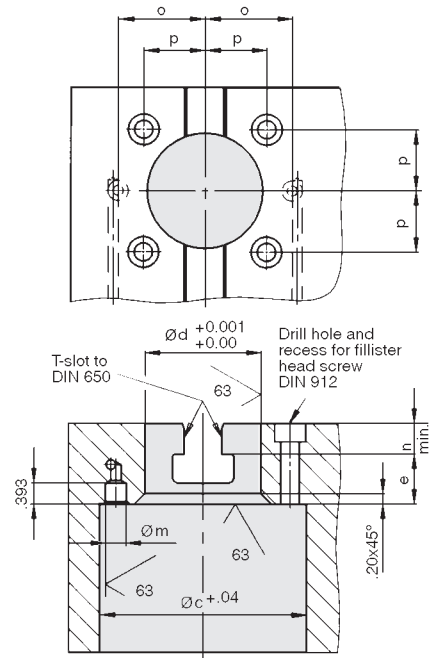
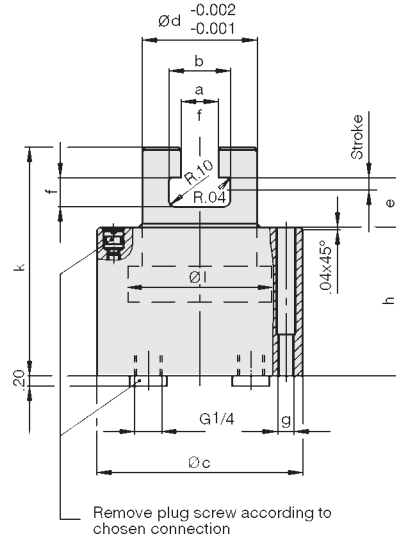


Pull Clamps with T-Slot

double-acting, max. operating pressure 5,800 psi



Application

For clamping tools. Can be installed in bed, slide and intermediate plates. Suitable for combination with T-clamping bars or T-nuts fastened on the tool. The hydraulic oil is supplied either through drilled passages in bed and slide or through tubing.

Description

Double-acting cylinder. Piston hardened and ground. Cylinder made of tempering steel. Hydraulic system protected by wiper rings.

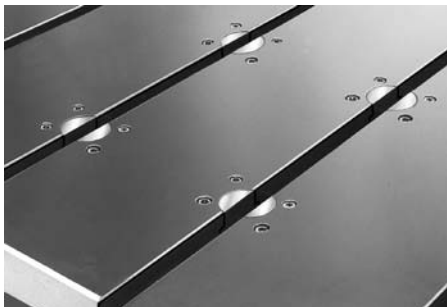
Advantages

- very compact design
- ideal power transmission with centrally arranged clamping elements
- bed and slide also usable for manual clamping
- tools easily adaptable

Power units see catalog SECTION I.

Important notes

Make sure that the T-slot of the clamping piston is subject to axial load only. The T-nut must be in contact with its complete surface. Avoid side loads. Operating conditions, tolerances, and other data, see page B-3.



Pull clamping elements with T-slot installed in a press bed

Plug-in connectors for flange connection

Part no. HCR-9210-117

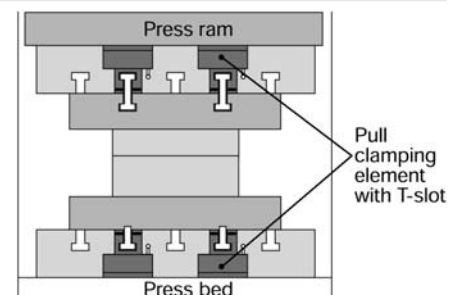
Please order as accessory

For T-slot to DIN 650	mm (in)	18 (.708)	22 (.866)	28 (1.102)
Clamping force at 5,800 psi (lb)		12,400	17,100	32,400
Clamping force at 1,000 psi (lb)		2,138	2,948	5,586
Piston Ø l	(in)	2.756	3.150	4.134
Rod Ø d	mm (in)	56 (2.205)	63 (2.480)	80 (3.150)
Stroke	(in)	.236	.236	.236
Oil requirement/clamping	(in ³)	.55	.73	1.34
Oil requirement/unclamping	(in ³)	1.40	1.83	3.17
a	mm (in)	18 (.709)	22 (.866)	28 (1.102)
b	(in)	1.181	1.458	1.811
c	(in)	3.937	4.528	5.905
e	(in)	.945	1.102	1.260
f	(in)	.551	.709	.866
g	(in)	M8	M10	M12
h	(in)	2.835	3.071	3.071
k	(in)	4.370	4.921	5.314
m +0.0007 /-0.0	mm (in)	10 (.3937)	10 (.3937)	10 (.3937)
n	(in)	.610	.768	1.004
o ± 0.10	(in)	1.654	1.870	2.460
p	(in)	1.169	1.323	1.740
Weight	(lb)	9	12.8	22
Part no.		HCR-2354-050	HCR-2355-050	HCR-2356-050

Example for application

Tool clamping in a press

- Slide: The upper tool is clamped by using double T-clamping bars
- Bed: the lower tool is clamped by using fixed T-clamping bars

