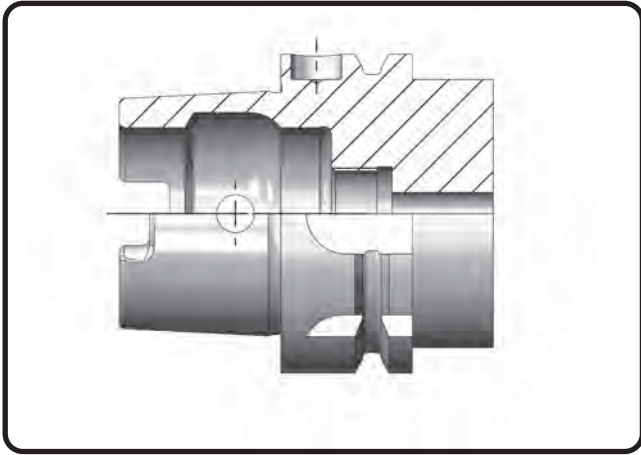


D SONDER MCT Tooling & Turning Tools

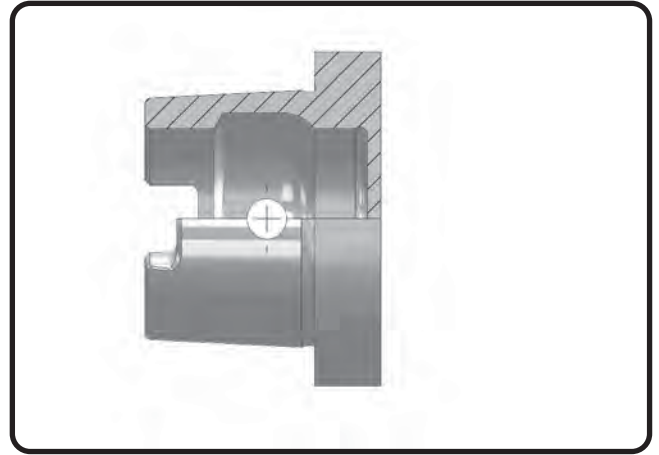


HSK A,C,E,F & BT, BBT & VDI



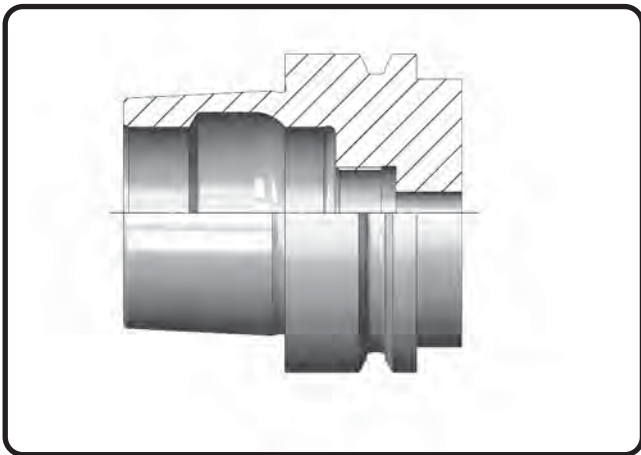
Form A

The form A is made for automatic tool change.



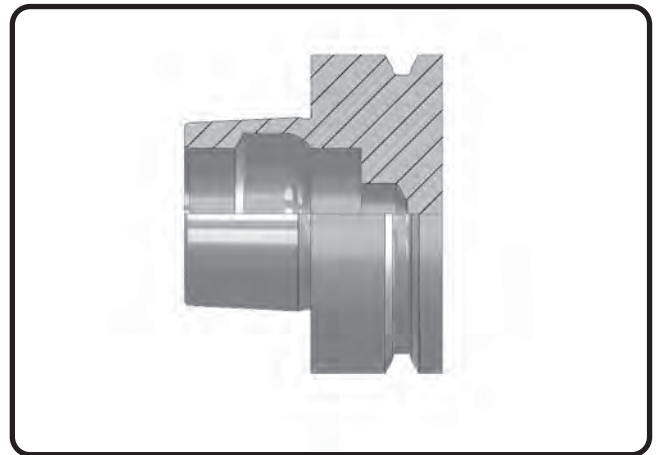
Form C

The form C is made for manual tool change.





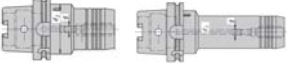

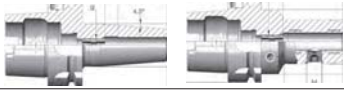
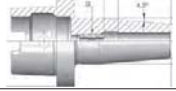

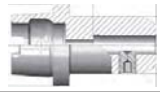


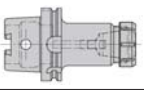


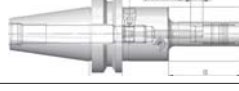
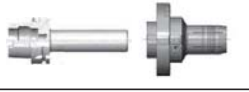

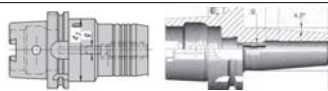

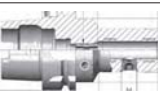
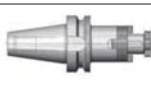

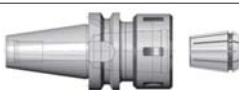
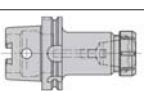
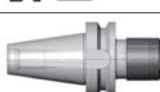

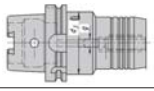



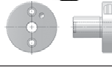



Form E

The forms E and F are for balanced rotation and automatic tool change.

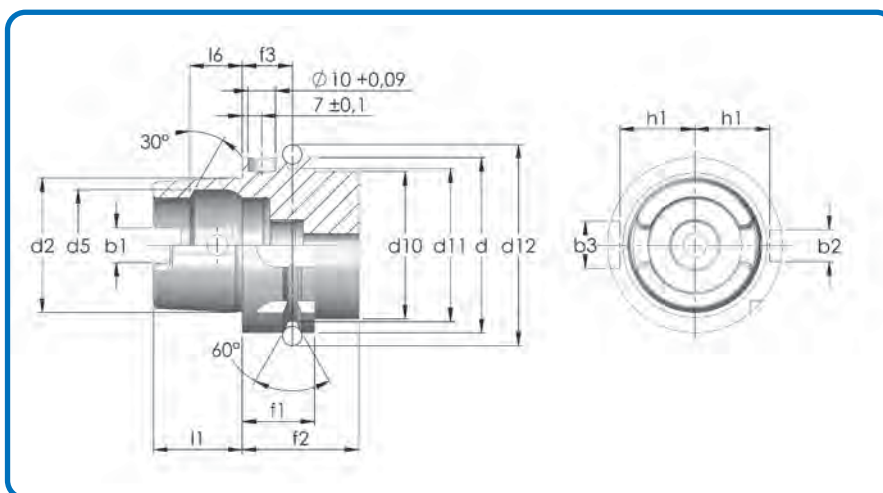


Form F



| Tool Type | Page | Tool Type | Page |
|--|--|---|--|
| Technical data: For DIN 69 893 HSK | 3 | Technical data: For DIN 69 893 HSK | 3 |
| Technical data: Hydraulic chuck Technical Information's | 4 | Technical data: Hydraulic chuck Technical Information's | 4 |
| HSK – A Type | | HSK – C Type | |
| Hydraulic Side Lock Chucks Hydraulic Slim Line Chucks |  7-9 | Flont Flange with Angular Adjustment Adaptors |  65 |
| Hydraulic Chucks |  10-16 | Hydraulic Chucks |  68-69 |
| Shrink Fit Adaptor Side Lock Adaptor |  18-24 25-27 | Shrink Fit Adaptor Side Lock Adaptor |  70-71 72 |
| Side Lock – Whistle Notch Adaptor Hydraulic Face Mill Adaptor |  28-30 31 | Side Lock – Whistle Notch Adaptor Face Mill Adaptor |  73 74 |
| Face Mill Adaptor Screw End Mill Adaptor |  32-34 35 | ER Collet Chucks Synchro® QC Tap Holders |  75 76 |
| ER Collet Chucks OZ Collet Chucks |  36-38 39 | Tool Blanks |  75 |
| HSK – E Type | | MAS – BT & BBT | |
| Synchro® Hyd. ER. QC Tap Holders Tool Blanks |  40-43 44 | Hydraulic Slim Line Chucks Hydraulic Side Lock Chucks |  79 80 |
| Test Bar Hyd Chuck radially adjustable |  45 46 | Hydraulic Chucks Shrink Fit Adaptor |  81-83 84-89 |
| Hydraulic Chucks Shrink Fit Adaptor |  50 51-53 | Side Lock Adaptor Side Lock – Whistle Notch Ad |  90-92 93-94 |
| Side Lock Adaptor Side Lock – Whistle Notch Adaptor |  54 55 | Face Mil Adaptor Screw End Mill Adaptor |  95-97 98 |
| Screw End Mill Adaptor Face Mill Adaptor |  56 57 | ER Collet Chucks OZ Collet Chucks |  99-100 101 |
| ER Collet Chucks Tool Blanks |  58 59 | Synchro® QC Tap Holders Test Arbor |  102-103 104 |
| HSK – F Type | | Straight Shrink Chucks ER Hydraulic Chucks |  104-107 108-109 |
| Hydraulic Chucks Shrink Fit Adaptor |  60 61-62 | Turning Tool Holders | |
| Side Lock Adaptor Face Mill Adaptor |  63 64 | VDI Tools |  110-113 |
| ER Collet Chucks Test Bar |  65 66 | Hydraulic Chucks Torque Tests Hydraulic Chucks Collets |  114 115 |
| Tool Blanks |  66 | ER OZ Collet Chuck Nuts ER OZ Collets |  116 117-119 |
| | | Collet Chuck Wrenches Other Products |  120 121-127 |

Automatic tool change Part 1 Form A



| HSK-d ₁ | b ₁ ±0.04 | b ₂ H10 | b ₃ H10 | d ₂ | d ₅ H11 | d ₁₀ max. | d ₁₁ -0.1 | d ₁₂ -0.1 | f ₁ -0.1 | f ₂ min. | f ₃ | l ₁ -0.2 | l ₆ js10 | h ₁ -0.2 | h ₃ +0.2 |
|--------------------|----------------------|--------------------|--------------------|----------------|--------------------|----------------------|----------------------|----------------------|---------------------|---------------------|----------------|---------------------|---------------------|---------------------|---------------------|
| 25 | 6.05 | 6 | 7 | 19.007 | 16.4 | 20 | 22 | 25.8 | 20 | 20 | 4,5 | 13 | 7.21 | 13 | -- |
| 32 | 7.05 | 7 | 9 | 24.007 | 21 | 26 | 26,5 | 37 | 20 | 35 | 16 | 16 | 8.92 | 13 | 5.4 |
| 40 | 8.05 | 9 | 11 | 30.007 | 25.5 | 34 | 34.8 | 45 | 20 | 35 | 16 | 20 | 11.42 | 17 | 5.2 |
| 50 | 10.54 | 12 | 14 | 38.009 | 32 | 42 | 43 | 59.3 | 26 | 42 | 18 | 25 | 14.13 | 21 | 5.1 |
| 63 | 12.54 | 16 | 18 | 48.010 | 40 | 53 | 55 | 72.3 | 26 | 42 | 18 | 32 | 18.13 | 26,5 | 5.0 |
| 80 | 16.04 | 18 | 20 | 60.012 | 50 | 68 | 70 | 88.8 | 26 | 42 | 18 | 40 | 22.85 | 34 | 4.9 |
| 100 | 20.02 | 20 | 22 | 75.013 | 63 | 88 | 92 | 109.75 | 29 | 45 | 20 | 50 | 28.56 | 44 | 4.9 |
| 125 | 25.02 | 25 | 28 | 95.016 | 80 | 111 | 117 | 134.75 | 29 | 45 | 20 | 63 | 36.27 | 55,5 | 4.8 |
| 160 | 30.02 | 32 | 36 | 120.016 | 100 | 144 | 152 | 169.75 | 31 | 47 | 22 | 80 | 45.98 | 72 | 4.8 |

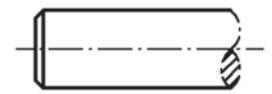
Scope of supply: Without coolant pipe and without spanner

| Coolant Tubes with cap nut and 2 circular sealing DIN 3770 | | | | | | | Spanner for coolant tubes | | |
|--|-------|------|--|----|------------|---------------|---------------------------|--|--|
| | | | Minimal angular mobility of the coolant tubes approx. 1° smooth-running, neutral-centered, axially sealed. | | | | | | |
| Code.No | HSK-A | l | l _{1d} | | G | Code.No | HSK | | |
| HSK 32-CT | 32 | 26 | 5,5 | 6 | M 10 x 1 | 90.11.026.001 | 32 | | |
| HSK 40-CT | 40 | 29,5 | 7,5 | 8 | M 12 x 1 | 91.11.026.002 | 40 | | |
| HSK 50-CT | 50 | 33 | 9,5 | 10 | M 16 x 1 | 92.11.026.003 | 50 | | |
| HSK 63-CT | 63 | 34,5 | 11,5 | 12 | M 18 x 1 | 93.11.026.004 | 63 | | |
| HSK 80-CT | 80 | 40 | 13,5 | 14 | M 20 x 1,5 | 94.11.026.004 | 80 | | |
| HSK100-CT | 100 | 44 | 15,5 | 16 | M 24 x 1,5 | 95.11.026.005 | 100 | | |
| HSK125-CT | 125 | 48 | 17,5 | 18 | M 30 x 1,5 | 96.11.026.005 | 125 | | |
| HSK160-CT | 160 | 52 | 19,5 | 20 | M 35 x 1,5 | 97.11.026.006 | 160 | | |

Clamping Torque

| Clamping- \varnothing mm | (Nm) | Tool shaft tolerance |
|----------------------------|------|----------------------|
| 6 | 15 | h_6 |
| 8 | 25 | h_6 |
| 10 | 50 | h_6 |
| 12 | 110 | h_6 |
| 14 | 160 | h_6 |
| 16 | 240 | h_6 |
| 18 | 350 | h_6 |
| 20 | 450 | h_6 |
| 25 | 500 | h_6 |
| 32 | 500 | h_6 |

These values are valid for shafts complying with DIN

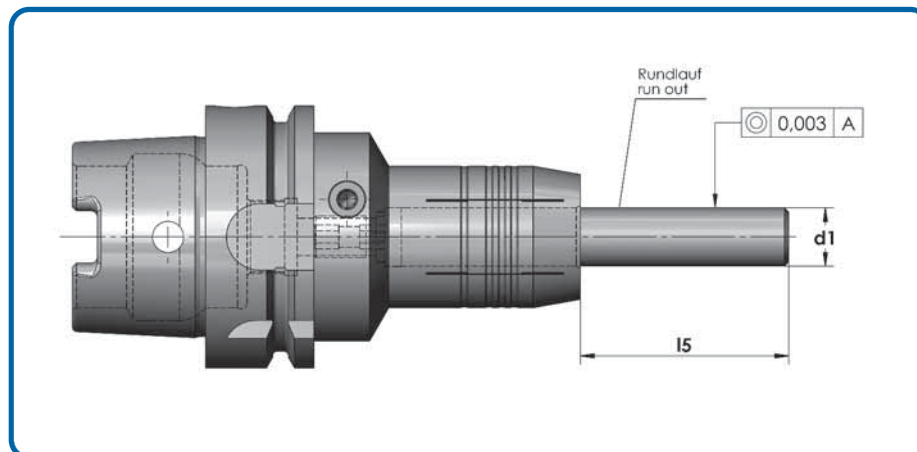


- 1) DIN 1835 A
DIN 6535 HA



- 2) DIN 1835 B
DIN 6535 HB

Precision



Maximum concentricity and repeating accuracy because of cylinder shafts being centrally clamped $l_5 =$ from $\varnothing 6$ to $\varnothing 20 = 2 \times d_1$, over $\varnothing 20 = 1,5 \times d_1$

Balancing

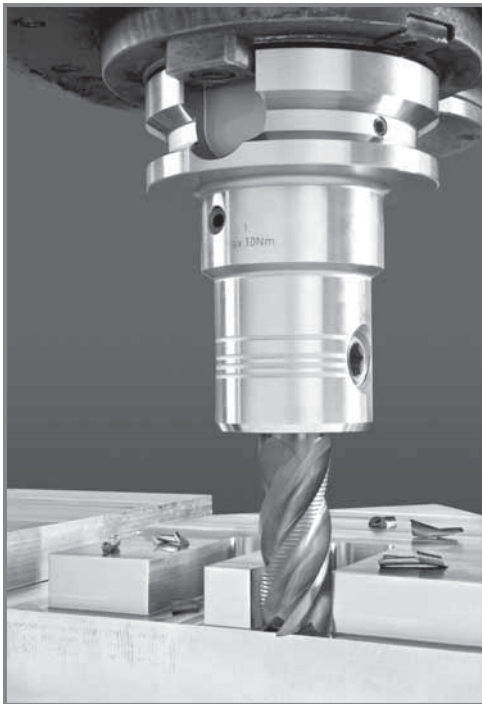
BT - 30 & 40 G=6,3 n=12,000 U/min.
BT - 50 G=6,3 n= 8,000 U/min.

HSK-A32 ~ 63 G=6,3 n=18,000 U/min.
HSK-A80 ~ 100 G=6,3 n=10,000 U/min.

HSK-E32 ~ 63 G=6,3 n=30,000 U/min.

HSK-F63 G=6,3 n=15,000 U/min.

HSK-C32 ~ 63 G=6,3 n=15 000 U/min.
HSK-C80 ~ 100 G=6,3 n=10 000 U/min.

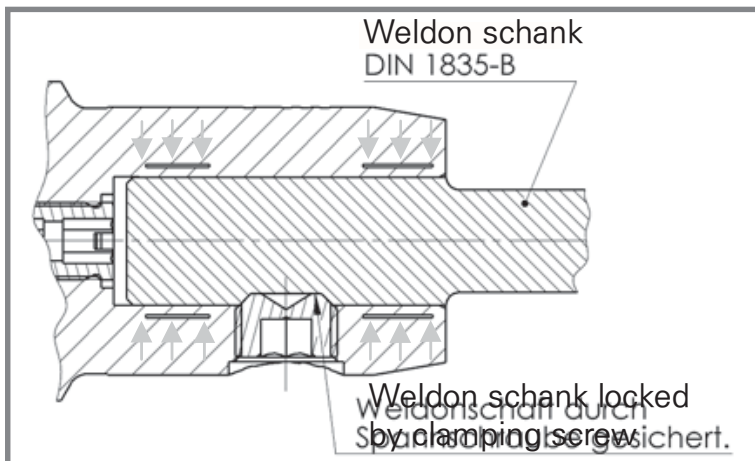


Hydraulic Side Lock Chuck for 100% Tools Security DIN 1835 / DIN 6535

For tools with shanks accordance with DIN 6535 (Weldon and Whistle Notch, HB and HE)



Operating and operating instructions:

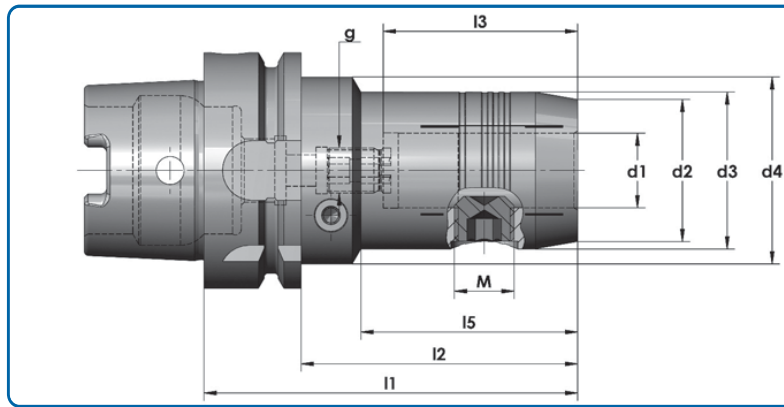


Advantages:

- + 100% radial-axial safety due to positive locking
- + Hydraulic vibration damping
- + Very good surface quality
- + Increased service life
- + Process safety

1. Orientation Weldon screw to Weldon flat
2. Turn hydraulic clamping screw (max. 10 Nm)
3. Turn sidelock clamping screw (max. 15 Nm)

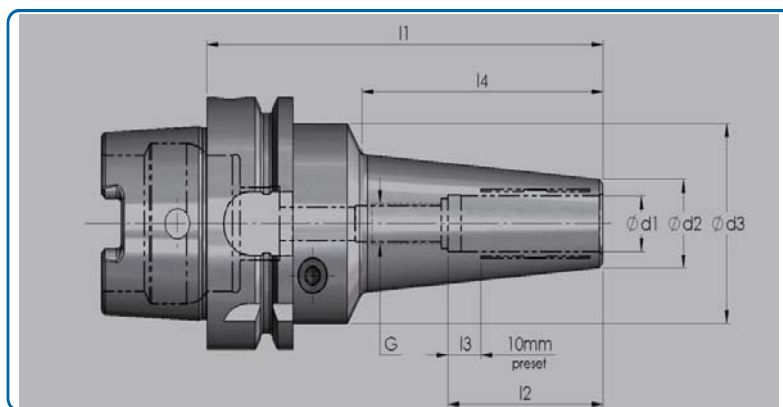
HSK 63A
HSK 80A
HSK100A



| Code No. | d ₁ | d ₂ | d ₃ | d ₄ | l ₁ | l ₂ | l ₃ | l ₅ | g | M |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------|---------|
| HSK 63A-HCL06-080 | 6 | 23 | 26 | 50 | 80 | 54 | 37 | 33 | M 5 | M 6 |
| HSK 63A-HCL08-080 | 8 | 25 | 28 | 50 | 80 | 54 | 37 | 33.5 | M 6 | M 8 |
| HSK 63A-HCL10-085 | 10 | 27 | 30 | 50 | 85 | 59 | 42 | 39 | M 8 x 1 | M10 |
| HSK 63A-HCL12-090 | 12 | 29 | 32 | 50 | 90 | 64 | 47 | 44 | M10 x 1 | M12 |
| HSK 63A-HCL14-090 | 14 | 30 | 34 | 50 | 90 | 64 | 47 | 46 | M10 x 1 | M12 |
| HSK 63A-HCL16-095 | 16 | 34 | 38 | 50 | 95 | 69 | 52 | 52 | M12 x 1 | M14 |
| HSK 63A-HCL18-095 | 18 | 36 | 40 | 50 | 95 | 69 | 52 | 52 | M12 x 1 | M14 |
| HSK 63A-HCL20-100 | 20 | 38 | 42 | 50 | 100 | 74 | 52 | 58 | M12 x 1 | M16 |
| HSK 63A-HCL25-120 | 25 | 46 | 50 | - | 120 | 94 | 58 | - | M16 x 1 | M18 x 2 |
| HSK 63A-HCL32-125 | 32 | 56 | 60 | - | 125 | 99 | 62 | - | M16 x 1 | M20 x 2 |
| | | | | | | | | | | |
| HSK 80A-HCL06-085 | 6 | 23 | 26 | 56 | 85 | 59 | 37 | 31 | M 5 | M 6 |
| HSK 80A-HCL08-085 | 8 | 25 | 28 | 56 | 85 | 59 | 37 | 32 | M 6 | M 8 |
| HSK 80A-HCL10-090 | 10 | 27 | 30 | 56 | 90 | 64 | 42 | 37 | M 8 x 1 | M10 |
| HSK 80A-HCL12-095 | 12 | 29 | 32 | 56 | 95 | 69 | 47 | 43 | M10 x 1 | M12 |
| HSK 80A-HCL14-095 | 14 | 30 | 34 | 56 | 95 | 69 | 47 | 44 | M10 x 1 | M12 |
| HSK 80A-HCL16-100 | 16 | 34 | 38 | 56 | 100 | 74 | 52 | 50 | M12 x 1 | M14 |
| HSK 80A-HCL18-100 | 18 | 36 | 40 | 56 | 100 | 74 | 52 | 50 | M12 x 1 | M14 |
| HSK 80A-HCL20-105 | 20 | 38 | 42 | 56 | 105 | 79 | 52 | 56 | M12 x 1 | M16 |
| HSK 80A-HCL25-115 | 25 | 46 | 50 | 56 | 115 | 89 | 58 | 53 | M16 x 1 | M18 x 2 |
| HSK 80A-HCL32-120 | 32 | 56 | 60 | - | 120 | 94 | 62 | - | M16 x 1 | M20 x 2 |
| | | | | | | | | | | |
| HSK100A-HCL06-085 | 6 | 23 | 26 | 50 | 85 | 56 | 37 | 29 | M 5 | M 6 |
| HSK100A-HCL08-085 | 8 | 25 | 28 | 50 | 85 | 56 | 37 | 33.5 | M 6 | M 8 |
| HSK100A-HCL10-090 | 10 | 27 | 30 | 50 | 90 | 61 | 42 | 42 | M 8 x 1 | M10 |
| HSK100A-HCL12-095 | 12 | 29 | 32 | 50 | 95 | 66 | 47 | 47 | M10 | M12 |
| HSK100A-HCL14-095 | 14 | 30 | 34 | 63 | 95 | 66 | 47 | 42 | M10 x 1 | M12 |
| HSK100A-HCL16-100 | 16 | 34 | 38 | 50 | 100 | 71 | 52 | 53 | M12 x 1 | M14 |
| HSK100A-HCL18-100 | 18 | 36 | 40 | 50 | 100 | 71 | 52 | 53 | M12 x 1 | M14 |
| HSK100A-HCL20-105 | 20 | 38 | 42 | 50 | 105 | 76 | 52 | 59 | M12 x 1 | M16 |
| HSK100A-HCL25-115 | 25 | 46 | 50 | 63 | 115 | 86 | 58 | 51 | M16 x 1 | M18 x 2 |
| HSK100A-HCL32-120 | 32 | 56 | 60 | 63 | 120 | 91 | 62 | 59 | M16 x 1 | M20 x 2 |
| HSK100A-HCL40-125 | 40 | 66 | 70 | - | 125 | 96 | 72 | - | M16 x 1 | M20 x 2 |
| HSK100A-HCL50-140 | 50 | 74 | 78 | - | 140 | 111 | 82 | - | M16 x 1 | M24 x 2 |

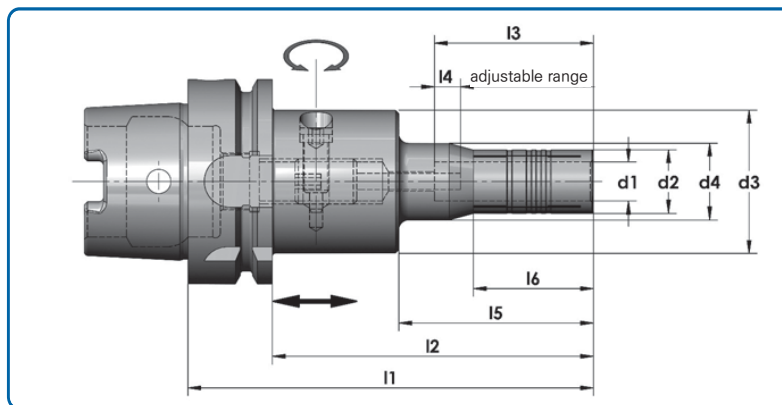
| Spare Parts | Adjusting screws | | | | Tightening screw | | | |
|-------------|------------------|-------------------------------------|----------|-------------------------|------------------|----------------|----------|----------------|
| | Code No. | HSK-A 63 / HSK-A80 x d ₁ | Code No. | HSK-A100xd ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 036.852 | HSK-A 63 / HSK-A80 x ø 6 | 036.852 | HSK-A100xø 6 | 031.801 | 6 | 031.826 | 18 |
| | 036.853 | HSK-A 63 / HSK-A80 x ø 8 | 036.853 | HSK-A100xø 8 | 031.802 | 8 | 031.819 | 20 |
| | 036.854 | HSK-A 63 / HSK-A80 x ø 10 | 036.854 | HSK-A100xø 10 | 031.827 | 10 | 031.812 | 25 |
| | 036.860 | HSK-A 63 / HSK-A80 x ø 12 | 036.860 | HSK-A100xø 12 | 031.817 | 12 | 031.813 | 32 |
| | 036.855 | HSK-A 63 / HSK-A80 x ø 14 | 036.855 | HSK-A100xø 14 | 031.834 | 14 | 031.813 | 40 |
| | 036.856 | HSK-A 63 / HSK-A80 x ø 16 | 036.856 | HSK-A100xø 16 | 031.826 | 16 | 031.820 | 50 |
| | 036.856 | HSK-A 63 / HSK-A80 x ø 18 | 036.856 | HSK-A100xø 18 | | | | |
| | 036.856 | HSK-A 63 / HSK-A80 x ø 20 | 036.856 | HSK-A100xø 20 | | | | |
| | 036.857 | HSK-A 63 / HSK-A80 x ø 25 | 036.857 | HSK-A100xø 25 | | | | |
| | 036.859 | HSK-A 63 / HSK-A80 x ø 32 | 036.857 | HSK-A100xø 32 | | | | |
| | | | 036.857 | HSK-A100xø 40 | | | | |
| | | | 036.857 | HSK-A100xø 50 | | | | |

HSK 63A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | g |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| HSK 63A-SFHC06-120 | 6 | 12 | 50 | 120 | 37 | 10 | 74 | M5 |
| HSK 63A-SFHC08-120 | 8 | 14 | 50 | 120 | 37 | 10 | 74 | M6 |
| HSK 63A-SFHC10-120 | 10 | 16 | 50 | 120 | 42 | 10 | 74 | M8x1 |
| HSK 63A-SFHC12-120 | 12 | 18 | 50 | 120 | 47 | 10 | 75 | M10x1 |
| HSK 63A-SFHC14-120 | 14 | 22 | 50 | 120 | 47 | 10 | 71 | M10x1 |
| HSK 63A-SFHC16-120 | 16 | 24 | 50 | 120 | 52 | 10 | 72 | M12x1 |
| HSK 63A-SFHC18-120 | 18 | 26 | 50 | 120 | 52 | 10 | 72 | M12x1 |
| HSK 63A-SFHC20-120 | 20 | 28 | 50 | 120 | 52 | 10 | 72 | M12x1 |
| HSK 63A-SFHC25-120 | 25 | 32 | 50 | 120 | 52 | 10 | 75 | M16x1 |
| HSK 63A-SFHC32-120 | 32 | 39 | 50 | 120 | 52 | 10 | 75 | M16x1 |
| | | | | | | | | |
| HSK 63A-SFHC06-160 | 6 | 16 | 50 | 160 | 37 | 10 | 111 | M5 |
| HSK 63A-SFHC08-160 | 8 | 18 | 50 | 160 | 37 | 10 | 111 | M6 |
| HSK 63A-SFHC10-160 | 10 | 20 | 50 | 160 | 42 | 10 | 113 | M8x1 |
| HSK 63A-SFHC12-160 | 12 | 22 | 50 | 160 | 47 | 10 | 113 | M10x1 |
| HSK 63A-SFHC14-160 | 14 | 24 | 50 | 160 | 47 | 10 | 113 | M10x1 |
| HSK 63A-SFHC16-160 | 16 | 28 | 50 | 160 | 52 | 10 | 120 | M12x1 |
| HSK 63A-SFHC18-160 | 18 | 30 | 50 | 160 | 52 | 10 | 120 | M12x1 |
| HSK 63A-SFHC20-160 | 20 | 32 | 50 | 160 | 52 | 10 | 125 | M12x1 |
| HSK 63A-SFHC25-160 | 25 | 35 | 50 | 160 | 52 | 10 | 125 | M16x1 |
| HSK 63A-SFHC32-160 | 32 | 39 | 50 | 160 | 52 | 10 | 125 | M16x1 |

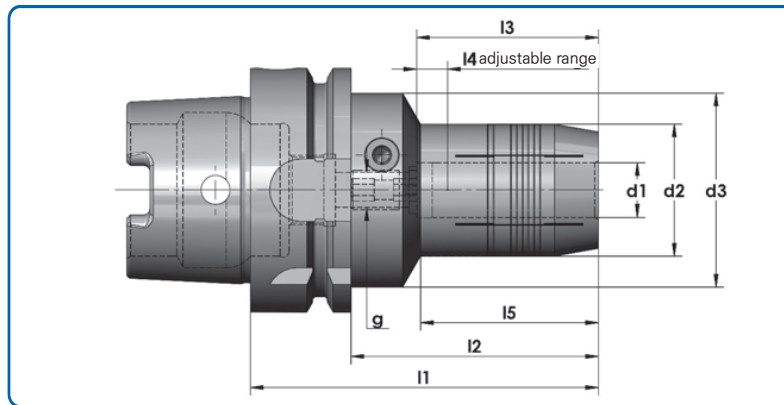
HSK 63A



| Code No. | d ₁ | d ₂ | d ₃ | d ₄ | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | l ₆ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| HSK 63A-HCS06-125 | 6 | 13,5 | 44 | 17,5 | 125 | 99 | 37 | 10 | 60 | 37 | M14 |
| HSK 63A-HCS08-125 | 8 | 15,5 | 44 | 19,5 | 125 | 99 | 37 | 10 | 60 | 37 | M14 |
| HSK 63A-HCS10-125 | 10 | 17,5 | 44 | - | 125 | 99 | 42 | 10 | 60 | - | M14 |
| HSK 63A-HCS12-125 | 12 | 19,5 | 44 | - | 125 | 99 | 47 | 10 | 60 | - | M14 |
| HSK 63A-HCS14-125 | 14 | 21,5 | 52 | - | 125 | 99 | 47 | 10 | 70 | - | M14 |
| HSK 63A-HCS16-125 | 16 | 23,5 | 52 | - | 125 | 99 | 52 | 10 | 70 | - | M14 |
| HSK 63A-HCS18-125 | 18 | 25,5 | 52 | - | 125 | 99 | 52 | 10 | 70 | - | M14 |
| HSK 63A-HCS20-125 | 20 | 27,5 | 52 | - | 125 | 99 | 52 | 10 | 70 | - | M14 |
| HSK 63A-HCS25-125 | 25 | 32,5 | 52 | - | 125 | 99 | 58 | 10 | 70 | - | M14 |
| HSK 63A-HCS32-125 | 32 | 39,5 | 52 | - | 125 | 99 | 62 | 10 | 70 | - | M14 |
| HSK 63A-HCS06-220 | 6 | 13,5 | 44 | 17,5 | 220 | 194 | 37 | 10 | 90 | 37 | M14 |
| HSK 63A-HCS08-220 | 8 | 15,5 | 44 | 19,5 | 220 | 194 | 37 | 10 | 90 | 37 | M14 |
| HSK 63A-HCS10-220 | 10 | 17,5 | 44 | - | 220 | 194 | 42 | 10 | 90 | - | M14 |
| HSK 63A-HCS12-220 | 12 | 19,5 | 44 | - | 220 | 194 | 47 | 10 | 90 | - | M14 |
| HSK 63A-HCS14-220 | 14 | 21,5 | 52 | - | 220 | 194 | 47 | 10 | 100 | - | M14 |
| HSK 63A-HCS16-220 | 16 | 23,5 | 52 | - | 220 | 194 | 52 | 10 | 100 | - | M14 |
| HSK 63A-HCS18-220 | 18 | 25,5 | 52 | - | 220 | 194 | 52 | 10 | 100 | - | M14 |
| HSK 63A-HCS20-220 | 20 | 27,5 | 52 | - | 220 | 194 | 52 | 10 | 100 | - | M14 |
| HSK 63A-HCS25-220 | 25 | 32,5 | 52 | - | 220 | 194 | 58 | 10 | 100 | - | M14 |
| HSK 63A-HCS32-220 | 32 | 39,5 | 52 | - | 220 | 194 | 62 | 10 | 100 | - | M14 |

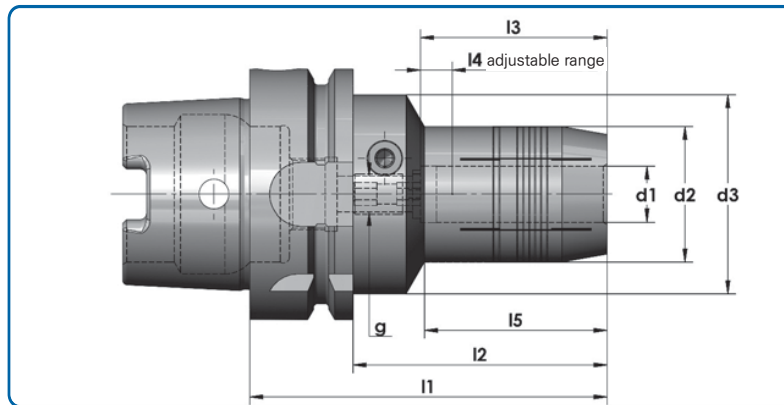
| Spare Parts | Adjusting screws | | | | Reducer | | | | | | | | | | | | Hexagon key | |
|-------------|------------------|----------------|----------|----------------|----------|---|----------------|----------|----|----------------|----------|----|----------------|----------|----|--------------------------------------|-------------|--|
| | | | | | | | | | | | | | | | | | | |
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d | d ₁ | Code No. | d | d ₁ | Code No. | d | d ₁ | Code No. | d | d ₁ | Code No. | |
| 036.852 | 6 | 036.856 | 16 | 024.025 | 12 | 3 | 024.001 | 20 | 6 | 024.010 | 32 | 6 | 024.015 | 32 | 16 | 082.300 | SW 4 | |
| 036.853 | 8 | 036.856 | 18 | 024.026 | 4 | 4 | 024.002 | 8 | 8 | 024.011 | 8 | 8 | 024.016 | 18 | 18 | (Keys have to be ordered separately) | | |
| 036.854 | 10 | 036.856 | 20 | 024.027 | 5 | 5 | 024.003 | 10 | 10 | 024.012 | 10 | 10 | 024.018 | 20 | | | | |
| 036.855 | 12 | 036.857 | 25 | 024.028 | 6 | 6 | 024.004 | 12 | 12 | 024.013 | 12 | 12 | 024.020 | 25 | | | | |
| 036.855 | 14 | 036.857 | 32 | 024.029 | 8 | 8 | 024.005 | 14 | 14 | 024.014 | 14 | 14 | | | | | | |
| | | | | | | | 024.006 | 16 | 16 | | | | | | | | | |

HSK 32A
 HSK 40A
 HSK 50A
 HSK 63A



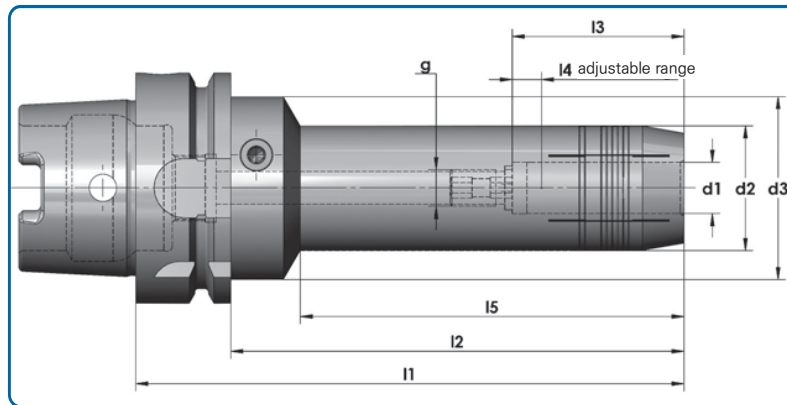
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|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| HSK 32A-HCD06-080 | 6 | 26 | 26 | 80 | 60 | 37 | 10 | 60 | M 5 |
| HSK 32A-HCD08-080 | 8 | 28 | 26 | 80 | 60 | 37 | 10 | 45 | M 6 |
| HSK 32A-HCD10-085 | 10 | 30 | 26 | 85 | 65 | 42 | 10 | 50 | M 8x1 |
| HSK 32A-HCD12-090 | 12 | 32 | 26 | 90 | 70 | 47 | 10 | 55 | M 6 |
| HSK 32A-HCD14-095 | 14 | 34 | 26 | 95 | 75 | 47 | 10 | 75 | M10x1 |
| HSK 32A-HCD16-100 | 16 | 38 | 26 | 100 | 80 | 52 | 10 | 80 | M 8x1 |
| HSK 32A-HCD20-100 | 20 | 42 | 42 | 100 | 80 | 52 | 10 | 80 | M 8x1 |
| HSK 40A-HCD06-080 | 6 | 26 | 34 | 80 | 60 | 37 | 10 | 35 | M 5 |
| HSK 40A-HCD08-080 | 8 | 28 | 34 | 80 | 60 | 37 | 10 | 36 | M 6 |
| HSK 40A-HCD10-085 | 10 | 30 | 34 | 85 | 65 | 42 | 10 | 41 | M 6 |
| HSK 40A-HCD12-090 | 12 | 32 | 34 | 90 | 70 | 47 | 10 | 47 | M 6 |
| HSK 40A-HCD12-080 | 12 | 32 | 34 | 80 | 65 | 47 | 10 | 60 | M 6 |
| HSK 40A-HCD14-090 | 14 | 34 | 34 | 90 | 70 | 47 | 10 | 49 | M 8x1 |
| HSK 40A-HCD14-085 | 14 | 34 | 34 | 85 | 65 | 47 | 10 | - | M 6 |
| HSK 40A-HCD16-090 | 16 | 38 | 34 | 90 | 70 | 52 | 10 | 52 | M 8x1 |
| HSK 40A-HCD18-090 | 18 | 40 | 34 | 90 | 70 | 52 | 10 | 52 | M 8x1 |
| HSK 40A-HCD20-090 | 20 | 42 | 34 | 90 | 70 | 52 | 10 | 70 | M 8x1 |
| HSK 50A-HCD06-080 | 6 | 26 | 42 | 80 | 54 | 37 | 10 | 35 | M 5 |
| HSK 50A-HCD08-080 | 8 | 28 | 42 | 80 | 54 | 37 | 10 | 36 | M 6 |
| HSK 50A-HCD10-085 | 10 | 30 | 42 | 85 | 59 | 42 | 10 | 41 | M 8x1 |
| HSK 50A-HCD12-090 | 12 | 32 | 42 | 90 | 64 | 47 | 10 | 47 | M 8x1 |
| HSK 50A-HCD14-090 | 14 | 34 | 42 | 90 | 64 | 47 | 10 | 49 | M10x1 |
| HSK 50A-HCD16-095 | 16 | 38 | 42 | 95 | 69 | 52 | 10 | 52 | M10x1 |
| HSK 50A-HCD18-095 | 18 | 40 | 42 | 95 | 69 | 52 | 10 | 52 | M10x1 |
| HSK 50A-HCD20-100 | 20 | 42 | 42 | 100 | 74 | 52 | 10 | 74 | M10x1 |
| HSK 50A-HCD25-120 | 25 | 50 | 42 | 120 | 94 | 58 | 10 | 74 | M10x1 |
| HSK 63A-HCD06-070 | 6 | 26 | 50 | 70 | 44 | 37 | 10 | 24 | M 5 |
| HSK 63A-HCD06-080 | 6 | 26 | 50 | 80 | 54 | 37 | 10 | 33 | M 5 |
| HSK 63A-HCD06-120 | 6 | 26 | 50 | 120 | 94 | 37 | 10 | 33 | M 5 |
| HSK 63A-HCD08-070 | 8 | 28 | 50 | 70 | 44 | 37 | 10 | 24 | M 6 |
| HSK 63A-HCD08-080 | 8 | 28 | 50 | 80 | 54 | 37 | 10 | 24 | M 6 |
| HSK 63A-HCD08-120 | 8 | 28 | 50 | 120 | 94 | 37 | 10 | 24 | M 6 |
| HSK 63A-HCD10-080 | 10 | 30 | 50 | 80 | 54 | 42 | 10 | 35 | M 8x1 |
| HSK 63A-HCD10-085 | 10 | 30 | 50 | 85 | 59 | 42 | 10 | 35 | M 8x1 |
| HSK 63A-HCD10-100 | 10 | 30 | 50 | 100 | 74 | 42 | 10 | 54 | M 8x1 |
| HSK 63A-HCD10-120 | 10 | 30 | 50 | 120 | 94 | 42 | 10 | 54 | M 8x1 |
| HSK 63A-HCD12-085 | 12 | 32 | 50 | 85 | 59 | 47 | 10 | 40 | M10x1 |
| HSK 63A-HCD12-090 | 12 | 32 | 50 | 90 | 64 | 47 | 10 | 44 | M10x1 |
| HSK 63A-HCD12-120 | 12 | 32 | 50 | 120 | 99 | 47 | 10 | 40 | M10x1 |
| HSK 63A-HCD14-085 | 14 | 34 | 50 | 85 | 59 | 47 | 10 | 40 | M10x1 |
| HSK 63A-HCD14-090 | 14 | 34 | 50 | 90 | 64 | 47 | 10 | 46 | M10x1 |
| HSK 63A-HCD14-120 | 14 | 34 | 50 | 120 | 94 | 47 | 10 | 46 | M10x1 |
| HSK 63A-HCD16-090 | 16 | 38 | 50 | 90 | 64 | 52 | 10 | 46 | M12x1 |
| HSK 63A-HCD16-095 | 16 | 38 | 50 | 95 | 69 | 52 | 10 | 52 | M12x1 |
| HSK 63A-HCD16-120 | 16 | 38 | 50 | 95 | 69 | 52 | 10 | 52 | M12x1 |

HSK 63A
HSK 80A
HSK 100A



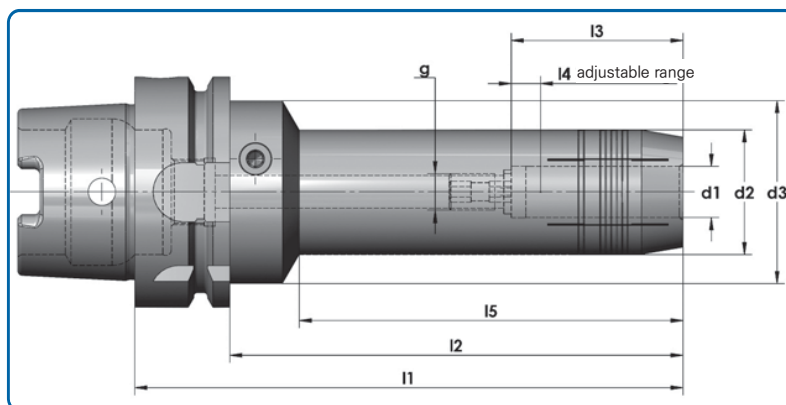
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|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| HSK 63A-HCD18-090 | 18 | 40 | 50 | 90 | 64 | 52 | 10 | 47 | M12x1 |
| HSK 63A-HCD18-095 | 18 | 40 | 50 | 95 | 69 | 52 | 10 | 52 | M12x1 |
| HSK 63A-HCD18-120 | 18 | 40 | 50 | 120 | 94 | 52 | 10 | 52 | M12x1 |
| HSK 63A-HCD20-090 | 20 | 42 | 50 | 90 | 64 | 52 | 10 | 48 | M12x1 |
| HSK 63A-HCD20-100 | 20 | 42 | 50 | 100 | 74 | 52 | 10 | 58 | M12x1 |
| HSK 63A-HCD20-120 | 20 | 42 | 50 | 120 | 94 | 52 | 10 | 58 | M12x1 |
| HSK 63A-HCD22-100 | 22 | 50 | 50 | 120 | 74 | 58 | 10 | 74 | M12x1 |
| HSK 63A-HCD22-120 | 22 | 50 | 50 | 120 | 94 | 58 | 10 | 74 | M12x1 |
| HSK 63A-HCD25-120 | 25 | 50 | 50 | 120 | 94 | 58 | 10 | 94 | M16x1 |
| HSK 63A-HCD32-120 | 32 | 60 | 53 | 125 | 99 | 62 | 10 | 99 | M16x1 |
| HSK 63A-HCD32-125 | 32 | 60 | 53 | 125 | 99 | 62 | 10 | 99 | M16x1 |
| HSK 80A-HCD06-070 | 6 | 26 | 50 | 70 | 41 | 37 | 10 | 24 | M 5 |
| HSK 80A-HCD06-085 | 6 | 26 | 53 | 85 | 59 | 37 | 10 | 31 | M 5 |
| HSK 80A-HCD08-070 | 8 | 28 | 50 | 70 | 41 | 37 | 10 | 24 | M 6 |
| HSK 80A-HCD08-085 | 8 | 28 | 53 | 85 | 59 | 37 | 10 | 32 | M 6 |
| HSK 80A-HCD10-080 | 10 | 30 | 50 | 80 | 51 | 42 | 10 | 35 | M 8x1 |
| HSK 80A-HCD10-090 | 10 | 30 | 53 | 90 | 64 | 42 | 10 | 37 | M 8x1 |
| HSK 80A-HCD12-085 | 12 | 32 | 50 | 85 | 56 | 47 | 10 | 40 | M10x1 |
| HSK 80A-HCD12-095 | 12 | 32 | 53 | 95 | 69 | 47 | 10 | 43 | M10x1 |
| HSK 80A-HCD14-085 | 14 | 34 | 50 | 85 | 56 | 47 | 10 | 40 | M10x1 |
| HSK 80A-HCD14-095 | 14 | 34 | 53 | 95 | 69 | 47 | 10 | 44 | M10x1 |
| HSK 80A-HCD16-095 | 16 | 38 | 50 | 95 | 66 | 52 | 10 | 51 | M12x1 |
| HSK 80A-HCD16-100 | 16 | 38 | 53 | 100 | 74 | 52 | 10 | 50 | M12x1 |
| HSK 80A-HCD18-095 | 18 | 40 | 50 | 95 | 66 | 52 | 10 | 51 | M12x1 |
| HSK 80A-HCD18-100 | 18 | 40 | 53 | 100 | 74 | 52 | 10 | 50 | M12x1 |
| HSK 80A-HCD20-095 | 20 | 42 | 50 | 95 | 66 | 52 | 10 | 48 | M12x1 |
| HSK 80A-HCD20-105 | 20 | 42 | 53 | 105 | 79 | 52 | 10 | 56 | M12x1 |
| HSK 80A-HCD25-110 | 25 | 50 | 63 | 110 | 81 | 58 | 10 | 65 | M16x1 |
| HSK 80A-HCD25-115 | 25 | 50 | 56 | 115 | 89 | 58 | 10 | 53 | M16x1 |
| HSK 80A-HCD32-120 | 32 | 60 | 60 | 120 | 94 | 62 | 10 | 94 | M16x1 |
| HSK 80A-HCD32-125 | 32 | 60 | 60 | 125 | 96 | 62 | 10 | 63 | M16x1 |
| HSK100A-HCD06-085 | 6 | 26 | 50 | 85 | 56 | 37 | 10 | 29 | M 5 |
| HSK100A-HCD08-085 | 8 | 28 | 50 | 85 | 56 | 37 | 10 | 29 | M 6 |
| HSK100A-HCD10-090 | 10 | 30 | 50 | 90 | 61 | 42 | 10 | 35 | M 8x1 |
| HSK100A-HCD12-095 | 12 | 32 | 50 | 95 | 66 | 49 | 10 | 40 | M10x1 |
| HSK100A-HCD14-095 | 14 | 34 | 50 | 95 | 66 | 49 | 10 | 42 | M10x1 |
| HSK100A-HCD16-100 | 16 | 38 | 50 | 100 | 71 | 52 | 10 | 47 | M12x1 |
| HSK100A-HCD18-100 | 18 | 40 | 50 | 100 | 71 | 52 | 10 | 53 | M12x1 |
| HSK100A-HCD20-105 | 20 | 42 | 50 | 105 | 76 | 52 | 10 | 59 | M12x1 |
| HSK100A-HCD25-115 | 25 | 50 | 63 | 115 | 86 | 58 | 10 | 51 | M16x1 |
| HSK100A-HCD32-120 | 32 | 60 | 63 | 120 | 91 | 62 | 10 | 59 | M16x1 |
| HSK100A-HCD40-125 | 40 | 70 | 70 | 125 | 91 | 62 | 10 | 91 | M16x1 |

HSK 63A
HSK 80A



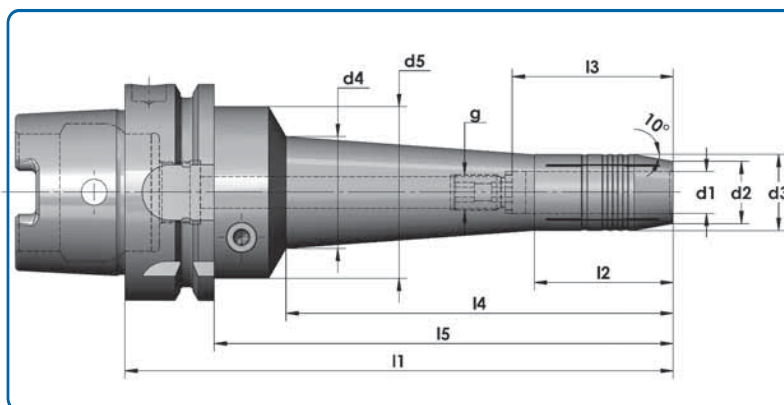
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|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| HSK100A-HCD06-150 | 6 | 26 | 50 | 150 | 121 | 37 | 10 | 100 | M 6 |
| HSK100A-HCD06-200 | 6 | 26 | 63 | 200 | 171 | 37 | 10 | 144 | M 6 |
| HSK100A-HCD08-150 | 8 | 28 | 63 | 150 | 121 | 37 | 10 | 94,5 | M 6 |
| HSK100A-HCD08-200 | 8 | 28 | 63 | 200 | 171 | 37 | 10 | 144,5 | M 6 |
| HSK100A-HCD10-150 | 10 | 30 | 63 | 150 | 121 | 42 | 10 | 95 | M 8 x 1 |
| HSK100A-HCD10-200 | 10 | 30 | 50 | 200 | 171 | 42 | 10 | 151 | M 8 x 1 |
| HSK100A-HCD12-150 | 12 | 32 | 63 | 150 | 121 | 47 | 10 | 95,5 | M10 x 1 |
| HSK100A-HCD12-200 | 12 | 32 | 63 | 200 | 171 | 47 | 10 | 145,5 | M10 x 1 |
| HSK100A-HCD14-150 | 14 | 34 | 50 | 150 | 121 | 47 | 10 | 97 | M10 x 1 |
| HSK100A-HCD14-200 | 14 | 34 | 50 | 200 | 171 | 47 | 10 | 147 | M10 x 1 |
| HSK100A-HCD16-150 | 16 | 38 | 63 | 150 | 121 | 52 | 10 | 97,5 | M12 x 1 |
| HSK100A-HCD16-200 | 16 | 38 | 63 | 200 | 171 | 52 | 10 | 147,5 | M12 x 1 |
| HSK100A-HCD18-150 | 18 | 40 | 50 | 150 | 121 | 52 | 10 | 107 | M12 x 1 |
| HSK100A-HCD18-200 | 18 | 40 | 63 | 200 | 171 | 52 | 10 | 148 | M12 x 1 |
| HSK100A-HCD20-150 | 20 | 42 | 63 | 150 | 121 | 52 | 10 | 99 | M12 x 1 |
| HSK100A-HCD20-200 | 20 | 42 | 63 | 200 | 171 | 52 | 10 | 149 | M12 x 1 |
| HSK100A-HCD25-150 | 25 | 50 | 50 | 150 | 121 | 58 | 10 | - | M16 x 1 |
| HSK100A-HCD25-200 | 25 | 50 | 63 | 200 | 171 | 58 | 10 | 136 | M16 x 1 |
| HSK100A-HCD32-150 | 32 | 60 | 60 | 150 | 121 | 62 | 10 | - | M16 x 1 |
| HSK100A-HCD32-200 | 32 | 60 | 60 | 200 | 171 | 62 | 10 | - | M16 x 1 |
| HSK100A-HCD40-150 | 40 | 70 | 70 | 150 | 121 | 72 | 10 | - | M16 x 1 |

HSK 100A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | l_5 | g |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| HSK100A-HCD06-150 | 6 | 26 | 50 | 150 | 121 | 37 | 10 | 100 | M 6 |
| HSK100A-HCD06-200 | 6 | 26 | 63 | 200 | 171 | 37 | 10 | 144 | M 6 |
| HSK100A-HCD08-150 | 8 | 28 | 63 | 150 | 121 | 37 | 10 | 94,5 | M 6 |
| HSK100A-HCD08-200 | 8 | 28 | 63 | 200 | 171 | 37 | 10 | 144,5 | M 6 |
| HSK100A-HCD10-150 | 10 | 30 | 63 | 150 | 121 | 42 | 10 | 95 | M 8 x 1 |
| HSK100A-HCD10-200 | 10 | 30 | 50 | 200 | 171 | 42 | 10 | 151 | M 8 x 1 |
| HSK100A-HCD12-150 | 12 | 32 | 63 | 150 | 121 | 47 | 10 | 95,5 | M10 x 1 |
| HSK100A-HCD12-200 | 12 | 32 | 63 | 200 | 171 | 47 | 10 | 145,5 | M10 x 1 |
| HSK100A-HCD14-150 | 14 | 34 | 50 | 150 | 121 | 47 | 10 | 97 | M10 x 1 |
| HSK100A-HCD14-200 | 14 | 34 | 50 | 200 | 171 | 47 | 10 | 147 | M10 x 1 |
| HSK100A-HCD16-150 | 16 | 38 | 63 | 150 | 121 | 52 | 10 | 97,5 | M12 x 1 |
| HSK100A-HCD16-200 | 16 | 38 | 63 | 200 | 171 | 52 | 10 | 147,5 | M12 x 1 |
| HSK100A-HCD18-150 | 18 | 40 | 50 | 150 | 121 | 52 | 10 | 107 | M12 x 1 |
| HSK100A-HCD18-200 | 18 | 40 | 63 | 200 | 171 | 52 | 10 | 148 | M12 x 1 |
| HSK100A-HCD20-150 | 20 | 42 | 63 | 150 | 121 | 52 | 10 | 99 | M12 x 1 |
| HSK100A-HCD20-200 | 20 | 42 | 63 | 200 | 171 | 52 | 10 | 149 | M12 x 1 |
| HSK100A-HCD25-150 | 25 | 50 | 50 | 150 | 121 | 58 | 10 | - | M16 x 1 |
| HSK100A-HCD25-200 | 25 | 50 | 63 | 200 | 171 | 58 | 10 | 136 | M16 x 1 |
| HSK100A-HCD32-150 | 32 | 60 | 60 | 150 | 121 | 62 | 10 | - | M16 x 1 |
| HSK100A-HCD32-200 | 32 | 60 | 60 | 200 | 171 | 62 | 10 | - | M16 x 1 |
| HSK100A-HCD40-150 | 40 | 70 | 70 | 150 | 121 | 72 | 10 | - | M16 x 1 |

HSK 63A

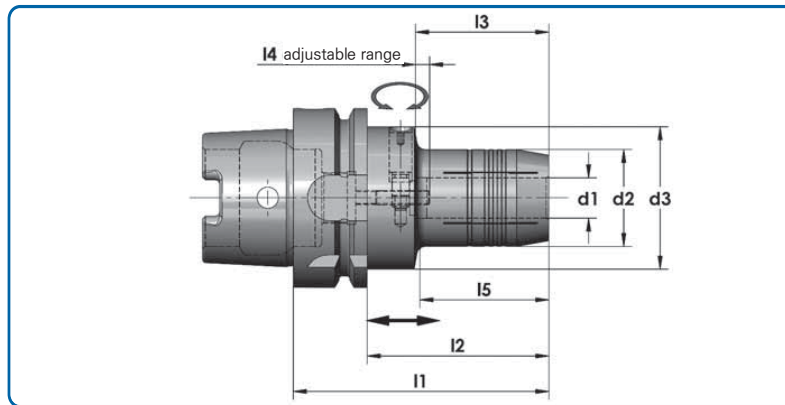


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|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------|
| HSK 63A-HCT06-160 | 6 | 12 | 16 | 26.5 | 50 | 160 | 36,5 | 40,5 | 89 | 124 | M 5 |
| HSK 63A-HCT08-160 | 8 | 14 | 18 | 28.5 | 50 | 160 | 37 | 40,5 | 90 | 124 | M 6 |
| HSK 63A-HCT10-160 | 10 | 16 | 20 | 30.5 | 50 | 160 | 42 | 40,5 | 90 | 124 | M 8 x 1 |
| HSK 63A-HCT12-160 | 12 | 18 | 22 | 32.5 | 50 | 160 | 47 | 40,5 | 90 | 124 | M10 x 1 |
| HSK 63A-HCT14-160 | 14 | 20 | 24 | 34.5 | 50 | 160 | 47 | 40,5 | 90,5 | 124 | M10 x 1 |
| HSK 63A-HCT16-160 | 16 | 22 | 26 | 36.5 | 50 | 160 | 47 | 40,5 | 91 | 124 | M12 x 1 |
| HSK 63A-HCT18-160 | 18 | 24 | 28 | 38.5 | 50 | 160 | 52 | 40,5 | 91 | 124 | M12 x 1 |
| HSK 63A-HCT20-160 | 20 | 26 | 30 | 40.5 | 50 | 160 | 52 | 40,5 | 92 | 124 | M16 x 1 |
| HSK 63A-HCT06-200 | 6 | 12 | 16 | 26.5 | 50 | 200 | 37 | 40,5 | 153 | 174 | M 5 |
| HSK 63A-HCT08-200 | 8 | 14 | 18 | 28.5 | 50 | 200 | 37 | 40,5 | 153 | 174 | M 6 |
| HSK 63A-HCT10-200 | 10 | 16 | 20 | 30.5 | 50 | 200 | 42 | 40,5 | 153 | 174 | M 8 x 1 |
| HSK 63A-HCT12-200 | 12 | 18 | 22 | 32.5 | 50 | 200 | 47 | 40,5 | 153 | 174 | M10 x 1 |
| HSK 63A-HCT14-200 | 14 | 20 | 24 | 34.5 | 50 | 200 | 47 | 40,5 | 153 | 174 | M10 x 1 |
| HSK 63A-HCT16-200 | 16 | 22 | 26 | 36.5 | 50 | 200 | 52 | 40,5 | 153 | 174 | M12 x 1 |
| HSK 63A-HCT18-200 | 18 | 24 | 28 | 38.5 | 50 | 200 | 52 | 40,5 | 153 | 174 | M12 x 1 |
| HSK 63A-HCT20-200 | 20 | 26 | 30 | 40.5 | 50 | 200 | 52 | 40,5 | 153 | 174 | M16 x 1 |

| Spare Parts | Adjusting screws | | | |
|-------------|------------------|----------------|----------|----------------|
| | Code No. | d ₁ | Code No. | d ₁ |
| | 036.852 | 6 | 036.856 | 16 |
| | 036.853 | 8 | 036.856 | 18 |
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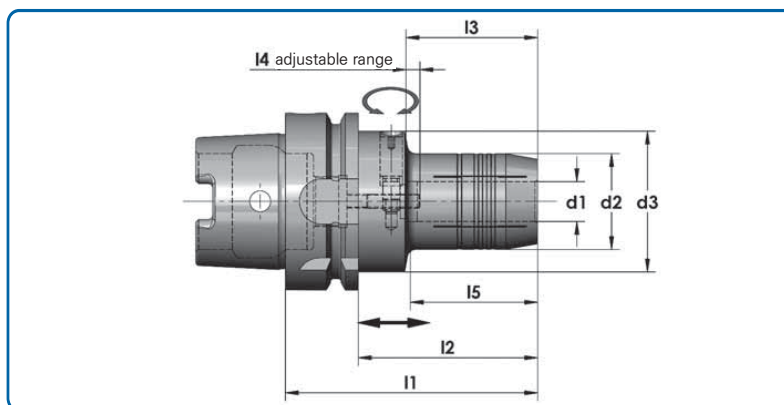
HSK 40A
HSK 50A
HSK 63A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | l_5 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| HSK 40A-HCR06-080 | 6 | 26 | 34 | 80 | 60 | 37 | 10 | 35 |
| HSK 40A-HCR08-080 | 8 | 28 | 34 | 80 | 60 | 37 | 10 | 36 |
| HSK 40A-HCR10-085 | 10 | 30 | 34 | 85 | 65 | 42 | 10 | 41 |
| HSK 40A-HCR12-090 | 12 | 32 | 34 | 90 | 70 | 47 | 10 | 47 |
| HSK 40A-HCR14-090 | 14 | 34 | 34 | 90 | 70 | 47 | 10 | 70 |
| HSK 40A-HCR16-090 | 16 | 38 | 34 | 90 | 70 | 52 | 10 | - |
| HSK 40A-HCR18-090 | 18 | 40 | 34 | 90 | 70 | 52 | 10 | - |
| HSK 40A-HCR20-090 | 20 | 42 | 34 | 90 | 70 | 52 | 10 | - |
| | | | | | | | | |
| HSK 50A-HCR06-080 | 6 | 26 | 42 | 80 | 54 | 37 | 10 | 33 |
| HSK 50A-HCR08-080 | 8 | 28 | 42 | 80 | 54 | 37 | 10 | 33 |
| HSK 50A-HCR10-085 | 10 | 30 | 42 | 85 | 59 | 42 | 10 | 39 |
| HSK 50A-HCR12-090 | 12 | 32 | 42 | 90 | 64 | 47 | 10 | 44 |
| HSK 50A-HCR14-090 | 14 | 34 | 42 | 90 | 64 | 47 | 10 | 46 |
| HSK 50A-HCR16-095 | 16 | 38 | 42 | 95 | 69 | 52 | 10 | 50 |
| HSK 50A-HCR18-095 | 18 | 40 | 42 | 95 | 69 | 52 | 10 | 52 |
| HSK 50A-HCR20-100 | 20 | 42 | 42 | 100 | 74 | 52 | 10 | 74 |
| HSK 50A-HCR25-120 | 25 | 42 | 42 | 120 | 94 | 58 | 10 | 94 |
| | | | | | | | | |
| HSK 63A-HCR06-080 | 6 | 26 | 50 | 80 | 54 | 37 | 10 | 33 |
| HSK 63A-HCR08-080 | 8 | 28 | 50 | 80 | 54 | 37 | 10 | 33 |
| HSK 63A-HCR10-085 | 10 | 30 | 50 | 85 | 59 | 42 | 10 | 39 |
| HSK 63A-HCR12-090 | 12 | 32 | 50 | 90 | 64 | 47 | 10 | 44 |
| HSK 63A-HCR14-090 | 14 | 34 | 50 | 90 | 64 | 47 | 10 | 46 |
| HSK 63A-HCR16-095 | 16 | 38 | 50 | 95 | 69 | 52 | 10 | 52 |
| HSK 63A-HCR18-095 | 18 | 40 | 50 | 95 | 69 | 52 | 10 | 52 |
| HSK 63A-HCR20-100 | 20 | 42 | 50 | 100 | 74 | 52 | 10 | 58 |
| HSK 63A-HCR25-120 | 25 | 50 | 50 | 120 | 94 | 58 | 10 | 94 |
| HSK 63A-HCR32-125 | 32 | 60 | 60 | 125 | 99 | 62 | 10 | 99 |

RadAx® Hydraulic chuck with radial length adjustment/0.05mm/U.

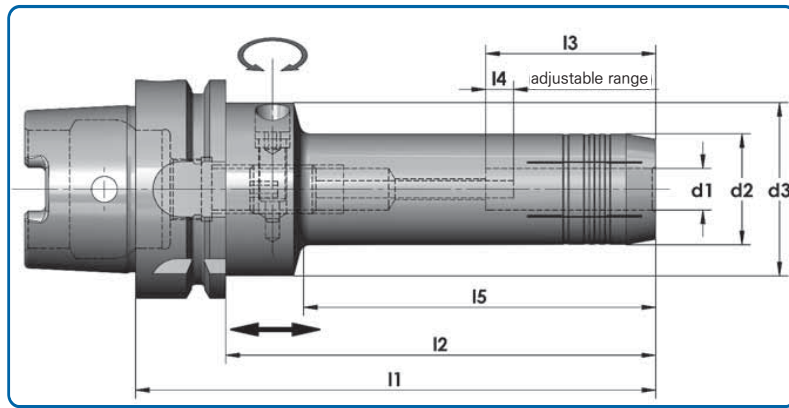
HSK 80A
HSK100A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | l_5 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| HSK 80A-HCR06-085 | 6 | 26 | 50 | 85 | 54 | 37 | 10 | 33 |
| HSK 80A-HCR08-085 | 8 | 28 | 50 | 85 | 54 | 37 | 10 | 33 |
| HSK 80A-HCR10-090 | 10 | 30 | 50 | 90 | 59 | 42 | 10 | 39 |
| HSK 80A-HCR12-095 | 12 | 32 | 50 | 95 | 64 | 47 | 10 | 44 |
| HSK 80A-HCR14-095 | 14 | 34 | 50 | 95 | 69 | 47 | 10 | 46 |
| HSK 80A-HCR16-100 | 16 | 38 | 50 | 100 | 74 | 52 | 10 | 50 |
| HSK 80A-HCR18-100 | 18 | 40 | 50 | 100 | 74 | 52 | 10 | 52 |
| HSK 80A-HCR20-105 | 20 | 42 | 50 | 105 | 79 | 52 | 10 | 58 |
| HSK 80A-HCR25-115 | 25 | 50 | 60 | 115 | 89 | 58 | 10 | 94 |
| HSK 80A-HCR32-125 | 32 | 60 | 60 | 125 | 99 | 62 | 10 | 99 |
| HSK100A-HCR06-085 | 6 | 26 | 50 | 85 | 56 | 37 | 10 | 33 |
| HSK100A-HCR08-085 | 8 | 28 | 50 | 85 | 56 | 37 | 10 | 33 |
| HSK100A-HCR10-090 | 10 | 30 | 50 | 90 | 61 | 42 | 10 | 39 |
| HSK100A-HCR12-115 | 12 | 32 | 50 | 115 | 86 | 47 | 10 | 54 |
| HSK100A-HCR14-095 | 14 | 34 | 50 | 95 | 66 | 47 | 10 | 46 |
| HSK100A-HCR16-100 | 16 | 38 | 63 | 100 | 71 | 52 | 10 | 47.5 |
| HSK100A-HCR18-100 | 18 | 40 | 63 | 100 | 71 | 52 | 10 | 47.5 |
| HSK100A-HCR20-105 | 20 | 42 | 63 | 105 | 76 | 52 | 10 | 54 |
| HSK100A-HCR25-115 | 25 | 50 | 63 | 115 | 86 | 58 | 10 | 54 |
| HSK100A-HCR32-120 | 32 | 60 | 63 | 120 | 91 | 62 | 10 | 59 |

RadAx® Hydraulic chuck with radial length adjustment/0.05mm/U.

