of the system. An interesting feature of CM 76 / CM 77 is that they allow the positioning of one axis either as incremental system or as relative or as absolute system. This characteristic makes CM 76 and CM 77 the ideal instrument to solve the applications in the field of the material progress and of the sheet working (eg. punching, boring, shearing machines). CM 76 / CM 77 record can contain up to 40 lines which can be divided into programs. Each line includes: the positioning value, the indication of the positioning type (absolute or relative), the number of units or repetitions and the positioning speed. In order to communicate with external units CM 76 and CM 77 can be equipped with a serial port RS232, while the mini-PLC implemented inside the instrument allows to choose, among the wide range of available options, the function of inputs, outputs and F-keys. This allows to integrate CM 76 and CM 77 at best in the system where they become components. **Complying with CE standards**

## DIMENSIONS



## TECHNICAL SPECIFICATIONS

- Supply 110/220 or 24V 50/60Hz  $\pm 10\%$
- 20-key polyester antiscratch keyboard
- 8-digit 7-segment display
- 2 LEDs signalling the system state
- Count input: 10 KHz to be quadrupled - 20 KHz to be doubled - 40 KHz direct
- Analogue output  $\pm 10V$  or  $0-10V$  with direction relay
- 5 relay outputs (I max 3A - V max. 220V)
- Output supply for the transducer: 12V
- 4 auxiliary outputs NPN/PNP selectable
- Serial line RS232 with standard 9-pin connector outlet (optional)
- Data memory on EEPROM
- Count record stored on NV-RAM
- 40 work lines which can be divided into programs indicating positioning values, number of units and working speed
- Front dimensions: CM76 144x72 - CM77 144x144
- Connections by extractable terminal box in the rear case

## OTHER FEATURES

- Positioning maintained in closed loop (with analogue output)
- Working as absolute or incremental axis
- Possibility to assign different speeds for the positioning reaching
- Very easy programming structure
- Parameter entering extremely clear for the user
- Possibility to implement custom software in the basic hardware
- Settable parameters: tolerance, inertia, play recovery, deceleration, blade thickness
- Encoder zero reference control



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