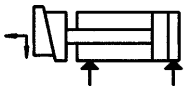
No. 6972D

Pull-Down Clamp, hydraulic

double acting,
max. operating pressure 400 bar.



Order no.	Article no.	Clamping force at 400 bar Sp* [kN]	Clamping force at 400 bar Lo* [kN]	Stroke H [mm]	Piston dia. [mm]	Vol. Sp [cm³]	Vol. Lo [cm³]	Md max. [Nm]	Weight [g]
320150	6972D-12	12	4,5	8	20	2,5	0,9	17	1500
320168	6972D-20	20	9,6	10	25	4,9	2,5	25	2900
320614	6972D-32	32	12,5	12	32	9,7	4,0	46	4900

Sp = clamp, Lo = unclamp

Design:

Cylinder body from hardened steel, burnished. Piston case hardened and ground. Exchangeable jaws. Standard version with serrated and hardened jaws. Complete with 4 fastening screws to ISO, O-ring and oil plugs, particle wiper at clamping bolt. Oil supply via threaded connection or oil channel in the fixture body.

Application:

Pull-down clamps are used whenever clamping is possible only laterally and the workpiece nevertheless has to be held firmly on the fixture body. The hydraulic principle facilitates high pressing and pull-down forces. This clamp can be used on fixture bodies with manifold-type oil supply. Fastening is facilitated from above by four screws.

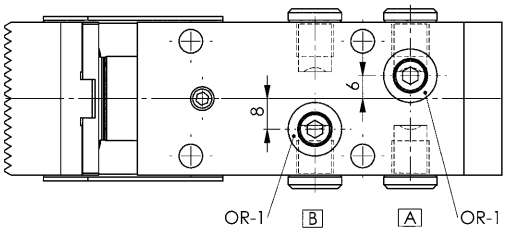
Features:

Quick and safe return movement, independent of the line lengths or the numbers of elements in the circuit. Independent horizontal and vertical movement (no locked coupling), giving a true pull-down effect. Lifting of the clamping jaw is prevented by the location of the clamping bolt right behind the jaw. Suitable for incorporation in fixtures. New design of jaw connection with rubber buffer ensures a sliding without any play.

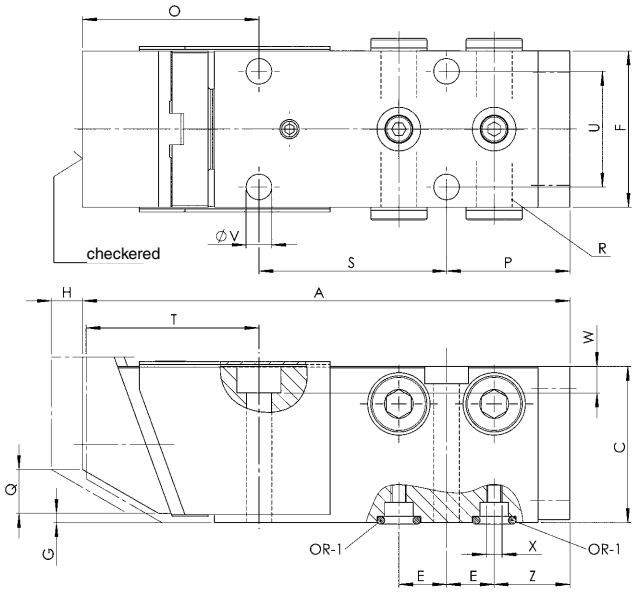
Note:

The maximum pull-down stroke of the jaw must not exceed dimension G. Do not overtighten the mounting fasteners! The maximum permissible torque must not be exceeded. The bottom oil channel is plugged by a sealing washer and a ISO 4762 - M 5x10 bolt. Minimum operating pressure is 40 bar. High variability by oil connection on two sides and bottom oil channel. Jaw and hydraulic piston are connected by a joint to prevent the induction of bending forces into the piston, thus increasing the element's service life. Pull-down force is equal to approx. 1/3 of the corresponding clamping force.

6972D-12



6972D-20, 6972D-32



Dimensions:

Order no.	Article no.	~A	C	E	F	G	H	O ±0.5	P	Q	R	S	T	U ±0,1	dia. V	W	X	Z	Screw (4 pieces)	OR-1 O-ring Order No.
320150	6972D-12	122	40	12,50	40	2	8	40,5	36,5	8,5	G1/8	45	39,5	30	6,2	7,0	M5	24,0	M6x50	114405
320168	6972D-20	156	50	15,25	50	3	10	56,5	39,5	14,0	G1/4	60	55,5	37	8,2	8,5	M5	24,3	M8x60	114405
320614	6972D-32	167	65	15,25	65	3	12	64,0	42,8	17,0	G1/4	60	63,0	48	10,2	10,5	M5	27,5	M10x75	114405

CAD

Subject to technical alterations.