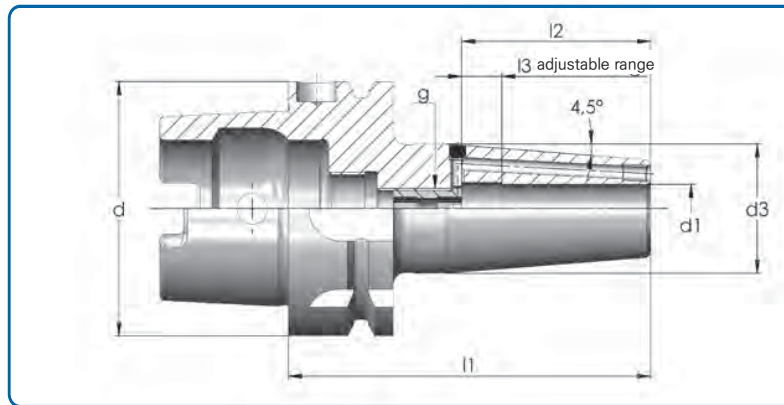
HSK 63A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | l_5 | g |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| HSK 63A-HCR06-150 | 6 | 26 | 50 | 150 | 124 | 37 | 10 | 100 | M14 |
| HSK 63A-HCR08-150 | 8 | 28 | 50 | 150 | 124 | 37 | 10 | 100 | M14 |
| HSK 63A-HCR10-150 | 10 | 30 | 50 | 150 | 124 | 42 | 10 | 100 | M14 |
| HSK 63A-HCR12-150 | 12 | 32 | 50 | 150 | 124 | 47 | 10 | 102 | M14 |
| HSK 63A-HCR16-150 | 16 | 38 | 50 | 150 | 124 | 52 | 10 | 103 | M14 |
| HSK 63A-HCR18-150 | 18 | 40 | 50 | 150 | 124 | 52 | 10 | 102 | M14 |
| HSK 63A-HCR20-150 | 20 | 42 | 50 | 150 | 124 | 52 | 10 | 102 | M14 |
| | | | | | | | | | |
| HSK100A-HCR08-150 | 8 | 28 | 63 | 150 | 121 | 37 | 10 | 93 | M14 |
| HSK100A-HCR10-150 | 10 | 30 | 63 | 150 | 121 | 42 | 10 | 93 | M14 |
| HSK100A-HCR12-150 | 12 | 32 | 63 | 150 | 121 | 47 | 10 | 95,5 | M14 |
| HSK100A-HCR20-150 | 20 | 42 | 63 | 150 | 121 | 52 | 10 | 93,5 | M14 |
| HSK100A-HCR40-150 | 40 | 70 | 70 | 150 | 121 | 72 | 10 | 121 | M16 |

RadAx[®] Hydraulic chuck with radial length adjustment/0.05mm/U.

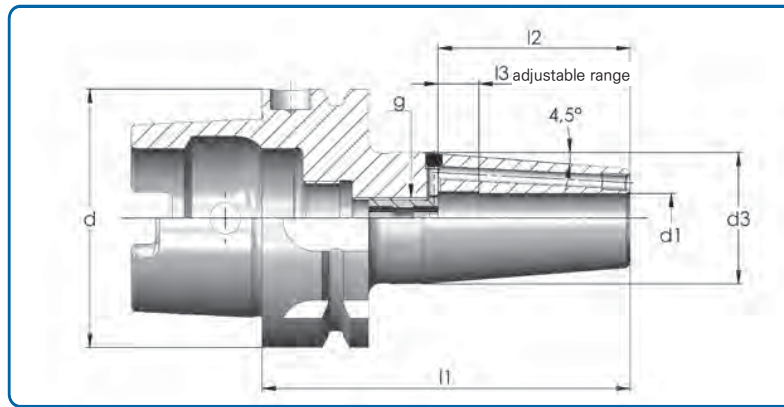
HSK 63A
HSK 80A
HSK100A



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g | |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--|
| HSK 63A-SFC03-080 | 3 | 11 | 15 | 80 | 10 | | - - | |
| HSK 63A-SFC04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | |
| HSK 63A-SFC05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | |
| HSK 63A-SFC06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 | |
| HSK 63A-SFC08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 | |
| HSK 63A-SFC10-085 | 10 | 24 | 32 | 85 | 42 | | M 8x1 | |
| HSK 63A-SFC12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | |
| HSK 63A-SFC14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | |
| HSK 63A-SFC16-095 | 16 | 27 | 34 | 95 | 50 | | M 12x1 | |
| HSK 63A-SFC18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 | |
| HSK 63A-SFC20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 | |
| HSK 63A-SFC25-115 | 25 | 44 | 53 | 115 | 58 | | M 16x1 | |
| HSK 63A-SFC32-120 | 32 | 44 | 53 | 120 | 61 | | M 16x1 | |
| | | | | | | | | |
| HSK 80A-SFC06-085 | 6 | 21 | 27 | 85 | 36 | | M 5 | |
| HSK 80A-SFC08-085 | 8 | 21 | 27 | 85 | 36 | 10 | M 6 | |
| HSK 80A-SFC10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | |
| HSK 80A-SFC12-095 | 12 | 24 | 32 | 95 | 47 | | M 10x1 | |
| HSK 80A-SFC14-095 | 14 | 27 | 34 | 95 | 47 | | M 10x1 | |
| HSK 80A-SFC16-100 | 16 | 27 | 34 | 100 | 50 | | M 12x1 | |
| HSK 80A-SFC18-100 | 18 | 33 | 42 | 100 | 50 | | M 12x1 | |
| HSK 80A-SFC20-105 | 20 | 33 | 42 | 105 | 52 | | M 16x1 | |
| | | | | | | | | |
| HSK100A-SFC05-085 | 5 | 16 | 22 | 85 | 20 | | M 4 | |
| HSK100A-SFC06-085 | 6 | 21 | 27 | 85 | 36 | 10 | M 5 | |
| HSK100A-SFC08-085 | 8 | 21 | 27 | 85 | 36 | | M 6 | |
| HSK100A-SFC10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | |
| HSK100A-SFC12-095 | 12 | 24 | 32 | 95 | 47 | | M 10x1 | |
| HSK100A-SFC14-095 | 14 | 27 | 34 | 95 | 47 | | M 10x1 | |
| HSK100A-SFC16-100 | 16 | 27 | 34 | 100 | 50 | | M 12x1 | |
| HSK100A-SFC18-100 | 18 | 33 | 42 | 100 | 50 | | M 12x1 | |
| HSK100A-SFC20-105 | 20 | 33 | 42 | 105 | 52 | | M 16x1 | |
| HSK100A-SFC25-115 | 25 | 44 | 53 | 115 | 58 | | M 16x1 | |
| HSK100A-SFC32-120 | 32 | 44 | 53 | 120 | 61 | | M 16x1 | |

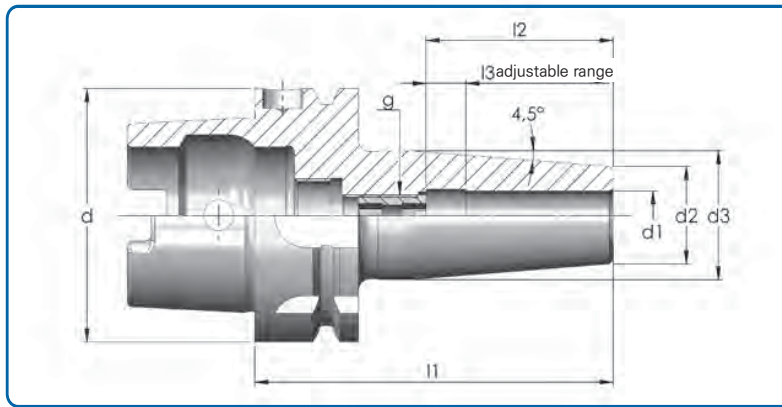
For mounting of solid carbide and HSS-cutters with h6 tolerance.
Permissible excentricity difference of the taper to the boring 0,003 mm.

HSK 63A
HSK100A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | g | |
|-------------------|-------|-------|-------|-------|-------|-------|--------|--|
| HSK 63A-SFC03-120 | 3 | 11 | 15 | 120 | 10 | | - - | |
| HSK 63A-SFC04-120 | 4 | 14 | 22 | 120 | 20 | 5 | M 3 | |
| HSK 63A-SFC05-120 | 5 | 16 | 22 | 120 | 20 | | M 4 | |
| HSK 63A-SFC06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 | |
| HSK 63A-SFC08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | |
| HSK 63A-SFC10-120 | 10 | 24 | 32 | 120 | 42 | | M 8x1 | |
| HSK 63A-SFC12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 | |
| HSK 63A-SFC14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | |
| HSK 63A-SFC16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | |
| HSK 63A-SFC18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | |
| HSK 63A-SFC20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 | |
| HSK 63A-SFC25-120 | 25 | 44 | 53 | 120 | 58 | | M 16x1 | |
| HSK 63A-SFC06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | |
| HSK 63A-SFC08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| HSK 63A-SFC10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| HSK 63A-SFC12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 | |
| HSK 63A-SFC14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 | |
| HSK 63A-SFC16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 | |
| HSK 63A-SFC18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 | |
| HSK 63A-SFC20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 | |
| HSK 63A-SFC25-160 | 25 | 44 | 53 | 160 | 58 | | M 16x1 | |
| HSK 63A-SFC32-160 | 32 | 44 | 53 | 160 | 61 | | M 16x1 | |
| HSK100A-SFC05-120 | 5 | 16 | 22 | 120 | 20 | 5 | M 4 | |
| HSK100A-SFC06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 | |
| HSK100A-SFC08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | |
| HSK100A-SFC10-120 | 10 | 24 | 32 | 120 | 42 | | M 8x1 | |
| HSK100A-SFC12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 | |
| HSK100A-SFC14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | |
| HSK100A-SFC16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | |
| HSK100A-SFC18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | |
| HSK100A-SFC20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 | |
| HSK100A-SFC25-120 | 25 | 44 | 53 | 120 | 58 | | M 16x1 | |
| HSK100A-SFC05-160 | 5 | 16 | 22 | 160 | 20 | 5 | M 4 | |
| HSK100A-SFC06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | |
| HSK100A-SFC08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| HSK100A-SFC10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| HSK100A-SFC12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 | |
| HSK100A-SFC14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 | |
| HSK100A-SFC16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 | |
| HSK100A-SFC18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 | |
| HSK100A-SFC20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 | |
| HSK100A-SFC25-160 | 25 | 44 | 53 | 160 | 58 | | M 16x1 | |
| HSK100A-SFC32-160 | 32 | 44 | 53 | 160 | 61 | | M 16x1 | |

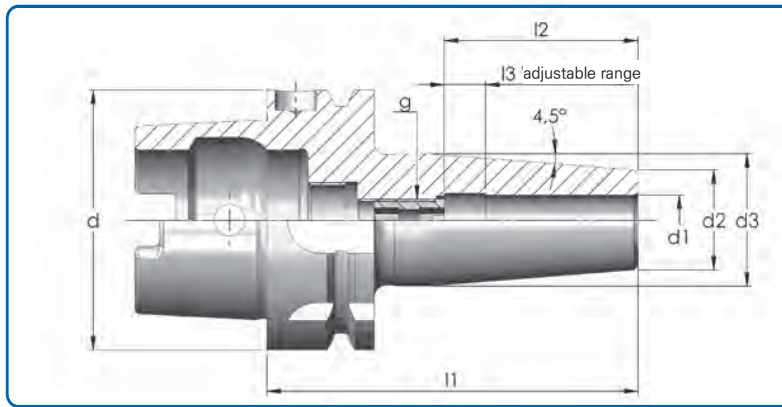
HSK 32A
HSK 40A
HSK 50A



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HSK 32A-SFD03-060 | 3 | 11 | 15 | 60 | 10 | | - - |
| HSK 32A-SFD04-060 | 4 | 14 | 15 | 60 | 20 | 5 | M 3 |
| HSK 32A-SFD05-060 | 5 | 16 | 22 | 60 | 20 | | M 4 |
| HSK 32A-SFD06-070 | 6 | 21 | 26 | 70 | 36 | 10 | M 5 |
| HSK 32A-SFD08-075 | 8 | 21 | 26 | 75 | 36 | | M 6 |
| HSK 32A-SFD10-070 | 10 | 24 | 29 | 70 | 42 | | M 8x1 |
| HSK 32A-SFD12-090 | 12 | 24 | 30 | 90 | 47 | | M 10x1 |
| HSK 32A-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 |
| HSK 32A-SFD16-090 | 16 | 27 | 34 | 90 | 50 | | M 12x1 |
| HSK 32A-SFD20-100 | 20 | 33 | 40 | 100 | 52 | | M 10x1 |
| | | | | | | | |
| HSK 40A-SFD03-080 | 3 | 11 | 15 | 80 | 10 | | - - |
| HSK 40A-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 |
| HSK 40A-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 |
| HSK 40A-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 |
| HSK 40A-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 |
| HSK 40A-SFD10-080 | 10 | 24 | 32 | 80 | 42 | | M 8x1 |
| HSK 40A-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 |
| HSK 40A-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 |
| HSK 40A-SFD16-090 | 16 | 27 | 34 | 90 | 50 | | M 12x1 |
| HSK 40A-SFD18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 |
| HSK 40A-SFD20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 |
| HSK 40A-SFD25-100 | 25 | 44 | 51 | 100 | 58 | | M 16x1 |
| | | | | | | | |
| HSK 50A-SFD06-060 | 6 | 21 | 27 | 60 | 36 | 10 | M 5 |
| HSK 50A-SFD08-060 | 8 | 21 | 27 | 60 | 36 | | M 6 |
| HSK 50A-SFD10-065 | 10 | 24 | 32 | 65 | 42 | | M 8x1 |
| HSK 50A-SFD12-070 | 12 | 24 | 32 | 70 | 47 | | M 10x1 |
| HSK 50A-SFD14-070 | 14 | 27 | 34 | 70 | 47 | | M 10x1 |
| HSK 50A-SFD16-080 | 16 | 27 | 34 | 80 | 50 | | M 12x1 |
| HSK 50A-SFD18-080 | 18 | 33 | 42 | 80 | 50 | | M 12x1 |
| HSK 50A-SFD20-080 | 20 | 33 | 42 | 80 | 52 | | M 16x1 |
| | | | | | | | |
| HSK 50A-SFD03-080 | 3 | 11 | 15 | 80 | 10 | | - - |
| HSK 50A-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 |
| HSK 50A-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 |
| HSK 50A-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 |
| HSK 50A-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 |
| HSK 50A-SFD10-085 | 10 | 24 | 32 | 85 | 42 | | M 8x1 |
| HSK 50A-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 |
| HSK 50A-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 |
| HSK 50A-SFD16-095 | 16 | 27 | 34 | 95 | 50 | | M 12x1 |
| HSK 50A-SFD18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 |
| HSK 50A-SFD20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 |
| HSK 50A-SFD25-115 | 25 | 44 | 53 | 115 | 58 | | M 16x1 |
| HSK 50A-SFD32-120 | 32 | 44 | 53 | 120 | 62 | | M 16x1 |

For mounting of solid carbide and HSS-cutters with h6 tolerance. Permissible excentricity difference of the taper to the boring 0,003 mm.

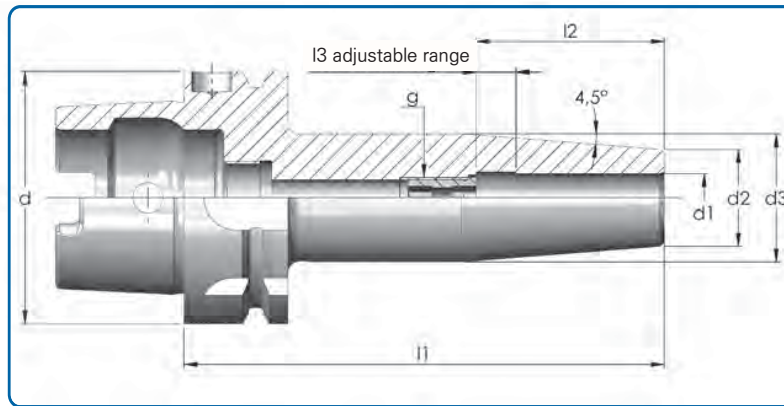
HSK 63A
HSK 80A
HSK100A



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | g | |
|-------------------|-------|-------|-------|-------|-------|-------|--------|--|
| HSK 63A-SFD03-080 | 3 | 11 | 15 | 80 | 10 | | -- | |
| HSK 63A-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | |
| HSK 63A-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | |
| HSK 63A-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 | |
| HSK 63A-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 | |
| HSK 63A-SFD10-085 | 10 | 24 | 32 | 85 | 42 | | M 8x1 | |
| HSK 63A-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | |
| HSK 63A-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | |
| HSK 63A-SFD16-095 | 16 | 27 | 34 | 95 | 50 | | M 12x1 | |
| HSK 63A-SFD18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 | |
| HSK 63A-SFD20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 | |
| HSK 63A-SFD25-115 | 25 | 44 | 53 | 115 | 58 | | M 16x1 | |
| HSK 63A-SFD32-120 | 32 | 44 | 53 | 120 | 61 | | M 16x1 | |
| | | | | | | | | |
| HSK 80A-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | |
| HSK 80A-SFD06-085 | 6 | 21 | 27 | 85 | 36 | | M 5 | |
| HSK 80A-SFD08-085 | 8 | 21 | 27 | 85 | 36 | 10 | M 6 | |
| HSK 80A-SFD10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | |
| HSK 80A-SFD12-095 | 12 | 24 | 32 | 95 | 47 | | M 10x1 | |
| HSK 80A-SFD14-095 | 14 | 27 | 34 | 95 | 47 | | M 10x1 | |
| HSK 80A-SFD16-100 | 16 | 27 | 34 | 100 | 50 | | M 12x1 | |
| HSK 80A-SFD18-100 | 18 | 33 | 42 | 100 | 50 | | M 12x1 | |
| HSK 80A-SFD20-105 | 20 | 33 | 42 | 105 | 52 | | M 16x1 | |
| HSK 80A-SFD25-115 | 25 | 44 | 53 | 115 | 58 | | M 16x1 | |
| HSK 80A-SFD32-120 | 32 | 44 | 53 | 120 | 61 | | M 16x1 | |
| | | | | | | | | |
| HSK100A-SFD03-085 | 3 | 11 | 15 | 85 | 10 | | | |
| HSK100A-SFD04-085 | 4 | 14 | 22 | 85 | 20 | 5 | M 3 | |
| HSK100A-SFD05-085 | 5 | 16 | 22 | 85 | 20 | | M 4 | |
| HSK100A-SFD06-085 | 6 | 21 | 27 | 85 | 36 | 10 | M 5 | |
| HSK100A-SFD08-085 | 8 | 21 | 27 | 85 | 36 | | M 6 | |
| HSK100A-SFD10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | |
| HSK100A-SFD12-095 | 12 | 24 | 32 | 95 | 47 | | M 10x1 | |
| HSK100A-SFD14-095 | 14 | 27 | 34 | 95 | 47 | | M 10x1 | |
| HSK100A-SFD16-100 | 16 | 27 | 34 | 100 | 50 | | M 12x1 | |
| HSK100A-SFD18-100 | 18 | 33 | 42 | 100 | 50 | | M 12x1 | |
| HSK100A-SFD20-105 | 20 | 33 | 42 | 105 | 52 | | M 16x1 | |
| HSK100A-SFD25-115 | 25 | 44 | 53 | 115 | 56 | | M 16x1 | |
| HSK100A-SFD32-120 | 32 | 44 | 53 | 120 | 62 | | M 16x1 | |
| HSK100A-SFD40-150 | 40 | 78 | 90 | 150 | 90 | | M 16x1 | |
| HSK100A-SFD50-150 | 50 | 78 | 90 | 150 | 90 | | M 16x1 | |

For mounting of solid carbide and HSS-cutters with h6 tolerance.
Permissible excentricity difference of the taper to the boring 0,003 mm.

HSK 63A
HSK 63A

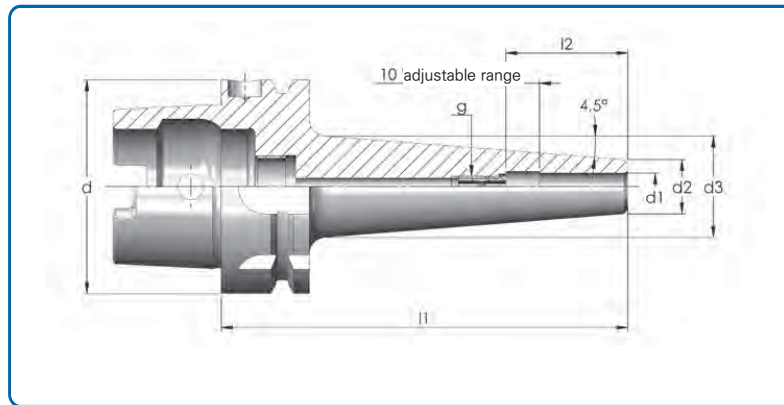


For mounting of solid carbide and HSS-cutters with h6 tolerance.
Permissible eccentricity difference of the taper to the boring 0,003 mm.

| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | g | |
|-------------------|-------|-------|-------|-------|-------|-------|--------|--|
| HSK 50A-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 | |
| HSK 50A-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | |
| HSK 50A-SFD10-120 | 10 | 24 | 32 | 120 | 42 | | M 8x1 | |
| HSK 50A-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 | |
| HSK 50A-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | |
| HSK 50A-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | |
| HSK 50A-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | |
| HSK 50A-SFD20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 | |
| HSK 50A-SFD03-160 | 3 | 11 | 15 | 160 | 10 | | -- | |
| HSK 50A-SFD04-160 | 4 | 14 | 22 | 160 | 20 | 5 | M 3 | |
| HSK 50A-SFD05-160 | 5 | 16 | 22 | 160 | 20 | | M 4 | |
| HSK 50A-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | |
| HSK 50A-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| HSK 50A-SFD10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| HSK 50A-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 | |
| HSK 50A-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 | |
| HSK 50A-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 | |
| HSK 50A-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 | |
| HSK 50A-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 | |
| HSK 63A-SFD03-120 | 3 | 11 | 15 | 120 | 10 | | -- | |
| HSK 63A-SFD04-120 | 4 | 14 | 22 | 120 | 20 | 5 | M 3 | |
| HSK 63A-SFD05-120 | 5 | 16 | 22 | 120 | 20 | | M 4 | |
| HSK 63A-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 | |
| HSK 63A-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | |
| HSK 63A-SFD10-120 | 10 | 24 | 32 | 120 | 42 | | M 8x1 | |
| HSK 63A-SFD12-120 | 12 | 24 | 32 | 120 | 42 | | M 10x1 | |
| HSK 63A-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | |
| HSK 63A-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | |
| HSK 63A-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | |
| HSK 63A-SFD20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 | |
| HSK 63A-SFD25-120 | 25 | 44 | 53 | 120 | 58 | | M 16x1 | |
| HSK 63A-SFD03-160 | 3 | 11 | 15 | 160 | 10 | -- | -- | |
| HSK 63A-SFD04-160 | 4 | 14 | 22 | 160 | 20 | 5 | M 3 | |
| HSK 63A-SFD05-160 | 5 | 16 | 22 | 160 | 20 | | M 4 | |
| HSK 63A-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | |
| HSK 63A-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| HSK 63A-SFD10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| HSK 63A-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 | |
| HSK 63A-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 | |
| HSK 63A-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 | |
| HSK 63A-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 | |
| HSK 63A-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 | |
| HSK 63A-SFD25-160 | 25 | 44 | 53 | 160 | 58 | | M 16x1 | |
| HSK 63A-SFD32-160 | 32 | 44 | 53 | 160 | 62 | | M 16x1 | |

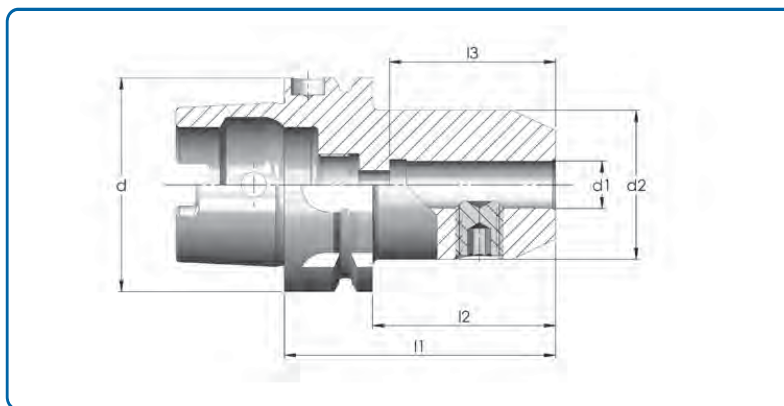
| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HSK 63A-SFD06-200 | 6 | 21 | 27 | 200 | 36 | 10 | M 5 |
| HSK 63A-SFD08-200 | 8 | 21 | 27 | 200 | 36 | | M 6 |
| HSK 63A-SFD12-200 | 12 | 24 | 32 | 200 | 47 | | M 10x1 |
| HSK 63A-SFD14-200 | 14 | 27 | 34 | 200 | 47 | | M 10x1 |
| HSK 63A-SFD16-200 | 16 | 27 | 34 | 200 | 50 | | M 12x1 |
| HSK 63A-SFD18-200 | 18 | 33 | 42 | 200 | 50 | | M 12x1 |
| HSK 63A-SFD20-200 | 20 | 33 | 42 | 200 | 52 | | M 16x1 |
| HSK 63A-SFD25-200 | 25 | 44 | 53 | 200 | 58 | | M 16x1 |
| HSK 63A-SFD32-200 | 32 | 44 | 53 | 200 | 62 | | M 16x1 |
| | | | | | | | |
| HSK 80A-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 |
| HSK 80A-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6x1 |
| HSK 80A-SFD10-120 | 10 | 24 | 32 | 120 | 41 | | M 8x1 |
| HSK 80A-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 |
| HSK 80A-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 |
| | | | | | | | |
| HSK 80A-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 |
| HSK 80A-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 |
| HSK 80A-SFD10-160 | 10 | 24 | 32 | 160 | 41 | | M 8x1 |
| HSK 80A-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 |
| HSK 80A-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 |
| HSK 80A-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 |
| HSK 80A-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 |
| HSK 80A-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 |
| HSK 80A-SFD25-160 | 25 | 44 | 53 | 160 | 58 | | M 16x1 |
| | | | | | | | |
| HSK100A-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 |
| HSK100A-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 |
| HSK100A-SFD10-120 | 10 | 24 | 32 | 120 | 41 | | M 8x1 |
| HSK100A-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 |
| HSK100A-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 |
| HSK100A-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 |
| HSK100A-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 |
| HSK100A-SFD20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 |
| HSK100A-SFD25-120 | 25 | 33 | 42 | 120 | 52 | | M 16x1 |
| | | | | | | | |
| HSK100A-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 |
| HSK100A-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 |
| HSK100A-SFD10-160 | 10 | 24 | 32 | 160 | 41 | | M 8x1 |
| HSK100A-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 |
| HSK100A-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 |
| HSK100A-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 |
| HSK100A-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 |
| HSK100A-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 |
| HSK100A-SFD25-160 | 25 | 44 | 53 | 160 | 58 | | M 16x1 |
| HSK100A-SFD32-160 | 32 | 44 | 53 | 160 | 62 | | M 16x1 |
| | | | | | | | |
| HSK100A-SFD06-200 | 6 | 21 | 27 | 200 | 36 | 10 | M 5 |
| HSK100A-SFD08-200 | 8 | 21 | 27 | 200 | 36 | | M 6 |
| HSK100A-SFD10-200 | 10 | 24 | 32 | 200 | 41 | | M 8x1 |
| HSK100A-SFD12-200 | 12 | 24 | 32 | 200 | 47 | | M 10x1 |
| HSK100A-SFD14-200 | 14 | 27 | 34 | 200 | 47 | | M 10x1 |
| HSK100A-SFD16-200 | 16 | 27 | 34 | 200 | 50 | | M 12x1 |
| HSK100A-SFD18-200 | 18 | 33 | 42 | 200 | 50 | | M 12x1 |
| HSK100A-SFD20-200 | 20 | 33 | 42 | 200 | 52 | | M 16x1 |
| HSK100A-SFD25-200 | 25 | 44 | 53 | 200 | 58 | | M 16x1 |
| HSK100A-SFD32-200 | 32 | 44 | 53 | 200 | 62 | | M 16x1 |
| | | | | | | | |
| HSK100A-SFD06-250 | 6 | 21 | 27 | 250 | 36 | 10 | M 5 |
| HSK100A-SFD08-250 | 8 | 21 | 27 | 250 | 36 | | M 6 |
| HSK100A-SFD10-250 | 10 | 24 | 32 | 250 | 41 | | M 8x1 |
| HSK100A-SFD12-250 | 12 | 24 | 32 | 250 | 47 | | M 10x1 |
| HSK100A-SFD14-250 | 14 | 27 | 34 | 250 | 47 | | M 10x1 |
| HSK100A-SFD16-250 | 16 | 27 | 34 | 250 | 50 | | M 12x1 |

HSK 63A
HSK 100A



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------|
| HSK 63A-SFT06-120 | 6 | 15 | 30 | 120 | 36 | M 5 |
| HSK 63A-SFT08-120 | 8 | 15 | 30 | 120 | 36 | M 6 |
| HSK 63A-SFT10-120 | 10 | 15 | 30 | 120 | 42 | M 8 x 1 |
| HSK 63A-SFT12-120 | 12 | 18 | 30 | 120 | 47 | M 10 x 1 |
| HSK 63A-SFT06-160 | 6 | 15 | 30 | 160 | 36 | M 5 |
| HSK 63A-SFT08-160 | 8 | 15 | 30 | 160 | 36 | M 6 |
| HSK 63A-SFT10-160 | 10 | 18 | 30 | 160 | 42 | M 8 x 1 |
| HSK 63A-SFT12-160 | 12 | 18 | 33 | 160 | 47 | M 10 x 1 |
| HSK100A-SFT06-120 | 6 | 15 | 30 | 120 | 36 | M 5 |
| HSK100A-SFT08-120 | 8 | 15 | 30 | 120 | 36 | M 6 |
| HSK100A-SFT10-120 | 10 | 18 | 30 | 120 | 42 | M 8 x 1 |
| HSK100A-SFT12-120 | 12 | 18 | 33 | 120 | 47 | M 10 x 1 |
| HSK100A-SFT14-120 | 14 | 21 | 36 | 120 | 47 | M 10 x 1 |
| HSK100A-SFT16-120 | 16 | 21 | 36 | 120 | 50 | M 12 x 1 |
| HSK100A-SFT06-160 | 6 | 15 | 30 | 160 | 36 | M 5 |
| HSK100A-SFT08-160 | 8 | 15 | 30 | 160 | 36 | M 6 |
| HSK100A-SFT10-160 | 10 | 18 | 30 | 160 | 42 | M 8 x 1 |
| HSK100A-SFT12-160 | 12 | 18 | 33 | 160 | 47 | M 10 x 1 |
| HSK100A-SFT14-160 | 14 | 21 | 36 | 160 | 47 | M 10 x 1 |
| HSK100A-SFT16-160 | 16 | 21 | 36 | 160 | 50 | M 12 x 1 |
| HSK100A-SFT06-200 | 6 | 15 | 30 | 200 | 36 | M 5 |
| HSK100A-SFT08-200 | 8 | 15 | 30 | 200 | 36 | M 6 |
| HSK100A-SFT10-200 | 10 | 18 | 30 | 200 | 42 | M 8 x 1 |
| HSK100A-SFT12-200 | 12 | 18 | 33 | 200 | 47 | M 10 x 1 |
| HSK100A-SFT14-200 | 14 | 21 | 36 | 200 | 47 | M 10 x 1 |
| HSK100A-SFT16-200 | 16 | 21 | 36 | 200 | 50 | M 12 x 1 |
| HSK100A-SFT06-220 | 6 | 15 | 30 | 220 | 36 | M 5 |
| HSK100A-SFT08-220 | 8 | 15 | 30 | 220 | 36 | M 6 |
| HSK100A-SFT10-220 | 10 | 18 | 30 | 220 | 42 | M 8 x 1 |
| HSK100A-SFT12-220 | 12 | 18 | 33 | 220 | 47 | M 10 x 1 |
| HSK100A-SFT14-220 | 14 | 21 | 36 | 220 | 47 | M 10 x 1 |
| HSK100A-SFT16-220 | 16 | 21 | 36 | 220 | 50 | M 12 x 1 |

HSK 32A
 HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A



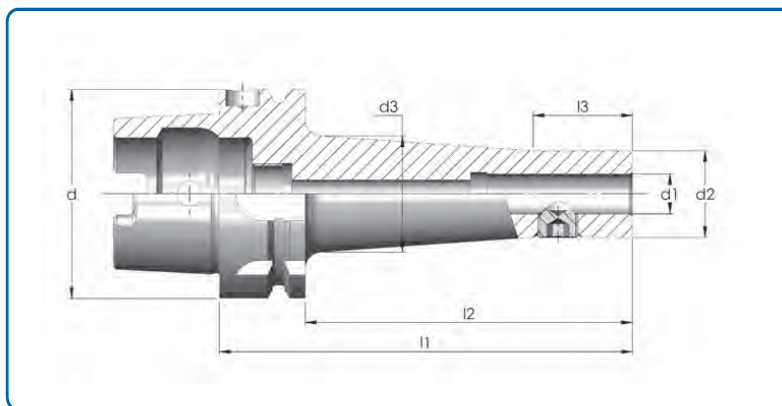
For mounting of straight-shank to DIN 1835 Form B and DIN 6535 Form HB.
Permissible eccentricity difference of the taper to the boring 0,003 mm.

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ |
|-------------------|----------------|----------------|----------------|----------------|----------------|
| HSK 32A-SLB06-060 | 6 | 25 | 60 | 40 | 40 |
| HSK 32A-SLB08-060 | 8 | 28 | 60 | 40 | 40 |
| HSK 32A-SLB10-065 | 10 | 35 | 65 | 45 | 44 |
| HSK 32A-SLB12-070 | 12 | 42 | 70 | 50 | 49 |
| HSK 32A-SLB14-075 | 14 | 44 | 75 | 60 | 49 |
| HSK 32A-SLB16-075 | 16* | 48 | 75 | 70 | 52 |
| HSK 32A-SLB20-090 | 20* | 50 | 90 | 70 | 52 |
| | | | | | |
| HSK 40A-SLB06-060 | 6 | 25 | 60 | 40 | 40 |
| HSK 40A-SLB08-060 | 8 | 28 | 60 | 40 | 40 |
| HSK 40A-SLB10-060 | 10 | 35 | 60 | 40 | 44 |
| HSK 40A-SLB12-070 | 12 | 42 | 70 | 50 | 49 |
| HSK 40A-SLB14-075 | 14 | 44 | 75 | 55 | 49 |
| HSK 40A-SLB16-075 | 16 | 40 | 75 | 55 | 52 |
| HSK 40A-SLB18-085 | 18 | 40 | 85 | 65 | 52 |
| HSK 40A-SLB20-085 | 20 | 40 | 85 | 65 | 54 |
| HSK 40A-SLB25-095 | 25 | 60 | 95 | 75 | 59 |
| HSK 40A-SLB32-105 | 32 | 60 | 105 | 85 | 63 |
| | | | | | |
| HSK 50A-SLB06-065 | 6 | 25 | 65 | 39 | 40 |
| HSK 50A-SLB08-065 | 8 | 28 | 65 | 39 | 40 |
| HSK 50A-SLB10-065 | 10 | 35 | 65 | 39 | 44 |
| HSK 50A-SLB12-080 | 12 | 42 | 80 | 54 | 49 |
| HSK 50A-SLB14-080 | 14 | 44 | 80 | 54 | 49 |
| HSK 50A-SLB16-080 | 16 | 48 | 80 | 54 | 52 |
| HSK 50A-SLB18-080 | 18 | 50 | 80 | 54 | 52 |
| HSK 50A-SLB20-080 | 20 | 52 | 80 | 54 | 54 |
| HSK 50A-SLB25-110 | 25 | 60 | 110 | 84 | 59 |
| HSK 50A-SLB32-110 | 32 | 60 | 110 | 84 | 63 |

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ |
|-------------------|----------------|----------------|----------------|----------------|----------------|
| HSK 63A-SLB06-065 | 6 | 25 | 65 | 39 | 40 |
| HSK 63A-SLB08-065 | 8 | 28 | 65 | 39 | 40 |
| HSK 63A-SLB10-065 | 10 | 35 | 65 | 39 | 44 |
| HSK 63A-SLB12-080 | 12 | 42 | 80 | 54 | 49 |
| HSK 63A-SLB14-080 | 14 | 44 | 80 | 54 | 49 |
| HSK 63A-SLB16-080 | 16 | 48 | 80 | 54 | 52 |
| HSK 63A-SLB18-080 | 18 | 50 | 80 | 54 | 52 |
| HSK 63A-SLB20-080 | 20 | 52 | 80 | 54 | 54 |
| HSK 63A-SLB25-110 | 25 | 65 | 110 | 84 | 59 |
| HSK 63A-SLB32-110 | 32 | 72 | 110 | 84 | 63 |
| HSK 63A-SLB40-120 | 40 | 63 | 120 | 94 | 73 |
| | | | | | |
| HSK 80A-SLB06-080 | 6 | 25 | 80 | 54 | 40 |
| HSK 80A-SLB08-080 | 8 | 28 | 80 | 54 | 40 |
| HSK 80A-SLB10-080 | 10 | 35 | 80 | 54 | 44 |
| HSK 80A-SLB12-080 | 12 | 42 | 80 | 54 | 49 |
| HSK 80A-SLB14-080 | 14 | 44 | 80 | 54 | 49 |
| HSK 80A-SLB16-100 | 16 | 48 | 100 | 74 | 52 |
| HSK 80A-SLB18-100 | 18 | 50 | 100 | 74 | 52 |
| HSK 80A-SLB20-100 | 20 | 52 | 100 | 74 | 54 |
| HSK 80A-SLB25-100 | 25 | 65 | 100 | 74 | 59 |
| HSK 80A-SLB32-110 | 32 | 72 | 110 | 84 | 63 |
| HSK 80A-SLB40-120 | 40 | 80 | 120 | 94 | 73 |
| | | | | | |
| HSK100A-SLB06-080 | 6 | 25 | 80 | 51 | 40 |
| HSK100A-SLB08-080 | 8 | 28 | 80 | 51 | 40 |
| HSK100A-SLB10-080 | 10 | 35 | 80 | 51 | 44 |
| HSK100A-SLB12-080 | 12 | 42 | 80 | 51 | 49 |
| HSK100A-SLB14-080 | 14 | 44 | 80 | 51 | 49 |
| HSK100A-SLB16-100 | 16 | 48 | 100 | 71 | 52 |
| HSK100A-SLB18-100 | 18 | 50 | 100 | 71 | 52 |
| HSK100A-SLB20-100 | 20 | 52 | 100 | 71 | 54 |
| HSK100A-SLB25-100 | 25 | 65 | 100 | 71 | 59 |
| HSK100A-SLB32-100 | 32 | 72 | 100 | 71 | 63 |
| HSK100A-SLB40-120 | 40 | 80 | 120 | 91 | 73 |
| HSK100A-SLB50-130 | 50 | 100 | 130 | 101 | 83 |
| | | | | | |
| HSK100A-SLB06-120 | 6 | 25 | 120 | 91 | 40 |
| HSK100A-SLB08-120 | 8 | 28 | 120 | 91 | 40 |
| HSK100A-SLB10-120 | 10 | 35 | 120 | 91 | 44 |
| HSK100A-SLB12-120 | 12 | 42 | 120 | 91 | 49 |
| HSK100A-SLB14-120 | 14 | 44 | 120 | 91 | 49 |
| HSK100A-SLB16-120 | 16 | 48 | 120 | 91 | 52 |
| HSK100A-SLB18-120 | 18 | 50 | 120 | 91 | 52 |
| HSK100A-SLB20-120 | 20 | 52 | 120 | 91 | 54 |
| HSK100A-SLB25-120 | 25 | 65 | 120 | 91 | 59 |
| HSK100A-SLB32-120 | 32 | 72 | 120 | 91 | 63 |

| Spare parts | Tightening screw | | | |
|-------------|------------------|----------------|----------|----------------|
| | | | | |
| | Code No. | d ₁ | Code No. | d ₁ |
| | 031.801 | 6 | 031.805 | 18 |
| | 031.802 | 8 | 031.806 | 20 |
| | 031.803 | 10 | 031.807 | 25 |
| | 031.804 | 12 | 031.808 | 32 |
| | 031.804 | 14 | 031.809 | 40 |
| | 031.805 | 16 | 031.810 | 50 |

HSK 63A
HSK 80A
HSK100A



For mounting of straight-shank to DIN 1835 Form B and DIN 6535 Form HB.
Permissible eccentricity difference of the taper to the boring 0,003 mm.

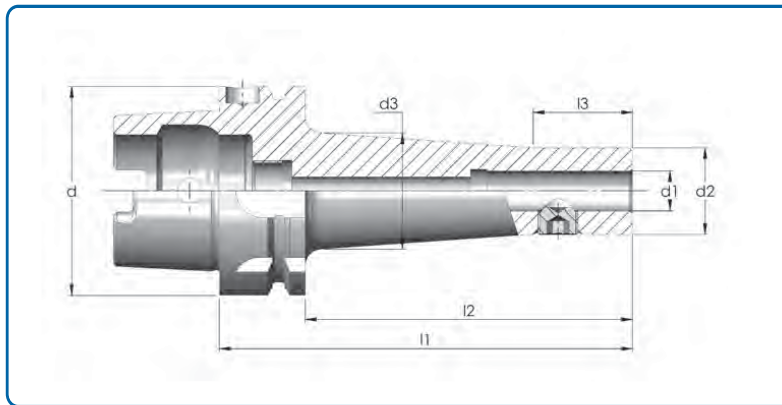
| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| HSK 63A-SLB06-125 | 6 | 22 | 28 | 125 | 99 | 26 |
| HSK 63A-SLB08-125 | 8 | 24 | 30 | 125 | 99 | 26 |
| HSK 63A-SLB10-125 | 10 | 25 | 32 | 125 | 99 | 30 |
| HSK 63A-SLB12-125 | 12 | 26 | 35 | 125 | 99 | 30 |
| HSK 63A-SLB14-125 | 14 | 28 | 37 | 125 | 99 | 30 |
| HSK 63A-SLB16-125 | 16 | 30 | 39 | 125 | 99 | 32 |
| HSK 63A-SLB18-125 | 18 | 32 | 41 | 125 | 99 | 32 |
| HSK 63A-SLB20-125 | 20 | 34 | 43 | 125 | 99 | 36 |
| | | | | | | |
| HSK 63A-SLB05-160 | 5 | 22 | 33 | 160 | 134 | 26 |
| HSK 63A-SLB06-160 | 6 | 22 | 33 | 160 | 134 | 26 |
| HSK 63A-SLB08-160 | 8 | 24 | 35 | 160 | 134 | 26 |
| HSK 63A-SLB10-160 | 10 | 25 | 39 | 160 | 134 | 30 |
| HSK 63A-SLB12-160 | 12 | 26 | 43 | 160 | 134 | 30 |
| HSK 63A-SLB14-160 | 14 | 28 | 44 | 160 | 134 | 30 |
| HSK 63A-SLB16-160 | 16 | 30 | 44 | 160 | 134 | 32 |
| HSK 63A-SLB18-160 | 18 | 32 | 46 | 160 | 134 | 32 |
| HSK 63A-SLB20-160 | 20 | 34 | 51 | 160 | 134 | 36 |
| HSK 63A-SLB25-160 | 25 | 46 | 53 | 160 | 134 | 60 |
| HSK 63A-SLB32-160 | 32 | 53 | 53 | 160 | 134 | 134 |
| HSK 63A-SLB40-160 | 40 | 62 | 62 | 160 | 134 | 134 |
| | | | | | | |
| HSK 80A-SLB06-125 | 6 | 22 | 28 | 125 | 99 | 26 |
| HSK 80A-SLB08-125 | 8 | 24 | 30 | 125 | 99 | 26 |
| HSK 80A-SLB10-125 | 10 | 25 | 32 | 125 | 99 | 30 |
| HSK 80A-SLB12-125 | 12 | 26 | 35 | 125 | 99 | 30 |
| HSK 80A-SLB14-125 | 14 | 28 | 37 | 125 | 99 | 30 |
| HSK 80A-SLB16-125 | 16 | 30 | 39 | 125 | 99 | 32 |
| HSK 80A-SLB18-125 | 18 | 32 | 41 | 125 | 99 | 32 |
| HSK 80A-SLB20-125 | 20 | 34 | 43 | 125 | 99 | 36 |
| HSK 80A-SLB25-125 | 25 | 46 | 53 | 125 | 99 | 60 |
| | | | | | | |
| HSK 80A-SLB06-160 | 6 | 22 | 30 | 160 | 134 | 26 |
| HSK 80A-SLB08-160 | 8 | 24 | 35 | 160 | 134 | 30 |
| HSK 80A-SLB10-160 | 10 | 25 | 39 | 160 | 134 | 30 |
| HSK 80A-SLB12-160 | 12 | 26 | 43 | 160 | 134 | 30 |
| HSK 80A-SLB14-160 | 14 | 28 | 44 | 160 | 134 | 30 |
| HSK 80A-SLB16-160 | 16 | 30 | 44 | 160 | 134 | 32 |
| HSK 80A-SLB18-160 | 18 | 32 | 46 | 160 | 134 | 32 |
| HSK 80A-SLB20-160 | 20 | 34 | 51 | 160 | 134 | 36 |
| HSK 80A-SLB25-160 | 25 | 46 | 56 | 160 | 134 | 60 |
| HSK 80A-SLB32-160 | 32 | 65 | 65 | 160 | 134 | 60 |

| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| HSK100A-SLB05-160 | 5 | 22 | 33 | 160 | 131 | 26 |
| HSK100A-SLB06-160 | 6 | 22 | 33 | 160 | 131 | 26 |
| HSK100A-SLB08-160 | 8 | 24 | 35 | 160 | 131 | 26 |
| HSK100A-SLB10-160 | 10 | 25 | 39 | 160 | 131 | 30 |
| HSK100A-SLB12-160 | 12 | 26 | 43 | 160 | 131 | 30 |
| HSK100A-SLB14-160 | 14 | 28 | 44 | 160 | 131 | 30 |
| HSK100A-SLB16-160 | 16 | 30 | 44 | 160 | 131 | 32 |
| HSK100A-SLB18-160 | 18 | 32 | 46 | 160 | 131 | 32 |
| HSK100A-SLB20-160 | 20 | 34 | 51 | 160 | 131 | 36 |
| HSK100A-SLB25-160 | 25 | 56 | 65 | 160 | 131 | 60 |
| HSK100A-SLB32-160 | 32 | 54 | 72 | 160 | 131 | 62 |
| HSK100A-SLB40-160 | 40 | 80 | 80 | 160 | 131 | 131 |
| | | | | | | |
| HSK100A-SLB06-200 | 6 | 22 | 33 | 200 | 171 | 26 |
| HSK100A-SLB08-200 | 8 | 24 | 35 | 200 | 171 | 26 |
| HSK100A-SLB10-200 | 10 | 25 | 39 | 200 | 171 | 30 |
| HSK100A-SLB12-200 | 12 | 26 | 43 | 200 | 171 | 30 |
| HSK100A-SLB14-200 | 14 | 28 | 44 | 200 | 171 | 30 |
| HSK100A-SLB16-200 | 16 | 30 | 44 | 200 | 171 | 32 |
| HSK100A-SLB18-200 | 18 | 32 | 46 | 200 | 171 | 32 |
| HSK100A-SLB20-200 | 20 | 34 | 51 | 200 | 171 | 36 |
| HSK100A-SLB25-200 | 25 | 46 | 56 | 200 | 171 | 60 |
| HSK100A-SLB32-200 | 32 | 54 | 72 | 200 | 171 | 62 |
| HSK100A-SLB40-200 | 40 | 62 | 80 | 200 | 171 | 74 |
| | | | | | | |
| HSK100A-SLB08-250 | 8 | 24 | 38 | 250 | 221 | 26 |
| HSK100A-SLB09-250 | 9 | 24 | 38 | 250 | 221 | 26 |
| HSK100A-SLB10-250 | 10 | 25 | 43 | 250 | 221 | 30 |
| HSK100A-SLB12-250 | 12 | 26 | 46 | 250 | 221 | 30 |
| HSK100A-SLB14-250 | 14 | 28 | 48 | 250 | 221 | 30 |
| HSK100A-SLB16-250 | 16 | 30 | 50 | 250 | 221 | 32 |
| HSK100A-SLB18-250 | 18 | 32 | 52 | 250 | 221 | 32 |
| HSK100A-SLB20-250 | 20 | 34 | 55 | 250 | 221 | 36 |
| HSK100A-SLB25-250 | 25 | 65 | 65 | 250 | 221 | 60 |

| Spare parts | Tightening screw * | | | | | |
|-------------|--------------------|----------------|----------|----------------|----------|----------------|
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 031.814 | 6 | 031.834 | 14 | 031.837 | 25 |
| | 031.832 | 8 | 031.835 | 16 | 031.838 | 32 |
| | 031.833 | 10 | 031.835 | 18 | 031.838 | 40 |
| | 031.834 | 12 | 031.836 | 20 | | |



HSK 63A
HSK 80A
HSK100A

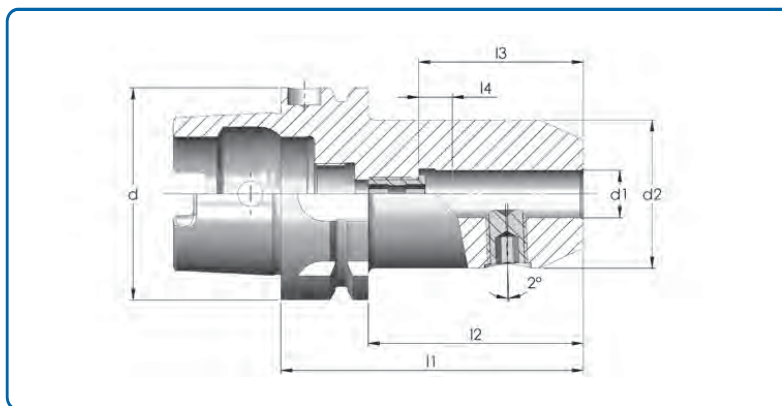


For mounting of straight-shank to DIN 1835 Form B and DIN 6535 Form HB.
Permissible eccentricity difference of the taper to the boring 0,003 mm.

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | Toleranz d ₁ |
|-------------------|----------------|----------------|----------------|----------------|-------------------------|
| HSK 50A-SLC06-065 | 6 | 25 | 65 | 39 | +0,005 |
| HSK 50A-SLC08-070 | 8 | 28 | 70 | 44 | 0 |
| HSK 50A-SLC10-075 | 10 | 35 | 75 | 49 | |
| HSK 50A-SLC12-080 | 12 | 42 | 80 | 54 | |
| HSK 50A-SLC16-080 | 16 | 48 | 80 | 54 | |
| HSK 50A-SLC20-090 | 20 | 52 | 90 | 64 | +0,007 |
| HSK 63A-SLC06-075 | 6 | 25 | 75 | 49 | +0,005 |
| HSK 63A-SLC08-075 | 8 | 28 | 75 | 49 | 0 |
| HSK 63A-SLC10-075 | 10 | 35 | 75 | 49 | |
| HSK 63A-SLC12-080 | 12 | 42 | 80 | 54 | |
| HSK 63A-SLC14-080 | 14 | 44 | 80 | 54 | |
| HSK 63A-SLC16-080 | 16 | 48 | 80 | 54 | |
| HSK 63A-SLC18-080 | 18 | 50 | 80 | 54 | |
| HSK 63A-SLC20-080 | 20 | 52 | 80 | 54 | +0,007 |
| HSK 63A-SLC25-110 | 25 | 63 | 110 | 84 | 0 |
| HSK 63A-SLC32-110 | 32 | 63 | 110 | 84 | |
| HSK 63A-SLC40-120 | 40 | 63 | 120 | 94 | |
| HSK 63A-SLC06-120 | 6 | 25 | 120 | 94 | +0,005 |
| HSK 63A-SLC08-120 | 8 | 28 | 120 | 94 | 0 |
| HSK 63A-SLC10-120 | 10 | 35 | 120 | 94 | |
| HSK 63A-SLC12-120 | 12 | 42 | 120 | 94 | |
| HSK 63A-SLC14-120 | 14 | 44 | 120 | 94 | |
| HSK 63A-SLC16-120 | 16 | 48 | 120 | 94 | |
| HSK 63A-SLC18-120 | 18 | 50 | 120 | 94 | +0,007 |
| HSK 63A-SLC20-120 | 20 | 52 | 120 | 94 | 0 |
| HSK 63A-SLC06-125 | 6 | 25 | 125 | 99 | +0,005 |
| HSK 63A-SLC08-125 | 8 | 28 | 125 | 99 | 0 |
| HSK 63A-SLC10-125 | 10 | 35 | 125 | 99 | |
| HSK 63A-SLC12-125 | 12 | 42 | 125 | 99 | |
| HSK 63A-SLC14-125 | 14 | 44 | 125 | 99 | +0,007 |
| HSK 63A-SLC16-125 | 16 | 48 | 125 | 99 | 0 |
| HSK 63A-SLC18-125 | 18 | 50 | 125 | 99 | |
| HSK 63A-SLC20-125 | 20 | 52 | 125 | 99 | |
| HSK100A-SLC06-075 | 6 | 25 | 75 | 46 | +0,005 |
| HSK100A-SLC08-075 | 8 | 28 | 75 | 46 | 0 |
| HSK100A-SLC10-080 | 10 | 35 | 80 | 51 | |
| HSK100A-SLC12-090 | 12 | 42 | 90 | 61 | |
| HSK100A-SLC14-090 | 14 | 44 | 90 | 61 | |
| HSK100A-SLC16-100 | 16 | 48 | 100 | 71 | |

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | Toleranz d ₁ |
|-------------------|----------------|----------------|----------------|----------------|-------------------------|
| HSK100A-SLC18-100 | 18 | 50 | 100 | 71 | |
| HSK100A-SLC20-100 | 20 | 52 | 100 | 71 | +0,007 |
| HSK100A-SLC25-100 | 25 | 65 | 100 | 71 | 0 |
| HSK100A-SLC32-100 | 32 | 72 | 100 | 71 | |
| HSK100A-SLC40-120 | 40 | 80 | 120 | 91 | |
| HSK100A-SLC50-120 | 50 | 85 | 120 | 91 | |
| HSK100A-SLC06-125 | 6 | 25 | 125 | 96 | +0,005 |
| HSK100A-SLC08-125 | 8 | 28 | 125 | 96 | 0 |
| HSK100A-SLC10-125 | 10 | 35 | 125 | 96 | |
| HSK100A-SLC12-125 | 12 | 42 | 125 | 96 | |
| HSK100A-SLC14-125 | 14 | 44 | 125 | 96 | |
| HSK100A-SLC16-125 | 16 | 48 | 125 | 96 | |
| HSK100A-SLC18-125 | 18 | 50 | 125 | 96 | |
| HSK100A-SLC20-125 | 20 | 52 | 125 | 96 | +0,007 |
| HSK100A-SLC25-125 | 25 | 65 | 125 | 96 | 0 |
| HSK100A-SLC32-125 | 32 | 72 | 125 | 96 | |
| HSK100A-SLC06-160 | 6 | 25 | 160 | 131 | +0,005 |
| HSK100A-SLC08-160 | 8 | 28 | 160 | 131 | 0 |
| HSK100A-SLC10-160 | 10 | 35 | 160 | 131 | |
| HSK100A-SLC12-160 | 12 | 42 | 160 | 131 | |
| HSK100A-SLC14-160 | 14 | 44 | 160 | 131 | |
| HSK100A-SLC16-160 | 16 | 48 | 160 | 131 | |
| HSK100A-SLC18-160 | 18 | 50 | 160 | 131 | |
| HSK100A-SLC20-160 | 20 | 52 | 160 | 131 | +0,007 |
| HSK100A-SLC25-160 | 25 | 65 | 160 | 131 | 0 |
| HSK100A-SLC32-160 | 32 | 72 | 160 | 131 | |
| HSK100A-SLC40-160 | 40 | 80 | 160 | 131 | |
| HSK100A-SLC06-200 | 6 | 25 | 200 | 171 | |
| HSK100A-SLC08-200 | 8 | 28 | 200 | 171 | |
| HSK100A-SLC10-200 | 10 | 35 | 200 | 171 | +0,007 |
| HSK100A-SLC12-200 | 12 | 42 | 200 | 171 | 0 |
| HSK100A-SLC14-200 | 14 | 44 | 200 | 171 | |
| HSK100A-SLC16-200 | 16 | 48 | 200 | 171 | |
| HSK100A-SLC18-200 | 18 | 50 | 200 | 171 | |
| HSK100A-SLC20-200 | 20 | 52 | 200 | 171 | |
| HSK100A-SLC25-200 | 25 | 65 | 200 | 171 | |
| HSK100A-SLC32-200 | 32 | 72 | 200 | 171 | |
| HSK100A-SLC40-200 | 40 | 80 | 200 | 171 | |
| HSK100A-SLC50-200 | 50 | 85 | 200 | 171 | |

HSK 32A
 HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A



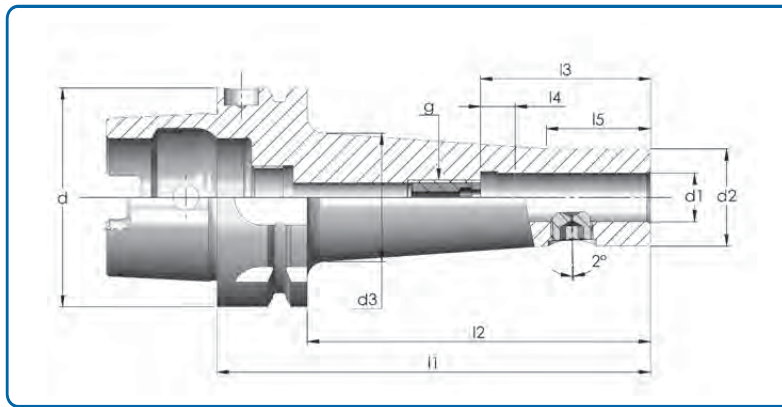
For mounting of straight-shank to DIN 1835 Form B and DIN 6535 Form HB.
 Permissible eccentricity difference of the taper to the boring 0,003 mm.

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | M |
|-------------------|----------------|----------------|----------------|----------------|----------------|-----|
| HSK 32A-WNA06-080 | 6 | 25 | 80 | 60 | 40 | M 5 |
| HSK 32A-WNA08-080 | 8 | 28 | 80 | 60 | 40 | M 6 |
| HSK 32A-WNA10-080 | 10 | 32 | 80 | 60 | 44 | M 8 |
| HSK 32A-WNA12-080 | 12 | 32 | 80 | 60 | 49 | M10 |
| HSK 32A-WNA14-080 | 14 | 32 | 80 | 60 | 49 | M10 |
| HSK 32A-WNA16-090 | 16 | 32 | 90 | 70 | 52 | M12 |
| HSK 32A-WNA18-090 | 18 | 34 | 90 | 70 | 52 | M12 |
| HSK 32A-WNA20-090 | 20 | 34 | 90 | 70 | 54 | M16 |
| HSK 40A-WNA06-080 | 6 | 25 | 80 | 60 | 40 | M 5 |
| HSK 40A-WNA08-080 | 8 | 28 | 80 | 60 | 40 | M 6 |
| HSK 40A-WNA10-080 | 10 | 35 | 80 | 60 | 44 | M 8 |
| HSK 40A-WNA12-090 | 12 | 42 | 90 | 70 | 49 | M10 |
| HSK 40A-WNA14-090 | 14 | 44 | 90 | 70 | 49 | M10 |
| HSK 40A-WNA16-090 | 16 | 48 | 90 | 70 | 52 | M12 |
| HSK 40A-WNA18-090 | 18 | 50 | 90 | 70 | 52 | M12 |
| HSK 40A-WNA20-090 | 20 | 40 | 90 | 70 | 54 | M16 |
| HSK 40A-WNA25-100 | 25 | 65 | 100 | 80 | 60 | M20 |
| HSK 40A-WNA32-110 | 32 | 72 | 110 | 80 | 63 | M20 |
| HSK 50A-WNA06-080 | 6 | 25 | 80 | 54 | 40 | M 5 |
| HSK 50A-WNA08-080 | 8 | 28 | 80 | 54 | 40 | M 6 |
| HSK 50A-WNA10-080 | 10 | 35 | 80 | 54 | 44 | M 8 |
| HSK 50A-WNA12-090 | 12 | 42 | 90 | 64 | 49 | M10 |
| HSK 50A-WNA14-090 | 14 | 44 | 90 | 64 | 49 | M10 |
| HSK 50A-WNA16-090 | 16 | 48 | 90 | 64 | 52 | M12 |
| HSK 50A-WNA18-090 | 18 | 50 | 90 | 64 | 52 | M12 |
| HSK 50A-WNA20-100 | 20 | 42 | 100 | 74 | 53 | M16 |
| HSK 50A-WNA25-110 | 25 | 60 | 110 | 84 | 59 | M16 |
| HSK 50A-WNA32-110 | 32 | 60 | 110 | 84 | 63 | M16 |
| HSK 63A-WNA06-080 | 6 | 25 | 80 | 54 | 40 | M 5 |
| HSK 63A-WNA08-080 | 8 | 28 | 80 | 54 | 40 | M 6 |
| HSK 63A-WNA10-080 | 10 | 35 | 80 | 54 | 44 | M 8 |

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | M |
|-------------------|----------------|----------------|----------------|----------------|----------------|-----|
| HSK 63A-WNA12-090 | 12 | 42 | 90 | 64 | 49 | M10 |
| HSK 63A-WNA14-090 | 14 | 44 | 90 | 64 | 49 | M10 |
| HSK 63A-WNA16-100 | 16 | 48 | 100 | 74 | 52 | M12 |
| HSK 63A-WNA18-100 | 18 | 50 | 100 | 74 | 52 | M12 |
| HSK 63A-WNA20-100 | 20 | 52 | 100 | 74 | 54 | M16 |
| HSK 63A-WNA25-110 | 25 | 65 | 110 | 84 | 59 | M20 |
| HSK 63A-WNA32-110 | 32 | 72 | 110 | 84 | 63 | M20 |
| HSK 63A-WNA40-120 | 40 | 63 | 120 | 94 | 73 | M16 |
| HSK 80A-WNA06-090 | 6 | 25 | 90 | 64 | 40 | M 5 |
| HSK 80A-WNA08-090 | 8 | 28 | 90 | 64 | 40 | M 6 |
| HSK 80A-WNA10-090 | 10 | 35 | 90 | 64 | 44 | M 8 |
| HSK 80A-WNA12-100 | 12 | 42 | 100 | 74 | 49 | M10 |
| HSK 80A-WNA14-100 | 14 | 44 | 100 | 74 | 49 | M10 |
| HSK 80A-WNA16-100 | 16 | 48 | 100 | 74 | 52 | M12 |
| HSK 80A-WNA18-100 | 18 | 50 | 100 | 74 | 52 | M12 |
| HSK 80A-WNA20-110 | 20 | 52 | 110 | 84 | 54 | M16 |
| HSK 80A-WNA25-110 | 25 | 65 | 110 | 94 | 59 | M20 |
| HSK 80A-WNA32-130 | 32 | 72 | 130 | 104 | 63 | M20 |
| HSK100A-WNA06-090 | 6 | 25 | 90 | 61 | 40 | M 5 |
| HSK100A-WNA08-090 | 8 | 28 | 90 | 61 | 40 | M 6 |
| HSK100A-WNA10-090 | 10 | 35 | 90 | 61 | 44 | M 8 |
| HSK100A-WNA12-100 | 12 | 42 | 100 | 71 | 49 | M10 |
| HSK100A-WNA14-100 | 14 | 44 | 100 | 71 | 49 | M10 |
| HSK100A-WNA16-100 | 16 | 48 | 100 | 71 | 52 | M12 |
| HSK100A-WNA18-100 | 18 | 50 | 100 | 71 | 52 | M12 |
| HSK100A-WNA20-110 | 20 | 52 | 110 | 81 | 54 | M16 |
| HSK100A-WNA25-120 | 25 | 65 | 120 | 91 | 59 | M20 |
| HSK100A-WNA32-120 | 32 | 72 | 120 | 91 | 63 | M20 |
| HSK100A-WNA40-140 | 40 | 80 | 140 | 111 | 73 | M20 |
| HSK100A-WNA50-140 | 50 | 93 | 140 | 111 | 83 | M20 |

| Spare parts | Tightening screw | | | | Adjusting screw | | | |
|-------------|------------------|----------------|----------|----------------|-----------------|----------------|----------|----------------|
| | | | | | | | | |
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 031.801 | 6 | 031.805 | 18 | 036.801 | 6 | 036.805 | 18 |
| | 031.802 | 8 | 031.806 | 20 | 036.802 | 8 | 036.806 | 20 |
| | 031.803 | 10 | 031.807 | 25 | 036.803 | 10 | 036.807 | 25 |
| | 031.804 | 12 | 031.808 | 32 | 036.803 | 12 | 036.807 | 32 |
| | 031.804 | 14 | 031.809 | 40 | 036.804 | 14 | 036.807 | 40 |
| | 031.805 | 16 | 031.810 | 50 | 036.805 | 16 | 036.807 | 50 |

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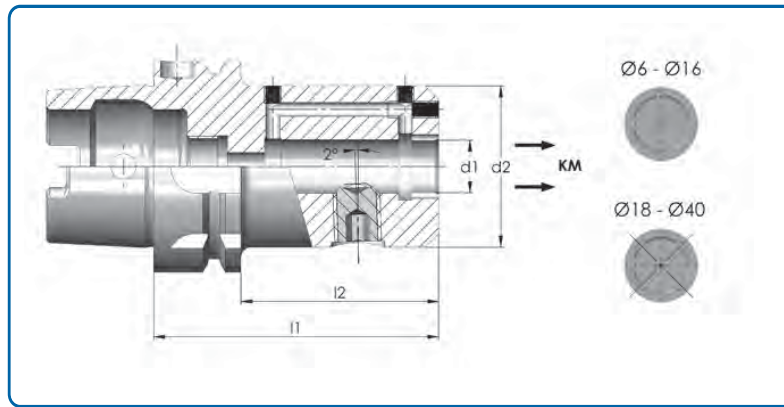


| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | G |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| HSK 63A-WNA06-125 | 6 | 22 | 28 | 125 | 99 | 40 | 10 | 26 | M 5 |
| HSK 63A-WNA08-125 | 8 | 24 | 30 | 125 | 99 | 40 | 10 | 26 | M 6 |
| HSK 63A-WNA10-125 | 10 | 25 | 32 | 125 | 99 | 44 | 10 | 30 | M 8 |
| HSK 63A-WNA12-125 | 12 | 26 | 35 | 125 | 99 | 49 | 10 | 30 | M10 |
| HSK 63A-WNA14-125 | 14 | 28 | 37 | 125 | 99 | 49 | 10 | 30 | M10 |
| HSK 63A-WNA16-125 | 16 | 30 | 39 | 125 | 99 | 52 | 10 | 32 | M12 |
| HSK 63A-WNA18-125 | 18 | 32 | 41 | 125 | 99 | 52 | 10 | 32 | M12 |
| HSK 63A-WNA20-125 | 20 | 34 | 43 | 125 | 99 | 54 | 10 | 36 | M16 |
| HSK 63A-WNA25-125 | 25 | 46 | 53 | 125 | 99 | 59 | 10 | 60 | M20 |
| | | | | | | | | | |
| HSK 63A-WNA04-160 | 4 | 22 | 30 | 160 | 134 | 36 | 10 | 26 | M 3 |
| HSK 63A-WNA06-160 | 6 | 22 | 33 | 160 | 134 | 40 | 10 | 26 | M 5 |
| HSK 63A-WNA08-160 | 8 | 24 | 35 | 160 | 134 | 40 | 10 | 26 | M 6 |
| HSK 63A-WNA10-160 | 10 | 25 | 39 | 160 | 134 | 44 | 10 | 30 | M 8 |
| HSK 63A-WNA12-160 | 12 | 26 | 43 | 160 | 134 | 49 | 10 | 30 | M10 |
| HSK 63A-WNA14-160 | 14 | 28 | 44 | 160 | 134 | 49 | 10 | 30 | M10 |
| HSK 63A-WNA16-160 | 16 | 30 | 44 | 160 | 134 | 52 | 10 | 32 | M12 |
| HSK 63A-WNA18-160 | 18 | 32 | 46 | 160 | 134 | 52 | 10 | 32 | M12 |
| HSK 63A-WNA20-160 | 20 | 34 | 51 | 160 | 134 | 54 | 10 | 36 | M16 |
| HSK 63A-WNA25-160 | 25 | 46 | 53 | 160 | 134 | 59 | 10 | 60 | M20 |
| HSK 63A-WNA32-160 | 32 | 65 | 65 | 160 | 134 | 59 | 10 | 60 | M20 |
| | | | | | | | | | |
| HSK 80A-WNA18-160 | 18 | 32 | 46 | 160 | 131 | 52 | 10 | 32 | M12 |
| HSK 80A-WNA20-160 | 20 | 34 | 51 | 160 | 131 | 54 | 10 | 36 | M16 |
| HSK 80A-WNA25-160 | 25 | 46 | 53 | 160 | 131 | 59 | 10 | 60 | M16 |
| | | | | | | | | | |
| HSK 80A-WNA12-200 | 12 | 26 | 43 | 200 | 171 | 49 | 10 | 30 | M10 |

| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | G |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| HSK100A-WNA06-160 | 6 | 22 | 33 | 160 | 131 | 40 | 10 | 26 | M 5 |
| HSK100A-WNA08-160 | 8 | 24 | 35 | 160 | 131 | 40 | 10 | 26 | M 6 |
| HSK100A-WNA10-160 | 10 | 25 | 39 | 160 | 131 | 44 | 10 | 30 | M 8 |
| HSK100A-WNA12-160 | 12 | 26 | 43 | 160 | 131 | 49 | 10 | 30 | M10 |
| HSK100A-WNA14-160 | 14 | 28 | 44 | 160 | 131 | 49 | 10 | 30 | M10 |
| HSK100A-WNA16-160 | 16 | 30 | 44 | 160 | 131 | 52 | 10 | 32 | M12 |
| HSK100A-WNA18-160 | 18 | 32 | 46 | 160 | 131 | 52 | 10 | 32 | M12 |
| HSK100A-WNA20-160 | 20 | 34 | 51 | 160 | 131 | 54 | 10 | 36 | M16 |
| HSK100A-WNA25-160 | 25 | 46 | 53 | 160 | 131 | 59 | 10 | 60 | M20 |
| HSK100A-WNA32-160 | 32 | 54 | 72 | 160 | 131 | 59 | 10 | 60 | M20 |
| | | | | | | | | | |
| HSK100A-WNA10-200 | 10 | 25 | 39 | 200 | 171 | 44 | 10 | 30 | M 8 |
| HSK100A-WNA12-200 | 12 | 26 | 43 | 200 | 171 | 49 | 10 | 30 | M10 |
| HSK100A-WNA14-200 | 14 | 28 | 44 | 200 | 171 | 49 | 10 | 30 | M10 |
| HSK100A-WNA16-200 | 16 | 30 | 44 | 200 | 171 | 52 | 10 | 32 | M12 |
| HSK100A-WNA18-200 | 18 | 32 | 46 | 200 | 171 | 52 | 10 | 32 | M12 |
| HSK100A-WNA20-200 | 20 | 34 | 51 | 200 | 171 | 54 | 10 | 36 | M16 |
| HSK100A-WNA25-200 | 25 | 46 | 53 | 200 | 171 | 59 | 10 | 60 | M20 |
| HSK100A-WNA32-200 | 32 | 54 | 72 | 200 | 171 | 59 | 10 | 60 | M20 |
| HSK100A-WNA40-200 | 40 | 80 | 80 | 200 | 171 | 73 | 10 | 171 | M16 |
| HSK100A-WNA50-200 | 50 | 93 | 93 | 200 | 171 | 83 | 10 | 171 | M16 |

| Spare parts | Tightening screw | | Adjusting screw | | | | |
|-------------|------------------|----------------|-----------------|----------------|----|---------|----|
| | | | | | | | |
| | Code No. | d ₁ | Code No. | d ₁ | | | |
| 031.814 | 6 | 031.835 | 18 | 036.801 | 6 | 036.804 | 16 |
| 031.832 | 8 | 031.836 | 20 | 036.802 | 8 | 036.805 | 18 |
| 031.833 | 10 | 031.837 | 25 | 036.803 | 10 | 036.805 | 20 |
| 031.834 | 12 | 031.838 | 40 | 036.803 | 12 | 036.806 | 25 |
| 031.834 | 14 | 031.839 | 50 | 036.804 | 14 | 036.806 | 32 |
| 031.834 | 16 | | | | | | |

