

Shanks for NC and machining centres

Version

Alloyed case hardening steel min. tensile strength 950 N/mm².

Taper angle tolerance more accurate than AT3.

Case-hardened 60-2 HRC.

Functional surfaces ground.

ISO
7388-1

New standard (ISO 7388-1)

Shape A: Without through hole

Shape AD: With through hole for central coolant supply

Shape AD/AF: With side coolant supply via the tool collar and through hole

Shape AF: With side coolant supply via the tool collar

DIN
69871

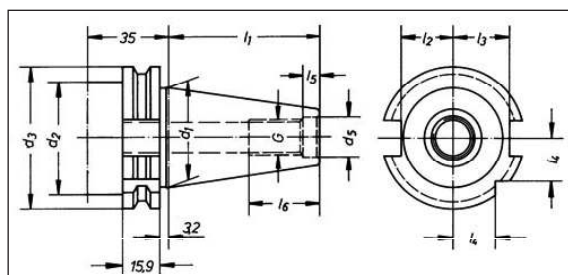
Old standard (DIN 69871 Part1)

Shape A: Without through hole

Shape AD: With through hole for central coolant supply

Shape AD/B: With through hole for central coolant supply and 2 holes on the tool collar for side coolant supply

Shape B: With 2 holes on the tool collar for side coolant supply



SK	d1 mm	g	d5 H7 mm	d2 max mm	d3 mm	l1 mm	l2 mm	l3 mm	l4 mm	l5 mm	l6 mm	d6 mm	e mm
30	31.75	M 12	13	45	50.00	47.80	16.4	19.0	15.0	5.5	24	4	21
40	44.45	M 16	17	50	63.55	68.40	22.8	25.0	18.5	8.2	32	4	27
50	69.85	M 24	25	80	97.50	101.75	35.5	37.7	30.0	11.5	47	6	42

21199

CNC precision drill chuck

ISO
7388-1

DIN
69871

G 6.3
25000
1/min

≤20µm



Design

- Concentricity less than or equal to 20 µm
- High clamping force
- Very short design
- Max. rotation speed finely balanced 35,000 rpm

Scope of delivery:

- Delivered with hexagon key with T-handle
SW 6 mm

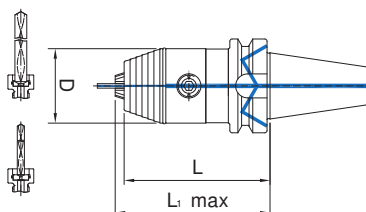
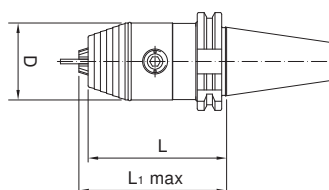
Applications

Suitable for clockwise/anti-clockwise rotation.

21199 201-202

Design

- Incl. sealing washers for the entire clamping range
(1x installed, 1x within scope of delivery)



A

21199 101-102



AD/AF



21199 201-202



ISO 7388-1 A

ISO 7388-1 AD/AF

Taper SK	Clamping range mm	D mm	L mm	L ₁ Max. mm	Torque Nm	Retention force N	Weight kg	21199	...	21199	...
40	0.5-13	50	90	96	20	80	1.6		101		
40	2.5-16	57	95	101	20	90	1.8		102		
40	0.5-13	50	90	96	20	80	1.7				201
40	2.5-16	57	95	101	20	90	1.9				202

21200

Precision short drill chuck

ISO
7388-1

DIN
69871

AD/AF

G 6.3
12000
1/min

 $\leq 35 \mu\text{m}$

HHW

Design

- Short design
- Wear parts hardened and ground

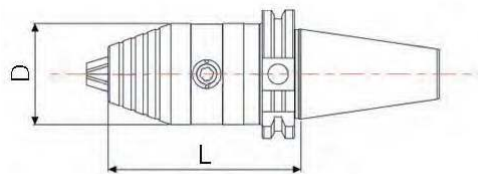
Scope of delivery:

Includes spanner with T-handle for high traction.

Applications

For clockwise/anti-clockwise rotation.

21200



Taper SK	Clamping range mm	L mm	D mm	21200	...
40	2.5-16	95	50	203	

21185

Short drill chuck AKL

ISO
7388-1

DIN
69871

AD

Vorgew.
7000
1/min

 $\leq 30 \mu\text{m}$

ALBRECHT

Präzisions Spannfutter

Design

- 100% concentricity checked, based on DIN ISO 10888
- Worm gear for high retention forces

Scope of delivery:

Includes spanner with T-handle for high traction.

Applications

For clockwise/anti-clockwise rotation.

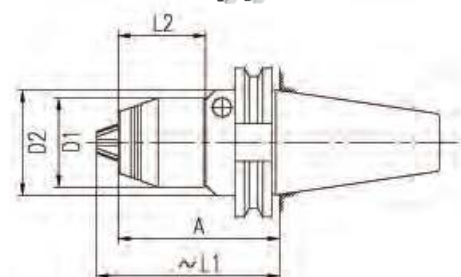
Note:

For pull studs, see art. no. 21733-21740.

Other balancing grades available on request.

Type ULTRA with concentricity less than or equal to 0.015 mm deliverable on request.

21185 302



Taper SK	Clamping range mm	A mm	D1 mm	D2 mm	L1 mm	L2 mm	21185	...
40	0.5-10	69	38	45	78	37.5	302	
40	1.0-16	80	50	-	92	-	303	
50	1.0-16	80	50	-	92	-	304	

21191

Precision short drill chuck

ISO
7388-1

DIN
69871

AD

G 6.3
7000
1/min

 $\leq 30 \mu\text{m}$

ATORN®

Design

- Clamped via worm gear
- Short model
- Hardened wear parts

Scope of delivery:

Includes spanner with T-handle for high traction.

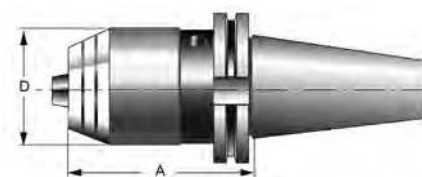
Applications

For clockwise/anti-clockwise rotation.

Note:

For pull studs, see art. no. 21733-21740.

21191



Taper SK	Clamping range mm	A mm	D mm	21191	...
40	1-16	80	50	101	
50	1-16	80	50	102	

21202

Precision short drill chuck

ISO
7388-1

DIN
69871

A

G 6.3
10000
1/min

 $\leq 30 \mu\text{m}$

mimatic

Tool Systems

Design

- Short model
- Hardened wear parts

Scope of delivery:

Includes spanner with T-handle for high traction.

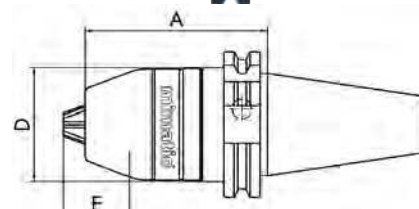
Applications

For clockwise/anti-clockwise rotation.

Note:

For pull studs, see art. no. 21733-21740.

21202



Taper SK	Clamping range mm	A mm	D mm	E mm	21202	...
40	0.5-13	80.0	48.5	29	201	
40	2.5-16	80.0	51.0	29	202	

21206

Precision short drill chuck

ISO
7388-1DIN
69871

A

G 6.3
12000
1/min

Design

- Short, robust and slim design
- Gear ratio generates high gripping forces
- High precision and concentricity

Scope of delivery:

Includes spanner with T-handle for high traction.

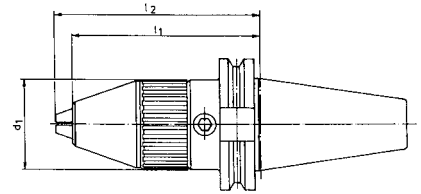
Applications

For clockwise/anti-clockwise rotation.

Note:

For pull studs, see art. no. 21733–21740.

21206



Taper SK	Clamping range mm	l ₁ mm	d ₁ mm	l ₂ mm	21206	...
40	1.0–13	87.5	43	95.5		101
40	2.5–16	104.5	56	109.5		102
50	1.0–13	87.5	43	95.5		103
50	2.5–16	106.5	56	111.5		104

21456

Quick-change tapping chuck

ISO
7388-1DIN
69871

A



Design

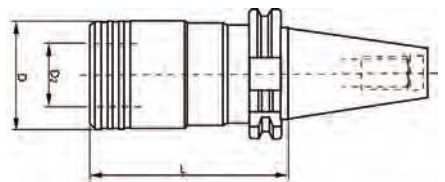
- With length compensation under compression and tension

Note:

For quick-change inserts, see art no. 21459–21460.

