



# CHAIN CLAMP





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Reg. Nr. 002081 QM



SERVICE HOURS  
MONDAY-THURSDAY 7.00 AM - 5.30 PM  
FRIDAY 7.00 AM - 3.30 PM

# Technical note on chain clamps

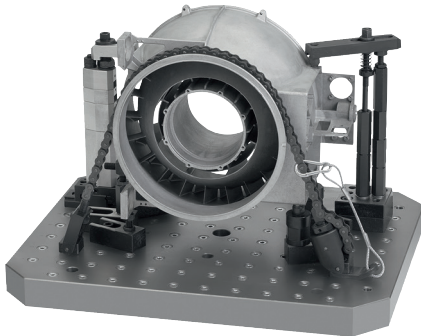


Chain clamps are used mainly in machine and plant construction and enable the secure clamping and fixation of workpieces with irregular contours and shapes. Chain clamps enable workpieces to be effectively clamped. Specially made fixtures with special equipment for clamping complex workpieces are not required. The uniform force distribution from the chain means that workpieces can be clamped relatively distortion-free. Chain clamps are fastened to machine tables or clamping plates using the fastening screws and T-slot keys.

## Features:

- Even pressure distribution
- Plastic elements to protect the workpiece
- Large adjustment range
- No need for special solution clamping fixtures
- High clamping force

## Application examples:



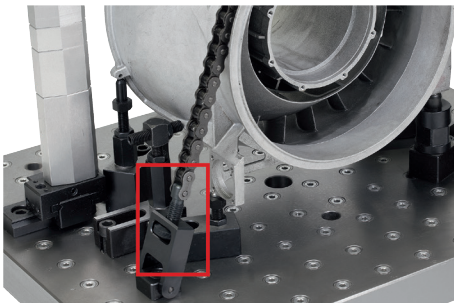
## Mounting:

1. Mount the clamping hook and clamping bracket as close as possible to the workpiece on the machine table or clamping plate.

2. Chain clamp set K1650

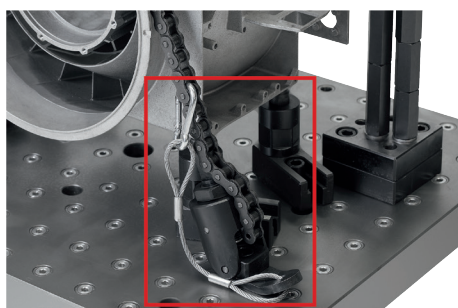
The clamping hook and clamping bracket can be fastened to a machine table or clamping plate using DIN 508 T-slot nuts (K0377) and DIN 912 / DIN EN ISO 4762 cap screws (K0869) (see Table 1).

3. Tighten the knurled nut on the clamping bracket until the tension rod is fully extended.



4. The length of the chain can be adjusted to the workpiece by removing or adding chain links. One end must then be fastened to the tension rod.

5. The free end is hooked onto the clamping hook and must then be secured using the securing set for clamping chains.



6. The knurled nut on the clamping bracket is now turned until the chain exerts a light pressure on the workpiece.

7. The actual clamping process is carried out by tightening the nut on the clamping hook. The clamping hook can be tightened using the ring spanner supplied with a torque spanner adapter.

| Order No. | Nut   | Screw | max. torque Nm | Clamping force max. kN | weight kg |
|-----------|-------|-------|----------------|------------------------|-----------|
| K1650.15  | K0377 | K0869 | 45             | 15                     | 2,6       |
| K1650.40  | K0377 | K0869 | 90             | 40                     | 7,6       |
| K1650.75  | K0377 | K0869 | 190            | 75                     | 21,16     |
| K1650.120 | K0377 | K0869 | 300            | 120                    | 29.1      |

Table 1

### Steel turnbuckles for chain clamp sets

A turnbuckle is used to pre-tension the chain clamp. The turnbuckle is mounted between two chain links and is tightened or loosened by turning the hex. head screw. The chain is pre-tensioned and any play is removed by the shortening of the chain length.

