

# TOOLING SYSTEM





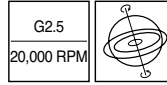
## Guide to Icons



➤ Run-out



➤ Surface Hardness



➤ Balance Grade



➤ Taper Shank Grade



➤ Surface Finish Grade



➤ Technical Data Page



➤ ER Collet Page



➤ TSK Collet Page



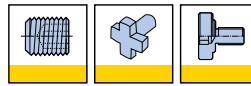
➤ ST / THC Collet Page



➤ Pull Stud Page



➤ Preset Screw Page



➤ Lock Screw Page



➤ ER 32 SRF Page



➤ Nut Page



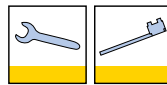
➤ Tap Adapter Page



➤ Cooling Tube Page



➤ Tube Wrench Page



➤ Wrench Page



➤ Driving Ring Page



➤ Induction Heating Unit Page



➤ Thermal Heating Unit Page

\* For non-stock items: Supply condition is subject to availability.  
If not available in stock then MOQ (Minimum order qty) will be applicable.



# Tool Selection Guide

## Tooling system

### Milling chuck

- DIN69871 G17
- HSK G42
- BT MAS-403 G71
- DIN2080 G92



Collet (CSR) G155



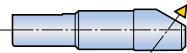
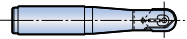
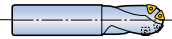
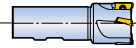
ST shank G114-G118



Collet (ER) G139-G149



GTIN collet G162-G163



### Collet chuck

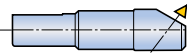
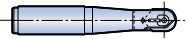
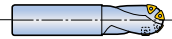
- DIN69871 G11-G13
- HSK G36-G41
- BT MAS-403 G65-G67
- DIN2080 G91
- C-ADAPTER G102-G103
- ST shank G114-G118
- MT shank G128



Collet (ER) G139-G149



GTIN collet G162-G163



### TSK collet chuck

- DIN69871 G14
- HSK G41
- BT MAS-403 G68



TSK collet G150-G152



### TSHRINK chuck

- DIN69871 G21
- HSK G45-G47
- BT MAS-403 G75
- C-ADAPTER G110



- DIN69871 G22
- HSK G48-G50
- BT MAS-403 G76
- ST shank G125



### THYCHUCK chuck

- DIN69871 G23
- HSK G51-G52
- BT MAS-403 G77-G78



THC collet G153-G154





# Tool Selection Guide

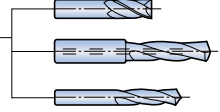
## Tooling system

**TBALANCE**

- DIN69871 G10
- HSK G35
- BT MAS-403 G64

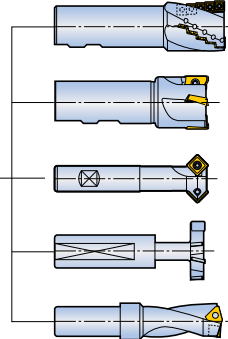


Collet (ER) G139-G149



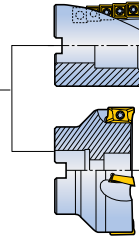
### End mill holder

- DIN69871 G18-G20
- HSK G43-G44
- BT MAS-403 G72-G74
- DIN2080 G93
- C-ADAPTER G104-G106



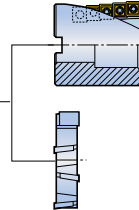
### Face mill / Shell end mill arbor

- DIN69871 G24-G25, G27
- HSK G53-G55, G57
- BT MAS-403 G80-G82, G84
- DIN2080 G94-G95
- C-ADAPTER G107, G109



### Combi face mill / Combi shell end mill arbor

- DIN69871 G26
- HSK G56
- BT MAS-403 G83
- DIN2080 G96
- C-ADAPTER G108



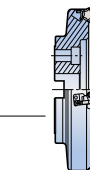
### Slotting cutter arbor

- DIN69871 G28
- BT MAS-403 G79



### Centering plug

- DIN2080 G99

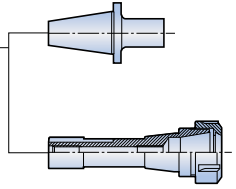


# Tool Selection Guide

## Tooling system

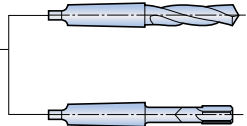
### Adapter

- DIN69871 G31
- BT MAS-403 G86



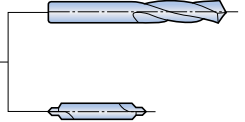
### Morse taper adapter

- DIN69871 G29-G30
- HSK G58
- BT MAS-403 G85-G86
- DIN2080 G97-G98



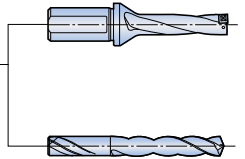
### Drill chuck arbor

- DIN69871 G31
- BT MAS-403 G87
- DIN2080 G99



### **FITBORE**

- DIN69871 G15
- HSK G42
- BT MAS-403 G69



### Tap chuck (GTI)

- DIN69871 G16
- BT MAS-403 G70



- GTI ER collet chuck G126



Collet (ER) G139-G149

- DIN69871 G16
- BT MAS-403 G70
- MTA G128



Tap adapter G164



# Tool Selection Guide

## Tooling system

### GFI floating reamer chuck (GFI)

- ST shank G127



Collet (ER) G139-G149

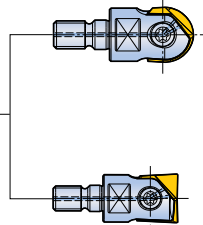


### T-FLEXTEC

- DIN69871 G32
- HSK G59-G60
- BT MAS-403 G88
- C-ADAPTER G111
- ST shank G119-G121



Adapter G122-G124



### Blank

- HSK G61
- C-ADAPTER G112

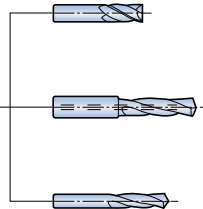


### GYRO center alignment

- ST shank G129-G130



Collet (ER) G139-G149



### GREEN Typhoon

- ER shank G132
- BT MAS-403 G133
- HSK G134
- C-ADAPTER G135
- ST shank G136



Collet (ER) G140, G145

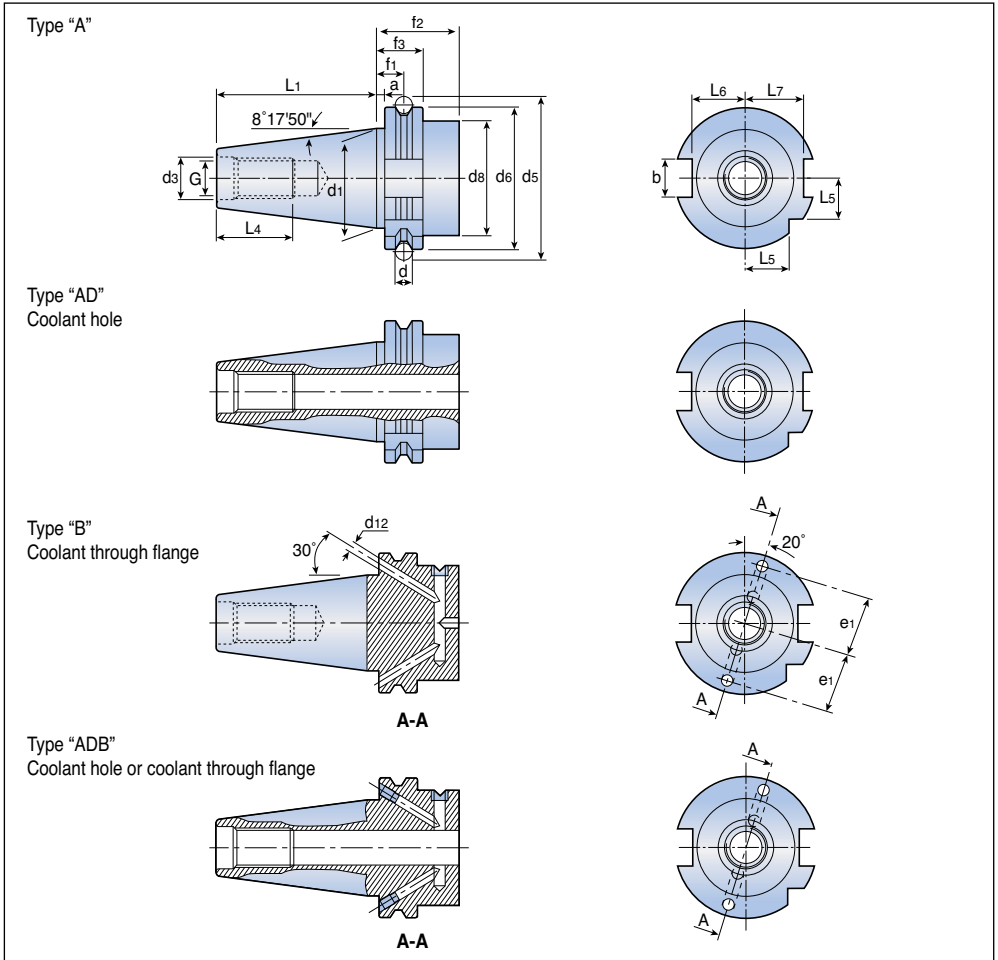


# DIN69871



# DIN69871 Form A/AD/B/ADB

## Standard toolholder



Shank	a ±0.1	b (H12)	d	d1	G	d3 (H7)	d5 ±0.05	d6	d8max	f1 ±0.1
<b>30</b>	3.2	16.1	7	31.75	M12	13	59.30	50.00	45	11.1
<b>40</b>	3.2	16.1	7	44.45	M16	17	72.30	63.55	50	11.1
<b>50</b>	3.2	25.7	7	69.85	M24	25	107.25	97.50	80	11.1

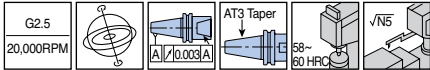
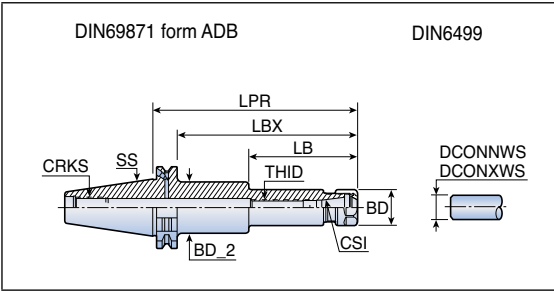
Shank	f2min	f3 -0.1	L1 -0.3	L4min	L5 -0.3	L6 -0.4	L7 -0.4	e1 ±0.1	d12	Taper AT3
<b>30</b>	35	19.1	47.80	24	15.0	16.4	19.0	21	4	0.002
<b>40</b>	35	19.1	68.40	32	18.5	22.8	25.0	27	4	0.003
<b>50</b>	35	19.1	101.75	47	30.0	35.5	37.7	42	6	0.004

\* For non-stock items: Supply condition is subject to availability.  
If not available in stock then MOQ (Minimum order qty) will be applicable.

