

## Area of application

- for medium-sized and large presses
- for use in combination with the positioning units type HFS (chain drive) and EFV (spindle drive)
- for different die sizes and clamping thicknesses
- suitable for top die clamping
- for dies with U-shaped recesses



## Mode of operation

- The clamping nut is inserted into the U-recess of the die and the corresponding machine T-slot by means of an optionally available positioning unit.
- The functional sequence of the clamping nut is as follows:
  - rapid positioning movement until the clamp unit contacts the die edge
  - generation of the clamping force
- Both functions are carried out by an electric drive with multistep reduction gear
- The clamping nut is mechanically self-locking.



## Description

The clamping nut carries out a rapid positioning movement by means of an electric drive with multistep reduction gear. When the clamp unit contacts the clamping surface the gear is automatically changed-over. Then, the clamping force is generated.

The motor is switched off by an electrical clamping force monitoring device. The mechanical self-locking of the clamping nut secures the die against unintentional lowering.

Energy is only required during the clamping and releasing procedures. The clamping nut is centrally operated by the machine control system.



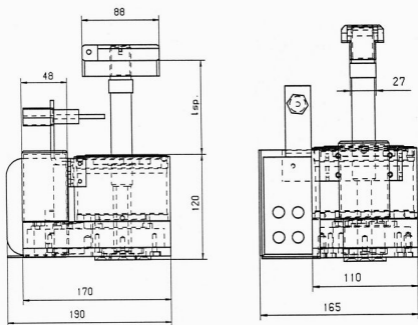
## Advantages

- progressively adjustable to different die sizes
- large clamping thickness tolerances
- with corrosion protection
- central operation
- with clamping force monitoring function
- high positioning speed
- mechanically self-locking
- short clamping time
- suitable for retrofit applications

## Technical Data

Max. operating temperature:	70° C
Mains voltage:	
Positioning motor	24 V DC (HFS) 400 V AC (EFV)
Clamping motor	48V DC
(Additional versions available on request.)	
Switching functions:	
Electrical monitoring of the following functions:	
Clamp unit in parked position	(S1)
Clamp unit positioned at the die	(S2)
Clamp unit within the admissible clamping range	(S4)
Clamp unit released	(S5)
Clamp unit clamped	(S6)
Limit switch type:	
inductive proximity switch, PNP NOC, PNP NOC, 10 – 30V DC	

Subject to technical modification !



**Technical Data:**

Type ESM 100

Clamping force = 100 kN  
Load capacity = 160 kN  
Clamping stroke = 25 mm

Subject to technical modification !