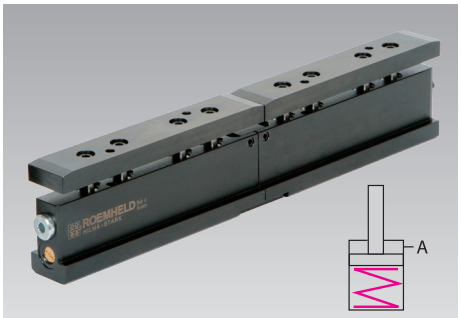
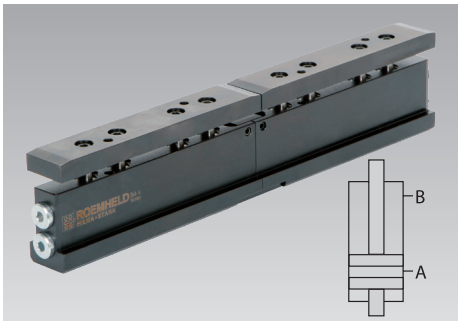
Double-T Clamping Bars

single or double acting, max. operating pressure 400 bar



single acting, with spring return



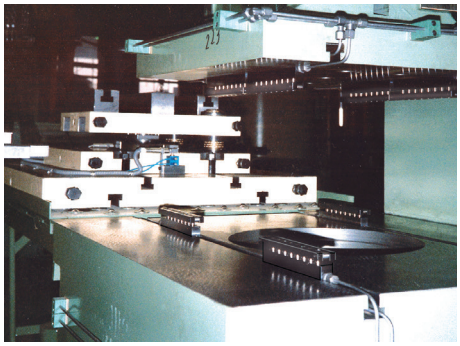
double acting, without carrying rollers

double acting, with carrying rollers

Application

- For clamping of dies on the press bed and press ram
- When the available space is limited

Application example



Double-T clamping bar on press bed and ram

Advantages

- The complete clamping surface can be used
- No collision edges
- Easy and quick retrofit
- Ideal, uniform force transmission

Double-T-clamping bar, single acting, with spring return, without carrying rollers

For use in the press ram, but also suitable for the press bed.
Installation of the double-T clamping bar by insertion into the T-slots of the press ram or the press bed in any desired position. The bar is manually secured in position with locking screws in the T-slot.
The double-T design requires T-slots in the die and in the press ram or press bed.
The clamping force is generated by applying hydraulic pressure to the pistons, and unclamping is carried out mechanically by spring return.

Double-T-clamping bar, double acting, without carrying rollers

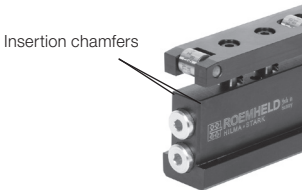
For use in the press ram, but also suitable for the press bed.
Installation of the double-T clamping bar and generation of the clamping force are as described above, but with one additional clamping circuit for unclamping.

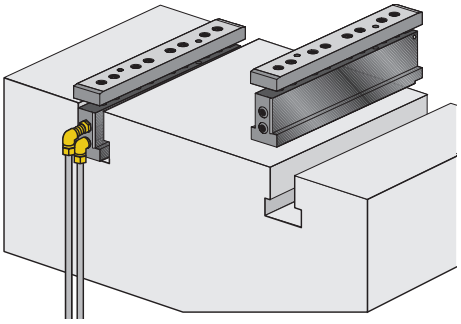
Double-T clamping bar, double acting, with carrying rollers for lifting and clamping

preferably for the use in the press bed.
Installation and function as described above, however equipped with carrying rollers.
A double-acting piston causes the lifting of the carrying rollers and the following clamping of the die by a second clamping circuit. Before clamping is made, the die positioned on the carrying rollers is not in contact with the table plate and can be easily moved and positioned.
Lifting, moving, positioning and clamping with one element only.

Insertion chamfer

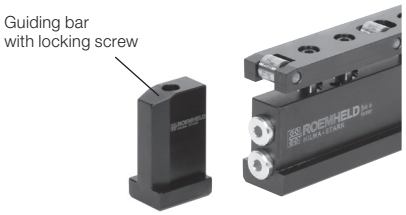
If the dies have a slight lateral offset when loading into the machine, the double-T clamping bars are protected by insertion chamfers at the connection side.