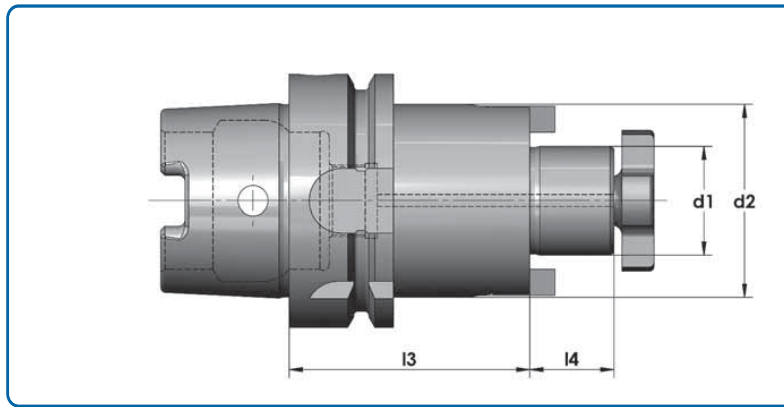
HSK 63A
HSK100A



| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | Tolerance of d ₁ |
|-------------------|----------------|----------------|----------------|----------------|-----------------------------|
| HSK 63A-WNC06-075 | 6 | 25 | 75 | 49 | + 0,005 |
| HSK 63A-WNC08-075 | 8 | 28 | 75 | 49 | 0 |
| HSK 63A-WNC10-080 | 10 | 35 | 80 | 49 | |
| HSK 63A-WNC12-090 | 12 | 42 | 90 | 54 | |
| HSK 63A-WNC14-090 | 14 | 44 | 90 | 54 | |
| HSK 63A-WNC16-100 | 16 | 48 | 100 | 54 | |
| HSK 63A-WNC18-100 | 18 | 50 | 100 | 54 | |
| HSK 63A-WNC20-100 | 20 | 52 | 100 | 54 | + 0,007 |
| HSK 63A-WNC25-110 | 25 | 65 | 110 | 84 | 0 |
| HSK 63A-WNC32-110 | 32 | 72 | 110 | 84 | |
| HSK 63A-WNC40-120 | 40 | 63 | 120 | 94 | |
| | | | | | |
| HSK100A-WNC06-075 | 6 | 25 | 75 | 46 | + 0,005 |
| HSK100A-WNC08-075 | 8 | 28 | 75 | 46 | 0 |
| HSK100A-WNC10-080 | 10 | 35 | 80 | 51 | |
| HSK100A-WNC12-090 | 12 | 42 | 90 | 61 | |
| HSK100A-WNC14-090 | 14 | 44 | 90 | 61 | |
| HSK100A-WNC16-100 | 16 | 48 | 100 | 71 | |
| HSK100A-WNC18-100 | 18 | 50 | 100 | 71 | |
| HSK100A-WNC20-100 | 20 | 52 | 100 | 71 | + 0,007 |
| HSK100A-WNC25-100 | 25 | 65 | 100 | 71 | 0 |
| HSK100A-WNC32-100 | 32 | 72 | 100 | 71 | |
| HSK100A-WNC40-120 | 40 | 80 | 120 | 91 | |

| Spare parts | Tightening screw | | | | Adjusting screw | | | |
|-------------|------------------|----------------|----------|----------------|-----------------|----------------|----------|----------------|
| | | | | | | | | |
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 031.801 | 6 | 031.805 | 18 | 036.801 | 6 | 036.804 | 16 |
| | 031.802 | 8 | 031.806 | 20 | 036.802 | 8 | 036.805 | 18 |
| | 031.803 | 10 | 031.807 | 25 | 036.803 | 10 | 036.806 | 20 |
| | 031.804 | 12 | 031.808 | 32 | 036.803 | 12 | 036.807 | 25 |
| | 031.804 | 14 | 031.809 | 40 | 036.804 | 14 | 036.807 | 32 |
| | 031.805 | 16 | | | | | 036.807 | 40 |

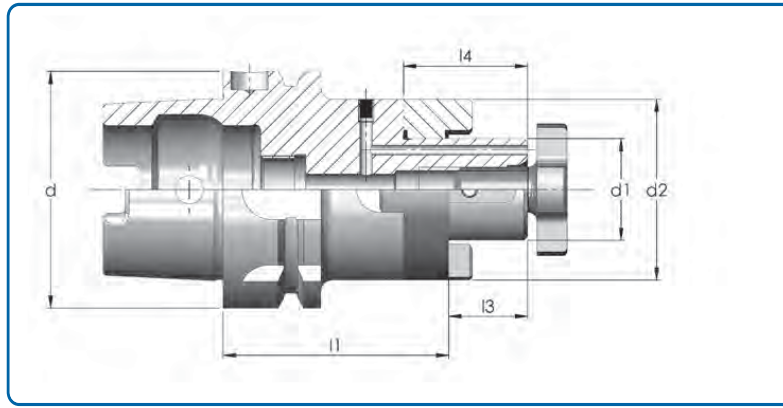
HSK 63A
HSK 80A
HSK100A



| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | |
|----------------------|----------------|----------------|----------------|----------------|---------------|
| HSK 63A-HFC16-050 | 16 | 38 | 50 | 17 | 93.02.040.004 |
| HSK 63A-HFC22-050 | 22 | 48 | 50 | 19 | 93.02.040.005 |
| HSK 63A-HFC27-060 | 27 | 60 | 60 | 21 | 93.02.040.006 |
| HSK 63A-HFC32-060 | 32 | 78 | 60 | 24 | 93.02.040.007 |
| HSK 63A-HFC40-060 | 40 | 89 | 60 | 27 | 93.02.040.008 |
| HSK 63A-HFC19.05-045 | 19.05 | 48 | 45 | 21 | 95.02.040.025 |
| HSK 63A-HFC25.40-060 | 25.40 | 60 | 60 | 21 | 95.02.040.026 |
| HSK 63A-HFC31.75-060 | 31.75 | 75 | 60 | 21 | 95.02.040.027 |
| HSK 63A-HFC38.10-060 | 38.10 | 89 | 60 | 28 | 95.02.040.028 |
| HSK 80A-HFC60-050 | 60 | 128 | 70 | 50 | 94.02.040.006 |
| HSK100A-HFC22-050 | 22 | 48 | 50 | 19 | 95.02.040.014 |
| HSK100A-HFC27-050 | 27 | 60 | 50 | 21 | 95.02.040.015 |
| HSK100A-HFC27-100 | 27 | 60 | 100 | 21 | 95.02.040.115 |
| HSK100A-HFC32-050 | 32 | 78 | 50 | 24 | 95.02.040.016 |
| HSK100A-HFC40-060 | 40 | 89 | 60 | 27 | 95.02.040.017 |
| HSK100A-HFC60-070 | 60 | 128 | 70 | 50 | 95.02.040.019 |
| HSK100A-HFC60-135 | 60 | 130 | 135 | 30 | 95.02.040.119 |
| HSK100A-HFC19.05-050 | 19.05 | 48 | 50 | 17 | 95.02.040.125 |
| HSK100A-HFC25.40-060 | 25.40 | 50 | 60 | 19 | 95.02.040.127 |
| HSK100A-HFC31.75-060 | 31.75 | 70 | 60 | 21 | 95.02.040.129 |
| HSK100A-HFC38.10-070 | 38.10 | 76 | 70 | 23 | 95.02.040.131 |
| HSK100A-HFC38.10-135 | 38.10 | 130 | 135 | 30 | 95.02.040.136 |

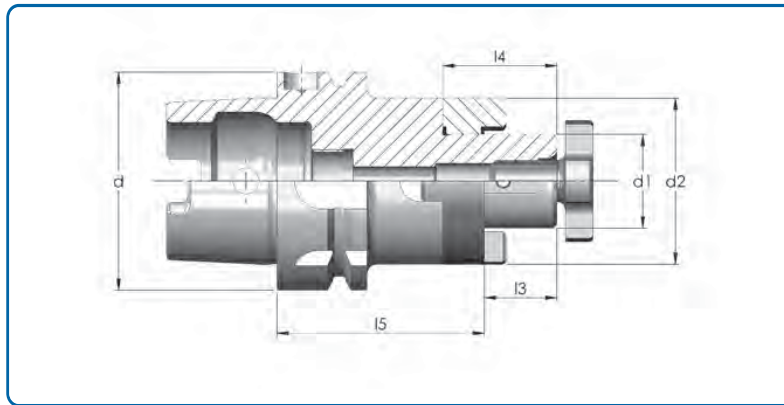
| Spare parts | Mitnehmer | Mitnehmer-Schraube | Fräseranzugsschraube | Fräseranzugsschraube mit Innensechskant | Fräseranzugsschraube mit Kühlmittel 4x90° | Schlüssel |
|-------------|-------------------------|-------------------------|-------------------------|---|---|-------------------------|
| | Code No. d ₁ | Code No. d ₁ | Code No. d ₁ | Code No. d ₁ | Code No. d ₁ | Code No. d ₁ |
| | | | | | | |
| | 04.016.200 16 | 04.016.300 16 | 02.047.002 16 | 02.049.002 16 | 02.049.202 16 | 02.048.002 16 |
| | 04.016.201 22 | 04.016.301 22 | 02.047.003 22 | 02.049.003 22 | 02.049.203 22 | 02.048.003 22 |
| | 04.016.202 27 | 04.016.302 27 | 02.047.004 27 | 02.049.004 27 | 02.049.204 27 | 02.048.004 27 |
| | 04.016.203 32 | 04.016.303 32 | 02.047.005 32 | 02.049.005 32 | 02.049.205 32 | 02.048.005 32 |
| | 04.016.204 40 | 04.016.303 40 | 02.047.006 40 | 02.049.006 40 | 02.049.206 40 | 02.048.006 40 |

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HSK100A



| Code No. | d ₁ | d ₂ | l ₁ | l ₃ | l ₄ |
|-------------------|----------------|----------------|----------------|----------------|----------------|
| HSK 32A-CFC16-055 | 16 | 32 | 55 | 17 | 27 |
| HSK 32A-CFC22-055 | 22 | 40 | 55 | 19 | 31 |
| HSK 32A-CFC27-065 | 27 | 48 | 65 | 21 | 33 |
| HSK 40A-CFC16-050 | 16 | 32 | 50 | 17 | 27 |
| HSK 40A-CFC22-050 | 22 | 40 | 50 | 19 | 31 |
| HSK 40A-CFC27-065 | 27 | 48 | 65 | 21 | 33 |
| HSK 50A-CFC16-050 | 16 | 32 | 50 | 17 | 27 |
| HSK 50A-CFC22-050 | 22 | 40 | 50 | 19 | 31 |
| HSK 50A-CFC27-065 | 27 | 48 | 65 | 21 | 33 |
| HSK 50A-CFC32-065 | 32 | 58 | 65 | 24 | 38 |
| HSK 63A-CFC16-060 | 16 | 32 | 60 | 17 | 27 |
| HSK 63A-CFC22-060 | 22 | 40 | 60 | 19 | 31 |
| HSK 63A-CFC27-060 | 27 | 48 | 60 | 21 | 33 |
| HSK 63A-CFC32-060 | 32 | 58 | 60 | 24 | 38 |
| HSK 63A-CFC40-070 | 40 | 70 | 70 | 27 | 41 |
| HSK 63A-CFC50-080 | 50 | 90 | 80 | 30 | 46 |
| HSK 63A-CFC16-100 | 16 | 32 | 100 | 17 | 27 |
| HSK 63A-CFC22-100 | 22 | 40 | 100 | 19 | 31 |
| HSK 63A-CFC27-100 | 27 | 48 | 100 | 21 | 33 |
| HSK 63A-CFC32-100 | 32 | 58 | 100 | 24 | 38 |
| HSK 63A-CFC40-100 | 40 | 70 | 100 | 27 | 41 |
| HSK 63A-CFC16-160 | 16 | 32 | 160 | 17 | 27 |
| HSK 63A-CFC22-160 | 22 | 40 | 160 | 19 | 31 |
| HSK 63A-CFC27-160 | 27 | 48 | 160 | 21 | 33 |
| HSK 63A-CFC32-160 | 32 | 58 | 160 | 24 | 38 |
| HSK 63A-CFC40-160 | 40 | 70 | 160 | 27 | 41 |
| HSK 80A-CFC16-060 | 16 | 32 | 60 | 17 | 27 |
| HSK 80A-CFC22-060 | 22 | 40 | 60 | 19 | 31 |
| HSK 80A-CFC27-060 | 27 | 48 | 60 | 21 | 33 |
| HSK 80A-CFC32-060 | 32 | 58 | 60 | 24 | 38 |
| HSK 80A-CFC40-070 | 40 | 70 | 70 | 27 | 41 |
| HSK100A-CFC16-060 | 16 | 32 | 60 | 17 | 27 |
| HSK100A-CFC22-060 | 22 | 40 | 60 | 19 | 31 |
| HSK100A-CFC27-060 | 27 | 48 | 60 | 21 | 33 |
| HSK100A-CFC32-060 | 32 | 58 | 60 | 24 | 38 |
| HSK100A-CFC40-070 | 40 | 70 | 70 | 27 | 41 |
| HSK100A-CFC50-080 | 50 | 90 | 80 | 30 | 46 |
| HSK100A-CFC60-120 | 60 | 110 | 120 | 48 | 66 |
| HSK100A-CFC16-100 | 16 | 32 | 100 | 17 | 27 |
| HSK100A-CFC16-160 | 16 | 32 | 160 | 17 | 27 |
| HSK100A-CFC22-160 | 22 | 40 | 160 | 19 | 31 |
| HSK100A-CFC27-160 | 27 | 48 | 160 | 21 | 33 |

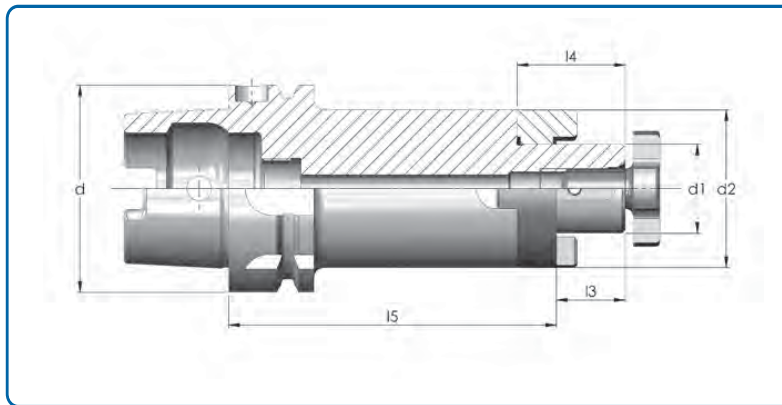
HSK 63A
HSK100A



Allowed radial run-out from HSK to stud d1 – 0,006 mm.

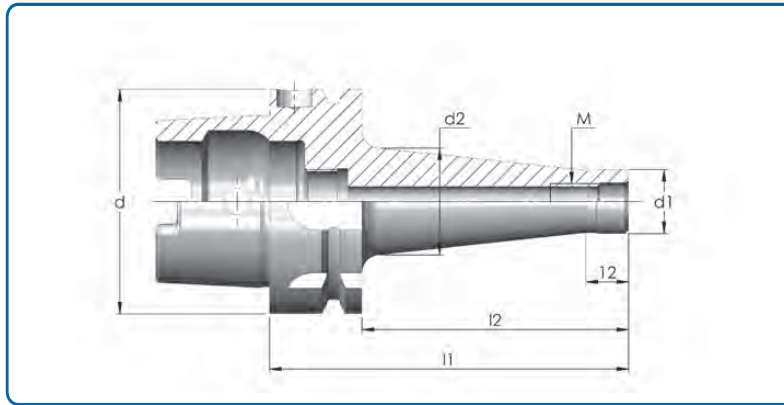
| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | l ₅ |
|-------------------|----------------|----------------|----------------|----------------|----------------|
| HSK 32A-CFD16-055 | 16 | 32 | 17 | 27 | 55 |
| HSK 32A-CFD22-055 | 22 | 40 | 19 | 31 | 55 |
| HSK 32A-CFD27-065 | 27 | 48 | 21 | 33 | 65 |
| HSK 32A-CFD32-065 | 32 | 58 | 24 | 38 | 65 |
| HSK 32A-CFD40-065 | 40 | 70 | 27 | 41 | 65 |
| | | | | | |
| HSK 40A-CFD16-050 | 16 | 32 | 17 | 27 | 50 |
| HSK 40A-CFD22-050 | 22 | 40 | 19 | 31 | 50 |
| HSK 40A-CFD27-065 | 27 | 48 | 21 | 33 | 65 |
| HSK 40A-CFD32-065 | 32 | 58 | 24 | 38 | 65 |
| | | | | | |
| HSK 50A-CFD16-050 | 16 | 32 | 17 | 27 | 50 |
| HSK 50A-CFD22-050 | 22 | 40 | 19 | 31 | 50 |
| HSK 50A-CFD27-065 | 27 | 48 | 21 | 33 | 65 |
| HSK 50A-CFD32-065 | 32 | 58 | 24 | 38 | 65 |
| | | | | | |
| HSK 60A-CFD13-060 | 13 | 28 | 15 | 25 | 60 |
| HSK 60A-CFD16-060 | 16 | 32 | 17 | 27 | 60 |
| HSK 60A-CFD22-060 | 22 | 40 | 19 | 31 | 60 |
| HSK 60A-CFD27-060 | 27 | 48 | 21 | 33 | 60 |
| HSK 60A-CFD32-060 | 32 | 58 | 24 | 38 | 60 |
| HSK 60A-CFD40-070 | 40 | 70 | 27 | 41 | 70 |
| HSK 60A-CFD50-080 | 50 | 90 | 30 | 46 | 80 |
| | | | | | |
| HSK 80A-CFD16-060 | 16 | 32 | 17 | 27 | 60 |
| HSK 80A-CFD22-060 | 22 | 40 | 19 | 31 | 60 |
| HSK 80A-CFD27-060 | 27 | 48 | 21 | 33 | 60 |
| HSK 80A-CFD32-060 | 32 | 58 | 24 | 38 | 60 |
| HSK 80A-CFD40-070 | 40 | 70 | 27 | 41 | 70 |
| | | | | | |
| HSK100A-CFD16-060 | 16 | 32 | 17 | 27 | 60 |
| HSK100A-CFD16-080 | 16 | 32 | 17 | 27 | 80 |
| HSK100A-CFD22-060 | 22 | 40 | 19 | 31 | 60 |
| HSK100A-CFD22-080 | 22 | 40 | 19 | 31 | 80 |
| HSK100A-CFD27-060 | 27 | 48 | 21 | 33 | 60 |
| HSK100A-CFD27-080 | 27 | 48 | 21 | 33 | 80 |
| HSK100A-CFD32-060 | 32 | 58 | 24 | 38 | 60 |
| HSK100A-CFD32-080 | 32 | 58 | 24 | 38 | 80 |
| HSK100A-CFD40-070 | 40 | 70 | 27 | 41 | 70 |
| HSK100A-CFD50-080 | 50 | 90 | 30 | 46 | 80 |
| HSK100A-CFD60-120 | 60 | 110 | 48 | 66 | 120 |

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| Code No. | d_1 | d_2 | l_3 | l_4 | l_5 |
|-------------------|-------|-------|-------|-------|-------|
| HSK 63A-CFD16-100 | 16 | 32 | 17 | 27 | 100 |
| HSK 63A-CFD22-100 | 22 | 40 | 19 | 31 | 100 |
| HSK 63A-CFD27-100 | 27 | 48 | 21 | 33 | 100 |
| HSK 63A-CFD32-100 | 32 | 58 | 24 | 38 | 100 |
| HSK 63A-CFD40-100 | 40 | 70 | 27 | 41 | 100 |
| HSK 63A-CFD16-160 | 16 | 32 | 17 | 27 | 160 |
| HSK 63A-CFD22-160 | 22 | 40 | 19 | 31 | 160 |
| HSK 63A-CFD27-160 | 27 | 48 | 21 | 33 | 160 |
| HSK 63A-CFD32-160 | 32 | 58 | 24 | 38 | 160 |
| HSK 63A-CFD40-160 | 40 | 70 | 27 | 41 | 160 |
| HSK 80A-CFD16-100 | 16 | 32 | 17 | 27 | 100 |
| HSK 80A-CFD22-100 | 22 | 40 | 19 | 31 | 100 |
| HSK 80A-CFD27-100 | 27 | 48 | 21 | 33 | 100 |
| HSK 80A-CFD32-100 | 32 | 58 | 24 | 38 | 100 |
| HSK 80A-CFA40-100 | 40 | 70 | 27 | 41 | 100 |
| HSK100A-CFD16-100 | 16 | 32 | 17 | 27 | 100 |
| HSK100A-CFD22-100 | 22 | 40 | 19 | 31 | 100 |
| HSK100A-CFD27-100 | 27 | 48 | 21 | 33 | 100 |
| HSK100A-CFD32-100 | 32 | 58 | 24 | 38 | 100 |
| HSK100A-CFD40-100 | 40 | 70 | 27 | 41 | 100 |
| HSK100A-CFD50-100 | 50 | 90 | 30 | 46 | 100 |
| HSK100A-CFD50-100 | 50 | 90 | 30 | 46 | 125 |
| HSK100A-CFD16-130 | 16 | 32 | 17 | 27 | 130 |
| HSK100A-CFD22-130 | 22 | 40 | 19 | 31 | 130 |
| HSK100A-CFD27-130 | 27 | 48 | 21 | 33 | 130 |
| HSK100A-CFD32-130 | 32 | 58 | 24 | 38 | 130 |
| HSK100A-CFD40-130 | 40 | 70 | 27 | 41 | 130 |
| HSK100A-CFD16-160 | 16 | 32 | 17 | 27 | 160 |
| HSK100A-CFD22-160 | 22 | 40 | 19 | 31 | 160 |
| HSK100A-CFD27-160 | 27 | 48 | 21 | 33 | 160 |
| HSK100A-CFD32-160 | 32 | 58 | 24 | 38 | 160 |
| HSK100A-CFD40-160 | 40 | 70 | 27 | 41 | 160 |
| HSK100A-CFD50-160 | 50 | 90 | 30 | 46 | 160 |
| HSK100A-CFD60-160 | 60 | 110 | 48 | 66 | 160 |
| HSK100A-CFD16-200 | 16 | 32 | 17 | 27 | 200 |
| HSK100A-CFD22-200 | 22 | 40 | 19 | 31 | 200 |
| HSK100A-CFD27-200 | 27 | 48 | 21 | 33 | 200 |
| HSK100A-CFD32-200 | 32 | 58 | 24 | 38 | 200 |
| HSK100A-CFD40-200 | 40 | 70 | 27 | 41 | 200 |
| HSK100A-CFD50-200 | 50 | 90 | 30 | 46 | 200 |
| HSK100A-CFD27-250 | 27 | 48 | 19 | 33 | 250 |
| HSK100A-CFD32-250 | 32 | 58 | 21 | 38 | 250 |
| HSK100A-CFD40-280 | 40 | 70 | 27 | 41 | 280 |

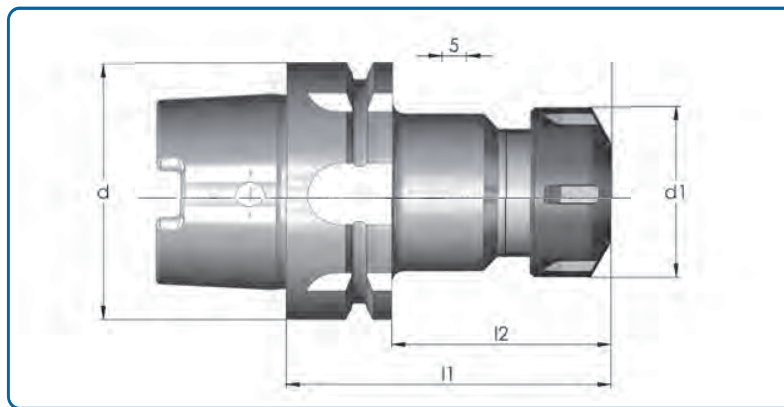
HSK 63A
HSK100A



| Code No. | M | d ₁ | d ₂ | l ₁ | l ₂ |
|-------------------|-----|----------------|----------------|----------------|----------------|
| HSK 50A-SEM06-051 | M6 | 10 | 13 | 51 | 25 |
| HSK 50A-SEM06-076 | M6 | 10 | 20 | 76 | 50 |
| HSK 50A-SEM06-101 | M6 | 10 | 23 | 101 | 75 |
| HSK 50A-SEM08-051 | M8 | 13,8 | 15 | 51 | 25 |
| HSK 50A-SEM08-076 | M8 | 13,8 | 23 | 76 | 50 |
| HSK 50A-SEM08-101 | M8 | 13,8 | 25 | 101 | 75 |
| HSK 50A-SEM08-126 | M8 | 13,8 | 30 | 126 | 100 |
| HSK 50A-SEM10-051 | M10 | 18 | 23 | 51 | 25 |
| HSK 50A-SEM10-076 | M10 | 18 | 25 | 76 | 50 |
| HSK 50A-SEM10-101 | M10 | 18 | 30 | 101 | 75 |
| HSK 50A-SEM10-126 | M10 | 18 | 35 | 126 | 100 |
| HSK 50A-SEM12-051 | M12 | 21 | 24 | 51 | 25 |
| HSK 50A-SEM12-076 | M12 | 21 | 30 | 76 | 50 |
| HSK 50A-SEM12-101 | M12 | 21 | 35 | 101 | 75 |
| HSK 50A-SEM12-126 | M12 | 21 | 38 | 126 | 100 |
| HSK 63A-SEM06-051 | M6 | 10 | 13 | 51 | 25 |
| HSK 63A-SEM06-076 | M6 | 10 | 20 | 76 | 50 |
| HSK 63A-SEM06-101 | M6 | 10 | 23 | 101 | 75 |
| HSK 63A-SEM08-051 | M8 | 13,8 | 15 | 51 | 25 |
| HSK 63A-SEM08-076 | M8 | 13,8 | 23 | 76 | 50 |
| HSK 63A-SEM08-101 | M8 | 13,8 | 25 | 101 | 75 |
| HSK 63A-SEM08-126 | M8 | 13,8 | 30 | 126 | 100 |
| HSK 63A-SEM10-051 | M10 | 18 | 23 | 51 | 25 |
| HSK 63A-SEM10-076 | M10 | 18 | 25 | 76 | 50 |
| HSK 63A-SEM10-101 | M10 | 18 | 30 | 101 | 75 |
| HSK 63A-SEM10-126 | M10 | 18 | 35 | 126 | 100 |
| HSK 63A-SEM12-051 | M12 | 21 | 24 | 51 | 25 |
| HSK 63A-SEM12-076 | M12 | 21 | 30 | 76 | 50 |
| HSK 63A-SEM12-101 | M12 | 21 | 35 | 101 | 75 |
| HSK 63A-SEM12-126 | M12 | 21 | 38 | 126 | 100 |
| HSK 63A-SEM12-151 | M12 | 21 | 43 | 151 | 125 |
| HSK 63A-SEM12-176 | M12 | 21 | 45 | 176 | 150 |
| HSK 63A-SEM16-051 | M16 | 29 | 34 | 51 | 25 |
| HSK 63A-SEM16-076 | M16 | 29 | 34 | 76 | 50 |
| HSK 63A-SEM16-101 | M16 | 29 | 35 | 101 | 75 |
| HSK 63A-SEM16-126 | M16 | 29 | 40 | 126 | 100 |
| HSK 63A-SEM16-151 | M16 | 29 | 44 | 151 | 125 |
| HSK 63A-SEM16-176 | M16 | 29 | 48 | 176 | 150 |

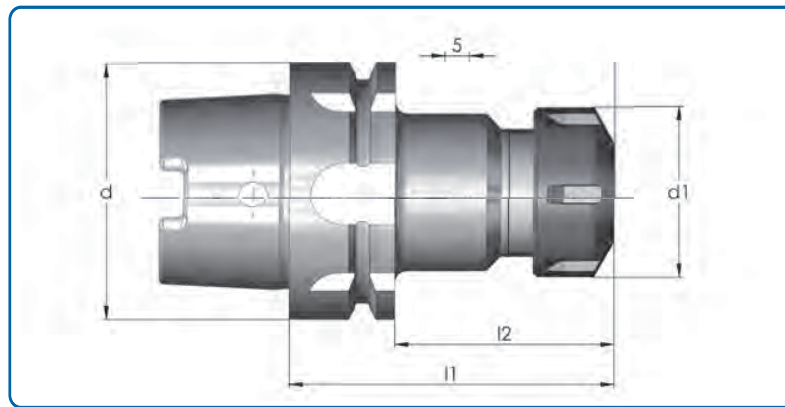
| Code No. | M | d ₁ | d ₂ | l ₁ | l ₂ |
|-------------------|-----|----------------|----------------|----------------|----------------|
| HSK 80A-SEM06-076 | M 6 | 10 | 20 | 76 | 50 |
| HSK 80A-SEM06-101 | M 6 | 10 | 23 | 101 | 75 |
| HSK 80A-SEM08-076 | M 8 | 13,8 | 23 | 76 | 50 |
| HSK 80A-SEM08-101 | M 8 | 13,8 | 25 | 101 | 75 |
| HSK 80A-SEM08-126 | M 8 | 13,8 | 30 | 126 | 100 |
| HSK 80A-SEM10-076 | M10 | 18 | 25 | 76 | 50 |
| HSK 80A-SEM10-101 | M10 | 18 | 30 | 101 | 75 |
| HSK 80A-SEM10-126 | M10 | 18 | 35 | 126 | 100 |
| HSK 80A-SEM12-076 | M12 | 21 | 30 | 76 | 50 |
| HSK 80A-SEM12-101 | M12 | 21 | 35 | 101 | 75 |
| HSK 80A-SEM12-126 | M12 | 21 | 38 | 126 | 100 |
| HSK 80A-SEM16-076 | M16 | 29 | 34 | 76 | 50 |
| HSK 80A-SEM16-101 | M16 | 29 | 35 | 101 | 75 |
| HSK 80A-SEM16-126 | M16 | 29 | 40 | 126 | 100 |
| HSK 80A-SEM16-151 | M16 | 29 | 55 | 151 | 125 |
| HSK100A-SEM08-079 | M8 | 13,8 | 23 | 79 | 50 |
| HSK100A-SEM08-129 | M8 | 13,8 | 30 | 129 | 100 |
| HSK100A-SEM10-079 | M10 | 18 | 25 | 79 | 50 |
| HSK100A-SEM10-129 | M10 | 18 | 35 | 129 | 100 |
| HSK100A-SEM12-079 | M12 | 21 | 30 | 79 | 50 |
| HSK100A-SEM12-129 | M12 | 21 | 38 | 129 | 100 |
| HSK100A-SEM12-154 | M12 | 21 | 47 | 154 | 125 |
| HSK100A-SEM12-179 | M12 | 21 | 52 | 179 | 150 |
| HSK100A-SEM12-229 | M12 | 21 | 55 | 229 | 200 |
| HSK100A-SEM16-079 | M16 | 29 | 34 | 79 | 50 |
| HSK100A-SEM16-129 | M16 | 29 | 40 | 129 | 100 |
| HSK100A-SEM16-179 | M16 | 29 | 45 | 179 | 150 |
| HSK100A-SEM16-229 | M16 | 29 | 58 | 229 | 200 |

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HSK 40A
HSK 50A



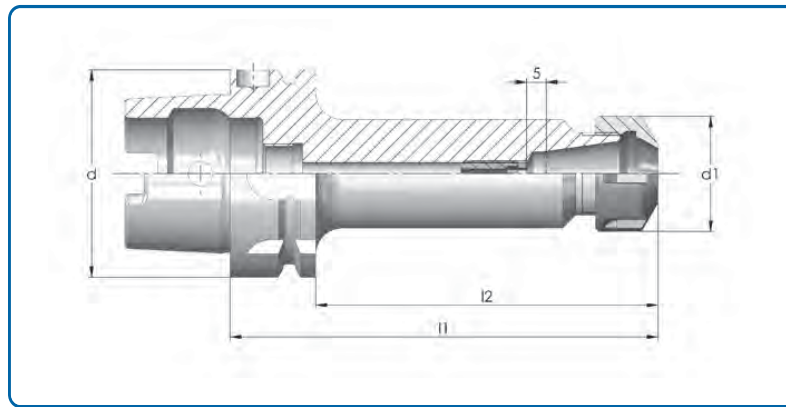
| Code No. | ER Nut | Size | d ₁ | l ₁ | l ₂ |
|-------------------|------------|--------|----------------|----------------|----------------|
| HSK 32A-ERM11-050 | ER 11-mini | 1 - 6 | 16 | 50 | 30 |
| HSK 32A-ERM16-050 | ER 16-mini | 1 - 10 | 22 | 50 | 30 |
| HSK 32A-ERM20-080 | ER 20-mini | 1 - 13 | 28 | 80 | 60 |
| HSK 32A-ERM25-060 | ER 25-mini | 1 - 16 | 35 | 60 | 40 |
| HSK 32A-ERM25-080 | ER 25-mini | 1 - 16 | 35 | 80 | 60 |
| HSK 32A-ERA16-055 | ER 16 | 1 - 10 | 28 | 55 | 35 |
| HSK 32A-ERA16-080 | ER 16 | 1 - 10 | 28 | 80 | 60 |
| HSK 40A-ERM11-040 | ER 11-mini | 1 - 6 | 16 | 40 | 20 |
| HSK 40A-ERM11-080 | ER 11-mini | 1 - 6 | 16 | 80 | 60 |
| HSK 40A-ERM11-100 | ER 16-mini | 1 - 10 | 16 | 100 | 80 |
| HSK 40A-ERM16-080 | ER 20-mini | 1 - 13 | 22 | 80 | 60 |
| HSK 40A-ERM25-054 | ER 25-mini | 1 - 16 | 35 | 54 | 34 |
| HSK 40A-ERM25-080 | ER 25-mini | 1 - 16 | 35 | 80 | 60 |
| HSK 40A-ERA16-054 | ER 16 | 1 - 10 | 28 | 54 | 34 |
| HSK 40A-ERA16-060 | ER 16 | 1 - 10 | 28 | 60 | 40 |
| HSK 40A-ERA16-070 | ER 16 | 1 - 10 | 28 | 70 | 50 |
| HSK 40A-ERA16-080 | ER 16 | 1 - 10 | 28 | 80 | 60 |
| HSK 40A-ERA16-120 | ER 16 | 1 - 10 | 28 | 120 | 100 |
| HSK 40A-ERA25-060 | ER 25 | 1 - 16 | 42 | 60 | 40 |
| HSK 40A-ERA25-070 | ER 25 | 1 - 16 | 42 | 70 | 50 |
| HSK 40A-ERA25-080 | ER 25 | 1 - 16 | 42 | 80 | 60 |
| HSK 40A-ERA25-090 | ER 25 | 1 - 16 | 42 | 90 | 70 |
| HSK 40A-ERA32-063 | ER 32 | 2 - 20 | 50 | 63 | 43 |
| HSK 40A-ERA32-080 | ER 32 | 2 - 20 | 50 | 80 | 60 |
| HSK 40A-ERA32-090 | ER 32 | 2 - 20 | 50 | 90 | 70 |
| HSK 50A-ERM11-060 | ER 11-mini | 1 - 6 | 16 | 60 | 34 |
| HSK 50A-ERM16-060 | ER 16-mini | 1 - 10 | 22 | 60 | 34 |
| HSK 50A-ERA08-060 | ER 8 | 1 - 5 | 12 | 60 | 34 |
| HSK 50A-ERA16-080 | ER 16 | 1 - 10 | 28 | 80 | 54 |
| HSK 50A-ERA16-100 | ER 16 | 1 - 10 | 28 | 100 | 74 |
| HSK 50A-ERA20-100 | ER 20 | 1 - 13 | 34 | 100 | 74 |
| HSK 50A-ERA25-080 | ER 25 | 1 - 16 | 42 | 80 | 54 |
| HSK 50A-ERA25-100 | ER 25 | 1 - 16 | 42 | 100 | 74 |
| HSK 50A-ERA32-100 | ER 32 | 2 - 20 | 50 | 100 | 74 |

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HSK 80A
HSK100A



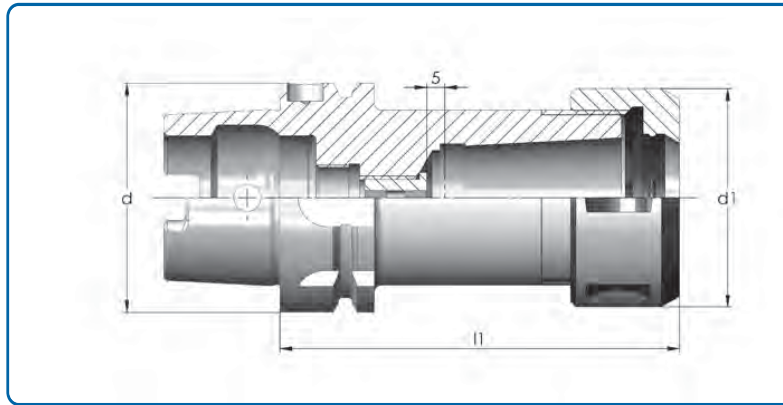
| Code No. | ER Nut | Size | d ₁ | l ₁ | l ₂ |
|-------------------|------------|---------|----------------|----------------|----------------|
| HSK 63A-ERM08-060 | ER 8-mini | 1 - 5 | 12 | 60 | 34 |
| HSK 63A-ERM08-100 | ER 8-mini | 1 - 5 | 12 | 100 | 74 |
| HSK 63A-ERM11-100 | ER 11-mini | 1 - 6 | 16 | 100 | 74 |
| HSK 63A-ERM11-120 | ER 11-mini | 1 - 6 | 16 | 120 | 94 |
| HSK 63A-ERM16-100 | ER 16-mini | 1 - 10 | 22 | 100 | 74 |
| HSK 63A-ERM20-100 | ER 20-mini | 1 - 13 | 28 | 100 | 74 |
| HSK 63A-ERA16-060 | ER 16 | 1 - 10 | 28 | 60 | 54 |
| HSK 63A-ERA16-080 | ER 16 | 1 - 10 | 28 | 80 | 34 |
| HSK 63A-ERA16-100 | ER 16 | 1 - 10 | 28 | 100 | 74 |
| HSK 63A-ERA20-100 | ER 20 | 1 - 13 | 34 | 100 | 74 |
| HSK 63A-ERA25-060 | ER 25 | 1 - 16 | 42 | 60 | 34 |
| HSK 63A-ERA25-070 | ER 25 | 1 - 16 | 42 | 70 | 44 |
| HSK 63A-ERA32-080 | ER 32 | 2 - 20 | 50 | 80 | 54 |
| HSK 63A-ERA40-080 | ER 40 | 3 - 26 | 63 | 80 | 54 |
| HSK 80A-ERA16-100 | ER 16 | 1 - 10 | 28 | 100 | 74 |
| HSK 80A-ERA20-100 | ER 20 | 1 - 13 | 34 | 100 | 74 |
| HSK 80A-ERA25-100 | ER 25 | 1 - 16 | 42 | 100 | 74 |
| HSK 80A-ERA32-100 | ER 32 | 2 - 20 | 50 | 100 | 74 |
| HSK 80A-ERA40-120 | ER 40 | 3 - 26 | 63 | 120 | 94 |
| HSK100A-ERA16-100 | ER 16 | 1 - 10 | 28 | 100 | 71 |
| HSK100A-ERA20-100 | ER 20 | 1 - 13 | 34 | 100 | 71 |
| HSK100A-ERA25-100 | ER 25 | 1 - 16 | 42 | 100 | 71 |
| HSK100A-ERA32-100 | ER 32 | 2 - 20 | 50 | 100 | 71 |
| HSK100A-ERA40-120 | ER 40 | 3 - 26 | 63 | 120 | 91 |
| HSK100A-ERA50-100 | ER 50 | 10 - 34 | 78 | 100 | 71 |
| HSK100A-ERA50-120 | ER 50 | 10 - 34 | 78 | 120 | 91 |

HSK 63A
 HSK 80A
 HSK100A



| Code No. | d ₁ | l ₁ | l ₂ |
|-------------------|----------------|----------------|----------------|
| HSK 63A-ERM25-160 | 35 | 160 | 134 |
| HSK 63A-ERM11-160 | 16 | 160 | 134 |
| HSK 63A-ERM16-160 | 22 | 160 | 134 |
| HSK 63A-ERA16-160 | 28 | 160 | 134 |
| HSK 63A-ERA20-160 | 34 | 160 | 134 |
| HSK 63A-ERA32-160 | 50 | 160 | 134 |
| HSK 63A-ERA25-160 | 42 | 160 | 134 |
| HSK 63A-ERA40-160 | 63 | 160 | 134 |
| | | | |
| HSK 63A-ERA16-200 | 28 | 200 | 174 |
| HSK 63A-ERA32-200 | 50 | 200 | 174 |
| HSK 63A-ERA40-200 | 63 | 200 | 174 |
| | | | |
| HSK 80A-ERA16-160 | 28 | 160 | 134 |
| HSK 80A-ERA25-160 | 42 | 160 | 134 |
| HSK 80A-ERA32-160 | 50 | 160 | 134 |
| | | | |
| HSK100A-ERA16-160 | 28 | 160 | 131 |
| HSK100A-ERA20-160 | 34 | 160 | 131 |
| HSK100A-ERA32-160 | 50 | 160 | 131 |
| HSK100A-ERA40-160 | 63 | 160 | 131 |
| HSK100A-ERA25-160 | 42 | 160 | 131 |
| | | | |
| HSK100A-ERA32-200 | 50 | 200 | 171 |
| HSK100A-ERA40-200 | 63 | 200 | 171 |
| HSK100A-ERA25-200 | 42 | 200 | 171 |
| HSK100A-ERA16-200 | 28 | 200 | 171 |
| HSK100A-ERA32-400 | 50 | 400 | 371 |

HSK 50A
 HSK 63A
 HSK 80A
 HSK100A

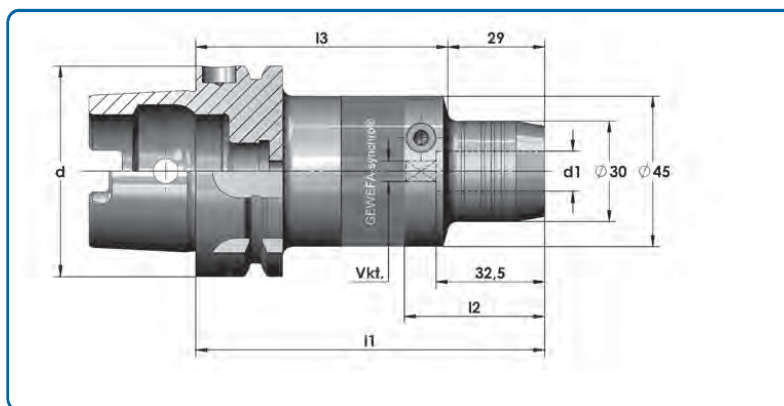


Admissible concentricity deviation of the external taper in relation to the internal taper = 0.008 mm.

| Code No. | Chucking range | d ₁ | l ₁ | |
|-------------------|----------------|----------------|----------------|--|
| HSK 50A-OZA16-090 | 2 -16 | 43 | 90 | |
| HSK 50A-OZA25-110 | 2 -25 | 60 | 110 | |
| HSK 63A-OZA16-100 | 2 -16 | 43 | 100 | |
| HSK 63A-OZA25-110 | 2 -25 | 60 | 110 | |
| HSK 63A-OZA25-160 | 2 -25 | 60 | 160 | |
| HSK 63A-OZA32-130 | 3 -32 | 72 | 130 | |
| HSK 63A-OZA40-160 | 6 -40 | 85 | 160 | |
| HSK 80A-OZA16-100 | 2 -16 | 43 | 100 | |
| HSK 80A-OZA25-120 | 2 -25 | 60 | 120 | |
| HSK 80A-OZA32-130 | 3 -32 | 72 | 130 | |
| HSK 80A-OZA40-165 | 6 -40 | 85 | 165 | |
| HSK100A-OZA16-100 | 2 -16 | 43 | 100 | |
| HSK100A-OZA25-120 | 2 -25 | 60 | 120 | |
| HSK100A-OZA32-130 | 3 -32 | 72 | 130 | |
| HSK100A-OZA40-165 | 6 -40 | 85 | 165 | |

| Spare parts | Tightening nuts | Key insert | Dynamometric key | Adjusting screws | wrenches | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|------------|------------------|------------------|----------|---------|-------|---------|-------|---------|-------|---------|-------|---|----------|----------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|--|----------|---------|---|----------|----------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---|----------|----------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| | <table border="1"> <thead> <tr> <th>Code No.</th> <th>d₁</th> </tr> </thead> <tbody> <tr><td>029.001</td><td>2 -16</td></tr> <tr><td>029.002</td><td>2 -25</td></tr> <tr><td>029.003</td><td>3 -32</td></tr> <tr><td>029.004</td><td>6 -40</td></tr> <tr><td>029.005</td><td>8 -50</td></tr> </tbody> </table> | Code No. | d ₁ | 029.001 | 2 -16 | 029.002 | 2 -25 | 029.003 | 3 -32 | 029.004 | 6 -40 | 029.005 | 8 -50 | <table border="1"> <thead> <tr> <th>Code No.</th> <th>d₁</th> </tr> </thead> <tbody> <tr><td>029.251</td><td>2 -16</td></tr> <tr><td>029.252</td><td>2 -25</td></tr> <tr><td>029.253</td><td>3 -32</td></tr> <tr><td>029.254</td><td>6 -40</td></tr> <tr><td>029.255</td><td>8 -50</td></tr> </tbody> </table> | Code No. | d ₁ | 029.251 | 2 -16 | 029.252 | 2 -25 | 029.253 | 3 -32 | 029.254 | 6 -40 | 029.255 | 8 -50 | <table border="1"> <thead> <tr> <th>Code No.</th> </tr> </thead> <tbody> <tr><td>029.701</td></tr> </tbody> </table> | Code No. | 029.701 | <table border="1"> <thead> <tr> <th>Code No.</th> <th>d₁</th> </tr> </thead> <tbody> <tr><td>032.805</td><td>2 -16</td></tr> <tr><td>032.805</td><td>2 -25</td></tr> <tr><td>032.805</td><td>3 -32</td></tr> <tr><td>032.806</td><td>6 -40</td></tr> <tr><td>032.806</td><td>8 -50</td></tr> </tbody> </table> | Code No. | d ₁ | 032.805 | 2 -16 | 032.805 | 2 -25 | 032.805 | 3 -32 | 032.806 | 6 -40 | 032.806 | 8 -50 | <table border="1"> <thead> <tr> <th>Code No.</th> <th>d₁</th> </tr> </thead> <tbody> <tr><td>029.201</td><td>2 -16</td></tr> <tr><td>029.202</td><td>2 -25</td></tr> <tr><td>029.203</td><td>3 -32</td></tr> <tr><td>029.204</td><td>6 -40</td></tr> <tr><td>029.205</td><td>8 -50</td></tr> </tbody> </table> | Code No. | d ₁ | 029.201 | 2 -16 | 029.202 | 2 -25 | 029.203 | 3 -32 | 029.204 | 6 -40 | 029.205 |
| Code No. | d ₁ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.001 | 2 -16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.002 | 2 -25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.003 | 3 -32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.004 | 6 -40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.005 | 8 -50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | d ₁ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.251 | 2 -16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.252 | 2 -25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.253 | 3 -32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.254 | 6 -40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.255 | 8 -50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.701 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | d ₁ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | 2 -16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | 2 -25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | 3 -32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.806 | 6 -40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.806 | 8 -50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | d ₁ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.201 | 2 -16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.202 | 2 -25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.203 | 3 -32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.204 | 6 -40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.205 | 8 -50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

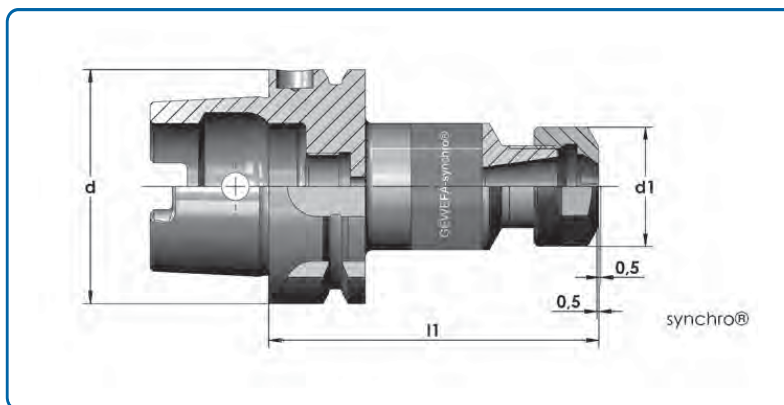
HSK 63A
HSK 80A
HSK100A



| Code No. | d ₁ ø | Square □ | l ₁ | l ₂ | l ₃ | |
|-------------------|---------------------|-------------|----------------|----------------|----------------|--|
| HSK 63A-SYH06-103 | 6 | 4,9 | 103,5 | 40,5 | 48,5 | |
| HSK 63A-SYH07-103 | 7 | 5,5 | 103,5 | 40,5 | 48,5 | |
| HSK 63A-SYH08-103 | 8 | 6,2 | 103,5 | 41,5 | 48,5 | |
| HSK 63A-SYH09-103 | 9 | 7,0 | 103,5 | 42,5 | 48,5 | |
| HSK 63A-SYH10-103 | 10 | 8,0 | 103,5 | 43,5 | 48,5 | |
| HSK 63A-SYH11-103 | 11 | 9,0 | 103,5 | 44,5 | 48,5 | |
| HSK 63A-SYH12-103 | 12 | 9,0 | 103,5 | 44,5 | 48,5 | |
| | | | | | | |
| HSK 80A-SYH06-108 | 6 | 4,9 | 108 | 40,5 | 53 | |
| HSK 80A-SYH07-108 | 7 | 5,5 | 108 | 40,5 | 53 | |
| HSK 80A-SYH08-108 | 8 | 6,2 | 108 | 41,5 | 53 | |
| HSK 80A-SYH09-108 | 9 | 7,0 | 108 | 42,5 | 53 | |
| HSK 80A-SYH10-108 | 10 | 8,0 | 108 | 43,5 | 53 | |
| HSK 80A-SYH11-108 | 11 | 9,0 | 108 | 44,5 | 53 | |
| HSK 80A-SYH12-108 | 12 | 9,0 | 108 | 44,5 | 53 | |
| | | | | | | |
| HSK100A-SYH06-110 | 6 | 4,9 | 110 | 40,5 | 52 | |
| HSK100A-SYH07-110 | 7 | 5,5 | 110 | 40,5 | 52 | |
| HSK100A-SYH08-110 | 8 | 6,2 | 110 | 41,5 | 52 | |
| HSK100A-SYH09-110 | 9 | 7,0 | 110 | 42,5 | 52 | |
| HSK100A-SYH10-110 | 10 | 8,0 | 110 | 43,5 | 52 | |
| HSK100A-SYH11-110 | 11 | 9,0 | 110 | 44,5 | 52 | |
| HSK100A-SYH12-110 | 12 | 9,0 | 110 | 44,5 | 52 | |
| | | | | | | |
| HSK100A-SYH06-130 | 6 | 4,9 | 130 | 40,5 | 72 | |
| HSK100A-SYH09-130 | 9 | 7,0 | 130 | 42,5 | 72 | |

For thread cutting with compensation of the spindle backlash by minimum tension / pressure compensation

HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A

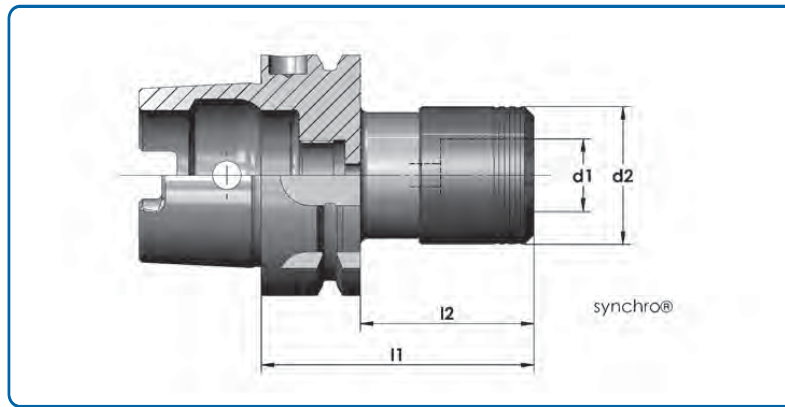


| Code No. | Tap sizes | Tap Size | Collet Size | d ₁ | l ₁ |
|--------------------|-----------|----------|-------------|----------------|----------------|
| HSK 40A-SER20-093 | M 3 - M12 | 3,5 - 10 | ER20 | 34 | 93 |
| HSK 50A-SER20-088 | M 3 - M12 | 3,5 - 10 | ER20 | 34 | 88 |
| HSK 50A-SER32-116 | M 4 - M27 | 3,5 - 16 | ER32 | 50 | 116 |
| HSK 63A-SER16-100m | M 3 - M10 | 1 - 10 | ER16-mini | 22 | 100 |
| HSK 63A-SER16-089 | M 3 - M12 | 1 - 10 | ER16 | 28 | 89 |
| HSK 63A-SER20-090 | M 3 - M16 | 3,5 - 12 | ER20 | 34 | 90 |
| HSK 63A-SER25-094 | M 3 - M20 | 3,5 - 16 | ER25 | 42 | 94 |
| HSK 63A-SER32-105 | M 4 - M27 | 3,5 - 20 | ER32 | 50 | 105 |
| HSK 63A-SER40-133 | M 4 - M33 | 7 - 20 | ER40 | 63 | 133,5 |
| HSK 80A-SER20-100 | M 3 - M16 | 3,5 - 10 | ER20 | 34 | 100 |
| HSK 80A-SER25-105 | M 3 - M20 | 3,5 - 16 | ER25 | 42 | 105 |
| HSK 80A-SER32-110 | M 4 - M27 | 3,5 - 16 | ER32 | 50 | 110,5 |
| HSK 80A-SER40-131 | M 4 - M33 | 7 - 20 | ER40 | 63 | 131 |
| HSK100A-SER16-095 | M 3 - M10 | 1 - 10 | ER16 | 28 | 95 |
| HSK100A-SER20-102 | M 3 - M16 | 3,5 - 10 | ER20 | 34 | 102 |
| HSK100A-SER32-110 | M 4 - M27 | 3,5 - 16 | ER32 | 50 | 110 |
| HSK100A-SER40-133 | M 4 - M33 | 7 - 20 | ER40 | 63 | 133 |
| HSK100A-SER50-148 | M10 - M42 | 10 - 34 | ER50 | 78 | 148 |

Tapping collet chuck ER synchro, with coolant feed.

Compensation of spindle backlash by minimal pull / pressure compensation Tapping collet ER see page 30% increase in tool life of the tap

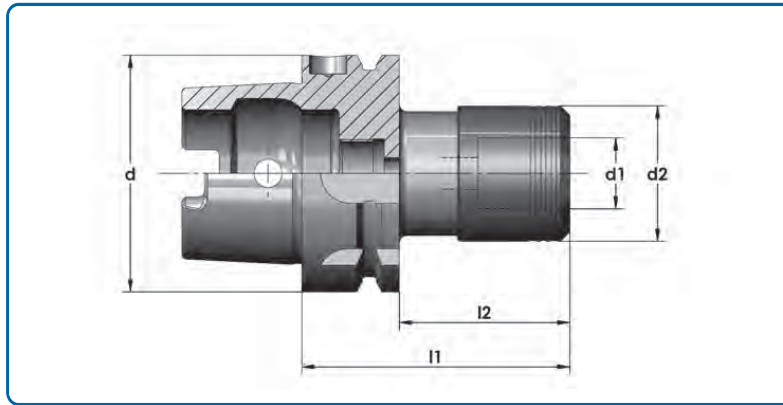
HSK 32A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A



| Code No. | Tap sizes | Size | d ₁ | d ₂ | l ₁ | l ₂ |
|-------------------|-----------|------|----------------|----------------|----------------|----------------|
| HSK 32A-STC01-72 | M 3 - M12 | 1 | 19 | 36 | 72 | 52 |
| HSK 50A-STC01-72 | M 3 - M12 | 1 | 19 | 36 | 72 | 46 |
| HSK 50A-STC01-91 | M 8 - M20 | 2 | 31 | 53 | 91 | 64 |
| HSK 63A-STC01-072 | M 3 - M12 | 1 | 19 | 36 | 72 | 46 |
| HSK 63A-STC01-080 | M 3 - M12 | 1 | 19 | 36 | 80 | 54 |
| HSK 63A-STC01-120 | M 3 - M12 | 1 | 19 | 36 | 120 | 94 |
| HSK 63A-STC01-152 | M 3 - M12 | 1 | 19 | 36 | 152 | 126 |
| HSK 63A-STC01-180 | M 3 - M12 | 1 | 19 | 36 | 180 | 154 |
| HSK 63A-STC02-089 | M 8 - M20 | 2 | 31 | 53 | 89 | 63 |
| HSK 63A-STC02-138 | M 8 - M20 | 2 | 31 | 53 | 138 | 112 |
| HSK 63A-STC03-121 | M14 - M33 | 3 | 48 | 78 | 121 | 95 |
| HSK 80A-STC01-070 | M 3 - M12 | 1 | 19 | 36 | 70 | 44 |
| HSK 80A-STC01-080 | M 3 - M12 | 1 | 19 | 36 | 80 | 54 |
| HSK 80A-STC02-092 | M 8 - M20 | 2 | 31 | 53 | 92 | 66 |
| HSK 80A-STC03-125 | M14 - M33 | 3 | 48 | 78 | 125 | 99 |
| HSK100A-STC01-075 | M 3 - M12 | 1 | 19 | 36 | 75 | 43 |
| HSK100A-STC01-160 | M 3 - M12 | 1 | 19 | 36 | 160 | 131 |
| HSK100A-STC01-250 | M 3 - M12 | 1 | 19 | 36 | 250 | 221 |
| HSK100A-STC02-094 | M 8 - M20 | 2 | 31 | 53 | 94 | 65 |
| HSK100A-STC02-160 | M 8 - M20 | 2 | 31 | 53 | 160 | 131 |
| HSK100A-STC03-127 | M14 - M33 | 3 | 48 | 78 | 127 | 98 |
| HSK100A-STC03-160 | M14 - M33 | 3 | 48 | 78 | 160 | 131 |
| HSK100A-STC04-180 | M22 - M48 | 4 | 60 | 96 | 180 | 130 |

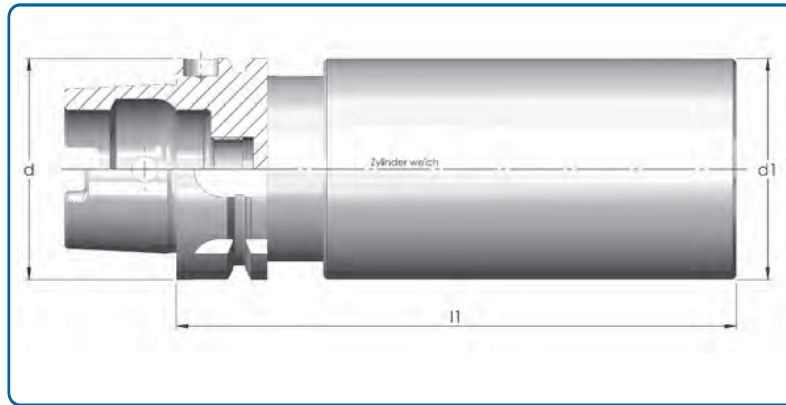
Tap Adaptor and synchro, with coolant feed.

HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A



| Code No. | Tap sizes | Size | d ₁ | d ₂ | l ₁ | l ₂ |
|-------------------|-------------|------|----------------|----------------|----------------|----------------|
| HSK 40A-QTC01-110 | M 3 - M 12 | 1 | 19 | 36 | 110 | 90 |
| HSK 50A-QTC01-110 | M 3 - M 12 | 1 | 19 | 36 | 110 | 84 |
| HSK 50A-QTC02-154 | M 8 - M 20 | 2 | 31 | 53 | 154 | 128 |
| HSK 63A-QTC01-110 | M 3 - M 12 | 1 | 19 | 36 | 110 | 84 |
| HSK 63A-QTC02-156 | M 8 - M 20 | 2 | 31 | 53 | 156 | 130 |
| HSK 63A-QTC03-228 | M 14 - M 33 | 3 | 48 | 78 | 228,5 | 202 |
| HSK 63A-QTC04-272 | M 33 - M 48 | 4 | 60 | 96 | 272 | 246 |
| HSK 80A-QTC01-114 | M 3 - M 12 | 1 | 19 | 36 | 114 | 85 |
| HSK 80A-QTC02-161 | M 8 - M 20 | 2 | 31 | 53 | 161 | 131 |
| HSK 80A-QTC03-243 | M 14 - M 33 | 3 | 48 | 78 | 243 | 214 |
| HSK100A-QTC01-110 | M 3 - M 12 | 1 | 19 | 36 | 110 | 91 |
| HSK100A-QTC02-163 | M 8 - M 20 | 2 | 31 | 53 | 163 | 134 |
| HSK100A-QTC03-234 | M 14 - M 33 | 3 | 48 | 78 | 234 | 205 |
| HSK100A-QTC04-272 | M 22 - M 48 | 4 | 60 | 96 | 272 | 246 |

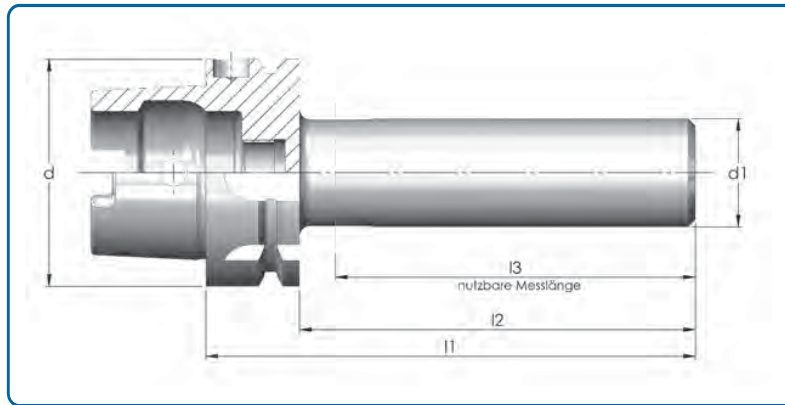
HSK 32A
 HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A



| Code No. | d ₁ | l ₁ |
|--------------------|----------------|----------------|
| HSK 32A-BLN032-100 | 32 | 100 |
| HSK 32A-BLN032-145 | 32 | 145 |
| | | |
| HSK 40A-BLN044-160 | 44 | 160 |
| HSK 40A-BLN040-400 | 40 | 400 |
| | | |
| HSK 50A-BLN050-125 | 50 | 125 |
| HSK 50A-BLN050-500 | 50 | 500 |
| HSK 50A-BLN053-150 | 53 | 150 |
| HSK 50A-BLN053-200 | 53 | 200 |
| HSK 50A-BLN065-130 | 65 | 130 |
| HSK 50A-BLN065-220 | 65 | 220 |
| HSK 50A-BLN070-110 | 70 | 110 |
| HSK 50A-BLN075-070 | 75 | 70 |
| HSK 50A-BLN080-070 | 80 | 70 |
| HSK 50A-BLN082-072 | 82 | 72 |
| HSK 50A-BLN090-200 | 90 | 200 |
| | | |
| HSK 63A-BLN060-260 | 60 | 260 |
| HSK 63A-BLN063-090 | 63 | 90 |
| HSK 63A-BLN063-160 | 63 | 160 |
| HSK 63A-BLN063-200 | 63 | 200 |
| HSK 63A-BLN063-250 | 63 | 250 |
| HSK 63A-BLN063-280 | 63 | 280 |
| HSK 63A-BLN063-350 | 63 | 350 |
| HSK 63A-BLN066-160 | 66 | 160 |
| HSK 63A-BLN068-125 | 68 | 125 |
| HSK 63A-BLN068-160 | 68 | 160 |
| HSK 63A-BLN070-135 | 70 | 135 |
| HSK 63A-BLN075-330 | 75 | 330 |
| HSK 63A-BLN080-150 | 80 | 150 |
| HSK 63A-BLN080-300 | 80 | 300 |
| HSK 63A-BLN080-250 | 80.5 | 250 |
| HSK 63A-BLN082-240 | 82 | 240 |
| HSK 63A-BLN090-300 | 90 | 300 |
| HSK 63A-BLN095-185 | 95 | 185 |
| HSK 63A-BLN095-240 | 95 | 240 |
| HSK 63A-BLN100-120 | 100 | 120 |
| HSK 63A-BLN100-150 | 100 | 150 |
| HSK 63A-BLN100-200 | 100 | 200 |
| HSK 63A-BLN100-220 | 100 | 220 |
| HSK 63A-BLN110-180 | 110 | 180 |
| HSK 63A-BLN110-250 | 110 | 250 |
| HSK 63A-BLN115-115 | 115 | 115 |
| HSK 63A-BLN115-250 | 115 | 250 |

| Code No. | d ₁ | l ₁ |
|--------------------|----------------|----------------|
| HSK 80A-BLN125-060 | 125 | 60 |
| HSK 80A-BLN125-200 | 125 | 200 |
| HSK 80A-BLN145-060 | 145 | 200 |
| HSK 80A-BLN150-180 | 150 | 180 |
| HSK 80A-BLN150-250 | 150 | 250 |
| HSK 80A-BLN150-260 | 150 | 260 |
| HSK 80A-BLN160-200 | 160 | 200 |
| HSK 80A-BLN255-070 | 255 | 70 |
| HSK 80A-BLN080-200 | 80 | 200 |
| HSK 80A-BLN080-250 | 80 | 250 |
| HSK 80A-BLN083-250 | 83 | 250 |
| HSK 80A-BLN100-200 | 100 | 200 |
| HSK 80A-BLN100-425 | 100 | 425 |
| HSK 80A-BLN130-200 | 130 | 200 |
| HSK 80A-BLN130-250 | 130 | 250 |
| HSK 80A-BLN150-150 | 150 | 150 |
| HSK 80A-BLN200-195 | 200 | 195 |
| | | |
| HSK100A-BLN062-119 | 62 | 119 |
| HSK100A-BLN095-300 | 95 | 300 |
| HSK100A-BLN100-160 | 100 | 160 |
| HSK100A-BLN100-200 | 100 | 200 |
| HSK100A-BLN100-250 | 100 | 250 |
| HSK100A-BLN100-315 | 100 | 315 |
| HSK100A-BLN100-330 | 100 | 330 |
| HSK100A-BLN100-350 | 100 | 350 |
| HSK100A-BLN100-400 | 100 | 400 |
| HSK100A-BLN100-450 | 100 | 450 |
| HSK100A-BLN100-500 | 100 | 500 |
| HSK100A-BLN110-300 | 110 | 300 |
| HSK100A-BLN110-600 | 110 | 600 |
| HSK100A-BLN115-600 | 115 | 600 |
| HSK100A-BLN120-230 | 120 | 230 |
| HSK100A-BLN126-250 | 126 | 250 |
| HSK100A-BLN126-300 | 126 | 300 |
| HSK100A-BLN130-200 | 130 | 200 |
| HSK100A-BLN160-115 | 160 | 115 |
| HSK100A-BLN160-155 | 160 | 155 |
| HSK100A-BLN160-200 | 160 | 200 |
| HSK100A-BLN160-235 | 160 | 235 |
| | | |
| HSK125A-BLN100-100 | 100 | 100 |
| HSK125A-BLN100-250 | 100 | 250 |
| HSK125A-BLN120-350 | 120 | 350 |

HSK 32A
 HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A
 HSK125A



Admissible concentricity deviation from hole = 0,003 mm.

