

Area of application

The Optima slide lock system type OSV is used for rendering the slide safe when working in the die room or on the machine itself. It is mainly used for mechanical, but also for hydraulic presses.

Rigidly installed, suspended at the press head area, its use requires a slide which has externally welded-on contour plates, or recesses in the surface.

Mode of operation

By means of an electric motor, operating via a gearbox, a threaded nut is set in rotation. The nut, in cooperation with the associated spindle, initiates the necessary rotary movement. The tie rod, which is in the parked position (fully extended), first of all performs a 90° rotation, and then moves directly to the slide and prevents it from being lowered accidentally.

A hydraulic cushion ensures release of the tie rod, even under load (within the possible release distance). Sticking of the tie rod is thus virtually impossible.

Movement sequence for securing the slide:

- 90° rotation of the tie rod into the locking position
- Movement of the tie rod to the underside of the slide (release of the slide in reverse order)

Distinguishing features

Due to the continuous variation in length of the tie rod, the press slide can be locked in any position. The single-motor construction ensures simple electrical installation and compact external dimensions.

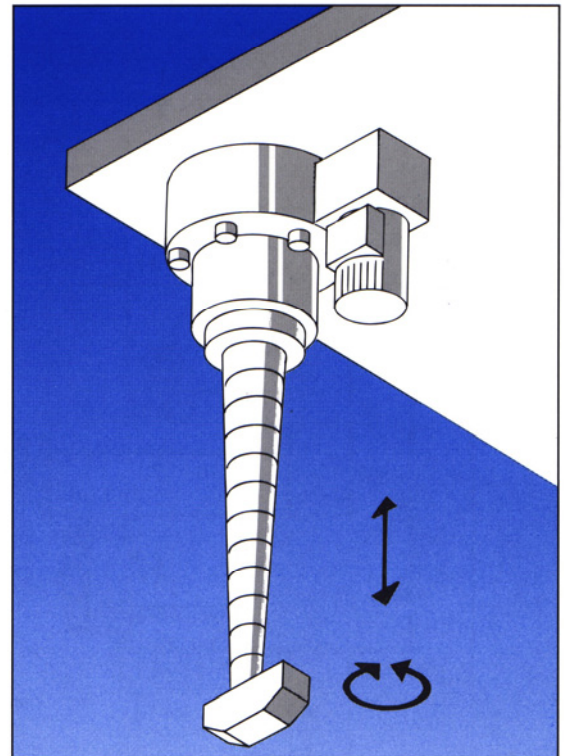
Electrical control of the following functions (switches):

- Tie rod extended (slide free) (S1, inductive)
- Tie rod rotated into one of the end positions (S2, inductive)
- Slide secured (S3, mechanical)

Technical data

Motor:	DC motor
Supply voltage:	400 V, 50 Hz; S3- duty factor 15%
Wiring on:	Harting-plug connection HAN 3 HvE*
Switches:	2 inductive proximity switches: p-n-p normally open contact; 10-30 V DC
	1 mechanical limit sensor: 1 normally closed contact separated according to VDE 0113 1 normally open contact 250 V AC, 230 V DC
Wiring on:	Harting-plug connection HAN 25 D*

*Alternative plug connections on request



Valve:	24 V DC; 1.1 A
Release stroke of the hydraulic cushion:	ca. 10 mm
Locking rate:	80 mm/sec.
Max. operating temp.:	70° C

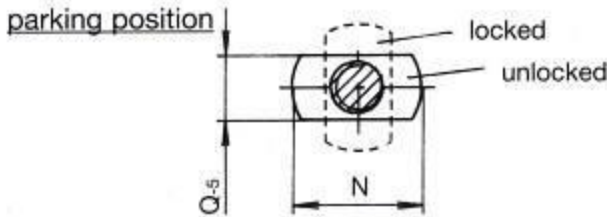
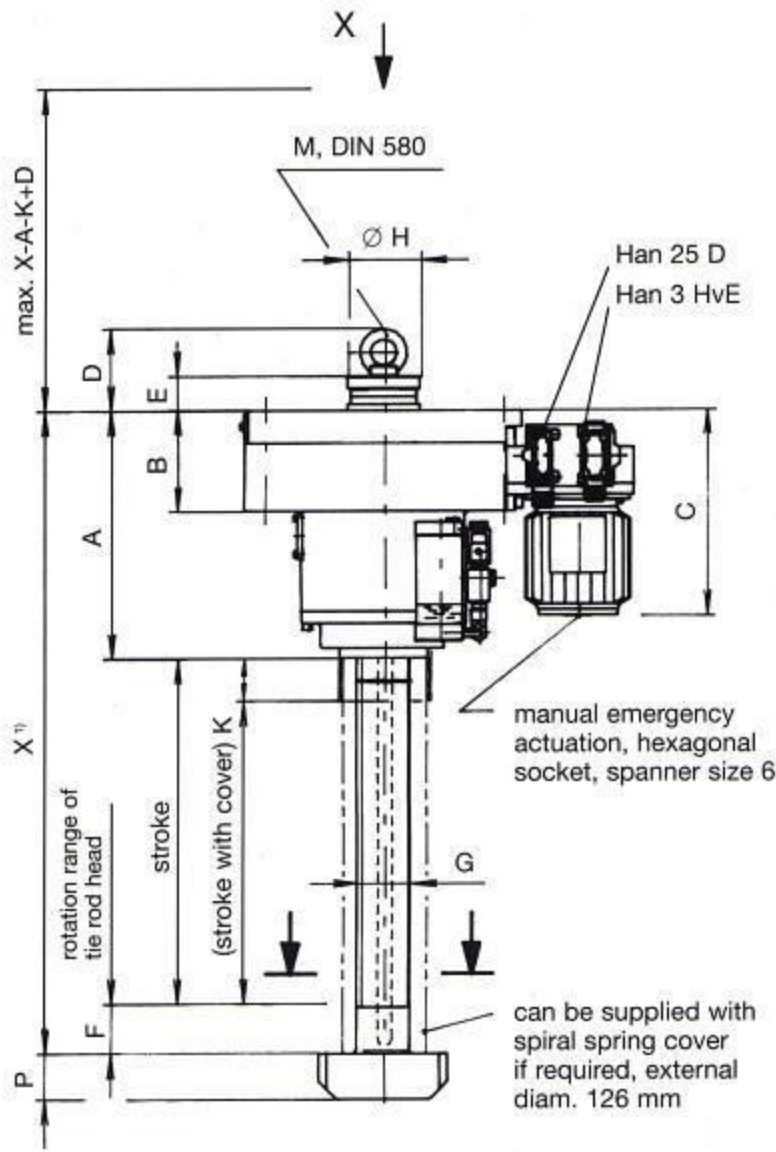
Advantages

