



Clarkson GmbH



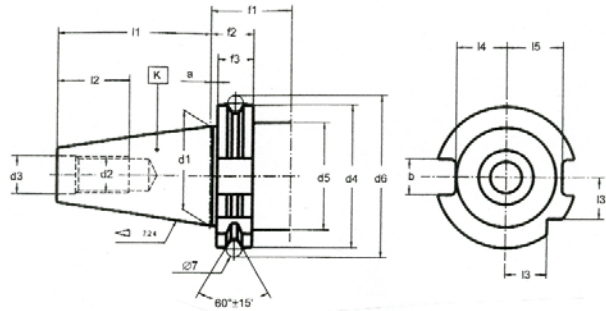
DIN 69871

07/2019

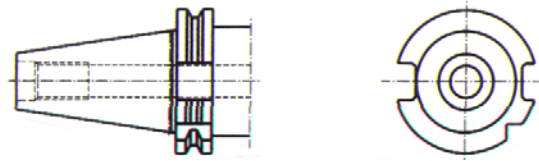


## Werkzeugaufnahme DIN 69871 Toolholders DIN 69871

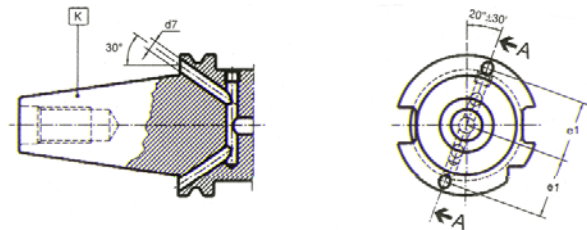
**Form: A**  
ohne Durchgangsbohrung  
**Form: A**  
without through hole



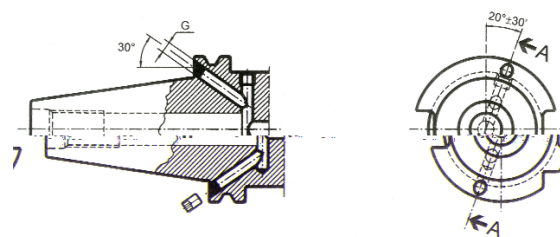
**Form: AD**  
mit Durchgangsbohrung  
**Form: AD**  
with through hole



**Form: B**  
mit innerer Kühlmittelzufuhr über den Bund  
**Form: B**  
with internal coolant through the flange



**Form: AD/B**  
mit innerer Kühlmittelzufuhr über den Bund  
(verschließbar). Bei Lieferung mit  
Gewindestiften verschlossen.  
**Form: AD/B**  
with internal coolant through the flange (clo-  
seable). Delivery with headless screws in  
closed position.



| K  | a   | b <sup>H12</sup> | d1    | d2  | d3 <sup>H7</sup> | d4    | d5max | d6±0,15 | d7 | l1     | l2min | l3   | l4   | l5   | f1 | f2 | f3   | e1 | G  |
|----|-----|------------------|-------|-----|------------------|-------|-------|---------|----|--------|-------|------|------|------|----|----|------|----|----|
| 30 | 3,2 | 16,1             | 31,75 | M12 | 13               | 50    | 45    | 59,3    | 4  | 47,8   | 24    | 15   | 16,4 | 19   | 35 | 19 | 15,9 | 21 | M4 |
| 40 | 3,2 | 16,1             | 44,45 | M16 | 17               | 63,55 | 50    | 72,3    | 4  | 68,4   | 32    | 18,5 | 22,8 | 25   | 35 | 19 | 15,9 | 27 | M4 |
| 50 | 3,2 | 25,7             | 69,85 | M24 | 25               | 97,5  | 80    | 107,25  | 6  | 101,75 | 47    | 30   | 35,5 | 37,7 | 35 | 19 | 15,9 | 42 | M6 |

**Werkstoff:**

Legierter Einzelstahl mit einer Zugfestigkeit im Kern von min. 1100 N/mm<sup>2</sup> Einsatzgehärtet HRC 60±2 (HV 700±50) Härtetiefe 0,8±2mm

**Genauigkeit:**

Kegelwinkel - Toleranzqualität AT 3 nach DIN 7187 und DIN 2080

**Material:**

alloyed case-hardened steel, tensile core strength of min. 1100 N/mm<sup>2</sup> Case hardened HRC 60±2 (HV 700±50) hardening depth 0,8±2mm

**Accuracy:**

Quality of taper AT 3 according to DIN 7187 and DIN 2080



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**Ersatzteile**  
**Spar-parts**

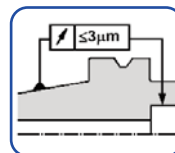
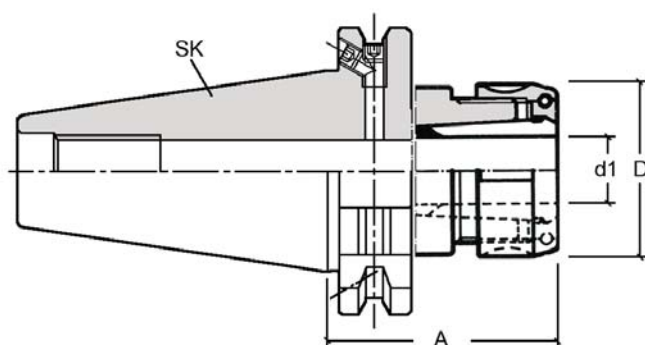


## Zangenfutter für OZ-Spannzangen DIN 6388

DIN69871 AD/B

### Collet chucks for OZ-Collets to DIN 6388

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Zange<br>Collet<br>OZ | Spannbereich<br>Capacity<br>d1 | A<br>mm | D<br>mm |
|-------------------------|----------------------|-----------------------|--------------------------------|---------|---------|
| 255.230.016.060*        | SK30                 | OZ16                  | 2-16                           | 60      | 43      |
| 255.230.025.080*        | SK30                 | OZ25                  | 2-25                           | 80      | 60      |
| 255.340.016.070         | SK40                 | OZ16                  | 2-16                           | 70      | 43      |
| 255.340.016.100         | SK40                 | OZ16                  | 2-16                           | 100     | 43      |
| 255.340.025.070         | SK40                 | OZ25                  | 2-25                           | 70      | 60      |
| 255.340.025.100         | SK40                 | OZ25                  | 2-25                           | 100     | 60      |
| 255.340.032.090         | SK40                 | OZ32                  | 3-32                           | 90      | 72      |
| 255.350.025.070         | SK50                 | OZ25                  | 2-25                           | 70      | 60      |
| 255.350.032.080         | SK50                 | OZ32                  | 3-32                           | 80      | 72      |
| 255.350.032.100         | SK50                 | OZ32                  | 3-32                           | 100     | 72      |

\*DIN 69871 Form AD



C09-10



C18



C01



C13-14-15

Lieferumfang:  
Mit kugellagerter Spannmutter  
Delivery:  
With ball bearing clamping nut

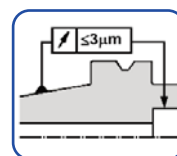
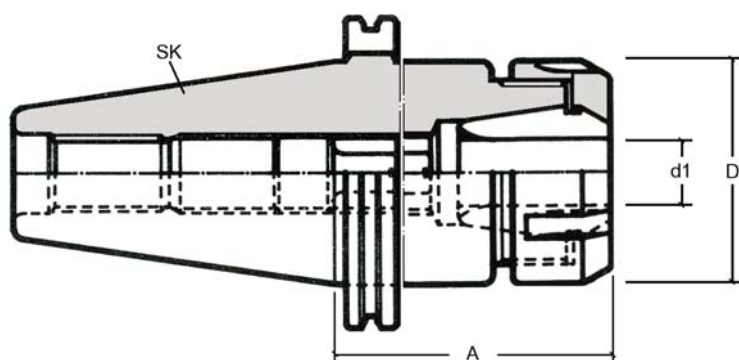


## Zangenfutter für ER-Spannzangen DIN 6499

DIN69871 AD

### Collet chucks for ER-Collets to DIN 6499

DIN69871 AD



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Zange<br>Collet<br>ER | Spannbereich<br>Capacity<br>d1 | A<br>mm | D<br>mm |
|-------------------------|----------------------|-----------------------|--------------------------------|---------|---------|
| 241.230.016.070         | SK30                 | ER16                  | 1-10                           | 70      | 32      |
| 241.230.016.100         | SK30                 | ER16                  | 1-10                           | 100     | 32      |
| 241.230.025.070         | SK30                 | ER25                  | 2-16                           | 70      | 42      |
| 241.230.025.100         | SK30                 | ER25                  | 2-16                           | 100     | 42      |
| 241.230.032.070         | SK30                 | ER32                  | 2-20                           | 70      | 50      |
| 241.230.032.100         | SK30                 | ER32                  | 2-20                           | 100     | 50      |
| 241.230.040.070         | SK30                 | ER40                  | 3-26                           | 70      | 63      |
| 241.240.016.063         | SK40                 | ER16                  | 1-10                           | 63      | 32      |
| 241.240.016.100         | SK40                 | ER16                  | 1-10                           | 100     | 32      |
| 241.240.016.160         | SK40                 | ER16                  | 1-10                           | 160     | 32      |
| 241.240.025.060         | SK40                 | ER25                  | 2-16                           | 60      | 42      |
| 241.240.025.100         | SK40                 | ER25                  | 2-16                           | 100     | 42      |
| 241.240.025.160         | SK40                 | ER25                  | 2-16                           | 160     | 42      |
| 241.240.032.070         | SK40                 | ER32                  | 2-20                           | 70      | 50      |
| 241.240.032.100         | SK40                 | ER32                  | 2-20                           | 100     | 50      |
| 241.240.032.160         | SK40                 | ER32                  | 2-20                           | 160     | 50      |
| 241.240.040.080         | SK40                 | ER40                  | 3-26                           | 80      | 63      |
| 241.240.040.100         | SK40                 | ER40                  | 3-26                           | 100     | 63      |
| 241.240.040.160         | SK40                 | ER40                  | 3-26                           | 160     | 63      |
| 241.250.016.063         | SK50                 | ER16                  | 1-10                           | 63      | 32      |
| 241.250.016.100         | SK50                 | ER16                  | 1-10                           | 100     | 32      |
| 241.250.016.160         | SK50                 | ER16                  | 1-10                           | 160     | 32      |
| 241.250.025.060         | SK50                 | ER25                  | 2-16                           | 60      | 42      |
| 241.250.025.100         | SK50                 | ER25                  | 2-16                           | 100     | 42      |
| 241.250.025.160         | SK50                 | ER25                  | 2-16                           | 160     | 42      |
| 241.250.032.070         | SK50                 | ER32                  | 2-20                           | 70      | 50      |
| 241.250.032.100         | SK50                 | ER32                  | 2-20                           | 100     | 50      |
| 241.250.032.160         | SK50                 | ER32                  | 2-20                           | 160     | 50      |
| 241.250.040.080         | SK50                 | ER40                  | 3-26                           | 80      | 63      |
| 241.250.040.100         | SK50                 | ER40                  | 3-26                           | 100     | 63      |
| 241.250.040.160         | SK50                 | ER40                  | 3-26                           | 160     | 63      |



Lieferumfang:  
Mit gewuchteter Spannmutter  
Delivery:  
With balanced clamping nut



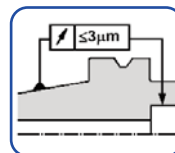
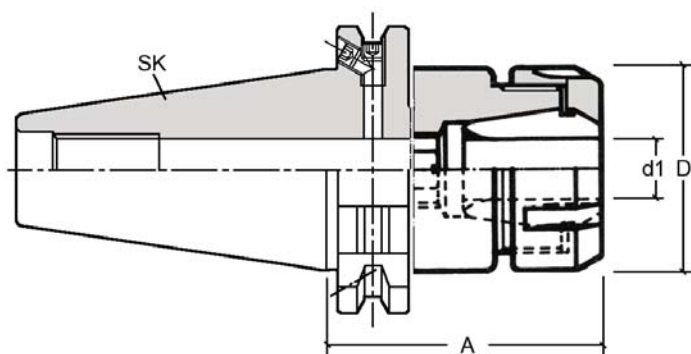


## Zangenfutter für ER-Spannzangen DIN 6499

DIN69871 AD/B

### Collet chucks for ER-Collets to DIN 6499

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Zange<br>Collet<br>ER | Spannbereich<br>Capacity<br>d1 | A<br>mm | D<br>mm |
|-------------------------|----------------------|-----------------------|--------------------------------|---------|---------|
| 241.340.016.063         | SK40                 | ER16                  | 1-10                           | 63      | 32      |
| 241.340.016.100         | SK40                 | ER16                  | 1-10                           | 100     | 32      |
| 241.340.016.160         | SK40                 | ER16                  | 1-10                           | 160     | 32      |
| 241.340.016.200         | SK40                 | ER16                  | 1-10                           | 200     | 32      |
| 241.340.025.060         | SK40                 | ER25                  | 2-16                           | 60      | 42      |
| 241.340.025.100         | SK40                 | ER25                  | 2-16                           | 100     | 42      |
| 241.340.025.160         | SK40                 | ER25                  | 2-16                           | 160     | 42      |
| 241.340.025.200         | SK40                 | ER25                  | 2-16                           | 200     | 42      |
| 241.340.032.070         | SK40                 | ER32                  | 2-20                           | 70      | 50      |
| 241.340.032.100         | SK40                 | ER32                  | 2-20                           | 100     | 50      |
| 241.340.032.160         | SK40                 | ER32                  | 2-20                           | 160     | 50      |
| 241.340.032.200         | SK40                 | ER32                  | 2-20                           | 200     | 50      |
| 241.340.040.080         | SK40                 | ER40                  | 3-26                           | 80      | 63      |
| 241.340.040.100         | SK40                 | ER40                  | 3-26                           | 100     | 63      |
| 241.340.040.160         | SK40                 | ER40                  | 3-26                           | 160     | 63      |
| 241.340.040.200         | SK40                 | ER40                  | 3-26                           | 200     | 63      |
| 241.350.016.063         | SK50                 | ER16                  | 1-10                           | 63      | 32      |
| 241.350.016.100         | SK50                 | ER16                  | 1-10                           | 100     | 32      |
| 241.350.016.160         | SK50                 | ER16                  | 1-10                           | 160     | 32      |
| 241.350.016.200         | SK50                 | ER16                  | 1-10                           | 200     | 32      |
| 241.350.025.060         | SK50                 | ER25                  | 2-16                           | 60      | 42      |
| 241.350.025.100         | SK50                 | ER25                  | 2-16                           | 100     | 42      |
| 241.350.025.160         | SK50                 | ER25                  | 2-16                           | 160     | 42      |
| 241.350.025.200         | SK50                 | ER25                  | 2-16                           | 200     | 42      |
| 241.350.032.070         | SK50                 | ER32                  | 2-20                           | 70      | 50      |
| 241.350.032.100         | SK50                 | ER32                  | 2-20                           | 100     | 50      |
| 241.350.032.160         | SK50                 | ER32                  | 2-20                           | 160     | 50      |
| 241.350.032.200         | SK50                 | ER32                  | 2-20                           | 200     | 50      |
| 241.350.040.080         | SK50                 | ER40                  | 3-26                           | 80      | 63      |
| 241.350.040.100         | SK50                 | ER40                  | 3-26                           | 100     | 63      |
| 241.350.040.160         | SK50                 | ER40                  | 3-26                           | 160     | 63      |
| 241.350.040.200         | SK50                 | ER40                  | 3-26                           | 200     | 63      |



Lieferumfang:  
Mit gewuchteter Spannmutter  
Delivery:  
Withbalanced clamping nut

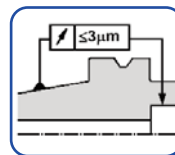
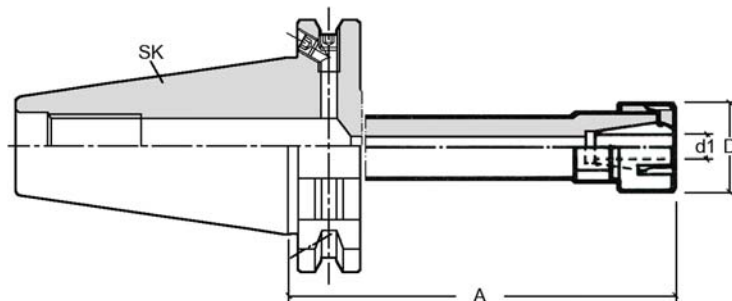


## Mini-Zangenfutter für ER-Spannzangen DIN 6499

DIN69871 AD/B

### Mini-Collet chucks for ER-Collets to DIN 6499

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Zange<br>Collet<br>ER | Spannbereich<br>Capacity<br>d1 | A<br>mm | D<br>mm |
|-------------------------|----------------------|-----------------------|--------------------------------|---------|---------|
| 242.340.011.070         | SK40                 | ER11                  | 1-7                            | 70      | 16      |
| 242.340.011.100         | SK40                 | ER11                  | 1-7                            | 100     | 16      |
| 242.340.011.160         | SK40                 | ER11                  | 1-7                            | 160     | 16      |
| 242.340.016.070         | SK40                 | ER16                  | 1-10                           | 70      | 22      |
| 242.340.016.100         | SK40                 | ER16                  | 1-10                           | 100     | 22      |
| 242.340.016.160         | SK40                 | ER16                  | 1-10                           | 160     | 22      |
| 242.340.025.070         | SK40                 | ER25                  | 1-16                           | 70      | 35      |
| 242.340.025.100         | SK40                 | ER25                  | 1-16                           | 100     | 35      |
| 242.340.025.160         | SK40                 | ER25                  | 1-16                           | 160     | 35      |



C09



C18



C02-03-04



C05



C13-14-15



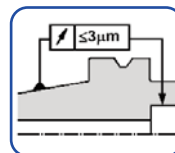
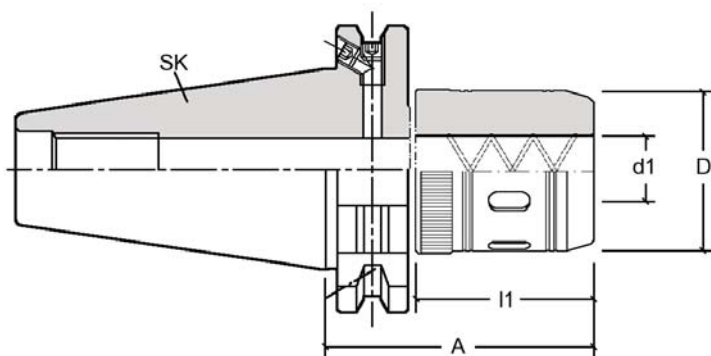


## Präzisions-Zangenkraftspannfutter

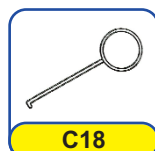
DIN69871 AD/B

### Precision Great Power Collet chuck

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Spannbereich<br>Capacity<br>d1 | l1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|--------------------------------|----------|---------|---------|
| 250.340.020.075         | SK40                 | 20                             | 60       | 75      | 46      |
| 250.340.020.105         | SK40                 | 20                             | 60       | 105     | 46      |
| 250.340.032.100         | SK40                 | 32                             | 80       | 100     | 62      |
| 250.340.032.120         | SK40                 | 32                             | 80       | 120     | 62      |
| 250.350.020.105         | SK50                 | 20                             | 60       | 105     | 46      |
| 250.350.032.085         | SK50                 | 32                             | 80       | 85      | 62      |
| 250.350.032.135         | SK50                 | 32                             | 80       | 135     | 62      |
| 250.350.040.100         | SK50                 | 40                             | 85       | 110     | 85      |
| 250.350.050.120         | SK50                 | 50                             | 90       | 120     | 99      |



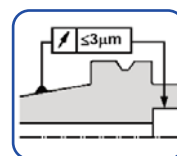
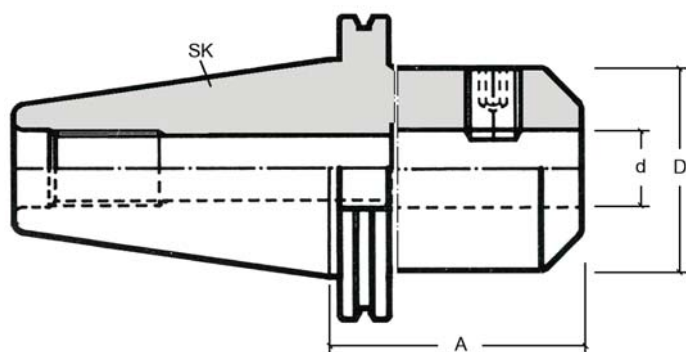


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

DIN69871 AD

Weldon chucks DIN 6359 for shanks to DIN1835B

DIN69871 AD



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.230.006.050         | SK30                 | 6       | 50      | 25      |
| 269.230.008.050         | SK30                 | 8       | 50      | 28      |
| 269.230.010.050         | SK30                 | 10      | 50      | 35      |
| 269.230.012.050         | SK30                 | 12      | 50      | 42      |
| 269.230.014.063         | SK30                 | 14      | 63      | 44      |
| 269.230.016.063         | SK30                 | 16      | 63      | 48      |
| 269.230.018.063         | SK30                 | 18      | 63      | 50      |
| 269.230.020.070         | SK30                 | 20      | 70      | 52      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.240.006.050         | SK40                 | 6       | 50      | 25      |
| 269.240.006.100         | SK40                 | 6       | 100     | 25      |
| 269.240.006.160         | SK40                 | 6       | 160     | 25      |
| 269.240.008.050         | SK40                 | 8       | 50      | 28      |
| 269.240.008.100         | SK40                 | 8       | 100     | 28      |
| 269.240.008.160         | SK40                 | 8       | 160     | 28      |
| 269.240.010.050         | SK40                 | 10      | 50      | 35      |
| 269.240.010.100         | SK40                 | 10      | 100     | 35      |
| 269.240.010.160         | SK40                 | 10      | 160     | 35      |
| 269.240.012.050         | SK40                 | 12      | 50      | 42      |
| 269.240.012.100         | SK40                 | 12      | 100     | 42      |
| 269.240.012.160         | SK40                 | 12      | 160     | 42      |
| 269.240.014.050         | SK40                 | 14      | 50      | 44      |
| 269.240.014.100         | SK40                 | 14      | 100     | 44      |
| 269.240.014.160         | SK40                 | 14      | 160     | 44      |
| 269.240.016.035         | SK40                 | 16      | 35      | 45      |
| 269.240.016.063         | SK40                 | 16      | 63      | 48      |
| 269.240.016.100         | SK40                 | 16      | 100     | 48      |
| 269.240.016.160         | SK40                 | 16      | 160     | 48      |
| 269.240.018.063         | SK40                 | 18      | 63      | 50      |
| 269.240.018.100         | SK40                 | 18      | 100     | 50      |
| 269.240.018.160         | SK40                 | 18      | 160     | 50      |
| 269.240.020.035         | SK40                 | 20      | 35      | 45      |
| 269.240.020.063         | SK40                 | 20      | 63      | 52      |
| 269.240.020.100         | SK40                 | 20      | 100     | 52      |
| 269.240.020.160         | SK40                 | 20      | 160     | 52      |
| 269.240.025.035         | SK40                 | 25      | 35      | 50      |
| 269.240.025.100         | SK40                 | 25      | 100     | 63      |
| 269.240.025.160         | SK40                 | 25      | 160     | 63      |
| 269.240.032.065         | SK40                 | 32      | 65      | 50      |
| 269.240.032.100         | SK40                 | 32      | 100     | 72      |
| 269.240.032.160         | SK40                 | 32      | 160     | 72      |
| 269.240.040.120         | SK40                 | 40      | 120     | 80      |



C16



C13-14-15

Hinweis:  
Ab Ød 25mm mit 2 Spannschrauben  
Note:  
From Ød 25mm with 2 clamping screws

Lieferumfang:  
Mit Spannschraube(n)  
Delivery:  
With clamping screw(s)

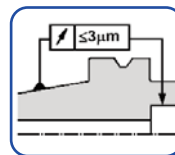
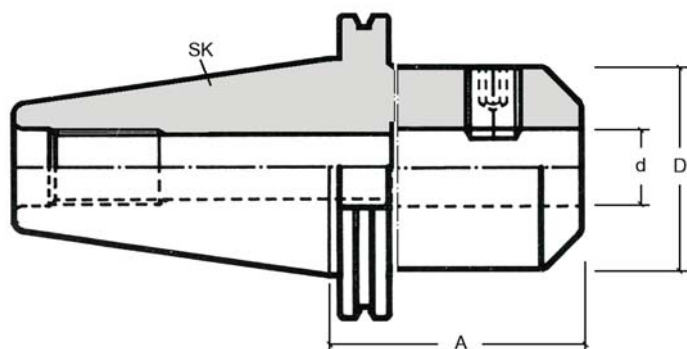


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

DIN69871 AD

Weldon chucks DIN 6359 for shanks to DIN1835B

DIN69871 AD



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.250.006.063         | SK50                 | 6       | 63      | 25      |
| 269.250.006.100         | SK50                 | 6       | 100     | 25      |
| 269.250.006.160         | SK50                 | 6       | 160     | 25      |
| 269.250.008.063         | SK50                 | 8       | 63      | 28      |
| 269.250.008.100         | SK50                 | 8       | 100     | 28      |
| 269.250.008.160         | SK50                 | 8       | 160     | 28      |
| 269.250.010.063         | SK50                 | 10      | 63      | 35      |
| 269.250.010.100         | SK50                 | 10      | 100     | 35      |
| 269.250.010.160         | SK50                 | 10      | 160     | 35      |
| 269.250.012.063         | SK50                 | 12      | 63      | 42      |
| 269.250.012.100         | SK50                 | 12      | 100     | 42      |
| 269.250.012.160         | SK50                 | 12      | 160     | 42      |
| 269.250.014.063         | SK50                 | 14      | 63      | 44      |
| 269.250.014.100         | SK50                 | 14      | 100     | 44      |
| 269.250.014.160         | SK50                 | 14      | 160     | 44      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.250.016.063         | SK50                 | 16      | 63      | 48      |
| 269.250.016.100         | SK50                 | 16      | 100     | 48      |
| 269.250.016.160         | SK50                 | 16      | 160     | 48      |
| 269.250.018.063         | SK50                 | 18      | 63      | 50      |
| 269.250.018.100         | SK50                 | 18      | 100     | 50      |
| 269.250.018.160         | SK50                 | 18      | 160     | 50      |
| 269.250.020.063         | SK50                 | 20      | 63      | 52      |
| 269.250.020.100         | SK50                 | 20      | 100     | 52      |
| 269.250.020.160         | SK50                 | 20      | 160     | 52      |
| 269.250.025.080         | SK50                 | 25      | 80      | 65      |
| 269.250.025.120         | SK50                 | 25      | 120     | 65      |
| 269.250.025.160         | SK50                 | 25      | 160     | 65      |
| 269.250.032.100         | SK50                 | 32      | 100     | 72      |
| 269.250.032.160         | SK50                 | 32      | 160     | 72      |
| 269.250.040.100         | SK50                 | 40      | 100     | 80      |
| 269.250.040.160         | SK50                 | 40      | 160     | 80      |



Hinweis:  
Ab Ød 25mm mit 2 Spannschrauben  
Note:  
From Ød 25mm with 2 clamping screws

Lieferumfang:  
Mit Spannschraube(n)  
Delivery:  
With clamping screw(s)

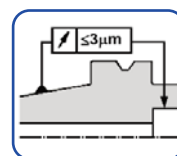
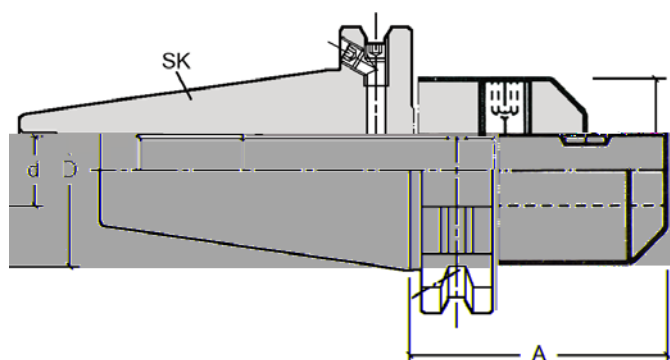


## Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

DIN69871 AD/B

## Weldon chucks DIN 6359 for shanks to DIN1835B

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.340.006.050         | SK40                 | 6       | 50      | 25      |
| 269.340.006.100         | SK40                 | 6       | 100     | 25      |
| 269.340.006.130         | SK40                 | 6       | 130     | 25      |
| 269.340.006.160         | SK40                 | 6       | 160     | 25      |
| 269.340.006.200         | SK40                 | 6       | 200     | 25      |
| 269.340.008.050         | SK40                 | 8       | 50      | 28      |
| 269.340.008.100         | SK40                 | 8       | 100     | 28      |
| 269.340.008.130         | SK40                 | 8       | 130     | 28      |
| 269.340.008.160         | SK40                 | 8       | 160     | 28      |
| 269.340.008.200         | SK40                 | 8       | 200     | 28      |
| 269.340.010.050         | SK40                 | 10      | 50      | 35      |
| 269.340.010.100         | SK40                 | 10      | 100     | 35      |
| 269.340.010.130         | SK40                 | 10      | 130     | 35      |
| 269.340.010.160         | SK40                 | 10      | 160     | 35      |
| 269.340.010.200         | SK40                 | 10      | 200     | 35      |
| 269.340.012.050         | SK40                 | 12      | 50      | 42      |
| 269.340.012.100         | SK40                 | 12      | 100     | 42      |
| 269.340.012.130         | SK40                 | 12      | 130     | 42      |
| 269.340.012.160         | SK40                 | 12      | 160     | 42      |
| 269.340.012.200         | SK40                 | 12      | 200     | 42      |
| 269.340.014.050         | SK40                 | 14      | 50      | 44      |
| 269.340.014.100         | SK40                 | 14      | 100     | 44      |
| 269.340.014.130         | SK40                 | 14      | 130     | 44      |
| 269.340.014.160         | SK40                 | 14      | 160     | 44      |
| 269.340.014.200         | SK40                 | 14      | 200     | 44      |
| 269.340.016.035         | SK40                 | 16      | 35      | 45      |
| 269.340.016.063         | SK40                 | 16      | 63      | 48      |
| 269.340.016.100         | SK40                 | 16      | 100     | 48      |
| 269.340.016.130         | SK40                 | 16      | 130     | 48      |
| 269.340.016.160         | SK40                 | 16      | 160     | 48      |
| 269.340.016.200         | SK40                 | 16      | 200     | 48      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.340.018.063         | SK40                 | 18      | 63      | 50      |
| 269.340.018.100         | SK40                 | 18      | 100     | 50      |
| 269.340.018.130         | SK40                 | 18      | 130     | 50      |
| 269.340.018.160         | SK40                 | 18      | 160     | 50      |
| 269.340.018.200         | SK40                 | 18      | 200     | 50      |
| 269.340.020.035         | SK40                 | 20      | 35      | 45      |
| 269.340.020.063         | SK40                 | 20      | 63      | 52      |
| 269.340.020.100         | SK40                 | 20      | 100     | 52      |
| 269.340.020.130         | SK40                 | 20      | 130     | 52      |
| 269.340.020.160         | SK40                 | 20      | 160     | 52      |
| 269.340.020.200         | SK40                 | 20      | 200     | 52      |
| 269.340.025.035         | SK40                 | 25      | 35      | 50      |
| 269.340.025.100         | SK40                 | 25      | 100     | 63      |
| 269.340.025.130         | SK40                 | 25      | 130     | 63      |
| 269.340.025.160         | SK40                 | 25      | 160     | 63      |
| 269.340.025.200         | SK40                 | 25      | 200     | 63      |
| 269.340.032.065         | SK40                 | 32      | 65      | 50      |
| 269.340.032.100         | SK40                 | 32      | 100     | 72      |
| 269.340.032.130         | SK40                 | 32      | 130     | 72      |
| 269.340.032.160         | SK40                 | 32      | 160     | 72      |
| 269.340.040.120         | SK40                 | 40      | 120     | 80      |



C16



C13-14-15

**Hinweis:**  
Ab Ød 25mm mit 2 Spannschrauben  
**Note:**  
From Ød 25mm with 2 clamping screws

**Lieferumfang:**  
Mit Spannschraube(n)  
**Delivery:**  
With clamping screw(s)

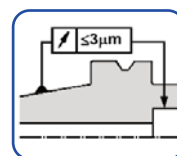
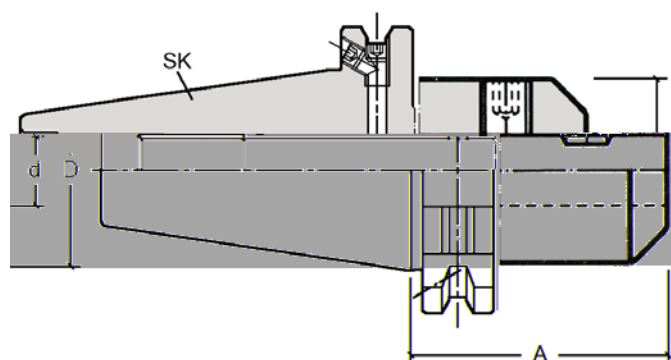


