



TRANSMISSIONS



Mechanical Power Transmission

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| | |
|-----------------------|-----|
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MINIMUM DIAMETERS OF TAPER BORED HUBS

The following table shows the recommended minimum diameter in mm for bespoke component hubs that are to be drilled, tapped and taper bored for use with Dunlop Taper bushes. All standard Dunlop Taper bushes are tested to ensure that they are capable of safely containing the radial and circumferential hub stresses generated by the wedging mechanism which makes Taper bushes the equivalent of a shrink-on fit.

| TAPER BUSH | MINIMUM HUB DIAMETERS (mm) FOR VARIOUS MATERIALS | | | |
|------------|--|---------------|-----------|-----------|
| | TENSILE STRENGTH N/mm ² | | | |
| | CAST IRON 180 | CAST IRON 250 | STEEL 420 | STEEL 600 |
| 1008 | 62 | 54 | 51 | 47 |
| 1108 | 64 | 57 | 54 | 50 |
| 1210 | 104 | 86 | 78 | 69 |
| 1610 | 109 | 92 | 85 | 78 |
| 1615 | 90 | 81 | 77 | 73 |
| 2012 | 121 | 106 | 99 | 92 |
| 2517 | 130 | 119 | 113 | 108 |
| 3020 | 160 | 146 | 140 | 132 |
| 3030 | 144 | 136 | 132 | 127 |
| 3525 | 211 | 191 | 178 | 167 |
| 3535 | 191 | 176 | 168 | 160 |
| 4030 | 224 | 207 | 197 | 186 |
| 4040 | 209 | 195 | 188 | 180 |
| 4535 | 223 | 212 | 205 | 198 |
| 4545 | 215 | 205 | 200 | 194 |
| 5040 | 240 | 229 | 223 | 216 |
| 5050 | 233 | 223 | 219 | 213 |

AVERAGE SLIP TORQUES FOR TAPER BUSH FIXING

The following table shows average slip torque values in Nm for each basic Taper bush size with a variety of common metric bore diameters. The values assume that the assembly uses a Dunlop Taper bush fitted in accordance with the instructions supplied with every bush to a hub prepared to the Dunlop specification. With a key, the slip tendency transfers to the bush/hub interface at a greater torque value related to the ratio of bush outer dia to bore dia.

| TAPER BUSH | BORE (mm) | AVERAGE SLIP TORQUE (Nm) |
|--------------|-----------|--------------------------|
| 1008 | 12 | 29 |
| | 19 | 59 |
| | 24 | 66 |
| 1108 | 12 | 28 |
| | 19 | 49 |
| | 28 | 79 |
| 1210 | 16 | 82 |
| | 24 | 142 |
| | 32 | 210 |
| 1610 1615 | 19 | 98 |
| | 24 | 135 |
| | 42 | 265 |
| 2012 | 24 | 320 |
| | 42 | 340 |
| | 50 | 420 |
| 2517 | 24 | 220 |
| | 42 | 430 |
| | 60 | 670 |

| TAPER BUSH | BORE (mm) | AVERAGE SLIP TORQUE (Nm) |
|---------------|-----------|--------------------------|
| 3020 3030 | 38 | 520 |
| | 55 | 890 |
| | 75 | 1300 |
| 3525* 3535 | 42 | 1000 |
| | 75 | 2150 |
| | 100 | 3075 |
| 4030* 4040 | 48 | 1700 |
| | 75 | 3150 |
| | 115 | 5150 |
| 4535 4545 | 55 | 2500 |
| | 100 | 5500 |
| | 125 | 6625 |
| 5040 5050 | 75 | 3950 |
| | 100 | 5650 |
| | 125 | 7370 |

Large bores marked* are only available in bush sizes marked*

TO INSTALL

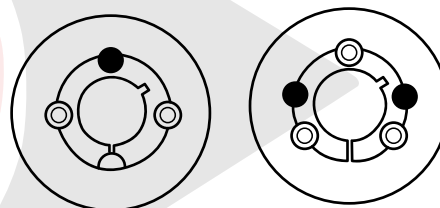
- Remove the protective coating from the bore and outside of bush and bore of hub. After ensuring that the mating tapered surfaces are completely clean and free from oil or dirt, insert bush in hub so that holes line up.
- Sparingly oil thread and point of grub screws, or thread and under head of cap screws. Place screws loosely in holes threaded in hub, shown thus in diagram.
- If a key is to be fitted place it in the shaft keyway before fitting the bush. It is essential that it is a parallel key and side fitting only and has TOP CLEARANCE.
- Clean shaft and fit hub to shaft as one unit and locate in position desired, remembering that bush

will nip the shaft first and then the hub will be slightly drawn on to the brush.

- Using a hexagon wrench tighten screws gradually and alternately to torque shown in table below.
- Hammer against large-end of bush, using a block or sleeve to prevent damage. (This will ensure that the bush is seated squarely in the bore). Screws will now turn a little more. Repeat this alternate hammering and screw tightening once or twice to achieve maximum grip on the shaft.
- After drive has been running under load for a short time stop and check tightness of screws.
- Fill empty holes with grease to exclude dirt.

TO REMOVE

- Slacken all screws by several turns, remove one or two according to number of removal holes shown thus in diagram. Insert screws into removal holes after oiling thread and under head of cap screws.
- Tighten screws alternately until bush is loosened in hub and assembly is free on the shaft.
- Remove assembly from shaft.



Removal holes

| BUSH SIZE | | 1008 | 1108 | 1210 | 1610 | 1615 | 2012 | 2517 | 3020 | 3030 | 3525 | 3535 | 4030 | 4040 | 4535 | 4545 | 5040 | 5050 |
|------------------------------|-----------------------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Screw tightening torque (Nm) | | 5.6 | 5.6 | 20 | 20 | 20 | 30 | 50 | 90 | 90 | 115 | 115 | 170 | 170 | 190 | 190 | 270 | 270 |
| QTY | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Screw Details | Size (BSW) | 1/4" | 1/4" | 3/8" | 3/8" | 3/8" | 7/16" | 1/2" | 5/8" | 5/8" | 1/2" | 1/2" | 5/8" | 5/8" | 3/4" | 3/4" | 7/8" | 7/8" |
| | Hex, Socket size (mm) | 3 | 3 | 5 | 5 | 5 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 14 | 14 |
| Large end dia. (mm) | | 35.0 | 38.0 | 47.5 | 57.0 | 57.0 | 70.0 | 85.5 | 108 | 108 | 127 | 127 | 146 | 146 | 162 | 162 | 178 | 178 |
| Bush length (mm) | | 22.3 | 22.3 | 25.4 | 25.4 | 38.1 | 31.8 | 44.5 | 50.8 | 76.2 | 63.5 | 89.0 | 76.2 | 102 | 89.0 | 114 | 102 | 127 |
| Approx mass (kg) | | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.7 | 1.5 | 2.7 | 3.6 | 3.8 | 5.0 | 5.6 | 7.7 | 7.5 | 10.0 | 11.1 | 14.0 |



TAPER BUSHES



TAPER BUSHES

Description

Dunlop Taper Bushes are the most convenient and cost effective method of fixing components to a mating shaft without using any special tools. Taper Bushes are pre-machined with the required bore & keyway size and are supplied complete with locking set screws, thus making savings in time and cost on any machining process. They are available with both metric or imperial bore and keyway size options. Taper Bushes are designed for use with V-Pulleys, Chain Sprockets, Micro V-Pulleys, Timing Belt Pulleys, Couplings, Weld-On & Bolt-On Hubs. Part numbers are identified by a 4 digit number (e.g. 1610) which represents the taper bush series followed by the bore size (e.g. 28mm) for example 1610x28mm.

METRIC BORES AND KEYWAYS

| BORE DIA. | KEYWAY | | SHALLOW KEYWAY DEPTH | TAPER BUSH PART NUMBER | | | | | | | | |
|-----------|--------|-------|----------------------|------------------------|------|------|------|------|------|------|------|------|
| | WIDTH | DEPTH | | 1008 | 1108 | 1210 | 1610 | 1615 | 2012 | 2517 | 3020 | 3030 |
| 9 | 3 | 1.4 | - | * | * | | | | | | | |
| 10 | 3 | 1.4 | - | * | * | | | | | | | |
| 11 | 4 | 1.8 | - | * | * | * | | | | | | |
| 12 | 4 | 1.8 | - | * | * | * | | | | | | |
| 14 | 5 | 2.3 | - | * | * | * | * | * | * | | | |
| 15 | 5 | 2.3 | - | * | * | * | * | * | * | | | |
| 16 | 5 | 2.3 | - | * | * | * | * | * | * | * | | |
| 18 | 6 | 2.8 | - | * | * | * | * | * | * | * | | |
| 19 | 6 | 2.8 | - | * | * | * | * | * | * | * | | |
| 20 | 6 | 2.8 | - | * | * | * | * | * | * | * | | |
| 22 | 6 | 2.8 | - | * | * | * | * | * | * | * | | |
| 24 | 8 | 3.3 | 1.3 | * | * | * | * | * | * | * | | |
| 25 | 8 | 3.3 | 1.3 | * | * | * | * | * | * | * | * | |
| 28 | 8 | 3.3 | 1.3 | | * | * | * | * | * | * | * | |
| 30 | 8 | 3.3 | - | | | * | * | * | * | * | * | |
| 32 | 10 | 3.3 | - | | | * | * | * | * | * | * | |
| 35 | 10 | 3.3 | - | | | | * | * | * | * | * | * |
| 38 | 10 | 3.3 | - | | | | * | * | * | * | * | * |
| 40 | 12 | 3.3 | - | | | | * | * | * | * | * | * |
| 42 | 12 | 3.3 | 2.2 | | | | * | * | * | * | * | * |
| 45 | 14 | 3.8 | - | | | | | | * | * | * | * |
| 48 | 14 | 3.8 | - | | | | | | * | * | * | * |
| 50 | 14 | 3.8 | - | | | | | | * | * | * | * |
| 55 | 16 | 4.3 | - | | | | | | | * | * | * |
| 60 | 18 | 4.4 | - | | | | | | | * | * | * |
| 65 | 18 | 4.4 | - | | | | | | | | * | * |
| 70 | 20 | 4.9 | - | | | | | | | | * | * |
| 75 | 20 | 4.9 | - | | | | | | | | * | * |

METRIC BORES AND KEYWAYS

| BORE DIA. | KEYWAY | | SHALLOW KEYWAY DEPTH | TAPER BUSH PART NUMBER | | | | | | | |
|-----------|--------|-------|----------------------|------------------------|------|------|------|------|------|------|------|
| | WIDTH | DEPTH | | 3525 | 3535 | 4030 | 4040 | 4535 | 4545 | 5040 | 5050 |
| 35 | 10 | 3.3 | - | * | * | | | | | | |
| 38 | 10 | 3.3 | - | * | * | | | | | | |
| 40 | 12 | 3.3 | - | * | * | * | * | | | | |
| 42 | 12 | 3.3 | - | * | * | * | * | | | | |
| 45 | 14 | 3.8 | - | * | * | * | * | | | | |
| 48 | 14 | 3.8 | - | * | * | * | * | | | | |
| 50 | 14 | 3.8 | - | * | * | * | * | | | | |
| 55 | 16 | 4.3 | - | * | * | * | * | * | * | | |
| 60 | 18 | 4.4 | - | * | * | * | * | * | * | | |
| 65 | 18 | 4.4 | - | * | * | * | * | * | * | | |
| 70 | 20 | 4.9 | - | * | * | * | * | * | * | * | * |
| 75 | 20 | 4.9 | - | * | * | * | * | * | * | * | * |
| 80 | 22 | 5.4 | - | * | * | * | * | * | * | * | * |
| 85 | 22 | 5.4 | - | * | * | * | * | * | * | * | * |
| 90 | 25 | 5.4 | - | * | * | * | * | * | * | * | * |
| 95 | 25 | 5.4 | - | * | | * | * | * | * | * | * |
| 100 | 28 | 6.4 | 4.4 | * | | * | * | * | * | * | * |
| 105 | 28 | 6.4 | - | | | * | | * | * | * | * |
| 110 | 28 | 6.4 | - | | | * | | * | * | * | * |
| 115 | 32 | 7.4 | 5.4 | | | * | | * | | * | * |
| 120 | 32 | 7.4 | - | | | | | * | | * | * |
| 125 | 32 | 7.4 | - | | | | | * | | * | * |