For pull studs, see art. no. 21733–21740.

21456



Taper SK	For screw tap	Suitable inserts/size	Length compensation Pressure/tension mm	L mm	D mm	D ₂ mm	21456	...
40	M 3–M 12	1	9.0/9.0	60	38	19		101
40	M 6–M 20	2	15.0/15.0	100	55	31		102
40	M 14–M 33	3	24.0/24.0	138	79	48		103
50	M 3–M 12	1	9.0/9.0	62	38	19		104
50	M 6–M 20	2	15.0/15.0	83	55	31		105

21457

Quick-change tapping chuck for synchronous spindles

ISO
7388-1DIN
69871

A



Design

- Minimum length compensation applied by damping element
- Secure clamping in quick-change inserts for ER collets
- Clamping screws to prevent rotation of the clamped screw tap

Applications

For use on drilling and machining centres with synchronous spindles.

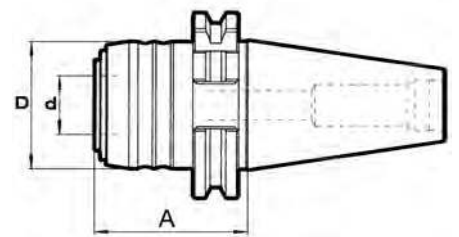
Caution:

The use of a synchronous collet reduces the high axial forces. Screw tap service life is greatly extended.

Note:

For quick-change inserts, see art. no. 21465.

21457



Taper SK	Size ER	d mm	D mm	A mm	Length compensation Pressure/tension mm	For screw tap	21457	...
40	16	20	43	53	0.2/1.0	M 3–M 12		101
40	25	32	60	90	0.2/1.0	M 6–M 20		102
50	16	20	43	53	0.2/1.0	M 3–M 12		103
50	25	32	60	74	0.2/1.0	M 6–M 20		104

21506 - 21510

ER collet chuck set

ISO
7388-1DIN
69871

AD



Set contents

- 1 High-performance drilling and milling chuck, type ER 40, clamping range 3–26 mm
- 13 Collet chucks, type 472 E, slotted on both sides, Diameter 4/5/6/8/10/12/14/16/18/20/22/24/25 mm
- 1 Spanner

21506 102



Set contents	Shank	Version	21506	...	21510	...
Collet chuck set	15 pieces	SK 40	In plastic case		102	
Plastic box	-	-	Empty			107

21512

ER collet chuck

ISO
7388-1DIN
69871

AD

G 2.5
25000
1/min

Design

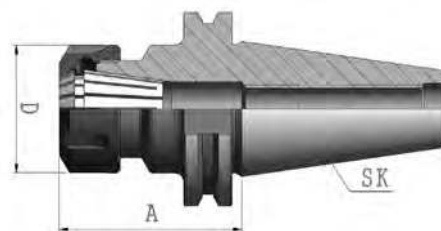
- Precision design
- Precision-balanced, grade 2.5 at 25,000 rpm
- Ground inner and outer taper
- Balluff chip bore
- Max. concentricity < 0.005 mm
- Size ER 16 with hexagonal nut

Applications

For clamping tools with straight shanks in collet chucks in accordance with DIN 6499, shape A and B.

Note:

For collet chuck sets, see art. no. 21519; for collet chucks, see art. no. 21520–21525 and 21534–21539. For pull studs, see art. no. 21733–21740; for spanners, see art. no. 21532.



Taper SK	Size	Clamping range mm	Collet chucks type	A mm	D mm	Short	
						21512	...
30	32	2–20	ER 32/470 E	70	50		203
40	ER 16	1–10	ER 16/426 E	63	32		204
40	ER 25	2–16	ER 25/430 E	60	42		207
40	32	2–20	ER 32/470 E	70	50		208
40	ER 40	3–26	ER 40/472 E	80	63		209
50	25	2–16	ER 25/430 E	60	42		221
50	32	2–20	ER 32/470 E	70	50		212
50	ER 40	3–26	ER 40/472 E	80	63		213

Taper SK	Size	Clamping range mm	Collet chucks type	A mm	D mm	Medium length	
						21512	...
40	ER 16	1–10	ER 16/426 E	100	32		205
40	ER 25	2–16	ER 25/430 E	100	42		215
40	32	2–20	ER 32/470 E	100	50		217
40	ER 40	3–26	ER 40/472 E	100	63		219
50	ER 16	1–10	ER 16/426 E	100	32		210
50	ER 25	2–16	ER 25/430 E	100	42		222
50	32	2–20	ER 32/470 E	100	50		224
50	ER 40	3–26	ER 40/472 E	100	63		226

Taper SK	Size	Clamping range mm	Collet chucks type	A mm	D mm	Long	
						21512	...
40	ER 16	1–10	ER 16/426 E	160	32		206
40	ER 25	2–16	ER 25/430 E	160	42		216
40	32	2–20	ER 32/470 E	160	50		218
40	ER 40	3–26	ER 40/472 E	160	63		220
50	ER 16	1–10	ER 16/426 E	160	32		211
50	ER 25	2–16	ER 25/430 E	160	42		223
50	32	2–20	ER 32/470 E	160	50		225
50	ER 40	3–26	ER 40/472 E	160	63		227

21512
Short21512
Medium length21512
Long

21500

ER collet chuck, slim

ISO
7388-1DIN
69871

AD/AF

G 2.5
25000
1/min

HSC



Design

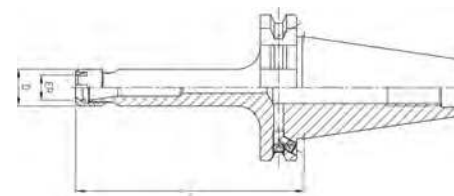
- Clamping nut finely balanced for HSC, ER11 through hole bored
- Shank hard-turned with Balluff chip bore

Applications

For clamping tools with straight shanks in collet chucks in accordance with DIN 6499, shape A and B.

Note:

For collet chuck sets, see art. no. 21519; for collet chucks, see art. no. 21520–21525 and 21534–21539. For pull studs, see art. no. 21733–21740. For chuck key, see art. no. 21516.



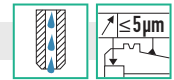
Taper SK	Size	Clamping range mm	Collet chucks type	A mm	D mm	Medium length	
						21500	...
40	ER 11	1–7	ER 11/4008 E	100	16		101
40	ER 16	1–10	ER 16/426 E	100	22		103
40	ER 25	1–16	ER 25/430 E	100	35		105

Taper SK	Size	Clamping range mm	Collet chucks type	A mm	D mm	Long	
						21500	...
40	ER 11	1–7	ER 11/4008 E	160	16		102
40	ER 16	1–10	ER 16/426 E	160	22		104
40	25	1–16	ER 25/430 E	160	35		106

21500
Medium length21500
Long

21515

ER chuck extensions



Design

- Cylindrical tool holder with Weldon shank
- Smallest dimensions

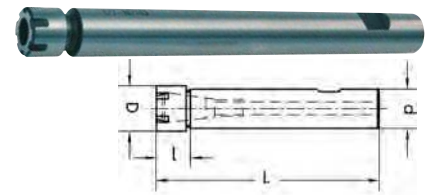
Applications

Extensions in Weldon mounts and collet chucks.

Note:

For spanner, see art. no. 21516.

Clamping range mm	Shank Ø d mm	Collet chucks Type	L mm	D mm	21515	...
1-7	16	ER 11/4008 E	162	16		101
1-10	20	ER 16/426 E	178	22		102
1-13	25	ER 20/428 E	190	28		103



21515

21505

Precision collet chuck

ISO
7388-1

DIN
69871

AD

G 2.5
25000
1/min

≤ 3 µm

ATORN®

Design

- Highly accurate, **patented** precision chuck with the highest concentricity and repeatability
- High retention forces
- High rigidity
- Extremely robust
- Large tool aperture

Scope of delivery:

Incl. clamping nut.

Caution:

Also suitable for HPC/HSC milling up to approx. 200 °C.

Note:

For spanner, see art. no. 21509.

For GERC-HP collet chucks,

see art. no. 21546-21551.

For GERC-B collet chucks,

see art. no. 21534-21539.

For pull studs, see art. no. 21733-21740.

For replacement clamping nuts, see art. no. 21518.



21505

Applications

For high-precision clamping during roughing and finishing, drilling, reaming, countersinking, thread cutting etc.