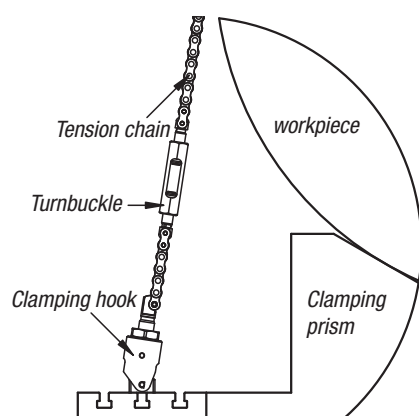
The use of a turnbuckle is always recommended for chains 3 m or more in length.

### Advantages:

- Optimal pre-tension
- With long chains, the turnbuckles counteract the chain elongation

| Order No.    | L [mm] | Clamping force max. kN |
|--------------|--------|------------------------|
| K1656.15052  | 52     | 15                     |
| K1656.40066  | 66     | 40                     |
| K1656.75092  | 92     | 75                     |
| K1656.120092 | 92     | 120                    |

Table 2



## Steel roller chains for chain clamp sets

In addition to the chains provided in the set, KIPP also offers other chain lengths suitable for chain tensioner K1650. These additional chain lengths make it possible to adapt flexibly to the widest variety of workpiece diameters and shapes.

### Advantages:

- The chain length of the chain clamp can be flexibly adjusted and lengthened
- Minimum chain stretching through pre-tension
- Resistance to dirt and temperature influences

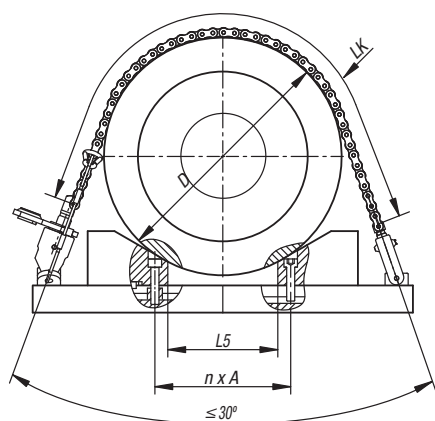
| Order No.     | L1 [mm] | Clamping force max. kN |
|---------------|---------|------------------------|
| K1655.150125  | 111     | 15                     |
| K1655.150250  | 238     | 15                     |
| K1655.150500  | 492     | 15                     |
| K1655.151000  | 1000    | 15                     |
| K1655.400125  | 127     | 40                     |
| K1655.400250  | 229     | 40                     |
| K1655.400500  | 483     | 40                     |
| K1655.401000  | 991     | 40                     |
| K1655.751000  | 984     | 75                     |
| K1655.751500  | 1492    | 75                     |
| K1655.752000  | 2000    | 75                     |
| K1655.1201000 | 1028    | 120                    |
| K1655.1201500 | 1485    | 120                    |
| K1655.1202000 | 2019    | 120                    |

Table 3

## 120° prisms, steel, for chain clamp sets

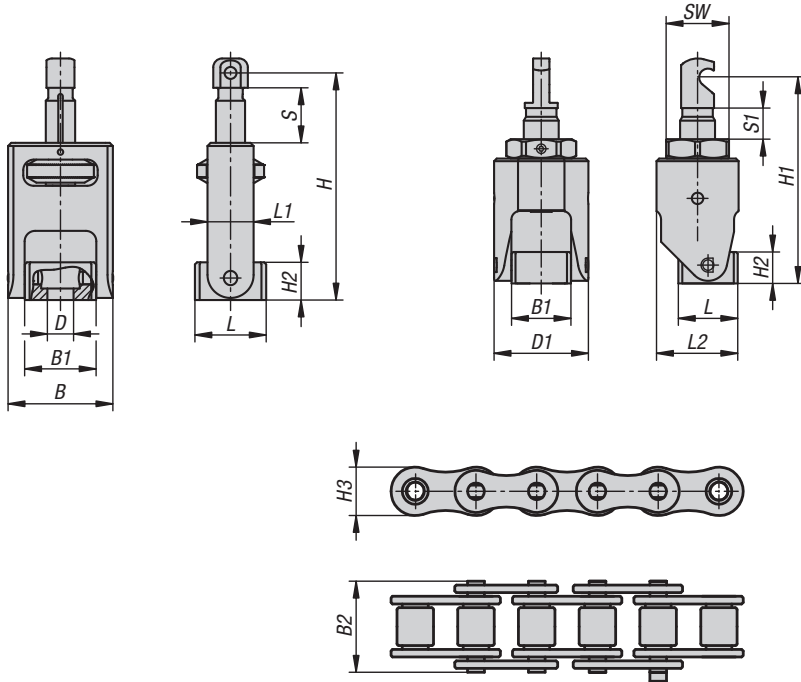
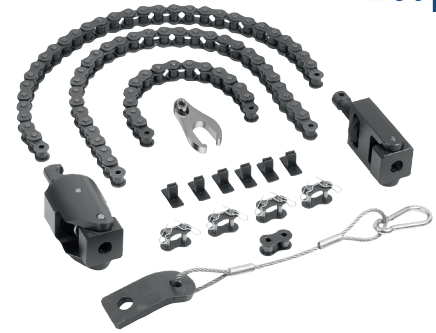
The flexible positioning of the prisms on the machine table enables optimal use of the chain clamp set for clamping. These are fastened to the machine table using the DIN 508 T-slot nuts K0377. If necessary, the prisms can also be aligned exactly on the machine table using a slot key.