INCH BORES AND KEYWAYS

| BORE DIA. | KEYWAY | | SHALLOW KEYWAY DEPTH | TAPER BUSH PART NUMBER | | | | | | | | |
|-----------|--------|-------|----------------------|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| | WIDTH | DEPTH | | 1008 | 1108 | 1210 | 1610 | 1615 | 2012 | 2517 | 3020 | 3030 |
| 0.375 | 0.125 | 0.06 | - | 019A0006 | 019B0006 | | | | | | | |
| 0.500 | 0.125 | 0.06 | - | 008 | 008 | | 019G0008 | 019H0008 | | | | |
| 0.625 | 0.187 | 0.09 | - | 010 | 010 | 019C0010 | 010 | 010 | | | | |
| 0.750 | 0.187 | 0.09 | - | 012 | 012 | 012 | 012 | 012 | 019K0012 | 019M0012 | | |
| 0.875 | 0.250 | 0.12 | - | 014 | 014 | 014 | 014 | 014 | 014 | 014 | | |
| 1.000 | 0.250 | 0.12 | 0.052 | 100* | 100 | 100 | 100 | 100 | 100 | 100 | | |
| 1.125 | 0.312 | 0.11 | 0.064 | | 102* | 102 | 102 | 102 | 102 | 102 | | |
| 1.250 | 0.312 | 0.11 | - | | | 104 | 104 | 104 | 104 | 104 | 019P0104 | 019Q0104 |
| 1.375 | 0.375 | 0.11 | - | | | | 106 | 106 | 106 | 106 | 106 | 106 |
| 1.500 | 0.375 | 0.11 | - | | | | 108 | 108 | 108 | 108 | 108 | 108 |
| 1.625 | 0.437 | 0.13 | 0.103 | | | | 110 | 110* | 110 | 110 | 110 | 110 |
| 1.750 | 0.437 | 0.13 | - | | | | | | 112 | 112 | 112 | 112 |
| 1.875 | 0.500 | 0.13 | - | | | | | | 114 | 114 | 114 | 114 |
| 2.000 | 0.500 | 0.13 | - | | | | | | 200 | 200 | 200 | 200 |
| 2.125 | 0.625 | 0.18 | - | | | | | | | 202 | 202 | 202 |
| 2.250 | 0.625 | 0.18 | - | | | | | | | 204 | 204 | 204 |
| 2.375 | 0.625 | 0.18 | - | | | | | | | 206 | 206 | 206 |
| 2.500 | 0.625 | 0.18 | - | | | | | | | 208 | 208 | 208 |
| 2.625 | 0.750 | 0.21 | - | | | | | | | | 210 | 210 |
| 2.750 | 0.750 | 0.21 | - | | | | | | | | 212 | 212 |
| 2.875 | 0.750 | 0.21 | - | | | | | | | | 214 | 214 |
| 3.000 | 0.750 | 0.21 | - | | | | | | | | 300 | 300 |

METRIC BORES AND KEYWAYS

| BORE DIA. | KEYWAY | | SHALLOW KEYWAY DEPTH | TAPER BUSH PART NUMBER | | | | | | | | |
|-----------|--------|-------|----------------------|------------------------|----------|----------|----------|----------|----------|----------|----------|-----|
| | WIDTH | DEPTH | | 3525 | 3535 | 4030 | 4040 | 4535 | 4545 | 5040 | 5050 | |
| 1.500 | 0.375 | 0.11 | - | 019J0108 | 019R0108 | | | | | | | |
| 1.625 | 0.437 | 0.13 | - | 110 | 110 | | | | | | | |
| 1.750 | 0.437 | 0.13 | - | 112 | 112 | 019X0112 | 019S0112 | | | | | |
| 1.875 | 0.500 | 0.13 | - | 114 | 114 | 114 | 114 | | | | | |
| 2.000 | 0.500 | 0.13 | - | 200 | 200 | 200 | 200 | | | | | |
| 2.125 | 0.625 | 0.18 | - | 202 | 202 | 202 | 202 | | | | | |
| 2.250 | 0.625 | 0.18 | - | 204 | 204 | 204 | 204 | 019Y0204 | 019T0204 | | | |
| 2.375 | 0.625 | 0.18 | - | 206 | 206 | 206 | 206 | 206 | 206 | | | |
| 2.500 | 0.750 | 0.18 | - | 208 | 208 | 208 | 208 | 208 | 208 | | | |
| 2.625 | 0.750 | 0.21 | - | 210 | 210 | 210 | 210 | 210 | 210 | | | |
| 2.750 | 0.750 | 0.21 | - | 212 | 212 | 212 | 212 | 212 | 212 | 019Z0212 | 019U0212 | |
| 2.875 | 0.750 | 0.21 | - | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 | 214 |
| 3.000 | 0.875 | 0.21 | - | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| 3.125 | 0.875 | 0.26 | - | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| 3.250 | 0.875 | 0.26 | - | 304 | 304 | 304 | 304 | 304 | 304 | 304 | 304 | 304 |
| 3.375 | 0.875 | 0.26 | - | 306 | 306 | 306 | 306 | 306 | 306 | 306 | 306 | 306 |
| 3.500 | 1.000 | 0.26 | - | 308 | 308 | 308 | 308 | 308 | 308 | 308 | 308 | 308 |
| 3.750 | 1.000 | 0.32 | 0.245 | 312* | | 312 | 312 | 312 | 312 | 312 | 312 | 312 |
| 4.000 | 1.250 | 0.32 | 0.155 | 400* | | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| 4.250 | 1.250 | 0.37 | - | | | 404 | | 404 | 404 | 404 | 404 | 404 |
| 4.500 | 1.250 | 0.37 | 0.255 | | | 408* | | 408 | 408 | 408 | 408 | 408 |
| 4.750 | 1.250 | 0.37 | - | | | | | 412 | | 412 | 412 | 412 |
| 5.000 | 1.250 | 0.37 | 0.258 | | | | | 500* | | 500 | 500 | 500 |

TAPER BUSH LOCKING DEVICES

| | |
|----------------------------|-----|
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Interchange table

| DUNLOP | FENNER DRIVES B-LOC | BONFIGLIOLI BONFIX | CHIARAVALLI | TRANSDEV DRIVELOCK | CHALLENGE EASTLOCK | FENNER/ERIKS FENLOCK | POGGI POGGILOCK | RINGFEDER | RINGSPAN | TOLLOK |
|--------|------------------------|-----------------------|-------------|-----------------------|-----------------------|-------------------------|--------------------|------------|----------|------------|
| DLK110 | B-800 | 1000 | RCK 80 | 80 | 02 | FLK110 | CAL-B | RFN 7110 | RLK110 | TLK110 |
| DLK130 | - | 4000 | RCK 70 | 70 | 04 | FLK130 | CAL-D | TI 9013.A | RLK130 | TLK130 |
| DLK131 | B-103 | 4500 | RCK 71 | 71 | 06 | FLK131 | CAL-E | TI 9013.B | RLK131 | TLK131 |
| DLK132 | - | 4100 | RCK 13 | 13 | 05 | FLK132 | CAL-DS | RFN 7013.0 | RLK132 | TLK132 |
| DLK133 | B-106 | 4600 | RCK 16 | 16 | 07 | FLK106/133 | CAL-ES | RFN 7013.1 | RLK133 | TLK106/133 |
| DLK134 | - | 4900 | RCK 15 | 15 | 15 | FLK134 | - | - | RLK134 | TLK134 |
| DLK200 | B-400 | 2000 | RCK 40 | 40 | 01 | FLK200 | CAL-A | RFN 7012 | RLK200 | TLK 200 |
| DLK300 | B-500 | 3000 | RCK 50 | 50 | 03 | FLK300 | CAL-C | RFN 8006 | RLK300 | TLK300 |
| DLK450 | B-112 | 9500 | RCK 11 | 11 | 19 | FLK450 | CAL-F | RFN 7015.0 | RLK450 | TLK450 |
| DLK603 | SD-10 | 8000 | RCK 19 | 19 | 14 | FLK603 | CAL-SD | RFN 4071 | RLK603 | TLK603 |

TECHNICAL INFORMATION

The functioning principle of the articles presented is based on radial deformation of the items, made up of a truncated cone section: the tightening torque applied to the connecting screws causes an axial movement of the parts in contact with each other and in function of the inverse cone shape and the longitudinal cuts made on them provokes an increase in the diameter (of the external ring) and a reduction of the diameter (of the internal ring).

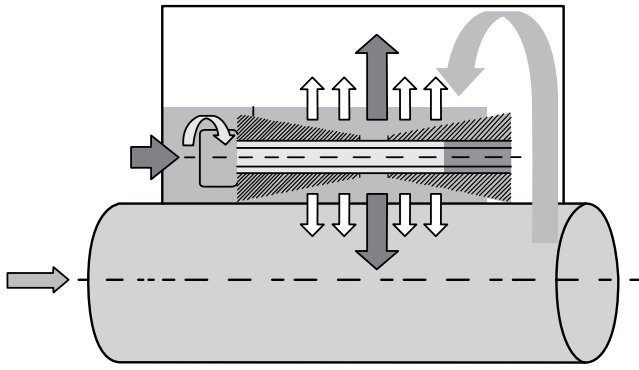
This changes allows (by virtue of the specific pressure between the bodies in contact) transmission of the torque between the shaft and the part connected to it (gear, timing belt pulley, V-Belt pulley or other specific parts).

