



TheToolingCompany

Woodworking Tool-Holder Catalog 2011

T-Tool USA LLC
2850 Glades Circle
Suite 11
Weston, FL 33327

Telephone 954-358-6071
Telefax 954-358-6073
E-Mail sales@t-toolusa.com
Web www.t-toolusa.com

**Engineering, Production and Distribution
All from one source**

DIN 69871 - A

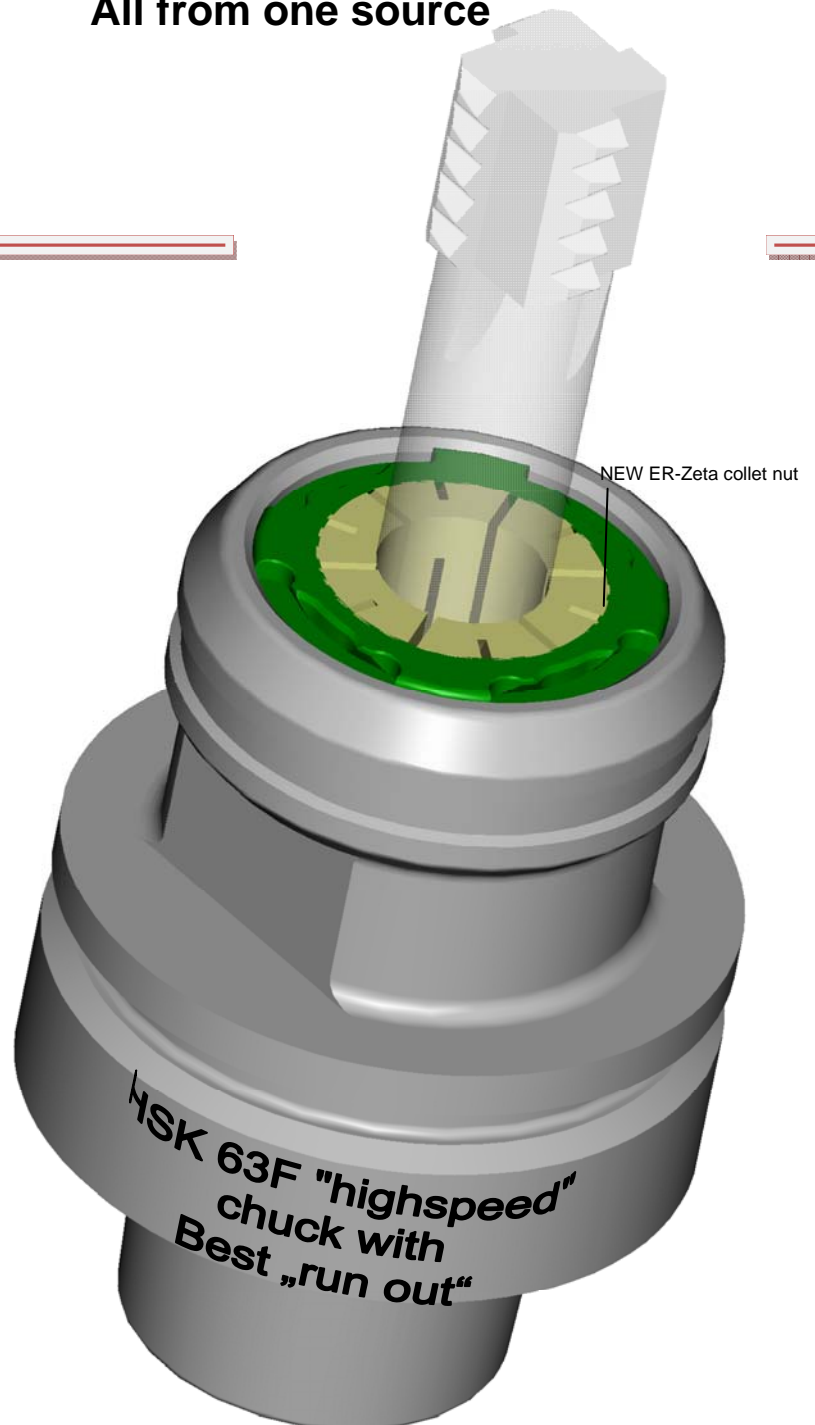
DIN 69893-6 HSK Form F

DIN 69893-5 HSK Form E

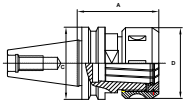
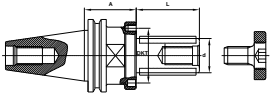
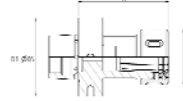
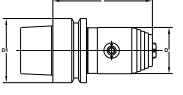

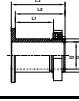


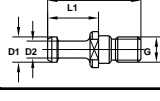


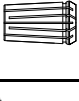
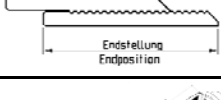
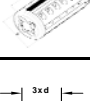
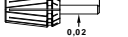
MAS BT

ISO 30

Powerlock-Tools



CONTENTS

ITEM	PAGE	
Collet Chucks	3 - 17	
Milling Arbors	18 - 26	
Arbors / Collet Chucks for Weingig / Gau-Jing- Machines	27 - 32	
Drill Chucks	33 - 35	
Mounting Devices	36 - 37	
Threaded bushings with safety lock nut	38	
Collet Nuts	39 - 48	
Zeta Operating Tools	49	
Pull studs	50 - 52	
Spanner Wrenches	53	
Torque Wrenches and Adapters	54 - 55	
Collets	56	
Knives	57	
Cutterheads	58 - 59	
Data sheets	60 - 61	

Collet Chucks SK-30 & SK-40

taper size DIN 69871

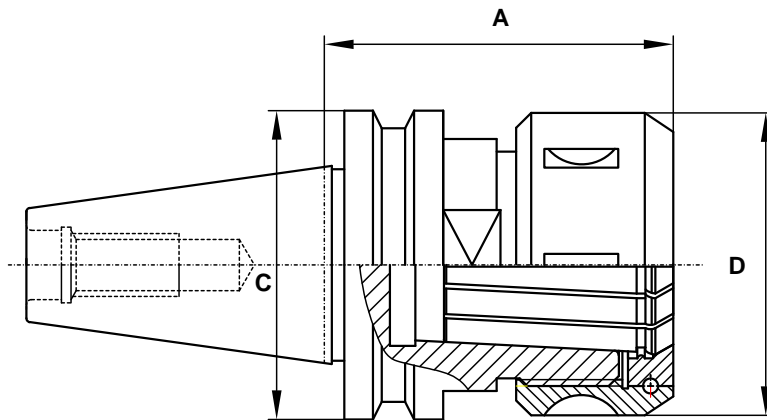
without groove and chamfer

for collets after DIN 6388 (RDO 35) A, B, E and DIN 6499

--Hardened and ground for double slotted collets

- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut and according pull stud



taper size	nominal size	clamping range	A	C	D	part number
SK 30	**ER 32	3 - 20	50	50	50	SPZ.30DIN05032ERR
	**ER 32	3 - 20	57	50	50	SPZ.30DIN05732ERR
	ER 32	3 - 20	63	50	50	SPZ.30DIN06332ERR
	**ER 40	3 - 26	64	50	64	SPZ.30DIN06440ERR
	* OZ 25 (RDO 35)	2 - 25	70	50	60	SPZ.30DIN07025OZR
Anderson	OZ 25 (RDO 35)	2 - 25	64	50	60	SPZ.30AND06425OZR

*Attention: Anderson machines are using A - dimension 64 mm

SK 40	ER 32	3 - 20	60	63,55	50	SPZ.40DIN06032ERR
	ER 40	3 - 26	70	63,55	63	SPZ.40DIN07040ERR
	OZ 25 (RDO 35)	2 - 25	70	60,55	60	SPZ.40DIN07025OZR

** Useable for Biesse toolblocks

Collet Chucks SK-30 HSD Spindles

taper size DIN 69871

without groove and chamfer

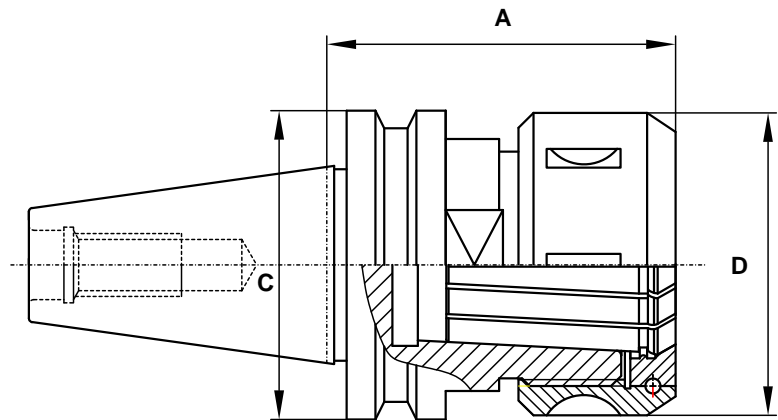
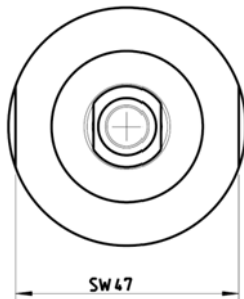
for collets after DIN 6499

--Hardened and ground for double slotted collets

- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut and according pull stud

Note: Collet nut depicted is an OZ type,



taper size	D	A	C	part number
SK 30	50	50	50	SPZ.30DIN05032ERR
	50	57	50	SPZ.30DIN05732ERR
	50	63	50	SPZ.30DIN06332ERR
	63	64	50	SPZ.30DIN06440ERR
Thermwood (not pictured)	50	57.5	57	SPZ.30BTBR05532ERR
	50	65	57	SPZ.30BTBR06535RDO

** Useable for Biesse toolblocks

Collet Chuck SK-30 / SK-40

taper Type ELTE

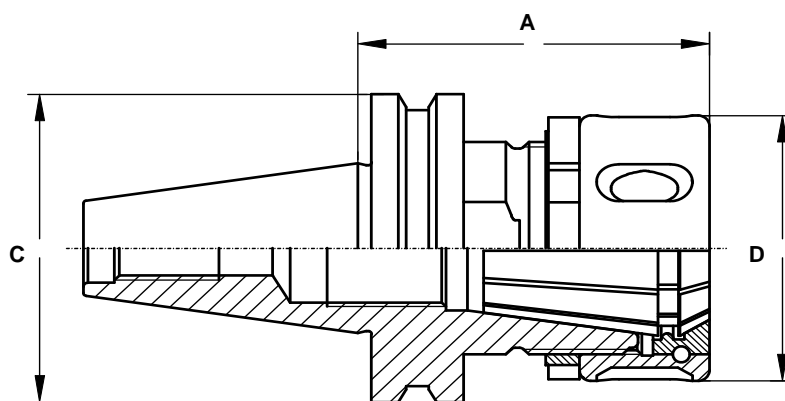
for collets after DIN 6499

--Hardened and ground for double slotted collets

• Balanced G2.5

• Applicable for left and right hand rotation.

Delivery condition: without collet, includes ballbearing nut and reverse nut



taper size	size	clamping range	A	C	D	part number
SK 30	ER 32	3 - 20	60	58	50	SPZ.30ELTE06032ERR
	ER 40	3 - 26	65	58	63	SPZ.30ELTE06540ERR
SK 40	ER 40	3 - 26	75	58	63	SPZ.40ELTE07540ERR

Collet Chuck ISO-20 - External / Internal Collet Nut

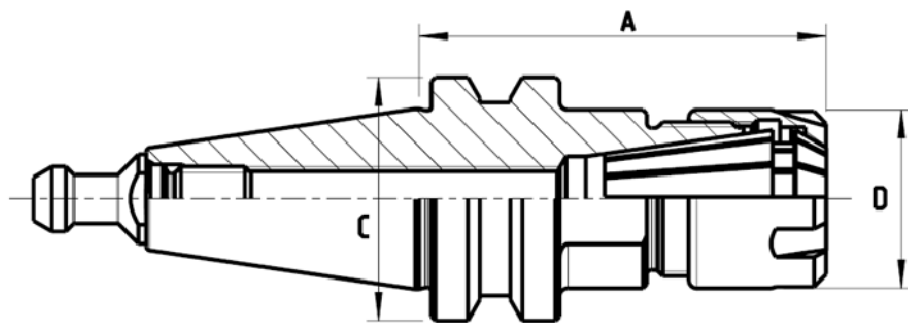
taper size ISO 20

without groove and chamfer

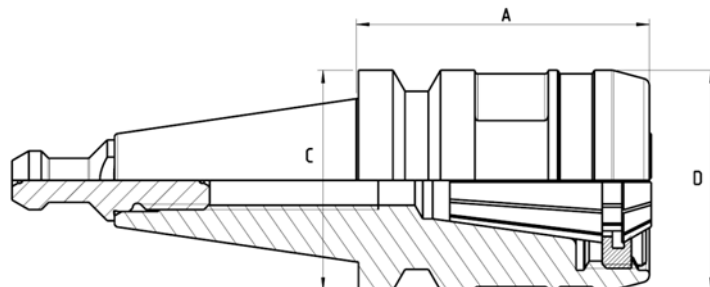
for collets after DIN 6499

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut and according pull stud



taper size	D	A	C	part number
ISO 20	22	51	30	SPZ.20ISO05116ERM
	28	51	30	SPZ.20ISO05120ERM



taper size	D	A	C	part number
ISO 20	30	25	30	SPZ.20ISO02516ERRI
	30	40	30	SPZ.20ISO04016ERRI

Collet Chuck ISO-25 & ISO-30

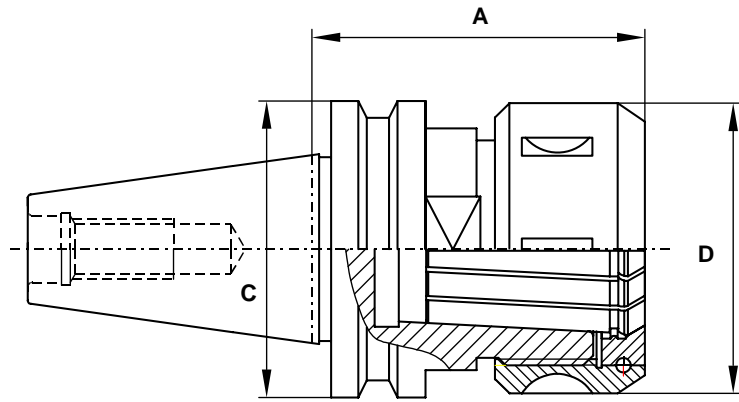
taper size ISO 30

without groove and chamfer

for collets after DIN 6499

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut and according pull stud



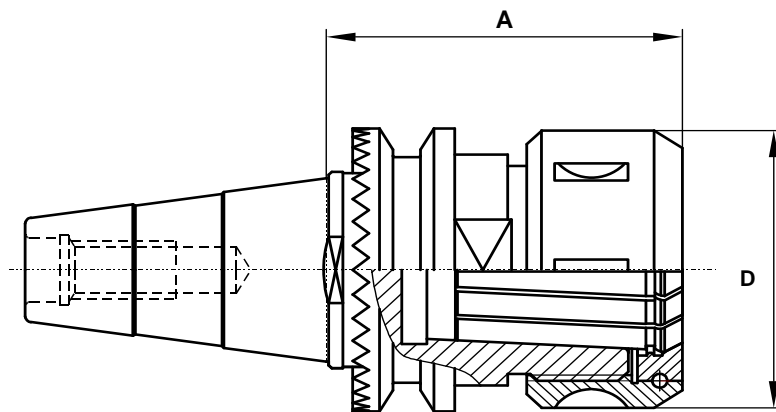
taper size	nominal size	clamping range	A	C	D	part number
ISO 25	ER 25	3 - 16	65	46	42	SPZ.25ISO06525ERR
ISO 30	ER 32	3 - 20	50	46	50	SPZ.30ISO05032ERR
	ER 32	3 - 20	58	46	50	SPZ.30ISO05832ERR
	ER 40	3 - 26	57	46	63	SPZ.30ISO05740ERR
	ER 40	3 - 26	64	46	63	SPZ.30ISO06440ERR

Attention: CMS - taper are included with ETS - nuts
additional collets ET-SE you will find on page 56

