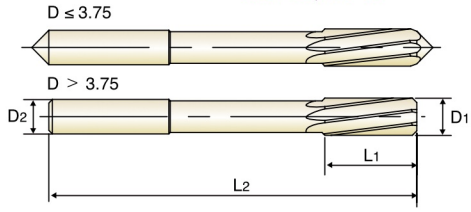
# HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

## HSS-E, NC-MASCHINENREIBAHLEN mit GERADZAHLIGEN SCHAFT Ø
## ALÉSOIRS HSS-E MACHINE CN AVEC DIFFÉRENTES TOLÉRANCES DE QUEUE
## ALESATORI A MACCHINA IN HSS-E CON GAMMA Ø NOMINALI

- O.D. Tolerances
  Whole-number Ø and 1/10 size : DIN 1420 for H7
  1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
  from Ø5.97 to Ø12.03 : +0.005/-0.000mm
- Shank Diameter Tolerances : h6
- LH Spiral Flutes / Right Hand Cut
- Chamfer Angle - Up to Ø3.75 : 15°
  - Over Ø3.75 : 45°

- Ø Toleranzen:
  ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7
  1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
  von Ø5,97 bis Ø12,03 : +0.005/-0.000mm
- Schaft-Durchmesser Toleranzen : h6
- linksspiralig/ rechtsscheidend
- Anschnittwinkel - bis Ø3,75 : 15°
  - über Ø3,75 : 45°




Hole type

HSS-E | H7 | LH7° | 15° | 45° | Bright

up to Ø3.75 over Ø3.75

p.A406

Recommended ToolHolder | PlainShank | Page
ERCOLLETCHUCK | D73-115

Unit : mm

| EDP No. | Reamer Diameter D1 | Shank Diameter D2 | Flute Length L1 | Overall Length L2 |
|---|---|---|---|---|
| K21B100470 | 4.7 | 5 | 21 | 80 |
| K21B100480 | 4.8 | 5 | 23 | 86 |
| K21B100490 | 4.9 | 5 | 23 | 86 |
| K21B100497 | 4.97 | 5 | 23 | 86 |
| K21B100498 | 4.98 | 5 | 23 | 86 |
| K21B100499 | 4.99 | 5 | 23 | 86 |
| K21B100500 | 5.0 | 5 | 23 | 86 |
| K21B100501 | 5.01 | 5 | 23 | 86 |
| K21B100502 | 5.02 | 5 | 23 | 86 |
| K21B100503 | 5.03 | 5 | 23 | 86 |
| K21B100510 | 5.1 | 5 | 23 | 86 |
| K21B100520 | 5.2 | 5 | 23 | 86 |
| K21B100530 | 5.3 | 5 | 23 | 86 |
| K21B100540 | 5.4 | 6 | 26 | 93 |
| K21B100550 | 5.5 | 6 | 26 | 93 |
| K21B100560 | 5.6 | 6 | 26 | 93 |
| K21B100570 | 5.7 | 6 | 26 | 93 |
| K21B100580 | 5.8 | 6 | 26 | 93 |
| K21B100590 | 5.9 | 6 | 26 | 93 |
| K21B100597 | 5.97 | 6 | 26 | 93 |
| K21B100598 | 5.98 | 6 | 26 | 93 |
| K21B100599 | 5.99 | 6 | 26 | 93 |
| K21B100600 | 6.0 | 6 | 26 | 93 |
| K21B100601 | 6.01 | 6 | 28 | 101 |

▶NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ○ | ○ | | ◎ | ○ | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

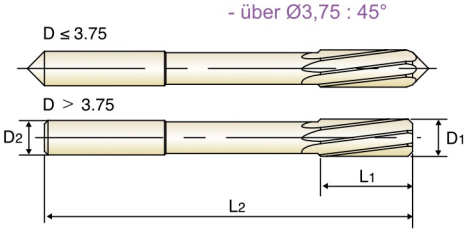
| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ○ | ○ | ○ | ○ | | ○ | ○ | ○ | | | | | | | | | | | | | |

# HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

## HSS-E, NC-MASCHINENREIBAHLEN mit GERADZAHLIGEN SCHAFT Ø
## ALÉSOIRS HSS-E MACHINE CN AVEC DIFFÉRENTES TOLÉRANCES DE QUEUE
## ALESATORI A MACCHINA IN HSS-E CON GAMMA Ø NOMINALI

- O.D. Tolerances
  Whole-number Ø and 1/10 size : DIN 1420 for H7
  1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
  from Ø5.97 to Ø12.03 : +0.005/-0.000mm
- Shank Diameter Tolerances : h6
- LH Spiral Flutes / Right Hand Cut
- Chamfer Angle - Up to Ø3.75 : 15°
  - Over Ø3.75 : 45°

- Ø Toleranzen:
  ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7
  1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
  von Ø5,97 bis Ø12,03 : +0.005/-0.000mm
- Schaft-Durchmesser Toleranzen : h6
- linksspiralig/ rechtsscheidend
- Anschnittwinkel - bis Ø3,75 : 15°
  - über Ø3,75 : 45°




