

# Hydromechanical Block Clamp Unit PDV-A

#### **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





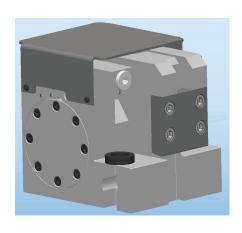


The clamping force is generated by a toggle mechanism. This is actuated by a double-acting hydraulic cylinder.

#### 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).



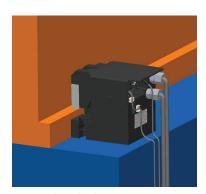
#### **Advantages**

- · 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





Fixing is achieved with two screws, DIN 912, strength class 10.9 (not included).
Special washers are included.

Type	PDV-A 63	PDV-A 100	PDV-A 200				
Clamping force [kN]	63	63 100					
Max. loading force [kN] 1)	100	130	250				
Operating pressure [bar]: min. / max.	90 / 140	120 / 140					
Clamping dimension tolerance [mm]	+/-0,2						
Oil volume [cm³]: Clamp / unclamp	56 / 50	56 / 50	97 / 87				
Max. oil volume flow [l/min] 2)	0,4 - 0,6	0,4 - 0,6	0,6 - 1,2				
Limit switch:Number / type Supply voltage Switching capacity Connection type	<ul> <li>two inductive proximity switches</li> <li>10-30 V DC</li> <li>plug-in type</li> <li>Clamping lever in unclamped position</li> <li>Continuous clamping force monitoring</li> </ul>						
Max. operating temperature [°C]	70						
Weight [kg]	26	30	42				

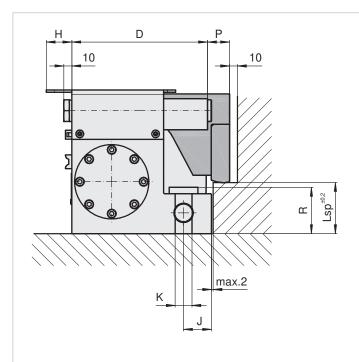
<sup>1)</sup> Mechanical damage may occur at higher loads.

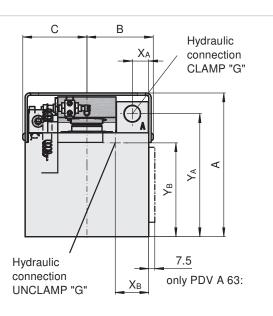
<sup>2)</sup> If a pump with a greater output is used, the oil flow must be reduced by means of flow control valves or one-way restrictors.

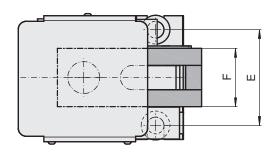


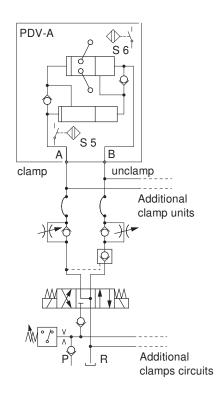
## Hydromechanical Block Clamp Unit

## PDV-A









#### Example order

Туре	А	В	C	D	Е	F	G	Н	J	K	Р	R	X <sub>A</sub>	X <sub>B</sub>	Y <sub>A</sub>	Y <sub>B</sub>	L <sub>SP</sub>
PDV-A 63	175	76	73	162	100	58	M22x1,5	30	30	Ø 17	25	52	20,5	39	154	113	60
PDV-A 100	180	83	80	170	120	73	M22x1,5	30	35	Ø 21	25	58	20,5	42	154	117,5	60
PDV-A 200	205	89	89	170	133	85	M22x1,5	15	40	Ø 25	55	72	23,5	48	175	138,5	70-80