- The advantages of the system block are as follows:
- Elimination of play between the shaft and the part driven.
- Uniform distribution of the load over the entire diameter
- Facility of synchronisation between the various possible parts connected as a set
- Reduction of the diameter (of project) of the drive shaft
- Increase of the resistant section of the drive shaft
- Reduction of the procurement times for machine assembly
- Maintenance facilitated with no need to stop the machine
- Availability of spare parts by main sub-suppliers of technical equipment

| | DLK132 | DLK133 | DLK134 | DLK110 | DLK130 | DLK131 | DLK450 | DLK200 | DLK300 | DLK603 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SELF CENTERING | ● | ● | ● | ● | ● | ● | ● | | | |
| NOT SELF CENTERING | | | | | | | | ● | ● | ● |
| MINIMUM RADIAL DIMENSIONS | | | | ● | | | | | ● | |
| RAPID MAINTENANCE AND ASSEMBLY | ● | ● | ● | ● | ● | ● | | ● | ● | ● |
| MEDIUM TO LOW TORQUE | | | | | | | | | ● | |
| MEDIUM TO HIGH TORQUE | ● | ● | | | | | | ● | | ● |
| HIGH TORQUE | | | ● | | ● | ● | ● | | | |
| SELF LOCKING | ● | ● | ● | ● | ● | ● | ● | | | |
| NON SELF LOCKING | | | | | | | | ● | ● | ● |

| Duty Factor (s) | LOAD TYPE | | |
|-------------------|-----------|--------------|-------------|
| | Constant | Intermittent | Alternating |
| Electric Motor | 1 - 1.2 | 1.2 - 1.5 | 1.5 - 2 |
| Combustion Engine | 1.2 - 1.5 | 1.5 - 2 | 2 - 3 |

TECHNICAL SPECIFICATION



- Pm** Pressure of locking set on hub
- Pa** Pressure of locking set on shaft
- Ta** Axial force transmissible
- Tv** Screw tightening torque
- Tm** Axial force exerted
- Mt** Transmissible torque of locking set
- Pt** Radial force (pressure)

$$P_t \text{ hub} = \pi \cdot D \cdot H_2 \cdot P_m$$

$$P_t \text{ shaft} = \pi \cdot d \cdot H_2 \cdot P_a$$

$$P_t = P_t \cdot \mu \cdot d / 2$$

$$T_a = 2 \cdot M_t \cdot s$$

$$P_t \text{ shaft} = P_t \text{ hub}$$

μ = coefficient of friction (0.13) for lubricated locking set (dry 0.15)

s = Duty Factor

| Screws UNI 5931 DIN 6912-7984 | Pitch (mm) | Tightening torque Tv with class 12.9 screws NM (UNI 3740-9) |
|-------------------------------|------------|---|
| M6 | 1.00 | 17.5 |
| M8 | 1.25 | 42.0 |
| M10 | 1.50 | 85.0 |
| M12 | 1.75 | 145.0 |
| M14 | 2.00 | 235.0 |
| M16 | 2.00 | 360.0 |
| M18 | 2.50 | 485.0 |
| M20 | 2.50 | 705.0 |
| M22 | 2.50 | 960.0 |
| M24 | 3.00 | 1220.0 |
| M30 | 3.00 | 2400.0 |

Tolerance and degree of roughness of surfaces.

Shaft:
Tolerance h8
roughness Rz <= 16 μ m

Hub:
Tolerance H8
roughness Rz <= 16 μ m

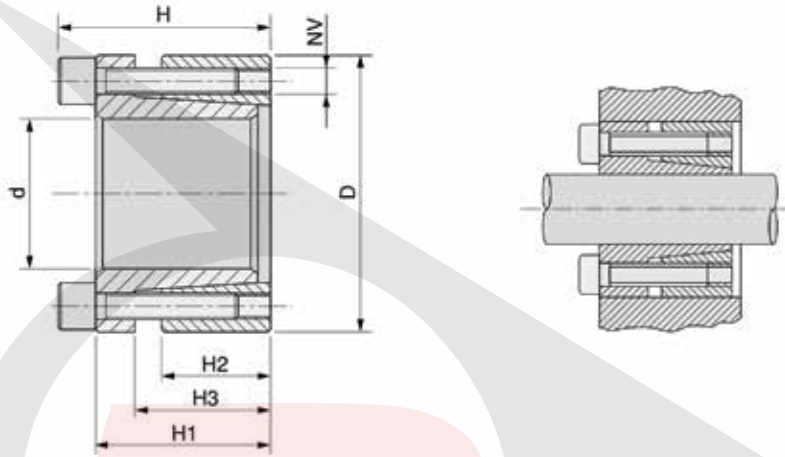


TAPER BUSH LOCKING DEVICE

Description

Taper Bush Locking devices are precision made to provide a wide, versatile range of keyless shaft/hub fixing assemblies. Their design is such they can be fitted to any mating component that has a parallel bore.

They offer simple installation, resistance to alternating torques, increased shaft strength, zero backlash, actual and angular adjustment therefore creating high torque transmission capacity.

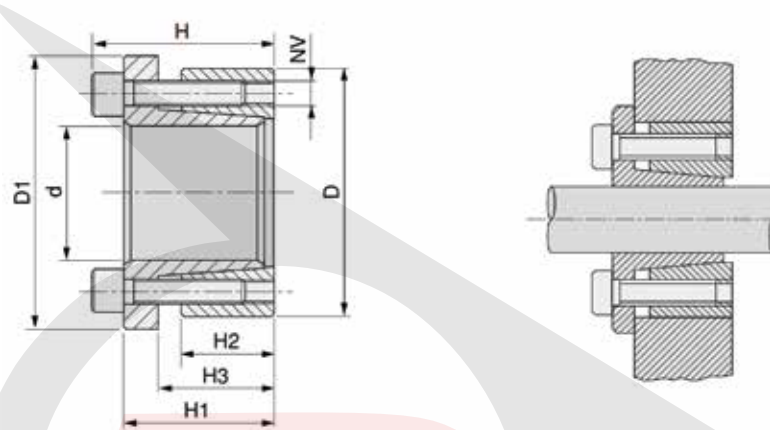


DLK132 SECTION

| Part No. | Dimensions | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|-----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK132X19 | 19 | 47 | 34 | 28 | 17 | 22 | M6x20 | 13 | 5 | M6x20 | 3 | 273 | 29 | 262 | 106 |
| DLK132X20 | 20 | 47 | 34 | 28 | 17 | 22 | M6x20 | 13 | 5 | M6x20 | 3 | 287 | 29 | 249 | 106 |
| DLK132X22 | 22 | 47 | 34 | 28 | 17 | 22 | M6x20 | 13 | 5 | M6x20 | 3 | 316 | 29 | 227 | 106 |
| DLK132X24 | 24 | 50 | 34 | 28 | 17 | 22 | M6x20 | 13 | 6 | M6x20 | 3 | 413 | 34 | 249 | 120 |
| DLK132X25 | 25 | 50 | 34 | 28 | 17 | 22 | M6x20 | 13 | 6 | M6x20 | 3 | 431 | 34 | 239 | 120 |
| DLK132X28 | 28 | 55 | 34 | 28 | 17 | 22 | M6x20 | 13 | 6 | M6x20 | 3 | 482 | 34 | 213 | 109 |
| DLK132X30 | 30 | 55 | 34 | 28 | 17 | 22 | M6x20 | 13 | 6 | M6x20 | 3 | 517 | 34 | 199 | 109 |
| DLK132X32 | 32 | 60 | 34 | 28 | 17 | 22 | M6x20 | 13 | 8 | M6x20 | 4 | 734 | 46 | 249 | 133 |
| DLK132X35 | 35 | 60 | 34 | 28 | 17 | 22 | M6x20 | 13 | 8 | M6x20 | 4 | 803 | 46 | 227 | 133 |
| DLK132X38 | 38 | 65 | 34 | 28 | 17 | 22 | M6x20 | 13 | 8 | M6x20 | 4 | 872 | 46 | 210 | 122 |
| DLK132X40 | 40 | 65 | 34 | 28 | 17 | 22 | M6x20 | 13 | 8 | M6x20 | 4 | 918 | 46 | 199 | 122 |
| DLK132X45 | 45 | 75 | 41 | 33 | 20 | 25 | M8x25 | 32 | 7 | M8x25 | 3 | 1674 | 74 | 244 | 146 |
| DLK132X50 | 50 | 80 | 41 | 33 | 20 | 25 | M8x25 | 32 | 7 | M8x25 | 3 | 1860 | 74 | 219 | 137 |
| DLK132X55 | 55 | 85 | 41 | 33 | 20 | 25 | M8x25 | 32 | 8 | M8x25 | 4 | 2340 | 85 | 228 | 148 |
| DLK132X60 | 60 | 90 | 41 | 33 | 20 | 25 | M8x25 | 32 | 8 | M8x25 | 4 | 2553 | 85 | 209 | 139 |
| DLK132X65 | 65 | 95 | 41 | 33 | 20 | 25 | M8x25 | 32 | 9 | M8x25 | 3 | 3110 | 96 | 217 | 149 |
| DLK132X70 | 70 | 110 | 50 | 40 | 24 | 30 | M10x30 | 65 | 8 | M10x30 | 4 | 4838 | 138 | 243 | 154 |
| DLK132X75 | 75 | 115 | 50 | 40 | 24 | 30 | M10x30 | 65 | 8 | M10x30 | 4 | 5184 | 138 | 226 | 148 |
| DLK132X80 | 80 | 120 | 50 | 40 | 24 | 30 | M10x30 | 65 | 8 | M10x30 | 4 | 5530 | 138 | 212 | 142 |
| DLK132X85 | 85 | 125 | 50 | 40 | 24 | 30 | M10x30 | 65 | 9 | M10x30 | 3 | 6610 | 156 | 225 | 153 |
| DLK132X90 | 90 | 130 | 50 | 40 | 24 | 30 | M10x30 | 65 | 9 | M10x30 | 3 | 6998 | 156 | 212 | 147 |
| DLK132X95 | 95 | 135 | 50 | 40 | 24 | 30 | M10x30 | 65 | 10 | M10x30 | 4 | 8208 | 173 | 223 | 157 |

DLK132 SECTION continued

| Part No. | Dimensions | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK132X100 | 100 | 145 | 56 | 44 | 26 | 32 | M12x35 | 110 | 8 | M12x35 | 4 | 9742 | 195 | 221 | 152 |
| DLK132X110 | 110 | 155 | 56 | 44 | 26 | 32 | M12x35 | 110 | 8 | M12x35 | 4 | 10716 | 195 | 201 | 143 |
| DLK132X120 | 120 | 165 | 56 | 44 | 26 | 32 | M12x35 | 110 | 9 | M12x35 | 4 | 13154 | 219 | 207 | 151 |
| DLK132X130 | 130 | 180 | 64 | 52 | 34 | 40 | M12x35 | 110 | 12 | M12x35 | 6 | 18996 | 292 | 195 | 141 |
| DLK132X140 | 140 | 190 | 68 | 54 | 34 | 40 | M14x40 | 170 | 9 | M14x40 | 4 | 20336 | 291 | 180 | 133 |
| DLK132X150 | 150 | 200 | 68 | 54 | 34 | 40 | M14x40 | 170 | 10 | M14x40 | 5 | 24211 | 323 | 187 | 140 |