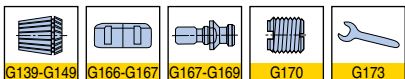


# DIN69871-ER

## ER collet chucks



Designation	Dimension (mm)											
	SS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	CRKS	THID	
<b>DIN69871 30 ER 16x63<sup>(1)</sup></b>	30	ER16	0.5	10.0	28	-	63	43.9	28	M12	M10	
<b>DIN69871 40 ER 16x63</b>	40	ER16	0.5	10.0	28	-	63	43.9	-	M16	M10	
<b>ER 16x100</b>	40	ER16	0.5	10.0	28	-	100	80.9	-	M16	M10	
<b>ER 16x160<sup>(1)</sup></b>	40	ER16	0.5	10.0	28	40	160	140.9	85	M16	M10	
<b>ER 20x63</b>	40	ER20	1.0	13.0	34	-	63	43.9	-	M16	M12	
<b>ER 20x100</b>	40	ER20	1.0	13.0	34	-	100	80.9	-	M16	M12	
<b>ER 20x160<sup>(1)</sup></b>	40	ER20	1.0	13.0	34	44	160	140.9	19	M16	M12	
<b>DIN69871 50 ER 16x100<sup>(1)</sup></b>	50	ER16	0.5	10.0	28	-	100	80.9	-	M24	M10	
<b>ER 16x160<sup>(1)</sup></b>	50	ER16	0.5	10.0	28	40	160	140.9	85	M24	M10	
<b>ER 16x200<sup>(1)</sup></b>	50	ER16	0.5	10.0	28	40	200	180.9	110	M24	M10	
<b>ER 20x100<sup>(1)</sup></b>	50	ER20	1.0	13.0	34	-	100	80.9	-	M24	M12	
<b>ER 20x160<sup>(1)</sup></b>	50	ER20	1.0	13.0	34	45	160	140.9	86	M24	M12	



- Add B for coolant through flange
- <sup>(1)</sup> Balance to G6.3 at 12,000RPM

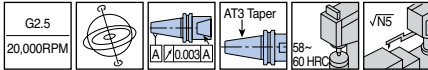
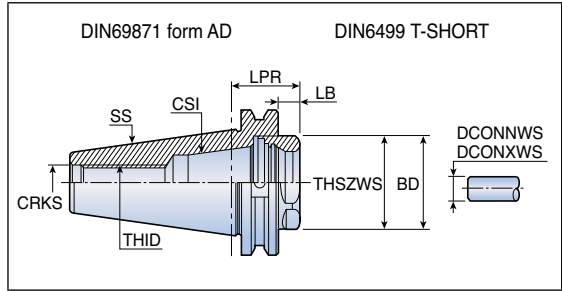




# DIN69871-ER-SHORT



## Short ER collet chucks

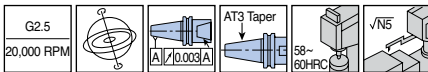
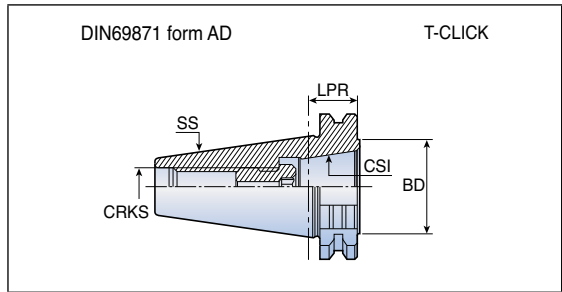


Designation	Dimension (mm)									
	SS	CSI	DCONNWS	DCONXWS	BD	LPR	LB	CRKS	THSZWS	THID
<b>DIN69871 40 ER32 SHORT</b>	40	ER32	2.0	20.0	40	25.1	6.0	M16	M40x1.5	-
<b>DIN69871 50 ER32 SHORT</b>	50	ER32	2.0	20.0	40	28.6	9.5	M24	M40x1.5	M22x1.5
<b>ER40 SHORT</b>	50	ER40	3.0	26.0	50	28.6	9.5	M24	M50x1.5	M28x1.5

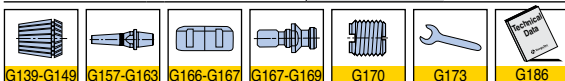
# DIN69871-ER-CLICK-IN



## Quick change connection adapters



Designation	Dimension (mm)				
	SS	CSI	BD	LPR	CRKS
<b>DIN69871 40 ER32 CLICK-IN</b>	40	32 SRF	41	20.1	M16
<b>DIN69871 50 ER32 CLICK-IN</b>	50	32 SRF	41	20.1	M24



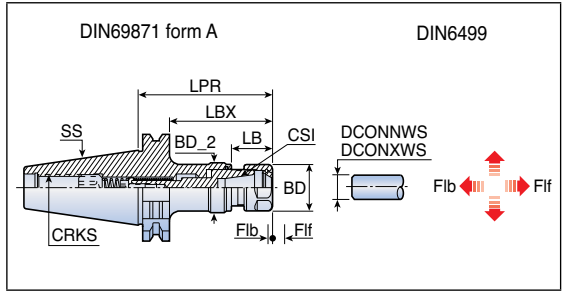
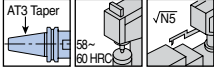
• Tightening torque: 24kg×m





# GTI DIN69871-ER

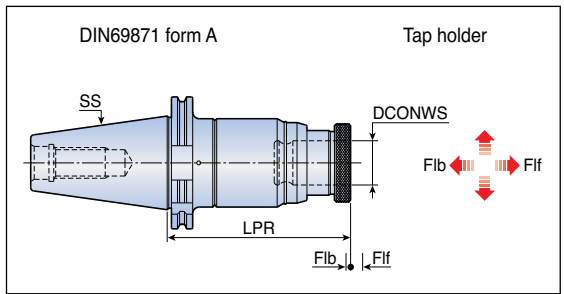
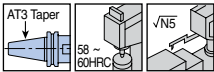
## GTI tap attachments



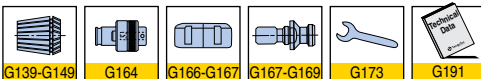
Designation	Dimension (mm)													
	SS	CSI	Tap <sub>min</sub>	Tap <sub>max</sub>	DCONNWS	DCONXWS	BD_2	BD	LPR	LBX	LB	Fib	Fif	CRKS
<b>GTI DIN69871 40 ER 16</b>	40	ER16	M3	M10	0.5	10.0	29.5	28	81.2	62.1	24.6	3	8	M16
<b>ER 32</b>	40	ER32	M6	M20	2.0	20.0	56.5	50	112.6	93.5	33.0	4	9	M16
<b>ER 40</b>	40	ER40	M6	M28	3.0	26.0	56.5	63	130.6	111.5	51.0	4	9	M16
<b>GTI DIN69871 50 ER 16</b>	50	ER16	M3	M10	0.5	10.0	29.5	28	106.8	87.7	24.6	3	8	M24
<b>ER 32</b>	50	ER32	M6	M20	2.0	20.0	56.5	50	115.3	96.2	33.0	4	9	M24
<b>ER 40</b>	50	ER40	M6	M28	3.0	26.0	56.5	63	133.3	114.2	51.0	4	9	M24

# DIN69871-TC

## Tap holders



Designation	Dimension (mm)							
	SS	Tap <sub>min</sub>	Tap <sub>max</sub>	DCONWS	LPR	Fib	Fif	Tap adapter
<b>DIN69871 40 TC 12-90</b>	40	M3	M12	19	90	6.5	12	TA1
<b>TC 22-142</b>	40	M6	M24	31	142	14.5	13	TA2
<b>DIN69871 50 TC 12-130</b>	50	M3	M12	19	130	6.5	12	TA1
<b>TC 22-142</b>	50	M6	M24	31	142	14.5	13	TA2
<b>TC 38-190</b>	50	M18	M38	48	190	20.0	20	TA3



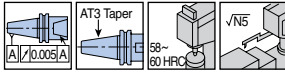
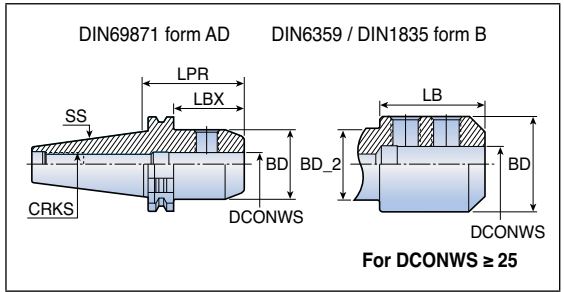
• Torque control system



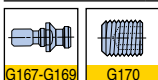


# DIN69871-EM

## End mill holders



Designation	Dimension (mm)							
	SS	DCONWS	BD	BD_2	LPR	LBX	LB	CRKS
<b>DIN69871 30 EM 6x50</b>	30	6	25	-	50	30.9	-	M12
<b>EM 8x50</b>	30	8	28	-	50	30.9	-	M12
<b>EM 10x50</b>	30	10	35	-	50	30.9	-	M12
<b>EM 14x63</b>	30	14	44	-	63	43.9	-	M12
<b>EM 16x63</b>	30	16	48	-	63	43.9	-	M12
<b>EM 18x72</b>	30	18	50	-	72	52.9	-	M12
<b>EM 20x72</b>	30	20	52	-	72	52.9	-	M12
<b>DIN69871 40 EM 6x50</b>	40	6	25	-	50	30.9	-	M16
<b>EM 8x50</b>	40	8	28	-	50	30.9	-	M16
<b>EM 10x50</b>	40	10	35	-	50	30.9	-	M16
<b>EM 12x50</b>	40	12	42	-	50	30.9	-	M16
<b>EM 14x63</b>	40	14	44	-	63	43.9	-	M16
<b>EM 16x63</b>	40	16	48	-	63	43.9	-	M16
<b>EM 18x63</b>	40	18	50	-	63	43.9	-	M16
<b>EM 20x63</b>	40	20	52	-	63	43.9	-	M16
<b>EM 25x100</b>	40	25	65	49.0	100	80.9	65	M16
<b>EM 32x100</b>	40	32	71	49.0	100	80.9	65	M16
<b>DIN69871 50 EM 6x63</b>	50	6	25	-	63	43.9	-	M24
<b>EM 8x63</b>	50	8	28	-	63	43.9	-	M24
<b>EM 10x63</b>	50	10	35	-	63	43.9	-	M24
<b>EM 12x63</b>	50	12	42	-	63	43.9	-	M24
<b>EM 14x63</b>	50	14	44	-	63	43.9	-	M24
<b>EM 16x63</b>	50	16	48	-	63	43.9	-	M24
<b>EM 18x63</b>	50	18	50	-	63	43.9	-	M24
<b>EM 20x63</b>	50	20	52	-	63	43.9	-	M24
<b>EM 25x80</b>	50	25	65	-	80	60.9	-	M24
<b>EM 32x100</b>	50	32	72	-	100	80.9	-	M24
<b>EM 40x100</b>	50	40	90	79.9	100	80.9	43	M24
<b>EM 50x125</b>	50	50	98	79.9	125	105.9	90	M24



• Add B for coolant through flange except DIN69871 30





















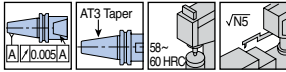
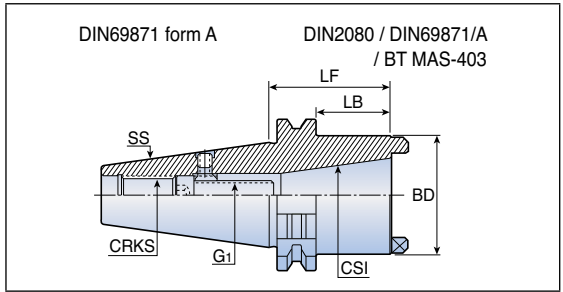






