



Zubehör

Accessories

Accessoires

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ACCESSORIES



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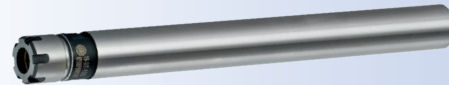
Spannfutter mit Zylinderschaft

Collet chuck with cylindrical shank

Mandrin á pincas á quene cylindrique

Silindirik şaftlı pens başlıkları

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | Spannbereich Capacity Capacité Kapasite | L | L1 | D | Euro |
|--|----|--|-----|----|----|------|
| 120.0205.12.50.M | 12 | ER 8 Mini (1 - 5) | 50 | 24 | 12 | |
| 120.0205.12.100.M | 12 | ER 8 Mini (1-5) | 100 | 24 | 12 | |
| 120.0205.12.150.M | 12 | ER 8 Mini (1-5) | 150 | 24 | 12 | |
| 120.0207.12.50.M | 12 | ER 11 Mini (1-7) | 50 | 25 | 16 | |
| 120.0207.12.100.M | 12 | ER 11 Mini (1-7) | 100 | 25 | 16 | |
| 120.0207.12.150.M | 12 | ER 11 Mini (1-7) | 150 | 25 | 16 | |
| 120.0207.16.50.M | 16 | ER 11 Mini (1-7) | 50 | 25 | 16 | |
| 120.0207.16.100.M | 16 | ER 11 Mini (1-7) | 100 | 25 | 16 | |
| 120.0207.16.150.M | 16 | ER 11 Mini (1-7) | 150 | 25 | 16 | |
| 120.0210.16.60.M | 16 | ER 16 Mini (1-10) | 60 | 30 | 22 | |
| 120.0210.16.100.M | 16 | ER 16 Mini (1-10) | 100 | 30 | 22 | |
| 120.0210.16.150.M | 16 | ER 16 Mini (1-10) | 150 | 30 | 22 | |
| 120.0210.20.60.M | 20 | ER 16 Mini (1-10) | 60 | 30 | 22 | |
| 120.0210.20.100.M | 20 | ER 16 Mini (1-10) | 100 | 30 | 22 | |
| 120.0210.20.150.M | 20 | ER 16 Mini (1-10) | 150 | 30 | 22 | |



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Spannzangen System ER
Collets System ER
Pincas de serrage System ER
Pens ER



Spannmutter Mini
Nut Mini
Écrou mini
Mini kapak



Rollenschlüssel für Spannmutter
Roller Bearing Wrenches
Cles á rouleaux
Bilyalı Kapak Sıkma Anahtar



Spannschlüssel für ER
Wrench ER
Clé de serrage ER
Anahtar ER



11.01



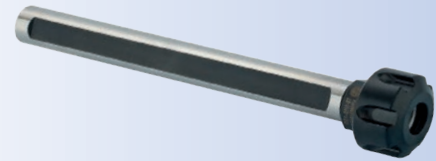
Spannfutter mit Zylinderschaft durchbohrt

Collet chuck with cylindrical shank bored through

Mandrin á princes á quene cylindrique percee

Silindirik şaftlı pens başlıkları

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | Spannbereich Capacity Capacité Kapasite | L | L1 | D | Euro |
|--|----|--|-----|----|----|------|
| 120.0210.16.60 | 16 | ER 16 (1-10) | 60 | 30 | 28 | |
| 120.0210.16.100 | 16 | ER 16 (1-10) | 100 | 30 | 28 | |
| 120.0210.16.150 | 16 | ER 16 (1-10) | 150 | 30 | 28 | |
| 120.0210.20.60 | 20 | ER 16 (1-10) | 60 | 30 | 28 | |
| 120.0210.20.100 | 20 | ER 16 (1-10) | 100 | 30 | 28 | |
| 120.0210.20.150 | 20 | ER 16 (1-10) | 150 | 30 | 28 | |
| 120.0210.25.60 | 25 | ER 16 (1-10) | 60 | 35 | 28 | |
| 120.0210.25.100 | 25 | ER 16 (1-10) | 100 | 35 | 28 | |
| 120.0210.25.150 | 25 | ER 16 (1-10) | 150 | 35 | 28 | |
| 120.0216.20.60 | 20 | ER 25 (2-16) | 60 | 50 | 42 | |
| 120.0216.20.100 | 20 | ER 25 (2-16) | 100 | 50 | 42 | |
| 120.0216.20.150 | 20 | ER 25 (2-16) | 150 | 50 | 42 | |
| 120.0216.25.60 | 25 | ER 25 (2-16) | 60 | 50 | 42 | |
| 120.0216.25.100 | 25 | ER 25 (2-16) | 100 | 50 | 42 | |
| 120.0216.25.150 | 25 | ER 25 (2-16) | 150 | 50 | 42 | |
| 120.0216.32.60 | 32 | ER 25 (2-16) | 60 | 50 | 42 | |
| 120.0216.32.100 | 32 | ER 25 (2-16) | 100 | 50 | 42 | |
| 120.0216.32.150 | 32 | ER 25 (2-16) | 150 | 50 | 42 | |
| 120.0220.20.60 | 20 | ER 32 (2-20) | 60 | 53 | 50 | |
| 120.0220.20.100 | 20 | ER 32 (2-20) | 100 | 53 | 50 | |
| 120.0220.20.150 | 20 | ER 32 (2-20) | 150 | 53 | 50 | |
| 120.0220.25.60 | 25 | ER 32 (2-20) | 60 | 53 | 50 | |
| 120.0220.25.100 | 25 | ER 32 (2-20) | 100 | 53 | 50 | |
| 120.0220.25.150 | 25 | ER 32 (2-20) | 150 | 53 | 50 | |
| 120.0220.32.60 | 32 | ER 32 (2-20) | 60 | 53 | 50 | |
| 120.0220.32.100 | 32 | ER 32 (2-20) | 100 | 53 | 50 | |
| 120.0220.32.150 | 32 | ER 32 (2-20) | 150 | 53 | 50 | |
| 120.0220.40.100 | 40 | ER 32 (2-20) | 100 | 53 | 50 | |
| 120.0220.40.150 | 40 | ER 32 (2-20) | 150 | 53 | 50 | |
| 120.0226.32.70 | 32 | ER 40 (2-26) | 70 | 63 | 63 | |
| 120.0226.32.100 | 32 | ER 40 (2-26) | 100 | 63 | 63 | |
| 120.0226.32.150 | 32 | ER 40 (2-26) | 150 | 63 | 63 | |
| 120.0226.40.70 | 40 | ER 40 (2-26) | 70 | 63 | 63 | |
| 120.0226.40.100 | 40 | ER 40 (2-26) | 100 | 63 | 63 | |
| 120.0226.40.150 | 40 | ER 40 (2-26) | 150 | 63 | 63 | |



ER 16

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DIN ISO
15488



10.11 - 10.18

Spannzangen System ER
Collets System ER
Pinces de serrage System ER
Pens ER

DIN ISO
15488



10.25 - 10.26

Spannmutter ER
Clamping nuts ER
Écrou de serrage ER
Pens kapağı ER



10.48

Spannschlüssel für ER
Wrench ER
Clé de serrage ER
Anahtar ER



11.01

Schrumpfverlängerungen

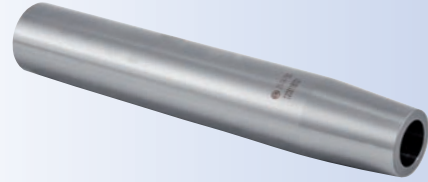
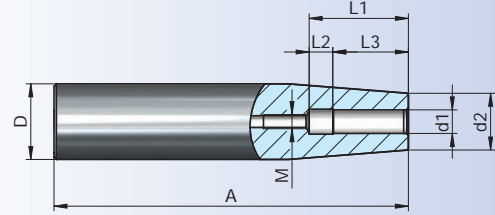


Shrink fit extensions

Allonge

Silindirik ısıtmalı takım tutucu

| Bestell-Nr. Order Nr. Référéce Sipariş Nr. | D | d1 | d2 | A | L1 | L2 | L3 | M | Euro |
|---|----|----|----|-----|----|----|----|-----|------|
| 120.25.12.03.150 | 12 | 3 | 8 | 150 | - | - | 12 | - | |
| 120.25.12.04.150 | 12 | 4 | 8 | 150 | - | - | 16 | - | |
| 120.25.16.03.150 | 16 | 3 | 10 | 150 | - | - | 12 | - | |
| 120.25.16.04.150 | 16 | 4 | 10 | 150 | - | - | 16 | - | |
| 120.25.16.05.150 | 16 | 5 | 10 | 150 | - | - | 20 | - | |
| 120.25.16.06.150 | 16 | 6 | 10 | 150 | 36 | 10 | 26 | M5 | |
| 120.25.20.03.150 | 20 | 3 | 10 | 150 | - | - | 12 | - | |
| 120.25.20.04.150 | 20 | 4 | 10 | 150 | - | - | 16 | M6 | |
| 120.25.20.05.150 | 20 | 5 | 10 | 150 | - | - | 20 | M6 | |
| 120.25.20.06.150 | 20 | 6 | 10 | 150 | 36 | 10 | 26 | M5 | |
| 120.25.20.08.150 | 20 | 8 | 12 | 150 | 36 | 10 | 26 | M6 | |
| 120.25.20.10.150 | 20 | 10 | 14 | 150 | 42 | 10 | 32 | M8 | |
| 120.25.20.12.150 | 20 | 12 | 16 | 150 | 47 | 10 | 37 | M10 | |
| 120.25.25.08.150 | 25 | 8 | 20 | 150 | 36 | 10 | 26 | M6 | |
| 120.25.25.10.150 | 25 | 10 | 20 | 150 | 42 | 10 | 32 | M8 | |
| 120.25.25.12.150 | 25 | 12 | 20 | 150 | 47 | 10 | 37 | M10 | |
| 120.25.25.14.150 | 25 | 14 | 20 | 150 | 47 | 10 | 37 | M10 | |
| 120.25.25.16.150 | 25 | 16 | 22 | 150 | 50 | 10 | 40 | M10 | |
| 120.25.32.10.150 | 32 | 10 | 24 | 150 | 42 | 10 | 32 | M6 | |
| 120.25.32.12.150 | 32 | 12 | 24 | 150 | 47 | 10 | 37 | M10 | |
| 120.25.32.14.150 | 32 | 14 | 27 | 150 | 47 | 10 | 37 | M10 | |
| 120.25.32.16.150 | 32 | 16 | 27 | 150 | 50 | 10 | 40 | M10 | |
| 120.25.32.18.150 | 32 | 18 | 27 | 150 | 50 | 10 | 40 | M10 | |
| 120.25.32.20.150 | 32 | 20 | 27 | 150 | 52 | 10 | 42 | M10 | |





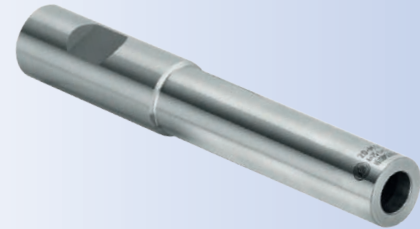
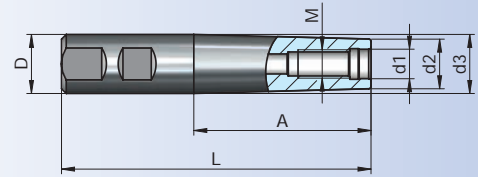
Fräseraufnahmen für Einschraubfräser Zylinderschäfte

Milling Cutter Arbors for Screw-on type Milling Cutters

Axes Coupeur Fraisage Pour Vis-Sur Type Coupeurs de Fraisage

Vidalı tip frezeler için silindirik şaftlı takım tutucular

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D | M | d1 | d2 | d3 | A | L | Euro |
|--|----|-----|------|----|----|-----|-----|------|
| 120.12.12.M05.020 | 12 | M5 | 5,5 | 10 | 12 | 20 | 65 | |
| 120.12.20.M06.025 | 20 | M6 | 6,5 | 10 | 18 | 25 | 75 | |
| 120.12.20.M06.050 | 20 | M6 | 6,5 | 10 | 18 | 50 | 100 | |
| 120.12.20.M06.075 | 20 | M6 | 6,5 | 10 | 18 | 75 | 125 | |
| 120.12.16.M08.040 | 16 | M8 | 8,5 | 13 | 16 | 40 | 88 | |
| 120.12.20.M08.025 | 20 | M8 | 8,5 | 13 | 18 | 25 | 75 | |
| 120.12.20.M08.050 | 20 | M8 | 8,5 | 13 | 18 | 50 | 100 | |
| 120.12.20.M08.075 | 20 | M8 | 8,5 | 13 | 18 | 75 | 125 | |
| 120.12.20.M10.025 | 20 | M10 | 10,5 | 18 | 18 | 25 | 75 | |
| 120.12.20.M10.025.1 | 20 | M10 | 10,5 | 18 | 20 | 25 | 80 | |
| 120.12.20.M10.050 | 20 | M10 | 10,5 | 18 | 18 | 50 | 100 | |
| 120.12.20.M10.075 | 20 | M10 | 10,5 | 18 | 18 | 75 | 125 | |
| 120.12.20.M10.097 | 20 | M10 | 10,5 | 18 | 20 | 97 | 152 | |
| 120.12.25.M12.025 | 25 | M12 | 12,5 | 21 | 25 | 25 | 81 | |
| 120.12.25.M12.040 | 25 | M12 | 12,5 | 21 | 25 | 40 | 101 | |
| 120.12.25.M12.075 | 25 | M12 | 12,5 | 21 | 25 | 75 | 131 | |
| 120.12.25.M12.109 | 25 | M12 | 12,5 | 21 | 25 | 109 | 170 | |
| 120.12.25.M12.125 | 25 | M12 | 12,5 | 21 | 25 | 125 | 181 | |
| 120.12.32.M12.105 | 32 | M12 | 12,5 | 21 | 25 | 105 | 170 | |
| 120.12.32.M16.025 | 32 | M16 | 17 | 29 | 32 | 25 | 85 | |
| 120.12.32.M16.040 | 32 | M16 | 17 | 29 | 32 | 40 | 105 | |
| 120.12.32.M16.075 | 32 | M16 | 17 | 29 | 32 | 75 | 135 | |
| 120.12.32.M16.125 | 32 | M16 | 17 | 29 | 32 | 125 | 185 | |



Empfohlene Anzugsmomente Recommended tightening torques Torques de serrage recommandés Önerilen sıkma torku

| | |
|-----|-------|
| M6 | 10 Nm |
| M8 | 25 Nm |
| M10 | 40 Nm |
| M12 | 60 Nm |
| M16 | 80 Nm |



Fräseraufnahmen für Einschraubfräser Zylinderschäfte

Milling Cutter Arbors for Screw-on type Milling Cutters

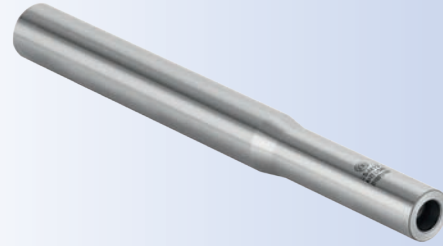
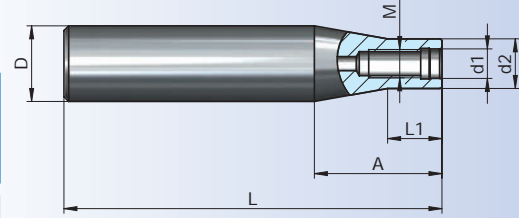
Axes Coupeur Fraisage Pour Vis-Sur Type Coupeurs de Fraisage

Vidalı tip frezeler için silindirik şaftlı takım tutucular

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D | M | d1 | d2 | L1 | A | L | Euro |
|--|----|-----|------|----|------|-------|-----|------|
| 123.12.20.M10.067 | 20 | M10 | 10,5 | 18 | 67 | 68,7 | 160 | |
| 123.12.25.M12.077 | 25 | M12 | 12,5 | 21 | 77 | 87,5 | 240 | |
| 123.12.32.M12.023 | 32 | M12 | 12,5 | 21 | 23 | 54 | 160 | |
| 123.12.32.M12.059 | 32 | M12 | 12,5 | 21 | 59,5 | 134 | 300 | |
| 123.12.32.M16.066 | 32 | M16 | 17 | 29 | 66 | 68,7 | 160 | |
| 123.12.32.M16.146 | 32 | M16 | 17 | 29 | 146 | 148,7 | 300 | |

Empfohlene Anzugsmomente
Recommended tightening torques
Torques de serrage recommandés
Önerilen sıkma torku

| | |
|-----|-------|
| M6 | 10 Nm |
| M8 | 25 Nm |
| M10 | 40 Nm |
| M12 | 60 Nm |
| M16 | 80 Nm |



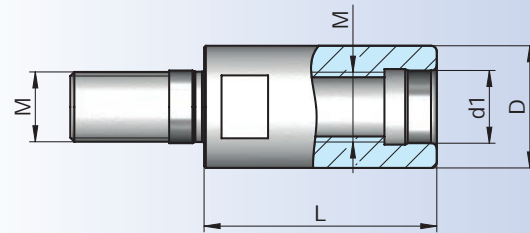
Verlängerungen für Einschraubfräser

Extensions for milling cutter arbors

Extension pour - sur - type coupeurs de fraisage

Vidalı tip frezeler için ara adaptör

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D | M | d1 | L | Euro |
|--|----|-----|------|----|------|
| 124.12.13.M08.030 | 13 | M8 | 8,5 | 30 | |
| 124.12.18.M10.035 | 18 | M10 | 10,5 | 35 | |
| 124.12.21.M12.040 | 21 | M12 | 12,5 | 40 | |
| 124.12.29.M16.040 | 29 | M16 | 17 | 40 | |





Reduzierungen für Einschraubfräser

Reducing for milling cutter arbors

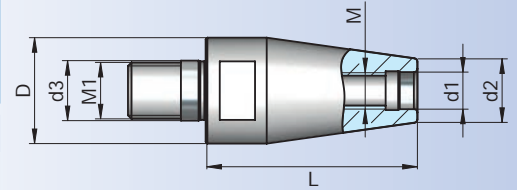
Extension pour vis - sur - type coupeurs de fraisage

Vidalı tip frezeler için ara adaptör

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D | M x M1 | d1 | d2 | d3 | L | Euro |
|--|----|--------|-----|----|------|----|------|
| 126.12.13.M0608.030 | 13 | M6-M8 | 5,5 | 10 | 8,5 | 30 | |
| 126.12.18.M0810.030 | 18 | M8-M10 | 8,5 | 13 | 10,5 | 30 | |

| | | | | | | | |
|---------------------|----|---------|------|----|------|----|--|
| 126.12.21.M1012.035 | 21 | M10-M12 | 10,5 | 18 | 12,5 | 35 | |
| 126.12.29.M1016.060 | 29 | M10-M16 | 10,5 | 18 | 17 | 60 | |
| 126.12.29.M1216.060 | 29 | M12-M16 | 12,5 | 21 | 17 | 60 | |

| Empfohlene Anzugmomente Recommended tightening torques Torques de serrage recommandés Önerilen sıkma torku | |
|---|-------|
| M6 | 10 Nm |
| M8 | 25 Nm |
| M10 | 40 Nm |
| M12 | 60 Nm |
| M16 | 80 Nm |



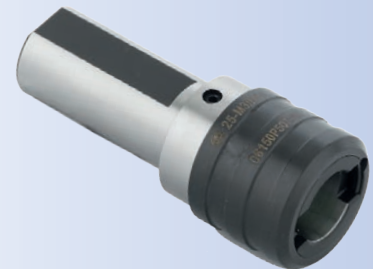
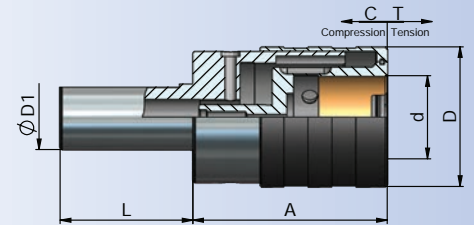
Gewindeschneid - Schnellwechselfutter mit Längenausgleich auf Druck und Zug

