

Area of application

This clamp unit is designed for mechanical and hydraulic presses exerting a force of ca. 500 tonnes and above. It can be used universally, ie for top and bottom die clamping and is also suitable for internal die clamping with multiple acting presses.

It can be rigidly installed, either to the bracket on the outside of the press or in recesses in the press bed or ram. The dies used should have either a lock plate, a clamping edge with a U-recess, or a T-slot guide.

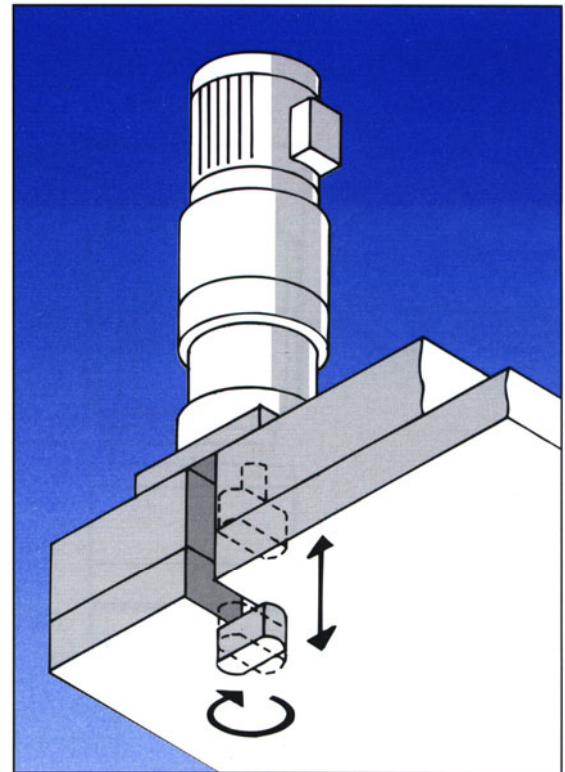
Mode of operation

By means of an electric motor and a gearing system, a threaded nut is set in rotation. The nut, in cooperation with the associated spindle, initiates the rotary and subsequent clamping movement of the tie rod by means of friction and mechanical control.

The mechanical self-locking of the clamp unit protects the clamped die against accidental release. Power is only required during the clamping and release processes.

Movement sequence for applying the clamping force:

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



Distinguishing features

Retracting the tie rod into the released position below the bed or ram level enables a die change without interfering edges. This is advantageous also in multiple acting presses.

Electrical control of the following functions (switches):

- Tie rod retracted (S3)
- Tie rod in clamping position (S5)
- Continuous monitoring of clamping force (S6)
- Tie rod in release position (S7)

Advantages

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

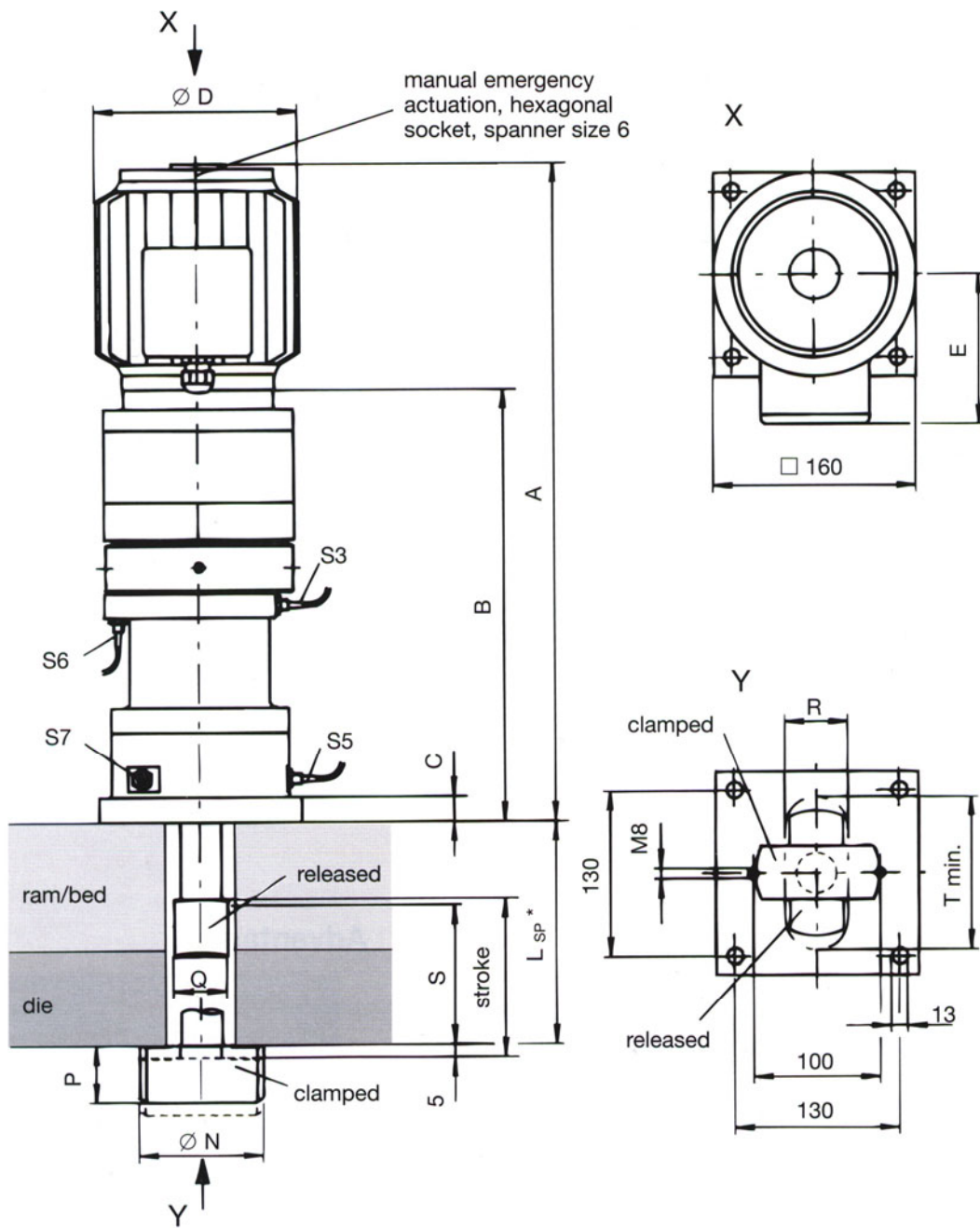
Technical data

Motor:	DC motor
Supply voltage:	400 V, 50 Hz; n = 3000 rpm; S3- duty factor 15 %
Switches:	4 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.
Max. operating temp:	70° C

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 in the supply).



* 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. max.	T min.	Weight [kg]
EDH 60	60	100	85	92	95	0,55	495	330	20	150	102	80	30	36	45 50	90	36
EDH 120	120	200	100	107	110	0,75	540	353	20	160	123	98	45	42	50 60	120	40
EDH 240	240	400	130	137	140	1,50	616	429	20	160	123	120	60	62	65 70	160	50