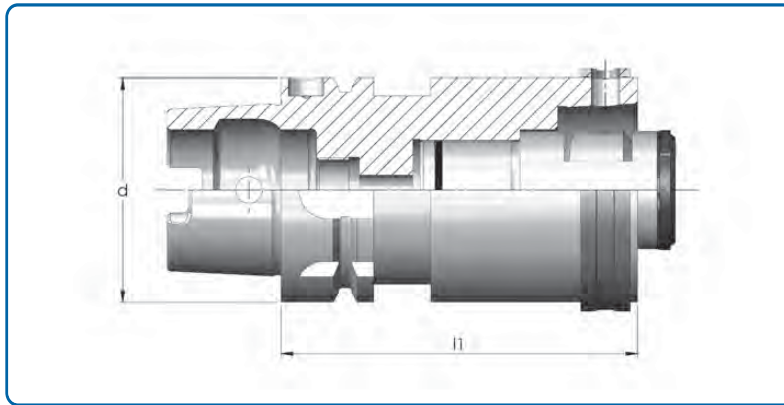
| Code No. | d_1 | l_1 | l_2 | l_3 usable length |
|-------------------|-------|-------|-------|----------------------------------|
| HSK 32A-TBG25-200 | 25 | 200 | 180 | 170 |
| HSK 40A-TBG25-200 | 25 | 200 | 180 | 170 |
| HSK 40A-TBG40-300 | 40 | 300 | 280 | 270 |
| HSK 50A-TBG30-120 | 30 | 120 | 94 | 75 |
| HSK 50A-TBG30-150 | 30 | 150 | 124 | 124 - with ball $\varnothing 30$ |
| HSK 50A-TBG32-246 | 32 | 246 | 220 | 200 |
| HSK 50A-TBG32-346 | 32 | 346 | 320 | 300 |
| HSK 50A-TBG40-326 | 40 | 326 | 300 | 280 |
| HSK 63A-TBG25-200 | 25 | 200 | 174 | 150 |
| HSK 63A-TBG30-130 | 30 | 130 | 110 | 90 |
| HSK 63A-TBG30-150 | 30 | 150 | 124 | 124 - with ball $\varnothing 30$ |
| HSK 63A-TBG30-176 | 30 | 176 | 150 | 130 |
| HSK 63A-TBG30-200 | 30 | 200 | 174 | 174 - with ball $\varnothing 30$ |
| HSK 63A-TBG40-200 | 40 | 200 | 174 | 150 |
| HSK 63A-TBG40-246 | 40 | 246 | 220 | 200 |
| HSK 63A-TBG40-250 | 40 | 250 | 224 | 200 |
| HSK 63A-TBG40-346 | 40 | 346 | 320 | 300 |
| HSK 63A-TBG40-646 | 40 | 646 | 620 | 600 |
| HSK 63A-TBG50-050 | 50 | 50 | - | 24 |
| HSK 63A-TBG50-521 | 50 | 521 | 495 | 475 |
| HSK 80A-TBG40-346 | 40 | 346 | 320 | 300 |
| HSK100A-TBG30-150 | 30 | 150 | 121 | 100 - with ball $\varnothing 30$ |
| HSK100A-TBG30-220 | 30 | 220 | 191 | 150 |
| HSK100A-TBG40-329 | 40 | 329 | 300 | 50 |
| HSK100A-TBG50-100 | 50 | 100 | 71 | 280 |
| HSK100A-TBG50-150 | 50 | 150 | 121 | 121 - with ball $\varnothing 50$ |
| HSK100A-TBG50-349 | 50 | 349 | 320 | 300 |
| HSK100A-TBG60-329 | 60 | 329 | 300 | 280 |
| HSK100A-TBG60-549 | 60 | 549 | 520 | 500 |
| HSK125A-TBG40-349 | 40 | 349 | 320 | 300 |
| HSK125A-TBG50-160 | 50 | 160 | 131 | 105 |
| HSK125A-TBG50-300 | 50 | 300 | 271 | 245 |

Wooden case for HSK control mandrels for proper storage

| Code No. | HSK-d |
|----------|-----------------------|
| 016.010 | HSK-A 32, 40, 50, 63, |
| 016.011 | 80 HSK-A100,125 |



HSK 32A
 HSK 40A
 HSK 50A
 HSK 63A
 HSK 80A
 HSK100A



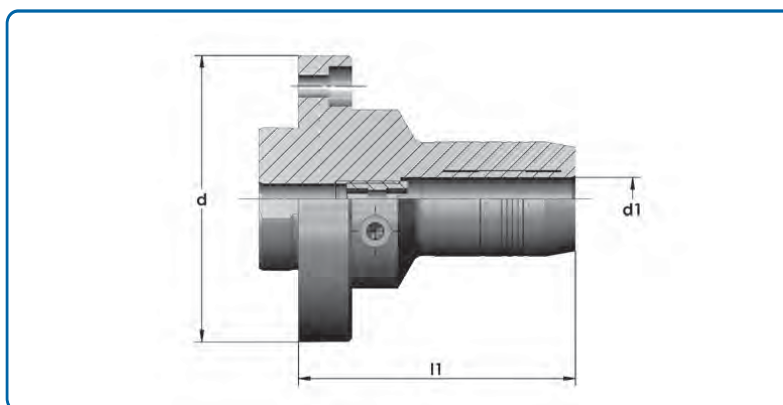
Extension

| Code No. | | l_1 |
|--------------------|-----------------|-------|
| HSK 32A-HSK032-055 | HSK-A 32 x 32 | 55 |
| HSK 32A-HSK032-070 | HSK-A 32 x 32 | 70 |
| HSK 40A-HSK040-060 | HSK-A 40 x 40 | 60 |
| HSK 40A-HSK040-080 | HSK-A 40 x 40 | 80 |
| HSK 50A-HSK050-080 | HSK-A 50 x 50 | 80 |
| HSK 50A-HSK050-100 | HSK-A 50 x 50 | 100 |
| HSK 63A-HSK063-080 | HSK-A 63 x 63 | 80 |
| HSK 63A-HSK063-090 | HSK-A 63 x 63 | 90 |
| HSK 63A-HSK063-100 | HSK-A 63 x 63 | 100 |
| HSK 63A-HSK063-120 | HSK-A 63 x 63 | 120 |
| HSK 63A-HSK063-160 | HSK-A 63 x 63 | 160 |
| HSK 63A-HSK063-200 | HSK-A 63 x 63 | 200 |
| HSK 80A-HSK080-100 | HSK-A 80 x 80 | 100 |
| HSK 80A-HSK080-120 | HSK-A 80 x 80 | 120 |
| HSK 80A-HSK080-160 | HSK-A 80 x 80 | 160 |
| HSK100A-HSK100-115 | HSK-A 100 x 100 | 115 |
| HSK100A-HSK100-140 | HSK-A 100 x 100 | 140 |
| HSK100A-HSK100-160 | HSK-A 100 x 100 | 160 |
| HSK100A-HSK100-200 | HSK-A 100 x 100 | 200 |

Reducers

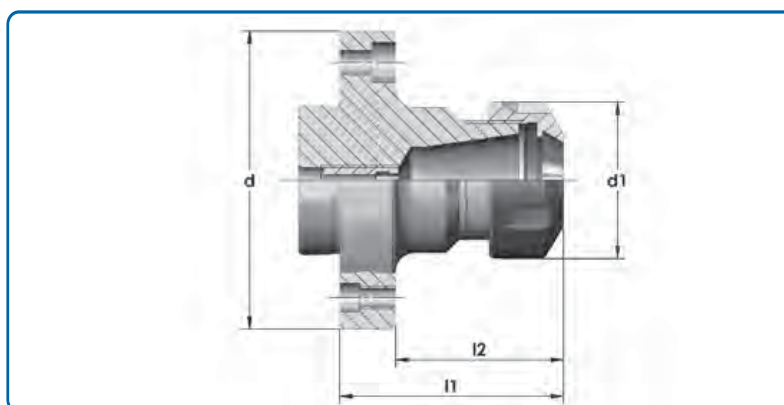
| Code No. | | l_1 |
|--------------------|----------------------|-------|
| HSK 40A-HSK032-060 | HSK-A 40 x 32 | 60 |
| HSK 50A-HSK032-050 | HSK-A 50 x 32 | 50 |
| HSK 50A-HSK040-060 | HSK-A 50 x 40 | 60 |
| HSK 50A-HSK040-070 | HSK-A 50 x 40 | 70 |
| HSK 63A-HSK025-055 | HSK-A 63 x 25 | 55 |
| HSK 63A-HSK032-070 | HSK-A 63 x 32 | 70 |
| HSK 63A-HSK040-080 | HSK-A 63 x 40 | 80 |
| HSK 63A-HSK050-080 | HSK-A 63 x 50 | 80 |
| HSK 80A-HSK032-075 | HSK-A 80 x 32 | 75 |
| HSK 80A-HSK040-080 | HSK-A 80 x 40 | 80 |
| HSK 80A-HSK050-080 | HSK-A 80 x 50 | 80 |
| HSK 80A-HSK063-090 | HSK-A 80 x 63 | 90 |
| HSK100A-HSK040-070 | HSK-A 100 x 40 | 70 |
| HSK100A-HSK050-080 | HSK-A 100 x 50 | 80 |
| HSK100A-HSK063-100 | HSK-A 100 x 63 | 100 |
| HSK100A-HSK080-100 | HSK-A 100 x 80 | 100 |
| HSK100A-HSK063-070 | HSK-A 100 x 63 | 70 |
| HSK100A-HSK050-200 | HSK-A 100 x 50 | 200 |
| HSK100A-HSK063-775 | HSK-A 100 x 63 | 775 |
| HSK 50A-HSK025-070 | HSK-A 50 x HSK-E 25 | 70 |
| HSK 50A-HSK032-070 | HSK-A 50 x HSK-E 32 | 70 |
| HSK 50A-HSK040-080 | HSK-A 50 x HSK-E 40 | 80 |
| HSK 50A-HSK050-100 | HSK-A 50 x HSK-E 50 | 100 |
| HSK 63A-HSK025-065 | HSK-A 63 x HSK-E 25 | 65 |
| HSK 63A-HSK032-070 | HSK-A 63 x HSK-E 32 | 70 |
| HSK 63A-HSK040-085 | HSK-A 63 x HSK-E 40 | 85 |
| HSK 63A-HSK050-095 | HSK-A 63 x HSK-E 50 | 95 |
| HSK 80A-HSK050-080 | HSK-A 80 x HSK-E 50 | 80 |
| HSK100A-HSK032-070 | HSK-A 100 x HSK-E 32 | 70 |
| HSK100A-HSK040-090 | HSK-A 100 x HSK-E 40 | 90 |
| HSK100A-HSK063-125 | HSK-A 100 x HSK-E 63 | 125 |

| Spare parts | HSK - Draw-in collets | | Covering rings | | | |
|-------------|-----------------------|---------|----------------|--------------------|----------------|---|
| | | | | | | |
| | Code No. | HSK | Code No. | HSK-d ₁ | d ₂ | B |
| 031.001 | 32 | 031.010 | 32 | 36 | 9 | |
| 031.001 | 40 | 031.010 | 40 | 45 | 9 | |
| 031.001 | 50 | 031.010 | 50 | 55 | 11 | |
| 031.001 | 63 | 031.010 | 63 | 70 | 14 | |
| 031.001 | 80 | 031.010 | 80 | 87 | 14 | |
| 031.001 | 100 | 031.010 | 100 | 110 | 18 | |

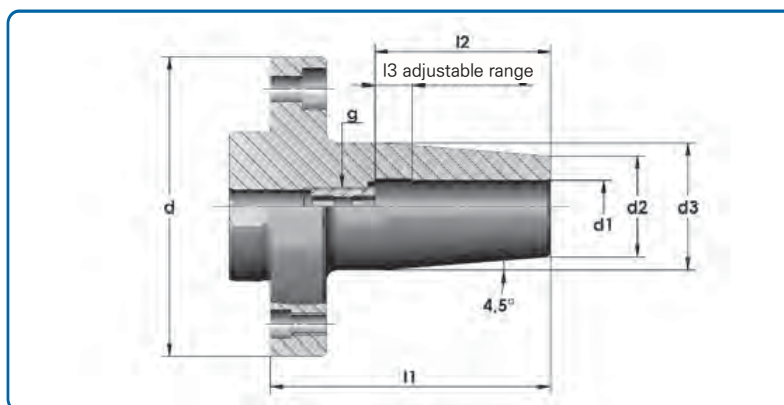


| Code No. | d | d ₁ | l ₁ | |
|------------------|-----|----------------|----------------|--|
| RAM 70-HCA16-050 | 70 | 16 | 50 | |
| RAM 80-HCA12-078 | 80 | 12 | 77,5 | |
| RAM 80-HCA16-083 | 80 | 16 | 82,5 | |
| RAM 80-HCA20-083 | 80 | 20 | 82,5 | |
| RAM 80-HCA25-083 | 80 | 25 | 90 | |
| RAM100-HCA16-090 | 100 | 12 | 90 | |
| RAM100-HCA25-100 | 100 | 25 | 100 | |
| RAM100-HCA32-103 | 100 | 32 | 103 | |
| RAM117-HCA32-103 | 117 | 32 | 103 | |

Radial adjustable ER Collet Chuck

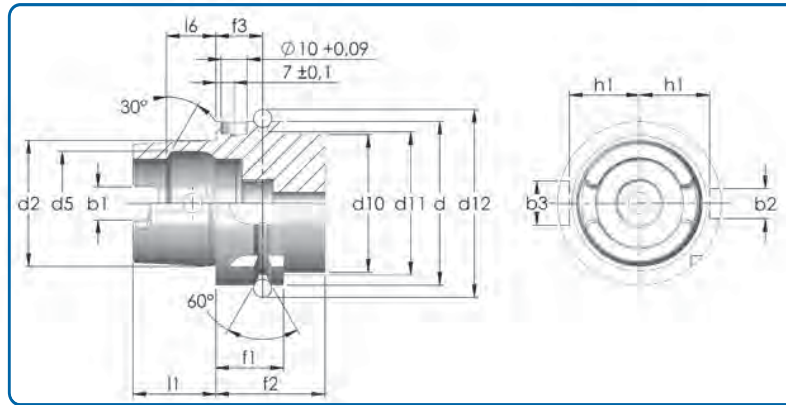


| Code No. | d | d ₁ | l ₁ | l ₂ | |
|------------------|-----|----------------|----------------|----------------|--|
| RAM080-ERA25-060 | 80 | 42 | 60 | 45 | |
| RAM080-ERA32-060 | 80 | 50 | 60 | 45 | |
| RAM100-ERA40-080 | 100 | 63 | 80 | 56 | |
| RAM100-ERA50-100 | 100 | 78 | 100 | 76 | |



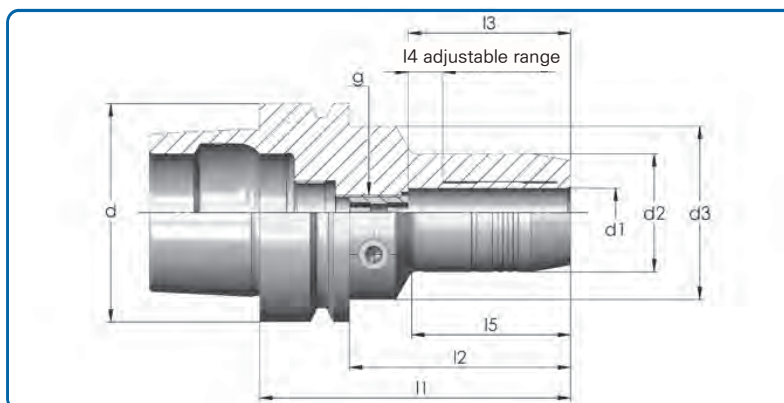
| Code No. | d | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|------------------|-----|----------------|----------------|----------------|----------------|----------------|----------------|---------|
| RAM 60-SFD06-070 | 60 | 6 | 21 | 27 | 70 | 36 | 10 | M5 |
| RAM 60-SFD08-070 | 60 | 8 | 21 | 27 | 70 | 36 | 10 | M6 |
| RAM 60-SFD10-070 | 60 | 10 | 24 | 32 | 70 | 42 | 10 | M8 x 1 |
| RAM 60-SFD12-070 | 60 | 12 | 24 | 32 | 70 | 47 | 10 | M10 x 1 |
| RAM 60-SFD14-070 | 60 | 14 | 27 | 34 | 70 | 47 | 10 | M10 x 1 |
| RAM 70-SFD14-075 | 70 | 14 | 27 | 34 | 75 | 47 | 10 | M10 x 1 |
| RAM 70-SFD16-075 | 70 | 16 | 27 | 34 | 75 | 50 | 10 | M12 x 1 |
| RAM 70-SFD16-175 | 70 | 16 | 27 | 34 | 175 | 50 | 10 | M12 x 1 |
| RAM 80-SFD06-070 | 80 | 6 | 21 | 27 | 70 | 36 | 10 | M5 |
| RAM 80-SFD08-070 | 80 | 8 | 21 | 27 | 70 | 36 | 10 | M6 |
| RAM 80-SFD10-070 | 80 | 10 | 24 | 32 | 70 | 42 | 10 | M8 x 1 |
| RAM 80-SFD12-070 | 80 | 12 | 24 | 32 | 70 | 47 | 10 | M10 x 1 |
| RAM 80-SFD14-075 | 80 | 14 | 27 | 34 | 75 | 47 | 10 | M10 x 1 |
| RAM 80-SFD16-075 | 80 | 16 | 27 | 34 | 75 | 50 | 10 | M12 x 1 |
| RAM 80-SFD18-080 | 80 | 18 | 33 | 42 | 80 | 50 | 10 | M12 x 1 |
| RAM 80-SFD20-080 | 80 | 20 | 33 | 42 | 80 | 52 | 10 | M16 x 1 |
| RAM 80-SFD20-175 | 80 | 20 | 33 | 42 | 175 | 52 | 10 | M16 x 1 |
| RAM 80-SFD25-080 | 80 | 25 | 44 | 53 | 80 | 58 | 10 | M16 x 1 |
| RAM 80-SFD32-080 | 80 | 32 | 44 | 53 | 80 | 61 | 10 | M16 x 1 |
| RAM100-SFD25-080 | 100 | 25 | 44 | 53 | 80 | 58 | 10 | M16 x 1 |
| RAM100-SFD32-080 | 100 | 32 | 44 | 53 | 80 | 61 | 10 | M16 x 1 |

HSK 25E
 HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



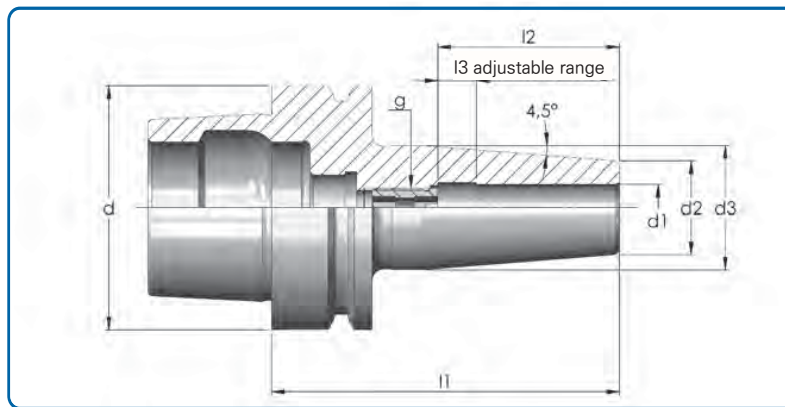
| HSK-d ₁ | d ₂ | d _{3 max.} | d _{4 -0,1} | d _{5 -0,1} | d _{6 -0,1} | d _{7 H10} | d _{8 H10} | d _{9 H11} | d ₁₀ | d ₁₁ | f _{1 -0,1} | f _{2 min.} | f _{3 ±0,1} | l _{1 -0,2} |
|--------------------|----------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|-----------------|-----------------|---------------------|---------------------|---------------------|---------------------|
| HSK-E25 | 19,006 | 20 | 22 | 28,5 | 3 | 14 | 16,4 | 15 | 3 | M 8 x 1 | 10 | 20 | 4,5 | 13 |
| HSK-E32 | 24,007 | 26 | 26,5 | 37 | 4 | 17 | 21 | 19 | 4,2 | M10 x 1 | 20 | 35 | 16 | 16 |
| HSK-E40 | 30,007 | 34 | 34,8 | 45 | 4 | 21 | 25,5 | 23 | 5 | M12 x 1 | 20 | 35 | 16 | 20 |
| HSK-E50 | 38,009 | 42 | 43 | 59,3 | 7 | 26 | 32 | 29 | 6,8 | M16 x 1 | 26 | 42 | 18 | 25 |
| HSK-E63 | 48,010 | 53 | 55 | 72,3 | 7 | 34 | 40 | 37 | 8,4 | M18 x 1 | 26 | 42 | 18 | 32 |
| | | | | | | | | | | | | | | |

HSK 25E
 HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d_1 | d_2 | l_3 | l_1 | l_2 | l_3 | l_4 | l_5 | g |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| HSK 25E-HCD06-070 | 6 | 26 | 20 | 70 | 60 | 37 | 10 | 38 | M 5 |
| HSK 25E-HCD08-070 | 8 | 28 | 20 | 80 | 75 | 37 | | | M 6 |
| HSK 25E-HCD10-085 | 10 | 30 | 20 | 85 | 80 | 42 | | | M 6 |
| HSK 25E-HCD12-090 | 12 | 32 | 20 | 90 | 85 | 47 | | | M 6 |
| HSK 32E-HCD06-080 | 6 | 26 | 26 | 80 | 60 | 37 | 10 | 60 | M 5 |
| HSK 32E-HCD08-080 | 8 | 28 | 26 | 80 | 60 | 37 | | | M 6 |
| HSK 32E-HCD10-085 | 10 | 30 | 26 | 85 | 65 | 42 | | | M 6 |
| HSK 32E-HCD12-090 | 12 | 32 | 26 | 90 | 70 | 47 | | | M 6 |
| HSK 40E-HCD06-080 | 6 | 26 | 34 | 80 | 60 | 37 | 10 | 35 | M 5 |
| HSK 40E-HCD08-080 | 8 | 28 | 34 | 80 | 60 | 37 | | 36 | M 6 |
| HSK 40E-HCD10-085 | 10 | 30 | 34 | 85 | 65 | 42 | | 41 | |
| HSK 40E-HCD12-090 | 12 | 32 | 34 | 90 | 70 | 47 | | 47 | |
| HSK 40E-HCD14-090 | 14 | 34 | 34 | 90 | 70 | 47 | | 70 | |
| HSK 40E-HCD16-100 | 16 | 38 | 34 | 100 | 80 | 52 | | | |
| HSK 40E-HCD20-100 | 20 | 42 | 34 | 100 | 80 | 52 | | | |
| HSK 50E-HCD06-080 | 6 | 26 | 42 | 80 | 35 | 37 | 10 | 54 | M 5 |
| HSK 50E-HCD08-080 | 8 | 28 | 42 | 80 | 36 | 37 | | 54 | M 6 |
| HSK 50E-HCD10-085 | 10 | 30 | 42 | 85 | 41 | 42 | | 59 | |
| HSK 50E-HCD12-090 | 12 | 32 | 42 | 90 | 47 | 47 | | 64 | |
| HSK 50E-HCD14-090 | 14 | 34 | 42 | 90 | 49 | 47 | | 64 | |
| HSK 50E-HCD16-095 | 16 | 38 | 42 | 95 | 52 | 52 | | 69 | |
| HSK 50E-HCD18-095 | 18 | 40 | 42 | 95 | 58 | 52 | | 69 | |
| HSK 50E-HCD20-100 | 20 | 42 | 42 | 100 | 74 | 52 | | 74 | |
| HSK 63E-HCD06-080 | 6 | 26 | 50 | 80 | 54 | 37 | 10 | 33 | M 5 |
| HSK 63E-HCD08-080 | 8 | 28 | 50 | 80 | 54 | 37 | | 33,5 | M 6 |
| HSK 63E-HCD10-085 | 10 | 30 | 50 | 85 | 59 | 42 | | 39 | |
| HSK 63E-HCD12-090 | 12 | 32 | 50 | 90 | 64 | 47 | | 44,5 | |
| HSK 63E-HCD14-090 | 14 | 34 | 50 | 90 | 64 | 47 | | 46 | |
| HSK 63E-HCD16-095 | 16 | 38 | 50 | 95 | 69 | 52 | | 51,5 | |
| HSK 63E-HCD18-095 | 18 | 40 | 50 | 95 | 69 | 52 | | 52 | |
| HSK 63E-HCD20-100 | 20 | 42 | 50 | 100 | 74 | 52 | | 58 | |
| HSK 63E-HCD25-120 | 25 | 50 | 50 | 120 | 94 | 58 | | 59 | |
| HSK 63E-HCD32-125 | 32 | 60 | 60 | 125 | 99 | 62 | | 59 | |

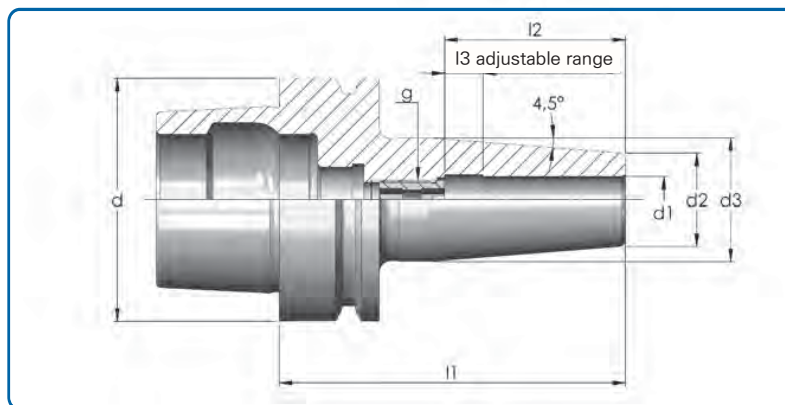
HSK 25E
 HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| HSK 25E-SFD03-040 | 3 | 11 | 15 | 40 | 10 | | -- |
| HSK 25E-SFD04-045 | 4 | 12 | 14 | 45 | 20 | 5 | -- |
| HSK 25E-SFD05-050 | 5 | 16 | 22 | 50 | 20 | | -- |
| HSK 25E-SFD06-050 | 6 | 21 | 26 | 50 | 36 | 10 | -- |
| HSK 25E-SFD08-050 | 8 | 21 | 26 | 50 | 36 | | -- |
| HSK 25E-SFD10-060 | 10 | 21 | 26 | 60 | 42 | | -- |
| HSK 25E-SFD12-070 | 12 | 24 | 26 | 70 | 47 | | -- |
| HSK 25E-SFD16-080 | 16 | 24 | 26 | 80 | 50 | | -- |
| | | | | | | | |
| HSK 32E-SFD03-070 | 3 | 11 | 15 | 70 | 10 | | -- |
| HSK 32E-SFD04-070 | 4 | 16 | 22 | 70 | 20 | 5 | M 3 |
| HSK 32E-SFD05-070 | 5 | 16 | 22 | 70 | 20 | | M 4 |
| HSK 32E-SFD06-070 | 6 | 21 | 26 | 70 | 36 | 10 | M 5 |
| HSK 32E-SFD08-070 | 8 | 21 | 26 | 70 | 36 | | M 6 |
| HSK 32E-SFD10-070 | 10 | 24 | 26 | 70 | 42 | | M 8x1 |
| HSK 32E-SFD12-080 | 12 | 24 | 26 | 80 | 47 | | M10x1 |
| | | | | | | | |
| HSK 40E-SFA03-075 | 3 | 11 | 15 | 75 | 10 | | -- |
| HSK 40E-SFA04-080 | 4 | 16 | 22 | 80 | 20 | | M 3 |
| HSK 40E-SFA05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 |
| HSK 40E-SFA06-080 | 6 | 21 | 27 | 80 | 36 | 5 | M 5 |
| HSK 40E-SFA08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 |
| HSK 40E-SFA10-080 | 10 | 24 | 32 | 80 | 42 | 10 | M 8x1 |
| HSK 40E-SFA12-090 | 12 | 24 | 32 | 90 | 47 | | M10x1 |
| HSK 40E-SFA14-090 | 14 | 27 | 34 | 90 | 47 | | M10x1 |
| HSK 40E-SFA16-090 | 16 | 27 | 34 | 90 | 50 | | M12x1 |
| HSK 40E-SFA20-090 | 20 | 33 | 42 | 90 | 52 | | -- |
| HSK 40E-SFA25-100 | 25 | 44 | 51 | 100 | 58 | | -- |

| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HSK 50E-SFD03-080 | 3 | 11 | 15 | 80 | 10 | | -- |
| HSK 50E-SFD04-080 | 4 | 16 | 22 | 80 | 20 | 5 | M 3 |
| HSK 50E-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 |
| HSK 50E-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 |
| HSK 50E-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 |
| HSK 50E-SFD10-085 | 10 | 24 | 32 | 85 | 42 | | M 8x1 |
| HSK 50E-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 |
| HSK 50E-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 |
| HSK 50E-SFD16-095 | 16 | 27 | 34 | 95 | 50 | | M 12x1 |
| HSK 50E-SFD18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 |
| HSK 50E-SFD20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 |
| | | | | | | | |
| HSK 63E-SFD03-080 | 3 | 11 | 15 | 80 | 10 | | -- |
| HSK 63E-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 |
| HSK 63E-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 |
| HSK 63E-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 |
| HSK 63E-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 |
| HSK 63E-SFD10-085 | 10 | 24 | 32 | 85 | 41 | | M 8x1 |
| HSK 63E-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 |
| HSK 63E-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 |
| HSK 63E-SFD16-095 | 16 | 27 | 34 | 95 | 50 | | M 12x1 |
| HSK 63E-SFD18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 |
| HSK 63E-SFD20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 |
| HSK 63E-SFD25-115 | 25 | 44 | 53 | 115 | 58 | | M 16x1 |
| HSK 63E-SFD32-120 | 32 | 44 | 53 | 120 | 62 | | M 16x1 |
| | | | | | | | |
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| | | | | | | | |

HSK 32E
HSK 40E
HSK 50E
HSK 63E

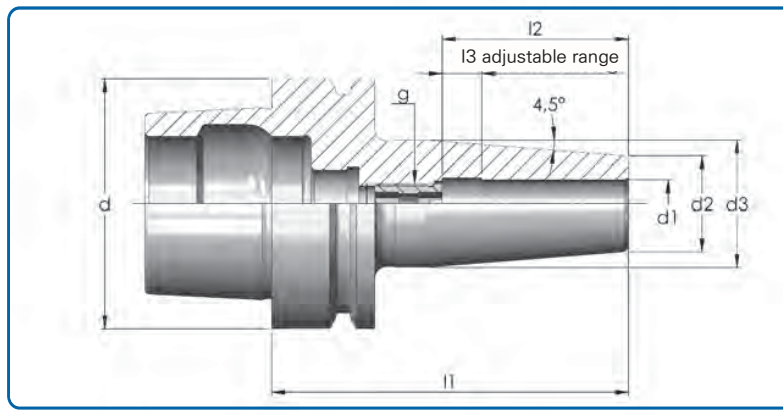


| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HSK 32E-SFD04-160 | 4 | 14 | 21 | 160 | 10 | | M 3 |
| HSK 32E-SFD05-160 | 5 | 16 | 24 | 160 | 20 | 5 | M 4 |
| HSK 32E-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 |
| HSK 32E-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 |
| HSK 32E-SFD10-160 | 10 | 24 | 32 | 160 | 41 | | M 8x1 |
| HSK 32E-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M10x1 |
| | | | | | | | |
| HSK 40E-SFD06-130 | 6 | 21 | 27 | 130 | 36 | 10 | M 5 |
| HSK 40E-SFD08-130 | 8 | 21 | 27 | 130 | 36 | | M 6 |
| HSK 40E-SFD10-130 | 10 | 24 | 32 | 130 | 41 | | M 8x1 |
| HSK 40E-SFD12-130 | 12 | 24 | 32 | 130 | 47 | | M10x1 |
| HSK 40E-SFD14-130 | 14 | 27 | 34 | 130 | 47 | | M10x1 |
| HSK 40E-SFD16-130 | 16 | 27 | 34 | 130 | 50 | | M12x1 |
| HSK 40E-SFD20-130 | 20 | 33 | 42 | 130 | 52 | | M16x1 |
| | | | | | | | |
| HSK 50E-SFD03-160 | 3 | 11 | 21 | 160 | 10 | | -- |
| HSK 50E-SFD04-160 | 4 | 14 | 21 | 160 | 10 | | M 3 |
| HSK 50E-SFD05-160 | 5 | 16 | 24 | 160 | 20 | 5 | M 4 |
| HSK 50E-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 |
| HSK 50E-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 |
| HSK 50E-SFD10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 |
| HSK 50E-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 |
| HSK 50E-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 |
| HSK 50E-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 |
| HSK 50E-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 |
| HSK 50E-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 |
| | | | | | | | |
| HSK 50E-SFD03-120 | 3 | 11 | 21 | 120 | 10 | | -- |
| HSK 50E-SFD04-120 | 4 | 14 | 21 | 120 | 10 | | M 3 |
| HSK 50E-SFD05-120 | 5 | 16 | 24 | 120 | 20 | 5 | M 4 |
| HSK 50E-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 |
| HSK 50E-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 |
| HSK 50E-SFD10-120 | 10 | 24 | 32 | 120 | 41 | | M 8x1 |
| HSK 50E-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 |
| HSK 50E-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 |
| HSK 50E-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 |
| HSK 50E-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 |
| HSK 50E-SFD20-120 | 20 | 33 | 42 | 100 | 52 | | M 16x1 |

| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HSK 63E-SFD04-120 | 4 | 14 | 21 | 120 | 10 | | M 3 |
| HSK 63E-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 |
| HSK 63E-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 |
| HSK 63E-SFD10-120 | 10 | 24 | 32 | 120 | 41 | | M 8x1 |
| HSK 63E-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 |
| HSK 63E-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 |
| | | | | | | | |
| HSK 63E-SFD03-160 | 3 | 11 | 21 | 160 | 10 | | -- |
| HSK 63E-SFD04-160 | 4 | 14 | 21 | 160 | 10 | | M 3 |
| HSK 63E-SFD05-160 | 5 | 16 | 24 | 160 | 20 | 5 | M 4 |
| HSK 63E-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 |
| HSK 63E-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 |
| HSK 63E-SFD10-160 | 10 | 24 | 32 | 160 | 41 | | M 8x1 |
| HSK 63E-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 |
| HSK 63E-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 |
| HSK 63E-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 |
| HSK 63E-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 |
| HSK 63E-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 |
| HSK 63E-SFD26-160 | 26 | 44 | 42 | 160 | 58 | | M 16x1 |

| Spare parts | Adjusting screw | |
|-------------|-----------------|-------|
| | Code No. | g |
| | 036.852 | M 5 |
| | 036.853 | M 6 |
| | 036.854 | M 8x1 |
| | 036.855 | M10x1 |
| | 036.856 | M12x1 |
| | 036.857 | M16x1 |

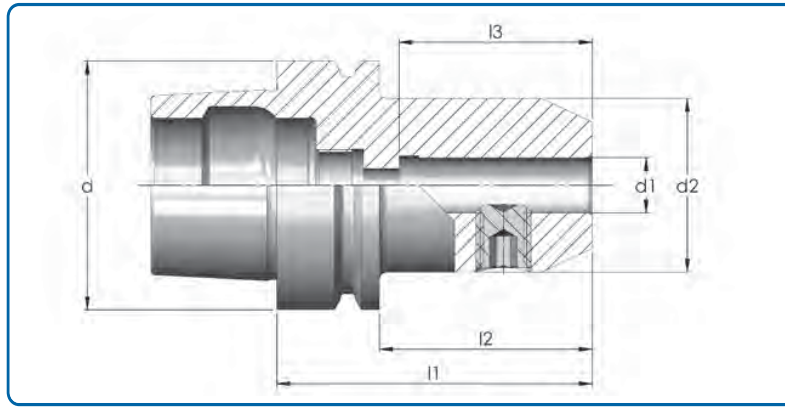
HSK 25E
 HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 |
|---------------------|-------|-------|-------|-------|-------|
| HSK 25E-SFC03-040-3 | 3 | 9 | 40 | 10 | 30 |
| HSK 25E-SFC04-040-3 | 4 | 10 | 40 | 20 | 30 |
| HSK 25E-SFC05-050-3 | 5 | 11 | 50 | 20 | 40 |
| HSK 25E-SFC06-050-3 | 6 | 12 | 50 | 36 | 40 |
| HSK 25E-SFC08-050-3 | 8 | 14 | 50 | 36 | 40 |
| HSK 25E-SFC10-050-3 | 10 | 16 | 50 | 42 | 40 |
| | | | | | |
| HSK 32E-SFC03-060-3 | 3 | 9 | 60 | 10 | 40 |
| HSK 32E-SFC04-060-3 | 4 | 10 | 60 | 20 | 40 |
| HSK 32E-SFC05-060-3 | 5 | 11 | 60 | 20 | 40 |
| HSK 32E-SFC06-060-3 | 6 | 12 | 60 | 36 | 40 |
| HSK 32E-SFC08-060-3 | 8 | 14 | 60 | 36 | 40 |
| HSK 32E-SFC10-060-3 | 10 | 16 | 60 | 42 | 40 |
| HSK 32E-SFC12-060-3 | 12 | 18 | 60 | 47 | 40 |
| | | | | | |
| HSK 40E-SFC03-060-3 | 3 | 9 | 60 | 10 | 40 |
| HSK 40E-SFC04-060-3 | 4 | 10 | 60 | 20 | 40 |
| HSK 40E-SFC06-060-3 | 6 | 12 | 60 | 36 | 40 |
| HSK 40E-SFC08-060-3 | 8 | 14 | 60 | 36 | 40 |
| HSK 40E-SFC10-060-3 | 10 | 16 | 60 | 42 | 40 |
| HSK 40E-SFC12-065-3 | 12 | 18 | 65 | 47 | 45 |
| HSK 40E-SFC14-065-3 | 14 | 20 | 65 | 47 | 45 |
| HSK 40E-SFC16-070-3 | 16 | 22 | 70 | 50 | 50 |
| | | | | | |
| HSK 40E-SFC05-080-3 | 5 | 11 | 80 | 20 | 60 |
| HSK 40E-SFC06-080-3 | 6 | 12 | 80 | 36 | 60 |
| HSK 40E-SFC08-080-3 | 8 | 14 | 80 | 36 | 60 |
| HSK 40E-SFC10-080-3 | 10 | 16 | 80 | 42 | 60 |
| HSK 40E-SFC12-080-3 | 12 | 18 | 80 | 47 | 60 |
| HSK 40E-SFC14-080-3 | 14 | 20 | 80 | 47 | 60 |
| HSK 40E-SFC16-080-3 | 16 | 22 | 80 | 50 | 60 |
| | | | | | |
| HSK 40E-SFC06-120-3 | 6 | 12 | 120 | 36 | 100 |
| HSK 40E-SFC08-120-3 | 8 | 14 | 120 | 36 | 100 |
| HSK 40E-SFC10-120-3 | 10 | 16 | 120 | 42 | 100 |

| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 |
|---------------------|-------|-------|-------|-------|-------|
| HSK 50E-SFC03-076-3 | 3 | 9 | 76 | 10 | 50 |
| HSK 50E-SFC04-076-3 | 4 | 10 | 76 | 20 | 50 |
| HSK 50E-SFC05-076-3 | 5 | 11 | 76 | 20 | 50 |
| HSK 50E-SFC06-076-3 | 6 | 12 | 76 | 36 | 50 |
| HSK 50E-SFC08-076-3 | 8 | 14 | 76 | 36 | 50 |
| HSK 50E-SFC10-076-3 | 10 | 16 | 76 | 36 | 50 |
| HSK 50E-SFC12-076-3 | 12 | 18 | 76 | 36 | 50 |
| | | | | | |
| HSK 50E-SFC06-126-3 | 6 | 12 | 126 | 36 | 100 |
| HSK 50E-SFC08-126-3 | 8 | 14 | 126 | 36 | 100 |
| HSK 50E-SFC10-126-3 | 10 | 16 | 126 | 42 | 100 |
| HSK 50E-SFC12-126-3 | 12 | 18 | 126 | 42 | 100 |
| | | | | | |
| HSK 50E-SFC06-176-3 | 6 | 12 | 176 | 42 | 150 |
| HSK 50E-SFC08-176-3 | 8 | 14 | 176 | 47 | 150 |
| HSK 50E-SFC10-176-3 | 10 | 16 | 176 | 47 | 150 |
| HSK 50E-SFC12-176-3 | 12 | 18 | 176 | 47 | 150 |
| | | | | | |
| HSK 63E-SFC03-080-3 | 3 | 8 | 80 | 10 | |
| HSK 63E-SFC04-080-3 | 4 | 9 | 80 | 20 | |
| HSK 63E-SFC05-080-3 | 5 | 10 | 80 | 20 | |
| HSK 63E-SFC06-080-3 | 6 | 12 | 80 | 36 | |
| HSK 63E-SFC08-080-3 | 8 | 16 | 80 | 36 | |
| HSK 63E-SFC10-085-3 | 10 | 20 | 85 | 42 | |
| HSK 63E-SFC12-090-3 | 12 | 24 | 90 | 47 | |
| HSK 63E-SFC14-090-3 | 14 | 26 | 90 | 47 | |
| HSK 63E-SFC16-095-3 | 16 | 28 | 95 | 50 | |
| HSK 63E-SFC18-095-3 | 18 | 31 | 95 | 50 | |
| HSK 63E-SFC20-100-3 | 20 | 33 | 100 | 52 | |
| HSK 63E-SFC25-115-3 | 25 | 39 | 115 | 58 | |
| HSK 63E-SFC32-120-3 | 32 | 44 | 120 | 62 | |

HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d_1 | d_2 | l_1 | l_2 | l_3 |
|-------------------|-------|-------|-------|-------|-------|
| HSK 32E-SLA06-060 | 6 | 25 | 60 | 40 | 40 |
| HSK 32E-SLA08-060 | 8 | 28 | 60 | 40 | 40 |
| HSK 32E-SLA10-065 | 10 | 35 | 65 | 45 | 44 |
| HSK 40E-SLA06-060 | 6 | 25 | 60 | 40 | 40 |
| HSK 40E-SLA08-060 | 8 | 28 | 60 | 40 | 40 |
| HSK 40E-SLA10-060 | 10 | 35 | 60 | 40 | 44 |
| HSK 40E-SLA12-070 | 12 | 42 | 70 | 50 | 49 |
| HSK 40E-SLA14-075 | 14 | 44 | 75 | 55 | 49 |
| HSK 40E-SLA16-075 | 16 | 48 | 75 | 55 | 52 |
| HSK 40E-SLA20-075 | 20 | 52 | 75 | 55 | 54 |
| HSK 50E-SLA06-065 | 6 | 25 | 65 | 39 | 40 |
| HSK 50E-SLA08-065 | 8 | 28 | 65 | 39 | 40 |
| HSK 50E-SLA10-065 | 10 | 35 | 65 | 39 | 44 |
| HSK 50E-SLA12-080 | 12 | 42 | 80 | 54 | 49 |
| HSK 50E-SLA14-080 | 14 | 44 | 80 | 54 | 49 |
| HSK 50E-SLA16-080 | 16 | 48 | 80 | 54 | 52 |
| HSK 50E-SLA18-080 | 18 | 50 | 80 | 54 | 52 |
| HSK 50E-SLA20-080 | 20 | 52 | 80 | 54 | 54 |
| HSK 50E-SLA25-120 | 25 | 65 | 120 | 76 | 56 |
| HSK 63E-SLA06-065 | 6 | 25 | 65 | 39 | 40 |
| HSK 63E-SLA08-065 | 8 | 28 | 65 | 39 | 40 |
| HSK 63E-SLA10-065 | 10 | 35 | 65 | 39 | 44 |
| HSK 63E-SLA12-080 | 12 | 42 | 80 | 54 | 49 |
| HSK 63E-SLA14-080 | 14 | 44 | 80 | 54 | 49 |
| HSK 63E-SLA16-080 | 16 | 48 | 80 | 54 | 52 |
| HSK 63E-SLA18-080 | 18 | 50 | 80 | 54 | 52 |
| HSK 63E-SLA20-080 | 20 | 52 | 80 | 54 | 54 |
| HSK 63E-SLA25-110 | 25 | 65 | 110 | 84 | 59 |
| HSK 63E-SLA32-110 | 32 | 72 | 110 | 84 | 63 |
| HSK 63E-SLA40-120 | 40 | 63 | 120 | 94 | 73 |

Spare parts

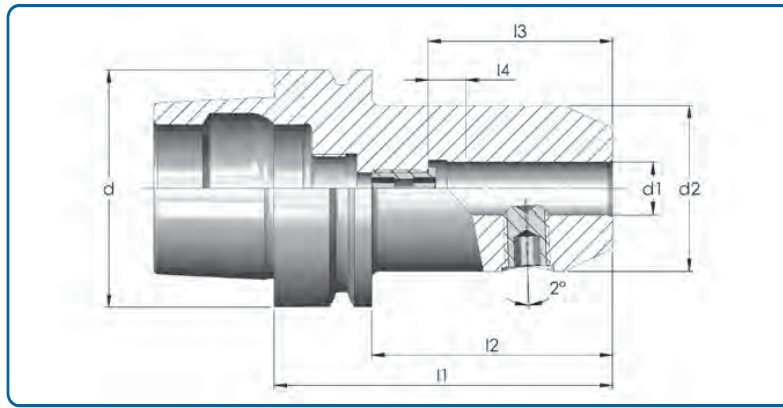
Tightening screw



| Code No. | d_1 | Code No. | d_1 |
|----------|-------|----------|-------|
| 031.801 | 6 | 031.805 | 16 |
| 031.802 | 8 | 031.805 | 18 |
| 031.803 | 10 | 031.806 | 20 |
| 031.804 | 12 | 031.807 | 25 |
| 031.804 | 14 | 031.808 | 32 |

For mounting straight-shank tools to DIN 1835 Form B.
 Permissible eccentricity difference of the taper to the boring 0,003 mm.
 From diameter $d_1 = 25$ upwards, 2 tightening screws are provided.

HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | l ₄ | g |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| HSK 32E-WNA06-060 | 6 | 25 | 60 | 40 | 40 | 8 | M 5 |
| HSK 32E-WNA08-080 | 8 | 28 | 80 | 60 | 40 | | M 6 |
| HSK 32E-WNA10-080 | 10 | 35 | 80 | 60 | 44 | | M 8 |
| HSK 40E-WNA06-060 | 6 | 25 | 60 | 40 | 40 | 8 | M 5 |
| HSK 40E-WNA08-080 | 8 | 28 | 80 | 60 | 40 | | M 6 |
| HSK 40E-WNA10-080 | 10 | 35 | 80 | 60 | 44 | | M 8 |
| HSK 40E-WNA12-090 | 12 | 42 | 90 | 70 | 49 | | M 8 |
| HSK 40E-WNA14-090 | 14 | 44 | 90 | 70 | 49 | | M10 |
| HSK 40E-WNA16-090 | 16 | 48 | 90 | 70 | 52 | | M10 |
| HSK 50E-WNA06-080 | 6 | 25 | 80 | 54 | 40 | 8 | M 5 |
| HSK 50E-WNA08-080 | 8 | 28 | 80 | 54 | 40 | | M 6 |
| HSK 50E-WNA10-080 | 10 | 35 | 80 | 54 | 44 | | M 8 |
| HSK 50E-WNA12-090 | 12 | 42 | 90 | 64 | 49 | | M 8 |
| HSK 50E-WNA14-090 | 14 | 44 | 90 | 64 | 49 | | M10 |
| HSK 50E-WNA16-090 | 16 | 48 | 90 | 64 | 52 | | M10 |
| HSK 50E-WNA18-090 | 18 | 50 | 90 | 64 | 52 | | M12 |
| HSK 50E-WNA20-100 | 20 | 52 | 100 | 74 | 54 | | M12 |
| HSK 63E-WNA06-080 | 6 | 25 | 80 | 54 | 40 | 8 | M 5 |
| HSK 63E-WNA08-080 | 8 | 28 | 80 | 54 | 40 | | M 6 |
| HSK 63E-WNA10-080 | 10 | 35 | 80 | 54 | 44 | | M 8 |
| HSK 63E-WNA12-090 | 12 | 42 | 90 | 64 | 49 | | M 8 |
| HSK 63E-WNA14-090 | 14 | 44 | 90 | 64 | 49 | | M10 |
| HSK 63E-WNA16-100 | 16 | 48 | 100 | 74 | 52 | | M10 |
| HSK 63E-WNA18-100 | 18 | 50 | 100 | 74 | 52 | | M12 |
| HSK 63E-WNA20-100 | 20 | 52 | 100 | 74 | 54 | | M12 |
| HSK 63E-WNA25-110 | 25 | 65 | 110 | 84 | 59 | | M16 |
| HSK 63E-WNA32-110 | 32 | 72 | 110 | 84 | 63 | | M16 |

For mounting straight-shank tools to DIN 1835 Form B.
 Permissible eccentricity difference of the taper to the boring 0,003 mm.
 From diameter d₁ = 25 upwards, 2 tightening screws are provided.

Spare parts

Tightening screw



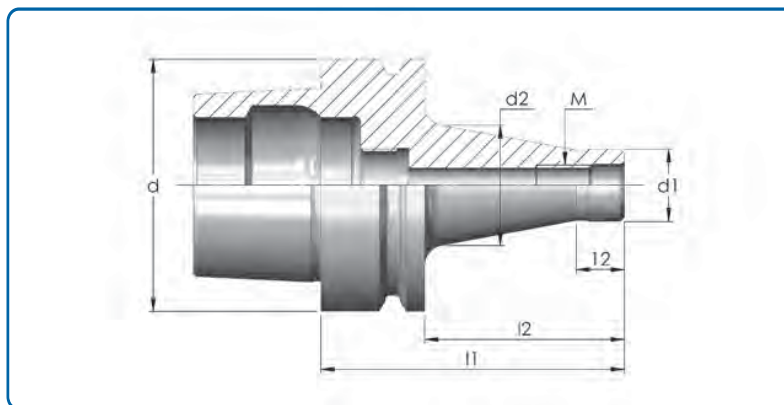
| Code No. | d ₁ |
|----------|----------------|
| 031.801 | 6 |
| 031.802 | 8 |
| 031.803 | 10 |
| 031.804 | 12 |
| 031.804 | 14 |

Adjusting screws



| Code No. | d ₁ | Code No. | d ₁ |
|----------|----------------|----------|----------------|
| 036.801 | 6 | 036.804 | 16 |
| 036.802 | 8 | 036.805 | 18 |
| 036.803 | 10 | 036.805 | 20 |
| 036.803 | 12 | 036.806 | 25 |
| 036.804 | 14 | 036.806 | 32 |

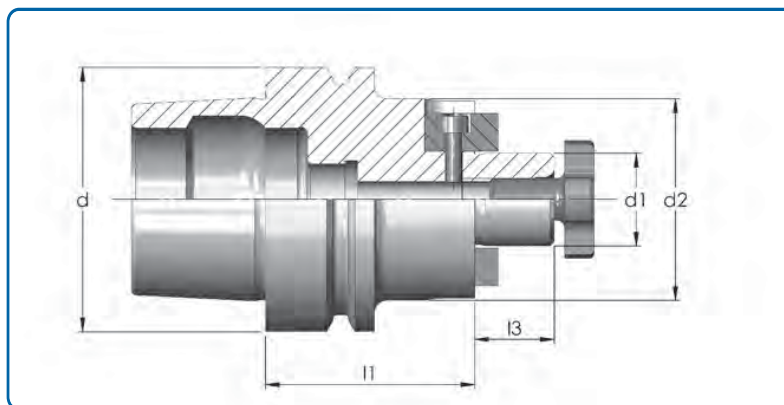
HSK 40E
HSK 50E
HSK 63E



| Code No. | M | d_1 | d_2 | l_1 | l_2 |
|-------------------|------|-------|-------|-------|-------|
| HSK 40E-SEM06-045 | M 6 | 10 | 10 | 45 | 25 |
| HSK 40E-SEM06-070 | M 6 | 10 | 20 | 70 | 50 |
| HSK 40E-SEM06-095 | M 6 | 10 | 23 | 95 | 75 |
| | | | | | |
| HSK 40E-SEM08-045 | M 8 | 13.8 | 15 | 45 | 25 |
| HSK 40E-SEM08-070 | M 8 | 13.8 | 23 | 70 | 50 |
| HSK 40E-SEM08-095 | M 8 | 13.8 | 25 | 95 | 75 |
| HSK 40E-SEM08-120 | M 8 | 13.8 | 30 | 120 | 100 |
| | | | | | |
| HSK 40E-SEM10-045 | M 10 | 18 | 23 | 45 | 25 |
| HSK 40E-SEM10-070 | M 10 | 18 | 25 | 70 | 50 |
| HSK 40E-SEM10-095 | M 10 | 18 | 30 | 95 | 75 |
| HSK 40E-SEM10-120 | M 10 | 18 | 30 | 120 | 100 |
| | | | | | |
| HSK 40E-SEM12-045 | M 12 | 21 | 24 | 45 | 25 |
| HSK 40E-SEM12-070 | M 12 | 21 | 30 | 70 | 50 |
| HSK 40E-SEM12-095 | M 12 | 21 | 35 | 95 | 75 |
| HSK 40E-SEM12-120 | M 12 | 21 | 38 | 120 | 100 |
| | | | | | |
| HSK 40E-SEM16-045 | M 16 | 29 | 34 | 45 | 25 |
| HSK 40E-SEM16-070 | M 16 | 29 | 34 | 70 | 50 |
| HSK 40E-SEM16-095 | M 16 | 29 | 35 | 95 | 75 |
| HSK 40E-SEM16-120 | M 16 | 29 | 40 | 120 | 100 |
| | | | | | |
| HSK 50E-SEM06-051 | M 6 | 10 | 13 | 51 | 25 |
| HSK 50E-SEM06-076 | M 6 | 10 | 20 | 76 | 50 |
| HSK 50E-SEM06-101 | M 6 | 10 | 23 | 101 | 75 |
| | | | | | |
| HSK 50E-SEM08-051 | M 8 | 13.8 | 15 | 51 | 25 |
| HSK 50E-SEM08-076 | M 8 | 13.8 | 23 | 76 | 50 |
| HSK 50E-SEM08-101 | M 8 | 13.8 | 25 | 101 | 75 |
| HSK 50E-SEM08-126 | M 8 | 13.8 | 30 | 126 | 100 |
| | | | | | |
| HSK 50E-SEM10-051 | M 10 | 18 | 23 | 51 | 25 |
| HSK 50E-SEM10-076 | M 10 | 18 | 25 | 76 | 50 |
| HSK 50E-SEM10-101 | M 10 | 18 | 30 | 101 | 75 |
| HSK 50E-SEM10-126 | M 10 | 18 | 35 | 126 | 100 |

| Code No. | M | d_1 | d_2 | l_1 | l_2 |
|-------------------|------|-------|-------|-------|-------|
| HSK 50E-SEM12-051 | M 12 | 21 | 24 | 51 | 25 |
| HSK 50E-SEM12-076 | M 12 | 21 | 30 | 76 | 50 |
| HSK 50E-SEM12-101 | M 12 | 21 | 35 | 101 | 75 |
| HSK 50E-SEM12-126 | M 12 | 21 | 38 | 126 | 100 |
| | | | | | |
| HSK 50E-SEM16-051 | M 16 | 21 | 24 | 51 | 25 |
| HSK 50E-SEM16-076 | M 16 | 21 | 30 | 76 | 50 |
| HSK 50E-SEM16-101 | M 16 | 21 | 35 | 101 | 75 |
| HSK 50E-SEM16-126 | M 16 | 21 | 38 | 126 | 100 |
| | | | | | |
| HSK 63E-SEM06-051 | M 6 | 10 | 13 | 51 | 25 |
| HSK 63E-SEM06-076 | M 6 | 10 | 20 | 76 | 50 |
| HSK 63E-SEM06-101 | M 6 | 10 | 23 | 101 | 75 |
| | | | | | |
| HSK 63E-SEM08-051 | M 8 | 13.8 | 15 | 51 | 25 |
| HSK 63E-SEM08-076 | M 8 | 13.8 | 23 | 76 | 50 |
| HSK 63E-SEM08-101 | M 8 | 13.8 | 25 | 101 | 75 |
| HSK 63E-SEM08-176 | M 8 | 13.8 | 30 | 176 | 100 |
| | | | | | |
| HSK 63E-SEM10-051 | M 10 | 18 | 23 | 51 | 25 |
| HSK 63E-SEM10-076 | M 10 | 18 | 25 | 76 | 50 |
| HSK 63E-SEM10-101 | M 10 | 18 | 30 | 101 | 75 |
| HSK 63E-SEM10-126 | M 10 | 18 | 35 | 126 | 100 |
| | | | | | |
| HSK 63E-SEM12-051 | M 12 | 21 | 24 | 51 | 25 |
| HSK 63E-SEM12-076 | M 12 | 21 | 30 | 76 | 50 |
| HSK 63E-SEM12-101 | M 12 | 21 | 35 | 101 | 75 |
| HSK 63E-SEM12-126 | M 12 | 21 | 38 | 126 | 100 |
| | | | | | |
| HSK 63E-SEM16-051 | M 16 | 29 | 34 | 51 | 25 |
| HSK 63E-SEM16-076 | M 16 | 29 | 34 | 76 | 50 |
| HSK 63E-SEM16-101 | M 16 | 29 | 35 | 101 | 75 |
| HSK 63E-SEM16-126 | M 16 | 29 | 40 | 126 | 100 |

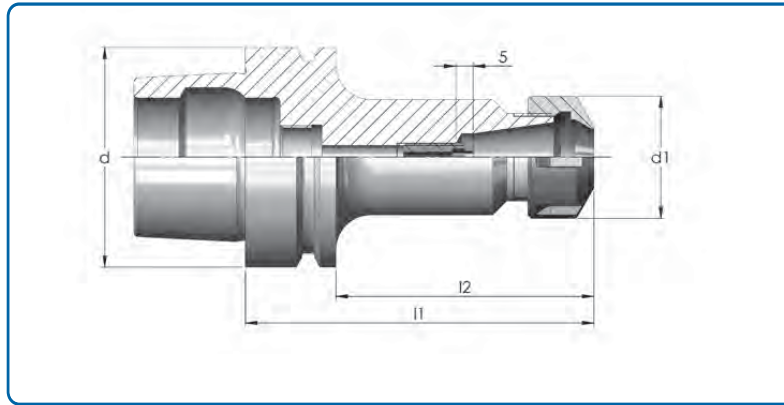
HSK 43F
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | |
|-------------------|----------------|----------------|----------------|----------------|--|
| HSK 32E-FMD16-050 | 16 | 34 | 17 | 50 | |
| HSK 40E-FMD16-050 | 16 | 34 | 17 | 50 | |
| HSK 40E-FMD22-050 | 22 | 48 | 19 | 50 | |
| HSK 40E-FMD27-055 | 27 | 60 | 21 | 55 | |
| HSK 50E-FMD16-050 | 16 | 38 | 17 | 50 | |
| HSK 50E-FMD22-060 | 22 | 48 | 19 | 60 | |
| HSK 50E-FMD27-060 | 27 | 58 | 21 | 60 | |
| HSK 50E-FMD32-060 | 32 | 65 | 24 | 60 | |
| HSK 63E-FMD16-050 | 16 | 38 | 17 | 50 | |
| HSK 63E-FMD22-060 | 22 | 48 | 19 | 60 | |
| HSK 63E-FMD27-060 | 27 | 58 | 21 | 60 | |
| HSK 63E-FMD32-060 | 32 | 65 | 24 | 60 | |
| HSK 63E-FMD40-060 | 40 | 89 | 27 | 60 | |

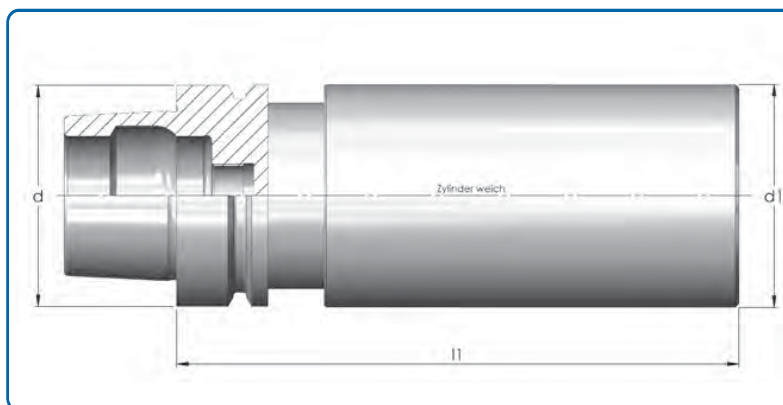
| Spare parts | Drive key | | Drive screw | | Cutter retaining screws | | Cutter retaining screw with hexagonsocket | | Wrenches | |
|-------------|-----------|----------------|-------------|----------------|-------------------------|----------------|---|----------------|----------|----------------|
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 016.200 | 16 | 016.300 | 16 | 047.002 | 16 | 049.002 | 16 | 048.002 | 16 |
| 016.201 | 22 | 016.301 | 22 | 047.003 | 22 | 049.003 | 22 | 048.003 | 22 | |
| 016.202 | 27 | 016.302 | 27 | 047.004 | 27 | 049.004 | 27 | 048.004 | 27 | |
| 016.203 | 32 | 016.303 | 32 | 047.005 | 32 | 049.005 | 32 | 048.005 | 32 | |

HSK 25E
 HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



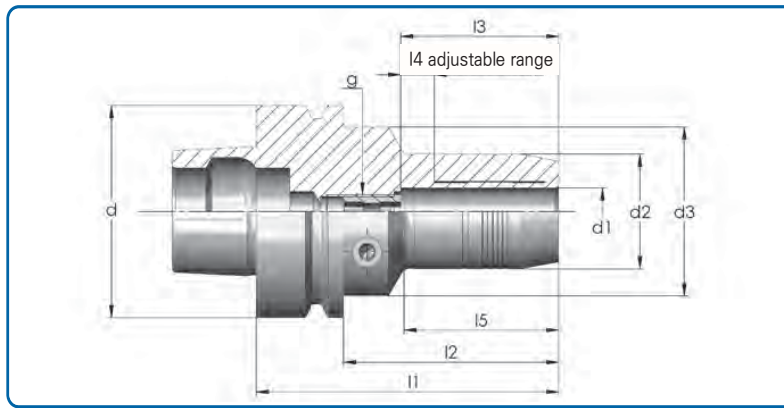
| Code No. | Chucking range | d ₁ | l ₁ | l ₂ |
|-------------------|-------------------|----------------|----------------|----------------|
| HSK 25E-ERM16-052 | 1 - 10 ER 16-mini | 22 | 51,6 | 41,6 |
| HSK 25E-ERM25-070 | 1 - 16 ER 25-mini | 35 | 70 | 60 |
| HSK 25E-ERM25-080 | 1 - 16 ER 25-mini | 35 | 80 | 70 |
| HSK 25E-ERA16-065 | 1 - 10 ER 16 | 28 | 65 | 55 |
| HSK 32E-ERM11-060 | 1 - 7 ER 11-mini | 16,5 | 60 | 40 |
| HSK 32E-ERM11-080 | 1 - 7 ER 11-mini | 16,5 | 80 | 60 |
| HSK 32E-ERM16-065 | 1 - 10 ER 16-mini | 22 | 65 | 45 |
| HSK 32E-ERM20-075 | 1 - 13 ER 20-mini | 28 | 75 | 55 |
| HSK 32E-ERM25-085 | 1 - 16 ER 25-mini | 35 | 85 | 65 |
| HSK 32E-ERA32-095 | 2 - 20 ER 32 | 50 | 95 | 70 |
| HSK 40E-ERM11-100 | 1 - 10 ER 16-mini | 22 | 100 | 80 |
| HSK 40E-ERM16-075 | 1 - 16 ER 20-mini | 28 | 75 | 43,5 |
| HSK 40E-ERA11-055 | 1 - 7 ER 11 | 19 | 55 | 35 |
| HSK 40E-ERA16-065 | 1 - 10 ER 16 | 28 | 65 | 45 |
| HSK 40E-ERA16-100 | 1 - 10 ER 16 | 28 | 100 | 80 |
| HSK 40E-ERA16-160 | 1 - 10 ER 16 | 28 | 160 | 140 |
| HSK 40E-ERA20-070 | 1 - 13 ER 20 | 34 | 70 | 50 |
| HSK 40E-ERA20-160 | 1 - 13 ER 20 | 34 | 160 | 140 |
| HSK 40E-ERA25-075 | 1 - 16 ER 25 | 42 | 75 | 55 |
| HSK 40E-ERA25-100 | 1 - 16 ER 25 | 42 | 100 | 80 |
| HSK 40E-ERA32-130 | 2 - 20 ER 32 | 50 | 130 | 140 |
| HSK 40E-ERA32-160 | 2 - 20 ER 32 | 50 | 160 | 140 |
| HSK 50E-ERA08-060 | 1 - 6 ER 8 | 12 | 60 | 34 |
| HSK 50E-ERA11-060 | 1 - 7 ER 11 | 19 | 60 | 34 |
| HSK 50E-ERA16-060 | 1 - 10 ER 16 | 28 | 60 | 34 |
| HSK 50E-ERA16-080 | 1 - 10 ER 16 | 28 | 80 | 54 |
| HSK 50E-ERA16-100 | 1 - 10 ER 16 | 28 | 100 | 74 |
| HSK 50E-ERA16-160 | 1 - 10 ER 16 | 28 | 160 | 134 |
| HSK 50E-ERA25-060 | 1 - 16 ER 25 | 42 | 80 | 54 |
| HSK 50E-ERA25-160 | 1 - 16 ER 25 | 42 | 160 | 134 |
| HSK 50E-ERA32-060 | 2 - 20 ER 32 | 50 | 85 | 59 |
| HSK 50E-ERA40-060 | 3 - 26 ER 40 | 63 | 100 | 74 |
| HSK 63E-ERA11-100 | 1 - 7 ER 11 | 16,5 | 100 | 74 |
| HSK 63E-ERA16-075 | 1 - 10 ER 16 | 28 | 75 | 49 |
| HSK 63E-ERA20-080 | 1 - 13 ER 20 | 34 | 80 | 54 |
| HSK 63E-ERA25-080 | 1 - 16 ER 25 | 42 | 80 | 54 |
| HSK 63E-ERA32-090 | 2 - 20 ER 32 | 50 | 90 | 64 |
| HSK 63E-ERA32-070 | 3 - 26 ER 32 | 50 | 70 | 44 |
| HSK 63E-ERA40-076 | 3 - 26 ER 40 | 63 | 76 | 50 |
| HSK 63E-ERA40-120 | 3 - 26 ER 40 | 63 | 120 | 94 |

HSK 25E
 HSK 32E
 HSK 40E
 HSK 50E
 HSK 63E



| Code No. | d ₁ | l ₁ | |
|-------------------|----------------|----------------|--|
| HSK 25E-BLN16-105 | 16 | 105 | |
| HSK 25E-BLN25-100 | 25 | 100 | |
| HSK 25E-BLN30-040 | 30 | 40 | |
| HSK 25E-BLN30-050 | 30 | 50 | |
| HSK 25E-BLN30-070 | 30 | 70 | |
| HSK 25E-BLN40-050 | 40 | 50 | |
| HSK 25E-BLN50-050 | 50 | 50 | |
| HSK 25E-BLN50-100 | 50 | 100 | |
| HSK 25E-BLN60-100 | 60 | 100 | |
| | | | |
| HSK 32E-BLN24-035 | 24 | 35 | |
| HSK 32E-BLN32-100 | 32,5 | 100 | |
| HSK 32E-BLN60-045 | 60 | 45 | |
| HSK 32E-BLN65-070 | 65 | 70 | |
| HSK 32E-BLN65-094 | 65 | 94 | |
| | | | |
| HSK 40E-BLN40-125 | 40,5 | 125 | |
| HSK 40E-BLN50-125 | 50 | 125 | |
| HSK 40E-BLN60-050 | 60 | 50 | |
| | | | |
| HSK 50E-BLN40-176 | 40 | 176 | |
| HSK 50E-BLN50-125 | 50,5 | 125 | |
| HSK 50E-BLN50-100 | 50 | 100 | |
| HSK 50E-BLN50-160 | 50 | 160 | |
| HSK 50E-BLN60-160 | 60 | 160 | |
| HSK 50E-BLN63-135 | 63 | 135 | |
| HSK 50E-BLN70-072 | 70 | 72 | |
| | | | |
| HSK 63E-BLN63-125 | 63 | 125 | |
| HSK 63E-BLN63-250 | 63,5 | 250 | |

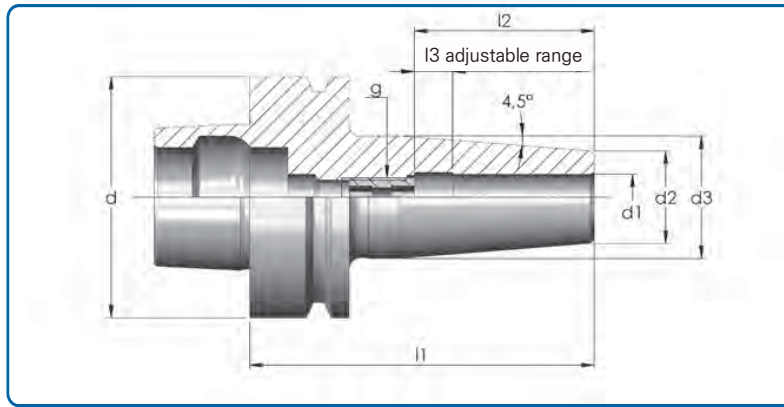
HSK 63F



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | g |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------|
| HSK 63F-HC06-100 | 6 | 26 | 50 | 100 | 74 | 37 | 10 | 55 | M 5 |
| HSK 63F-HC08-100 | 8 | 28 | 50 | 100 | 74 | 37 | 10 | 56 | M 6 |
| HSK 63F-HC10-100 | 10 | 30 | 50 | 100 | 74 | 42 | 10 | 54 | M 8 x 1 |
| HSK 63F-HC12-100 | 12 | 32 | 50 | 100 | 74 | 47 | 10 | 54,5 | M10 x 1 |
| HSK 63F-HC14-100 | 14 | 34 | 50 | 100 | 74 | 47 | 10 | 56 | M10 x 1 |
| HSK 63F-HC16-100 | 16 | 38 | 50 | 100 | 74 | 52 | 10 | 56 | M12 x 1 |
| HSK 63F-HC18-100 | 18 | 40 | 50 | 100 | 74 | 52 | 10 | 58 | M12 x 1 |
| HSK 63F-HC20-100 | 20 | 42 | 50 | 100 | 74 | 52 | 10 | 58 | M16 x 1 |
| HSK 63F-HC25-120 | 25 | 50 | 50 | 120 | 94 | 58 | 10 | 94 | M16 x 1 |
| HSK 63F-HC32-125 | 32 | 60 | 53 | 125 | 99 | 62 | 10 | 99 | M16 x 1 |