Quick-change tapping chucks with length compensation

Appareil à tarauder avec compensation longitudinale

Kılavuz çekme başlığı giriş ve çıkış kompanzeli

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D1 | Spannbereich Capacity Capacité Kapasite | d | A | D | L | C | T | Euro |
|--|----|--|----|-----|------|----|------|------|------|
| 120.16.12.20.41 | 20 | M2-M14 | 19 | 41 | 36,5 | 50 | 7 | 7 | |
| 120.16.12.25.41 | 25 | M2-M14 | 19 | 41 | 36,5 | 50 | 7 | 7 | |
| 120.16.12.32.41 | 32 | M2-M14 | 19 | 41 | 36,5 | 61 | 7 | 7 | |
| 120.16.12.40.41 | 40 | M2-M14 | 19 | 41 | 36,5 | 68 | 7 | 7 | |
| 120.16.20.20.110 | 20 | M5-M24 | 31 | 110 | 53,5 | 50 | 12 | 12 | |
| 120.16.20.25.75 | 25 | M5-M24 | 31 | 75 | 53,5 | 50 | 12 | 12 | |
| 120.16.20.32.75 | 32 | M5-M24 | 31 | 75 | 53,5 | 61 | 12 | 12 | |
| 120.16.20.40.75 | 40 | M5-M24 | 31 | 75 | 53,5 | 68 | 12 | 12 | |
| 120.16.36.40.115 | 40 | M14-M36 | 48 | 115 | 78 | 68 | 17,5 | 17,5 | |



Zubehör / Accessories / Accessoires / Yedekler



Schnellwechseleinsätze
Tapping collets
Douilles de taraudage
Kılavuz tutucu



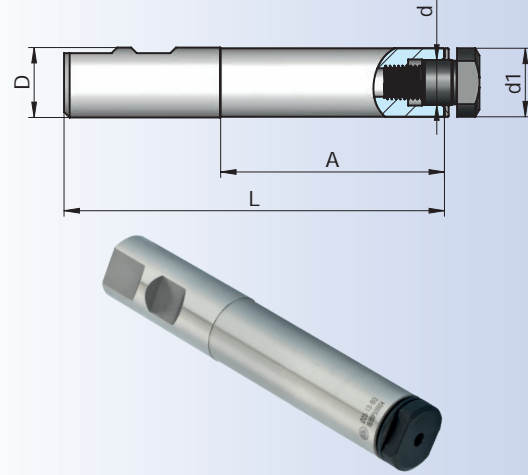
Sägeblattaufnahme

Saw blade holder

Porte - lame de scie

Daire testere tutucu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Sägeblatt Ø | D | d1 | d | A | L | Euro |
|--|----------------|----|------|----|----|-----|------|
| 121.20.05.040 | 20 | 20 | 10 | 5 | 40 | 90 | |
| 121.20.08.050 | 25/32 | 20 | 13 | 8 | 50 | 100 | |
| 121.20.10.060 | 40 | 20 | 19,5 | 10 | 60 | 110 | |
| 121.25.13.080 | 50 | 25 | 24,5 | 13 | 80 | 136 | |
| 121.25.16.080 | 63 | 25 | 24,5 | 16 | 80 | 136 | |



Verwendung : Zur Aufnahme von Sägeblättern in Fräseraufnahmen oder Spannfutter
Application : For saw blade holders in end mill holder and collet chuck
Emploi : Pour la réception de lames de scie dans des porte-fraises ou des porte-pinces
Kullanma Yeri : Veldon tutuculara ve pens başlığına bağlamak için daire testere malafası

Reduziereinsätze DIN 1835 B für Zylinderschäfte DIN 1835 E

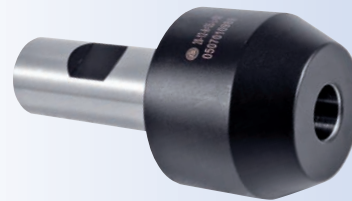
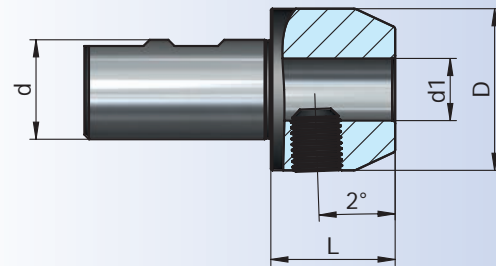
Reducing bushings DIN 1835 B for cylindrical shanks DIN 1835E

Réduction DIN 1835 B pour queue cylindriques DIN 1835 E

Redüksiyon DIN 1835 B Silindirik shaftlı DIN 1835 E

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | d1 | D | L | Euro |
|--|----|----|----|----|------|
| 122.20.06.030 | 20 | 6 | 25 | 30 | |
| 122.20.08.030 | 20 | 8 | 28 | 30 | |
| 122.20.10.030 | 20 | 10 | 35 | 30 | |
| 122.20.12.035 | 20 | 12 | 42 | 35 | |

| | | | | | |
|---------------|----|----|----|----|--|
| 122.32.06.030 | 32 | 6 | 25 | 30 | |
| 122.32.08.030 | 32 | 8 | 28 | 30 | |
| 122.32.10.030 | 32 | 10 | 35 | 30 | |
| 122.32.12.035 | 32 | 12 | 42 | 35 | |
| 122.32.14.035 | 32 | 14 | 44 | 35 | |
| 122.32.16.038 | 32 | 16 | 48 | 38 | |
| 122.32.18.038 | 32 | 18 | 50 | 38 | |
| 122.32.20.040 | 32 | 20 | 52 | 40 | |



Zubehör / Accessories / Accessoires / Yedekler



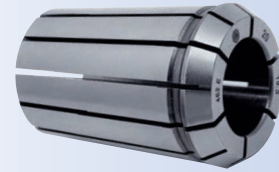
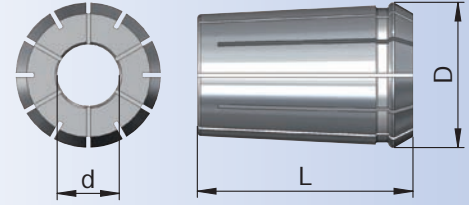
Spannschrauben
Clamping screw
Wis de serrage
Sıkma civatası



Einstellschraube
Adjusting screw
Vis de réglage
Dayama civatası

**Collets DIN 6388 B****Pinces de serrage DIN 6388, forme B****Pensler DIN 6388 B Formu**

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|------|----|------|
| 415 E-02 | 2 | 25,5 | 40 | |
| 415 E-03 | 3 | 25,5 | 40 | |
| 415 E-04 | 4 | 25,5 | 40 | |
| 415 E-05 | 5 | 25,5 | 40 | |
| 415 E-06 | 6 | 25,5 | 40 | |
| 415 E-07 | 7 | 25,5 | 40 | |
| 415 E-08 | 8 | 25,5 | 40 | |
| 415 E-09 | 9 | 25,5 | 40 | |
| 415 E-10 | 10 | 25,5 | 40 | |
| 415 E-11 | 11 | 25,5 | 40 | |
| 415 E-12 | 12 | 25,5 | 40 | |
| 415 E-13 | 13 | 25,5 | 40 | |
| 415 E-14 | 14 | 25,5 | 40 | |
| 415 E-15 | 15 | 25,5 | 40 | |
| 415 E-16 | 16 | 25,5 | 40 | |



Spanntoleranz : - 0,5 mm

Clamping capacity : - 0,5 mm

Capacité de serrage : - 0,5 mm

Sıkma kapasitesi : - 0,5 mm

Rundlaufgenauigkeit : 6µm

Concentricity : 6µm

Concentricité : 6µm

Konsantriklik : 6µm

Komplettsatz : Seite 10.22

Complete set : Page 10.22

Kit complet : Voir page 10.22

Komple set : Sayfa 10.22

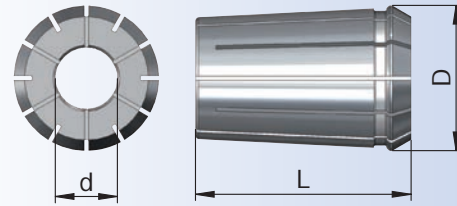


Collets DIN 6388 B

Pincas de serrage DIN 6388, forme B

Pensler DIN 6388 B Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|-------|----|------|
| 462 E-02 | 2 | 35,05 | 52 | |
| 462 E-03 | 3 | 35,05 | 52 | |
| 462 E-04 | 4 | 35,05 | 52 | |
| 462 E-05 | 5 | 35,05 | 52 | |
| 462 E-06 | 6 | 35,05 | 52 | |
| 462 E-07 | 7 | 35,05 | 52 | |
| 462 E-08 | 8 | 35,05 | 52 | |
| 462 E-09 | 9 | 35,05 | 52 | |
| 462 E-10 | 10 | 35,05 | 52 | |
| 462 E-11 | 11 | 35,05 | 52 | |
| 462 E-12 | 12 | 35,05 | 52 | |
| 462 E-13 | 13 | 35,05 | 52 | |
| 462 E-14 | 14 | 35,05 | 52 | |
| 462 E-15 | 15 | 35,05 | 52 | |
| 462 E-16 | 16 | 35,05 | 52 | |
| 462 E-17 | 17 | 35,05 | 52 | |
| 462 E-18 | 18 | 35,05 | 52 | |
| 462 E-19 | 19 | 35,05 | 52 | |
| 462 E-20 | 20 | 35,05 | 52 | |
| 462 E-21 | 21 | 35,05 | 52 | |
| 462 E-22 | 22 | 35,05 | 52 | |
| 462 E-23 | 23 | 35,05 | 52 | |
| 462 E-24 | 24 | 35,05 | 52 | |
| 462 E-25 | 25 | 35,05 | 52 | |



Spanntoleranz : - 0,5 mm
Clamping capacity : - 0,5 mm
Capacité de serrage : - 0,5 mm
Sıkma kapasitesi : - 0,5 mm

Rundlaufgenauigkeit : 6µm
Concentricity : 6µm
Concentricité : 6µm
Konsantriklik : 6µm

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22

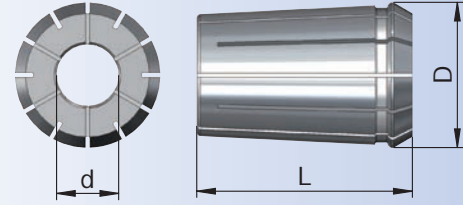


Collets DIN 6388 B

Pincas de serrage DIN 6388, forme B

Pensler DIN 6388 B Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|------|----|------|
| 467 E-04 | 4 | 43,7 | 60 | |
| 467 E-05 | 5 | 43,7 | 60 | |
| 467 E-06 | 6 | 43,7 | 60 | |
| 467 E-07 | 7 | 43,7 | 60 | |
| 467 E-08 | 8 | 43,7 | 60 | |
| 467 E-09 | 9 | 43,7 | 60 | |
| 467 E-10 | 10 | 43,7 | 60 | |
| 467 E-11 | 11 | 43,7 | 60 | |
| 467 E-12 | 12 | 43,7 | 60 | |
| 467 E-13 | 13 | 43,7 | 60 | |
| 467 E-14 | 14 | 43,7 | 60 | |
| 467 E-15 | 15 | 43,7 | 60 | |
| 467 E-16 | 16 | 43,7 | 60 | |
| 467 E-17 | 17 | 43,7 | 60 | |
| 467 E-18 | 18 | 43,7 | 60 | |
| 467 E-19 | 19 | 43,7 | 60 | |
| 467 E-20 | 20 | 43,7 | 60 | |
| 467 E-21 | 21 | 43,7 | 60 | |
| 467 E-22 | 22 | 43,7 | 60 | |
| 467 E-23 | 23 | 43,7 | 60 | |
| 467 E-24 | 24 | 43,7 | 60 | |
| 467 E-25 | 25 | 43,7 | 60 | |
| 467 E-26 | 26 | 43,7 | 60 | |
| 467 E-27 | 27 | 43,7 | 60 | |
| 467 E-28 | 28 | 43,7 | 60 | |
| 467 E-29 | 29 | 43,7 | 60 | |
| 467 E-30 | 30 | 43,7 | 60 | |
| 467 E-31 | 31 | 43,7 | 60 | |
| 467 E-32 | 32 | 43,7 | 60 | |



| | | | |
|---------------------|------------|---------------------|--------------|
| Spanntoleranz | : - 0,5 mm | Rundlaufgenauigkeit | : 10 μ m |
| Clamping capacity | : - 0,5 mm | Concentricity | : 10 μ m |
| Capacité de serrage | : - 0,5 mm | Concentricité | : 10 μ m |
| Sıkma kapasitesi | : - 0,5 mm | Konsantriklik | : 10 μ m |

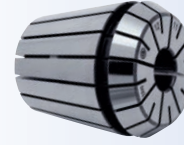
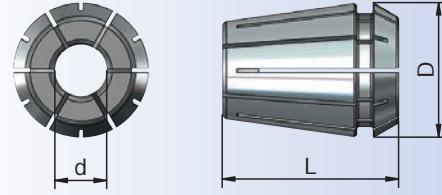
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| Komplettsatz | : Seite 10.22 |
| Complete set | : Page 10.22 |
| Kit complet | : Voir page 10.22 |
| Komple set | : Sayfa 10.22 |



Collets System ER DIN 6499 B

Pincas de serrage System ER DIN 6499, Forme B

Pensler ER DIN 6499 B Formu



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|-----|-----|------|------|
| 4004 E-01 | 1 | 8,5 | 13,6 | |
| 4004 E-1.5 | 1,5 | 8,5 | 13,6 | |
| 4004 E-02 | 2 | 8,5 | 13,6 | |
| 4004 E-02.5 | 2,5 | 8,5 | 13,6 | |
| 4004 E-03 | 3 | 8,5 | 13,6 | |
| 4004 E-03.5 | 3,5 | 8,5 | 13,6 | |
| 4004 E-04 | 4 | 8,5 | 13,6 | |
| 4004 E-04.5 | 4,5 | 8,5 | 13,6 | |
| 4004 E-05 | 5 | 8,5 | 13,6 | |

Spanntoleranz : - 0,5 mm
Clamping capacity : - 0,5 mm
Capacité de serrage : - 0,5 mm
Sıkma kapasitesi : - 0,5 mm

Rundlaufgenauigkeit : 10µm
Concentricity : 10µm
Concentricité : 10µm
Konsantriklik : 10µm

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22

Spannzangen System ER DIN 6499 / ISO 15488-B

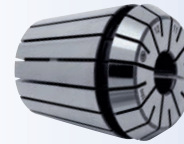
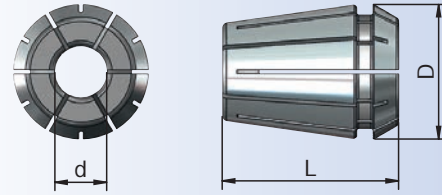
ER 11 - B

Collets System ER DIN 6499 B

Pincas de serrage System ER DIN 6499, Forme B

Pensler DIN 6499 B Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|-----|------|----|------|
| 4008 E-01 | 1 | 11,5 | 18 | |
| 4008 E-1.5 | 1,5 | 11,5 | 18 | |
| 4008 E-02 | 2 | 11,5 | 18 | |
| 4008 E-02.5 | 2,5 | 11,5 | 18 | |
| 4008 E-03 | 3 | 11,5 | 18 | |
| 4008 E-03.5 | 3,5 | 11,5 | 18 | |
| 4008 E-04 | 4 | 11,5 | 18 | |
| 4008 E-04.5 | 4,5 | 11,5 | 18 | |
| 4008 E-05 | 5 | 11,5 | 18 | |
| 4008 E-05.5 | 5,5 | 11,5 | 18 | |
| 4008 E-06 | 6 | 11,5 | 18 | |
| 4008 E-06.5 | 6,5 | 11,5 | 18 | |
| 4008 E-07 | 7 | 11,5 | 18 | |



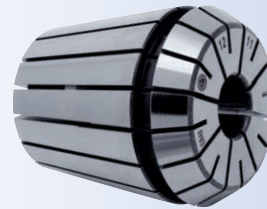
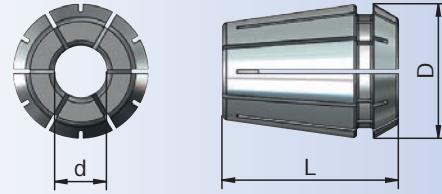
Spanntoleranz : - 0,5 mm
Clamping capacity : - 0,5 mm
Capacité de serrage : - 0,5 mm
Sıkma kapasitesi : - 0,5 mm

Rundlaufgenauigkeit : 5µm
Concentricity : 5µm
Concentricité : 5µm
Konsantriklik : 5µm

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22

**Collets System ER DIN 6499 B****Pinces de serrage System ER DIN 6499, Forme B****Pensler ER DIN 6499 B Formu**

| Bestell-Nr. Order Nr. Référéce Sipariş Nr. | d | D | L | Euro |
|---|----|----|------|------|
| 426 E-01 | 1 | 17 | 27,5 | |
| 426 E-02 | 2 | 17 | 27,5 | |
| 426 E-03 | 3 | 17 | 27,5 | |
| 426 E-04 | 4 | 17 | 27,5 | |
| 426 E-05 | 5 | 17 | 27,5 | |
| 426 E-06 | 6 | 17 | 27,5 | |
| 426 E-07 | 7 | 17 | 27,5 | |
| 426 E-08 | 8 | 17 | 27,5 | |
| 426 E-09 | 9 | 17 | 27,5 | |
| 426 E-10 | 10 | 17 | 27,5 | |



Spanntoleranz : Ø1-Ø2 (-0,5 mm) / Ø3-Ø10 (-1 mm)
Clamping capacity : Ø1-Ø2 (-0,5 mm) / Ø3-Ø10 (-1 mm)
Capacité de serrage : Ø1-Ø2 (-0,5 mm) / Ø3-Ø10 (-1 mm)
Sıkma kapasitesi : Ø1-Ø2 (-0,5 mm) / Ø3-Ø10 (-1 mm)

Rundlaufgenauigkeit : 5µm
Concentricity : 5µm
Concentricité : 5µm
Konsantriklik : 5µm

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22

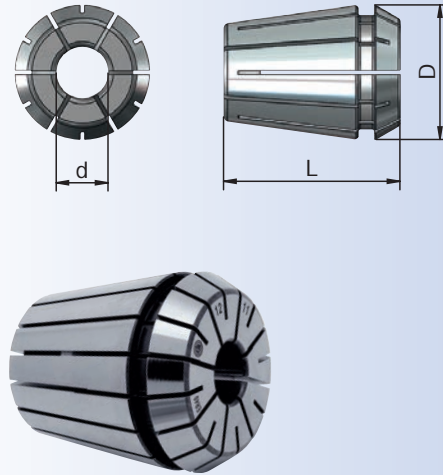


Collets System ER DIN 6499 B

Pincas de serrage System ER DIN 6499, Forme B

Pensler ER DIN 6499 B Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|----|------|------|
| 428 E-02 | 2 | 21 | 31,5 | |
| 428 E-03 | 3 | 21 | 31,5 | |
| 428 E-04 | 4 | 21 | 31,5 | |
| 428 E-05 | 5 | 21 | 31,5 | |
| 428 E-06 | 6 | 21 | 31,5 | |
| 428 E-07 | 7 | 21 | 31,5 | |
| 428 E-08 | 8 | 21 | 31,5 | |
| 428 E-09 | 9 | 21 | 31,5 | |
| 428 E-10 | 10 | 21 | 31,5 | |
| 428 E-11 | 11 | 21 | 31,5 | |
| 428 E-12 | 12 | 21 | 31,5 | |
| 428 E-13 | 13 | 21 | 31,5 | |