Table 4 shows a number of ways that workpieces with a certain diameter can be mounted, and the corresponding chain lengths which are required.



| Order No.         | $n \times A$  | $\varnothing D$ [mm] | Chain length LK [mm] (x) =<br>Number of links | L5 [mm] |
|-------------------|---------------|----------------------|---|---------|
| K1662.11847080    | 1 x 40 = 40   | 190 - 280            | 413 (26) - 635 (40)                           | 2       |
|                   | 2 x 40 = 80   | 250 - 360            | 413 (26) - 635 (40)                           | 42      |
|                   | 3 x 40 = 120  | 270 - 440            | 603 (38) - 1048 (66)                          | 82      |
|                   | 4 x 40 = 160  | 300 - 520            | 635 (40) - 1238 (78)                          | 122     |
|                   | 5 x 40 = 200  | 350 - 600            | 762 (48) - 1429 (90)                          | 162     |
|                   | 6 x 40 = 240  | 430 - 680            | 953 (60) 1619 (102)                           | 202     |
|                   | 7 x 40 = 280  | 510 - 760            | 1143 (72) - 1810 (114)                        | 242     |
|                   | 8 x 40 = 320  | 620 - 840            | 1397 (88) - 2000 (126)                        | 282     |
|                   | 9 x 40 = 360  | 760 - 920            | 1778 (112) - 2191 (138)                       | 322     |
| K1662.14847100    | 1 x 50 = 50   | 250 - 370            | 559 (22) - 864 (34)                           | 2       |
|                   | 2 x 50 = 100  | 320 - 470            | 711 (28) - 1118 (44)                          | 52      |
|                   | 3 x 50 = 150  | 320 - 570            | 711 (28) - 1372 (54)                          | 102     |
|                   | 4 x 50 = 200  | 320 - 670            | 711 (28) - 1575 (62)                          | 152     |
|                   | 5 x 50 = 250  | 430 - 770            | 965 (38) - 1829 (72)                          | 202     |
|                   | 6 x 50 = 300  | 530 - 870            | 1168 (46) - 2083 (82)                         | 252     |
|                   | 7 x 50 = 350  | 630 - 970            | 1422 (56) - 2337 (92)                         | 302     |
|                   | 8 x 50 = 400  | 760 - 1070           | 1727 (68) - 2591 (102)                        | 352     |
|                   | 9 x 50 = 450  | 960 - 1170           | 2235 (88) - 1794 (110)                        | 402     |
|                   | 10 x 50 = 500 | 1160 - 1270          | 2743 (108) - 3048 (120)                       | 452     |
| K1662.36007825022 | 3 x 135 = 405 | 1200-1550            | 2889 (91) - 3842 (121)                        | 315     |
|                   | 5 x 135 = 675 | 1550-2100            | 3683 (116) - 5175 (163)                       | 585     |
|                   | 7 x 135 = 945 | 2100-2500            | 5017 (158) - 6096 (192)                       | 855     |
| K1662.36007825026 | 3 x 135 = 405 | 1200-1550            | 2324 (61) - 3848 (101)                        | 315     |
|                   | 5 x 135 = 675 | 1550-2100            | 3657 (96) - 5143 (135)                        | 585     |
|                   | 7 x 135 = 945 | 2100-2500            | 5029 (132) - 6096 (160)                       | 855     |

## Chain clamp sets, steel



**Material:**

Clamping hook, steel.  
Clamping bracket, steel.  
Roller chain, steel.