- Securing the slide in any position
- Sticking of the tie rod virtually impossible
- Electrical control of all important functions
- Compact dimensions
- Central control
- One-motor operation

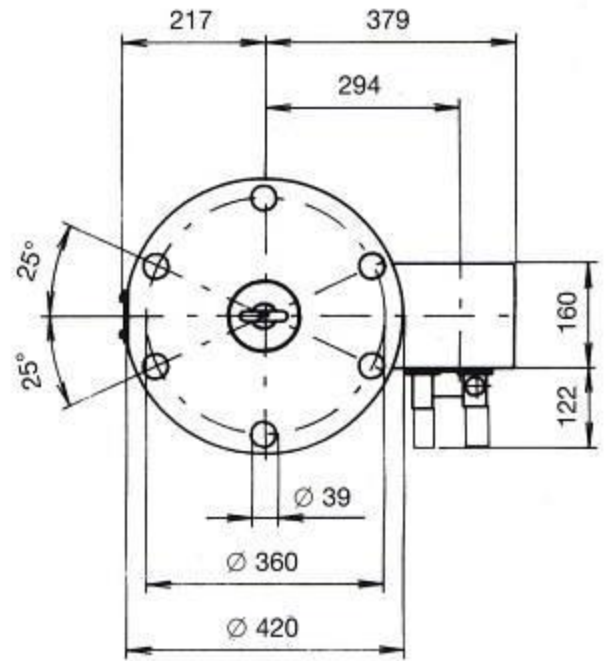
Construction

The slide lock system has a forged chromium-molybdenum steel tie rod.

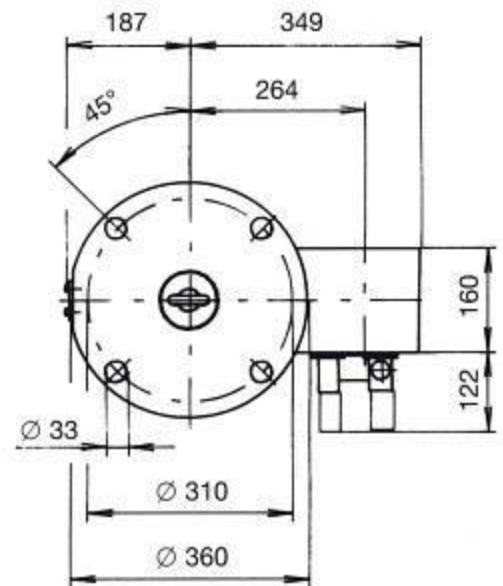
To secure the machine, please use four bolts strength class 10.9 according to DIN 912 (not included in the supply). The thread dimension depends on the type (see reverse).



X (OSV 800/1200)



X (OSV 500)



¹⁾ Please state X when ordering

²⁾ Dimension K to X = 1350 mm. In the case of greater lengths, please request separately. (Without spiral spring cover K = 0)

³⁾ Depending on spindle length

Type	F _B [kN]	Motor power [kW]	A	B	C	D	E	F	G	H	K ²⁾	M	N	P	Q	Weight [kg] ³⁾
OSV 500	500	0,75	340	145	315	109	47	60	Tr60x9	90	75	M16	145	50	70	ca. 200
OSV 800	800	1,5	380	155	325	124	52	90	Tr80x10	110	100	M20	195	70	100	ca. 280
OSV 1200	1200	1,5	380	155	325	124	52	90	Tr80x10	110	100	M20	195	70	100	ca. 300