Accessory guiding bar

If the die offset is larger (up to 1.5 mm) or the dies are not fed on the connection side of the double-T clamping bars of the machine, we recommend separate guiding bars. They are fastened in the T-slot using clamping bolts. Special guide bar designs are available on request (e.g. with hydraulic ports for the connection side).



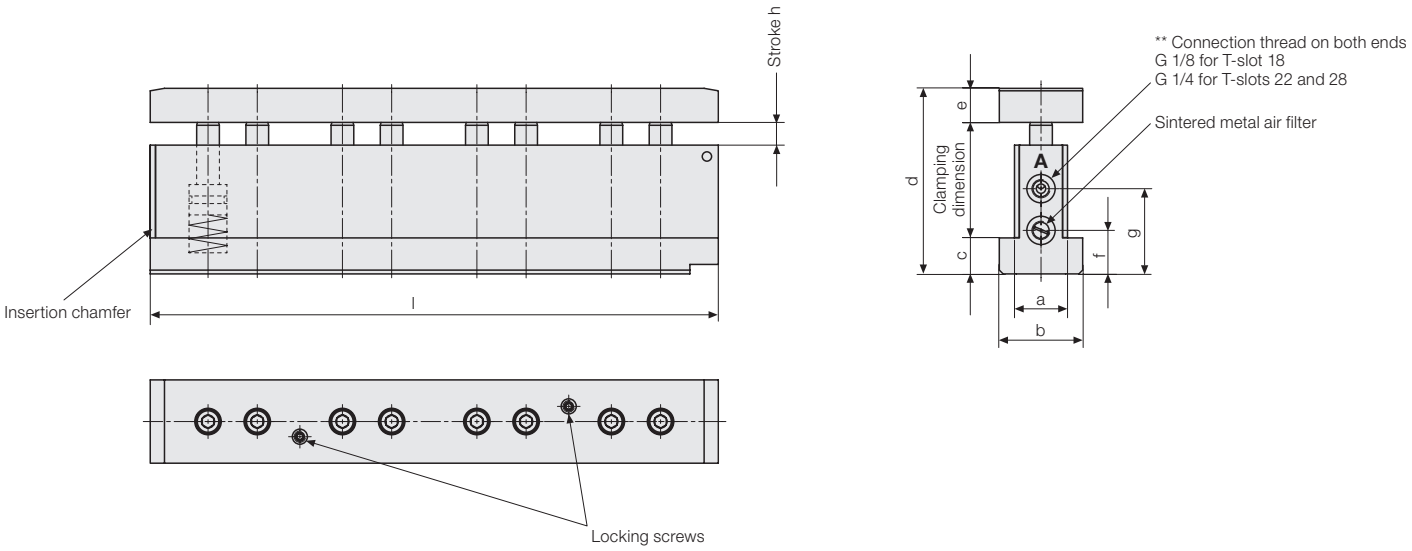
Guiding bar	Part no.
for T-slot 18	**718320015**
for T-slot 22	**718320016**
for T-slot 28	**718320017**

Important notes

All double-T bars are composed of modular segments. Thus, different lengths can be delivered. When clamping or unclamping, make sure that there is an overlap of >90 % of the segment length.

Segment lengths:
T-slot 18 ≙ 150 mm
T-slot 22 ≙ 300 mm
T-slot 28 ≙ 300 mm

Double-T clamping bars
single acting with spring return • without carrying rollers

