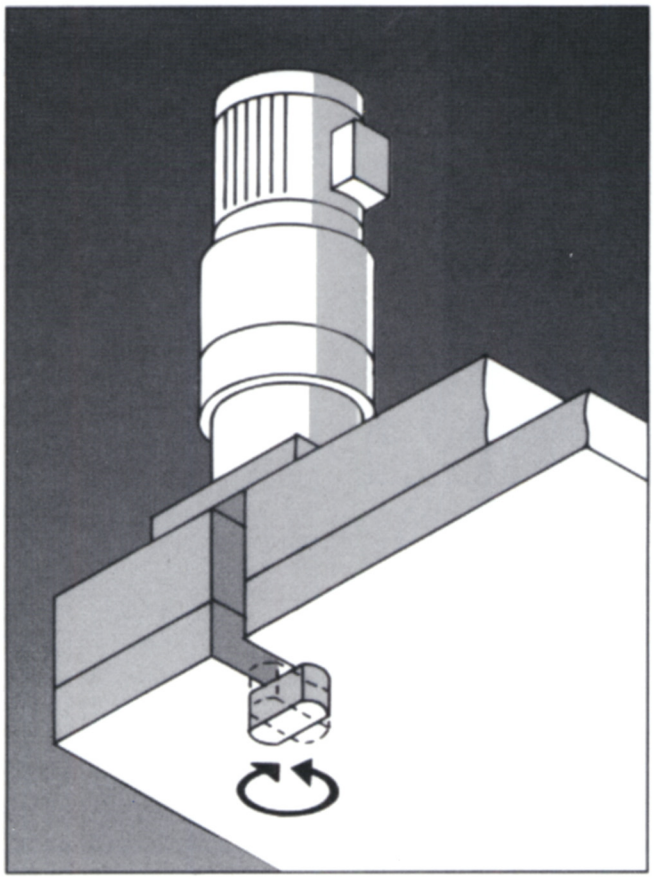


## Area of application

The turn-clamp unit type ED is designed for mechanical and hydraulic presses exerting a force of ca. 500 tons or more. It is suitable both for top die clamping and for inner punch die clamping, in multiple acting presses.

It can be installed rigidly either on the press ram ledge or in recesses in the ram surface. The dies used should have a lock plate or a clamping edge with a U-recess.

## Mode of operation

By means of an electric motor and a gear system, a threaded nut is set in rotation. The nut, in cooperation with the associated spindle, initiates the rotary movement by friction. After the clamping process is started, the tie rod of the clamp unit is brought to the clamping position by means of a 90° rotation, and the die is finally clamped in the required position.

The mechanical self-locking of the clamp unit prevents accidental release of the clamped die. Electric power is only required during the clamping and release processes.

***Movement sequence for applying the clamping force:***

- 90° rotation
- Clamping stroke of the tie rod
  (reverse order to release clamp unit)

## Distinguishing features

Due to the fact that the clamping process takes place in the most compact space, the clamp unit may also be used with multiple acting presses. In the released position the tie rod head projects below the surface of the ram. As a result, this clamp unit is usually used on the ram.

***Electrical control of the following functions (switches):***

- Tie rod released, rotated to clamp position (S5)
- Continuous monitoring of clamping force (S6)
- Tie rod is rotated to unclamp position (S7)

## Technical data

| | |
|---|---|
| Motor: | DC motor |
| Supply voltage: | 460 V, 60 Hz; n = 300 rpm; |
| Switches: | 3 inductive proximity switches p-n-p normally open contact |
| Supply voltage: | 10-30 V DC |
| Cable length: | ca. 3 m |
| Clamping rate: | ca. 3 mm/sec. |
| Clamping time: | ca. 1-6 sec. |
| Max operating temp.: | 70°C |