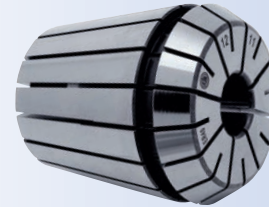
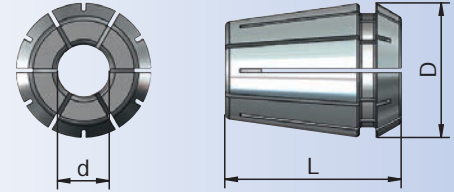
Spanntoleranz : Ø1-Ø2 (-0,5 mm) / Ø3-Ø13 (-1 mm)
 Clamping capacity : Ø1-Ø2 (-0,5 mm) / Ø3-Ø13 (-1 mm)
 Capacité de serrage : Ø1-Ø2 (-0,5 mm) / Ø3-Ø13 (-1 mm)
 Sıkma kapasitesi : Ø1-Ø2 (-0,5 mm) / Ø3-Ø13 (-1 mm)

Rundlaufgenauigkeit : 5µm
 Concentricity : 5µm
 Concentricité : 5µm
 Konsantriklik : 5µm

Komplettsatz : Seite 10.22
 Complete set : Page 10.22
 Kit complet : Voir page 10.22
 Komple set : Sayfa 10.22

**Collets System ER DIN 6499 B****Pinces de serrage System ER DIN 6499, Forme B****Pensler ER DIN 6499 B Formu**

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|----|----|------|
| 430 E-02 | 2 | 26 | 34 | |
| 430 E-03 | 3 | 26 | 34 | |
| 430 E-04 | 4 | 26 | 34 | |
| 430 E-05 | 5 | 26 | 34 | |
| 430 E-06 | 6 | 26 | 34 | |
| 430 E-07 | 7 | 26 | 34 | |
| 430 E-08 | 8 | 26 | 34 | |
| 430 E-09 | 9 | 26 | 34 | |
| 430 E-10 | 10 | 26 | 34 | |
| 430 E-11 | 11 | 26 | 34 | |
| 430 E-12 | 12 | 26 | 34 | |
| 430 E-13 | 13 | 26 | 34 | |
| 430 E-14 | 14 | 26 | 34 | |
| 430 E-15 | 15 | 26 | 34 | |
| 430 E-16 | 16 | 26 | 34 | |



Spanntoleranz : Ø1-Ø2 (-0,5 mm) / Ø3-Ø16 (-1 mm)
Clamping capacity : Ø1-Ø2 (-0,5 mm) / Ø3-Ø16 (-1 mm)
Capacité de serrage : Ø1-Ø2 (-0,5 mm) / Ø3-Ø16 (-1 mm)
Sıkma kapasitesi : Ø1-Ø2 (-0,5 mm) / Ø3-Ø16 (-1 mm)

Rundlaufgenauigkeit : 5µm
Concentricity : 5µm
Concentricité : 5µm
Konsantriklik : 5µm

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22

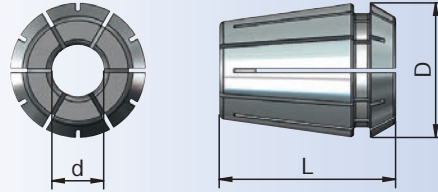


Collets System ER DIN 6499 B

Pincas de serrage System ER DIN 6499, Forme B

Pensler ER DIN 6499 B Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|----|----|------|
| 470 E-02 | 2 | 33 | 40 | |
| 470 E-03 | 3 | 33 | 40 | |
| 470 E-04 | 4 | 33 | 40 | |
| 470 E-05 | 5 | 33 | 40 | |
| 470 E-06 | 6 | 33 | 40 | |
| 470 E-07 | 7 | 33 | 40 | |
| 470 E-08 | 8 | 33 | 40 | |
| 470 E-09 | 9 | 33 | 40 | |
| 470 E-10 | 10 | 33 | 40 | |
| 470 E-11 | 11 | 33 | 40 | |
| 470 E-12 | 12 | 33 | 40 | |
| 470 E-13 | 13 | 33 | 40 | |
| 470 E-14 | 14 | 33 | 40 | |
| 470 E-15 | 15 | 33 | 40 | |
| 470 E-16 | 16 | 33 | 40 | |
| 470 E-17 | 17 | 33 | 40 | |
| 470 E-18 | 18 | 33 | 40 | |
| 470 E-19 | 19 | 33 | 40 | |
| 470 E-20 | 20 | 33 | 40 | |



Spanntoleranz : -1 mm
Clamping capacity : -1 mm
Capacité de serrage : -1 mm
Sıkma kapasitesi : -1 mm

Rundlaufgenauigkeit : 5µm
Concentricity : 5µm
Concentricité : 5µm
Konsantriklik : 5µm

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22

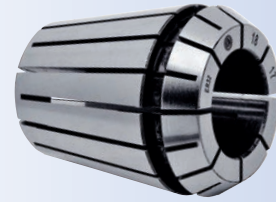
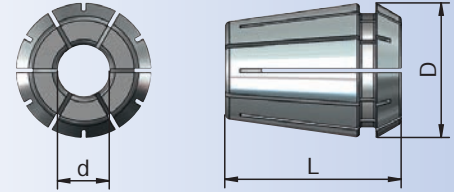


Collets System ER DIN 6499 B

Pinces de serrage System ER DIN 6499, Forme B

Pensler ER DIN 6499 B Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|----|----|------|
| 472 E-03 | 3 | 41 | 46 | |
| 472 E-04 | 4 | 41 | 46 | |
| 472 E-05 | 5 | 41 | 46 | |
| 472 E-06 | 6 | 41 | 46 | |
| 472 E-07 | 7 | 41 | 46 | |
| 472 E-08 | 8 | 41 | 46 | |
| 472 E-09 | 9 | 41 | 46 | |
| 472 E-10 | 10 | 41 | 46 | |
| 472 E-11 | 11 | 41 | 46 | |
| 472 E-12 | 12 | 41 | 46 | |
| 472 E-13 | 13 | 41 | 46 | |
| 472 E-14 | 14 | 41 | 46 | |
| 472 E-15 | 15 | 41 | 46 | |
| 472 E-16 | 16 | 41 | 46 | |
| 472 E-17 | 17 | 41 | 46 | |
| 472 E-18 | 18 | 41 | 46 | |
| 472 E-19 | 19 | 41 | 46 | |
| 472 E-20 | 20 | 41 | 46 | |
| 472 E-21 | 21 | 41 | 46 | |
| 472 E-22 | 22 | 41 | 46 | |
| 472 E-23 | 23 | 41 | 46 | |
| 472 E-24 | 24 | 41 | 46 | |
| 472 E-25 | 25 | 41 | 46 | |
| 472 E-26 | 26 | 41 | 46 | |



| | | | |
|---------------------|---------|---------------------|-------------|
| Spanntoleranz | : -1 mm | Rundlaufgenauigkeit | : 5 μ m |
| Clamping capacity | : -1 mm | Concentricity | : 5 μ m |
| Capacité de serrage | : -1 mm | Concentricité | : 5 μ m |
| Sıkma kapasitesi | : -1 mm | Konsantriklik | : 5 μ m |

| | |
|--------------|-------------------|
| Komplettsatz | : Seite 10.22 |
| Complete set | : Page 10.22 |
| Kit complet | : Voir page 10.22 |
| Komple set | : Sayfa 10.22 |



Collet system ER DIN 6499 A with square locking drive without length-adjustment

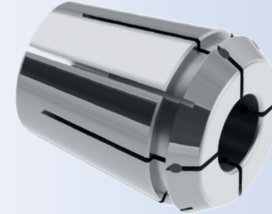
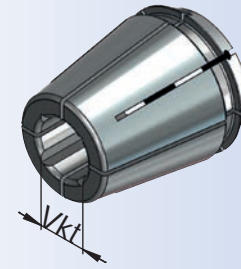
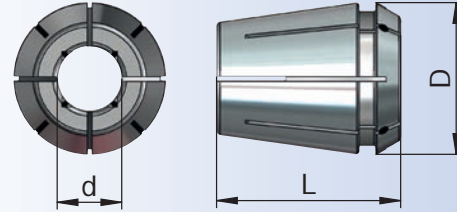
Pinces System ER DIN 6499 avec carré d'entraînement, Forme A

Kılavuz pensi içten soğutmalı sistemler için keçeli tip, ER DIN 6499 A Formu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Spannbereich Capacity Capacité Kapasite | d | D | Vkt | L | Euro |
|--|--|-----|------|-----|------|------|
| ERGBD.10.3527 | ER16 | 3,5 | 16,5 | 2,7 | 27,5 | |
| ERGBD.10.0432 | ER16 | 4 | 16,5 | 3,2 | 27,5 | |
| ERGBD.10.4535 | ER16 | 4,5 | 16,5 | 3,5 | 27,5 | |
| ERGBD.10.0605 | ER16 | 6 | 16,5 | 5 | 27,5 | |
| ERGBD.10.0756 | ER16 | 7 | 16,5 | 5,6 | 27,5 | |
| ERGBD.10.0863 | ER16 | 8 | 16,5 | 6,3 | 27,5 | |
| new ERGBD.10.0871 | ER16 | 9 | 16,5 | 7,1 | 27,5 | |

| | | | | | | |
|---------------|------|-----|------|-----|------|--|
| ERGBD.13.3527 | ER20 | 3,5 | 20,7 | 2,7 | 31,5 | |
| ERGBD.13.0432 | ER20 | 4 | 20,7 | 3,2 | 31,5 | |
| ERGBD.13.4535 | ER20 | 4,5 | 20,7 | 3,5 | 31,5 | |
| ERGBD.13.0605 | ER20 | 6 | 20,7 | 5 | 31,5 | |
| ERGBD.13.0756 | ER20 | 7 | 20,7 | 5,6 | 31,5 | |
| ERGBD.13.0863 | ER20 | 8 | 20,7 | 6,3 | 31,5 | |
| ERGBD.13.1008 | ER20 | 10 | 20,7 | 8 | 31,5 | |
| ERGBD.13.1109 | ER20 | 11 | 20,7 | 9 | 31,5 | |
| ERGBD.13.1209 | ER20 | 12 | 20,7 | 9 | 31,5 | |

| | | | | | | |
|----------------|------|-----|------|------|----|--|
| ERGBD.16.3527 | ER25 | 3,5 | 25,7 | 2,7 | 34 | |
| ERGBD.16.0432 | ER25 | 4 | 25,7 | 3,2 | 34 | |
| ERGBD.16.4535 | ER25 | 4,5 | 25,7 | 3,5 | 34 | |
| ERGBD.16.0605 | ER25 | 6 | 25,7 | 5 | 34 | |
| ERGBD.16.0756 | ER25 | 7 | 25,7 | 5,6 | 34 | |
| ERGBD.16.0863 | ER25 | 8 | 25,7 | 6,3 | 34 | |
| ERGBD.16.0971 | ER25 | 9 | 25,7 | 7,1 | 34 | |
| ERGBD.16.1008 | ER25 | 10 | 25,7 | 8 | 34 | |
| ERGBD.16.1109 | ER25 | 11 | 25,7 | 9 | 34 | |
| ERGBD.16.1209 | ER25 | 12 | 25,7 | 9 | 34 | |
| ERGBD.16.14112 | ER25 | 14 | 25,7 | 11,2 | 34 | |
| ERGBD.16.16125 | ER25 | 16 | 25,7 | 12,5 | 34 | |

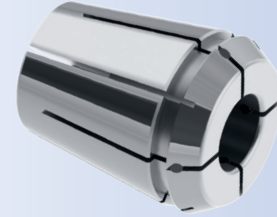
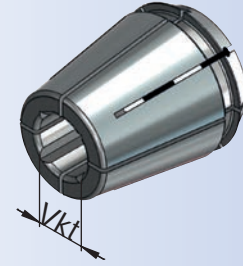
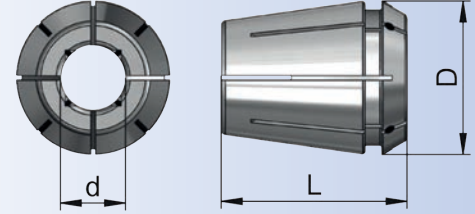


Spanntoleranz : h8
Clamping capacity : h8
Capacité de serrage : h8
Sıkma kapasitesi : h8

Rundlaufgenauigkeit : 10µm
Concentricity : 10µm
Concentricité : 10µm
Konsantriklik : 10µm

**Collet system ER DIN 6499 A with square locking drive without length-adjustment****Pinces System ER DIN 6499 avec carré d'entraînement, Forme A****Kılavuz pensi için soğutmalı sistemler için keçeli tip, ER DIN 6499 A Formu**

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Spannbereich Capacity Capacité Kapasite | d | D | Vkt | L | Euro |
|--|--|-----|------|------|----|------|
| ERGBD.20.0432 | ER32 | 4 | 32,7 | 3,2 | 40 | |
| ERGBD.20.4535 | ER32 | 4,5 | 32,7 | 3,5 | 40 | |
| ERGBD.20.0605 | ER32 | 6 | 32,7 | 5 | 40 | |
| ERGBD.20.0756 | ER32 | 7 | 32,7 | 5,6 | 40 | |
| ERGBD.20.0863 | ER32 | 8 | 32,7 | 6,3 | 40 | |
| ERGBD.20.0971 | ER32 | 9 | 32,7 | 7,1 | 40 | |
| ERGBD.20.1008 | ER32 | 10 | 32,7 | 8 | 40 | |
| ERGBD.20.1109 | ER32 | 11 | 32,7 | 9 | 40 | |
| ERGBD.20.1209 | ER32 | 12 | 32,7 | 9 | 40 | |
| ERGBD.20.14112 | ER32 | 14 | 32,7 | 11,2 | 40 | |
| ERGBD.20.16125 | ER32 | 16 | 32,7 | 12,5 | 40 | |
| ERGBD.20.18145 | ER32 | 18 | 32,7 | 14,5 | 40 | |
| ERGBD.20.2016 | ER32 | 20 | 32,7 | 16 | 40 | |
| ERGBD.26.0605 | ER40 | 6 | 40,7 | 5 | 46 | |
| ERGBD.26.0756 | ER40 | 7 | 40,7 | 5,6 | 46 | |
| ERGBD.26.0863 | ER40 | 8 | 40,7 | 6,3 | 46 | |
| ERGBD.26.0971 | ER40 | 9 | 40,7 | 7,1 | 46 | |
| ERGBD.26.1008 | ER40 | 10 | 40,7 | 8 | 46 | |
| ERGBD.26.1109 | ER40 | 11 | 40,7 | 9 | 46 | |
| ERGBD.26.1209 | ER40 | 12 | 40,7 | 9 | 46 | |
| ERGBD.26.14112 | ER40 | 14 | 40,7 | 11,2 | 46 | |
| ERGBD.26.16125 | ER40 | 16 | 40,7 | 12,5 | 46 | |
| ERGBD.26.18145 | ER40 | 18 | 40,7 | 14,5 | 46 | |
| ERGBD.26.2016 | ER40 | 20 | 40,7 | 16 | 46 | |
| ERGBD.26.2218 | ER40 | 22 | 40,7 | 18 | 46 | |
| ERGBD.26.2520 | ER40 | 25 | 40,7 | 20 | 46 | |



Spanntoleranz : h8
Clamping capacity : h8
Capacité de serrage : h8
Sıkma kapasitesi : h8

Rundlaufgenauigkeit : 10µm
Concentricity : 10µm
Concentricité : 10µm
Konsantriklik : 10µm

Spannzangen für Präzisionskraftspannfutter

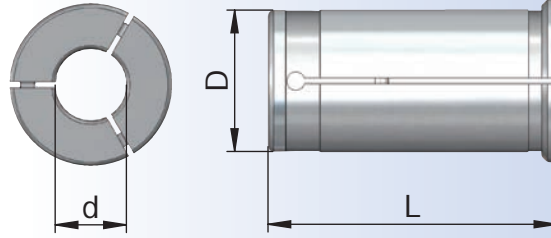


Collet for precision milling chuck

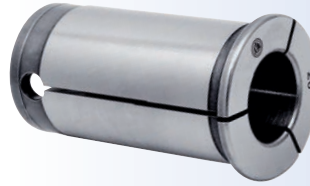
Pinces pour mandrin de fraisage de précision

Bilyalı takım tutucu için pensler

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|----|----|----|------|
| EKS 20-06 | 6 | 20 | 53 | |
| EKS 20-08 | 8 | 20 | 53 | |
| EKS 20-10 | 10 | 20 | 53 | |
| EKS 20-12 | 12 | 20 | 53 | |
| EKS 20-16 | 16 | 20 | 53 | |



| | | | | | |
|------------|-----------|----|----|----|--|
| new | EKS 25-06 | 6 | 25 | 59 | |
| new | EKS 25-08 | 8 | 25 | 59 | |
| new | EKS 25-10 | 10 | 25 | 59 | |
| new | EKS 25-12 | 12 | 25 | 59 | |
| new | EKS 25-16 | 16 | 25 | 59 | |
| new | EKS 25-20 | 20 | 25 | 59 | |



| | | | | | |
|------------|-----------|----|----|----|--|
| | EKS 32-06 | 6 | 32 | 65 | |
| | EKS 32-08 | 8 | 32 | 65 | |
| | EKS 32-10 | 10 | 32 | 65 | |
| | EKS 32-12 | 12 | 32 | 65 | |
| new | EKS 32-14 | 14 | 32 | 65 | |
| | EKS 32-16 | 16 | 32 | 65 | |
| new | EKS 32-18 | 18 | 32 | 65 | |
| | EKS 32-20 | 20 | 32 | 65 | |
| | EKS 32-25 | 25 | 32 | 65 | |

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22



Spannzangen für Hyrodehnspannfutter

Reducing arbor for hydraulic expansions chuck

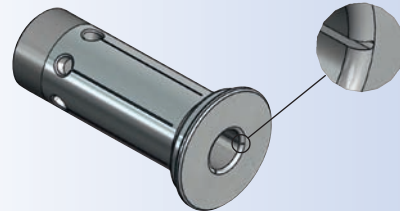
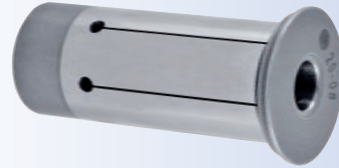
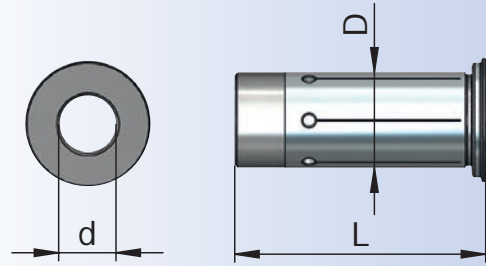
Douille de réduction pour mandrins expansibles hydrauliques

Hidrolik takım tutucu pensi

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|---|----|----|------|
| R12-030 | 3 | 12 | 46 | |
| R12-040 | 4 | 12 | 46 | |
| R12-050 | 5 | 12 | 46 | |
| R12-060 | 6 | 12 | 46 | |
| R12-080 | 8 | 12 | 46 | |

| | | | | |
|---------|----|----|------|--|
| R20-030 | 3 | 20 | 52,5 | |
| R20-040 | 4 | 20 | 52,5 | |
| R20-050 | 5 | 20 | 52,5 | |
| R20-060 | 6 | 20 | 52,5 | |
| R20-080 | 8 | 20 | 52,5 | |
| R20-100 | 10 | 20 | 52,5 | |
| R20-120 | 12 | 20 | 52,5 | |
| R20-140 | 14 | 20 | 52,5 | |
| R20-160 | 16 | 20 | 52,5 | |

| | | | | |
|---------|----|----|----|--|
| R32-060 | 6 | 32 | 63 | |
| R32-080 | 8 | 32 | 63 | |
| R32-100 | 10 | 32 | 63 | |
| R32-120 | 12 | 32 | 63 | |
| R32-140 | 14 | 32 | 63 | |
| R32-160 | 16 | 32 | 63 | |
| R32-200 | 20 | 32 | 63 | |
| R32-250 | 25 | 32 | 63 | |



Kühlkanal-Bohrungen: Können als option bestellt werden
(Beispiel Bestellnummer: R12-080.KKB)

Coolant Channels: Can be ordered as option
(Example order code no: R12-080.KKB)

Conduits pour arrosage: Peuvent être commandés comme l'option
(Exemple commande no: R12-080.KKB)