**Version:**

Steel parts, tempered.

**Sample order:**

K1650.15

**Note:**

Chain clamps are used mainly in machine and plant construction. Chain clamps enable cylindrical, complicated and large to very large workpieces to be clamped securely and effectively in the quickest and easiest way.

Suitable for cylindrical workpieces, valve bodies, pistons etc.

The workpiece surface can be protected by attaching the plastic elements.

**Application:**

The knurled nut on the clamping bracket can be used to preset the chain length and the clamping force. The required torque is set on the clamping hook.

**Supplied with:**

Chain clamp set K1650.15:

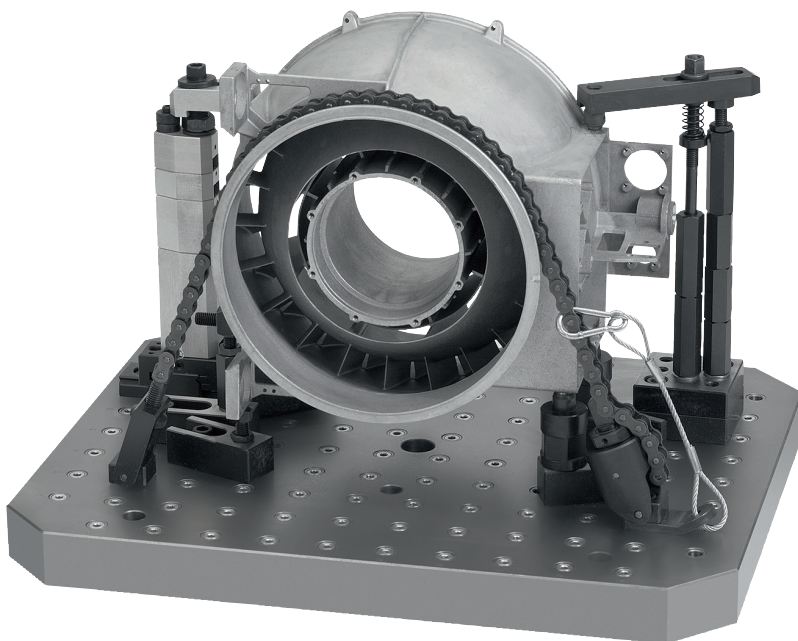
- Clamping hook.
- Clamping bracket.
- 4x roller chains (2x 492 mm, 1x 238 mm, 1x 15.9 mm).
- 4x connecting links with cotter pins to connect.
- 6x snap-on plastic elements.
- Securing set for clamping chains.

Chain clamp set K1650.40:

- Clamping hook.
- Clamping bracket.
- 4x roller chains (1x 991 mm, 1x 483 mm, 1x 229 mm, 1x 25.4 mm).
- 4x connecting links with cotter pins to connect.
- 6x snap-on plastic elements.
- Securing set for clamping chains.