Taper SK	Clamping range mm	Collet chucks type	A mm	D mm	Max. insertion depth E without stop mm	Suitable clamping nut	Tightening torque of clamping nut Nm	21505	...
40	1-10	GERC 16	70	30	55	AER 16	55		101
40	1-16	GERC 25	70	40	114	AER 25	85		105
40	2-20	GERC 32	70	50	99	AER 32	140		109
40 L	1-10	GERC 16	100	30	85	AER 16	55		102
40 L	1-16	GERC 25	100	40	114	AER 25	85		106
40 L	2-20	GERC 32	100	50	114	AER 32	140		110
40 XL	1-10	GERC 16	160	30	117	AER 16	55		103
40 XL	1-16	GERC 25	160	40	118	AER 25	85		107
40 XL	2-20	GERC 32	160	50	135	AER 32	140		111

FAHRION®
PRÄZISION

Design

- Ground inner and outer taper
- Concentricity and repeatability 0.003 mm (with GERC-HP collet chucks)
- **Supplied without clamping nut**

Applications

For precision clamping of tools with straight shanks without any loss of concentricity or gripping force up to a shaft tolerance of h10.

Note:

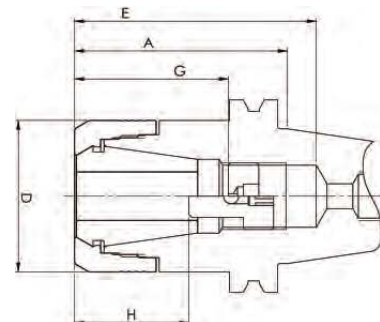
Collet chucks with square drives for screw taps cannot be used.

For clamping nuts and spanners, see art. no. 21509.

For sealing washers, see art. no. 21513 (only available online).

GERC-HP/-HPD/-HPDD collet chucks, see art. no. 21546–21551 and 21563–21569.

For pull studs, see art. no. 21733–21740.


21507
Design

Standard design.

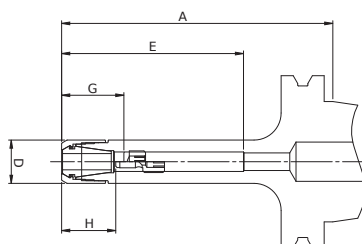
Taper SK	Size	Clamping range mm	Collet chucks type	D mm	A mm	Insertion depth E mm	Short	
							21507	...
40	CP 16	1–10	GERC 16/426 E	30	70	55		103
40	CP 25	2–16	GERC 25/430 E	40	70	114		108
40	CP 32	2–20	GERC 32/470 E	50	70	99		113
50	CP 32	2–20	GERC 32/470 E	50	70	109		116

Taper SK	Size	Clamping range mm	Collet chucks type	D mm	A mm	Insertion depth E mm	Medium length	
							21507	...
40	CP 16	1–10	GERC 16/426 E	30	100	85		104
40	CP 25	2–16	GERC 25/430 E	40	100	114		109
40	CP 32	2–20	GERC 32/470 E	50	100	114		114
50	CP 32	2–20	GERC 32/470 E	50	100	120		117

Taper SK	Size	Clamping range mm	Collet chucks type	D mm	A mm	Insertion depth E mm	Long	
							21507	...
40	CP 16	1–10	GERC 16/426 E	30	160	117		105
40	CP 25	2–16	GERC 25/430 E	40	160	118		110
40	CP 32	2–20	GERC 32/470 E	50	160	135		115
50	CP 32	2–20	GERC 32/470 E	50	160	150		118

21508 101-102
Design

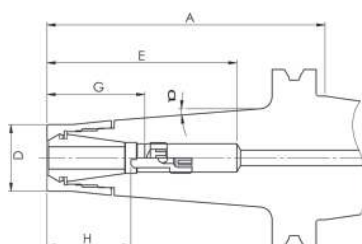
Slim design.



Taper SK	Size	Clamping range mm	Collet chucks type	D mm	A mm	Insertion depth E mm	21508	
							21508	...
40	CP 11 M	1–7	GERC 11/4008 E	16	100	84		101
40	CP 11 M	1–7	GERC 11/4008 E	16	160	144		102

21508 201-202
Design

Tapered design.



Taper SK	Size	Clamping range mm	Collet chucks type	D mm	A mm	Insertion depth E mm	21508	
							21508	...
40	CPC 16C	1–10	GERC 16/426 E	24	100	120		201
40	CPC 16C	1–10	GERC 16/426 E	24	160	120		202

21507
Short

21507
Medium length

21507
Long

21508 101-102

21508 201-202


21543

OZ collet chuck

ISO
7388-1DIN
69871

AD

G 2.5
25000
1/min

Design

- Ground inner and outer taper
- Ball-bearing union nut
- Balluf chip bore

Scope of delivery:

Includes clamping nut.

Applications

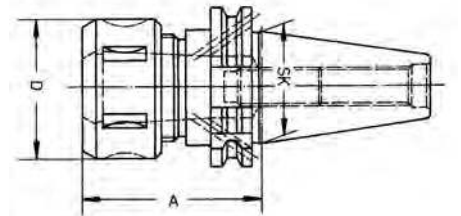
For clamping tools with straight shanks in collet chucks in line with DIN 6388.

Note:

For collet chucks, see art. no. 21552–21554. For pull studs, see art. no. 21733–21740.



21543



Taper SK	Clamping range mm	For collet chucks type	A mm	D mm	21543	...
30	2–16	415 E	60	43		101
40	2–25	462 E	70	60		103
40	3–32	467 E	90	72		104
50	2–25	462 E	70	60		105
50	4–32	467 E	80	72		106

21580

Hydro expansion chuck

ISO
7388-1DIN
69871G 2.5
25000
1/min

Design

- High degree of concentricity and maximum torque transmission
- Vibration-damping tool clamping
- Easy to use
- High positioning accuracy and repetition accuracy
- Made in Germany

Scope of delivery:

Incl. hexagonal T-handle key

Applications

For finish, drilling and reaming.
Can clamp all common shanks.

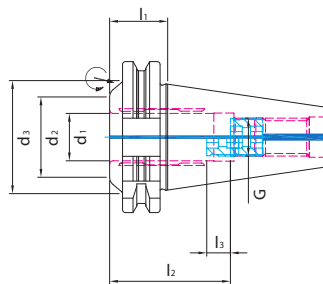
Note:

For reducing sleeves, see cat. no. 21581.
For pull studs, see art. no. 21733–21740.
Key for coolant tube, see art. no. 21865.

21580 100

Design

- Ultra short



AD



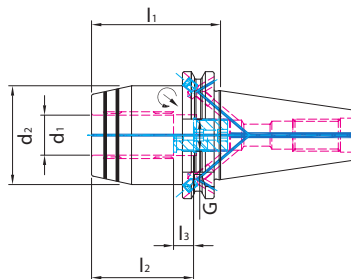
21580 100

Taper SK	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	THD	SW mm	21580	...
40	20	34	48	24.5	51	10	M 16 x 1	8		100

21580 101-102

Design

- Short, heavy



AD/AF



21580 101-102

Taper SK	d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	THD	SW mm	21580	...
40	20	49.5	64.5	51	10	M 16 x 1	8		101
50	32	72.0	81.0	61	10	M 16 x 1	8		102

21710

Ultra-slim hydraulic expansion chuck 3°

ISO
7388-1

DIN
69871

AD/AF

G 2.5
25000
1/min

HSC

ATORN®

Design

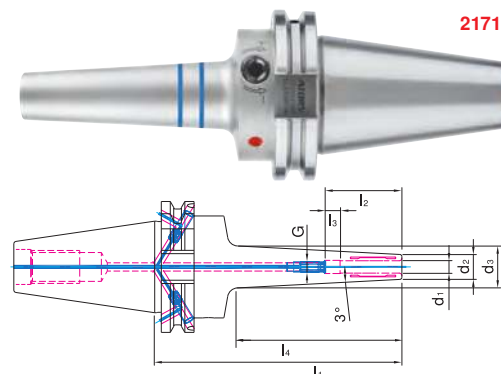
- Newly developed, ultra-slim hydraulic expansion chuck with 3° incline
- Increased clamping force
- For tight interference contours
- Very high temperature resistance up to 180°C

Advantages:

- Near-contour machining
- Expensive shrink-fit device no longer required

Applications

For drilling, reaming and milling.