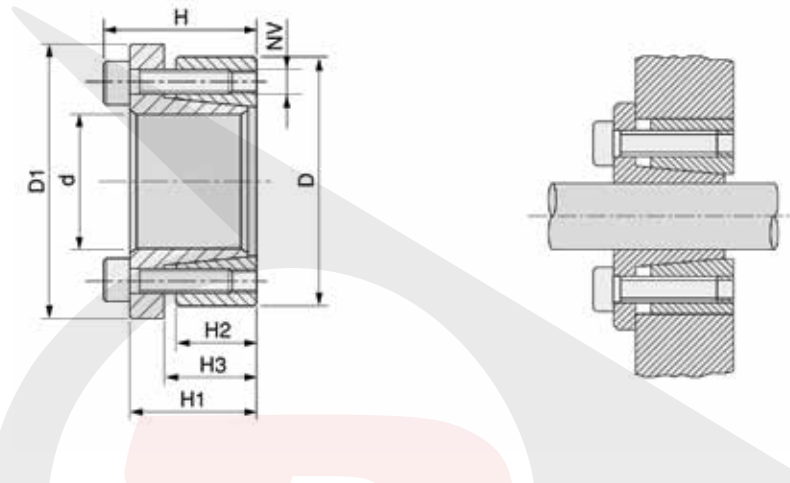


DLK133 SECTION

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|-----|-----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK133X19 | 19 | 47 | 56 | 34 | 28 | 17 | 22 | M6x20 | 17 | 5 | M6x20 | 3 | 243 | 26 | 234 | 94 |
| DLK133X20 | 20 | 47 | 56 | 34 | 28 | 17 | 22 | M6x20 | 17 | 5 | M6x20 | 3 | 256 | 26 | 222 | 94 |
| DLK133X22 | 22 | 47 | 56 | 34 | 28 | 17 | 22 | M6x20 | 17 | 5 | M6x20 | 3 | 282 | 26 | 202 | 94 |
| DLK133X24 | 24 | 50 | 59 | 34 | 28 | 17 | 22 | M6x20 | 17 | 6 | M6x20 | 3 | 368 | 31 | 222 | 106 |
| DLK133X25 | 25 | 50 | 59 | 34 | 28 | 17 | 22 | M6x20 | 17 | 6 | M6x20 | 3 | 383 | 31 | 213 | 106 |
| DLK133X28 | 28 | 55 | 64 | 34 | 28 | 17 | 22 | M6x20 | 17 | 6 | M6x20 | 3 | 429 | 31 | 190 | 97 |
| DLK133X30 | 30 | 55 | 64 | 34 | 28 | 17 | 22 | M6x20 | 17 | 6 | M6x20 | 3 | 460 | 31 | 177 | 97 |
| DLK133X32 | 32 | 60 | 69 | 34 | 28 | 17 | 22 | M6x20 | 17 | 8 | M6x20 | 4 | 655 | 41 | 222 | 118 |
| DLK133X35 | 35 | 60 | 69 | 34 | 28 | 17 | 22 | M6x20 | 17 | 8 | M6x20 | 4 | 716 | 41 | 203 | 118 |
| DLK133X38 | 38 | 65 | 74 | 34 | 28 | 17 | 22 | M6x20 | 17 | 8 | M6x20 | 4 | 778 | 41 | 187 | 109 |
| DLK133X40 | 40 | 65 | 74 | 34 | 28 | 17 | 22 | M6x20 | 17 | 8 | M6x20 | 4 | 819 | 41 | 178 | 109 |
| DLK133X45 | 45 | 75 | 84 | 41 | 33 | 20 | 25 | M8x25 | 41 | 7 | M8x25 | 3 | 1458 | 65 | 212 | 127 |
| DLK133X50 | 50 | 80 | 89 | 41 | 33 | 20 | 25 | M8x25 | 41 | 7 | M8x25 | 3 | 1620 | 65 | 191 | 119 |
| DLK133X55 | 55 | 85 | 94 | 41 | 33 | 20 | 25 | M8x25 | 41 | 8 | M8x25 | 4 | 2037 | 74 | 199 | 129 |
| DLK133X60 | 60 | 90 | 99 | 41 | 33 | 20 | 25 | M8x25 | 41 | 8 | M8x25 | 4 | 2223 | 74 | 182 | 121 |
| DLK133X65 | 65 | 95 | 104 | 41 | 33 | 20 | 25 | M8x25 | 41 | 9 | M8x25 | 3 | 2710 | 83 | 189 | 129 |
| DLK133X70 | 70 | 110 | 119 | 50 | 40 | 24 | 30 | M10x30 | 83 | 8 | M10x30 | 4 | 4203 | 120 | 211 | 134 |
| DLK133X75 | 75 | 115 | 124 | 50 | 40 | 24 | 30 | M10x30 | 83 | 8 | M10x30 | 4 | 4754 | 120 | 197 | 128 |
| DLK133X80 | 80 | 120 | 129 | 50 | 40 | 24 | 30 | M10x30 | 83 | 8 | M10x30 | 4 | 4804 | 120 | 184 | 123 |
| DLK133X85 | 85 | 125 | 134 | 50 | 40 | 24 | 30 | M10x30 | 83 | 9 | M10x30 | 3 | 5742 | 135 | 195 | 133 |
| DLK133X90 | 90 | 130 | 139 | 50 | 40 | 24 | 30 | M10x30 | 83 | 9 | M10x30 | 3 | 6080 | 135 | 184 | 128 |
| DLK133X95 | 95 | 135 | 144 | 50 | 40 | 24 | 30 | M10x30 | 83 | 10 | M10x30 | 4 | 7131 | 150 | 194 | 137 |

DLK133 SECTION continued

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|-----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK133X100 | 100 | 145 | 154 | 56 | 44 | 26 | 32 | M12x35 | 145 | 8 | M12x35 | 4 | 8732 | 175 | 198 | 137 |
| DLK133X110 | 110 | 155 | 164 | 56 | 44 | 26 | 32 | M12x35 | 145 | 8 | M12x35 | 4 | 9605 | 175 | 180 | 128 |
| DLK133X120 | 120 | 165 | 174 | 56 | 44 | 26 | 32 | M12x35 | 145 | 9 | M12x35 | 4 | 11787 | 196 | 186 | 135 |
| DLK133X130 | 130 | 180 | 189 | 64 | 52 | 34 | 40 | M12x35 | 145 | 12 | M12x35 | 6 | 17024 | 262 | 175 | 126 |
| DLK133X140 | 140 | 190 | 199 | 68 | 54 | 34 | 40 | M14x40 | 230 | 9 | M14x40 | 4 | 18703 | 267 | 166 | 122 |
| DLK133X150 | 150 | 200 | 209 | 68 | 54 | 54 | 40 | M14x40 | 230 | 10 | M14x40 | 5 | 22259 | 297 | 172 | 129 |

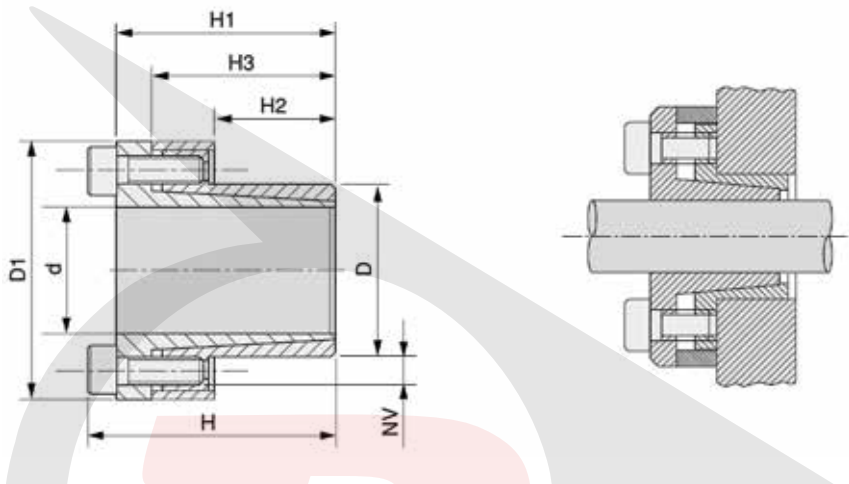


DLK134 SECTION

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK134X14 | 14 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 37 | 4 | M8x25 | 2 | 234 | 33 | 415 | 106 |
| DLK134X16 | 16 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 37 | 4 | M8x25 | 2 | 268 | 33 | 363 | 106 |
| DLK134X18 | 18 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 333 | 37 | 357 | 117 |
| DLK134X19 | 19 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 352 | 37 | 338 | 117 |
| DLK134X20 | 20 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 370 | 37 | 321 | 117 |
| DLK134X22 | 22 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 407 | 37 | 292 | 117 |
| DLK134X24 | 24 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 445 | 37 | 268 | 117 |
| DLK134X25 | 25 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 463 | 37 | 257 | 117 |
| DLK134X28 | 28 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 519 | 37 | 229 | 117 |
| DLK134X30 | 30 | 55 | 62 | 39 | 31 | 17 | 22 | M8x25 | 41 | 4 | M8x25 | 2 | 556 | 37 | 214 | 117 |
| DLK134X24 | 24 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 556 | 46 | 335 | 124 |
| DLK134X25 | 25 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 579 | 46 | 321 | 124 |
| DLK134X28 | 28 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 649 | 46 | 287 | 124 |
| DLK134X30 | 30 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 695 | 46 | 268 | 124 |
| DLK134X32 | 32 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 741 | 46 | 251 | 124 |
| DLK134X33 | 33 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 764 | 46 | 242 | 124 |
| DLK134X35 | 35 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 811 | 46 | 230 | 124 |
| DLK134X38 | 38 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 917 | 46 | 211 | 124 |
| DLK134X40 | 40 | 65 | 72 | 39 | 31 | 17 | 22 | M8x25 | 41 | 5 | M8x25 | 3 | 966 | 46 | 201 | 124 |
| DLK134X30 | 30 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 41 | 7 | M8x25 | 3 | 972 | 65 | 318 | 119 |
| DLK134X32 | 32 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 41 | 7 | M8x25 | 3 | 1037 | 65 | 299 | 119 |
| DLK134X33 | 33 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 41 | 7 | M8x25 | 3 | 1069 | 65 | 289 | 119 |
| DLK134X35 | 35 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 41 | 7 | M8x25 | 3 | 1134 | 65 | 273 | 119 |

DLK134 SECTION continued

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK134X38 | 38 | 80 | 87 | 41 | 33 | 20 | 25 | M8X25 | 41 | 7 | M8X25 | 3 | 1231 | 65 | 251 | 119 |
| DLK134X40 | 40 | 80 | 87 | 41 | 33 | 20 | 25 | M8X25 | 41 | 7 | M8X25 | 3 | 1296 | 65 | 239 | 119 |
| DLK134X42 | 42 | 80 | 87 | 41 | 33 | 20 | 25 | M8X25 | 41 | 7 | M8X25 | 3 | 1361 | 65 | 227 | 119 |
| DLK134X45 | 45 | 80 | 87 | 41 | 33 | 20 | 25 | M8X25 | 41 | 7 | M8X25 | 3 | 1458 | 65 | 212 | 119 |
| DLK134X48 | 48 | 80 | 87 | 41 | 33 | 20 | 25 | M8X25 | 41 | 7 | M8X25 | 3 | 1555 | 65 | 199 | 119 |
| DLK134X50 | 50 | 80 | 87 | 41 | 33 | 20 | 25 | M8X25 | 41 | 7 | M8X25 | 3 | 1620 | 65 | 191 | 116 |

