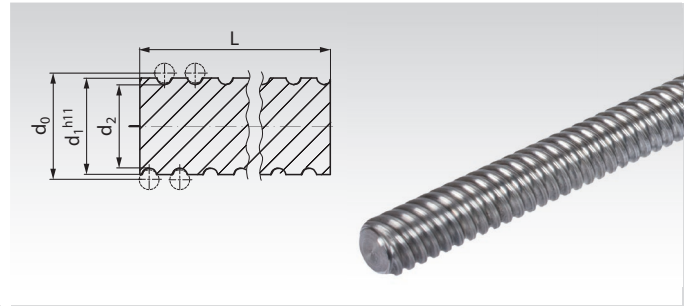


Ball Screw Spindles, Right Hand, Rolled

Material: Bearing steel 100Cr6, No. 1.3505, rolled.
Tensile strength 1570 N/mm², Brinell hardness 207 HB.

- Rolled ball screw spindle.
 - To be combined with **MÄDLER**[®] flanged ball screw nuts and cylindrical ball screw nuts.
 - Pitch accuracy 52 µm/300 mm (T7).
 - Straightness 0,1 mm/m.
 - Special lengths and spindle end reworking against extra charge.
- Temperature range: -20°C to +80°C (for short time to +110°C).

Ordering Details: e.g.: Product No. 640 080 21, Ball Screw Spindle 8x2, Length 245mm



| Product No. | Size | Length L ^{+5mm} mm | Pitch-Ø d ₀ mm | Outer Ø d ₁ mm | Core Ø d ₂ mm | Weight kg |
|-------------|-------|-----------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------|
| 640 080 21 | 8x2 | 245 | 8,41 | 8,11 | 7 | 0,09 |
| 640 080 22 | | 495 | 8,41 | 8,11 | 7 | 0,18 |
| 640 080 23 | | 1000 | 8,41 | 8,11 | 7 | 0,37 |
| 640 100 21 | 10x2 | 245 | 10 | 9,7 | 8,5 | 0,13 |
| 640 100 22 | | 495 | 10 | 9,7 | 8,5 | 0,26 |
| 640 100 23 | | 1000 | 10 | 9,7 | 8,5 | 0,53 |
| 640 120 41 | 12x4 | 645 | 12,15 | 11,71 | 9,5 | 0,48 |
| 640 120 42 | | 1295 | 12,15 | 11,71 | 9,5 | 0,96 |
| 640 120 43 | | 1950 | 12,15 | 11,71 | 9,5 | 1,45 |
| 640 120 44 | | 2600 | 12,15 | 11,71 | 9,5 | 1,93 |
| 640 160 51 | 16x5 | 995 | 16,6 | 16 | 13,1 | 1,39 |
| 640 160 52 | | 1495 | 16,6 | 16 | 13,1 | 2,08 |
| 640 160 53 | | 1995 | 16,6 | 16 | 13,1 | 2,78 |
| 640 160 54 | | 3000 | 16,6 | 16 | 13,1 | 4,18 |
| 640 161 01 | 16x10 | 995 | 16,44 | 15,7 | 12,7 | 1,32 |
| 640 161 02 | | 1495 | 16,44 | 15,7 | 12,7 | 1,99 |
| 640 161 03 | | 1995 | 16,44 | 15,7 | 12,7 | 2,66 |
| 640 161 04 | | 3000 | 16,44 | 15,7 | 12,7 | 3,99 |
| 640 161 61 | 16x16 | 995 | 16,6 | 16 | 13,5 | 1,41 |
| 640 161 62 | | 1495 | 16,6 | 16 | 13,5 | 2,12 |
| 640 161 63 | | 1995 | 16,6 | 16 | 13,5 | 2,83 |
| 640 161 64 | | 3000 | 16,6 | 16 | 13,5 | 4,25 |
| 640 200 51 | 20x5 | 695 | 20,6 | 20 | 17,2 | 1,56 |
| 640 200 52 | | 1395 | 20,6 | 20 | 17,2 | 3,13 |
| 640 200 53 | | 2100 | 20,6 | 20 | 17,2 | 4,70 |
| 640 200 54 | | 2800 | 20,6 | 20 | 17,2 | 6,27 |
| 640 201 01 | 20x10 | 995 | 20,6 | 20 | 17 | 2,21 |
| 640 201 02 | | 1495 | 20,6 | 20 | 17 | 3,33 |
| 640 201 03 | | 1995 | 20,6 | 20 | 17 | 4,44 |
| 640 201 04 | | 3000 | 20,6 | 20 | 17 | 6,67 |
| 640 202 01 | 20x20 | 645 | 20,74 | 19,9 | 17,2 | 1,43 |
| 640 202 02 | | 1295 | 20,74 | 19,9 | 17,2 | 2,88 |
| 640 202 03 | | 1950 | 20,74 | 19,9 | 17,2 | 4,34 |
| 640 202 04 | | 2600 | 20,74 | 19,9 | 17,2 | 5,78 |
| 640 250 51 | 25x5 | 695 | 25,6 | 25 | 22,2 | 2,48 |
| 640 250 52 | | 1395 | 25,6 | 25 | 22,2 | 4,98 |
| 640 250 53 | | 2100 | 25,6 | 25 | 22,2 | 7,50 |
| 640 250 54 | | 2800 | 25,6 | 25 | 22,2 | 9,99 |
| 640 251 01 | 25x10 | 670 | 25,5 | 24,8 | 21,8 | 2,33 |
| 640 251 02 | | 1345 | 25,5 | 24,8 | 21,8 | 4,69 |
| 640 251 03 | | 2025 | 25,5 | 24,8 | 21,8 | 7,05 |
| 640 251 04 | | 2700 | 25,5 | 24,8 | 21,8 | 9,41 |
| 640 252 51 | 25x25 | 695 | 25,7 | 24,5 | 21,4 | 2,39 |
| 640 252 52 | | 1395 | 25,7 | 24,5 | 21,4 | 4,79 |
| 640 252 53 | | 2100 | 25,7 | 24,5 | 21,4 | 7,21 |
| 640 252 54 | | 2800 | 25,7 | 24,5 | 21,4 | 9,61 |