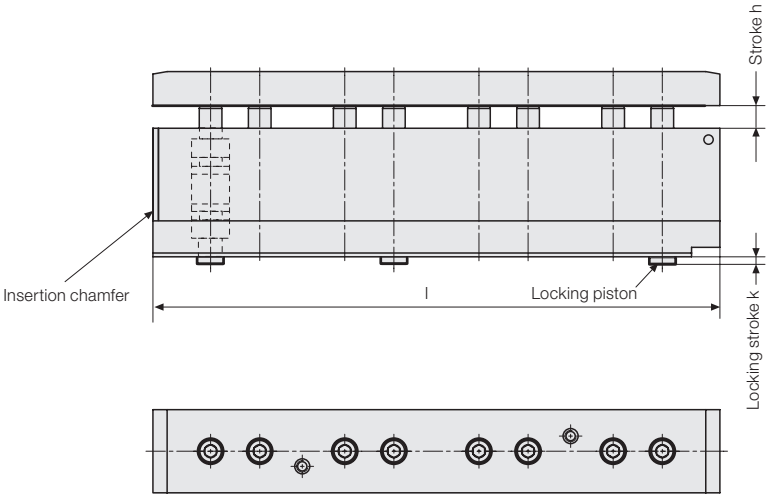


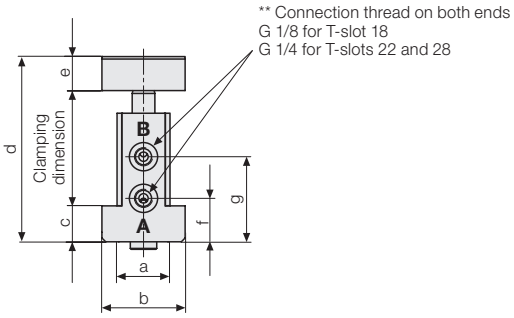
Slot a	[mm]	18	22	28
b	[mm]	28	35	44
c	[mm]	11.5	15.0	19.0
d min.	[mm]	55	70	89
d max.	[mm]	63	80	101
e	[mm]	11	15	18
g	[mm]	30.5	41.0	46.0
Clamping dimension	[mm]	33.5 +6	41.0 +8	53.0 +10
Stroke h*	[mm]	8	10	12
Max. operating pressure	[bar]	400	400	400

* Reduction of stroke on request

T-slot a [mm]	Length l* [mm]	Clamping force at 400 bar [kN]	Oil volume [cm³] Clamping	Part no.
18	150	16.6	3.3	**8 18321810****
18	300	33.2	6.6	**8 18321812**
18	450	49.8	9.9	**8 18321814**
18	600	66.4	13.2	**8 18321816**
18	750	83.0	16.6	**8 18321818**
22	300	39.2	3.3	**8 18322210****
22	600	78.4	19.6	**8 18322212**
22	900	117.6	29.4	**8 18322214**
22	1200	156.8	39.2	**8 18322216**
22	1500	196.0	49.0	**8 18322218**
28	300	64.0	19.3	**8 18322810****
28	600	128.0	38.6	**8 18322812**
28	900	192.0	57.9	**8 18322814**
28	1200	256.0	77.2	**8 18322816**
28	1500	320.0	96.5	**8 18322818**

* Intermediate lengths and extra-long bars on request
** Connection thread on one end