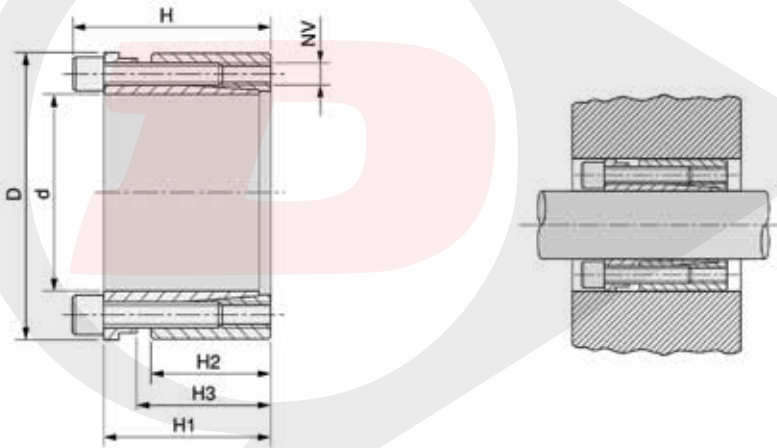


DLK110 SECTION

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK110X08 | 8 | 15 | 28 | 28 | 24 | 12 | 21 | M4X10 | 4.81 | 4 | M4X10 | 3 | 39 | 10 | 299 | 159 |
| DLK110X09 | 9 | 16 | 32 | 31 | 27 | 14 | 23 | M4X12 | 5.2 | 4 | M4X12 | 3 | 44 | 10 | 227 | 128 |
| DLK11010 | 10 | 16 | 32 | 31 | 27 | 14 | 23 | M4X12 | 5.2 | 4 | M4X12 | 3 | 49 | 10 | 205 | 128 |
| DLK110X11 | 11 | 18 | 34 | 31 | 27 | 14 | 23 | M4X12 | 5.2 | 4 | M4X12 | 3 | 53 | 10 | 186 | 114 |
| DLK110X12 | 12 | 18 | 34 | 31 | 27 | 14 | 23 | M4X12 | 5.2 | 4 | M4X12 | 3 | 58 | 10 | 171 | 114 |
| DLK110X14 | 14 | 23 | 39 | 31 | 27 | 14 | 23 | M4X12 | 5.2 | 4 | M4X12 | 3 | 68 | 10 | 146 | 89 |
| DLK110X15 | 15 | 24 | 45 | 42 | 36 | 16 | 29 | M6X18 | 17 | 3 | M6X18 | 2 | 120 | 16 | 196 | 123 |
| DLK110X16 | 16 | 24 | 45 | 42 | 36 | 16 | 29 | M6X18 | 17 | 3 | M6X18 | 2 | 128 | 16 | 184 | 123 |
| DLK110X18 | 18 | 26 | 47 | 44 | 38 | 18 | 31 | M6X18 | 17 | 4 | M6X18 | 3 | 191 | 21 | 194 | 134 |
| DLK110X19 | 19 | 27 | 48 | 44 | 38 | 18 | 31 | M6X18 | 17 | 4 | M6X18 | 3 | 202 | 21 | 183 | 129 |
| DLK110X20 | 20 | 28 | 49 | 44 | 38 | 18 | 31 | M6X18 | 17 | 4 | M6X18 | 3 | 213 | 21 | 174 | 124 |
| DLK110X22 | 22 | 32 | 54 | 51 | 45 | 25 | 38 | M6X18 | 17 | 4 | M6X18 | 3 | 234 | 21 | 114 | 78 |
| DLK110X24 | 24 | 34 | 56 | 51 | 45 | 25 | 38 | M6X18 | 17 | 4 | M6X18 | 3 | 255 | 21 | 105 | 74 |
| DLK110X25 | 25 | 34 | 56 | 51 | 45 | 25 | 38 | M6X18 | 17 | 4 | M6X18 | 3 | 266 | 21 | 100 | 74 |
| DLK110X28 | 28 | 39 | 61 | 51 | 45 | 25 | 38 | M6X18 | 17 | 5 | M6X18 | 3 | 373 | 27 | 112 | 81 |
| DLK110X30 | 30 | 41 | 63 | 51 | 45 | 25 | 38 | M6X18 | 17 | 6 | M6X18 | 3 | 480 | 32 | 126 | 92 |
| DLK110X32 | 32 | 43 | 65 | 56 | 50 | 30 | 43 | M6X18 | 17 | 6 | M6X18 | 3 | 511 | 32 | 98 | 73 |
| DLK110X35 | 35 | 47 | 69 | 56 | 50 | 30 | 43 | M6X18 | 17 | 8 | M6X18 | 4 | 747 | 43 | 120 | 89 |
| DLK110X38 | 38 | 50 | 72 | 56 | 50 | 30 | 43 | M6X18 | 17 | 8 | M6X18 | 4 | 811 | 43 | 110 | 84 |
| DLK110X40 | 40 | 53 | 75 | 58 | 52 | 32 | 45 | M6X18 | 17 | 9 | M6X18 | 4 | 959 | 48 | 110 | 83 |
| DLK110X42 | 42 | 55 | 77 | 58 | 52 | 32 | 45 | M6X18 | 17 | 9 | M6X18 | 4 | 1007 | 48 | 105 | 80 |
| DLK110X45 | 45 | 59 | 85 | 72 | 64 | 40 | 56 | M6X22 | 42 | 8 | M6X22 | 4 | 1781 | 79 | 130 | 99 |
| DLK110X48 | 48 | 62 | 88 | 72 | 64 | 40 | 56 | M8X22 | 42 | 8 | M8X22 | 4 | 1900 | 79 | 122 | 94 |

DLK110 SECTION continued

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|-----|-----|-----|----|-----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK110X50 | 50 | 65 | 92 | 82 | 74 | 50 | 66 | M8X22 | 42 | 10 | M8X22 | 5 | 2473 | 99 | 117 | 90 |
| DLK110X55 | 55 | 71 | 98 | 82 | 74 | 50 | 66 | M8X22 | 42 | 10 | M8X22 | 5 | 2721 | 99 | 106 | 82 |
| DLK110X60 | 60 | 77 | 104 | 82 | 74 | 50 | 66 | M8X22 | 42 | 10 | M8X22 | 5 | 2968 | 99 | 97 | 76 |
| DLK110X65 | 65 | 84 | 111 | 82 | 74 | 50 | 66 | M8X22 | 42 | 10 | M8X22 | 5 | 3215 | 99 | 90 | 69 |
| DLK110X70 | 70 | 90 | 122 | 101 | 91 | 60 | 80 | M10X25 | 84 | 8 | M10X25 | 4 | 4430 | 127 | 89 | 69 |
| DLK110X75 | 75 | 95 | 126 | 101 | 91 | 60 | 80 | M10X25 | 84 | 9 | M10X25 | 4 | 5338 | 142 | 93 | 74 |
| DLK110X80 | 80 | 100 | 131 | 106 | 96 | 65 | 85 | M10X25 | 84 | 12 | M10X25 | 5 | 7595 | 190 | 108 | 86 |
| DLK110X85 | 85 | 106 | 137 | 106 | 96 | 65 | 85 | M10X25 | 84 | 12 | M10X25 | 5 | 8069 | 190 | 101 | 81 |
| DLK110X90 | 90 | 112 | 143 | 106 | 96 | 65 | 85 | M10X25 | 84 | 14 | M10X25 | 6 | 9968 | 222 | 112 | 90 |
| DLK110X95 | 95 | 120 | 153 | 106 | 96 | 65 | 85 | M10X25 | 84 | 14 | M10X25 | 6 | 10522 | 222 | 106 | 84 |
| DLK110X100 | 100 | 125 | 162 | 114 | 102 | 65 | 89 | M12X30 | 145 | 12 | M12X30 | 5 | 13651 | 273 | 124 | 99 |
| DLK110X110 | 110 | 140 | 177 | 119 | 107 | 70 | 94 | M12X30 | 145 | 12 | M12X30 | 5 | 15016 | 273 | 105 | 82 |
| DLK110X120 | 120 | 155 | 195 | 139 | 127 | 90 | 114 | M12X30 | 145 | 16 | M12X30 | 7 | 21844 | 364 | 99 | 77 |
| DLK110X130 | 130 | 165 | 205 | 139 | 127 | 90 | 114 | M12X30 | 145 | 16 | M12X30 | 7 | 23664 | 364 | 92 | 72 |
| DLK110X140 | 140 | 175 | 215 | 139 | 127 | 90 | 114 | M12X30 | 145 | 16 | M12X30 | 7 | 25485 | 364 | 85 | 68 |
| DLK110X150 | 150 | 185 | 225 | 139 | 127 | 90 | 114 | M12X30 | 145 | 16 | M12X30 | 7 | 27305 | 364 | 80 | 64 |

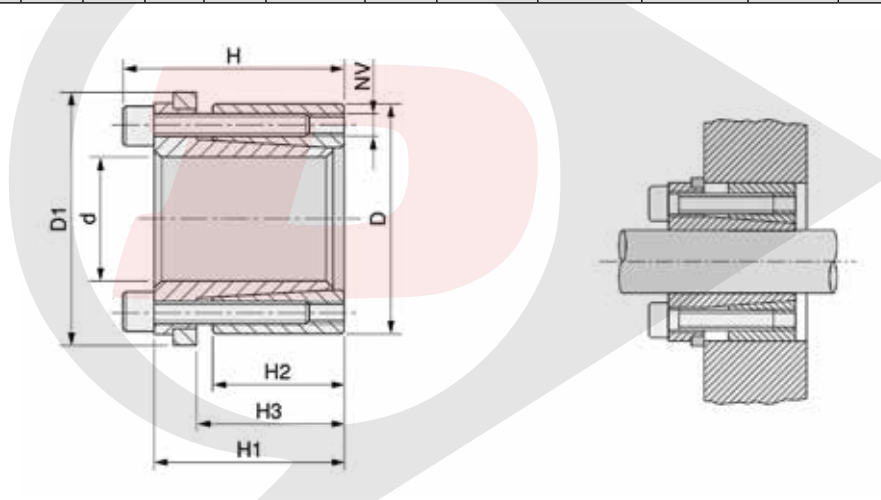


DLK130 SECTION

| Part No. | Dimensions | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK130X19 | 19 | 47 | 45 | 39 | 26 | 31 | M6X25 | 17 | 4 | M6X25 | 2 | 307 | 32 | 193 | 78 |
| DLK130X20 | 20 | 47 | 45 | 39 | 26 | 31 | M6X25 | 17 | 4 | M6X25 | 2 | 323 | 32 | 183 | 78 |
| DLK130X22 | 22 | 47 | 45 | 39 | 26 | 31 | M6X25 | 17 | 4 | M6X25 | 2 | 355 | 32 | 166 | 78 |
| DLK130X24 | 24 | 50 | 45 | 39 | 26 | 31 | M6X25 | 17 | 6 | M6X25 | 3 | 382 | 48 | 229 | 110 |
| DLK130X25 | 25 | 50 | 45 | 39 | 26 | 31 | M6X25 | 17 | 6 | M6X25 | 3 | 606 | 48 | 220 | 110 |
| DLK130X28 | 28 | 55 | 45 | 39 | 26 | 31 | M6X25 | 17 | 6 | M6X25 | 3 | 679 | 48 | 196 | 100 |
| DLK130X30 | 30 | 55 | 45 | 39 | 26 | 31 | M6X25 | 17 | 6 | M6X25 | 3 | 727 | 48 | 183 | 100 |
| DLK130X32 | 32 | 60 | 45 | 39 | 26 | 31 | M6X25 | 17 | 8 | M6X25 | 4 | 1033 | 65 | 229 | 122 |
| DLK130X35 | 35 | 60 | 45 | 39 | 26 | 31 | M6X25 | 17 | 8 | M6X25 | 4 | 1130 | 65 | 209 | 122 |
| DLK130X38 | 38 | 65 | 45 | 39 | 26 | 31 | M6X25 | 17 | 8 | M6X25 | 4 | 1227 | 65 | 193 | 113 |
| DLK130X40 | 40 | 65 | 45 | 39 | 26 | 31 | M6X25 | 17 | 8 | M6X25 | 4 | 1292 | 65 | 183 | 113 |
| DLK130X42 | 42 | 75 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 1835 | 87 | 204 | 115 |
| DLK130X45 | 45 | 75 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 1966 | 87 | 191 | 115 |