21710

Taper SK	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	l ₄ mm	THD	SW mm	21710	...
40	3	9	49.4	120	28	16	79.5	M 3	1.5		098
40	4	10	49.5	120	28	12	79.5	M 3	1.5		099
40	5	11	49.5	120	28	8	79.5	M 3	1.5		100
40	6	12	49.5	120	37	20	59.9	M 5	2.5		101
40	8	14	49.5	120	37	10	79.9	M 6	3.0		102
40	10	16	49.5	120	41	10	80.9	M 8 x 1	3.0		103
40	12	18	49.5	120	46	10	81.9	M 10 x 1	5.0		104

21576

HHD hydraulic expansion roughing chuck

ISO
7388-1

DIN
69871

AD/AF

G 2.5
25000
1/min

HSC

ATORN®

Design

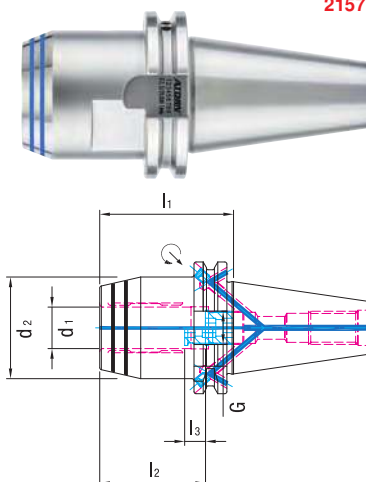
- Further development of the standard expansion chuck
- Best torque transmission
- High damping properties
- High temperature resistance

Applications

For heavy-duty machining in HSC, HPC and TF milling applications.

Note:

For reducing sleeves, see art. no. 21581.
For pull studs, see art. no. 21733–21740.



21576

Taper SK	d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	THD	SW mm	21576	...
40	12	42	50.0	46	10	M 8 x 1	3		101
40	20	49	64.5	51	10	M 16 x 1	8		102
50	20	49	64.5	51	10	M 16 x 1	8		103

21579

Hydraulic expansion extension

G 2.5
25000
1/min

HSC

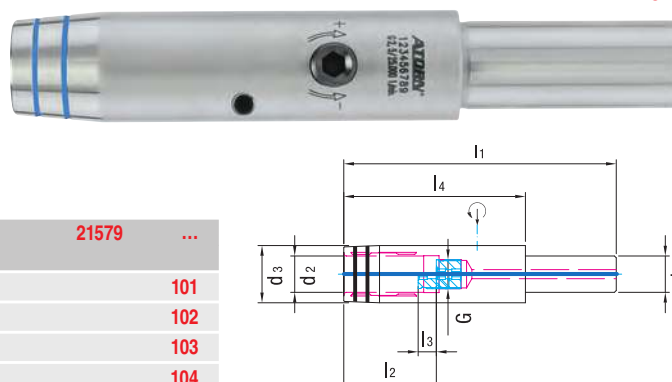
ATORN®

Design

- Made from high-quality, tempered tool steel

Applications

For extension and adaptation in different clamping tools.



21579

d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	l ₄ mm	THD	21579	...
20	12	25.0	150	46	10	100	M 10 x 1		101
20	20	31.5	150	51	10	100	M 16 x 1		102
32	20	31.5	150	51	10	90	M 16 x 1		103
32	20	31.5	200	51	10	90	M 16 x 1		104

diebold**Design**

- **Highest level of concentricity** and taper tolerance
- Made in air-conditioned production

Advantages:

- High retention forces and long service life thanks to the use of **high-quality heat-resistant steels** and special heat treatment processes
- **Patented taper allows** automatic shrink processes and simplified handling

Applications

For clamping of cemented carbide, HSS and steel shafts with a tolerance of h6.

Note:

Incl. length-adjusting screw.

For extensions, see art. no. 21598.

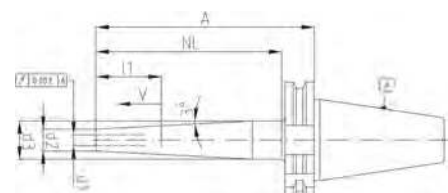
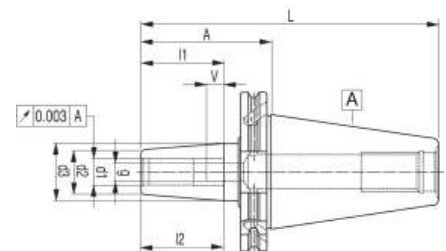
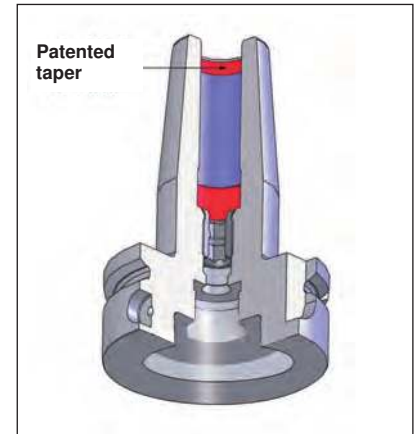
For pull studs, see art. no. 21733–21740. For shrinking equipment, see art. no. 21588–21595.

21596 701-722**Design**

- Slim, stainless coated

Taper SK	d1 mm	d2 mm	d3 mm	L1 mm	L2 mm	A mm	V mm	g	21596	...
40	3	15	20	20	32	80	5	M 6		498
40	4	15	20	20	32	80	5	M 6		499
40	5	15	20	25	32	80	5	M 6		500
40	6	20	27	36	45	80	10	M 5		501
40	8	20	27	36	45	80	10	M 6		502
40	10	24	32	42	50	80	10	M 8 x 1		503
40	12	24	32	47	50	80	10	M 8 x 1		504
40	14	27	34	47	50	80	10	M 10 x 1		505
40	16	27	34	50	50	80	10	M 12 x 1		506
40	18	33	42	50	57	80	10	M 12 x 1		507
40	20	33	42	52	57	80	10	M 16 x 1		508
40	25	44	50	58	60	100	10	M 16 x 1		509
40	32	44	50	62	38	100	10	M 16 x 1		510
40 L	6	21	27	36	45	120	10	M 5		550
40 L	8	21	27	36	45	120	10	M 6		551
40 L	10	24	32	42	50	120	10	M 8		552
40 L	12	24	32	47	50	120	10	M 8		553
40 L	14	27	34	47	50	120	10	M 8		554
40 L	16	27	34	50	50	120	10	M 12		555
40 L	18	33	42	50	57	120	10	M 12		556
40 L	20	33	42	52	57	120	10	M 16		557
40 XL	6	20	27	36	45	160	10	M 5		601
40 XL	8	20	27	36	45	160	10	M 6		602
40 XL	10	24	32	42	50	160	10	M 8 x 1		603
40 XL	12	24	32	47	50	160	10	M 8 x 1		604
40 XL	14	27	34	47	50	160	10	M 8 x 1		605
40 XL	16	27	34	50	50	160	10	M 12 x 1		606
40 XL	18	33	42	50	57	160	10	M 12 x 1		607
40 XL	20	33	42	52	57	160	10	M 16 x 1		608

Taper SK	d1 mm	d2 mm	d3 mm	l1 mm	NL mm	A mm	V mm	g	Slim 21596	...
40	3	9	13	20	60	83	5	M 6		701
40	4	10	14	20	60	83	5	M 6		702
40	6	12	18	36	60	83	5	M 5		703
40	8	14	20	36	60	83	5	M 6		704
40	10	16	22	42	60	83	5	M 8 x 1		705
40	12	18	24	47	60	83	5	M 10 x 1		706
40	16	22	28	50	60	83	5	M 12 x 1		707
40 L	3	9	16	20	100	120	5	M 6		709
40 L	4	10	17	20	100	120	5	M 6		710
40 L	6	12	22	36	100	120	5	M 5		711
40 L	8	14	24	36	100	120	5	M 6		712
40 L	10	16	26	42	100	120	5	M 8 x 1		713
40 L	12	18	28	47	100	120	5	M 10 x 1		714
40 L	16	22	32	50	100	120	5	M 12 x 1		715
40 L	20	27	37	52	100	120	5	M 16 x 1		716
40 XL	6	12	26	36	140	160	5	M 5		717
40 XL	8	14	28	36	140	160	5	M 6		718
40 XL	10	16	30	42	140	160	5	M 8 x 1		719
40 XL	12	18	32	47	140	160	5	M 10 x 1		720
40 XL	16	22	36	50	140	160	5	M 12 x 1		721
40 XL	20	27	41	52	140	160	5	M 16 x 1		722



Shrink-fit chucks

21605

Shrink-fit chuck, 3°

ISO
7388-1

DIN
69871

AD/AF



G 2.5
25000
1/min



ATORN®

Design

- Slim design
- High transmittable torques
- High concentricity
- Balluf chip bore

Scope of delivery:

- Built-in stop screw

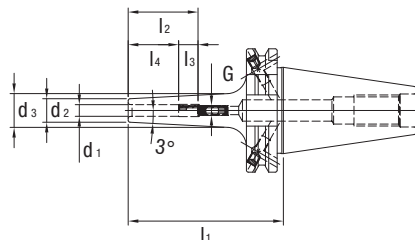
Applications

For shrinking HSS and CC tools with a shaft tolerance of h6 and more precise.