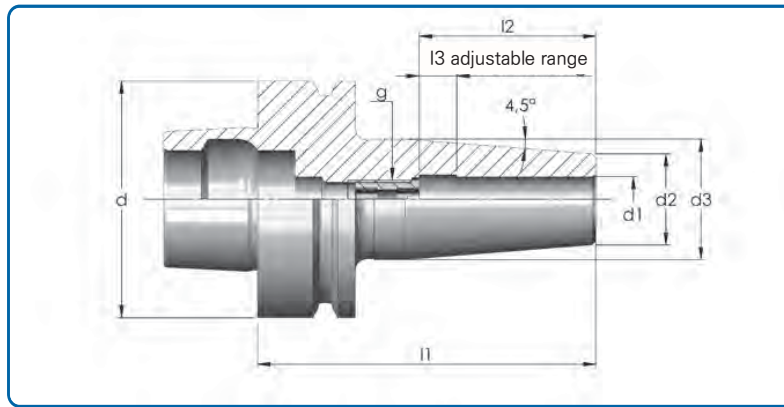
| Adjusting screws | | Reducer | | | | | | Hexagon key | | | | | |
|------------------|----------------|----------|----------------|----------|----|----------------|----------|-------------|----------------|----------|----|----|---|
| | | | | | | | | | | | | | |
| Code No. | d ₁ | Code No. | d ₁ | Code No. | d | d ₁ | Code No. | d | d ₁ | Code No. | | | |
| 036.852 | 6 | 036.856 | 16 | 024.025 | 12 | 3 | 024.007 | 20 | 3 | 024.010 | 32 | 6 | 082.300 SW 4 (Keys have to be ordered separately). |
| 036.853 | 8 | 036.856 | 18 | 024.028 | 4 | 4 | 024.008 | 4 | 4 | 024.011 | 8 | 8 | |
| 036.854 | 10 | 036.856 | 20 | 024.027 | 5 | 5 | 024.009 | 5 | 5 | 024.012 | 10 | 10 | |
| 036.855 | 12 | 036.857 | 25 | 024.028 | 6 | 6 | 024.001 | 6 | 6 | 024.013 | 12 | 12 | |
| 036.855 | 14 | 036.857 | 32 | 024.029 | 8 | 8 | 024.002 | 8 | 8 | 024.014 | 14 | 14 | |
| | | | | | | | 024.003 | 10 | 10 | 024.015 | 16 | 16 | |
| | | | | | | | 024.004 | 12 | 12 | 024.016 | 18 | 18 | |
| | | | | | | | 024.005 | 14 | 14 | 024.018 | 20 | 20 | |
| | | | | | | | 024.006 | 16 | 16 | 024.020 | 25 | 25 | |

HSK 63F
HSK 80F



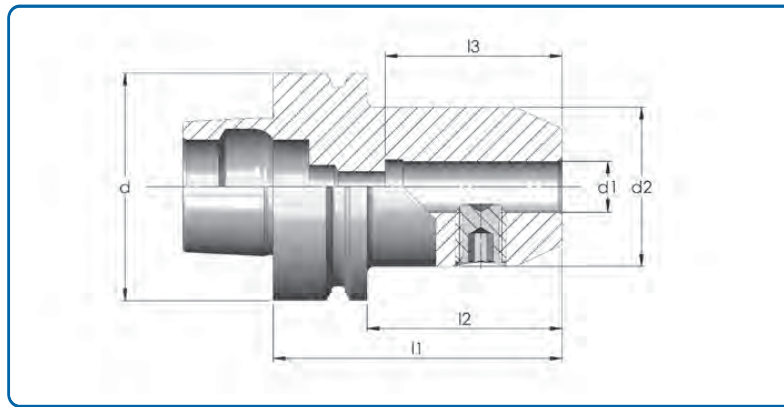
| Code No. | d1 | d2 | d3 | l1 | l2 | l3 | g | |
|-------------------|----|----|----|-----|----|----|--------|--|
| HSK 63F-SFD03-080 | 3 | 11 | 15 | 80 | 10 | -- | - - | |
| HSK 63F-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | |
| HSK 63F-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | |
| HSK 63F-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 | |
| HSK 63F-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 | |
| HSK 63F-SFD10-085 | 10 | 24 | 32 | 85 | 42 | | M 8x1 | |
| HSK 63F-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | |
| HSK 63F-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | |
| HSK 63F-SFD16-095 | 16 | 27 | 34 | 95 | 50 | | M 12x1 | |
| HSK 63F-SFD18-095 | 18 | 33 | 42 | 95 | 50 | | M 12x1 | |
| HSK 63F-SFD20-100 | 20 | 33 | 42 | 100 | 52 | | M 16x1 | |
| HSK 63F-SFD25-125 | 25 | 44 | 53 | 125 | 58 | | M 16x1 | |
| HSK 63F-SFD32-125 | 32 | 44 | 53 | 125 | 62 | | M 16x1 | |
| HSK 80F-SFD12-080 | 12 | 24 | 32 | 80 | 47 | 10 | M 10x1 | |
| HSK 80F-SFD14-080 | 14 | 27 | 34 | 80 | 47 | -- | M 10x1 | |
| HSK 80F-SFD16-080 | 16 | 27 | 34 | 80 | 50 | -- | M 12x1 | |
| HSK 80F-SFD18-080 | 18 | 33 | 42 | 80 | 50 | -- | M 12x1 | |
| HSK 80F-SFD20-080 | 20 | 33 | 42 | 80 | 52 | -- | M 16x1 | |
| HSK 80F-SFD25-080 | 25 | 44 | 53 | 80 | 58 | -- | M 16x1 | |
| HSK 80F-SFD32-080 | 32 | 44 | 53 | 80 | 62 | -- | M 16x1 | |

HSK 63F
HSK 80F



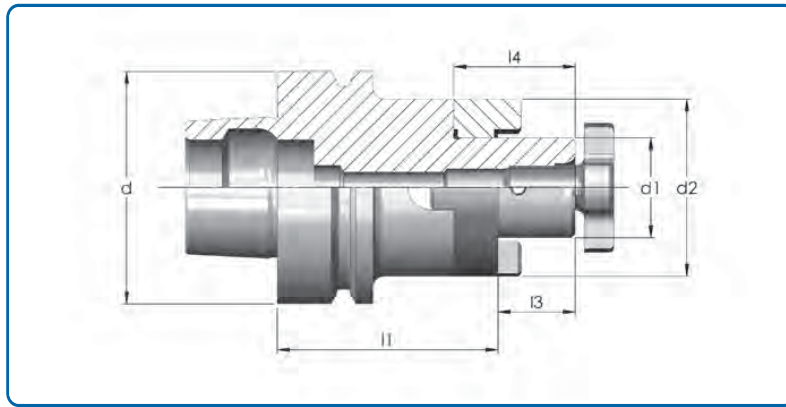
| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g | |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--|
| HSK 63F-SFD03-120 | 3 | 11 | 15 | 120 | 10 | -- | - - | |
| HSK 63F-SFD04-120 | 4 | 14 | 22 | 120 | 20 | 5 | M 3 | |
| HSK 63F-SFD05-120 | 5 | 16 | 22 | 120 | 20 | | M 4 | |
| HSK 63F-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 | |
| HSK 63F-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | |
| HSK 63F-SFD10-120 | 10 | 24 | 32 | 120 | 42 | | M 8x1 | |
| HSK 63F-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 | |
| HSK 63F-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | |
| HSK 63F-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | |
| HSK 63F-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | |
| HSK 63F-SFD04-160 | 4 | 14 | 22 | 160 | 20 | 5 | M 3 | |
| HSK 63F-SFD05-160 | 5 | 16 | 22 | 160 | 20 | | M 4 | |
| HSK 63F-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | |
| HSK 63F-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| HSK 63F-SFD10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| HSK 63F-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M10x1 | |
| HSK 63F-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M10x1 | |
| HSK 63F-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M12x1 | |
| HSK 63F-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M12x1 | |
| HSK 63F-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M16x1 | |
| HSK 80F-SFD12-120 | 12 | 24 | 32 | 120 | 47 | 10 | M10x1 | |
| HSK 80F-SFD14-120 | 14 | 27 | 34 | 120 | 47 | -- | M10x1 | |
| HSK 80F-SFD16-120 | 16 | 27 | 34 | 120 | 50 | -- | M12x1 | |
| HSK 80F-SFD18-120 | 18 | 33 | 42 | 120 | 50 | -- | M12x1 | |
| HSK 80F-SFD20-120 | 20 | 33 | 42 | 120 | 52 | -- | M16x1 | |
| HSK 80F-SFD25-120 | 25 | 44 | 53 | 120 | 58 | -- | M16x1 | |
| HSK 80F-SFD32-120 | 32 | 44 | 53 | 120 | 62 | -- | M16x1 | |

HSK 63F



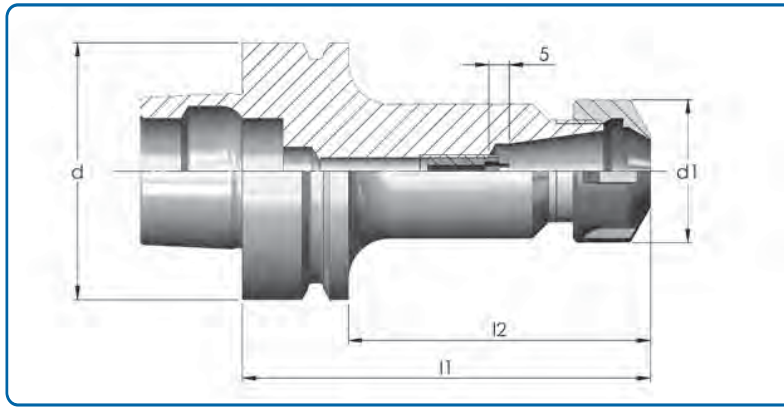
| Code No. | d_1 | d_2 | l_1 | l_2 | l_3 | Tolerance | |
|-------------------|-------|-------|-------|-------|-------|-----------|--|
| HSK 63F-SLA06-065 | 6 | 25 | 65 | 39 | 40 | + 0,005 | |
| HSK 63F-SLA06-065 | 8 | 28 | 65 | 39 | 40 | 0 | |
| HSK 63F-SLA06-065 | 10 | 35 | 65 | 39 | 44 | | |
| HSK 63F-SLA06-065 | 12 | 42 | 80 | 54 | 49 | | |
| HSK 63F-SLA06-065 | 14 | 44 | 80 | 54 | 49 | | |
| HSK 63F-SLA06-065 | 16 | 48 | 80 | 54 | 52 | | |
| HSK 63F-SLA06-065 | 18 | 48 | 80 | 54 | 52 | | |
| HSK 63F-SLA06-065 | 20 | 52 | 80 | 54 | 54 | + 0,007 | |
| HSK 63F-SLA06-065 | 25 | 65 | 110 | 84 | 59 | 0 | |
| HSK 63F-SLA06-065 | 32 | 72 | 110 | 84 | 63 | | |
| HSK 63F-SLA06-065 | 6 | 25 | 120 | 94 | 40 | + 0,005 | |
| HSK 63F-SLA06-065 | 8 | 28 | 120 | 94 | 40 | 0 | |
| HSK 63F-SLA06-065 | 10 | 35 | 120 | 94 | 44 | | |
| HSK 63F-SLA06-065 | 12 | 42 | 120 | 94 | 49 | | |
| HSK 63F-SLA06-065 | 14 | 44 | 120 | 94 | 49 | | |
| HSK 63F-SLA06-065 | 16 | 48 | 120 | 94 | 52 | | |
| HSK 63F-SLA06-065 | 18 | 50 | 120 | 94 | 52 | | |
| HSK 63F-SLA06-065 | 20 | 52 | 120 | 94 | 54 | | |
| HSK 63F-SLA06-065 | 25 | 65 | 120 | 94 | 59 | | |
| HSK 63F-SLA06-065 | 32 | 72 | 120 | 94 | 63 | | |

HSK 63F



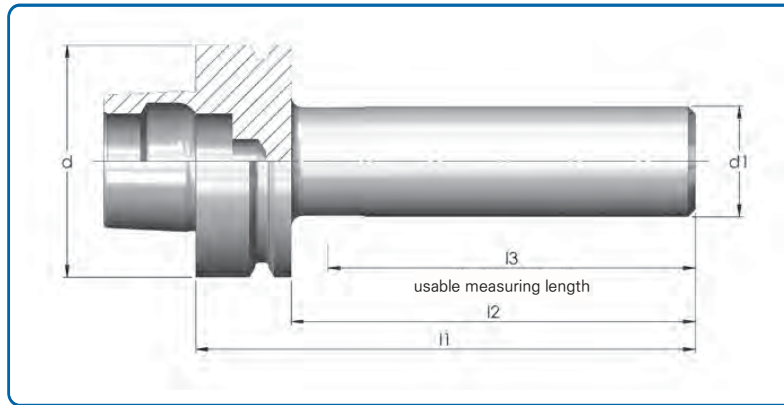
| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | l ₅ | |
|-------------------|----------------|----------------|----------------|----------------|----------------|--|
| HSK 63F-FMC16-060 | 16 | 32 | 17 | 27 | 60 | |
| HSK 63F-FMC22-060 | 22 | 40 | 19 | 31 | 60 | |
| HSK 63F-FMC27-060 | 27 | 48 | 21 | 33 | 60 | |
| HSK 63F-FMC32-060 | 32 | 58 | 24 | 38 | 60 | |
| HSK 63F-FMC40-070 | 40 | 70 | 27 | 41 | 70 | |
| HSK 63F-FMC16-100 | 16 | 32 | 17 | 27 | 100 | |
| HSK 63F-FMC22-100 | 22 | 40 | 19 | 31 | 100 | |
| HSK 63F-FMC27-100 | 27 | 48 | 21 | 33 | 100 | |
| HSK 63F-FMC22-160 | 22 | 50 | 31 | 31 | 160 | |
| HSK 63F-FMC32-160 | 32 | 58 | 38 | 38 | 160 | |

HSK 32F
 HSK 40F
 HSK 50F
 HSK 63F



| Code No. | Chucking range | d ₁ | l ₁ | l ₂ |
|-------------------|------------------|----------------|----------------|----------------|
| HSK 32F-ERM25-060 | 1 - 16 ER25-mini | 35 | 60 | 40 |
| HSK 32F-ERM25-080 | 1 - 16 ER25-mini | 35 | 80 | 60 |
| HSK 32F-ERM25-120 | 1 - 16 ER25-mini | 35 | 120 | 100 |
| HSK 40F-ERA16-060 | 1 - 10 ER16 | 28 | 60 | 40 |
| HSK 40F-ERA25-060 | 1 - 13 ER20 | 34 | 60 | 40 |
| HSK 40F-ERA25-060 | 1 - 16 ER25 | 42 | 60 | 40 |
| HSK 40F-ERM25-070 | 1 - 16 ER25-mini | 35 | 70 | 50 |
| HSK 50F-ERA25-070 | 1 - 16 ER25 | 42 | 70 | 44 |
| HSK 50F-ERA32-080 | 2 - 20 ER32 | 50 | 80 | 54 |
| HSK 50F-ERA40-080 | 3 - 26 ER40 | 63 | 80 | 54 |
| HSK 50F-ERA16-160 | 1 - 10 ER16 | 28 | 160 | 134 |
| HSK 50F-ERA25-160 | 1 - 16 ER25 | 42 | 160 | 134 |
| HSK 50F-ERA32-160 | 2 - 20 ER32 | 50 | 160 | 134 |
| HSK 50F-ERA40-160 | 3 - 26 ER40 | 63 | 160 | 134 |
| HSK 63F-ERM16-100 | 1 - 10 ER16-mini | 22 | 100 | 74 |
| HSK 63F-ERA16-060 | 1 - 10 ER16 | 28 | 60 | 34 |
| HSK 63F-ERA16-100 | 1 - 10 ER16 | 28 | 100 | 74 |
| HSK 63F-ERA25-070 | 1 - 16 ER25 | 42 | 70 | 44 |
| HSK 63F-ERA25-075 | 1 - 16 ER25 | 42 | 75 | 49 |
| HSK 63F-ERA25-100 | 1 - 16 ER25 | 42 | 100 | 74 |
| HSK 63F-ERA32-120 | 2 - 20 ER32 | 50 | 120 | 94 |
| HSK 63F-ERA32-090 | 2 - 20 ER32 | 50 | 90 | 64 |
| HSK 63F-ERA40-075 | 3 - 26 ER40 | 63 | 75 | 49 |
| HSK 63F-ERA40-090 | 3 - 26 ER40 | 63 | 90 | 64 |
| HSK 63F-ERA40-125 | 3 - 26 ER40 | 63 | 125 | 99 |
| HSK 63F-ERA50-120 | 10 - 34 ER50 | 78 | 120 | 94 |

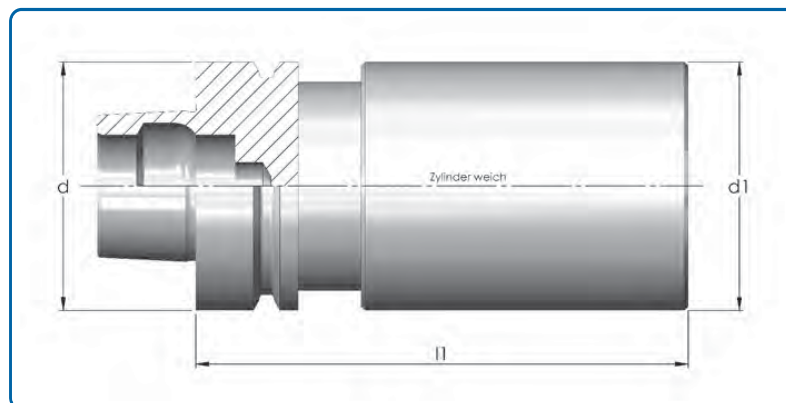
HSK 32F
HSK 50F
HSK 63F



| Code No. | d ₁ | l ₁ | l ₂ | l ₃ |
|-------------------|----------------|----------------|----------------|----------------|
| HSK 32F-TBG25-200 | 25 | 200 | 180 | with ball |
| HSK 50F-TBG25-246 | 25 | 246 | 220 | 200 |
| HSK 63F-TBG21-270 | 21 | 270 | 244 | 220 |
| HSK 63F-TBG30-150 | 30 | 150 | 124 | 100 |
| HSK 63F-TBG40-250 | 40 | 250 | 224 | 200 |
| HSK 63F-TBG40-350 | 40 | 350 | 324 | 300 |
| HSK 63F-TBG50-180 | 50 | 180 | 154 | with ball |
| HSK 63F-TBG50-350 | 50 | 350 | 324 | 300 |

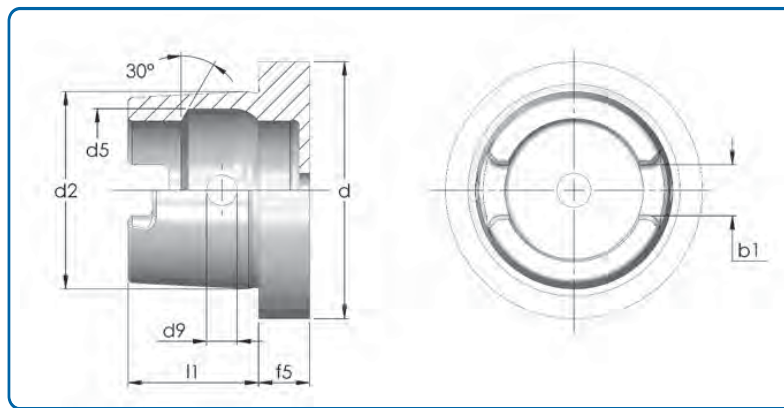
Tool blanks

HSK 63F



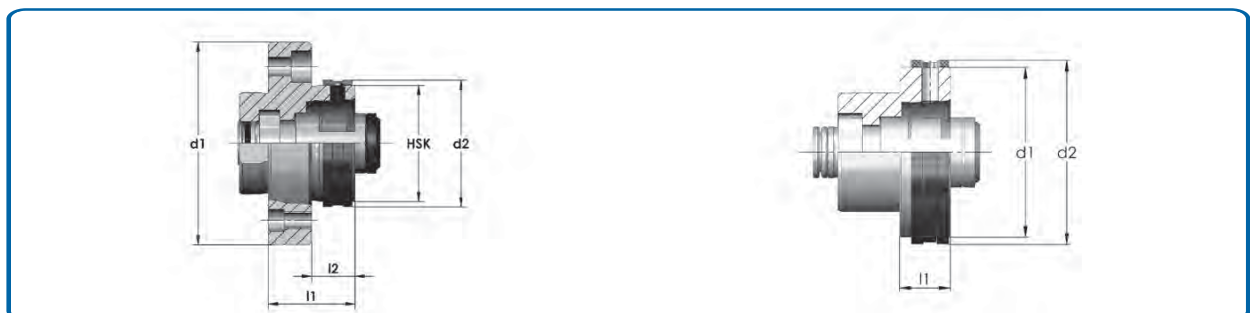
| Code No. | d ₁ | l ₁ | |
|-------------------|----------------|----------------|--|
| HSK 63F-BLN63-125 | 63 | 125 | |
| HSK 63F-BLN63-250 | 63 | 250 | |

HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C
 HSK 80C
 HSK 100C



| HSK/C-d ₁ | l ₁ | f ₅ | d ₂ | d ₅ | d ₉ | b ₁ |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 32 | 16 | 10 | 24 | 21 | 4 | 7,05 |
| 40 | 20 | 10 | 30 | 25,5 | 4,6 | 8,05 |
| 50 | 25 | 12,5 | 38 | 32 | 6 | 10,54 |
| 63 | 32 | 12,5 | 48 | 40 | 7,5 | 12,54 |
| 80 | 40 | 16 | 60 | 50 | 8,5 | 16,04 |
| 100 | 50 | 16 | 75 | 63 | 12 | 20,02 |

Front flange with angular adjustment for short spindles



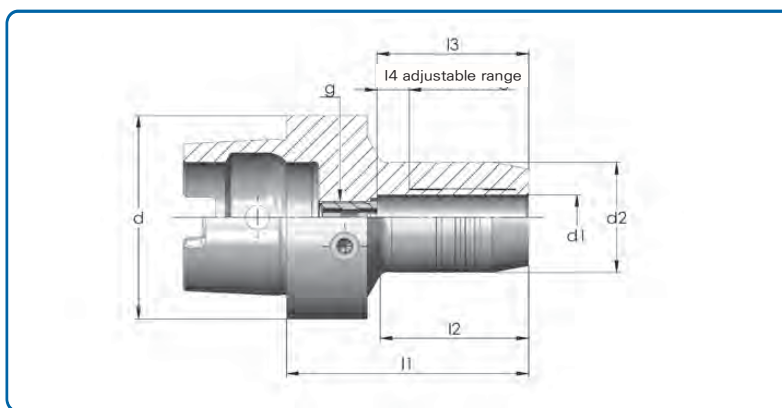
Machine spindle or standard SK-adapter for gripping HSK-tools

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ |
|----------------|----------------|----------------|----------------|----------------|
| FRA-HSK32-060 | 60 | 37 | 26 | 13 |
| FRA-HSK40-070 | 70 | 45 | 30 | 15 |
| FRA-HSK50-080 | 80 | 55 | 35 | 18 |
| FRA-HSK63-100 | 100 | 70 | 43 | 22 |
| FRA-HSK80-117 | 117 | 87 | 50 | 29 |
| FRA-HSK80-100 | 100 | 87 | 90 | 69 |
| FRA-HSK100-140 | 140 | 110 | 70 | 42 |
| FRA-HSK100-100 | 100 | 110 | 110 | 110 |

Short spindle (DIN 69002) for gripping of HSK tools

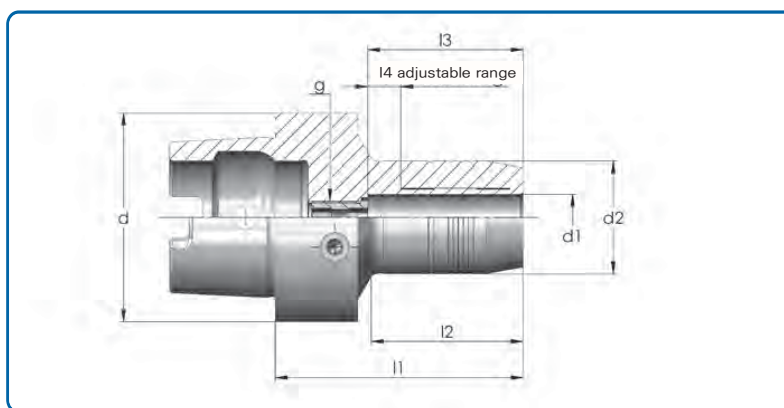
| Code No. | d ₁ | d ₂ | l ₁ | l ₂ |
|----------------|----------------|----------------|----------------|----------------|
| FRS-HSK032-055 | 55 | 61 | 13 | |
| FRS-HSK040-063 | 63 | 70 | 15 | |
| FRS-HSK050-080 | 80 | 87 | 17 | |
| FRS-HSK063-100 | 100 | 108 | 21 | |
| FRS-HSK080-117 | 117 | 125 | 21 | |
| FRS-HSK100-140 | 140 | 150 | 28 | |

HSK 25C
 HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C



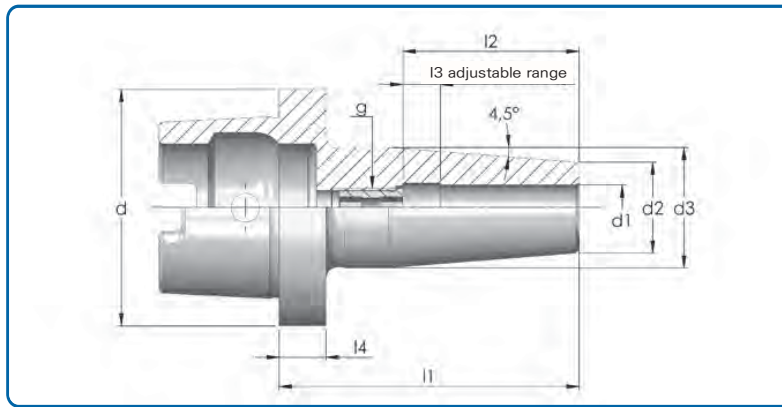
| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | l ₄ | g |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|---------|
| HSK 25C-HC06-060 | 6 | 26 | 60 | 38 | 37 | 10 | M 5 |
| HSK 25C-HC08-060 | 8 | 28 | 60 | 38 | 37 | | M 6 |
| HSK 25C-HC10-065 | 10 | 30 | 65 | 43 | 42 | | M 8 x 1 |
| HSK 32C-HC06-060 | 6 | 26 | 60 | 35 | 37 | 10 | M 5 |
| HSK 32C-HC08-060 | 8 | 28 | 60 | 36 | 37 | | M 6 |
| HSK 32C-HC10-065 | 10 | 30 | 65 | 41 | 42 | | M 8 x 1 |
| HSK 32C-HC12-070 | 12 | 32 | 70 | 70 | 47 | | M 8 x 1 |
| HSK 32C-HC14-075 | 14 | 34 | 75 | 65 | 47 | | M10 x 1 |
| HSK 32C-HC06-067 | 6 | 26 | 67 | 42 | 37 | 10 | M 5 |
| HSK 32C-HC10-072 | 10 | 30 | 72.5 | 48.5 | 42 | | M 8 x 1 |
| HSK 32C-HC10-076 | 10 | 30 | 76 | 52 | 42 | | M 8 x 1 |
| HSK 32C-HC12-076 | 12 | 32 | 76 | 76 | 47 | | M10 x 1 |
| HSK 40C-HC06-060 | 6 | 26 | 60 | 35 | 37 | 10 | M 5 |
| HSK 40C-HC08-060 | 8 | 28 | 60 | 36 | 37 | | M 6 |
| HSK 40C-HC10-065 | 10 | 30 | 65 | 38 | 42 | | M 8 x 1 |
| HSK 40C-HC12-070 | 12 | 32 | 70 | 47 | 47 | | M10 x 1 |
| HSK 40C-HC14-080 | 14 | 34 | 80 | 49 | 47 | | M10 x 1 |
| HSK 40C-HC16-080 | 16 | 38 | 80 | 69 | 52 | | M12 x 1 |
| HSK 40C-HC18-080 | 18 | 40 | 80 | 80 | 52 | | M12 x 1 |
| HSK 40C-HC20-080 | 20 | 40 | 80 | 80 | 52 | | M 8 x 1 |
| HSK 50C-HC06-060 | 6 | 26 | 60 | 33 | 37 | 10 | M 5 |
| HSK 50C-HC08-060 | 8 | 28 | 60 | 33 | 37 | | M 6 |
| HSK 50C-HC10-065 | 10 | 30 | 65 | 39 | 42 | | M 8 x 1 |
| HSK 50C-HC12-075 | 12 | 32 | 75 | 44 | 47 | | M10 x 1 |
| HSK 50C-HC14-075 | 14 | 34 | 75 | 46 | 47 | | M10 x 1 |
| HSK 50C-HC16-080 | 16 | 38 | 80 | 51 | 52 | | M12 x 1 |
| HSK 50C-HC18-080 | 18 | 40 | 80 | 52 | 52 | | M12 x 1 |
| HSK 50C-HC20-080 | 20 | 42 | 80 | 58 | 52 | | M12 x 1 |
| HSK 63C-HC06-060 | 6 | 26 | 60 | 29 | 37 | 10 | M 5 |
| HSK 63C-HC08-060 | 8 | 28 | 60 | 29 | 37 | | M 6 |
| HSK 63C-HC10-065 | 10 | 30 | 65 | 35 | 42 | | M 8 x 1 |
| HSK 63C-HC12-075 | 12 | 32 | 75 | 40 | 47 | | M10 x 1 |
| HSK 63C-HC14-075 | 14 | 34 | 75 | 42 | 47 | | M10 x 1 |
| HSK 63C-HC16-080 | 16 | 38 | 80 | 47 | 52 | | M12 x 1 |
| HSK 63C-HC18-080 | 18 | 40 | 80 | 48 | 52 | | M12 x 1 |
| HSK 63C-HC20-080 | 20 | 42 | 80 | 54 | 52 | | M12 x 1 |
| HSK 63C-HC25-095 | 25 | 50 | 95 | 51 | 58 | | M12 x 1 |
| HSK 63C-HC32-100 | 32 | 60 | 100 | 59 | 62 | | M12 x 1 |

HSK 80C
HSK 100C



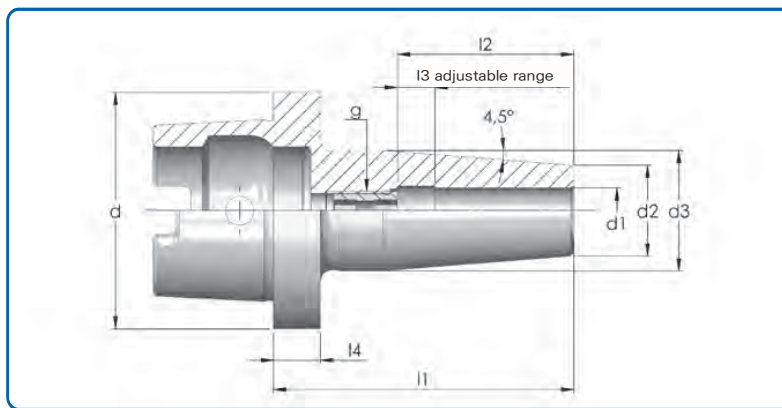
| Code No. | d_1 | d_2 | l_1 | l_2 | l_3 | l_4 | g |
|-------------------|-------|-------|-------|-------|-------|-------|---------|
| HSK 80C-HC06-073 | 6 | 26 | 73 | 29 | 37 | 10 | M 5 |
| HSK 80C-HC08-073 | 8 | 28 | 73 | 29 | 37 | | M 6 |
| HSK 80C-HC10-077 | 10 | 30 | 77 | 35 | 42 | | M 8 x 1 |
| HSK 80C-HC12-082 | 12 | 32 | 82 | 40,5 | 47 | | M10 x 1 |
| HSK 80C-HC14-082 | 14 | 34 | 82 | 42 | 47 | | M10 x 1 |
| HSK 80C-HC16-085 | 16 | 38 | 85 | 47,5 | 52 | | M12 x 1 |
| HSK 80C-HC18-085 | 18 | 40 | 85 | 48 | 52 | | M12 x 1 |
| HSK 80C-HC20-085 | 20 | 42 | 85 | 54 | 52 | | M12 x 1 |
| HSK 80C-HC25-095 | 25 | 50 | 95 | 51 | 58 | | M16 x 1 |
| HSK 80C-HC32-100 | 32 | 60 | 100 | 59 | 62 | | M16 x 1 |
| HSK 100C-HC10-077 | 10 | 30 | 77 | 37 | 42 | 10 | M 8 x 1 |
| HSK 100C-HC12-082 | 12 | 32 | 82 | 47 | 47 | | M10 x 1 |
| HSK 100C-HC14-082 | 14 | 34 | 82 | 47 | 47 | | M10 x 1 |
| HSK 100C-HC16-085 | 16 | 38 | 85 | 47,5 | 52 | | M12 x 1 |
| HSK 100C-HC18-085 | 18 | 40 | 85 | 52 | 52 | | M12 x 1 |
| HSK 100C-HC20-085 | 20 | 42 | 85 | 52 | 52 | | M12 x 1 |
| HSK 100C-HC25-095 | 25 | 50 | 95 | 62 | 58 | | M12 x 1 |
| HSK 100C-HC32-100 | 32 | 60 | 100 | 75 | 62 | | M16 x 1 |

HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | g | |
|-------------------|-------|-------|-------|-------|-------|-------|-------|--------|--|
| HSK 32C-SFD06-065 | 6 | 21 | 27 | 65 | 36 | 10 | 10 | M 5 | |
| HSK 32C-SFD06-075 | 6 | 21 | 27 | 75 | 36 | | | M 5 | |
| HSK 32C-SFD08-065 | 8 | 21 | 27 | 65 | 36 | | | M 6 | |
| HSK 32C-SFD08-075 | 8 | 21 | 27 | 75 | 36 | | | M 6 | |
| HSK 32C-SFD10-065 | 10 | 24 | 32 | 65 | 42 | - | | -- | |
| HSK 32C-SFD10-080 | 10 | 24 | 32 | 80 | 42 | | | M 8x1 | |
| HSK 32C-SFD12-075 | 12 | 24 | 32 | 75 | 47 | | | M 10x1 | |
| HSK 32C-SFD14-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 32C-SFD16-080 | 16 | 27 | 34 | 80 | 50 | | | M 12x1 | |
| | | | | | | | | | |
| HSK 40C-SFD03-070 | 3 | 11 | 15 | 70 | 10 | | 10 | -- | |
| HSK 40C-SFD04-070 | 4 | 14 | 22 | 70 | 20 | 5 | | M 3 | |
| HSK 40C-SFD05-070 | 5 | 16 | 22 | 70 | 20 | | | M 4 | |
| HSK 40C-SFD06-070 | 6 | 21 | 27 | 70 | 36 | 10 | | M 5 | |
| HSK 40C-SFD08-070 | 8 | 21 | 27 | 70 | 36 | | | M 6 | |
| HSK 40C-SFD10-070 | 10 | 24 | 32 | 70 | 42 | | | M 8x1 | |
| HSK 40C-SFD12-080 | 12 | 24 | 32 | 80 | 47 | | | M 10x1 | |
| HSK 40C-SFD14-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 40C-SFD16-080 | 16 | 27 | 34 | 80 | 50 | | | M 12x1 | |
| HSK 40C-SFD18-080 | 18 | 33 | 42 | 80 | 50 | | | M 12x1 | |
| HSK 40C-SFD20-080 | 20 | 33 | 42 | 80 | 52 | | | M 16x1 | |
| | | | | | | | | | |
| HSK 50C-SFD06-070 | 6 | 21 | 27 | 70 | 36 | 10 | 12,5 | M 5 | |
| HSK 50C-SFD08-070 | 8 | 21 | 27 | 70 | 36 | | | M 6 | |
| HSK 50C-SFD10-075 | 10 | 24 | 32 | 75 | 42 | | | M 8x1 | |
| HSK 50C-SFD12-075 | 12 | 24 | 32 | 75 | 47 | | | M 10x1 | |
| HSK 50C-SFD14-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 50C-SFD16-085 | 16 | 27 | 34 | 85 | 50 | | | M 12x1 | |
| HSK 50C-SFD18-085 | 18 | 33 | 42 | 85 | 50 | | | M 12x1 | |
| HSK 50C-SFD20-090 | 20 | 33 | 42 | 90 | 52 | | | M 16x1 | |
| | | | | | | | | | |
| HSK 63C-SFD06-070 | 6 | 21 | 27 | 70 | 36 | 10 | 12,5 | M 5 | |
| HSK 63C-SFD06-070 | 8 | 21 | 27 | 70 | 36 | | | M 6 | |
| HSK 63C-SFD06-075 | 10 | 24 | 32 | 75 | 42 | | | M 8x1 | |
| HSK 63C-SFD06-080 | 12 | 24 | 32 | 80 | 47 | | | M 10x1 | |
| HSK 63C-SFD06-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 63C-SFD06-085 | 16 | 27 | 34 | 85 | 50 | | | M 12x1 | |
| HSK 63C-SFD06-085 | 18 | 33 | 42 | 85 | 50 | | | M 12x1 | |
| HSK 63C-SFD06-090 | 20 | 33 | 42 | 90 | 52 | | | M 16x1 | |
| HSK 63C-SFD06-100 | 25 | 44 | 53 | 100 | 58 | | | M 16x1 | |
| HSK 63C-SFD06-110 | 32 | 44 | 53 | 110 | 61 | | | M 16x1 | |

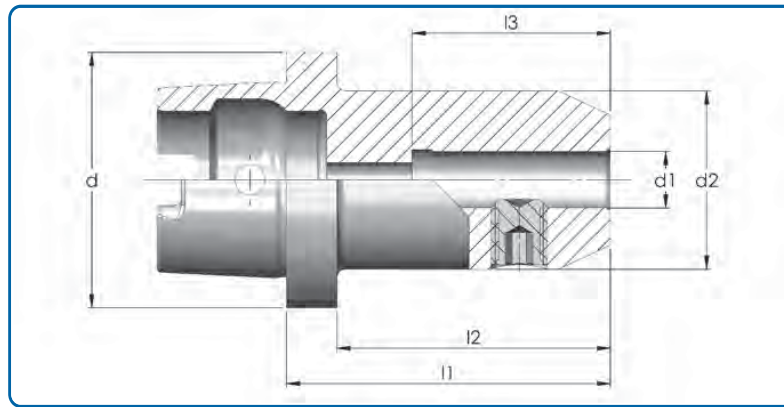
HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | g | |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--|
| HSK 32C-SFD06-065 | 6 | 21 | 27 | 65 | 36 | 10 | 10 | M 5 | |
| HSK 32C-SFD06-075 | 6 | 21 | 27 | 75 | 36 | | | M 5 | |
| HSK 32C-SFD08-065 | 8 | 21 | 27 | 65 | 36 | | | M 6 | |
| HSK 32C-SFD08-075 | 8 | 21 | 27 | 75 | 36 | | | M 6 | |
| HSK 32C-SFD10-065 | 10 | 24 | 32 | 65 | 42 | - | | -- | |
| HSK 32C-SFD10-080 | 10 | 24 | 32 | 80 | 42 | | | M 8x1 | |
| HSK 32C-SFD12-075 | 12 | 24 | 32 | 75 | 47 | | | M 10x1 | |
| HSK 32C-SFD14-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 32C-SFD16-080 | 16 | 27 | 34 | 80 | 50 | | | M 12x1 | |
| | | | | | | | | | |
| HSK 40C-SFD03-070 | 3 | 11 | 15 | 70 | 10 | | 10 | -- | |
| HSK 40C-SFD04-070 | 4 | 14 | 22 | 70 | 20 | 5 | | M 3 | |
| HSK 40C-SFD05-070 | 5 | 16 | 22 | 70 | 20 | | | M 4 | |
| HSK 40C-SFD06-070 | 6 | 21 | 27 | 70 | 36 | 10 | | M 5 | |
| HSK 40C-SFD08-070 | 8 | 21 | 27 | 70 | 36 | | | M 6 | |
| HSK 40C-SFD10-070 | 10 | 24 | 32 | 70 | 42 | | | M 8x1 | |
| HSK 40C-SFD12-080 | 12 | 24 | 32 | 80 | 47 | | | M 10x1 | |
| HSK 40C-SFD14-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 40C-SFD16-080 | 16 | 27 | 34 | 80 | 50 | | | M 12x1 | |
| HSK 40C-SFD18-080 | 18 | 33 | 42 | 80 | 50 | | | M 12x1 | |
| HSK 40C-SFD20-080 | 20 | 33 | 42 | 80 | 52 | | | M 16x1 | |
| | | | | | | | | | |
| HSK 50C-SFD06-070 | 6 | 21 | 27 | 70 | 36 | 10 | 12,5 | M 5 | |
| HSK 50C-SFD08-070 | 8 | 21 | 27 | 70 | 36 | | | M 6 | |
| HSK 50C-SFD10-075 | 10 | 24 | 32 | 75 | 42 | | | M 8x1 | |
| HSK 50C-SFD12-075 | 12 | 24 | 32 | 75 | 47 | | | M 10x1 | |
| HSK 50C-SFD14-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 50C-SFD16-085 | 16 | 27 | 34 | 85 | 50 | | | M 12x1 | |
| HSK 50C-SFD18-085 | 18 | 33 | 42 | 85 | 50 | | | M 12x1 | |
| HSK 50C-SFD20-090 | 20 | 33 | 42 | 90 | 52 | | | M 16x1 | |
| | | | | | | | | | |
| HSK 63C-SFD06-070 | 6 | 21 | 27 | 70 | 36 | 10 | 12,5 | M 5 | |
| HSK 63C-SFD06-070 | 8 | 21 | 27 | 70 | 36 | | | M 6 | |
| HSK 63C-SFD06-075 | 10 | 24 | 32 | 75 | 42 | | | M 8x1 | |
| HSK 63C-SFD06-080 | 12 | 24 | 32 | 80 | 47 | | | M 10x1 | |
| HSK 63C-SFD06-080 | 14 | 27 | 34 | 80 | 47 | | | M 10x1 | |
| HSK 63C-SFD06-085 | 16 | 27 | 34 | 85 | 50 | | | M 12x1 | |
| HSK 63C-SFD06-085 | 18 | 33 | 42 | 85 | 50 | | | M 12x1 | |
| HSK 63C-SFD06-090 | 20 | 33 | 42 | 90 | 52 | | | M 16x1 | |
| HSK 63C-SFD06-100 | 25 | 44 | 53 | 100 | 58 | | | M 16x1 | |
| HSK 63C-SFD06-110 | 32 | 44 | 53 | 110 | 61 | | | M 16x1 | |

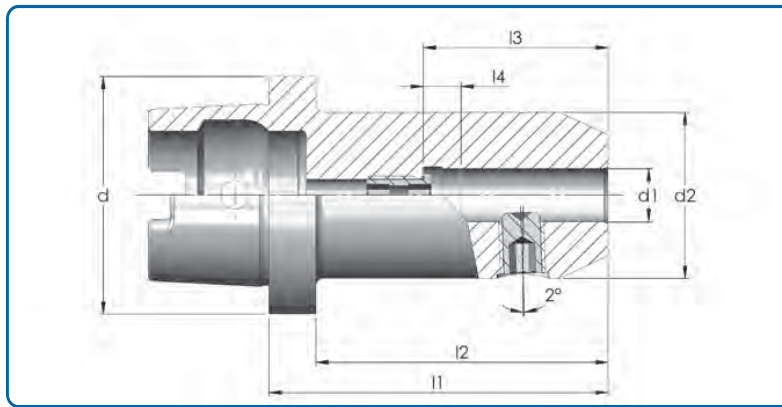
For mounting of solid carbide and HSS-cutters $\varnothing 6 - \varnothing 32$ with h6-tolerance and $\varnothing 3, 4, 5$ with h4-tolerance. Excentricity difference of the taper to the boring 0.003 mm.

HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C
 HSK 100C



| Code No. | d_1 | d_2 | l_1 | l_2 | l_3 | Tolerance d_1 | |
|-------------------|-------|-------|-------|-------|-------|-----------------|--|
| HSK 32C-SLA12-070 | 12 | 26 | 70 | 58 | 49 | | |
| HSK 40C-SLA08-060 | 8 | 28 | 60 | 50 | 36 | +0,005 | |
| HSK 40C-SLA10-070 | 10 | 35 | 70 | 60 | 40 | 0 | |
| HSK 40C-SLA12-070 | 12 | 40 | 70 | 60 | 45 | | |
| HSK 40C-SLA14-075 | 14 | 40 | 75 | 65 | 45 | | |
| HSK 40C-SLA16-075 | 16 | 40 | 75 | 65 | 48 | | |
| HSK 40C-SLA18-080 | 18 | 40 | 80 | 70 | 48 | | |
| HSK 40C-SLA20-080 | 20 | 40 | 80 | 70 | 50 | +0,007 | |
| HSK 50C-SLA06-060 | 6 | 25 | 60 | 47,5 | 40 | +0,005 | |
| HSK 50C-SLA08-060 | 8 | 28 | 60 | 47,5 | 40 | 0 | |
| HSK 50C-SLA10-065 | 10 | 35 | 65 | 52,5 | 44 | | |
| HSK 50C-SLA12-075 | 12 | 42 | 75 | 62,5 | 49 | | |
| HSK 50C-SLA14-075 | 14 | 44 | 75 | 62,5 | 49 | | |
| HSK 50C-SLA16-080 | 16 | 48 | 80 | 67,5 | 52 | | |
| HSK 50C-SLA18-080 | 18 | 50 | 80 | 67,5 | 52 | | |
| HSK 50C-SLA20-080 | 20 | 50 | 80 | 67,5 | 54 | +0,007 | |
| HSK 50C-SLA25-080 | 25 | 50 | 80 | 67,5 | 59 | 0 | |
| HSK 63C-SLA06-060 | 6 | 25 | 60 | 47,5 | 40 | +0,005 | |
| HSK 63C-SLA08-060 | 8 | 28 | 60 | 47,5 | 40 | 0 | |
| HSK 63C-SLA10-065 | 10 | 35 | 65 | 52,5 | 44 | | |
| HSK 63C-SLA12-075 | 12 | 42 | 75 | 62,5 | 49 | | |
| HSK 63C-SLA14-075 | 14 | 44 | 75 | 62,5 | 49 | | |
| HSK 63C-SLA16-080 | 16 | 48 | 80 | 67,5 | 52 | | |
| HSK 63C-SLA18-080 | 18 | 50 | 80 | 67,5 | 52 | | |
| HSK 63C-SLA20-080 | 20 | 52 | 80 | 67,5 | 54 | +0,007 | |
| HSK 63C-SLA25-095 | 25 | 63 | 95 | 82,5 | 59 | 0 | |
| HSK 63C-SLA32-100 | 32 | 63 | 100 | 87,5 | 63 | | |
| HSK100C-SLA06-065 | 6 | 25 | 65 | 49 | 40 | +0,005 | |
| HSK100C-SLA08-065 | 8 | 28 | 65 | 49 | 40 | 0 | |
| HSK100C-SLA10-070 | 10 | 35 | 70 | 54 | 44 | | |
| HSK100C-SLA12-075 | 12 | 42 | 75 | 59 | 49 | | |
| HSK100C-SLA14-075 | 14 | 44 | 75 | 59 | 49 | | |
| HSK100C-SLA16-080 | 16 | 48 | 80 | 64 | 52 | | |
| HSK100C-SLA18-080 | 18 | 50 | 80 | 64 | 52 | | |
| HSK100C-SLA20-085 | 20 | 52 | 85 | 69 | 54 | +0,007 | |
| HSK100C-SLA25-095 | 25 | 65 | 95 | 79 | 59 | 0 | |
| HSK100C-SLA32-100 | 32 | 72 | 100 | 84 | 63 | | |
| HSK100C-SLA40-100 | 40 | 80 | 100 | 84 | 73 | | |

HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C
 HSK 80C
 HSK 100C



| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | l ₄ | Tolerance d ₁ | M |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------------|-----|
| HSK 32C-WNA06-060 | 6 | 25 | 60 | 50 | 36 | 10 | +0,005 | M 5 |
| HSK 32C-WNA08-060 | 8 | 28 | 60 | 50 | 36 | | 0 | M 6 |
| HSK 32C-WNA10-065 | 10 | 35 | 65 | 55 | 40 | | | M 8 |
| HSK 32C-WNA12-070 | 12 | 42 | 70 | 60 | 45 | | | M 8 |
| HSK 32C-WNA14-070 | 14 | 44 | 70 | 60 | 45 | | | M 8 |
| HSK 40C-WNA06-060 | 6 | 25 | 60 | 50 | 36 | 10 | +0,005 | M 5 |
| HSK 40C-WNA08-060 | 8 | 28 | 60 | 50 | 36 | | 0 | M 6 |
| HSK 40C-WNA10-065 | 10 | 35 | 65 | 55 | 40 | | | M 8 |
| HSK 40C-WNA12-070 | 12 | 40 | 70 | 60 | 45 | | | M10 |
| HSK 40C-WNA14-070 | 14 | 40 | 70 | 60 | 45 | | | M10 |
| HSK 40C-WNA16-075 | 16 | 40 | 75 | 65 | 48 | | | M12 |
| HSK 40C-WNA18-075 | 18 | 40 | 75 | 65 | 48 | | | M12 |
| HSK 40C-WNA20-080 | 20 | 48 | 80 | 65 | 50 | | | M12 |
| HSK 40C-WNA25-100 | 25 | 46 | 100 | 90 | 59 | | | M16 |
| HSK 50C-WNA06-060 | 6 | 25 | 60 | 47,5 | 36 | 10 | +0,005 | M 5 |
| HSK 50C-WNA08-060 | 8 | 28 | 60 | 47,5 | 36 | | 0 | M 6 |
| HSK 50C-WNA10-065 | 10 | 35 | 65 | 52,5 | 40 | | | M 8 |
| HSK 50C-WNA12-075 | 12 | 42 | 75 | 62,5 | 45 | | | M10 |
| HSK 50C-WNA14-075 | 14 | 44 | 75 | 62,5 | 45 | | | M10 |
| HSK 50C-WNA16-080 | 16 | 48 | 80 | 67,5 | 48 | | | M12 |
| HSK 50C-WNA18-080 | 18 | 50 | 80 | 67,5 | 48 | | | M12 |
| HSK 50C-WNA20-080 | 20 | 52 | 80 | 67,5 | 50 | | +0,007 | M16 |
| HSK 50C-WNA25-085 | 25 | 65 | 85 | 73,5 | 56 | | 0 | M20 |
| HSK 63C-WNA06-060 | 6 | 25 | 60 | 47,5 | 40 | 10 | +0,005 | M 5 |
| HSK 63C-WNA08-060 | 8 | 28 | 60 | 47,5 | 38 | | 0 | M 6 |
| HSK 63C-WNA10-065 | 10 | 35 | 65 | 52,5 | 44 | | | M 8 |
| HSK 63C-WNA12-075 | 12 | 42 | 75 | 62,5 | 47 | | | M 8 |
| HSK 63C-WNA14-075 | 14 | 44 | 75 | 62,5 | 47 | | | M10 |
| HSK 63C-WNA16-080 | 16 | 48 | 80 | 67,5 | 51 | | | M10 |

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | l ₄ | Tolerance d ₁ | M |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------------|-----|
| HSK 63C-WNA18-080 | 18 | 50 | 80 | 67,5 | 52 | 10 | +0,007 | M12 |
| HSK 63C-WNA20-080 | 20 | 52 | 80 | 67,5 | 54 | | 0 | M12 |
| HSK 63C-WNA25-095 | 25 | 65 | 95 | 82,5 | 56 | | | M16 |
| HSK 63C-WNA32-100 | 32 | 72 | 100 | 82,5 | 60 | | | M20 |
| HSK 80C-WNA06-065 | 6 | 25 | 65 | 49 | 40 | 6 | +0,005 | M 5 |
| HSK 80C-WNA08-065 | 8 | 28 | 65 | 49 | 40 | | 0 | M 6 |
| HSK 80C-WNA10-070 | 10 | 35 | 70 | 54 | 44 | | | M 8 |
| HSK 80C-WNA12-075 | 12 | 42 | 75 | 59 | 49 | | | M 8 |
| HSK 80C-WNA14-075 | 14 | 44 | 75 | 59 | 49 | | | M10 |
| HSK 80C-WNA16-080 | 16 | 48 | 80 | 64 | 52 | | | M12 |
| HSK 80C-WNA18-080 | 18 | 50 | 80 | 64 | 52 | | | M12 |
| HSK 80C-WNA20-085 | 20 | 52 | 85 | 69 | 54 | | +0,007 | M12 |
| HSK 80C-WNA25-095 | 25 | 65 | 95 | 79 | 59 | 10 | 0 | M12 |
| HSK 80C-WNA32-100 | 32 | 72 | 100 | 84 | 63 | | | M16 |
| HSK100C-WNA06-065 | 6 | 25 | 65 | 49 | 40 | 6 | +0,005 | M 5 |
| HSK100C-WNA08-065 | 8 | 28 | 65 | 49 | 40 | | 0 | M 6 |
| HSK100C-WNA10-070 | 10 | 35 | 70 | 54 | 44 | | | M 8 |
| HSK100C-WNA12-075 | 12 | 42 | 75 | 59 | 49 | | | M 8 |
| HSK100C-WNA14-075 | 14 | 44 | 75 | 59 | 49 | | | M10 |
| HSK100C-WNA16-080 | 16 | 48 | 80 | 64 | 52 | | | M12 |
| HSK100C-WNA18-080 | 18 | 50 | 80 | 64 | 52 | | | M12 |
| HSK100C-WNA20-085 | 20 | 52 | 85 | 69 | 54 | | +0,007 | M12 |
| HSK100C-WNA25-095 | 25 | 65 | 95 | 79 | 59 | 10 | 0 | M12 |
| HSK100C-WNA32-100 | 32 | 72 | 100 | 84 | 63 | | | M16 |

Note : From diameter d₁ = 25 upwards, 2 tightening screws are provided.

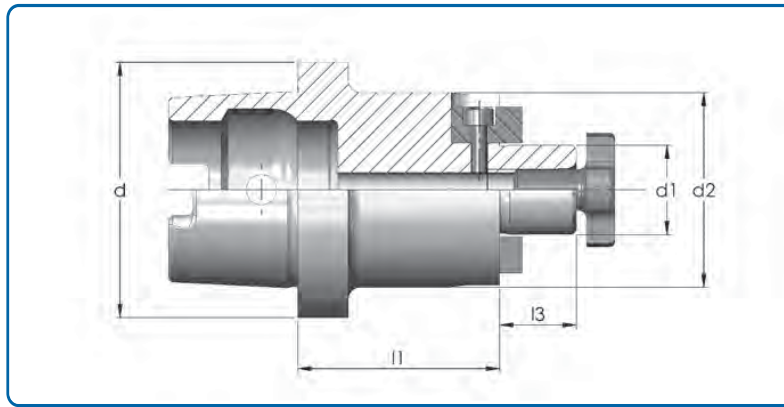
Remark : To Provide for machining with extreme accuracy, the bore is to far finer tolerance than called for in DIN 1835.

Application : For mounting straight-shank tools to DIN 1835 Form E and DIN 6536 Form HE.

Execution : Permissible exentricity difference of the taper to the boring 0.003 mm.

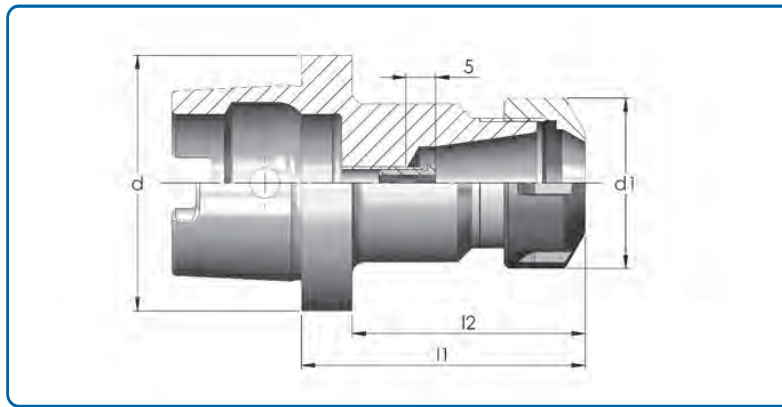
| Spare parts | Tightening screw | | | | Adjusting screw | | | |
|-------------|------------------|----------------|----------|----------------|-----------------|----------------|----------|----------------|
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 031.801 | 6 | 031.805 | 16 | 036.801 | 6 | 036.805 | 16 |
| | 031.802 | 8 | 031.805 | 18 | 036.802 | 8 | 036.805 | 18 |
| | 031.803 | 10 | 031.806 | 20 | 036.803 | 10 | 036.806 | 20 |
| | 031.804 | 12 | 031.807 | 25 | 036.804 | 12 | 036.807 | 25 |
| | 031.804 | 14 | 031.808 | 32 | 036.804 | 14 | 036.807 | 32 |

HSK 25C



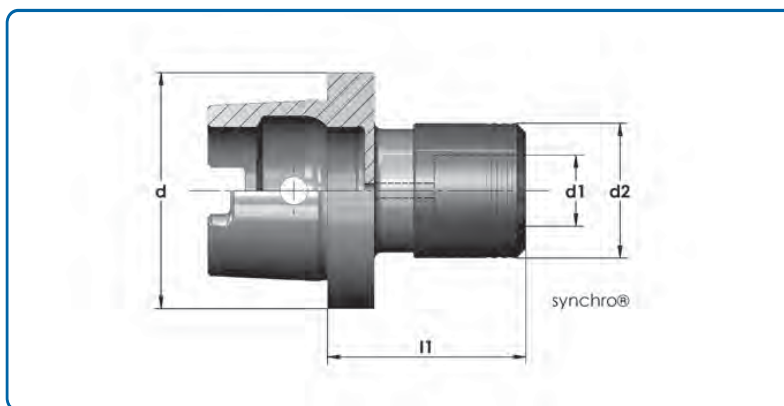
| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | |
|-------------------|----------------|----------------|----------------|----------------|--|
| HSK 40C-FMD16-050 | 16 | 40 | 17 | 50 | |
| HSK 40C-FMD22-060 | 22 | 40 | 19 | 60 | |
| HSK 50C-FMD16-060 | 16 | 40 | 17 | 60 | |
| HSK 50C-FMD22-060 | 22 | 50 | 19 | 60 | |
| HSK 50C-FMD27-060 | 27 | 50 | 21 | 60 | |
| HSK 63C-FMD22-050 | 22 | 48 | 19 | 50 | |
| HSK 63C-FMD27-060 | 27 | 60 | 21 | 60 | |
| HSK 63C-FMD32-060 | 32 | 78 | 24 | 60 | |
| HSK 63C-FMD40-060 | 40 | 89 | 27 | 60 | |
| HSK 80C-FMD22-050 | 22 | 48 | 19 | 50 | |
| HSK 80C-FMD32-048 | 32 | 78 | 24 | 48 | |
| HSK 80C-FMD32-060 | 32 | 78 | 24 | 60 | |
| HSK 80C-FMD40-060 | 40 | 89 | 27 | 60 | |
| HSK100C-FMD22-050 | 22 | 48 | 19 | 50 | |
| HSK100C-FMD27-050 | 27 | 60 | 21 | 50 | |
| HSK100C-FMD32-050 | 32 | 78 | 24 | 50 | |
| HSK100C-FMD40-060 | 40 | 89 | 27 | 60 | |
| HSK100C-FMD50-060 | 50 | 120 | 30 | 70 | |

HSK 25C
 HSK 32C
 HSK 40C
 HSK 50C
 HSK 63C
 HSK 80C
 HSK100C



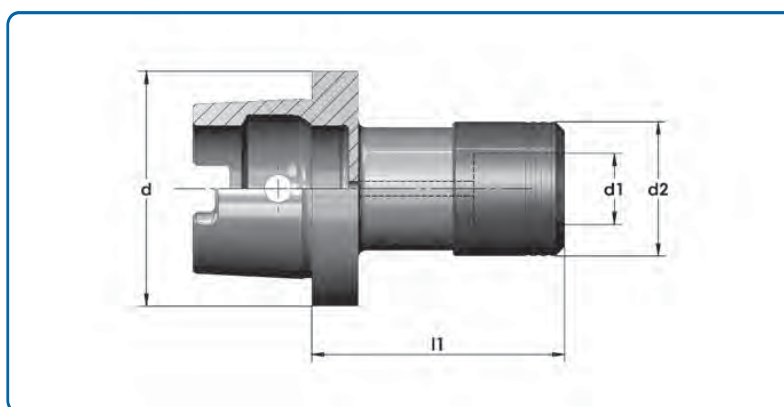
| Code No. | Chucking range | d_1 | l_1 | l_2 |
|-------------------|-------------------|-------|-------|-------|
| HSK 25C-ERA08-026 | 0 - 6 ER 8 | 12 | 26 | 18 |
| HSK 25C-ERM11-040 | 1 - 6 ER 11-mini | 16 | 40 | 32 |
| HSK 25C-ERA11-045 | 1 - 6 ER 11 | 16 | 45 | 37 |
| HSK 25C-ERM16-028 | 1 - 10 ER 16-mini | 22 | 28 | 19,5 |
| HSK 25C-ERM16-055 | 1 - 10 ER 16-mini | 22 | 55 | 47 |
| HSK 32C-ERA16-045 | 1 - 10 ER 16 | 28 | 45 | 35 |
| HSK 32C-ERA16-060 | 1 - 10 ER 16 | 28 | 60 | 50 |
| HSK 32C-ERA20-065 | 1 - 13 ER 20 | 34 | 65 | 55 |
| HSK 32C-ERM25-065 | 1 - 16 ER 25-mini | 35 | 65 | 55 |
| HSK 40C-ERM16-070 | 1 - 10 ER 16-mini | 22 | 70 | 60 |
| HSK 40C-ERA16-060 | 1 - 10 ER 16 | 28 | 60 | 50 |
| HSK 40C-ERA20-060 | 1 - 13 ER 20 | 34 | 60 | 50 |
| HSK 40C-ERA20-070 | 1 - 13 ER 20 | 34 | 70 | 60 |
| HSK 40C-ERA25-070 | 1 - 16 ER 25 | 42 | 70 | 60 |
| HSK 40C-ERA32-075 | 2 - 20 ER 32 | 50 | 75 | 65 |
| HSK 40C-ERA40-085 | 3 - 26 ER 40 | 63 | 85 | 75 |
| HSK 40C-ERA16-160 | 1 - 10 ER 16 | 28 | 160 | 150 |
| HSK 50C-ERA16-060 | 1 - 10 ER 16 | 28 | 60 | 47,5 |
| HSK 50C-ERA16-100 | 1 - 10 ER 16 | 28 | 100 | 87,5 |
| HSK 50C-ERA25-070 | 1 - 16 ER 25 | 42 | 70 | 57,5 |
| HSK 50C-ERA32-080 | 2 - 20 ER 32 | 50 | 80 | 67,5 |
| HSK 50C-ERA40-080 | 3 - 26 ER 40 | 63 | 80 | 67,5 |
| HSK 63C-ERA16-060 | 1 - 10 ER 16 | 28 | 60 | 47,5 |
| HSK 63C-ERM20-070 | 1 - 13 ER 20-mini | 28 | 70 | 57,5 |
| HSK 63C-ERA25-070 | 1 - 16 ER 25 | 42 | 70 | 57,5 |
| HSK 63C-ERA32-075 | 2 - 20 ER 32 | 50 | 75 | 62,5 |
| HSK 63C-ERA40-080 | 3 - 26 ER 40 | 63 | 80 | 67,5 |
| HSK 63C-ERA16-100 | 1 - 10 ER 16 | 28 | 100 | 87,5 |
| HSK 80C-ERA16-100 | 1 - 10 ER 16 | 28 | 100 | 84 |
| HSK 80C-ERA16-160 | 1 - 10 ER 16 | 28 | 160 | 144 |
| HSK 80C-ERA32-080 | 2 - 20 ER 32 | 50 | 80 | 64 |
| HSK 80C-ERA40-085 | 3 - 26 ER 40 | 63 | 85 | 69 |
| HSK100C-ERA16-100 | 1 - 10 ER 16 | 28 | 100 | 84 |
| HSK100C-ERA16-160 | 1 - 10 ER 16 | 28 | 160 | 144 |
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HSK 25C



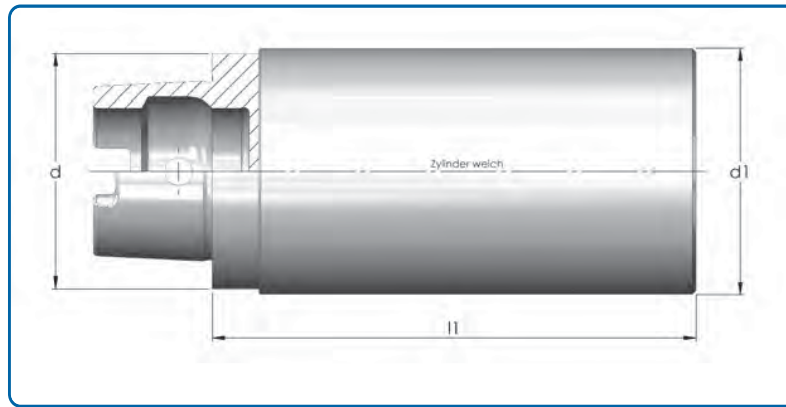
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| HSK 50C-STC01-058 | M 3 - M12 | 1 | 19 | 36 | 58 | 45,5 |
| HSK 50C-STC02-076 | M 8 - M20 | 2 | 31 | 53 | 76 | 63,5 |
| HSK 63C-STC01-058 | M 3 - M12 | 1 | 19 | 36 | 58 | 45,5 |
| HSK 63C-STC02-076 | M 8 - M20 | 2 | 31 | 53 | 76 | 63,5 |
| HSK 63C-STC03-109 | M 14 - M33 | 3 | 48 | 78 | 109 | 96,5 |
| HSK100C-STC02-080 | M 8 - M20 | 2 | 31 | 53 | 80 | 64 |
| HSK100C-STC03-112 | M 14 - M33 | 3 | 48 | 78 | 112 | 96 |

Quick Change Tapping Chucks



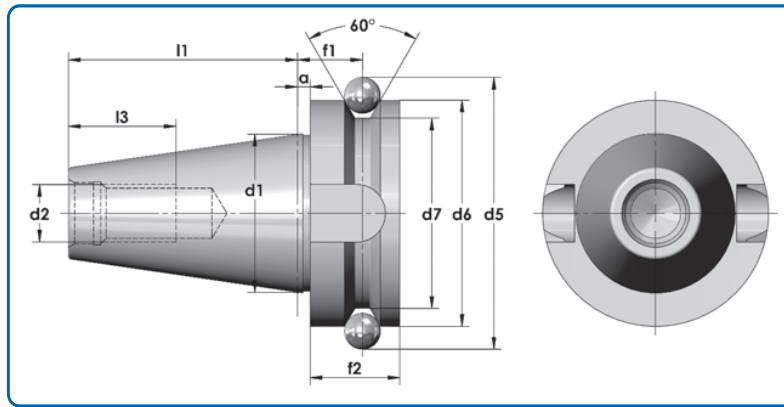
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| HSK 40C-QTC01-105 | M 3 - M12 | 1 | 19 | 36 | 105 | 85 |
| HSK 40C-QTC02-148 | M 8 - M20 | 2 | 31 | 53 | 148 | 128 |
| HSK 50C-QTC01-109 | M 3 - M12 | 1 | 19 | 36 | 109 | 83 |
| HSK 50C-QTC02-152 | M 8 - M20 | 2 | 31 | 53 | 152 | 126 |
| HSK 63C-QTC01-109 | M 3 - M12 | 1 | 19 | 36 | 109 | 83 |
| HSK 63C-QTC02-155 | M 8 - M20 | 2 | 31 | 53 | 155 | 129 |
| HSK 63C-QTC03-203 | M 14 - M33 | 3 | 48 | 78 | 203 | 177 |
| HSK100C-QTC02-191 | M 8 - M20 | 2 | 31 | 53 | 191 | 162 |
| HSK100C-QTC03-234 | M 14 - M33 | 3 | 48 | 78 | 234 | 205 |

