

Hydraulic Block Clamp Unit HBS-A

Application area

- For medium and large presses
- For clamping moving bolsters as well as lower dies
- For dies with straight clamping edges
- Fixed installation to the sides of the press columns

Mode of operation





- A double-acting hydraulic cylinder pushes a wedge onto the clamping edge of the die.
- The clamping force is generated by the angle of the wedge.
- The clamp unit is unclamped by reversing this sequence.

Description

The hydraulically driven wedge clamp unit generates the required clamping force by means of the wedge mechanism. In order to secure the clamping force, hydraulic pressure must be maintained (with pilot-controlled check valves, optional). Pressure sensing by the pressure switch on the hydraulic power pack is required.

In its park position, the clamping wedge is fully retracted into the housing and therefore protected against damage. To ensure that the clamping wedge remains in the park position during die change, the operating pressure must be maintained or a pilot-controlled check valve must be integrated into the unclamping line.

Park and clamping positions are monitored by limit switches.



Fixing is achieved with four screws, DIN 912, strength class 10.9 (not included).

Technical data

Туре	HBS-A 200
Clamping force [kN]	40
Max. loading force [kN] ¹⁾	250
Max. operating pressure [bar]	100
Operating pressure: Unclamp [bar]	100
Clamping dimension tolerance [mm]	+/- 0,5
Stroke [mm]	35
Oil volume: Clamp / unclamp [cm ³]	56 / 110
Max. oil volume flow [l/min] ²⁾	0,6-1,2
Limit switch: Number / type (optional) Supply voltage Connection type Designation	 two inductive proximity switches 10-30 V DC Plug-in type (M8 x 1) Clamping wedge in park position S1 Clamping wedge in clamping position S2
Max. operating temperature [°C]	70
Woight [kg]	36

Weight [kg]

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.



Advantages

- Low space requirements due to compact dimensions
- Large clamping dimension tolerance
- Minimal installation investment
- Central operation
- Continuous clamping force monitoring possible (pressure sensing)
- Monitoring of clamping and unclamping positions
- High mechanical load capacity

Accessories

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

Optima Spanntechnik GmbH · Industriestraße 7·57584 Scheuerfeld · www.optima-spanntechnik.de



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