Soğutma kanalı: İsteğe bağlı alından su vermeli yapılabilir
(Örnek sipariş no : R12-080.KKB)

Komplettsatz : Seite 10.22
Complete set : Page 10.22
Kit complet : Voir page 10.22
Komple set : Sayfa 10.22



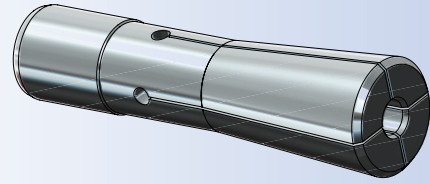
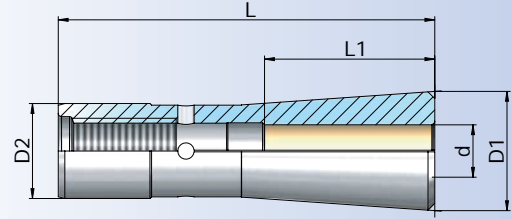
Spannzangen für EPC-Spannfutter

Reducing bushes for EPC-Collet Chucks

Douille de reduction pour mandrin a pinces EPC

Çektirmeli takım tutucu için pensler

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D1 | D2 | L | L1 | Euro |
|--|----|------|------|------|----|------|
| new EPC06.03 | 3 | 10,2 | 8 | 37,5 | 9 | |
| new EPC06.04 | 4 | 10,2 | 8 | 37,5 | 12 | |
| new EPC06.05 | 5 | 10,2 | 8 | 37,5 | 15 | |
| new EPC06.06 | 6 | 10,2 | 8 | 37,5 | 20 | |
| new EPC08.03 | 3 | 13,7 | 10,5 | 46,5 | 9 | |
| new EPC08.04 | 4 | 13,7 | 10,5 | 46,5 | 12 | |
| new EPC08.05 | 5 | 13,7 | 10,5 | 46,5 | 15 | |
| new EPC08.06 | 6 | 13,7 | 10,5 | 46,5 | 20 | |
| new EPC08.08 | 8 | 13,7 | 10,5 | 46,5 | 26 | |
| new EPC12.03 | 3 | 18,2 | 14,5 | 57,5 | 9 | |
| new EPC12.04 | 4 | 18,2 | 14,5 | 57,5 | 12 | |
| new EPC12.05 | 5 | 18,2 | 14,5 | 57,5 | 15 | |
| new EPC12.06 | 6 | 18,2 | 14,5 | 57,5 | 20 | |
| new EPC12.08 | 8 | 18,2 | 14,5 | 57,5 | 26 | |
| new EPC12.10 | 10 | 18,2 | 14,5 | 57,5 | 30 | |
| new EPC12.12 | 12 | 18,2 | 14,5 | 57,5 | 34 | |
| new EPC16.03 | 3 | 23,2 | 18,5 | 65,5 | 9 | |
| new EPC16.04 | 4 | 23,2 | 18,5 | 65,5 | 12 | |
| new EPC16.05 | 5 | 23,2 | 18,5 | 65,5 | 15 | |
| new EPC16.06 | 6 | 23,2 | 18,5 | 65,5 | 20 | |
| new EPC16.08 | 8 | 23,2 | 18,5 | 65,5 | 26 | |
| new EPC16.10 | 10 | 23,2 | 18,5 | 65,5 | 30 | |
| new EPC16.12 | 12 | 23,2 | 18,5 | 65,5 | 34 | |
| new EPC16.14 | 14 | 23,2 | 18,5 | 65,5 | 38 | |
| new EPC16.16 | 16 | 23,2 | 18,5 | 65,5 | 40 | |





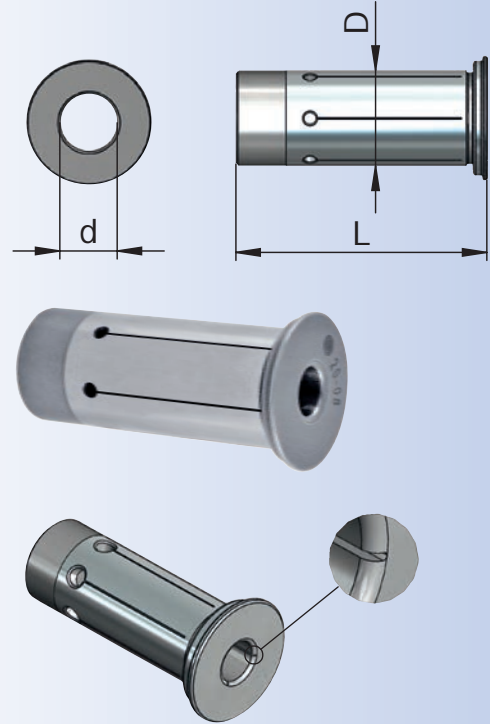
Spannzangen für Hyrodehnspannfutter

Reducing arbor for hydraulic expansions chuck

Douille de réduction pour mandrins expansibles hydrauliques

Hidrolik takım tutucu pensi

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | D | L | Euro |
|--|--------|----|------|------|
| R20-0.1875IN | 3/16" | 20 | 52,5 | |
| R20-0.25IN | 1/14" | 20 | 52,5 | |
| R20-0.3125IN | 5/16" | 20 | 52,5 | |
| R20-0.375IN | 3/8" | 20 | 52,5 | |
| R20-0.4375IN | 7/16" | 20 | 52,5 | |
| R20-0.5IN | 1/2" | 20 | 52,5 | |
| R20-0.5625IN | 9/16" | 20 | 52,5 | |
| R20-0.625IN | 5/8" | 20 | 52,5 | |
| R32-0.5IN | 1/2" | 32 | 63 | |
| R32-0.5625IN | 9/16" | 32 | 63 | |
| R32-0.625IN | 5/8" | 32 | 63 | |
| R32-0.6875IN | 11/16" | 32 | 63 | |
| R32-0.75IN | 3/4" | 32 | 63 | |
| R32-0.875IN | 7/8" | 32 | 63 | |
| R32-1.0IN | 1" | 32 | 63 | |



Kühlkanal-Bohrungen: Können als option bestellt werden
(Beispiel Bestellnummer: R20-0.1875IN.KKB)

Coolant Channels: Can be ordered as option
(Example order code no: R20-0.1875IN.KKB)

Conduits pour arrosage: Peuvent être commandés comme l'option
(Exemple commande no: R20-0.1875IN.KKB)

Soğutma kanalı: İsteğe bağlı alından su vermeli yapılabilir
(Örnek sipariş no : R20-0.1875IN.KKB)

Koffer

Case Plastic

Valise de Plastique

Plastik Kutu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | Bohrungen Holes Trous taraudés Delik Sayısı | B x H x L | Euro |
|--|---|--|----------------|------|
| * 701.05.1 | ER8 | 9 | 90 x 30 x 95 | |
| * 701.07.1 | ER11 | 13 | 90 x 30 x 95 | |
| * 701.10.1 | ER16 | 10 | 110 x 45 x 115 | |
| * 701.12.1 | R12 | 5 | 210 x 72 x 255 | |
| * 701.13.1 | ER20 | 12 | 110 x 45 x 115 | |
| 701.16.1 | ER25-OZ16 | 15 | 185 x 48 x 235 | |
| 701.20.1 | ER32 | 18 | 230 x 83 x 275 | |
| 701.20.2 | R20-EKS20 | 9 | 210 x 72 x 255 | |
| 701.25.1 | OZ25 | 16 | 210 x 72 x 255 | |
| 701.26.1 | ER40 | 23 | 275 x 83 x 340 | |
| 701.32.1 | OZ32 | 16 | 275 x 83 x 340 | |
| 701.32.2 | R32-EKS32 | 8 | 210 x 72 x 255 | |



Spannzangensatz im Koffer



Collet set in box

Set de pinces dans valise

Pens takımı plastik kutusu ile birlikte



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Stück Piece Pièce Type | Koffer Case Plastic Valise de plastique Plastik Kutu | Abmessung Size Dimension Cinsi | Euro |
|--|---------------------------------|---|--|------|
| 415 E-S | OZ16 (15 St.) | 701.16.1 | 2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 | |
| 462 E-S | OZ25 (16 St.) | 701.25.1 | 4-5-6-7-8-9-10-11-12-14-16-18-20-22-24-25 | |
| 467 E-S | OZ32 (16 St.) | 701.32.1 | 5-6-7-8-10-12-14-16-18-20-22-24-25-28-30-32 | |
| *4004 E-S | 4004 E (ER8) (9 St.) | 701.05.1 | 1-1,5-2-2,5-3-3,5-4-4,5-5 | |
| *4008 E-S | 4008 E (ER11) (13 St.) | 701.07.1 | 1 -1,5-2-2,5-3-3,5-4-4,5-5-5,5-6-6,5-7 | |
| *426 E-S | 426 E (ER16) (10 St.) | 701.10.1 | 1-2-3-4-5-6-7-8-9-10 | |
| *428 E-S | 428 E (ER20) (12 St.) | 701.13.1 | 2-3-4-5-6-7-8-9-10-11-12-13 | |
| 430 E-S | 430 E (ER25) (15 St.) | 701.16.1 | 2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 | |
| 470 E-S | 470 E (ER32) (18 St.) | 701.20.1 | 3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20 | |
| 472 E-S | 472 E (ER40) (23 St.) | 701.26.1 | 4-5-6-7-8-9-10-11-12-13-14-15-16-18-19-20-21 -22-23-24-25-26 | |



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Stück Piece Pièce Type | Koffer Case Plastic Valise de plastique Plastik Kutu | Abmessung Size Dimension Cinsi | Euro |
|--|---------------------------------|---|---|------|
| EKS 20-S | EKS 20 (5 St.) | 701.20.2 | 6-8-10-12-16 | |
| EKS 32-S | EKS 32 (7 St.) | 701.32.2 | 6-8-10-12-16-20-25 | |
| * R12-S | R12 (5 St.) | 701.12.1 | 3-4-5-6-8 | |
| * R20-S | R20 (9 St.) | 701.30.2 | 3-4-5-6-8-10-12-14-16 | |
| * R32-S | R32 (8 St.) | 701.32.2 | 6-8-10-12-14-16-20-25 | |



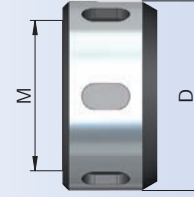
Spannmutter OZ DIN 6388 D kugelgelagerte Ausführung

Clamping nuts OZ DIN 6388 D ball-bearing version

Écrou de serrage DIN 6388 D version roulement à billes

Pens kapağı bilyeli tip DIN 6388 D

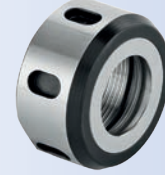
| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Gewinde Tap Filet Diş | Euro |
|--|---|----|--------------------------------|------|
| 112.01.16 | 415 E | 43 | M33 x 1,5 | |
| 112.01.25 | 462 E | 60 | M48 x 2 | |
| 112.01.32 | 467 E | 72 | M 60 x 2,5 | |



Zubehör / Accessories / Accessoires / Yedekler



Hakenschlüssel
Wrench
Clé à ergot
E tipi ay anahtar



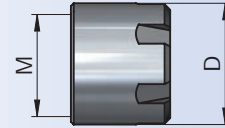
Spannmutter ER Mini

Clamping Nut ER Mini

Écrou ER Mini

ER Mini Kapak

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Gewinde Tap Filet Diş | Euro |
|--|---|----|--------------------------------|------|
| 109.02.05 | ER8 | 12 | M10x0,75 | |
| 109.02.07 | ER11 | 16 | M13x0,75 | |
| 109.02.10 | ER16 | 22 | M19 x 1 | |



Zubehör / Accessories / Accessoires / Yedekler



Rollenschlüssel für Spannmutter
Roller Bearing Wrenches
Cles à rouleaux
Bilyali Kapak Sıkma Anahtar



Spannschlüssel ER
Wrench ER
Clé de serrage ER
Anahtar ER

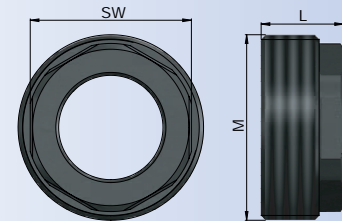
Spannmutter mit Außengewinde

Clamping nut short

Écrou de serrage court

Gömme kapak

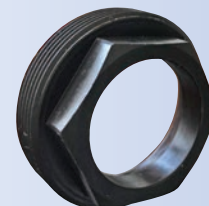
| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | SW | L | Gewinde Tap Filet Diş | Euro |
|--|---|----|----|--------------------------------|------|
| new 110.02.10.D | ER16 | 19 | 11 | M24 x 1,0 | |
| new 110.02.16.D | ER25 | 24 | 14 | M32 x 1,5 | |
| new 110.02.20.D | ER32 | 30 | 16 | M40 x 1,5 | |



Zubehör / Accessories / Accessoires / Yedekler



Spannschlüssel ER
Wrench ER
Clé de serrage ER
Anahtar ER



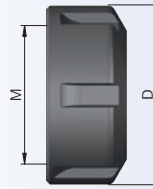
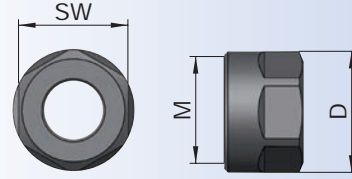


Spannmutter ER DIN 6499 Standardausführung mit Exzenterring - gewuchtet

Clamping nuts ER DIN 6499 - balanced

Écrou de serrage ER DIN 6499 version standard avec bague excentrique - équilibré

Pens kapağı ER tipi DIN 6499 Balansı alınmış



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | SW | Gewinde Tap Filet Diş | Euro |
|--|---|----|----|--------------------------------|------|
| * 110.02.07.6KT | ER11 | 19 | 17 | M14 X 0,75 | |
| * 110.02.10.6KT | ER16 | 28 | 25 | M22 x 1,5 | |
| 110.02.10 | ER16 | 30 | - | M22 X 1,5 | |
| * 110.02.13.6KT | ER20 | 34 | 30 | M25 x 1,5 | |
| 110.02.16 | ER25 | 42 | - | M 32 x 1,5 | |
| 110.02.20 | ER32 | 50 | - | M40 x 1,5 | |
| 110.02.26 | ER40 | 63 | - | M50x 1,5 | |

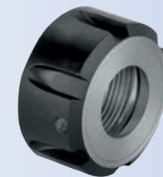
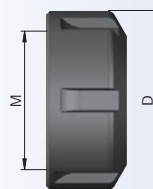
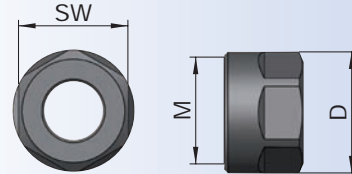
- * Sechskantmutter
- * Six side clamping nuts
- * Ecrou á 6 pens
- * 6 köşeli

Spannmutter ER DIN 6499 kugelgelagerte Ausführung

Clamping nuts ER DIN 6499 Ball-bearing version

Écrou de serrage ER DIN 6499 version roulement à billes

Pens kapağı ER tipi DIN 6499 Bilyalı tip



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | SW | Gewinde Tap Filet Diş | Euro |
|--|---|----|----|--------------------------------|------|
| * 112.02.10 | ER16 | 30 | 27 | M22 x 1,5 | |
| 112.02.13 | ER20 | 35 | - | M25 x 1,5 | |
| 112.02.16 | ER25 | 42 | - | M32 x 1,5 | |
| 112.02.20 | ER32 | 50 | - | M40 x 1,5 | |
| 112.02.26 | ER40 | 63 | - | M50 x 1,5 | |

- * Sechskantmutter
- * Six side clamping nuts
- * Ecrou á 6 pens
- * 6 köşeli

Zubehör / Accessories / Accessoires / Yedekler



Rollenschlüssel für Spannmutter
Roller Bearing Wrenches
Cles á rouleaux
Bilyalı Kapak Sıkma Anahtar



Spannschlüssel ER
Wrench ER
Clé de serrage ER
Anahtar ER



Spannmutter OZ DIN 6388 D für Dichtscheiben

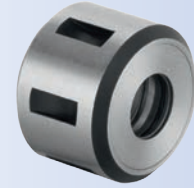
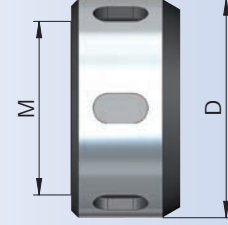
Clamping nuts OZ for sealing disc DIN 6388 D

Écrou de serrage OZ pour joints DIN 6388 D

Pens kapağı DIN 6388 D

Su sızdırmaz ringli içten soğutmalı takımlar için

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Gewinde Tap Filet Diş | Euro |
|--|---|----|--------------------------------|------|
| 113.01.16 | 415 E | 43 | M33 x 1,5 | |
| 113.01.25 | 462 E | 60 | M48 x 2 | |
| 113.01.32 | 467 E | 72 | M60 x 2,5 | |



Zubehör / Accessories / Accessoires / Yedekler



Hakenschlüssel
Wrench
Clé à ergot
E tipi ay anahtar

10.46

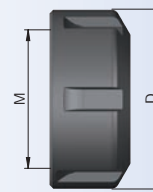
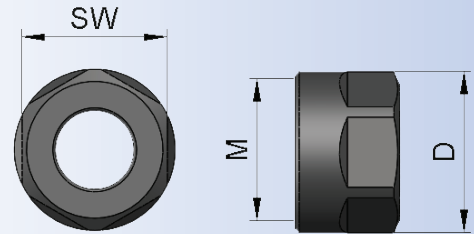
Spannmutter ER DIN 6499 für Dichtscheiben

Clamping nuts ER DIN 6499 for sealing disc

Écrou de serrage pour joints ER DIN 6499

Pens kapağı DIN 6499 ER tipi Su sızdırmaz ringli

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | SW | Gewinde Tap Filet Diş | Euro |
|--|---|----|----|--------------------------------|------|
| *113.02.10 | ER16 | 28 | 25 | M22 x 1,5 | |
| 113.02.16 | ER25 | 42 | - | M32 X 1,5 | |
| 113.02.20 | ER32 | 50 | - | M40 x 1,5 | |
| 113.02.26 | ER40 | 63 | - | M50 x 1,5 | |



- * Sechskantmutter
- * Six side clamping nuts
- * Ecrou à 6 pens
- * 6 köşeli

Zubehör / Accessories / Accessoires / Yedekler



Rollenschlüssel für Spannmutter
Roller Bearing Wrenches
Cles à rouleaux
Bilyalı Kapak Sıkma Anahtar

10.47



Spannschlüssel ER
Wrench ER
Clé de serrage ER
Anahtar ER

10.48





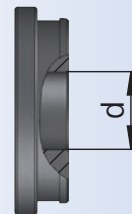
Dichtscheiben für OZ Spannmuttern

Sealing disc for OZ clamping nuts

Jointes écrou de serrage OZ

Su sızdırmaz ringli içten soğutmalı takımlar için

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d je 0,5 mm | D | Typ | Euro |
|--|----------------|------|-------|------|
| 01.16.XXX | 3,0-6,0 | 20,3 | 415 E | |
| 01.16.XXX | 6,5-16,0 | | | |
| 01.25.XXX | 3,0-6,0 | 29,8 | 462 E | |
| 01.25.XXX | 6,5-25,0 | | | |
| 01.32.XXX | 3,0-6,0 | 38,3 | 467 E | |
| 01.32.XXX | 6,5-32,0 | | | |



Dichtscheiben für ER Spannmuttern

ER

Sealing Disc for ER clamping nuts

Jointes pour écrou de serrage ER

Su sızdırmaz ringli içten soğutmalı takımlar için

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d je 0,5 mm | D | Typ | Euro |
|--|----------------|-------|-------|------|
| 02.10.xxx | 3,0 - 6,0 | 12,85 | ER 16 | |
| 02.10.xxx | 6,5-10,0 | | | |
| 02.16.xxx | 3,0 - 6,0 | 20,80 | ER 25 | |
| 02.16.xxx | 6,5-16,0 | | | |
| 02.20.xxx | 3,0 - 6,0 | 26,80 | ER 32 | |
| 02.20.xxx | 6,5 - 20,0 | | | |
| 02.26.xxx | 3,0 - 6,0 | 33,30 | ER 40 | |
| 02.26.xxx | 6,5 - 26,0 | | | |





