

## Hydraulic Retracting Turn Clamp Cylinder HDHSZ

#### **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 is initially hidden entirely in the clamp housing. During extension it is supplied with torque. The rotation of the tie rod head is restricted by a guide plate on the clamp unit and by the die (lock plate). As soon as the tie rod head is no longer guided, it rotates to the clamping position.

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

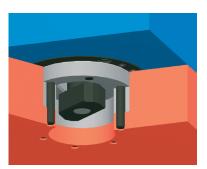


#### Advantages

- 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
- Only two hydraulic connections required
- Tie rod can be turned by hand.

#### Accessories

- Pilot-controlled check valves
- Flow control valve
- Fittings
- Hydraulichoses/Hydraulicaccesories
- Hydraulic power packs
- Limit switches / cable



#### **Technical data**

Туре	HDHSZ 100	HDHSZ 200							
Clamping force [kN] / at operating pressure [bar]	100 / 400	200 / 400							
Max. loading force [kN] 1)	125	250							
Max. operating pressure [bar]	400								
Clamping dimension tolerance [mm]	+/- 2								
Stroke {mm}	б								
Oilvolume:Clamp/unclamp[cm <sup>3</sup> ]	93 / 76	181 / 130							
Max. oil volume flow [l/min] <sup>2)</sup>	1,2								
Limit switch:Number / type Supply voltage Connection type Designation	<ul> <li>• Two inductive proximity switches</li> <li>• 10-30 V DC</li> <li>• Plug-in type (M8x1), cable length ca. 0,2 m</li> <li>• Tie rod rotated to unclamped position</li> </ul>								
	and retracted • Tie rod extended and rotated in clamping position								
Max. operating temperature [°C]	70								
Weight [kg]	24	46							

1) Mechanical damage may occur at higher loads.

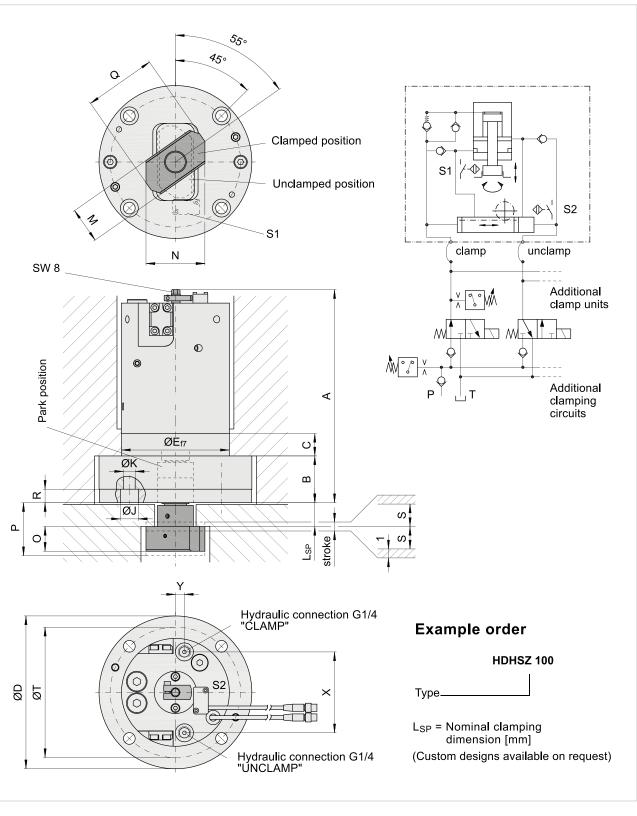
 If a pump with a greater output is used, the oil flow must be reduced by means of flow control valves or one way restrictors.

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



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HDHSZ



Туре	stroke	S	Α	В	С	ØD	ØE	ØΙ	ØK	М	Ν	0	Р	Q	R	ØT	Х	Y	L <sub>sp</sub>
HDHSZ 100	6	2	235	50	25	170	10	20	13	40	66	27,5	56	80	13	145	90	10	24
HDHSZ 200	6	2	285	70	25	215	145	33	22	60	90	34,5	67	100	21,5	175	90	10	29

Technical specifications are subject to change without notice!