

Keilwellen und Keilbuchsen Splined shafts and splined bushings

Eigenschaften

Wir führen:

- Keilwellen als Meterware in gängigen Größen aus Stahl meist ab Lager lieferbar, Zuschnitt nach Kundenwunsch bis max. 3000 mm
- Keilwellen in Fixlängen 1000, 1500, 2000, 3000 mm aus Stahl und Edelstahl
- Keilbuchsen als runde Muffe, als Flanschnabe und als Klemmring aus Stahl, Bronze oder Edelstahl.
- Die Materialkombinationen Stahl/Stahl, Stahl/Edelstahl und Edelstahl/Edelstahl neigen zum Fressen! Bei häufiger Bewegung und/oder hoher Beanspruchung empfehlen wir Keilbuchsen aus Bronze

Vorteile

- Keilwellen übertragen größere Drehmomente als Wellen mit Passfeder- oder Feststellschraube
- Auf Buchsen oder an Klemmrings montierte Übertragungselemente wie Zahnräder sind auf der Keilwelle verschiebbar. Dadurch kann die Interaktion mit dem Gegenrad unterbrochen werden
- Keilwellen gewährleisten einfache, formschlüssige Ein- und Auskuppung von Drehbewegungen

Anwendungen

- Ankupplung von Getrieben
- Lösbare Welle-Nabe Verbindung
- Montage von axial justierbaren Zahnrädern

Properties

We deliver:

- Splined shafts sold by length, in standard sizes, made of steel, mostly deliverable from stock, cut to length up to max. 3000 mm for customer request.
- Splined shafts in fixed lengths 1000, 1500, 2000, 3000 mm, made of steel and stainless steel.
- Splined bushings as round sleeve, as flange hub, and as clamping ring, made of steel, bronze or stainless steel.
- The material combinations (steel/steel, steel/stainless steel and stainless steel/stainless steel) tend to seize. For frequent movements and/or high loads, we recommend using splined bushings made of bronze

Advantages

- Spline shafts transmit greater torques than shafts with keyways or set screws
- Transmitting components (such as gears) which are mounted to splined bushings or clamping collars can be slid along the splined shaft. The interaction with the counter gear can thus be interrupted
- Splined shafts ensure that there is simple, form-fitting engagement and disengagement for the rotational movements

Applications

- Coupling of gear boxes
- Detachable shaft-hub connections
- Installations of axially adjustable gears

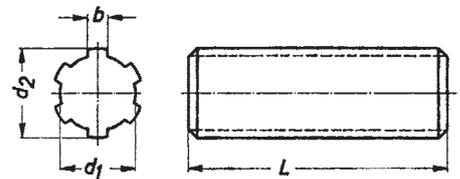


Keilwellen, Meterware, ab Lager Splined shafts, sold by length, available from stock

Material C45, gezogen nach DIN ISO 14-B (DIN 5463)

Material C45, cold drawn acc. to DIN ISO 14-B (DIN 5463)

| Bestell-Nr. Part no. | Anzahl Keile No. of splines | innerer \varnothing inner \varnothing | äußerer \varnothing outer \varnothing | Keilbreite Spline width | Gewicht Weight |
|-------------------------|--------------------------------|--|--|----------------------------|-------------------|
| | [mm] | d_1 [mm] | d_2 [mm] | b [mm] | [kg/m] |
| KWL11 | 6 | 11 | 14 | 3 | 0,949 |
| KWL13 | 6 | 13 | 16 | 3,5 | 1,287 |
| KWL16 | 6 | 16 | 20 | 4 | 1,911 |
| KWL18 | 6 | 18 | 22 | 5 | 2,453 |
| KWL21 | 6 | 21 | 25 | 5 | 3,139 |
| KWL23 | 6 | 23 | 28 | 6 | 3,964 |
| KWL26 | 6 | 26 | 32 | 6 | 5,008 |
| KWL28 | 6 | 28 | 34 | 7 | 5,816 |
| KWL32 | 8 | 32 | 38 | 6 | 7,433 |
| KWL36 | 8 | 36 | 42 | 7 | 9,302 |
| KWL42 | 8 | 42 | 48 | 8 | 12,371 |
| KWL46 | 8 | 46 | 54 | 9 | 15,300 |



| Bestell-Nr. Part no. | KWL | z z |
|------------------------|---------------------------|---|
| | Keilwelle Splined shaft | innerer \varnothing inner \varnothing |