# DIN69871-AD

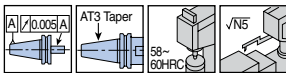
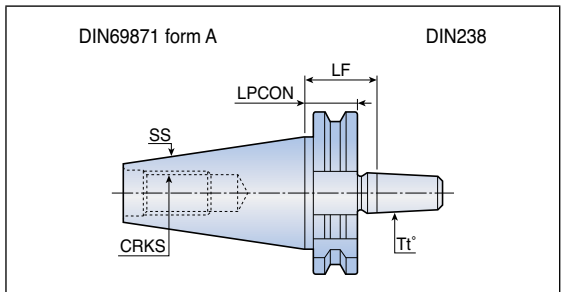
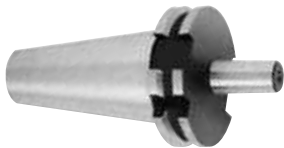
## Adapters



Designation	Dimension (mm)						
	SS	CSI	BD	LF	LB	CRKS	G1
<b>DIN69871 40 AD DIN2080 30</b>	40	DIN2080 30	50	50	30.9	M16	M12
<b>DIN69871 50 AD BT/SK 40</b>	50	BT/SK 40	66	70	50.9	M24	M16

# DIN69871-DC

## Drill chuck arbors



Designation	Dimension (mm)				
	SS	Tt°	LF	LPCON	CRKS
<b>DIN69871 30 DC B12x26</b>	30	B12	26	19.1	M12
<b>DIN69871 40 DC B12x26</b>	40	B12	26	19.1	M16
<b>DC B16x26</b>	40	B16	26	19.1	M16
<b>DC B18x26</b>	40	B18	26	19.1	M16
<b>DIN69871 50 DC B16x26</b>	50	B16	26	19.1	M24
<b>DC B18x26</b>	50	B16	26	19.1	M24



• Without drill chuck

G167-G169

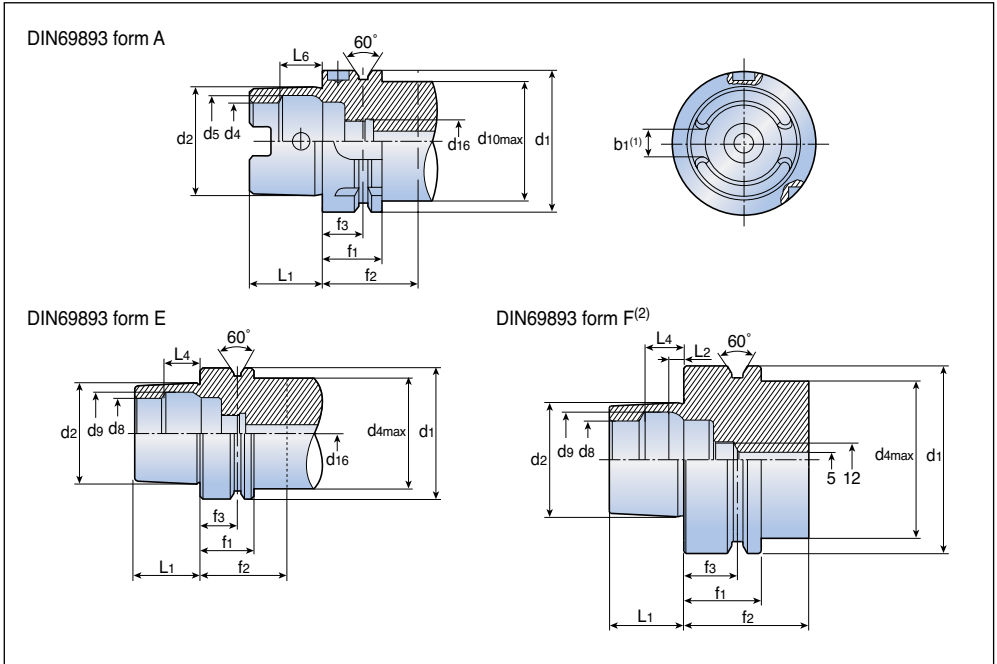


# HSK



# DIN69893 Form A/E/F

## Standard toolholder



### DIN69893 form A

HSK-A	d1 h10	d2	d4 H10	d5 H11	d10max	d16	L1 -0.2	L6 JS10	b1 ±0.04 <sup>(1)</sup>	f1 -0.1	f2min	f3 ±0.1
<b>40</b>	40	30	21	25.5	34	M12x1	20	11.42	8.05	20	35	16
<b>50</b>	50	38	26	32.0	42	M16x1	25	14.13	10.54	26	42	18
<b>63</b>	63	48	34	40.0	53	M18x1	32	18.13	12.54(12.42)	26	42	18
<b>80</b>	80	60	42	50.0	67	M20x1.5	40	22.85	16.04	26	42	18
<b>100</b>	100	75	53	63.0	85	M24x1.5	50	28.56	20.02 (19.9)	29	45	20

• <sup>(1)</sup> The dimensions in parentheses refer to dimension b1 only for HSK A...WH tools.

These tools feature key slot gap and tolerance, set on turning tools for accurate cutting edge height position.  
(According to Japanese ICTM standard and ISO 12164/3 standard)

### DIN69893 form E

HSK-E	d1 h10	d2	d4max	d8 H10	d9 H11	d16	L1 -0.2	L4 JS10	f1 -0.1	f2min	f3 ±0.1
<b>32</b>	32	24	26	17	19.0	M10x1	16	8.92	20	35	16
<b>40</b>	40	30	34	21	25.5	M12x1	20	11.42	20	35	16
<b>50</b>	50	38	42	26	32.0	M16x1	25	14.13	26	42	18
<b>63</b>	63	48	53	34	40.0	M18x1	32	18.13	26	42	18

### DIN69893 form F<sup>(2)</sup>

HSK-F	d1 h10	d2	d4max	d8 H10	d9 H11	L1 -0.2	L2	L4 JS10	f1 -0.1	f2min	f3 ±0.1
<b>63</b>	63	38	53	26	32	25	5.0	14.13	26	42	18

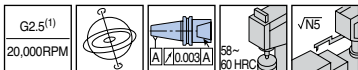
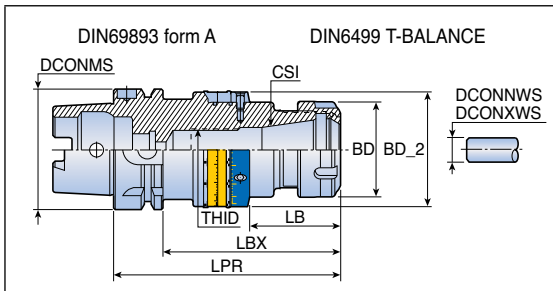
• <sup>(2)</sup> Without crosshole

\* For non-stock items: Supply condition is subject to availability.

If not available in stock then MOQ (Minimum order qty) will be applicable.

# HSK A-ER-BIN

## Balanceable ER collet chucks

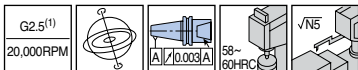
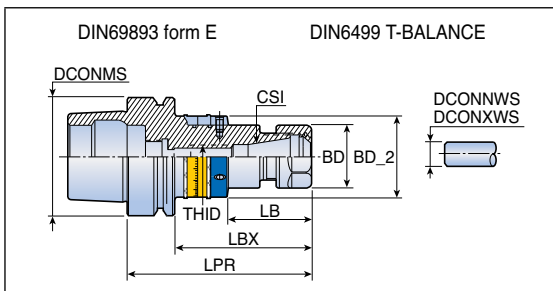


Designation	Dimension (mm)									
	DCONMS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	THID
<b>HSK A 63 ER 16x100 BIN</b>	63	ER16	0.5	10.0	28	44	100	74	45.0	M10
<b>ER 16x160 BIN</b>	63	ER16	0.5	10.0	28	44	160	134	75.0	M10
<b>ER 20x100 BIN</b>	63	ER20	1.0	13.0	34	44	100	74	45.1	M12
<b>ER 20x160 BIN</b>	63	ER20	1.0	13.0	34	44	160	134	86.1	M12
<b>ER 25x100 BIN</b>	63	ER25	1.0	16.0	42	44	100	74	45.2	M16
<b>ER 25x160 BIN</b>	63	ER25	1.0	16.0	42	44	160	134	86.2	M16
<b>ER 32x120 BIN</b>	63	ER32	2.0	20.0	50	60	120	94	48.0	M22x1.5
<b>ER 32x160 BIN</b>	63	ER32	2.0	20.0	50	60	160	134	85.0	M22x1.5

• (1) Preset balanced value

# HSK E-ER-BIN

## Balanceable ER collet chucks



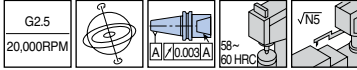
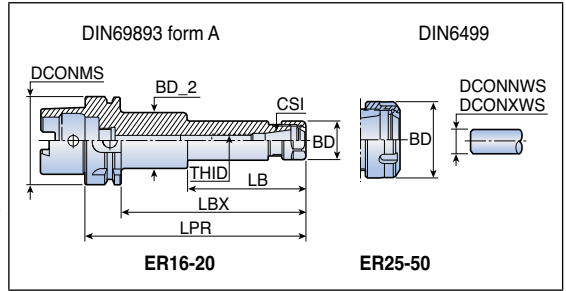
Designation	Dimension (mm)									
	DCONMS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	THID
<b>HSK E 63 ER 16x100 BIN</b>	63	ER16	0.5	10.0	28	44	100	74	45.0	M10
<b>ER 20x100 BIN</b>	63	ER20	1.0	13.0	34	44	100	74	45.1	M12
<b>ER 25x100 BIN</b>	63	ER25	1.0	13.0	42	44	100	74	45.2	M16
<b>ER 32x120 BIN</b>	63	ER32	2.0	20.0	50	60	120	94	48.0	M22x1.5



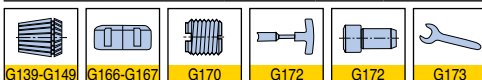
• (1) Preset balanced value

# HSK A-ER

## ER collet chucks



Designation	Dimension (mm)										
	DCONMS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	THID	
<b>HSK A 40 ER 16x60</b>	40	ER16	0.5	10.0	28	-	60	40	-	-	
<b>ER 16x80</b>	40	ER16	0.5	10.0	28	-	80	60	-	M10	
<b>ER 16x100</b>	40	ER16	0.5	10.0	28	-	100	80	-	M10	
<b>ER 25x60</b>	40	ER25	1.0	16.0	42	32.4	60	40	28.0	-	
<b>ER 25x80</b>	40	ER25	1.0	16.0	42	32.4	80	60	28.0	M18x1.5	
<b>ER 25x100</b>	40	ER25	1.0	16.0	42	32.4	100	80	28.0	M16	
<b>ER 32x100</b>	40	ER32	2.0	20.0	50	40.4	100	80	31.0	M22x1.5	
<b>HSK A 50 ER 16x100</b>	50	ER16	0.5	10.0	28	-	100	74	-	M10	
<b>ER 16x120</b>	50	ER16	0.5	10.0	28	-	120	94	-	M10	
<b>ER 20x100</b>	50	ER20	1.0	13.0	34	-	100	74	-	M12	
<b>ER 20x120</b>	50	ER20	1.0	13.0	34	-	120	94	-	M12	
<b>ER 25x80</b>	50	ER25	1.0	16.0	42	32.4	80	54	28.0	M8	
<b>ER 25x100</b>	50	ER25	1.0	16.0	42	41.8	100	74	28.5	M16	
<b>ER 32x100</b>	50	ER32	2.0	20.0	50	40.4	100	74	31.0	M22x1.5	
<b>ER 32x120</b>	50	ER32	2.0	20.0	50	41.8	120	94	35.0	M22x1.5	
<b>HSK A 63 ER 16x100</b>	63	ER16	0.5	10.0	28	-	100	74	-	M10	
<b>ER 16x120</b>	63	ER16	0.5	10.0	28	-	120	94	-	M10	
<b>ER 16x160</b>	63	ER16	0.5	10.0	28	40.0	160	134	85.6	M10	
<b>ER 20x100</b>	63	ER20	1.0	13.0	34	-	100	74	-	M12	
<b>ER 20x120</b>	63	ER20	1.0	13.0	34	-	120	94	-	M12	
<b>ER 20x160</b>	63	ER20	1.0	13.0	34	45.0	160	134	85.0	M12	
<b>ER 25x80</b>	63	ER25	1.0	16.0	42	-	80	54	-	M8	
<b>ER 25x100</b>	63	ER25	1.0	16.0	42	-	100	74	-	M16	
<b>ER 25x120</b>	63	ER25	1.0	16.0	42	-	120	94	-	M16	
<b>ER 25x160</b>	63	ER25	1.0	16.0	42	-	160	134	-	M16	
<b>ER 32x80</b>	63	ER32	2.0	20.0	50	40.4	80	54	31.0	-	
<b>ER 32x100</b>	63	ER32	2.0	20.0	50	-	100	74	-	M22x1.5	
<b>ER 32x120</b>	63	ER32	2.0	20.0	50	-	120	94	-	M22x1.5	
<b>ER 32x160</b>	63	ER32	2.0	20.0	50	-	160	134	-	M22x1.5	
<b>ER 40x80</b>	63	ER40	3.0	26.0	63	50.4	80	54	34.0	-	
<b>ER 40x100</b>	63	ER40	3.0	26.0	63	50.4	100	74	34.0	M28x1.5	
<b>ER 40x120</b>	63	ER40	3.0	26.0	63	50.4	120	94	34.0	M28x1.5	