Hole type

HSS-E | H7 | LH7° | 15° | 45° | Bright

up to Ø3.75 over Ø3.75

p.A406

Recommended ToolHolder — PlainShank: ERCOLLETCHUCK — Page: D73-115

Unit : mm

| EDP No. | Reamer Diameter D1 | Shank Diameter D2 | Flute Length L1 | Overall Length L2 |
|---|---|---|---|---|
| K21B100602 | 6.02 | 6 | 28 | 101 |
| K21B100603 | 6.03 | 6 | 28 | 101 |
| K21B100610 | 6.1 | 6 | 28 | 101 |
| K21B100620 | 6.2 | 6 | 28 | 101 |
| K21B100630 | 6.3 | 6 | 28 | 101 |
| K21B100640 | 6.4 | 6 | 28 | 101 |
| K21B100650 | 6.5 | 6 | 28 | 101 |
| K21B100660 | 6.6 | 6 | 28 | 101 |
| K21B100670 | 6.7 | 6 | 28 | 101 |
| K21B100680 | 6.8 | 8 | 31 | 109 |
| K21B100690 | 6.9 | 8 | 31 | 109 |
| K21B100700 | 7.0 | 8 | 31 | 109 |
| K21B100710 | 7.1 | 8 | 31 | 109 |
| K21B100720 | 7.2 | 8 | 31 | 109 |
| K21B100730 | 7.3 | 8 | 31 | 109 |
| K21B100740 | 7.4 | 8 | 31 | 109 |
| K21B100750 | 7.5 | 8 | 31 | 109 |
| K21B100760 | 7.6 | 8 | 33 | 117 |
| K21B100770 | 7.7 | 8 | 33 | 117 |
| K21B100780 | 7.8 | 8 | 33 | 117 |
| K21B100790 | 7.9 | 8 | 33 | 117 |
| K21B100797 | 7.97 | 8 | 33 | 117 |
| K21B100798 | 7.98 | 8 | 33 | 117 |
| K21B100799 | 7.99 | 8 | 33 | 117 |

▶NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ○ | ○ | | ◎ | ○ | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

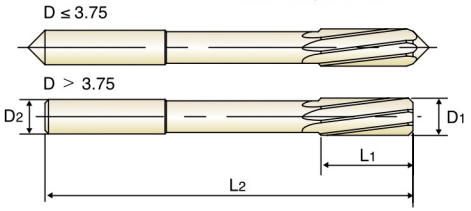
| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ○ | ○ | ○ | ○ | | ○ | ○ | ○ | | | | | | | | | | | | | |

# HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

## HSS-E, NC-MASCHINENREIBAHLEN mit GERADZAHLIGEN SCHAFT Ø
## ALÉSOIRS HSS-E MACHINE CN AVEC DIFFÉRENTES TOLÉRANCES DE QUEUE
## ALESATORI A MACCHINA IN HSS-E CON GAMMA Ø NOMINALI

- O.D. Tolerances
  Whole-number Ø and 1/10 size : DIN 1420 for H7
  1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
  from Ø5.97 to Ø12.03 : +0.005/-0.000mm
- Shank Diameter Tolerances : h6
- LH Spiral Flutes / Right Hand Cut
- Chamfer Angle - Up to Ø3.75 : 15°
  - Over Ø3.75 : 45°

- Ø Toleranzen:
  ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7
  1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
  von Ø5,97 bis Ø12,03 : +0.005/-0.000mm
- Schaft-Durchmesser Toleranzen : h6
- linksspiralig/ rechtsscheidend
- Anschnittwinkel - bis Ø3,75 : 15°
  - über Ø3,75 : 45°




Hole type

HSS-E | H7 | LH7° | 15° (up to Ø3.75) | 45° (over Ø3.75) | Bright

p.A406

Recommended ToolHolder — PlainShank: ERCOLLETCHUCK — Page: D73-115

Unit : mm

| EDP No. | Reamer Diameter D1 | Shank Diameter D2 | Flute Length L1 | Overall Length L2 |
|---|---|---|---|---|
| K21B100800 | 8.0 | 8 | 33 | 117 |
| K21B100801 | 8.01 | 8 | 33 | 117 |
| K21B100802 | 8.02 | 8 | 33 | 117 |
| K21B100803 | 8.03 | 8 | 33 | 117 |
| K21B100810 | 8.1 | 8 | 33 | 117 |
| K21B100820 | 8.2 | 8 | 33 | 117 |
| K21B100830 | 8.3 | 8 | 33 | 117 |
| K21B100840 | 8.4 | 8 | 33 | 117 |
| K21B100850 | 8.5 | 8 | 33 | 117 |
| K21B100860 | 8.6 | 10 | 36 | 125 |
| K21B100870 | 8.7 | 10 | 36 | 125 |
| K21B100880 | 8.8 | 10 | 36 | 125 |
| K21B100890 | 8.9 | 10 | 36 | 125 |
| K21B100900 | 9.0 | 10 | 36 | 125 |
| K21B100901 | 9.01 | 10 | 36 | 125 |
| K21B100902 | 9.02 | 10 | 36 | 125 |
| K21B100903 | 9.03 | 10 | 36 | 125 |
| K21B100910 | 9.1 | 10 | 36 | 125 |
| K21B100920 | 9.2 | 10 | 36 | 125 |
| K21B100930 | 9.3 | 10 | 36 | 125 |
| K21B100940 | 9.4 | 10 | 36 | 125 |
| K21B100950 | 9.5 | 10 | 36 | 125 |
| K21B100960 | 9.6 | 10 | 38 | 133 |
| K21B100970 | 9.7 | 10 | 38 | 133 |