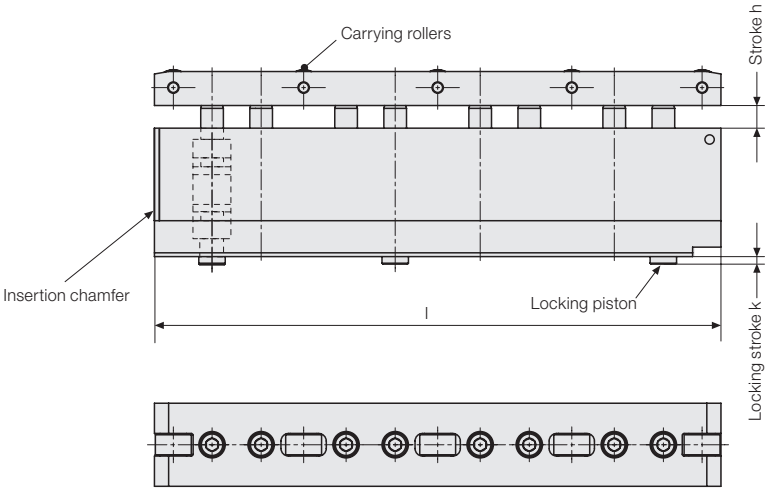


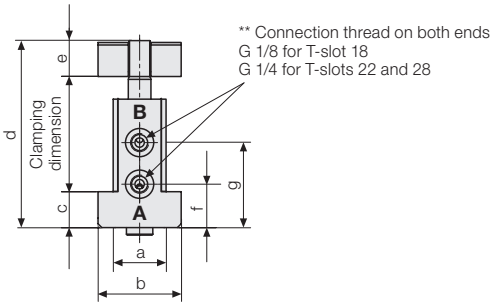
Slot a	[mm]	18	22	28
b	[mm]	28	35	44
c	[mm]	11.5	15.0	19.0
d min.	[mm]	55	70	89
d max.	[mm]	63	80	101
e	[mm]	11	15	18
f	[mm]	13.5	18.0	23.0
g	[mm]	30.5	41.0	46.0
Clamping dimension	[mm]	33.5+6	41.0+8	53.0+10
Stroke h*	[mm]	8	10	12
Locking stroke k**	[mm]	2.5	3.0	4.0
Max. operating pressure	[bar]	400	400	400

* Reduction of stroke on request
** Locking screw (see double-T bar single-acting) instead of locking piston on request

T-slot a [mm]	Length l* [mm]	Clamping force at 400 bar [kN]	Oil volume [cm³] Clamping	Oil volume [cm³] Unclamping	Part no.
18	150	16.6	3.3	6.4	**8 183 21820****
18	300	33.2	6.6	12.9	**8 183 21822**
18	450	49.8	9.9	19.4	**8 183 21824**
18	600	66.4	13.3	25.8	**8 183 21826**
18	750	83.0	16.6	32.3	**8 183 21828**
22	300	39.2	9.8	20.9	**8 183 22220****
22	600	78.4	19.6	41.8	**8 183 22222**
22	900	117.6	29.4	62.7	**8 183 22224**
22	1200	156.8	39.2	83.6	**8 183 22226**
22	1500	196.0	49.0	104.5	**8 183 22228**
28	300	64.0	19.3	40.2	**8 183 22820****
28	600	128.0	38.6	80.4	**8 183 22822**
28	900	192.0	57.9	120.6	**8 183 22824**
28	1200	256.0	77.2	160.8	**8 183 22826**
28	1500	320.0	96.5	201.0	**8 183 22828**

* Intermediate lengths and extra-long bars on request
** Connection thread on one end





Slot a	[mm]	18	22	28
b	[mm]	28	35	44
c	[mm]	11.5	15 .0	19.0
d min.	[mm]	56	71	90
d max.	[mm]	64	81	102
e	[mm]	12	16	19
f	[mm]	13.5	18.0	23.0
g	[mm]	30.5	41.0	46.0
Clamping dimension	[mm]	33.5+6	41.0+8	53.0+10
Stroke h*	[mm]	8	10	12
Locking stroke k**	[mm]	2.5	3.0	4.0
Max. operating pressure	[bar]	400	400	400

* Reduction of stroke on request

T-slot a [mm]	Length l* [mm]	Load at 400 bar [kN]	Clamping force at 400 bar [kN]	Number of carrying rollers	Oil volume [cm³] Clamping	Oil volume [cm³] Unclamping	Part no.
18	150	9	16.6	3	3.3	6.4	**818321830****
18	300	18	33.2	6	6.6	12.9	**818321832**
18	450	27	49.8	9	9.9	19.4	**818321834**
18	600	36	66.4	12	13.3	25.8	**818321836**
18	750	45	83.0	15	16.6	32.3	**818321838**
22	300	32	39.2	5	9.8	20.9	**818322230****
22	600	64	78.4	10	19.6	41.8	**818322232**
22	900	96	117.6	15	29.4	62.7	**818322234**
22	1200	128	156.8	20	39.2	83.6	**818322236**
22	1500	160	196.0	25	49.0	104.5	**818322238**
28	300	37.5	64.0	5	19.3	40.2	**818322830****
28	600	75.0	128.0	10	38.6	80.4	**818322832**
28	900	112.5	192.0	15	57.9	120.6	**818322834**
28	1200	150.0	256.0	20	77.2	160.8	**818322836**
28	1500	187.5	320.0	25	96.5	201.0	**818322838**

* Intermediate lengths and extra-long bars on request
** Connection thread on one end