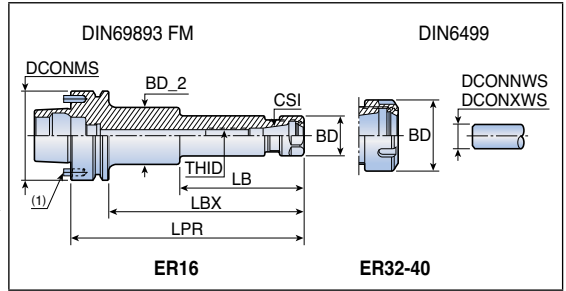
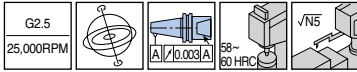






# HSK FM-ER

## ER collet chucks

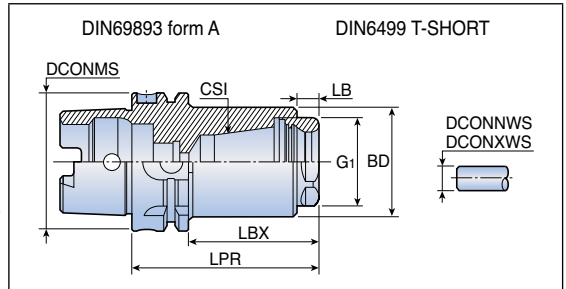
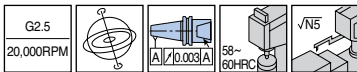


Designation	Dimension (mm)									
	DCONMS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	THID
<b>HSK FM 63 ER 16x80</b>	63	ER16	0.5	10.0	28	-	80	54	-	M10
<b>ER 16x100</b>	63	ER16	0.5	10.0	28	-	100	74	-	M10
<b>ER 16x120</b>	63	ER16	0.5	10.0	28	-	120	94	-	M10
<b>ER 16x160</b>	63	ER16	0.5	10.0	28	40	160	134	85.6	M10
<b>ER 32x80</b>	63	ER32	2.0	20.0	50	-	80	54	-	-
<b>ER 32x100</b>	63	ER32	2.0	20.0	50	-	100	74	-	M22x1.5
<b>ER 40x80</b>	63	ER40	3.0	26.0	63	50	80	54	32.0	-
<b>ER 40x100</b>	63	ER40	3.0	26.0	63	50	100	74	32.0	M28x1.5

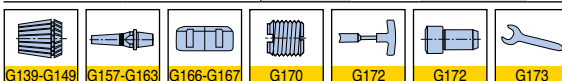
• <sup>(1)</sup> The driving pins can be removed to turn the toolholder into a standard HSK F 63 type

# HSK A-ER-SHORT

## Short ER collet chucks



Designation	Dimension (mm)									
	DCONMS	CSI	DCONNWS	DCONXWS	BD	LPR	LBX	LB	G <sub>1</sub>	
<b>HSK A 63 ER 32 SHORT</b>	63	ER32	2.0	10.0	50	81.0	55.0	9.5	M40x1.5	
<b>HSK A 100 ER 32 SHORT</b>	100	ER32	2.0	10.0	50	89.5	60.5	9.5	M40x1.5	
<b>ER 40 SHORT</b>	100	ER40	3.0	26.0	70	104.5	75.5	9.5	M50x1.5	

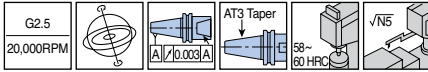
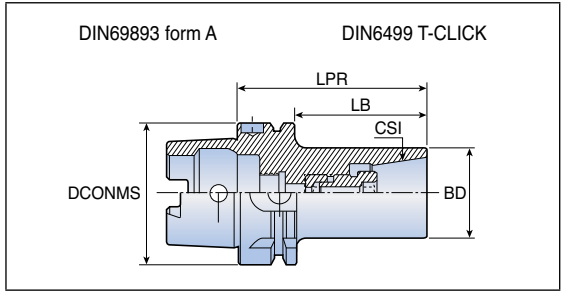


• <sup>(1)</sup> Equipped with nut ER16 MINI

# HSK A-ER-CLICK-IN



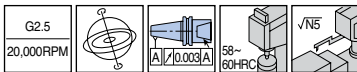
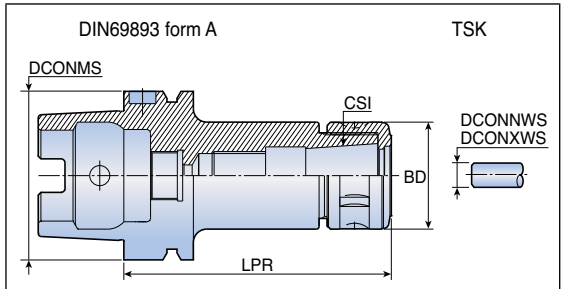
Quick change connection adapters



Designation	Dimension (mm)				
	DCONMS	CSI	BD	LPR	LB
<b>HSK A 63 ER32 CLICK-IN</b>	63	32 SRF	41	85	59

# HSK A-TSK

TSK collet chucks



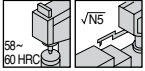
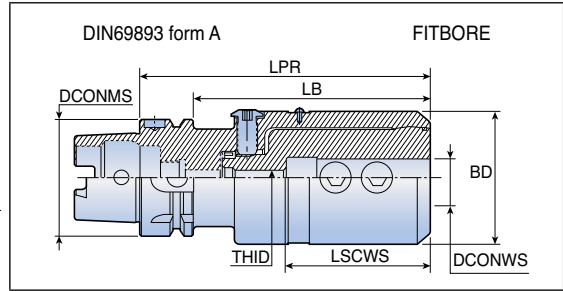
Designation	Dimension (mm)					
	DCONMS	CSI	DCONNWS	DCONXWS	BD	LPR
<b>HSK A 50 TSK 6-80</b>	50	TSK6	1.5	6.0	19.5	80
<b>TSK 10-90</b>	50	TSK10	1.5	10.0	27.5	90
<b>TSK 16-100</b>	50	TSK16	2.5	16.0	40.0	100
<b>HSK A 63 TSK 6-80</b>	63	TSK6	1.5	6.0	19.5	80
<b>TSK 10-90</b>	63	TSK10	1.5	10.0	27.5	90
<b>TSK 16-100</b>	63	TSK16	2.5	16.0	40.0	100
<b>TSK 25-120</b>	63	TSK20	15.5	25.4	55.0	120
<b>HSK A 100 TSK 6-80</b>	100	TSK6	1.5	6.0	19.5	80
<b>TSK 10-90</b>	100	TSK10	1.5	10.0	27.5	90
<b>TSK 16-100</b>	100	TSK16	2.5	16.0	40.0	100
<b>TSK 25-120</b>	100	TSK25	15.5	25.4	55.0	120



# FITBORE HSK A-EM



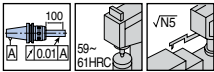
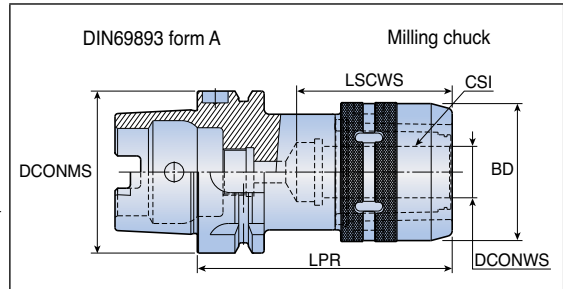
## Adjustable rotary toolholders



Designation	Dimension (mm)						
	DCONMS	DCONWS	BD	LPR	LB	LSCWS	THID
<b>FITBORE HSK A 63 EM 25</b>	63	25	72	142	116	71	M10
<b>EM 32</b>	63	32	72	142	116	71	M10
<b>EM 40</b>	63	40	72	142	116	71	M10

# HSK A-TMC

## Milling chucks

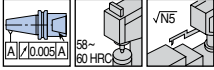
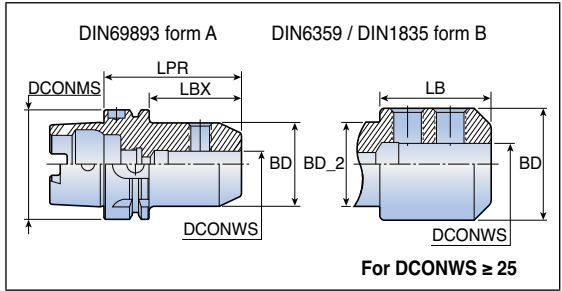


Designation	Dimension (mm)					
	DCONMS	CSI	DCONWS	BD	LPR	LSCWS
<b>HSK A 63 TMC 20-105</b>	63	20	20	54	105	70
<b>TMC 25-120</b>	63	25	25	62	120	80
<b>TMC 32-130</b>	63	32	32	72	130	100
<b>HSK A 100 TMC 20-110</b>	100	20	20	54	110	70
<b>TMC 25-130</b>	100	25	25	62	130	80
<b>TMC 32-135</b>	100	32	32	72	135	100
<b>TMC 42-135</b>	100	42	42	92	135	100



# HSK A-EM

## End mill holders

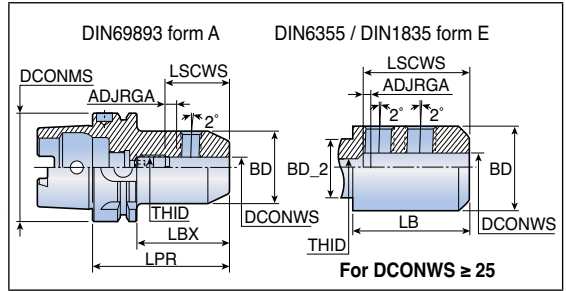
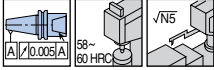