▶NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ○ | ○ | | ◎ | ○ | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

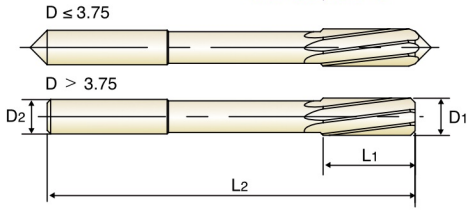
| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ○ | ○ | ○ | ○ | | ○ | ○ | ○ | | | | | | | | | | | | | |

# HSS-E, NC MACHINE REAMERS WITH WHOLE-NUMBER SHANK Ø

## HSS-E, NC-MASCHINENREIBAHLEN mit GERADZAHLIGEN SCHAFT Ø
## ALÉSOIRS HSS-E MACHINE CN AVEC DIFFÉRENTES TOLÉRANCES DE QUEUE
## ALESATORI A MACCHINA IN HSS-E CON GAMMA Ø NOMINALI

- O.D. Tolerances
  Whole-number Ø and 1/10 size : DIN 1420 for H7
  1/100 size : from Ø2.01 to Ø5.03 : +0.004/-0.000mm
  from Ø5.97 to Ø12.03 : +0.005/-0.000mm
- Shank Diameter Tolerances : h6
- LH Spiral Flutes / Right Hand Cut
- Chamfer Angle - Up to Ø3.75 : 15°
  - Over Ø3.75 : 45°

- Ø Toleranzen:
  ganzzahlige Ø und 1/10 Größen : DIN 1420 für H7
  1/100 Größen : ab Ø2,01 bis Ø5,03 : +0.004/-0.000mm
  von Ø5,97 bis Ø12,03 : +0.005/-0.000mm
- Schaft-Durchmesser Toleranzen : h6
- linksspiralig/ rechtsscheidend
- Anschnittwinkel - bis Ø3,75 : 15°
  - über Ø3,75 : 45°




Hole type

HSS-E | H7 | LH7° | 15° (up to Ø3.75) | 45° (over Ø3.75) | Bright

p.A406

Recommended ToolHolder — PlainShank: ERCOLLETCHUCK — Page: D73-115

Unit : mm

| EDP No. | Reamer Diameter D1 | Shank Diameter D2 | Flute Length L1 | Overall Length L2 |
|---|---|---|---|---|
| K21B100980 | 9.8 | 10 | 38 | 133 |
| K21B100990 | 9.9 | 10 | 38 | 133 |
| K21B100997 | 9.97 | 10 | 38 | 133 |
| K21B100998 | 9.98 | 10 | 38 | 133 |
| K21B100999 | 9.99 | 10 | 38 | 133 |
| K21B101000 | 10.0 | 10 | 38 | 133 |
| K21B101001 | 10.01 | 10 | 38 | 133 |
| K21B101002 | 10.02 | 10 | 38 | 133 |
| K21B101003 | 10.03 | 10 | 38 | 133 |
| K21B101100 | 11.0 | 10 | 41 | 142 |
| K21B101197 | 11.97 | 10 | 41 | 151 |
| K21B101198 | 11.98 | 10 | 41 | 151 |
| K21B101199 | 11.99 | 10 | 41 | 151 |
| K21B101200 | 12.0 | 10 | 44 | 151 |
| K21B101201 | 12.01 | 10 | 44 | 151 |
| K21B101202 | 12.02 | 10 | 44 | 151 |
| K21B101203 | 12.03 | 10 | 44 | 151 |
| K21B101300 | 13.0 | 10 | 44 | 151 |
| K21B101400 | 14.0 | 14 | 47 | 160 |
| K21B101500 | 15.0 | 14 | 50 | 162 |
| K21B101600 | 16.0 | 14 | 52 | 170 |
| K21B101700 | 17.0 | 14 | 54 | 175 |
| K21B101800 | 18.0 | 14 | 56 | 182 |
| K21B101900 | 19.0 | 16 | 58 | 189 |
| K21B102000 | 20.0 | 16 | 60 | 195 |

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommended | ◎ | ◎ | ○ | ○ | | ◎ | ○ | | | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400Rm | 1050Rm | 550 | 630 | 400 | 550 |
| Recommended | ○ | ○ | ○ | ○ | | ○ | ○ | ○ | | | | | | | | | | | | | |