DLK130 SECTION continued

| Part No. | Dimensions | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK130X48 | 48 | 80 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 2097 | 87 | 179 | 107 |
| DLK130X50 | 50 | 80 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 2184 | 87 | 172 | 107 |
| DLK130X55 | 55 | 85 | 55 | 47 | 30 | 36 | M8X30 | 41 | 8 | M8X30 | 4 | 3202 | 116 | 208 | 135 |
| DLK130X60 | 60 | 90 | 55 | 47 | 30 | 36 | M8X30 | 41 | 8 | M8X30 | 4 | 3493 | 116 | 191 | 127 |
| DLK130X65 | 65 | 95 | 55 | 47 | 30 | 36 | M8X30 | 41 | 8 | M8X30 | 4 | 3784 | 116 | 176 | 120 |
| DLK130X70 | 70 | 110 | 67 | 57 | 40 | 46 | M10X35 | 83 | 8 | M10X35 | 4 | 6607 | 189 | 199 | 127 |
| DLK130X75 | 75 | 115 | 72 | 62 | 40 | 46 | M10X35 | 83 | 8 | M10X35 | 4 | 7079 | 189 | 186 | 121 |
| DLK130X80 | 80 | 120 | 72 | 62 | 40 | 46 | M10X35 | 83 | 8 | M10X35 | 4 | 7551 | 189 | 174 | 116 |
| DLK130X85 | 85 | 125 | 72 | 62 | 40 | 46 | M10X35 | 83 | 10 | M10X35 | 4 | 10029 | 236 | 205 | 139 |
| DLK130X90 | 90 | 130 | 72 | 62 | 40 | 46 | M10X35 | 83 | 10 | M10X35 | 4 | 10619 | 236 | 193 | 134 |
| DLK130X95 | 95 | 135 | 72 | 62 | 40 | 46 | M10X35 | 83 | 10 | M10X35 | 4 | 11209 | 236 | 183 | 129 |
| DLK130X100 | 100 | 145 | 89 | 77 | 46 | 52 | M12X45 | 145 | 8 | M12X45 | 4 | 13738 | 275 | 176 | 121 |
| DLK130X110 | 110 | 155 | 89 | 77 | 46 | 52 | M12X45 | 145 | 8 | M12X45 | 4 | 15111 | 278 | 160 | 114 |
| DLK130X120 | 120 | 165 | 89 | 77 | 46 | 52 | M12X45 | 145 | 10 | M12X45 | 4 | 20606 | 343 | 183 | 133 |
| DLK130X130 | 130 | 180 | 89 | 77 | 46 | 52 | M12X45 | 145 | 12 | M12X45 | 4 | 26788 | 412 | 203 | 147 |
| DLK130X140 | 140 | 190 | 98 | 84 | 51 | 59 | M12X45 | 230 | 8 | M12X45 | 4 | 26142 | 373 | 154 | 114 |
| DLK130X150 | 150 | 200 | 98 | 84 | 51 | 59 | M12X45 | 230 | 10 | M12X45 | 5 | 35016 | 467 | 180 | 135 |

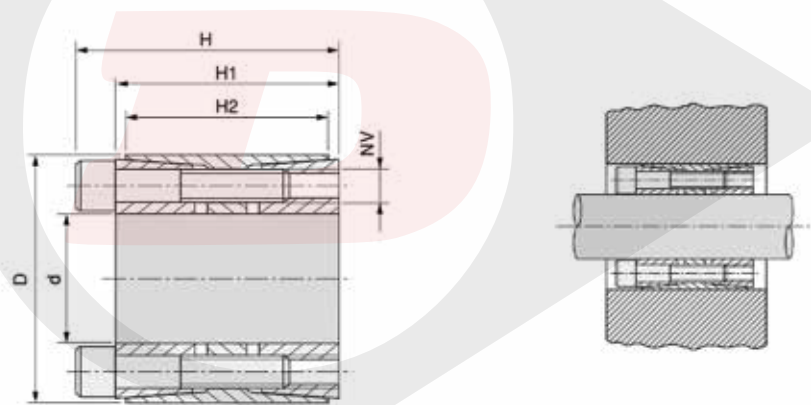


DLK131 SECTION

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK131X19 | 19 | 47 | 53 | 45 | 39 | 26 | 31 | M6X20 | 17 | 4 | M6X20 | 2 | 202 | 21 | 127 | 51 |
| DLK131X20 | 20 | 47 | 53 | 45 | 39 | 26 | 31 | M6X20 | 17 | 4 | M6X20 | 2 | 213 | 21 | 121 | 51 |
| DLK131X22 | 22 | 47 | 53 | 45 | 39 | 26 | 31 | M6X20 | 17 | 4 | M6X20 | 2 | 234 | 21 | 110 | 51 |
| DLK131X24 | 24 | 50 | 56 | 45 | 39 | 26 | 31 | M6X20 | 17 | 6 | M6X20 | 3 | 384 | 32 | 151 | 73 |
| DLK131X25 | 25 | 50 | 56 | 45 | 39 | 26 | 31 | M6X20 | 17 | 6 | M6X20 | 3 | 400 | 32 | 145 | 73 |
| DLK131X28 | 28 | 55 | 61 | 45 | 39 | 26 | 31 | M6X20 | 17 | 6 | M6X20 | 3 | 448 | 32 | 129 | 66 |
| DLK131X30 | 30 | 55 | 61 | 45 | 39 | 26 | 31 | M6X20 | 17 | 6 | M6X20 | 3 | 480 | 32 | 121 | 66 |
| DLK131X32 | 32 | 60 | 66 | 45 | 39 | 26 | 31 | M6X20 | 17 | 8 | M6X20 | 4 | 683 | 43 | 151 | 81 |
| DLK131X35 | 35 | 60 | 66 | 45 | 39 | 26 | 31 | M6X20 | 17 | 8 | M6X20 | 4 | 747 | 43 | 138 | 81 |
| DLK131X38 | 38 | 65 | 71 | 45 | 39 | 26 | 31 | M6X20 | 17 | 8 | M6X20 | 4 | 811 | 43 | 127 | 74 |
| DLK131X40 | 40 | 65 | 71 | 45 | 39 | 26 | 31 | M6X20 | 17 | 8 | M6X20 | 4 | 853 | 43 | 121 | 74 |
| DLK131X42 | 42 | 75 | 81 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 1216 | 58 | 135 | 76 |
| DLK131X45 | 45 | 75 | 81 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 1302 | 58 | 126 | 76 |

DLK131 SECTION continued

| Part No. | Dimensions | | | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|-----|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | D1 | H | H1 | H2 | H3 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK131X48 | 48 | 80 | 86 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 1389 | 58 | 119 | 71 |
| DLK131X50 | 50 | 80 | 86 | 55 | 47 | 30 | 36 | M8X30 | 41 | 6 | M8X30 | 3 | 1447 | 58 | 114 | 71 |
| DLK131X55 | 55 | 85 | 91 | 55 | 47 | 30 | 36 | M8X30 | 41 | 8 | M8X30 | 4 | 2124 | 77 | 138 | 89 |
| DLK131X60 | 60 | 90 | 96 | 55 | 47 | 30 | 36 | M8X30 | 41 | 8 | M8X30 | 4 | 2317 | 77 | 127 | 84 |
| DLK131X65 | 65 | 95 | 101 | 55 | 47 | 30 | 36 | M8X30 | 41 | 8 | M8X30 | 4 | 2510 | 77 | 117 | 80 |
| DLK131X70 | 70 | 110 | 116 | 67 | 57 | 40 | 46 | M10X35 | 83 | 8 | M10X35 | 4 | 4381 | 125 | 132 | 84 |
| DLK131X75 | 75 | 115 | 121 | 72 | 62 | 40 | 46 | M10X35 | 83 | 8 | M10X35 | 4 | 4694 | 125 | 123 | 80 |
| DLK131X80 | 80 | 120 | 126 | 72 | 62 | 40 | 46 | M10X35 | 83 | 8 | M10X35 | 4 | 5007 | 125 | 115 | 77 |
| DLK131X85 | 85 | 125 | 131 | 72 | 62 | 40 | 46 | M10X35 | 83 | 10 | M10X35 | 4 | 6651 | 156 | 136 | 92 |
| DLK131X90 | 90 | 130 | 136 | 72 | 62 | 40 | 46 | M10X35 | 83 | 10 | M10X35 | 4 | 7042 | 156 | 128 | 89 |
| DLK131X95 | 95 | 135 | 141 | 72 | 62 | 40 | 46 | M10X35 | 83 | 10 | M10X35 | 4 | 7433 | 156 | 121 | 85 |
| DLK131X100 | 100 | 145 | 151 | 89 | 77 | 46 | 52 | M12X45 | 145 | 8 | M12X45 | 4 | 9104 | 182 | 117 | 81 |
| DLK131X110 | 110 | 155 | 161 | 89 | 77 | 46 | 52 | M12X45 | 145 | 8 | M12X45 | 4 | 10015 | 182 | 106 | 75 |
| DLK131X120 | 120 | 165 | 171 | 89 | 77 | 46 | 52 | M12X45 | 145 | 10 | M12X45 | 4 | 13653 | 228 | 122 | 88 |
| DLK131X130 | 130 | 180 | 186 | 89 | 77 | 46 | 52 | M12X45 | 145 | 12 | M12X45 | 4 | 17757 | 273 | 135 | 97 |
| DLK131X140 | 140 | 190 | 196 | 98 | 84 | 51 | 59 | M14X45 | 230 | 8 | M14X45 | 4 | 17328 | 248 | 102 | 75 |
| DLK131X150 | 150 | 200 | 206 | 98 | 84 | 51 | 59 | M14X45 | 230 | 10 | M14X45 | 5 | 23207 | 309 | 119 | 89 |

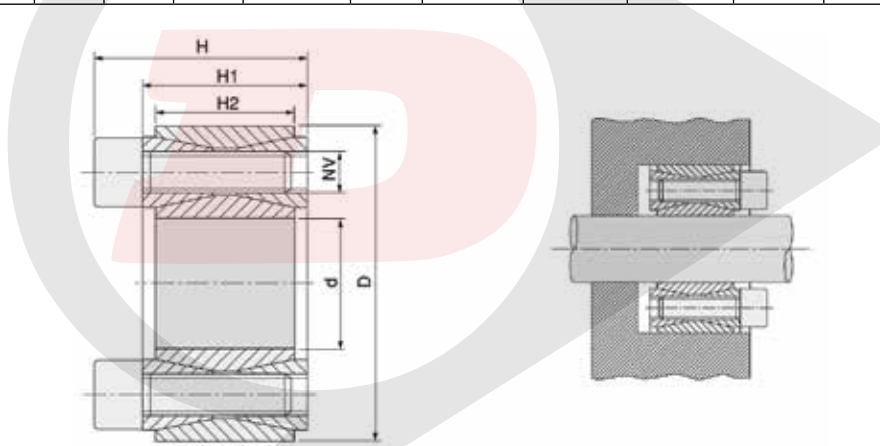


DLK450 SECTION

| Part No. | Dimensions | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK450X25 | 25 | 55 | 46 | 40 | 32 | M6X35 | 17 | 6 | M6X35 | 3 | 799 | 64 | 314 | 107 |
| DLK450X28 | 28 | 55 | 46 | 40 | 32 | M6X35 | 17 | 6 | M6X35 | 3 | 895 | 64 | 281 | 107 |
| DLK450X30 | 30 | 55 | 46 | 40 | 32 | M6X35 | 17 | 6 | M6X35 | 3 | 959 | 64 | 262 | 107 |
| DLK450X35 | 35 | 60 | 60 | 54 | 44 | M6X45 | 17 | 7 | M6X45 | 3 | 1306 | 75 | 185 | 83 |
| DLK450X38 | 38 | 75 | 62 | 54 | 44 | M8X50 | 41 | 7 | M8X50 | 3 | 2567 | 135 | 308 | 121 |
| DLK450X40 | 40 | 75 | 62 | 54 | 44 | M8X50 | 41 | 7 | M8X50 | 3 | 2702 | 135 | 293 | 121 |
| DLK450X42 | 42 | 75 | 62 | 54 | 44 | M8X50 | 41 | 7 | M8X50 | 3 | 2837 | 135 | 279 | 121 |
| DLK450X45 | 45 | 75 | 62 | 54 | 44 | M8X50 | 41 | 7 | M8X50 | 3 | 3040 | 135 | 260 | 121 |
| DLK450X48 | 48 | 80 | 72 | 64 | 56 | M8X55 | 41 | 8 | M8X55 | 4 | 3707 | 154 | 216 | 102 |
| DLK450X50 | 50 | 80 | 72 | 64 | 56 | M8X55 | 41 | 8 | M8X55 | 4 | 3861 | 154 | 207 | 102 |
| DLK450X55 | 55 | 85 | 72 | 64 | 56 | M8X55 | 41 | 9 | M8X55 | 4 | 4779 | 174 | 212 | 108 |
| DLK450X60 | 60 | 90 | 72 | 64 | 56 | M8X55 | 41 | 10 | M8X55 | 4 | 5793 | 193 | 216 | 113 |
| DLK450X65 | 65 | 95 | 72 | 64 | 56 | M8X55 | 41 | 10 | M8X55 | 4 | 6276 | 193 | 199 | 107 |