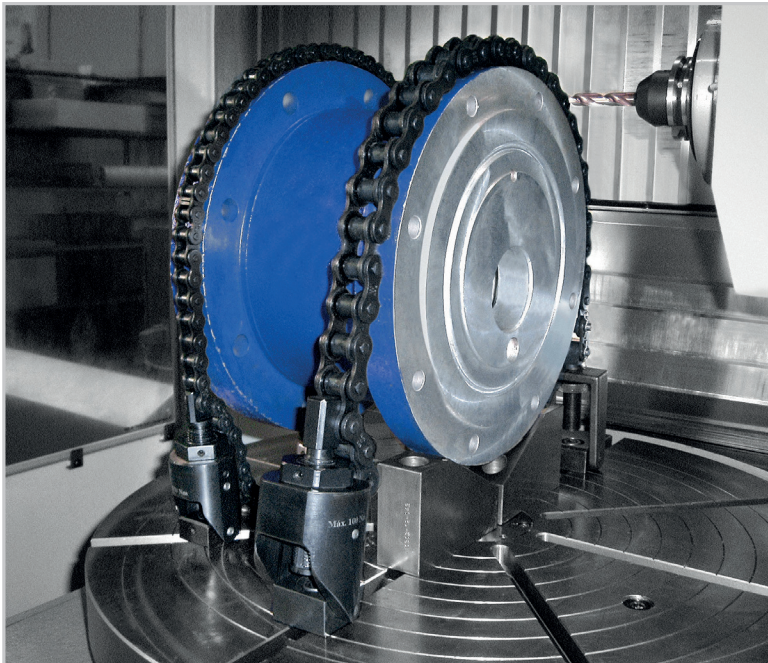
Chain clamp set K1650.75:

- Clamping hook.
- Clamping bracket.
- 2x roller chains (1x 1492 mm, 1x 984 mm).
- 2x connecting links with cotter pins to connect.
- 6x snap-on plastic elements.
- Securing set for clamping chains.





## Chain clamp sets, steel



### Chain clamp set K1650.120:

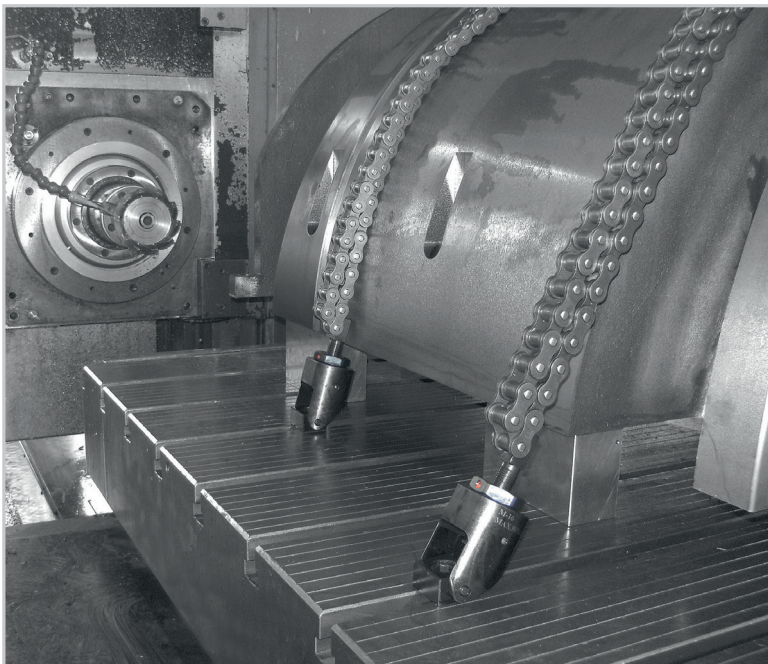
- Clamping hook.
- Clamping bracket.
- 2x roller chains (1x 1485 mm, 1x 1028 mm).
- 2x connecting links with cotter pins to connect.
- 6x snap-on plastic elements.
- Securing set for clamping chains.

### Accessories:

- Steel roller chains for chain clamp sets K1655.
- Steel turnbuckles for chain clamp sets K1656.
- Steel prisms for chain clamp sets K1662.
- Nuts for T-slots DIN 508 enhanced, K0377.
- Cap screws DIN EN ISO 4762, K0869.

### Attention:

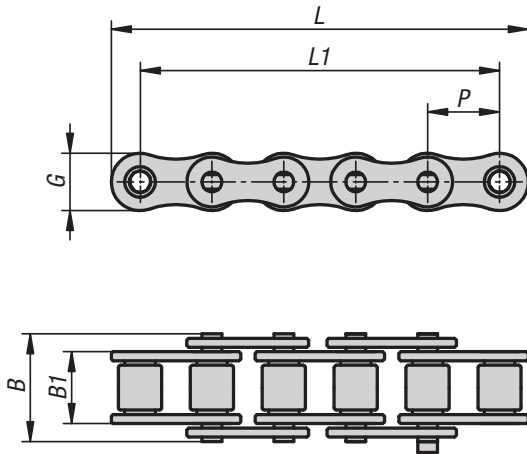
- The opening angle of the chain should not exceed 30°.
- Do not exceed max. permitted tightening torques.



