







Since double-T bars are composed of modular segments, various lengths are available.

### **Applications:**

- for clamping dies on press bed and press slide
- when the available space is limited

**Double-T clamping bar, single-acting with spring return, without support rollers:** usually for use in a press slide but also suitable for use in a press bed.

The double-T clamping bar is installed by pushing it into the T-slots of the press slide or the press bed in any desired position. The bar is manually secured in position using locking screws in the root of the T-slot.

The double-T design requires T-slots in the die and in the press slide 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 support rollers:** usually for use in a press ram but also suitable for use in a 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. The bar is automatically secured in position using locking pistons in the root of the T-slot.

**Double-T clamping bar, double-acting with support rollers for lifting and clamping:** usually for use in a press bed.

Installation and generation of the clamping force as des-cribed above, but with additional support rollers. A double-acting piston causes the support rollers to lift the die and to be clamped by a second clamping circuit. Before clamping the die is placed on the support rollers, i.e. it is not in contact with the press bed and can easily be moved in a linear direction and be positioned.

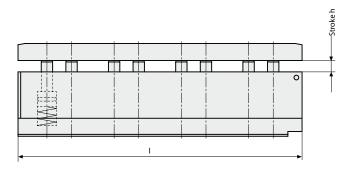
Lifting, moving, positioning and clamping uses only one element.

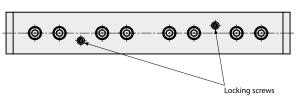
### **Special features:**

- max. operating pressure 400 bar, therefore no low-pressure circuit is required
- the complete clamping surface can be used
- no collision edges
- easy and quick retrofit
- ideal, uniform power transmission.



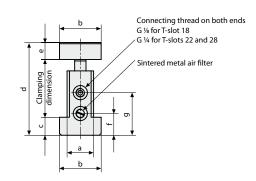
## **Double-T clamping bar** single-acting with spring return





| 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       |

<sup>\*</sup> Reduction of stroke on request



| Part no.      | T-slot (a)<br>(mm) | Length (I)*<br>(mm) | Clamping force (kN) at 400 bar | Oil consumpt.<br>(cm³) clamping |
|---------------|--------------------|---------------------|--------------------------------|---------------------------------|
|               |                    |                     |                                |                                 |
| 8.1832.1810** | 18                 | 150                 | 16,6                           | 3,3                             |
| 8.1832.1812   | 18                 | 300                 | 33,2                           | 6,6                             |
| 8.1832.1814   | 18                 | 450                 | 49,8                           | 9,9                             |
| 8.1832.1816   | 18                 | 600                 | 66,4                           | 13,2                            |
| 8.1832.1818   | 18                 | 750                 | 83,0                           | 16,6                            |
|               |                    |                     |                                |                                 |
| 8.1832.2210** | 22                 | 300                 | 39,2                           | 9,8                             |
| 8.1832.2212   | 22                 | 600                 | 78,4                           | 19,6                            |
| 8.1832.2214   | 22                 | 900                 | 117,6                          | 29,4                            |
| 8.1832.2216   | 22                 | 1200                | 156,8                          | 39,2                            |
| 8.1832.2218   | 22                 | 1500                | 196,0                          | 49,0                            |
|               |                    |                     |                                |                                 |
| 8.1832.2810** | 28                 | 300                 | 64,0                           | 19,3                            |
| 8.1832.2812   | 28                 | 600                 | 128,0                          | 38,6                            |
| 8.1832.2814   | 28                 | 900                 | 192,0                          | 57,9                            |
| 8.1832.2816   | 28                 | 1200                | 256,0                          | 77,2                            |
| 8.1832.2818   | 28                 | 1500                | 320,0                          | 96,5                            |

<sup>\*</sup> Intermediate length dimensions and extra-long bars are available on request.

The double-T clamping bars are composed of individual segments. When clamping or unclamping, make sure that there is an overlap of >90% of the length of the segment.

Length of the segment: T-slot  $18 \stackrel{\wedge}{=} 150$  mm T-slot  $22 \stackrel{\wedge}{=} 300$  mm T-slot  $28 \stackrel{\wedge}{=} 300$  mm

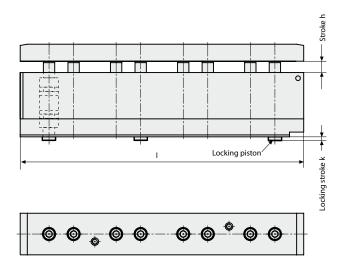


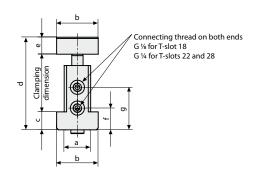
Double-T clamping bar on press bed and press slide

<sup>\*\*</sup> Connection thread on one end

# Double-T clamping bar double-acting







| 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       |

<sup>\*</sup> Reduced stroke is available on request

The double-T clamping bars are composed of individual segments. When clamping or unclamping, make sure that there is an overlap of >90% of the length of the segment.