| Product No. | Size | Length L ^{+5mm} mm | Pitch-Ø d ₀ mm | Outer Ø d ₁ mm | Core Ø d ₂ mm | Weight kg |
|-------------|-------|-----------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------|
| 640 320 51 | 32x5 | 695 | 32,6 | 32 | 29,2 | 4,13 |
| 640 320 52 | | 1395 | 32,6 | 32 | 29,2 | 8,30 |
| 640 320 53 | | 2100 | 32,6 | 32 | 29,2 | 12,49 |
| 640 320 54 | | 2800 | 32,6 | 32 | 29,2 | 16,65 |
| 640 321 01 | 32x10 | 670 | 33,44 | 31,8 | 26,8 | 3,74 |
| 640 321 02 | | 1345 | 33,44 | 31,8 | 26,8 | 7,51 |
| 640 321 03 | | 2025 | 33,44 | 31,8 | 26,8 | 11,31 |
| 640 321 04 | | 2700 | 33,44 | 31,8 | 26,8 | 15,07 |
| 640 322 01 | 32x20 | 670 | 32,4 | 31,2 | 28,2 | 3,80 |
| 640 322 02 | | 1345 | 32,4 | 31,2 | 28,2 | 7,63 |
| 640 322 03 | | 2025 | 32,4 | 31,2 | 28,2 | 11,48 |
| 640 322 04 | | 2700 | 32,4 | 31,2 | 28,2 | 15,31 |
| 640 323 21 | 32x32 | 995 | 33,22 | 31,9 | 28,1 | 5,75 |
| 640 323 22 | | 1495 | 33,22 | 31,9 | 28,1 | 8,65 |
| 640 323 23 | | 1995 | 33,22 | 31,9 | 28,1 | 11,54 |
| 640 323 24 | | 3000 | 33,22 | 31,9 | 28,1 | 17,35 |
| 640 400 51 | 40x5 | 695 | 40,6 | 40 | 37,2 | 6,54 |
| 640 400 52 | | 1395 | 40,6 | 40 | 37,2 | 13,12 |
| 640 400 53 | | 2100 | 40,6 | 40 | 37,2 | 19,75 |
| 640 400 54 | | 2800 | 40,6 | 40 | 37,2 | 26,33 |
| 640 401 01 | 40x10 | 670 | 41,36 | 39,7 | 34,8 | 5,98 |
| 640 401 02 | | 1345 | 41,36 | 39,7 | 34,8 | 12,00 |
| 640 401 03 | | 2025 | 41,36 | 39,7 | 34,8 | 18,06 |
| 640 401 04 | | 2700 | 41,36 | 39,7 | 34,8 | 24,08 |
| 640 501 01 | 50x10 | 995 | 51,34 | 49,9 | 44,7 | 14,21 |
| 640 501 02 | | 1495 | 51,34 | 49,9 | 44,7 | 21,34 |
| 640 501 03 | | 1995 | 51,34 | 49,9 | 44,7 | 28,48 |
| 640 501 04 | | 3000 | 51,34 | 49,9 | 44,7 | 42,83 |
| 640 502 01 | 50x20 | 995 | 50,16 | 48,6 | 43,5 | 13,38 |
| 640 502 02 | | 1495 | 50,16 | 48,6 | 43,5 | 20,10 |
| 640 502 03 | | 1995 | 50,16 | 48,6 | 43,5 | 26,83 |
| 640 502 04 | | 3000 | 50,16 | 48,6 | 43,5 | 40,34 |
| 640 631 01 | 63x10 | 995 | 64,4 | 62,9 | 57,7 | 20,04 |
| 640 631 02 | | 1495 | 64,4 | 62,9 | 57,7 | 30,11 |
| 640 631 03 | | 1995 | 64,4 | 62,9 | 57,7 | 40,18 |
| 640 631 04 | | 3000 | 64,4 | 62,9 | 57,7 | 60,42 |



Bearing Units for Spindels page 414

Bearing Units for Spindels Page 414

These ready-to-install bearing units for trapezoidal and ball-screw spindle drives are available from stock. The unit for the fixed side has two angular contact ball bearings, lightly preloaded, to withstand high axial and radial forces. The unit for the support side has a standard ball bearing to hold the spindle end in its position.

Shaft End Reworking for Spindels Page 417

The matching spindle reworking can be done by the customer or, at short time, by **MÄDLER**[®]. The spindle reworking shown on page 417 is just a recommendation. For shaft processing, soft annealing (tempering) of the hardened spindle ends is necessary.