Keilwellen in Fixlängen

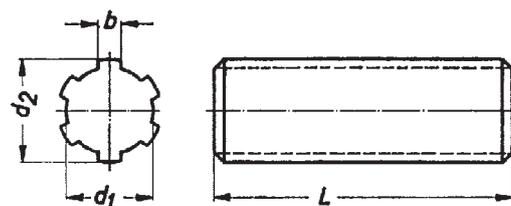
Splined shafts in fixed length



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Material: C45 oder 1.4301, gezogen nach DIN ISO 14-B [DIN5463]
Material: C45 or 1.4301, cold drawn acc. to DIN ISO 14-B [DIN5463]



Keilwellen | Splined shafts

| Bestell-Nr. Part no. Material C45 | Bestell-Nr. Part no. Material 1.4301 | Anzahl Keile Number of splines | d ₁ -0,03 -0,08 | d ₂ -0,07 -0,27 | b ±0 -0,08 | Länge Length [mm] | Gewicht Weight [kg] |
|---|--|-----------------------------------|----------------------------------|----------------------------------|------------------|-------------------------|---------------------------|
| KW11-1000 | KW11-1000SS | 6 | 11 | 14 | 3,0 | 1000 | 0,949 |
| KW11-1500 | KW11-1500SS | 6 | 11 | 14 | 3,0 | 1500 | 1,420 |
| KW11-2000 | KW11-2000SS | 6 | 11 | 14 | 3,0 | 2000 | 1,900 |
| KW11-3000 | KW11-3000SS | 6 | 11 | 14 | 3,0 | 3000 | 2,850 |
| KW13-1000 | KW13-1000SS | 6 | 13 | 16 | 3,5 | 1000 | 1,287 |
| KW13-1500 | KW13-1500SS | 6 | 13 | 16 | 3,5 | 1500 | 1,930 |
| KW13-2000 | KW13-2000SS | 6 | 13 | 16 | 3,5 | 2000 | 2,570 |
| KW13-3000 | KW13-3000SS | 6 | 13 | 16 | 3,5 | 3000 | 3,860 |
| KW16-1000 | KW16-1000SS | 6 | 16 | 20 | 4,0 | 1000 | 1,911 |
| KW16-1500 | KW16-1500SS | 6 | 16 | 20 | 4,0 | 1500 | 2,870 |
| KW16-2000 | KW16-2000SS | 6 | 16 | 20 | 4,0 | 2000 | 3,820 |
| KW16-3000 | KW16-3000SS | 6 | 16 | 20 | 4,0 | 3000 | 5,730 |
| KW18-1000 | KW18-1000SS | 6 | 18 | 22 | 5,0 | 1000 | 2,453 |
| KW18-1500 | KW18-1500SS | 6 | 18 | 22 | 5,0 | 1500 | 3,680 |
| KW18-2000 | KW18-2000SS | 6 | 18 | 22 | 5,0 | 2000 | 4,910 |
| KW18-3000 | KW18-3000SS | 6 | 18 | 22 | 5,0 | 3000 | 7,360 |
| KW21-1000 | KW21-1000SS | 6 | 21 | 25 | 5,0 | 1000 | 3,139 |
| KW21-1500 | KW21-1500SS | 6 | 21 | 25 | 5,0 | 1500 | 4,710 |
| KW21-2000 | KW21-2000SS | 6 | 21 | 25 | 5,0 | 2000 | 6,280 |
| KW21-3000 | KW21-3000SS | 6 | 21 | 25 | 5,0 | 3000 | 9,420 |
| KW23-1000 | KW23-1000SS | 6 | 23 | 28 | 6,0 | 1000 | 3,964 |
| KW23-1500 | KW23-1500SS | 6 | 23 | 28 | 6,0 | 1500 | 5,950 |
| KW23-2000 | KW23-2000SS | 6 | 23 | 28 | 6,0 | 2000 | 7,930 |
| KW23-3000 | KW23-3000SS | 6 | 23 | 28 | 6,0 | 3000 | 11,890 |
| KW26-1000 | KW26-1000SS | 6 | 26 | 32 | 6,0 | 1000 | 5,008 |
| KW26-1500 | KW26-1500SS | 6 | 26 | 32 | 6,0 | 1500 | 7,510 |
| KW26-2000 | KW26-2000SS | 6 | 26 | 32 | 6,0 | 2000 | 10,020 |
| KW26-3000 | KW26-3000SS | 6 | 26 | 32 | 6,0 | 3000 | 15,020 |
| KW28-1000 | KW28-1000SS | 6 | 28 | 34 | 7,0 | 1000 | 5,816 |
| KW28-1500 | KW28-1500SS | 6 | 28 | 34 | 7,0 | 1500 | 8,720 |
| KW28-2000 | KW28-2000SS | 6 | 28 | 34 | 7,0 | 2000 | 11,630 |
| KW28-3000 | KW28-3000SS | 6 | 28 | 34 | 7,0 | 3000 | 17,450 |
| KW32-1000 | KW32-1000SS | 8 | 32 | 38 | 6,0 | 1000 | 7,433 |
| KW32-1500 | KW32-1500SS | 8 | 32 | 38 | 6,0 | 1500 | 11,150 |
| KW32-2000 | KW32-2000SS | 8 | 32 | 38 | 6,0 | 2000 | 14,870 |
| KW32-3000 | KW32-3000SS | 8 | 32 | 38 | 6,0 | 3000 | 22,300 |
| KW36-1000 | KW36-1000SS | 8 | 36 | 42 | 7,0 | 1000 | 9,302 |
| KW36-1500 | KW36-1500SS | 8 | 36 | 42 | 7,0 | 1500 | 13,950 |
| KW36-2000 | KW36-2000SS | 8 | 36 | 42 | 7,0 | 2000 | 18,600 |
| KW36-3000 | KW36-3000SS | 8 | 36 | 42 | 7,0 | 3000 | 27,910 |
| KW42-1000 | KW42-1000SS | 8 | 42 | 48 | 8,0 | 1000 | 12,371 |
| KW42-1500 | KW42-1500SS | 8 | 42 | 48 | 8,0 | 1500 | 18,560 |
| KW42-2000 | KW42-2000SS | 8 | 42 | 48 | 8,0 | 2000 | 24,740 |
| KW42-3000 | KW42-3000SS | 8 | 42 | 48 | 8,0 | 3000 | 37,110 |
| KW46-1000 | KW46-1000SS | 8 | 46 | 54 | 9,0 | 1000 | 15,300 |
| KW46-2000 | KW46-2000SS | 8 | 46 | 54 | 9,0 | 2000 | 30,600 |
| KW46-3000 | KW46-3000SS | 8 | 46 | 54 | 9,0 | 3000 | 45,900 |