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

DIN69871 AD/B

Weldon chucks DIN 6359 for shanks to DIN1835B

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.350.006.063         | SK50                 | 6       | 63      | 25      |
| 269.350.006.100         | SK50                 | 6       | 100     | 25      |
| 269.350.006.130         | SK50                 | 6       | 130     | 25      |
| 269.350.006.160         | SK50                 | 6       | 160     | 25      |
| 269.350.006.200         | SK50                 | 6       | 200     | 25      |
| 269.350.008.063         | SK50                 | 8       | 63      | 28      |
| 269.350.008.100         | SK50                 | 8       | 100     | 28      |
| 269.350.008.130         | SK50                 | 8       | 130     | 28      |
| 269.350.008.160         | SK50                 | 8       | 160     | 28      |
| 269.350.008.200         | SK50                 | 8       | 200     | 28      |
| 269.350.010.063         | SK50                 | 10      | 63      | 35      |
| 269.350.010.100         | SK50                 | 10      | 100     | 35      |
| 269.350.010.130         | SK50                 | 10      | 130     | 35      |
| 269.350.010.160         | SK50                 | 10      | 160     | 35      |
| 269.350.010.200         | SK50                 | 10      | 200     | 35      |
| 269.350.012.063         | SK50                 | 12      | 63      | 42      |
| 269.350.012.100         | SK50                 | 12      | 100     | 42      |
| 269.350.012.130         | SK50                 | 12      | 130     | 42      |
| 269.350.012.160         | SK50                 | 12      | 160     | 42      |
| 269.350.012.200         | SK50                 | 12      | 200     | 42      |
| 269.350.014.063         | SK50                 | 14      | 63      | 44      |
| 269.350.014.100         | SK50                 | 14      | 100     | 44      |
| 269.350.014.130         | SK50                 | 14      | 130     | 44      |
| 269.350.014.160         | SK50                 | 14      | 160     | 44      |
| 269.350.014.200         | SK50                 | 14      | 200     | 44      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 269.350.016.063         | SK50                 | 16      | 63      | 48      |
| 269.350.016.100         | SK50                 | 16      | 100     | 48      |
| 269.350.016.130         | SK50                 | 16      | 130     | 48      |
| 269.350.016.160         | SK50                 | 16      | 160     | 48      |
| 269.350.016.200         | SK50                 | 16      | 200     | 48      |
| 269.350.018.063         | SK50                 | 18      | 63      | 50      |
| 269.350.018.100         | SK50                 | 18      | 100     | 50      |
| 269.350.018.130         | SK50                 | 18      | 130     | 50      |
| 269.350.018.160         | SK50                 | 18      | 160     | 50      |
| 269.350.018.200         | SK50                 | 18      | 200     | 50      |
| 269.350.020.063         | SK50                 | 20      | 63      | 52      |
| 269.350.020.100         | SK50                 | 20      | 100     | 52      |
| 269.350.020.130         | SK50                 | 20      | 130     | 52      |
| 269.350.020.160         | SK50                 | 20      | 160     | 52      |
| 269.350.020.200         | SK50                 | 20      | 200     | 52      |
| 269.350.025.080         | SK50                 | 25      | 80      | 65      |
| 269.350.025.120         | SK50                 | 25      | 120     | 65      |
| 269.350.025.130         | SK50                 | 25      | 130     | 65      |
| 269.350.025.160         | SK50                 | 25      | 160     | 65      |
| 269.350.032.100         | SK50                 | 32      | 100     | 72      |
| 269.350.032.130         | SK50                 | 32      | 130     | 72      |
| 269.350.032.160         | SK50                 | 32      | 160     | 72      |
| 269.350.040.100         | SK50                 | 40      | 100     | 80      |
| 269.350.040.160         | SK50                 | 40      | 160     | 80      |
| 269.350.050.120         | SK50                 | 50      | 120     | 120     |



C16



C13-14-15

**Hinweis:**  
Ab Ød 25mm mit 2 Spannschrauben  
**Note:**  
From Ød 25mm with 2 clamping screws

**Lieferumfang:**  
Mit Spannschraube(n)  
**Delivery:**  
With clamping screw(s)

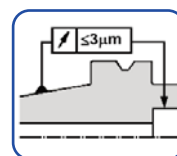
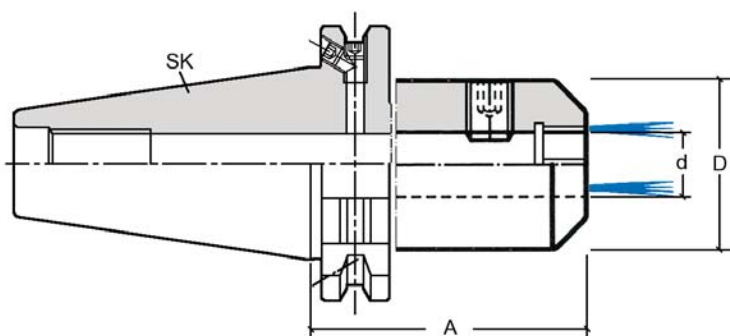


Fräsfutter DIN 6359 für Zylinderschäfte DIN1835B

DIN69871 AD/B

Weldon chucks DIN 6359 for shanks to DIN1835B

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 279.340.006.050         | SK40                 | 6       | 50      | 25      |
| 279.340.006.100         | SK40                 | 6       | 100     | 25      |
| 279.340.008.050         | SK40                 | 8       | 50      | 28      |
| 279.340.008.100         | SK40                 | 8       | 100     | 28      |
| 279.340.010.050         | SK40                 | 10      | 50      | 35      |
| 279.340.010.100         | SK40                 | 10      | 100     | 35      |
| 279.340.012.050         | SK40                 | 12      | 50      | 42      |
| 279.340.012.100         | SK40                 | 12      | 100     | 42      |
| 279.340.014.050         | SK40                 | 14      | 50      | 44      |
| 279.340.014.100         | SK40                 | 14      | 100     | 44      |
| 279.340.016.063         | SK40                 | 16      | 63      | 48      |
| 279.340.016.100         | SK40                 | 16      | 100     | 48      |
| 279.340.018.063         | SK40                 | 18      | 63      | 50      |
| 279.340.018.100         | SK40                 | 18      | 100     | 50      |
| 279.340.020.063         | SK40                 | 20      | 63      | 52      |
| 279.340.020.100         | SK40                 | 20      | 100     | 52      |
| 279.340.025.100         | SK40                 | 25      | 100     | 65      |
| 279.340.032.100         | SK40                 | 32      | 100     | 72      |
| 279.340.040.120         | SK40                 | 40      | 120     | 80      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 279.350.006.063         | SK50                 | 6       | 63      | 25      |
| 279.350.006.100         | SK50                 | 6       | 100     | 25      |
| 279.350.008.063         | SK50                 | 8       | 63      | 28      |
| 279.350.008.100         | SK50                 | 8       | 100     | 28      |
| 279.350.010.063         | SK50                 | 10      | 63      | 35      |
| 279.350.010.100         | SK50                 | 10      | 100     | 35      |
| 279.350.012.063         | SK50                 | 12      | 63      | 42      |
| 279.350.012.100         | SK50                 | 12      | 100     | 42      |
| 279.350.014.063         | SK50                 | 14      | 63      | 44      |
| 279.350.014.100         | SK50                 | 14      | 100     | 44      |
| 279.350.016.063         | SK50                 | 16      | 63      | 48      |
| 279.350.016.100         | SK50                 | 16      | 100     | 48      |
| 279.350.018.063         | SK50                 | 18      | 63      | 50      |
| 279.350.018.100         | SK50                 | 18      | 100     | 50      |
| 279.350.020.063         | SK50                 | 20      | 63      | 52      |
| 279.350.020.100         | SK50                 | 20      | 100     | 52      |
| 279.350.025.080         | SK50                 | 25      | 80      | 65      |
| 279.350.032.100         | SK50                 | 32      | 100     | 72      |
| 279.350.040.100         | SK50                 | 40      | 100     | 80      |



C16



C13-14-15

Hinweis:  
 Ab Ød 25mm mit 2 Spannschrauben  
 von Ød 6 bis 14mm mit 2 Kühlkanälen  
 von Ød 16 bis 40mm mit 4 Kühlkanälen  
 Für Werkzeuge mit IK ist ein O-Ring erforderlich

Lieferumfang:  
 Mit Spannschraube(n) und O-Ring  
 Delivery:  
 With clamping screw(s) and O-ring

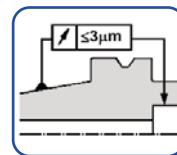
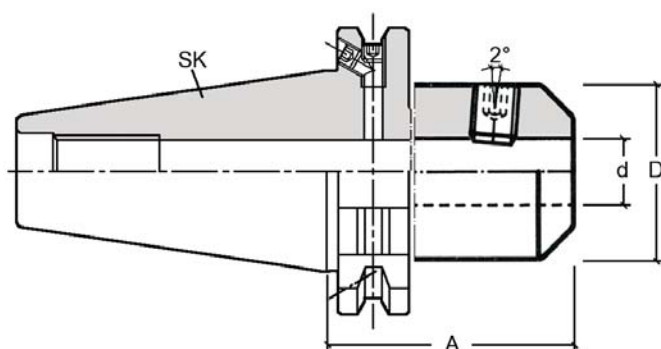




Fräsfutter DIN 6359 Whistle Notch für Zylinderschäfte DIN1835E DIN69871 AD/B

Whistle Notch chucks DIN 6359 for shanks to DIN1835E

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 268.340.006.050         | SK40                 | 6       | 50      | 25      |
| 268.340.008.050         | SK40                 | 8       | 50      | 28      |
| 268.340.010.050         | SK40                 | 10      | 50      | 35      |
| 268.340.012.050         | SK40                 | 12      | 50      | 42      |
| 268.340.014.050         | SK40                 | 14      | 50      | 44      |
| 268.340.016.063         | SK40                 | 16      | 63      | 48      |
| 268.340.018.063         | SK40                 | 18      | 63      | 50      |
| 268.340.020.063         | SK40                 | 20      | 63      | 52      |
| 268.340.025.100         | SK40                 | 25      | 100     | 65      |
| 268.340.032.100         | SK40                 | 32      | 100     | 72      |
| 268.340.040.120         | SK40                 | 40      | 120     | 80      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|---------|
| 268.350.006.063         | SK50                 | 6       | 63      | 25      |
| 268.350.008.063         | SK50                 | 8       | 63      | 28      |
| 268.350.010.063         | SK50                 | 10      | 63      | 35      |
| 268.350.012.063         | SK50                 | 12      | 63      | 42      |
| 268.350.014.063         | SK50                 | 14      | 63      | 44      |
| 268.350.016.063         | SK50                 | 16      | 63      | 48      |
| 268.350.018.063         | SK50                 | 18      | 63      | 50      |
| 268.350.020.063         | SK50                 | 20      | 63      | 52      |
| 268.350.025.080         | SK50                 | 25      | 80      | 65      |
| 268.350.032.100         | SK50                 | 32      | 100     | 72      |
| 268.350.040.100         | SK50                 | 40      | 100     | 80      |



Hinweis:  
Ab Ød 25mm mit 2 Spannschrauben  
Note:  
From Ød 25mm with 2 clamping screws

Lieferumfang:  
Mit Spannschraube(n) und axialer  
Anschlagschraube  
Delivery:  
With clamping screw(s) and stop screw

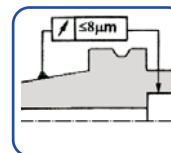
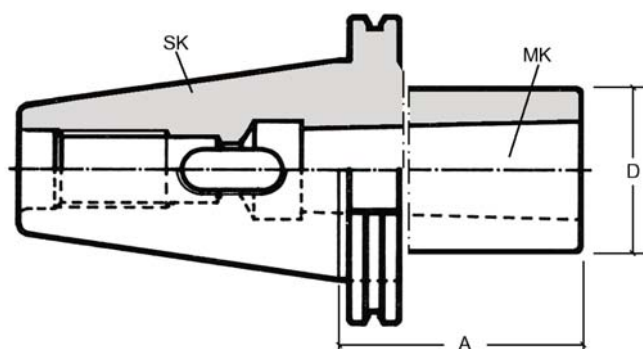


Zwischenhülse für MK mit Austreibblappen DIN 6383

DIN69871 AD(B)

Morse taper adaptor for MT with tang DIN 6383

DIN69871 AD(B)



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Morse Kegel<br>Morse Taper<br>MK | A<br>mm | D<br>mm |
|-------------------------|----------------------|----------------------------------|---------|---------|
| 220.230.001.050         | SK30                 | 1                                | 50      | 25      |
| 220.230.002.065         | SK30                 | 2                                | 65      | 32      |
| 220.230.003.080         | SK30                 | 3                                | 80      | 40      |
| 220.240.001.050         | SK40                 | 1                                | 50      | 25      |
| 220.240.002.050         | SK40                 | 2                                | 50      | 32      |
| 220.240.002.117         | SK40                 | 2                                | 117     | 32      |
| 220.240.003.070         | SK40                 | 3                                | 70      | 40      |
| 220.240.003.133         | SK40                 | 3                                | 133     | 40      |
| 220.240.004.095         | SK40                 | 4                                | 95      | 48      |
| 220.240.004.156         | SK40                 | 4                                | 156     | 48      |
| 220.340.001.050*        | SK40                 | 1                                | 50      | 25      |
| 220.340.002.050*        | SK40                 | 2                                | 50      | 32      |
| 220.340.003.070*        | SK40                 | 3                                | 70      | 40      |
| 220.340.004.095*        | SK40                 | 4                                | 95      | 48      |
| 220.250.001.045         | SK50                 | 1                                | 45      | 25      |
| 220.250.002.060         | SK50                 | 2                                | 60      | 32      |
| 220.250.002.117         | SK50                 | 2                                | 117     | 32      |
| 220.250.003.065         | SK50                 | 3                                | 65      | 40      |
| 220.250.003.137         | SK50                 | 3                                | 137     | 40      |
| 220.250.004.095         | SK50                 | 4                                | 95      | 48      |
| 220.250.004.167         | SK50                 | 4                                | 167     | 48      |
| 220.250.005.105         | SK50                 | 5                                | 105     | 63      |
| 220.250.005.197         | SK50                 | 5                                | 197     | 63      |
| 220.350.001.045*        | SK50                 | 1                                | 45      | 25      |
| 220.350.002.060*        | SK50                 | 2                                | 60      | 32      |
| 220.350.003.065*        | SK50                 | 3                                | 65      | 40      |
| 220.350.004.095*        | SK50                 | 4                                | 95      | 48      |
| 220.350.005.105*        | SK50                 | 5                                | 105     | 63      |



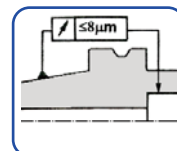
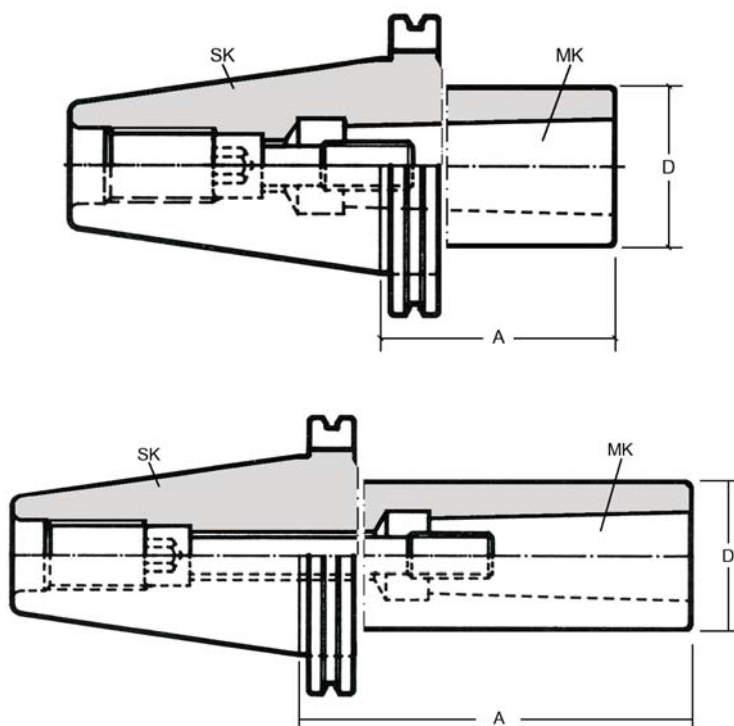


Zwischenhülse für MK mit Anzugsgewinde DIN 6364

DIN69871 A

*Morse taper adaptor for MT with tang DIN 6364*

*DIN69871 A*



| Bestell Nr.<br><i>Code No.</i> | Kegel<br><i>Taper</i><br>SK | Morse Kegel<br><i>Morse Taper</i><br>MK | M   | A<br>mm | D<br>mm |
|--------------------------------|-----------------------------|---|-----|---------|---------|
| 221.240.001.050                | SK40                        | 1                                       | M6  | 50      | 25      |
| 221.240.002.050                | SK40                        | 2                                       | M10 | 50      | 32      |
| 221.240.003.070                | SK40                        | 3                                       | M12 | 70      | 40      |
| 221.240.004.095                | SK40                        | 4                                       | M16 | 95      | 48      |
| 224.240.004.110                | SK40                        | 4                                       | M16 | 110     | 63      |
| 221.250.001.045                | SK50                        | 1                                       | M6  | 45      | 25      |
| 221.250.002.060                | SK50                        | 2                                       | M10 | 60      | 32      |
| 221.250.003.065                | SK50                        | 3                                       | M12 | 65      | 40      |
| 221.250.004.070                | SK50                        | 4                                       | M16 | 70      | 48      |
| 224.250.004.085                | SK50                        | 4                                       | M16 | 85      | 63      |
| 221.250.005.100                | SK50                        | 5                                       | M20 | 100     | 63      |
| 224.250.005.118                | SK50                        | 5                                       | M20 | 118     | 78      |



Lieferumfang:  
Mit Fräseranzugsschraube  
*Delivery:*  
*With tightening bold*

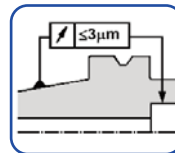
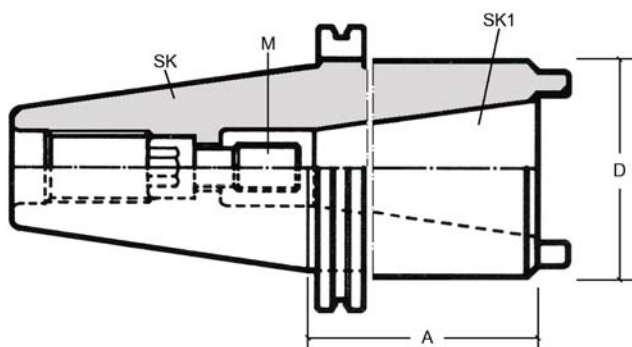


## Zwischenhülse für SK-Aufnahmen

DIN69871 A

### Adapter sleeves for toolholder with ISO taper

DIN69871 A



| Bestell Nr.<br><i>Code No.</i> | Kegel<br><i>Taper</i><br>SK | Morse Kegel<br><i>Morse Taper</i><br>SK1 | M   | A<br>mm | D<br>mm |
|--------------------------------|-----------------------------|--|-----|---------|---------|
| 252.240.030.050                | SK40                        | SK30                                     | M12 | 50      | 50      |
| 252.240.040.100                | SK40                        | SK40                                     | M16 | 100     | 63      |
| 252.250.040.070                | SK50                        | SK40                                     | M16 | 70      | 70      |
| 252.250.050.120                | SK50                        | SK50                                     | M24 | 120     | 97      |



Lieferumfang:  
Mit Fräseranzugsschraube  
*Delivery:*  
*With tightening bolt*

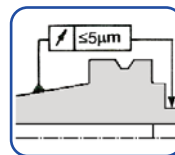
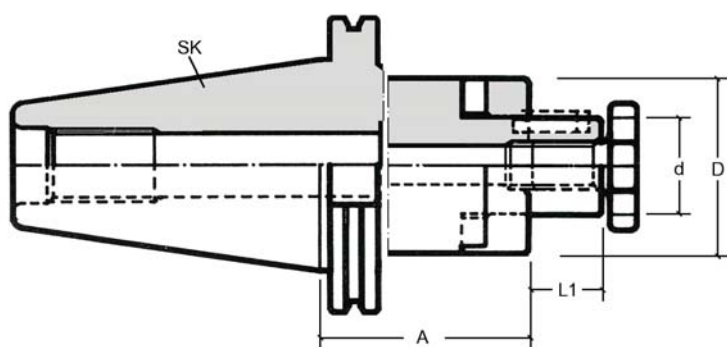


## Kombi-Aufsteckfräserdorne DIN 6358

DIN69871 AD

### Combi shell mill holders DIN 6358

DIN69871 AD



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | L1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|----------|---------|---------|
| 238.230.016.050         | SK30                 | 16      | 17       | 50      | 32      |
| 238.230.022.050         | SK30                 | 22      | 19       | 50      | 40      |
| 238.230.027.055         | SK30                 | 27      | 21       | 55      | 48      |
| 238.230.032.060         | SK30                 | 32      | 24       | 60      | 58      |
| 238.240.016.055         | SK40                 | 16      | 17       | 55      | 32      |
| 238.240.016.100         | SK40                 | 16      | 17       | 100     | 32      |
| 238.240.016.160         | SK40                 | 16      | 17       | 160     | 32      |
| 238.240.022.055         | SK40                 | 22      | 19       | 55      | 40      |
| 238.240.022.100         | SK40                 | 22      | 19       | 100     | 40      |
| 238.240.022.160         | SK40                 | 22      | 19       | 160     | 40      |
| 238.240.027.055         | SK40                 | 27      | 21       | 55      | 48      |
| 238.240.027.100         | SK40                 | 27      | 21       | 100     | 48      |
| 238.240.027.160         | SK40                 | 27      | 21       | 160     | 48      |
| 238.240.032.060         | SK40                 | 32      | 24       | 60      | 58      |
| 238.240.032.100         | SK40                 | 32      | 24       | 100     | 58      |
| 238.240.032.160         | SK40                 | 32      | 24       | 160     | 58      |
| 238.240.040.060         | SK40                 | 40      | 27       | 60      | 70      |
| 238.240.040.100         | SK40                 | 40      | 27       | 100     | 70      |
| 238.240.040.160         | SK40                 | 40      | 27       | 160     | 70      |
| 238.250.016.055         | SK50                 | 16      | 17       | 55      | 32      |
| 238.250.016.100         | SK50                 | 16      | 17       | 100     | 32      |
| 238.250.016.160         | SK50                 | 16      | 17       | 160     | 32      |
| 238.250.022.055         | SK50                 | 22      | 19       | 55      | 40      |
| 238.250.022.100         | SK50                 | 22      | 19       | 100     | 40      |
| 238.250.022.160         | SK50                 | 22      | 19       | 160     | 40      |
| 238.250.027.055         | SK50                 | 27      | 21       | 55      | 48      |
| 238.250.027.100         | SK50                 | 27      | 21       | 100     | 48      |
| 238.250.027.160         | SK50                 | 27      | 21       | 160     | 48      |
| 238.250.032.055         | SK50                 | 32      | 24       | 55      | 58      |
| 238.250.032.100         | SK50                 | 32      | 24       | 100     | 58      |
| 238.250.032.160         | SK50                 | 32      | 24       | 160     | 58      |
| 238.250.040.055         | SK50                 | 40      | 27       | 55      | 70      |
| 238.250.040.100         | SK50                 | 40      | 27       | 100     | 70      |
| 238.250.040.160         | SK50                 | 40      | 27       | 160     | 70      |



Lieferumfang:  
Mit Fräseranzugsschraube, Mitnehmerring und Passfeder  
Delivery:  
With retaining screw, driving ring and feather key

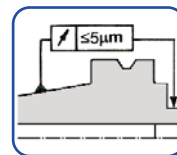
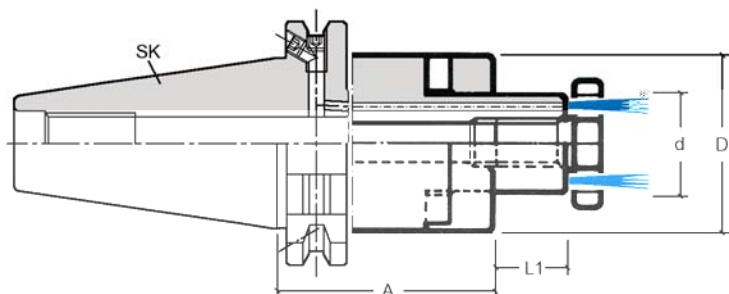


## Kombi-Aufsteckfräserdorne DIN 6358

DIN69871 AD/B

### Combi shell mill holders DIN 6358

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | L1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|----------|---------|---------|
| 237.340.016.055         | SK40                 | 16      | 17       | 55      | 32      |
| 237.340.016.100         | SK40                 | 16      | 17       | 100     | 32      |
| 237.340.016.130         | SK40                 | 16      | 17       | 130     | 32      |
| 237.340.016.160         | SK40                 | 16      | 17       | 160     | 32      |
| 237.340.016.200         | SK40                 | 16      | 17       | 200     | 32      |
| 237.340.022.055         | SK40                 | 22      | 19       | 55      | 40      |
| 237.340.022.100         | SK40                 | 22      | 19       | 100     | 40      |
| 237.340.022.130         | SK40                 | 22      | 19       | 130     | 40      |
| 237.340.022.160         | SK40                 | 22      | 19       | 160     | 40      |
| 237.340.022.200         | SK40                 | 22      | 19       | 200     | 40      |
| 237.340.027.055         | SK40                 | 27      | 21       | 55      | 48      |
| 237.340.027.100         | SK40                 | 27      | 21       | 100     | 48      |
| 237.340.027.130         | SK40                 | 27      | 21       | 130     | 48      |
| 237.340.027.160         | SK40                 | 27      | 21       | 160     | 48      |
| 237.340.027.200         | SK40                 | 27      | 21       | 200     | 48      |
| 237.340.032.060         | SK40                 | 32      | 24       | 60      | 58      |
| 237.340.032.100         | SK40                 | 32      | 24       | 100     | 58      |
| 237.340.032.130         | SK40                 | 32      | 24       | 130     | 58      |
| 237.340.032.160         | SK40                 | 32      | 24       | 160     | 58      |
| 237.340.032.200         | SK40                 | 32      | 24       | 200     | 58      |
| 237.340.040.060         | SK40                 | 40      | 27       | 60      | 70      |
| 237.340.040.100         | SK40                 | 40      | 27       | 100     | 70      |
| 237.340.040.160         | SK40                 | 40      | 27       | 160     | 70      |



Lieferumfang:  
Mit Fräseranzugsschraube, Mitnehmerring und  
Passfeder  
Delivery:  
With retaining screw, driving ring and feather key



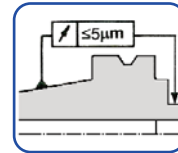
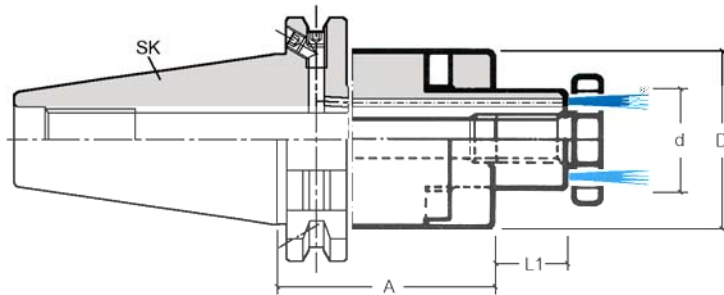


## Kombi-Aufsteckfräserdorne DIN 6358

DIN69871 AD/B

### Combi shell mill holders DIN 6358

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | L1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|----------|---------|---------|
| 237.350.016.055         | SK50                 | 16      | 17       | 55      | 32      |
| 237.350.016.100         | SK50                 | 16      | 17       | 100     | 32      |
| 237.350.016.130         | SK50                 | 16      | 17       | 130     | 32      |
| 237.350.016.160         | SK50                 | 16      | 17       | 160     | 32      |
| 237.350.016.200         | SK50                 | 16      | 17       | 200     | 32      |
| 237.350.022.055         | SK50                 | 22      | 19       | 55      | 40      |
| 237.350.022.100         | SK50                 | 22      | 19       | 100     | 40      |
| 237.350.022.130         | SK50                 | 22      | 19       | 130     | 40      |
| 237.350.022.160         | SK50                 | 22      | 19       | 160     | 40      |
| 237.350.022.200         | SK50                 | 22      | 19       | 200     | 40      |
| 237.350.027.055         | SK50                 | 27      | 21       | 55      | 48      |
| 237.350.027.100         | SK50                 | 27      | 21       | 100     | 48      |
| 237.350.027.130         | SK50                 | 27      | 21       | 130     | 48      |
| 237.350.027.160         | SK50                 | 27      | 21       | 160     | 48      |
| 237.350.027.200         | SK50                 | 27      | 21       | 200     | 48      |
| 237.350.032.055         | SK50                 | 32      | 24       | 55      | 58      |
| 237.350.032.100         | SK50                 | 32      | 24       | 100     | 58      |
| 237.350.032.130         | SK50                 | 32      | 24       | 130     | 58      |
| 237.350.032.160         | SK50                 | 32      | 24       | 160     | 58      |
| 237.350.032.200         | SK50                 | 32      | 24       | 200     | 58      |
| 237.350.040.055         | SK50                 | 40      | 27       | 55      | 70      |
| 237.350.040.100         | SK50                 | 40      | 27       | 100     | 70      |
| 237.350.040.130         | SK50                 | 40      | 27       | 130     | 70      |
| 237.350.040.160         | SK50                 | 40      | 27       | 160     | 70      |
| 237.350.040.200         | SK50                 | 40      | 27       | 200     | 70      |



Lieferumfang:  
Mit Fräseranzugsschraube, Mitnehmerring und  
Passfeder  
Delivery:  
With retaining screw, driving ring and feather key

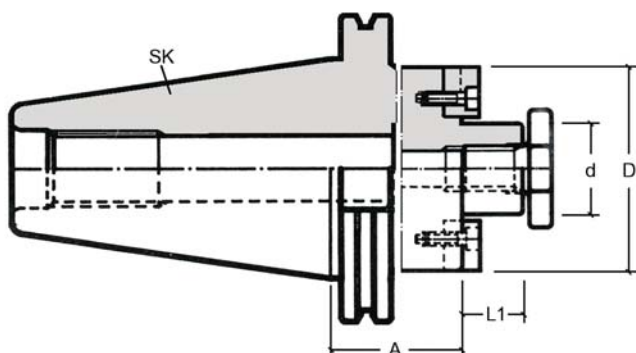


## Quernut-Aufsteckfräserdorne DIN 6357 mit vergrößertem Bunddurchmesser

### DIN69871 AD

Shell mill holders DIN 6357 with enlarged contact face

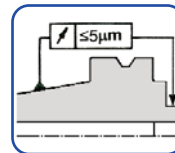
DIN69871 AD



d  $\varnothing$ 40 und  $\varnothing$ 60  
mit zusätzlichen 4  
Gewindebohrungen  
nach DIN 2079  
with additional 4  
screw hole to  
DIN 2079



G 6,3  
Gewuchtet  
15.000 min-1

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | L1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|----------|---------|---------|
| 239.230.016.040         | SK30                 | 16      | 17       | 40      | 38      |
| 239.230.022.040         | SK30                 | 22      | 19       | 40      | 48      |
| 239.230.027.050         | SK30                 | 27      | 21       | 50      | 58      |
| 239.230.032.050         | SK30                 | 32      | 24       | 50      | 78      |
| 239.240.016.035         | SK40                 | 16      | 17       | 35      | 38      |
| 239.240.016.100         | SK40                 | 16      | 17       | 100     | 38      |
| 239.240.022.035         | SK40                 | 22      | 19       | 35      | 48      |
| 239.240.022.100         | SK40                 | 22      | 19       | 100     | 48      |
| 239.240.022.160         | SK40                 | 22      | 19       | 160     | 48      |
| 239.240.027.040         | SK40                 | 27      | 21       | 40      | 58      |
| 239.240.027.100         | SK40                 | 27      | 21       | 100     | 60      |
| 239.240.027.160         | SK40                 | 27      | 21       | 160     | 60      |
| 239.240.032.050         | SK40                 | 32      | 24       | 50      | 78      |
| 239.240.032.100         | SK40                 | 32      | 24       | 100     | 78      |
| 239.240.032.160         | SK40                 | 32      | 24       | 160     | 78      |
| 239.240.040.050         | SK40                 | 40      | 27       | 50      | 80      |
| 239.250.022.035         | SK50                 | 22      | 19       | 35      | 48      |
| 239.250.022.100         | SK50                 | 22      | 19       | 100     | 48      |
| 239.250.022.160         | SK50                 | 22      | 19       | 160     | 48      |
| 239.250.027.040         | SK50                 | 27      | 21       | 40      | 58      |
| 239.250.027.100         | SK50                 | 27      | 21       | 100     | 60      |
| 239.250.027.160         | SK50                 | 27      | 21       | 160     | 60      |
| 239.250.032.050         | SK50                 | 32      | 24       | 50      | 78      |
| 239.250.032.100         | SK50                 | 32      | 24       | 100     | 78      |
| 239.250.032.160         | SK50                 | 32      | 24       | 160     | 78      |
| 239.250.040.050         | SK50                 | 40      | 27       | 50      | 88      |
| 239.250.040.100         | SK50                 | 40      | 27       | 100     | 89      |
| 239.250.040.160         | SK50                 | 40      | 27       | 160     | 89      |
| 239.250.060.070         | SK50                 | 60      | 40       | 70      | 128     |



C17



C18



B17

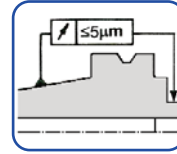
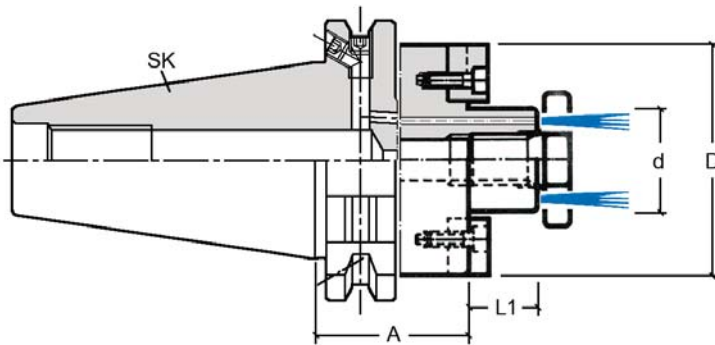


C13-14-15

Lieferumfang:  
Mit Mitnehmersteinen, Kreuzschraube und Schraube DIN912  
Delivery:  
With drivers, cross head retaining screw and screw DIN912



Quernut-Aufsteckfräserdorne DIN 6357 mit vergrößertem Bunddurchmesser **DIN69871 AD/B**  
*Shell mill holders DIN 6357 with enlarged contact face* **DIN69871 AD/B**



