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Precise tap control for quality and reliability – make the most of your tool's performance.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

Interfaces:

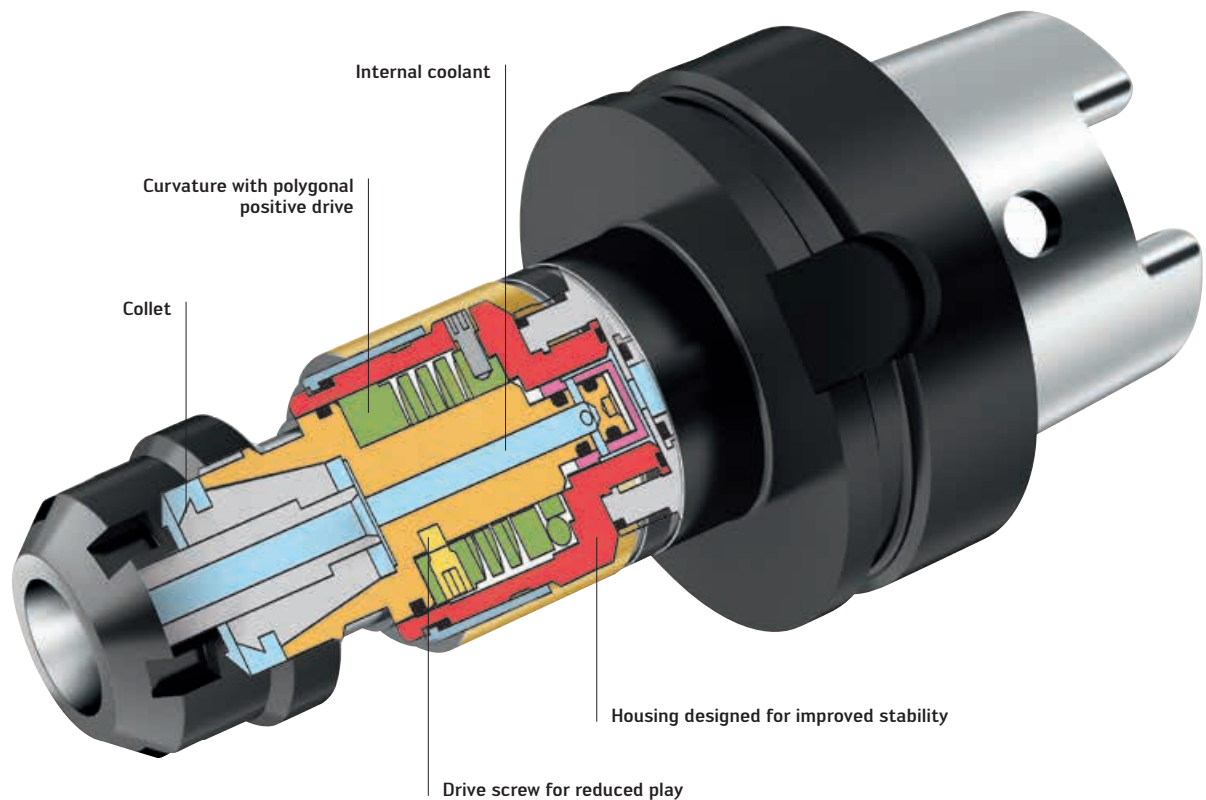
- HSK100
- SK40/50
- BT30/40/50

Other available interfaces:

- HSK63
- Weldon 25
- NCT

THE TOOL

- Synchronized tapping chuck
- With patented micro-compensator made of a specially developed alloy
- Integrated minimum compensation in axial and radial directions



AB035-H

BENEFITS FOR YOU

- Compensates for radial and axial changes in position on a micro scale
- Greater process reliability thanks to the reduced risk of fracture (particularly where dimensions are small)
- Longer threading tool life due to less friction

Ordering information
from page 256.

THE APPLICATION

- Synchronous machining
- At high cutting speeds
- Can be used on all conventional machining centers