| Bestell-Nr. Part no. | KW | zz | -zzzz | _/SS |
|------------------------|---------------------------|---------------------|----------------|--|
| | Keilwelle Splined shaft | innerer Ø inner Ø | Länge Length | _ = Stahl Steel / SS = Edelstahl Stainless steel |

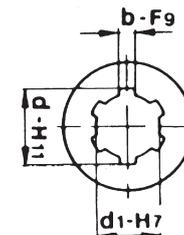
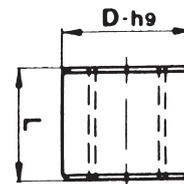
Keilmuffen, Keilnaben mit Flansch und Klemmringe Splined sleeves, splined hubs with flange and clamping collars



nach DIN ISO 14-A [DIN 5463], Material Stahl C45, Bronze RG7, Edelstahl 1.4305
acc. to DIN ISO 14-A [DIN 5463], Material C45 steel, RG7 bronze, stainless steel 1.4305

Keilmuffen | Splined sleeves

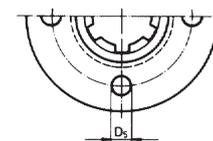
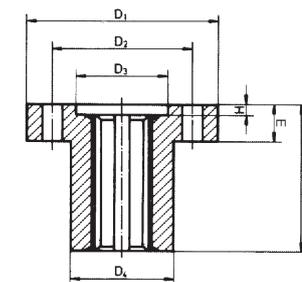
| Bestell-Nr. Part no. Material C45 | Bestell-Nr. Part no. Material RG7 | Bestell-Nr. Part no. Material 1.4305 | D h9 | L | dH11 | d1H7 | Anzahl No. splines | bF9 | Gewicht Weight Stahl Steel | Gewicht Weight RG7 |
|---|---|--|------|------|------|------|-----------------------|------|------------------------------------|--------------------------|
| | | | [mm] | [mm] | [mm] | [mm] | | [mm] | [kg] | [kg] |
| KM11 | KM11R | KM11SS | 20 | 40 | 14 | 11 | 6 | 3 | 0,06 | 0,08 |
| KM13 | KM13R | KM13SS | 28 | 45 | 16 | 13 | 6 | 3,5 | 0,16 | 0,18 |
| KM16 | KM16R | KM16SS | 32 | 45 | 20 | 16 | 6 | 4 | 0,20 | 0,22 |
| KM18 | KM18R | KM18SS | 40 | 50 | 22 | 18 | 6 | 5 | 0,27 | 0,30 |
| KM21 | KM21R | KM21SS | 40 | 55 | 25 | 21 | 6 | 5 | 0,36 | 0,42 |
| KM23 | KM23R | KM23SS | 50 | 55 | 28 | 23 | 6 | 6 | 0,47 | 0,54 |
| KM26 | KM26R | KM26SS | 52 | 60 | 32 | 26 | 6 | 6 | 0,70 | 0,78 |
| KM28 | KM28R | KM28SS | 60 | 60 | 34 | 28 | 6 | 7 | 0,76 | 0,87 |
| KM32 | KM32R | KM32SS | 60 | 60 | 38 | 32 | 8 | 6 | 0,88 | 1,00 |
| KM36 | KM36R | KM36SS | 70 | 65 | 42 | 36 | 8 | 7 | 1,08 | 1,23 |
| KM42 | KM42R | KM42SS | 65 | 70 | 48 | 42 | 8 | 8 | 0,94 | 1,10 |