### KIPP Chain clamp sets, steel

| Order No. | B  | B1 | B2 | D   | D1 | H max. | H min. | H1 max. | H1 min. | H2 | H3 | Travel S | L  | L1 | L2   | S1 | SW | Max. torque Nm | Clamping force max. kN |
|-----------|----|----|----|-----|----|--------|--------|---------|---------|----|----|----------|----|----|------|----|----|----------------|------------------------|
| K1650.15  | 50 | 34 | 20 | M12 | 54 | 108    | 83     | 118     | 100     | 18 | 15 | 25       | 34 | 21 | 46,5 | 18 | 36 | 45             | 15                     |
| K1650.40  | 64 | 44 | 33 | M16 | 70 | 146    | 110    | 153     | 122     | 25 | 21 | 36       | 37 | 29 | 61,5 | 31 | 46 | 90             | 40                     |
| K1650.75  | 91 | 64 | 44 | M20 | 98 | 205,5  | 162    | 250     | 195     | 41 | 26 | 43,5     | 58 | 48 | 86   | 55 | 65 | 190            | 75                     |
| K1650.120 | 91 | 64 | 54 | M24 | 98 | 209    | 166    | 260     | 199     | 41 | 33 | 43       | 58 | 48 | 86   | 61 | 65 | 300            | 120                    |

## Roller chains, steel, for chain clamp sets



**Material:**  
Steel.

**Sample order:**  
K1655.150250

**Note:**  
Roller chains for chain clamp sets can be used with chain clamp sets (K1650) for clamping round, irregular, and large to very large workpieces. Roller chains can be shortened and joined together with other roller chains as desired.

**Supplied with:**  
1x roller chain

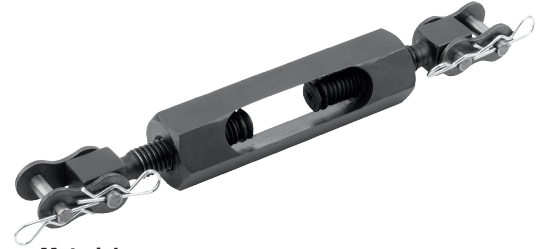
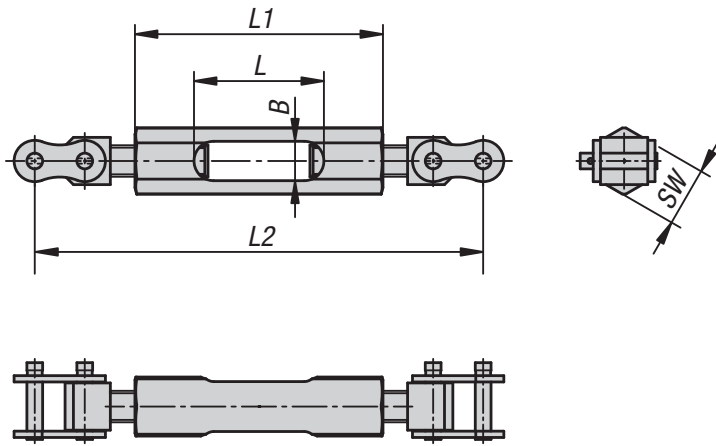
**Accessories:**  
Steel turnbuckles for chain clamp sets K1656.