Designation	Dimension (mm)								
	DCONMS	DCONWS	BD	BD_2	LPR	LBX	LB		
<b>HSK A 50</b>	<b>EM 6x65</b>	50	6	25	-	65	39	-	
	<b>EM 8x65</b>	50	8	28	-	65	39	-	
	<b>EM 10x65</b>	50	10	35	-	65	39	-	
	<b>EM 14x80</b>	50	14	44	-	80	54	-	
	<b>EM 16x80</b>	50	16	48	-	80	54	-	
	<b>EM 18x80</b>	50	18	50	-	80	54	-	
	<b>EM 20x80</b>	50	20	52	-	80	54	-	
<b>HSK A 63</b>	<b>EM 6x65</b>	63	6	25	-	65	39	-	
	<b>EM 8x65</b>	63	8	28	-	65	39	-	
	<b>EM 10x65</b>	63	10	35	-	65	39	-	
	<b>EM 12x80</b>	63	12	42	-	80	54	-	
	<b>EM 14x80</b>	63	14	44	-	80	54	-	
	<b>EM 16x80</b>	63	16	48	-	80	54	-	
	<b>EM 18x80</b>	63	18	50	-	80	54	-	
	<b>EM 20x80</b>	63	20	52	-	80	54	-	
	<b>EM 25x110</b>	63	25	65	52	110	84	65.5	
	<b>EM 32x110</b>	63	32	72	52	110	84	65.5	
<b>HSK A 100</b>	<b>EM 8x80</b>	100	8	28	-	80	51	-	
	<b>EM 10x80</b>	100	10	35	-	80	51	-	
	<b>EM 12x80</b>	100	12	42	-	80	51	-	
	<b>EM 14x80</b>	100	14	44	-	80	51	-	
	<b>EM 16x100</b>	100	16	48	-	100	71	-	
	<b>EM 18x100</b>	100	18	50	-	100	71	-	
	<b>EM 20x100</b>	100	20	52	-	100	71	-	
	<b>EM 25x100</b>	100	25	65	-	100	71	-	
	<b>EM 32x100</b>	100	32	72	-	100	71	-	
	<b>EM 40x110</b>	100	40	85	-	110	81	-	



# HSK A-EM-E

## End mill holders - Whistle notch

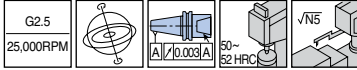
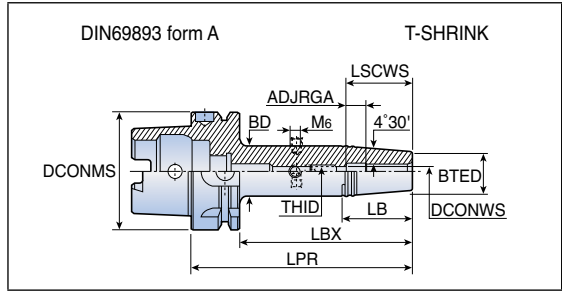


Designation	Dimension (mm)										
	DCONMS	DCONWS	BD	BD_2	LPR	LBX	LB	ADJRGA	LSCWS	THID	
<b>HSK A 50</b>	<b>EM 6x80 E</b>	50	6	25	-	80	54	-	8	38	M5
	<b>EM 8x80 E</b>	50	8	28	-	80	54	-	5	40	M6
	<b>EM 10x80 E</b>	50	10	35	-	80	54	-	5	44	M8
	<b>EM 12x90 E</b>	50	12	42	-	90	64	-	5	49	M10
	<b>EM 14x90 E</b>	50	14	44	-	90	64	-	5	49	M10
	<b>EM 16x90 E</b>	50	16	48	-	90	64	-	5	52	M12
	<b>EM 18x90 E</b>	50	18	50	-	90	64	-	5	52	M12
	<b>EM 20x100 E</b>	50	20	52	-	100	74	-	5	54	M16
<b>HSK A 63</b>	<b>EM 6x80 E</b>	63	6	25	-	80	54	-	8	40	M5
	<b>EM 8x80 E</b>	63	8	28	-	80	54	-	5	40	M6
	<b>EM 10x80 E</b>	63	10	35	-	80	54	-	5	44	M8
	<b>EM 12x90 E</b>	63	12	42	-	90	64	-	5	49	M10
	<b>EM 14x90 E</b>	63	14	44	-	90	64	-	5	49	M10
	<b>EM 16x100 E</b>	63	16	48	-	100	74	-	5	52	M12
	<b>EM 18x100 E</b>	63	18	50	-	100	74	-	8	55	M12
	<b>EM 20x100 E</b>	63	20	52	-	100	74	-	5	54	M16
<b>HSK A 100</b>	<b>EM 25x110 E</b>	63	25	65	52	110	84	65.5	7	61	M16
	<b>EM 32x110 E</b>	63	32	72	52	110	84	65.5	5	63	M20x1.5
	<b>EM 6x90 E</b>	100	6	25	-	90	61	-	5	40	M5
	<b>EM 8x90 E</b>	100	8	28	-	90	61	-	5	40	M6
	<b>EM 10x90 E</b>	100	10	35	-	90	61	-	5	44	M8
	<b>EM 12x100 E</b>	100	12	42	-	100	71	-	10	54	M10
	<b>EM 14x100 E</b>	100	14	44	-	100	71	-	10	54	M10
	<b>EM 16x100 E</b>	100	16	48	-	100	71	-	5	52	M12
<b>EM 18x100 E</b>	100	18	50	-	100	71	-	5	52	M12	
<b>EM 20x110 E</b>	100	20	52	-	110	81	-	5	54	M16	
<b>EM 25x120 E</b>	100	25	65	-	120	91	-	7	61	M20x1.5	
<b>EM 32x120 E</b>	100	32	72	-	120	91	-	5	63	M20x1.5	

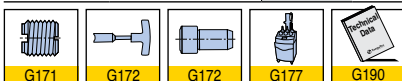




## Thermal shrinking chucks

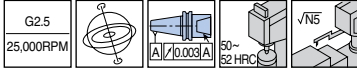
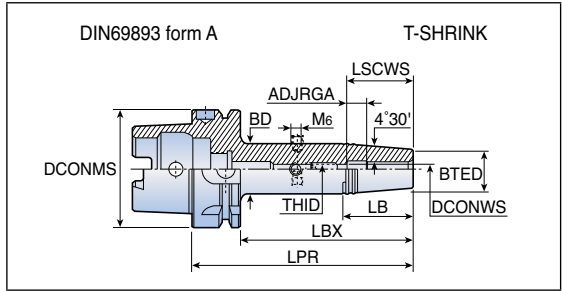


Designation	Dimension (mm)										
	DCONMS	DCONWS	BTED	BD	LPR	LBX	LB	ADJRGA	LSCWS	THID	Hex key
<b>HSK A 50 SRKIN 6x80</b>	50	6	21	27	80	54	38	11	36	M5	2.5
<b>SRKIN 8x80</b>	50	8	21	27	80	54	38	11	36	M6	3.0
<b>SRKIN 10x85</b>	50	10	24	32	85	59	51	11	42	M8	4.0
<b>SRKIN 12x90</b>	50	12	24	32	90	64	51	11	47	M10	5.0
<b>SRKIN 14x90</b>	50	14	27	34	90	64	45	11	47	M10	5.0
<b>SRKIN 16x95</b>	50	16	27	34	95	69	45	11	50	M10	5.0
<b>HSK A 63 SRKIN 6x80</b>	63	6	21	27	80	54	38	11	36	M5	2.5
<b>SRKIN 6x120</b>	63	6	21	27	120	94	38	11	36	M5	2.5
<b>SRKIN 6x160</b>	63	6	21	27	160	134	38	11	36	M5	2.5
<b>SRKIN 8x80</b>	63	8	21	27	80	54	38	11	36	M6	3.0
<b>SRKIN 8x120</b>	63	8	21	27	120	94	38	11	36	M6	3.0
<b>SRKIN 8x160</b>	63	8	21	27	160	134	38	11	36	M6	3.0
<b>SRKIN 10x85</b>	63	10	24	32	85	54	51	11	42	M8	4.0
<b>SRKIN 10x120</b>	63	10	24	32	120	94	51	11	42	M8	4.0
<b>SRKIN 10x160</b>	63	10	24	32	160	134	51	11	42	M8	4.0
<b>SRKIN 12x90</b>	63	12	24	32	90	64	51	6	42	M8	4.0
<b>SRKIN 12x120</b>	63	12	24	32	120	94	51	11	47	M10	5.0
<b>SRKIN 12x160</b>	63	12	24	32	160	134	51	11	47	M10	5.0
<b>SRKIN 14x90</b>	63	14	27	34	90	64	45	11	47	M10	5.0
<b>SRKIN 14x120</b>	63	14	27	34	120	94	45	11	47	M10	5.0
<b>SRKIN 14x160</b>	63	14	27	34	160	134	45	11	47	M10	5.0
<b>SRKIN 16x75</b>	63	16	27	34	75	49	-	11	50	-	-
<b>SRKIN 16x95</b>	63	16	27	34	95	69	44	11	50	M12	6.0
<b>SRKIN 16x120</b>	63	16	27	34	120	94	44	11	50	M12	6.0
<b>SRKIN 16x160</b>	63	16	27	34	160	134	44	11	50	M12	6.0
<b>SRKIN 18x95</b>	63	18	33	42	95	69	57	11	50	M12	6.0
<b>SRKIN 18x120</b>	63	18	33	42	120	94	57	11	50	M12	6.0
<b>SRKIN 18x160</b>	63	18	33	42	160	134	57	11	50	M12	6.0
<b>SRKIN 20x75</b>	63	20	33	41	75	49	-	9	50	-	-
<b>SRKIN 20x100</b>	63	20	33	42	100	74	57	11	52	M16	8.0
<b>SRKIN 20x120</b>	63	20	33	42	120	94	57	11	52	M16	8.0
<b>SRKIN 20x160</b>	63	20	33	42	160	134	57	11	52	M16	8.0
<b>SRKIN 25x85</b>	63	25	44	53	85	59	-	11	58	-	-



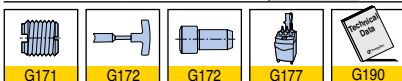
• Use only inductive heating device for T-SHRINK holders

## Thermal shrinking chucks



Designation	Dimension (mm)											
	DCONMS	DCONWS	BTED	BD	LPR	LBX	LB	ADJRG A	LSCWS	THID	Hex key	
<b>HSK A 63 SRKIN 25x115</b>	63	25	44	53	115	89	55	11	58	M16	8.0	
<b>SRKIN 32x85</b>	63	32	44	53	85	59	-	11	58	-	-	
<b>SRKIN 32x120</b>	63	32	44	53	120	94	55	11	58	M16	8.0	
<b>HSK A 100 SRKIN 6x85</b>	100	6	21	27	85	56	38	11	36	M5	2.5	
<b>SRKIN 6x120</b>	100	6	21	27	120	91	38	11	36	M5	2.5	
<b>SRKIN 6x160</b>	100	6	21	27	160	131	38	11	36	M6	3.0	
<b>SRKIN 8x85</b>	100	8	21	27	85	56	38	11	36	M6	3.0	
<b>SRKIN 8x120</b>	100	8	21	27	120	91	38	11	36	M6	3.0	
<b>SRKIN 8x160</b>	100	8	21	27	160	131	38	11	36	M6	3.0	
<b>SRKIN 10x90</b>	100	10	24	32	90	61	51	11	42	M8	4.0	
<b>SRKIN 10x120</b>	100	10	24	32	120	91	51	11	42	M8	4.0	
<b>SRKIN 10x160</b>	100	10	24	32	160	131	51	11	42	M8	4.0	
<b>SRKIN 12x95</b>	100	12	24	32	95	66	51	11	47	M10	5.0	
<b>SRKIN 12x120</b>	100	12	24	32	120	91	51	11	47	M10	5.0	
<b>SRKIN 12x160</b>	100	12	24	32	160	131	51	11	47	M10	5.0	
<b>SRKIN 14x95</b>	100	14	27	34	95	66	45	11	47	M10	5.0	
<b>SRKIN 14x120</b>	100	14	27	34	120	91	45	11	47	M10	5.0	
<b>SRKIN 14x160</b>	100	14	27	34	160	131	45	11	47	M10	5.0	
<b>SRKIN 16x100</b>	100	16	27	34	100	71	45	11	50	M12	6.0	
<b>SRKIN 16x120</b>	100	16	27	34	120	91	45	11	50	M12	6.0	
<b>SRKIN 16x160</b>	100	16	27	34	160	131	45	11	50	M12	6.0	
<b>SRKIN 18x100</b>	100	18	33	42	100	71	57	11	50	M12	6.0	
<b>SRKIN 18x160</b>	100	18	33	42	160	131	57	11	50	M12	6.0	
<b>SRKIN 20x105</b>	100	20	33	42	105	76	57	11	52	M16	8.0	
<b>SRKIN 20x160</b>	100	20	33	42	160	131	57	11	52	M16	8.0	
<b>SRKIN 25x115</b>	100	25	44	53	115	86	57	11	58	M16	8.0	
<b>SRKIN 32x120</b>	100	32	44	53	120	91	57	11	58	M16	8.0	