HSK 25C
 HSK 30C
 HSK 40C
 HSK 50C
 HSK 63C
 HSK 80C
 HSK100C



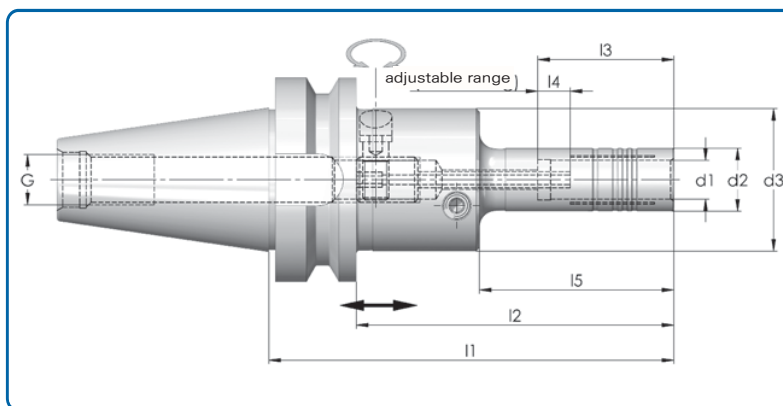
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| HSK 25C-BLN25-050 | 25 | 50 |
| HSK 25C-BLN25-110 | 25 | 110 |
| HSK 32C-BLN32-040 | 32 | 40 |
| HSK 25C-BLN32-110 | 32 | 110 |
| HSK 25C-BLN50-100 | 50 | 100 |
| | | |
| HSK 32C-BLN32-160 | 32 | 160 |
| HSK 32C-BLN42-050 | 42 | 50 |
| HSK 32C-BLN70-045 | 70 | 45 |
| HSK 32C-BLN80-080 | 80 | 80 |
| HSK 32C-BLN40-110 | 40 | 110 |
| HSK 32C-BLN50-125 | 50 | 125 |
| HSK 32C-BLN60-100 | 60 | 100 |
| | | |
| HSK 40C-BLN43-160 | 43 | 160 |
| HSK 40C-BLN34-160 | 34 | 160 |
| HSK 40C-BLN51-180 | 51 | 180 |
| HSK 40C-BLN60-100 | 60 | 100 |
| | | |
| HSK 50C-BLN50-050 | 50 | 50 |
| HSK 50C-BLN50-200 | 50 | 200 |
| HSK 50C-BLN64-200 | 64 | 200 |
| HSK 50C-BLN80-160 | 80 | 160 |
| HSK 50C-BLN85-150 | 85 | 150 |

| Code No. | d ₁ | l ₁ |
|--------------------|----------------|----------------|
| HSK 63C-BLN063-250 | 63 | 250 |
| HSK 63C-BLN063-300 | 63 | 300 |
| HSK 63C-BLN065-350 | 65 | 350 |
| HSK 63C-BLN068-125 | 68 | 125 |
| HSK 63C-BLN080-250 | 80 | 70 |
| HSK 63C-BLN080-250 | 80 | 250 |
| HSK 63C-BLN100-056 | 100 | 56 |
| HSK 63C-BLN100-080 | 100 | 80 |
| HSK 63C-BLN100-170 | 100 | 170 |
| HSK 63C-BLN110-200 | 110 | 200 |
| HSK 63C-BLN120-085 | 120 | 85 |
| HSK 63C-BLN120-160 | 120 | 160 |
| | | |
| HSK 80C-BLN080-250 | 80 | 250 |
| HSK 80C-BLN097-385 | 97 | 385 |
| HSK 80C-BLN100-100 | 100 | 100 |
| HSK 80C-BLN100-200 | 100 | 200 |
| HSK 80C-BLN200-050 | 200 | 50 |
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| HSK100C-BLN102-250 | 102 | 250 |
| HSK100C-BLN130-160 | 130 | 160 |
| HSK100C-BLN108-285 | 108 | 285 |



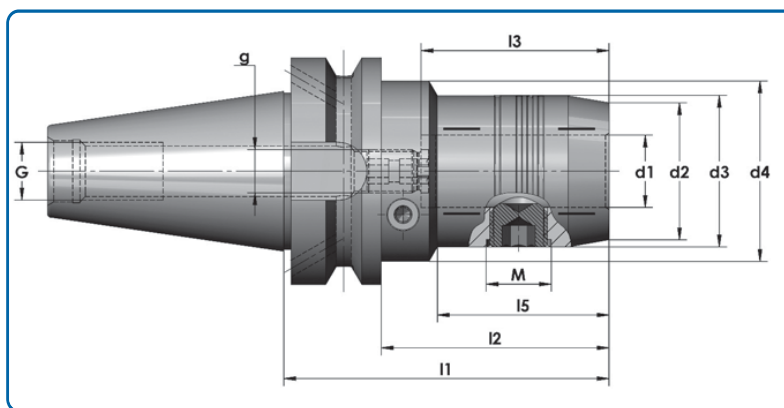
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|--------|-------------|-------|-------|------------------|------------------|-------|---------------|-------|---------------|--------------------|--|
| BT 30 | 2 | 31.75 | M 12 | 56.14 | 46 | 38 | 13.6 | 20 | 48.4 | 24 | |
| BT 40 | 2 | 44.45 | M 16 | 75.68 | 63 | 53 | 16.6 | 25 | 65.4 | 30 | |
| BT 45 | 3 | 51.75 | M 20 | 100.22 | 85 | 73 | 21.2 | 30 | 82.8 | 40 | |
| BT 50 | 3 | 69.85 | M 24 | 119 | 100 | 85 | 23.2 | 35 | 101.8 | 45 | |

BT 40
BT 50
BBT 40
BBT 50





| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | l_5 | G |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| BT 40-HCS06-125 | 6 | 13,5 | 44 | 125 | 98 | 37 | 10 | 60 | M 16 |
| BT 40-HCS08-125 | 8 | 16 | 44 | 125 | 98 | 37 | 10 | 60 | |
| BT 40-HCS10-125 | 10 | 17,5 | 44 | 125 | 98 | 42 | 10 | 60 | |
| BT 40-HCS12-125 | 12 | 19,5 | 44 | 125 | 98 | 47 | 10 | 60 | |
| BT 40-HCS14-125 | 14 | 21,5 | 44 | 125 | 98 | 47 | 10 | 60 | |
| BT 40-HCS16-125 | 16 | 23,5 | 44 | 125 | 98 | 52 | 10 | 60 | |
| BT 40-HCS18-125 | 18 | 25,5 | 44 | 125 | 98 | 52 | 10 | 60 | |
| BT 40-HCS20-125 | 20 | 27,5 | 44 | 125 | 98 | 52 | 10 | 60 | |
| BT 40-HCS25-125 | 25 | 32,5 | 44 | 125 | 98 | 58 | 10 | 60 | |
| BT 40-HCS32-125 | 32 | 39,5 | 44 | 125 | 98 | 62 | 10 | 60 | |
| BT 50-HCS06-125 | 6 | 13,5 | 44 | 125 | 87 | 37 | 10 | 60 | M 16 |
| BT 50-HCS08-125 | 8 | 16 | 44 | 125 | 87 | 37 | 10 | 60 | |
| BT 50-HCS10-125 | 10 | 17,5 | 44 | 125 | 87 | 42 | 10 | 60 | |
| BT 50-HCS12-125 | 12 | 19,5 | 44 | 125 | 87 | 47 | 10 | 60 | |
| BT 50-HCS14-125 | 14 | 21,5 | 44 | 125 | 87 | 47 | 10 | 60 | |
| BT 50-HCS16-125 | 16 | 23,5 | 44 | 125 | 87 | 52 | 10 | 60 | |
| BT 50-HCS18-125 | 18 | 25,5 | 44 | 125 | 87 | 52 | 10 | 60 | |
| BT 50-HCS20-125 | 20 | 27,5 | 44 | 125 | 87 | 52 | 10 | 60 | |
| BT 50-HCS25-125 | 25 | 32,5 | 44 | 125 | 87 | 58 | 10 | 60 | |
| BT 50-HCS32-125 | 32 | 39,5 | 44 | 125 | 87 | 62 | 10 | 60 | |

BT 40
BT 50
BBT 40
BBT 50

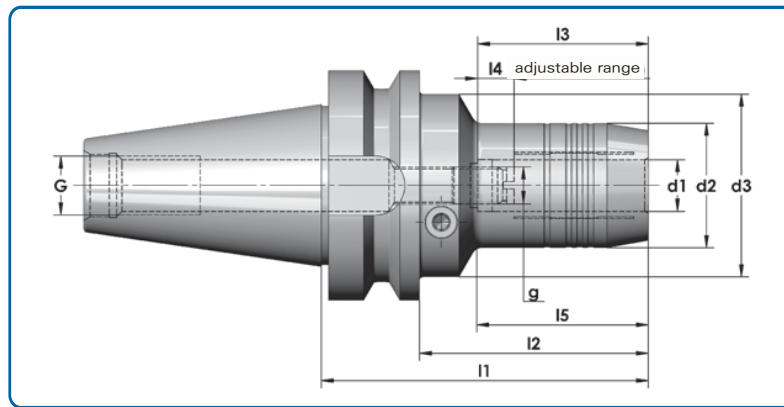


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|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|---------|---------|
| BT 40-HCL06-090 | 6 | 23 | 26 | 50 | 90 | 63 | 37 | 43 | M16 | M 5 | M 6 |
| BT 40-HCL08-090 | 8 | 25 | 28 | 50 | 90 | 63 | 37 | 43,5 | M16 | M 6 | M 8 |
| BT 40-HCL10-090 | 10 | 27 | 30 | 50 | 90 | 63 | 42 | 44 | M16 | M 8 x 1 | M10 |
| BT 40-HCL12-090 | 12 | 29 | 32 | 50 | 90 | 63 | 47 | 44,5 | M16 | M10 x 1 | M12 |
| BT 40-HCL14-090 | 14 | 30 | 34 | 50 | 90 | 63 | 47 | 47,5 | M16 | M10 x 1 | M12 |
| BT 40-HCL16-090 | 16 | 34 | 38 | 50 | 90 | 63 | 52 | 47,5 | M16 | M12 x 1 | M14 |
| BT 40-HCL18-090 | 18 | 36 | 40 | 50 | 90 | 63 | 52 | 47,5 | M16 | M12 x 1 | M14 |
| BT 40-HCL20-090 | 20 | 38 | 42 | 50 | 90 | 63 | 52 | 47,5 | M16 | M12 x 1 | M16 |
| BT 40-HCL25-090 | 25 | 46 | 50 | - | 90 | 63 | 58 | - | M16 | M16 x 1 | M18 x 2 |
| BT 40-HCL32-110 | 32 | 56 | 60 | - | 110 | 81,5 | 62 | - | M16 | M16 x 1 | M20 x 2 |
| BT 50-HCL06-110 | 6 | 23 | 26 | 80 | 110 | 72 | 37 | 43 | M24 | M 5 | M 6 |
| BT 50-HCL08-110 | 8 | 25 | 28 | 80 | 110 | 72 | 37 | 43 | M24 | M 6 | M 8 |
| BT 50-HCL10-110 | 10 | 27 | 30 | 80 | 110 | 72 | 42 | 44 | M24 | M 8 x 1 | M10 |
| BT 50-HCL12-110 | 12 | 29 | 32 | 80 | 110 | 72 | 47 | 42 | M24 | M10 x 1 | M12 |
| BT 50-HCL14-110 | 14 | 30 | 34 | 80 | 110 | 72 | 47 | 42 | M24 | M10 x 1 | M12 |
| BT 50-HCL16-110 | 16 | 34 | 38 | 80 | 110 | 72 | 52 | 45 | M24 | M12 x 1 | M14 |
| BT 50-HCL18-110 | 18 | 36 | 40 | 80 | 110 | 72 | 52 | 45 | M24 | M12 x 1 | M14 |
| BT 50-HCL20-110 | 20 | 38 | 42 | 80 | 110 | 72 | 52 | 47,5 | M24 | M12 x 1 | M16 |
| BT 50-HCL25-110 | 25 | 46 | 50 | 80 | 110 | 72 | 58 | 47,5 | M24 | M16 x 1 | M18 x 2 |
| BT 50-HCL32-110 | 32 | 56 | 60 | 80 | 110 | 72 | 62 | 56 | M24 | M16 x 1 | M20 x 2 |
| BT 50-HCL40-130 | 40 | 66 | 70 | - | 130 | 92 | 72 | - | M24 | M16 x 1 | M20 x 2 |

| Accessories | Adjusting screws | | Tightening screw | |
|-------------|------------------|----------------------|------------------|----------------------|
| | Code No. | BT40x d ₁ | Code No. | BT50x d ₁ |
| | 036.852 | BT40x ø 6 | 036.852 | BT50x ø 6 |
| | 036.853 | BT40x ø 8 | 036.853 | BT50x ø 8 |
| | 036.854 | BT40x ø 10 | 036.854 | BT50x ø 10 |
| | 036.855 | BT40x ø 12 | 036.855 | BT50x ø 12 |
| | 036.855 | BT40x ø 14 | 036.855 | BT50x ø 14 |
| | 036.856 | BT40x ø 16 | 036.856 | BT50x ø 16 |
| | 036.856 | BT40x ø 18 | 036.856 | BT50x ø 18 |
| | 036.856 | BT40x ø 20 | 036.856 | BT50x ø 20 |
| | 036.864 | BT40x ø 25 | 036.857 | BT50x ø 25 |
| | 036.857 | BT40x ø 32 | 036.857 | BT50x ø 32 |
| | | | 036.857 | BT50x ø 40 |

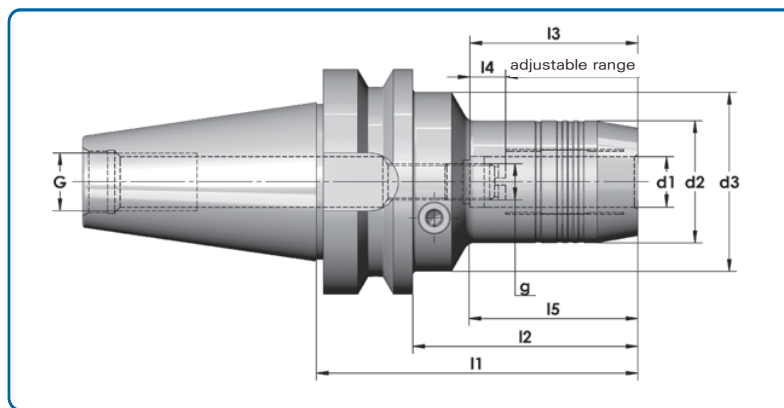



BT 30
BT 40
BBT 30
BBT 40



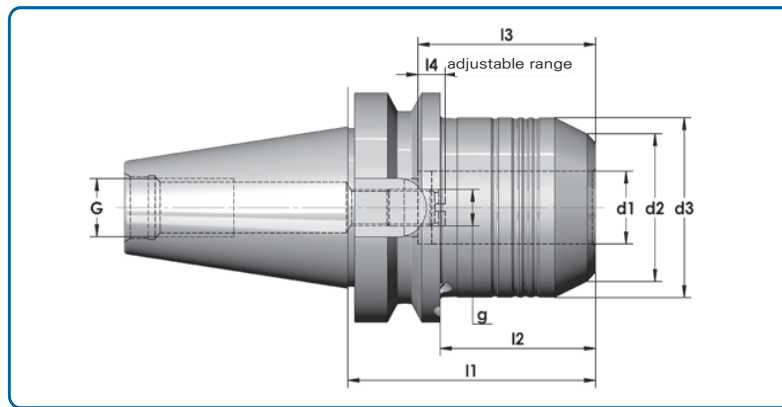
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|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
| BT 30-HCD06-060 | 6 | 26 | 26 | 60 | 38 | 37 | 10 | 33,0 | M 5 | M 12 |
| BT 30-HCD08-064 | 8 | 28 | 45 | 64 | 42 | 37 | 10 | 29,0 | M 6 | |
| BT 30-HCD10-064 | 10 | 30 | 30 | 64 | 42 | 42 | 10 | 37,0 | M 8 x 1 | |
| BT 30-HCD12-072 | 12 | 32 | 32 | 72 | 50 | 47 | 10 | 43,0 | M 10 x 1 | |
| BT 30-HCD14-070 | 14 | 34 | 34 | 70 | 48 | 47 | 10 | 45,0 | M 10 x 1 | |
| BT 30-HCD16-090 | 16 | 38 | 50 | 90 | 63 | 52 | 10 | 47,0 | M 12 x 1 | |
| BT 30-HCD18-090 | 18 | 40 | 42 | 90 | 68 | 52 | 10 | 68,0 | M 12 x 1 | |
| BT 30-HCD20-090 | 20 | 42 | 42 | 90 | 68 | 52 | 10 | 68,0 | M 16 x 1 | |
| BT 30-HCD25-110 | 25 | 50 | 50 | 110 | 88 | 58 | 10 | 78,0 | M 12 x 1 | |
| BT 40-HCD06-090 | 6 | 26 | 50 | 90 | 63 | 37 | 10 | 43,0 | M 5 | M 16 |
| BT 40-HCD08-090 | 8 | 28 | 50 | 90 | 63 | 37 | 10 | 43,5 | M 6 | |
| BT 40-HCD10-090 | 10 | 30 | 50 | 90 | 63 | 42 | 10 | 44,0 | M 8 x 1 | |
| BT 40-HCD12-090 | 12 | 32 | 50 | 90 | 63 | 47 | 10 | 44,5 | M 10 x 1 | |
| BT 40-HCD14-090 | 14 | 34 | 50 | 90 | 63 | 47 | 10 | 47,5 | M 10 x 1 | |
| BT 40-HCD16-090 | 16 | 38 | 50 | 90 | 63 | 52 | 10 | 47,5 | M 12 x 1 | |
| BT 40-HCD18-090 | 18 | 40 | 50 | 90 | 63 | 52 | 10 | 47,5 | M 12 x 1 | |
| BT 40-HCD20-090 | 20 | 42 | 50 | 90 | 63 | 52 | 10 | 47,5 | M 16 x 1 | |
| BT 40-HCD25-090 | 25 | 50 | 63 | 90 | 51 | 58 | 10 | 51,0 | M 16 x 1 | |
| BT 40-HCD32-110 | 32 | 60 | 60 | 110 | 81,5 | 62 | 10 | 81,5 | M 16 x 1 | |
| BT 40-HCD12-120 | 12 | 22 | 50 | 120 | 93 | 47 | 10 | 70,0 | M 10x1 | |
| BT 40-HCD16-140 | 16 | 38 | 50 | 140 | 113 | 52 | 10 | 47,5 | M 12x1 | M 16 |
| BT 40-HCD06-150 | 6 | 26 | 50 | 150 | 123 | 37 | 10 | 103 | M 5 | M 24 |
| BT 40-HCD08-150 | 8 | 28 | 50 | 150 | 123 | 37 | 10 | 103 | M 6 | |
| BT 40-HCD10-150 | 10 | 30 | 50 | 150 | 123 | 42 | 10 | 104 | M 8 x 1 | |
| BT 40-HCD12-150 | 12 | 32 | 50 | 150 | 123 | 47 | 10 | 104,5 | M 10 x 1 | |
| BT 40-HCD14-150 | 14 | 34 | 50 | 150 | 123 | 47 | 10 | 107,5 | M 10 x 1 | |
| BT 40-HCD16-150 | 16 | 38 | 50 | 150 | 123 | 52 | 10 | 107 | M 12 x 1 | |
| BT 40-HCD18-150 | 18 | 40 | 50 | 150 | 123 | 52 | 10 | 107 | M 12 x 1 | |
| BT 40-HCD20-150 | 20 | 42 | 50 | 150 | 123 | 52 | 10 | 107 | M 12 x 1 | |
| BT 40-HCD25-150 | 25 | 50 | 50 | 150 | 115 | 58 | 10 | 115 | M 12 x 1 | |
| BT 40-HCD32-150 | 32 | 60 | 60 | 150 | 115 | 62 | 10 | 115 | M 16 x 1 | |

BT 40
BT 50
BBT 40
BBT 50



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | l_4 | l_5 | g | G |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
| BT 40-HCD06-200 | 6 | 26 | 50 | 200 | 173 | 37 | 10 | 153 | M 5 | M 16 |
| BT 40-HCD08-200 | 8 | 28 | 50 | 200 | 173 | 37 | 10 | 153 | M 6 | |
| BT 40-HCD10-200 | 10 | 30 | 50 | 200 | 173 | 42 | 10 | 154 | M 8 x 1 | |
| BT 40-HCD12-200 | 12 | 32 | 50 | 200 | 173 | 47 | 10 | 154,5 | M 10 x 1 | |
| BT 40-HCD14-200 | 14 | 34 | 50 | 200 | 173 | 47 | 10 | 154 | M 10 x 1 | |
| BT 40-HCD16-200 | 16 | 38 | 50 | 200 | 173 | 52 | 10 | 154 | M 12 x 1 | |
| BT 40-HCD18-200 | 18 | 40 | 50 | 200 | 173 | 52 | 10 | 154 | M 12 x 1 | |
| BT 40-HCD20-200 | 20 | 42 | 50 | 200 | 173 | 52 | 10 | 157 | M 16 x 1 | |
| BT 40-HCD25-200 | 25 | 50 | 50 | 200 | 165 | 58 | 10 | 165 | M 16 x 1 | |
| BT 40-HCD32-200 | 32 | 60 | 60 | 200 | 171,5 | 62 | 10 | 171,5 | M 16 x 1 | |
| BT 50-HCD06-110 | 6 | 26 | 80 | 110 | 72 | 37 | 10 | 43,0 | M 5 | M 24 |
| BT 50-HCD08-110 | 8 | 28 | 80 | 110 | 72 | 37 | 10 | 43,5 | M 6 | |
| BT 50-HCD10-110 | 10 | 30 | 80 | 110 | 72 | 42 | 10 | 44,0 | M 8 x 1 | |
| BT 50-HCD12-110 | 12 | 32 | 80 | 110 | 72 | 47 | 10 | 42,0 | M 10 x 1 | |
| BT 50-HCD14-110 | 14 | 34 | 80 | 110 | 72 | 47 | 10 | 42,0 | M 10 x 1 | |
| BT 50-HCD16-110 | 16 | 38 | 80 | 110 | 72 | 52 | 10 | 45,0 | M 12 x 1 | |
| BT 50-HCD18-110 | 18 | 40 | 80 | 110 | 72 | 52 | 10 | 45,0 | M 12 x 1 | |
| BT 50-HCD20-110 | 20 | 42 | 80 | 110 | 72 | 52 | 10 | 47,5 | M 16 x 1 | |
| BT 50-HCD25-110 | 25 | 50 | 80 | 110 | 72 | 58 | 10 | 47,5 | M 16 x 1 | |
| BT 50-HCD32-110 | 32 | 60 | 80 | 110 | 72 | 62 | 10 | 47,5 | M 16 x 1 | |
| BT 50-HCD40-130 | 40 | 70 | 70 | 130 | 92 | 72 | 10 | 92 | M 16 x 1 | |
| BT 50-HCD06-160 | 6 | 26 | 80 | 160 | 122 | 37 | 10 | 93 | M 5 | M 24 |
| BT 50-HCD08-160 | 8 | 28 | 80 | 160 | 122 | 37 | 10 | 93 | M 6 | |
| BT 50-HCD10-160 | 10 | 30 | 80 | 160 | 122 | 42 | 10 | 94 | M 8 x 1 | |
| BT 50-HCD12-160 | 12 | 32 | 80 | 160 | 122 | 47 | 10 | 92 | M 10 x 1 | |
| BT 50-HCD14-160 | 14 | 34 | 80 | 160 | 122 | 47 | 10 | 94 | M 10 x 1 | |
| BT 50-HCD16-160 | 16 | 38 | 80 | 160 | 122 | 52 | 10 | 94 | M 12 x 1 | |
| BT 50-HCD18-160 | 18 | 40 | 80 | 160 | 122 | 52 | 10 | 94 | M 12 x 1 | |
| BT 50-HCD20-160 | 20 | 42 | 80 | 160 | 122 | 52 | 10 | 100 | M 12 x 1 | |
| BT 50-HCD25-160 | 25 | 50 | 80 | 160 | 122 | 58 | 10 | 100 | M 16 x 1 | |
| BT 50-HCD32-160 | 32 | 60 | 80 | 160 | 122 | 62 | 10 | 100 | M 16 x 1 | |

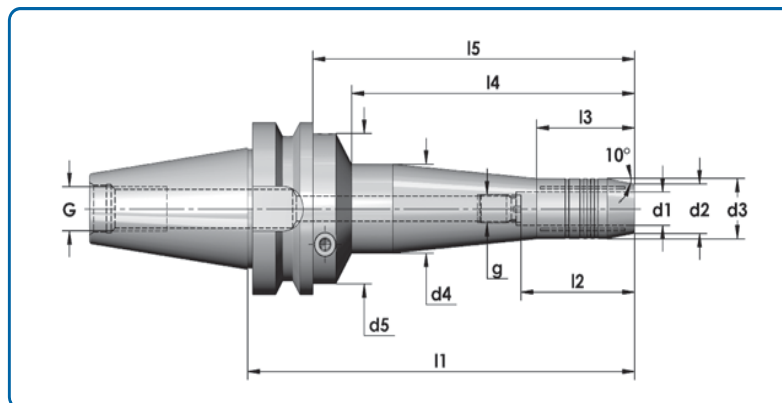
BT 40
BT 50
BBT40
BBT50



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | g | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|------|
| BT 40-HCD20-072 | 20 | 40 | 49,5 | 72,5 | 45,5 | 62 | 10 | M 16 x 1 | M 16 |
| BT 50-HCD32-090 | 32 | 56 | 72 | 90 | 52 | 75 | 10 | M 16 x 1 | M 24 |

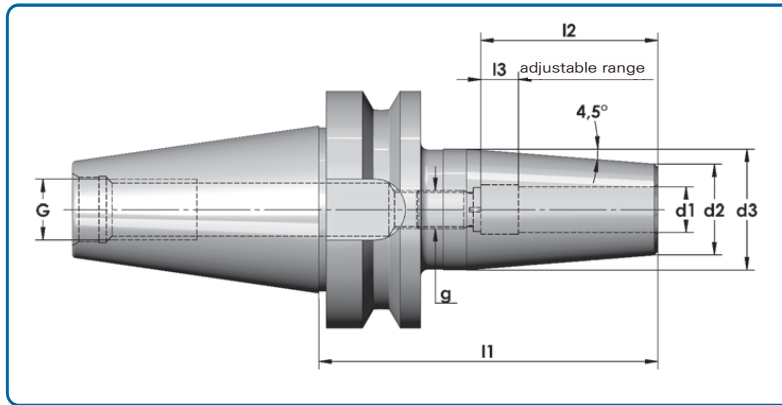
Hydraulic chucks-Taper Slim

BT 40
BT 50
BBT 40
BBT 50



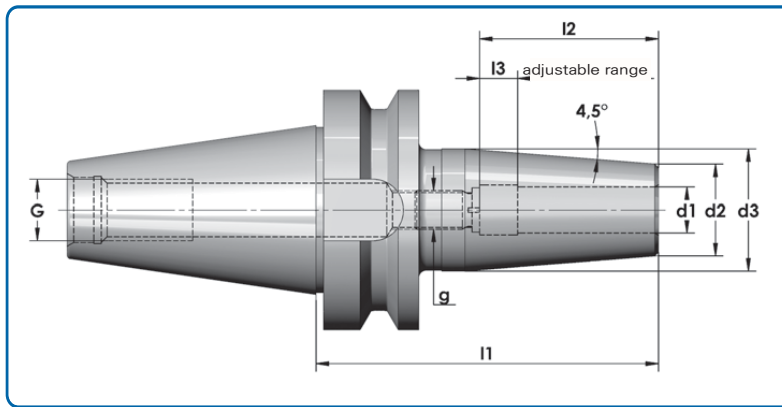
| Code No. | d ₁ | d ₂ | d ₃ | d ₄ | d ₅ | l ₁ | l ₂ | l ₃ | l ₄ | l ₅ | g | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|------|
| BT 40-HCD06-160 | 06 | 12 | 16 | 26,5 | 50 | 160 | 37 | 40,5 | 116 | 133 | M 5 | M 16 |
| BT 40-HCD08-160 | 08 | 14 | 18 | 28,5 | 50 | 160 | 37 | 40,5 | 117 | 133 | M 6 | M 16 |
| BT 40-HCD10-160 | 10 | 16 | 20 | 30,5 | 50 | 160 | 41 | 40,5 | 117 | 133 | M 8 x 1 | M 16 |
| BT 40-HCD12-160 | 12 | 18 | 22 | 32,5 | 50 | 160 | 46 | 40,5 | 117 | 133 | M 10 x 1 | M 16 |
| BT 40-HCD14-160 | 14 | 20 | 24 | 34,5 | 50 | 160 | 46 | 40,5 | 117,5 | 133 | M 10 x 1 | M 16 |
| BT 40-HCD16-160 | 16 | 22 | 26 | 36,5 | 50 | 160 | 49 | 40,5 | 118 | 133 | M 12 x 1 | M 16 |
| BT 40-HCD18-160 | 18 | 24 | 28 | 38,5 | 50 | 160 | 49 | 40,5 | 118 | 133 | M 12 x 1 | M 16 |
| BT 40-HCD20-160 | 20 | 26 | 30 | 40,5 | 50 | 160 | 51 | 40,5 | 119 | 133 | M 16 x 1 | M 16 |
| BT 50-HCD06-200 | 06 | 12 | 16 | 26,5 | 50 | 200 | 37 | 40,5 | 129 | 173 | M 5 | M 16 |
| BT 50-HCD08-200 | 08 | 14 | 18 | 28,5 | 50 | 200 | 37 | 40,5 | 130 | 173 | M 6 | M 16 |
| BT 50-HCD10-200 | 10 | 16 | 20 | 30,5 | 50 | 200 | 41 | 40,5 | 130 | 173 | M 8 x 1 | M 16 |
| BT 50-HCD12-200 | 12 | 18 | 22 | 32,5 | 50 | 200 | 46 | 40,5 | 130 | 173 | M 10 x 1 | M 16 |
| BT 50-HCD14-200 | 14 | 20 | 24 | 34,5 | 50 | 200 | 46 | 40,5 | 130,5 | 173 | M 10 x 1 | M 16 |
| BT 50-HCD16-200 | 16 | 22 | 26 | 36,5 | 50 | 200 | 49 | 40,5 | 131 | 173 | M 12 x 1 | M 16 |
| BT 50-HCD18-200 | 18 | 24 | 28 | 38,5 | 50 | 200 | 49 | 40,5 | 131,5 | 173 | M 12 x 1 | M 16 |
| BT 50-HCD20-200 | 20 | 26 | 30 | 40,5 | 50 | 200 | 51 | 40,5 | 132 | 173 | M 16 x 1 | M 16 |

BT 30
BT 40
BBT 30
BBT 40



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | g | G | |
|-----------------|-------|-------|-------|-------|-------|-------|--------|------|--|
| BT 30-SFD03-080 | 3 | 11 | 15 | 80 | 10 | -- | | M 12 | |
| BT 30-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | | |
| BT 30-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | | |
| BT 30-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 | | |
| BT 30-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 | | |
| BT 30-SFD10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | | |
| BT 30-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | | |
| BT 30-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | | |
| BT 30-SFD16-090 | 16 | 27 | 34 | 90 | 50 | | M 12x1 | | |
| BT 30-SFD18-090 | 18 | 33 | 42 | 90 | 50 | | M 12x1 | | |
| BT 30-SFD20-090 | 20 | 33 | 42 | 90 | 52 | | M 16x1 | | |
| BT 30-SFD25-100 | 25 | 44 | 53 | 100 | 58 | | M 16x1 | | |
| BT 40-SFD03-080 | 3 | 11 | 15 | 80 | 10 | -- | -- | M 16 | |
| BT 40-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | | |
| BT 40-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | | |
| BT 40-SFD06-090 | 6 | 21 | 27 | 90 | 36 | | M 5 | | |
| BT 40-SFD08-090 | 8 | 21 | 27 | 90 | 36 | | M 6 | | |
| BT 40-SFD10-090 | 10 | 24 | 32 | 90 | 41 | | M 8x1 | | |
| BT 40-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | | |
| BT 40-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | | |
| BT 40-SFD16-090 | 16 | 27 | 34 | 90 | 50 | | M 12x1 | | |
| BT 40-SFD18-090 | 18 | 33 | 42 | 90 | 50 | | M 12x1 | | |
| BT 40-SFD20-090 | 20 | 33 | 42 | 90 | 52 | | M 16x1 | | |
| BT 40-SFD25-100 | 25 | 44 | 53 | 100 | 58 | | M 16x1 | | |
| BT 40-SFD03-120 | 3 | 11 | 15 | 120 | 10 | -- | -- | M 16 | |
| BT 40-SFD04-120 | 4 | 14 | 22 | 120 | 20 | 5 | M 3 | | |
| BT 40-SFD05-120 | 5 | 16 | 22 | 120 | 20 | | M 4 | | |
| BT 40-SFD06-120 | 6 | 21 | 27 | 120 | 36 | | M 5 | | |
| BT 40-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | | |
| BT 40-SFD10-120 | 10 | 24 | 32 | 120 | 41 | | M 8x1 | | |
| BT 40-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 | | |
| BT 40-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | | |
| BT 40-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | | |
| BT 40-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | | |
| BT 40-SFD20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 | | |
| BT 40-SFD25-120 | 25 | 44 | 53 | 120 | 58 | | M 16x1 | | |

BT 40
BBT 40

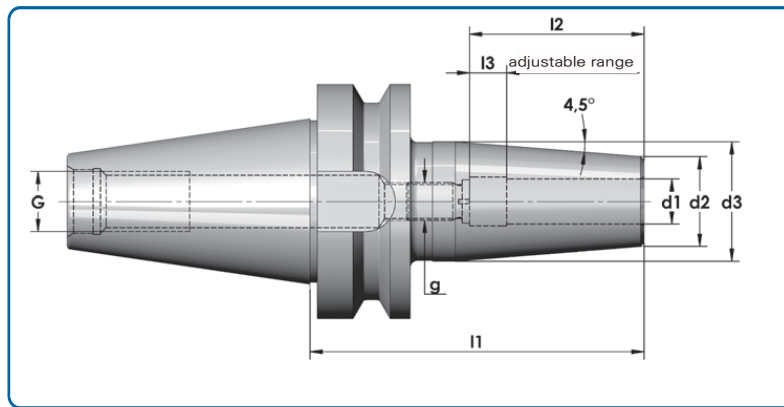


| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|------|
| BT 40-SFD03-120 | 3 | 11 | 15 | 160 | 10 | -- | -- | M 16 |
| BT 40-SFD03-120 | 4 | 14 | 27 | 160 | 20 | 10 | M 3 | |
| BT 40-SFD03-120 | 5 | 16 | 32 | 160 | 20 | | M 4 | |
| BT 40-SFD03-120 | 6 | 21 | 27 | 160 | 36 | | M 5 | |
| BT 40-SFD03-120 | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| BT 40-SFD03-120 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| BT 40-SFD03-120 | 12 | 24 | 32 | 160 | 47 | | M 10x1 | |
| BT 40-SFD03-120 | 14 | 27 | 34 | 160 | 47 | | M 10x1 | |
| BT 40-SFD03-120 | 16 | 27 | 34 | 160 | 50 | | M 12x1 | |
| BT 40-SFD03-120 | 18 | 33 | 42 | 160 | 50 | | M 12x1 | |
| BT 40-SFD03-120 | 20 | 33 | 42 | 160 | 52 | | M 16x1 | |
| BT 40-SFD03-120 | 25 | 44 | 53 | 160 | 58 | | M 16x1 | |
| BT 40-SFD03-120 | 32 | 44 | 62 | 160 | 58 | | M 16x1 | |
| BT 40-SFD03-200 | 3 | 11 | 15 | 200 | 10 | -- | -- | M 16 |
| BT 40-SFD04-200 | 4 | 14 | 27 | 200 | 20 | | M 3 | |
| BT 40-SFD05-200 | 5 | 16 | 32 | 200 | 20 | | M 4 | |
| BT 40-SFD06-200 | 6 | 21 | 32 | 200 | 36 | | M 5 | |
| BT 40-SFD08-200 | 8 | 21 | 34 | 200 | 36 | | M 6 | |
| BT 40-SFD10-200 | 10 | 24 | 34 | 200 | 42 | | M 8x1 | |
| BT 40-SFD12-200 | 12 | 24 | 42 | 200 | 47 | | M 10x1 | |
| BT 40-SFD14-200 | 14 | 27 | 42 | 200 | 47 | | M 10x1 | |
| BT 40-SFD16-200 | 16 | 27 | 34 | 200 | 50 | | M 12x1 | |
| BT 40-SFD18-200 | 18 | 33 | 42 | 200 | 50 | | M 12x1 | |
| BT 40-SFD20-200 | 20 | 33 | 42 | 200 | 52 | | M 16x1 | |
| BT 40-SFD25-200 | 25 | 44 | 53 | 200 | 58 | | M 16x1 | |
| BT 40-SFD32-200 | 32 | 44 | 62 | 200 | 58 | | M 16x1 | |

| Spare parts | Adjusting screw | |
|-------------|-----------------|---------|
| | Code No. | g |
| | 036.808 | M 3 |
| | 036.809 | M 4 |
| | 036.852 | M 5 |
| | 036.853 | M 6 |
| | 036.854 | M 8 x 1 |
| | 036.855 | M10 x 1 |
| | 036.856 | M12 x 1 |
| | 036.857 | M16 x 1 |



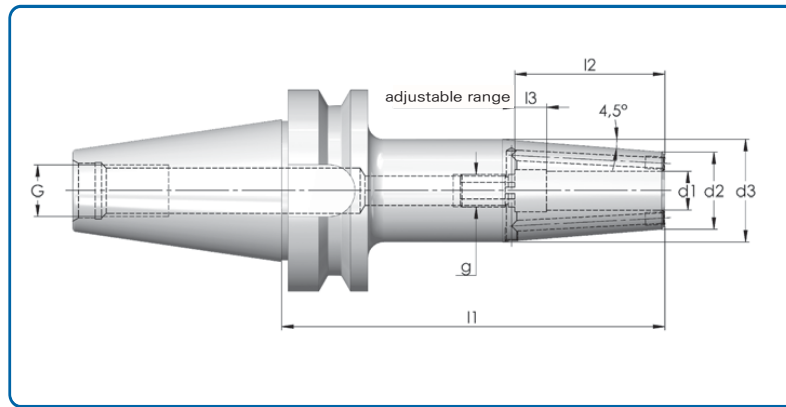
BT 50
BBT 50



| Code No. | d_1 | d_2 | d_3 | l_1 | l_2 | l_3 | g | G | |
|-----------------|-------|-------|-------|-------|-------|-------|--------|------|--|
| BT 50-SFD04-100 | 4 | 14 | 22 | 100 | 20 | 5 | M 3 | M 24 | |
| BT 50-SFD05-100 | 5 | 16 | 22 | 100 | 20 | 10 | M 4 | | |
| BT 50-SFD06-100 | 6 | 21 | 27 | 100 | 36 | | M 5 | | |
| BT 50-SFD08-100 | 8 | 21 | 27 | 100 | 36 | | M 6 | | |
| BT 50-SFD10-100 | 10 | 24 | 32 | 100 | 42 | | M 8x1 | | |
| BT 50-SFD12-100 | 12 | 24 | 32 | 100 | 47 | | M 10x1 | | |
| BT 50-SFD14-100 | 14 | 27 | 34 | 100 | 47 | | M 10x1 | | |
| BT 50-SFD16-100 | 16 | 27 | 34 | 100 | 50 | | M 12x1 | | |
| BT 50-SFD18-110 | 18 | 33 | 42 | 110 | 50 | | M 12x1 | | |
| BT 50-SFD20-110 | 20 | 33 | 42 | 110 | 52 | | M 16x1 | | |
| BT 50-SFD25-120 | 25 | 44 | 53 | 120 | 58 | | M 16x1 | | |
| BT 50-SFD32-120 | 32 | 44 | 53 | 120 | 62 | | M 16x1 | | |
| BT 50-SFD06-160 | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | M 24 | |
| BT 50-SFD08-160 | 8 | 21 | 27 | 160 | 36 | | M 6 | | |
| BT 50-SFD10-160 | 10 | 24 | 32 | 160 | 42 | | M 8x1 | | |
| BT 50-SFD12-160 | 12 | 24 | 32 | 160 | 47 | | M 10x1 | | |
| BT 50-SFD14-160 | 14 | 27 | 34 | 160 | 47 | | M 10x1 | | |
| BT 50-SFD16-160 | 16 | 27 | 34 | 160 | 50 | | M 12x1 | | |
| BT 50-SFD18-160 | 18 | 33 | 42 | 160 | 50 | | M 12x1 | | |
| BT 50-SFD20-160 | 20 | 33 | 42 | 160 | 52 | | M 16x1 | | |
| BT 50-SFD25-160 | 25 | 44 | 53 | 160 | 58 | | M 16x1 | | |
| BT 50-SFD32-160 | 32 | 44 | 53 | 160 | 62 | | M 16x1 | | |
| BT 50-SFD06-200 | 6 | 21 | 27 | 200 | 36 | 10 | M 5 | M 24 | |
| BT 50-SFD08-200 | 8 | 21 | 27 | 200 | 36 | | M 6 | | |
| BT 50-SFD10-200 | 10 | 24 | 32 | 200 | 42 | | M 8x1 | | |
| BT 50-SFD12-200 | 12 | 24 | 32 | 200 | 47 | | M 10x1 | | |
| BT 50-SFD14-200 | 14 | 27 | 34 | 200 | 47 | | M 10x1 | | |
| BT 50-SFD16-200 | 16 | 27 | 34 | 200 | 50 | | M 12x1 | | |
| BT 50-SFD18-200 | 18 | 33 | 42 | 200 | 50 | | M 12x1 | | |
| BT 50-SFD20-200 | 20 | 33 | 42 | 200 | 52 | | M 16x1 | | |
| BT 50-SFD25-200 | 25 | 44 | 53 | 200 | 58 | | M 16x1 | | |

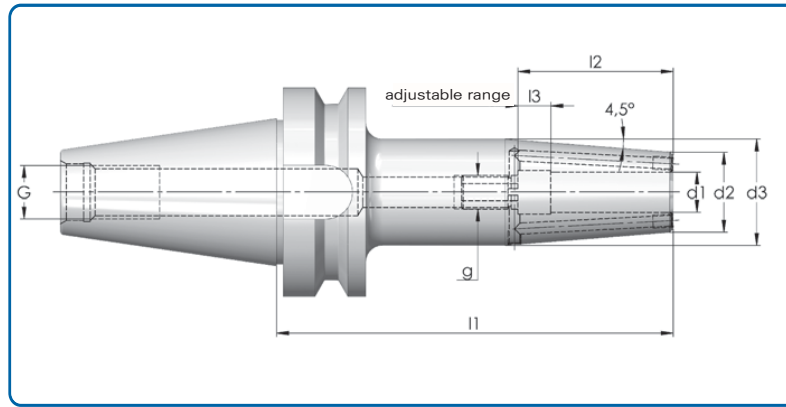
Excentricity difference of the taper to the boring 0.003 mm.

BT 30
BT 40
BBT 30
BBT 40



| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|------|
| BT 30-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | M 12 |
| BT 30-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | |
| BT 30-SFD06-080 | 6 | 21 | 27 | 80 | 36 | 10 | M 5 | |
| BT 30-SFD08-080 | 8 | 21 | 27 | 80 | 36 | | M 6 | |
| BT 30-SFD10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | |
| BT 30-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | |
| BT 30-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | |
| BT 30-SFD16-090 | 16 | 27 | 34 | 90 | 50 | | M 12x1 | |
| BT 30-SFD18-090 | 18 | 33 | 42 | 90 | 50 | | M 12x1 | |
| BT 30-SFD20-090 | 20 | 33 | 42 | 90 | 52 | | M 16x1 | |
| BT 40-SFD04-080 | 4 | 14 | 22 | 80 | 20 | 5 | M 3 | M 16 |
| BT 40-SFD05-080 | 5 | 16 | 22 | 80 | 20 | | M 4 | |
| BT 40-SFD06-090 | 6 | 21 | 27 | 90 | 36 | 10 | M 5 | |
| BT 40-SFD08-090 | 8 | 21 | 27 | 90 | 36 | | M 6 | |
| BT 40-SFD10-090 | 10 | 24 | 32 | 90 | 42 | | M 8x1 | |
| BT 40-SFD12-090 | 12 | 24 | 32 | 90 | 47 | | M 10x1 | |
| BT 40-SFD14-090 | 14 | 27 | 34 | 90 | 47 | | M 10x1 | |
| BT 40-SFD16-090 | 16 | 27 | 34 | 90 | 50 | | M 12x1 | |
| BT 40-SFD18-090 | 18 | 33 | 42 | 90 | 50 | | M 12x1 | |
| BT 40-SFD20-090 | 20 | 33 | 42 | 90 | 52 | | M 16x1 | |
| BT 40-SFD25-100 | 25 | 44 | 53 | 100 | 58 | | M 16x1 | |
| BT 40-SFD04-120 | 4 | 14 | 22 | 120 | 20 | 5 | M 3 | M 16 |
| BT 40-SFD05-120 | 5 | 16 | 22 | 120 | 20 | | M 4 | |
| BT 40-SFD06-120 | 6 | 21 | 27 | 120 | 36 | 10 | M 5 | |
| BT 40-SFD08-120 | 8 | 21 | 27 | 120 | 36 | | M 6 | |
| BT 40-SFD10-120 | 10 | 24 | 32 | 120 | 42 | | M 8x1 | |
| BT 40-SFD12-120 | 12 | 24 | 32 | 120 | 47 | | M 10x1 | |
| BT 40-SFD14-120 | 14 | 27 | 34 | 120 | 47 | | M 10x1 | |
| BT 40-SFD16-120 | 16 | 27 | 34 | 120 | 50 | | M 12x1 | |
| BT 40-SFD18-120 | 18 | 33 | 42 | 120 | 50 | | M 12x1 | |
| BT 40-SFD20-120 | 20 | 33 | 42 | 120 | 52 | | M 16x1 | |
| BT 40-SFD25-120 | 25 | 44 | 53 | 120 | 58 | | M 16x1 | |

BT 50
BBT 50



| Code No. | taper | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | g | G |
|-----------------|-------|----------------|----------------|----------------|----------------|----------------|----------------|--------|------|
| BT 50-SFD04-100 | | 4 | 14 | 22 | 100 | 20 | 5 | M 3 | M 24 |
| BT 50-SFD05-100 | | 5 | 16 | 22 | 100 | 20 | | M 4 | |
| BT 50-SFD06-100 | | 6 | 21 | 27 | 100 | 36 | 10 | M 5 | |
| BT 50-SFD08-100 | | 8 | 21 | 27 | 100 | 36 | | M 6 | |
| BT 50-SFD10-100 | | 10 | 24 | 32 | 100 | 42 | | M 8x1 | |
| BT 50-SFD12-100 | | 12 | 24 | 32 | 100 | 47 | | M 10x1 | |
| BT 50-SFD14-100 | | 14 | 27 | 34 | 100 | 47 | | M 10x1 | |
| BT 50-SFD16-100 | | 16 | 27 | 34 | 100 | 50 | | M 12x1 | |
| BT 50-SFD18-110 | | 18 | 33 | 42 | 110 | 50 | | M 12x1 | |
| BT 50-SFD20-110 | | 20 | 33 | 42 | 110 | 52 | | M 16x1 | |
| BT 50-SFD25-120 | | 25 | 44 | 53 | 120 | 58 | | M 16x1 | |
| BT 50-SFD32-120 | | 32 | 44 | 53 | 120 | 62 | | M 16x1 | |
| BT 50-SFD04-160 | | 4 | 14 | 22 | 160 | 20 | 5 | M 3 | M 24 |
| BT 50-SFD05-160 | | 5 | 16 | 22 | 160 | 20 | | M 4 | |
| BT 50-SFD06-160 | | 6 | 21 | 27 | 160 | 36 | 10 | M 5 | |
| BT 50-SFD08-160 | | 8 | 21 | 27 | 160 | 36 | | M 6 | |
| BT 50-SFD10-160 | | 10 | 24 | 32 | 160 | 42 | | M 8x1 | |
| BT 50-SFD12-160 | | 12 | 24 | 32 | 160 | 47 | | M 10x1 | |
| BT 50-SFD14-160 | | 14 | 27 | 34 | 160 | 47 | | M 10x1 | |
| BT 50-SFD16-160 | | 16 | 27 | 34 | 160 | 50 | | M 12x1 | |
| BT 50-SFD18-160 | | 18 | 33 | 42 | 160 | 50 | | M 12x1 | |
| BT 50-SFD20-160 | | 20 | 33 | 42 | 160 | 52 | | M 16x1 | |
| BT 50-SFD25-160 | | 25 | 44 | 53 | 160 | 58 | | M 16x1 | |
| BT 50-SFD32-160 | | 32 | 44 | 53 | 160 | 62 | | M 16x1 | |

Adjusting screw

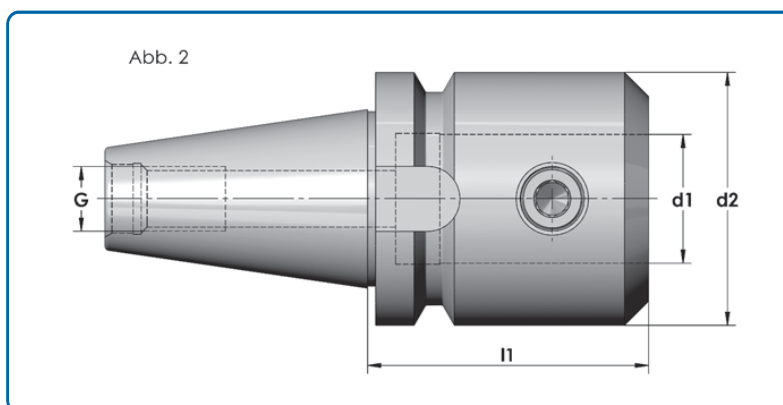
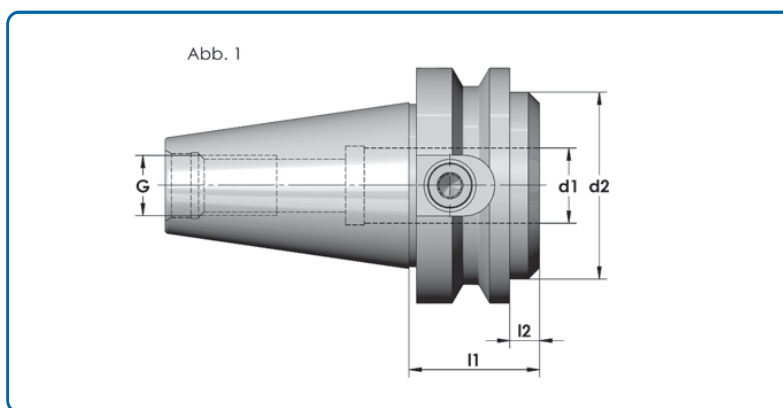
Code No. g

| | |
|---------|---------|
| 036.852 | M 5 |
| 036.853 | M 6 |
| 036.854 | M 8 x 1 |
| 036.855 | M10 x 1 |
| 036.856 | M12 x 1 |
| 036.857 | M16 x 1 |



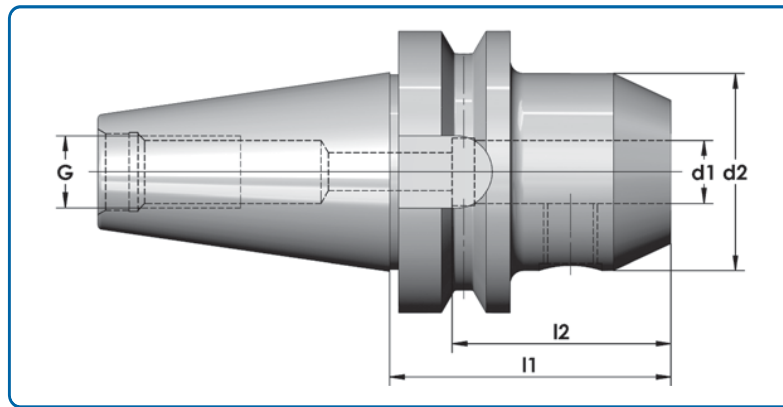
Spare parts

BT 40
BT 50
BBT 40
BBT 50



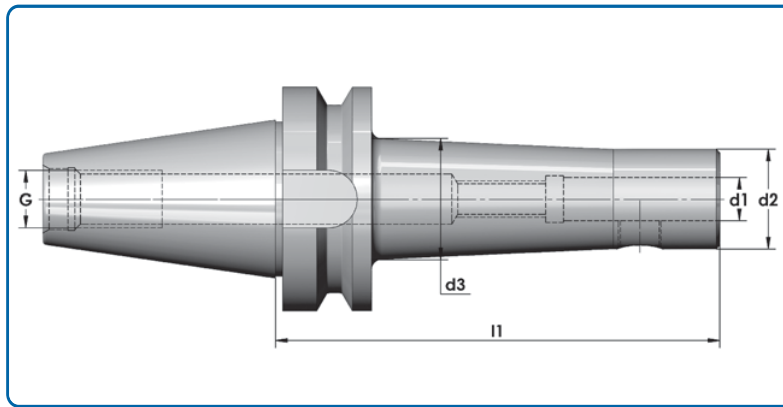
| Code No. | Abb. | d ₁ | d ₂ | l ₁ | l ₂ | G | Tol. |
|-----------------|------|----------------|----------------|----------------|----------------|------|--------|
| BT 40-SLA16-035 | 1 | 16 | 48 | 35 | 8 | M 16 | +0,007 |
| BT 40-SLA20-035 | 1 | 20 | 50 | 35 | 8 | | 0 |
| BT 40-SLA25-063 | 1 | 25 | 50 | 63 | 8 | | |
| BT 40-SLA25-035 | 1 | 25 | 50 | 35 | 8 | | |
| BT 40-SLA32-070 | 2 | 32 | 64 | 70 | 38 | | |
| BT 50-SLA25-035 | 1 | 25 | 50 | 35 | 2 | M 24 | +0,007 |
| BT 50-SLA32-070 | 2 | 32 | 64 | 70 | 37 | | 0 |

BT 30
BT 40
BT 50
BBT 30
BBT 40
BBT 50



| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | G | Tolerance |
|-----------------|----------------|----------------|----------------|----------------|------|-----------|
| BT 30-SFD06-050 | 6 | 25 | 50 | 40 | M 12 | +0,005 |
| BT 30-SFD08-050 | 8 | 28 | 50 | 40 | | 0 |
| BT 30-SFD10-050 | 10 | 35 | 50 | 40 | | |
| BT 30-SFD12-050 | 12 | 42 | 50 | 49 | | |
| BT 30-SFD14-050 | 14 | 44 | 50 | 49 | | |
| BT 30-SFD16-063 | 16 | 48 | 63 | 52 | | |
| BT 30-SFD18-063 | 18 | 50 | 63 | 52 | | |
| BT 30-SFD20-063 | 20 | 52 | 63 | 54 | | +0,007 |
| BT 30-SFD25-090 | 25 | 65 | 90 | 59 | | 0 |
| BT 30-SFD06-100 | 6 | 25 | 100 | 40 | M 12 | +0,005 |
| BT 30-SFD08-100 | 8 | 28 | 100 | 40 | | 0 |
| BT 30-SFD10-100 | 10 | 35 | 100 | 40 | | |
| BT 30-SFD12-100 | 12 | 42 | 100 | 49 | | |
| BT 40-SFD06-050 | 6 | 25 | 50 | 40 | M 16 | +0,005 |
| BT 40-SFD08-050 | 8 | 28 | 50 | 40 | | 0 |
| BT 40-SFD10-063 | 10 | 35 | 63 | 40 | | |
| BT 40-SFD12-063 | 12 | 42 | 63 | 49 | | |
| BT 40-SFD14-063 | 14 | 44 | 63 | 49 | | |
| BT 40-SFD16-063 | 16 | 48 | 63 | 52 | | |
| BT 40-SFD18-063 | 18 | 50 | 63 | 52 | | |
| BT 40-SFD20-063 | 20 | 52 | 63 | 54 | | +0,007 |
| BT 40-SFD25-090 | 25 | 65 | 90 | 59 | | 0 |
| BT 40-SFD32-100 | 32 | 72 | 100 | 63 | | |
| BT 40-SFD40-120 | 40 | 80 | 120 | 73 | | |
| BT 50-SFD06-063 | 6 | 25 | 63 | 40 | M 24 | +0,005 |
| BT 50-SFD08-063 | 8 | 28 | 63 | 40 | | 0 |
| BT 50-SFD10-063 | 10 | 35 | 63 | 40 | | |
| BT 50-SFD12-080 | 12 | 42 | 80 | 49 | | |
| BT 50-SFD14-080 | 14 | 44 | 80 | 49 | | |
| BT 50-SFD16-080 | 16 | 48 | 80 | 52 | | |
| BT 50-SFD18-080 | 18 | 50 | 80 | 52 | | |
| BT 50-SFD20-080 | 20 | 52 | 80 | 54 | | +0,007 |
| BT 50-SFD25-100 | 25 | 65 | 100 | 59 | | 0 |
| BT 50-SFD32-105 | 32 | 72 | 105 | 63 | | |
| BT 50-SFD40-120 | 40 | 80 | 120 | 73 | | |
| BT 50-SFD50-125 | 50 | 100 | 125 | 83 | | |

BT 40
BT 50
BBT 40
BBT 50

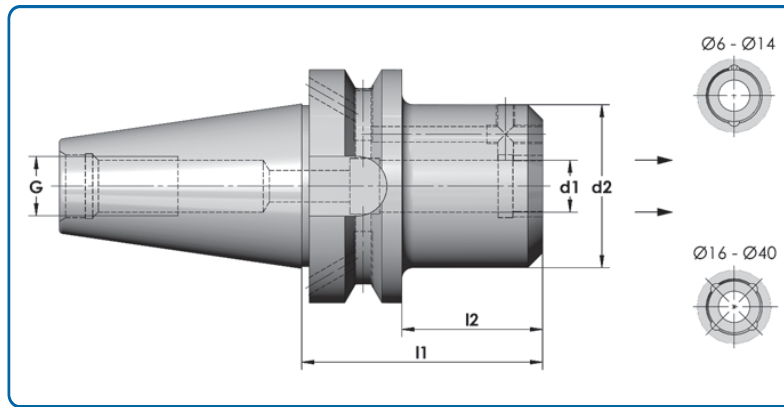


| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| BT 40-SLA06-125 | 6 | 22 | 28 | 125 | 26 | 40 | M 16 |
| BT 40-SLA08-125 | 8 | 24 | 30 | 125 | 26 | 40 | |
| BT 40-SLA10-125 | 10 | 25 | 32 | 125 | 30 | 44 | |
| BT 40-SLA12-125 | 12 | 26 | 35 | 125 | 30 | 49 | |
| BT 40-SLA14-125 | 14 | 28 | 37 | 125 | 30 | 49 | |
| BT 40-SLA16-125 | 16 | 30 | 39 | 125 | 32 | 52 | |
| BT 40-SLA18-125 | 18 | 32 | 41 | 125 | 32 | 52 | |
| BT 40-SLA20-125 | 20 | 34 | 43 | 125 | 36 | 54 | |
| BT 40-SLA25-125 | 25 | 46 | 50 | 125 | 60 | 59 | |
| BT 40-SLA06-160 | 6 | 22 | 33 | 160 | 26 | 40 | M 16 |
| BT 40-SLA08-160 | 8 | 24 | 35 | 160 | 26 | 40 | |
| BT 40-SLA10-160 | 10 | 25 | 39 | 160 | 30 | 44 | |
| BT 40-SLA12-160 | 12 | 26 | 43 | 160 | 30 | 49 | |
| BT 40-SLA14-160 | 14 | 28 | 44 | 160 | 30 | 49 | |
| BT 40-SLA16-160 | 16 | 30 | 44 | 160 | 32 | 52 | |
| BT 40-SLA18-160 | 18 | 32 | 46 | 160 | 32 | 52 | |
| BT 40-SLA20-160 | 20 | 34 | 50 | 160 | 36 | 54 | |
| BT 40-SLA25-160 | 25 | 46 | 56 | 160 | 60 | 59 | |
| BT 40-SLA32-160 | 32 | 54 | 63 | 160 | 63 | 158 | |

| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| BT 50-SLA06-125 | 6 | 22 | 32 | 125 | 26 | 40 | M 24 |
| BT 50-SLA08-125 | 8 | 24 | 34 | 125 | 26 | 40 | |
| BT 50-SLA10-125 | 10 | 25 | 32 | 125 | 30 | 44 | |
| BT 50-SLA12-125 | 12 | 26 | 34 | 125 | 30 | 49 | |
| BT 50-SLA14-125 | 14 | 28 | 37 | 125 | 30 | 49 | |
| BT 50-SLA16-125 | 16 | 30 | 39 | 125 | 32 | 52 | |
| BT 50-SLA18-125 | 18 | 32 | 41 | 125 | 32 | 52 | |
| BT 50-SLA20-125 | 20 | 34 | 43 | 125 | 36 | 54 | |
| BT 50-SLA25-125 | 25 | 46 | 50 | 125 | 60 | 59 | |
| BT 50-SLA32-125 | 32 | 54 | 65 | 125 | 62 | 63 | |
| BT 50-SLA06-160 | 6 | 22 | 33 | 160 | 26 | 40 | M 24 |
| BT 50-SLA08-160 | 8 | 24 | 35 | 160 | 26 | 40 | |
| BT 50-SLA10-160 | 10 | 25 | 39 | 160 | 30 | 44 | |
| BT 50-SLA12-160 | 12 | 26 | 43 | 160 | 30 | 49 | |
| BT 50-SLA14-160 | 14 | 28 | 44 | 160 | 30 | 49 | |
| BT 50-SLA16-160 | 16 | 30 | 44 | 160 | 32 | 52 | |
| BT 50-SLA18-160 | 18 | 32 | 46 | 160 | 32 | 52 | |
| BT 50-SLA20-160 | 20 | 34 | 50 | 160 | 36 | 54 | |
| BT 50-SLA25-160 | 25 | 46 | 56 | 160 | 60 | 59 | |
| BT 50-SLA32-160 | 32 | 54 | 72 | 160 | 62 | 63 | |
| BT 50-SLA40-160 | 40 | 62 | 80 | 160 | 74 | 73 | |
| BT 50-SLA06-200 | 6 | 22 | 33 | 200 | 26 | 40 | M 24 |
| BT 50-SLA08-200 | 8 | 24 | 35 | 200 | 26 | 40 | |
| BT 50-SLA10-200 | 10 | 25 | 39 | 200 | 30 | 44 | |
| BT 50-SLA12-200 | 12 | 26 | 43 | 200 | 30 | 49 | |
| BT 50-SLA14-200 | 14 | 28 | 44 | 200 | 30 | 49 | |
| BT 50-SLA16-200 | 16 | 30 | 44 | 200 | 32 | 52 | |
| BT 50-SLA18-200 | 18 | 32 | 46 | 200 | 32 | 52 | |
| BT 50-SLA20-200 | 20 | 34 | 50 | 200 | 36 | 54 | |
| BT 50-SLA25-200 | 25 | 46 | 56 | 200 | 60 | 59 | |
| BT 50-SLA32-200 | 32 | 54 | 72 | 200 | 62 | 63 | |
| BT 50-SLA40-200 | 40 | 62 | 80 | 200 | 75 | 73 | |

| Tightening screw | | Adjusting screws | |
|------------------|----------------|------------------|----------------|
| | | | |
| Code No. | d ₁ | Code No. | d ₁ |
| 031.814 | 6 | 032.801 | 6 |
| 031.832 | 8 | 032.802 | 8 |
| 031.833 | 10 | 032.803 | 10 |
| 031.834 | 12 | 032.804 | 12 |
| 031.834 | 14 | 032.804 | 14 |
| 031.835 | 16 | 032.805 | 16 |
| 031.835 | 18 | 032.805 | 18 |
| 031.836 | 20 | 032.806 | 20 |
| 031.837 | 25 | 032.806 | 25 |
| 031.838 | 32 | 032.806 | 32 |
| 031.838 | 40 | 032.806 | 40 |
| 031.838 | 50 | 032.806 | 50 |

BT 40



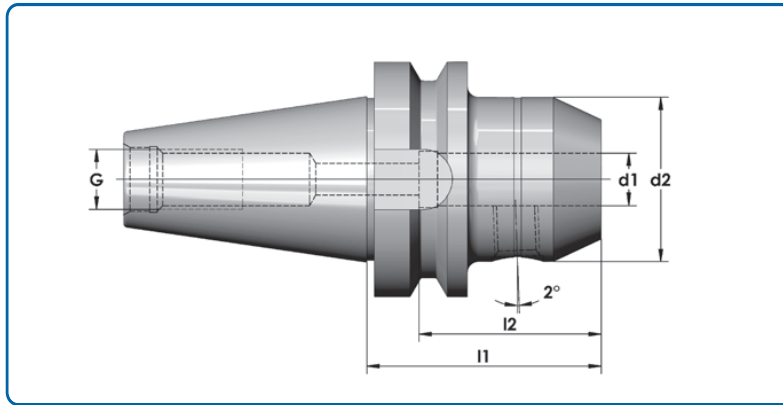
| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | G | Tolerance d ₁ |
|-----------------|----------------|----------------|----------------|----------------|------|-----------------------------|
| BT 40–SLC06–065 | 6 | 25 | 65 | 40 | M 16 | +0,005 |
| BT 40–SLC08–065 | 8 | 28 | 65 | 40 | | 0 |
| BT 40–SLC10–065 | 10 | 35 | 65 | 40 | | |
| BT 40–SLC12–065 | 12 | 42 | 65 | 49 | | |
| BT 40–SLC14–065 | 14 | 44 | 65 | 49 | | |
| BT 40–SLC16–065 | 16 | 48 | 65 | 52 | | |
| BT 40–SLC18–065 | 18 | 50 | 65 | 52 | | |
| BT 40–SLC20–065 | 20 | 52 | 65 | 54 | | +0,007 |
| BT 40–SLC25–100 | 25 | 65 | 100 | 59 | | 0 |
| BT 40–SLC32–100 | 32 | 72 | 100 | 63 | | |
| BT 40–SLC06–080 | 6 | 25 | 80 | 40 | M 24 | +0,005 |
| BT 40–SLC08–080 | 8 | 28 | 80 | 40 | | 0 |
| BT 40–SLC10–080 | 10 | 35 | 80 | 40 | | |
| BT 40–SLC12–080 | 12 | 42 | 80 | 49 | | |
| BT 40–SLC14–080 | 14 | 44 | 80 | 49 | | |
| BT 40–SLC16–080 | 16 | 48 | 80 | 52 | | |
| BT 40–SLC18–080 | 18 | 50 | 80 | 52 | | |
| BT 40–SLC20–080 | 20 | 52 | 80 | 54 | | +0,007 |
| BT 40–SLC25–100 | 25 | 65 | 100 | 59 | | 0 |
| BT 40–SLC32–105 | 32 | 72 | 105 | 63 | | |
| BT 40–SLC40–120 | 40 | 80 | 120 | 63 | | |

Execution : Permissible exentricity difference of the taper to the boring 0.003 mm.

Remark : Coolant through along the shaft.
The coolnat through at the collar of internal cooled cutters can be broken by thread pin M4.