Adaptors with HSK, MAS-BT and SK interfaces

Fig.: Synchronized chuck

Adaptor DIN 6535 HA

AK610

Steel



– For ConeFit milling cutter heads

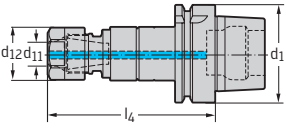
| Tool | Designation | d ₁ mm | d ₁₁ | l ₄ mm | l ₁ mm | Version | kg |
|-------------------|---------------------|----------------------|-----------------|----------------------|----------------------|---------|------|
| Shank DIN 6535 HA | AK610.Z10.E10.020 | 10 | E10 | 20 | 75 | A | 0.05 |
| | ★ AK610.Z10.E10.050 | 10 | E10 | 50 | 100 | A | 0 |
| | AK610.Z12.E10.005 | 12 | E10 | 5 | 65 | A | 0.06 |
| | AK610.Z12.E12.022 | 12 | E12 | 22 | 100 | A | 0.09 |
| | ★ AK610.Z12.E12.048 | 12 | E12 | 48 | 100 | A | 0 |
| | AK610.Z16.E10.050 | 16 | E10 | 50 | 160 | B | 0.21 |
| | AK610.Z16.E10.036 | 16 | E10 | 92 | 140 | C | 0.20 |
| | AK610.Z16.E10.005 | 16 | E10 | 5 | 65 | A | 0.11 |
| | AK610.Z16.E12.005 | 16 | E12 | 5 | 65 | A | 0.10 |
| | AK610.Z16.E12.060 | 16 | E12 | 60 | 170 | B | 0.22 |
| | AK610.Z16.E12.025 | 16 | E12 | 25 | 140 | C | 0.20 |
| | AK610.Z16.E16.025 | 16 | E16 | 25 | 110 | A | 0.17 |
| | ★ AK610.Z16.E16.050 | 16 | E16 | 50 | 110 | A | 0 |
| | ★ AK610.Z16.E16.080 | 16 | E16 | 80 | 135 | A | 0 |
| | AK610.Z20.E16.005 | 20 | E16 | 5 | 70 | A | 0.17 |
| | AK610.Z20.E16.025 | 20 | E16 | 25 | 110 | A | 0.24 |
| | AK610.Z20.E16.075 | 20 | E16 | 75 | 190 | B | 0.39 |
| | AK610.Z20.E20.030 | 20 | E20 | 30 | 120 | A | 0.26 |
| | ★ AK610.Z20.E20.110 | 20 | E20 | 110 | 180 | A | 0 |
| | AK610.Z25.E16.054 | 25 | E16 | 55 | 170 | C | 0.57 |
| | AK610.Z25.E20.005 | 25 | E20 | 5 | 80 | A | 0.28 |
| | AK610.Z25.E25.040 | 25 | E25 | 40 | 140 | A | 0.50 |
| | ★ AK610.Z25.E25.110 | 25 | E25 | 110 | 180 | A | 0 |
| | AK610.Z32.E20.073 | 32 | E20 | 73 | 180 | C | 0.96 |
| | AK610.Z32.E25.005 | 32 | E25 | 5 | 80 | A | 0.46 |
| | AK610.Z32.E25.045 | 32 | E25 | 45 | 200 | C | 1.17 |

For the tightening torques of screw-fitted milling cutter heads, see "Rotating adaptors/Assembly parts and accessories"

Synchronous tapping adaptor DIN 69893-1 A AB035-H





– Integrated minimum compensation in axial and radial directions

| Tool | Designation | d_1 | d_{11} mm | d_{12} mm | l_4 mm | Collets | kg |
|--|-----------------------|----------|---|----------------|-------------|---------|-----|
|  HSK DIN 69893-1 A | ★ AB035-H63-ER20-108 | HSK-A63 | M4–M12 (UNC 8–UNC 1/2) | 35 | 108 | ER20 | 1.4 |
| | ★ AB035-H63-ER25-128 | HSK-A63 | M8–M20 (UNC 5/16–UNC 3/4) | 44 | 128 | ER25 | 2 |
| | ★ AB035-H63-ER40-160 | HSK-A63 | M16–M30 (UNC 7/16–UNC 1 ¹ / ₈) | 62 | 160 | ER40 | 3.8 |
| | ★ AB035-H100-ER20-115 | HSK-A100 | M4–M12 (UNC 8–UNC 1/2) | 35 | 145 | ER20 | 2.4 |
| | ★ AB035-H100-ER25-134 | HSK-A100 | M8–M20 (UNC 5/16–UNC 3/4) | 44 | 134 | ER25 | 2.8 |
| | ★ AB035-H100-ER40-164 | HSK-A100 | M16–M30 (UNC 7/16–UNC 1 ¹ / ₈) | 62 | 163 | ER40 | 4.2 |

If a collet chuck is used for the internal coolant supply, the sealing discs under "Assembly parts and accessories" must be used. The clamping nut can be damaged if the chuck is used without a sealing disc.