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | L1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|---------|----------|---------|---------|
| 240.340.016.035         | SK40                 | 16      | 17       | 35      | 38      |
| 240.340.016.100         | SK40                 | 16      | 17       | 100     | 38      |
| 240.340.016.160         | SK40                 | 16      | 17       | 160     | 38      |
| 240.340.022.035         | SK40                 | 22      | 19       | 35      | 48      |
| 240.340.022.100         | SK40                 | 22      | 19       | 100     | 48      |
| 240.340.022.160         | SK40                 | 22      | 19       | 160     | 48      |
| 240.340.027.035         | SK40                 | 27      | 21       | 35      | 50      |
| 240.340.027.040         | SK40                 | 27      | 21       | 40      | 58      |
| 240.340.A27.100         | SK40                 | 27      | 21       | 100     | 50      |
| 240.340.027.100         | SK40                 | 27      | 21       | 100     | 58      |
| 240.340.027.160         | SK40                 | 27      | 21       | 160     | 50      |
| 240.340.032.050         | SK40                 | 32      | 24       | 50      | 78      |
| 240.340.032.100         | SK40                 | 32      | 24       | 100     | 78      |
| 240.340.032.160         | SK40                 | 32      | 24       | 160     | 78      |
| 240.340.040.050         | SK40                 | 40      | 27       | 50      | 88      |
| 240.340.040.100         | SK40                 | 40      | 27       | 100     | 88      |
| 240.340.040.160         | SK40                 | 40      | 27       | 160     | 88      |
| 240.350.016.035         | SK50                 | 16      | 17       | 35      | 38      |
| 240.350.016.100         | SK50                 | 16      | 17       | 100     | 38      |
| 240.350.016.160         | SK50                 | 16      | 17       | 160     | 38      |
| 240.350.022.035         | SK50                 | 22      | 19       | 35      | 48      |
| 240.350.022.100         | SK50                 | 22      | 19       | 100     | 48      |
| 240.350.022.160         | SK50                 | 22      | 19       | 160     | 48      |
| 240.350.027.040         | SK50                 | 27      | 21       | 40      | 58      |
| 240.350.027.100         | SK50                 | 27      | 21       | 100     | 58      |
| 240.350.027.160         | SK50                 | 27      | 21       | 160     | 58      |
| 240.350.032.050         | SK50                 | 32      | 24       | 50      | 78      |
| 240.350.032.100         | SK50                 | 32      | 24       | 100     | 78      |
| 240.350.032.160         | SK50                 | 32      | 24       | 160     | 78      |
| 240.350.040.050         | SK50                 | 40      | 27       | 50      | 88      |
| 240.350.040.100         | SK50                 | 40      | 27       | 100     | 88      |
| 240.350.040.160         | SK50                 | 40      | 27       | 160     | 88      |
| 240.350.050.070         | SK50                 | 50      | 30       | 70      | 128     |
| 240.350.060.070         | SK50                 | 60      | 40       | 70      | 128     |



Lieferumfang:  
Mit Mitnehmersteinen, Kreuzschraube und Schraube DIN912  
 Delivery:  
With drivers, cross head retaining screw and screw DIN912

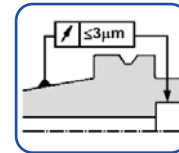
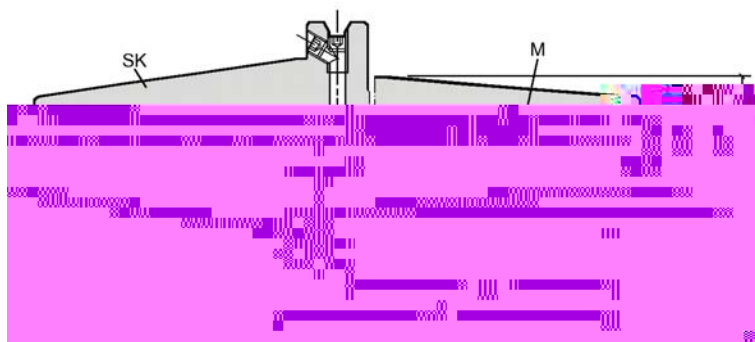


## Fräseraufnahme für Einschraubfräser

DIN69871 AD/B

### Milling abors for screw in tool

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | M    | d<br>mm | d1<br>mm | D<br>mm | A<br>mm | L<br>mm |
|-------------------------|----------------------|------|---------|----------|---------|---------|---------|
| 254.340.M06.044         | SK40                 | M 6  | 6,6     | 10       | 13      | 44      | 25      |
| 254.340.M06.069         | SK40                 | M 6  | 6,5     | 10       | 20      | 69      | 50      |
| 254.340.M06.094         | SK40                 | M 6  | 6,5     | 10       | 23      | 94      | 75      |
| 254.340.M06.109         | SK40                 | M 6  | 6,5     | 10       | 25      | 119     | 100     |
| 254.340.M08.044         | SK40                 | M 8  | 8,5     | 13       | 15      | 44      | 25      |
| 254.340.M08.069         | SK40                 | M 8  | 8,5     | 13       | 23      | 69      | 50      |
| 254.340.M08.094         | SK40                 | M 8  | 8,5     | 13       | 23      | 94      | 75      |
| 254.340.M08.119         | SK40                 | M 8  | 8,5     | 13       | 25      | 119     | 100     |
| 254.340.M10.024         | SK40                 | M 10 | 10,5    | 18       | 18      | 24      | 5       |
| 254.340.M10.044         | SK40                 | M 10 | 10,5    | 18       | 20      | 44      | 25      |
| 254.340.M10.069         | SK40                 | M 10 | 10,5    | 18       | 23      | 69      | 50      |
| 254.340.M10.094         | SK40                 | M 10 | 10,5    | 18       | 28      | 94      | 75      |
| 254.340.M10.119         | SK40                 | M 10 | 10,5    | 18       | 32      | 119     | 100     |
| 254.340.M10.119.X       | SK40                 | M 10 | 10,5    | 18       | -       | 119     | 100     |
| 254.340.M10.169         | SK40                 | M 10 | 10,5    | 18       | 36,5    | 169     | 150     |
| 254.340.M10.169.X       | SK40                 | M 10 | 10,5    | 18       | -       | 169     | 150     |
| 254.340.M12.024         | SK40                 | M 12 | 12,5    | 21       | 21      | 24      | 5       |
| 254.340.M12.044         | SK40                 | M 12 | 12,5    | 21       | 24      | 44      | 25      |
| 254.340.M12.069         | SK40                 | M 12 | 12,5    | 21       | 24      | 69      | 50      |
| 254.340.M12.094         | SK40                 | M 12 | 12,5    | 21       | 31      | 94      | 75      |
| 254.340.M12.119         | SK40                 | M 12 | 12,5    | 21       | 33      | 119     | 100     |
| 254.340.M12.119.X       | SK40                 | M 12 | 12,5    | 21       | -       | 119     | 100     |
| 254.340.M12.144         | SK40                 | M 12 | 12,5    | 21       | 36      | 144     | 125     |
| 254.340.M12.144.X       | SK40                 | M 12 | 12,5    | 21       | -       | 144     | 125     |
| 254.340.M12.169         | SK40                 | M 12 | 12,5    | 21       | 40      | 169     | 150     |
| 254.340.M12.169.X       | SK40                 | M 12 | 12,5    | 21       | -       | 169     | 150     |
| 254.340.M16.024         | SK40                 | M 16 | 17      | 29       | 29      | 24      | 5       |
| 254.340.M16.044         | SK40                 | M 16 | 17      | 29       | 29      | 44      | 25      |
| 254.340.M16.069         | SK40                 | M 16 | 17      | 29       | 34      | 69      | 50      |
| 254.340.M16.094         | SK40                 | M 16 | 17      | 29       | 34      | 94      | 75      |
| 254.340.M16.119         | SK40                 | M 16 | 17      | 29       | 36      | 119     | 100     |
| 254.340.M16.119.X       | SK40                 | M 16 | 17      | 29       | -       | 119     | 100     |
| 254.340.M16.144         | SK40                 | M 16 | 17      | 29       | 40      | 144     | 125     |
| 254.340.M16.144.X       | SK40                 | M 16 | 17      | 29       | -       | 144     | 125     |
| 254.340.M16.169         | SK40                 | M 16 | 17      | 29       | 42,5    | 169     | 150     |
| 254.340.M16.169.X       | SK40                 | M 16 | 17      | 29       | -       | 169     | 150     |



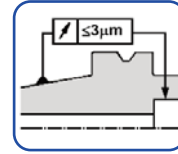
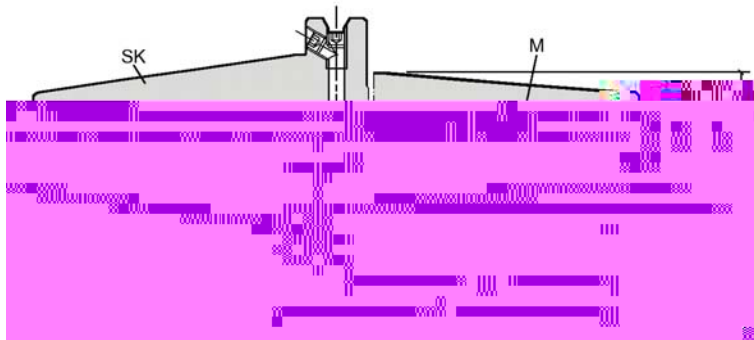


## Fräseraufnahme für Einschraubfräser

DIN69871 AD/B

### Milling arbors for screw in tool

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | M    | d<br>mm | d1<br>mm | D<br>mm | A<br>mm | L<br>mm |
|-------------------------|----------------------|------|---------|----------|---------|---------|---------|
| 254.350.M08.069         | SK50                 | M 8  | 8,5     | 13       | 23      | 69      | 50      |
| 254.350.M08.119         | SK50                 | M 8  | 8,5     | 13       | 25      | 119     | 100     |
| 254.350.M08.169         | SK50                 | M 8  | 8,5     | 13       | 30      | 169     | 150     |
| 254.350.M10.069         | SK50                 | M 10 | 10,5    | 18       | 23      | 69      | 50      |
| 254.350.M10.119         | SK50                 | M 10 | 10,5    | 18       | 32      | 119     | 100     |
| 254.350.M10.119.X       | SK50                 | M 10 | 10,5    | 18       | -       | 119     | 100     |
| 254.350.M10.169         | SK50                 | M 10 | 10,5    | 18       | 36,5    | 169     | 150     |
| 254.350.M10.169.X       | SK50                 | M 10 | 10,5    | 18       | -       | 169     | 150     |
| 254.350.M12.069         | SK50                 | M 12 | 12,5    | 21       | 24      | 69      | 50      |
| 254.350.M12.094         | SK50                 | M 12 | 12,5    | 21       | 31      | 94      | 75      |
| 254.350.M12.119         | SK50                 | M 12 | 12,5    | 21       | 33      | 119     | 100     |
| 254.350.M12.119.X       | SK50                 | M 12 | 12,5    | 21       | -       | 119     | 100     |
| 254.350.M12.169         | SK50                 | M 12 | 12,5    | 21       | 40      | 169     | 150     |
| 254.350.M12.169.X       | SK50                 | M 12 | 12,5    | 21       | -       | 169     | 150     |
| 254.350.M16.069         | SK50                 | M 16 | 17      | 29       | 34      | 69      | 50      |
| 254.350.M16.094         | SK50                 | M 16 | 17      | 29       | 34      | 94      | 75      |
| 254.350.M16.119         | SK50                 | M 16 | 17      | 29       | 36      | 119     | 100     |
| 254.350.M16.119.X       | SK50                 | M 16 | 17      | 29       | -       | 119     | 100     |
| 254.350.M16.169         | SK50                 | M 16 | 17      | 29       | 42,5    | 169     | 150     |
| 254.350.M16.169.X       | SK50                 | M 16 | 17      | 29       | -       | 169     | 150     |



C13-14-15



B09



B09



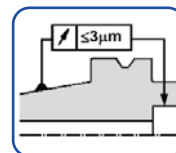
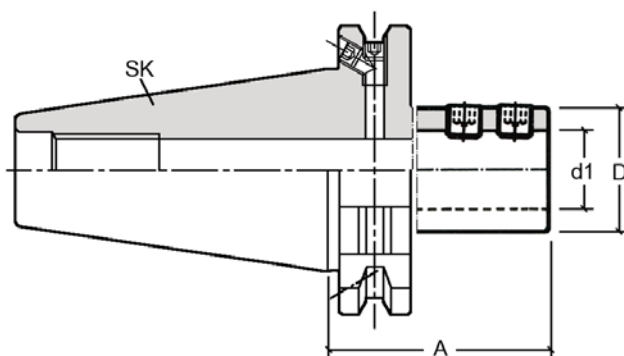


## Bohrerhalter für Wendepplattenbohrer E1

DIN69871 AD/B

Holder for drills with indexable inserts form E1

DIN69871 AD/B



C16



C13-14-15

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|----------|---------|---------|
| 227.340.020.065         | SK40                 | 20       | 65      | 40      |
| 227.340.025.070         | SK40                 | 25       | 70      | 45      |
| 227.340.032.075         | SK40                 | 32       | 75      | 52      |
| 227.340.040.115         | SK40                 | 40       | 115     | 65      |
| 227.350.020.070         | SK50                 | 20       | 70      | 40      |
| 227.350.025.070         | SK50                 | 25       | 70      | 45      |
| 227.350.032.070         | SK50                 | 32       | 70      | 52      |
| 227.350.040.080         | SK50                 | 40       | 80      | 60      |

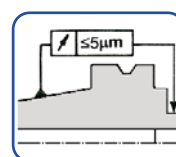
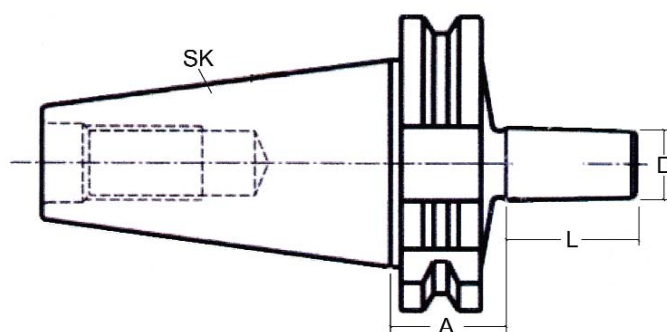
Lieferumfang:  
Mit Spannschraube(n)  
Delivery:  
With clamping screw(s)

## Bohrfutteraufnahme DIN 238

DIN69871 A

Drill chuck adaptor DIN 238

DIN69871 A



C13-14-15

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | D   | A<br>mm | L<br>mm |
|-------------------------|----------------------|-----|---------|---------|
| 201.230.B12.025         | SK30                 | B12 | 25      | 18,5    |
| 201.230.B16.025         | SK30                 | B16 | 25      | 24      |
| 201.240.B12.025         | SK40                 | B12 | 25      | 18,5    |
| 201.240.B16.025         | SK40                 | B16 | 25      | 24      |
| 201.240.B18.035         | SK40                 | B18 | 35      | 32      |
| 201.250.B12.025         | SK50                 | B12 | 25      | 18,5    |
| 201.250.B16.025         | SK50                 | B16 | 25      | 24      |
| 201.250.B18.025         | SK50                 | B18 | 25      | 32      |



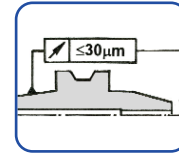
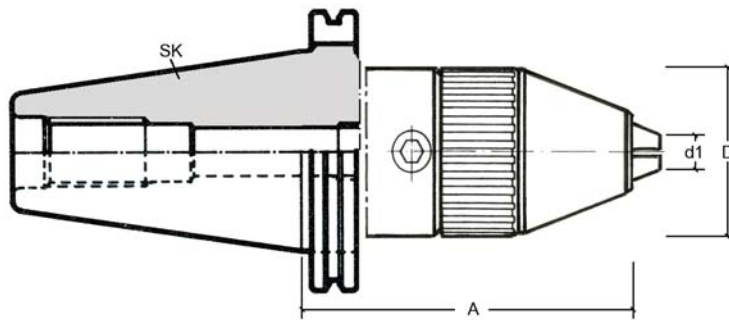


## NC-Bohrfutter für Rechts- und Linkslauf

DIN69871 AD

### NC-Drill chuck for right- and left hand rotation

DIN69871 AD



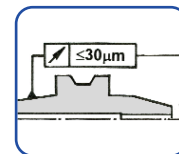
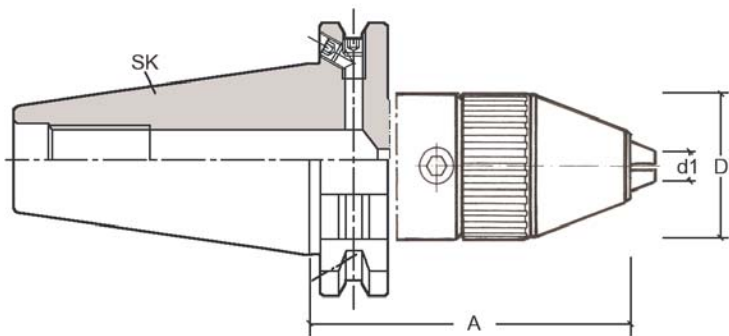
| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|----------|---------|---------|
| 342.230.058.070         | SK30                 | 0,5-8    | 70      | 36      |
| 342.230.113.111         | SK30                 | 1-13     | 111     | 50      |
| 342.240.058.070         | SK40                 | 0,5-8    | 70      | 36      |
| 342.240.113.090         | SK40                 | 1-13     | 90      | 50      |
| 342.240.316.095         | SK40                 | 3-16     | 95      | 50      |
| 342.250.113.090         | SK50                 | 1-13     | 90      | 50      |
| 342.250.316.095         | SK50                 | 3-16     | 95      | 50      |

## NC-Bohrfutter für Rechts- und Linkslauf

DIN69871 AD/B

### NC-Drill chuck for right- and left hand rotation

DIN69871 AD/B



C16



C13-14-15

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d1<br>mm | A<br>mm | D<br>mm |
|-------------------------|----------------------|----------|---------|---------|
| 342.340.058.070         | SK40                 | 0,5-8    | 70      | 36      |
| 342.340.113.090         | SK40                 | 1-13     | 90      | 50      |
| 342.340.316.095         | SK40                 | 3-16     | 95      | 50      |
| 342.350.113.090         | SK50                 | 1-13     | 90      | 50      |
| 342.350.316.095         | SK50                 | 3-16     | 95      | 50      |

Höchste Präzision sowie genauester Rundlauf, mechanische Spannkraftverstärkung garantiert eine sichere Spannung. Während der Bearbeitung, ob Rechts- oder Linkslauf sowie bei Spindelstop, ist ein selbständiges Lösen nicht möglich.  
 High precision and accurate concentricity, mechanical amplification is the guarantee of the very high clamping force. During the working process, if with right- or left-hand rotation or spindle stop, no automatic slackingenig will be possible.

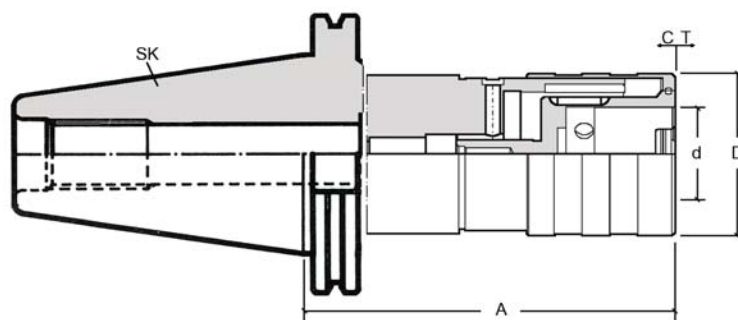


## Gewindeschneidfutter mit Längenausgleich auf Druck und Zug

DIN69871 A

### Quick-change tapping chucks with length compensation

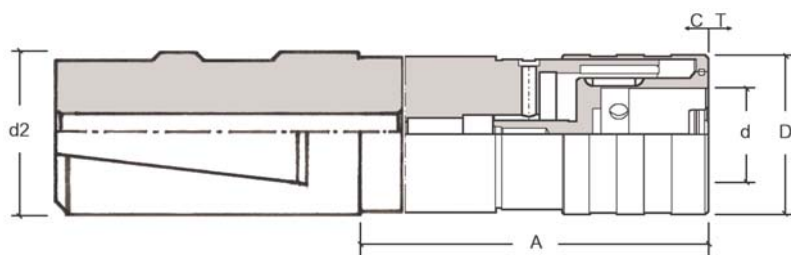
DIN69871 A



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | Spannbereich<br>Capacity | d<br>mm | A<br>mm | D<br>mm | C<br>mm | T<br>mm |
|-------------------------|----------------------|--------------------------|---------|---------|---------|---------|---------|
| 340.230.019.066         | SK30                 | M3-M14                   | 19      | 66      | 38      | 7       | 7       |
| 340.230.031.099         | SK30                 | M5-M22                   | 31      | 99      | 54      | 12      | 12      |
| 340.240.019.064         | SK40                 | M3-M14                   | 19      | 64      | 38      | 7       | 7       |
| 340.240.031.097         | SK40                 | M5-M22                   | 31      | 97      | 54      | 12      | 12      |
| 340.240.048.136         | SK40                 | M14-M36                  | 48      | 136     | 78      | 17,5    | 17,5    |
| 340.250.019.062         | SK50                 | M3-M14                   | 19      | 62      | 38      | 7       | 7       |
| 340.250.031.085         | SK50                 | M5-M22                   | 31      | 85      | 54      | 12      | 12      |
| 340.250.048.138         | SK50                 | M14-M36                  | 48      | 138     | 78      | 17,5    | 17,5    |

## Gewindeschneidfutter mit Längenausgleich auf Druck und Zug Zyl.Schaft nach DIN 1835 B+E

### Quick-change tapping chucks with length compensation tool shank to DIN 1835 B+E



C13-14-15



C11



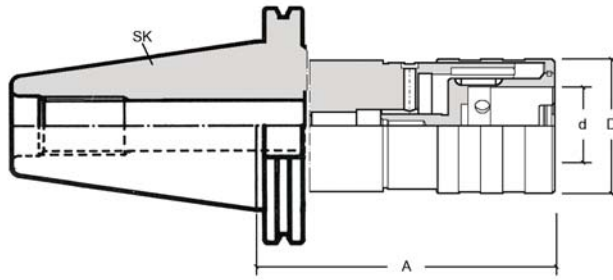
C12



## Gewindeschneidfutter **ohne** Längenausgleich auf Druck und Zug DIN69871 AD

*Quick-change tapping chucks **without** length compensation*

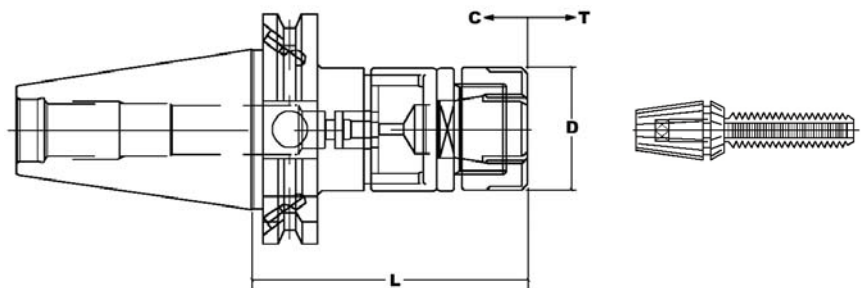
*DIN69871 AD*



| Bestell Nr.<br><i>Code No.</i> | Kegel<br><i>Taper</i><br>SK | Spannbereich<br><i>Capacity</i> | d<br>mm | A<br>mm | D<br>mm |
|--------------------------------|-----------------------------|---------------------------------|---------|---------|---------|
| 350.230.019.065                | SK30                        | M3-M14                          | 19      | 65      | 38      |
| 350.230.031.093                | SK30                        | M5-M22                          | 31      | 93      | 54      |
| 350.240.019.062                | SK40                        | M3-M14                          | 19      | 62      | 38      |
| 350.240.031.095                | SK40                        | M5-M22                          | 31      | 95      | 54      |
| 350.240.048.137                | SK40                        | M14-M36                         | 48      | 137     | 78      |
| 350.250.019.060                | SK50                        | M3-M14                          | 19      | 60      | 38      |
| 350.250.031.085                | SK50                        | M5-M22                          | 31      | 85      | 54      |
| 350.250.048.117                | SK50                        | M14-M36                         | 48      | 117     | 78      |

## SYNCHRO-Gewindefutter für ER Spannzangen DIN 6499 mit Minimallängenausgleich DIN69871 AD/B

*SYNCHRO Tapping chucks for ER collets DIN 6499 with minimum length compensation DIN69871 AD/B*



| Bestell Nr.<br><i>Code No.</i> | Kegel<br><i>Taper</i><br>SK | Spannbereich<br><i>Capacity</i><br>d1 | ER | D<br>mm | L<br>mm | C<br>mm | T<br>mm |
|--------------------------------|-----------------------------|---------------------------------------|----|---------|---------|---------|---------|
| 351.340.016.079                | SK40                        | M2-M8                                 | 16 | 28      | 79      | 0,5     | 0,5     |
| 351.340.020.085                | SK40                        | M3-M10                                | 20 | 34      | 85      | 0,5     | 0,5     |
| 351.340.025.090                | SK40                        | M3-M14                                | 25 | 42      | 90      | 0,5     | 0,5     |
| 351.340.032.100                | SK40                        | M4-M18                                | 32 | 50      | 100     | 0,5     | 0,5     |
| 351.340.040.120                | SK40                        | M8-M24                                | 40 | 63      | 120     | 0,5     | 0,5     |
| 351.350.016.079                | SK50                        | M2-M8                                 | 16 | 28      | 79      | 0,5     | 0,5     |
| 351.350.020.085                | SK50                        | M3-M10                                | 20 | 34      | 85      | 0,5     | 0,5     |
| 351.350.025.090                | SK50                        | M3-M14                                | 25 | 42      | 90      | 0,5     | 0,5     |
| 351.350.032.100                | SK50                        | M4-M18                                | 32 | 50      | 100     | 0,5     | 0,5     |
| 351.350.040.105                | SK50                        | M8-M24                                | 40 | 63      | 105     | 0,5     | 0,5     |



C13-14-15



C11



C12



C09-10



C18



C02-03-04



C13-14-15

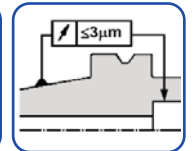
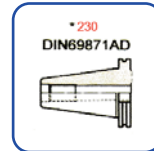
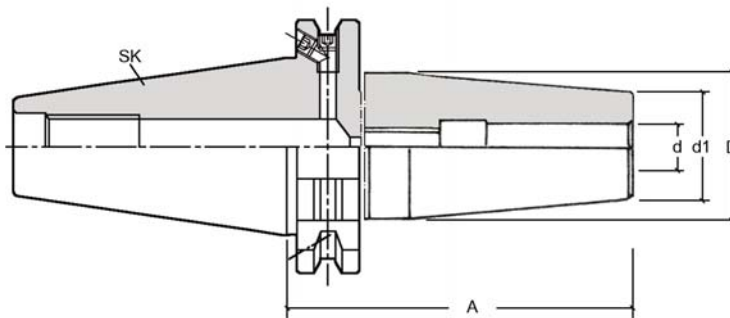


## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|---------|
| 271.230.003.080*        | SK30                 | 3       | 80      | 10       | 20      |
| 271.230.004.080*        | SK30                 | 4       | 80      | 15       | 24      |
| 271.230.005.080*        | SK30                 | 5       | 80      | 15       | 24      |
| 271.230.006.080*        | SK30                 | 6       | 80      | 20       | 27      |
| 271.230.008.080*        | SK30                 | 8       | 80      | 20       | 27      |
| 271.230.010.080*        | SK30                 | 10      | 80      | 24       | 31      |
| 271.230.012.080*        | SK30                 | 12      | 80      | 24       | 31      |
| 271.230.014.080*        | SK30                 | 14      | 80      | 27       | 34      |
| 271.230.016.080*        | SK30                 | 16      | 80      | 27       | 34      |
| 271.230.018.080*        | SK30                 | 18      | 80      | 33       | 40      |
| 271.230.020.080*        | SK30                 | 20      | 80      | 33       | 40      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|---------|
| 271.340.008.080         | SK40                 | 8       | 80      | 20       | 27      |
| 271.340.008.120         | SK40                 | 8       | 120     | 20       | 27      |
| 271.340.008.160         | SK40                 | 8       | 160     | 20       | 27      |
| 271.340.010.080         | SK40                 | 10      | 80      | 24       | 31      |
| 271.340.010.120         | SK40                 | 10      | 120     | 24       | 31      |
| 271.340.010.160         | SK40                 | 10      | 160     | 24       | 31      |
| 271.340.012.080         | SK40                 | 12      | 80      | 24       | 31      |
| 271.340.012.120         | SK40                 | 12      | 120     | 24       | 31      |
| 271.340.012.160         | SK40                 | 12      | 160     | 24       | 31      |
| 271.340.014.080         | SK40                 | 14      | 80      | 27       | 34      |
| 271.340.014.120         | SK40                 | 14      | 120     | 27       | 34      |
| 271.340.014.160         | SK40                 | 14      | 160     | 27       | 34      |
| 271.340.016.080         | SK40                 | 16      | 80      | 27       | 34      |
| 271.340.016.120         | SK40                 | 16      | 120     | 27       | 34      |
| 271.340.016.160         | SK40                 | 16      | 160     | 27       | 34      |
| 271.340.018.080         | SK40                 | 18      | 80      | 33       | 40      |
| 271.340.018.120         | SK40                 | 18      | 120     | 33       | 40      |
| 271.340.018.160         | SK40                 | 18      | 160     | 33       | 40      |
| 271.340.020.080         | SK40                 | 20      | 80      | 33       | 40      |
| 271.340.020.120         | SK40                 | 20      | 120     | 33       | 40      |
| 271.340.020.160         | SK40                 | 20      | 160     | 33       | 40      |
| 271.340.025.080         | SK40                 | 25      | 80      | 44       | 53      |
| 271.340.025.120         | SK40                 | 25      | 120     | 44       | 53      |
| 271.340.025.160         | SK40                 | 25      | 160     | 44       | 53      |
| 271.340.032.080         | SK40                 | 32      | 80      | 44       | 53      |
| 271.340.032.120         | SK40                 | 32      | 120     | 44       | 53      |
| 271.340.032.160         | SK40                 | 32      | 160     | 44       | 53      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|---------|
| 271.340.003.080         | SK40                 | 3       | 80      | 10       | 20      |
| 271.340.003.120         | SK40                 | 3       | 120     | 10       | 20      |
| 271.340.003.160         | SK40                 | 3       | 160     | 10       | 20      |
| 271.340.004.080         | SK40                 | 4       | 80      | 15       | 25      |
| 271.340.004.120         | SK40                 | 4       | 120     | 15       | 22      |
| 271.340.004.160         | SK40                 | 4       | 160     | 15       | 22      |
| 271.340.005.080         | SK40                 | 5       | 80      | 15       | 25      |
| 271.340.005.120         | SK40                 | 5       | 120     | 15       | 22      |
| 271.340.005.160         | SK40                 | 5       | 160     | 15       | 22      |
| 271.340.006.080         | SK40                 | 6       | 80      | 20       | 27      |
| 271.340.006.120         | SK40                 | 6       | 120     | 20       | 27      |
| 271.340.006.160         | SK40                 | 6       | 160     | 20       | 27      |

\* = AD



C13-14-15

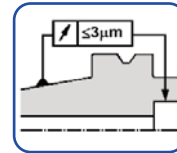
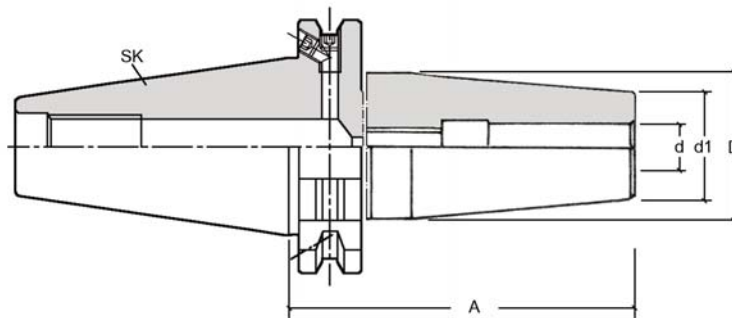


## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

*Shrink chucks for mounting solid carbide and HSS shanks*

*DIN69871 AD/B*



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|---------|
| 271.350.003.080         | SK50                 | 3       | 80      | 10       | 20      |
| 271.350.003.120         | SK50                 | 3       | 120     | 10       | 20      |
| 271.350.003.160         | SK50                 | 3       | 160     | 10       | 20      |
| 271.350.004.080         | SK50                 | 4       | 80      | 15       | 25      |
| 271.350.004.120         | SK50                 | 4       | 120     | 15       | 22      |
| 271.350.004.160         | SK50                 | 4       | 160     | 15       | 22      |
| 271.350.005.080         | SK50                 | 5       | 80      | 15       | 25      |
| 271.350.005.120         | SK50                 | 5       | 120     | 15       | 22      |
| 271.350.005.160         | SK50                 | 5       | 160     | 20       | 22      |
| 271.350.006.080         | SK50                 | 6       | 80      | 20       | 27      |
| 271.350.006.120         | SK50                 | 6       | 120     | 20       | 27      |
| 271.350.006.130         | SK50                 | 6       | 130     | 20       | 27      |
| 271.350.006.160         | SK50                 | 6       | 160     | 20       | 27      |
| 271.350.006.200         | SK50                 | 6       | 200     | 20       | 27      |
| 271.350.008.080         | SK50                 | 8       | 80      | 20       | 27      |
| 271.350.008.120         | SK50                 | 8       | 120     | 20       | 27      |
| 271.350.008.130         | SK50                 | 8       | 130     | 20       | 27      |
| 271.350.008.160         | SK50                 | 8       | 160     | 20       | 27      |
| 271.350.008.200         | SK50                 | 8       | 200     | 20       | 27      |
| 271.350.010.080         | SK50                 | 10      | 80      | 24       | 31      |
| 271.350.010.120         | SK50                 | 10      | 120     | 24       | 31      |
| 271.350.010.130         | SK50                 | 10      | 130     | 24       | 31      |
| 271.350.010.160         | SK50                 | 10      | 160     | 24       | 31      |
| 271.350.010.200         | SK50                 | 10      | 200     | 24       | 31      |
| 271.350.012.080         | SK50                 | 12      | 80      | 24       | 31      |
| 271.350.012.120         | SK50                 | 12      | 120     | 24       | 31      |
| 271.350.012.130         | SK50                 | 12      | 130     | 24       | 31      |
| 271.350.012.160         | SK50                 | 12      | 160     | 24       | 31      |
| 271.350.012.200         | SK50                 | 12      | 200     | 24       | 31      |