Reduzierbuchse für Bohrstangenhalter

Reduction bushes for boring bar holder

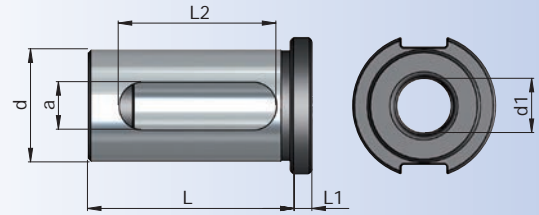
Douille de réduction pour barre d'alésage

Delik kateri redüksiyonu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | d1 | L | L1 | L2 | a | Euro |
|--|----|----|----|----|----|------|------|
| 709.25.06.45 | 25 | 6 | 45 | 5 | 35 | 10,5 | |
| 709.25.08.45 | 25 | 8 | 45 | 5 | 35 | 10,5 | |
| 709.25.10.45 | 25 | 10 | 45 | 5 | 35 | 10,5 | |
| 709.25.12.45 | 25 | 12 | 45 | 5 | 35 | 10,5 | |
| 709.25.14.45 | 25 | 14 | 45 | 5 | 35 | 10,5 | |
| 709.25.16.45 | 25 | 16 | 45 | 5 | 35 | 10,5 | |
| 709.25.18.45 | 25 | 18 | 45 | 5 | 35 | 10,5 | |
| 709.25.20.45 | 25 | 20 | 45 | 5 | 35 | 10,5 | |

| | | | | | | | |
|--------------|----|----|----|---|----|------|--|
| 709.32.06.65 | 32 | 6 | 65 | 5 | 45 | 10,5 | |
| 709.32.08.65 | 32 | 8 | 65 | 5 | 45 | 10,5 | |
| 709.32.10.65 | 32 | 10 | 65 | 5 | 45 | 10,5 | |
| 709.32.12.65 | 32 | 12 | 65 | 5 | 45 | 10,5 | |
| 709.32.14.65 | 32 | 14 | 65 | 5 | 45 | 10,5 | |
| 709.32.16.65 | 32 | 16 | 65 | 5 | 45 | 10,5 | |
| 709.32.18.65 | 32 | 18 | 65 | 5 | 45 | 10,5 | |
| 709.32.20.65 | 32 | 20 | 65 | 5 | 45 | 10,5 | |
| 709.32.25.65 | 32 | 25 | 65 | 5 | 45 | 10,5 | |

| | | | | | | | |
|--------------|----|----|----|---|----|------|--|
| 709.40.06.75 | 40 | 6 | 75 | 5 | 52 | 12,5 | |
| 709.40.08.75 | 40 | 8 | 75 | 5 | 52 | 12,5 | |
| 709.40.10.75 | 40 | 10 | 75 | 5 | 52 | 12,5 | |
| 709.40.12.75 | 40 | 12 | 75 | 5 | 52 | 12,5 | |
| 709.40.14.75 | 40 | 14 | 75 | 5 | 52 | 12,5 | |
| 709.40.16.75 | 40 | 16 | 75 | 5 | 52 | 12,5 | |
| 709.40.18.75 | 40 | 18 | 75 | 5 | 54 | 12,5 | |
| 709.40.20.75 | 40 | 20 | 75 | 5 | 54 | 12,5 | |
| 709.40.25.75 | 40 | 25 | 75 | 5 | 54 | 12,5 | |
| 709.40.32.75 | 40 | 32 | 75 | 5 | 54 | 12,5 | |



Reduzierbuchse für Bohrstangenhalter



Reduction bushes for boring bar holder

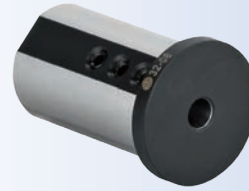
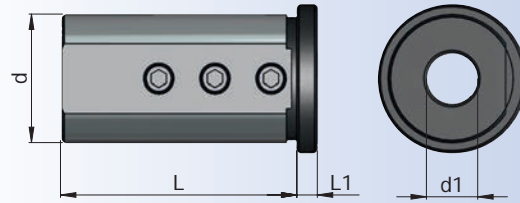
Douille de réduction pour barre d'alésage

Delik kateri redüksiyonu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | d1 | L | L1 | Type | Euro |
|--|----|----|----|----|------|------|
| 709.25.06.1.46 | 25 | 6 | 46 | 4 | 1 | |
| 709.25.08.1.46 | 25 | 8 | 46 | 4 | 1 | |
| 709.25.10.1.46 | 25 | 10 | 46 | 4 | 1 | |
| 709.25.12.1.46 | 25 | 12 | 46 | 4 | 1 | |
| 709.25.14.1.46 | 25 | 14 | 46 | 4 | 2 | |
| 709.25.16.1.46 | 25 | 16 | 46 | 4 | 2 | |
| 709.25.18.1.46 | 25 | 18 | 46 | 4 | 2 | |
| 709.25.20.1.46 | 25 | 20 | 46 | 4 | 2 | |

| | | | | | | |
|----------------|----|----|----|---|---|--|
| 709.32.06.1.53 | 32 | 6 | 53 | 5 | 1 | |
| 709.32.08.1.53 | 32 | 8 | 53 | 5 | 1 | |
| 709.32.10.1.53 | 32 | 10 | 53 | 5 | 1 | |
| 709.32.12.1.53 | 32 | 12 | 53 | 5 | 1 | |
| 709.32.14.1.53 | 32 | 14 | 53 | 5 | 1 | |
| 709.32.16.1.53 | 32 | 16 | 53 | 5 | 2 | |
| 709.32.18.1.53 | 32 | 18 | 53 | 5 | 2 | |
| 709.32.20.1.53 | 32 | 20 | 53 | 5 | 2 | |
| 709.32.25.1.53 | 32 | 25 | 53 | 5 | 2 | |

| | | | | | | |
|----------------|----|----|----|---|---|--|
| 709.40.06.1.53 | 40 | 6 | 53 | 5 | 1 | |
| 709.40.08.1.53 | 40 | 8 | 53 | 5 | 1 | |
| 709.40.10.1.53 | 40 | 10 | 53 | 5 | 1 | |
| 709.40.12.1.53 | 40 | 12 | 53 | 5 | 1 | |
| 709.40.14.1.53 | 40 | 14 | 53 | 5 | 1 | |
| 709.40.16.1.53 | 40 | 16 | 53 | 5 | 1 | |
| 709.40.18.1.53 | 40 | 18 | 53 | 5 | 1 | |
| 709.40.20.1.53 | 40 | 20 | 53 | 5 | 1 | |
| 709.40.25.1.53 | 40 | 25 | 53 | 5 | 2 | |
| 709.40.32.1.53 | 40 | 32 | 53 | 5 | 2 | |



Type 1



Type 2



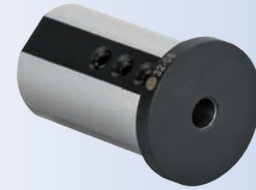
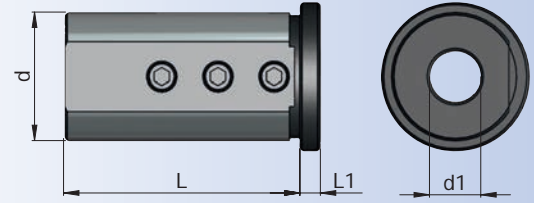
Reduzierbuchse für Bohrstangenhalter

Reduction bushes for boring bar holder

Douille de réduction pour barre d'alésage

İç çap tornalama kater tutucu redüksiyonu

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | d | d1 | L | L1 | Type | Euro |
|--|----|----|----|----|------|------|
| 709.32.06.1.80 | 32 | 6 | 80 | 5 | 1 | |
| 709.32.08.1.80 | 32 | 8 | 80 | 5 | 1 | |
| 709.32.10.1.80 | 32 | 10 | 80 | 5 | 1 | |
| 709.32.12.1.80 | 32 | 12 | 80 | 5 | 1 | |
| 709.32.14.1.80 | 32 | 14 | 80 | 5 | 1 | |
| 709.32.16.1.80 | 32 | 16 | 80 | 5 | 2 | |
| 709.32.18.1.80 | 32 | 18 | 80 | 5 | 2 | |
| 709.32.20.1.80 | 32 | 20 | 80 | 5 | 2 | |
| 709.32.25.1.80 | 32 | 25 | 80 | 5 | 2 | |
| 709.40.06.1.80 | 40 | 6 | 80 | 5 | 1 | |
| 709.40.08.1.80 | 40 | 8 | 80 | 5 | 1 | |
| 709.40.10.1.80 | 40 | 10 | 80 | 5 | 1 | |
| 709.40.12.1.80 | 40 | 12 | 80 | 5 | 1 | |
| 709.40.14.1.80 | 40 | 14 | 80 | 5 | 1 | |
| 709.40.16.1.80 | 40 | 16 | 80 | 5 | 1 | |
| 709.40.18.1.80 | 40 | 18 | 80 | 5 | 1 | |
| 709.40.20.1.80 | 40 | 20 | 80 | 5 | 1 | |
| 709.40.25.1.80 | 40 | 25 | 80 | 5 | 2 | |
| 709.40.32.1.80 | 40 | 32 | 80 | 5 | 2 | |



Type 1



Type 2



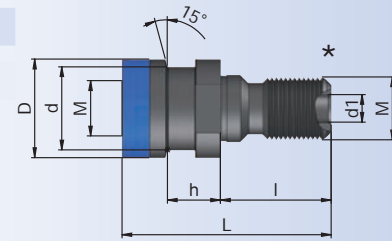
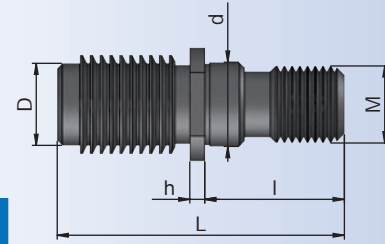
Pull studs

Tirettes

Çektirme civataları

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | M | I | L | d | d1 | h | O - ring joint torique X | Euro |
|--|---|--------|-----|----|----|------|----|------|--------------------------------|------|
| 401.20.16.S | S 20x2 | S 20x2 | M16 | 22 | 55 | 17 | - | 4 | - | |
| *401.20.16.SK | M16 | 25 | M16 | 28 | 53 | 21,1 | 7 | 13,7 | - | |
| *401.20.16.BT | M16 | 25 | M16 | 28 | 53 | 21,1 | 7 | 16,7 | - | |
| *501.20.24.IK | M24 | 39,2 | M24 | 40 | 65 | 32 | 7 | 13 | - | |

- * Mit zusätzlichem Innengewinde
- * With internal screw thread
- * Avec Filet supplémentaire
- * İçten çektirme dişli

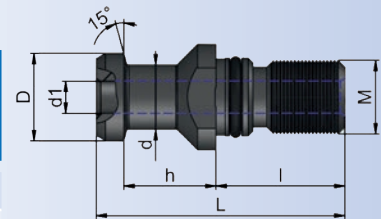


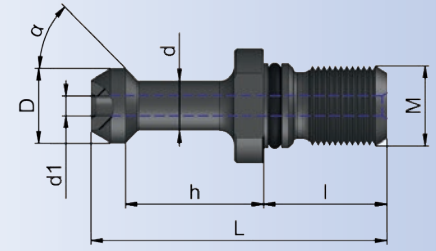
Pull studs

Tirettes

Çektirme civataları

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Type | D | M | I | L | d | d1 | h | O - ring joint torique X | Euro |
|--|-----------------|----|-----|----|----|----|------|----|--------------------------------|------|
| 302.20.12 | DIN 69872-A | 13 | M12 | 20 | 44 | 9 | - | 19 | | |
| 302.20.12.1 | DIN 69872-A | 12 | M12 | 20 | 44 | 8 | - | 19 | | |
| 402.20.16.IK | DIN 69872-A | 19 | M16 | 28 | 54 | 14 | 7 | 20 | X | |
| 405.20.16.4.IK | BT OKUMA-MAKINO | 19 | M16 | 25 | 54 | 14 | 4 | 23 | X | |
| 405.20.16.7.IK | BT | 19 | M16 | 25 | 54 | 14 | 7 | 23 | X | |
| 403.20.16 | DIN 69872-A | 19 | M16 | 28 | 54 | 14 | - | 20 | X | |
| 502.20.24.IK | DIN 69872-A | 28 | M24 | 40 | 74 | 21 | 11,5 | 25 | X | |
| 503.20.24 | DIN 69872-A | 28 | M24 | 40 | 74 | 21 | - | 25 | X | |



**Pull studs****Tirettes****Çektirme civataları**

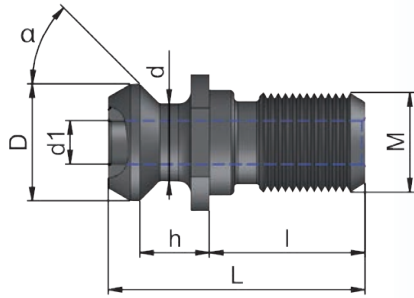
| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D | M | α | l | L | d | d1 | h | O - ring joint torique X | Euro |
|--|----|-----|----------|----|----|----|-----|----|--------------------------------|------|
| 305.20.45 | 11 | M12 | 45° | 20 | 43 | 7 | - | 18 | - | |
| 405.20.45 | 15 | M16 | 45° | 25 | 60 | 10 | - | 28 | X | |
| 505.20.45 | 23 | M24 | 45° | 40 | 85 | 17 | - | 35 | X | |
| 305.20.60 | 11 | M12 | 60° | 20 | 43 | 7 | - | 18 | - | |
| 405.20.60 | 15 | M16 | 60° | 25 | 60 | 10 | - | 28 | X | |
| 505.20.60 | 23 | M24 | 60° | 40 | 85 | 17 | - | 35 | X | |
| 305.20.90 | 11 | M12 | 90° | 20 | 43 | 7 | - | 18 | - | |
| 405.20.90 | 15 | M16 | 90° | 25 | 60 | 10 | - | 28 | X | |
| 505.20.90 | 23 | M24 | 90° | 40 | 85 | 17 | - | 35 | X | |
| 306.20.45.IK | 11 | M12 | 45° | 20 | 43 | 8 | 2,5 | 18 | X | |
| 406.20.45.IK | 15 | M16 | 45° | 25 | 60 | 10 | 3 | 28 | X | |
| 506.20.45.IK | 23 | M24 | 45° | 40 | 85 | 17 | 6 | 35 | X | |
| 406.20.60.IK | 15 | M16 | 60° | 25 | 60 | 10 | 3 | 28 | X | |
| 506.20.60.IK | 23 | M24 | 60° | 40 | 85 | 17 | 6 | 35 | X | |
| 406.20.90.IK | 15 | M16 | 90° | 25 | 60 | 10 | 3 | 28 | X | |
| 506.20.90.IK | 23 | M24 | 90° | 40 | 85 | 17 | 6 | 35 | X | |
| 405.20.45.1 | 15 | M16 | 45° | 25 | 57 | 10 | - | 25 | X | |
| 406.20.45.1.IK | 15 | M16 | 45° | 25 | 57 | 10 | 3 | 25 | X | |



Pull studs

Tirettes

Çektirme civataları



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Type | D | M | α | L | d | d1 | l | h | O - ring joint torique X | Euro |
|--|----------------|--------|-----|----------|--------|--------|-------|----|--------|--------------------------------|------|
| 404.20.16.IK | ISO 40 | 18,95 | M16 | 45° | 44,4 | 12,95 | 7,35 | 28 | 11,15 | X | |
| 504.20.24.IK | ISO 50 | 29,1 | M24 | 45° | 65,55 | 19,6 | 11,55 | 40 | 17,95 | X | |
| 407.20.16.IK | CAT 40 - MAZAK | 18,796 | M16 | 45° | 41,256 | 12,446 | 7 | 25 | 11,176 | - | |
| 407.20.16.1.IK | BT 40-MAZAK | 18,796 | M16 | 45° | 44,106 | 12,446 | 7 | 25 | 14,026 | - | |
| 507.20.24.IK | CAT 50 - MAZAK | 28,956 | M24 | 45° | 65,4 | 20,828 | 10 | 40 | 17,78 | - | |
| 507.20.24.1.IK | BT 50 - MAZAK | 28,956 | M24 | 45° | 65,2 | 20,828 | 10 | 40 | 17,58 | - | |



Einsatz mit Rutschkupplung

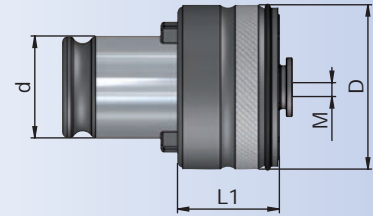
M2 - M14

Tapping collets with clutch

Douille avec limiteur de couple

Kılavuz tutucu emniyetli

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | d | L1 | Ø | □ | Euro |
|--|------|----|----|----|-----|-----|------|
| 16.11.M02.2821 | M2 | 32 | 19 | 24 | 2,8 | 2,1 | |
| 16.11.M25.2821 | M2,5 | 32 | 19 | 24 | 2,8 | 2,1 | |
| 16.11.M03.3527 | M3 | 32 | 19 | 24 | 3,5 | 2,7 | |
| 16.11.M35.0403 | M3,5 | 32 | 19 | 24 | 4 | 3 | |
| 16.11.M04.4534 | M4 | 32 | 19 | 24 | 4,5 | 3,4 | |
| 16.11.M04.2821 | M4 | 32 | 19 | 24 | 2,8 | 2,1 | |
| 16.11.M05.0649 | M5 | 32 | 19 | 24 | 6 | 4,9 | |
| 16.11.M05.3527 | M5 | 32 | 19 | 24 | 3,5 | 2,7 | |
| 16.11.M06.4534 | M6 | 32 | 19 | 24 | 4,5 | 3,4 | |
| 16.11.M06.0649 | M6 | 32 | 19 | 24 | 6 | 4,9 | |
| 16.11.M08.0862 | M8 | 32 | 19 | 24 | 8 | 6,2 | |
| 16.11.M08.0649 | M8 | 32 | 19 | 24 | 6 | 4,9 | |
| 16.11.M10.0755 | M10 | 32 | 19 | 24 | 7 | 5,5 | |
| 16.11.M10.1008 | M10 | 32 | 19 | 24 | 10 | 8 | |
| 16.11.M12.0907 | M12 | 32 | 19 | 24 | 9 | 7 | |
| 16.11.M14.1109 | M14 | 32 | 19 | 24 | 11 | 9 | |



Einsatz ohne Rutschkupplung

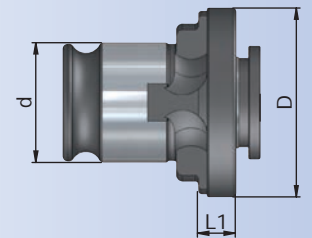
M2 - M14

Tapping collets without clutch

Douille sans limiteur de couple

Kılavuz tutucu emniyetsiz

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | d | L1 | Ø | □ | Euro |
|--|-----------------------|----|----|----|-----|-----|------|
| 16.01.2821 | M2 - M2,2 - M2,5 - M4 | 30 | 19 | 6 | 2,8 | 2,1 | |
| 16.01.3527 | M3 - M5 | 30 | 19 | 6 | 3,5 | 2,7 | |
| 16.01.0403 | M3,5 | 30 | 19 | 6 | 4 | 3 | |
| 16.01.4534 | M4 - M6 | 30 | 19 | 6 | 4,5 | 3,4 | |
| 16.01.0649 | M5 - M6 - M8 | 30 | 19 | 6 | 6 | 4,9 | |
| 16.01.0862 | M8 | 30 | 19 | 6 | 8 | 6,2 | |
| 16.01.0755 | M10 | 30 | 19 | 6 | 7 | 5,5 | |
| 16.01.1008 | M10 | 30 | 19 | 6 | 10 | 8 | |
| 16.01.0907 | M12 | 30 | 19 | 6 | 9 | 7 | |
| 16.01.1109 | M14 | 30 | 19 | 6 | 11 | 9 | |