For collets, see "Assembly parts and accessories"

Bodies and assembly parts are included in the scope of delivery.

| Assembly parts | | ER20 | ER25 | ER40 |
|---|--|--------|--------|--------|
|  | Clamping nut for internal coolant supply | FS2558 | FS2559 | FS1450 |
|  | Tensioning key | FS2553 | FS1544 | FS1546 |

Synchronised tapping adaptor AB035-W



– Integrated minimum compensation in axial and radial directions

| Tool | Designation | d_1 | d_{11} mm | d_{12} mm | l_4 mm | Collets | kg |
|--|----------------------|-------|---------------------------|----------------|-------------|---------|-----|
| Combishank DIN 1835, Form B and D | ★ AB035-W25-ER11-052 | 25 | M2-M5 (UNC 2–UNC 10) | 19 | 52 | ER11 | 0.5 |
| | ★ AB035-W25-ER20-069 | 25 | M4-M12 (UNC 8–UNC 1/2) | 34 | 69 | ER20 | 0.8 |
| | ★ AB035-W25-ER25-088 | 25 | M8-M20 (UNC 5/16–UNC 3/4) | 42 | 88 | ER25 | 1.4 |

If a collet chuck is used for the internal coolant supply, the sealing discs under "Assembly parts and accessories" must be used
 The clamping nut can be damaged if the chuck is used without a sealing disc.
 For collets, see "Assembly parts and accessories"
 Bodies and assembly parts are included in the scope of delivery.

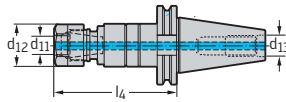
| Assembly parts | Collets | ER11 -4.5 | ER11 -6 | ER20 | ER25 |
|----------------|--|-----------|---------|--------|--------|
| | Clamping nut for internal coolant supply | FS2556 | FS2557 | FS2558 | FS2559 |
| | Tensioning key | FS2554 | FS2554 | FS2553 | FS1544 |

Synchronous tapping adaptor DIN 69871-AD AB035-S





- Integrated minimum compensation in axial and radial directions
- ISO 7388-1

| Tool | Designation | d ₁ | d ₁₁ mm | d ₁₂ mm | d ₁₃ mm | l ₄ mm | Collets | kg |
|--------------|----------------------|----------------|------------------------------|-----------------------|-----------------------|----------------------|---------|-----|
| SK DIN 69871 | ★ AB035-S40-ER20-102 | ISO40 | M4-M12 (UNC 8-UNC 1/2) | 35 | M16 | 102 | ER20 | 1.2 |
| | ★ AB035-S40-ER25-120 | ISO40 | M8-M20 (UNC 5/16-UNC 3/4) | 44 | M16 | 122 | ER25 | 1.6 |
| | ★ AB035-S50-ER20-106 | ISO50 | M4-M12 (UNC 8-UNC 1/2) | 35 | M24 | 106 | ER20 | 3 |
| | ★ AB035-S50-ER25-126 | ISO50 | M8-M20 (UNC 5/16-UNC 3/4) | 44 | M24 | 126 | ER25 | 3.4 |
| | ★ AB035-S50-ER40-155 | ISO50 | M16-M30 (UNC 7/16-UNC 1 1/8) | 62 | M24 | 155 | ER40 | 4.7 |



If a collet chuck is used for the internal coolant supply, the sealing discs under "Assembly parts and accessories" must be used. The clamping nut can be damaged if the chuck is used without a sealing disc. For collets, see "Assembly parts and accessories". Bodies and assembly parts are included in the scope of delivery.

| Assembly parts | Collets | ER20 | ER25 | ER40 |
|--|--|--------|--------|--------|
|  | Clamping nut for internal coolant supply | FS2558 | FS2559 | FS1450 |
|  | Tensioning key | FS2553 | FS1544 | FS1546 |

Synchronous tapping adaptor MAS-BT JIS B 6339 AB035-J



- Integrated minimum compensation in axial and radial directions
- ISO 7388-2

| Tool | Designation | d ₁ | d ₁₁ mm | d ₁₂ mm | d ₁₃ mm | l ₄ mm | Collets | kg |
|----------------|----------------------|----------------|------------------------------|-----------------------|-----------------------|----------------------|---------|-----|
| JIS B 6339 | ★ AB035-J30-ER11-082 | BT30 | M2-M5 (UNC 2-UNC 10) | 24 | M12 | 82 | ER11 | 0.5 |
| | ★ AB035-J30-ER20-105 | BT30 | M4-M12 (UNC 8-UNC 1/2) | 35 | M12 | 105 | ER20 | 0.8 |
| | ★ AB035-J30-ER25-125 | BT30 | M8-M20 (UNC 5/16-UNC 3/4) | 44 | M12 | 125 | ER25 | 1.2 |
| | ★ AB035-J40-ER20-110 | BT40 | M4-M12 (UNC 8-UNC 1/2) | 35 | M16 | 110 | ER20 | 1.4 |
| | ★ AB035-J40-ER25-130 | BT40 | M8-M20 (UNC 5/16-UNC 3/4) | 44 | M16 | 130 | ER25 | 1.8 |
| | ★ AB035-J50-ER20-125 | BT50 | M4-M12 (UNC 8-UNC 1/2) | 35 | M24 | 125 | ER20 | 4.0 |
| | ★ AB035-J50-ER25-145 | BT50 | M8-M20 (UNC 5/16-UNC 3/4) | 44 | M24 | 145 | ER25 | 4.4 |
| | ★ AB035-J50-ER40-174 | BT50 | M16-M30 (UNC 7/16-UNC 1 1/8) | 62 | M24 | 174 | ER40 | 5.7 |

