

Application area

- For medium and large presses
- For increased functional safety thanks to mechanical self-locking
- For clamping moving bolsters as well as upper and lower dies
- For dies with straight clamping edges

Mode of operation



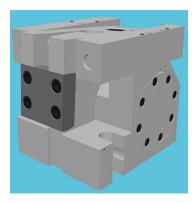


The clamping force is generated by a toggle mechanism. This is actuated by a double-acting hydraulic cylinder.

Description

In order to clamp, a clamping lever extends from the housing until it reaches the die clamping edge. The clamping force is then applied by means of a toggle mechanism. The system is mechanically self-locking. Low hydraulic pressure is only required during the process of clamping and unclamping.

The Optima "Aktivator" ensures that the clamping force is continuously monitored. To unclamp, the clamping lever is first discharged and then retracted entirely into the housing (park position).

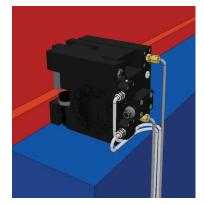


Advantages

- Mechanically self-locking
- Highest level of safety thanks to continuous clamping force monitoring by the Optima "Aktivator"
- Low operating pressure
- High clamping force and small dimensions
 - Practically maintenance free
- Fully automatic operation
- Simple monitoring of functions by limit switches
- Easy installation
- Suitable for retrofitting

Accessories

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



Technical data

Туре	PDV 40	PDV 63	PDV 100	PDV 200					
Clamping force [kN]	40	63	100	200					
Max. loading force [kN] ¹⁾	60	60 100 130							
Operating pressure [bar]: min. / max.	100/140	90/140	/ 140 110 / 140 120 / 1						
Clamping dimension tolerance [mm]	+/- 0,2								
Oil volume [cm ³]: Clamp / unclamp	24 / 20	56 / 50	56 / 50	97/87					
Max. oil volume flow [l/min] ²⁾	0,2 - 0,3	0,4 - 0,6	0,4 - 0,6	0,6 - 1,2					
Limit switch:Number / type Supply voltage Switching capacity Connection type Designation	 two mechanical limit switches 250 V AC 2A / 230 V AC ; • 5 A / 24 V DC Screw connection Clamping lever in unclamped position S5 Continuous clamping force monitoring S6 								
Max. operating temperature [°C]	70								
Weight [kg]	15	23	25	45					

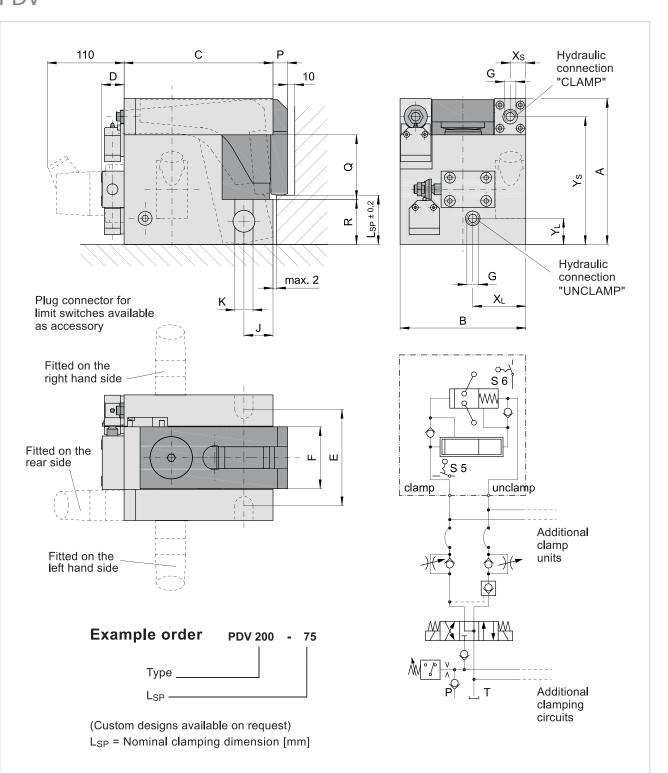
1) Mechanical damage may occur at higher loads.

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 two screws, DIN EN ISO 4762, strength class 10.9 (not included). Special washers are included.



Hydromechanical Block Clamp Unit PDV



Туре	А	В	С	D	Е	F	G	J	K	R	Q	Р	X _s	X	Y _s	Y	L _{SP}
PDV 40	128	130	138	27	95	60	G 1/8	25	17	40	54	15	17	90	113	24	50
PDV 63	170	140	155	30	100	58	G 1/4	30	17	58	73	20	20	85	153	35	60
PDV 100	175	155	170	30	120	73	G 1/4	35	21	50	80	20	20	58	152,5	22	60
PDV 200	201	173	205	31	133	85	G 1/4	40	25	62	89	20	21,5	73	176	36	70-80