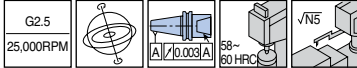
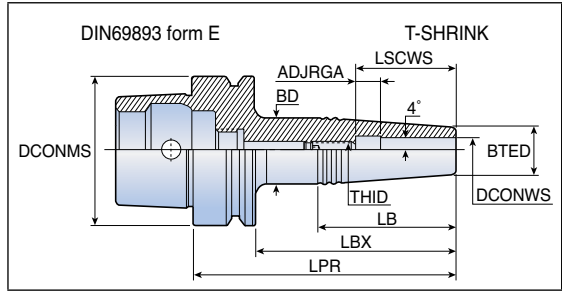
• Use only inductive heating device for T-SHRINK holders







## Thermal shrinking chucks



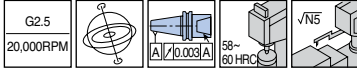
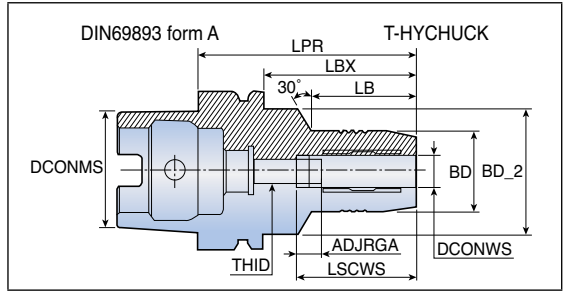
Designation	Dimension (mm)										
	DCONMS	DCONWS	BTED	BD	LPR	LBX	LB	ADJRGA	LSCWS	THID	Hex key
<b>HSK E 32 SRK 3x45</b>	32	3	10	13	65	45	30.0	6	16	M4	2.0
<b>SRK 4x45</b>	32	4	10	15	65	45	35.0	6	18	M4	2.0
<b>SRK 5x45</b>	32	5	10	15	65	45	35.0	10	25	M4	2.0
<b>SRK 6x45</b>	32	6	11	16	65	45	35.0	10	28	M4	2.0
<b>SRK 8x45</b>	32	8	14	20	65	45	42.0	10	35	M4	2.0
<b>SRK 10x45</b>	32	12	16	22	65	45	42.0	10	40	M4	2.0
<b>SRK 12x45</b>	32	12	20	25	65	45	35.6	8	40	M4	2.0
<b>HSK E 40 SRK 3x45</b>	40	3	10	13	65	45	30.0	6	16	M5	2.5
<b>SRK 3x80</b>	40	3	10	19	100	80	64.0	6	16	M5	2.5
<b>SRK 4x45</b>	40	4	10	15	65	45	35.0	6	18	M5	2.5
<b>SRK 4x80</b>	40	4	10	19	100	80	64.0	6	18	M5	2.5
<b>SRK 5x45</b>	40	5	10	15	65	45	35.0	10	25	M4	2.0
<b>SRK 5x80</b>	40	5	10	19	100	80	64.0	10	25	M4	2.0
<b>SRK 6x45</b>	40	6	11	16	65	45	35.0	10	28	M5	2.5
<b>SRK 6x80</b>	40	6	11	20	100	80	64.0	10	28	M5	2.5
<b>SRK 8x45</b>	40	8	14	20	65	45	42.0	10	35	M5	2.5
<b>SRK 8x80</b>	40	8	14	23	100	80	64.0	10	35	M6	3.0
<b>SRK 10x45</b>	40	10	16	22	65	45	42.0	10	40	M5	2.5
<b>SRK 10x80</b>	40	10	16	24	100	80	60.0	10	40	M8	4.0
<b>SRK 12x45</b>	40	12	20	26	65	45	42.0	10	42	M5	2.5
<b>SRK 12x80</b>	40	12	20	28	100	80	56.0	10	42	M10	5.0
<b>HSK E 50 SRK 3x45</b>	50	3	10	15	71	45	36.0	6	16	M5	2.5
<b>SRK 3x80</b>	50	3	10	19	106	80	64.0	6	16	M5	2.5
<b>SRK 4x45</b>	50	4	10	15	71	45	36.0	6	18	M5	2.5
<b>SRK 4x80</b>	50	4	10	19	106	80	64.0	6	18	M5	2.5
<b>SRK 5x45</b>	50	5	10	15	71	45	36.0	6	21	M6	3.0
<b>SRK 5x80</b>	50	5	10	15	106	80	64.0	6	21	M6	3.0
<b>SRK 6x45</b>	50	6	11	16	71	45	36.0	10	28	M5	2.5
<b>SRK 6x80</b>	50	6	11	20	106	80	64.0	10	28	M5	2.5
<b>SRK 8x45</b>	50	8	14	20	71	45	43.0	10	35	M6	3.0
<b>SRK 8x80</b>	50	8	14	23	106	80	64.0	10	35	M6	3.0
<b>SRK 10x45</b>	50	10	16	22	71	45	42.0	7	37	M6	3.0
<b>SRK 10x80</b>	50	10	16	24	106	80	60.0	10	40	M8	4.0
<b>SRK 12x45</b>	50	12	20	26	71	45	42.0	7	39	M6	3.0
<b>SRK 12x80</b>	50	12	20	28	106	80	57.0	10	42	M10	5.0



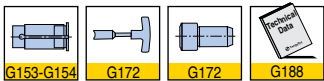


# HSK A-THC

Hydraulic chucks



Designation	Dimension (mm)										
	DCONMS	DCONWS	BD	BD_2	LPR	LBX	LB	ADJRGA	LSCWS	THID	
<b>HSK A 40</b>	<b>THC 6-70</b>	40	6	28	34	70	50	28	10	37.5	M5
	<b>THC 8-70</b>	40	8	30	34	70	50	28	10	37.5	M6
	<b>THC 10-75</b>	40	10	32	34	75	55	34	10	42.5	M6
	<b>THC 12-85</b>	40	12	34	34	85	60	60	10	47.5	M6
<b>HSK A 50</b>	<b>THC 6-70</b>	50	6	28	40	70	44	28	10	37.5	M5
	<b>THC 8-70</b>	50	8	30	40	70	44	28	10	37.5	M6
	<b>THC 10-75</b>	50	10	32	40	75	49	34	10	42.5	M8x1
	<b>THC 12-80</b>	50	12	34	40	85	59	39	10	47.5	M10x1
	<b>THC 16-90</b>	50	16	38	53	90	64	30	10	52.5	M10x1
	<b>THC 20-90</b>	50	20	43	60	90	64	29	10	52.5	M10x1
	<b>THC 25-120</b>	50	25	48	60	120	94	59	10	61.0	M16x1
<b>HSK A 63</b>	<b>THC 6-70</b>	63	6	28	50	70	44	24	10	37.5	M5
	<b>THC 8-70</b>	63	8	30	50	70	44	24	10	37.5	M6
	<b>THC 10-80</b>	63	10	32	50	80	54	35	10	42.5	M8x1
	<b>THC 12-85</b>	63	12	34	50	85	59	40	10	47.5	M10x1
	<b>THC 14-85</b>	63	14	36	50	85	59	40	10	47.5	M10x1
	<b>THC 16-90</b>	63	16	38	50	90	64	46	10	52.5	M10x1
	<b>THC 20-90</b>	63	20	43	50	90	64	48	10	52.5	M10x1
	<b>THC 25-120</b>	63	25	48	63	120	94	59	10	61.0	M16x1
	<b>THC 32-125</b>	63	32	53	75	125	99	63	10	65.0	M16x1
	<b>HSK A 100</b>	<b>THC 6-80<sup>(1)</sup></b>	100	6	28	50	80	46	29	10	37.5
<b>THC 8-75<sup>(1)</sup></b>		100	8	30	54	75	46	26	10	37.5	M6
<b>THC 10-90<sup>(1)</sup></b>		100	10	32	50	90	61	42	10	42.5	M8x1
<b>THC 12-95<sup>(1)</sup></b>		100	12	34	50	95	66	47	10	47.5	M10x1
<b>THC 16-100<sup>(1)</sup></b>		100	16	38	50	100	71	53	10	52.5	M10x1
<b>THC 18-100<sup>(1)</sup></b>		100	18	41	50	100	71	53	10	52.5	M10x1
<b>THC 20-105<sup>(1)</sup></b>		100	20	43	50	105	76	59	10	52.5	M10x1
<b>THC 25-110<sup>(1)</sup></b>		100	25	48	63	110	81	62	10	61.0	M16x1
<b>THC 32-110<sup>(1)</sup></b>		100	32	53	75	110	81	62	10	65.0	M16x1



• <sup>(1)</sup> Balance to G2.5 at 15,000RPM





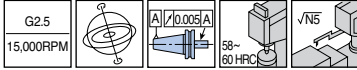
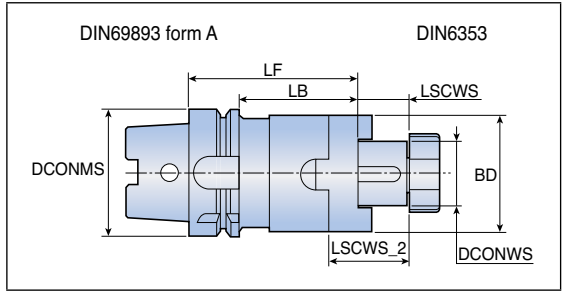