DLK450 SECTION continued

| Part No. | Dimensions | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|-----|-----|-----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK450X70 | 70 | 110 | 88 | 78 | 70 | M10X60 | 83 | 10 | M10X60 | 4 | 10951 | 313 | 235 | 120 |
| DLK450X75 | 75 | 115 | 88 | 78 | 70 | M10X60 | 83 | 10 | M10X60 | 4 | 11733 | 313 | 220 | 115 |
| DLK450X80 | 80 | 120 | 88 | 78 | 70 | M10X60 | 83 | 11 | M10X60 | 4 | 13768 | 344 | 227 | 121 |
| DLK450X85 | 85 | 125 | 88 | 78 | 70 | M10X60 | 83 | 12 | M10X60 | 5 | 15959 | 376 | 233 | 127 |
| DLK450X90 | 90 | 130 | 88 | 78 | 70 | M10X60 | 83 | 12 | M10X60 | 5 | 16898 | 376 | 220 | 122 |
| DLK450X95 | 95 | 135 | 88 | 78 | 70 | M10X60 | 83 | 12 | M10X60 | 5 | 17837 | 376 | 208 | 117 |
| DLK450X100 | 100 | 145 | 112 | 100 | 90 | M12X80 | 145 | 11 | M12X80 | 4 | 25029 | 501 | 211 | 113 |
| DLK450X110 | 110 | 155 | 112 | 100 | 90 | M12X80 | 145 | 12 | M12X80 | 5 | 30039 | 546 | 209 | 115 |
| DLK450X120 | 120 | 165 | 112 | 100 | 90 | M12X80 | 145 | 14 | M12X80 | 6 | 38226 | 637 | 224 | 127 |
| DLK450X130 | 130 | 180 | 130 | 116 | 104 | M14X90 | 230 | 12 | M14X90 | 5 | 48270 | 743 | 201 | 117 |
| DLK450X140 | 140 | 190 | 130 | 116 | 104 | M14X90 | 230 | 14 | M14X90 | 7 | 60654 | 866 | 217 | 129 |
| DLK450X150 | 150 | 200 | 130 | 116 | 104 | M14X90 | 230 | 15 | M14X90 | 7 | 69628 | 928 | 217 | 132 |
| DLK450X160 | 160 | 210 | 130 | 116 | 104 | M14X90 | 230 | 16 | M14X90 | 7 | 79220 | 990 | 217 | 134 |
| DLK450X170 | 170 | 225 | 164 | 148 | 134 | M16X120 | 360 | 14 | M16X120 | 7 | 100851 | 1186 | 206 | 116 |
| DLK450X180 | 180 | 235 | 164 | 148 | 134 | M16X120 | 360 | 15 | M16X120 | 7 | 114414 | 1271 | 208 | 119 |
| DLK450X190 | 190 | 250 | 164 | 148 | 134 | M16X120 | 360 | 16 | M16X120 | 7 | 128814 | 1356 | 210 | 119 |
| DLK450X200 | 200 | 260 | 164 | 148 | 134 | M16X120 | 360 | 16 | M16X120 | 7 | 135594 | 1356 | 200 | 115 |
| DLK450X220 | 220 | 285 | 164 | 148 | 134 | M16X120 | 360 | 18 | M16X120 | 8 | 167805 | 1526 | 204 | 118 |

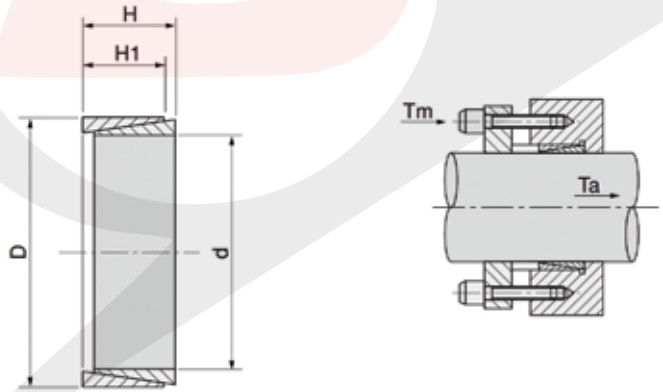


DLK200 SECTION

| Part No. | Dimensions | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|-----------|------------|----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK200X19 | 19 | 47 | 26 | 20 | 17 | M6X18 | 14.9 | 8 | M8 | 2 | 298 | 31 | 286 | 116 |
| DLK200X20 | 20 | 47 | 26 | 20 | 17 | M6X18 | 14.9 | 8 | M8 | 2 | 313 | 31 | 272 | 116 |
| DLK200X22 | 22 | 47 | 26 | 20 | 17 | M6X18 | 14.9 | 8 | M8 | 2 | 345 | 31 | 247 | 116 |
| DLK200X24 | 24 | 50 | 26 | 20 | 17 | M6X18 | 14.9 | 9 | M8 | 3 | 424 | 35 | 255 | 123 |
| DLK200X25 | 25 | 50 | 26 | 20 | 17 | M6X18 | 14.9 | 9 | M8 | 3 | 441 | 35 | 245 | 123 |
| DLK200X28 | 28 | 55 | 26 | 20 | 17 | M6X18 | 14.9 | 10 | M8 | 3 | 549 | 39 | 243 | 124 |
| DLK200X30 | 30 | 55 | 26 | 20 | 17 | M6X18 | 14.9 | 10 | M8 | 3 | 588 | 39 | 227 | 124 |
| DLK200X32 | 32 | 60 | 26 | 20 | 17 | M6X18 | 14.9 | 12 | M8 | 4 | 758 | 47 | 255 | 136 |
| DLK200X35 | 35 | 60 | 26 | 20 | 17 | M6X18 | 14.9 | 12 | M8 | 4 | 822 | 47 | 233 | 136 |
| DLK200X38 | 38 | 65 | 26 | 20 | 17 | M6X18 | 14.9 | 14 | M8 | 4 | 1042 | 55 | 250 | 146 |
| DLK200X40 | 40 | 65 | 26 | 20 | 17 | M6X18 | 14.9 | 14 | M8 | 4 | 1097 | 55 | 238 | 146 |
| DLK200X42 | 42 | 75 | 32 | 24 | 20 | M8X22 | 35.0 | 12 | M10 | 4 | 1740 | 83 | 291 | 163 |
| DLK200X45 | 45 | 75 | 32 | 24 | 20 | M8X22 | 35.0 | 12 | M10 | 4 | 1864 | 83 | 271 | 163 |

DLK200 SECTION continued

| Part No. | Dimensions | | | | | Tightening | | | Loosening | | Performances | | Surface Pressure | |
|------------|------------|-----|----|----|----|------------|---------|---------------|-----------|---------------|--------------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | H2 | NV | Tv (Nm) | No. of screws | NV | No. of screws | Mt (mm) | Ta (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK200X48 | 48 | 80 | 32 | 24 | 20 | M8X22 | 35.0 | 12 | M10 | 4 | 1988 | 83 | 254 | 153 |
| DLK200X50 | 50 | 80 | 32 | 24 | 20 | M8X22 | 35.0 | 12 | M10 | 4 | 2071 | 83 | 244 | 153 |
| DLK200X55 | 55 | 85 | 32 | 24 | 20 | M8X22 | 35.0 | 14 | M10 | 4 | 2658 | 97 | 259 | 168 |
| DLK200X60 | 60 | 90 | 32 | 24 | 20 | M8X22 | 35.0 | 14 | M10 | 4 | 2900 | 64 | 238 | 158 |
| DLK200X65 | 65 | 95 | 32 | 24 | 20 | M8X22 | 35.0 | 16 | M10 | 4 | 3587 | 110 | 250 | 171 |
| DLK200X70 | 70 | 110 | 38 | 28 | 24 | M10X25 | 69.0 | 14 | M12 | 4 | 5345 | 153 | 268 | 171 |
| DLK200X75 | 75 | 115 | 38 | 28 | 24 | M10X25 | 69.0 | 14 | M12 | 4 | 5727 | 153 | 250 | 163 |
| DLK200X80 | 80 | 120 | 38 | 28 | 24 | M10X25 | 69.0 | 14 | M12 | 4 | 6108 | 153 | 235 | 156 |
| DLK200X85 | 85 | 125 | 38 | 28 | 24 | M10X25 | 69.0 | 16 | M12 | 4 | 7417 | 175 | 252 | 172 |
| DLK200X90 | 90 | 130 | 38 | 28 | 24 | M10X25 | 69.0 | 16 | M12 | 4 | 7854 | 175 | 238 | 165 |
| DLK200X95 | 95 | 135 | 38 | 28 | 24 | M10X25 | 69.0 | 18 | M12 | 4 | 9326 | 196 | 254 | 179 |
| DLK200X100 | 100 | 145 | 45 | 33 | 26 | M12X30 | 123.3 | 14 | M14 | 4 | 11362 | 227 | 258 | 178 |
| DLK200X110 | 110 | 155 | 45 | 33 | 26 | M12X30 | 123.3 | 14 | M14 | 4 | 12498 | 227 | 234 | 166 |
| DLK200X120 | 120 | 165 | 45 | 33 | 26 | M12X30 | 123.3 | 16 | M14 | 4 | 15578 | 260 | 245 | 178 |
| DLK200X130 | 130 | 180 | 50 | 38 | 34 | M12X35 | 123.3 | 20 | M14 | 4 | 21095 | 325 | 217 | 156 |
| DLK200X140 | 140 | 190 | 50 | 38 | 34 | M12X35 | 123.3 | 22 | M14 | 4 | 24993 | 357 | 221 | 163 |
| DLK200X150 | 150 | 200 | 50 | 38 | 34 | M12X35 | 123.3 | 24 | M14 | 4 | 29217 | 390 | 225 | 169 |
| DLK200X160 | 160 | 210 | 50 | 38 | 34 | M12X35 | 123.3 | 26 | M14 | 4 | 33756 | 422 | 229 | 174 |
| DLK200X170 | 170 | 225 | 58 | 44 | 38 | M14X40 | 187.0 | 22 | M16 | 4 | 39483 | 465 | 212 | 160 |
| DLK200X180 | 180 | 235 | 58 | 44 | 38 | M14X40 | 187.0 | 24 | M16 | 4 | 45606 | 507 | 218 | 167 |
| DLK200X190 | 190 | 250 | 66 | 52 | 46 | M14X45 | 187.0 | 28 | M16 | 4 | 56163 | 591 | 199 | 152 |
| DLK200X200 | 200 | 260 | 66 | 52 | 46 | M14X45 | 187.0 | 30 | M16 | 4 | 63342 | 633 | 203 | 156 |

