

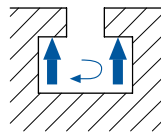
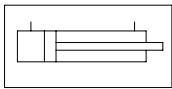
Hydraulic Turn Clamp Cylinder

HDSZ

Application area

- For medium and large presses
- For clamping upper and lower dies
- For dies with lock plate, U-recess or T-slot
- Fixed installation in press slide or press bed

Mode of operation



- A single-acting hydraulic cylinder with spring return supplies the clamping movement.
- A double-acting hydraulic cylinder provides rotation.

Description

A hydraulic rotation unit turns the tie rod head 90°. Then, the clamping cylinder executes the clamping stroke. The sequence of movements is controlled internally. In order to secure the clamping force, hydraulic pressure must be maintained (e.g. with pilot-controlled check valves).

Pressure monitoring by the pressure switch on the hydraulic power pack is required. To unclamp, the tie rod is lifted off the die by means of a return spring. Rotation occurs via the hydraulic rotation unit.

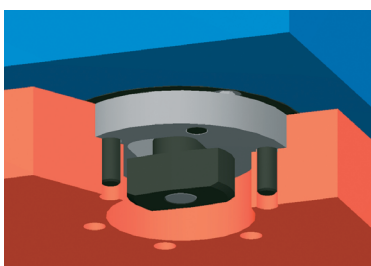


Advantages

- Fully automated operation
- Large clamping dimension tolerance
- Simple monitoring of functions by proximity switches
- Minimal installation investment
- Practically maintenance free
- High clamping force and small dimensions
- Only two hydraulic connections required
- Tie rod can be turned by hand

Accessories

- Pilot-controlled check valves
- Flow control valves
- Fittings
- Hydraulic hoses / Hydraulic accessories
- Hydraulic power packs
- Limit switches / cable



Technical data

Typ	HDSZ-63	HDSZ 100	HDSZ 160
Clamping force [kN] / at operating pressure [bar]	63 / 400	100 / 400	160 / 400
Max. loading force [kN] ¹⁾	75	125	200
Max. operating pressure [bar]	400		
Clamping dimension tolerance [mm]	+/- 2		
Stroke [mm]	6		
Oil volume: Clamp / unclamp [cm ³]	14 / 4	19 / 4	31 / 6
Max. oil volume flow [l/min] ²⁾	1,2		
Limit switch: Number / type Supply voltage Connection type Designation	· two inductive proximity switches · 10-30 V DC · Plug-in type (M8x1), cable length approx. 0,2m · Tie rod unclamped and rotated to unclamped position S1 · Tie rod rotated in clamping position S2		
Max. operating temperature [°C]	70		
Weight [kg]	11	15	22,5

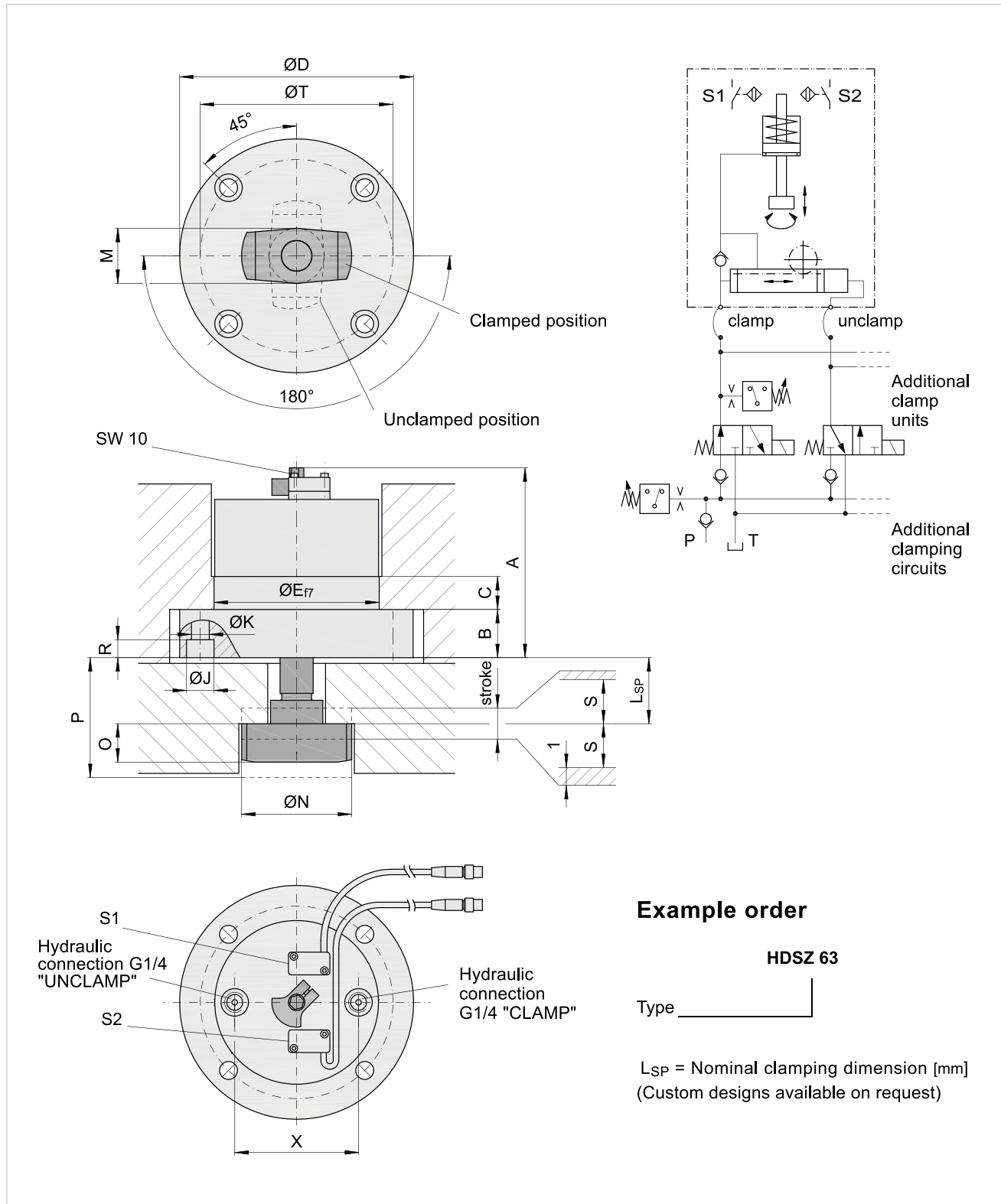
1) Mechanical damage may occur at higher loads.

2) If a pump with a greater output is used, the oil flow must be reduced by means of flow-control valves or one-way restrictors.

Fixing is achieved with four screws, DIN EN ISO 4762, strength class 10.9 (not included).

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Example order

HDSZ 63

Type _____

L_{SP} = Nominal clamping dimension [mm]
(Custom designs available on request)

Type	stroke	S	A	B	C	$\varnothing D$	$\varnothing E$	$\varnothing J$	$\varnothing K$	M	$\varnothing N$	O	P	R	$\varnothing T$	X	L_{SP}
HDSZ 63	6	2	135	35	20	150	110	20	13	34	65	24	48	13	128	80	19
HDSZ 100	6	2	145	35	20	170	120	20	13	40	80	28	57	13	140	90	24
HDSZ 160	6	2	155	40	20	195	140	26	17	50	95	35	69	16,5	165	110	29