| KM42L | KM42LR | KM42LSS | 80 | 70 | 48 | 42 | 8 | 8 | 1,88 | 2,16 |
| KM46 | KM46R | KM46SS | 80 | 90 | 54 | 46 | 8 | 9 | 2,25 | 2,49 |



| Bestell-Nr. Part no. | KM | z z | _/SS/R |
|----------------------------|---------------------|-----|---|
| Keilmuffe Splined sleeve | innerer Ø inner Ø | | _ = Stahl Steel / SS = Edelstahl Stainless steel / R = Bronze |

Keilnaben mit Flansch | Splined hubs with flange

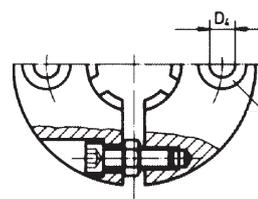
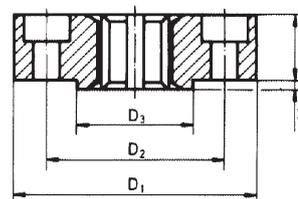
| Bestell-Nr. Part no. Material C45 | Bestell-Nr. Part no. Material RG7 | Bestell-Nr. Part no. Material 1.4305 | D ₁ | D ₂ | D ₃ H7 | D ₄ H8 | D ₅ | E | L | H | Gewicht Weight Stahl Steel | Gewicht Weight RG7 |
|---|---|--|----------------|----------------|----------------------|----------------------|----------------|------|------|------|------------------------------------|--------------------------|
| | | | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [kg] | [kg] |
| KN11 | KN11R | KN11SS | 42 | 28 | 20 | 20 | 4,5 | 8 | 35 | 3,0 | 0,10 | 0,12 |
| KN13 | KN13R | KN13SS | 50 | 36 | 22 | 25 | 4,5 | 8 | 40 | 3,0 | 0,18 | 0,22 |
| KN16 | KN16R | KN16SS | 52 | 38 | 25 | 28 | 5,5 | 10 | 40 | 3,0 | 0,22 | 0,26 |
| KN18 | KN18R | KN18SS | 54 | 40 | 30 | 30 | 5,5 | 10 | 45 | 3,5 | 0,26 | 0,30 |
| KN21 | KN21R | KN21SS | 62 | 48 | 35 | 34 | 6,6 | 10 | 50 | 3,5 | 0,34 | 0,38 |
| KN23 | KN23R | KN23SS | 64 | 50 | 36 | 36 | 6,6 | 10 | 55 | 3,5 | 0,41 | 0,47 |
| KN26 | KN26R | KN26SS | 70 | 56 | 40 | 42 | 6,6 | 10 | 60 | 3,5 | 0,50 | 0,58 |
| KN28 | KN28R | KN28SS | 78 | 60 | 46 | 45 | 9,0 | 12 | 60 | 3,5 | 0,64 | 0,74 |
| KN32 | KN32R | KN32SS | 82 | 65 | 50 | 50 | 9,0 | 12 | 60 | 3,5 | 0,72 | 0,84 |
| KN36 | KN36R | KN36SS | 90 | 70 | 52 | 52 | 9,0 | 16 | 80 | 4,0 | 0,94 | 1,07 |
| KN42 | KN42R | KN42SS | 95 | 75 | 60 | 60 | 11,0 | 16 | 80 | 4,0 | 1,22 | 1,38 |
| KN46 | KN46R | KN46SS | 100 | 80 | 65 | 65 | 11,0 | 16 | 100 | 4,0 | 1,50 | 1,70 |