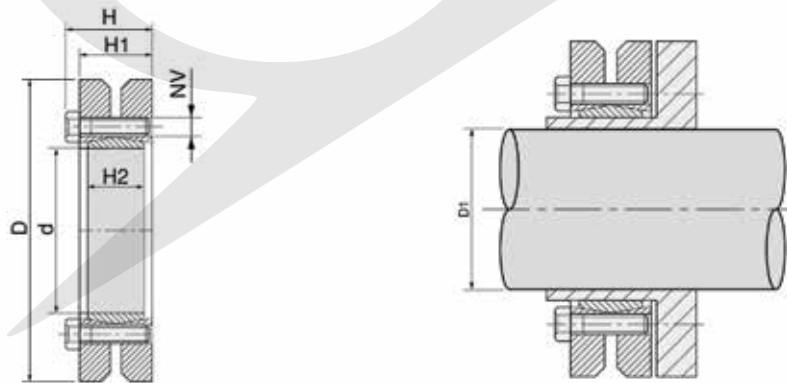


DLK300 SECTION

| Part No. | Dimensions | | | | Performances | | | Surface Pressure | |
|-----------|------------|----|-----|-----|--------------|---------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | Mt (mm) | Ta (KN) | Tm (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK300X08 | 8 | 11 | 4.5 | 3.7 | 4.2 | 1.06 | 5.0 | 100 | 70 |
| DLK300X09 | 9 | 12 | 4.5 | 3.7 | 5.8 | 1.29 | 13.3 | 100 | 79 |
| DLK300X10 | 10 | 13 | 4.5 | 3.7 | 7.6 | 1.53 | 14.4 | 100 | 86 |
| DLK300X12 | 12 | 15 | 4.5 | 3.7 | 9.9 | 1.65 | 14.5 | 100 | 80 |
| DLK300X14 | 14 | 18 | 6.3 | 5.3 | 18.9 | 2.70 | 23.8 | 100 | 77 |
| DLK300X15 | 15 | 19 | 6.3 | 5.3 | 22.1 | 2.94 | 24.3 | 100 | 79 |
| DLK300X16 | 16 | 20 | 6.3 | 5.3 | 25.4 | 3.18 | 24.5 | 100 | 81 |
| DLK300X18 | 18 | 22 | 6.3 | 5.3 | 31.8 | 3.53 | 25.3 | 100 | 82 |
| DLK300X19 | 19 | 24 | 6.3 | 5.3 | 35.8 | 3.76 | 29.7 | 100 | 80 |
| DLK300X20 | 20 | 25 | 6.3 | 5.3 | 38.8 | 3.88 | 30.1 | 100 | 79 |

DLK300 SECTION continued

| Part No. | Dimensions | | | | Performances | | | Surface Pressure | |
|------------|------------|-----|------|------|--------------|---------|---------|-------------------------|-------------------------|
| | d | D | H | H1 | Mt (mm) | Ta (KN) | Tm (KN) | Pa (N/mm ²) | Pm (N/mm ²) |
| DLK300X22 | 22 | 26 | 6.3 | 5.3 | 47.9 | 4.35 | 28.9 | 100 | 86 |
| DLK300X24 | 24 | 28 | 6.3 | 5.3 | 56.4 | 4.70 | 30.0 | 100 | 86 |
| DLK300X25 | 25 | 30 | 6.3 | 5.3 | 61.7 | 4.94 | 32.4 | 100 | 84 |
| DLK300X28 | 28 | 32 | 6.3 | 5.3 | 77.4 | 5.53 | 32.6 | 100 | 88 |
| DLK300X30 | 30 | 35 | 6.3 | 5.3 | 88.2 | 5.88 | 35.5 | 100 | 86 |
| DLK300X32 | 32 | 36 | 6.3 | 5.3 | 100.0 | 6.23 | 36.7 | 100 | 88 |
| DLK300X35 | 35 | 40 | 7.0 | 6.0 | 136.0 | 7.76 | 45.7 | 100 | 88 |
| DLK300X38 | 38 | 44 | 7.0 | 6.0 | 161.0 | 8.47 | 49.7 | 100 | 87 |
| DLK300X40 | 40 | 45 | 8.0 | 6.6 | 195.0 | 9.80 | 58.8 | 100 | 89 |
| DLK300X42 | 42 | 48 | 8.0 | 6.6 | 215.0 | 10.20 | 62.6 | 100 | 87 |
| DLK300X45 | 45 | 52 | 10.0 | 8.6 | 323.0 | 14.30 | 92.2 | 100 | 87 |
| DLK300X48 | 48 | 55 | 10.0 | 8.6 | 367.0 | 15.30 | 94.6 | 100 | 88 |
| DLK300X50 | 50 | 57 | 10.0 | 8.6 | 397.0 | 15.90 | 96.5 | 100 | 88 |
| DLK300X55 | 55 | 62 | 10.0 | 8.6 | 479.0 | 17.40 | 101.8 | 100 | 88 |
| DLK300X60 | 60 | 68 | 12.0 | 10.4 | 691.0 | 23.00 | 133.4 | 100 | 88 |
| DLK300X65 | 65 | 73 | 12.0 | 10.4 | 814.0 | 25.00 | 140.4 | 100 | 89 |
| DLK300X70 | 70 | 79 | 14.0 | 12.2 | 1107.0 | 31.60 | 176.0 | 100 | 89 |
| DLK300X75 | 75 | 84 | 14.0 | 12.2 | 1266.0 | 33.80 | 189.6 | 100 | 89 |
| DLK300X80 | 80 | 91 | 17.0 | 15.0 | 1769.0 | 44.20 | 251.0 | 100 | 89 |
| DLK300X90 | 90 | 101 | 17.0 | 15.0 | 2244.0 | 49.90 | 272.4 | 100 | 89 |
| DLK300X100 | 100 | 114 | 21.0 | 18.7 | 3452.0 | 69.00 | 377.7 | 100 | 89 |
| DLK300X110 | 110 | 124 | 21.0 | 18.7 | 4178.0 | 76.00 | 415.0 | 100 | 89 |
| DLK300X120 | 120 | 134 | 21.0 | 18.7 | 4967.0 | 82.80 | 440.2 | 100 | 89 |
| DLK300X130 | 130 | 148 | 28.0 | 25.3 | 7896.0 | 121.00 | 654.2 | 100 | 89 |
| DLK300X140 | 140 | 158 | 28.0 | 25.3 | 9146.0 | 131.00 | 689.0 | 100 | 89 |
| DLK300X150 | 150 | 168 | 28.0 | 25.3 | 10505.0 | 140.00 | 727.5 | 100 | 89 |



DLK603 SECTION

| Part No. | Dimensions | | | | | | Tightening | | | Performances | | Surface Pressure |
|-----------|------------|----|----|------|------|----|------------|---------|---------------|--------------|---------|-------------------------|
| | d | D | D1 | H | H1 | H2 | NV | Tv (Nm) | No. of screwa | Mt (Nm) | Ta (Kn) | Pa (N/mm ²) |
| DLK603X24 | 24 | 50 | 19 | 23.0 | 19.5 | 14 | M5X18 | 4 | 6 | 216 | 23.0 | 272 |
| | | | 20 | | | | | | | 265 | 27.0 | |
| | | | 21 | | | | | | | 314 | 30.0 | |
| DLK603X30 | 30 | 60 | 24 | 25.0 | 21.5 | 16 | M5X18 | 4 | 7 | 372 | 31.0 | 221 |
| | | | 25 | | | | | | | 421 | 34.0 | |
| | | | 26 | | | | | | | 461 | 36.0 | |

DLK603 SECTION

| Part No. | Dimensions | | | | | | Tightening | | | Performances | | Surface Pressure |
|------------|------------|-----|-----|------|------|----|------------|---------|---------------|--------------|---------|-------------------------|
| | d | D | D1 | H | H1 | H2 | NV | Tv (Nm) | No. of screws | Mt (Nm) | Ta (Kn) | Pa (N/mm ²) |
| DLK603X36 | 36 | 50 | 26 | 27.5 | 23.5 | 18 | M6X20 | 12 | 5 | 471 | 36.3 | 292 |
| | | | 28 | | | | | | | 550 | 39.3 | |
| | | | 30 | | | | | | | 713 | 47.5 | |
| DLK603X44 | 44 | 80 | 32 | 29.5 | 25.5 | 20 | M6X20 | 12 | 7 | 925 | 57.8 | 301 |
| | | | 35 | | | | | | | 1175 | 67.1 | |
| | | | 36 | | | | | | | 1275 | 70.8 | |
| DLK603X50 | 50 | 90 | 38 | 31.5 | 27.5 | 22 | M6X25 | 12 | 8 | 1313 | 69.1 | 275 |
| | | | 40 | | | | | | | 1638 | 81.9 | |
| | | | 42 | | | | | | | 1925 | 91.7 | |
| DLK603X55 | 55 | 100 | 42 | 34.5 | 30.5 | 23 | M6X25 | 12 | 8 | 1450 | 69.0 | 239 |
| | | | 45 | | | | | | | 1900 | 84.4 | |
| | | | 48 | | | | | | | 2350 | 97.9 | |
| DLK603X62 | 62 | 110 | 48 | 34.5 | 30.5 | 23 | M6X25 | 12 | 10 | 2775 | 116.0 | 265 |
| | | | 50 | | | | | | | 3275 | 131.0 | |
| | | | 52 | | | | | | | 3613 | 139.0 | |
| DLK603X68 | 68 | 115 | 50 | 34.5 | 30.5 | 23 | M6X25 | 12 | 10 | 2500 | 100.0 | 242 |
| | | | 55 | | | | | | | 3125 | 114.0 | |
| | | | 60 | | | | | | | 3938 | 131.0 | |
| DLK603X75 | 75 | 138 | 55 | 37.8 | 32.5 | 25 | M8X30 | 30 | 7 | 3125 | 114.0 | 259 |
| | | | 60 | | | | | | | 4000 | 133.0 | |
| | | | 65 | | | | | | | 4938 | 152.0 | |
| DLK603X80 | 80 | 145 | 60 | 37.8 | 32.5 | 25 | M8X30 | 30 | 7 | 4000 | 133.0 | 243 |
| | | | 65 | | | | | | | 4875 | 150.0 | |
| | | | 70 | | | | | | | 5750 | 164.0 | |
| DLK603X90 | 90 | 155 | 65 | 44.3 | 39.0 | 30 | M8X35 | 30 | 10 | 5938 | 183.0 | 257 |
| | | | 70 | | | | | | | 7500 | 214.0 | |
| | | | 75 | | | | | | | 9063 | 242.0 | |
| DLK603X100 | 100 | 170 | 70 | 49.3 | 44.0 | 34 | M8X35 | 30 | 12 | 8625 | 246.0 | 245 |
| | | | 75 | | | | | | | 9375 | 250.0 | |
| | | | 80 | | | | | | | 11250 | 281.0 | |
| DLK603X110 | 110 | 185 | 75 | 56.4 | 50.0 | 39 | M10X40 | 59 | 9 | 9000 | 240.0 | 232 |
| | | | 80 | | | | | | | 11250 | 281.0 | |
| | | | 85 | | | | | | | 13500 | 318.0 | |
| DLK603X125 | 125 | 215 | 85 | 60.4 | 54.0 | 42 | M10X40 | 59 | 12 | 13750 | 324.0 | 253 |
| | | | 90 | | | | | | | 16250 | 361.0 | |
| | | | 95 | | | | | | | 18750 | 395.0 | |
| DLK603X140 | 140 | 230 | 95 | 68.0 | 60.5 | 46 | M12X45 | 100 | 10 | 18875 | 397.0 | 251 |
| | | | 100 | | | | | | | 22000 | 440.0 | |
| | | | 105 | | | | | | | 25125 | 479.0 | |
| DLK603X155 | 155 | 265 | 105 | 72.0 | 64.5 | 50 | M12X50 | 100 | 12 | 27500 | 524.0 | 250 |
| | | | 110 | | | | | | | 31250 | 568.0 | |
| | | | 115 | | | | | | | 35000 | 609.0 | |
| DLK603X165 | 165 | 290 | 115 | 81.0 | 71.0 | 56 | M16X55 | 250 | 8 | 38750 | 674.0 | 263 |
| | | | 120 | | | | | | | 43750 | 729.0 | |
| | | | 125 | | | | | | | 48750 | 780.0 | |

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