

# Hydraulic Retracting Turn Clamp Cylinder HDHSZ-A

## Application area

- For medium and large presses
- · For clamping upper and lower dies
- For dies with lock plates, U-recess or T-slot
- · Fixed installation on the press slide or press bed

### Mode of operation





 Two double-acting hydraulic cylinders provide the rotation respectively the extension and clamping movement of the tie rod.

#### Description

The tie rod initially hidden entirely in the clamp housing and then extended hydraulically until it reaches the end position.

On actuation of the valves the tie rod carries out the rotation first and then clamping movement.

In order to secure the clamping force, hydraulic pressure must be maintained (e.g. with pilot-controlled check valves.)

Pressure sensing by the pressure switch on the hydraulic power pack is required.

In order to unclamp the tie rod is first lifted from the clamping point. Then the valves are switched over thus causing the tie rod to rotate in unclamping position and then to retract in its park position inside the

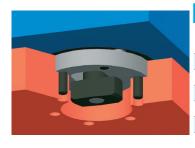
### **Advantages**

- Fully automatic operation
- Large clamping dimension tolerance
- Simple monitoring of functions by proximity switch
- Continuous clamping force monitoring by pressure sensing
- Minimal installation investment
- Pratically maintenance free
- High clamping force and small dimensions
- Tie rod can be turned by hand.

#### Accessories

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

#### Technical data



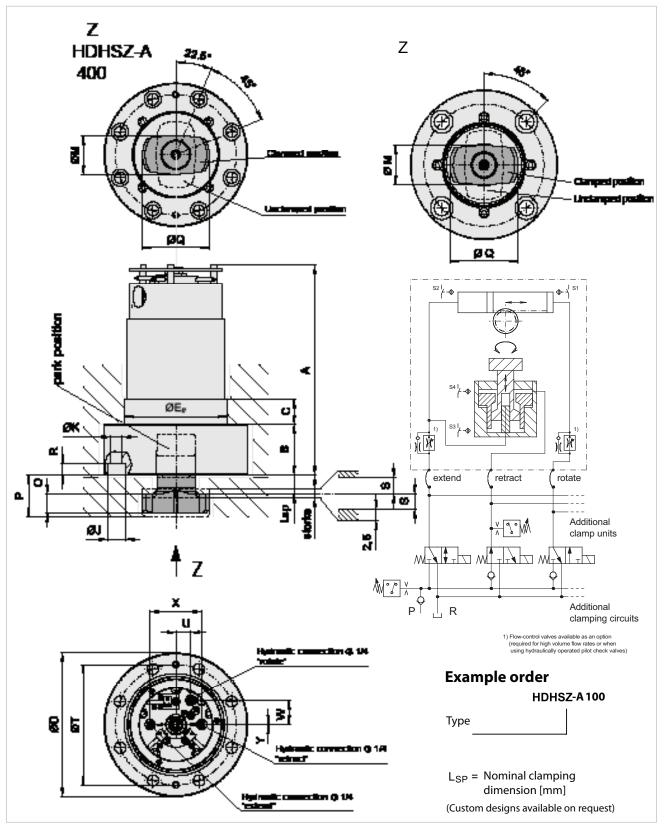
Fixing is achieved with four screws, DIN EN ISO 4762, strength class 10.9 (not included).

Туре	HDHSZ-A 100	HDHSZ-A 200	HDHSZ -A 400					
Clamping force [kN] / at operating pressure [bar]	100/215	200/238	400/232					
Max. loading force [kN] 1)	125	250	500					
Max. operating pressure [bar]	250	250	250					
Clamping dimension tolerance [mm]	+/- 2	+/- 2	+/- 2					
Stroke {mm}	8	8	8					
Oil volume: Clamp / unclamp [cm³]	70/112	212/319						
Max. oil volume flow [l/min] 2)		1,2						
Limit switch: Number / type Supply voltage Connection type Designation	· 10-30 V DC · Plug-in type (M · Tie rod rotated and retracted	e rod rotated in clamping position  or rod rotated to unclamped position  or rotated S1  or rod rotated in clamping position S2  or rod retracted S3						
Max. operating temperature [°C]		70						
Weight [kg]	23	41	93					

- 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.



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Туре	stroke	L <sub>SP</sub>	S	А	В	C	ØD	ØE	Ø٦	ØK	M	0	Р	Q	R	ØT	U	W	Х	Υ
HDHSZ-A100	8	24	2	280	50	25	170	120	20	13,5	40	26	58	80	13	145	15	31	65	5
HDHSZ-A 200	8	29	2	333	70	25	215	145	33	22	57	32	69	100	21,5	175	27	30	80	2
HDHSZ-A 400	8	36	2	410	99	50	280	200	32	22	77	38	80	130	21,5	235	29	47	100	0