### KIPP Roller chains, steel, for chain clamp sets

| Order No.     | B  | B1 | G  | L    | L1   | P      | Clamping force max. kN |
|---------------|----|----|----|------|------|--------|------------------------|
| K1655.150125  | 20 | 13 | 15 | 126  | 111  | 15,875 | 15                     |
| K1655.150250  | 20 | 13 | 15 | 253  | 238  | 15,875 | 15                     |
| K1655.150500  | 20 | 13 | 15 | 507  | 492  | 15,875 | 15                     |
| K1655.151000  | 20 | 13 | 15 | 1015 | 1000 | 15,875 | 15                     |
| K1655.400125  | 33 | 25 | 21 | 148  | 127  | 25,4   | 40                     |
| K1655.400250  | 33 | 25 | 21 | 250  | 229  | 25,4   | 40                     |
| K1655.400500  | 33 | 25 | 21 | 504  | 483  | 25,4   | 40                     |
| K1655.401000  | 33 | 25 | 21 | 1012 | 991  | 25,4   | 40                     |
| K1655.751000  | 44 | 29 | 26 | 1000 | 984  | 31,75  | 75                     |
| K1655.751500  | 44 | 29 | 26 | 1500 | 1492 | 31,75  | 75                     |
| K1655.752000  | 44 | 29 | 26 | 2000 | 2000 | 31,75  | 75                     |
| K1655.1201000 | 54 | 38 | 33 | 1000 | 1028 | 38,1   | 120                    |
| K1655.1201500 | 54 | 38 | 33 | 1500 | 1485 | 38,1   | 120                    |
| K1655.1202000 | 54 | 38 | 33 | 2000 | 2019 | 38,1   | 120                    |

# K1656

## Turnbuckles, steel, for chain clamp sets



**Material:**  
Steel.

**Sample order:**  
K1656.15052

**Note:**  
Steel turnbuckles for chain clamp sets are mounted between the chains. The turnbuckles are used to pre-tension the chain and remove any play, which is always greater with longer chains.

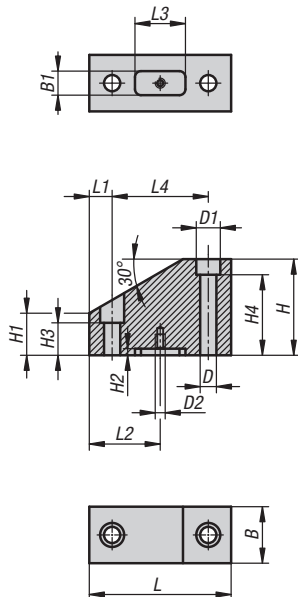
**Accessories:**  
Steel roller chains for chain clamp sets K1655.

### KIPP Turnbuckles, steel, for chain clamp sets

| Order No.    | B  | L  | L1  | L2      | SW | Clamping force max. kN |
|--------------|----|----|-----|---------|----|------------------------|
| K1656.15052  | 14 | 52 | 97  | 143-178 | 24 | 15                     |
| K1656.40066  | 20 | 66 | 126 | 202-253 | 30 | 40                     |
| K1656.75092  | 31 | 92 | 180 | 270-333 | 50 | 75                     |
| K1656.120092 | 31 | 92 | 180 | 291-360 | 50 | 120                    |

# K1662

## Prisms, steel, for chain clamp sets



**Material:**  
Carbon steel.

**Version:**  
Black oxidised.

**Sample order:**  
K1662.11847080

**Note:**  
Prisms for chain clamp sets enable flexible positioning of the workpiece. The prisms can be fastened to the machine table using T-slot nuts.

**Accessories:**  
Nuts for T-slots DIN 508 enhanced, K0377.

### KIPP Prisms, steel, for chain clamp sets

| Order No.         | B  | B1 | D    | D1 | D2 | H   | H1  | H2  | H3 | H4  | L   | L1 | L2  | L3 | L4  |
|-------------------|----|----|------|----|----|-----|-----|-----|----|-----|-----|----|-----|----|-----|
| K1662.11847080    | 47 | 20 | 13,5 | 20 | M6 | 80  | 35  | 5,5 | 27 | 67  | 118 | 19 | 59  | 42 | 80  |
| K1662.14847100    | 47 | 20 | 17,5 | 26 | M6 | 100 | 44  | 5,5 | 33 | 33  | 148 | 24 | 74  | 44 | 100 |
| K1662.36007825022 | 78 | 20 | 22   | 33 | M6 | 250 | 102 | 5,5 | 91 | 161 | 360 | 45 | 100 | 44 | 270 |
| K1662.36007825026 | 78 | 20 | 26   | 40 | M6 | 250 | 102 | 5,5 | 91 | 161 | 360 | 45 | 100 | 44 | 270 |

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