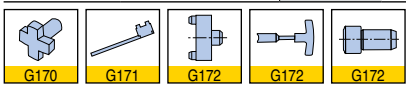


# HSK A-SEMC

Combi shell end mill arbors



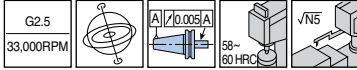
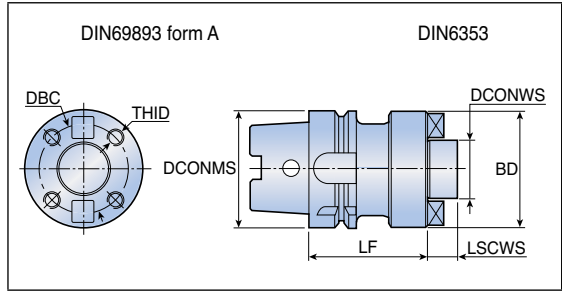
Designation	Dimension (mm)							
	DCONMS	DCONWS	BD	LF	LB	LSCWS	LSCWS_2	
<b>HSK A 50 SEMC 16x50</b>	50	16	32	50	24	17	27	
<b>SEMC 27x65</b>	50	27	48	65	39	21	33	
<b>HSK A 63 SEMC 16x60</b>	63	16	32	60	34	17	21	
<b>SEMC 22x60</b>	63	22	40	60	34	19	31	
<b>SEMC 27x60</b>	63	27	48	60	34	21	33	
<b>SEMC 32x60</b>	63	32	58	60	34	24	38	
<b>SEMC 40x70</b>	63	40	70	70	44	27	41	
<b>HSK A 100 SEMC 16x60</b>	100	16	32	60	31	17	27	
<b>SEMC 22x60</b>	100	22	40	60	31	19	31	
<b>SEMC 27x60</b>	100	27	48	60	31	21	33	
<b>SEMC 32x60</b>	100	32	58	60	31	24	38	
<b>SEMC 40x70</b>	100	40	70	70	41	27	41	
<b>SEMC 50x80</b>	100	50	90	80	51	30	46	



• Wrench not included

# HSK A FM

Face mill arbors

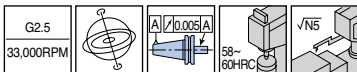
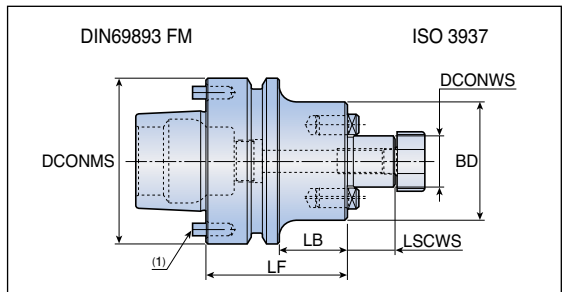


Designation	Dimension (mm)						
	DCONMS	DCONWS	BD	DBC	LF	LSCWS	THID
<b>HSK A 100 FM 60x70</b>	100	60	128	101.6	70	40	M16

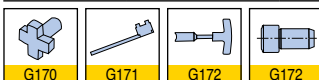
• Wrench not included

# HSK FM-SEM

Face mill arbors - HSK high torque



Designation	Dimension (mm)					
	DCONMS	DCONWS	BD	LF	LB	LSCWS
<b>HSK FM 63 SEM 22x60</b>	63	22	47	60	34	19
<b>SEM 27x60</b>	63	27	58	60	34	21
<b>SEM 32x60</b>	63	32	66	60	34	24



• <sup>(1)</sup> The driving pins can be removed to turn the toolholder into a standard HSK F 63 type



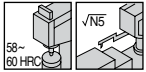
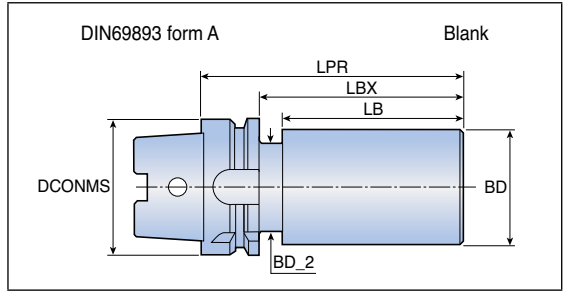




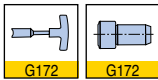


# HSK A-B16MN

HSK blanks



Designation	Dimension (mm)					
	DCONMS	BD	BD_2	LPR	LBX	LB
<b>HSK A 50 B16MN 100</b>	50	53	41.8	100	74	58.0
	<b>B16MN 200</b>	50	53	41.8	200	174
<b>HSK A 63 B16MN 100</b>	63	63	52.8	100	74	55.5
	<b>B16MN 200</b>	63	63	52.8	200	174
<b>HSK A 100 B16MN 100</b>	100	102	85.0	100	71	54.8
	<b>B16MN 200</b>	100	102	85.0	200	171



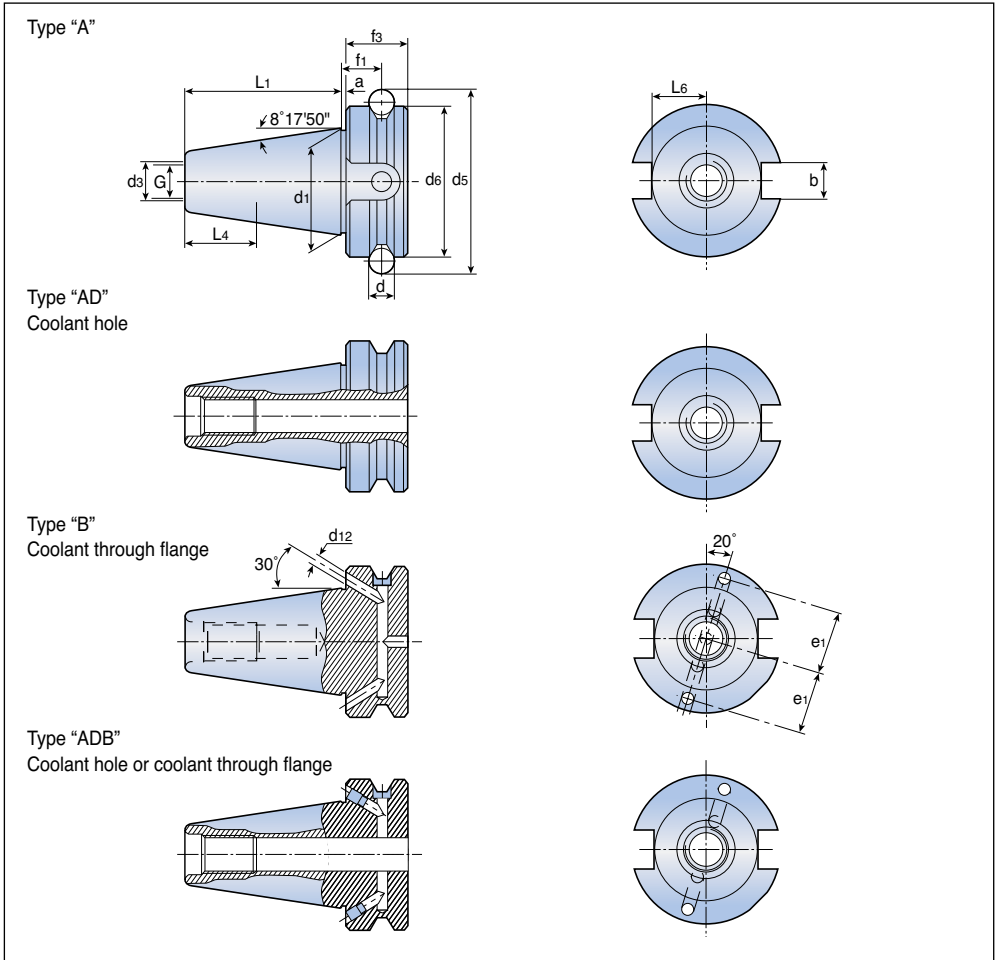
- Material: Case hardened alloy steel
- Shank hardness 58 HRC minimum
- Nose hardness 35-37 HRC

# BT MAS



# BT MAS 403 Form A/AD/B/ADB

## Standard toolholder



Shank	a ±0.1	b (H12)	d	d1	G	d3 (H8)	d5	d6 (H8)
<b>30</b>	2	16.1	8	31.75	M12	12.5	56.144	46
<b>40</b>	2	16.1	10	44.45	M16	17.0	75.679	63
<b>50</b>	3	25.7	15	69.85	M24	25.0	119.020	100

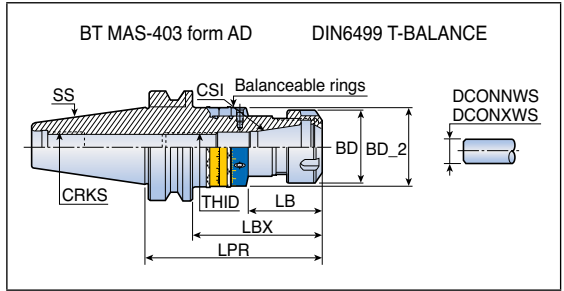
Shank	f1 ±0.1	f3	L1 ±0.2	L4min	L6 -0.2	e1 ±0.1	d12	Taper AT3
<b>30</b>	13.6	20	48.4	24	16.3	21	4	0.002
<b>40</b>	16.6	25	65.4	30	22.6	27	4	0.003
<b>50</b>	23.2	35	101.8	45	35.4	42	6	0.004

\* For non-stock items: Supply condition is subject to availability.  
If not available in stock then MOQ (Minimum order qty) will be applicable.

# BT-ER-BIN



## Balanceable ER collet chucks



G2.5 <sup>(1)</sup> 20,000RPM			AT3 Taper		√N5	
		A/0.003A	SE 58~ 60 HRC			

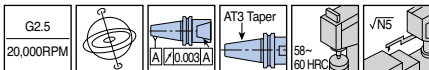
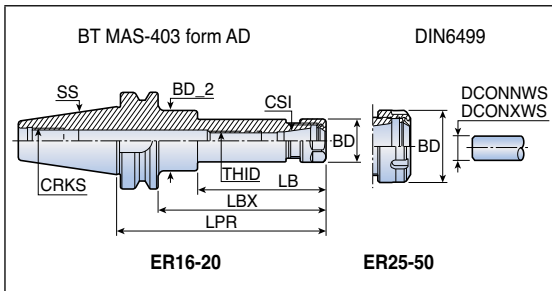
Designation	Dimension (mm)										
	SS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	CRKS	THID
<b>BT40 ER 16x100 BIN</b>	40	ER16	0.5	10.0	28	44	100	73	44.0	M16	M10
<b>ER 16x150 BIN</b>	40	ER16	0.5	10.0	28	44	150	123	78.7	M16	M10
<b>ER 20x100 BIN</b>	40	ER20	1.0	13.0	34	44	100	73	44.6	M16	M12
<b>ER 20x150 BIN</b>	40	ER20	1.0	13.0	34	44	150	123	79.6	M16	M12
<b>ER 25x100 BIN</b>	40	ER25	1.0	16.0	42	44	100	73	43.0	M16	M16
<b>ER 25x150 BIN</b>	40	ER25	1.0	16.0	42	44	150	123	79.0	M16	M16
<b>ER 32x100 BIN</b>	40	ER32	2.0	20.0	50	60	100	73	44.0	M16	M22x1.5
<b>ER 32x150 BIN</b>	40	ER32	2.0	20.0	50	60	150	123	94.0	M16	M22x1.5
<b>ER 40x100 BIN</b>	40	ER40	3.0	26.0	63	60	100	73	44.0	M16	M28x1.5