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|---------|
| 271.350.014.080         | SK50                 | 14      | 80      | 27       | 34      |
| 271.350.014.120         | SK50                 | 14      | 120     | 27       | 34      |
| 271.350.014.130         | SK50                 | 14      | 130     | 27       | 34      |
| 271.350.014.160         | SK50                 | 14      | 160     | 27       | 34      |
| 271.350.014.200         | SK50                 | 14      | 200     | 27       | 34      |
| 271.350.016.080         | SK50                 | 16      | 80      | 27       | 34      |
| 271.350.016.120         | SK50                 | 16      | 120     | 27       | 34      |
| 271.350.016.130         | SK50                 | 16      | 130     | 27       | 34      |
| 271.350.016.160         | SK50                 | 16      | 160     | 27       | 34      |
| 271.350.016.200         | SK50                 | 16      | 200     | 27       | 34      |
| 271.350.018.080         | SK50                 | 18      | 80      | 33       | 40      |
| 271.350.018.120         | SK50                 | 18      | 120     | 33       | 40      |
| 271.350.018.130         | SK50                 | 18      | 130     | 33       | 42      |
| 271.350.018.160         | SK50                 | 18      | 160     | 33       | 40      |
| 271.350.018.200         | SK50                 | 18      | 200     | 33       | 42      |
| 271.350.020.080         | SK50                 | 20      | 80      | 33       | 40      |
| 271.350.020.120         | SK50                 | 20      | 120     | 33       | 40      |
| 271.350.020.130         | SK50                 | 20      | 130     | 33       | 42      |
| 271.350.020.160         | SK50                 | 20      | 160     | 33       | 40      |
| 271.350.020.200         | SK50                 | 20      | 200     | 33       | 42      |
| 271.350.025.100         | SK50                 | 25      | 100     | 44       | 53      |
| 271.350.025.120         | SK50                 | 25      | 120     | 44       | 53      |
| 271.350.025.130         | SK50                 | 25      | 130     | 44       | 53      |
| 271.350.025.160         | SK50                 | 25      | 160     | 44       | 53      |
| 271.350.025.200         | SK50                 | 25      | 200     | 44       | 53      |
| 271.350.032.100         | SK50                 | 32      | 100     | 44       | 53      |
| 271.350.032.120         | SK50                 | 32      | 120     | 44       | 53      |
| 271.350.032.130         | SK50                 | 32      | 130     | 44       | 53      |
| 271.350.032.160         | SK50                 | 32      | 160     | 44       | 53      |
| 271.350.032.200         | SK50                 | 32      | 200     | 44       | 53      |



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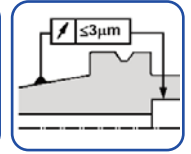
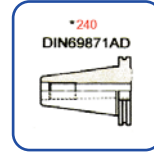
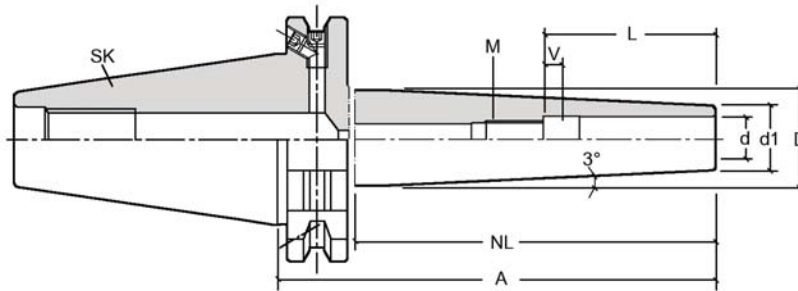


## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

### Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | NL<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|----------|---------|---------|---------|-------|
| 272.340.003.080         | SK40                 | 3       | 80      | 52       | 9        | 13      | ~       | ~       | ~     |
| 272.240.003.083*        | SK40                 | 3       | 83      | 60       | 9        | 13      | 5       | 20      | M6    |
| 272.340.003.120         | SK40                 | 3       | 120     | 92       | 9        | 16      | ~       | ~       | ~     |
| 272.240.003.123*        | SK40                 | 3       | 123     | 100      | 9        | 16      | 5       | 20      | M6    |
| 272.340.004.080         | SK40                 | 4       | 80      | 52       | 10       | 15      | ~       | ~       | ~     |
| 272.240.004.083*        | SK40                 | 4       | 83      | 60       | 10       | 14      | 5       | 20      | M6    |
| 272.340.004.120         | SK40                 | 4       | 120     | 92       | 10       | 20      | ~       | ~       | ~     |
| 272.240.004.123*        | SK40                 | 4       | 123     | 100      | 10       | 17      | 5       | 20      | M6    |
| 272.340.005.080         | SK40                 | 5       | 80      | 52       | 11       | 16      | ~       | ~       | ~     |
| 272.340.005.120         | SK40                 | 5       | 120     | 92       | 11       | 20      | ~       | ~       | ~     |
| 272.340.006.080         | SK40                 | 6       | 80      | 52       | 12       | 18      | ~       | ~       | ~     |
| 272.240.006.083*        | SK40                 | 6       | 83      | 60       | 12       | 18      | 5       | 36      | M6    |
| 272.340.006.120         | SK40                 | 6       | 120     | 92       | 12       | 22      | ~       | ~       | ~     |
| 272.240.006.123*        | SK40                 | 6       | 123     | 100      | 12       | 22      | 5       | 36      | M5    |
| 272.240.006.163*        | SK40                 | 6       | 163     | 140      | 12       | 26      | 5       | 36      | M5    |
| 272.340.008.080         | SK40                 | 8       | 80      | 52       | 14       | 20      | ~       | ~       | ~     |
| 272.240.008.083*        | SK40                 | 8       | 83      | 60       | 14       | 20      | 5       | 36      | M6    |
| 272.340.008.120         | SK40                 | 8       | 120     | 92       | 14       | 24      | ~       | ~       | ~     |
| 272.240.008.123*        | SK40                 | 8       | 123     | 100      | 14       | 24      | 5       | 36      | M6    |
| 272.240.008.163*        | SK40                 | 8       | 163     | 140      | 14       | 28      | 5       | 36      | M6    |
| 272.340.010.080         | SK40                 | 10      | 80      | 52       | 16       | 22      | ~       | ~       | ~     |
| 272.240.010.083*        | SK40                 | 10      | 83      | 60       | 16       | 22      | 5       | 42      | M8x1  |
| 272.340.010.120         | SK40                 | 10      | 120     | 92       | 16       | 26      | ~       | ~       | ~     |
| 272.240.010.123*        | SK40                 | 10      | 123     | 100      | 16       | 26      | 5       | 42      | M8x1  |
| 272.240.010.163*        | SK40                 | 10      | 163     | 140      | 16       | 30      | 5       | 42      | M8x1  |
| 272.340.012.080         | SK40                 | 12      | 80      | 52       | 18       | 24      | ~       | ~       | ~     |
| 272.240.012.083*        | SK40                 | 12      | 83      | 60       | 18       | 24      | 5       | 47      | M10x1 |
| 272.340.012.120         | SK40                 | 12      | 120     | 92       | 18       | 28      | ~       | ~       | ~     |
| 272.240.012.123*        | SK40                 | 12      | 123     | 100      | 18       | 28      | 5       | 47      | M10x1 |
| 272.240.012.163*        | SK40                 | 12      | 163     | 140      | 18       | 32      | 5       | 47      | M10x1 |
| 272.240.016.083*        | SK40                 | 16      | 83      | 60       | 22       | 28      | 5       | 50      | M12x1 |
| 272.240.016.123*        | SK40                 | 16      | 123     | 100      | 22       | 32      | 5       | 50      | M12x1 |
| 272.240.016.163*        | SK40                 | 16      | 163     | 140      | 22       | 36      | 5       | 50      | M12x1 |

\* = AD



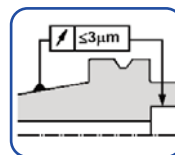
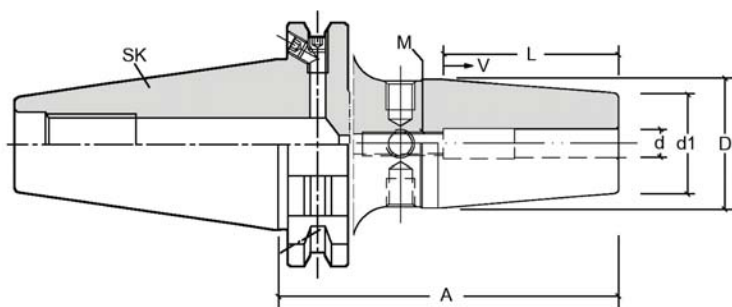


## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

### Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B

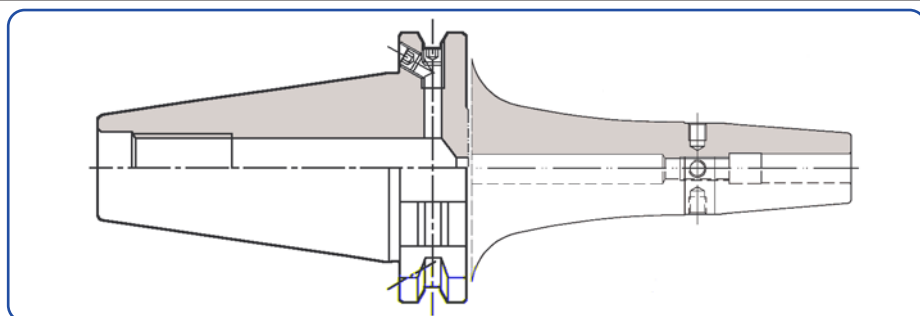


Mit vier zusätzlichen Gewinden am Umfang zum nachträglichen Feinwuchten.

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|---------|---------|---------|-------|
| 280.340.003.080         | SK40                 | 3       | 80      | 12       | 17      | ~       | ~       | ~     |
| 280.340.003.130         | SK40                 | 3       | 130     | 21       | 27      | ~       | ~       | ~     |
| 280.340.004.080         | SK40                 | 4       | 80      | 12       | 17      | ~       | ~       | ~     |
| 280.340.004.130         | SK40                 | 4       | 130     | 21       | 27      | ~       | ~       | ~     |
| 280.340.005.080         | SK40                 | 5       | 80      | 12       | 17      | ~       | ~       | ~     |
| 280.340.005.130         | SK40                 | 5       | 130     | 24       | 27      | ~       | ~       | ~     |
| 280.340.006.080         | SK40                 | 6       | 80      | 21       | 27      | 10      | 37      | M5    |
| 280.340.006.120         | SK40                 | 6       | 120     | 21       | 27      | 10      | 37      | M5    |
| 280.340.006.130         | SK40                 | 6       | 130     | 21       | 27      | 10      | 37      | M5    |
| 280.340.006.160         | SK40                 | 6       | 160     | 21       | 27      | 10      | 37      | M5    |
| 280.340.006.200         | SK40                 | 6       | 200     | 21       | 27      | 10      | 37      | M5    |
| 280.340.008.080         | SK40                 | 8       | 80      | 21       | 27      | 10      | 37      | M6    |
| 280.340.008.120         | SK40                 | 8       | 120     | 21       | 27      | 10      | 37      | M6    |
| 280.340.008.130         | SK40                 | 8       | 130     | 21       | 27      | 10      | 37      | M6    |
| 280.340.008.160         | SK40                 | 8       | 160     | 21       | 27      | 10      | 37      | M6    |
| 280.340.008.200         | SK40                 | 8       | 200     | 21       | 27      | 10      | 37      | M6    |
| 280.340.010.080         | SK40                 | 10      | 80      | 24       | 32      | 10      | 42      | M8x1  |
| 280.340.010.120         | SK40                 | 10      | 120     | 24       | 32      | 10      | 42      | M8x1  |
| 280.340.010.130         | SK40                 | 10      | 130     | 24       | 32      | 10      | 42      | M8x1  |
| 280.340.010.160         | SK40                 | 10      | 160     | 24       | 32      | 10      | 42      | M8x1  |
| 280.340.010.200         | SK40                 | 10      | 200     | 24       | 32      | 10      | 42      | M8x1  |
| 280.340.012.080         | SK40                 | 12      | 80      | 24       | 32      | 10      | 48      | M10x1 |
| 280.340.012.120         | SK40                 | 12      | 120     | 24       | 32      | 10      | 48      | M10x1 |
| 280.340.012.130         | SK40                 | 12      | 130     | 24       | 32      | 10      | 48      | M10x1 |
| 280.340.012.160         | SK40                 | 12      | 160     | 24       | 32      | 10      | 48      | M10x1 |
| 280.340.012.200         | SK40                 | 12      | 200     | 24       | 32      | 10      | 48      | M10x1 |
| 280.340.014.080         | SK40                 | 14      | 80      | 27       | 34      | 10      | 48      | M10x1 |
| 280.340.014.120         | SK40                 | 14      | 120     | 27       | 34      | 10      | 48      | M10x1 |
| 280.340.014.130         | SK40                 | 14      | 130     | 27       | 34      | 10      | 48      | M10x1 |
| 280.340.014.160         | SK40                 | 14      | 160     | 27       | 34      | 10      | 48      | M10x1 |
| 280.340.014.200         | SK40                 | 14      | 200     | 27       | 34      | 10      | 48      | M10x1 |



C13-14-15





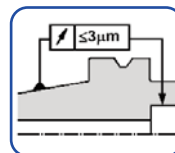
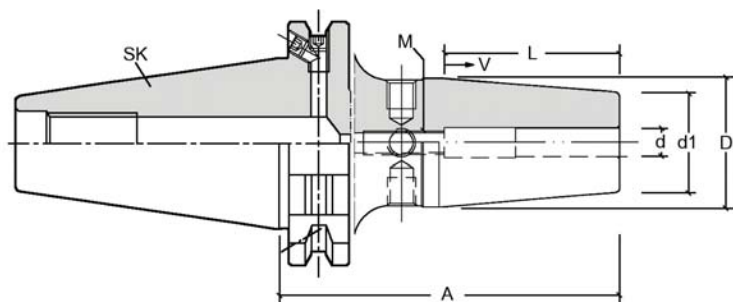


Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

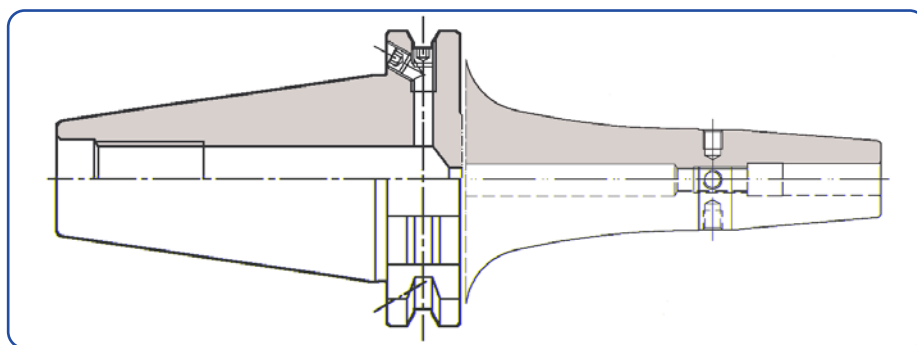
Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B



Mit vier zusätzlichen Gewinden am Umfang zum nachträglichen Feinwuchten.

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|---------|---------|---------|-------|
| 280.340.016.080         | SK40                 | 16      | 80      | 27       | 34      | 10      | 51      | M12x1 |
| 280.340.016.120         | SK40                 | 16      | 120     | 27       | 34      | 10      | 51      | M12x1 |
| 280.340.016.130         | SK40                 | 16      | 130     | 27       | 34      | 10      | 51      | M12x1 |
| 280.340.016.160         | SK40                 | 16      | 160     | 27       | 34      | 10      | 51      | M12x1 |
| 280.340.016.200         | SK40                 | 16      | 200     | 27       | 34      | 10      | 51      | M12x1 |
| 280.340.018.080         | SK40                 | 18      | 80      | 33       | 42      | 10      | 51      | M12x1 |
| 280.340.018.120         | SK40                 | 18      | 120     | 33       | 42      | 10      | 51      | M12x1 |
| 280.340.018.130         | SK40                 | 18      | 130     | 33       | 42      | 10      | 51      | M12x1 |
| 280.340.018.160         | SK40                 | 18      | 160     | 33       | 42      | 10      | 51      | M12x1 |
| 280.340.018.200         | SK40                 | 18      | 200     | 33       | 42      | 10      | 51      | M12x1 |
| 280.340.020.080         | SK40                 | 20      | 80      | 33       | 42      | 10      | 53      | M16x1 |
| 280.340.020.120         | SK40                 | 20      | 120     | 33       | 42      | 10      | 53      | M16x1 |
| 280.340.020.130         | SK40                 | 20      | 130     | 33       | 42      | 10      | 53      | M16x1 |
| 280.340.020.160         | SK40                 | 20      | 160     | 33       | 42      | 10      | 53      | M16x1 |
| 280.340.020.200         | SK40                 | 20      | 200     | 33       | 42      | 10      | 53      | M16x1 |
| 280.340.025.100         | SK40                 | 25      | 100     | 44       | 53      | 10      | 59      | M16x1 |
| 280.340.025.120         | SK40                 | 25      | 120     | 44       | 53      | 10      | 59      | M16x1 |
| 280.340.025.130         | SK40                 | 25      | 130     | 44       | 53      | 10      | 59      | M16x1 |
| 280.340.025.160         | SK40                 | 25      | 160     | 44       | 53      | 10      | 59      | M16x1 |
| 280.340.025.200         | SK40                 | 25      | 200     | 44       | 53      | 10      | 59      | M16x1 |
| 280.340.032.100         | SK40                 | 32      | 100     | 44       | 53      | 10      | 63      | M16x1 |
| 280.340.032.130         | SK40                 | 32      | 130     | 44       | 53      | 10      | 63      | M16x1 |



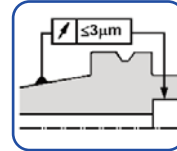
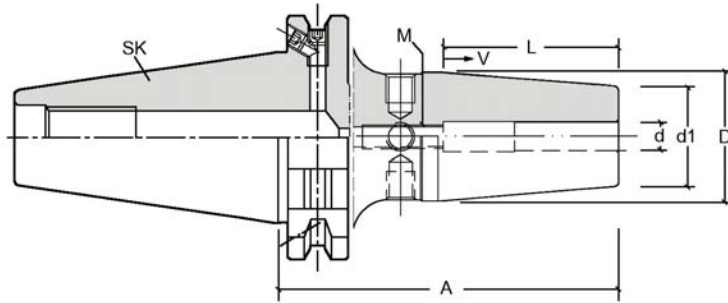


## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

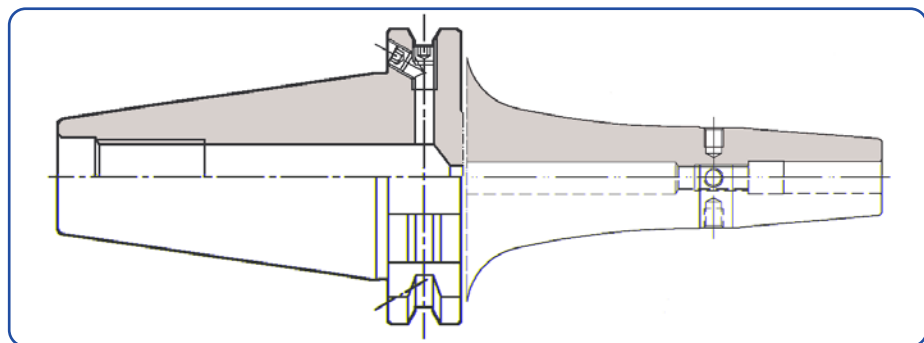
### Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B



Mit vier zusätzlichen Gewinden am Umfang zum nachträglichen Feinwuchten.

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|---------|---------|---------|-------|
| 280.350.006.080         | SK50                 | 6       | 80      | 21       | 27      | 10      | 37      | M5    |
| 280.350.006.120         | SK50                 | 6       | 120     | 21       | 27      | 10      | 37      | M5    |
| 280.350.006.130         | SK50                 | 6       | 130     | 21       | 27      | 10      | 37      | M5    |
| 280.350.006.160         | SK50                 | 6       | 160     | 21       | 27      | 10      | 37      | M5    |
| 280.350.006.200         | SK50                 | 6       | 200     | 21       | 27      | 10      | 37      | M5    |
| 280.350.008.080         | SK50                 | 8       | 80      | 21       | 27      | 10      | 37      | M6    |
| 280.350.008.120         | SK50                 | 8       | 120     | 21       | 27      | 10      | 37      | M6    |
| 280.350.008.130         | SK50                 | 8       | 130     | 21       | 27      | 10      | 37      | M6    |
| 280.350.008.160         | SK50                 | 8       | 160     | 21       | 27      | 10      | 37      | M6    |
| 280.350.008.200         | SK50                 | 8       | 200     | 21       | 27      | 10      | 37      | M6    |
| 280.350.010.080         | SK50                 | 10      | 80      | 24       | 32      | 10      | 42      | M10x1 |
| 280.350.010.120         | SK50                 | 10      | 120     | 24       | 32      | 10      | 42      | M10x1 |
| 280.350.010.130         | SK50                 | 10      | 130     | 24       | 32      | 10      | 42      | M10x1 |
| 280.350.010.160         | SK50                 | 10      | 160     | 24       | 32      | 10      | 42      | M10x1 |
| 280.350.010.200         | SK50                 | 10      | 200     | 24       | 32      | 10      | 42      | M10x1 |
| 280.350.012.080         | SK50                 | 12      | 80      | 24       | 32      | 10      | 48      | M10x1 |
| 280.350.012.120         | SK50                 | 12      | 120     | 24       | 32      | 10      | 48      | M10x1 |
| 280.350.012.130         | SK50                 | 12      | 130     | 24       | 32      | 10      | 48      | M10x1 |
| 280.350.012.160         | SK50                 | 12      | 160     | 24       | 32      | 10      | 48      | M10x1 |
| 280.350.012.200         | SK50                 | 12      | 200     | 24       | 32      | 10      | 48      | M10x1 |
| 280.350.014.080         | SK50                 | 14      | 80      | 27       | 34      | 10      | 48      | M10x1 |
| 280.350.014.120         | SK50                 | 14      | 120     | 27       | 34      | 10      | 48      | M10x1 |
| 280.350.014.130         | SK50                 | 14      | 130     | 27       | 34      | 10      | 48      | M10x1 |
| 280.350.014.160         | SK50                 | 14      | 160     | 27       | 34      | 10      | 48      | M10x1 |
| 280.350.014.200         | SK50                 | 14      | 200     | 27       | 34      | 10      | 48      | M10x1 |



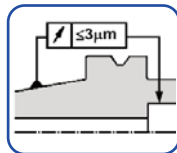
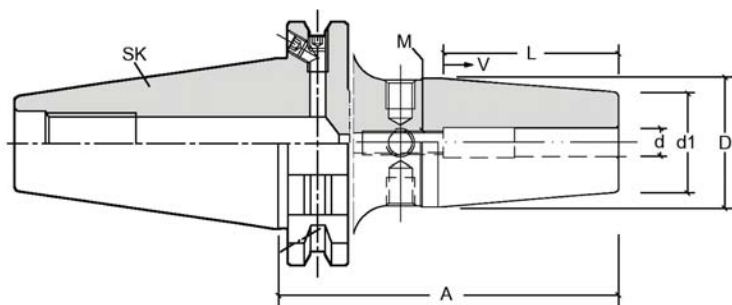


## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

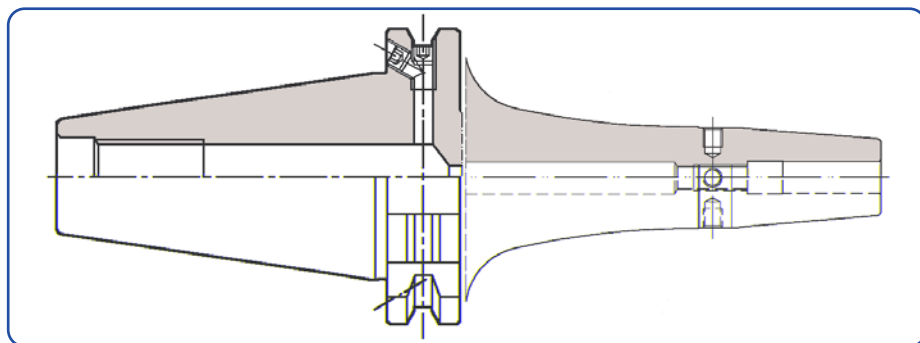
### Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B



Mit vier zusätzlichen Gewinden am Umfang zum nachträglichen Feinwuchten.

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|---------|---------|---------|-------|
| 280.350.016.080         | SK50                 | 16      | 80      | 27       | 34      | 10      | 51      | M12x1 |
| 280.350.016.120         | SK50                 | 16      | 120     | 27       | 34      | 10      | 51      | M12x1 |
| 280.350.016.130         | SK50                 | 16      | 130     | 27       | 34      | 10      | 51      | M12x1 |
| 280.350.016.160         | SK50                 | 16      | 160     | 27       | 34      | 10      | 51      | M12x1 |
| 280.350.016.200         | SK50                 | 16      | 200     | 27       | 34      | 10      | 51      | M12x1 |
| 280.350.018.080         | SK50                 | 18      | 80      | 33       | 42      | 10      | 51      | M12x1 |
| 280.350.018.120         | SK50                 | 18      | 120     | 33       | 42      | 10      | 51      | M12x1 |
| 280.350.018.130         | SK50                 | 18      | 130     | 33       | 42      | 10      | 51      | M12x1 |
| 280.350.018.160         | SK50                 | 18      | 160     | 33       | 42      | 10      | 51      | M12x1 |
| 280.350.018.200         | SK50                 | 18      | 200     | 33       | 42      | 10      | 51      | M12x1 |
| 280.350.020.080         | SK50                 | 20      | 80      | 33       | 42      | 10      | 53      | M16x1 |
| 280.350.020.120         | SK50                 | 20      | 120     | 33       | 42      | 10      | 53      | M16x1 |
| 280.350.020.130         | SK50                 | 20      | 130     | 33       | 42      | 10      | 53      | M16x1 |
| 280.350.020.160         | SK50                 | 20      | 160     | 33       | 42      | 10      | 53      | M16x1 |
| 280.350.020.200         | SK50                 | 20      | 200     | 33       | 42      | 10      | 53      | M16x1 |
| 280.350.025.100         | SK50                 | 25      | 100     | 44       | 53      | 10      | 59      | M16x1 |
| 280.350.025.120         | SK50                 | 25      | 120     | 44       | 53      | 10      | 59      | M16x1 |
| 280.350.025.130         | SK50                 | 25      | 130     | 44       | 53      | 10      | 59      | M16x1 |
| 280.350.025.160         | SK50                 | 25      | 160     | 44       | 53      | 10      | 59      | M16x1 |
| 280.350.025.200         | SK50                 | 25      | 200     | 44       | 53      | 10      | 59      | M16x1 |
| 280.350.032.100         | SK50                 | 32      | 100     | 44       | 53      | 10      | 63      | M16x1 |
| 280.350.032.120         | SK50                 | 32      | 120     | 44       | 53      | 10      | 63      | M16x1 |
| 280.350.032.130         | SK50                 | 32      | 130     | 44       | 53      | 10      | 63      | M16x1 |
| 280.350.032.160         | SK50                 | 32      | 160     | 44       | 53      | 10      | 63      | M16x1 |
| 280.350.032.200         | SK50                 | 32      | 200     | 44       | 53      | 10      | 63      | M16x1 |



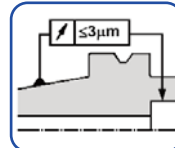
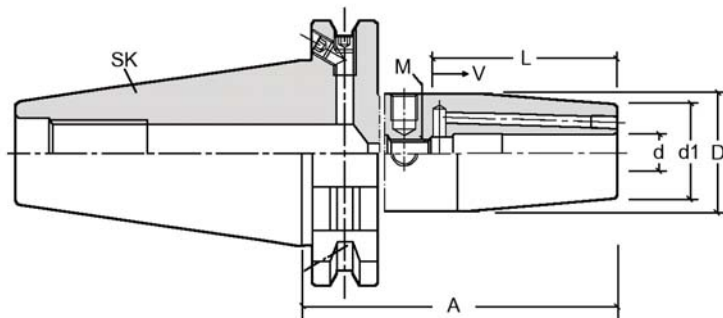


Schrumpffutter für HM und HSS Schäfte mit Kühlkanälen

DIN69871 AD/B

Shrink chucks with cooling for solid carbide and HSS shanks

DIN69871 AD/B



Mit vier zusätzlichen Gewinden am Umfang zum nachträglichen Feinwuchten.

| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|---------|---------|---------|-------|
| 281.340.003.080*        | SK40                 | 3       | 80      | 26       | ~       | ~       | 42      | ~     |
| 281.340.003.130*        | SK40                 | 3       | 130     | 12       | 17      | ~       | ~       | ~     |
| 281.340.004.080*        | SK40                 | 4       | 80      | 26       | ~       | ~       | 48      | ~     |
| 281.340.004.130*        | SK40                 | 4       | 130     | 12       | 17      | ~       | ~       | ~     |
| 281.340.005.080*        | SK40                 | 5       | 80      | 29       | ~       | ~       | 51      | ~     |
| 281.340.005.130*        | SK40                 | 5       | 130     | 12       | 17      | ~       | ~       | ~     |
| 281.340.006.080         | SK40                 | 6       | 80      | 21       | 27      | 10      | 37      | M5    |
| 281.340.006.120         | SK40                 | 6       | 120     | 21       | 27      | 10      | 37      | M5    |
| 281.340.006.130         | SK40                 | 6       | 130     | 21       | 27      | 10      | 37      | M5    |
| 281.340.008.080         | SK40                 | 8       | 80      | 21       | 27      | 10      | 37      | M6    |
| 281.340.008.120         | SK40                 | 8       | 120     | 21       | 27      | 10      | 37      | M6    |
| 281.340.008.130         | SK40                 | 8       | 130     | 21       | 27      | 10      | 37      | M6    |
| 281.340.010.065*        | SK40                 | 10      | 65      | 26       | 33      | ~       | 42      | ~     |
| 281.340.010.080         | SK40                 | 10      | 80      | 24       | 32      | 10      | 42      | M8x1  |
| 281.340.010.120         | SK40                 | 10      | 120     | 24       | 32      | 10      | 42      | M8x1  |
| 281.340.010.130         | SK40                 | 10      | 130     | 24       | 32      | 10      | 42      | M8x1  |
| 281.340.012.065*        | SK40                 | 12      | 65      | 26       | 33      | ~       | 48      | ~     |
| 281.340.012.080         | SK40                 | 12      | 80      | 24       | 32      | 10      | 48      | M10x1 |
| 281.340.012.120         | SK40                 | 12      | 120     | 24       | 32      | 10      | 48      | M10x1 |
| 281.340.012.130         | SK40                 | 12      | 130     | 24       | 32      | 10      | 48      | M10x1 |
| 281.340.014.080         | SK40                 | 14      | 80      | 27       | 34      | 10      | 48      | M10x1 |
| 281.340.014.120         | SK40                 | 14      | 120     | 27       | 34      | 10      | 48      | M10x1 |
| 281.340.014.130         | SK40                 | 14      | 130     | 27       | 34      | 10      | 48      | M10x1 |
| 281.340.016.065*        | SK40                 | 16      | 65      | 29       | 36      | ~       | 51      | ~     |
| 281.340.016.080         | SK40                 | 16      | 80      | 27       | 34      | 10      | 51      | M12x1 |
| 281.340.016.120         | SK40                 | 16      | 120     | 27       | 34      | 10      | 51      | M12x1 |
| 281.340.016.130         | SK40                 | 16      | 130     | 27       | 34      | 10      | 51      | M12x1 |
| 281.340.018.080         | SK40                 | 18      | 80      | 33       | 42      | 10      | 51      | M12x1 |
| 281.340.018.120         | SK40                 | 18      | 120     | 33       | 42      | 10      | 51      | M12x1 |
| 281.340.018.130         | SK40                 | 18      | 130     | 33       | 42      | 10      | 51      | M12x1 |
| 281.340.020.065*        | SK40                 | 20      | 65      | 35       | 42      | ~       | 53      | ~     |
| 281.340.020.080         | SK40                 | 20      | 80      | 33       | 42      | 10      | 53      | M16x1 |
| 281.340.020.120         | SK40                 | 20      | 120     | 33       | 42      | 10      | 53      | M16x1 |
| 281.340.020.130         | SK40                 | 20      | 130     | 33       | 42      | 10      | 53      | M16x1 |
| 281.340.025.075*        | SK40                 | 25      | 75      | 45       | 52      | ~       | 59      | ~     |
| 281.340.025.100         | SK40                 | 25      | 100     | 44       | 53      | 10      | 59      | M16x1 |
| 281.340.025.130         | SK40                 | 25      | 130     | 44       | 53      | 10      | 59      | M16x1 |
| 281.340.032.130         | SK40                 | 32      | 130     | 44       | 53      | 10      | 63      | M16x1 |



\*ohne Längeneinstellschraube



## Schrumpffutter für HM und HSS Schäfte mit Kühlkanälen

DIN69871 AD/B

### Shrink chucks with cooling for solid carbide and HSS shanks

DIN69871 AD/B

Fortsetzung von Seite A37 / Continuation page A37

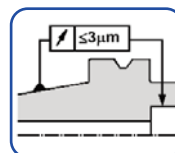
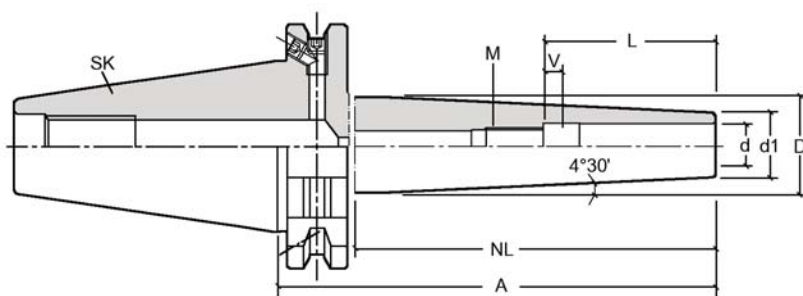
| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|---------|---------|---------|-------|
| 281.350.006.080         | SK50                 | 6       | 80      | 21       | 27      | 10      | 37      | M5    |
| 281.350.008.080         | SK50                 | 8       | 80      | 21       | 27      | 10      | 37      | M6    |
| 281.350.010.080         | SK50                 | 10      | 80      | 24       | 32      | 10      | 42      | M8x1  |
| 281.350.012.080         | SK50                 | 12      | 80      | 24       | 32      | 10      | 48      | M10x1 |
| 281.350.014.080         | SK50                 | 14      | 80      | 27       | 34      | 10      | 48      | M10x1 |
| 281.350.016.080         | SK50                 | 16      | 80      | 27       | 34      | 10      | 51      | M12x1 |
| 281.350.018.080         | SK50                 | 18      | 80      | 33       | 42      | 10      | 51      | M12x1 |
| 281.350.020.080         | SK50                 | 20      | 80      | 33       | 42      | 10      | 53      | M16x1 |
| 281.350.025.080         | SK50                 | 25      | 80      | 44       | 53      | 10      | 59      | M16x1 |
| 281.350.032.100         | SK50                 | 32      | 100     | 44       | 53      | 10      | 63      | M16x1 |