## Advantages

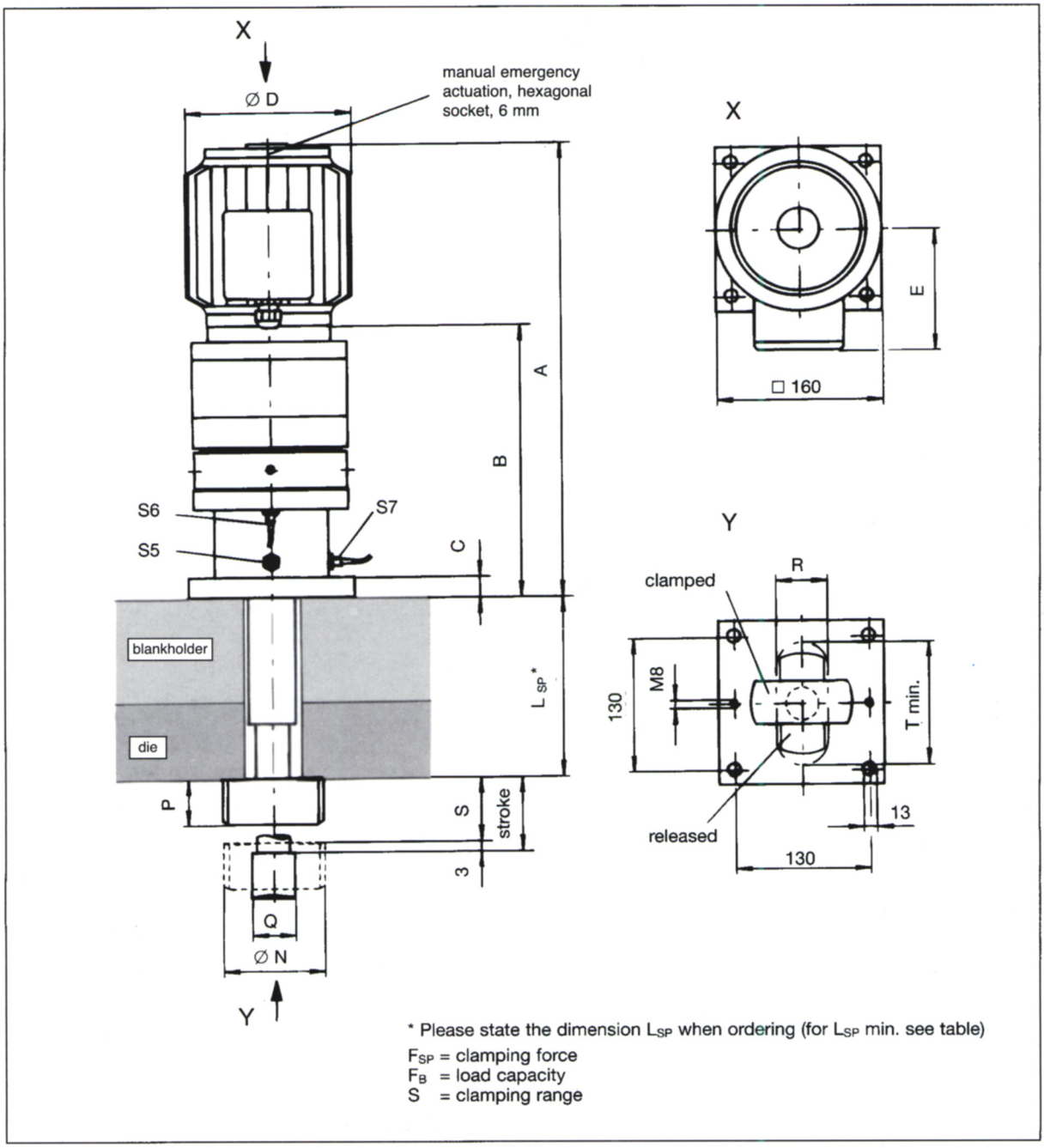
- Large clamping thickness tolerance
- Central control
- Compact dimensions
- Mechanical self-locking
- Electrical control of all important functions
- Continuous monitoring of clamping force

## Construction

The clamp unit has a forged and gunmetal finish tie rod. A high-ratio epicyclic gear box provides the necessary driving power.

To secure the clamp unit to the machine, please use four M12 bolts, strength class 8.8 according to DIN 912 (not included).

3.200




* Please state the dimension $L_{SP}$ when ordering (for $L_{SP}$ min. see table)

$F_{SP}$ = clamping force
$F_B$ = load capacity
S = clamping range

| Type | $F_{SP}$ [kN] | $F_B$ [kN] | S | Stroke | $L_{SP}$ min. | Motor power [kW] | A | B | C | D | E | N | P | Q | R min. | R max. | T min. | Weight [kg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ED 60 | 60 | 100 | 15 | 18 | 105 | 0,55 | 418 | 253 | 20 | 150 | 102 | 80 | 30 | 36 | 45 | 50 | 90 | 33 |
| ED 120 | 120 | 200 | 15 | 18 | 105 | 0,75 | 440 | 253 | 20 | 160 | 123 | 98 | 45 | 42 | 50 | 60 | 120 | 36 |
| ED 240 | 240 | 400 | 15 | 18 | 130 | 1,50 | 484 | 297 | 20 | 160 | 123 | 120 | 60 | 62 | 65 | 70 | 160 | 45 |