Note : d₁ Ø 6 to Ø 18 with 2 coolant grooves
d₁ Ø 20 to Ø 40 with 4 coolant grooves

BT 40

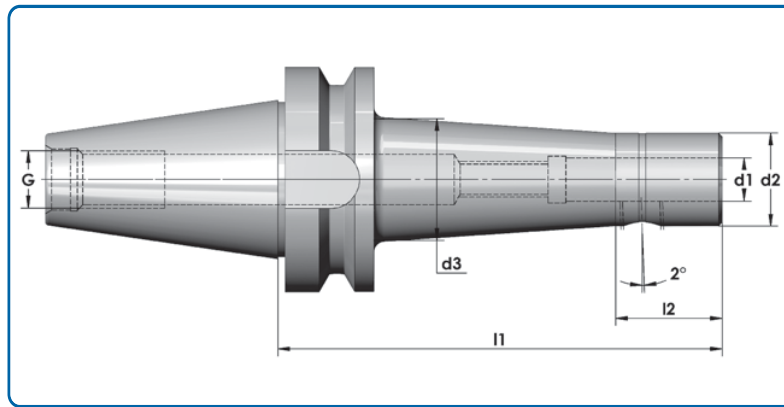


| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | G | Tolerance of d ₁ |
|-----------------|----------------|----------------|----------------|----------------|------|-----------------------------|
| BT 30-WNA06-050 | 6 | 25 | 50 | 40 | M 12 | + 0,005 |
| BT 30-WNA08-050 | 8 | 28 | 50 | 40 | | 0 |
| BT 30-WNA10-050 | 10 | 35 | 50 | 40 | | |
| BT 30-WNA12-050 | 12 | 42 | 50 | 49 | | |
| BT 30-WNA14-050 | 14 | 44 | 50 | 49 | | |
| BT 30-WNA16-063 | 16 | 48 | 63 | 52 | | |
| BT 30-WNA18-063 | 18 | 50 | 63 | 52 | | |
| BT 30-WNA20-063 | 20 | 52 | 63 | 54 | | + 0,007 |
| | | | | | | 0 |
| BT 40-WNA06-050 | 6 | 25 | 50 | 40 | M 16 | + 0,005 |
| BT 40-WNA08-050 | 8 | 28 | 50 | 40 | | 0 |
| BT 40-WNA10-063 | 10 | 35 | 63 | 40 | | |
| BT 40-WNA12-063 | 12 | 42 | 63 | 49 | | |
| BT 40-WNA14-063 | 14 | 44 | 63 | 49 | | |
| BT 40-WNA16-063 | 16 | 48 | 63 | 52 | | |
| BT 40-WNA18-063 | 18 | 50 | 63 | 52 | | |
| BT 40-WNA20-063 | 20 | 52 | 63 | 54 | | |
| BT 40-WNA25-090 | 25 | 65 | 90 | 59 | | |
| BT 40-WNA32-100 | 32 | 72 | 100 | 63 | | |
| BT 40-WNA40-120 | 40 | 80 | 120 | 73 | | |

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | G | Tolerance of d ₁ |
|-----------------|----------------|----------------|----------------|----------------|------|-----------------------------|
| BT 50-WNA06-063 | 6 | 25 | 63 | 40 | M 24 | + 0,005 |
| BT 50-WNA08-063 | 8 | 28 | 63 | 40 | | 0 |
| BT 50-WNA10-063 | 10 | 35 | 63 | 40 | | |
| BT 50-WNA12-080 | 12 | 42 | 80 | 49 | | |
| BT 50-WNA14-080 | 14 | 44 | 80 | 49 | | |
| BT 50-WNA16-080 | 16 | 48 | 80 | 52 | | |
| BT 50-WNA18-080 | 18 | 50 | 80 | 52 | | |
| BT 50-WNA20-080 | 20 | 52 | 80 | 54 | | + 0,007 |
| BT 50-WNA25-100 | 25 | 65 | 100 | 59 | | 0 |
| BT 50-WNA32-105 | 32 | 72 | 105 | 63 | | |
| BT 50-WNA40-120 | 40 | 80 | 120 | 73 | | |
| BT 50-WNA50-125 | 50 | 100 | 125 | 83 | | |

| Spare parts | Tightening screw | | Adjusting screw | |
|-------------|------------------|----------------|-----------------|----------------|
| | Code No. | d ₁ | Code No. | d ₁ |
| | 031.801 | 6 | 032.801 | 6 |
| | 031.802 | 8 | 032.802 | 8 |
| | 031.803 | 10 | 032.803 | 10 |
| | 031.804 | 12 | 032.804 | 12 |
| | 031.804 | 14 | 032.804 | 14 |
| | 031.805 | 16 | 032.805 | 16 |
| | 031.805 | 18 | 032.805 | 18 |
| | 031.806 | 20 | 032.806 | 20 |
| | 031.807 | 25 | 032.806 | 25 |
| | 031.808 | 32 | 032.806 | 32 |

BT 40

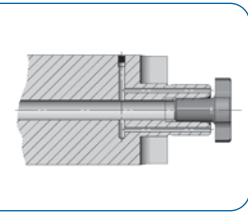
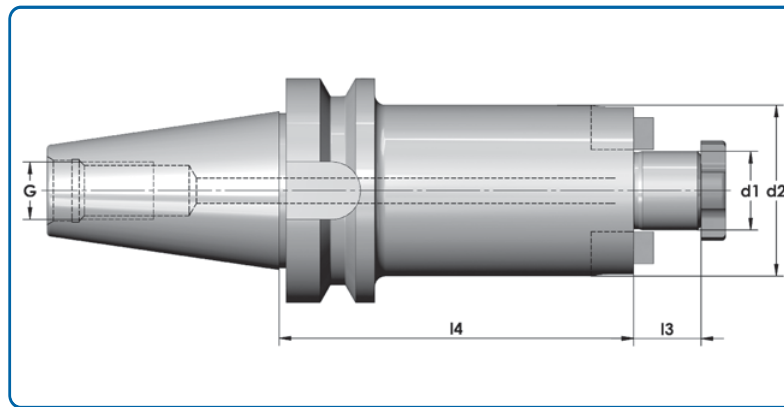


| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| BT 40-WNA06-125 | 6 | 22 | 28 | 125 | 26 | 40 | M 16 |
| BT 40-WNA08-125 | 8 | 24 | 30 | 125 | 26 | 40 | |
| BT 40-WNA10-125 | 10 | 25 | 32 | 125 | 30 | 44 | |
| BT 40-WNA12-125 | 12 | 26 | 35 | 125 | 30 | 49 | |
| BT 40-WNA14-125 | 14 | 28 | 37 | 125 | 30 | 49 | |
| BT 40-WNA16-125 | 16 | 30 | 39 | 125 | 32 | 52 | |
| BT 40-WNA18-125 | 18 | 32 | 41 | 125 | 32 | 52 | |
| BT 40-WNA20-125 | 20 | 34 | 43 | 125 | 36 | 54 | |
| BT 40-WNA25-125 | 25 | 36 | 50 | 125 | 60 | 59 | |
| BT 40-WNA06-160 | 6 | 22 | 33 | 160 | 26 | 40 | M 16 |
| BT 40-WNA08-160 | 8 | 24 | 35 | 160 | 26 | 40 | |
| BT 40-WNA10-160 | 10 | 25 | 39 | 160 | 30 | 44 | |
| BT 40-WNA12-160 | 12 | 26 | 43 | 160 | 30 | 49 | |
| BT 40-WNA14-160 | 14 | 28 | 44 | 160 | 30 | 49 | |
| BT 40-WNA16-160 | 16 | 30 | 44 | 160 | 32 | 52 | |
| BT 40-WNA18-160 | 18 | 32 | 46 | 160 | 32 | 52 | |
| BT 40-WNA20-160 | 20 | 34 | 50 | 160 | 36 | 54 | |
| BT 40-WNA25-160 | 25 | 46 | 50 | 160 | 60 | 59 | |
| BT 40-WNA32-160 | 32 | 54 | 63 | 160 | 63 | 63 | |

| Code No. | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| BT 50-WNA06-160 | 6 | 22 | 33 | 160 | 26 | 40 | M 24 |
| BT 50-WNA08-160 | 8 | 24 | 35 | 160 | 26 | 40 | |
| BT 50-WNA10-160 | 10 | 25 | 39 | 160 | 30 | 44 | |
| BT 50-WNA12-160 | 12 | 26 | 43 | 160 | 30 | 49 | |
| BT 50-WNA14-160 | 14 | 28 | 44 | 160 | 30 | 49 | |
| BT 50-WNA16-160 | 16 | 30 | 44 | 160 | 32 | 52 | |
| BT 50-WNA18-160 | 18 | 32 | 46 | 160 | 32 | 52 | |
| BT 50-WNA20-160 | 20 | 34 | 57 | 160 | 36 | 54 | |
| BT 50-WNA25-160 | 25 | 46 | 60 | 160 | 60 | 59 | |
| BT 50-WNA32-160 | 32 | 54 | 72 | 160 | 63 | 63 | |
| BT 50-WNA06-200 | 6 | 22 | 36 | 200 | 26 | 40 | M 24 |
| BT 50-WNA08-200 | 8 | 24 | 38 | 200 | 26 | 40 | |
| BT 50-WNA10-200 | 10 | 25 | 43 | 200 | 30 | 44 | |
| BT 50-WNA12-200 | 12 | 26 | 46 | 200 | 30 | 49 | |
| BT 50-WNA14-200 | 14 | 28 | 48 | 200 | 30 | 49 | |
| BT 50-WNA16-200 | 16 | 30 | 50 | 200 | 32 | 52 | |
| BT 50-WNA18-200 | 18 | 32 | 52 | 200 | 32 | 52 | |
| BT 50-WNA20-200 | 20 | 34 | 55 | 200 | 36 | 54 | |
| BT 50-WNA25-200 | 25 | 46 | 64 | 200 | 60 | 59 | |
| BT 50-WNA32-200 | 32 | 54 | 72 | 200 | 63 | 63 | |

| Spare parts | Tightening screw | | Adjusting screw | |
|-------------|------------------|----------------|-----------------|----------------|
| | Code No. | d ₁ | Code No. | d ₁ |
| | 031.814 | 6 | 032.801 | 6 |
| | 031.832 | 8 | 032.802 | 8 |
| | 031.833 | 10 | 032.803 | 10 |
| | 031.834 | 12 | 032.804 | 12 |
| | 031.834 | 14 | 032.804 | 14 |
| | 031.835 | 16 | 032.805 | 16 |
| | 031.835 | 18 | 032.805 | 18 |
| | 031.836 | 20 | 032.806 | 20 |
| | 031.837 | 25 | 032.807 | 25 |
| | 031.838 | 32 | 032.808 | 32 |

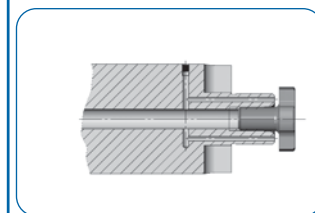
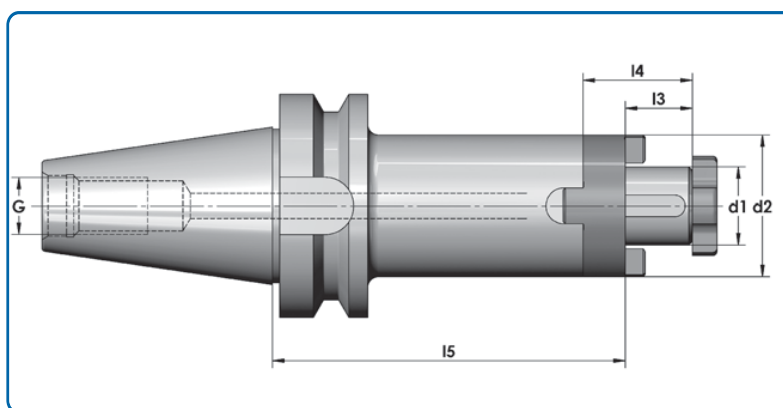
BT 40
BT 50
BBT 40
BBT 50



4 holes in the spigot for cooling lubricant supply on request

| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | G |
|-----------------|----------------|----------------|----------------|----------------|------|
| BT 40-FMD16-045 | 16 | 40 | 17 | 45 | M 16 |
| BT 40-FMD22-045 | 22 | 48 | 19 | 45 | |
| BT 40-FMD27-045 | 27 | 60 | 21 | 45 | |
| BT 40-FMD32-045 | 32 | 78 | 24 | 45 | |
| BT 40-FMD40-050 | 40 | 89 | 27 | 50 | |
| BT 40-FMD50-060 | 50 | 120 | 30 | 60 | |
| BT 40-FMD60-060 | 60 | 128 | 50 | 60 | |
| BT 40-FMD16-100 | 16 | 40 | 17 | 100 | M 16 |
| BT 40-FMD22-100 | 22 | 48 | 19 | 100 | |
| BT 40-FMD27-100 | 27 | 60 | 21 | 100 | |
| BT 40-FMD32-100 | 32 | 78 | 24 | 100 | |
| BT 50-FMD16-055 | 16 | 40 | 17 | 55 | M 24 |
| BT 50-FMD22-055 | 22 | 48 | 19 | 55 | |
| BT 50-FMD27-055 | 27 | 60 | 21 | 55 | |
| BT 50-FMD32-055 | 32 | 78 | 24 | 55 | |
| BT 50-FMD40-055 | 40 | 89 | 27 | 55 | |
| BT 50-FMD50-055 | 50 | 120 | 30 | 55 | |
| BT 50-FMD16-100 | 16 | 40 | 17 | 100 | M 24 |
| BT 50-FMD22-100 | 22 | 48 | 19 | 100 | |
| BT 50-FMD27-100 | 27 | 60 | 21 | 100 | |
| BT 50-FMD32-100 | 32 | 78 | 24 | 100 | |
| BT 50-FMD40-100 | 40 | 89 | 27 | 100 | M 24 |
| BT 50-FMD16-160 | 16 | 40 | 17 | 160 | |
| BT 50-FMD22-160 | 22 | 48 | 19 | 160 | |
| BT 50-FMD27-160 | 27 | 60 | 21 | 160 | |
| BT 50-FMD32-160 | 32 | 78 | 24 | 160 | M 24 |
| BT 50-FMD40-160 | 40 | 89 | 27 | 160 | |
| BT 50-FMD50-160 | 50 | 120 | 30 | 160 | |
| BT 50-FMD22-200 | 22 | 48 | 19 | 200 | |
| BT 50-FMD27-200 | 27 | 60 | 21 | 200 | |

BT 30
BT 40
BT 50
BBT 30
BBT 40
BBT 50

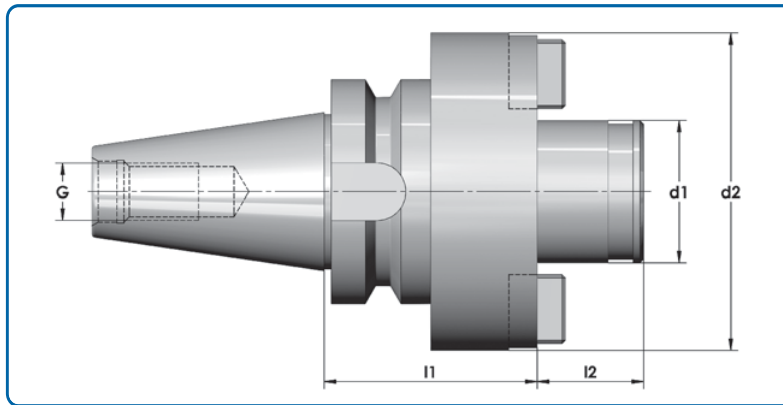


4 holes in the spigot for cooling lubricant supply on request

| Code No. | d ₁ | d ₂ | l ₃ | l ₄ | l ₅ | G |
|-----------------|----------------|----------------|----------------|----------------|----------------|------|
| BT 30-CFD13-045 | 13 | 28 | 15 | 22 | 45 | M 12 |
| BT 30-CFD16-045 | 16 | 32 | 17 | 27 | 45 | |
| BT 30-CFD22-047 | 22 | 40 | 19 | 31 | 47 | |
| BT 30-CFD37-049 | 37 | 48 | 21 | 33 | 49 | |
| BT 30-CFD32-053 | 32 | 58 | 24 | 38 | 53 | |
| BT 30-CFD40-054 | 40 | 70 | 27 | 41 | 54 | |
| BT 40-CFD13-055 | 13 | 28 | 15 | 25 | 55 | M 16 |
| BT 40-CFD16-055 | 16 | 32 | 17 | 27 | 55 | |
| BT 40-CFD22-055 | 22 | 40 | 19 | 31 | 55 | |
| BT 40-CFD27-055 | 27 | 48 | 21 | 33 | 55 | |
| BT 40-CFD32-060 | 32 | 58 | 24 | 38 | 60 | |
| BT 40-CFD40-060 | 40 | 70 | 27 | 41 | 60 | |
| BT 40-CFD16-100 | 16 | 32 | 17 | 27 | 100 | M 16 |
| BT 40-CFD22-100 | 22 | 40 | 19 | 31 | 100 | |
| BT 40-CFD27-100 | 27 | 48 | 21 | 33 | 100 | |
| BT 40-CFD32-100 | 32 | 58 | 24 | 38 | 100 | |
| BT 40-CFD40-100 | 40 | 70 | 27 | 41 | 100 | |
| BT 40-CFD27-200 | 27 | 48 | 21 | 33 | 200 | M 16 |
| BT 40-CFD40-200 | 40 | 70 | 27 | 41 | 200 | |
| BT 50-CFD16-070 | 16 | 32 | 17 | 27 | 70 | |
| BT 50-CFD22-070 | 22 | 40 | 19 | 31 | 70 | M 24 |
| BT 50-CFD27-070 | 27 | 48 | 21 | 33 | 70 | |
| BT 50-CFD32-070 | 32 | 58 | 24 | 38 | 70 | |
| BT 50-CFD40-070 | 40 | 70 | 27 | 41 | 70 | |
| BT 50-CFD50-070 | 50 | 90 | 30 | 46 | 70 | |
| BT 50-CFD16-055 | 16 | 32 | 17 | 27 | 100 | M 24 |
| BT 50-CFD22-055 | 22 | 40 | 19 | 31 | 100 | |
| BT 50-CFD27-055 | 27 | 48 | 21 | 33 | 100 | |
| BT 50-CFD32-055 | 32 | 58 | 24 | 38 | 100 | |
| BT 50-CFD40-055 | 40 | 70 | 27 | 41 | 100 | |
| BT 50-CFD16-160 | 16 | 32 | 17 | 27 | 160 | M 24 |
| BT 50-CFD22-160 | 22 | 40 | 19 | 31 | 160 | |
| BT 50-CFD27-160 | 27 | 48 | 21 | 33 | 160 | |
| BT 50-CFD32-160 | 32 | 58 | 24 | 38 | 160 | |
| BT 50-CFD40-160 | 40 | 70 | 27 | 41 | 160 | |

| Spare parts | Clutch drive rings | | Cutter retaining screws | | Cutter retaining screw with hexagonsocket | |
|-------------|--------------------|----------------|-------------------------|----------------|---|----------------|
| | Code No. | d ₁ | Code No. | d ₁ | Code No. | d ₁ |
| | 046.001 | 13 | 047.001 | 13 | 049.001 | 13 |
| | 046.002 | 16 | 047.002 | 16 | 049.002 | 16 |
| | 046.003 | 22 | 047.003 | 22 | 049.003 | 22 |
| | 046.004 | 27 | 047.004 | 27 | 049.004 | 27 |
| | 046.005 | 32 | 047.005 | 32 | 049.005 | 32 |
| | 046.006 | 40 | 047.006 | 40 | 049.006 | 40 |
| | 046.007 | 50 | 047.007 | 50 | 049.007 | 50 |
| | 046.008 | 60 | 047.008 | 60 | 049.008 | 60 |

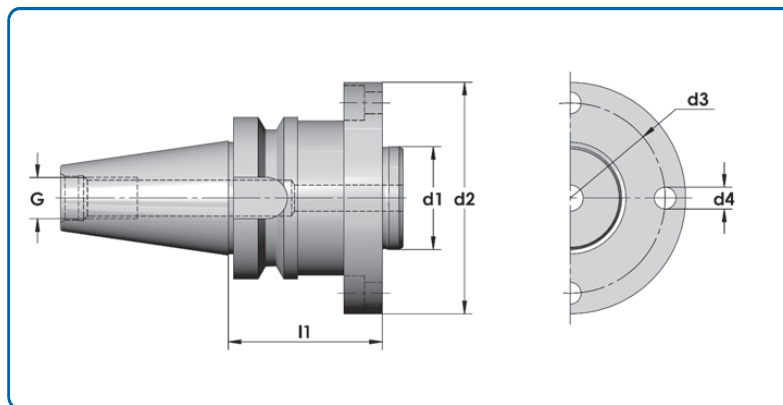
BT 40
BT 50
BBT 40
BBT 50



| Code No. | Milling cutter mount | d_1 | d_2 | l_1 | l_2 | G | Weight |
|-----------------|----------------------|-------|-------|-------|-------|------|--------|
| BT 40-FCS40-060 | ISO 40 | 40 | 89.3 | 60 | 30 | M 16 | 2.8 |
| BT 40-FCS60-075 | ISO 50 | 60 | 129.1 | 75 | 40 | | 3.7 |
| BT 50-FCS40-070 | ISO 40 | 40 | 89.3 | 70 | 30 | M 24 | 5.3 |
| BT 50-FCS60-080 | ISO 50 | 60 | 129.1 | 80 | 40 | | 8.6 |
| BT 50-FCS60-100 | ISO 50 | 60 | 129.1 | 100 | 40 | | 9.7 |
| BT 50-FCS50-100 | ISO 50 | 50 | 129.1 | 100 | 40 | | 9.4 |
| BT 50-FCS60-250 | ISO 50 | 60 | 129.1 | 250 | 40 | | 20.3 |
| BT 60-FCS60-082 | ISO 50 + 60 | 60 | 221 | 82 | 40 | M 30 | 23.3 |

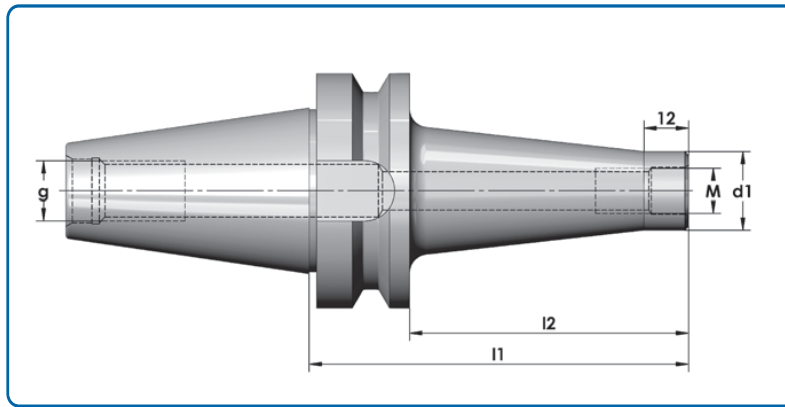
Flange Adaptors

BT 40
BT 50
BBT 40
BBT 50



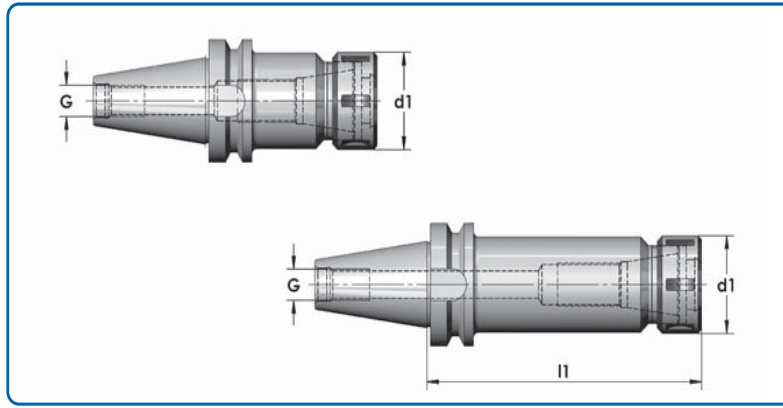
| Code No. | d_1 | d_2 | d_3 | d_4 | l_1 | G | Weight |
|-----------------|-------|-------|-------|-------|-------|------|--------|
| BT 40-FAD40-060 | 40 | 90 | 74 | 9 | 60 | M 16 | 2.1 |
| BT 50-FAD60-060 | 60 | 112 | 92 | 11 | 100 | M 24 | 6.4 |

BT 40
B5 50
BBT 40
BBT 50



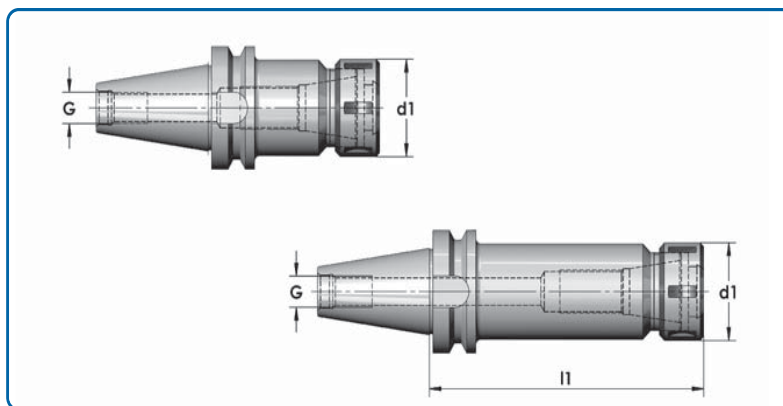
| Code No. | M | d ₁ | d ₂ | l ₁ | l ₂ | G |
|-----------------|------|----------------|----------------|----------------|----------------|------|
| BT 40-SEM08-052 | M 8 | 13,8 | 15 | 52 | 25 | M 16 |
| BT 40-SEM08-077 | M 8 | 13,8 | 23 | 77 | 50 | |
| BT 40-SEM08-102 | M 8 | 13,8 | 25 | 102 | 75 | |
| BT 40-SEM10-052 | M 10 | 18 | 23 | 52 | 25 | |
| BT 40-SEM10-077 | M 10 | 18 | 25 | 77 | 50 | |
| BT 40-SEM10-102 | M 10 | 18 | 30 | 102 | 75 | |
| BT 40-SEM12-052 | M 12 | 21 | 24 | 52 | 25 | |
| BT 40-SEM12-077 | M 12 | 21 | 30 | 77 | 50 | |
| BT 40-SEM12-102 | M 12 | 21 | 35 | 102 | 75 | |
| BT 40-SEM12-127 | M 12 | 21 | 38 | 127 | 100 | |
| BT 40-SEM16-052 | M 16 | 29 | 29 | 52 | 25 | |
| BT 40-SEM16-077 | M 16 | 29 | 34 | 77 | 50 | |
| BT 40-SEM16-102 | M 16 | 29 | 35 | 102 | 75 | |
| BT 40-SEM16-127 | M 16 | 29 | 40 | 127 | 100 | |
| BT 50-SEM10-088 | M 10 | 18 | 25 | 88 | 50 | M 24 |
| BT 50-SEM10-113 | M 10 | 18 | 30 | 113 | 75 | |
| BT 50-SEM10-138 | M 10 | 18 | 35 | 138 | 100 | |
| BT 50-SEM12-088 | M 12 | 21 | 30 | 88 | 50 | |
| BT 50-SEM12-138 | M 12 | 21 | 38 | 138 | 100 | |
| BT 50-SEM12-188 | M 12 | 21 | 52 | 188 | 150 | |
| BT 50-SEM12-038 | M 12 | 21 | 58 | 38 | 200 | |
| BT 50-SEM12-288 | M 12 | 21 | 63 | 288 | 250 | |
| BT 50-SEM12-338 | M 12 | 21 | 68 | 338 | 300 | |
| BT 50-SEM16-088 | M 16 | 29 | 34 | 88 | 50 | |
| BT 50-SEM16-138 | M 16 | 29 | 40 | 138 | 100 | |
| BT 50-SEM16-188 | M 16 | 29 | 48 | 188 | 150 | |
| BT 50-SEM16-238 | M 16 | 29 | 58 | 238 | 200 | |
| BT 50-SEM16-288 | M 16 | 29 | 62 | 288 | 250 | |
| BT 50-SEM16-338 | M 16 | 29 | 68 | 338 | 300 | |

BT 30
BT 40
BBT 30
BBT 40



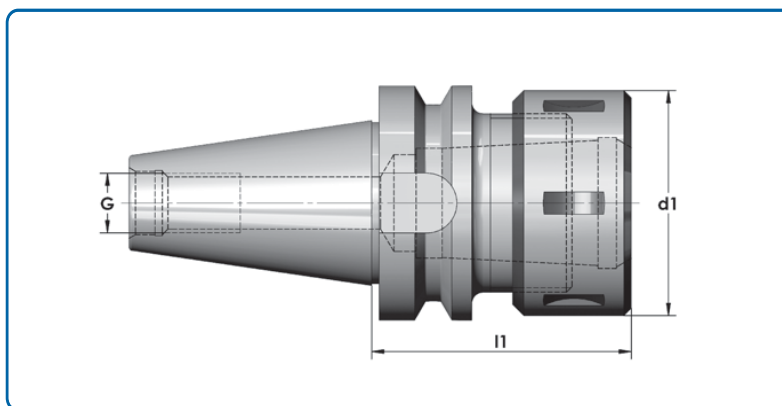
| Code No. | Chucking range | l_1 | d_1 | G | |
|-----------------|-----------------------|-------|-------|------|--|
| BT 30-ERM11-060 | 1 - 6 ER 11-mini | 60 | 16 | M 12 | |
| BT 30-ERA16-060 | 1 - 10 ER 16 | 60 | 28 | | |
| BT 30-ERA20-060 | 1 - 13 ER 20 | 60 | 34 | | |
| BT 30-ERA25-060 | 1 - 16 ER 25 | 60 | 42 | | |
| BT 30-ERA32-070 | 2 - 20 ER 32 | 70 | 50 | | |
| | | | | | |
| BT 30-ERA16-100 | 1 - 10 ER 16 | 100 | 28 | M 12 | |
| BT 30-ERA20-100 | 1 - 13 ER 20 | 100 | 34 | | |
| BT 30-ERA25-100 | 1 - 16 ER 25 | 100 | 42 | | |
| BT 30-ERA32-100 | 2 - 20 ER 32 | 100 | 50 | | |
| | | | | | |
| BT 30-ERA16-160 | 1 - 10 ER 16 | 160 | 28 | | |
| | | | | | |
| BT 40-ERA16-060 | 1 - 10 ER 16 | 60 | 28 | M 16 | |
| BT 40-ERA20-070 | 1 - 20 ER 20 | 70 | 34 | | |
| BT 40-ERA25-070 | 1 - 16 ER 25 | 70 | 42 | | |
| BT 40-ERA32-070 | 2 - 20 ER 32 | 70 | 50 | | |
| BT 40-ERA40-070 | 3 - 26 ER 40 | 70 | 63 | | |
| | | | | | |
| BT 40-ERM16-100 | 1 - 10 ER 16-mini 100 | 100 | 22 | M 16 | |
| BT 40-ERA16-100 | 1 - 10 ER 16 | 100 | 28 | | |
| BT 40-ERM20-100 | 1 - 20 ER 20-mini | 100 | 28 | | |
| BT 40-ERA25-100 | 1 - 16 ER 25 | 100 | 34 | | |
| BT 40-ERA32-100 | 2 - 20 ER 32 | 100 | 50 | | |
| BT 40-ERA40-100 | 3 - 26 ER 40 | 100 | 63 | | |
| | | | | | |
| BT 40-ERA20-120 | 1 - 20 ER 20 | 120 | 42 | M 16 | |
| BT 40-ERA25-120 | 1 - 16 ER 25 | 120 | 50 | | |
| BT 40-ERA32-120 | 2 - 20 ER 32 | 120 | 63 | | |
| | | | | | |
| BT 40-ERA20-150 | 1 - 20 ER 20 | 150 | 34 | M 16 | |
| | | | | | |
| BT 40-ERA16-160 | 1 - 10 ER 16 | 160 | 28 | M 16 | |
| BT 40-ERA25-160 | 1 - 16 ER 25 | 160 | 34 | | |
| BT 40-ERA32-160 | 2 - 20 ER 32 | 160 | 50 | | |
| BT 40-ERA40-160 | 3 - 26 ER 40 | 160 | 63 | | |
| | | | | | |
| BT 40-ERA16-200 | 1 - 10 ER 16 | 200 | 28 | M 16 | |
| BT 40-ERA25-200 | 1 - 16 ER 25 | 200 | 34 | | |
| BT 40-ERA32-200 | 2 - 20 ER 32 | 200 | 50 | | |
| BT 40-ERA40-200 | 3 - 26 ER 40 | 200 | 63 | | |

BT 50
BBT50



| Code No. | Chucking range | l_1 | d_1 | G | |
|-----------------|------------------|-------|-------|------|--|
| BT 50-ERA25-070 | 1 -16 ER 25 | 70 | 42 | M 24 | |
| BT 50-ERA32-070 | 2 -20 ER 32 | 70 | 50 | | |
| BT 50-ERA40-080 | 3 -26 ER 40 | 80 | 63 | | |
| BT 50-ERA50-080 | 10 -34 ER 50 | 80 | 78 | | |
| BT 50-ERM11-120 | 1 -6 ER 11 mini | 120 | 16 | M 24 | |
| BT 50-ERM11-100 | 1 -6 ER 11 mini | 100 | 16 | | |
| BT 50-ERA16-100 | 1 -10 ER 16 | 100 | 28 | | |
| BT 50-ERM20-100 | 1 -13 ER 20-mini | 100 | 28 | | |
| BT 50-ERA25-100 | 1 -16 ER 25 | 100 | 42 | | |
| BT 50-ERA32-100 | 2 -20 ER 32 | 100 | 50 | | |
| BT 50-ERA32-130 | 2 -20 ER 32 | 130 | 50 | | |
| BT 50-ERM16-160 | 1 -10 ER 16-mini | 160 | 22 | M 24 | |
| BT 50-ERA16-160 | 1 -10 ER 16 | 160 | 28 | | |
| BT 50-ERM20-160 | 1 -13 ER 20-mini | | 28 | | |
| BT 50-ERA25-160 | 1 -16 ER 25 | 160 | 42 | | |
| BT 50-ERA32-160 | 2 -20 ER 32 | 160 | 50 | | |
| BT 50-ERA40-160 | 3 -26 ER 40 | 160 | 63 | | |
| BT 50-ERA16-200 | 1 -10 ER 16 | 200 | 28 | M 24 | |
| BT 50-ERM20-200 | 1 -13 ER 20-mini | 200 | 28 | | |
| BT 50-ERA25-200 | 1 -16 ER 25 | 200 | 42 | | |
| BT 50-ERA32-200 | 2 -20 ER 32 | 200 | 50 | | |
| BT 50-ERA32-250 | 2 -20 ER 32 | 250 | 50 | | |
| BT 50-ERA40-200 | 3 -26 ER 40 | 200 | 63 | | |
| BT 50-ERA50-200 | 10 -34 ER 50 | 200 | 78 | | |

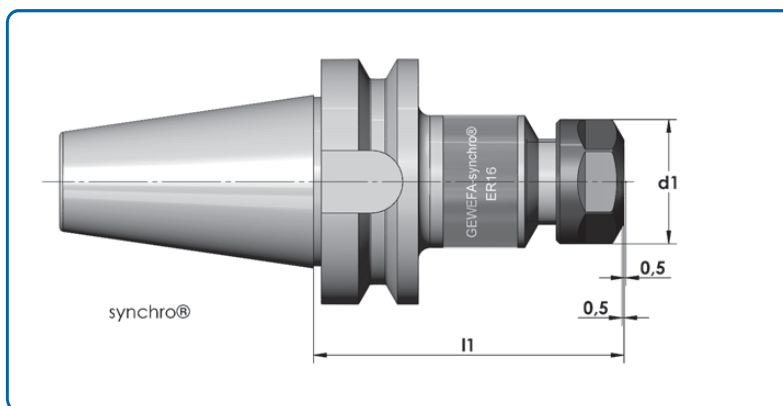
BT 30
BT 40
BT 50
BBT 30
BBT 40
BBT 50



| Code No. | Chucking range | l_1 | d_1 | G | Weight |
|-----------------|----------------|-------|-------|------|--------|
| BT 30-OZA16-065 | 2 -16 | 65 | 43 | M 12 | 0,6 |
| BT 30-OZA25-065 | 2 -25 | 65 | 60 | | 1,0 |
| BT 40-OZA16-070 | 2 -16 | 70 | 43 | M 16 | 1,2 |
| BT 40-OZA16-100 | 2 -16 | 100 | 43 | | 1,3 |
| BT 40-OZA16-120 | 2 -16 | 120 | 43 | | 1,4 |
| BT 40-OZA16-160 | 2 -16 | 160 | 43 | | 1,5 |
| BT 40-OZA25-070 | 2 -25 | 70 | 60 | | 1,3 |
| BT 40-OZA32-090 | 3 -32 | 90 | 72 | | 1,8 |
| BT 50-OZA25-085 | 2 -25 | 85 | 60 | M 24 | 4,1 |
| BT 50-OZA32-090 | 3 -32 | 90 | 72 | | 4,2 |
| BT 50-OZA32-160 | 3 -32 | 160 | 72 | | 4,1 |
| BT 50-OZA40-090 | 6 -40 | 90 | 82 | | 4,2 |
| BT 50-OZA50-100 | 8 -50 | 100 | 100 | | 4,4 |

| Spare parts | Tightening nuts | | Hook wrenches | | Key insert | | Dynamometric key | | Adjusting screws | |
|-------------|-----------------|---------|---------------|---------|------------|---------|------------------|---------|------------------|-------|
| | | | | | | | | | | |
| | Code No. | d_1 | Code No. | d_1 | Code No. | d_1 | Code No. | | Code No. | d_1 |
| 029.001 | 2 -16 | 029.201 | 2 -16 | 029.251 | 2 -16 | 029.701 | | 032.805 | 2 -16 | |
| 029.002 | 2 -25 | 029.202 | 2 -25 | 029.252 | 2 -25 | | | 032.805 | 2 -25 | |
| 029.003 | 3 -32 | 029.203 | 3 -32 | 029.253 | 3 -32 | | | 032.805 | 3 -32 | |
| 029.004 | 6 -40 | 029.204 | 6 -40 | 029.254 | 6 -40 | | | 032.806 | 6 -40 | |
| 029.005 | 8 -50 | 029.205 | 8 -50 | 029.255 | 8 -50 | | | 032.806 | 8 -50 | |

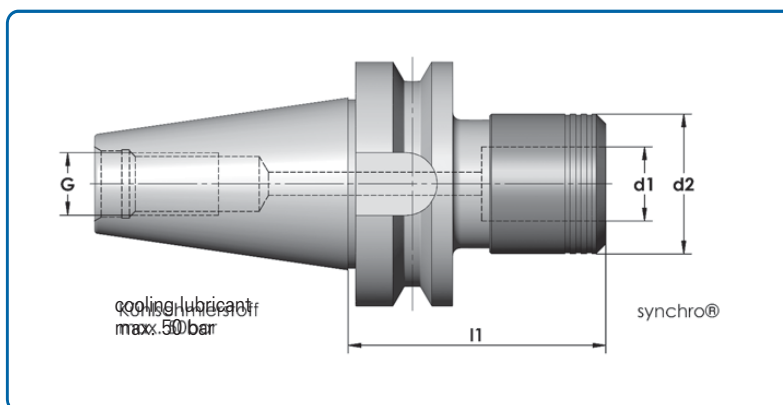
BT 40
BT 50
BBT 40
BBT 50



| Code No. | For tap sizes | Chucking range | Size | d ₁ | l ₁ |
|-----------------|---------------|----------------|------|----------------|----------------|
| BT 40-SER16-079 | M 3 - M 12 | 1 - 10 | ER16 | 28 | 79 |
| BT 40-SER20-085 | M 3 - M 16 | 3,5 - 10 | ER20 | 34 | 85 |
| BT 40-SER25-089 | M 3 - M 20 | 3,5 - 16 | ER25 | 42 | 89 |
| BT 40-SER32-110 | M 4 - M 27 | 3,5 - 16 | ER32 | 50 | 110 |
| BT 40-SER40-115 | M 4 - M 33 | 7 - 20 | ER40 | 63 | 115 |
| BT 50-SER16-095 | M 3 - M 12 | 1 - 10 | ER16 | 28 | 95 |
| BT 50-SER20-100 | M 3 - M 16 | 3,5 - 10 | ER20 | 34 | 100 |
| BT 50-SER25-110 | M 3 - M 20 | 3,5 - 16 | ER25 | 42 | 110 |
| BT 50-SER32-120 | M 4 - M 27 | 3,5 - 16 | ER32 | 50 | 120 |
| BT 50-SER40-120 | M 4 - M 33 | 7 - 20 | ER40 | 63 | 120 |

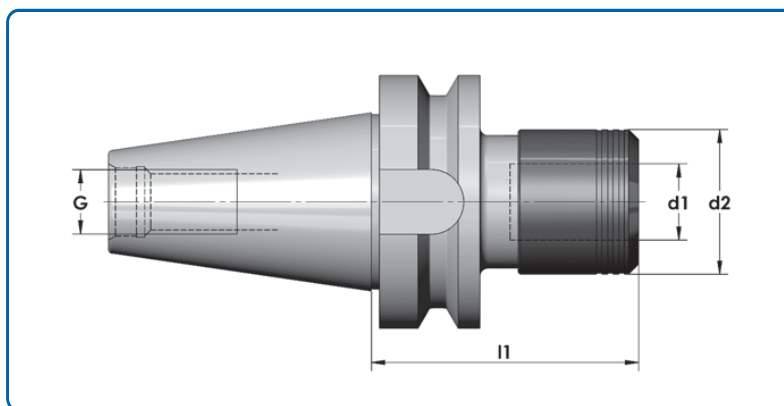
Synchro Tap Holders

BT 40
BT 50
BBT 40
BBT 50



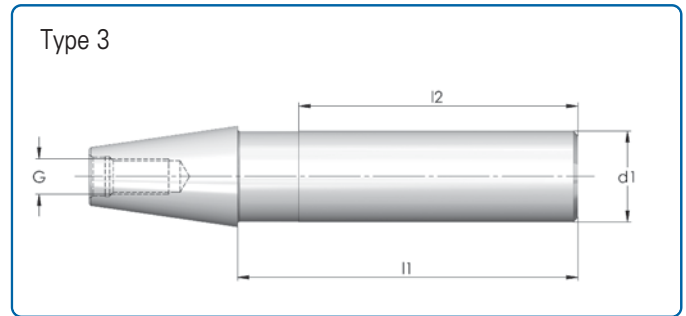
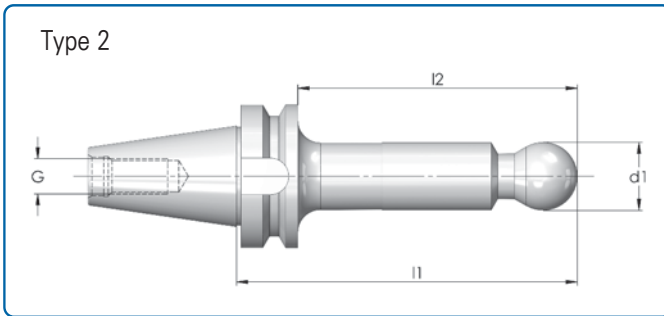
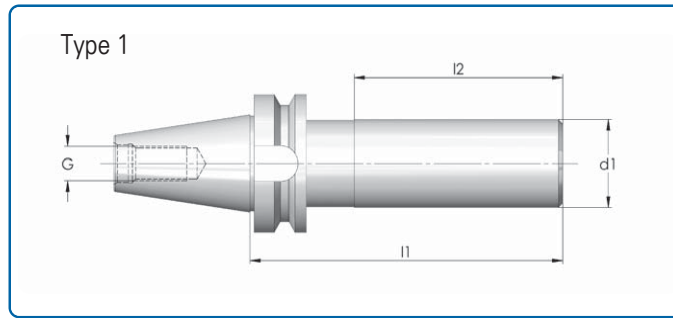
| Code No. | For tap sizes | Size | d ₁ | d ₂ | l ₁ | G | Weight |
|-----------------|---------------|------|----------------|----------------|----------------|------|--------|
| BT 30-STH01-066 | M 3 - M12 | 1 | 19 | 36 | 66 | M 12 | 1.1 |
| BT 30-STH02-080 | M 8 - M20 | 2 | 31 | 53 | 80 | | 1.5 |
| BT 40-STH01-071 | M 3 - M12 | 1 | 19 | 36 | 71 | M 16 | 1.8 |
| BT 40-STH02-085 | M 8 - M20 | 2 | 31 | 53 | 85 | | 2.2 |
| BT 40-STH03-121 | M 14 - M33 | 3 | 48 | 78 | 121 | | 4.0 |
| BT 50-STH01-084 | M 3 - M12 | 1 | 19 | 36 | 84 | M 24 | 3.0 |
| BT 50-STH02-096 | M 8 - M20 | 2 | 31 | 53 | 96 | | 3.3 |
| BT 50-STH03-134 | M 14 - M33 | 3 | 48 | 78 | 134 | | 5.2 |
| BT 50-STH04-170 | M 22 - M48 | 4 | 60 | 96 | 170 | | 7.2 |

BT 30
BT 40
BT 50



| Code No. | Tap sizes | Size | Length compensation in compression and Tension | | d ₁ | d ₂ | l ₁ | G | Weight |
|-----------------|-------------|------|--|------|----------------|----------------|----------------|------|--------|
| BT 30-QTC01-061 | M 3 - M 12 | 1 | 7,5 | 7,5 | 19 | 36 | 61,5 | M 12 | 0,5 |
| BT 30-QTC02-095 | M 8 - M 20 | 2 | 12,5 | 12,5 | 31 | 53 | 95 | | 1,0 |
| BT 40-QTC01-066 | M 3 - M 12 | 1 | 7,5 | 7,5 | 19 | 36 | 66,5 | M 16 | 1,1 |
| BT 40-QTC02-093 | M 8 - M 20 | 2 | 12,5 | 12,5 | 31 | 53 | 93,5 | | 1,5 |
| BT 40-QTC03-162 | M 14 - M 33 | 3 | 20 | 20 | 48 | 78 | 162,5 | | 3,3 |
| BT 50-QTC01-085 | M 3 - M 12 | 1 | 7,5 | 7,5 | 19 | 36 | 85 | M 24 | 3,0 |
| BT 50-QTC02-101 | M 8 - M 20 | 2 | 12,5 | 12,5 | 31 | 53 | 101,5 | | 3,3 |
| BT 50-QTC03-141 | M 14 - M 33 | 3 | 20 | 20 | 48 | 78 | 141 | | 5,2 |
| BT 50-QTC04-164 | M 22 - M 48 | 4 | 22,5 | 22,5 | 60 | 96 | 164,5 | | 6,5 |

BT 30
BT 40
BT 50



Application: For acceptance tests for machine tools to ISO Recommendation R 230.

| Code No. | d ₁ | l ₁ | l ₂ | G | Tolerance | Type |
|-----------------|----------------|----------------|----------------|------|-----------|------|
| BT 30-TBG24-085 | 24 | 85 | 50 | M12 | 0,003 | 1 |
| BT 30-TBG32-300 | 32 | 300 | 254 | | | 1 |
| BT 30-TBG25-200 | 25 | 200 | 152 | | | 1 |
| BT 30-TBG32-300 | 32 | 300 | 275 | | | 3 |
| BT 40-TBG30-150 | 30 | 150 | 113 | M16 | 0,003 | 2 |
| BT 40-TBG40-150 | 40 | 150 | 100 | | | 1 |
| BT 40-TBG40-300 | 40 | 300 | 247 | | | 1 |
| BT 40-TBG40-300 | 40 | 300 | 272 | | | 3 |
| BT 40-TBG50-300 | 50 | 300 | 250 | | | 1 |
| BT 50-TBG30-150 | 30 | 150 | 124 | M 24 | 0,003 | 2 |
| BT 50-TBG50-200 | 50 | 200 | | | | 1 |
| BT 50-TBG50-300 | 50 | 300 | | | | 1 |
| BT 50-TBG50-300 | 50 | 300 | | | | 3 |
| BT 50-TBG50-400 | 50 | 400 | | | | 1 |

Accessoires wooden case for storage



ST

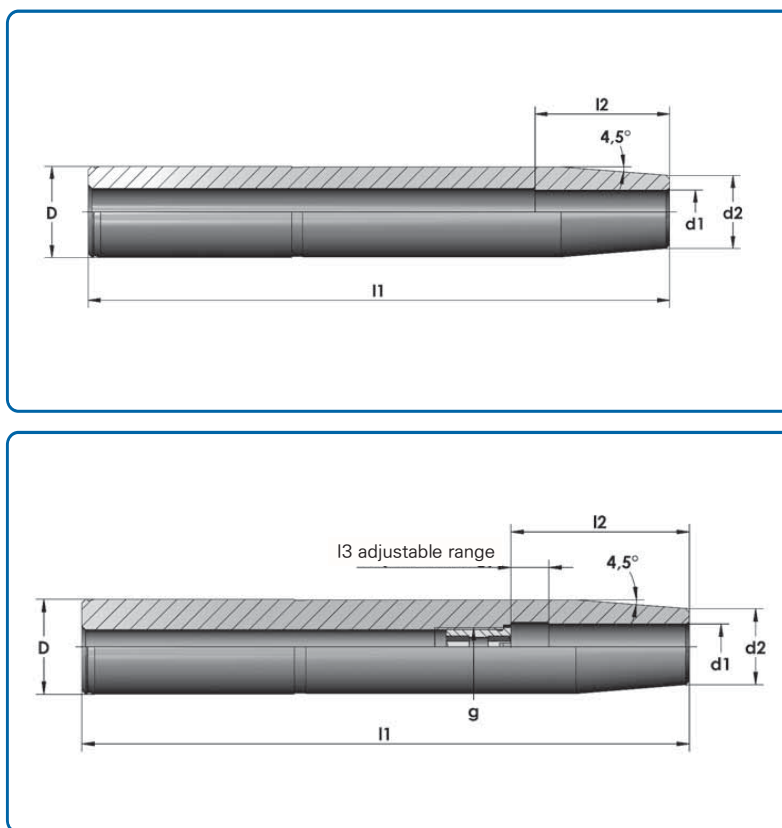


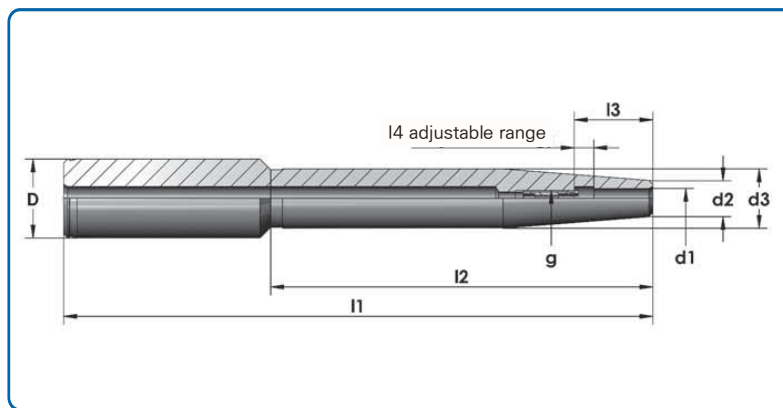
FIG 1

| Code No. | D | d ₁ | d ₂ | l ₁ | l ₂ |
|---------------|----|----------------|----------------|----------------|----------------|
| ST12-SC03-100 | 12 | 3 | 8 | 100 | 10 |
| ST12-SC03-160 | 12 | 3 | 8 | 160 | 10 |
| ST12-SC04-160 | 12 | 4 | 8 | 160 | 20 |
| ST12-SH06-160 | 12 | 6 | 10 | 160 | 36 |
| | | | | | |
| ST16-SC03-160 | 16 | 3 | 10 | 160 | 10 |
| ST16-SC04-160 | 16 | 4 | 10 | 160 | 12 |
| ST16-SC05-160 | 16 | 5 | 10 | 160 | 20 |
| ST16-SC06-160 | 16 | 6 | 10 | 160 | 36 |
| | | | | | |
| ST20-SC05-160 | 20 | 5 | 14 | 160 | 15 |
| ST20-SC06-160 | 20 | 6 | 14 | 160 | 28 |
| ST20-SC08-160 | 20 | 8 | 14 | 160 | 26 |
| | | | | | |
| ST25-SC08-160 | 25 | 8 | 19 | 160 | 26 |
| ST25-SC10-160 | 25 | 10 | 20 | 160 | 32 |
| ST25-SC12-160 | 25 | 12 | 20 | 160 | 37 |
| ST25-SC14-160 | 25 | 14 | 20 | 160 | 47 |
| ST25-SC16-160 | 25 | 16 | 22 | 160 | 40 |
| | | | | | |
| ST32-SC10-160 | 32 | 10 | 27 | 160 | 32 |
| ST32-SC12-160 | 32 | 12 | 27 | 160 | 32 |
| ST32-SC14-160 | 32 | 14 | 27 | 160 | 37 |
| ST32-SC16-160 | 32 | 16 | 27 | 160 | 40 |
| ST32-SC20-160 | 32 | 20 | 27 | 160 | 42 |

FIG 2

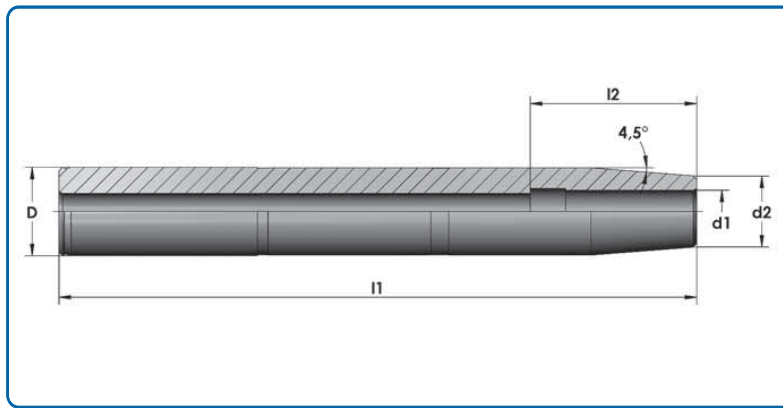
| Code No. | D | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ | g |
|---------------|----|----------------|----------------|----------------|----------------|----------------|--------|
| ST16-SH06-160 | 16 | 6 | 10 | 160 | 36 | 10 | M 5 |
| | | | | | | | |
| ST20-SH06-160 | 20 | 6 | 14 | 160 | 36 | 10 | M 5 |
| ST20-SH08-160 | 20 | 8 | 14 | 160 | 36 | | M 6 |
| | | | | | | | |
| ST25-SH08-160 | 25 | 8 | 19 | 160 | 36 | 10 | M 6 |
| ST25-SH10-160 | 25 | 10 | 20 | 160 | 42 | | M 8x1 |
| ST25-SH12-160 | 25 | 12 | 20 | 160 | 47 | | M 10x1 |
| ST25-SH14-160 | 25 | 14 | 20 | 160 | 47 | | M 10x1 |
| ST25-SH16-160 | 25 | 16 | 22 | 160 | 50 | | M 12x1 |
| | | | | | | | |
| ST32-SH10-160 | 32 | 10 | 27 | 160 | 42 | 10 | M 8x1 |
| ST32-SH12-160 | 32 | 12 | 27 | 160 | 47 | | M 10x1 |
| ST32-SH14-160 | 32 | 14 | 27 | 160 | 47 | | M 10x1 |
| ST32-SH16-160 | 32 | 16 | 27 | 160 | 50 | | M 12x1 |
| ST32-SH18-160 | 32 | 18 | 27 | 160 | 50 | | M 12x1 |
| ST32-SH20-160 | 32 | 20 | 27 | 160 | 52 | | M 16x1 |
| ST32-SH25-160 | 32 | 25 | 32 | 160 | 58 | | M 16x1 |

ST



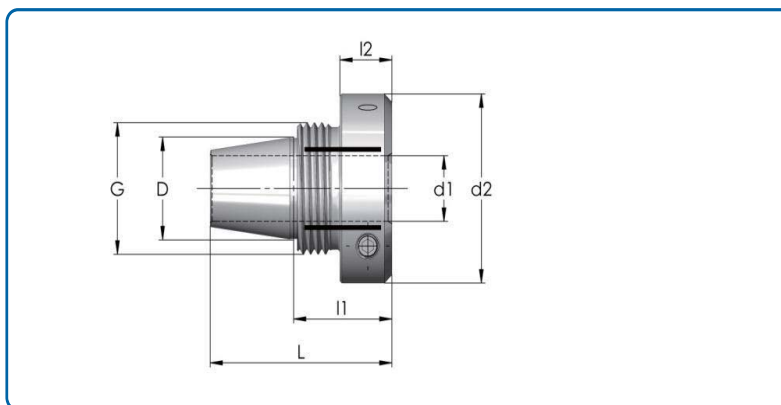
| Code No. | D | d ₁ | d ₂ | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | g |
|---------------|----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| ST20-SY03-100 | 20 | 3 | 9 | 15 | 100 | 50 | 10 | | -- |
| ST20-SY04-100 | 20 | 4 | 9 | 15 | 100 | 50 | 20 | 5 | M 3 |
| ST20-SY05-100 | 20 | 5 | 9 | 15 | 100 | 50 | 20 | | M 4 |
| ST20-SY06-100 | 20 | 6 | 15 | 20 | 100 | 50 | 36 | 10 | M 5 |
| ST20-SY08-100 | 20 | 8 | 15 | 20 | 100 | 50 | 36 | | M 6 |
| ST20-SY10-100 | 20 | 10 | 20 | 20 | 100 | 50 | 42 | | M 8x1 |
| ST20-SY12-100 | 20 | 12 | 20 | 20 | 100 | 50 | 47 | | M 10x1 |
| ST25-SY08-110 | 25 | 8 | 15 | 20 | 110 | 50 | 36 | 10 | M 6 |
| ST25-SY10-110 | 25 | 10 | 20 | 25 | 110 | 50 | 42 | | M 8x1 |
| ST25-SY12-110 | 25 | 12 | 20 | 25 | 110 | 50 | 47 | | M 10x1 |
| ST25-SY14-110 | 25 | 14 | 20 | 25 | 110 | 50 | 47 | | M 10x1 |
| ST25-SY16-110 | 25 | 16 | 22 | 25 | 110 | 50 | 50 | | M 12x1 |
| ST25-SY18-110 | 25 | 18 | 22 | 25 | 110 | 50 | 50 | | M 12x1 |
| ST32-SY08-110 | 32 | 8 | 15 | 20 | 110 | 50 | 36 | 10 | M 6 |
| ST32-SY10-110 | 32 | 10 | 20 | 25 | 110 | 50 | 42 | | M 8x1 |
| ST32-SY12-110 | 32 | 12 | 20 | 25 | 110 | 50 | 47 | | M 10x1 |
| ST32-SY14-110 | 32 | 14 | 20 | 25 | 110 | 50 | 47 | | M 10x1 |
| ST32-SY16-110 | 32 | 16 | 22 | 27 | 110 | 50 | 50 | | M 12x1 |
| ST32-SY18-110 | 32 | 18 | 27 | 32 | 110 | 50 | 52 | | M 12x1 |
| ST20-SY03-150 | 20 | 3 | 9 | 15 | 150 | 100 | 10 | | -- |
| ST20-SY04-150 | 20 | 4 | 9 | 15 | 150 | 100 | 20 | 5 | M 3 |
| ST20-SY05-150 | 20 | 5 | 9 | 15 | 150 | 100 | 20 | | M 4 |
| ST20-SY06-150 | 20 | 6 | 15 | 20 | 150 | 100 | 36 | 10 | M 5 |
| ST20-SY08-150 | 20 | 8 | 15 | 20 | 150 | 100 | 36 | | M 6 |
| ST20-SY10-150 | 20 | 10 | 17 | 20 | 150 | 100 | 42 | | M 8x1 |
| ST20-SY12-150 | 20 | 12 | 20 | 20 | 150 | 100 | 47 | | M 10x1 |
| ST25-SY10-160 | 25 | 10 | 20 | 25 | 160 | 100 | 42 | 10 | M 8x1 |
| ST25-SY12-160 | 25 | 12 | 20 | 25 | 160 | 100 | 47 | | M 10x1 |
| ST25-SY14-160 | 25 | 14 | 20 | 25 | 160 | 100 | 47 | | M 10x1 |
| ST25-SY16-160 | 25 | 16 | 22 | 32 | 160 | 100 | 50 | | M 12x1 |
| ST32-SY08-160 | 32 | 8 | 15 | 32 | 160 | 100 | 36 | 10 | M 6 |
| ST32-SY10-160 | 32 | 10 | 20 | 32 | 160 | 100 | 42 | | M 8x1 |
| ST32-SY12-160 | 32 | 12 | 20 | 32 | 160 | 100 | 47 | | M 10x1 |
| ST32-SY14-160 | 32 | 14 | 20 | 32 | 160 | 100 | 47 | | M 10x1 |
| ST32-SY16-160 | 32 | 16 | 22 | 32 | 160 | 100 | 50 | | M 12x1 |
| ST32-SY20-160 | 32 | 20 | 27 | 32 | 160 | 100 | 52 | | M 16x1 |
| ST20-SY06-200 | 20 | 6 | 15 | 20 | 200 | 100 | 36 | 10 | M 5 |
| ST20-SY08-200 | 20 | 8 | 15 | 20 | 200 | 100 | 36 | | M 6 |
| ST20-SY10-200 | 20 | 10 | 17 | 20 | 200 | 100 | 42 | | M 8x1 |
| ST20-SY12-200 | 20 | 12 | 20 | 20 | 200 | 100 | 47 | | M 10x1 |
| ST20-SY14-200 | 20 | 14 | 17 | 20 | 200 | 100 | 47 | | M 10x1 |

ST



| Code No. | D | d ₁ | d ₂ | l ₁ | l ₂ | |
|---------------|----|----------------|----------------|----------------|----------------|--|
| ST20-SC06-300 | 20 | 6 | 14 | 300 | 36 | |
| ST20-SC08-300 | 20 | 8 | 14 | 300 | 36 | |
| ST20-SC10-300 | 20 | 10 | 17 | 300 | 42 | |
| ST20-SC12-300 | 20 | 12 | 19,7 | 300 | 47 | |
| ST25-SC06-300 | 25 | 6 | 18 | 300 | 36 | |
| ST25-SC08-300 | 25 | 8 | 18 | 300 | 36 | |
| ST25-SC10-300 | 25 | 10 | 20 | 300 | 42 | |
| ST25-SC12-300 | 25 | 12 | 20 | 300 | 47 | |
| ST25-SC14-300 | 25 | 14 | 20 | 300 | 47 | |
| ST25-SC16-300 | 25 | 16 | 22 | 300 | 50 | |
| ST32-SY08-110 | 32 | 6 | 21 | 300 | 36 | |
| ST32-SY10-110 | 32 | 8 | 21 | 300 | 36 | |
| ST32-SY12-110 | 32 | 10 | 27 | 300 | 42 | |
| ST32-SY14-110 | 32 | 12 | 27 | 300 | 47 | |
| ST32-SY16-110 | 32 | 14 | 27 | 300 | 47 | |
| ST32-SY18-110 | 32 | 16 | 27 | 300 | 50 | |
| ST20-SY03-150 | 32 | 18 | 27 | 300 | 50 | |
| ST20-SY04-150 | 32 | 20 | 27 | 300 | 52 | |
| ST20-SY05-150 | 32 | 25 | 31,7 | 300 | 58 | |

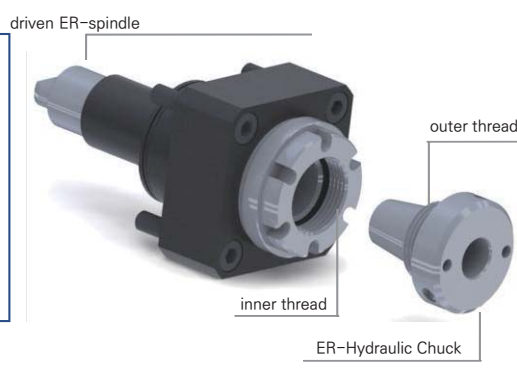
ER



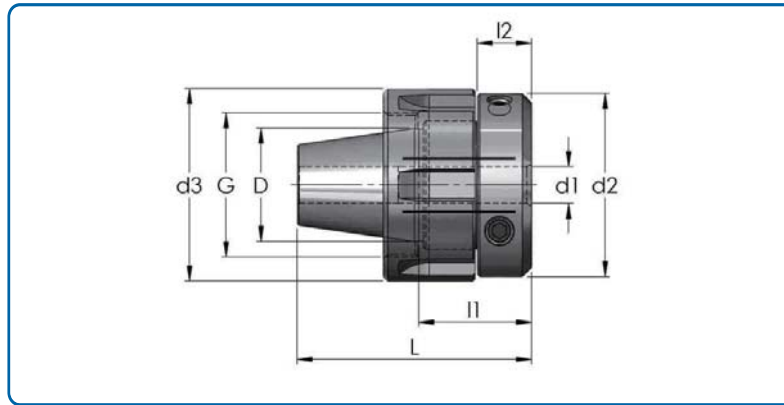
| Code No. | D | G | d1 | d2 | L | l1 | l2 |
|---------------|------|---------|----|----|------|------|------|
| ER16-HC05-044 | ER16 | M24x1.0 | 5 | 36 | 43,7 | 22,5 | 12 |
| ER16-HC06-044 | | | 6 | 36 | 45,7 | 24,5 | 14 |
| ER16-HC08-044 | | | 8 | 36 | 45,7 | 24,5 | 14 |
| ER20-HC06-048 | ER20 | M28x1.5 | 6 | 38 | 48,3 | 24 | 13,5 |
| ER20-HC08-048 | | | 8 | 38 | 48,3 | 24 | 13,5 |
| ER20-HC10-048 | | | 10 | 38 | 48,3 | 24 | 13,5 |
| ER25-HC06-051 | ER25 | M32X1.5 | 6 | 40 | 51 | 24,5 | 12 |
| ER25-HC08-051 | | | 8 | 40 | 51 | 24,5 | 12 |
| ER25-HC10-051 | | | 10 | 40 | 51 | 24,5 | 12 |
| ER25-HC12-051 | | | 12 | 42 | 51 | 24,5 | 12 |
| ER25-HC16-049 | | | 16 | 46 | 49 | 26,5 | 14 |
| ER32-HC06-058 | ER32 | M40X1.5 | 6 | 50 | 58,3 | 26,5 | 12 |
| ER32-HC08-058 | | | 8 | 50 | 58,3 | 26,5 | 12 |
| ER32-HC10-058 | | | 10 | 50 | 58,3 | 26,5 | 12 |
| ER32-HC12-058 | | | 12 | 50 | 58,3 | 26,5 | 12 |
| ER32-HC14-058 | | | 14 | 50 | 58,3 | 26,5 | 12 |
| ER32-HC16-058 | | | 16 | 50 | 58,3 | 26,5 | 12 |
| ER32-HC18-058 | | | 18 | 50 | 58,3 | 26,5 | 12 |

Advantages:

- high flexibility
- constant spindle runout
- centering of inner and outer taper nearly zero
- anti vibration damping by hydraulic system



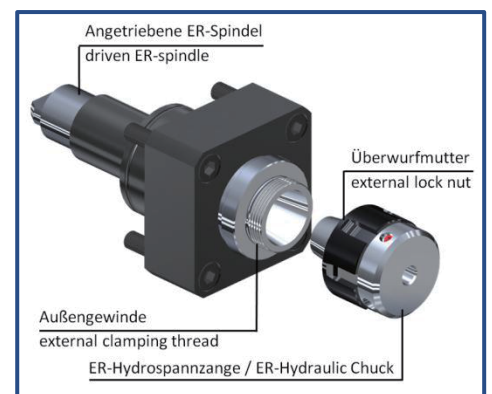
ER



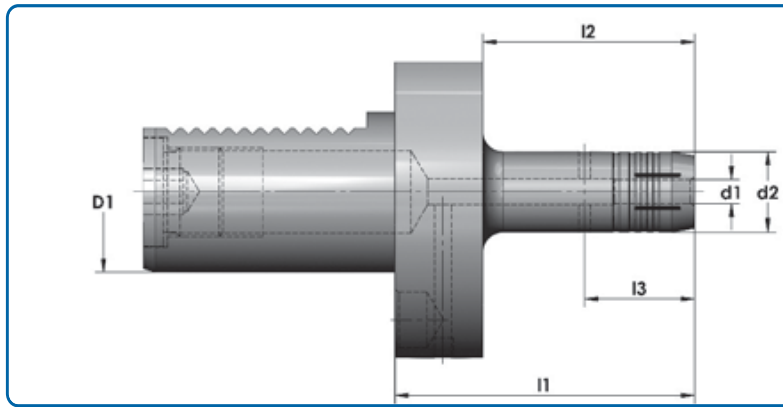
| Code No. | D | G | d1 | d2 | d3 | L | l1 | l2 |
|-----------------|------|---------|----|----|----|------|------|------|
| ER16 N-HC05-044 | ER16 | M22x1.5 | 5 | 36 | 28 | 43,7 | 22,5 | 12 |
| ER16 N-HC06-044 | | | 6 | 36 | 28 | 45,7 | 24,5 | 14 |
| ER16 N-HC08-044 | | | 8 | 36 | 28 | 45,7 | 24,5 | 14 |
| ER20 N-HC06-048 | ER20 | M25x1.5 | 6 | 38 | 34 | 48,3 | 24 | 13,5 |
| ER20 N-HC08-048 | | | 8 | 38 | 34 | 48,3 | 24 | 13,5 |
| ER20 N-HC10-048 | | | 10 | 38 | 34 | 48,3 | 24 | 13,5 |
| ER25 N-HC06-051 | ER25 | M32x1.5 | 6 | 40 | 42 | 51 | 24,5 | 12 |
| ER25 N-HC08-051 | | | 8 | 40 | 42 | 51 | 24,5 | 12 |
| ER25 N-HC10-051 | | | 10 | 40 | 42 | 51 | 24,5 | 12 |
| ER25 N-HC12-051 | | | 12 | 42 | 42 | 51 | 24,5 | 12 |
| ER25 N-HC16-049 | | | 16 | 46 | 42 | 49 | 26,5 | 14 |
| ER32 N-HC06-058 | ER32 | M40x1.5 | 6 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC08-058 | | | 8 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC10-058 | | | 10 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC12-058 | | | 12 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC14-058 | | | 14 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC16-058 | | | 16 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC18-058 | | | 18 | 50 | 50 | 58,3 | 26,5 | 12 |
| ER32 N-HC20-058 | | | 20 | 50 | 50 | 58,3 | 26,5 | 12 |

Advantages:

- high flexibility
- constant spindle runout
- centering of inner and outer taper nearly zero
- anti vibration damping by hydraulic system

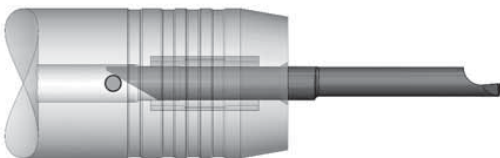


VDI 20
VDI 30
VDI 40

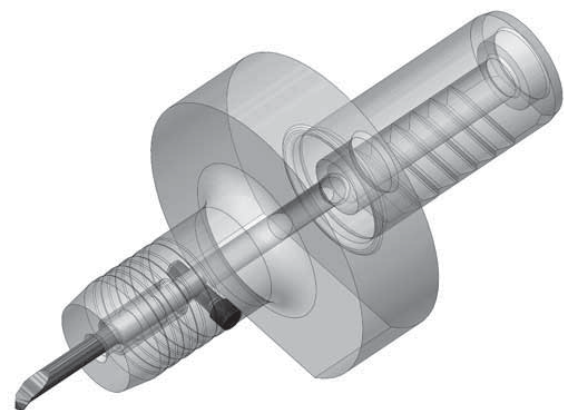
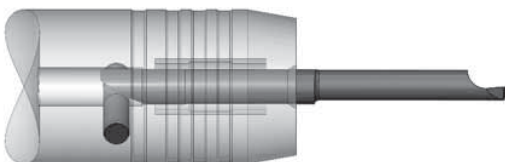


| Code No. | d1 | d2 | l1 | l2 | l3 |
|------------------|----|----|----|----|----|
| VDI 20-HCD04-050 | 4 | 18 | 50 | 34 | 15 |
| VDI 20-HCD05-050 | 5 | 18 | 50 | 34 | 20 |
| VDI 20-HCD06-050 | 6 | 20 | 50 | 34 | 20 |
| VDI 30-HCD04-050 | 4 | 18 | 50 | 32 | 15 |
| VDI 30-HCD05-050 | 5 | 18 | 50 | 32 | 20 |
| VDI 30-HCD06-050 | 6 | 20 | 50 | 32 | 20 |
| VDI 40-HCD04-075 | 4 | 18 | 75 | 53 | 15 |
| VDI 40-HCD05-075 | 5 | 18 | 75 | 53 | 20 |
| VDI 40-HCD06-075 | 6 | 20 | 75 | 53 | 20 |
| VDI 40-HCD07-075 | 7 | 22 | 75 | 53 | 20 |
| VDI 40-HCD08-075 | 8 | 24 | 75 | 53 | 25 |
| VDI 40-HCD10-075 | 10 | 26 | 75 | 53 | 25 |

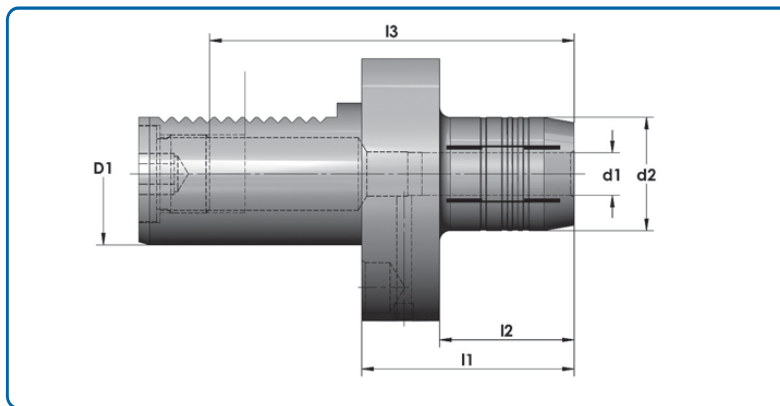
System DTS / Hobe / MAS / SANDVIK / SIMTEK / SUMITOMO / VARGUS etc.