## Schrumpffutter zum Spannen von HM und HSS Schäften

DIN69871 AD/B

### Shrink chucks for mounting solid carbide and HSS shanks

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | NL<br>mm | d1<br>mm | D<br>mm | V<br>mm | L<br>mm | M     |
|-------------------------|----------------------|---------|---------|----------|----------|---------|---------|---------|-------|
| 282.340.003.080         | SK40                 | 3       | 80      | 60       | 8        | 14      | 5       | 20      | ~     |
| 282.340.003.120         | SK40                 | 3       | 120     | 100      | 9        | 25      | ~       | ~       | ~     |
| 282.340.004.080         | SK40                 | 4       | 80      | 60       | 9        | 15      | 5       | 20      | ~     |
| 282.340.004.120         | SK40                 | 4       | 120     | 100      | 9        | 25      | ~       | ~       | ~     |
| 282.340.005.080         | SK40                 | 5       | 80      | 60       | 10       | 16      | 5       | 20      | ~     |
| 282.340.005.120         | SK40                 | 5       | 120     | 100      | 9        | 25      | ~       | ~       | ~     |
| 282.340.006.080         | SK40                 | 6       | 80      | 60       | 12       | 16      | 10      | 36      | M5    |
| 282.340.006.120         | SK40                 | 6       | 120     | 100      | 15       | 30      | 10      | 37      | M5    |
| 282.340.008.080         | SK40                 | 8       | 80      | 60       | 14       | 18      | 10      | 36      | M6    |
| 282.340.008.120         | SK40                 | 8       | 120     | 100      | 15       | 30      | 10      | 37      | M6    |
| 282.340.010.080         | SK40                 | 10      | 80      | 60       | 16       | 20      | 10      | 41      | M8x1  |
| 282.340.010.120         | SK40                 | 10      | 120     | 100      | 18       | 32      | 10      | 42      | M8x1  |
| 282.340.012.080         | SK40                 | 12      | 80      | 60       | 18       | 22      | 10      | 46      | M10x1 |
| 282.340.012.120         | SK40                 | 12      | 120     | 100      | 18       | 32      | 10      | 48      | M10x1 |



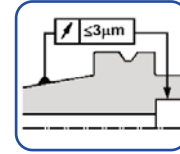
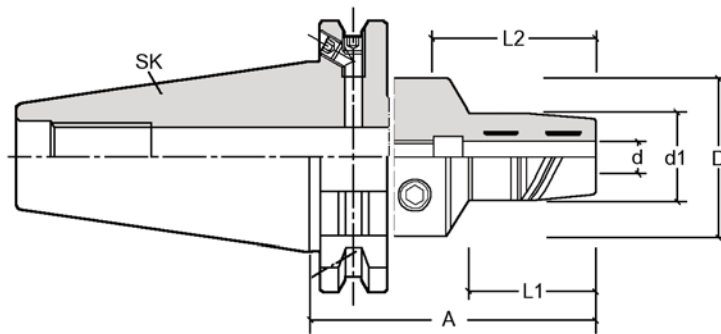


## Hydro-Dehnspannfutter kurz

DIN69871 AD/B

## Hydraulic expansibles chuck short

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | L1<br>mm | L2<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|----------|----------|---------|
| 260.230.012.090*        | SK30                 | 12      | 90      | 32       | 36       | 46       | 49,5    |
| 260.230.020.100*        | SK30                 | 20      | 100     | 42       | 46       | 51       | 49,5    |
| 260.340.006.080         | SK40                 | 6       | 80      | 26       | 40       | 37       | 49,5    |
| 260.340.008.080         | SK40                 | 8       | 80      | 28       | 40       | 37       | 49,5    |
| 260.340.010.080         | SK40                 | 10      | 80      | 30       | 40       | 41       | 49,5    |
| 260.340.012.080         | SK40                 | 12      | 80      | 32       | 40       | 46       | 49,5    |
| 260.340.014.080         | SK40                 | 14      | 80      | 34       | 40       | 46       | 49,5    |
| 260.340.016.080         | SK40                 | 16      | 80      | 38       | 46       | 49       | 49,5    |
| 260.340.018.080         | SK40                 | 18      | 80      | 40       | 46       | 49       | 49,5    |
| 260.340.020.080         | SK40                 | 20      | 80      | 42       | 46       | 51       | 49,5    |
| 260.340.025.095         | SK40                 | 25      | 95      | 49,5     | 76       | 57       | 55      |
| 260.340.032.095         | SK40                 | 32      | 95      | 56       | 76       | 61       | 63      |
| 260.350.006.080         | SK50                 | 6       | 80      | 26       | 40       | 37       | 49,5    |
| 260.350.008.080         | SK50                 | 8       | 80      | 28       | 40       | 37       | 49,5    |
| 260.350.010.080         | SK50                 | 10      | 80      | 30       | 40       | 41       | 49,5    |
| 260.350.012.080         | SK50                 | 12      | 80      | 32       | 40       | 46       | 49,5    |
| 260.350.014.080         | SK50                 | 14      | 80      | 34       | 40       | 46       | 49,5    |
| 260.350.016.080         | SK50                 | 16      | 80      | 38       | 46       | 49       | 49,5    |
| 260.350.018.080         | SK50                 | 18      | 80      | 40       | 46       | 49       | 49,5    |
| 260.350.020.064         | SK50                 | 20      | 64,5    | 49,5     | 88,5     | 51       | 49,5    |
| 260.350.020.080         | SK50                 | 20      | 80      | 42       | 46       | 51       | 49,5    |
| 260.350.025.100         | SK50                 | 25      | 100     | 55       | 55       | 57       | 60      |
| 260.350.032.081         | SK50                 | 32      | 81      | 72       | 105      | 61       | 72      |
| 260.350.032.100         | SK50                 | 32      | 100     | 63       | 55       | 61       | 70      |

\* Form AD



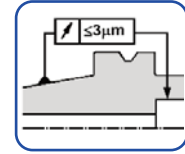
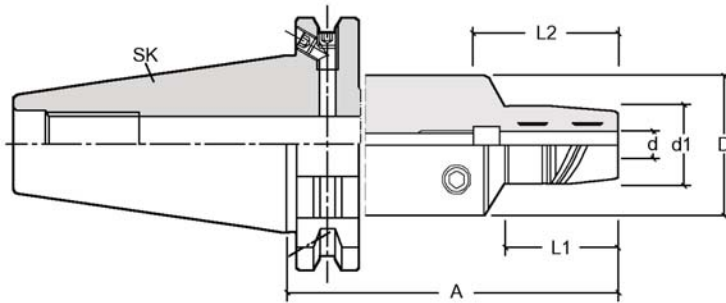


## Hydro-Dehnspannfutter lang

DIN69871 AD/B

### Hydraulic expansibles chuck long

DIN69871 AD/B



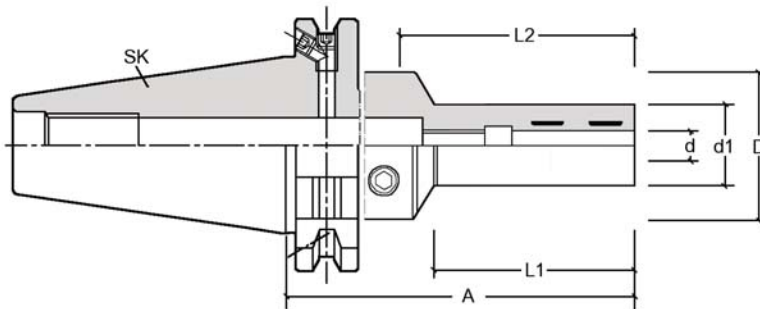
| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | l1<br>mm | L2<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|----------|----------|---------|
| 260.340.006.110         | SK40                 | 6       | 110     | 26       | 40       | 37       | 49,5    |
| 260.340.008.110         | SK40                 | 8       | 110     | 28       | 40       | 37       | 49,5    |
| 260.340.010.110         | SK40                 | 10      | 110     | 30       | 40       | 41       | 49,5    |
| 260.340.012.110         | SK40                 | 12      | 110     | 32       | 40       | 46       | 49,5    |
| 260.340.014.110         | SK40                 | 14      | 110     | 34       | 40       | 46       | 49,5    |
| 260.340.016.110         | SK40                 | 16      | 110     | 38       | 46       | 49       | 49,5    |
| 260.340.018.110         | SK40                 | 18      | 110     | 40       | 46       | 49       | 49,5    |
| 260.340.020.110         | SK40                 | 20      | 110     | 42       | 46       | 51       | 49,5    |
| 260.340.025.110         | SK40                 | 25      | 110     | 49,5     | 76       | 57       | 55      |
| 260.340.032.110         | SK40                 | 32      | 110     | 56       | 76       | 61       | 63      |
| 260.350.006.110         | SK50                 | 6       | 110     | 26       | 40       | 37       | 49,5    |
| 260.350.008.110         | SK50                 | 8       | 110     | 28       | 40       | 37       | 49,5    |
| 260.350.010.110         | SK50                 | 10      | 110     | 30       | 40       | 41       | 49,5    |
| 260.350.012.110         | SK50                 | 12      | 110     | 32       | 40       | 46       | 49,5    |
| 260.350.014.110         | SK50                 | 14      | 110     | 34       | 40       | 46       | 49,5    |
| 260.350.016.110         | SK50                 | 16      | 110     | 38       | 46       | 49       | 49,5    |
| 260.350.018.110         | SK50                 | 18      | 110     | 40       | 46       | 49       | 49,5    |
| 260.350.020.110         | SK50                 | 20      | 110     | 42       | 46       | 51       | 49,5    |
| 260.350.025.120         | SK50                 | 25      | 120     | 55       | 55       | 57       | 60      |
| 260.350.032.120         | SK50                 | 32      | 120     | 63       | 55       | 61       | 70      |

## Hydro-Dehnspannfutter lang schlanke Ausführung

DIN69871 AD/B

### Hydraulic expansibles chuck long slimline design

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | l1<br>mm | L2<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|----------|----------|---------|
| 261.340.012.110         | SK40                 | 12      | 110     | 25       | 60       | 46       | 49,5    |
| 261.350.012.110         | SK50                 | 12      | 110     | 25       | 60       | 46       | 49,5    |



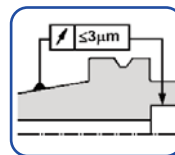
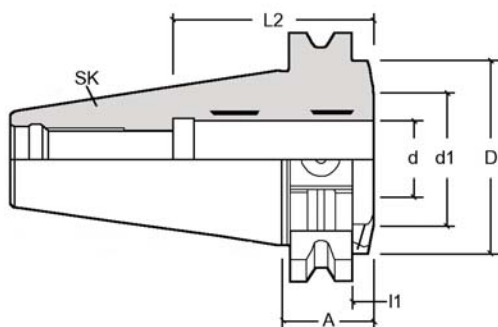


## Hydro-Dehnspannfutter extra kurz

DIN69871 AD

### Hydraulic expansibles chuck extra short

DIN69871 AD



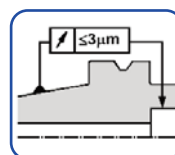
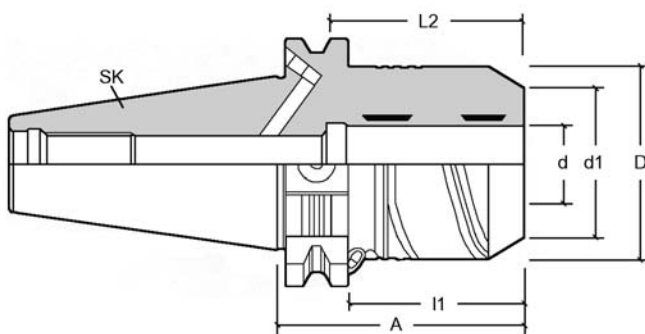
| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | l1<br>mm | L2<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|----------|----------|---------|
| 260.240.020.024         | SK40                 | 20      | 24,6    | 34       | 5,5      | 51       | 49,5    |

## Hydro-Dehnspannfutter stabil / kurz

DIN69871 AD/B

### Hydraulic expansibles chuck stabil / short

DIN69871 AD/B



| Bestell Nr.<br>Code No. | Kegel<br>Taper<br>SK | d<br>mm | A<br>mm | d1<br>mm | l1<br>mm | L2<br>mm | D<br>mm |
|-------------------------|----------------------|---------|---------|----------|----------|----------|---------|
| 260.340.020.064         | SK40                 | 20      | 64,5    | 39       | 45,5     | 51       | 49,5    |
| 260.350.020.064         | SK50                 | 20      | 64,5    | 39       | 45,5     | 51       | 49      |
| 260.350.032.081         | SK50                 | 32      | 81      | 61       | 62       | 61       | 72      |



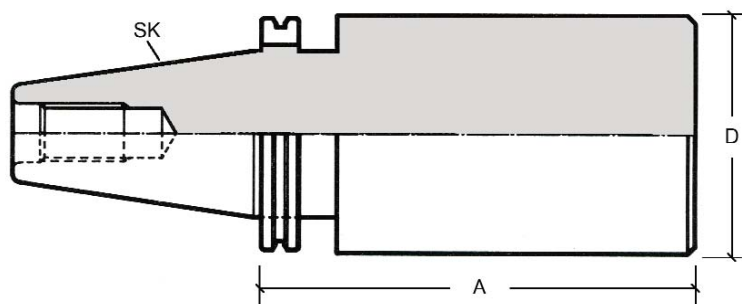


## Rohlinge zur Anfertigung von Sonderwerkzeugen

DIN69871 A

*Blanks for production of special tools*

*DIN69871 A*



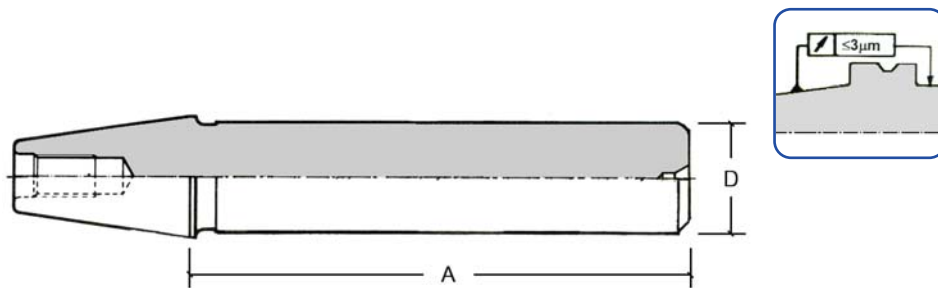
| Bestell Nr.<br><i>Code No.</i> | Kegel<br><i>Taper</i><br>SK | D<br>mm | A<br>mm |
|--------------------------------|-----------------------------|---------|---------|
| 361.230.040.160                | SK30                        | 40,5    | 160     |
| 361.240.063.250                | SK40                        | 63      | 250     |
| 361.250.097.315                | SK50                        | 97      | 315     |

## Kontrolldorne

DIN69871 A

*Test abors*

*DIN69871 A*



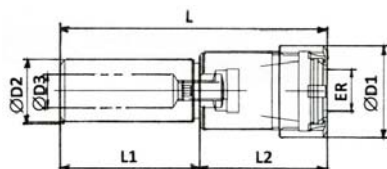
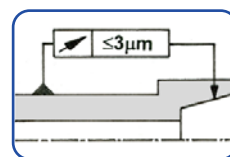
| Bestell Nr.<br><i>Code No.</i> | Kegel<br><i>Taper</i><br>SK | D<br>mm | A<br>mm |
|--------------------------------|-----------------------------|---------|---------|
| 898.230.032.300                | SK30                        | 32      | 300     |
| 898.240.040.300                | SK40                        | 40      | 300     |
| 898.250.050.300                | SK50                        | 50      | 300     |





## ER-Spannfutter mit Zylinderschaft mit Standard Spannmutter

*ER-Collet with cylindrical shank and with standard nut*



| Bestell Nr.<br><i>Code No.</i> | $\text{ØD2}$<br>h6 | Spannbereich<br><i>Capacity</i> | $\text{ØD1}$<br>mm | $\text{ØD3}$<br>mm | L1<br>mm | L2<br>mm | L<br>mm |
|--------------------------------|--------------------|---------------------------------|--------------------|--------------------|----------|----------|---------|
| <b>ER16</b>                    |                    |                                 |                    |                    |          |          |         |
| 253.W16.N16.166                | 16                 | 1-10                            | 32                 | 7                  | 130      | 36       | 166     |
| 253.W20.N16.081                | 20                 | 1-10                            | 32                 | 11                 | 50       | 31       | 81      |
| 253.W20.N16.131                | 20                 | 1-10                            | 32                 | 11                 | 100      | 31       | 131     |
| 253.W20.N16.161                | 20                 | 1-10                            | 32                 | 11                 | 130      | 31       | 161     |
| 253.W25.N16.087                | 25                 | 1-10                            | 32                 | 11                 | 60       | 27       | 87      |
| <b>ER20</b>                    |                    |                                 |                    |                    |          |          |         |
| 253.W20.N20.082                | 20                 | 1-13                            | 35                 | 11                 | 46       | 36       | 82      |
| 253.W20.N20.096                | 20                 | 1-13                            | 35                 | 11                 | 60       | 36       | 96      |
| 253.W20.N20.136                | 20                 | 1-13                            | 35                 | 11                 | 100      | 36       | 136     |
| 253.W25.N20.088                | 25                 | 1-13                            | 35                 | 13                 | 60       | 28       | 88      |

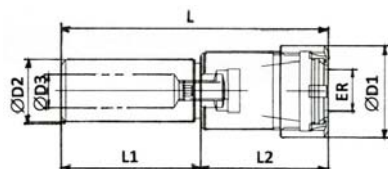
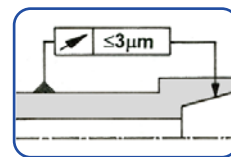


Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagschraube  
*Delivery: With balanced clamping nut and axial stopscrew*



## ER-Spannfutter mit Zylinderschaft mit Standard Spannmutter

*ER-Collet with cylindrical shank and with standard nut*



| Bestell Nr.<br><i>Code No.</i> | $\varnothing D2$<br>h6 | Spannbereich<br><i>Capacity</i> | $\varnothing D1$<br>mm | $\varnothing D3$<br>mm | L1<br>mm | L2<br>mm | L<br>mm |
|--------------------------------|------------------------|---------------------------------|------------------------|------------------------|----------|----------|---------|
| <b>ER25</b>                    |                        |                                 |                        |                        |          |          |         |
| 253.W16.N25.116                | 16                     | 1-16                            | 42                     | 9                      | 70       | 46       | 116     |
| 253.W20.N25.096                | 20                     | 1-16                            | 42                     | 11                     | 50       | 46       | 96      |
| 253.W20.N25.146                | 20                     | 1-16                            | 42                     | 11                     | 100      | 46       | 146     |
| 253.W20.N25.206                | 20                     | 1-16                            | 42                     | 11                     | 160      | 46       | 206     |
| 253.W25.N25.082                | 25                     | 1-16                            | 42                     | 13                     | 50       | 32       | 82      |
| 253.W25.N25.102                | 25                     | 1-16                            | 42                     | 13                     | 70       | 32       | 102     |
| 253.W25.N25.132                | 25                     | 1-16                            | 42                     | 13                     | 100      | 32       | 132     |
| 253.W25.N25.192                | 25                     | 1-16                            | 42                     | 13                     | 160      | 32       | 192     |
| 253.W32.N25.098                | 32                     | 1-16                            | 42                     | 19                     | 70       | 28       | 98      |
| 253.W32.N25.128                | 32                     | 1-16                            | 42                     | 19                     | 100      | 28       | 128     |
| 253.W40.N25.112                | 40                     | 1-16                            | 42                     | 19                     | 70       | 42       | 112     |
| <b>ER32</b>                    |                        |                                 |                        |                        |          |          |         |
| 253.W20.N32.104                | 20                     | 2-20                            | 50                     | 13                     | 50       | 54       | 104     |
| 253.W20.N32.154                | 20                     | 2-20                            | 50                     | 13                     | 100      | 54       | 154     |
| 253.W25.N32.104                | 25                     | 2-20                            | 50                     | 13                     | 50       | 54       | 104     |
| 253.W25.N32.124                | 25                     | 2-20                            | 50                     | 13                     | 70       | 54       | 124     |
| 253.W25.N32.154                | 25                     | 2-20                            | 50                     | 13                     | 100      | 54       | 154     |
| 253.W25.N32.184                | 25                     | 2-20                            | 50                     | 13                     | 130      | 54       | 184     |
| 253.W32.N32.088                | 32                     | 2-20                            | 50                     | 23                     | 50       | 38       | 88      |
| 253.W32.N32.108                | 32                     | 2-20                            | 50                     | 23                     | 70       | 38       | 108     |
| 253.W32.N32.138                | 32                     | 2-20                            | 50                     | 23                     | 100      | 38       | 138     |
| 253.W32.N32.158                | 32                     | 2-20                            | 50                     | 23                     | 120      | 38       | 158     |
| 253.W32.N32.188                | 32                     | 2-20                            | 50                     | 23                     | 150      | 38       | 188     |
| 253.W40.N32.100                | 40                     | 2-20                            | 50                     | 23                     | 70       | 30       | 100     |
| 253.W40.N32.130                | 40                     | 2-20                            | 50                     | 23                     | 100      | 30       | 130     |
| 253.W40.N32.160                | 40                     | 2-20                            | 50                     | 23                     | 130      | 30       | 160     |

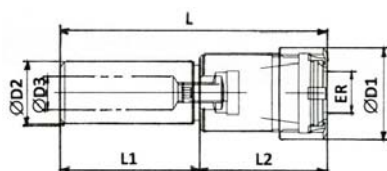
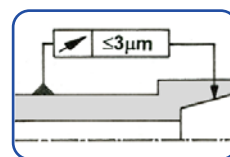


Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagschraube  
*Delivery: With balanced clamping nut and axial stopscrew*



## ER-Spannfutter mit Zylinderschaft mit MINI Spannmutter

*ER-Collet with cylindrical shank and with MINI nut*



| Bestell Nr.<br><i>Code No.</i> | $\varnothing D2$<br>h6 | Spannbereich<br><i>Capacity</i> | $\varnothing D1$<br>mm | $\varnothing D3$<br>mm | L1<br>mm | L2<br>mm | L<br>mm |
|--------------------------------|------------------------|---------------------------------|------------------------|------------------------|----------|----------|---------|
| <b>ER11</b>                    |                        |                                 |                        |                        |          |          |         |
| 253.W10.011.100                | 10                     | 1-7                             | 16                     | ~                      | 75       | 25       | 100     |
| 253.W12.011.100                | 12                     | 1-7                             | 16                     | ~                      | 75       | 25       | 100     |
| 253.W16.011.100                | 16                     | 1-7                             | 16                     | ~                      | 75       | 25       | 100     |
| 253.W16.011.130                | 16                     | 1-7                             | 16                     | ~                      | 105      | 25       | 130     |
| 253.W16.011.160                | 16                     | 1-7                             | 16                     | ~                      | 135      | 25       | 160     |
| 253.W20.011.050                | 20                     | 1-7                             | 16                     | ~                      | 25       | 25       | 50      |
| 253.W20.011.100                | 20                     | 1-7                             | 16                     | ~                      | 75       | 25       | 100     |
| 253.W20.011.130                | 20                     | 1-7                             | 16                     | ~                      | 105      | 25       | 130     |
| 253.W20.011.160                | 20                     | 1-7                             | 16                     | ~                      | 135      | 25       | 160     |
| <b>ER16</b>                    |                        |                                 |                        |                        |          |          |         |
| 253.W12.016.080                | 12                     | 1-10                            | 22                     | 5                      | 50       | 30       | 80      |
| 253.W12.016.120                | 12                     | 1-10                            | 22                     | 5                      | 90       | 30       | 120     |
| 253.W16.016.100                | 16                     | 1-10                            | 22                     | 5                      | 70       | 30       | 100     |
| 253.W16.016.130                | 16                     | 1-10                            | 22                     | 5                      | 100      | 30       | 130     |
| 253.W16.016.160                | 16                     | 1-10                            | 22                     | 5                      | 130      | 30       | 160     |
| 253.W16.016.200                | 16                     | 1-10                            | 22                     | 5                      | 170      | 30       | 200     |
| 253.W20.016.100                | 20                     | 1-10                            | 22                     | 5                      | 70       | 30       | 100     |
| 253.W20.016.130                | 20                     | 1-10                            | 22                     | 5                      | 100      | 30       | 130     |
| 253.W20.016.160                | 20                     | 1-10                            | 22                     | 5                      | 130      | 30       | 160     |
| <b>ER20</b>                    |                        |                                 |                        |                        |          |          |         |
| 253.W20.020.100                | 20                     | 1-13                            | 28                     | 9                      | 60       | 40       | 100     |
| 253.W20.020.160                | 20                     | 1-13                            | 28                     | 9                      | 120      | 40       | 160     |
| 253.W20.020.200                | 20                     | 1-13                            | 28                     | 9                      | 160      | 40       | 200     |
| 253.W25.020.160                | 25                     | 1-13                            | 28                     | 9                      | 120      | 40       | 160     |



C09



C18



C02-03-04



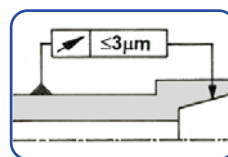
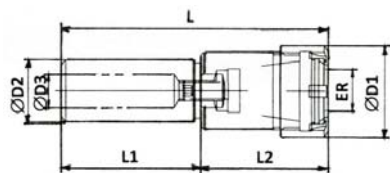
C16

Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagschraube  
*Delivery: With balanced clamping nut and axial stopscrew*



## ER-Spannfutter mit Zylinderschaft mit MINI Spannmutter

*ER-Collet with cylindrical shank and with MINI nut*



| Bestell Nr.<br><i>Code No.</i> | ØD2<br>h6 | Spannbereich<br><i>Capacity</i> | ØD1<br>mm | ØD3<br>mm | L1<br>mm | L2<br>mm | L<br>mm |
|--------------------------------|-----------|---------------------------------|-----------|-----------|----------|----------|---------|
| <b>ER11</b>                    |           |                                 |           |           |          |          |         |
| 253.006.011.070                | 6         | 1-7                             | 16        | ~         | 45       | 25       | 70      |
| 253.007.011.070                | 7         | 1-7                             | 16        | ~         | 45       | 25       | 70      |
| 253.008.011.080                | 8         | 1-7                             | 16        | ~         | 55       | 25       | 80      |
| 253.008.011.125                | 8         | 1-7                             | 16        | ~         | 100      | 25       | 125     |
| 253.010.011.080                | 10        | 1-7                             | 16        | 5         | 55       | 25       | 80      |
| 253.010.011.105                | 10        | 1-7                             | 16        | 5         | 80       | 25       | 105     |
| 253.010.011.125                | 10        | 1-7                             | 16        | 5         | 100      | 25       | 125     |
| 253.010.011.155                | 10        | 1-7                             | 16        | 5         | 130      | 25       | 155     |
| 253.012.011.080                | 12        | 1-7                             | 16        | 7         | 55       | 25       | 80      |
| 253.012.011.095                | 12        | 1-7                             | 16        | 7         | 70       | 25       | 95      |
| 253.012.011.125                | 12        | 1-7                             | 16        | 7         | 100      | 25       | 125     |
| 253.012.011.165                | 12        | 1-7                             | 16        | 7         | 140      | 25       | 165     |
| 253.016.011.062                | 16        | 1-7                             | 16        | 7         | 40       | 22       | 62      |
| 253.016.011.082                | 16        | 1-7                             | 16        | 7         | 60       | 22       | 82      |
| 253.016.011.102                | 16        | 1-7                             | 16        | 7         | 80       | 22       | 102     |
| 253.016.011.122                | 16        | 1-7                             | 16        | 7         | 100      | 22       | 122     |
| 253.016.011.152                | 16        | 1-7                             | 16        | 7         | 130      | 22       | 152     |
| 253.016.011.182                | 16        | 1-7                             | 16        | 7         | 160      | 22       | 182     |
| 253.016.011.222                | 16        | 1-7                             | 16        | 7         | 200      | 22       | 222     |
| <b>ER16</b>                    |           |                                 |           |           |          |          |         |
| 253.008.016.092                | 8         | 1-10                            | 22        | ~         | 55       | 37       | 92      |
| 253.010.016.097                | 10        | 1-10                            | 22        | 5         | 60       | 37       | 97      |
| 253.010.016.137                | 10        | 1-10                            | 22        | 5         | 100      | 37       | 137     |
| 253.012.016.092                | 12        | 1-10                            | 22        | 7         | 55       | 37       | 92      |
| 253.012.016.117                | 12        | 1-10                            | 22        | 7         | 80       | 37       | 117     |
| 253.012.016.157                | 12        | 1-10                            | 22        | 7         | 120      | 37       | 157     |
| 253.016.016.072                | 16        | 1-10                            | 22        | 7         | 35       | 37       | 72      |
| 253.016.016.097                | 16        | 1-10                            | 22        | 7         | 60       | 37       | 97      |
| 253.016.016.117                | 16        | 1-10                            | 22        | 7         | 80       | 37       | 117     |
| 253.016.016.137                | 16        | 1-10                            | 22        | 7         | 100      | 37       | 137     |
| 253.016.016.167                | 16        | 1-10                            | 22        | 7         | 130      | 37       | 167     |
| 253.016.016.197                | 16        | 1-10                            | 22        | 7         | 160      | 37       | 197     |
| 253.016.016.237                | 16        | 1-10                            | 22        | 7         | 200      | 37       | 237     |
| <b>ER20</b>                    |           |                                 |           |           |          |          |         |
| 253.016.020.095                | 16        | 1-13                            | 28        | 9         | 55       | 40       | 95      |
| 253.016.020.140                | 16        | 1-13                            | 28        | 9         | 100      | 40       | 140     |
| 253.016.020.200                | 16        | 1-13                            | 28        | 9         | 160      | 40       | 200     |



C09



C18



C02-03-04



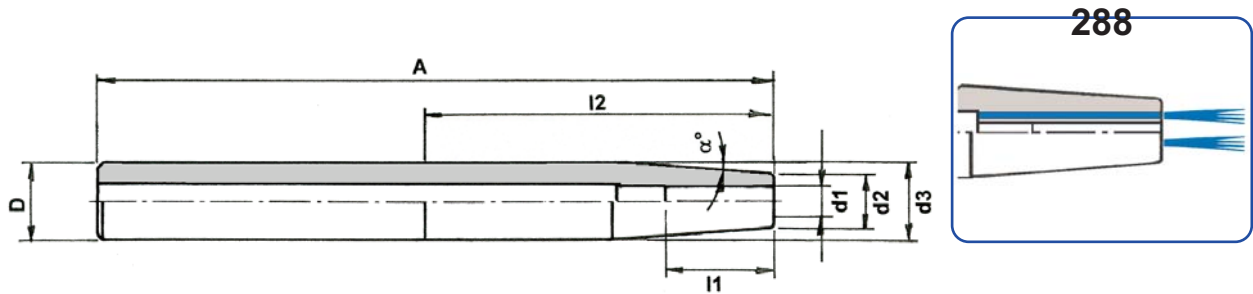
C16

Lieferumfang: Mit gewichteter Spannmutter und axialer Anschlagschraube  
*Delivery: With balanced clamping nut and axial stopscrew*



## Schrumpfverlängerungen ohne Längeneinstellschraube

### Shrink fit extensions without length adjustment screw



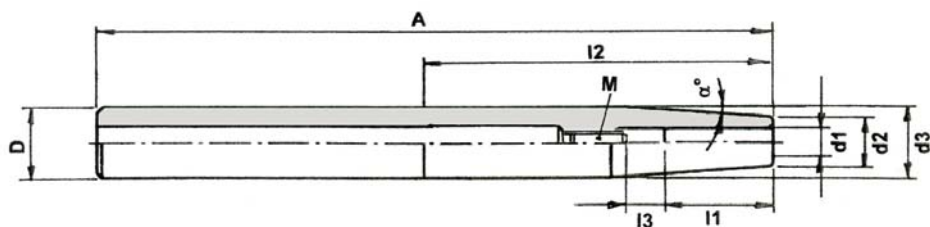
| Bestell Nr.<br>Code No. | D<br>h6 | d1<br>mm | d2<br>mm | d3<br>mm | $\alpha^\circ$ | l1<br>mm | l2<br>mm | A<br>mm |
|-------------------------|---------|----------|----------|----------|----------------|----------|----------|---------|
| 286.012.003.110         | 12      | 3        | 8        | 11,8     | 3°             | 12       | 63       | 110     |
| 286.012.003.160         | 12      | 3        | 8        | 12       | 4°30'          | 12       | ~        | 160     |
| 286.012.004.110         | 12      | 4        | 10       | 11,8     | 3°             | 16       | 63       | 110     |
| 286.012.004.160         | 12      | 4        | 8        | 12       | 4°30'          | 16       | ~        | 160     |
| 286.012.005.110         | 12      | 5        | 11       | 11,8     | 3°             | 20       | 63       | 110     |
| 286.016.003.160         | 16      | 3        | 10       | 16       | 4°30'          | 12       | ~        | 160     |
| 286.016.003.200         | 16      | 3        | 9        | 16       | 3°             | 12       | 150      | 200     |
| 286.016.004.160         | 16      | 4        | 10       | 16       | 4°30'          | 16       | ~        | 160     |
| 286.016.004.200         | 16      | 4        | 10       | 16       | 3°             | 16       | 150      | 200     |
| 286.016.005.160         | 16      | 5        | 10       | 16       | 4°30'          | 20       | ~        | 160     |
| 286.016.005.200         | 16      | 5        | 10       | 16       | 3°             | 20       | 150      | 200     |
| 286.016.006.160         | 16      | 6        | 10       | 16       | 4°30'          | 26       | ~        | 160     |
| 286.020.005.160         | 20      | 5        | 14       | 20       | 4°30'          | 20       | ~        | 160     |
| 286.020.006.160         | 20      | 6        | 14       | 20       | 4°30'          | 26       | ~        | 160     |
| 286.020.006.300         | 20      | 6        | 14       | 20       | 4°30'          | 26       | ~        | 300     |
| 286.020.008.160         | 20      | 8        | 14       | 20       | 4°30'          | 26       | ~        | 160     |
| 286.020.008.300         | 20      | 8        | 14       | 20       | 4°30'          | 26       | ~        | 300     |
| 286.025.008.160         | 25      | 8        | 19       | 25       | 4°30'          | 26       | ~        | 160     |
| 286.025.008.300         | 25      | 8        | 19       | 25       | 4°30'          | 26       | ~        | 300     |
| 286.025.010.160         | 25      | 10       | 20       | 25       | 4°30'          | 32       | ~        | 160     |
| 286.025.010.300         | 25      | 10       | 20       | 25       | 4°30'          | 32       | ~        | 300     |
| 286.025.012.160         | 25      | 12       | 20       | 25       | 4°30'          | 37       | ~        | 160     |
| 286.025.012.300         | 25      | 12       | 20       | 25       | 4°30'          | 37       | ~        | 300     |
| 286.025.014.160         | 25      | 14       | 20       | 25       | 4°30'          | 37       | ~        | 160     |
| 286.025.014.300         | 25      | 14       | 20       | 25       | 4°30'          | 37       | ~        | 300     |
| 286.025.016.160         | 25      | 16       | 22       | 25       | 4°30'          | 40       | ~        | 160     |
| 286.025.016.300         | 25      | 16       | 22       | 25       | 4°30'          | 40       | ~        | 300     |
| 286.032.010.160         | 32      | 10       | 24       | 32       | 4°30'          | 32       | ~        | 160     |
| 286.032.010.300         | 32      | 10       | 24       | 32       | 4°30'          | 32       | ~        | 300     |
| 286.032.012.160         | 32      | 12       | 24       | 32       | 4°30'          | 37       | ~        | 160     |
| 286.032.012.300         | 32      | 12       | 24       | 32       | 4°30'          | 37       | ~        | 300     |
| 286.032.014.160         | 32      | 14       | 27       | 32       | 4°30'          | 37       | ~        | 160     |
| 286.032.014.300         | 32      | 14       | 27       | 32       | 4°30'          | 37       | ~        | 300     |
| 286.032.016.160         | 32      | 16       | 27       | 32       | 4°30'          | 40       | ~        | 160     |
| 286.032.016.300         | 32      | 16       | 27       | 32       | 4°30'          | 40       | ~        | 300     |
| 286.032.018.160         | 32      | 18       | 27       | 32       | 4°30'          | 40       | ~        | 160     |
| 286.032.020.160         | 32      | 20       | 27       | 32       | 4°30'          | 42       | ~        | 160     |
| 286.032.020.300         | 32      | 20       | 27       | 32       | 4°30'          | 42       | ~        | 300     |
| 288.020.006.160         | 25      | 6        | 14       | 20       | 4°30'          | 26       | ~        | 160     |
| 288.025.008.160         | 25      | 8        | 19       | 25       | 4°30'          | 26       | ~        | 160     |
| 288.025.010.160         | 25      | 10       | 20       | 25       | 4°30'          | 32       | ~        | 160     |
| 288.032.010.160         | 32      | 10       | 24       | 32       | 4°30'          | 32       | ~        | 160     |
| 288.032.012.160         | 32      | 12       | 24       | 32       | 4°30'          | 37       | ~        | 160     |
| 288.032.014.160         | 32      | 14       | 27       | 32       | 4°30'          | 37       | ~        | 160     |
| 288.032.016.160         | 32      | 16       | 27       | 32       | 4°30'          | 40       | ~        | 160     |