Collet Chuck ISO-30 Toothed—SCM/Morbidelli
 taper size ISO 30 with toothed wheel work
 for collets after DIN 6388 (RDO 35) A,B,E and DIN 6499

- ..Hardened and ground for double slotted collets
- Balanced G2.5

Delivery condition: without collet, includes collet nut and according pull stud



taper size	nominal size	clamping range	A	D	part number
ISO 30	ER 32	3 - 20	55	50	SPZ.30ISOV05532ERR
	ER 40	3 - 26	70	63	SPZ.30ISOV07040ERR
	OZ 25 (RDO 35)	2 - 25	72	60	SPZ.30ISOV07225OZR

Collet Chuck BT Types

taper size MAS BT

with groove and chamfer

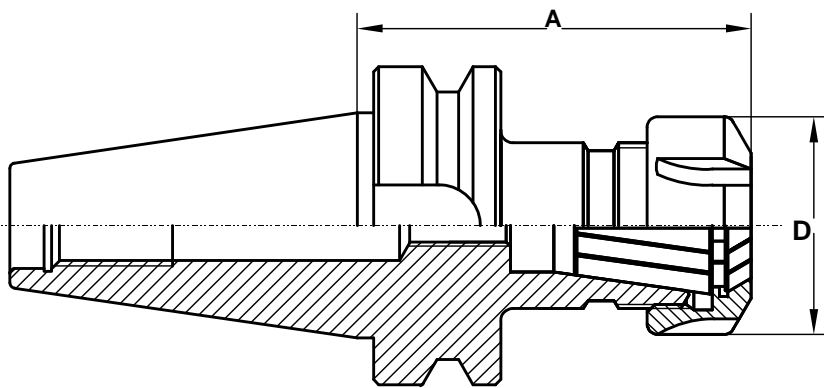
for collets after DIN 6499

--Hardened and ground for double slotted collets

• Balanced G2.5

• Left-Hand rotation available

Delivery condition: without collet, includes collet nut and according pull stud



taper size	nominal size	clamping range	A	D	part number
BT 20 (SHODA Type)	ER 20	2 - 13	45	35	SPZ.20BT04520ERR
	ER 25	3 - 16	45	42	SPZ.20BT04525ERR
BT 30	ER 25	3 - 16	60	42	SPZ.30BT06025ERR
	ER 32	3 - 20	60	50	SPZ.30BT06032ERR
	ER 40	3 - 26	70	63	SPZ.30BT07040ERR
BT 35	ER 25	3 - 16	65	42	SPZ.35BT06525ERR
	ER 32	3 - 20	65	50	SPZ.35BT06532ERR
	ER 40	3 - 26	70	63	SPZ.35BT07040ERR
	OZ 25	3 - 26	75	60	SPZ.35BT07525OZR
BT 40	ER 25	3 - 16	65	42	SPZ.40BT06525ERR
	ER 32	3 - 20	65	50	SPZ.40BT06532ERR
	ER 40	3 - 26	70	63	SPZ.40BT07040ERR

Collet Chuck BT Type Internal Collet Nut—Short Chuck

taper size MAS BT

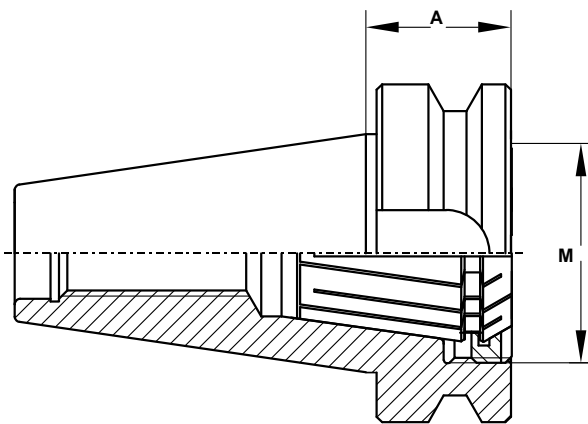
with inside clamping nut

for collets after DIN 6499

--Hardened and ground for double slotted collets

• Balanced G2.5

Delivery condition: without collet, includes collet nut and according pull stud



taper size	nominal size	clamping range	A	M	part number
BT 30	ER 16	1 - 10	22	M24x1	SPZ.30BT02216ERI
	ER 25	1 - 16	22	M32x1,5	SPZ.30BT02225ERI
BT 35	ER 16	1 - 10	27	M24x1	SPZ.35BT02716ERI
	ER 25	1 - 16	27	M32x1,5	SPZ.35BT02725ERI
	ER 32	3 - 20	27	M40x1,5	SPZ.35BT02732ERI
BT 40	ER 16	1 - 10	27	M24x1	SPZ.40BT02716ERI
	ER 25	1 - 16	27	M32x1,5	SPZ.40BT02725ERI
	ER 32	3 - 20	27	M40x1,5	SPZ.40BT02732ERI

Collet Chuck BT Type

taper size MAS BT

without groove and chamfer (dogs)

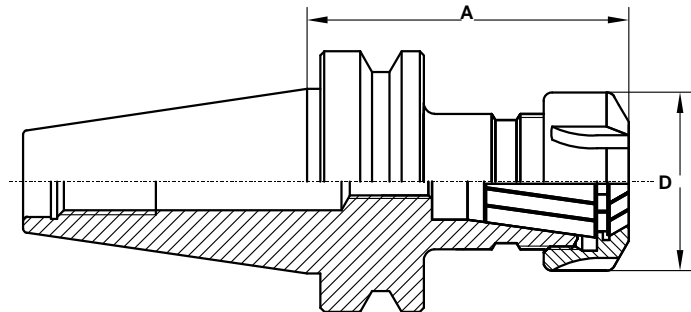
for collets after DIN 6499

--Hardened and ground for double slotted collets

• Balanced G2.5

• Left-Hand rotation available

Delivery condition: without collet, includes collet nut and according pull stud



taper size	nominal size	clamping range	A	D	part number
BT 30	ER 25	3 - 16	60	42	SPZ.30BTW06025ERR
	ER 32	3 - 20	60	50	SPZ.30BTW06032ERR
	ER 40	3 - 26	70	63	SPZ.30BTW07040ERR
BT 35	ER 25	3 - 16	65	42	SPZ.35BTW06525ERR
	ER 32	3 - 20	65	50	SPZ.35BTW06532ERR
	ER 40	3 - 26	70	63	SPZ.35BTW07040ERR
BT 40	ER 25	3 - 16	65	42	SPZ.40BTW06525ERR
	ER 32	3 - 20	65	50	SPZ.40BTW06532ERR
	ER 40	3 - 26	70	63	SPZ.40BTW07040ERR

Collet Chuck HSK-E Internal Collet Nut

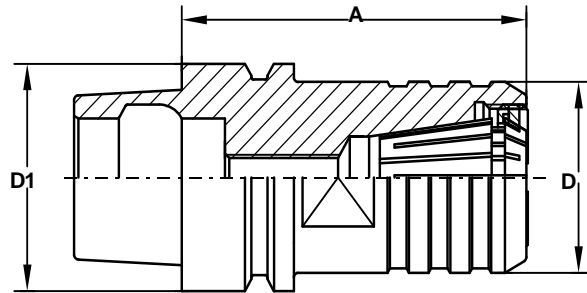
taper size V DIN 69893-5 Form E

with inside clamping nut

for collets after DIN 6499

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut



taper size	nominal size	clamping range	A	D	part number
HSK 25E	ER 16	1 - 10	40	29	SPZ.HSK25E04016ERI
HSK 32E	ER 16	1 - 10	60	32	SPZ.HSK32E06016ERI
	ER 20	1 - 13	60	35	SPZ.HSK32E06020ERI
HSK 40E	ER 20	1 - 13	65	35	SPZ.HSK40E06520ERI
	ER 25	1 - 16	80	42	SPZ.HSK40E08025ERI
HSK 50E	ER 16	1 - 10	100	32	SPZ.HSK50E10016ERI
	ER 20	1 - 13	70	35	SPZ.HSK50E07020ERI
	ER 25	1 - 16	80	42	SPZ.HSK50E08025ERI
	ER 32	2 - 20	100	50	SPZ.HSK50E10032ERI
HSK 63E	ER 32	2 - 20	65	50	SPZ.HSK63E06532ERI
	ER 40	2 - 26	70	63	SPZ.HSK63E07040ERI

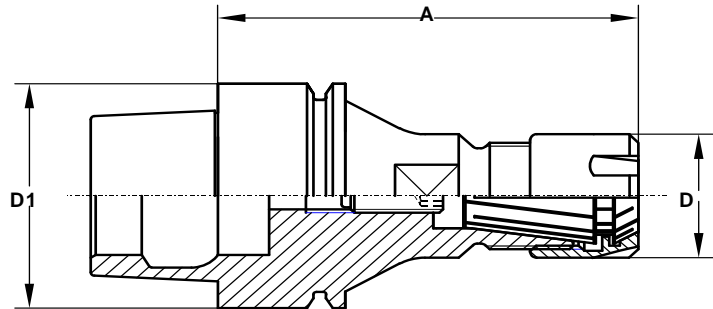
For collet nuts and spanners go to page 46

Collet Chuck HSK-E

taper size V DIN 69893-5 Form E
for collets after DIN 6499

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut



taper size	nominal size	clamping range	A	D	part number
HSK 25E	ER 16*	1 - 10	40	22	SPZ.HSK25E04016ERR
HSK 32E	ER25	1 - 16	60	42	SPZ.HSK32E06025ERR
HSK 40E	ER 11*	1 - 6	45	16	SPZ.HSK40E04511ERR
	ER 11*	1 - 6	70	16	SPZ.HSK40E07011ERR
	ER 16*	1 - 10	50	22	SPZ.HSK40E05016ERR
	ER 16*	1 - 10	80	22	SPZ.HSK40E08016ERR
	ER 20*	1 - 13	65	28	SPZ.HSK40E06520ERR
	ER 25*	1 - 16	80	35	SPZ.HSK40E08025ERR
HSK 50E	ER 11*	1 - 6	50	16	SPZ.HSK50E05011ERR
	ER 11*	1 - 6	90	16	SPZ.HSK50E09011ERR
	ER 16*	1 - 10	50	22	SPZ.HSK50E05016ERR
	ER 16*	1 - 10	90	22	SPZ.HSK50E09016ERR
	ER 20*	2 - 13	60	28	SPZ.HSK50E06020ERR
	ER 25	1 - 16	80	42	SPZ.HSK50E08025ERR
HSK 63E	ER 32	2 - 20	65	50	SPZ.HSK63E06532ERR
	ER 40	2 - 26	75	63	SPZ.HSK63E07540ERR

Collet Chuck HSK-F Internal Collet Nut - Includes Extended Lengths

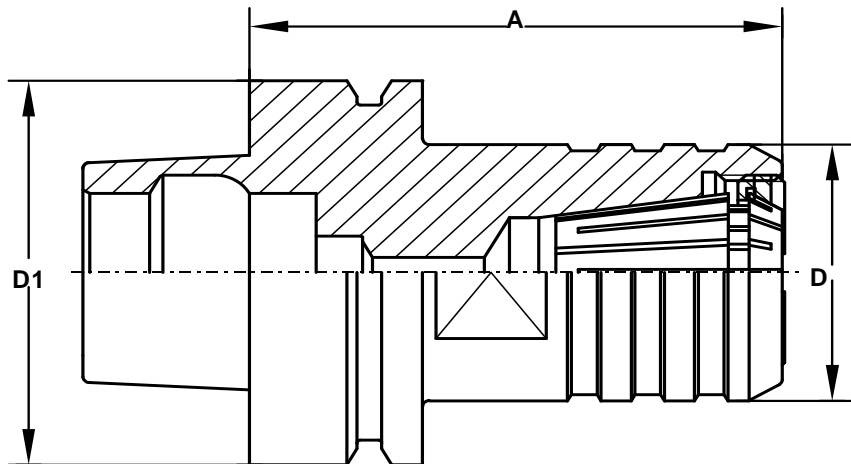
taper size V DIN 69893-6 Form F

with inside clamping nut

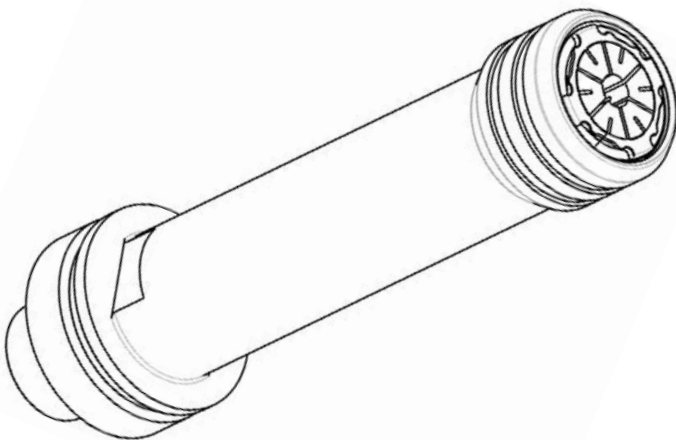
for collets after DIN 6499 and DIN 6388 (RDO 35)

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut
For collet nuts and spanners go to page 46



taper size	nominal size	clamping range	A	D	part number
HSK 63F	ER 32	2 - 20	60	50	SPZ.HSK63F06032ERI
	OZ 25 (RDO 35)	2 - 25,4	76	53	SPZ.HSK63F07525OZI
Anderson Type Extended	OZ 25 (RDO 35)	2 - 25,4	80	53	SPZ.HSK63F08025OZI
	OZ 25 (RDO 35)	2 - 25,4	115	53	SPZ.HSK63F11525OZI
	OZ 25 (RDO 35)	2 - 25,4	150	53	SPZ.HSK63F15025OZI
	OZ 25 (RDO 35)	2 - 25,4	200	53	SPZ.HSK63F20025OZI
	OZ 25 (RDO 35)	2 - 25,4	225	53	SPZ.HSK63F22525OZI



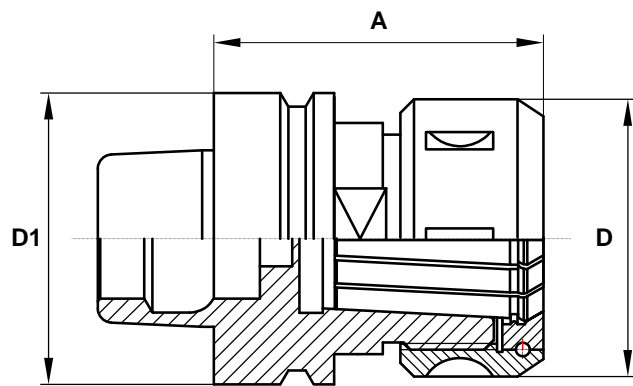
Collet Chuck HSK-F

taper size V DIN 69893-6 Form F

for collets after DIN 6388 (RDO 35) A, B, E and DIN 6499

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut



taper size	nominal size	clamping range	A	D	part number
HSK 50F	ER 32	2 - 20	65	50	SPZH50F06532ERR*
	ER 40	2 - 26	76	63	SPZ.HSK50F07640ERR
	OZ 25 (RDO 35)	2 - 25	76	60	SPZ.HSK50F07625OZR
HSK 63F	ER 32	2 - 20	70	50	SPZ.HSK63F07032ERR
	ER 32	2 - 20	100	50	SPZ.HSK63F10032ERR
	ER 40	2 - 26	76	63	SPZ.HSK63F07640ERR
	ER40	2 - 26	90	63	SPZ.HSK63F08040ERR
	Compact	OZ 25 (RDO 35)	2 - 25	76	60
Anderson Type	OZ 25 (RDO 35)	2 - 25	76	50	SPZ.HSK63F07625OZC
	OZ 25 (RDO 35)	2 - 25	80	60	SPZ.HSK63F08025OZR
	OZ 25 (RDO 35)	2 - 25	115	60	SPZ.HSK63F11525OZR