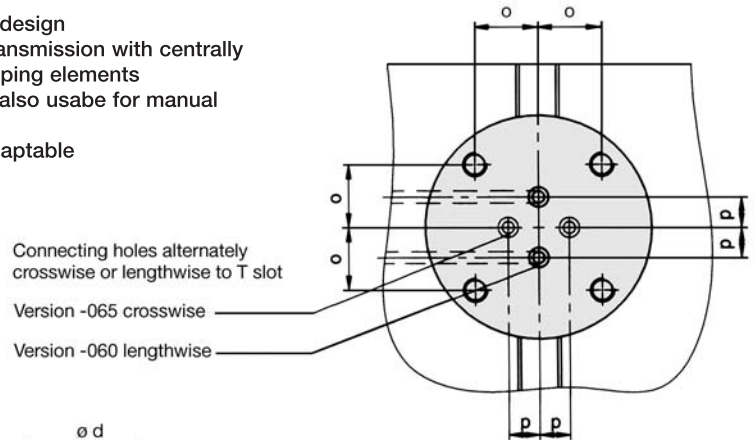


Pull Clamps with T-Slot

double-acting, max operating pressure 5,800 psi



- very compact design
- ideal power transmission with centrally arranged clamping elements
- bed and slide also usable for manual clamping
- tools easily adaptable



Application

For clamping tools. Can be installed in bed, slide and intermediate plates. Suitable for combination with T-clamping bars or T-nuts fastened on the tool. The hydraulic oil is supplied either through drilled passages in bolster and slide or through tubing.

Description

Double-acting cylinder. Piston hardened and ground. Cylinder made of tempered steel. Hydraulic system protected by wiper rings.

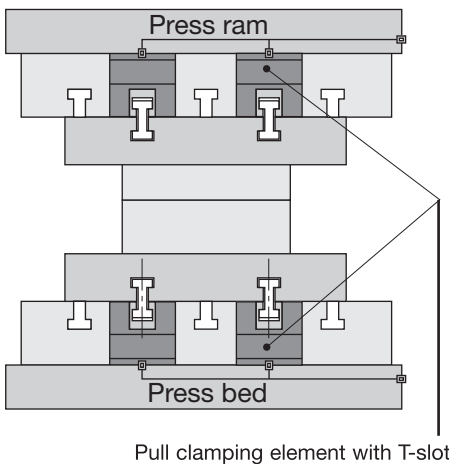
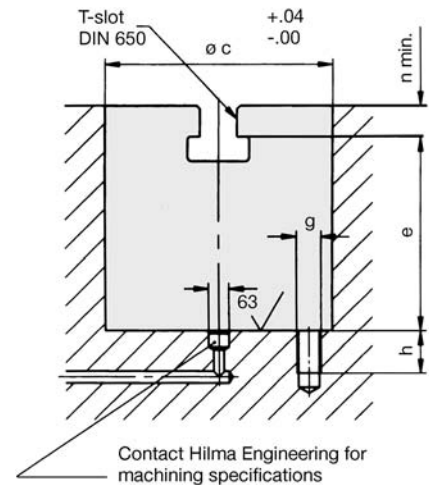
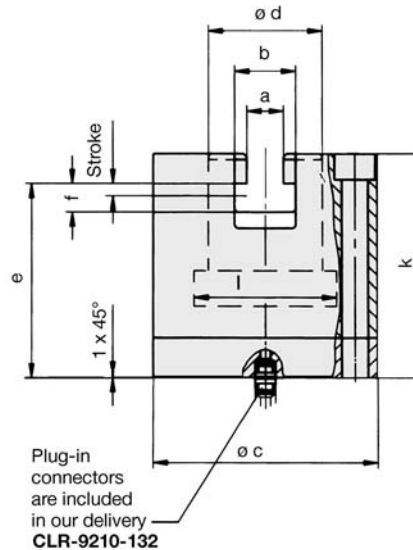
Important notes

Operating conditions, tolerances, and other data, see page B-3.

Power Units

See catalog SECTION I.

Advantages



For T-slot to DIN 650	mm (in)	18(.708)	22(.866)	28(1.102)
Clamping force at 5.800 psi	(lb)	12,600	17,700	33,500
1,000 psi	(lb)	2,100	2,950	5,583
Piston Øl	(in)	2.756	3.150	4.134
Rod Ød	(in)	2.205	2.480	3.150
Stroke	(in)	0.236	0.236	0.236
Oil requirement/clamping	(in ³)	0.55	0.73	1.34
Oil requirement/unclamping	(in ³)	1.40	1.83	3.17
a	mm (in)	18(.709)	22(.866)	28(1.102)
b	(in)	1.181	1.458	1.811
c	(in)	4.331	5.118	6.535
e	(in)	3.780	4.173	4.331
f	(in)	0.551	0.709	0.866
g	(mm)	M12	M16	M20
h	(in)	0.827	0.906	1.063
k	(in)	4.370	4.921	5.314
n	(in)	0.61	0.768	1.004
o	(in)	1.224	1.425	1.839
p ± 0.002	(in)	0.591	0.591	0.591
Weight	(lb)	13.5	20.9	36.6
Part no. connection length wise to T-slot		HCR-2354-060	HCR-2355-060	HCR-2356-060
Part no. connection cross wise to T-slot		HCR-2354-065	HCR-2355-065	HCR-2356-065