## Schrumpfverlängerungen mit Längeneinstellschraube

### Shrink fit extensions with length adjustment screw



| Bestell Nr.<br>Code No. | D<br>h6 | d1<br>mm | d2<br>mm | d3<br>mm | $\alpha^\circ$ | l1<br>mm | l2<br>mm | l3<br>mm | M     | A<br>mm |
|-------------------------|---------|----------|----------|----------|----------------|----------|----------|----------|-------|---------|
| 283.012.003.150         | 12      | 3        | 8        | 12       | 4°30'          | 12       | ~        | ~        | M5    | 150     |
| 283.012.004.150         | 12      | 4        | 8        | 12       | 4°30'          | 16       | ~        | ~        | M5    | 150     |
| 283.012.006.110         | 12      | 6        | 12       | 17       | 3°             | 26       | 63       | 10       | M5    | 110     |
| 283.012.008.110         | 12      | 8        | 14       | 19       | 3°             | 26       | 63       | 10       | M6    | 110     |
| 283.016.003.110         | 16      | 3        | 9        | 13       | 3°             | 12       | 60       | 10       | M6    | 110     |
| 283.016.003.150         | 16      | 3        | 10       | 16       | 4°30'          | 12       | ~        | ~        | M5    | 150     |
| 283.016.004.110         | 16      | 4        | 10       | 14       | 3°             | 16       | 60       | 10       | M6    | 110     |
| 283.016.004.150         | 16      | 4        | 10       | 16       | 4°30'          | 16       | ~        | ~        | M5    | 150     |
| 283.016.005.110         | 16      | 5        | 11       | 15       | 3°             | 20       | 58       | 10       | M6    | 110     |
| 283.016.005.150         | 16      | 5        | 10       | 16       | 4°30'          | 20       | ~        | ~        | M6    | 150     |
| 283.016.006.110         | 16      | 6        | 12       | 15,8     | 3°             | 26       | 60       | 10       | M5    | 110     |
| 283.016.006.150         | 16      | 6        | 10       | 16       | 4°30'          | 26       | ~        | 10       | M5    | 150     |
| 283.016.006.200         | 16      | 6        | 12       | 16       | 3°             | 26       | 150      | 10       | M5    | 200     |
| 283.016.008.110         | 16      | 8        | 14       | 19       | 3°             | 26       | 60       | 10       | M6    | 110     |
| 283.016.008.160         | 16      | 8        | 14       | 16       | 4°30'          | 26       | ~        | 10       | M5    | 160     |
| 283.020.003.110         | 20      | 3        | 9        | 13       | 3°             | 12       | 58       | 10       | M6    | 110     |
| 283.020.003.150         | 20      | 3        | 10       | 20       | 4°30'          | 12       | ~        | ~        | M5    | 150     |
| 283.020.004.110         | 20      | 4        | 10       | 14       | 3°             | 16       | 58       | 10       | M6    | 110     |
| 283.020.004.150         | 20      | 4        | 10       | 20       | 4°30'          | 16       | ~        | ~        | M5    | 150     |
| 283.020.005.110         | 20      | 5        | 11       | 15       | 3°             | 20       | 58       | 10       | M6    | 110     |
| 283.020.005.150         | 20      | 5        | 10       | 20       | 4°30'          | 20       | ~        | ~        | M6    | 150     |
| 283.020.006.110         | 20      | 6        | 12       | 16       | 3°             | 26       | 58       | 10       | M5    | 110     |
| 283.020.006.150         | 20      | 6        | 10       | 20       | 4°30'          | 26       | ~        | 10       | M5    | 150     |
| 283.020.006.160         | 20      | 6        | 14       | 20       | 4°30'          | 26       | ~        | 10       | M5    | 160     |
| 283.020.006.250         | 20      | 6        | 12       | 20       | 3°             | 26       | 198      | 10       | M5    | 250     |
| 283.020.008.110         | 20      | 8        | 14       | 19       | 3°             | 26       | 58       | 10       | M6    | 110     |
| 283.020.008.150         | 20      | 8        | 12       | 20       | 4°30'          | 26       | ~        | 10       | M6    | 150     |
| 283.020.008.160         | 20      | 8        | 14       | 20       | 4°30'          | 26       | ~        | 10       | M6    | 160     |
| 283.020.008.250         | 20      | 8        | 14       | 20       | 3°             | 26       | 198      | 10       | M6    | 250     |
| 283.020.010.110         | 20      | 10       | 16       | 19,8     | 3°             | 32       | 58       | 10       | M8x1  | 110     |
| 283.020.010.150         | 20      | 10       | 14       | 20       | 4°30'          | 32       | ~        | 10       | M6    | 150     |
| 283.020.010.250         | 20      | 10       | 16       | 20       | 3°             | 32       | 198      | 10       | M8x1  | 250     |
| 283.020.012.110         | 20      | 12       | 18       | 19,8     | 3°             | 37       | 58       | 10       | M10x1 | 110     |
| 283.020.012.150         | 20      | 12       | 16       | 20       | 4°30'          | 37       | ~        | 10       | M10x1 | 150     |

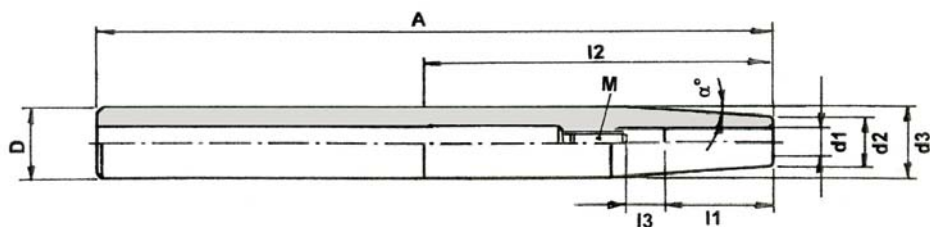


C16



## Schrumpfverlängerungen mit Längeneinstellschraube

### Shrink fit extensions with length adjustment screw



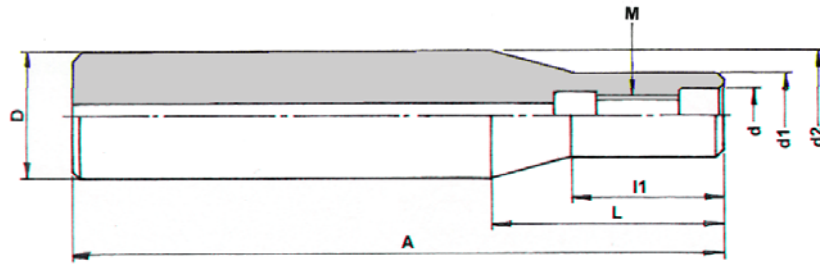
| Bestell Nr.<br>Code No. | D<br>h6 | d1<br>mm | d2<br>mm | d3<br>mm | $\alpha^\circ$ | I1<br>mm | I2<br>mm | I3<br>mm | M     | A<br>mm |
|-------------------------|---------|----------|----------|----------|----------------|----------|----------|----------|-------|---------|
| 283.025.008.150         | 25      | 8        | 20       | 25       | 4°30'          | 26       | ~        | 10       | M6    | 150     |
| 283.025.008.160         | 25      | 8        | 19       | 25       | 4°30'          | 26       | ~        | 10       | M6    | 160     |
| 283.025.010.150         | 25      | 10       | 20       | 25       | 4°30'          | 32       | ~        | 10       | M6    | 150     |
| 283.025.010.160         | 25      | 10       | 20       | 25       | 4°30'          | 32       | ~        | 10       | M8x1  | 160     |
| 283.025.012.150         | 25      | 12       | 20       | 25       | 4°30'          | 37       | ~        | 10       | M10x1 | 150     |
| 283.025.012.160         | 25      | 12       | 20       | 25       | 4°30'          | 37       | ~        | 10       | M10x1 | 160     |
| 283.025.012.250         | 25      | 12       | 18       | 25       | 3°             | 37       | 193      | 10       | M10x1 | 250     |
| 283.025.014.150         | 25      | 14       | 20       | 25       | 4°30'          | 37       | ~        | 10       | M10x1 | 150     |
| 283.025.014.160         | 25      | 14       | 20       | 25       | 4°30'          | 37       | ~        | 10       | M10x1 | 160     |
| 283.025.016.150         | 25      | 16       | 22       | 25       | 4°30'          | 40       | ~        | 10       | M10x1 | 150     |
| 283.025.016.160         | 25      | 16       | 22       | 25       | 4°30'          | 40       | ~        | 10       | M12x1 | 160     |
| 283.025.016.250         | 25      | 16       | 22       | 25       | 3°             | 40       | 193      | 10       | M12x1 | 250     |
| 283.032.010.150         | 32      | 10       | 24       | 32       | 4°30'          | 32       | ~        | 10       | M6    | 150     |
| 283.032.010.160         | 32      | 10       | 24       | 32       | 4°30'          | 32       | ~        | 10       | M8x1  | 160     |
| 283.032.012.150         | 32      | 12       | 24       | 32       | 4°30'          | 37       | ~        | 10       | M10x1 | 150     |
| 283.032.012.160         | 32      | 12       | 24       | 32       | 4°30'          | 37       | ~        | 10       | M10x1 | 160     |
| 283.032.014.150         | 32      | 14       | 27       | 32       | 4°30'          | 37       | ~        | 10       | M10x1 | 150     |
| 283.032.014.160         | 32      | 14       | 27       | 32       | 4°30'          | 37       | ~        | 10       | M10x1 | 160     |
| 283.032.016.150         | 32      | 16       | 27       | 32       | 4°30'          | 40       | ~        | 10       | M10x1 | 150     |
| 283.032.016.160         | 32      | 16       | 27       | 32       | 4°30'          | 40       | ~        | 10       | M12x1 | 160     |
| 283.032.018.150         | 32      | 18       | 27       | 32       | 4°30'          | 40       | ~        | 10       | M10x1 | 150     |
| 283.032.018.160         | 32      | 18       | 27       | 32       | 4°30'          | ~        | ~        | 10       | M12x1 | 160     |
| 283.032.020.150         | 32      | 20       | 27       | 32       | 4°30'          | 42       | ~        | 10       | M10x1 | 150     |
| 283.032.020.160         | 32      | 20       | 27       | ~        | ~              | ~        | ~        | ~        | ~     | ~       |



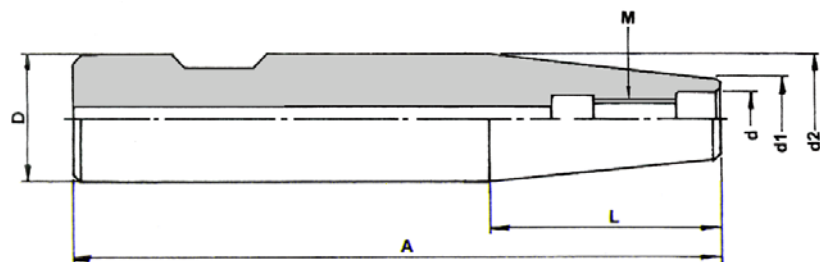


## Fräsdorne mit Zyl.Schaft nach DIN 1835A + B für Einschraubfräser

### Milling arbors with shank to DIN 1835A + B for screw in tools



| Bestell Nr.<br>Code No. | D<br>mm | M   | d<br>mm | d1<br>mm | d2<br>mm | l1<br>mm | A<br>mm | L<br>mm |
|-------------------------|---------|-----|---------|----------|----------|----------|---------|---------|
| 267.020.M10.160         | 20      | M10 | 10,5    | 18,5     | 20       | 67       | 160     | 68,7    |
| 267.025.M12.240         | 25      | M12 | 12,5    | 23       | 25       | 77       | 240     | 87,5    |
| 267.032.M12.160         | 32      | M12 | 12,5    | 23       | 32       | 23       | 160     | 54      |
| 267.032.M12.300         | 32      | M12 | 12,5    | 23       | 32       | 59,5     | 300     | 134     |
| 267.032.M16.160         | 32      | M16 | 17,0    | 30       | 32       | 66       | 160     | 68,7    |
| 267.032.M16.300         | 32      | M16 | 17,0    | 30       | 32       | 146      | 300     | 148,7   |

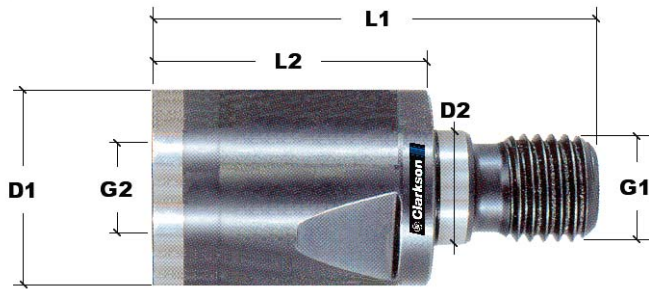


| Bestell Nr.<br>Code No. | D<br>mm | M   | d<br>mm | d1<br>mm | d2<br>mm | A<br>mm | L<br>mm |
|-------------------------|---------|-----|---------|----------|----------|---------|---------|
| 267.W20.M06.075         | 20      | M6  | 6,5     | 10       | 18       | 75      | 25      |
| 267.W20.M06.100         | 20      | M6  | 6,5     | 10       | 18       | 100     | 50      |
| 267.W20.M06.125         | 20      | M6  | 6,5     | 10       | 18       | 125     | 75      |
| 267.W16.M08.088         | 16      | M8  | 8,5     | 13       | 16       | 88      | 40      |
| 267.W20.M08.075         | 20      | M8  | 8,5     | 13       | 18       | 75      | 25      |
| 267.W20.M08.100         | 20      | M8  | 8,5     | 13       | 18       | 100     | 50      |
| 267.W20.M08.125         | 20      | M8  | 8,5     | 13       | 18       | 125     | 75      |
| 267.W20.M10.075         | 20      | M10 | 10,5    | 18       | 18       | 75      | 25      |
| 267.W20.M10.080         | 20      | M10 | 10,5    | 18,5     | 20       | 80      | 25      |
| 267.W20.M10.100         | 20      | M10 | 10,5    | 18       | 18       | 100     | 50      |
| 267.W20.M10.125         | 20      | M10 | 10,5    | 18       | 18       | 125     | 75      |
| 267.W20.M10.152         | 20      | M10 | 10,5    | 18,5     | 20       | 152     | 97      |
| 267.W25.M12.081         | 25      | M12 | 12,5    | 21       | 25       | 81      | 35      |
| 267.W25.M12.101         | 25      | M12 | 12,5    | 23       | 25       | 101     | 40      |
| 267.W25.M12.131         | 25      | M12 | 12,5    | 21       | 25       | 131     | 75      |
| 267.W25.M12.170         | 25      | M12 | 12,5    | 23       | 25       | 170     | 109     |
| 267.W25.M12.181         | 25      | M12 | 12,5    | 21       | 25       | 181     | 125     |
| 267.W32.M12.170         | 32      | M12 | 12,5    | 23       | 25       | 170     | 170     |
| 267.W32.M16.085         | 32      | M16 | 17,0    | 29       | 32       | 85      | 25      |
| 267.W32.M16.105         | 32      | M16 | 17,0    | 30       | 32       | 105     | 40      |
| 267.W32.M16.135         | 32      | M16 | 17,0    | 29       | 32       | 135     | 75      |
| 267.W32.M16.185         | 32      | M16 | 17,0    | 29       | 32       | 185     | 125     |



## Verlängerungen für Einschraubfräser

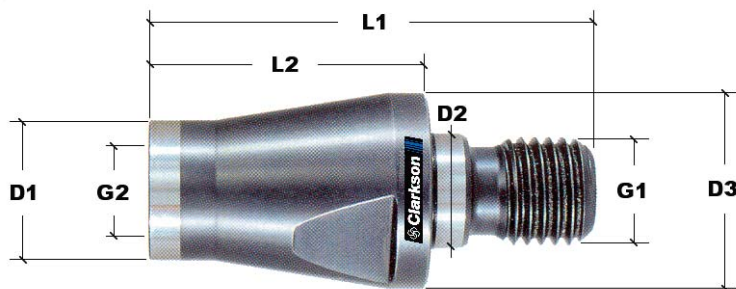
### Extensions for screw in tools



| Bestell Nr.<br>Code No. | G1<br>M | G2<br>M | D1<br>mm | D2<br>mm | L1<br>mm | L2<br>mm |
|-------------------------|---------|---------|----------|----------|----------|----------|
| 257.M06.M06.025         | M6      | M6      | 9,8      | 6,5      | 40       | 25       |
| 257.M08.M08.030         | M8      | M8      | 12,8     | 8,5      | 48       | 30       |
| 257.M10.M10.A35         | M10     | M10     | 15,4     | 10,5     | 55       | 35       |
| 257.M10.M10.035         | M10     | M10     | 17,8     | 10,5     | 55       | 35       |
| 257.M12.M12.040         | M12     | M12     | 20,8     | 12,5     | 62       | 40       |
| 257.M16.M16.040         | M16     | M16     | 28,8     | 17,0     | 59       | 40       |
| 257.M16.M16.045         | M16     | M16     | 28,8     | 17,0     | 64       | 45       |

## Reduzierung für Einschraubfräser

### Reductions for screw in tools

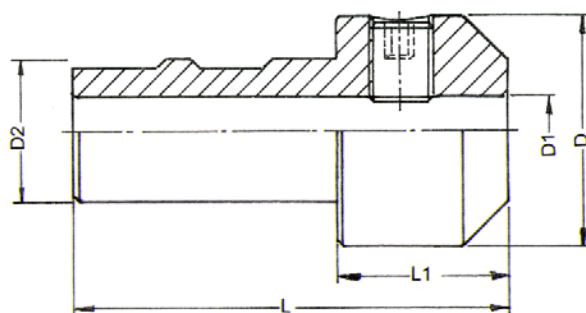


| Bestell Nr.<br>Code No. | G1<br>M | G2<br>M | D1<br>mm | D2<br>mm | D3<br>mm | L1<br>mm | L2<br>mm |
|-------------------------|---------|---------|----------|----------|----------|----------|----------|
| 258.M08.M06.025         | M8      | M6      | 9,8      | 8,5      | 12,8     | 43       | 25       |
| 258.M10.M08.030         | M10     | M8      | 12,8     | 10,5     | 17,8     | 50       | 30       |
| 258.M12.M06.040         | M12     | M6      | 9,8      | 12,5     | 20,8     | 62       | 40       |
| 258.M12.M08.040         | M12     | M8      | 12,8     | 12,5     | 20,8     | 62       | 40       |
| 258.M12.M10.035         | M12     | M10     | 15,4     | 12,5     | 20,8     | 57       | 35       |
| 258.M12.M10.A35         | M12     | M10     | 17,8     | 12,5     | 20,8     | 57       | 35       |
| 258.M16.M08.060         | M16     | M8      | 12,8     | 17,0     | 28,8     | 84       | 60       |
| 258.M16.M10.060         | M16     | M10     | 15,4     | 17,0     | 28,8     | 84       | 60       |
| 258.M16.M10.A60         | M16     | M10     | 17,8     | 17,0     | 28,8     | 84       | 60       |
| 258.M16.M12.040         | M16     | M12     | 20,8     | 17,0     | 28,8     | 64       | 40       |



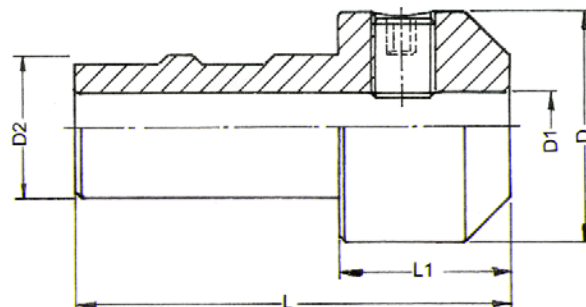
## Reduziereinsätze DIN 1835B für Zylinderschäfte DIN 1835B + E

### Reducing bushes DIN 1835B for cylindrical shanks DIN 1835B + E



**Form: AD**  
mit Durchgangsbohrung

| Bestell Nr.<br>Code No. | D1<br>mm | D2<br>h6 | D<br>mm | L1<br>mm | L<br>mm |
|-------------------------|----------|----------|---------|----------|---------|
| 276.020.006.030         | 6        | 20       | 25      | 30       | 80      |
| 276.020.008.030         | 8        | 20       | 28      | 30       | 80      |
| 276.020.010.030         | 10       | 20       | 35      | 30       | 80      |
| 276.020.012.035         | 12       | 20       | 42      | 35       | 85      |



| Bestell Nr.<br>Code No. | D1<br>mm | D2<br>h6 | D<br>mm | L1<br>mm | L<br>mm |
|-------------------------|----------|----------|---------|----------|---------|
| 276.032.006.030         | 6        | 32       | 25      | 30       | 90      |
| 276.032.008.030         | 8        | 32       | 28      | 30       | 90      |
| 276.032.010.030         | 10       | 32       | 35      | 30       | 90      |
| 276.032.012.035         | 12       | 32       | 42      | 35       | 95      |
| 276.032.014.035         | 14       | 32       | 44      | 35       | 95      |
| 276.032.016.038         | 16       | 32       | 48      | 38       | 98      |
| 276.032.018.038         | 18       | 32       | 50      | 38       | 98      |
| 276.032.020.040         | 20       | 32       | 52      | 40       | 100     |

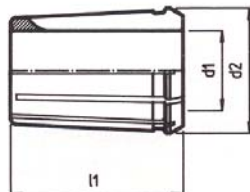


C16



## Spannzangen DIN 6388 B (ISO 10897 B) System OZ

### Collets DIN 6388 B (ISO 10897 B) OZ system



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | d1<br>mm | d2<br>mm | l1<br>mm |
|--------------------------------|----------------------|----------|----------|----------|
|--------------------------------|----------------------|----------|----------|----------|

| OZ 16           |       |    |      |    |
|-----------------|-------|----|------|----|
| 435.016.002.000 | OZ 16 | 2  | 25,5 | 40 |
| 435.016.003.000 | OZ 16 | 3  | 25,5 | 40 |
| 435.016.004.000 | OZ 16 | 4  | 25,5 | 40 |
| 435.016.005.000 | OZ 16 | 5  | 25,5 | 40 |
| 435.016.006.000 | OZ 16 | 6  | 25,5 | 40 |
| 435.016.007.000 | OZ 16 | 7  | 25,5 | 40 |
| 435.016.008.000 | OZ 16 | 8  | 25,5 | 40 |
| 435.016.009.000 | OZ 16 | 9  | 25,5 | 40 |
| 435.016.010.000 | OZ 16 | 10 | 25,5 | 40 |
| 435.016.011.000 | OZ 16 | 11 | 25,5 | 40 |
| 435.016.012.000 | OZ 16 | 12 | 25,5 | 40 |
| 435.016.013.000 | OZ 16 | 13 | 25,5 | 40 |
| 435.016.014.000 | OZ 16 | 14 | 25,5 | 40 |
| 435.016.015.000 | OZ 16 | 15 | 25,5 | 40 |
| 435.016.016.000 | OZ 16 | 16 | 25,5 | 40 |

| OZ 25           |       |    |       |    |
|-----------------|-------|----|-------|----|
| 435.025.002.000 | OZ 25 | 2  | 35,05 | 52 |
| 435.025.003.000 | OZ 25 | 3  | 35,05 | 52 |
| 435.025.004.000 | OZ 25 | 4  | 35,05 | 52 |
| 435.025.005.000 | OZ 25 | 5  | 35,05 | 52 |
| 435.025.006.000 | OZ 25 | 6  | 35,05 | 52 |
| 435.025.007.000 | OZ 25 | 7  | 35,05 | 52 |
| 435.025.008.000 | OZ 25 | 8  | 35,05 | 52 |
| 435.025.009.000 | OZ 25 | 9  | 35,05 | 52 |
| 435.025.010.000 | OZ 25 | 10 | 35,05 | 52 |
| 435.025.011.000 | OZ 25 | 11 | 35,05 | 52 |
| 435.025.012.000 | OZ 25 | 12 | 35,05 | 52 |
| 435.025.013.000 | OZ 25 | 13 | 35,05 | 52 |
| 435.025.014.000 | OZ 25 | 14 | 35,05 | 52 |
| 435.025.015.000 | OZ 25 | 15 | 35,05 | 52 |
| 435.025.016.000 | OZ 25 | 16 | 35,05 | 52 |
| 435.025.017.000 | OZ 25 | 17 | 35,05 | 52 |
| 435.025.018.000 | OZ 25 | 18 | 35,05 | 52 |
| 435.025.019.000 | OZ 25 | 19 | 35,05 | 52 |
| 435.025.020.000 | OZ 25 | 20 | 35,05 | 52 |
| 435.025.021.000 | OZ 25 | 21 | 35,05 | 52 |
| 435.025.022.000 | OZ 25 | 22 | 35,05 | 52 |
| 435.025.023.000 | OZ 25 | 23 | 35,05 | 52 |
| 435.025.024.000 | OZ 25 | 24 | 35,05 | 52 |
| 435.025.025.000 | OZ 25 | 25 | 35,05 | 52 |

| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | d1<br>mm | d2<br>mm | l1<br>mm |
|--------------------------------|----------------------|----------|----------|----------|
|--------------------------------|----------------------|----------|----------|----------|

| OZ 32           |       |    |      |    |
|-----------------|-------|----|------|----|
| 435.032.003.000 | OZ 32 | 3  | 43,7 | 60 |
| 435.032.004.000 | OZ 32 | 4  | 43,7 | 60 |
| 435.032.005.000 | OZ 32 | 5  | 43,7 | 60 |
| 435.032.006.000 | OZ 32 | 6  | 43,7 | 60 |
| 435.032.007.000 | OZ 32 | 7  | 43,7 | 60 |
| 435.032.008.000 | OZ 32 | 8  | 43,7 | 60 |
| 435.032.009.000 | OZ 32 | 9  | 43,7 | 60 |
| 435.032.010.000 | OZ 32 | 10 | 43,7 | 60 |
| 435.032.011.000 | OZ 32 | 11 | 43,7 | 60 |
| 435.032.012.000 | OZ 32 | 12 | 43,7 | 60 |
| 435.032.013.000 | OZ 32 | 13 | 43,7 | 60 |
| 435.032.014.000 | OZ 32 | 14 | 43,7 | 60 |
| 435.032.015.000 | OZ 32 | 15 | 43,7 | 60 |
| 435.032.016.000 | OZ 32 | 16 | 43,7 | 60 |
| 435.032.017.000 | OZ 32 | 17 | 43,7 | 60 |
| 435.032.018.000 | OZ 32 | 18 | 43,7 | 60 |
| 435.032.019.000 | OZ 32 | 19 | 43,7 | 60 |
| 435.032.020.000 | OZ 32 | 20 | 43,7 | 60 |
| 435.032.021.000 | OZ 32 | 21 | 43,7 | 60 |
| 435.032.022.000 | OZ 32 | 22 | 43,7 | 60 |
| 435.032.023.000 | OZ 32 | 23 | 43,7 | 60 |
| 435.032.024.000 | OZ 32 | 24 | 43,7 | 60 |
| 435.032.025.000 | OZ 32 | 25 | 43,7 | 60 |
| 435.032.026.000 | OZ 32 | 26 | 43,7 | 60 |
| 435.032.027.000 | OZ 32 | 27 | 43,7 | 60 |
| 435.032.028.000 | OZ 32 | 28 | 43,7 | 60 |
| 435.032.029.000 | OZ 32 | 29 | 43,7 | 60 |
| 435.032.030.000 | OZ 32 | 30 | 43,7 | 60 |
| 435.032.031.000 | OZ 32 | 31 | 43,7 | 60 |
| 435.032.032.000 | OZ 32 | 32 | 43,7 | 60 |

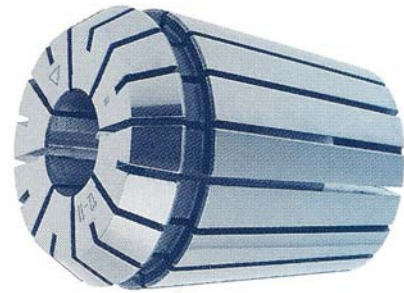






## Spannzangen DIN 6499 B (ISO 15488 B) System ER

### Collets DIN 6499 B (ISO 15488 B) ER system



| Bestell Nr.<br>Code No. | Größe<br>Size | d1<br>mm | d2<br>mm | l1<br>mm |
|-------------------------|---------------|----------|----------|----------|
|-------------------------|---------------|----------|----------|----------|

| ER 25           |       |      |    |    |
|-----------------|-------|------|----|----|
| 228.025.002.000 | ER 25 | 2    | 26 | 34 |
| 228.025.002.500 | ER 25 | 2,5  | 26 | 34 |
| 228.025.003.000 | ER 25 | 3    | 26 | 34 |
| 228.025.003.500 | ER 25 | 3,5  | 26 | 34 |
| 228.025.004.000 | ER 25 | 4    | 26 | 34 |
| 228.025.004.500 | ER 25 | 4,5  | 26 | 34 |
| 228.025.005.000 | ER 25 | 5    | 26 | 34 |
| 228.025.005.500 | ER 25 | 5,5  | 26 | 34 |
| 228.025.006.000 | ER 25 | 6    | 26 | 34 |
| 228.025.006.500 | ER 25 | 6,5  | 26 | 34 |
| 228.025.007.000 | ER 25 | 7    | 26 | 34 |
| 228.025.007.500 | ER 25 | 7,5  | 26 | 34 |
| 228.025.008.000 | ER 25 | 8    | 26 | 34 |
| 228.025.008.500 | ER 25 | 8,5  | 26 | 34 |
| 228.025.009.000 | ER 25 | 9    | 26 | 34 |
| 228.025.009.500 | ER 25 | 9,5  | 26 | 34 |
| 228.025.010.000 | ER 25 | 10   | 26 | 34 |
| 228.025.010.500 | ER 25 | 10,5 | 26 | 34 |
| 228.025.011.000 | ER 25 | 11   | 26 | 34 |
| 228.025.011.500 | ER 25 | 11,5 | 26 | 34 |
| 228.025.012.000 | ER 25 | 12   | 26 | 34 |
| 228.025.012.500 | ER 25 | 12,5 | 26 | 34 |
| 228.025.013.000 | ER 25 | 13   | 26 | 34 |
| 228.025.013.500 | ER 25 | 13,5 | 26 | 34 |
| 228.025.014.000 | ER 25 | 14   | 26 | 34 |
| 228.025.014.500 | ER 25 | 14,5 | 26 | 34 |
| 228.025.015.000 | ER 25 | 15   | 26 | 34 |
| 228.025.015.500 | ER 25 | 15,5 | 26 | 34 |
| 228.025.016.000 | ER 25 | 16   | 26 | 34 |

| Bestell Nr.<br>Code No. | Größe<br>Size | d1<br>mm | d2<br>mm | l1<br>mm |
|-------------------------|---------------|----------|----------|----------|
|-------------------------|---------------|----------|----------|----------|