* HSK50F ER32 for Biesse Skipper

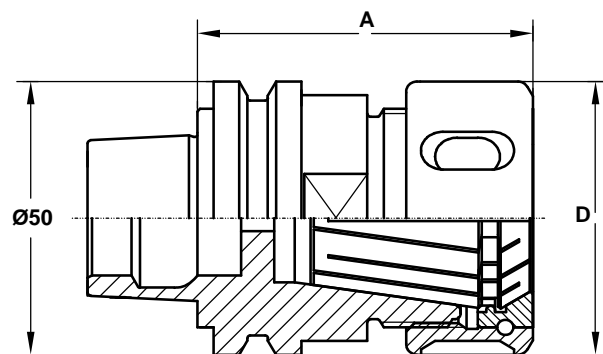
Collet Chuck HSK-40E

taper size HSK-E 40, Type Alberti - Polar

for collets after DIN 6388 (RDO 35) A, B, E and DIN 6499

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut

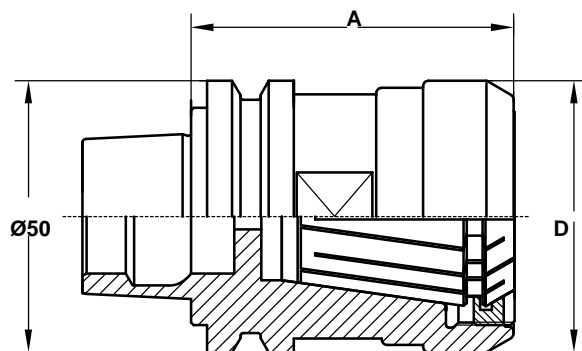


taper size	nominal size	clamping range	A	D	part number
HSK-40E	ER 32	2 - 20	60	50	SPZ.HSK40ALB06032ERR
	ER 40	2 - 26	65	63	SPZ.HSK40ALB06540ERR
	OZ 25 (RDO 35)	2 - 25	70	60	SPZ.HSK40ALB07025OZR

Collet Chuck HSK-40E Internal Collet Nut
 taper size HSK-E 40, Type Alberti - Polar
 with inside clamping nut
 for collets after DIN 6499 and DIN 6388 (RDO 35)

- Hardened and ground for double slotted collets
- Balanced G2.5
- Left-Hand rotation available

Delivery condition: without collet, includes collet nut



taper size	nominal size	clamping range	A	D	part number
HSK-40E	ER 32	2 - 20	60	50	SPZ.HSK40ALB06032ERI
	OZ 25 (RDO 35)	2 - 25	70	63	SPZ.HSK40ALB07025OZI

For collet nut and spanners go to page 46

Milling Arbors SK-30 & SK-40

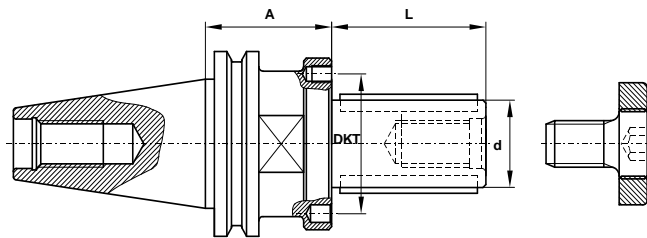
Taper size DIN 69871

without groove and chamfer

for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws and according pull stud

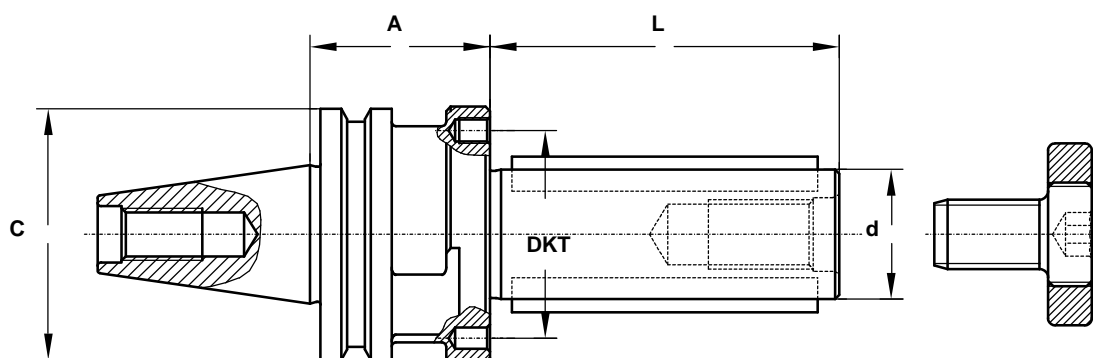


taper size	d	A	L	DKT	DKN	part number
SK 30	20	42	40	32	6x1,5	FD.30DIN04204020
	20	42	55	32	6x1,5	FD.30DIN04205520
	20	42	70	32	6x1,5	FD.30DIN04207020
	20	63	40	32	6x1,5	FD.30DIN06304020
	20	63	55	32	6x1,5	FD.30DIN06305520
	20	63	70	32	6x1,5	FD.30DIN06307020
	30	42	25	48	8x2	FD.30DIN04202530
	30	42	40	48	8x2	FD.30DIN04204030
	30	42	55	48	8x2	FD.30DIN04205530
	30	42	80	48	8x2	FD.30DIN04208030
	30	63	25	48	8x2	FD.30DIN06302530
	30	63	40	48	8x2	FD.30DIN06304030
	30	63	55	48	8x2	FD.30DIN06305530
	30	63	80	48	8x2	FD.30DIN06308030
	SK 40	20	42	40	32	6x1,5
20		42	55	32	6x1,5	FD.40DIN04205520
20		42	70	32	6x1,5	FD.40DIN04207020
20		63	40	32	6x1,5	FD.40DIN06304020
20		63	55	32	6x1,5	FD.40DIN06305520
20		63	70	32	6x1,5	FD.40DIN06307020
30		42	25	48	8x2	FD.40DIN04202530
30		42	40	48	8x2	FD.40DIN04204030
30		42	55	48	8x2	FD.40DIN04205530
30		42	80	48	8x2	FD.40DIN04208030
30		63	25	48	8x2	FD.40DIN06302530
30		63	40	48	8x2	FD.40DIN06304030
30		63	55	48	8x2	FD.40DIN06305530
30		63	80	48	8x2	FD.40DIN06308030

Milling Arbors ELTE
taper size, Type ELTE
for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws and according pull stud



taper size	d	A	C	L	DKT	DKN	part number
SK 30	20	42	58	40	32	6x1,5	FD.30ELTE04204020
	20	42	58	55	32	6x1,5	FD.30ELTE04205520
	20	42	58	70	32	6x1,5	FD.30ELTE04207020
	30	42	58	25	48	8x2	FD.30ELTE04202530
	30	42	58	40	48	8x2	FD.30ELTE04204030
	30	42	58	55	48	8x2	FD.30ELTE04205530
	30	42	58	80	48	8x2	FD.30ELTE04208030
SK 40	20	42	58	40	32	6x1,5	FD.40ELTE04204020
	20	42	58	55	32	6x1,5	FD.40ELTE04205520
	20	42	58	70	32	6x1,5	FD.40ELTE04207020
	30	42	58	25	48	8x2	FD.40ELTE04202530
	30	42	58	40	48	8x2	FD.40ELTE04204030
	30	42	58	55	48	8x2	FD.40ELTE04205530
	30	42	58	80	48	8x2	FD.40ELTE04208030

Milling Arbors ISO-30

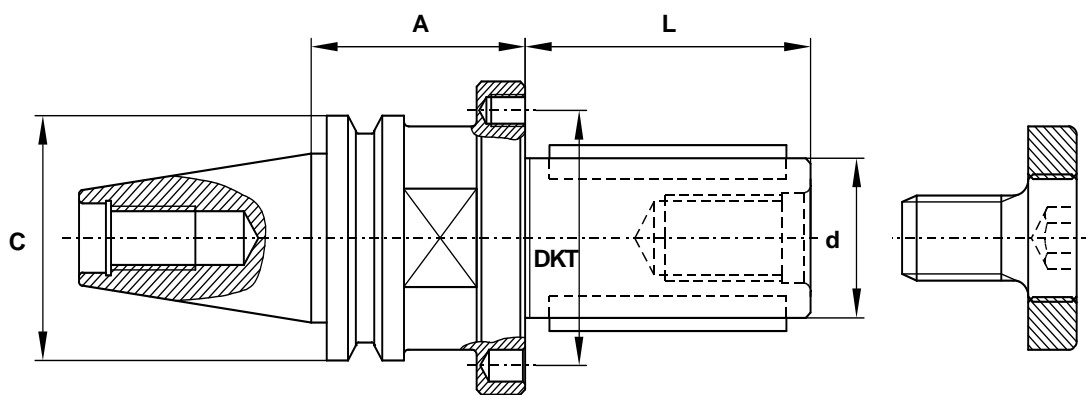
taper size ISO

without groove and chamfer

for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws and according pull stud



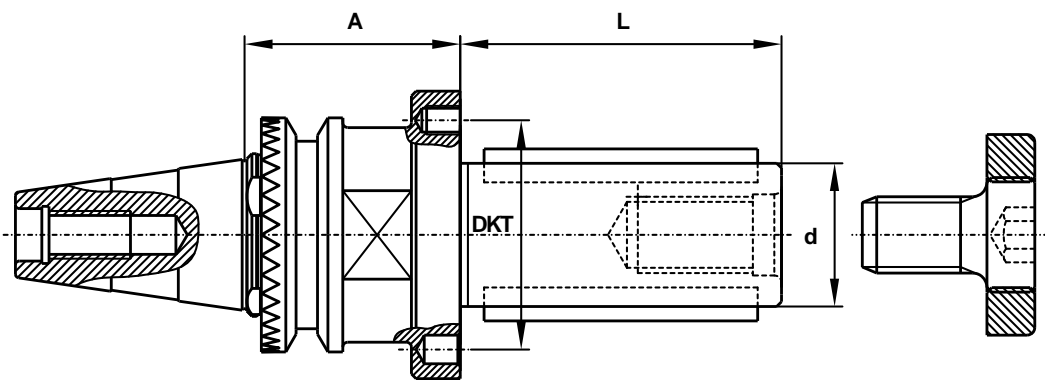
taper size	d	A	C	L	DKT	DKN	part number
ISO 30	20	42	46	40	32	6x1,5	FD.30ISO04204020
	20	42	46	55	32	6x1,5	FD.30ISO04205520
	20	42	46	70	32	6x1,5	FD.30ISO04207020
	30	42	46	25	48	8x2	FD.30ISO04202530
	30	42	46	40	48	8x2	FD.30ISO04204030
	30	42	46	55	48	8x2	FD.30ISO04205530
	30	42	46	80	48	8x2	FD.30ISO04208030

Milling Arbors ISO-30 Toothed

taper size ISO 30 with toothed wheel work
for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws and according pull stud



taper size	d	A	L	DKT	DKN	part number
ISO 30	20	45	40	32	6x1,5	FD.30ISOV04504020
	20	45	55	32	6x1,5	FD.30ISOV04505520
	20	45	70	32	6x1,5	FD.30ISOV04507020
	30	45	40	48	8x2	FD.30ISOV04504030
	30	45	55	48	8x2	FD.30ISOV04505530
	30	45	80	48	8x2	FD.30ISOV04508030

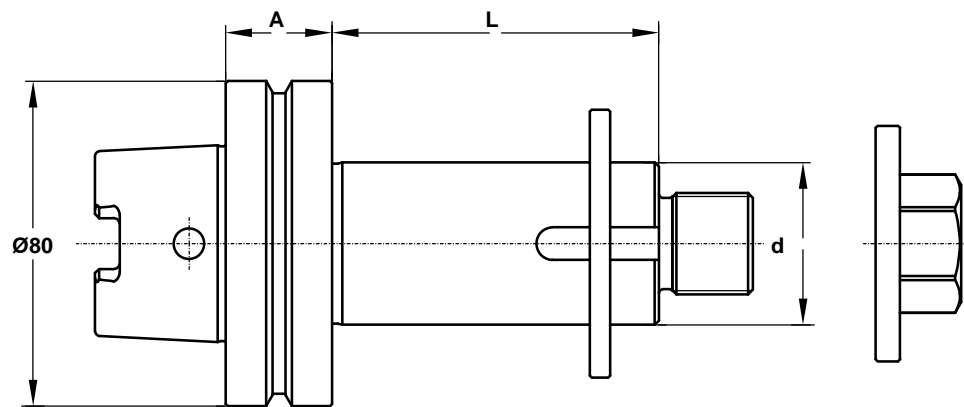
Milling Arbors HSK-63A Celaschi

taper size for Celaschi machine

for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: locking kit included

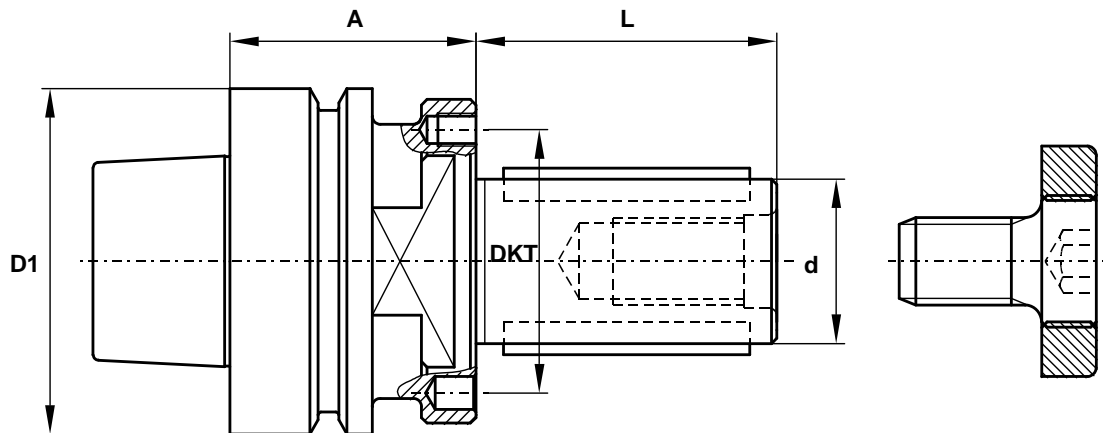


taper size	d	A	L	part number
HSK 63A	30	26	40	FD.HSK63ACE02604030
	30	26	55	FD.HSK63ACE02605530
	30	26	80	FD.HSK63ACE02608030
	40	26	40	FD.HSK63ACE02604040
	40	26	55	FD.HSK63ACE02605540
	40	26	80	FD.HSK63ACE02608040

Milling Arbors HSK-63F Metric
 taper size V DIN 69893-6 Form F
 for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws



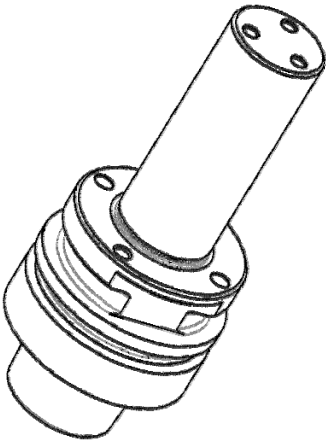
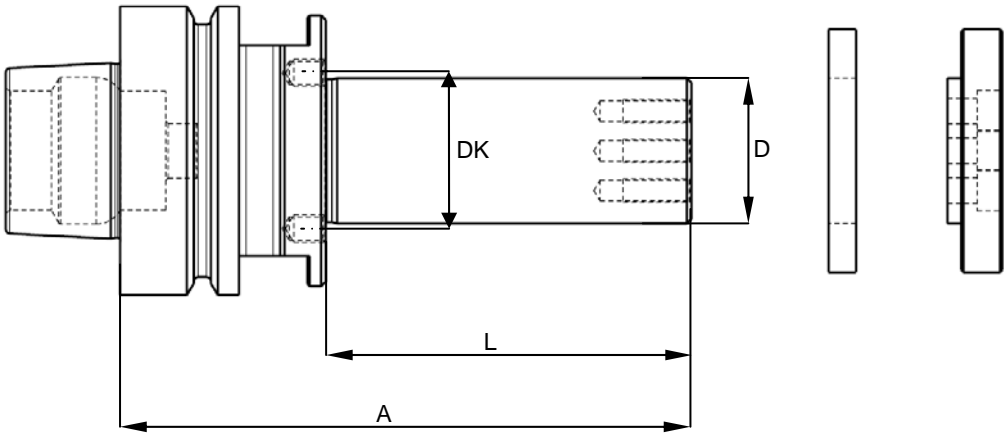
taper size	d	A	L	DKT	DKN	part number
HSK 63F	20	80	40	32	6x1,5	FD.HSK63F08004020
	20	80	55	32	6x1,5	FD.HSK63F08005520
	20	80	70	32	6x1,5	FD.HSK63F08007020
	20	45	70	32	6x1,5	FD.HSK63F04507020
	30	80	25	48	8x2	FD.HSK63F08002530
	30	80	40	48	8x2	FD.HSK63F08004030
	30	80	80	48	8x2	FD.HSK63F08008030
	30	45	80	48	8x2	FD.HSK63F04508030
	30	45	55	48	8x2	FD.HSK63F04505530