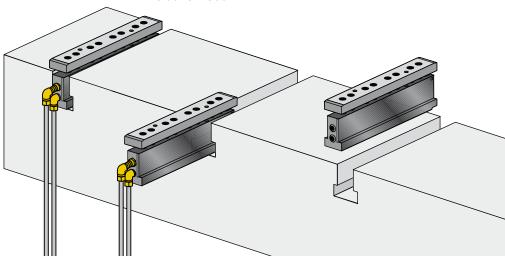
| Length of the segment: | T-slot 18 <sup>△</sup> 150 m                    |  |  |
|------------------------|---|--|--|
| 5                      | T-slot $22 \stackrel{\wedge}{=} 300 \text{ mm}$ |  |  |

T-slot  $28 \stackrel{\wedge}{=} 300 \text{ mm}$ 

| Part no.      | T-slot (a)<br>(mm) | Length (l)<br>(mm)* | Clamping force (kN) at 400 bar |      | mpt. (cm³)<br>unclamp. |
|---------------|--------------------|---------------------|--------------------------------|------|------------------------|
| 8.1832.1820** | 18                 | 150                 | 16,6                           | 3,3  | 6,4                    |
| 8.1832.1822   | 18                 | 300                 | 33,2                           | 6,6  | 12,9                   |
| 8.1832.1824   | 18                 | 450                 | 49,8                           | 9,9  | 19,4                   |
| 8.1832.1826   | 18                 | 600                 | 66,4                           | 13,3 | 25,8                   |
| 8.1832.1828   | 18                 | 750                 | 83,0                           | 16,6 | 32,3                   |
| 8.1832.2220** | 22                 | 300                 | 39,2                           | 9,8  | 20,9                   |
|               |                    |                     | ·                              |      |                        |
| 8.1832.2222   | 22                 | 600                 | 78,4                           | 19,6 | 41,8                   |
| 8.1832.2224   | 22                 | 900                 | 117,6                          | 29,4 | 62,7                   |
| 8.1832.2226   | 22                 | 1200                | 156,8                          | 39,2 | 83,6                   |
| 8.1832.2228   | 22                 | 1500                | 196,0                          | 49,0 | 104,5                  |
|               |                    |                     |                                |      |                        |
| 8.1832.2820** | 28                 | 300                 | 64,0                           | 19,3 | 40,2                   |
| 8.1832.2822   | 28                 | 600                 | 128,0                          | 38,6 | 80,4                   |
| 8.1832.2824   | 28                 | 900                 | 192,0                          | 57,9 | 120,6                  |
| 8.1832.2826   | 28                 | 1200                | 256,0                          | 77,2 | 160,8                  |
| 8.1832.2828   | 28                 | 1500                | 320,0                          | 96,5 | 201,0                  |

<sup>\*</sup> Intermediate length dimensions and extra-long bars are available on request.

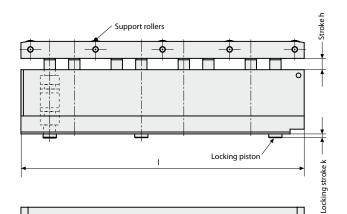
<sup>\*\*</sup> Connection thread on one end

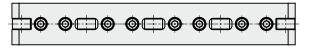


<sup>\*\*</sup> Locking screw (see double-T bar single-acting) instead of locking piston is available on request.



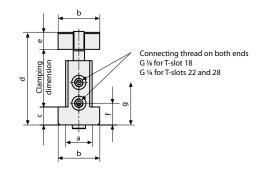
## Double-T clamping bar double-acting lifting and clamping





| 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       |

<sup>\*</sup> Reduced stroke is available on request

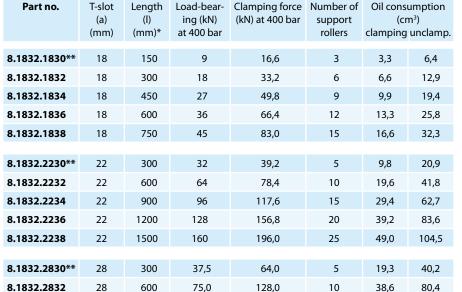


The double-T clamping bars are composed of individual segments. When clamping or unclamping, make sure that there is an overlap of >90% of the length of the segment.

Length of the segment: T-slot  $18 \stackrel{\triangle}{=} 150$  mm T-slot  $22 \stackrel{\triangle}{=} 300$  mm T-slot  $28 \stackrel{\triangle}{=} 300$  mm



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





If the lateral offset of the dies is more significant (up to 1.5 mm), or if the dies are not loaded into the machine at the connection end of the double-T clamping bars, it is recommended that separate guide rails are used. 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 end).

Guide rail for slot T 18 **7.1832.0015** 

Guide rail for slot T 22 **7.1832.0016** 

Guide rail for slot T 28 **7.1832.0017** 

120,6

160,8

201,0

57.9

77,2

96.5

900

1200

1500

112,5

150.0

187,5

192,0

256,0

320,0

28

28

28

8.1832.2834

8.1832.2836

8.1832.2838

15

20

25

<sup>\*</sup> Intermediate length dimensions and extra-long bars are available on request.

<sup>\*\*</sup> Connection thread on one end