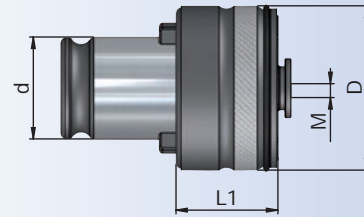


Tapping collets with clutch

Douille avec limiteur de couple

Kılavuz tutucu emniyetli

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | d | L1 | Ø | □ | Euro |
|--|-----|----|----|----|----|------|------|
| 16.12.M05.0649 | M5 | 50 | 31 | 31 | 6 | 4,9 | |
| 16.12.M06.0649 | M6 | 50 | 31 | 31 | 6 | 4,9 | |
| 16.12.M08.0862 | M8 | 50 | 31 | 31 | 8 | 6,2 | |
| 16.12.M08.0649 | M8 | 50 | 31 | 31 | 6 | 4,9 | |
| 16.12.M10.0755 | M10 | 50 | 31 | 31 | 7 | 5,5 | |
| 16.12.M10.1008 | M10 | 50 | 31 | 31 | 10 | 8 | |
| 16.12.M12.0907 | M12 | 50 | 31 | 31 | 9 | 7 | |
| 16.12.M14.1109 | M14 | 50 | 31 | 31 | 11 | 9 | |
| 16.12.M16.1209 | M16 | 50 | 31 | 31 | 12 | 9 | |
| 16.12.M18.1411 | M18 | 50 | 31 | 31 | 14 | 11 | |
| 16.12.M20.1612 | M20 | 50 | 31 | 31 | 16 | 12 | |
| 16.12.M22.18145 | M22 | 50 | 31 | 31 | 18 | 14,5 | |
| 16.12.M24.18145 | M24 | 50 | 31 | 31 | 18 | 14,5 | |



Einsatz ohne Rutschkupplung

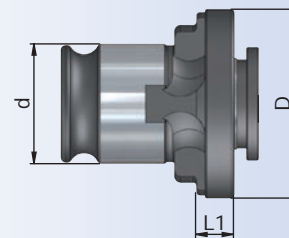
M5 - M24

Tapping collets without clutch

Douille sans limiteur de couple

Kılavuz tutucu emniyetsiz

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | d | L1 | Ø | □ | Euro |
|--|--------------|------|----|-----|----|------|------|
| 16.02.0649 | M5 - M6 - M8 | 46,5 | 31 | 8,5 | 6 | 4,9 | |
| 16.02.0862 | M8 | 46,5 | 31 | 8,5 | 8 | 6,2 | |
| 16.02.0755 | M10 | 46,5 | 31 | 8,5 | 7 | 5,5 | |
| 16.02.1008 | M10 | 46,5 | 31 | 8,5 | 10 | 8 | |
| 16.02.0907 | M12 | 46,5 | 31 | 8,5 | 9 | 7 | |
| 16.02.1109 | M14 | 46,5 | 31 | 8,5 | 11 | 9 | |
| 16.02.1209 | M16 | 46,5 | 31 | 8,5 | 12 | 9 | |
| 16.02.1411 | M18 | 46,5 | 31 | 8,5 | 14 | 11 | |
| 16.02.1612 | M20 | 46,5 | 31 | 8,5 | 16 | 12 | |
| 16.02.18145 | M22 - M24 | 46,5 | 31 | 8,5 | 18 | 14,5 | |





Einsatz mit Rutschkupplung

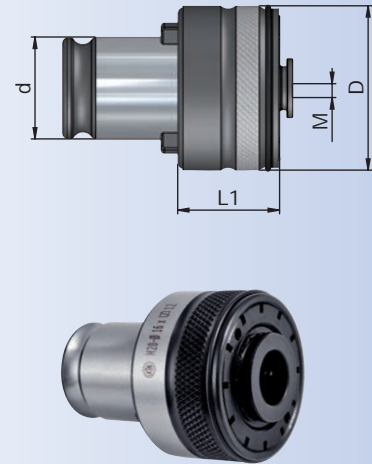
M14 - M36

Tapping collets with clutch

Douille avec limiteur de couple

Kılavuz tutucu emniyetli

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | d | L1 | Ø | □ | Euro |
|--|-----|----|----|----|----|------|------|
| 16.13.M14.1109 | M14 | 72 | 48 | 41 | 11 | 9 | |
| 16.13.M16.1209 | M16 | 72 | 48 | 41 | 12 | 9 | |
| 16.13.M18.1411 | M18 | 72 | 48 | 41 | 14 | 11 | |
| 16.13.M20.1612 | M20 | 72 | 48 | 41 | 16 | 12 | |
| 16.13.M22.18145 | M22 | 72 | 48 | 41 | 18 | 14,5 | |
| 16.13.M24.18145 | M24 | 72 | 48 | 41 | 18 | 14,5 | |
| 16.13.M27.2016 | M27 | 72 | 48 | 41 | 20 | 16 | |
| 16.13.M30.2218 | M30 | 72 | 48 | 41 | 22 | 18 | |
| 16.13.M33.2520 | M33 | 72 | 48 | 41 | 25 | 20 | |
| 16.13.M36.2822 | M36 | 72 | 48 | 41 | 28 | 22 | |



Einsatz ohne Rutschkupplung

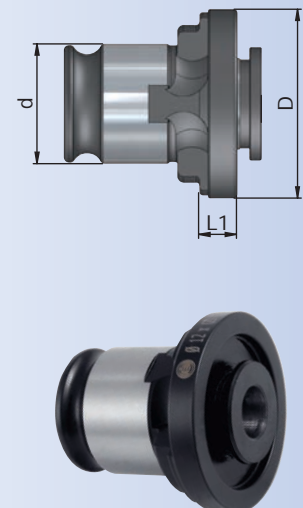
M14 - M36

Tapping collets without clutch

Douille sans limiteur de couple

Kılavuz tutucu emniyetsiz

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | d | L1 | Ø | □ | Euro |
|--|-----------|----|----|----|----|------|------|
| 16.03.1109 | M14 | 68 | 48 | 11 | 11 | 9 | |
| 16.03.1209 | M16 | 68 | 48 | 11 | 12 | 9 | |
| 16.03.1411 | M18 | 68 | 48 | 11 | 14 | 11 | |
| 16.03.1612 | M20 | 68 | 48 | 11 | 16 | 12 | |
| 16.03.18145 | M22 - M24 | 68 | 48 | 11 | 18 | 14,5 | |
| 16.03.2016 | M27 | 68 | 48 | 11 | 20 | 16 | |
| 16.03.2218 | M30 | 68 | 48 | 11 | 22 | 18 | |
| 16.03.2520 | M33 | 68 | 48 | 11 | 25 | 20 | |
| 16.03.2822 | M36 | 68 | 48 | 11 | 28 | 22 | |



Gewindebohrerhalter mit Zylinderschaft DIN 1835 B, ohne Rutschkupplung



Tap holder with cylindrical shank DIN 1835 B without clutch

Porte-taraud avec queue cylindrique DIN 1835 B sans limiterur de couple

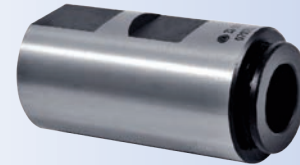
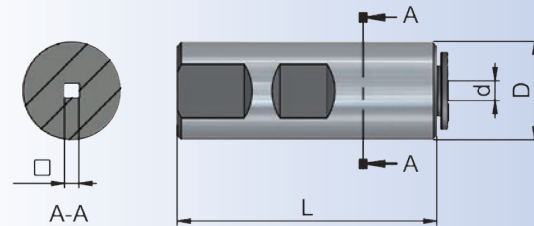
Silindirik şaftlı kılavuz tutucu emniyetsiz

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | M | D | L | d | □ | Euro |
|--|--------------|----|----|-----|-----|------|
| 16.16.3527.56 | M3 - M5 | 16 | 56 | 3,5 | 2,7 | |
| 16.16.0403.56 | M3,5 | 16 | 56 | 4 | 3 | |
| 16.16.4534.56 | M4 - M6 | 16 | 56 | 4,5 | 3,4 | |
| 16.16.0649.56 | M5 - M6 - M8 | 16 | 56 | 6 | 4,9 | |

| | | | | | | |
|---------------|--------------|----|----|-----|-----|--|
| 16.20.4534.58 | M4 - M6 | 20 | 58 | 4,5 | 3,4 | |
| 16.20.0649.58 | M5 - M6 - M8 | 20 | 58 | 6 | 4,9 | |
| 16.20.0862.58 | M8 | 20 | 58 | 8 | 6,2 | |
| 16.20.0755.58 | M10 | 20 | 58 | 7 | 5,5 | |
| 16.20.1008.58 | M10 | 20 | 58 | 10 | 8 | |
| 16.20.0907.58 | M12 | 20 | 58 | 9 | 7 | |

| | | | | | | |
|---------------|--------------|----|----|-----|-----|--|
| 16.25.4534.66 | M4 - M6 | 25 | 66 | 4,5 | 3,4 | |
| 16.25.0649.66 | M5 - M6 - M8 | 25 | 66 | 6 | 4,9 | |
| 16.25.0862.66 | M8 | 25 | 66 | 8 | 6,2 | |
| 16.25.0755.66 | M10 | 25 | 66 | 7 | 5,5 | |
| 16.25.1008.66 | M10 | 25 | 66 | 10 | 8 | |
| 16.25.0907.66 | M12 | 25 | 66 | 9 | 7 | |
| 16.25.1109.66 | M14 | 25 | 66 | 11 | 9 | |
| 16.25.1209.66 | M16 | 25 | 66 | 12 | 9 | |

| | | | | | | |
|----------------|--------------|----|----|----|------|--|
| 16.32.0649.70 | M5 - M6 - M8 | 32 | 70 | 6 | 4,9 | |
| 16.32.0862.70 | M8 | 32 | 70 | 8 | 6,2 | |
| 16.32.0755.70 | M10 | 32 | 70 | 7 | 5,5 | |
| 16.32.1008.70 | M10 | 32 | 70 | 10 | 8 | |
| 16.32.0907.70 | M12 | 32 | 70 | 9 | 7 | |
| 16.32.1109.70 | M14 | 32 | 70 | 11 | 9 | |
| 16.32.1209.70 | M16 | 32 | 70 | 12 | 9 | |
| 16.32.1411.70 | M18 | 32 | 70 | 14 | 11 | |
| 16.32.1612.70 | M20 | 32 | 70 | 16 | 12 | |
| 16.32.18145.70 | M22 - M24 | 32 | 70 | 18 | 14,5 | |





Spannschraube für Weldon Spannfutter DIN 1835 B

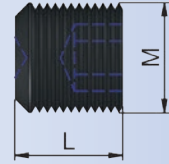
Clamping screw weldon DIN 1835 B

Vis de serrage weldon DIN 1835 B

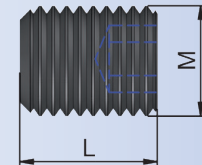
Veldon sıkma civatası DIN 1835 B

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | DIN 1835 M | L | Veldon Ø | Euro |
|--|---|---------------|----|----------|------|
| 160.M06.100.010 | - | M6 | 10 | 6 | |
| 160.M08.125.010 | - | M8 | 10 | 8 | |
| 160.M10.150.012 | - | M10 | 12 | 10 | |
| 160.M12.175.016 | - | M12 | 16 | 12-14 | |
| 160.M14.200.016 | - | M14 | 16 | 16-18 | |
| 160.M16.200.016 | - | M16 | 16 | 20 | |
| 160.M18.200.020 | - | M18x2 | 20 | 25 | |
| 160.M20.200.020 | - | M20x2 | 20 | 32-40 | |

| | | | | | |
|-----------------|--------------|-----|----|----|--|
| 160.M14.200.016 | 402.04.16.35 | M14 | 16 | 16 | |
| | 405.04.16.35 | | | | |
| 160.M16.200.014 | 405.04.20.35 | M16 | 14 | 20 | |
| 160.M16.200.016 | 402.04.20.35 | M16 | 16 | 20 | |



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | DIN 913 M | L | Veldon Ø | Euro |
|--|---|--------------|----|----------|------|
| 161.M16.100.008 | 402.04.25.35 | M16x1 | 8 | 25 | |
| | 405.04.25.35 | | | | |
| 161.M16.100.012 | 402.04.25.35 | M16x1 | 12 | 25 | |
| | 405.04.25.35 | | | | |
| 161.M16.100.008 | 402.04.32.65 | M16x1 | 8 | 32 | |
| | 405.04.32.65 | M16x1 | | | |
| 161.M16.100.010 | 402.04.32.65 | M16x1 | 10 | 32 | |
| 161.M16.100.014 | 405.04.32.65 | M16x1 | 14 | 32 | |





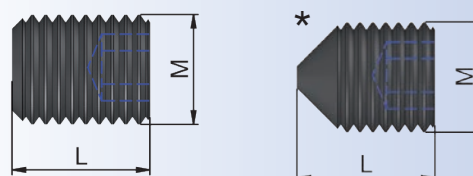
Spanschraube

Clamping screw

Vis de serrage

Sıkma civatası

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 913 M | L | Form E1 d2 | Euro |
|--|--------------|----|---------------|------|
| 161.M10.100.012 | M10x1 | 12 | Ø16 - Ø20 | |
| 161.M12.100.012 | M12x1 | 12 | Ø25 - Ø32 | |
| 161.M16.100.012 | M16x1 | 12 | Ø40 - Ø50 | |



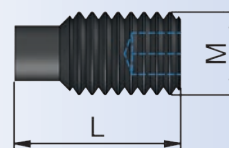
Einstellschraube

Adjustment screw

Vis de réglage

Ayar civatası

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 915 M | L | ARF-Plus | Euro |
|--|--------------|----|---------------|------|
| 166.M06.100.012 | M6 | 12 | SK-BT-HSK-EPS | |
| 166.M06.100.020 | M6 | 20 | SK-BT-HSK-EPS | |



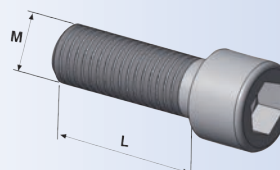
Anzugsschraube

Bolt

Tirette

Civata

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 912 M | L | ARF-Plus | Euro |
|--|--------------|----|---------------|------|
| 163.M06.100.020 | M6 | 20 | SK-BT-HSK-EPS | |





Spannschraube

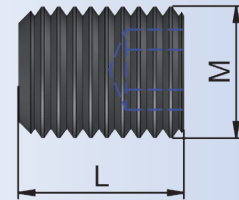
Clamping screw

Vis de serrage

Sıkma civatası

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 913 M | L | Form E2 d1xd2 | Euro |
|--|--------------|----|------------------|------|
| 161.M06.100.012 | M6 | 12 | 16x06 16x08 | |
| 161.M06.100.010 | M6 | 10 | 16x10 | |
| 161.M08.125.012 | M8 | 12 | 16x12 | |
| 161.M08.125.010 | M8 | 10 | 16x16 | |
| 161.M06.100.016 | M6 | 16 | 20x08 | |
| 161.M06.100.014 | M6 | 14 | 20x10 | |
| 161.M08.125.014 | M8 | 14 | 20x12 | |
| 161.M08.125.012 | M8 | 12 | 20x16 20x20 | |
| 161.M08.125.010 | M8 | 10 | 20x25 | |
| 161.M06.100.016 | M6 | 16 | 25x08 | |
| 161.M06.100.014 | M6 | 14 | 25x10 | |
| 161.M08.125.014 | M8 | 14 | 25x12 | |
| 161.M08.125.012 | M8 | 12 | 25x16 | |
| 161.M08.125.014 | M8 | 14 | 25x20 | |
| 161.M08.125.012 | M8 | 12 | 25x25 | |
| 161.M06.100.012 | M6 | 12 | 30x08 30x10 | |
| 161.M08.125.012 | M8 | 12 | 30x12 | |
| 161.M08.125.018 | M8 | 18 | 30x16 | |
| 161.M08.125.016 | M8 | 16 | 30x20 | |
| 161.M08.125.012 | M8 | 12 | 30x32 | |
| 161.M10.150.012 | M10 | 12 | 30x40 | |
| 161.M06.100.012 | M6 | 12 | 40x08 | |
| 161.M08.125.012 | M8 | 12 | 40x10 40x12 | |
| 161.M10.150.018 | M10 | 18 | 40x16 | |
| 161.M10.150.016 | M10 | 16 | 40x20 | |
| 161.M10.150.014 | M10 | 14 | 40x25 | |
| 161.M10.150.016 | M10 | 16 | 40x32 | |
| 161.M10.150.012 | M10 | 12 | 40x40 | |

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 913 M | L | Form E2 d1xd2 | Euro |
|--|--------------|----|------------------|------|
| 161.M08.125.016 | M8 | 16 | 50x12 | |
| 161.M10.150.016 | M10 | 16 | 50x16 | |
| 161.M12.175.014 | M12 | 14 | 50x20 50x25 | |
| 161.M12.175.020 | M12 | 20 | 50x32 | |
| 161.M12.175.016 | M12 | 16 | 50x40 | |
| 161.M12.175.012 | M12 | 12 | 50x50 | |



Anschlagschraube

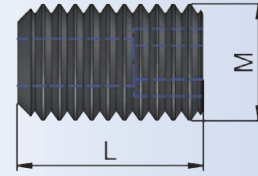


Stop screw

Vis ajuster

Dayama civatası

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 916 | | SK-BT | Euro |
|--|---------|----|--------------------|------|
| | M | L | Whistle Notch Ø | |
| 165.1.M05.080.016 | M5 | 16 | 6 | |
| 165.1.M06.100.016 | M6 | 16 | 8 | |
| 165.1.M08.125.020 | M8 | 20 | 10 | |
| 165.1.M10.150.025 | M10 | 25 | 12-14 | |
| 165.1.M12.175.025 | M12 | 25 | 16-18 | |
| 165.1.M16.200.025 | M16 | 25 | 20 | |
| 165.1.M20.250.030 | M20 | 30 | 25-32-40 | |



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 916 | | HSK A | Euro |
|--|---------|----|--------------------|------|
| | M | L | Whistle Notch Ø | |
| 165.1.M05.080.016 | M5 | 16 | 6 | |
| 165.1.M06.100.016 | M6 | 16 | 8 | |
| 165.1.M08.125.016 | M8 | 16 | 10 | |
| 165.1.M10.150.016 | M10 | 16 | 12-14 | |
| 165.1.M12.175.016 | M12 | 16 | 16-18 | |
| 165.1.M12.175.020 | M12 | 20 | 20-25-32 | |
| 165.1.M12.175.012 | M12 | 12 | 40 | |

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 916 | | HSK C | Euro |
|--|---------|----|--------------------|------|
| | M | L | Whistle Notch Ø | |
| 165.1.M05.080.012 | M5 | 12 | 6 | |
| 165.1.M06.100.012 | M6 | 12 | 8 | |
| 165.1.M08.125.012 | M8 | 12 | 10 | |
| 165.1.M10.150.012 | M10 | 12 | 14 | |
| 165.1.M12.175.012 | M12 | 12 | 16-18-20 | |
| 165.1.M12.175.016 | M12 | 16 | 25-32 | |