Milling Arbors HSK-63F 1.25"

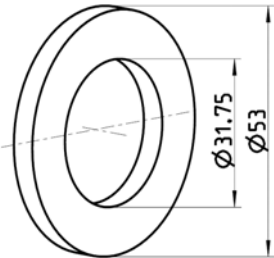
taper size HSK- 63F INCH
for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with 3 bolt endcap and spacer



taper size	d	A	L	DK	part number
HSK 63F	1 1/4	45	55	48	FD.HSK63F0450553175
	1 1/4	45	80	48	FD.HSK63F0450803175
	1 1/4	45	100	48	FD.HSK63F0451003175
	1 1/4	45	112	48	FD.HSK63F0451123175



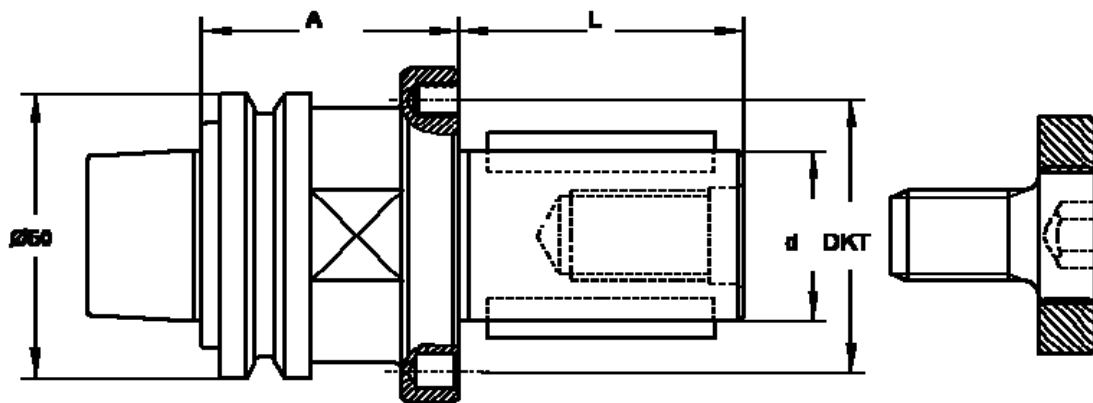
item	d	part number
spacer	1 1/4x6	SPC.53063175

Milling Arbors HSK-40E

taper size HSK-E 40, Type Alberti - Polar
for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws



taper size	d	A	L	DKT	DKN	part number
HSK-40E	20	45	50	32	6x1,5	FD.HSK40ALB04505020
	20	45	70	32	6x1,5	FD.HSK40ALB04507020
	30	45	50	48	8x2	FD.HSK40ALB04505030
	30	45	80	48	8x2	FD.HSK40ALB04508030

Milling Arbors BT Type Metric

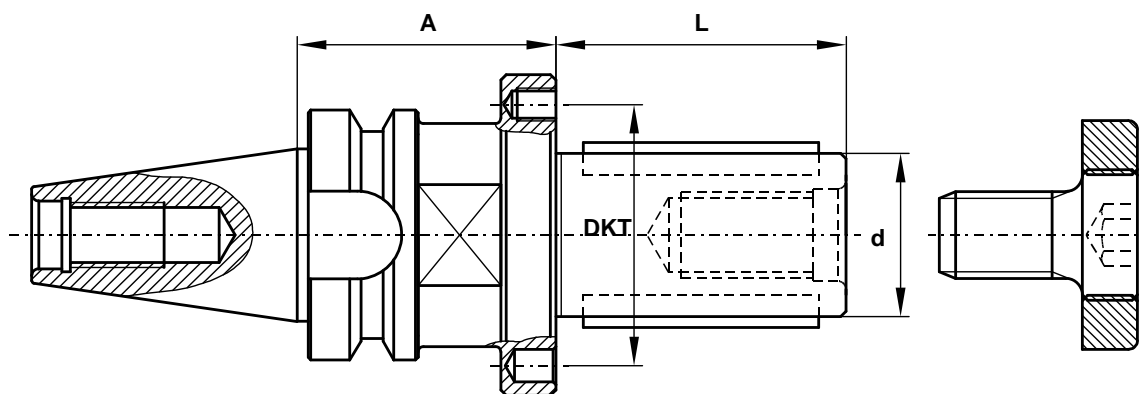
taper size MAS BT

with groove and chamfer

for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: with cruciform screws and according pull stud

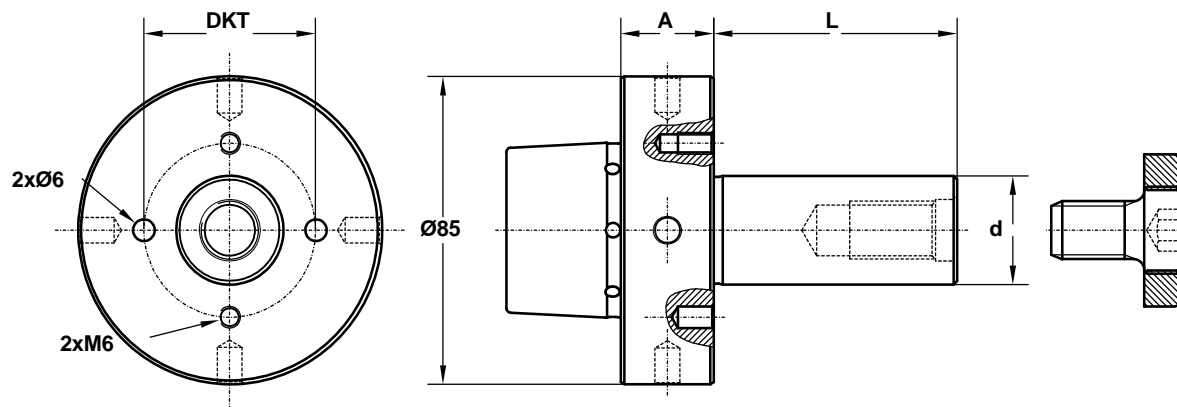


taper size	d	A	L	DKT	DKN	part number
BT 30	20	42	55	32	6x1,5	FD.30BT04205520
	30	42	55	48	8x2	FD.30BT04205530
	30	42	80	48	8x2	FD.30BT04208030
BT 35	20	42	55	32	6x1,5	FD.35BT04205520
	30	42	55	48	8x2	FD.35BT04205530
	30	42	80	48	8x2	FD.35BT04208030
BT 40	20	42	55	32	6x1,5	FD.40BT04205520
	30	42	55	48	8x2	FD.40BT04205530
	30	42	80	48	8x2	FD.40BT04208030

Milling Arbors HSK-63 Weing
 taper size for Weing machine
 for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: cruciform screws included



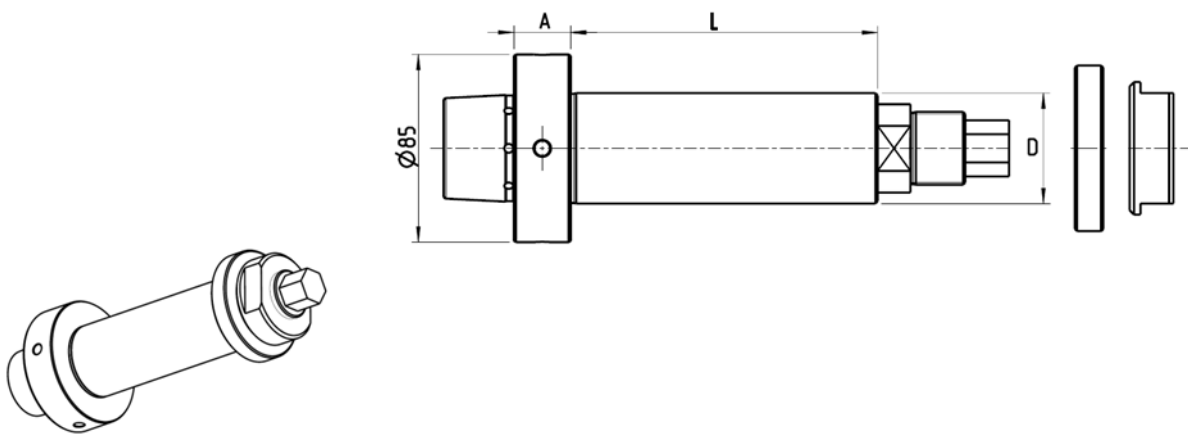
taper size	d	A	L	DKT	part number
HSK 63 WE	20	26	70	32	FD.HSK63WE02607020
	30	26	40	48	FD.HSK63WE02604030
	30	26	50	48	FD.HSK63WE02605030
	30	26	80	48	FD.HSK63WE02608030
	30	26	100	48	FD.HSK63WE02610030
	30	26	120	48	FD.HSK63WE02612030
	30	26	130	48	FD.HSK63WE02613030
	30	26	140	48	FD.HSK63WE02614030
	30	26	180	48	FD.HSK63WE02618030
	40	26	50	58	FD.HSK63WE02605040
	40	26	80	58	FD.HSK63WE02608040
	40	26	100	58	FD.HSK63WE02610040
	40	26	120	58	FD.HSK63WE02612040
	40	26	130	58	FD.HSK63WE02613040
	40	26	140	58	FD.HSK63WE02614040
	40	26	180	58	FD.HSK63WE02618040
	40	26	240	58	FD.HSK63WE02624040

Milling Arbors HSK-63 Weing

taper size for Weing machine
for boring tools and
Weing combi-spanner

- hardened and ground
- balanced

Delivery condition: locking kit included

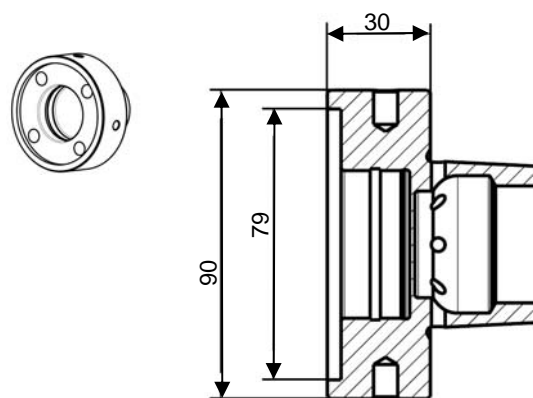
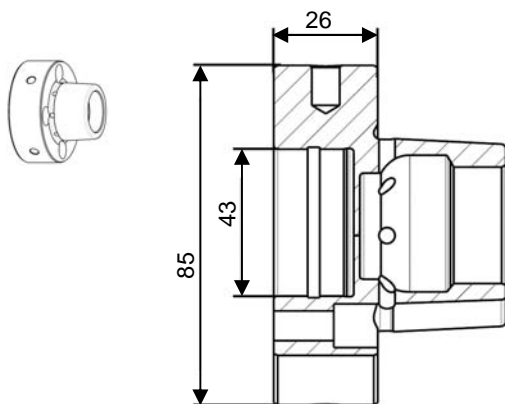


taper size	d	A	L	part number
HSK 63 WE	40	26	50	FD.HSK63WE02605040
	40	26	80	FD.HSK63WE02608040
	40	26	100	FD.HSK63WE02610040
	40	26	120	FD.HSK63WE02612040
	40	26	130	FD.HSK63WE02613040
	40	26	140	FD.HSK63WE02614040
	40	26	170	FD.HSK63WE02617040
	40	26	180	FD.HSK63WE02618040
	40	26	210	FD.HSK63WE02621040
	40	26	240	FD.HSK63WE02624040
	50	26	50	FD.HSK63WE02605050
	50	26	80	FD.HSK63WE02608050
	50	26	100	FD.HSK63WE02610050
	50	26	120	FD.HSK63WE02612050
	50	26	140	FD.HSK63WE02614050
	50	26	180	FD.HSK63WE02618050
	50	26	210	FD.HSK63WE02621050
	50	26	240	FD.HSK63WE02624050

**A universal unit modular system
For Weinig Powermat and Unimat**

- hardened and ground
- balanced

Delivery condition: includes clamping screws



taper size	part number
HSK 63 WE	MOD.63WE02685
	MOD.63WE02685CO*

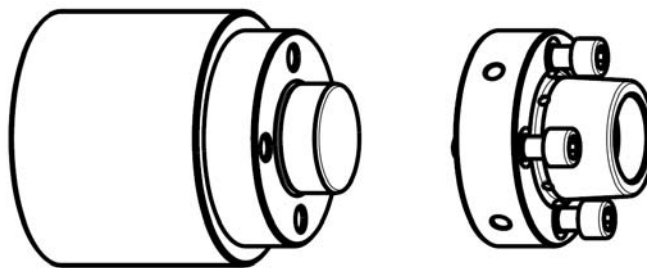
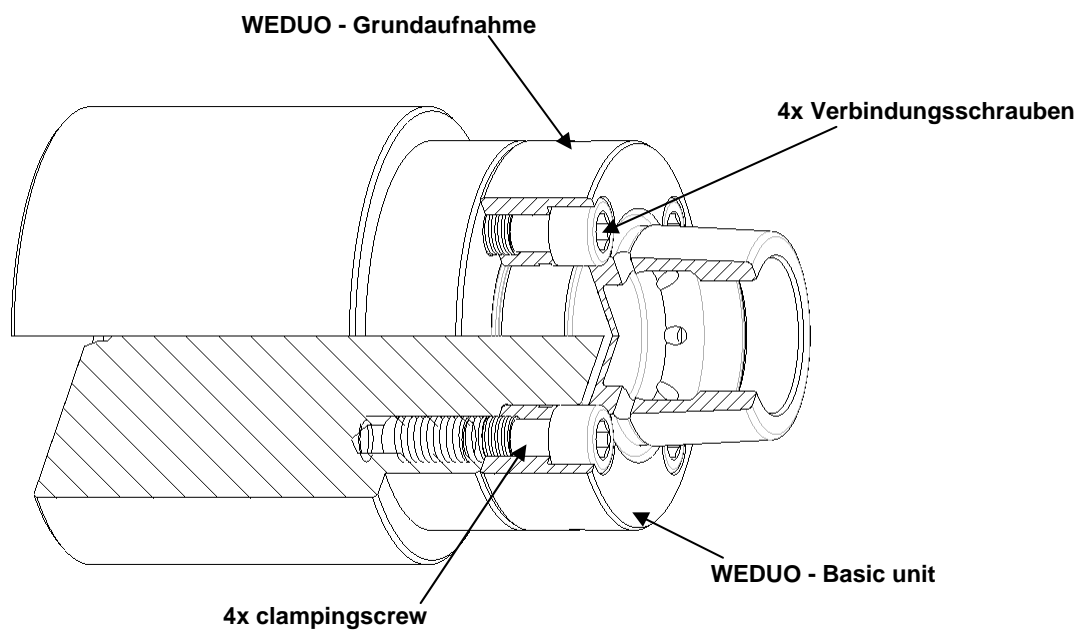
taper size	part number
HSK 63 WE	MOD.63WE03090
	MOD.63WE03090CO*

For Weinig WEDUO please request for production sheet

* • corrosion resistant coated

Advantages:

- all parts of the system are balanced up to 12.000 RPM - G2,5
- rigid location, free of vibration, without moveable parts
- concentricity max. 0,005mm
- repetition precision max. 0,005mm in all directions
- suitable for Left- and Right hand rotation
- possibility for Aluminium profilers
- connection pressure 4.500kN