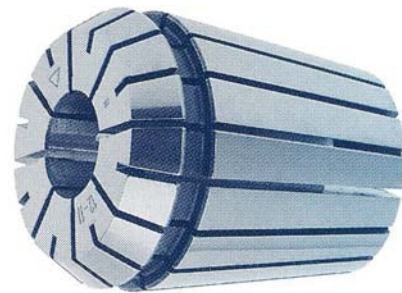
| ER 32           |       |      |    |    |
|-----------------|-------|------|----|----|
| 228.032.002.000 | ER 32 | 2    | 33 | 40 |
| 228.032.002.500 | ER 32 | 2,5  | 33 | 40 |
| 228.032.003.000 | ER 32 | 3    | 33 | 40 |
| 228.032.003.500 | ER 32 | 3,5  | 33 | 40 |
| 228.032.004.000 | ER 32 | 4    | 33 | 40 |
| 228.032.004.500 | ER 32 | 4,5  | 33 | 40 |
| 228.032.005.000 | ER 32 | 5    | 33 | 40 |
| 228.032.005.500 | ER 32 | 5,5  | 33 | 40 |
| 228.032.006.000 | ER 32 | 6    | 33 | 40 |
| 228.032.006.500 | ER 32 | 6,5  | 33 | 40 |
| 228.032.007.000 | ER 32 | 7    | 33 | 40 |
| 228.032.007.500 | ER 32 | 7,5  | 33 | 40 |
| 228.032.008.000 | ER 32 | 8    | 33 | 40 |
| 228.032.008.500 | ER 32 | 8,5  | 33 | 40 |
| 228.032.009.000 | ER 32 | 9    | 33 | 40 |
| 228.032.009.500 | ER 32 | 9,5  | 33 | 40 |
| 228.032.010.000 | ER 32 | 10   | 33 | 40 |
| 228.032.010.500 | ER 32 | 10,5 | 33 | 40 |
| 228.032.011.000 | ER 32 | 11   | 33 | 40 |
| 228.032.011.500 | ER 32 | 11,5 | 33 | 40 |
| 228.032.012.000 | ER 32 | 12   | 33 | 40 |
| 228.032.012.500 | ER 32 | 12,5 | 33 | 40 |
| 228.032.013.000 | ER 32 | 13   | 33 | 40 |
| 228.032.013.500 | ER 32 | 13,5 | 33 | 40 |
| 228.032.014.000 | ER 32 | 14   | 33 | 40 |
| 228.032.014.500 | ER 32 | 14,5 | 33 | 40 |
| 228.032.015.000 | ER 32 | 15   | 33 | 40 |
| 228.032.015.500 | ER 32 | 15,5 | 33 | 40 |
| 228.032.016.000 | ER 32 | 16   | 33 | 40 |
| 228.032.016.500 | ER 32 | 16,5 | 33 | 40 |
| 228.032.017.000 | ER 32 | 17   | 33 | 40 |
| 228.032.017.500 | ER 32 | 17,5 | 33 | 40 |
| 228.032.018.000 | ER 32 | 18   | 33 | 40 |
| 228.032.018.500 | ER 32 | 18,5 | 33 | 40 |
| 228.032.019.000 | ER 32 | 19   | 33 | 40 |
| 228.032.019.500 | ER 32 | 19,5 | 33 | 40 |
| 228.032.020.000 | ER 32 | 20   | 33 | 40 |

Präzisionszangen ≤ 0,005  
auf Anfrage lieferbar  
Precision collets ≤ 0,005



## Spannzangen DIN 6499 B (ISO 15488 B) System ER

### Collets DIN 6499 B (ISO 15488 B) ER system



| Bestell Nr.<br>Code No. | Größe<br>Size | d1<br>mm | d2<br>mm | l1<br>mm |
|-------------------------|---------------|----------|----------|----------|
|-------------------------|---------------|----------|----------|----------|

| ER 40           |       |    |    |    |
|-----------------|-------|----|----|----|
| 228.040.003.000 | ER 40 | 3  | 41 | 46 |
| 228.040.004.000 | ER 40 | 4  | 41 | 46 |
| 228.040.005.000 | ER 40 | 5  | 41 | 46 |
| 228.040.006.000 | ER 40 | 6  | 41 | 46 |
| 228.040.007.000 | ER 40 | 7  | 41 | 46 |
| 228.040.008.000 | ER 40 | 8  | 41 | 46 |
| 228.040.009.000 | ER 40 | 9  | 41 | 46 |
| 228.040.010.000 | ER 40 | 10 | 41 | 46 |
| 228.040.011.000 | ER 40 | 11 | 41 | 46 |
| 228.040.012.000 | ER 40 | 12 | 41 | 46 |
| 228.040.013.000 | ER 40 | 13 | 41 | 46 |
| 228.040.014.000 | ER 40 | 14 | 41 | 46 |

| Bestell Nr.<br>Code No. | Größe<br>Size | d1<br>mm | d2<br>mm | l1<br>mm |
|-------------------------|---------------|----------|----------|----------|
|-------------------------|---------------|----------|----------|----------|

| ER 40           |       |    |    |    |
|-----------------|-------|----|----|----|
| 228.040.015.000 | ER 40 | 15 | 41 | 46 |
| 228.040.016.000 | ER 40 | 16 | 41 | 46 |
| 228.040.017.000 | ER 40 | 17 | 41 | 46 |
| 228.040.018.000 | ER 40 | 18 | 41 | 46 |
| 228.040.019.000 | ER 40 | 19 | 41 | 46 |
| 228.040.020.000 | ER 40 | 20 | 41 | 46 |
| 228.040.021.000 | ER 40 | 21 | 41 | 46 |
| 228.040.022.000 | ER 40 | 22 | 41 | 46 |
| 228.040.023.000 | ER 40 | 23 | 41 | 46 |
| 228.040.024.000 | ER 40 | 24 | 41 | 46 |
| 228.040.025.000 | ER 40 | 25 | 41 | 46 |
| 228.040.026.000 | ER 40 | 26 | 41 | 46 |

## Spannzangensätze DIN 6499 B (ISO 15488 B) System ER

### Collets sets DIN 6499 B (ISO 15488 B) ER system



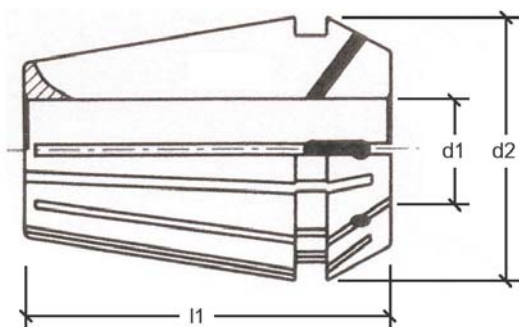
| Bestell Nr.<br>Code No. | Größe<br>Size | Stück<br>Qty | Abmessungen<br>Size |
|-------------------------|---------------|--------------|---------------------|
|-------------------------|---------------|--------------|---------------------|

|                 |       |    |  |
|-----------------|-------|----|--|
| 228.008.001.005 | ER8   | 9  | 1-1,5-2-2,5-3-3,5-4-4,5-5                                      |
| 228.011.001.007 | ER 11 | 13 | 1-1,5-2-2,5-3-3,5-4-4,5-5-5,5-6-6,5-7                          |
| 228.016.001.010 | ER 16 | 10 | 1-2-3-4-5-6-7-8-9-10   |
| 228.020.002.013 | ER 20 | 12 | 2-3-4-5-6-7-8-9-10-11-12-13                                    |
| 228.025.002.016 | ER 25 | 15 | 2-3-4-5-6-7-8-9-10-11-12-13-14-15-16                           |
| 228.032.003.020 | ER 32 | 18 | 3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20                 |
| 228.040.004.026 | ER 40 | 23 | 4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26 |



## Spannzangen mit Abdichtung für IK DIN 6499 B (ISO 15488 B) System ER

*Collets sealed with seal for IC DIN 6499 B (ISO 15488 B) ER system*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | d1<br>mm | d2<br>mm | l1<br>mm |
|--------------------------------|----------------------|----------|----------|----------|
|--------------------------------|----------------------|----------|----------|----------|

| ER 16           |       |    |    |      |
|-----------------|-------|----|----|------|
| 228.016.003.A00 | ER 16 | 3  | 17 | 27,5 |
| 228.016.004.A00 | ER 16 | 4  | 17 | 27,5 |
| 228.016.005.A00 | ER 16 | 5  | 17 | 27,5 |
| 228.016.006.A00 | ER 16 | 6  | 17 | 27,5 |
| 228.016.007.A00 | ER 16 | 7  | 17 | 27,5 |
| 228.016.008.A00 | ER 16 | 8  | 17 | 27,5 |
| 228.016.009.A00 | ER 16 | 9  | 17 | 27,5 |
| 228.016.010.A00 | ER 16 | 10 | 17 | 27,5 |

| ER20            |       |    |    |      |
|-----------------|-------|----|----|------|
| 228.020.003.A00 | ER 20 | 3  | 21 | 31,5 |
| 228.020.004.A00 | ER 20 | 4  | 21 | 31,5 |
| 228.020.005.A00 | ER 20 | 5  | 21 | 31,5 |
| 228.020.006.A00 | ER 20 | 6  | 21 | 31,5 |
| 228.020.007.A00 | ER 20 | 7  | 21 | 31,5 |
| 228.020.008.A00 | ER 20 | 8  | 21 | 31,5 |
| 228.020.009.A00 | ER 20 | 9  | 21 | 31,5 |
| 228.020.010.A00 | ER 20 | 10 | 21 | 31,5 |
| 228.020.011.A00 | ER 20 | 11 | 21 | 31,5 |
| 228.020.012.A00 | ER 20 | 12 | 21 | 31,5 |
| 228.020.013.A00 | ER 20 | 13 | 21 | 31,5 |

| ER 25           |       |    |    |    |
|-----------------|-------|----|----|----|
| 228.025.003.A00 | ER 25 | 3  | 26 | 34 |
| 228.025.004.A00 | ER 25 | 4  | 26 | 34 |
| 228.025.005.A00 | ER 25 | 5  | 26 | 34 |
| 228.025.006.A00 | ER 25 | 6  | 26 | 34 |
| 228.025.007.A00 | ER 25 | 7  | 26 | 34 |
| 228.025.008.A00 | ER 25 | 8  | 26 | 34 |
| 228.025.009.A00 | ER 25 | 9  | 26 | 34 |
| 228.025.010.A00 | ER 25 | 10 | 26 | 34 |
| 228.025.011.A00 | ER 25 | 11 | 26 | 34 |
| 228.025.012.A00 | ER 25 | 12 | 26 | 34 |
| 228.025.013.A00 | ER 25 | 13 | 26 | 34 |
| 228.025.014.A00 | ER 25 | 14 | 26 | 34 |
| 228.025.015.A00 | ER 25 | 15 | 26 | 34 |
| 228.025.016.A00 | ER 25 | 16 | 26 | 34 |

| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | d1<br>mm | d2<br>mm | l1<br>mm |
|--------------------------------|----------------------|----------|----------|----------|
|--------------------------------|----------------------|----------|----------|----------|

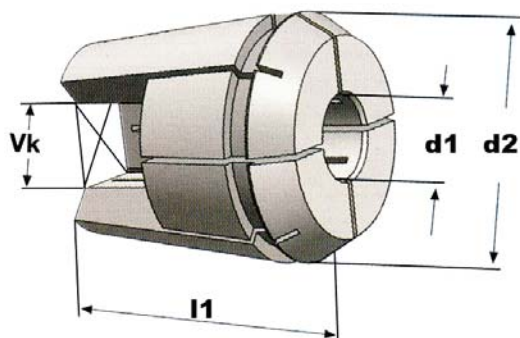
| ER 32           |       |    |    |    |
|-----------------|-------|----|----|----|
| 228.032.003.A00 | ER 32 | 3  | 33 | 40 |
| 228.032.004.A00 | ER 32 | 4  | 33 | 40 |
| 228.032.005.A00 | ER 32 | 5  | 33 | 40 |
| 228.032.006.A00 | ER 32 | 6  | 33 | 40 |
| 228.032.007.A00 | ER 32 | 7  | 33 | 40 |
| 228.032.008.A00 | ER 32 | 8  | 33 | 40 |
| 228.032.009.A00 | ER 32 | 9  | 33 | 40 |
| 228.032.010.A00 | ER 32 | 10 | 33 | 40 |
| 228.032.011.A00 | ER 32 | 11 | 33 | 40 |
| 228.032.012.A00 | ER 32 | 12 | 33 | 40 |
| 228.032.013.A00 | ER 32 | 13 | 33 | 40 |
| 228.032.014.A00 | ER 32 | 14 | 33 | 40 |
| 228.032.015.A00 | ER 32 | 15 | 33 | 40 |
| 228.032.016.A00 | ER 32 | 16 | 33 | 40 |
| 228.032.017.A00 | ER 32 | 17 | 33 | 40 |
| 228.032.018.A00 | ER 32 | 18 | 33 | 40 |
| 228.032.019.A00 | ER 32 | 19 | 33 | 40 |
| 228.032.020.A00 | ER 32 | 20 | 33 | 40 |

| ER 40           |       |    |    |    |
|-----------------|-------|----|----|----|
| 228.040.003.A00 | ER 40 | 3  | 41 | 46 |
| 228.040.004.A00 | ER 40 | 4  | 41 | 46 |
| 228.040.005.A00 | ER 40 | 5  | 41 | 46 |
| 228.040.006.A00 | ER 40 | 6  | 41 | 46 |
| 228.040.007.A00 | ER 40 | 7  | 41 | 46 |
| 228.040.008.A00 | ER 40 | 8  | 41 | 46 |
| 228.040.009.A00 | ER 40 | 9  | 41 | 46 |
| 228.040.010.A00 | ER 40 | 10 | 41 | 46 |
| 228.040.011.A00 | ER 40 | 11 | 41 | 46 |
| 228.040.012.A00 | ER 40 | 12 | 41 | 46 |
| 228.040.013.A00 | ER 40 | 13 | 41 | 46 |
| 228.040.014.A00 | ER 40 | 14 | 41 | 46 |
| 228.040.015.A00 | ER 40 | 15 | 41 | 46 |
| 228.040.016.A00 | ER 40 | 16 | 41 | 46 |
| 228.040.017.A00 | ER 40 | 17 | 41 | 46 |
| 228.040.018.A00 | ER 40 | 18 | 41 | 46 |
| 228.040.019.A00 | ER 40 | 19 | 41 | 46 |
| 228.040.020.A00 | ER 40 | 20 | 41 | 46 |
| 228.040.021.A00 | ER 40 | 21 | 41 | 46 |
| 228.040.022.A00 | ER 40 | 22 | 41 | 46 |
| 228.040.023.A00 | ER 40 | 23 | 41 | 46 |
| 228.040.024.A00 | ER 40 | 24 | 41 | 46 |
| 228.040.025.A00 | ER 40 | 25 | 41 | 46 |
| 228.040.026.A00 | ER 40 | 26 | 41 | 46 |



Spannzangen mit Innenvierkant DIN 6499 A (ISO 15488 A) System ER für Gewindebohrer

*Collets with square locking drive DIN 6499 A (ISO 15488 A) ER system for taps*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | d1<br>mm | VK<br>mm | d2<br>mm | l1<br>mm |
|--------------------------------|----------------------|----------|----------|----------|----------|
|--------------------------------|----------------------|----------|----------|----------|----------|

| ER 16           |       |     |     |    |      |
|-----------------|-------|-----|-----|----|------|
| 228.G16.035.027 | ER 16 | 3,5 | 2,7 | 17 | 27,5 |
| 228.G16.040.030 | ER 16 | 4   | 3   | 17 | 27,5 |
| 228.G16.045.034 | ER 16 | 4,5 | 3,4 | 17 | 27,5 |
| 228.G16.050.040 | ER 16 | 5   | 4   | 17 | 27,5 |
| 228.G16.055.043 | ER 16 | 5,5 | 4,3 | 17 | 27,5 |
| 228.G16.060.049 | ER 16 | 6   | 4,9 | 17 | 27,5 |
| 228.G16.070.055 | ER 16 | 7   | 5,5 | 17 | 27,5 |
| 228.G16.090.070 | ER 16 | 9   | 7   | 17 | 27,5 |
| 228.G16.100.080 | ER 16 | 10  | 8   | 17 | 27,5 |

| ER20            |       |     |     |    |      |
|-----------------|-------|-----|-----|----|------|
| 228.G20.035.027 | ER 20 | 3,5 | 2,7 | 21 | 31,5 |
| 228.G20.040.030 | ER 20 | 4   | 3   | 21 | 31,5 |
| 228.G20.045.034 | ER 20 | 4,5 | 3,4 | 21 | 31,5 |
| 228.G20.055.043 | ER 20 | 5,5 | 4,3 | 21 | 31,5 |
| 228.G20.060.049 | ER 20 | 6   | 4,9 | 21 | 31,5 |
| 228.G20.070.055 | ER 20 | 7   | 5,5 | 21 | 31,5 |
| 228.G20.080.062 | ER 20 | 8   | 6,2 | 21 | 31,5 |
| 228.G20.090.070 | ER 20 | 9   | 7   | 21 | 31,5 |
| 228.G20.100.080 | ER 20 | 10  | 8   | 21 | 31,5 |
| 228.G20.110.090 | ER 20 | 11  | 9   | 21 | 31,5 |
| 228.G20.120.090 | ER 20 | 12  | 9   | 21 | 31,5 |

| ER 25           |       |     |     |    |    |
|-----------------|-------|-----|-----|----|----|
| 228.G25.035.027 | ER 25 | 3,5 | 2,7 | 26 | 34 |
| 228.G25.040.030 | ER 25 | 4   | 3   | 26 | 34 |
| 228.G25.045.034 | ER 25 | 4,5 | 3,4 | 26 | 34 |
| 228.G25.050.040 | ER 25 | 5   | 4   | 26 | 34 |
| 228.G25.055.043 | ER 25 | 5,5 | 4,3 | 26 | 34 |
| 228.G25.060.049 | ER 25 | 6   | 4,9 | 26 | 34 |
| 228.G25.070.055 | ER 25 | 7   | 5,5 | 26 | 34 |
| 228.G25.080.062 | ER 25 | 8   | 6,2 | 26 | 34 |
| 228.G25.090.070 | ER 25 | 9   | 7   | 26 | 34 |
| 228.G25.100.080 | ER 25 | 10  | 8   | 26 | 34 |
| 228.G25.110.090 | ER 25 | 11  | 9   | 26 | 34 |
| 228.G25.120.090 | ER 25 | 12  | 9   | 26 | 34 |
| 228.G25.140.110 | ER 25 | 14  | 11  | 26 | 34 |
| 228.G25.160.120 | ER 25 | 16  | 12  | 26 | 34 |

| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | d1<br>mm | VK<br>mm | d2<br>mm | l1<br>mm |
|--------------------------------|----------------------|----------|----------|----------|----------|
|--------------------------------|----------------------|----------|----------|----------|----------|

| ER 32           |       |     |      |    |    |
|-----------------|-------|-----|------|----|----|
| 228.G32.040.030 | ER 32 | 4   | 3    | 33 | 40 |
| 228.G32.045.034 | ER 32 | 4,5 | 3,4  | 33 | 40 |
| 228.G32.050.040 | ER 32 | 5   | 4    | 33 | 40 |
| 228.G32.055.043 | ER 32 | 5,5 | 4,3  | 33 | 40 |
| 228.G32.060.049 | ER 32 | 6   | 4,9  | 33 | 40 |
| 228.G32.070.055 | ER 32 | 7   | 5,5  | 33 | 40 |
| 228.G32.080.062 | ER 32 | 8   | 6,2  | 33 | 40 |
| 228.G32.090.070 | ER 32 | 9   | 7    | 33 | 40 |
| 228.G32.100.080 | ER 32 | 10  | 8    | 33 | 40 |
| 228.G32.110.090 | ER 32 | 11  | 9    | 33 | 40 |
| 228.G32.120.090 | ER 32 | 12  | 9    | 33 | 40 |
| 228.G32.140.110 | ER 32 | 14  | 11   | 33 | 40 |
| 228.G32.160.125 | ER 32 | 16  | 12   | 33 | 40 |
| 228.G32.180.145 | ER 32 | 18  | 14,5 | 33 | 40 |
| 228.G32.200.160 | ER 32 | 20  | 16   | 33 | 40 |

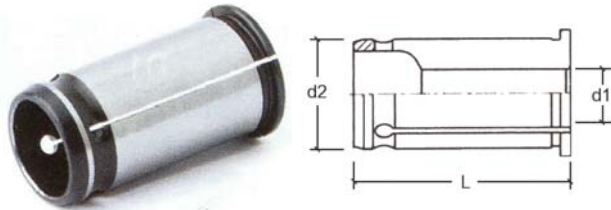
| ER 40           |       |    |      |    |    |
|-----------------|-------|----|------|----|----|
| 228.G40.060.049 | ER 40 | 6  | 4,9  | 41 | 46 |
| 228.G40.070.055 | ER 40 | 7  | 5,5  | 41 | 46 |
| 228.G40.080.062 | ER 40 | 8  | 6,2  | 41 | 46 |
| 228.G40.090.070 | ER 40 | 9  | 7    | 41 | 46 |
| 228.G40.100.080 | ER 40 | 10 | 8    | 41 | 46 |
| 228.G40.110.090 | ER 40 | 11 | 9    | 41 | 46 |
| 228.G40.120.090 | ER 40 | 12 | 9    | 41 | 46 |
| 228.G40.140.110 | ER 40 | 14 | 11   | 41 | 46 |
| 228.G40.160.120 | ER 40 | 16 | 12   | 41 | 46 |
| 228.G40.180.145 | ER 40 | 18 | 14,5 | 41 | 46 |
| 228.G40.200.160 | ER 40 | 20 | 16   | 41 | 46 |
| 228.G40.220.180 | ER 40 | 22 | 18   | 41 | 46 |
| 228.G40.250.200 | ER 40 | 25 | 20   | 41 | 46 |



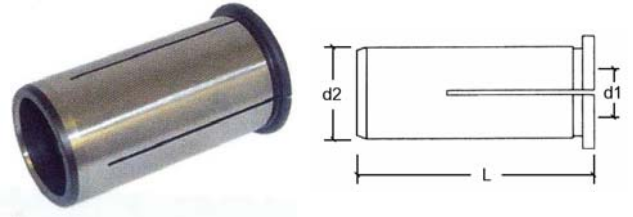
## Reduzierhülsen für Zangenkraftspannfutter

### Reducing arbor for Great Power Collet chucks

Typ: A



Typ: B



Typ: A

| Bestell Nr.<br>Code No. | d1<br>mm | d2<br>mm | L<br>mm |
|-------------------------|----------|----------|---------|
| 229.A20.006.053         | 6        | 20       | 53      |
| 229.A20.007.053         | 7        | 20       | 53      |
| 229.A20.008.053         | 8        | 20       | 53      |
| 229.A20.010.053         | 10       | 20       | 53      |
| 229.A20.012.053         | 12       | 20       | 53      |
| 229.A20.014.053         | 14       | 20       | 53      |
| 229.A20.015.053         | 15       | 20       | 53      |
| 229.A20.016.053         | 16       | 20       | 53      |

| Bestell Nr.<br>Code No. | d1<br>mm | d2<br>mm | L<br>mm |
|-------------------------|----------|----------|---------|
| 229.A32.006.065         | 6        | 32       | 65      |
| 229.A32.008.065         | 8        | 32       | 65      |
| 229.A32.010.065         | 10       | 32       | 65      |
| 229.A32.012.065         | 12       | 32       | 65      |
| 229.A32.014.065         | 14       | 32       | 65      |
| 229.A32.015.065         | 15       | 32       | 65      |
| 229.A32.016.065         | 16       | 32       | 65      |
| 229.A32.020.065         | 20       | 32       | 65      |
| 229.A32.025.065         | 25       | 32       | 65      |

Typ: B hermetisch abgedichtet

hermetically sealed

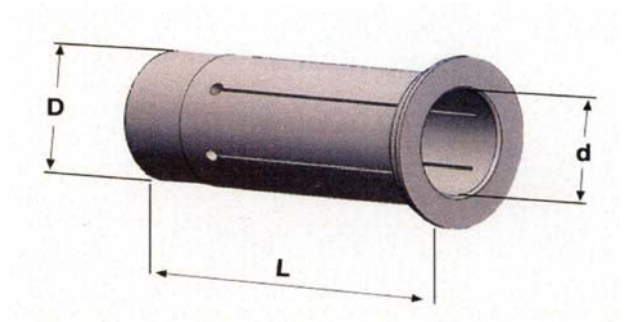
| Bestell Nr.<br>Code No. | d1<br>mm | d2<br>mm | L<br>mm |
|-------------------------|----------|----------|---------|
| 229.B20.003.053         | 3        | 20       | 53      |
| 229.B20.004.053         | 4        | 20       | 53      |
| 229.B20.005.053         | 5        | 20       | 53      |
| 229.B20.006.053         | 6        | 20       | 53      |
| 229.B20.007.053         | 7        | 20       | 53      |
| 229.B20.008.053         | 8        | 20       | 53      |
| 229.B20.009.053         | 9        | 20       | 53      |
| 229.B20.010.053         | 10       | 20       | 53      |
| 229.B20.011.053         | 11       | 20       | 53      |
| 229.B20.012.053         | 12       | 20       | 53      |
| 229.B20.013.053         | 13       | 20       | 53      |
| 229.B20.014.053         | 14       | 20       | 53      |
| 229.B20.015.053         | 15       | 20       | 53      |
| 229.B20.016.053         | 16       | 20       | 53      |
| 229.B40.016.073         | 16       | 40       | 73      |
| 229.B40.020.073         | 20       | 40       | 73      |
| 229.B40.025.073         | 25       | 40       | 73      |
| 229.B40.032.073         | 32       | 40       | 73      |
| 229.B50.020.083         | 20       | 50       | 83      |
| 229.B50.025.083         | 25       | 50       | 83      |
| 229.B50.032.083         | 32       | 50       | 83      |
| 229.B50.040.083         | 40       | 50       | 83      |
| 229.B50.042.083         | 42       | 50       | 83      |

| Bestell Nr.<br>Code No. | d1<br>mm | d2<br>mm | L<br>mm |
|-------------------------|----------|----------|---------|
| 229.B32.003.065         | 3        | 32       | 65      |
| 229.B32.004.065         | 4        | 32       | 65      |
| 229.B32.005.065         | 5        | 32       | 65      |
| 229.B32.006.065         | 6        | 32       | 65      |
| 229.B32.007.065         | 7        | 32       | 65      |
| 229.B32.008.065         | 8        | 32       | 65      |
| 229.B32.009.065         | 9        | 32       | 65      |
| 229.B32.010.065         | 10       | 32       | 65      |
| 229.B32.011.065         | 11       | 32       | 65      |
| 229.B32.012.065         | 12       | 32       | 65      |
| 229.B32.013.065         | 13       | 32       | 65      |
| 229.B32.014.065         | 14       | 32       | 65      |
| 229.B32.015.065         | 15       | 32       | 65      |
| 229.B32.016.065         | 16       | 32       | 65      |
| 229.B32.017.065         | 17       | 32       | 65      |
| 229.B32.018.065         | 18       | 32       | 65      |
| 229.B32.019.065         | 19       | 32       | 65      |
| 229.B32.020.065         | 20       | 32       | 65      |
| 229.B32.021.065         | 21       | 32       | 65      |
| 229.B32.022.065         | 22       | 32       | 65      |
| 229.B32.023.065         | 23       | 32       | 65      |
| 229.B32.024.065         | 24       | 32       | 65      |
| 229.B32.025.065         | 25       | 32       | 65      |
| 229.B32.026.065         | 26       | 32       | 65      |



## Reduzierbüchsen für Hydrodehnspannfutter

### Reducing arbor for hydraulic chucks



| Bestell Nr.<br>Code No. | D<br>mm | d<br>mm | L<br>mm |
|-------------------------|---------|---------|---------|
| 231.012.003.046         | 12      | 3       | 46      |
| 231.012.004.046         | 12      | 4       | 46      |
| 231.012.005.046         | 12      | 5       | 46      |
| 231.012.006.046         | 12      | 6       | 46      |
| 231.012.008.046         | 12      | 8       | 46      |
| 231.020.003.052         | 20      | 3       | 52,5    |
| 231.020.004.052         | 20      | 4       | 52,5    |
| 231.020.005.052         | 20      | 5       | 52,5    |
| 231.020.006.052         | 20      | 6       | 52,5    |
| 231.020.008.052         | 20      | 8       | 52,5    |
| 231.020.010.052         | 20      | 10      | 52,5    |
| 231.020.012.052         | 20      | 12      | 52,5    |
| 231.020.014.052         | 20      | 14      | 52,5    |
| 231.020.016.052         | 20      | 16      | 52,5    |
| 231.032.006.063         | 32      | 6       | 63      |
| 231.032.008.063         | 32      | 8       | 63      |
| 231.032.010.063         | 32      | 10      | 63      |
| 231.032.012.063         | 32      | 12      | 63      |
| 231.032.014.063         | 32      | 14      | 63      |
| 231.032.016.063         | 32      | 16      | 63      |
| 231.032.020.063         | 32      | 20      | 63      |
| 231.032.025.063         | 32      | 25      | 63      |





## Spannmutter DIN 6499 (ISO 15488) System ER

### Clamping nuts DIN 6499 (ISO 15488) ER system

Standardausführung mit Exenterring, gewuchtet  
*standard type with eccentric ring, balanced*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | D<br>mm | L<br>mm | SW<br>mm | M       |
|--------------------------------|----------------------|---------|---------|----------|---------|
| 456.016.032.018                | ER16                 | 32      | 18      | ~        | M22x1,5 |
| 456.020.035.019                | ER20                 | 35      | 19      | ~        | M25x1,5 |
| 456.025.042.020                | ER25                 | 42      | 20      | ~        | M32x1,5 |
| 456.032.050.022                | ER32                 | 50      | 22      | ~        | M40x1,5 |
| 456.040.063.025                | ER40                 | 63      | 25      | ~        | M50x1,5 |

gleitgelagerte Ausführung  
*sleeve-bearing version*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | D<br>mm | L<br>mm | SW<br>mm | M       |
|--------------------------------|----------------------|---------|---------|----------|---------|
| 456.016.032.G18                | ER16                 | 32      | 18      | ~        | M22x1,5 |
| 456.025.042.G20                | ER25                 | 42      | 20      | ~        | M32x1,5 |
| 456.032.050.G22                | ER32                 | 50      | 22      | ~        | M40x1,5 |
| 456.040.063.G25                | ER40                 | 63      | 25      | ~        | M50x1,5 |

Standardausführung mit Exenterring, gewuchtet  
*standard type with eccentric ring, balanced*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | D<br>mm | L<br>mm | SW<br>mm | M        |
|--------------------------------|----------------------|---------|---------|----------|----------|
| 456.611.019.012                | ER11                 | 19      | 12      | 17       | M14x,075 |
| 456.616.028.018                | ER16                 | 28      | 18      | 25       | M22x1,5  |
| 456.620.034.019                | ER20                 | 42      | 19      | 30       | M25x1,5  |

gleitgelagerte Ausführung  
*sleeve-bearing version*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | D<br>mm | L<br>mm | SW<br>mm | M       |
|--------------------------------|----------------------|---------|---------|----------|---------|
| 456.616.028.G18                | ER16                 | 30      | 18      | 27       | M22x1,5 |

Standardausführung mit Exenterring, gewuchtet TYP MINI  
*standard type with eccentric ring, balanced TYP MINI*



| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | D<br>mm | L<br>mm | SW<br>mm | M        |
|--------------------------------|----------------------|---------|---------|----------|----------|
| 456.M08.012.011                | ER8                  | 12      | 11      | ~        | M10x0,75 |
| 456.M11.016.012                | ER11                 | 16      | 12      | ~        | M13x0,75 |
| 456.M16.022.018                | ER16                 | 22      | 18      | ~        | M19x1    |

Spannmutter Typ: OZ DIN 6388 D  
kugelgelagerte Ausführung  
*Clamping nuts type: OZ DIN 6388 D  
ball-bearing version*



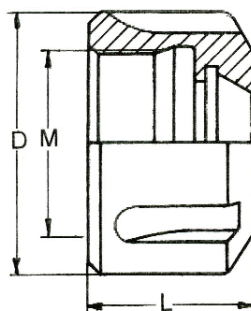
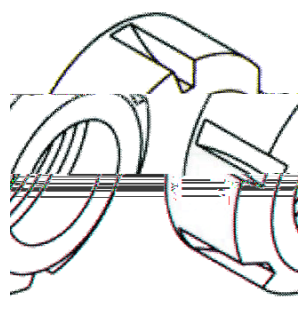
| Bestell Nr.<br><i>Code No.</i> | Größe<br><i>Size</i> | D<br>mm | L<br>mm | SW<br>mm | M       |
|--------------------------------|----------------------|---------|---------|----------|---------|
| 484.016.043.024                | OZ16                 | 43      | 24      | ~        | M33x1,5 |
| 484.025.060.030                | OZ25                 | 60      | 30      | ~        | M48x2   |
| 484.032.072.033                | OZ32                 | 72      | 33,5    | ~        | M60x2,5 |





## Spannmutter DIN 6499 (ISO 15488) System ER für Dichtscheiben

### Clamping nuts DIN 6499 (ISO 15488) ER system for sealing discs



| Bestell Nr.<br>Code No. | Größe<br>Size | D<br>mm | L<br>mm | M       | Ausführung<br>model |
|-------------------------|---------------|---------|---------|---------|---------------------|
| 458.016.032.018         | ER 16         | 32      | 18      | M25x1,5 | Standard            |
| 458.025.042.020         | ER 25         | 42      | 20      | M32x1,5 | Standard            |
| 458.032.050.022         | ER 32         | 50      | 22      | M40x1,5 | Standard            |
| 458.040.063.025         | ER 40         | 63      | 25      | M50x1,5 | Standard            |

## Dichtscheiben für ER Spannmutter

### Sealing discs for ER clamping nuts



| Bestell Nr.<br>Code No. | Größe<br>Size | d von -bis<br>d from -to | Steigung<br>step |
|-------------------------|---------------|--------------------------|------------------|
| 457.016.XXX.XXX         | ER 16         | 3,0-10,0mm               | 0,5mm            |
| 457.025.XXX.XXX         | ER 25         | 3,0-16,0mm               | 0,5mm            |
| 457.032.XXX.XXX         | ER 32         | 3,0-20,0mm               | 0,5mm            |
| 457.040.XXX.XXX         | ER 40         | 3,0-26,0mm               | 0,5mm            |