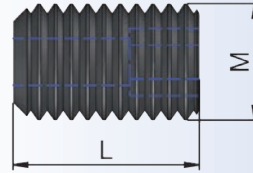


Anschlagschraube

Stop screw

Vis ajuster

Dayama civatası



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 916 M | L | Shirink Ø | Abmessung Size Dimension Cinsi | Euro | |
|--|--------------|----|--------------|---|---------------|--|
| 165.1.M04.070.010 | M4 | 10 | 03 | HSK32 | | |
| 165.1.M05.080.016 | M5 | 16 | | SK30/HSK40-50-63/EPS63 | | |
| 165.1.M06.100.016 | M6 | 16 | | SK40-50/BT30-40-50 | | |
| 165.1.M05.080.016 | M5 | 16 | 03 Slim | SK/BT/HSK/EPS | | |
| 165.1.M04.070.010 | M4 | 10 | 04 | HSK32 | | |
| 165.1.M05.080.016 | M5 | 16 | | HSK40 | | |
| 165.1.M06.100.016 | M6 | 16 | | SK/BT/HSK50-63/EPS63 | | |
| 165.1.M05.080.016 | M5 | 16 | 04 Slim | SK40-50/BT40-50 | | |
| 165.1.M06.100.016 | M6 | 16 | | HSK63/EPS63 | | |
| 165.1.M04.070.010 | M4 | 10 | 05 | HSK32-40 | | |
| 165.1.M06.100.016 | M6 | 16 | | SK/BT/HSK50-63/EPS63 | | |
| 165.1.M06.100.016 | M6 | 16 | 05 Slim | SK/BT/HSK/EPS | | |
| 165.1.M05.080.016 | M5 | 16 | 06 | SK/BT/HSK/EPS | | |
| | | | 06 Slim | | | |
| 165.1.M06.100.016 | M6 | 16 | 08 | SK/BT/HSK/EPS | | |
| | | | 08 Slim | | | |
| 165.1.M08.125.008 | M8 | 8 | 10 | HSK32 | | |
| 165.1.M08.125.016 | M8 | 16 | | SK/BT/HSK40-50-63-80-100/EPS50-63 | | |
| 165.1.M08.125.010 | M8 | 10 | 10 Slim | SK/BT/HSK/EPS | | |
| | | | | HSK32 | | |
| 165.1.M10.150.016 | M10 | 16 | 12 | SK/BT/HSK40-50-60-80-100/EPS | | |
| 165.1.M10.150.016 | M10 | 16 | | 12 Slim | SK/BT/HSK/EPS | |
| 165.1.M10.150.016 | M10 | 16 | 14 | SK/BT/HSK/EPS | | |
| 165.1.M10.150.010 | M10 | 16 | 16 | HSK40-50 | | |
| | | | | EPS40-50 | | |
| | | | | SK/BT/EPS63-80 | | |
| 165.1.M12.175.016 | M12 | 16 | 16 Slim | HSK100 | | |
| 165.1.M12.175.016 | M12 | 16 | | 18 | SK/BT/HSK/EPS | |
| | | | | 20 | SK/BT/HSK/EPS | |
| | | | | 25 | SK/BT/HSK/EPS | |
| 165.1.M16.200.020 | M16 | 20 | 32 | HSK63-80-100/EPS50-63-80 | | |
| | | | | SK/BT | | |

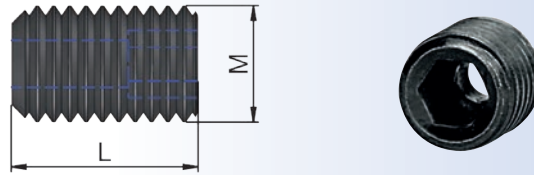
Anschlagschraube



Stop screw

Vis ajuster

Dayama civatası



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | DIN 916 | | Hydraulic | Abmessung Size Dimension Cinsi | Euro |
|--|---------|----|-------------|---|------|
| | M | L | Ø | | |
| 165.1.M05.080.006 | M5 | 6 | 06 | HSK100/EPS63 | |
| 165.1.M05.080.010 | M5 | 10 | | HSK40-50-60/EPS50 | |
| 165.1.M05.080.016 | M5 | 16 | | SK/BT/EPS40 | |
| 165.1.M06.100.006 | M6 | 6 | 08 | HSK50-63-100/EPS50-63 | |
| 165.1.M06.100.016 | M6 | 16 | | SK/BT/HSK63 Long | |
| 165.1.M08.125.010 | M8 | 10 | 10 | HSK50-63/EPS63 | |
| 165.1.M08.125.016 | M8 | 16 | | SK/BT/HSK63 Long-100/EPS40-50 | |
| 165.1.M10.150.010 | M10 | 10 | 12 | HSK40-50-63 | |
| 165.1.M10.150.016 | M10 | 16 | | SK/BT/HSK63 Long-100 | |
| 165.1.M10.150.010 | M10 | 10 | 14 | HSK40-50-63 | |
| 165.1.M10.150.016 | M10 | 16 | | SK/BT/HSK63 Long-100/EPS50-63 | |
| 165.1.M12.175.010 | M12 | 10 | 16 | HSK40-50-63 | |
| 165.1.M12.175.016 | M12 | 16 | | SK/BT/HSK63 Long-100/EPS50-63 | |
| 165.1.M12.175.010 | M12 | 10 | 18 | HSK40-50-63 | |
| 165.1.M12.175.016 | M12 | 16 | | SK/BT/HSK63 Long-100/EPS50-63 | |
| 165.1.M08.100.008 | M8x1 | 8 | 20 | A63.65.20.80 | |
| 165.1.M10.150.010 | M10 | 10 | | HSK50 | |
| 165.1.M10.150.012 | M10 | 12 | | EPS63 | |
| 165.1.M10.150.016 | M10 | 16 | | EPS50 | |
| 165.1.M12.175.010 | M12 | 10 | | HSK63/403.65.20.64/406.65.20.72 | |
| 165.1.M12.175.016 | M12 | 16 | | HSK63 Long-100 | |
| 165.1.M12.175.020 | M12 | 20 | SK/BT/EPS80 | | |
| 165.1.M12.175.016 | M12 | 16 | 25 | EPS50-63 | |
| 165.1.M16.200.016 | M16 | 16 | | SK/BT/HSK | |
| 165.1.M12.175.010 | M12 | 10 | 32 | 503.65.32.81 | |
| 165.1.M12.100.012 | M12x1 | 12 | | 506.65.32.90 | |
| 165.1.M16.200.016 | M16 | 16 | | SK/BT/HSK/EPS | |



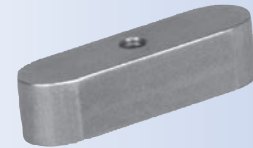
Paßfeder

Feather Key

Ressort de passage

Kama

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | h b L | DIN 913 | Euro |
|--|-------------|---------|------|
| 10.16.4 | 4 x 4 x 20 | M2x4 | |
| 10.22.6 | 6 x 6 x 25 | M3 x 5 | |
| 10.27.7 | 7 x 7 x 25 | M3 x 6 | |
| 10.32.8 | 8 x 7 x 28 | M3 x 6 | |
| 10.40.10 | 10 x 8 x 32 | M3 x 6 | |



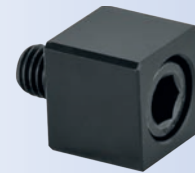
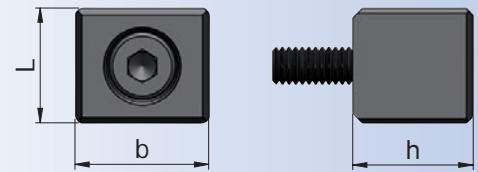
Mitnehmersteine mit Schraube

Drive Key

Entraineur

Vidalı kama

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | b L h | DIN 912 | Euro |
|--|------------------|----------|------|
| 11.16.8 | 8 x 10x9,8 | M3 x 12 | |
| 11.22.10 | 10 x 11 x 11,2 | M4 x 12 | |
| 11.27.12 | 12 x 14x 12,6 | M4 x 16 | |
| 11.32.14 | 14 x 22 x 14 | M5 x 16 | |
| 11.40.16 | 16 x 23 x 16 | M5 x 20 | |
| 11.50.18 | 18 x 32 x 18 | M6 x 20 | |
| 11.60.25 | 25,4 x 26,5 x 25 | M12 x 25 | |



Unterlegplatte

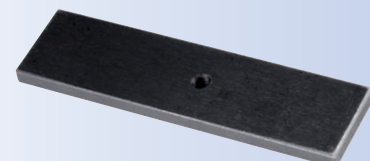
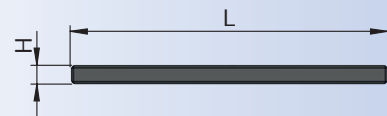
VDI 3425

Shim

Plaque entretoise

Kater laması

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | B x H x L | Euro |
|--|----------------|------|
| 169.12.01 | 10 x 3,95 x 41 | |
| 209.16.01 | 13 x 3,95 x 49 | |
| 309.20.01 | 17 x 3,95 x 69 | |
| 409.25.01 | 21 x 4,95 x 84 | |
| 509.32.01 | 24 x 6,95 x 99 | |





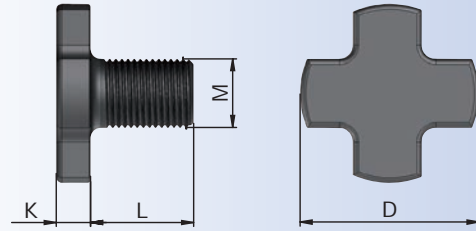
Fräseranzugsschrauben DIN 6367

Drawn in bolt DIN 6367

Vis de serrage DIN 6367

Tarama başlık sıkma civatası DIN 6367

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | | | | | Euro |
|--|---|-----|----|----|----|------|
| | | M | D | K | L | |
| 102.10.16 | 16 | M8 | 20 | 6 | 16 | |
| 102.10.22 | 22 | M10 | 28 | 7 | 18 | |
| 102.10.27 | 27 | M12 | 35 | 8 | 22 | |
| 102.10.32 | 32 | M16 | 42 | 9 | 26 | |
| 102.10.40 | 40 | M20 | 52 | 10 | 30 | |
| 102.10.50 | 50 | M24 | 63 | 12 | 36 | |
| 102.10.60 | 60 | M30 | 75 | 14 | 45 | |



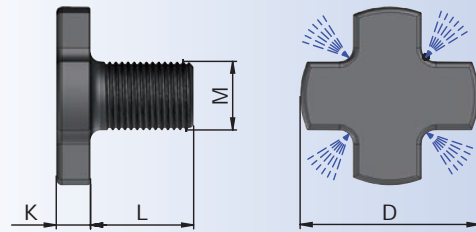
Fräseranzugsschrauben DIN 6367 durchgebohrt für Kühlmittelzufuhr

Drawn in bolt bored through for coolant DIN 6367

Vis de serrage DIN 6367 percée pour l'arrosage par la collerette

Tarama başlık sıkma civatası DIN 6367 içten soğutmalı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | | | | | Euro |
|--|---|-----|----|----|----|------|
| | | M | D | K | L | |
| 102.11.16 | 16 | M8 | 20 | 6 | 16 | |
| 102.11.22 | 22 | M10 | 28 | 7 | 18 | |
| 102.11.27 | 27 | M12 | 35 | 8 | 22 | |
| 102.11.32 | 32 | M16 | 42 | 9 | 26 | |
| 102.11.40 | 40 | M20 | 52 | 10 | 30 | |
| 102.11.50 | 50 | M24 | 63 | 12 | 36 | |
| 102.11.60 | 60 | M30 | 75 | 14 | 45 | |





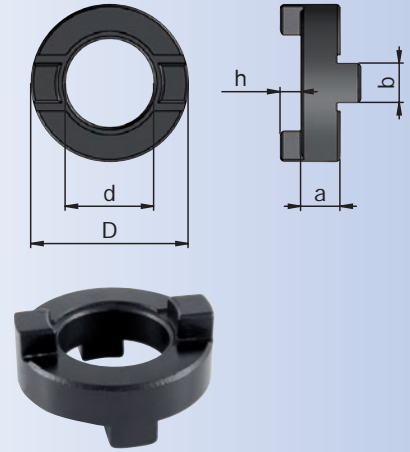
Mitnehmerringe DIN 6366

Clutch drive rings to DIN 6366

Bague d'entraînement DIN 6366

Tırnaklı pul DIN 6366

| Bestell-Nr. Order Nr. Référéncé Sipariş Nr. | d | D | a | b | h | Euro |
|--|----|----|----|----|-----|------|
| 101.10.16 | 16 | 32 | 10 | 8 | 5 | |
| 101.10.22 | 22 | 40 | 12 | 10 | 5,6 | |
| 101.10.27 | 27 | 48 | 12 | 12 | 6,3 | |
| 101.10.32 | 32 | 58 | 14 | 14 | 7 | |
| 101.10.40 | 40 | 70 | 14 | 16 | 8 | |



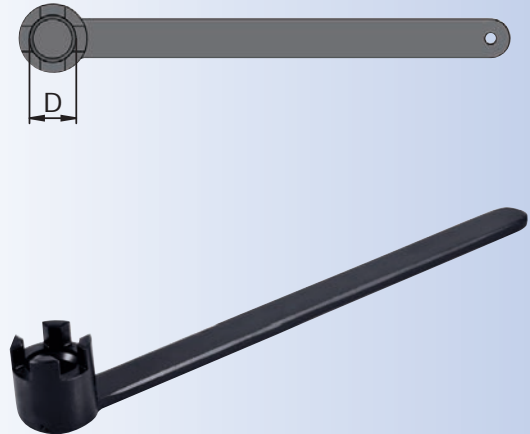
Spannschlüssel DIN 6368 für Aufsteckdorne

Wrench DIN 6368

Clé de serrage DIN 6368

Tarama başlık civatası sıkma anahtarı DIN 6368

| Bestell-Nr. Order Nr. Référéncé Sipariş Nr. | D | Euro |
|--|----------|------|
| 10.16 | 16/M8 | |
| 10.22 | 22/M10 | |
| 10.27 | 27/M12 | |
| 10.32 | 32/M16 | |
| 10.40 | 40 / M20 | |
| 10.50 | 50 / M24 | |
| 10.60 | 60 / M30 | |



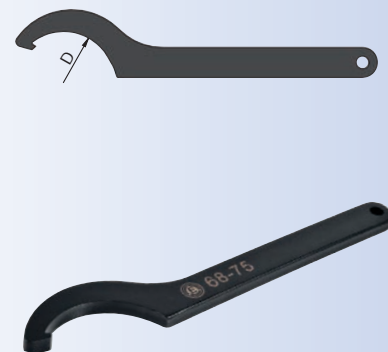
Hakenschlüssel DIN 1810 A für OZ - Spannmuttern

Wrench DIN 1810 A

Clé à ergot DIN 1810 A

E tipi ay anahtar DIN 1810 A

| Bestell-Nr. Order Nr. Référéncé Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Euro |
|--|---|-------|------|
| 01.16 | 415 E (2-16) | 40-42 | |
| 01.25 | 462 E (2-25) | 58-62 | |
| 01.32 | 467 E (3-32) | 68-75 | |





Rollenschlüssel für ER - Spannmuttern / Präzisionskartstpannfutter

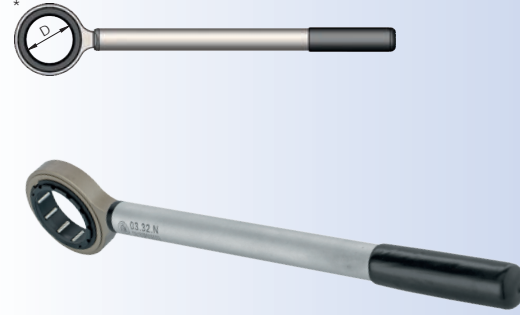
Wrench for ER - Precision milling chuck

Clé pour ER - Mandrin de fraisage de précision

ER tipi ve bilyalı pens tutucu için anahtar

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Euro |
|--|---|----|------|
| 02.05.10 | ER 8 (1-5) | 10 | |
| new 02.05.12 | ER 8 (1-5) | 12 | |
| 02.07.16 | ER 11 (1-7) | 16 | |
| 02.10.22 | ER 16 (1-10) | 22 | |
| 02.10.24 | ER 16 (1-10) | 24 | |
| 02.10.30 | ER 16(1-10) | 30 | |
| 02.10.32 | ER 16 (1-10) | 32 | |
| 02.13.35 | ER 20 (1-13) | 35 | |
| 02.16.40 | ER 25 (2-16) | 40 | |
| 02.16.42 | ER 25 (2-16) | 42 | |
| 02.20.50 | ER 32 (2-20) | 50 | |
| 02.26.63 | ER 40 (3-26) | 63 | |

| | | | |
|--------------------|----------------|----|--|
| 03.20.N | EKS 20 (16-20) | 48 | |
| new 03.25.N | EKS 25 (16-25) | 61 | |
| 03.32.N | EKS 32 (16-32) | 68 | |



Angetriebene werkzeuge spannschlüssel für spannmuttern

Driven Tools wrench

Porte-outils motorise clé de serrage

Tahrikli takım anahtarları

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | SW | Euro |
|--|----|------|
| new AA36-00K | 36 | |
| new AA41-00K | 41 | |
| new AA50-00K | 50 | |
| new AA15-00 | 15 | |
| new AA30-00 | 30 | |
| new AA36-00 | 36 | |
| new AA41-00 | 41 | |
| new AA50-00 | 50 | |
| new AA55-00 | 55 | |





Spannschlüssel für ER Spannmuttern

Wrench ER

Clé de serrage ER

ER tipi anahtar

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Euro |
|--|---|----------|------|
| *02.10 | 1 - 10 (ER16) | 28 sw 25 | |
| 02.10.1 | 1 - 10 (ER16) | 32 | |
| *02.10.2 | 1 - 10 (ER16) | 30 sw 27 | |
| 02.13 | 1 - 13 (ER20) | 35 sw 30 | |
| 02.13.1 | 1 - 13 (ER20) | 35 | |
| 02.16 | 2 - 16 (ER25) | 42 | |
| 02.20 | 2 - 20 (ER32) | 50 | |
| 02.26 | 3 - 26 (ER40) | 63 | |



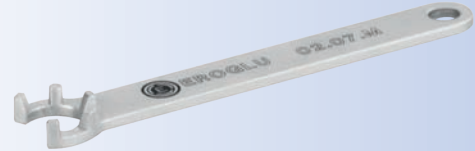
Spannschlüssel für ER Mini

Wrench ER Mini

Clé de serrage ER Mini

ER tipi anahtar mini

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Euro |
|--|---|----|------|
| 02.05.M | 1 - 5 (ER8) | 12 | |
| 02.07.M | 1-7 (ER11) | 16 | |
| 02.10.M | 1 - 10 (ER16) | 22 | |



Ausziehschlüssel für Reduzierhülsen der Hydrodehnspannfutter

Wrench reducing arbor for hydraulic expansion chuck

Clé pour les douilles de réduction pour les mondrins expansibles hydraulique

Hidrolik pens sökme anahtarı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | Euro |
|--|---|------|
| 65.01 | R12 / R20 / R32 | |





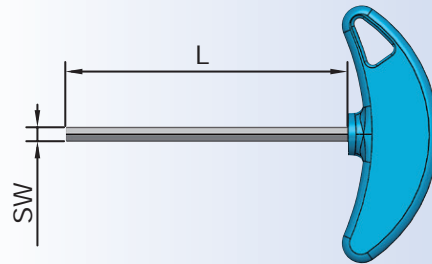
Spanschlüssel

Wrench

Clé de serrage

Sıkma anahtarı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | SW | Typ | L | Euro |
|--|----|-----|-----|------|
| 15.04 | 4 | NC | 100 | |
| 15.06 | 6 | NC | 100 | |
| 65.05 | 5 | HDS | 100 | |



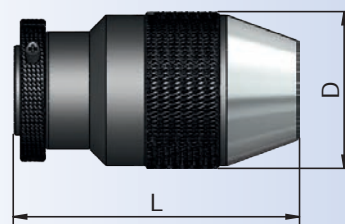
Bohrfutter

Drill chuck

Mandrin de perçage á serrage

Süper supra mandren

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | B | Spannbereich Capacity Capacité Kapasite | D | L | Euro |
|--|-----|--|----|----|------|
| 14.13.B16 | B16 | 0-13 | 50 | 92 | |
| 14.16.B16 | B16 | 3-16 | 57 | 95 | |