Milling Arbors HSK-63 Gau Jing

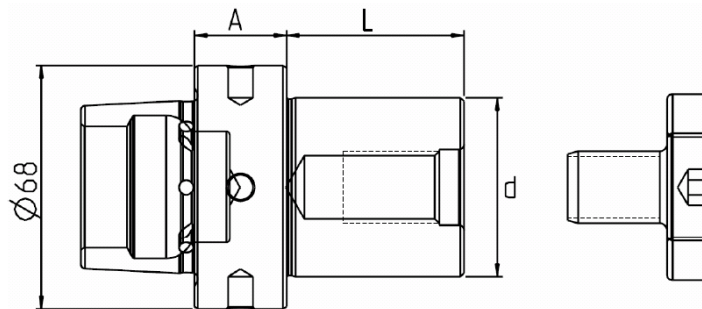
taper size for Gau Jing machine

for boring tools and

for boring tools

- hardened and ground
- balanced
- locking piston

Delivery condition: cruciform screws included



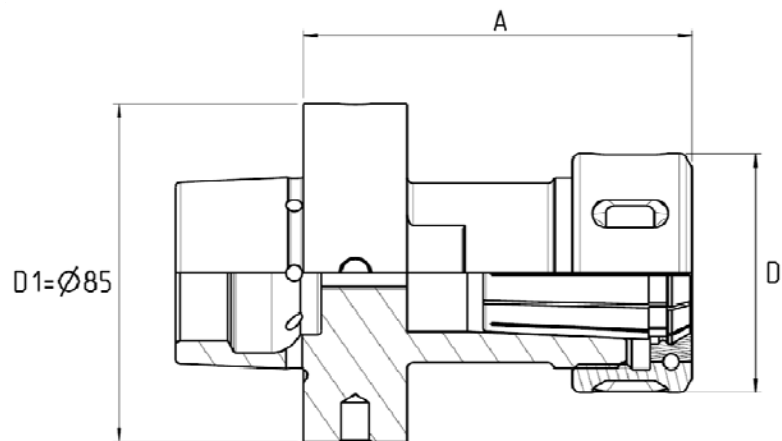
taper size	d	A	L	part number
HSK 63 GJ	50	26	50	FD.HSK63GJ02605050
	50	26	80	FD.HSK63GJ02608050
	50	26	100	FD.HSK63GJ02610050
	50	26	120	FD.HSK63GJ02612050
	50	26	150	FD.HSK63GJ02615050
	50	26	180	FD.HSK63GJ02618050
	50	26	210	FD.HSK63GJ02621050
	50	26	240	FD.HSK63GJ02624050

Collet Chuck HSK Weinig D85

taper size for Weinig machine
for shaft tools

- hardened and ground
- for double slotted collets
- balanced
- deliverable in anti-clockwise rotation

Delivery condition: without collet, includes nut



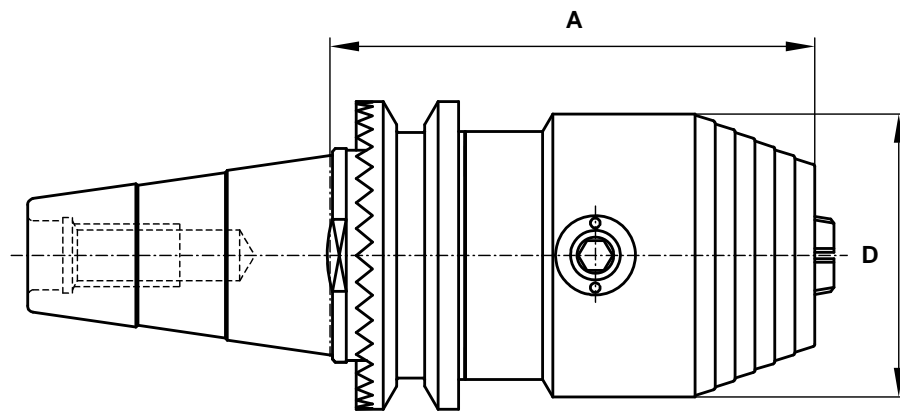
taper size	nominal size	clamping range	A	D	part number
HSK63WE-D85	ER 40	2 - 26	70	63	SPZ.HSK63WE07040ERR
	DIN6499				
	OZ 25 (RDO35)	2 - 25	98	60	SPZ.HSK63WE09825OZR
	DIN6388				

Drill Chuck ISO-30 Toothed

taper size ISO 30 with toothed wheel work
for clockwise and anti-clockwise rotation

- hardened and ground
- balanced
- continuously adjustable clamping range

Delivery condition: includes allen key and pull stud



taper size	clamping range	A	D	part number
ISO 30	1 - 13	90	50	BOF.30ISOV09013

Drill Chuck HSK-E Types

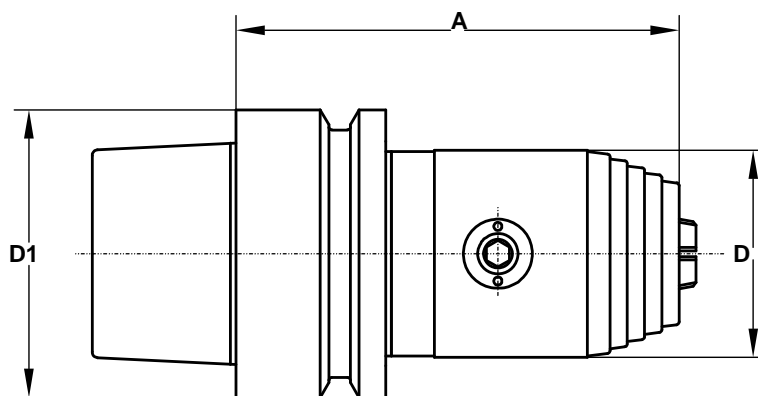
taper size V DIN 69893-5 Form E

without inside coolant

for clockwise and anti-clockwise rotation

- hardened and ground
- balanced
- continuously adjustable clamping range

Delivery condition: includes allen key



taper size	clamping range	A	D	part number
HSK 40E	0,5 - 8	77	36	BOF.HSK40E07708
HSK 50E	0,5 - 8	77	36	BOF.HSK50E07708
HSK 63E	1 - 13	98	50	BOF.HSK63E09813
	3 - 16	98	57	BOF.HSK63E09816

Drill Chuck HSK-63F

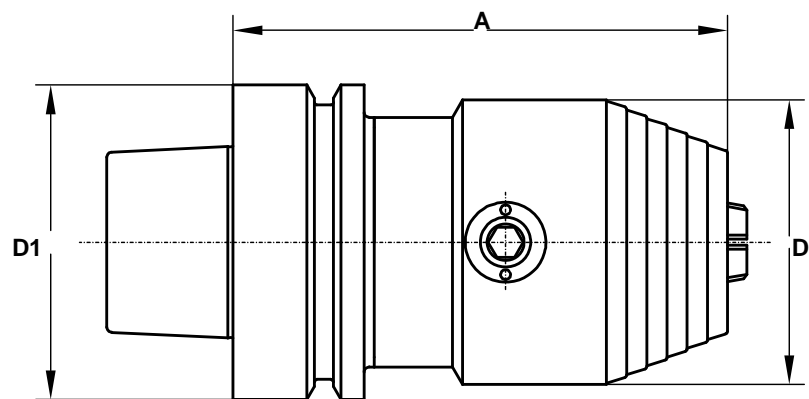
taper size V DIN 69893-6 Form F

without inside coolant

for clockwise and anti-clockwise rotation

- hardened and ground
- balanced
- continuously adjustable clamping range

Delivery condition: includes allen key

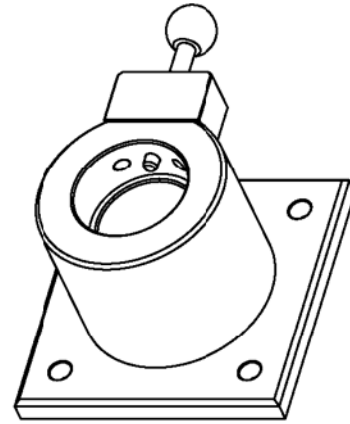


taper size	clamping range	A	D	part number
HSK 63F	1 - 13	98	50	BOF.HSK63F09813
	3 - 16	98	57	BOF.HSK63F09816

Mounting device Type HSK-Weinig

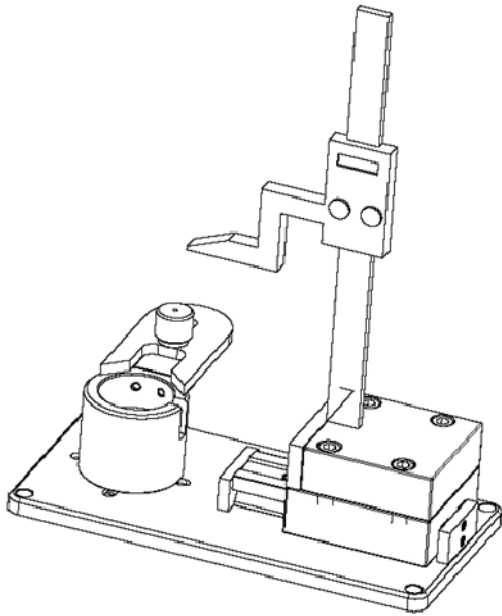
for safe assembly of
staff cutters in collet chucks
or boring cutters on milling arbors

- effortless and easy operation

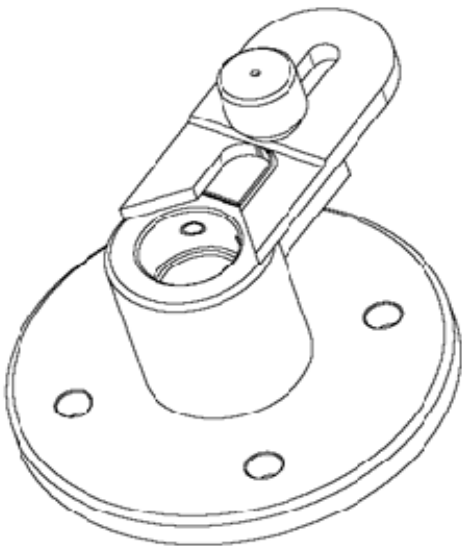


nominal size	D	part number
HSK 63 WE	85	MOHSK-WE

**Tool Mounting Devices with or without digital height gauge
for HSK tooling**

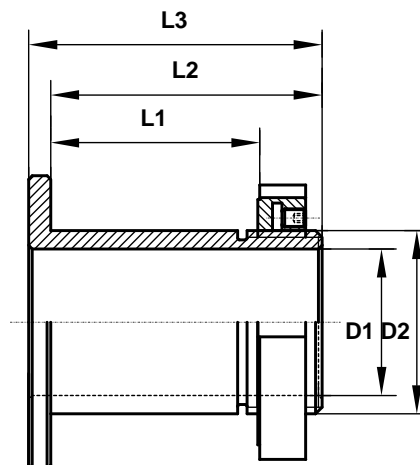


nominal size	D	part number
HSK 32 E	32	DMOHSK-E32
HSK 40 E	40	DMOHSK-E40
HSK 50 E	50	DMOHSK-E50
HSK F63/E63	63	DMOHSK-E63/F63



nominal size	D	part number
HSK 32 E	32	MOHSK-E32
HSK 40 E	40	MOHSK-E40
HSK 50 E	50	MOHSK-E50
HSK F63/E63	63	MOHSK-E63/F63

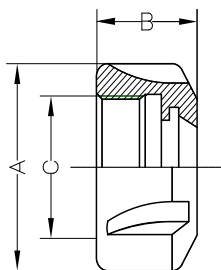
Threaded bushings with safety lock nut



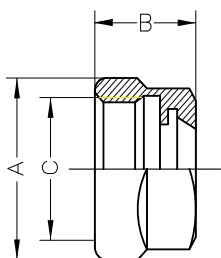
type	part number	L3	L2	L1	D2	D1	G
30x112	SPABU11230	112	106	97	50	30	M50x1,5
35x112	SPABU11235	112	106	97	50	35	M50x1,5
40x750	SPABU07540	75	69	60	50	40	M50x1,5
40x900	SPABU09040	90	84	75	50	40	M50x1,5
40x100	SPABU10040	100	94	85	50	40	M50x1,5
40x125	SPABU12540	125	119	110	50	40	M50x1,5
50x750	SPABU07550	75	69	60	60	50	M60x1,5
50x900	SPABU09050	90	84	75	60	50	M60x1,5
50x100	SPABU10050	100	94	85	60	50	M60x1,5
50x125	SPABU12550	125	119	110	60	50	M60x1,5

Other sizes on request

Nuts for collets DIN 6499 Type ER/ESX

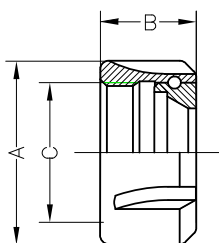


Type	Part #	A	B	C
UM/ER 16	SPAMU16UMERPROF	32	17,5	M 22x1,5
UM/ER 20	SPAMU20UMERPROF	35	19	M 25x1,5
UM/ER 25	SPAMU25UMER	42	20	M 32x1,5
UM/ER 32	SPAMU32UMER	50	23	M 40x1,5
UM/ER 40	SPAMU40UMER	63	25	M 50x1,5
UM/ER 50	SPAMU50UMER	78	35,5	M 64x2



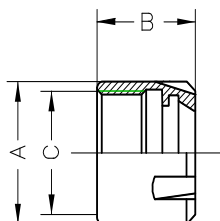
Type	Part #	A	B	C
UM/ER 11 SW	SPAMU11UMERSW	19	11,3	M 14x0,75
UM/ER 16 SW	SPAMU16UMERSW	28	17,5	M 22x1,5
UM/ER 20 SW	SPAMU20UMERSW	34	19	M 25x1,5

Bearing nuts for collets DIN 6499 Type ER/ESX



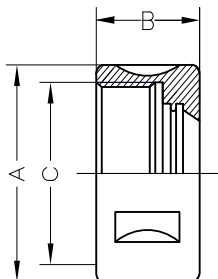
Type	Part #	A	B	C
KM/ER 25	SPAMU25UMERKM	42	22	M 32X1.5
KM/ER 32	SPAMU32UMERKM	50	26	M 40X1.5
KM/ER 40	SPAMU40UMERKM	63	29	M 50X1.5

Mini nuts for collets DIN 6499 Type ER/ESX



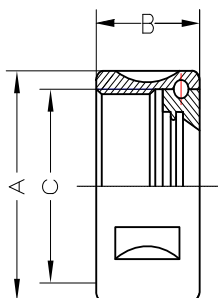
Type	Part #	A	B	C
ER - 8 - M	SPAMU08ERM	12	10,8	M 10x0,75
ER - 11 - M	SPAMU11ERM	16	11,3	M 13x0,75
ER - 16 - M	SPAMU16ERM	22	17	M 19x1,0
ER - 20 - M	SPAMU20ERM	28	19	M 24x1,0
ER - 25 - M	SPAMU25ERM	35	20	M 30x1,0

Nuts for collets DIN 6499 Type ER/ESX



Type (right)	Part #	A	B	C
OZ - ER 16	SPAMU16OZER	32	17,5	M 22x1,5
OZ - ER 20	SPAMU20OZER	35	19	M 25x1,5
OZ - ER 25	SPAMU25OZER	42	20	M 32x1,5
OZ - ER 32	SPAMU32OZER	50	23	M 40x1,5
OZ - ER 40	SPAMU40OZER	63	25	M 50x1,5
Type (left)	Part #	A	B	C
OZ - ER 16L	SPAMU16OZERL	32	17,5	M 22x1,5
OZ - ER 20L	SPAMU20OZERL	35	19	M 25x1,5
OZ - ER 25L	SPAMU25OZERL	42	20	M 32x1,5
OZ - ER 32L	SPAMU32OZERL	50	23	M 40x1,5
OZ - ER 40L	SPAMU40OZERL	63	25	M 50x1,5

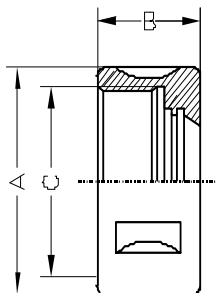
Ball-bearing nuts for collets DIN 6499 Type ER/ESX



Type (right)	Part #	A	B	C
OZ - KM/ER 16	SPAMU16OZKMER	32	17,5	M 22x1,5
OZ - KM/ER 20	SPAMU20OZKMER	35	19	M 25x1,5
OZ - KM/ER 25	SPAMU25OZKMER	42	20	M 32x1,5
OZ - KM/ER 32	SPAMU32OZKMER	50	23	M 40x1,5
OZ - KM/ER 40	SPAMU40OZKMER	63	29	M 50x1,5
Type (left)	Part #	A	B	C
OZ - KM/ER 16L	SPAMU16OZKMERL	32	17,5	M 22x1,5
OZ - KM/ER 20L	SPAMU20OZKMERL	35	19	M 25x1,5
OZ - KM/ER 25L	SPAMU25OZKMERL	42	20	M 32x1,5
OZ - KM/ER 32L	SPAMU32OZKMERL	50	23	M 40x1,5
OZ - KM/ER 40L	SPAMU40OZKMERL	63	29	M 50x1,5