Bestellbeispiel für **A) ER16 4,0mm** und **B) ER32 11,5mm**

Code für **A= 457.016.004.000**

Code für **B= 457.032.011.500**

Ordering example for **A) ER16 4,0mm** and **B) ER32 11,5mm**

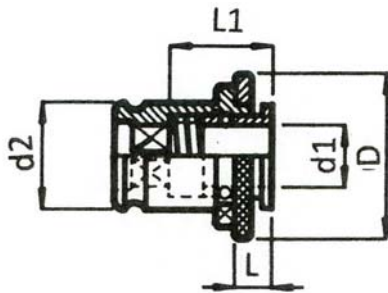
Code for **A= 457.016.004.000**

Code for **B= 457.032.011.500**



## Schnellwechsel-Einsätze ohne Überlastungskupplung

### Quick change adaptors without safety clutch



| Bestell Nr.<br>Code No. | Größe<br>Size | D<br>mm | d2<br>mm | d1<br>mm | V<br>mm | L<br>mm | L1<br>mm |
|-------------------------|---------------|---------|----------|----------|---------|---------|----------|
|-------------------------|---------------|---------|----------|----------|---------|---------|----------|

|                 |   |    |    |     |     |   |    |
|-----------------|---|----|----|-----|-----|---|----|
| 331.019.028.021 | 1 | 30 | 19 | 2,8 | 2,1 | 7 | 17 |
| 331.019.035.027 | 1 | 30 | 19 | 3,5 | 2,7 | 7 | 17 |
| 331.019.040.030 | 1 | 30 | 19 | 4   | 3   | 7 | 17 |
| 331.019.045.034 | 1 | 30 | 19 | 4,5 | 3,4 | 7 | 17 |
| 331.019.060.049 | 1 | 30 | 19 | 6   | 4,9 | 7 | 17 |
| 331.019.050.040 | 1 | 30 | 19 | 5   | 4   | 7 | 17 |
| 331.019.070.055 | 1 | 30 | 19 | 7   | 5,5 | 7 | 17 |
| 331.019.080.062 | 1 | 30 | 19 | 8   | 6,2 | 7 | 17 |
| 331.019.090.070 | 1 | 30 | 19 | 9   | 7   | 7 | 17 |
| 331.019.100.080 | 1 | 30 | 19 | 10  | 8   | 7 | 17 |
| 331.019.110.090 | 1 | 30 | 19 | 11  | 9   | 7 | 17 |

|                 |   |    |    |    |      |    |    |
|-----------------|---|----|----|----|------|----|----|
| 331.031.060.049 | 2 | 48 | 31 | 6  | 4,9  | 11 | 30 |
| 331.031.070.055 | 2 | 48 | 31 | 7  | 5,5  | 11 | 30 |
| 331.031.080.062 | 2 | 48 | 31 | 8  | 6,2  | 11 | 30 |
| 331.031.090.070 | 2 | 48 | 31 | 9  | 7    | 11 | 30 |
| 331.031.100.080 | 2 | 48 | 31 | 10 | 8    | 11 | 30 |
| 331.031.110.090 | 2 | 48 | 31 | 11 | 9    | 11 | 30 |
| 331.031.120.090 | 2 | 48 | 31 | 12 | 9    | 11 | 30 |
| 331.031.140.110 | 2 | 48 | 31 | 14 | 11   | 11 | 30 |
| 331.031.160.120 | 2 | 48 | 31 | 16 | 12   | 11 | 30 |
| 331.031.180.145 | 2 | 48 | 31 | 18 | 14,5 | 11 | 30 |

|                 |   |    |    |    |      |    |    |
|-----------------|---|----|----|----|------|----|----|
| 331.048.110.090 | 3 | 70 | 48 | 11 | 9    | 14 | 44 |
| 331.048.120.090 | 3 | 70 | 48 | 12 | 9    | 14 | 44 |
| 331.048.140.110 | 3 | 70 | 48 | 14 | 11   | 14 | 44 |
| 331.048.160.120 | 3 | 70 | 48 | 16 | 12   | 14 | 44 |
| 331.048.180.145 | 3 | 70 | 48 | 18 | 14,5 | 14 | 44 |
| 331.048.200.160 | 3 | 70 | 48 | 20 | 16   | 14 | 44 |
| 331.048.220.180 | 3 | 70 | 48 | 22 | 18   | 14 | 44 |
| 331.048.250.200 | 3 | 70 | 48 | 25 | 20   | 14 | 44 |
| 331.048.280.220 | 3 | 70 | 48 | 28 | 22   | 14 | 44 |

| für for |             |         |          |          |
|---------|-------------|---------|----------|----------|
| DIN 371 | DIN 376/374 | DIN 353 | DIN 2182 | DIN 2183 |

|          |     |        |       |       |
|----------|-----|--------|-------|-------|
| M2-M2,5  |     |        |       |       |
| M3       | M5  |        | 1/8"  |       |
| M3,5     |     |        | 5/32" |       |
| M4       | M6  |        | 7/32" | 1/4"  |
| M5-6     | M8  |        |       |       |
| JIS-Norm |     |        |       |       |
|          | M10 | R 1/8" | 1/4"  | 3/8"  |
| M8       |     |        | 5/16" | 7/16" |
|          | M12 |        | 3/8"  | 1/2"  |
| M10      |     |        |       |       |
|          | M14 | R 1/4" |       | 9/16" |

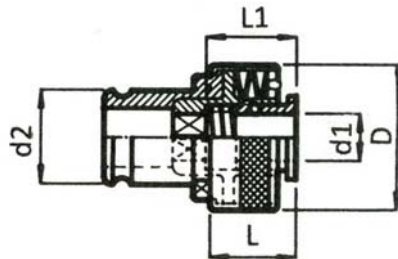
|      |        |        |  |             |
|------|--------|--------|--|-------------|
| M5-6 | M8     |        |  |             |
|      | M10    | R 1/8" |  | 3/8"        |
| M8   |        |        |  | 7/16"       |
|      | M12    |        |  | 1/2"        |
| M10  |        |        |  |             |
|      | M14    | R 1/4" |  | 9/16"       |
|      | M16    | R 3/8" |  | 5/8"        |
|      | M18    |        |  | 11/16"      |
|      | M20    | R 1/2" |  | 13/16"      |
|      | M22-24 | R 5/8" |  | 7/8"-15/16" |

|  |        |          |  |             |
|--|--------|----------|--|-------------|
|  | M14    | R 1/4"   |  | 9/16"       |
|  | M16    | R 3/8"   |  | 5/8"        |
|  | M18    |          |  | 11/16"      |
|  | M20    | R 1/2"   |  | 13/16"      |
|  | M22-24 | R 5/8"   |  | 7/8"-15/16" |
|  | M27    | R 3/4"   |  | 1"          |
|  | M30    | R 7/8"   |  | 1.1/8"      |
|  | M33    | R 1"     |  | 1.1/4"      |
|  | M36    | R 1.1/8" |  | 1.3/8"      |



## Schnellwechsel-Einsätze mit Überlastungskupplung

### Quick change adaptors with safety clutch



| Bestell Nr.<br>Code No. | Größe<br>Size | D<br>mm | d2<br>mm | d1<br>mm | V<br>mm | L<br>mm | L1<br>mm |
|-------------------------|---------------|---------|----------|----------|---------|---------|----------|
|-------------------------|---------------|---------|----------|----------|---------|---------|----------|

|                 |   |    |    |     |     |    |    |
|-----------------|---|----|----|-----|-----|----|----|
| 334.019.028.021 | 1 | 32 | 19 | 2,8 | 2,1 | 25 | 17 |
| 334.019.035.027 | 1 | 32 | 19 | 3,5 | 2,7 | 25 | 17 |
| 334.019.040.030 | 1 | 32 | 19 | 4   | 3   | 25 | 17 |
| 334.019.045.034 | 1 | 32 | 19 | 4,5 | 3,4 | 25 | 17 |
| 334.A19.060.049 | 1 | 32 | 19 | 4,5 | 3,4 | 25 | 17 |
| 334.019.060.049 | 1 | 32 | 19 | 6   | 4,9 | 25 | 17 |
| 334.019.070.055 | 1 | 32 | 19 | 7   | 5,5 | 25 | 17 |
| 334.019.080.062 | 1 | 32 | 19 | 8   | 6,2 | 25 | 17 |
| 334.019.090.070 | 1 | 32 | 19 | 9   | 7   | 25 | 17 |
| 334.019.100.080 | 1 | 32 | 19 | 10  | 8   | 25 | 17 |
| 334.019.110.090 | 1 | 32 | 19 | 11  | 9   | 25 | 17 |

|                 |   |    |    |    |      |    |    |
|-----------------|---|----|----|----|------|----|----|
| 334.A31.060.049 | 2 | 50 | 31 | 6  | 4,9  | 34 | 30 |
| 334.031.060.049 | 2 | 50 | 31 | 6  | 4,9  | 34 | 30 |
| 334.031.070.055 | 2 | 50 | 31 | 7  | 5,5  | 34 | 30 |
| 334.031.080.062 | 2 | 50 | 31 | 8  | 6,2  | 34 | 30 |
| 334.031.090.070 | 2 | 50 | 31 | 9  | 7    | 34 | 30 |
| 334.031.100.080 | 2 | 50 | 31 | 10 | 8    | 34 | 30 |
| 334.031.110.090 | 2 | 50 | 31 | 11 | 9    | 34 | 30 |
| 334.031.120.090 | 2 | 50 | 31 | 12 | 9    | 34 | 30 |
| 334.031.140.110 | 2 | 50 | 31 | 14 | 11   | 34 | 30 |
| 334.031.160.120 | 2 | 50 | 31 | 16 | 12   | 34 | 30 |
| 334.031.180.145 | 2 | 50 | 31 | 18 | 14,5 | 34 | 30 |

|                 |   |    |    |    |      |    |    |
|-----------------|---|----|----|----|------|----|----|
| 334.048.110.090 | 3 | 72 | 48 | 11 | 9    | 44 | 44 |
| 334.048.120.090 | 3 | 72 | 48 | 12 | 9    | 44 | 44 |
| 334.048.140.110 | 3 | 72 | 48 | 14 | 11   | 44 | 44 |
| 334.048.160.120 | 3 | 72 | 48 | 16 | 12   | 44 | 44 |
| 334.048.180.145 | 3 | 72 | 48 | 18 | 14,5 | 44 | 44 |
| 334.A48.180.145 | 3 | 72 | 48 | 18 | 14,5 | 44 | 44 |
| 334.048.200.160 | 3 | 72 | 48 | 20 | 16   | 44 | 44 |
| 334.048.220.180 | 3 | 72 | 48 | 22 | 18   | 44 | 44 |
| 334.048.250.200 | 3 | 72 | 48 | 25 | 20   | 44 | 44 |
| 334.048.280.220 | 3 | 72 | 48 | 28 | 22   | 44 | 44 |

| für for |             |         |          |          |
|---------|-------------|---------|----------|----------|
| DIN 371 | DIN 376/374 | DIN 353 | DIN 2182 | DIN 2183 |

|         |     |        |       |       |
|---------|-----|--------|-------|-------|
| M2-M2,5 |     |        |       |       |
| M3      | M5  |        | 1/8"  |       |
| M3,5    |     |        | 5/32" |       |
| M4      | M6  |        | 7/32" | 1/4"  |
| M5      |     |        |       |       |
| M6      | M8  |        |       |       |
|         | M10 | R 1/8" | 1/4"  | 3/8"  |
| M8      |     |        | 5/16" | 7/16" |
|         | M12 |        | 3/8"  | 1/2"  |
| M10     |     |        |       |       |
|         | M14 | R 1/4" |       | 9/16" |

|     |        |        |  |             |
|-----|--------|--------|--|-------------|
| M5  |        |        |  |             |
| M6  | M8     |        |  |             |
|     | M10    | R 1/8" |  | 3/8"        |
| M8  |        |        |  | 7/16"       |
|     | M12    |        |  | 1/2"        |
| M10 |        |        |  |             |
|     | M14    | R 1/4" |  | 9/16"       |
|     | M16    | R 3/8" |  | 5/8"        |
|     | M18    |        |  | 11/16"      |
|     | M20    | R 1/2" |  | 13/16"      |
|     | M22-24 | R 5/8" |  | 7/8"-15/16" |

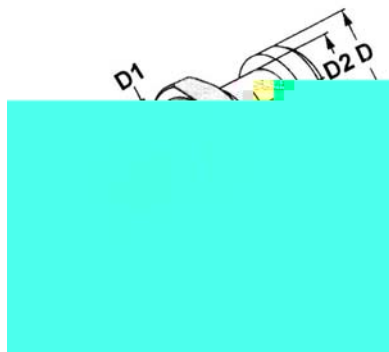
|  |     |          |  |             |
|--|-----|----------|--|-------------|
|  | M14 | R 1/4"   |  | 9/16"       |
|  | M16 | R 3/8"   |  | 5/8"        |
|  | M18 |          |  | 11/16"      |
|  | M20 | R 1/2"   |  | 13/16"      |
|  | M22 | R 5/8"   |  | 7/8"-15/16" |
|  | M24 |          |  |             |
|  | M27 | R 3/4"   |  | 1"          |
|  | M30 | R 7/8"   |  | 1.1/8"      |
|  | M33 | R 1"     |  | 1.1/4"      |
|  | M36 | R 1.1/8" |  | 1.3/8"      |



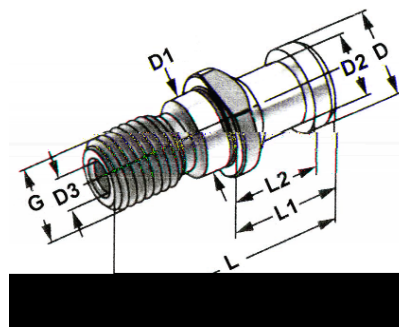
## Anzugsbolzen DIN 69872 A+B

### Pull studs DIN 69872 A+B

Typ B



Typ A

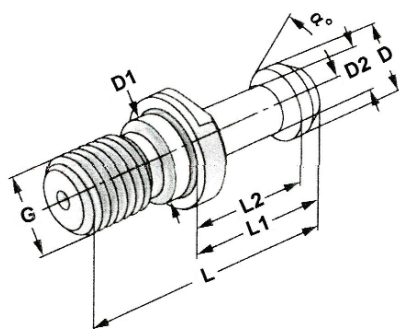


| Bestell Nr.<br>Code No.                             | Typ<br>type | G    | L<br>mm | L1<br>mm | L2<br>mm | D<br>mm | D1<br>mm | D2<br>mm | D3<br>mm |
|---|-------------|------|---------|----------|----------|---------|----------|----------|----------|
| 499.340.011.054                                     | B           | M 16 | 54      | 26       | 20       | 19      | 17       | 14       | ~        |
| 499.350.011.074                                     | B           | M 24 | 74      | 34       | 25       | 28      | 25       | 21       | ~        |
| 499.230.111.044                                     | A           | M 12 | 44      | 24       | 19       | 13      | 13       | 9        | 3        |
| 499.240.111.054                                     | A           | M 16 | 54      | 26       | 20       | 19      | 17       | 14       | 7        |
| 499.250.111.074                                     | A           | M 24 | 74      | 34       | 25       | 28      | 25       | 21       | 11,5     |
| Anzugsbolzen ähnlich DIN 69872 A, um 3mm verlängert |             |      |         |          |          |         |          |          |          |
| 499.240.111.029                                     | A           | M16  | 54      | 29       | 23       | 19      | 17       | 14       | 7        |

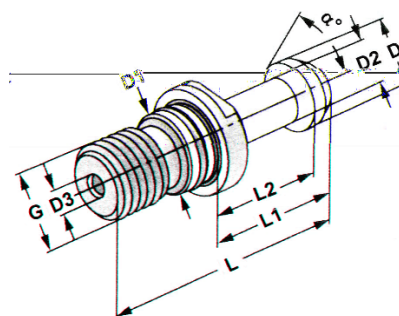
## Anzugsbolzen Haas ähnlich JIS B 6399 (MAS 403 BT) um 3mm verkürzt

### Pull studs Haas similar to JIS B 6399 (MAS 403 BT) shortened by 3mm

Typ B



Typ A



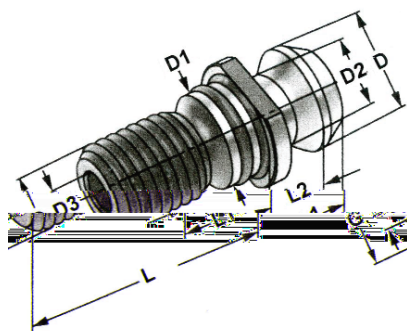
| Bestell Nr.<br>Code No. | Typ<br>type | G α°    | L<br>mm | L1<br>mm | L2<br>mm | D<br>mm | D1<br>mm | D2<br>mm | D3<br>mm |
|-------------------------|-------------|---------|---------|----------|----------|---------|----------|----------|----------|
| 499.H45.011.057         | B           | M16-45° | 57      | 32       | 25       | 15      | 17       | 10       | ~        |
| 499.H60.011.057         | B           | M16-60° | 57      | 32       | 25       | 15      | 17       | 10       | ~        |
| 499.H90.011.057         | B           | M16-90° | 57      | 32       | 25       | 15      | 17       | 10       | ~        |
| 499.H45.111.057         | A           | M16-45° | 57      | 32       | 25       | 15      | 17       | 10       | 4        |
| 499.H60.111.057         | A           | M16-60° | 57      | 32       | 25       | 15      | 17       | 10       | 4        |
| 499.H90.111.057         | A           | M16-90° | 57      | 32       | 25       | 15      | 17       | 10       | 4        |



## Anzugsbolzen ISO 7388

### Pull studs ISO 7388

**Typ A** mit Durchgangsbohrung mit O-Ring



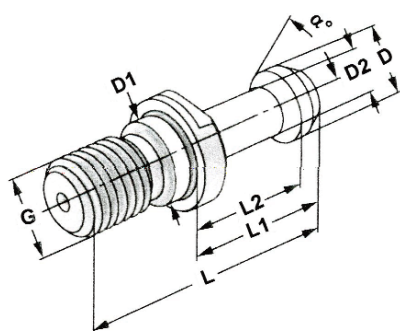
**Typ B** mit Durchgangsbohrung ohne O-Ring

| Bestell Nr.<br>Code No. | Typ<br>type | G    | L<br>mm | L1<br>mm | L2<br>mm | D<br>mm | D1<br>mm | D2<br>mm | D3<br>mm |
|-------------------------|-------------|------|---------|----------|----------|---------|----------|----------|----------|
| 499.140.011.455         | B           | M 16 | 44,5    | 16,4     | 11,15    | 18,95   | 17       | 12,95    | ~        |
| 499.150.011.655         | B           | M 24 | 65,5    | 25,55    | 17,95    | 29,10   | 25       | 19,60    | ~        |
| 499.140.111.445         | A           | M 16 | 44,5    | 16,4     | 11,15    | 18,95   | 17       | 12,95    | 7        |
| 499.150.111.655         | A           | M 24 | 65,5    | 25,55    | 17,95    | 29,10   | 25       | 19,60    | 11,5     |

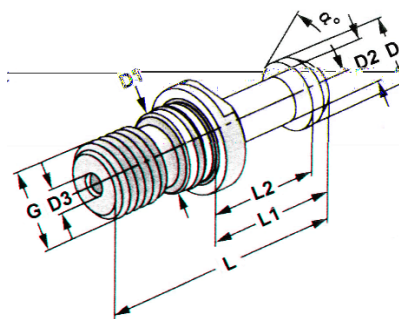
## Anzugsbolzen JIS B 6399 (MAS 403 BT)

### Pull studs JIS B 6399 (MAS 403 BT)

**Typ B**



**Typ A**

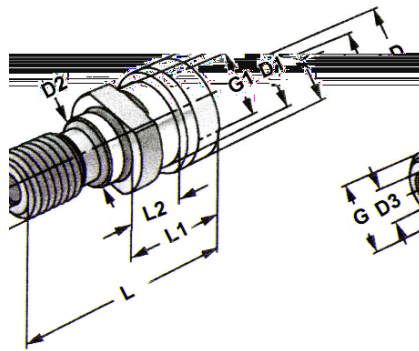


| Bestell Nr.<br>Code No. | Typ<br>type | G α°    | L<br>mm | L1<br>mm | L2<br>mm | D<br>mm | D1<br>mm | D2<br>mm | D3<br>mm |
|-------------------------|-------------|---------|---------|----------|----------|---------|----------|----------|----------|
| 499.B45.011.043         | B           | M12-45° | 43      | 23       | 18       | 11      | 12,5     | 7        | ~        |
| 499.B60.011.043         | B           | M12-60° | 43      | 23       | 18       | 11      | 12,5     | 7        | ~        |
| 499.B45.011.060         | B           | M16-45° | 60      | 35       | 28       | 15      | 17       | 10       | ~        |
| 499.B60.011.060         | B           | M16-60° | 60      | 35       | 28       | 15      | 17       | 10       | ~        |
| 499.B90.011.060         | B           | M16-90° | 60      | 35       | 28       | 15      | 17       | 10       | ~        |
| 499.B45.011.085         | B           | M24-45° | 85      | 45       | 35       | 23      | 25       | 17       | ~        |
| 499.B60.011.085         | B           | M24-60° | 85      | 45       | 35       | 23      | 25       | 17       | ~        |
| 499.B90.011.085         | B           | M24-90° | 85      | 45       | 35       | 23      | 25       | 17       | ~        |
| 499.A45.011.043         | A           | M12-45° | 43      | 23       | 18       | 11      | 12,5     | 7        | 2,5      |
| 499.A60.011.043         | A           | M12-60° | 43      | 23       | 18       | 11      | 12,5     | 7        | 2,5      |
| 499.A45.011.060         | A           | M16-45° | 60      | 35       | 28       | 15      | 17       | 10       | 4        |
| 499.A60.011.060         | A           | M16-60° | 60      | 35       | 28       | 15      | 17       | 10       | 4        |
| 499.A90.011.060         | A           | M16-90° | 60      | 35       | 28       | 15      | 17       | 10       | 4        |
| 499.A45.011.085         | A           | M24-45° | 85      | 45       | 35       | 23      | 25       | 17       | 6        |
| 499.A60.011.085         | A           | M24-60° | 85      | 45       | 35       | 23      | 25       | 17       | 6        |
| 499.A90.011.085         | A           | M24-90° | 85      | 45       | 35       | 23      | 25       | 17       | 6        |



## Anzugsbolzen DIN 2080 mit Ott-Ringnut

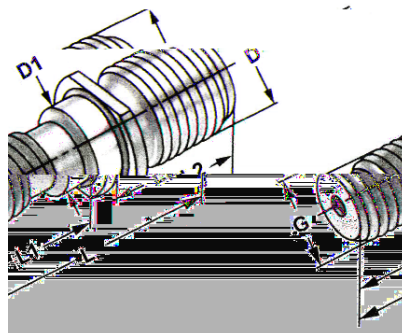
### Pull studs DIN 2080 with Ott-groove



| Bestell Nr.<br>Code No. | G   | G1  | D mm | D1 mm | D2 mm | D3 mm | L mm | L1 mm | L2 mm |
|-------------------------|-----|-----|------|-------|-------|-------|------|-------|-------|
| 499.240.204.053         | M16 | M16 | 25   | 21,1  | 17    | 7     | 53   | 25,1  | 13,6  |
| 499.250.204.065         | M24 | M24 | 39,6 | 32    | 25    | 7     | 65,1 | 25,1  | 13,3  |

## Anzugsbolzen S20x2

### Pull studs S20x2

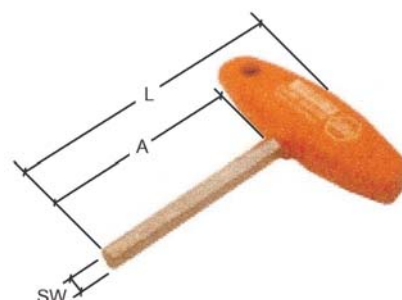


| Bestell Nr.<br>Code No. | G   | L mm | L1 mm | L2 mm | D mm  | D1 mm |
|-------------------------|-----|------|-------|-------|-------|-------|
| 499.S20.111.056         | M16 | 56   | 28    | 19    | S20x2 | 17    |

## Inbusschlüssel

### Wrench

| Bestell Nr.<br>Code No. | SW | A mm | L mm |
|-------------------------|----|------|------|
| 920.000.SW4.100         | 4  | 70   | 100  |
| 920.000.SW5.100         | 5  | 90   | 100  |
| 920.000.SW6.100         | 6  | 90   | 100  |

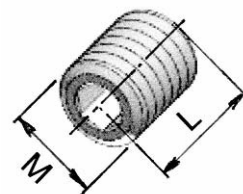




## Spannschrauben für Weldon Spannfutter DIN 1835 B

### Clamping screw for weldon chucks DIN 1835 B

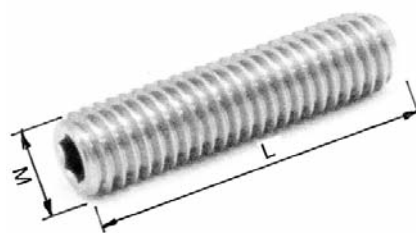
| Bestell Nr.<br>Code No. | M        | L<br>mm | für Ø<br>for Ø |
|-------------------------|----------|---------|----------------|
| 432.006.M06.010         | M6x1     | 10      | 6              |
| 432.008.M08.010         | M8x1,25  | 10      | 8              |
| 432.010.M10.012         | M10x1,5  | 12      | 10             |
| 432.012.M12.016         | M12x1,75 | 16      | 12             |
| 432.014.M12.016         | M12x1,75 | 16      | 14             |
| 432.016.M14.016         | M14x2    | 16      | 16             |
| 432.018.M14.016         | M14x2    | 16      | 18             |
| 432.020.M16.016         | M16x2    | 16      | 20             |
| 432.025.M18.020         | M18x2    | 20      | 25             |
| 432.032.M20.020         | M20x2    | 20      | 32             |
| 432.040.M20.020         | M20x2    | 20      | 40             |



## Anschlagschraube

### Stop screw

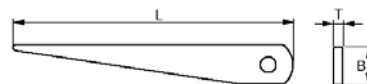
| Bestell Nr.<br>Code No. | M   | L<br>mm | für Ø<br>for Ø |
|-------------------------|-----|---------|----------------|
| 433.006.M05.016         | M5  | 16      | 6              |
| 433.008.M06.016         | M6  | 16      | 8              |
| 433.010.M08.020         | M8  | 20      | 10             |
| 433.012.M10.025         | M10 | 25      | 12             |
| 433.014.M10.025         | M10 | 25      | 14             |
| 433.016.M12.025         | M12 | 25      | 16             |
| 433.018.M12.025         | M12 | 25      | 18             |
| 433.020.M16.025         | M16 | 25      | 20             |
| 433.025.M20.030         | M20 | 30      | 25             |
| 433.032.M20.030         | M20 | 30      | 32             |
| 433.040.M20.030         | M20 | 30      | 40             |



## Austreiber

### Drill drifts

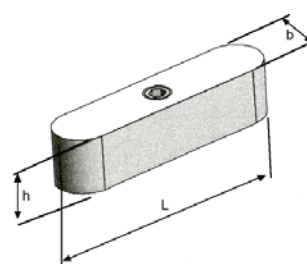
| Bestell Nr.<br>Code No. | MK    | T<br>mm | B<br>mm | L<br>mm |
|-------------------------|-------|---------|---------|---------|
| 940.012.140             | MK1+2 | 5       | 20      | 140     |
| 940.003.190             | MK3   | 7       | 25      | 190     |
| 940.004.225             | MK4   | 10      | 30      | 225     |



## Paßfeder

### Feather key

| Bestell Nr.<br>Code No. | M    | h<br>mm | b<br>mm | L<br>mm |
|-------------------------|------|---------|---------|---------|
| 941.016.020             | M2x4 | 4       | 4       | 20      |
| 941.022.025             | M3x5 | 6       | 6       | 25      |
| 941.027.025             | M3x6 | 7       | 7       | 25      |
| 941.032.028             | M3x6 | 8       | 7       | 28      |
| 941.040.032             | M3x6 | 10      | 8       | 32      |



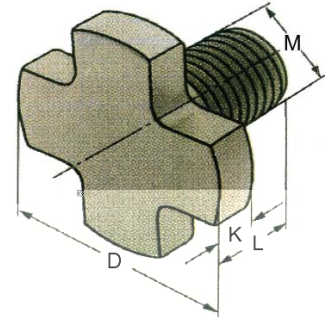




## Fräseranzugsschraube DIN 6367

*Drawn in bolt DIN 6367*

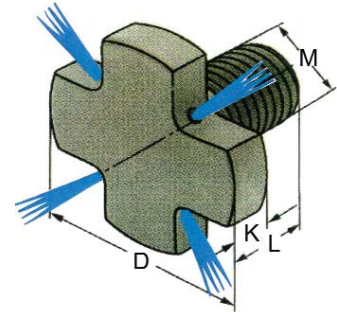
| Bestell Nr.<br>Code No. | für Ø<br>for Ø | M   | D<br>mm | K<br>mm | L<br>mm |
|-------------------------|----------------|-----|---------|---------|---------|
| 422.016.M08.016         | 16             | M8  | 20      | 6       | 16      |
| 422.022.M10.018         | 22             | M10 | 28      | 7       | 18      |
| 422.027.M12.022         | 27             | M12 | 35      | 8       | 22      |
| 422.032.M16.026         | 32             | M16 | 42      | 9       | 26      |
| 422.040.M20.030         | 40             | M20 | 52      | 10      | 30      |
| 422.050.M24.036         | 50             | M24 | 63      | 12      | 36      |
| 422.060.M30.045         | 60             | M30 | 75      | 14      | 45      |



## Fräseranzugsschraube DIN 6367 mit Kühlmittelzufuhr

*Drawn in bolt DIN 6367 with coolant*

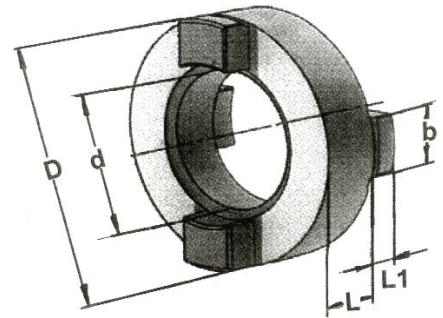
| Bestell Nr.<br>Code No. | für Ø<br>for Ø | M   | D<br>mm | K<br>mm | L<br>mm |
|-------------------------|----------------|-----|---------|---------|---------|
| 421.016.M08.016         | 16             | M8  | 20      | 9       | 16      |
| 421.022.M10.018         | 22             | M10 | 28      | 7       | 18      |
| 421.027.M12.022         | 27             | M12 | 35      | 8       | 22      |
| 421.032.M16.026         | 32             | M16 | 42      | 9       | 26      |
| 421.040.M20.030         | 40             | M20 | 52      | 10      | 30      |
| 421.050.M24.036         | 50             | M24 | 63      | 12      | 36      |
| 421.060.M30.045         | 60             | M30 | 75      | 14      | 45      |



## Mitnahmering DIN 6366

*Clutch drive rings to DIN 6366*

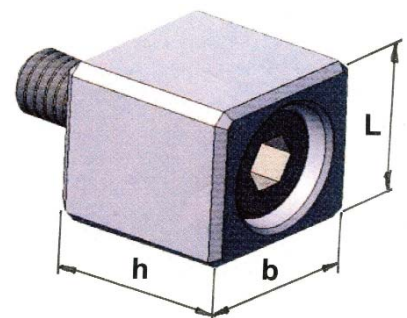
| Bestell Nr.<br>Code No. | d<br>mm | D<br>mm | L<br>mm | b<br>mm | L1<br>mm |
|-------------------------|---------|---------|---------|---------|----------|
| 424.016.032.010         | 16      | 32      | 10      | 8       | 5        |
| 424.022.040.012         | 22      | 40      | 12      | 10      | 5,6      |
| 424.027.048.012         | 27      | 48      | 12      | 12      | 6,3      |
| 424.032.058.014         | 32      | 58      | 14      | 14      | 7        |
| 424.040.070.014         | 40      | 70      | 14      | 16      | 8        |



## Mitnehmersteine

*Drive key*

| Bestell Nr.<br>Code No. | für Ø<br>for Ø | h<br>mm | b<br>mm | L<br>mm | Schraube<br>DIN 912 |
|-------------------------|----------------|---------|---------|---------|---------------------|
| 426.016.008.010         | 16             | 8       | 10      | 9,8     | M3x12               |
| 426.022.010.011         | 22             | 10      | 11      | 11,2    | M4x12               |
| 426.027.012.014         | 27             | 12      | 14      | 12,6    | M4x16               |
| 426.032.014.022         | 32             | 14      | 22      | 14      | M5x16               |
| 426.040.016.023         | 40             | 16      | 23      | 16      | M5x20               |
| 426.050.018.032         | 50             | 18      | 32      | 18      | M6x20               |
| 426.060.254.265         | 60             | 25,4    | 26,5    | 25      | M12x25              |

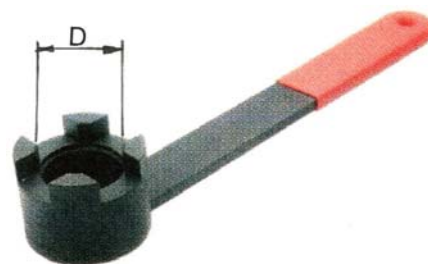




## Spannschlüssel DIN 6368

### Wrench DIN 6368

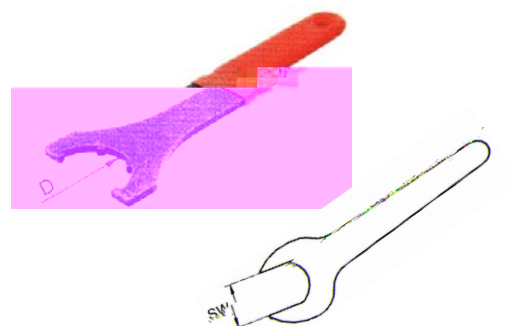
| Bestell Nr.<br>Code No. | D<br>mm | für<br>for |
|-------------------------|---------|------------|
| 423.016.M08.000         | 16      | M8         |
| 423.022.M10.000         | 22      | M10        |
| 423.027.M12.000         | 27      | M12        |
| 423.032.M16.000         | 32      | M16        |
| 423.040.M20.000         | 40      | M20        |
| 423.050.M24.000         | 50      | M24        |
| 423.060.M30.000         | 60      | M30        |



## Spannschlüssel DIN 6368

### Wrench DIN 6368

| Bestell Nr.<br>Code No. | Abmessung<br>Size | D<br>mm | SW<br>mm |
|-------------------------|-------------------|---------|----------|
| 939.000.011.000         | 1-7 (ER11)        | 19      | 17       |
| 939.000.016.0SW         | 1-10 (ER16)       | 28      | 25       |
| 939.000.016.000         | 1-10 (ER16)       | 32      | ~        |
| 939.000.020.000         | 2-13 (ER20)       | 35      | ~        |
| 939.000.020.0SW         | 2-13 (ER20)       | 34      | 30       |
| 939.000.025.000         | 2-16 (ER25)       | 42      | ~        |
| 939.000.032.000         | 2-20 (ER32)       | 50      | ~        |
| 939.000.040.000         | 2-26 (ER40)       | 63      | ~        |



## Spannschlüssel DIN 6368

### Wrench DIN 6368

| Bestell Nr.<br>Code No. | Abmessung<br>Size | D<br>mm |
|-------------------------|-------------------|---------|
| 938.000.008.000         | 1-5 (ER8)         | 12      |
| 938.000.011.000         | 1-7 (ER11)        | 16      |
| 938.000.016.000         | 1-10 (ER16)       | 22      |



## Spannschlüssel DIN 6368

### Wrench DIN 6368

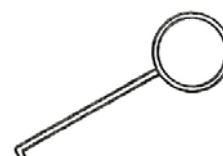
| Bestell Nr.<br>Code No. | Abmessung<br>Size | D<br>mm |
|-------------------------|-------------------|---------|
| 925.000.040.042         | 2-16 (OZ16)       | 40-42   |
| 925.000.058.062         | 2-25 (OZ25)       | 58-62   |
| 925.000.068.075         | 3-32 (OZ32)       | 68-75   |



## Spannschlüssel DIN 6368

### Wrench DIN 6368

| Bestell Nr.<br>Code No. |
|-------------------------|
| 943.499.040.206         |





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