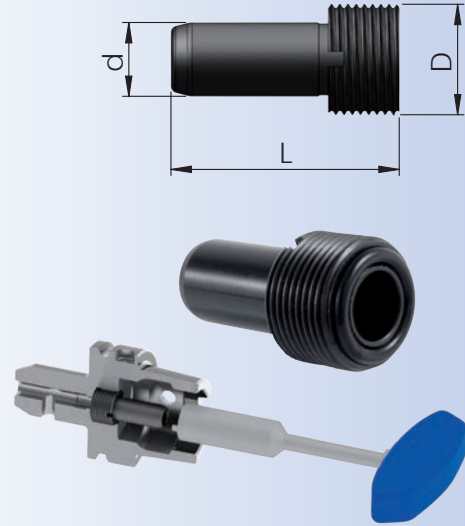
Kühlmittelübergabeeinheit

Delivery unit for coolant

Unité de transmission de liquide de refroidissement par le centre

Soğutma suyu ünitesi

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | HSK-A | D | d | L | Euro |
|--|-----------|-----------|----|------|------|
| A32.700 | HSK-A 32 | M10 x 1 | 6 | 26,0 | |
| A40.700 | HSK-A 40 | M12 x 1 | 8 | 29,5 | |
| A50.700 | HSK-A 50 | M16 x 1 | 10 | 33,0 | |
| A63.700 | HSK-A 63 | M18 x 1 | 12 | 36,5 | |
| A80.700 | HSK-A 80 | M20 x 1,5 | 14 | 40,0 | |
| A100.700 | HSK-A 100 | M24 x 1,5 | 16 | 44,0 | |



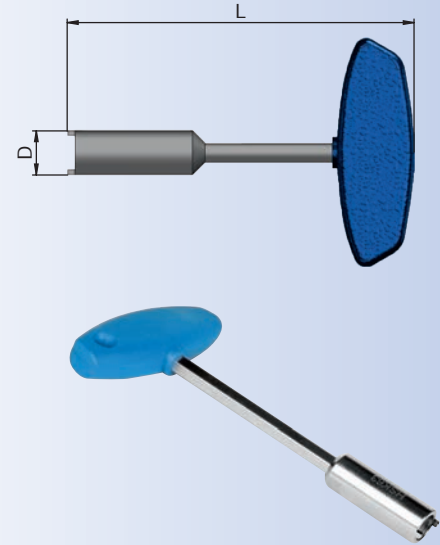
Schlüssel für Kühlmittelübergabeeinheit

Wrench for delivery unit for coolant

Clé pour raccord d'arrodage

Soğutma suyu ünitesi anahtarı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | HSK-A | D | L | Euro |
|--|-----------|------|-----|------|
| A32.701 | HSK-A 32 | 8,5 | 115 | |
| A40.701 | HSK-A 40 | 10,5 | 115 | |
| A50.701 | HSK-A 50 | 14,5 | 115 | |
| A63.701 | HSK-A 63 | 16,5 | 136 | |
| A80.701 | HSK-A 80 | 18,5 | 136 | |
| A100.701 | HSK-A 100 | 22,0 | 136 | |



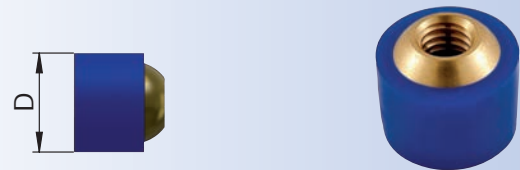
Kunststoff - Kugelspritzdüse

Plastic ball sprayer nozzle

Buse d'injection spherique en plastique

Su verme misketi

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | D | Euro |
|--|----|------|
| 703.08 | 8 | |
| 703.10 | 10 | |
| 703.12 | 12 | |
| 703.14 | 14 | |





Verschraubung

Ball cooling pipe with nut

Boule frais tube avec vissage

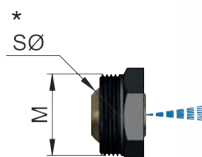
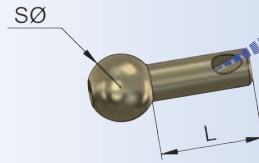
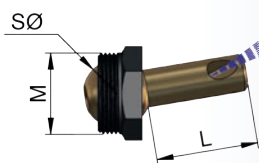
Somunlu su verme misketi

Bestell-Nr.
Order Nr.
Référence
Sipariş Nr.

| | M | SØ | L | Euro |
|------------|-------|----|----|------|
| 703.M10.15 | M10x1 | 8 | 15 | |
| 703.M10.30 | M10x1 | 8 | 30 | |
| 703.M10.50 | M10x1 | 8 | 50 | |

| | | | | |
|------------|-------|----|----|--|
| 703.M12.15 | M12x1 | 10 | 15 | |
| 703.M12.30 | M12x1 | 10 | 30 | |
| 703.M12.50 | M12x1 | 10 | 50 | |

| | | | | |
|-----------|-------|----|---|--|
| * 704.M10 | M10x1 | 8 | - | |
| * 704.M12 | M12x1 | 10 | - | |



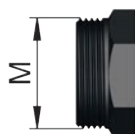
Bestell-Nr.
Order Nr.
Référence
Sipariş Nr.

| | SØ | L | Euro |
|------------|----|----|------|
| 703.S08.15 | 8 | 15 | |
| 703.S08.30 | 8 | 30 | |
| 703.S08.50 | 8 | 50 | |

| | | | |
|------------|----|----|--|
| 703.S10.15 | 10 | 15 | |
| 703.S10.30 | 10 | 30 | |
| 703.S10.50 | 10 | 50 | |

Bestell-Nr.
Order Nr.
Référence
Sipariş Nr.

| | M | Euro |
|---------|-------|------|
| 703.M10 | M10x1 | |
| 703.M12 | M12x1 | |



Kegelwischer

Taper wiper

Cônes de nettoyage

Konik temizleyici

Bestell-Nr.
Order Nr.
Référence
Sipariş Nr.

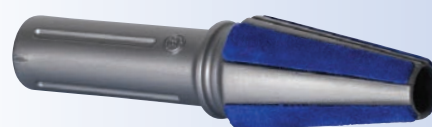
| | Abmessung Size Dimension Cinsi | Euro |
|--------|---|------|
| 710.01 | MK 1 | |
| 710.02 | MK 2 | |
| 710.03 | MK 3 | |
| 710.04 | MK 4 | |
| 710.05 | MK 5 | |

| | | |
|--------|-------|--|
| 710.30 | SK 30 | |
| 710.40 | SK 40 | |
| 710.50 | SK 50 | |

| | | |
|-------------|---------|--|
| 710.32.HSK | HSK 32 | |
| 710.40.HSK | HSK 40 | |
| 710.50.HSK | HSK 50 | |
| 710.63.HSK | HSK 63 | |
| 710.80.HSK | HSK 80 | |
| 710.100.HSK | HSK 100 | |



MK



SK



HSK



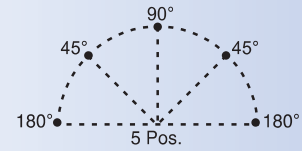
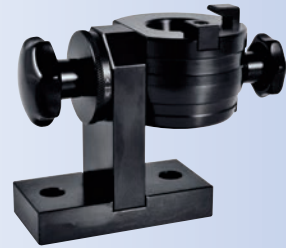
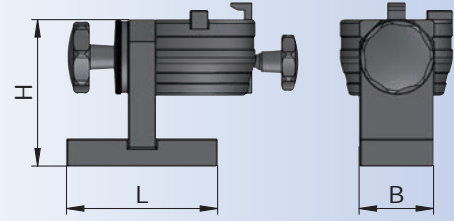
Montageblock aus Stahl, schwenkbar

Universal assembly block steel

Bloc de montage universel en fer

Çelik montaj aparatı sağa ve sola 90° dönebilen

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | L | H | B | Euro |
|--|---|-----|-----|----|------|
| 705.30 | SK 30 | 125 | 121 | 64 | |
| 705.40 | SK 40 | 130 | 136 | 64 | |
| 705.50 | SK 50 | 170 | 170 | 72 | |
| | | | | | |
| 709.16 | VDI 16 | 100 | 97 | 48 | |
| 709.20 | VDI20 | 100 | 97 | 48 | |
| 709.25 | VDI 25 | 100 | 97 | 48 | |
| 709.30 | VDI 30 | 130 | 121 | 64 | |
| 709.40 | VDI 40 | 130 | 136 | 64 | |
| 709.50 | VDI 50 | 170 | 170 | 72 | |
| | | | | | |
| 708.32 | HSK32-A | 100 | 97 | 48 | |
| 708.40 | HSK40-A | 100 | 97 | 48 | |
| 708.50 | HSK50-A | 125 | 121 | 64 | |
| 708.63 | HSK63-A | 130 | 136 | 64 | |
| 708.80 | HSK80-A | 170 | 170 | 72 | |
| 708.100 | HSK100-A | 170 | 170 | 72 | |



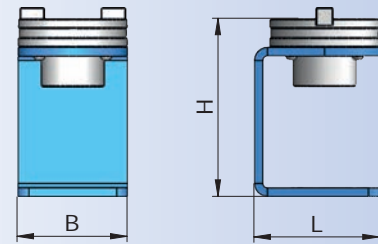
Montageblock aus Stahl

Assembly block steel

Bloc de montage

Çelik montaj aparatı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | L | H | B | Euro |
|--|---|-----|-----|-----|------|
| 707.30 | ISO 30 | 111 | 153 | 88 | |
| 707.40 | ISO 40 | 114 | 157 | 100 | |
| 707.50 | ISO 50 | 160 | 200 | 144 | |





Schnellmontageblock mit Rollenlager aus Stahl, Universal

Fast-mounting assembly block steel, universal

Bloc de montage rapide de l'acier, universel

Pratik universal çelik montaj aparatı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | Euro |
|--|---|----|------|
| 705.40/63 | SK 40-BT 40-HSK 63-EPS 63 | 63 | |

* Zur Aufnahme von HSK 63 - EPS 63 - SK 40 - BT 40

For clamping of HSK 63 - EPS 63 - SK 40 - BT 40

Pour le serrage de HSK 63 - EPS 63 - SK 40 - BT 40

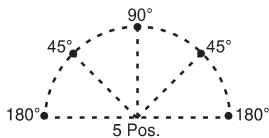
HSK 63 - EPS 63 - SK 40 - BT 40 tipi başlıklar için

* 45° und 90° - 5 verschiedene Positionen verwendbar

45° and 90° - can be used in 5 different positions

45° et 90° - 5 différentes positions applicables

45° ve 90° - 5 ayrı pozisyonda kullanılabilir

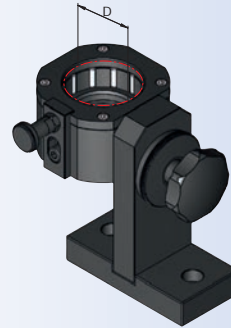


* Gesichert gegen Herausfallen durch Arretierung

Secured against falling down with adjustment lock

Assuré contre tomber par un blocage

Takımlar aparat içinde pozisyonlarda kilitleyerek düşmesi engellenir



* Klemmung über Rollenlager am Bund ohne Kontakt des Kegels

Clamping with sliding-contact bearings at the flange, no contact with cone

Serrage sur le roulement à galets à l'embase sans contact du cône

Koniğe temas etmeden dış çaptan bilyalar sayesinde sıkıştırılabilir

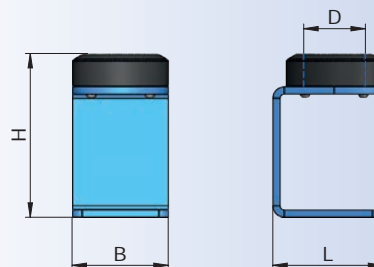
Schnellmontageblock aus Stahl mit Rollenlager

Quick-change mounting assembly block steel, with roller bearings

Bloc de montage rapide de l'acier avec roulements à roulex

Bilyalı çelik montaj aparatı

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | D | L | H | B | Euro |
|--|---|------|-----|-----|-----|------|
| 706.30 | BT 30 | 46 | 111 | 165 | 88 | |
| 706.32 | HSK 32 - EPS 32 | 32 | 85 | 120 | 74 | |
| 706.40 | HSK 40 - EPS 40 | 40 | 85 | 120 | 74 | |
| 706.50 | SK 30 - HSK 50 - EPS 50 | 50 | 111 | 165 | 88 | |
| 706.50.1 | SK 50 | 97,5 | 160 | 209 | 144 | |
| 706.63 | SK 40 - BT 40- HSK 63 - EPS 63 | 63 | 114 | 170 | 100 | |
| 706.80 | HSK 80 - EPS 80 | 80 | 130 | 175 | 122 | |
| 706.100 | HSK 100 - BT 50 | 100 | 160 | 209 | 144 | |





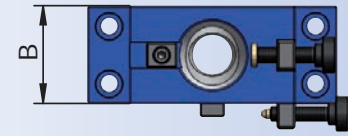
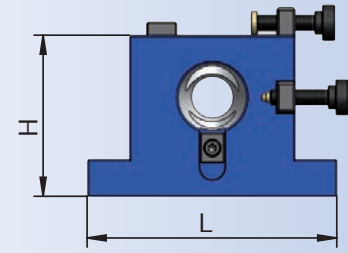
Montageblock aus Aluminium

Tightening fixtures Aluminium

Bloc de montage en aluminium

Montaj aparatı alüminyum

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | L | H | B | Euro |
|--|---|-----|-----|----|------|
| 700.30 | SK 30 | 127 | 75 | 47 | |
| 700.40 | SK 40 | 160 | 105 | 62 | |
| 700.50 | SK 50 | 180 | 155 | 99 | |



NC - Bohrfutter mit MK Schaft für Rechts - und Linkslauf MK

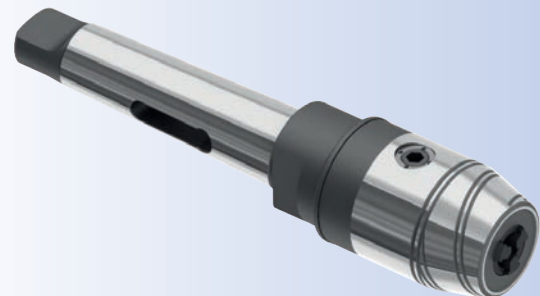
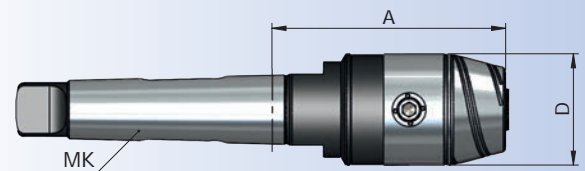
NC - Drill chucks with MK shaft for left and right rotation MK

Mandrin de perçage CNC avec cône morse pour rotation gauche-droite MK

MK shaftlı NC tipi mandren malafası komple sağ ve sol dönüşlü MK



| Bestell-Nr. Order Nr. Référence Sipariş Nr. | MK | Spannbereich Capacity Capacité Kapasite | | | Euro |
|--|----|--|-----|----|------|
| | | A | D | | |
| 082.15.08.75 | 2 | 0,5 - 8 | 75 | 36 | |
| 082.15.13.105 | 2 | 1,0 - 13 | 105 | 50 | |
| 082.15.16.110 | 2 | 3,0 - 16 | 110 | 57 | |
| 083.15.08.75 | 3 | 0,5 - 8 | 75 | 36 | |
| 083.15.13.100 | 3 | 1,0 - 13 | 100 | 50 | |
| 083.15.16.105 | 3 | 3,0 - 16 | 105 | 57 | |
| 084.15.13.104 | 4 | 1,0 - 13 | 104 | 50 | |
| 084.15.16.109 | 4 | 3,0 - 16 | 109 | 57 | |



Zubehör / Accessories / Accessoires / Yedekler



10.55-10.57

Ersatzteile
Spare Parts
Pièce de rechange
Yedek parçalar



10.49

Spannschlüssel
Wrench
Clé de serrage
Sıkma anahtarı



11.06



Tischwerkzeuggestell

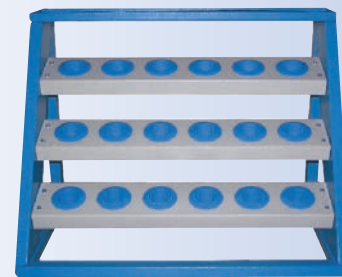
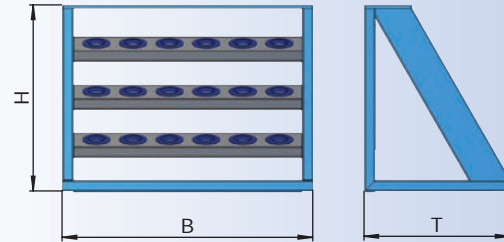
Verschweißte, lackierte Stahlblechkonstruktion
Werkzeugaufnahmen mit Kunststoffeinsätzen

Benchtop tool shelf, made of welded sheet steel,
with plastic tool holders

Support de table pour outils
Fabrication soudée, vernie en tôle d'acier
Insert d'outil en plastique

Masa üstü takım sehpası, takım tutucu yeri plastik

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | Anzahl Einsätze Inserts Takım Adedi | B | T | H | Euro |
|--|---|--|-----|-----|-----|------|
| 793.30 | SK 30 | 21 | 700 | 400 | 500 | |
| 793.40 | SK 40 | 18 | 700 | 400 | 500 | |
| 793.50 | SK 50 | 15 | 700 | 400 | 500 | |
| 794.16 | VDI 16 | 21 | 700 | 400 | 500 | |
| 794.20 | VDI 20 | 21 | 700 | 400 | 500 | |
| 794.25 | VDI 25 | 21 | 700 | 400 | 500 | |
| 794.30 | VDI 30 | 21 | 700 | 400 | 500 | |
| 794.40 | VDI 40 | 18 | 700 | 400 | 500 | |
| 794.50 | VDI 50 | 15 | 700 | 400 | 500 | |
| 795.32 | HSK 32 | 21 | 700 | 400 | 500 | |
| 795.40 | HSK 40 | 21 | 700 | 400 | 500 | |
| 795.50 | HSK 50 | 21 | 700 | 400 | 500 | |
| 795.63 | HSK 63 | 18 | 700 | 400 | 500 | |
| 795.80 | HSK 80 | 15 | 700 | 400 | 500 | |
| 795.100 | HSK 100 | 15 | 700 | 400 | 500 | |
| new 796.63 | EPS 63 | 18 | 700 | 400 | 500 | |





Transport - und Werkzeugwagen

Verschweißte, lackierte Stahlblechkonstruktion
2 Bockrollen und 2 Lenkrollen mit feststeller
Werkzeugaufnahmen mit Kunststoffeinsätzen

Benchtop tool shelf, made of welded sheet steel,
2 Steering castors and 2 fixed castors with
locking device, plastic tool holders

Support de table pour outils
Fabrication soudée, vernie en tôle d'acier
2pieds fixes, 2 pieds de guidage avec linguet
Insert d'outil en plastique

Taşınabilir çift taraflı takım arabası, dönerli, kilitlenen
ve sabit tekerlekli, takım tutucu yeri plastik

| Bestell-Nr. Order Nr. Référence Sipariş Nr. | Abmessung Size Dimension Cinsi | Anzahl Einsätze Inserts Takım Adedi | B | T | H | Euro | |
|--|---|--|-----|-----|------|------|--|
| 790.30 | SK 30 | 70 | 700 | 600 | 1260 | | |
| 790.40 | SK 40 | 60 | 700 | 600 | 1260 | | |
| 790.50 | SK 50 | 50 | 700 | 600 | 1260 | | |
| 791.16 | VDI 16 | 70 | 700 | 600 | 1260 | | |
| 791.20 | VDI 20 | 70 | 700 | 600 | 1260 | | |
| 791.25 | VDI 25 | 70 | 700 | 600 | 1260 | | |
| 791.30 | VDI 30 | 70 | 700 | 600 | 1260 | | |
| 791.40 | VDI 40 | 60 | 700 | 600 | 1260 | | |
| 791.50 | VDI 50 | 50 | 700 | 600 | 1260 | | |
| 792.32 | HSK32 | 70 | 700 | 600 | 1260 | | |
| 792.40 | HSK40 | 70 | 700 | 600 | 1260 | | |
| 792.50 | HSK50 | 70 | 700 | 600 | 1260 | | |
| 792.63 | HSK63 | 60 | 700 | 600 | 1260 | | |
| 792.80 | HSK80 | 50 | 700 | 600 | 1260 | | |
| 792.100 | HSK100 | 50 | 700 | 600 | 1260 | | |
| new | 793.63 | EPS 63 | 60 | 700 | 600 | 1260 | |