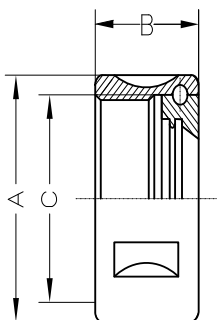
balanced type on request

Nuts for collets DIN 6388



Type (right)	Part #	A	B	C
OZ. 1809	SPAMU1809OZF	18	14	M 14x1
OZ. 1820	SPAMU1820OZF	26	19	M 20x1,5
OZ. 1821	SPAMU1821OZF	30	19	M 22x1,5
OZ. 1822	SPAMU1822OZF	35	20	M 27x1,5
OZ. 1823	SPAMU1823OZF	43	24	M 33x1,5
OZ. 1823-2	SPAMU1823-2OZF	43	24	M 30x1,5
OZ. 1824	SPAMU1824OZF	53	28	M 42x2
OZ. 1825	SPAMU1825OZF	60	30	M 48x2
Type (left)	Part #	A	B	C
OZ. 1821 L	SPAMU1821OZFL	30	19	M 22x1,5
OZ. 1822 L	SPAMU1822OZFL	35	20	M 27x1,5
OZ. 1823 L	SPAMU1823OZFL	43	24	M 33x1,5
OZ. 1823-2 L	SPAMU1823-2OZFL	43	24	M 30x1,5
OZ. 1824 L	SPAMU1824OZFL	53	28	M 42x2
OZ. 1825 L	SPAMU1825OZFL	60	30	M 48x2

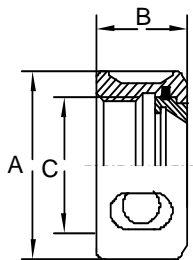
Ball-bearing nuts for collets DIN 6388



Type (right)	Part #	A	B	C
OZ. 1823 K	SPAMU1823OZK	43	24	M 33x1,5
OZ. 1823-2 K	SPAMU1823-2OZK	43	24	M 30x1,5
OZ. 1824 K	SPAMU1824OZK	53	28	M 42x2
OZ. 1825 K	SPAMU1825OZK	60	30	M 48x2
OZ. 1826 K	SPAMU1826OZK	72	28	M 60x2,5
OZ. 1827 K	SPAMU1827OZK	85	30	M 68x2,5
Type (left)	Part #	A	B	C
OZ. 1823 KL	SPAMU1823OZKL	43	24	M 33x1,5
OZ. 1823-2 KL	SPAMU1823-2OZKL	43	24	M 30x1,5
OZ. 1824 KL	SPAMU1824OZKL	53	28	M 42x2
OZ. 1825 KL	SPAMU1825OZKL	60	30	M 48x2
OZ. 1826 KL	SPAMU1826OZKL	72	28	M 60x2,5
OZ. 1827 KL	SPAMU1827OZKL	85	30	M 68x2,5

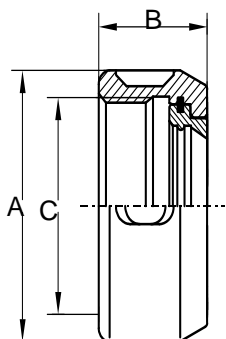
balanced type on request

Highspeed friction bearing nuts for collets DIN 6499 Type ER/ESX



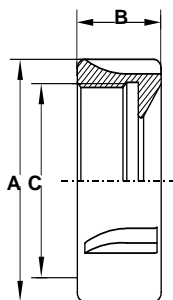
Type	Part #	A	B	C
OZ - ER 16 GL	SPAMU16OZERGL	32	17,5	M 22x1,5
OZ - ER 20 GL	SPAMU20OZERGL	35	19	M 25x1,5
OZ - ER 25 GL	SPAMU25OZERGL	42	20	M 32x1,5
OZ - ER 32 GL	SPAMU32OZERGL	50	23	M 40x1,5
OZ - ER 40 GL	SPAMU40OZERGL	63	25	M 50x1,5

Friction bearing nuts for collets DIN 6388



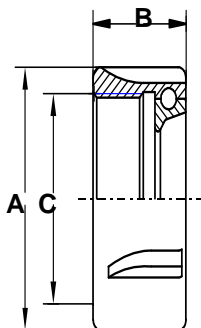
Type	Part #	A	B	C
OZ. 1825 GL	SPAMU1825OZGL	60	30	M48x2

Nuts for collets Type ETS



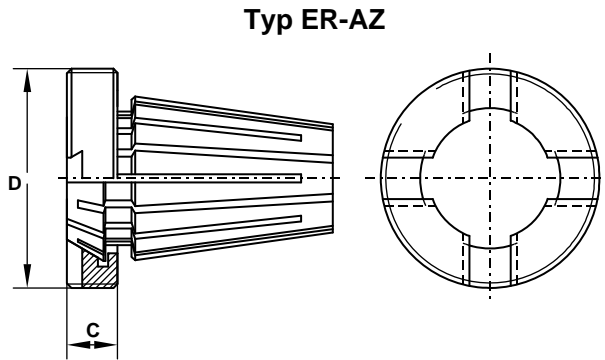
Type	Part #	A	B	C
ETS 16	SPAMU16ETS	32	15	M22x1,5
ETS 20	SPAMU20ETS	35	16,5	M25x1,5
ETS 25	SPAMU25ETS	42	18,5	M32x1,5
ETS 32	SPAMU32ETS	50	22	M40x1,5
ETS 40	SPAMU40ETS	63	25	M50x1,5

Ball-bearing nuts for collets Type ETS



Type	Part #	A	B	C
ETS 32 K	SPAMU32ETSK	50	24	M40x1,5
ETS 40 K	SPAMU40ETSK	63	27	M50x1,5

Collet nut with outside thread, for short chucks

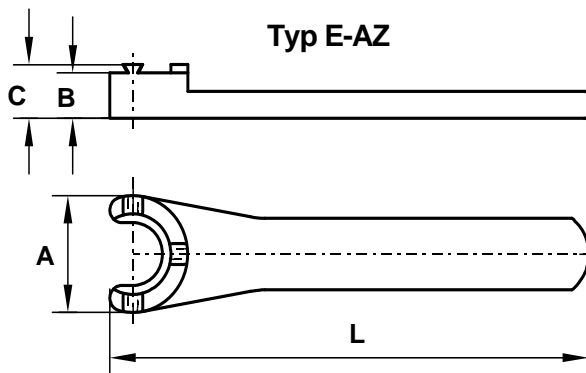


type	Part #	C	D
ER 11 AZ	SPMU11ERAZ	4	M18x1
ER 16 AZ	SPMU16ERAZ	6	M24x1
ER 20 AZ	SPMU20ERAZ	6,5	M28x1,5
ER 25 AZ	SPMU25ERAZ	7	M32x1,5
ER 32 AZ	SPMU32ERAZ	7,5	M40x1,5
ER 40 AZ	SPMU40ERAZ	10	M50x1,5

Collet nut with outside thread, for short chucks

Type	Part #	C	D
OZ 25 AZ	SPAMU25OZAZ	10	M43x1,5

Spanner wrench for nut type ER-AZ



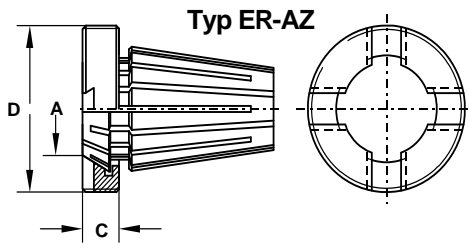
Type	Part #	A	L
E 11 AZ	SCH11EAZ	Ø16	150
E 16 AZ	SCH16EAZ	Ø21	180
E 20 AZ	SCH20EAZ	Ø26	180
E 25 AZ	SCH25EAZ	Ø30	200
E 32 AZ	SCH32EAZ	Ø37	215
E 40 AZ	SCH40EAZ	Ø47	240

Spanner wrench for nut type OZ-AZ

Type	Part #	A	L
OZ 25 AZ	SCH25OAZ	Ø40	215

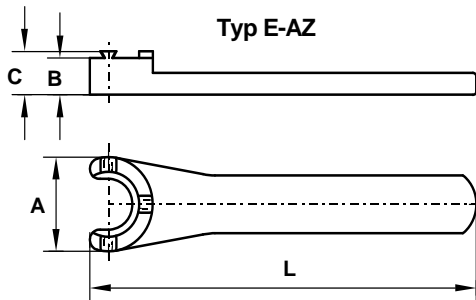
**Data sheet collet nuts with outside thread for collets DIN 6499 type ER/ESX
extremely short type**

Collet nut with outside thread, for short chucks



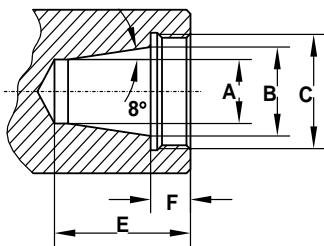
Type	A	C	D
ER 11 AZ	Ø8,5	4	M18x1
ER 16 AZ	Ø12,5	6	M24x1
ER 20 AZ	Ø15,5	6,5	M28x1,5
ER 25 AZ	Ø20	7	M32x1,5
ER 32 AZ	Ø27	7,5	M40x1,5
ER 40 AZ	Ø33	10	M50x1,5
OZ 25 AZ	Ø34	10	M43x1,5

Spanner wrench for nut type ER-AZ and OZ-AZ



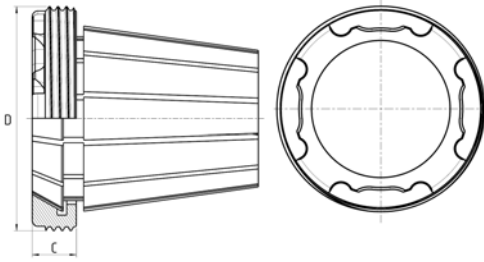
Type	A	B	C	L
E 11 AZ	Ø16	10	12	150
E 16 AZ	Ø21	10	12	150
E 20 AZ	Ø26	10	12	150
E 25 AZ	Ø30	10	12	172
E 32 AZ	Ø37	9,5	12	215
E 40 AZ	Ø47	9,5	12	240
O 25 AZ	Ø40	9,5	12	215

Design dimensions for collet locations on machining spindles



Type	A	B	C	E	F
ER 11 AZ	7,5	11	M18x1,0	23,5	6,5
ER 16 AZ	10,5	16	M24x1,0	32	10
ER 20 AZ	13,5	20	M28x1,5	37,5	11
ER 25 AZ	18,0	25	M32x1,5	41	12
ER 32 AZ	23,5	32	M40x1,5	46,5	12,5
ER 40 AZ	30,5	40	M50x1,5	53	15
OZ 25 AZ	29,5	32,9	M43x1,5	57	16

Collet nut ER-ZETA with outside thread after DIN 6499

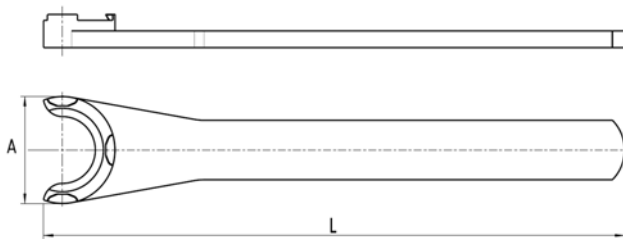


Type	Part #	B	C
ER 11 Zeta	SPAMUER11Zeta	4	M18x1
ER 16 Zeta	SPAMUER16Zeta	6	M24x1
ER 20 Zeta	SPAMUER20Zeta	6,5	M28x1,5
ER 25 Zeta	SPAMUER25Zeta	7	M32x1,5
ER 32 Zeta	SPAMUER32Zeta	7,5	M40x1,5
ER 40 Zeta	SPAMUER40Zeta	10	M50x1,5
ER 50 Zeta	SPAMUER50KMZeta	15	M68x1,5

Collet nut ER-ZETA with outside thread after DIN 6388

Type	Part #	B	C
OZ 25 Zeta	SPAMUOZ25Zeta	10	M43x1,5

Spanner wrench E-ZETA for nut type DIN 6499 ER-Zeta



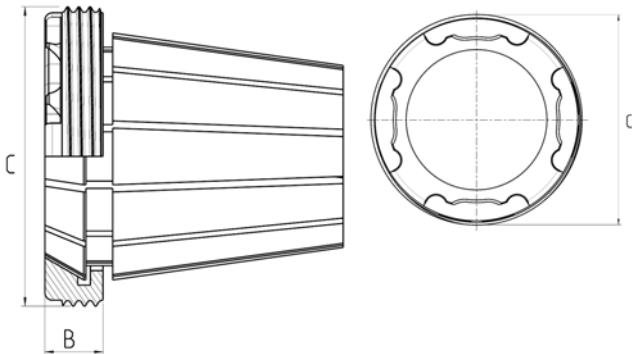
Type	Part #	A	L
E 11-12 Zeta	SCHE11-12Zeta	Ø16	150
E 16 Zeta	SCHE16Zeta	Ø21	180
E 20 Zeta	SCHE20Zeta	Ø26	180
E 25 Zeta	SCHE25Zeta	Ø30	200
E 32 Zeta	SCHE32Zeta	Ø37	215
E 40 Zeta	SCHE40Zeta	Ø47	240

Spanner wrench E-ZETA for nut type DIN 6388 ER-Zeta

Type	Part #	A	L
O 25 Zeta	SCHO25Zeta	Ø40	215

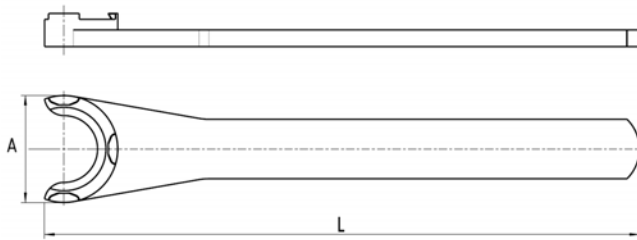
**Data sheet collet nuts with outside thread for collets DIN 6499 type ER/ESX
extremely short type**

Collet nut with outside thread type ER-ZETA



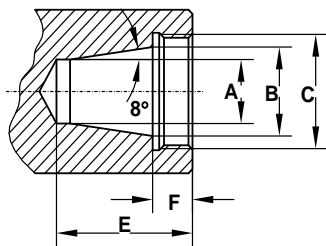
Type	B	C
ER 11 Zeta	4	M18x1
ER 16 Zeta	6	M24x1
ER 20 Zeta	6,5	M28x1,5
ER 25 Zeta	7	M32x1,5
ER 32 Zeta	7,5	M40x1,5
ER 40 Zeta	10	M50x1,5
ER 50 Zeta	15	M68x1,5

Spanner wrench for nut type ZETA



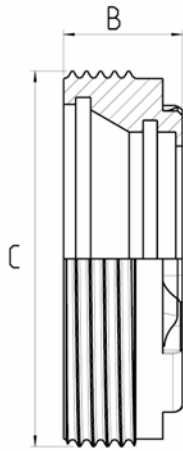
Type	A	L
E 11-12 Zeta	Ø16	150
E 16 Zeta	Ø21	150
E 20 Zeta	Ø26	150
E 25 Zeta	Ø30	172
E 32 Zeta	Ø37	210
E 40 Zeta	Ø47	240
E 50 Zeta	Ø66	260

Design dimensions for collet locations on machining spindles



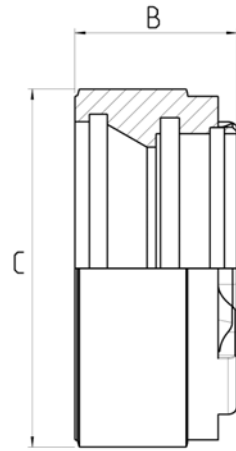
Type	A	B	C	E	F
ER 11 Zeta	7,5	11	M18x1,0	23,5	6,5
ER 16 Zeta	10,5	16	M24x1,0	32	10
ER 20 Zeta	13,5	20	M28x1,5	37,5	11
ER 25 Zeta	18,0	25	M32x1,5	41	12
ER 32 Zeta	23,5	32	M40x1,5	46,5	12,5
ER 40 Zeta	30,5	40	M50x1,5	53	15
OZ 25 Zeta	29,5	32,9	M43x1,5	57	16