Quality

Made of special high-strength heat-resistant steel.

21605



Short										
Taper	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	THD	21605	...
SK	mm	mm	mm	mm	mm	mm	mm			
40	3	80	9	14	28	16	12	M 6		103
40	4	80	10	15	28	12	16	M 6		104
40	5	80	11	16	30	10	20	M 6		105
40	6	80	12	17	36	10	26	M 5		106
40	8	80	14	19	36	10	26	M 6		108
40	10	85	16	21	41	10	31	M 8 x 1		110
40	12	90	18	24	47	10	37	M 10 x 1		112
40	14	90	20	26	47	10	37	M 10 x 1		114
40	16	95	22	28	50	10	40	M 12 x 1		116
40	18	95	24	30	50	10	40	M 12 x 1		118
40	20	100	26	32	52	10	42	M 16 x 1		120

Medium length										
Taper	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	THD	21605	...
SK	mm	mm	mm	mm	mm	mm	mm			
40	3	120	9	16	-	-	12	M 6		203
40	4	120	10	17	-	-	16	M 6		204
40	5	120	11	18	-	-	20	M 6		205
40	6	120	12	22	36	10	26	M 5		206
40	8	120	14	24	36	10	26	M 6		208
40	10	120	16	26	41	10	31	M 8 x 1		210
40	12	120	18	28	47	10	37	M 10 x 1		212
40	14	120	20	30	47	10	37	M 10 x 1		214
40	16	120	22	32	50	10	40	M 12 x 1		216
40	18	120	24	34	50	10	40	M 12 x 1		218
40	20	120	26	36	52	10	42	M 16 x 1		220

Long										
Taper	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	THD	21605	...
SK	mm	mm	mm	mm	mm	mm	mm			
40	3	160	9	19	-	-	12	M 6		303
40	4	160	10	20	-	-	16	M 6		304
40	5	160	11	21	-	-	20	M 6		305
40	6	160	12	24	36	10	26	M 5		306
40	8	160	14	26	36	10	26	M 6		308
40	10	160	16	28	41	10	31	M 8 x 1		310
40	12	160	18	30	47	10	37	M 10 x 1		312
40	14	160	20	32	47	10	37	M 10 x 1		314
40	16	160	22	34	50	10	40	M 12 x 1		316
40	18	160	24	36	50	10	40	M 12 x 1		318
40	20	160	26	38	52	10	42	M 16 x 1		320



ATORN®**Design**

- Slim design
- Made of special high-strength heat-resistant steel
- Additional threads on the circumference
- For subsequent balancing
- Balluf chip bore
- Made in Germany

Scope of delivery:

- Built-in stop screw

Applications

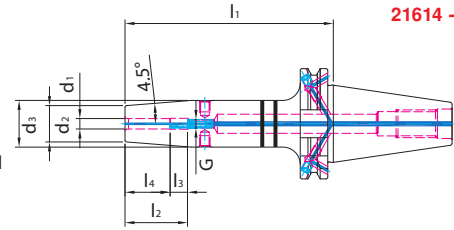
For shrinking HSS and cemented-carbide tools with a shaft tolerance of h6 and more precise.

21614

- With central coolant supply

21615

- With central coolant supply and additional resealable cooling channels



21614 - 21615

Short		Without KKB							With KKB			
Taper SK	d ₁ mm	l ₁ mm	d ₂ mm	d ₃ mm	l ₂ mm	l ₃ mm	l ₄ mm	THD	21614	...	21615	...
40	3	80	10	17	28	16	12	M 6		101		101
40	4	80	15	22	28	12	16	M 6		102		102
40	5	80	15	22	30	10	20	M 6		103		103
40	6	80	21	27	36	10	26	M 5		104		104
40	8	80	21	27	36	10	26	M 6		105		105
40	10	80	24	32	41	10	31	M 8 x 1		106		106
40	12	80	24	32	47	10	37	M 10 x 1		107		107
40	14	80	27	34	47	10	37	M 10 x 1		108		108
40	16	80	27	34	50	10	40	M 12 x 1		109		109
40	18	80	33	42	50	10	40	M 12 x 1		110		110
40	20	80	33	42	52	10	42	M 16 x 1		111		111
40	25	100	44	53	58	10	48	M 16 x 1		112		112

Medium length		Without KKB							With KKB			
Taper SK	d ₁ mm	l ₁ mm	d ₂ mm	d ₃ mm	l ₂ mm	l ₃ mm	l ₄ mm	THD	21614	...	21615	...
40	3	120	10	17	-	-	12	-		201		201
40	4	120	15	22	-	-	16	-		202		202
40	5	120	15	22	-	-	20	-		203		203
40	6	120	21	27	36	10	26	M 5		204		204
40	8	120	21	27	36	10	26	M 6		205		205
40	10	120	24	32	41	10	31	M 8 x 1		206		206
40	12	120	24	32	47	10	37	M 10 x 1		207		207
40	14	120	27	34	47	10	37	M 10 x 1		208		208
40	16	120	27	34	50	10	40	M 12 x 1		209		209
40	18	120	33	42	50	10	40	M 12 x 1		210		210
40	20	120	33	42	52	10	42	M 16 x 1		211		211

Long		Without KKB							With KKB			
Taper SK	d ₁ mm	l ₁ mm	d ₂ mm	d ₃ mm	l ₂ mm	l ₃ mm	l ₄ mm	THD	21614	...	21615	...
40	3	160	10	17	-	-	12	-		301		301
40	4	160	15	22	-	-	16	-		302		302
40	5	160	15	22	-	-	20	-		303		303
40	6	160	21	27	36	10	26	M 5		304		304
40	8	160	21	27	36	10	26	M 6		305		305
40	10	160	24	32	41	10	31	M 8 x 1		306		306
40	12	160	24	32	47	10	37	M 10 x 1		307		307
40	14	160	27	34	47	10	37	M 10 x 1		308		308
40	16	160	27	34	50	10	40	M 12 x 1		309		309
40	18	160	33	42	50	10	40	M 12 x 1		310		310
40	20	160	33	42	52	10	42	M 16 x 1		311		311

Extra long		Without KKB							With KKB			
Taper SK	d ₁ mm	l ₁ mm	d ₂ mm	d ₃ mm	l ₂ mm	l ₃ mm	l ₄ mm	THD	21614	...	21615	...
40	3	200	10	17	28	16	12	M 6		401		401
40	4	200	15	22	28	12	16	M 6		402		402
40	5	200	15	22	30	10	20	M 6		403		403
40	6	200	21	27	36	10	26	M 5		404		404
40	8	200	21	27	36	10	26	M 6		405		405
40	10	200	24	32	41	10	31	M 8 x 1		406		406
40	12	200	24	32	47	10	37	M 10 x 1		407		407
40	14	200	27	34	47	10	37	M 10 x 1		408		408
40	16	200	27	34	50	10	40	M 12 x 1		409		409
40	18	200	33	42	50	10	40	M 12 x 1		410		410
40	20	200	33	42	52	10	42	M 16 x 1		411		411



21614 101-112



21614 201-211



21614 301-311



21614 401-411

17676

Tool chucks for screw-in mill cutters

ISO
7388-1

DIN
69871

AD


G 2.5
25000
1/min


Design

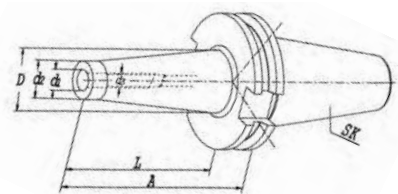
- Precision design
- Ground outer taper and fitting surface

Applications

For mounting threaded screw-in mill cutters.

Note:

For pull studs, see art. no. 21733–21740.