If a collet chuck is used for the internal coolant supply, the sealing discs under "Assembly parts and accessories" must be used. The clamping nut can be damaged if the chuck is used without a sealing disc. For collets, see "Assembly parts and accessories". Bodies and assembly parts are included in the scope of delivery.

| Assembly parts | | Collets | ER11 -4.5 | ER11 -6 | ER20 | ER25 | ER40 |
|----------------|--|---------|-----------|---------|--------|--------|--------|
| | Clamping nut for internal coolant supply | | FS2556 | FS2557 | FS2558 | FS2559 | FS1450 |
| | Tensioning key | | FS2554 | FS2554 | FS2553 | FS1544 | FS1546 |

ER tapping collets DIN 6499 C340



- ER - GB in accordance with DIN 6499

| Tool | Designation | Collets | d ₁₁ mm | l ₁ mm | SW mm | kg |
|--------------|---------------|---------|-----------------------|----------------------|----------|------|
| DIN 6499 | C340.11.028 | ER11 | 2.8 | 18 | 2.1 | 0.01 |
| | C340.11.035 | ER11 | 3.5 | 18 | 2.7 | 0.01 |
| | C340.11.045 | ER11 | 4.5 | 18 | 3.4 | 0.01 |
| | C340.11.060 | ER11 | 6 | 18 | 4.9 | 0.01 |
| | C340.20.045 | ER20 | 4.5 | 31.5 | 3.4 | 0.05 |
| | C340.20.060 | ER20 | 6 | 31.5 | 4.9 | 0.05 |
| | C340.20.070 | ER20 | 7 | 31.5 | 5.5 | 0.05 |
| | C340.20.080 | ER20 | 8 | 31.5 | 6.2 | 0.05 |
| | C340.20.090 | ER20 | 9 | 31.5 | 7 | 0.04 |
| | C340.20.100 | ER20 | 10 | 31.5 | 8 | 0.04 |
| | ★ C340.25.045 | ER25 | 4.5 | 34 | 3.4 | 0.01 |
| | ★ C340.25.060 | ER25 | 6 | 34 | 4.9 | 0.01 |
| | ★ C340.25.070 | ER25 | 7 | 34 | 5.5 | 0.01 |
| | C340.25.080 | ER25 | 8 | 34 | 6.2 | 0.08 |
| | C340.25.090 | ER25 | 9 | 34 | 7 | 0.08 |
| | C340.25.100 | ER25 | 10 | 34 | 8 | 0.07 |
| | C340.25.110 | ER25 | 11 | 34 | 9 | 0.07 |
| | C340.25.120 | ER25 | 12 | 34 | 9 | 0.07 |
| | C340.25.140 | ER25 | 14 | 34 | 11 | 0.06 |
| | C340.25.160 | ER25 | 16 | 34 | 12 | 0.05 |
| | C340.32.045 | ER32 | 4.5 | 40 | 3.4 | 0.17 |
| | C340.32.060 | ER32 | 6 | 40 | 4.9 | 0.16 |
| | C340.32.070 | ER32 | 7 | 40 | 5.5 | 0.17 |
| | C340.32.080 | ER32 | 8 | 40 | 6.2 | 0.17 |
| | C340.32.090 | ER32 | 9 | 40 | 7 | 0.16 |
| | C340.32.100 | ER32 | 10 | 40 | 8 | 0.16 |
| | C340.32.110 | ER32 | 11 | 40 | 9 | 0.16 |
| | C340.32.120 | ER32 | 12 | 40 | 9 | 0.16 |
| | C340.32.140 | ER32 | 14 | 40 | 11 | 0.15 |
| | C340.32.160 | ER32 | 16 | 40 | 12 | 0.13 |
| | C340.40.120 | ER40 | 12 | 46 | 9 | 0.17 |
| | C340.40.140 | ER40 | 14 | 46 | 11 | 0.16 |
| | C340.40.160 | ER40 | 16 | 46 | 12 | 0.14 |
| | C340.40.180 | ER40 | 18 | 46 | 14.5 | 0.15 |
| | C340.40.200 | ER40 | 20 | 46 | 16 | 0.17 |
| C340.40.220 | ER40 | 22 | 46 | 18 | 0.19 | |