| Bestell-Nr. Part no. | KN | z z | _/SS/R |
|------------------------|---------------------|-----|---|
| Keilnabe Splined hub | innerer Ø inner Ø | | _ = Stahl Steel / SS = Edelstahl Stainless steel / R = Bronze |

Klemmringe | Clamping collars

| Bestell-Nr. Part no. Material C45 | Bestell-Nr. Part no. Material RG7 | Bestell-Nr. Part no. Material 1.4305 | D ₁ | D ₂ | D ₃ H7 | D ₄ H8 | Gewinde Thread | L | H | Gewicht Weight Stahl Steel | Gewicht Weight RG7 |
|---|---|--|----------------|----------------|----------------------|----------------------|-------------------|------|------|------------------------------------|--------------------------|
| | | | [mm] | [mm] | [mm] | [mm] | | [mm] | [mm] | [kg] | [kg] |
| KR11 | KR11R | KR11SS | 42 | 28 | 20 | 4,5 | M4 | 12 | 2 | 0,10 | 0,12 |
| KR13 | KR13R | KR13SS | 50 | 36 | 22 | 4,5 | M4 | 12 | 2 | 0,16 | 0,18 |
| KR16 | KR16R | KR16SS | 52 | 38 | 25 | 5,5 | M5 | 14 | 2 | 0,18 | 0,20 |
| KR18 | KR18R | KR18SS | 54 | 40 | 30 | 5,5 | M5 | 14 | 3 | 0,20 | 0,23 |
| KR21 | KR21R | KR21SS | 62 | 48 | 35 | 6,6 | M6 | 14 | 3 | 0,24 | 0,28 |
| KR23 | KR23R | KR23SS | 64 | 50 | 36 | 6,6 | M6 | 15 | 3 | 0,26 | 0,30 |
| KR26 | KR26R | KR26SS | 70 | 56 | 40 | 6,6 | M8 | 15 | 3 | 0,34 | 0,40 |
| KR28 | KR28R | KR28SS | 78 | 60 | 46 | 9,0 | M8 | 18 | 3 | 0,47 | 0,54 |
| KR32 | KR32R | KR32SS | 82 | 65 | 50 | 9,0 | M8 | 18 | 3 | 0,52 | 0,62 |
| KR36 | KR36R | KR36SS | 90 | 70 | 52 | 9,0 | M8 | 18 | 3 | 0,62 | 0,72 |
| KR42 | KR42R | KR42SS | 95 | 75 | 60 | 11,0 | M8 | 22 | 3 | 0,82 | 0,94 |
| KR46 | KR46R | KR46SS | 100 | 80 | 65 | 11,0 | M8 | 24 | 3 | 0,96 | 1,08 |



Senkung | Counter bore
DIN 74-Km ...

| Bestell-Nr. Part no. | KR | z z | _/SS/R |
|-----------------------------|---------------------|-----|---|
| Klemmring Clamping collar | innerer Ø inner Ø | | _ = Stahl Steel / SS = Edelstahl Stainless steel / R = Bronze |