17676

d ₃ mm	SK	d ₁ mm	d ₂ mm	D mm	L mm	A mm	17676	...
M 6	40	6.5	10	13	25	44		101
M 6	40	6.5	10	20	50	69		102
M 6	40	6.5	10	23	75	94		103
M 8	40	8.5	13	15	25	44		104
M 8	40	8.5	13	23	50	69		105
M 8	40	8.5	13	23	75	94		106
M 8	40	8.5	13	25	100	119		107
M 10	40	10.5	18	20	25	44		108
M 10	40	10.5	18	23	50	69		109

d ₃ mm	SK	d ₁ mm	d ₂ mm	D mm	L mm	A mm	17676	...
M 10	40	10.5	18	28	75	94		110
M 10	40	10.5	18	32	100	119		111
M 12	40	12.5	21	24	25	44		112
M 12	40	12.5	21	31	75	94		113
M 12	40	12.5	21	36	125	144		114
M 16	40	17.0	29	29	25	44		115
M 16	40	17.0	29	34	75	94		116
M 16	40	17.0	29	40	125	144		117

21607

Reductions for screw-in mill cutters

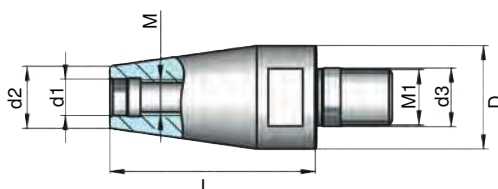


Design

- Made of tempered tool steel

Applications

For reducing existing tool chucks.



21607

M1 x M	D mm	d ₁ mm	d ₂ mm	d ₃ mm	L mm	21607	...
M8/M5	13.0	5.5	10.0	8.5	30		101
M10/M8	18.5	8.5	13.5	10.5	30		102
M12/M10	23.0	10.5	18.5	12.5	35		103
M16/M10	30.0	10.5	18.5	17.0	60		104
M16/M12	30.0	12.5	23.0	17.0	60		105

21608

Extensions for screw-in mill cutters

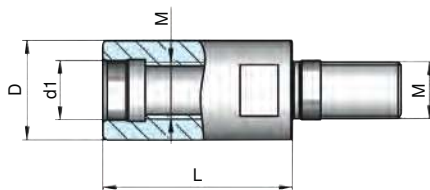


Design

- Made of tempered tool steel

Applications

For extending existing tool chucks.



21608

M	D mm	d ₁ mm	L mm	21608	...
M 8	13.5	8.5	30		101
M 10	18.5	10.5	35		102
M 12	23.0	12.5	40		103
M 16	30.0	17.0	40		104

21601

Tool chucks for drill chucks



Design

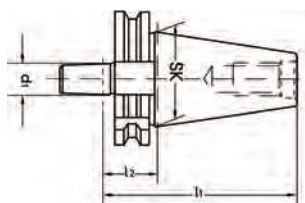
- Precision design

Applications

For mounting drill chucks on milling machines.

Note:

For pull studs, see art. no. 21733–21740.


ISO
7388-1

DIN
69871

A

G 2.5
25000
1/min


21601



Taper SK	Mount d ₁ DIN 238	l ₂ mm	l ₁ mm	21601	...
40	B 16	25	93.4		301
50	B 16	25	126.75		303



21609

Taper sleeves

ISO
7388-1

DIN
69871

AD



G 2.5
25000
1/min



Design

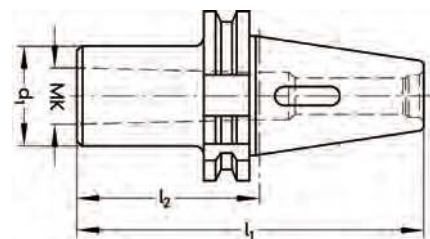
- Precision design
- Precision-balanced, grade 2.5 at 25,000 rpm
- Balluf chip bore
- Max. concentricity < 0.005 mm

Applications

For mounting tools with MK shanks and flat tangs.

Note:

For pull studs, see art. no. 21733–21740.



Outer taper SK	Inner taper MK	l ₂ mm	l ₁ mm	d ₁ mm	21609	...
30	1	50	97.8	25		301
30	2	65	112.8	32		302
30	3	80	127.8	40		303
40	1	50	118.4	25		304
40	2	50	118.4	32		305
40	2L	117	184.5	32		306
40	3	70	138.4	40		307
40	3L	133	201.4	40		308
40	4	95	163.4	48		309
40	4L	156	224.4	48		310
50	1	45	146.75	25		311
50	2	60	161.75	32		312
50	2L	117	218.75	32		313
50	3	65	116.75	40		314
50	3L	137	238.75	40		315
50	4	95	196.75	48		316
50	4L	167	268.75	48		317
50	5	105	206.75	63		318
50	5L	197	298.75	63		319

21609 305



21609 306



21613

Milling bit holders

ISO
7388-1

DIN
69871

A

G 2.5
25000
1/min



Design

- Precision design with built-in retaining screw

Applications

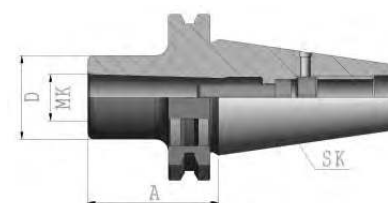
For mounting tools with MK shanks and clamping threads.

Note:

For pull studs, see art. no. 21733–21740.

Outer taper SK	Inner taper MK	Clamping thread Internal	A mm	D mm	21613	...
40	1	M 6	50	25		101
40	2	M 10	50	32		102
40	3	M 12	70	40		103
40	4	M 16	95	48		104
50	2	M 10	60	32		106
50	3	M 12	65	40		107
50	4	M 16	70	48		108

21613



21618

Spacer sleeves

ISO
7388-1

DIN
69871

A

G 2.5
25000
1/min



Design

- Precision design with built-in retaining screw

Applications

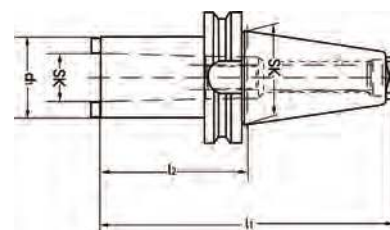
For mounting and extending SK shanks.

Note:

For pull studs, see art. no. 21733–21740.

Outer taper SK	Inner taper SK	Clamping thread Outer	Clamping thread Internal	l ₂ mm	l ₁ mm	d ₁ mm	21618	...
40	40	M 16	M 16	100	168.40	63		202
50	40	M 24	M 16	70	171.75	70		203
50	50	M 24	M 24	120	221.75	97		204

21618



21625

HG collet chucks

ISO
7388-1

DIN
69871

AD/AF



G 2.5
25000
1/min



HSC

Haimer

Design

- Highly accurate and precise chuck
- Stable tension
- High concentricity

Scope of delivery:

With clamping screw and pull-out hook.

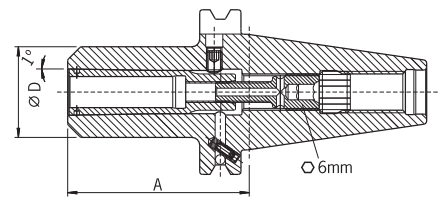
Applications

Ideal for high-speed machining. For clamping tools with straight shanks.

Note:

For HG collets, see art. no. 21627.

For pull studs, see art. no. 21733–21740.



Taper SK	Size	A mm	Ø D mm	For HG collet Ø art. no. 21627	Short 21625	...
40	1	65	30	3/4/5/6/8	101	
50	1	65	30	3/4/5/6/8	104	
40	2	70	35	10/12/14	107	
50	2	70	35	10/12/14	110	
40	3	75	48	16/18/20	113	
50	3	75	48	16/18/20	116	



Taper SK	Size	A mm	Ø D mm	For HG collet Ø art. no. 21627	Medium length 21625	...
40	1	100	30	3/4/5/6/8	102	
50	1	100	30	3/4/5/6/8	105	
40	2	100	35	10/12/14	108	
50	2	100	35	10/12/14	111	
40	3	100	48	16/18/20	114	
50	3	100	48	16/18/20	117	

21627

HG collets

Haimer

Design

- Hardened spring steel, ground and coated

Applications

For HG chuck and h6 shaft tolerances.



21627



Clamping diameter mm	For size	21627	...
3	1	101	
4	1	102	
5	1	103	
6	1	104	

Clamping diameter mm	For size	21627	...
8	1	105	
10	2	106	
12	2	107	
14	2	108	

Clamping diameter mm	For size	21627	...
16	3	109	
18	3	110	
20	3	111	

**Design**

- Precision design
- **Precision-balanced, grade 2.5 at 25,000 rpm**
- Inner cooling, AD version
- Balluff chip bore
- Max. concentricity < 0.005 mm

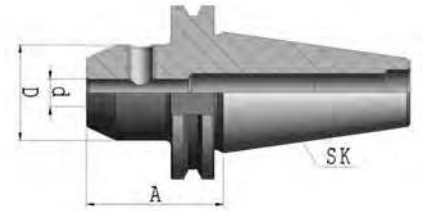
Applications

For clamping tools with side driving surfaces in accordance with DIN 1835 B and DIN 6535 HB.