30° twisted - System ARNO



VDI 16
VDI 20
VDI 30
VDI 40
VDI 50



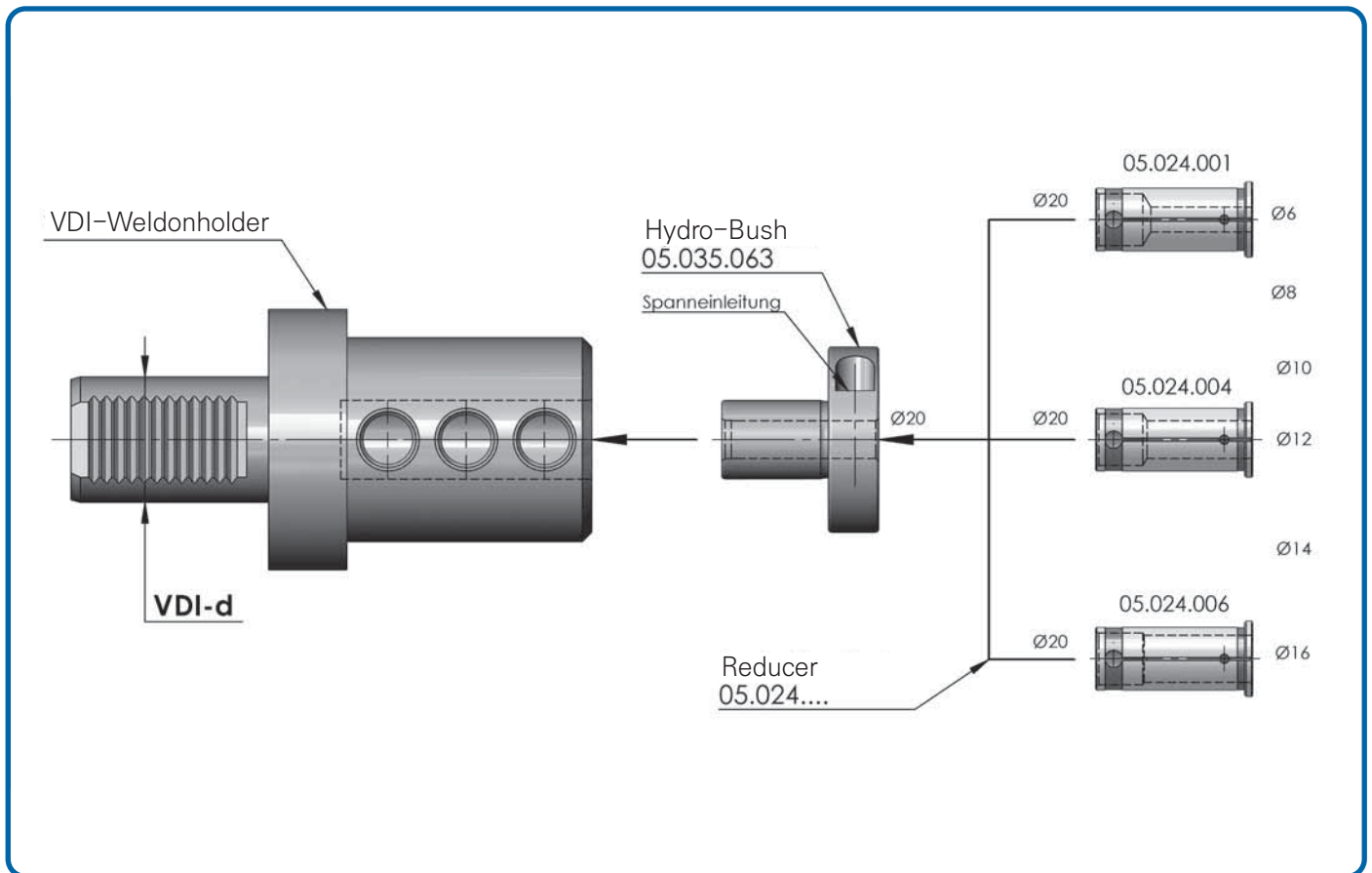
with cooling lubricant supply

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ |
|------------------|----------------|----------------|----------------|----------------|----------------|
| VDI 16-HCD16-075 | 16 | 38 | 75 | 57 | 70 |
| VDI 16-HCD20-075 | 20 | 42 | 75 | 57 | 60 |
| VDI 20-HCD06-049 | 6 | 26 | 49 | 33 | 75 |
| VDI 20-HCD08-049 | 8 | 28 | 49 | 33 | 75 |
| VDI 20-HCD10-049 | 10 | 30 | 49 | 33 | 75 |
| VDI 20-HCD12-054 | 12 | 32 | 54 | 38 | 55 |
| VDI 20-HCD14-054 | 14 | 34 | 54 | 38 | 55 |
| VDI 20-HCD16-075 | 16 | 38 | 75 | 57 | 70 |
| VDI 20-HCD18-075 | 18 | 40 | 75 | 57 | 70 |
| VDI 20-HCD20-075 | 20 | 42 | 75 | 57 | 60 |
| VDI 25-HCD06-049 | 6 | 26 | 49 | 33 | 80 |
| VDI 25-HCD08-049 | 8 | 28 | 49 | 33 | 80 |
| VDI 25-HCD10-049 | 10 | 30 | 49 | 33 | 80 |
| VDI 25-HCD12-054 | 12 | 32 | 54 | 38 | 85 |
| VDI 25-HCD14-054 | 14 | 34 | 54 | 38 | 85 |
| VDI 25-HCD16-075 | 16 | 38 | 75 | 57 | 75 |
| VDI 25-HCD18-075 | 18 | 40 | 75 | 57 | 75 |
| VDI 25-HCD20-075 | 20 | 42 | 75 | 57 | 75 |
| VDI 25-HCD25-100 | 25 | 50 | 100 | 84 | 85 |
| VDI 30-HCD06-049 | 6 | 26 | 49 | 33 | 85 |
| VDI 30-HCD08-049 | 8 | 28 | 49 | 33 | 85 |
| VDI 30-HCD10-049 | 10 | 30 | 49 | 33 | 85 |
| VDI 30-HCD12-054 | 12 | 32 | 54 | 38 | 85 |
| VDI 30-HCD14-054 | 14 | 34 | 54 | 38 | 85 |
| VDI 30-HCD16-089 | 16 | 38 | 89 | 73 | 85 |
| VDI 30-HCD18-089 | 18 | 40 | 89 | 73 | 85 |
| VDI 30-HCD20-089 | 20 | 42 | 89 | 73 | 85 |
| VDI 30-HCD25-094 | 25 | 50 | 94 | 78 | 85 |
| VDI 30-HCD32-094 | 32 | 60 | 94 | 78 | 80 |
| VDI 40-HCD06-055 | 6 | 26 | 55 | 33 | 90 |
| VDI 40-HCD08-055 | 8 | 28 | 55 | 33 | 90 |
| VDI 40-HCD10-055 | 10 | 30 | 55 | 33 | 90 |
| VDI 40-HCD12-060 | 12 | 32 | 60 | 38 | 95 |
| VDI 40-HCD12-080 | 12 | 32 | 80 | 58 | 115 |
| VDI 40-HCD12-090 | 12 | 32 | 90 | 68 | 125 |
| VDI 40-HCD14-060 | 14 | 34 | 60 | 38 | 95 |
| VDI 40-HCD16-095 | 16 | 38 | 95 | 73 | 130 |
| VDI 40-HCD18-095 | 18 | 40 | 95 | 73 | 130 |

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ |
|------------------|----------------|----------------|----------------|----------------|----------------|
| VDI 40-HCD20-095 | 20 | 42 | 95 | 73 | 130 |
| VDI 40-HCD25-095 | 25 | 50 | 95 | 73 | 130 |
| VDI 40-HCD32-075 | 32 | 60 | 75 | 53 | 70 |
| VDI 40-HCD32-095 | 32 | 60 | 95 | 73 | 90 |
| VDI 40-HCD40-100 | 40 | 70 | 100 | 78 | 90 |
| VDI50-HCD06-055 | 6 | 26 | 55 | 33 | 110 |
| VDI50-HCD08-055 | 8 | 28 | 55 | 33 | 110 |
| VDI50-HCD10-055 | 10 | 30 | 55 | 33 | 110 |
| VDI50-HCD12-060 | 12 | 32 | 60 | 38 | 115 |
| VDI50-HCD14-060 | 14 | 34 | 60 | 38 | 115 |
| VDI50-HCD16-095 | 16 | 38 | 95 | 65 | 150 |
| VDI50-HCD18-095 | 18 | 40 | 95 | 65 | 150 |
| VDI50-HCD20-095 | 20 | 42 | 95 | 65 | 150 |
| VDI50-HCD25-095 | 25 | 50 | 95 | 65 | 150 |
| VDI50-HCD32-095 | 32 | 60 | 95 | 65 | 90 |
| VDI50-HCD40-100 | 40 | 60 | 100 | 75 | 90 |
| VDI20-HCD20-100 | 20 | 42 | 100 | 70 | 150 |
| VDI20-HCD20-070 | 20 | 50 | 70 | 40 | 120 |

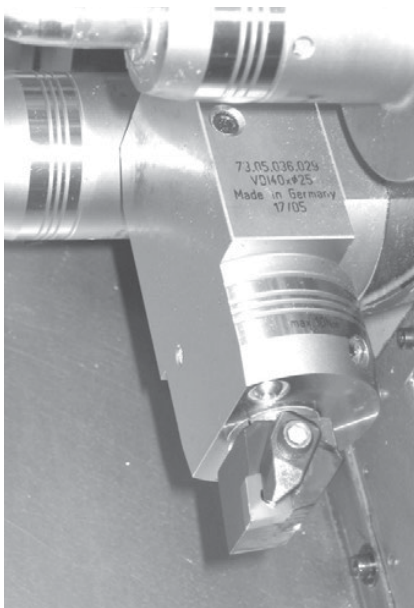
VDI-RadAx

| Code No. | d ₁ | d ₂ | l ₁ | l ₂ | l ₃ |
|------------------|----------------|----------------|----------------|----------------|----------------|
| VDI 40-HCR10-055 | 10 | 30 | 55 | 33 | 42 |
| VDI 40-HCR12-060 | 12 | 32 | 60 | 38 | 47 |
| VDI 40-HCR14-060 | 14 | 34 | 60 | 38 | 47 |
| VDI 40-HCR20-065 | 20 | 42 | 65 | 43 | 52 |

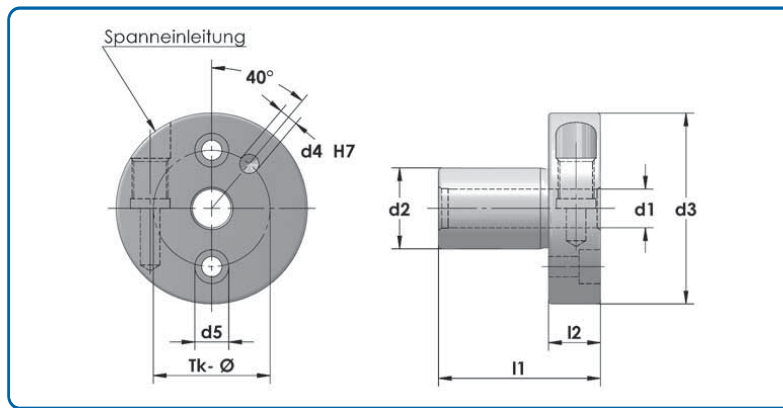


modular VDI – Tool System “Hydro-Flex” Advantages:

- short construction
- manufacturer independent system
- tool change through only one clamping point



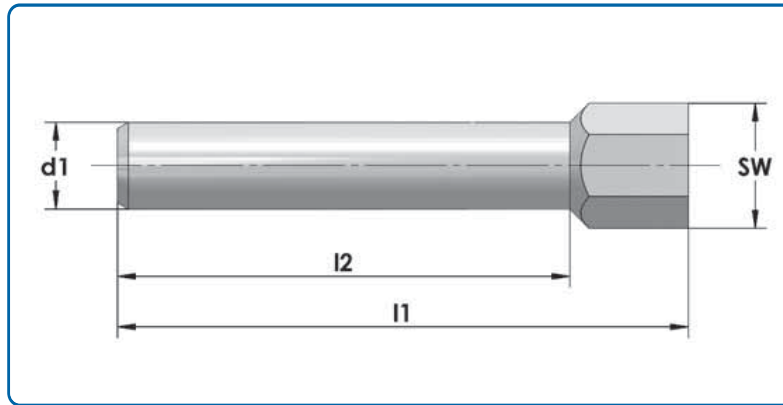
BT 40



| Code No. | d ₁ | d ₂ | d ₃ | d ₄ | d ₅ | TK-Ø | l ₁ | l ₂ |
|------------|----------------|----------------|----------------|----------------|----------------|------|----------------|----------------|
| FL16-HC12 | 12 | 16 | 57 | 6 | M 5 | 28 | 40 | 16 |
| FL18-HC15 | 15 | 18 | 46 | -- | -- | -- | 39 | 14 |
| FL20-HC08 | 8 | 20 | 54 | -- | M 6 | 36 | 46 | 16 |
| FL20-HC10 | 10 | 20 | 59 | -- | M 6 | 36 | 46 | 16 |
| FL20-HC12 | 12 | 20 | 59 | -- | M 6 | 36 | 46 | 16 |
| FL20-HC16 | 16 | 20 | 59 | 6 | M 6 | 36 | 46 | 16 |
| FL25-HC06 | 6 | 25 | 59 | -- | -- | -- | 46 | 16 |
| FL25-HC10 | 10 | 25 | 59 | -- | -- | -- | 46 | 16 |
| FL25-HC12 | 12 | 25 | 59 | -- | -- | -- | 50 | 16 |
| FL25-HC16 | 16 | 25 | 59 | -- | -- | -- | 46 | 16 |
| FL25-HC20 | 20 | 25 | 59 | -- | M 6 | 36 | 46 | 16 |
| FL32-HC20 | 20 | 32 | 67 | 6 | M 6 | 44 | 50 | 16 |
| FL32-HC25 | 25 | 32 | 67 | 6 | M 6 | 44 | 50 | 16 |
| FL40-HC32 | 32 | 40 | 75 | 6 | M 6 | 52 | 55 | 16 |
| FL50-HC40 | 40 | 50 | 94 | 6,5 | M 6 | 62 | 62 | 18 |
| FL50-HC42 | 42 | 50 | 94 | 6,5 | M 6 | 62 | 62 | 18 |
| FL60-HC50 | 50 | 60 | 100 | 6,5 | M 6 | 76 | 70 | 18 |
| FL100-HC50 | 80 | 100 | 150 | -- | M 6 | 118 | 120 | 20 |

- Applications:
- live tools
 - slide lock adapter
 - boring bar holder

BT 40
BT 50
BBT 40
BBT 50



| Code No. | d_{1h_6} | l_1 | l_2 | SW | Nm |
|------------|------------|-------|-------|----|-----|
| 05.024.201 | 6 | 53 | 42 | 10 | 15 |
| 05.024.202 | 8 | 53 | 42 | 10 | 25 |
| 05.024.203 | 10 | 56 | 45 | 10 | 50 |
| 05.024.204 | 12 | 62 | 51 | 10 | 90 |
| 05.024.205 | 14 | 62 | 51 | 10 | 100 |
| 05.024.206 | 16 | 71 | 54 | 17 | 125 |
| 05.024.207 | 18 | 71 | 54 | 17 | 180 |
| 05.024.208 | 20 | 71 | 55 | 17 | 225 |
| 05.024.209 | 25 | 79 | 61 | 17 | 300 |
| 05.024.210 | 32 | 87 | 65 | 17 | 400 |

key insert



| Code No. | SW |
|----------|----|
| 024.401 | 10 |
| 024.402 | 17 |

Torque wrench



| Code No. | Nm |
|----------|----------|
| 029.700 | 10 - 100 |
| 029.701 | 40 - 200 |
| 029.702 | 75 - 400 |

Spare parts

key



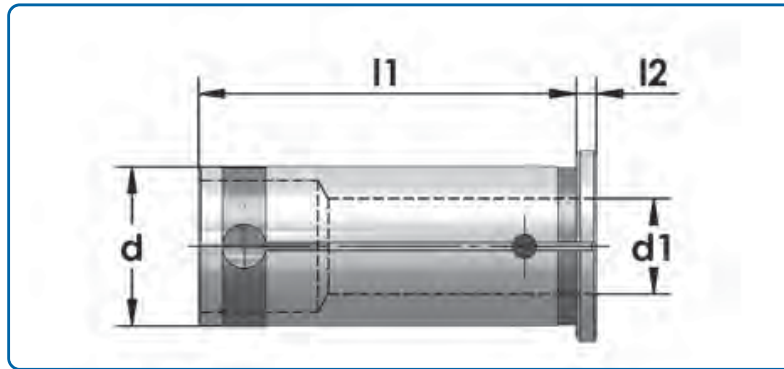
| Code No. | SW | |
|----------|----|------|
| 082.300 | 4 | Blue |
| 082.301 | 5 | |
| 082.305 | 2 | Red |
| 082.302 | 4 | |
| 082.304 | 5 | |
| 082.303 | 6 | |

Adjusting screw



| Code No. | d_1 | Code No. | d_1 |
|----------|-------|----------|-------|
| 036.852 | 6 | 036.856 | 16 |
| 036.853 | 8 | 036.856 | 18 |
| 036.854 | 10 | 036.856 | 20 |
| 036.855 | 12 | 036.857 | 25 |
| | 14 | 036.857 | 32 |

Spare parts

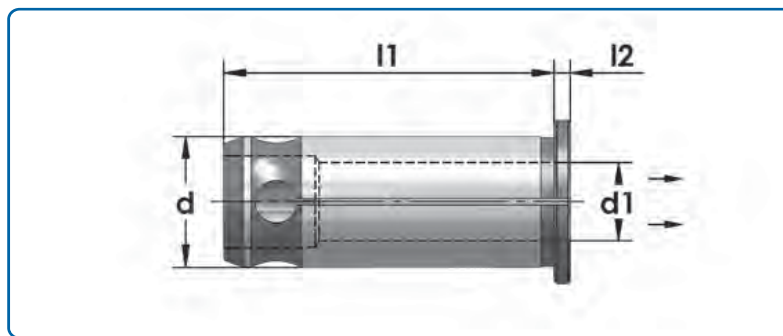


| Code No. | d | d ₁ | l ₁ | l ₂ |
|------------|----|----------------|----------------|----------------|
| 05.024.025 | 12 | 3 | 44,5 | 2 |
| 05.024.026 | | 4 | | |
| 05.024.027 | | 5 | | |
| 05.024.028 | | 6 | | |
| 05.024.029 | | 8 | | |
| 05.024.007 | 20 | 3 | 50,9 | 2 |
| 05.024.008 | | 4 | | |
| 05.024.009 | | 5 | | |
| 05.024.001 | | 6 | | |
| 05.024.002 | | 8 | | |
| 05.024.003 | | 10 | | |
| 05.024.004 | | 12 | | |
| 05.024.005 | | 14 | | |
| 05.024.006 | | 16 | | |

| Code No. | d | d ₁ | l ₁ | l ₂ |
|------------|----|----------------|----------------|----------------|
| 05.024.038 | 25 | 5 | 57 | 2,5 |
| 05.024.030 | | 6 | | |
| 05.024.031 | | 8 | | |
| 05.024.032 | | 10 | | |
| 05.024.033 | | 12 | | |
| 05.024.034 | | 14 | | |
| 05.024.035 | | 16 | | |
| 05.024.036 | | 18 | | |
| 05.024.037 | | 20 | | |

| Code No. | d | d ₁ | l ₁ | l ₂ |
|------------|----|----------------|----------------|----------------|
| 05.024.010 | 32 | 6 | 63 | 2,5 |
| 05.024.011 | | 8 | | |
| 05.024.012 | | 10 | | |
| 05.024.013 | | 12 | | |
| 05.024.014 | | 14 | | |
| 05.024.015 | | 16 | | |
| 05.024.016 | | 18 | | |
| 05.024.018 | | 20 | | |
| 05.024.020 | | 25 | | |

Hydraulic Chucks Reducer

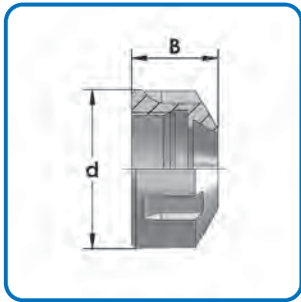


| Code No. | d | d ₁ | l ₁ | l ₂ |
|------------|----|----------------|----------------|----------------|
| 05.024.050 | 12 | 3 | 40 | 2 |
| 05.024.051 | | 4 | | |
| 05.024.052 | | 5 | | |
| 05.024.053 | | 6 | | |
| 05.024.055 | | 7 | | |
| 05.024.054 | | 8 | | |
| 05.024.057 | | 9 | | |
| 05.024.056 | | 10 | | |
| 05.024.059 | 20 | 2 | 53 | 2,5 |
| 05.024.060 | | 3 | | |
| 05.024.061 | | 4 | | |
| 05.024.062 | | 5 | | |
| 05.024.063 | | 6 | | |
| 05.024.064 | | 7 | | |
| 05.024.065 | | 8 | | |
| 05.024.066 | | 9 | | |
| 05.024.067 | | 10 | | |
| 05.024.068 | | 11 | | |
| 05.024.069 | | 12 | | |
| 05.024.070 | | 13 | | |
| 05.024.071 | | 14 | | |

| Code No. | d | d ₁ | l ₁ | l ₂ |
|------------|----|----------------|----------------|----------------|
| 05.024.072 | 20 | 15 | 53 | 2,5 |
| 05.024.073 | | 16 | | |
| 05.024.074 | | 17 | | |
| 05.024.075 | | 18 | | |
| 05.024.076 | 22 | 3 | 53 | 2,5 |
| 05.024.077 | | 4 | | |
| 05.024.078 | | 5 | | |
| 05.024.040 | | 6 | | |
| 05.024.041 | | 8 | | |
| 05.024.042 | | 10 | | |
| 05.024.043 | | 12 | | |
| 05.024.044 | | 14 | | |
| 05.024.045 | | 16 | | |
| 05.024.046 | | 18 | | |
| 05.024.090 | 32 | 3 | 64,5 | 3 |
| 05.024.091 | | 4 | | |
| 05.024.092 | | 5 | | |
| 05.024.080 | | 6 | | |
| 05.024.093 | | 7 | | |
| 05.024.081 | | 8 | | |

| Code No. | d | d ₁ | l ₁ | l ₂ |
|------------|----|----------------|----------------|----------------|
| 05.024.094 | 32 | 9 | 64,5 | 3 |
| 05.024.082 | | 10 | | |
| 05.024.095 | | 11 | | |
| 05.024.083 | | 12 | | |
| 05.024.096 | | 13 | | |
| 05.024.084 | | 14 | | |
| 05.024.097 | | 15 | | |
| 05.024.085 | | 16 | | |
| 05.024.098 | | 17 | | |
| 05.024.086 | | 18 | | |
| 05.024.099 | | 19 | | |
| 05.024.087 | | 20 | | |
| 05.024.089 | | 22 | | |
| 05.024.088 | | 25 | | |

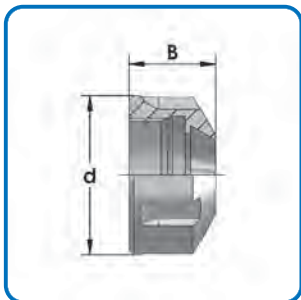
Standard UM-ER



| Code No. | ER | d | B | |
|------------|----|----|------|--------|
| 05.029.406 | 11 | 19 | 11,3 | 15 Nm |
| 05.029.400 | 16 | 28 | 17,5 | 40 Nm |
| 05.029.405 | 20 | 34 | 19 | 60 Nm |
| 05.029.401 | 25 | 42 | 20 | 80 Nm |
| 05.029.402 | 32 | 50 | 22,5 | 150 Nm |
| 05.029.403 | 40 | 63 | 25,5 | 180 Nm |
| 05.029.404 | 50 | 78 | 35,3 | 200 Nm |

Max. Torque clamping nut
Max. Dynamometric Tightening nuts
(for clamping force up to 15.000 rpm)

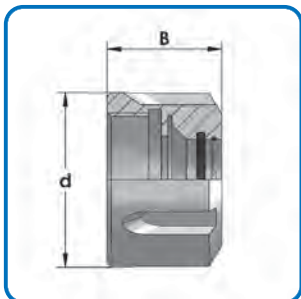
Standard HU-ER



| Code No. | ER | d | B | |
|------------|----|----|------|--------|
| 05.029.430 | 11 | 19 | 11,5 | 15 Nm |
| 05.029.431 | 16 | 32 | 17,5 | 40 Nm |
| 05.029.432 | 20 | 35 | 19 | 60 Nm |
| 05.029.433 | 25 | 42 | 20 | 80 Nm |
| 05.029.434 | 32 | 50 | 22,5 | 150 Nm |
| 05.029.435 | 40 | 63 | 25,5 | 180 Nm |

Max. Dynamometric Tightening nuts
(for clamping force up to 15.000 rpm)

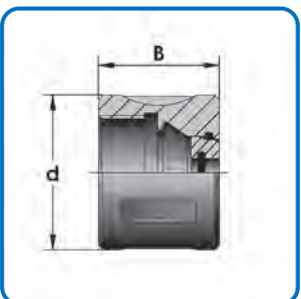
Standard KM-ER-6499



| Code No. | ER | d | B | |
|------------|----|----|------|--------|
| 05.029.505 | 16 | 28 | 22,5 | 40 Nm |
| 05.029.509 | 20 | 34 | 24 | 60 Nm |
| 05.029.506 | 25 | 42 | 25 | 80 Nm |
| 05.029.507 | 32 | 50 | 27,5 | 150 Nm |
| 05.029.508 | 40 | 63 | 30,5 | 180 Nm |
| 05.029.504 | 50 | 78 | 33 | 200 Nm |

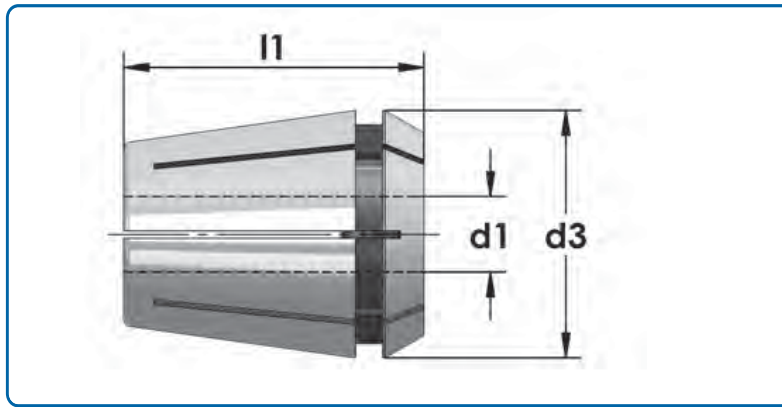
Max. Dynamometric
Tightening nuts with sealing for
internal coolant through

Standard KM/OZ-6388

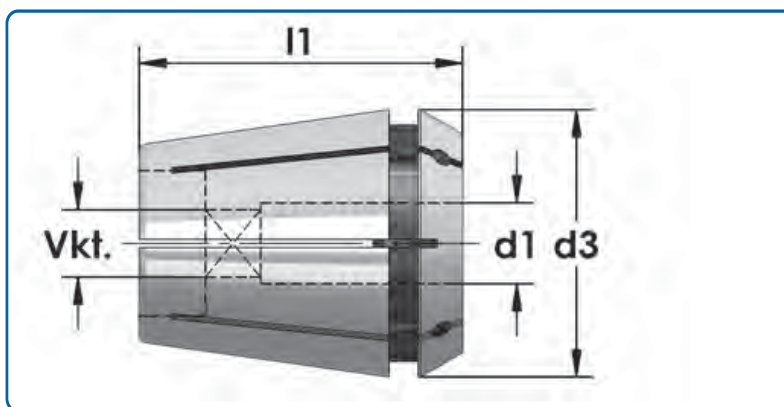


| Code No. | OZ | d | B | |
|------------|------|----|----|--------|
| 05.029.500 | 2-16 | 43 | 24 | 85 Nm |
| 05.029.501 | 2-25 | 60 | 30 | 140 Nm |
| 05.029.502 | 3-32 | 72 | 34 | 170 Nm |
| 05.029.503 | 6-40 | 85 | 37 | 190 Nm |

Max. Dynamometric
Tightening nuts with sealing for
internal coolant through



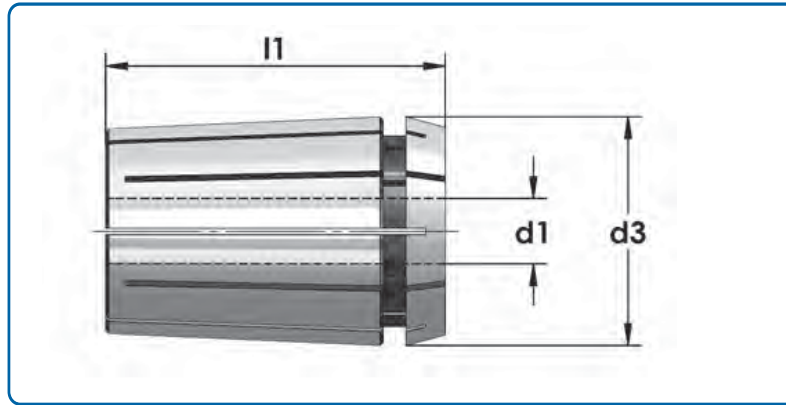
| Code No. | Chuckling range | d ₁ | d ₃ | l ₁ | Code No. | Chuckling range | d ₁ | d ₃ | l ₁ |
|------------|----------------------|----------------|----------------|----------------|----------------------|-----------------------|----------------|----------------|----------------|
| 05.027.201 | 1 - 7 ER 11 (400 E) | 1 | 11,5 | 18 | 05.027.025 | 2 - 20 ER 32 (470 E) | 7 | 33 | 40 |
| 05.027.202 | | 1,5 | | | 8 | | | | |
| 05.027.203 | | 2 | | | 9 | | | | |
| 05.027.204 | | 2,5 | | | 10 | | | | |
| 05.027.205 | | 3 | | | 11 | | | | |
| 05.027.206 | | 3,5 | | | 12 | | | | |
| 05.027.207 | | 4,0 | | | 13 | | | | |
| 05.027.208 | | 4,5 | | | 14 | | | | |
| 05.027.209 | | 5 | | | 15 | | | | |
| 05.027.210 | | 5,5 | | | 16 | | | | |
| 05.027.211 | | 6 | | | 17 | | | | |
| 05.027.212 | | 6,5 | | | 18 | | | | |
| 05.027.213 | | 7 | | | 19 | | | | |
| 05.027.101 | 1 - 10 ER 16 (426 E) | 1 | 17 | 27,5 | 05.027.038 | 20 | | | |
| 05.027.103 | | 2 | | | 3 - 26 ER 40 (472 E) | 3 | 41 | 46 | |
| 05.027.105 | | 3 | | | | 4 | | | |
| 05.027.107 | | 4 | | | | 5 | | | |
| 05.027.108 | | 5 | | | | 6 | | | |
| 05.027.109 | | 6 | | | | 7 | | | |
| 05.027.110 | | 7 | | | | 8 | | | |
| 05.027.111 | | 8 | | | | 9 | | | |
| 05.027.112 | | 9 | | | | 10 | | | |
| 05.027.113 | | 10 | | | | 11 | | | |
| 05.027.301 | 1 - 13 ER 20 (428 E) | 1 | 31,5 | 05.027.049 | | 12 | | | |
| 05.027.302 | | 1,5 | | 13 | | | | | |
| 05.027.303 | | 2 | | 14 | | | | | |
| 05.027.304 | | 2,5 | | 15 | | | | | |
| 05.027.305 | | 3 | | 16 | | | | | |
| 05.027.306 | | 4 | | 17 | | | | | |
| 05.027.307 | | 5 | | 18 | | | | | |
| 05.027.308 | | 6 | | 19 | | | | | |
| 05.027.309 | | 7 | | 20 | | | | | |
| 05.027.310 | | 8 | | 21 | | | | | |
| 05.027.311 | | 9 | | 22 | | | | | |
| 05.027.312 | | 10 | | 23 | | | | | |
| 05.027.313 | | 11 | | 24 | | | | | |
| 05.027.314 | 12 | 25 | | | | | | | |
| 05.027.315 | 13 | 26 | | | | | | | |
| 05.027.001 | 1 - 16 ER 25 (430 E) | 1 | 26 | 34 | 05.027.070 | 10 - 34 ER 50 (477 E) | 10 | 51 | 64 |
| 05.027.002 | | 2 | | | 11 | | | | |
| 05.027.003 | | 3 | | | 12 | | | | |
| 05.027.004 | | 4 | | | 13 | | | | |
| 05.027.005 | | 5 | | | 14 | | | | |
| 05.027.006 | | 6 | | | 15 | | | | |
| 05.027.007 | | 7 | | | 16 | | | | |
| 05.027.008 | | 8 | | | 17 | | | | |
| 05.027.009 | | 9 | | | 18 | | | | |
| 05.027.010 | | 10 | | | 19 | | | | |
| 05.027.011 | | 11 | | | 20 | | | | |
| 05.027.012 | | 12 | | | 21 | | | | |
| 05.027.013 | | 13 | | | 22 | | | | |
| 05.027.014 | | 14 | | | 23 | | | | |
| 05.027.015 | | 15 | | | 24 | | | | |
| 05.027.016 | | 16 | | | 25 | | | | |
| 05.027.017 | | 2,5 | | | 26 | | | | |
| 05.027.018 | | 3,5 | | | 27 | | | | |
| 05.027.019 | | 1,5 | | | 28 | | | | |
| 05.027.020 | 2 - 20 ER 32 (470 E) | 2 | 33 | 40 | 05.027.089 | 29 | | | |
| 05.027.021 | | 3 | | | 30 | | | | |
| 05.027.022 | | 4 | | | 31 | | | | |
| 05.027.023 | | 5 | | | 32 | | | | |
| 05.027.024 | | 6 | | | 33 | | | | |
| | | | | | 34 | | | | |



| Code No. | Chuckling range | d ₁ ∅ | d ₂ q | d ₃ | l ₁ |
|------------|-----------------|---------------------|---------------------|----------------|----------------|
| 05.027.800 | ER 16 - GB | 4,5 | 3,4 | 16 | 27,5 |
| 05.027.801 | | 5,5 | 4,3 | | |
| 05.027.802 | | 6,0 | 4,9 | | |
| 05.027.803 | | 7,0 | 5,5 | | |
| 05.027.804 | | 8,0 | 6,2 | | |
| 05.027.805 | | 9,0 | 7,0 | | |
| 05.027.820 | ER 20 - GB | 4,5 | 3,4 | 20 | 31,5 |
| 05.027.821 | | 5,5 | 4,3 | | |
| 05.027.822 | | 6,0 | 4,9 | | |
| 05.027.823 | | 7,0 | 5,5 | | |
| 05.027.824 | | 8,0 | 6,2 | | |
| 05.027.825 | | 9,0 | 7,0 | | |
| 05.027.826 | | 10,0 | 8,0 | | |
| 05.027.827 | | 11,0 | 9,0 | | |
| 05.027.828 | | 12,0 | 9,0 | | |
| 05.027.840 | ER 25 - GB | 4,5 | 3,4 | 25 | 34,0 |
| 05.027.841 | | 5,5 | 4,3 | | |
| 05.027.842 | | 6,0 | 4,9 | | |
| 05.027.843 | | 7,0 | 5,5 | | |
| 05.027.844 | | 8,0 | 6,2 | | |
| 05.027.845 | | 9,0 | 7,0 | | |
| 05.027.846 | | 10,0 | 8,0 | | |
| 05.027.847 | | 11,0 | 9,0 | | |
| 05.027.848 | | 12,0 | 9,0 | | |
| 05.027.849 | | 16,0 | 12,0 | | |
| 05.027.850 | | 14,0 | 11,0 | | |
| 05.027.851 | | 15,0 | 12,0 | | |
| 05.027.860 | ER 32 - GB | 4,5 | 3,4 | 32 | 40,0 |
| 05.027.861 | | 5,5 | 4,3 | | |
| 05.027.862 | | 6,0 | 4,9 | | |
| 05.027.863 | | 7,0 | 5,5 | | |
| 05.027.864 | | 8,0 | 6,2 | | |
| 05.027.865 | | 9,0 | 7,0 | | |
| 05.027.866 | | 10,0 | 8,0 | | |
| 05.027.867 | | 11,0 | 9,0 | | |
| 05.027.868 | | 12,0 | 9,0 | | |
| 05.027.869 | | 14,0 | 11,0 | | |
| 05.027.870 | | 16,0 | 12,0 | | |
| 05.027.871 | | 18,0 | 14,5 | | |
| 05.027.872 | 20,0 | 16,0 | | | |

| Code No. | Chuckling range | d ₁ ∅ | d ₂ q | d ₃ | l ₁ |
|------------|-----------------|---------------------|---------------------|----------------|----------------|
| 05.027.890 | ER 40 - GB | 7,0 | 5,5 | 40 | 46 |
| 05.027.891 | | 8,0 | 6,2 | | |
| 05.027.892 | | 9,0 | 7,0 | | |
| 05.027.893 | | 10,0 | 8,0 | | |
| 05.027.894 | | 11,0 | 9,0 | | |
| 05.027.895 | | 12,0 | 9,0 | | |
| 05.027.896 | | 14,0 | 11,0 | | |
| 05.027.897 | | 16,0 | 12,0 | | |
| 05.027.898 | | 18,0 | 14,5 | | |
| 05.027.899 | | 20,0 | 16,0 | | |
| 05.027.900 | 22,0 | 18,0 | | | |
| 05.027.901 | ER 50 - GB | 20,0 | 16,0 | 51 | 64 |
| 05.027.902 | | 25,0 | 20,0 | | |
| 05.027.903 | | 28,0 | 22,0 | | |
| 05.027.904 | | 32,0 | 24,0 | | |

For gripping straight-shanktools.
 These collets can be used in conjunction
 with our collet chucks ER .











Collets double slotted 1:10 DIN
6388 form B

For gripping straight-shank milling cutters
and twist drills on the margin.
Collets are available in vulcanized execution.

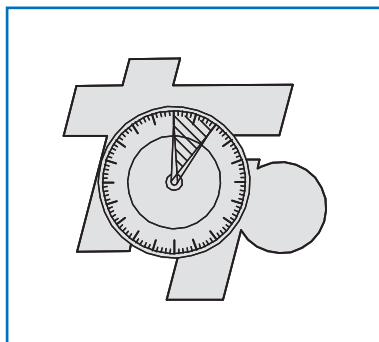
| Code No. | Chucking range | d ₁ | d ₃ | l ₁ |
|------------|----------------|----------------|----------------|----------------|
| 05.028.001 | 2 - 16 (415 E) | 2,0 | 25,5 | 40 |
| 05.028.002 | | 2,5 | | |
| 05.028.003 | | 3,0 | | |
| 05.028.004 | | 3,5 | | |
| 05.028.005 | | 4,0 | | |
| 05.028.006 | | 4,5 | | |
| 05.028.007 | | 5,0 | | |
| 05.028.008 | | 5,5 | | |
| 05.028.009 | | 6,0 | | |
| 05.028.010 | | 6,5 | | |
| 05.028.011 | | 7,0 | | |
| 05.028.012 | | 7,5 | | |
| 05.028.013 | | 8,0 | | |
| 05.028.014 | | 8,5 | | |
| 05.028.015 | 9,0 | | | |
| 05.028.016 | 9,5 | | | |
| 05.028.017 | 10,0 | | | |
| 05.028.018 | 10,5 | | | |
| 05.028.019 | 11,0 | | | |
| 05.028.020 | 11,5 | | | |
| 05.028.021 | 12,0 | | | |
| 05.028.022 | 12,5 | | | |
| 05.028.023 | 13,0 | | | |
| 05.028.024 | 13,5 | | | |
| 05.028.025 | 14,0 | | | |
| 05.028.026 | 14,5 | | | |
| 05.028.027 | 15,0 | | | |
| 05.028.028 | 15,5 | | | |
| 05.028.029 | 16,0 | | | |
| 05.028.101 | 2 - 25 (462 E) | 2,0 | 35,05 | 52 |
| 05.028.102 | | 2,5 | | |
| 05.028.103 | | 3,0 | | |
| 05.028.104 | | 3,5 | | |
| 05.028.105 | | 4,0 | | |
| 05.028.106 | | 4,5 | | |
| 05.028.107 | | 5,0 | | |
| 05.028.108 | | 5,5 | | |
| 05.028.109 | | 6,0 | | |
| 05.028.110 | | 6,5 | | |
| 05.028.111 | | 7,0 | | |
| 05.028.112 | | 7,5 | | |
| 05.028.113 | | 8,0 | | |
| 05.028.114 | | 8,5 | | |
| 05.028.115 | | 9,0 | | |
| 05.028.116 | | 9,5 | | |
| 05.028.117 | | 10,0 | | |
| 05.028.118 | | 10,5 | | |
| 05.028.119 | 11,0 | | | |
| 05.028.120 | 11,5 | | | |
| 05.028.121 | 12,0 | | | |
| 05.028.122 | 12,5 | | | |
| 05.028.123 | 13,0 | | | |
| 05.028.124 | 13,5 | | | |
| 05.028.125 | 14,0 | | | |
| 05.028.126 | 14,5 | | | |
| 05.028.127 | 15,0 | | | |

| Code No. | Chucking range | d ₁ | d ₃ | l ₁ |
|------------|----------------|----------------|----------------|----------------|
| 05.028.128 | | 15,5 | | |
| 05.028.129 | | 16,0 | | |
| 05.028.130 | | 16,5 | | |
| 05.028.131 | | 17,0 | | |
| 05.028.132 | | 17,5 | | |
| 05.028.133 | | 18,0 | | |
| 05.028.134 | | 18,5 | | |
| 05.028.135 | | 19,0 | | |
| 05.028.136 | | 19,5 | | |
| 05.028.137 | | 20,0 | | |
| 05.028.138 | | 20,5 | | |
| 05.028.139 | 21,0 | | | |
| 05.028.140 | 2 - 25 (462 E) | 21,5 | 35,05 | 52 |
| 05.028.141 | | 22,0 | | |
| 05.028.142 | | 22,5 | | |
| 05.028.143 | | 23,0 | | |
| 05.028.144 | | 23,5 | | |
| 05.028.145 | | 24,0 | | |
| 05.028.146 | | 24,5 | | |
| 05.028.147 | | 25,0 | | |
| 05.028.201 | 3 - 32 (467 E) | 6,0 | 43,7 | 60 |
| 05.028.202 | | 6,5 | | |
| 05.028.203 | | 7,0 | | |
| 05.028.204 | | 7,5 | | |
| 05.028.205 | | 8,0 | | |
| 05.028.206 | | 8,5 | | |
| 05.028.207 | | 9,0 | | |
| 05.028.208 | | 9,5 | | |
| 05.028.209 | | 10,0 | | |
| 05.028.210 | | 10,5 | | |
| 05.028.211 | | 11,0 | | |
| 05.028.212 | | 11,5 | | |
| 05.028.213 | | 12,0 | | |
| 05.028.214 | | 12,5 | | |
| 05.028.215 | | 13,0 | | |
| 05.028.216 | 13,5 | | | |
| 05.028.217 | 14,0 | | | |
| 05.028.218 | 14,5 | | | |
| 05.028.219 | 15,0 | | | |
| 05.028.220 | 15,5 | | | |
| 05.028.221 | 16,0 | | | |
| 05.028.222 | 16,5 | | | |
| 05.028.223 | 17,0 | | | |
| 05.028.224 | 17,5 | | | |
| 05.028.225 | 18,0 | | | |
| 05.028.226 | 18,5 | | | |
| 05.028.227 | 19,0 | | | |
| 05.028.228 | 19,5 | | | |
| 05.028.229 | 20,0 | | | |
| 05.028.230 | 20,5 | | | |
| 05.028.231 | 21,0 | | | |
| 05.028.232 | 21,5 | | | |
| 05.028.233 | 22,0 | | | |
| 05.028.234 | 22,5 | | | |
| 05.028.235 | 23,0 | | | |

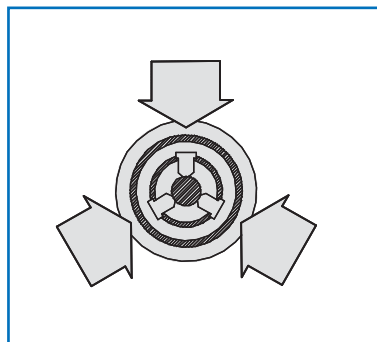
| Accessoires | OZ Key insert | ER Key insert | Dynamometric key | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|-------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|--|----------|----------------|---------|--------------------|---------|---------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|-----------------|---------|----------------|---|----------|-----|---------|-----------|---------|-------------|---------|-------------|---------|-------------|
| |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Code No.</th> <th>d₁</th> </tr> </thead> <tbody> <tr><td>029.249</td><td>1 - 6</td></tr> <tr><td>029.250</td><td>1 - 10</td></tr> <tr><td>029.251</td><td>2 - 16</td></tr> <tr><td>029.252</td><td>2 - 25</td></tr> <tr><td>029.253</td><td>3 - 32</td></tr> <tr><td>029.254</td><td>6 - 40</td></tr> <tr><td>029.255</td><td>8 - 50</td></tr> </tbody> </table> | Code No. | d ₁ | 029.249 | 1 - 6 | 029.250 | 1 - 10 | 029.251 | 2 - 16 | 029.252 | 2 - 25 | 029.253 | 3 - 32 | 029.254 | 6 - 40 | 029.255 | 8 - 50 | <table border="1"> <thead> <tr> <th>Code No.</th> <th>d₁</th> </tr> </thead> <tbody> <tr><td>029.349</td><td>ER 11-mini (1 - 6)</td></tr> <tr><td>029.349</td><td>ER 11 (1 - 6)</td></tr> <tr><td>029.350</td><td>ER 16 (1 - 10)</td></tr> <tr><td>029.355</td><td>ER 20 (1 - 13)</td></tr> <tr><td>029.351</td><td>ER 25 (1 - 16)</td></tr> <tr><td>029.352</td><td>ER 32 (2 - 20)</td></tr> <tr><td>029.353</td><td>ER 40 (3 - 36)</td></tr> <tr><td>029.354</td><td>ER 50 (10 - 34)</td></tr> <tr><td>029.355</td><td>ER 20 (1 - 13)</td></tr> </tbody> </table> | Code No. | d ₁ | 029.349 | ER 11-mini (1 - 6) | 029.349 | ER 11 (1 - 6) | 029.350 | ER 16 (1 - 10) | 029.355 | ER 20 (1 - 13) | 029.351 | ER 25 (1 - 16) | 029.352 | ER 32 (2 - 20) | 029.353 | ER 40 (3 - 36) | 029.354 | ER 50 (10 - 34) | 029.355 | ER 20 (1 - 13) | <table border="1"> <thead> <tr> <th>Code No.</th> <th>Nm-</th> </tr> </thead> <tbody> <tr><td>029.699</td><td>5 - 50 Nm</td></tr> <tr><td>029.700</td><td>10 - 100 Nm</td></tr> <tr><td>029.701</td><td>40 - 200 Nm</td></tr> <tr><td>029.702</td><td>75 - 400 Nm</td></tr> </tbody> </table> | Code No. | Nm- | 029.699 | 5 - 50 Nm | 029.700 | 10 - 100 Nm | 029.701 | 40 - 200 Nm | 029.702 | 75 - 400 Nm |
| Code No. | d ₁ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.249 | 1 - 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.250 | 1 - 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.251 | 2 - 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.252 | 2 - 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.253 | 3 - 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.254 | 6 - 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.255 | 8 - 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | d ₁ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.349 | ER 11-mini (1 - 6) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.349 | ER 11 (1 - 6) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.350 | ER 16 (1 - 10) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.355 | ER 20 (1 - 13) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.351 | ER 25 (1 - 16) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.352 | ER 32 (2 - 20) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.353 | ER 40 (3 - 36) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.354 | ER 50 (10 - 34) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.355 | ER 20 (1 - 13) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | Nm- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.699 | 5 - 50 Nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.700 | 10 - 100 Nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.701 | 40 - 200 Nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.702 | 75 - 400 Nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Accessoires | Hook wrenches | Adjusting screws ~ | Wrenches | Wrenches | Adjusting screws | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|---|------------------|--|---------|-------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|--|-------------|----------------|----------|--|-------------|--|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|--|-------------|--|----------|--|-------------|--|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|--|-------------|--|----------|--|-------------|--|---------|------------|---------|------------|---------|------------|---------|------------|--|-------------|--|----------|--|-------------|--|---------|-------|---------|-------------|---------|-------|---------|-------|---------|-------|---------|-------|
| | DIN | DIN | | | ER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <table border="1"> <thead> <tr> <th>Bestell-Nr.</th> <th>d₁</th> </tr> <tr> <th>Code No.</th> <th></th> </tr> <tr> <th>No. de cde.</th> <th></th> </tr> </thead> <tbody> <tr><td>029.206</td><td>1 - 6</td></tr> <tr><td>029.207</td><td>1 - 10</td></tr> <tr><td>029.201</td><td>2 - 16</td></tr> <tr><td>029.202</td><td>2 - 25</td></tr> <tr><td>029.203</td><td>3 - 32</td></tr> <tr><td>029.204</td><td>6 - 40</td></tr> <tr><td>029.205</td><td>8 - 50</td></tr> </tbody> </table> | Bestell-Nr. | d ₁ | Code No. | | No. de cde. | | 029.206 | 1 - 6 | 029.207 | 1 - 10 | 029.201 | 2 - 16 | 029.202 | 2 - 25 | 029.203 | 3 - 32 | 029.204 | 6 - 40 | 029.205 | 8 - 50 | <table border="1"> <thead> <tr> <th>Bestell-Nr.</th> <th>d₁</th> </tr> <tr> <th>Code No.</th> <th></th> </tr> <tr> <th>No. de cde.</th> <th></th> </tr> </thead> <tbody> <tr><td>032.805</td><td>2 - 16</td></tr> <tr><td>032.805</td><td>2 - 25</td></tr> <tr><td>032.805</td><td>3 - 32</td></tr> <tr><td>032.806</td><td>6 - 40</td></tr> <tr><td>032.806</td><td>8 - 50</td></tr> </tbody> </table> | Bestell-Nr. | d ₁ | Code No. | | No. de cde. | | 032.805 | 2 - 16 | 032.805 | 2 - 25 | 032.805 | 3 - 32 | 032.806 | 6 - 40 | 032.806 | 8 - 50 | <table border="1"> <thead> <tr> <th>Bestell-Nr.</th> <th></th> </tr> <tr> <th>Code No.</th> <th></th> </tr> <tr> <th>No. de cde.</th> <th></th> </tr> </thead> <tbody> <tr><td>029.305</td><td>ER 11 Gabels.</td></tr> <tr><td>029.300</td><td>ER 16 Gabels.</td></tr> <tr><td>029.310</td><td>ER 16 Nutens.</td></tr> <tr><td>029.306</td><td>ER 20 Gabels.</td></tr> <tr><td>029.311</td><td>ER 20 Nutens.</td></tr> <tr><td>029.301</td><td>ER 25 Nutens.</td></tr> <tr><td>029.302</td><td>ER 32 Nutens.</td></tr> <tr><td>029.303</td><td>ER 40 Nutens.</td></tr> <tr><td>029.304</td><td>ER 50 Nutens.</td></tr> </tbody> </table> | Bestell-Nr. | | Code No. | | No. de cde. | | 029.305 | ER 11 Gabels. | 029.300 | ER 16 Gabels. | 029.310 | ER 16 Nutens. | 029.306 | ER 20 Gabels. | 029.311 | ER 20 Nutens. | 029.301 | ER 25 Nutens. | 029.302 | ER 32 Nutens. | 029.303 | ER 40 Nutens. | 029.304 | ER 50 Nutens. | <table border="1"> <thead> <tr> <th>Bestell-Nr.</th> <th></th> </tr> <tr> <th>Code No.</th> <th></th> </tr> <tr> <th>No. de cde.</th> <th></th> </tr> </thead> <tbody> <tr><td>029.315</td><td>ER 11 Mini</td></tr> <tr><td>029.312</td><td>ER 16 Mini</td></tr> <tr><td>029.313</td><td>ER 20 Mini</td></tr> <tr><td>029.314</td><td>ER 25 Mini</td></tr> </tbody> </table> | Bestell-Nr. | | Code No. | | No. de cde. | | 029.315 | ER 11 Mini | 029.312 | ER 16 Mini | 029.313 | ER 20 Mini | 029.314 | ER 25 Mini | <table border="1"> <thead> <tr> <th>Bestell-Nr.</th> <th></th> </tr> <tr> <th>Code No.</th> <th></th> </tr> <tr> <th>No. de cde.</th> <th></th> </tr> </thead> <tbody> <tr><td>032.802</td><td>ER 11</td></tr> <tr><td>032.803</td><td>ER 16/ER 20</td></tr> <tr><td>032.803</td><td>ER 25</td></tr> <tr><td>032.805</td><td>ER 32</td></tr> <tr><td>032.805</td><td>ER 40</td></tr> <tr><td>032.806</td><td>ER 50</td></tr> </tbody> </table> | Bestell-Nr. | | Code No. | | No. de cde. | | 032.802 | ER 11 | 032.803 | ER 16/ER 20 | 032.803 | ER 25 | 032.805 | ER 32 | 032.805 | ER 40 | 032.806 | ER 50 |
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| 029.206 | 1 - 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.207 | 1 - 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.201 | 2 - 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.202 | 2 - 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.203 | 3 - 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.204 | 6 - 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.205 | 8 - 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 032.805 | 2 - 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | 2 - 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | 3 - 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.806 | 6 - 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.806 | 8 - 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 029.305 | ER 11 Gabels. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.300 | ER 16 Gabels. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.310 | ER 16 Nutens. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.306 | ER 20 Gabels. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.311 | ER 20 Nutens. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.301 | ER 25 Nutens. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.302 | ER 32 Nutens. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.303 | ER 40 Nutens. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.304 | ER 50 Nutens. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bestell-Nr. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Code No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 029.315 | ER 11 Mini | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.312 | ER 16 Mini | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.313 | ER 20 Mini | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 029.314 | ER 25 Mini | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 032.802 | ER 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.803 | ER 16/ER 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.803 | ER 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | ER 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.805 | ER 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 032.806 | ER 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

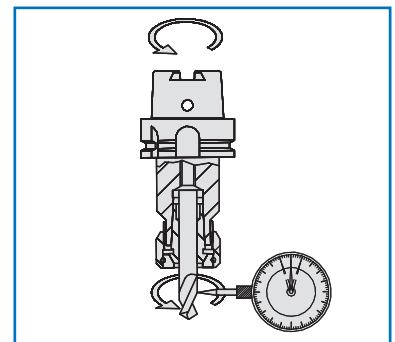
Advantage of working with dynamometric key



Short setup times by defined torque



Larger elasticity without big effort



Higher concentricity guarantees manufacturing quality.

MQL용 유압척
HSK-A for 2-channel



MQL 2채널 용 툴 홀더는
스탠다드 공구이며,
위 그림은 기계 안에 설치된
모습입니다.

슬림 라인 유압 척



BT40 x \varnothing 32 x 100 AD + B



MQL ER-Collet Chuck
HSK-A for 2-channel



HSK-A63 x \varnothing 20 x 160 유압척



HSK-C25 그라인딩 휠용 유압척



SK-40 x \varnothing 25 x \varnothing 32 x 190

신제품 **Rainbow Line**



고속 스피들
100,000RPM



앵글 헤드



대형 스페셜 앵글 헤드



TRH 806

터렛 헤드



멀티 헤드

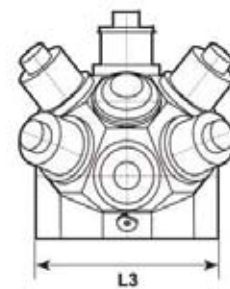
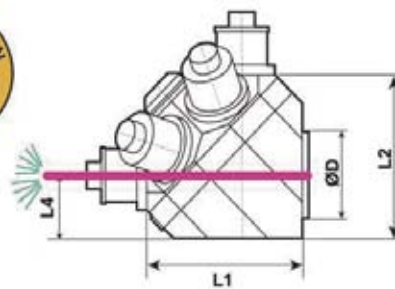


N.C(자동)앵글 헤드



TRH 500

HSK 100
40 KW





터보 컴프레서 공구



다양한 실린더 헤드 공구



원형 HP 밀링 커터

정면 밀링 커터



신제품 - K_Mill



드릴 헤드



하이브리드 리머

마이크로 리머



플렉스 리머



PCD 정밀 보링 툴

가공 품질, 공구 마모 및 파손 모니터링 솔루션 - WattPilote

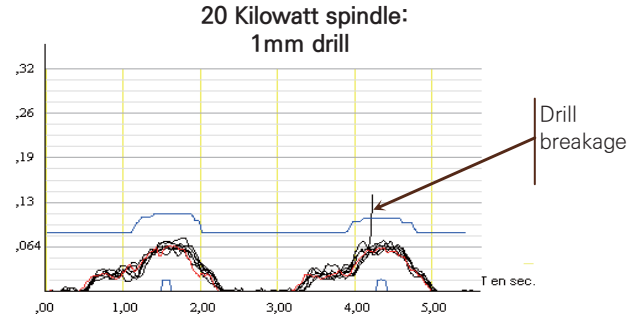
와트파일럿은 공작기계의 가공 품질, 공구 마모, 파손 컨트롤 및 파손 방지 기능을 수행합니다. 와트파일럿은 스피indle이나 축모터를 통해 사용되는 전류변화를 정밀 측정하여 전류변화값으로 가공 상태, 공구의 마모 및 파손 등을 분석하여 공구의 컨디션을 분석합니다.

전류 컨트롤

절삭공구 파손 발생 시, 공작기계 및 톨 홀더를 보호하고 불량제품 생산을 최소화 하기위해 반응시간은 가장 빨라야합니다. 전류 모니터링은 “실시간 모니터링”으로 이를 가능하게 합니다.
 신규 절삭공구로 피삭재 가공 시 학습 커브를 설정하며 모니터링을 시작합니다.
 와트파일럿은 이 학습 커브를 활용하여 정상적인 공정에서 사용되는 최소, 최대 전류 범위를 설정합니다.

실시간 감지 Instantaneous detection

TOOL BREAKAGE MISSING TOOL DOUBLE MACHINING



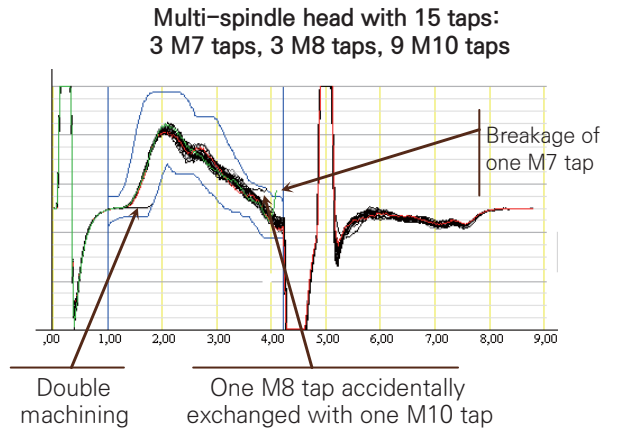
미분 컨트롤 (특허)

밀링 커터, 복합형상의 공구, 리머, 멀티스핀들 헤드에서 드릴 혹은 탭 가공 중 해당 절삭공구의 미세 파손이 일어날 경우 소요 전류 변화는 극히 적습니다.

와트파일럿에서의 미분 기술은 밀링커터에서 하나의 인서트나 파손되었을때처럼 아주 작고 빠르게 발생하는 전류 변화를 증폭시켜주고 피삭재의 경도 변화 등 황삭표면 상태에 따라 소요 전류가 변할 수 있는 가능성을 무시하도록 해줍니다. 따라서 멀티스핀들 헤드 또는 황삭 공정에서 단 한개의 인서트라도 칩핑을 감지할 수 있습니다.

실시간 감지 Instantaneous detection

TOOL BREAKAGE INSERT BREAKAGE PART IN WRONG POSITION



에너지 컨트롤

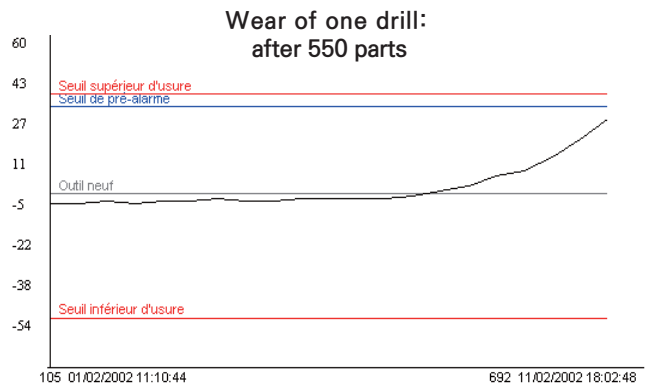
절삭공구의 마모는 전기 소모량에 영향을 끼칩니다. 절삭공구에 마모가 일어나면 가공공정에 필요한 에너지가 상승합니다.

와트파일럿은 절삭공구가 피삭재 가공 시 소요하는 에너지와 사용자에게 의해 설정된 값을 비교, 검증합니다.

초기공정 작업 중에는 절삭가공에 필요한 머시닝 에너지로 가장 효율적인 절삭공구의 형상을 결정하거나 최적의 인선타입을 결정하는 용도로도 사용 가능합니다.

공정 완료 후 감지 Detection at the end of cycle

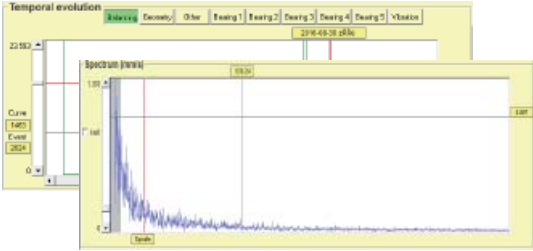
WORN TOOL MISSING TOOL MISSING PART



Machine Condition Monitoring

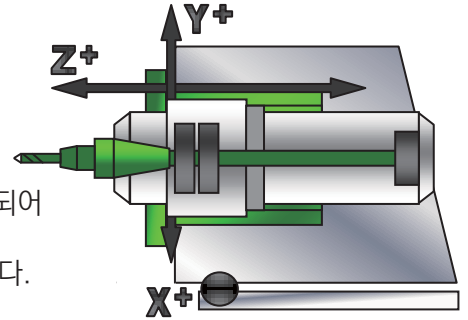
공작기계의 예지보전 및 상태 모니터링 솔루션

스핀들 Spindle

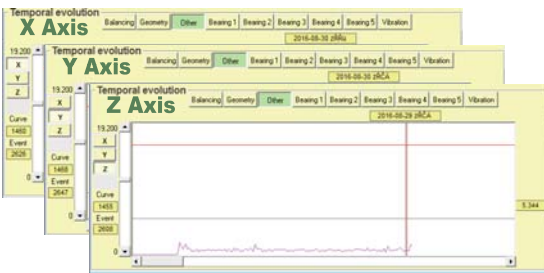


- 밸런싱 분석
- 샤프트 구조 분석
- 부품 정렬 상태 분석

MCM은 장비의 스펙들에 설치되어 장비 사용 상태와 공정 품질에 관련된 진동 데이터를 추출합니다.

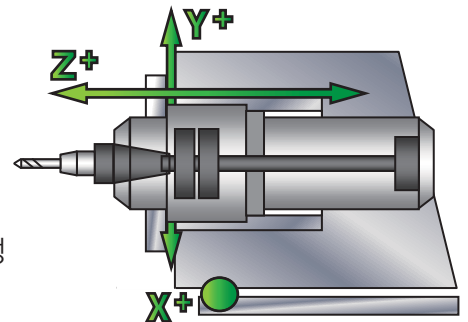


축 Axis

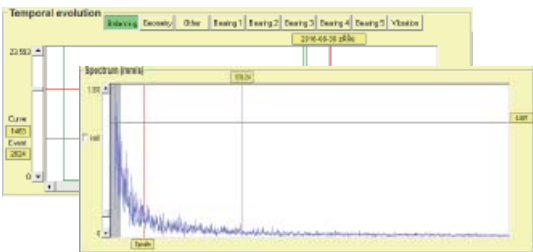


- 슬라이드 및 볼 스크류 데이터 분석

MCM은 장비의 스펙들에 설치되어 장비 사용 상태와 공정 품질에 관련된 진동 데이터를 추출합니다.

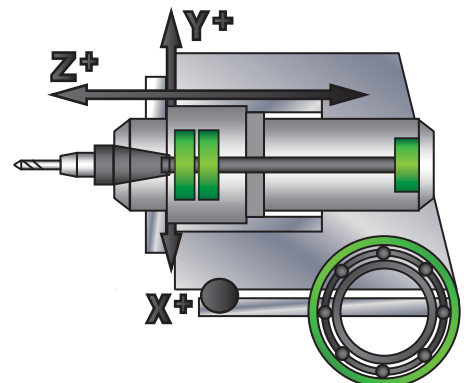


베어링 Bearings



- 내부 링
- 외부 링
- 케이지
- 볼

MCM은 장비의 스펙들에 설치되어 장비 사용 상태와 공정 품질에 관련된 진동 데이터를 추출합니다.



Deep Hole Drilling with MQL

(최소량의 절삭유 사용으로 깊은 홀 가공)

탁월한 절삭력 발현을 위한 공구디자인

MQL 용으로 새롭게 개발된 건드릴

Solid carbide gundrill

Type 113-HP-M

드릴 직경 : 2.000 - 12.000mm



장 점 :

- 에너지 효율성(cooling 불필요)
- 친환경 - 절삭유 사용 최소화
- 피삭재 세척 등 추가적인 공정 불필요
- 원가 절감 (예; 절삭유 시스템에 대한 투자비용 및 운영비용 절감)
- 에멀전 사용과 비교하여 향상된 공구 수명
- 에멀전 사용 대비 가공후의 표면 조도 향상
- 내열강 소재의 경우 가공성 향상
- 에멀전과 MQL 동시 사용 가능



적용 예시

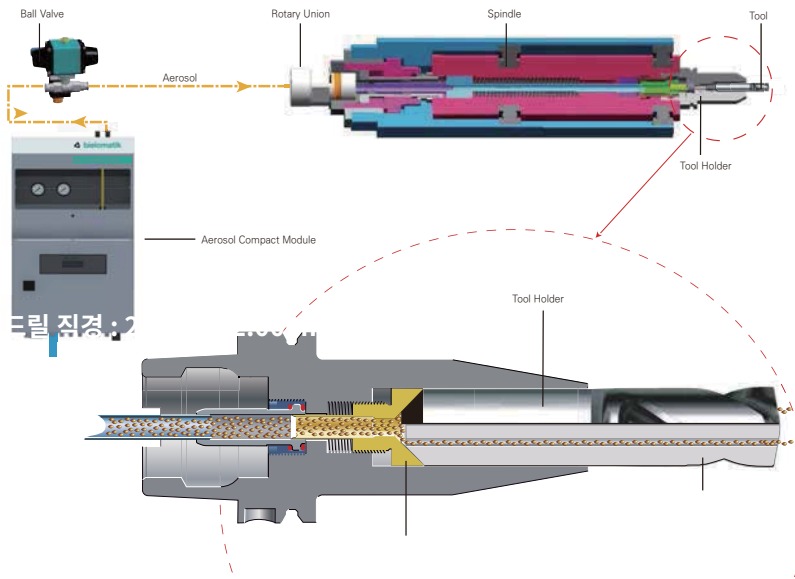
Type 113-HP-M 솔리드 카바이드 드릴과 Type 158 카바이드 트위스트 드릴 비교

| | 솔리드 카바이드 드릴 type 113-HP-M | 카바이드 트위스트 드릴 type 158 |
|---|---------------------------|-----------------------|
| Cutting speed Vc / 절삭 속도 | 75 m/min | 75m/min |
| Spindle speed n / 스피들 속도 | 4800 rev/min | 4800 rev/min |
| Feed f / 회전당 이송량 | 0.165 mm/rev | 0.165 mm/rev |
| Feed rate Vf / 이송량 | 800mm/min | 800mm/min |
| Centerline deviation(drift)/중심축으로부터 이탈 정도 | max. 0.05mm | max. 0.10mm |
| Surface finish Rz/ 표면 조도 | 2-4 μm | > 10 μm |
| Tool life / 공구 수명 | 150m | 120m |





새로운 MQL 1채널 시스템 : 다양한 적용



방식

- 에어 속도에 따른 절삭유 공급
- 공기흐름 또는 공급 채널에 따른 최대의 절삭유 분사 가능
- 각도가 있는 공급 라인에도 적용 가능
- 5-10bar 수준의 압축공기 적용 조건에서도 가능
- 절삭 공구 내부 급유 및 외부 급유 가능

특징

- 압축 공기를 이용, 탱크 내부에서 에어로졸 생성
- 회전하는 스피ndl을 이용한 에어로졸의 분사

새로운 기능

- 4개의 공급구로 4개의 스피ndl에 동시에 에어로졸 공급 가능 - 다양한 공구 사용시 적절한 에어로졸 분배가 가능
- 유량 채널 내 축적되는 오일 없이 분사 가능한 에어로졸 오일량 증가
- 압축공기 16 bar까지 적용 가능, 경우에 따라 25 bar도 가능 - 딥 홀 드릴링 및 소형 공구에 적용 가능

MQL 1채널 시스템에서 에어로졸(Aerosol)은 bielomatik 특허인 복합적인 노즐 기술에 의해 생산됩니다. 이는 에어로졸 장치, 로터리 유니온, 스피ndl 또는 선반 터렛을 통해 절삭공구로 공급됩니다.

MQL 1채널 시스템은 상대적으로 중/저속 절삭 과정에 적용됩니다.

디자인에 따라서는 점도가 낮은 기름을 사용할 수 있습니다. 대표적인 적용 사례가 터렛 선삭 장비로 구성된 전용기라인입니다.

이 시스템은 머시닝 센터에도 적용이 가능합니다. 더욱이 이 시스템은 장비 수리, 보전 업그레이드시에도 적용 가능합니다.

수용성절삭유/MQL간의 전환이 가능하며 장비에 손쉽게 설치되고, 사용자에게 친화적인 통합 컨트롤 시스템을 갖고 있습니다. I/O 연결 또는 PROFIBUS를 통한 각 공구별 셋팅 및 제어가 가능합니다.

16,000 RPM까지의 스피ndl 속도에도 적용이 가능하며, 표준 로터리 유니온을 사용합니다.