Sealing nut after DIN 6499 (rego-fix sealing system) with external thread



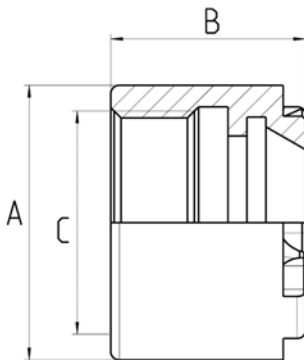
Type	Part #	B	C
ERAXC 16 Zeta	SPAMUERAXC16Zeta	10	M24x1
ERAXC 20 Zeta	SPAMUERAXC20Zeta	11	M28x1,5
ERAXC 25 Zeta	SPAMUERAXC25Zeta	11,5	M32x1,5
ERAXC 32 Zeta	SPAMUERAXC32Zeta	12,5	M40x1,5
ERAXC 40 Zeta	SPAMUERAXC40Zeta	14	M50x1,5

Sealing nut after DIN 6499 (Zollmann sealing system) with external thread



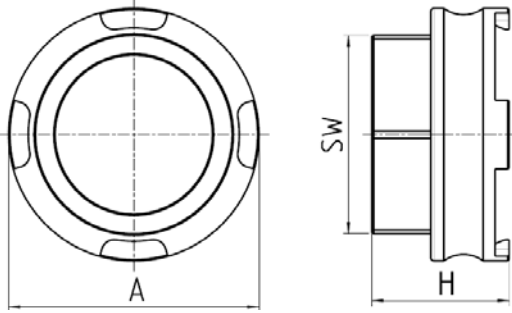
Type	Part #	B	C
ERZD 32 Zeta	ERZD 32 Zeta	18	M40x1,3
ERZD 40 Zeta	ERZD 40 Zeta	22	M50x1,3
ERDZ 50 Zeta	ERDZ 50 Zeta	24	M68x1,3

Mini nuts for collets DIN 6499 type ZETA



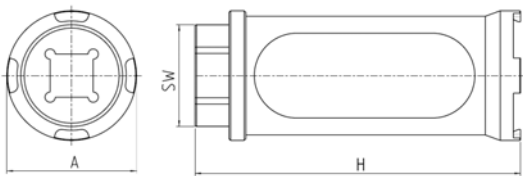
Type	Part #	A	B	C
ERM 11 Zeta	SPAMUERM11Zeta	16	11,3	M13x0,75
ERM 12 Zeta	SPAMUERM12Zeta	17	11,3	M14x0,75
ERM 16 Zeta	SPAMUERM16Zeta	22	17	M19x1,0
ERM 20 Zeta	SPAMUERM20Zeta	28	19	M24x1,0
ERM 25 Zeta	SPAMUERM25Zeta	35	20	M30x1,0
ERM 32 Zeta	SPAMUERM32Zeta	43	23	M 38 x1,0

Screw-on-adapter ED-ZETA for Zeta-safety clamping collet clamping system



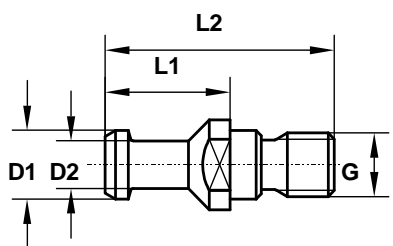
Type	Part #	A	SW	H
ED 11-12 Zeta	SCHED11-12Zeta	16	13	16
ED 16 Zeta	SCHED16Zeta	22	19	18
ED 20 Zeta	SCHED20Zeta	26	22	19
ED 25 Zeta	SCHED25Zeta	30	27	20
ED 32 Zeta	SCHED32Zeta	38	30	21
ED 40 Zeta	SCHED40Zeta	48	36	24
ED 50 Zeta	SCHED50Zeta	66	46	30
OD 25 Zeta	SCHOD25Zeta	41	36	24

Torque nut EC-ZETA for Zeta-safety collet clamping system



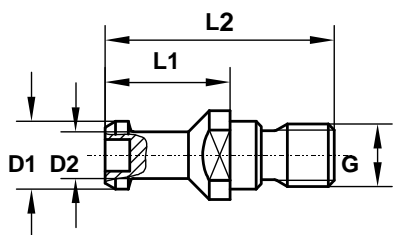
Type	Part #	A	SW	H
EC 11-12 Zeta	STEC11-12Zeta	16	13	75
EC 16 Zeta	STEC16Zeta	22	17	85
EC 20 Zeta	STEC20Zeta	26	19	90
EC 25 Zeta	STEC25Zeta	30	22	96
EC 32 Zeta	STEC32Zeta	38	27	96
EC 40 Zeta	STEC40Zeta	48	27	110
EC 50 Zeta	STEC50Zeta	66	27	130
OC 25 Zeta	STOC25Zeta	41	27	110

Pull studs after DIN 69872-A (Weeke, Bussellatto, Andi from middle of '97)



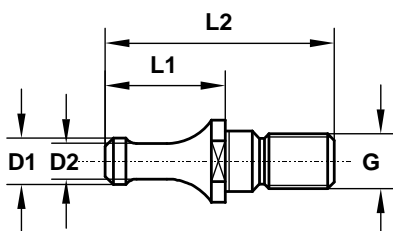
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30DIN69872A	M 12	13	9	24	44
SK 40	BO40DIN69872A	M 16	19	14	26	54

Pull studs after DIN 69872-A with chip-relief



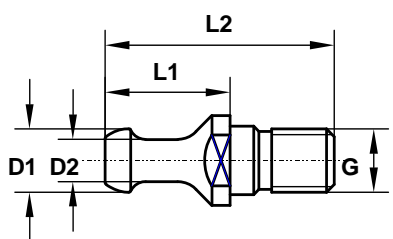
Type	Part #	G	D1	D2	L1	L2
SK 40	BO40DIN69872CH	M 16	19	14	26	54

Pull studs for SCM - Morbidelli SK 30 with toothed wheel work



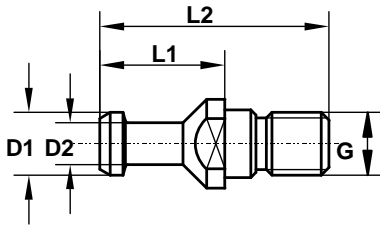
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30SCMMOR10	M 10	8,5	6,5	22	42

Pull studs after Biesse with button head SK 30 (HSD, Masterwood)



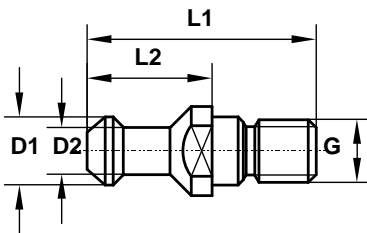
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30BIERUN12	M 12	12	8	24	44

Pull studs Biesse - Morbidelli SK 30



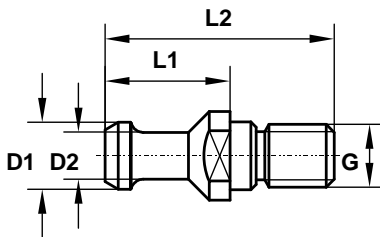
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30BIEMOR12	M 12	12	8	19	44

Pull studs Alberti SK 30 (Colombo—clamping by balls)



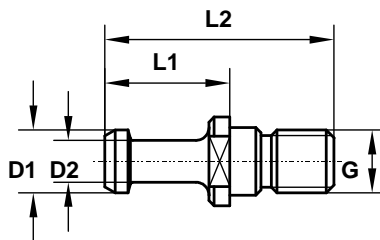
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30AIBE12	M 12	13	9	24	44

Pull studs CMS SK 30



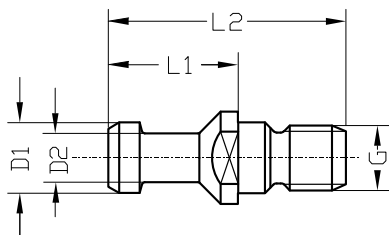
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30CMS12	M 12	12, 8	9	24	44

Pull studs Esseteam SK 30



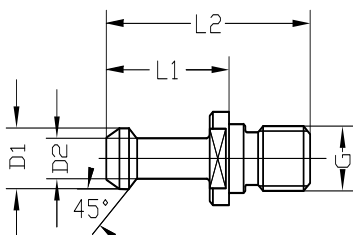
Type	Part #	G	D1	D2	L1	L2
SK 30	BO30ESSET12	M 12	12	8	24	44

Pull studs after MAS - BT - KOMO



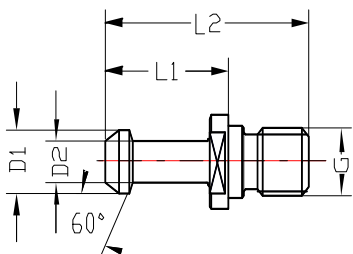
Type	Part #	G	D1	D2	L1	L2
BT 30	BO30BTKOMO	M 12	13	9	24	44

Pull studs after MAS - BT/Typ 45°



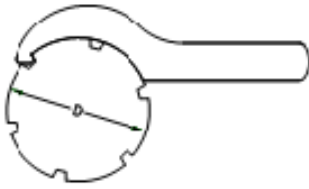
Type	Part #	G	D1	D2	L1	L2
BT 30	BO30BT45	M 12	11	7	23	43
BT 35	BO35BT45	M 12	13	8,5	28	48
BT 40	BO40BT45	M 16	15	10	35	60

Pull studs after MAS - BT/Typ 60° (BT30 - Shoda, Andi up to middle of '97) (BT35 - Heian)



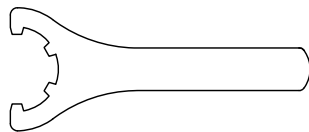
Type	Part #	G	D1	D2	L1	L2
BT 30	BO30BT60	M 12	11	7	23	43
BT 35	BO35BT60	M 12	13	8,5	28	48
BT 40	BO40BT60	M 16	15	10	35	60

Spanner wrench for nuts DIN 6388



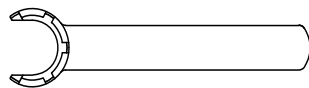
Part #	D	SW
SCHDIN638818	18	18-16
SCHDIN638826	26	26-25
SCHDIN638830	30	30-28
SCHDIN638835	35	35-34
SCHDIN638843	43	43-40
SCHDIN638850	50	45-50
SCHDIN638860	60	60-58
SCHDIN638872	72	72-68
SCHDIN638885	85	85-80

Spanner wrench for nuts DIN 6499



Part #	Size
SCHDIN649916	16
SCHDIN649920	20
SCHDIN649925	25
SCHDIN649932	32
SCHDIN649940	40
SCHDIN649950	50

Spanner wrench for nuts DIN 6499 mini



Part #	Size
SCHDIN6499MINI08	08
SCHDIN6499MINI11	11
SCHDIN6499MINI16	16
SCHDIN6499MINI20	20
SCHDIN6499MINI25	25

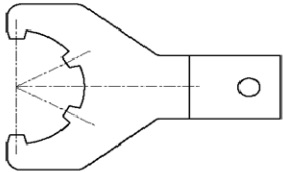
Torque wrenches and adapters

Torque wrenches:

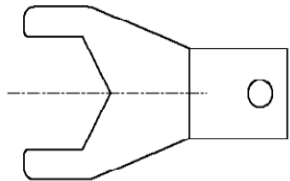


Part#	Size
300TH 44-220Lbf.ft	40-300 Nm
200TH 44-150Lbf.ft	40-200 Nm
80TH 8-60Lbf.ft	10-80Nm

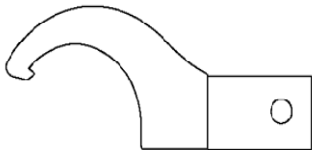
Torque adapter:



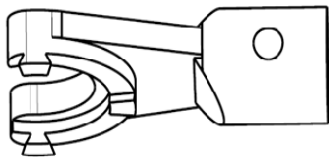
Part # / Size	Nm
To adapter 16	60
To adapter 20	70
To adapter 25	90
To adapter 32	120
To adapter 40	160



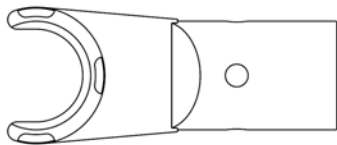
Part # / Size	Nm
To adapter 16 hex	60
To adapter 20 hex	70



Part # / Size	Nm
To adapter 40-43 DIN	80
To adapter 45-50 DIN	120
To adapter 60-62 DIN	160



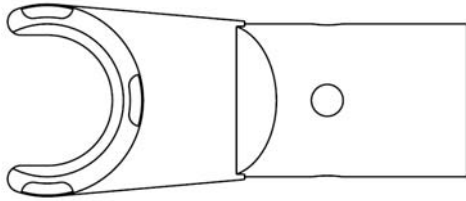
Part # / Size	Nm
To adapter ER16 AZT	60
To adapter ER20 AZT	70
To adapter ER25 AZT	90
To adapter ER32 AZT	120
To adapter ER40 AZT	160
To adapter OZ25 AZT	160



Size	ZETA Part #	Nm
To adapter ET 11-12 Zeta	THET11-12	40
To adapter ET 16 Zeta	THET16	60
To adapter ET 20 Zeta	THET20	75
To adapter ET 25 Zeta	THET25	100
To adapter ET 32 Zeta	THET32	130
To adapter ET 40 Zeta	THET40	150
To adapter ET 50 Zeta	THET50	170
To adapter OT 25 Zeta	THOT25	150

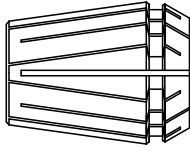
Data sheet torque sizes ft.lbf

Type	Nm	ft.lbs
ERM 11	25	18
ERM 12	25	18
ERM 16	40	30
ERM 20	55	40
ERM 25	60	44
ERM 32	70	50



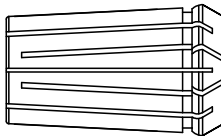
Type	Nm	ft.lbs
ER 11	40	30
ER 16	60	44
ER 20	75	56
ER 25	100	74
ER 32	130	96
ER 40	150	110
ER 50	170	126
OZ 25	150	110

Collets after DIN 6499 system Regofix - Inch or Metric



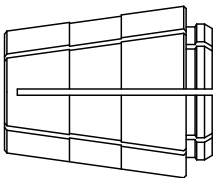
Type	Size	Part #
426 E / ER 16	1/16" - 3/8"	SPAZ16DIN6499 001-010
428 E / ER 20	1/16" - 1/2"	SPAZ20DIN6499 002-013
430 E / ER 25	3/32" - 5/8"	SPAZ25DIN6499 002-016
470 E / ER 32	1/8" - 3/4"	SPAZ32DIN6499 003-020
472 E / ER 40	5/32" - 1.0"	SPAZ40DIN6499 004-026

Collets after DIN 6388 system OZ (RDO) - Inch or Metric



Type	Size	Part #
410 E / OZ 16	3/32" - 5/8"	SPAZ16DIN6388 001-016
415 E / OZ 16	3/32" - 5/8"	SPAZ16DIN6388 002-016
444 E / OZ 25	3/32" - 7/8"	SPAZ25DIN6388 001-025
462 E / OZ 25	2/32" - 7/8"	SPAZ25DIN6388 002-025
467 E / OZ 32	5/32" - 3/4"	SPAZ32DIN6388 004-032
450 E / OZ 32	5/32" - 3/4"	SPAZ32DIN6388 003-032

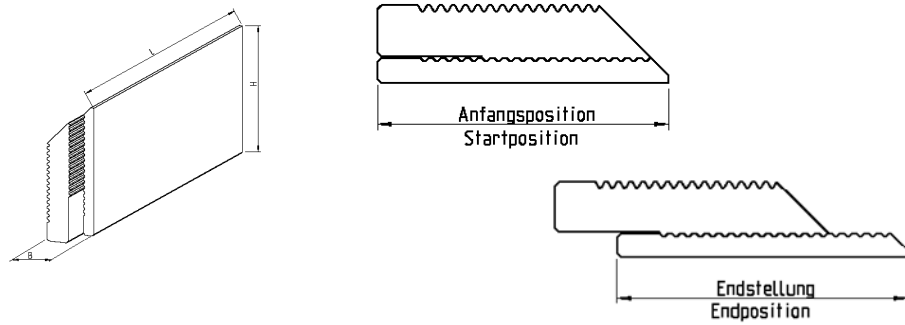
Collets after system ETS - Inch or Metric