Note:

For pull studs, see art. no. 21733–21740.

For spare screws, see art. no. 21635.

**Extra short**

Taper SK	For milling shank Ø d mm	A mm	D mm	21632	...
40	16	35	45	124	NEW
40	20	35	45	132	NEW
40	25	35	50	136	NEW

Short

Taper SK	For milling shank Ø d mm	A mm	D mm	21632	...
30	6	50	25	101	
30	8	50	28	102	
30	10	50	35	103	
30	12	50	42	104	
30	16	63	48	106	
30	20	70	52	108	
40	6	50	25	109	
40	8	50	28	112	
40	10	50	35	115	
40	12	50	42	118	
40	14	50	44	121	
40	16	63	48	125	
40	18	63	50	129	
40	20	63	52	133	
40	32	65	50	139	NEW
50	6	63	25	145	
50	8	63	28	148	
50	10	63	35	151	
50	12	63	42	154	
50	14	63	44	157	
50	16	63	48	160	
50	18	63	50	163	
50	20	63	52	166	

Medium length

Taper SK	For milling shank Ø d mm	A mm	D mm	21632	...
40	6	100	25	110	
40	8	100	28	113	
40	10	100	35	116	
40	12	100	42	119	
40	14	100	44	122	
40	16	100	48	126	
40	18	100	50	130	
40	20	100	52	134	
40	25	100	63	137	
40	32	100	72	140	
40	40	120	80	141	
50	6	100	25	146	
50	8	100	28	149	
50	10	100	35	152	
50	12	100	42	155	
50	14	100	44	158	
50	16	100	48	161	
50	18	100	50	164	
50	20	100	52	167	
50	25	80	65	169	
50	32	100	72	171	
50	40	100	80	173	

21632 Extra short**21632 Short****21632 Medium length****21632 Long****Long**

Taper SK	For milling shank Ø d mm	A mm	D mm	21632	...
40	6	160	25	111	
40	8	160	28	114	
40	10	160	35	117	
40	12	160	42	120	
40	14	160	44	123	
40	16	160	48	127	
40	18	160	50	131	
40	20	160	52	135	
40	25	160	63	138	
40	32	160	72	100	NEW
50	6	160	25	147	
50	8	160	28	150	
50	10	160	35	153	
50	12	160	42	156	
50	14	160	44	159	
50	16	160	48	162	
50	18	160	50	165	
50	20	160	52	168	
50	25	160	65	170	
50	32	160	72	172	

Milling cutter holders | Tool holders for indexable inserts for solid drills

21620

Slim milling cutter holders

ISO
7388-1

DIN
69871

AD/AF



G 2.5
25000
1/min



Design

- Extended slim version
- Bore tolerance < 0.004 mm
- Shank hard-turned for smoother running
- With ball joint clamping screw for **Weldon and whistle-notch systems**
- Balluf chip bore as standard

Applications

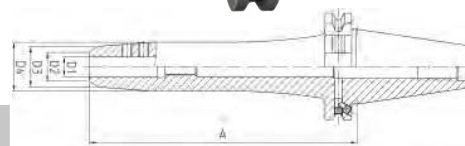
For clamping tools with side driving surfaces in accordance with DIN 1835 B and DIN 6535 HB.

Note:

For pull studs, see art. no. 21733–21740.
For spare screws, see art. no. 21635.



21620



Scope of delivery:

Drilled-through stop screw.

Medium length

Taper SK	For milling shank Ø D1 mm	A mm	D2 mm	D3 mm	D4 mm	21620	...
40	6	100	13	18	29		101
40	8	100	15	20	31		103
40	10	100	16	21	33		105
40	12	100	17	22	35		107
40	16	100	21	26	39		111
40	18	100	23	28	41		113
40	20	100	25	30	43		115

21621

Milling cutter holders with KKB

ISO
7388-1

DIN
69871

AD/AF



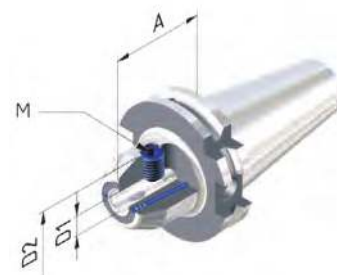
G 2.5
25000
1/min



HPC

Design

- Hard-turned shank
- Balluf chip bore
- With two coolant channel bores (= KKB)
- With clamping screw and 2 x M3 screws to seal the hole if necessary



21621 101-110



Short

Taper SK	D1 mm	A mm	D2 mm	L mm	M	21621	...
40	6	50	25	35	M 6		101
40	8	50	28	35	M 8		102
40	10	50	35	41	M 10		103
40	12	50	42	48	M 12		104
40	14	50	42	48	M 12		105
40	16	63	48	51	M 14		106
40	20	63	52	53	M 16		108
40	25	100	65	60	M 18 x 2		109
40	32	100	72	64	M 20 x 2		110

21621 201-207



Medium length

Taper SK	D1 mm	A mm	D2 mm	L mm	M	21621	...
40	6	100	25	35	M 6		201
40	8	100	28	35	M 8		202
40	10	100	35	41	M 10		203
40	12	100	42	48	M 12		204
40	16	100	48	51	M 14		206
40	20	100	52	53	M 16		207

21637

Milling cutter holders with cooling channel

ISO
7388-1DIN
69871

AD

G 2.5
25000
1/min

Design

- Precision design
- Bore tolerance < 0.004 mm
- **With cooling channel**
- Balluf chip bore

Advantage:

Coolant pressure washes chips away better.

Applications

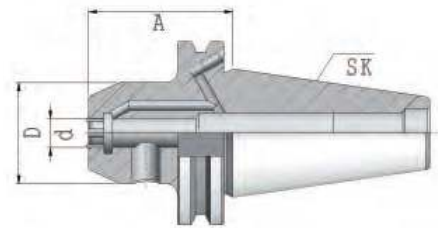
For clamping tools with side driving surfaces in accordance with DIN 1835 B and DIN 6535 HB.

Note:

For pull studs, see art. no. 21733–21740.

For spare screws, see art. no. 21635.

21637



Taper SK	For milling shank Ø d mm	A mm	D mm	Short 21637	...
40	6	50	25		201
40	8	50	28		204
40	10	50	35		207
40	12	50	42		210
40	14	50	44		213
40	16	63	48		216
40	18	63	50		219
40	20	63	52		222
50	6	63	25		301
50	8	63	28		302
50	10	63	35		303
50	12	63	42		304
50	14	63	44		305
50	16	63	48		306
50	18	63	50		307
50	20	63	52		308
50	25	80	65		309

Medium length

Taper SK	For milling shank Ø d mm	A mm	D mm	Medium length 21637	...
40	6	100	25		202
40	8	100	28		205
40	10	100	35		208
40	12	100	42		211
40	14	100	44		214
40	16	100	48		217
40	18	100	50		220
40	20	100	52		223
40	25	100	63		225
40	32	100	72		227
40	40	120	80		229
50	32	100	72		310
50	40	100	80		311

21639

Tool holders for reversible solid drill inserts

ISO
7388-1DIN
69871

AD

G 2.5
25000
1/min

Design

- Precision design
- High degree of concentricity thanks to face-ground contact surface (< 0.003 mm)
- Balluf chip bore

Advantages:

The offset set screw pulls the contact surface of the drill against the enlarged circumference of the unit, which provides better support for the tool and makes higher feed rates possible.

Applications

For all solid drills with straight shanks in line with DIN 6595 Part 1.

Note:

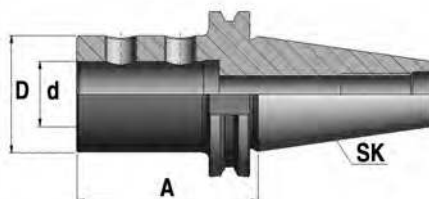
For pull studs, see art. no. 21733–21740.

For spare screws, see art. no. 21635.