Type	Größe/Size 2.5inch increment	Artikel-Nr./Part #
ET-SE 16	1/8" - 3/8"	SPAZ16ET-SE 001-010
ET-SE 20	3/32" - 1/2"	SPAZ20ET-SE 002-013
ET-SE 25	3/32"- 5/8"	SPAZ25ET-SE 002-016
ET-SE 32	1/8" - 3/4"	SPAZ32ET-SE 003-020
ET-SE 40	5/32" - 1.0"	SPAZ40ET-SE 004-026

PLEASE INQUIRE IF YOU DO NOT SEE COLLETS YOUR LOOKING FOR

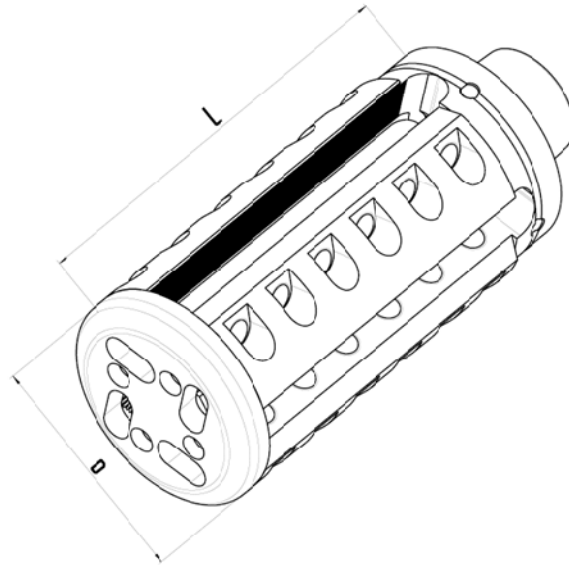
Knives for back corrugated cutterheads with security corrugation



Double Pack

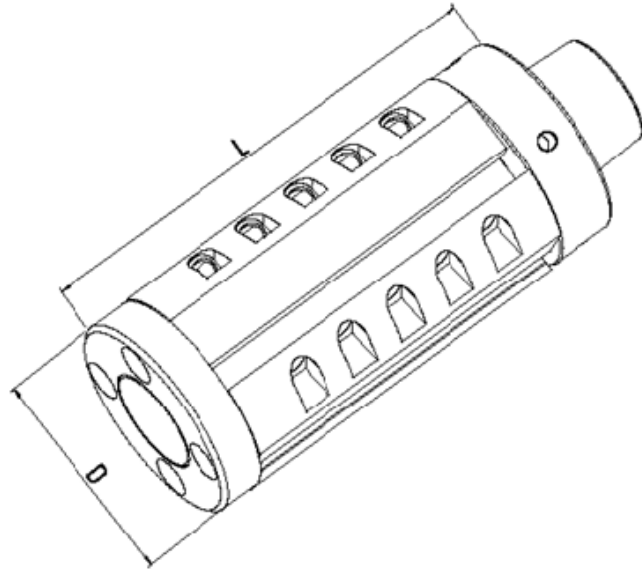
L (mm)	H (mm)	B (mm)	T10/HW Standard	L (mm)	H (mm)	B (mm)	Backing plate
140	38	3.2	SDP0403832T10	140	35	7.1	SDP0403571
150	38	3.2	SDP0503832T10	150	35	7.1	SDP0503571
160	38	3.2	SDP0603832T10	160	35	7.1	SDP0603571
180	38	3.2	SDP0803832T10	180	35	7.1	SDP0803571
100	38	3.2	SDP1003832T10	100	35	7.1	SDP1003571
120	38	3.2	SDP1203832T10	120	35	7.1	SDP1203571
130	38	3.2	SDP1303832T10	130	35	7.1	SDP1303571
150	38	3.2	SDP1503832T10	150	35	7.1	SDP1503571
170	38	3.2	SDP1703832T10	170	35	7.1	SDP1703571
180	38	3.2	SDP1803832T10	180	35	7.1	SDP1803571
190	38	3.2	SDP1903832T10	190	35	7.1	SDP1903571
210	38	3.2	SDP2103832T10	210	35	7.1	SDP2103571
240	38	3.2	SDP2403832T10	240	35	7.1	SDP2403571
300	38	3.2	SDP3003832T10	300	35	7.1	SDP3003571
140	50	3.2	SDP0405032T10	140	47	7.1	SDP0404771
150	50	3.2	SDP0505032T10	150	47	7.1	SDP0504771
160	50	3.2	SDP0605032T10	160	47	7.1	SDP0604771
180	50	3.2	SDP0805032T10	180	47	7.1	SDP0804771
100	50	3.2	SDP1005032T10	100	47	7.1	SDP1004771
120	50	3.2	SDP1205032T10	120	47	7.1	SDP1204771
130	50	3.2	SDP1305032T10	130	47	7.1	SDP1304771
150	50	3.2	SDP1505032T10	150	47	7.1	SDP1504771
170	50	3.2	SDP1705032T10	170	47	7.1	SDP1704771
180	50	3.2	SDP1805032T10	180	47	7.1	SDP1804771
190	50	3.2	SDP1905032T10	190	47	7.1	SDP1904771
210	50	3.2	SDP2105032T10	210	47	7.1	SDP2104771
240	50	3.2	SDP2405032T10	240	47	7.1	SDP2404771
300	50	3.2	SDP3005032T10	300	47	7.1	SDP3004771
140	60	3.2	SDP0406032T10	140	57	7.1	SDP0405771
150	60	3.2	SDP0506032T10	150	57	7.1	SDP0505771
160	60	3.2	SDP0606032T10	160	57	7.1	SDP0605771
180	60	3.2	SDP0806032T10	180	57	7.1	SDP0805771
100	60	3.2	SDP1006032T10	100	57	7.1	SDP1005771
120	60	3.2	SDP1206032T10	120	57	7.1	SDP1205771
130	60	3.2	SDP1306032T10	130	57	7.1	SDP1305771
150	60	3.2	SDP1506032T10	150	57	7.1	SDP1505771
170	60	3.2	SDP1706032T10	170	57	7.1	SDP1705771
180	60	3.2	SDP1806032T10	180	57	7.1	SDP1805771
190	60	3.2	SDP1906032T10	190	57	7.1	SDP1905771
210	60	3.2	SDP2106032T10	210	57	7.1	SDP2105771
240	60	3.2	SDP2406032T10	240	57	7.1	SDP2405771
300	60	3.2	SDP3006032T10	300	57	7.1	SDP3005771

**Cutterheads for corrugated knives Weinig Powerlock System –
Single piece**



part number	D x L (mm)	Z	style
PMK.HSK63WE0260400902	90x400	2	L/R
PMK.HSK63WE0260600902	90x600	2	L/R
PMK.HSK63WE0260800902	90x800	2	L/R
PMK.HSK63WE0261000902	90x100	2	L/R
PMK.HSK63WE0261300902	90x130	2	L/R
PMK.HSK63WE0261500902	90x150	2	L/R
PMK.HSK63WE0261700902	90x170	2	L/R
PMK.HSK63WE0261900902	90x190	2	L/R
PMK.HSK63WE0262100902	90x210	2	L/R
PMK.HSK63WE0262400902	90x240	2	L/R
PMK.HSK63WE0260400904	90x400	4	L/R
PMK.HSK63WE0260600904	90x600	4	L/R
PMK.HSK63WE0260800904	90x800	4	L/R
PMK.HSK63WE0261000904	90x100	4	L/R
PMK.HSK63WE0261300904	90x130	4	L/R
PMK.HSK63WE0261500904	90x150	4	L/R
PMK.HSK63WE0261700904	90x170	4	L/R
PMK.HSK63WE0261900904	90x190	4	L/R
PMK.HSK63WE0262100904	90x210	4	L/R
PMK.HSK63WE0262400904	90x240	4	L/R

Cutterheads for corrugated knives Weinig Powerlock System – Modular system



part number	D x L (mm)	Z	style
MMK.HSK63WE0260400902	90x40	2	L/R
MMK.HSK63WE0260600902	90x60	2	L/R
MMK.HSK63WE0260800902	90x80	2	L/R
MMK.HSK63WE0261000902	90x100	2	L/R
MMK.HSK63WE0261300902	90x130	2	L/R
MMK.HSK63WE0261500902	90x150	2	L/R
MMK.HSK63WE0261700902	90x170	2	L/R
MMK.HSK63WE0261900902	90x190	2	L/R
MMK.HSK63WE0262100902	90x210	2	L/R
MMK.HSK63WE0262400902	90x240	2	L/R
MMK.HSK63WE0260400904	90x40	4	L/R
MMK.HSK63WE0260600904	90x60	4	L/R
MMK.HSK63WE0260800904	90x80	4	L/R
MMK.HSK63WE0261000904	90x100	4	L/R
MMK.HSK63WE0261300904	90x130	4	L/R
MMK.HSK63WE0261500904	90x150	4	L/R
MMK.HSK63WE0261700904	90x170	4	L/R
MMK.HSK63WE0261900904	90x190	4	L/R
MMK.HSK63WE0262100904	90x210	4	L/R
MMK.HSK63WE0262400904	90x240	4	L/R

Datenblatt

Data Sheet

date de techniques

Technische Daten	Technical data	Données techniques
Material Stock Matièr		16MnCr5
Einsatztiefe Case Profondeur		0,4 - 0,6 mm
Härte Hardness Dureté		57 - 60 HRC
Kernfestigkeit Core strenght Résistance		900 - 1100 Nm
Toleranzen	Tolerances	Tolérances

Kegel
Taper
Cône

> AT 3 nach DIN 7178 Teil 1

Rundlauf:
Concentricity:
Concentricité:

Kegel zu Werkzeugaufnahme
Taper to Workholding
Cône par rapport du porte-outil

Für Werkzeuge mit Aussenaufnahme
For tools with external input
Pour outils avec fixation extérieure

4 μ

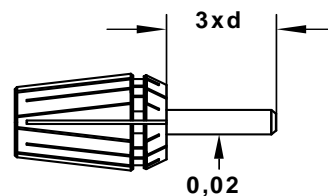
Für Werkzeuge mit Innenaufnahme
For tools with internal input
Pour outils avec fixation intérieure

4 μ

Planschlag
Wobble
Concentricité plane

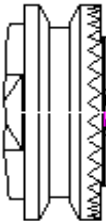
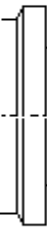
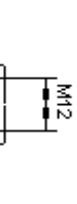
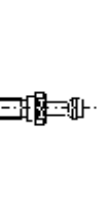
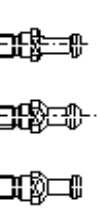










2 μ

Spannzangenfutter
Collet Chucks
Mandrins Porte-Pinces



Datenblatt, Data sheet

Spannzangenhalter, collet cucks
Aufnahmen für Bohrungswerkzeuge, Tapers for boring tools

 <p>ISO 30 mit Verzahnung with gear ring</p>	 <p>SK 30 DIN 69871 ohne Nuten und Kerben without dogs</p>	 <p>ISO 30 ISO/DIS 7388/3 ohne Nuten und Kerben without dogs</p>	 <p>MAS BT 30 mit Mitrnehmer with dogs</p>	 <p>MAS BT 30 ohne Mitrnehmer without dogs</p>
<p>SCM Mortdell III</p> 	<p>SK 30</p>  <p>Maha Eisenham Rye Vaeke IMA Anderlron ab 37 Reichenbacher</p>     <p>Albert 830m Masterwood (Colombo- Motoren)</p> <p>Beisse bis BJ32 Masterwood (HDS- Motoren)</p>	<p>SCM einige Maschinen</p>  <p>CMS Beisse Bullstaab Rover</p>	<p>BT 30</p>  <p>Therm wood Shoda Helan</p>	<p>BT 30</p>  <p>Shoda Helan</p> <p>SK 30 (D=12,5)</p>  <p>Komoro</p>

TERMS & CONDITIONS OF SALE: T-Tool USA LLC

Delivery

Shipping dates are approximate and are based upon prompt receipt of all necessary information.

T-Tool USA LLC, "The Company", shall not be liable for delays in delivery or failure to manufacturer of delivery (1) due to causes beyond its reasonable control, or (2) due to acts of God, acts of the Purchaser, acts of civil or military authorities, priorities, fires, strikes, floods, epidemics, war, riot, delays in transportation or car shortages, or (3) inability due to causes beyond its reasonable control to obtain necessary labor, materials, components or manufacturing facilities. In the event of any such delay, the date of delivery shall be extended for a period equal to the time lost by reason of the delay.

In all cases, risk or damage to goods in transit shall fall upon the Purchaser, whose responsibility it shall be to file claims with the carrier.

Payments

Each shipment shall be considered a separate and independent transaction, and payment therefore shall be made accordingly. If shipments are delayed by the Purchaser, payments shall become due on the date when the Company is prepared to make shipment. If the work to be performed hereunder is delayed by the Purchaser, payments shall be made based on the purchase price and the percentage of completion. Products held for the Purchaser shall be at the risk and expense of the Purchaser if the financial condition of the Purchaser at any time does not, in the judgment of the Company, justify continuance of the work to be performed by the Company hereunder on the terms of the payment as agreed upon, the Company may require full or partial payment in advance or shall be entitled to cancel any order then outstanding and shall receive reimbursement for its reasonable and proper cancellation charges, and in the event of bankruptcy or insolvency of the purchaser or in the event any proceeding is brought against the Purchaser, voluntary or involuntary under the bankruptcy or any insolvency laws, the Company shall be entitled to cancel any order then outstanding at any time during the period allowed for filling claims against the estate and shall receive reimbursement for its reasonable and proper cancellation charges. All invoices are due and payable not later than 30 days from date of invoice unless specific terms have been agreed to or granted. The Company shall reserve the right to charge interest to invoices due past 60 days of invoice date at a rate of prime plus 1%.

Orders under \$250 may be prepaid by either MASTERCARD , VISA, or AMEX credit cards unless credit has been approved otherwise.

Sales and Similar Taxes

Unless otherwise stated herein, the Company's prices do not include sales, use, excise or similar taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use excise or other similar tax applicable to the sale or use of the equipment hereunder shall be paid by the Purchaser, or in lieu thereof the Purchaser shall provide the Company with a tax-exemption certificate acceptable to the taxing authorities.

Cancellations and Returns

The Purchaser may cancel his order only upon written notice and upon payment to the Company of the reasonable and proper cancellation charges. No returns will be accepted after 30 days from the date of receipt of goods.

Cancellation charges are 15% of the order value on standard products. No cancellation will be accepted on special orders, these would include tooling that has been laser marked with purchaser's company name or logo.

Limitation of Liability

The Company's liability on any claim of any kind, including negligence, for any loss or damage arising out of, connected with, or resulting from this contract, or from the performance of breach therefore, or from the manufacture, sale, delivery, resale, repair or use of any product covered by or furnished under this contract shall in no case exceed the price allocable to the product covered by or furnished under this contract nor exceed the price allocable to the product or part thereof which gives rise the claim, In no event shall the Company be liable for special or consequential damages.

Security Title

Title and right of possession of the products sold hereunder shall remain with the Company and such products shall remain personal property until all payments hereunder (including deferred payments whether evidenced by notes or otherwise) shall have been made in full in each, and the Purchaser agrees to do all acts necessary to perfect and maintain such right and title in the Company.

General

The Company will comply with all applicable Federal, State and local laws, and specifically represents that any goods to be delivered hereunder will be produced in compliance with the requirements of the Fair Labor Standards Act of 1938, as amended.

The product sold hereunder was not designed or manufactured for use in or with any atomic installation or activity. If so used, the Company disclaims all responsibility of every kind, including negligence, and in addition the Purchaser shall indemnify and hold the Company harmless for any liability or damage whatsoever arising out of the use of the product in such a manner.

Pricing / Delivery

Pricing and availability are subject to change without notice. All orders will be furnished at prices in effect at the time of order.

Delivery Terms

All prices are F.O.B. Weston, Florida 33327 including any handling or packing charges if applicable.