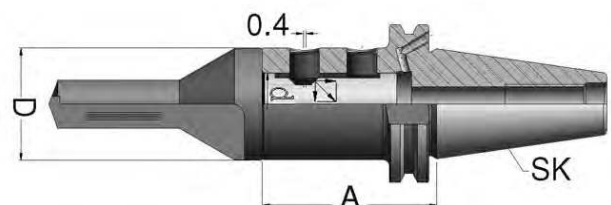
21639 101



21639 103



Taper SK	d mm	A mm	D mm	21639	...
40	20	65	40		101
40	25	70	45		102
40	32	75	52		103
50	20	70	40		104
50	25	70	45		105
50	32	70	52		106



21650

Combination mill arbors

ISO
7388-1

DIN
69871

AD


G 2.5
25000
1/min


Design

- Precision design
- **Precision-balanced, grade 2.5 at 25,000 rpm**
- Balluff chip bore
- Max. concentricity < 0.005 mm
- Face-ground contact surface (< 0.003 mm)
- Long version (160 mm) with KKB

Scope of delivery:

Including key, driver ring and retaining screws.

Applications

With key for cutters with longitudinal grooves such as DIN 841, and driver ring for cutters with lateral groove DIN 1880 and blade heads DIN 1830.

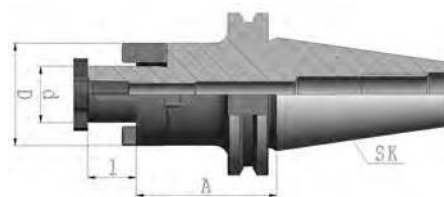
Note:

For pull studs, see art. no. 21733–21740.

For driving rings, see art. no. 21655.

For retaining screws, see art. no. 21656 and 21659.

Retaining screw no. 21657.



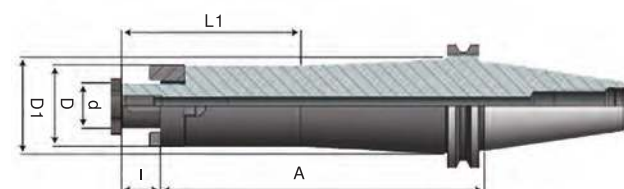
Taper SK	d mm	A mm	D mm	l mm	Short	
					21650	...
30	16	50	32	17		102
30	22	50	40	19		103
30	27	55	48	21		104
40	16	55	32	17		202
40	22	55	40	19		204
40	27	55	48	21		206
40	32	60	58	24		208
40	40	60	70	27		210
50	16	55	32	17		501
50	22	55	40	19		503
50	27	55	48	21		505
50	32	55	58	24		507
50	40	55	70	27		509

21650
Short

21650
Medium length

Taper SK	d mm	A mm	D mm	l mm	Medium length	
					21650	...
40	16	100	32	17		203
40	22	100	40	19		205
40	27	100	48	21		207
40	32	100	58	24		209
50	16	100	32	17		502
50	22	100	40	19		504
50	27	100	48	21		506
50	32	100	58	24		508
50	40	100	70	27		510

Medium length


21650
Long


Taper SK	d mm	A mm	D mm	L mm	D1 mm	L1 mm	Long with KKB	
							21650	...
40	16	160	39.0	17	39.0	88		213
40	22	160	47.0	19	46.5	88		215
40	27	160	48.0	21	-	-		217
40	32	160	58.0	24	-	-		219
50	16	160	39.0	17	39.0	88		512
50	22	160	47.0	19	47.0	88		514
50	27	160	55.5	21	55.0	88		516
50	32	160	65.5	24	65.5	88		518
50	40	160	70.0	27	-	-		520

Long with KKB



**Design**

- Precision version with enlarged and face-ground contact surfaces
- **Precision-balanced, grade 2.5 at 25,000 rpm**
- Inner cooling, AD version
- Short overhang for greater stability
- Balluf chip bore
- Max. concentricity > 0.005 mm
- **With cooling channel bore**

Applications

For face milling cutter heads and cutters with lateral grooves.

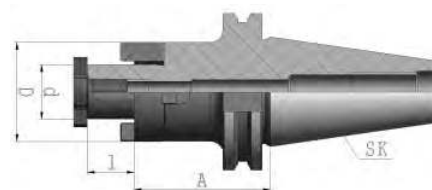
Note:

d = 40 and 60 mm also have 4 threaded holes for direct mounting.

For pull studs, see art. no. 21733–21740.

For retaining screws, see art. no. 21656 and 21659.

Retaining screw no. 21657.

**Short with KKB**

Taper SK	d mm	A mm	D mm	I mm	21671	...
40	16	35	38	17		304
40	22	35	48	19		305
40	27	40	58	21		306
40	32	50	78	24		307
40	40	50	88	27		308
50	16	35	38	17		400 NEW
50	22	35	48	19		402
50	27	40	58	21		403
50	32	50	78	24		404
50	40	50	88	27		405
50	60	70	128	40		406

21671**Short****21671**
Medium length**Medium length with KKB**

Taper SK	d mm	A mm	D mm	I mm	21671	...
40	16	100	38	17		314 NEW
40	22	100	48	19		309
40	27	100	58	21		310
40	32	100	78	24		311
50	16	100	38	17		401 NEW
50	22	100	48	19		407
50	27	100	58	21		408
50	32	100	78	24		409
50	40	100	88	27		410

21671**Long****Long with KKB**

Taper SK	d mm	A mm	D mm	I mm	21671	...
40	16	160	38	17		315 NEW
40	22	160	48	19		316 NEW
40	27	160	58	21		317 NEW
40	32	160	78	24		318 NEW
40	40	160	88	27		319 NEW
50	16	160	38	17		411 NEW
50	22	160	48	19		412 NEW
50	27	160	58	21		413 NEW
50	32	160	78	24		414 NEW
50	40	160	88	27		415 NEW

21675

Blade head supports with KKB

ISO
7388-1

DIN
69871

AD/AF


G 2.5
25000
1/min


HPC

Design

- Ground taper shank, mounting spigot and contact surface
- Hard-turned shank
- Balluf chip bore
- With two coolant channel bores (= KKB)

Scope of delivery:

Cutter retaining screw.



21675

Taper SK	D1 mm	A mm	D2 mm	L1 mm	M	21675	...
40	16	35	38	17	M 8		101
40	22	35	48	19	M 10		102
40	27	35	60	21	M 12		103
40	32	50	78	24	M 16		104



21683

Boring bar blanks

ISO
7388-1

DIN
69871

Design

- Steep taper and collar hardened and ground
- **Material: 16 MnCr5**
- Balluf chip bore

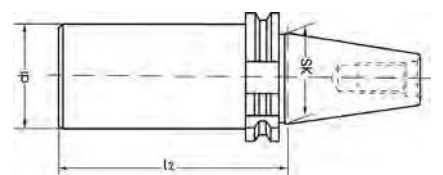
Applications

For producing special tools.

Taper SK	Boring bar Ø d ₁ mm	l ₂ mm	21683	...
40	63.0	250		102
50	97.0	315		201



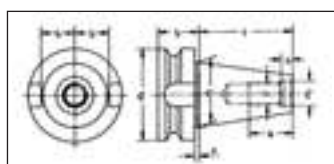
21683



Info

Tool holders according to ISO 7388-2 (MAS-BT)

ISO 7388-2 (formerly MAS-BT) version
Alloyed case hardening steel min. tensile strength 950 N/mm².
Taper angle tolerance more accurate than AT3.
Case-hardened 60-2 HRC.
Functional surfaces ground.



New standard ISO 7388-2

- Shape J:** without through hole
- Shape JD:** with through hole for central coolant supply
- Shape JD/JF:** with through hole and side coolant supply via the tool collar
- Shape JF:** with side coolant supply via the tool collar

Old standard DIN 69871 Part 1

- Shape A:** without through hole
- Shape AD:** with through hole for central coolant supply
- Shape AD/B:** with through hole for central coolant supply and 2 holes on the tool collar for side coolant supply
- Shape B:** with 2 holes on the tool collar for side coolant supply



MAS-BT	d1 mm	g	d5 H7 mm	d2 mm	a mm	l1 mm	l2 mm	l3 mm	l5 mm	l6 mm
30	31.75	M 12	12.5	46	2	48.4	22	16.3	7.0	24
40	44.45	M 16	17.0	63	2	65.4	27	22.6	8.2	32
50	69.85	M 24	25.0	100	3	101.8	38	35.3	11.0	47

21192

CNC short drill chuck

ATORN®

Design

- Short model
- Wear parts hardened and ground

Scope of delivery:

Includes spanner with T-handle for high traction.

Applications

For clockwise/anti-clockwise rotation.

Note:

For pull studs, see art. no. 21737–21739.

ISO
7388-2

MAS-BT/
JIS B 6339

J

G 6.3
12000
1/min


Taper MAS-BT	Clamping range mm	A mm	D mm	21192	...
40	1–16	88	50		101



21192