G139-G149	G166-G167	G167-G169	G170	G173	G187

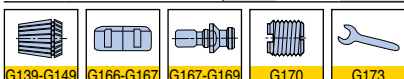
• <sup>(1)</sup> Preset balanced value

# BT-ER

## ER collet chucks



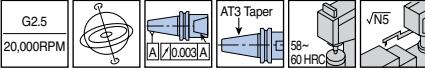
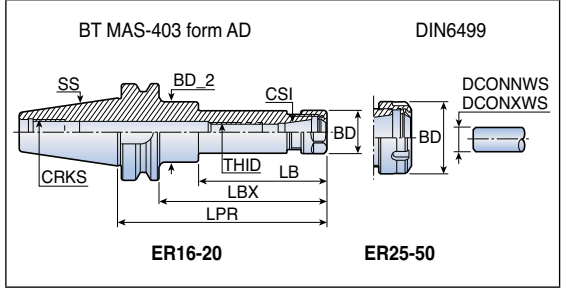
Designation	Dimension (mm)										
	SS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	CRKS	THID
<b>BT30</b> ER 16x70 <sup>(1)</sup>	30	ER16	0.5	10.0	28	-	70	48	-	M12	M10
ER 16x100 <sup>(1)</sup>	30	ER16	0.5	10.0	28	-	100	73	-	M12	M10
ER 20x70 <sup>(1)</sup>	30	ER20	1.0	13.0	34	-	70	48	-	M12	M12
ER 25x60 <sup>(1)</sup>	30	ER25	1.0	16.0	42	-	60	38	-	M12	M16
ER 32x60 <sup>(1)</sup>	30	ER32	2.0	20.0	50	-	60	38	-	M12	M18x1.5
<b>BT40</b> ER 16x70	40	ER16	0.5	10.0	28	-	70	43	-	M16	M12
ER 16x100	40	ER16	0.5	10.0	28	-	100	73	-	M16	M12
ER 16x150 <sup>(1)</sup>	40	ER16	0.5	10.0	28	40	150	123	85	M16	M12
ER 16x200 <sup>(1)</sup>	40	ER16	0.5	10.0	28	40	200	173	85	M16	M10
ER 20x70	40	ER20	1.0	13.0	34	-	70	43	-	M16	M12
ER 20x100	40	ER20	1.0	13.0	34	-	100	73	-	M16	M12
ER 20x120	40	ER20	1.0	13.0	34	-	120	93	-	M16	M12
ER 20x150 <sup>(1)</sup>	40	ER20	1.0	13.0	34	-	150	123	-	M16	M12
ER 25x60	40	ER25	1.0	13.0	42	-	60	33	-	M16	M16
ER 25x100	40	ER25	1.0	16.0	42	-	100	73	-	M16	M16
ER 25x150 <sup>(1)</sup>	40	ER25	1.0	16.0	42	-	150	123	-	M16	M16
ER 32x60	40	ER32	2.0	20.0	50	-	60	33	-	M16	M22x1.5
ER 32x100	40	ER32	2.0	20.0	50	-	100	73	-	M16	M22x1.5
ER 32x150 <sup>(1)</sup>	40	ER32	2.0	20.0	50	-	150	123	-	M16	M22x1.5
ER 32x200 <sup>(1)</sup>	40	ER32	2.0	20.0	50	-	200	162	-	M17	M22x1.6
ER 40x80	40	ER40	3.0	26.0	63	-	80	53	-	M16	M28x1.5
ER 40x100	40	ER40	3.0	26.0	63	-	100	73	-	M16	M28x1.5
ER 40x150 <sup>(1)</sup>	40	ER40	3.0	26.0	63	-	150	123	-	M16	M28x1.5
ER 50x90	40	ER50	10.0	34.0	78	-	90	63	-	M16	M28x1.5
<b>BT50</b> ER 16x100 <sup>(1)</sup>	50	ER16	0.5	10.0	28	-	100	62	-	M24	M12
ER 16x125 <sup>(1)</sup>	50	ER16	0.5	10.0	28	-	125	87	-	M24	M12
ER 16x150 <sup>(1)</sup>	50	ER16	0.5	10.0	28	-	150	112	-	M24	M12
ER 16x200 <sup>(1)</sup>	50	ER16	0.5	10.0	28	40	200	162	85	M24	M10
ER 20x100 <sup>(1)</sup>	50	ER20	1.0	10.0	34	-	100	62	-	M24	M12
ER 20x125 <sup>(1)</sup>	50	ER20	1.0	13.0	34	-	125	87	-	M24	M12
ER 20x150 <sup>(1)</sup>	50	ER20	1.0	13.0	34	-	150	112	-	M24	M12
ER 20x200 <sup>(1)</sup>	50	ER20	1.0	13.0	34	50	200	162	85	M24	M12



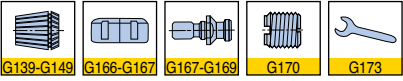
- Add B for coolant through flange
- <sup>(1)</sup> Balance to G6.3 at 12,000RPM

# BT-ER

## ER collet chucks



Designation	Dimension (mm)											
	SS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	CRKS	THID	
<b>BT50 ER 25x100</b>	50	ER25	1.0	16.0	42	-	100	62	-	M24	M16	
<b>ER 25x150</b>	50	ER25	1.0	16.0	42	-	150	112	-	M24	M16	
<b>ER 25x200<sup>(1)</sup></b>	50	ER25	1.0	16.0	42	55	200	162	87	M24	M16	
<b>ER 32x100</b>	50	ER32	2.0	20.0	50	-	100	62	-	M24	M22x1.5	
<b>ER 32x125</b>	50	ER32	2.0	20.0	50	-	125	87	-	M24	M22x1.5	
<b>ER 32x150</b>	50	ER32	2.0	20.0	50	-	150	112	-	M24	M22x1.5	
<b>ER 32x200<sup>(1)</sup></b>	50	ER32	2.0	20.0	50	63	200	162	88	M24	M22x1.5	
<b>ER 40x100</b>	50	ER40	3.0	26.0	63	-	100	62	-	M24	M28x1.5	
<b>ER 40x150</b>	50	ER40	3.0	26.0	63	-	150	112	-	M24	M28x1.5	
<b>ER 40x200<sup>(1)</sup></b>	50	ER40	3.0	26.0	63	-	200	162	-	M24	M28x1.5	
<b>ER 50x100</b>	50	ER50	3.0	26.0	78	-	100	62	-	M24	M36x1.5	
<b>ER 50x150</b>	50	ER50	10.0	34.0	78	-	150	112	-	M24	M36x1.5	

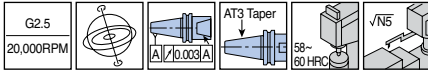
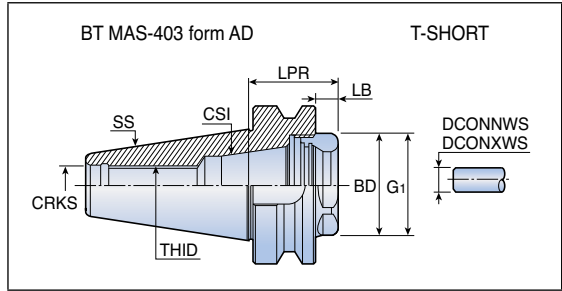
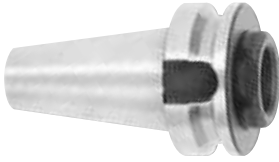


- Add B for coolant through flange
- <sup>(1)</sup> Balance to G6.3 at 12,000RPM

# BT-ER-SHORT



## Short ER collet chucks



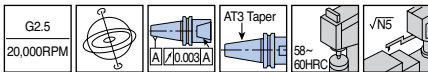
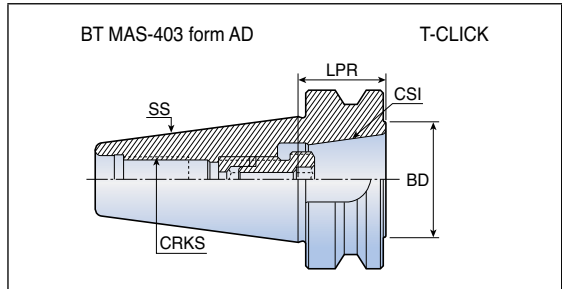
Designation	Dimension (mm)									
	SS	CSI	DCONNWS	DCONXWS	BD	LPR	LB	CRKS	G1	THID
<b>BT30 ER 20 SHORT</b>	30	ER20	1.0	13.0	25	27.2	5.2	M12	M25x1.5	M12
<b>BT40 ER 32 SHORT</b>	40	ER32	2.0	20.0	40	36.5	9.5	M16	M40x1.5	M16
<b>ER 40 SHORT</b>	40	ER40	3.0	26.0	50	46.5	9.5	M16	M50x1.5	M16
<b>BT50 ER 32 SHORT</b>	50	ER32	2.0	20.0	40	47.5	9.5	M24	M40x1.5	M22x1.5
<b>ER 40 SHORT</b>	50	ER40	3.0	26.0	50	47.5	9.5	M24	M50x1.5	M28x1.5

• Add B for coolant through flange

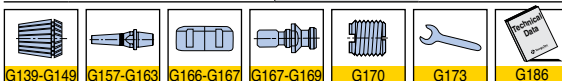
# BT-ER-CLICK-IN



## Quick change connection adapters



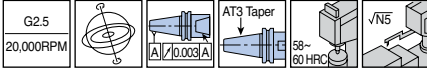
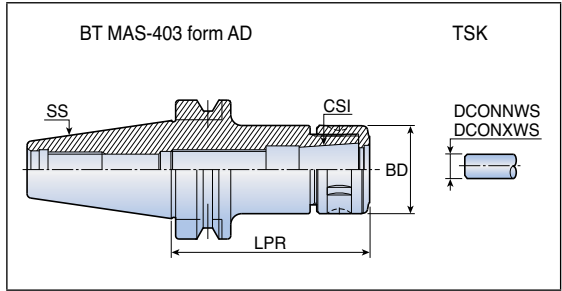
Designation	Dimension (mm)				
	SS	CSI	BD	LPR	CRKS
<b>BT40 ER32 CLICK-IN</b>	40	32 SRF	41	28	M16
<b>BT50 ER32 CLICK-IN</b>	50	32 SRF	41	29	M24



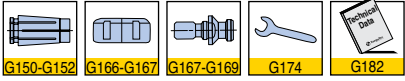
• Tightening torque: 24kg x m

# BT-TSK

## TSK collet chucks



Designation	Dimension (mm)					
	SS	CSI	DCONNWS	DCONXWS	BD	LPR
<b>BT30 TSK 6-90<sup>(1)</sup></b>	30	TSK6	1.0	6.0	19.5	90
<b>TSK 10-90<sup>(1)</sup></b>	30	TSK10	2.0	10.0	27.5	90
<b>BT40 TSK 6-90</b>	40	TSK6	1.0	6.0	19.5	90
<b>TSK 6-120</b>	40	TSK6	1.0	6.0	19.5	120
<b>TSK 10-90</b>	40	TSK10	2.0	10.0	27.5	90
<b>TSK 10-120</b>	40	TSK10	2.0	10.0	27.5	120
<b>TSK 16-90</b>	40	TSK16	3.0	16.0	40.0	90
<b>TSK 16-120</b>	40	TSK16	3.0	16.0	40.0	120
<b>TSK 25-90</b>	40	TSK25	8.0	25.4	55.0	90
<b>TSK 25-120</b>	40	TSK25	8.0	25.4	55.0	120
<b>BT50 TSK 6-120<sup>(1)</sup></b>	50	TSK6	1.0	6.0	19.5	120
<b>TSK 6-165<sup>(1)</sup></b>	50	TSK6	1.0	6.0	19.5	165
<b>TSK 6-195<sup>(1)</sup></b>	50	TSK6	1.0	6.0	19.5	195
<b>TSK 10-120<sup>(1)</sup></b>	50	TSK10	2.0	10.0	27.5	120
<b>TSK 10-165<sup>(1)</sup></b>	50	TSK10	2.0	10.0	27.5	165
<b>TSK 10-195<sup>(1)</sup></b>	50	TSK10	2.0	10.0	27.5	195
<b>TSK 16-120<sup>(1)</sup></b>	50	TSK16	3.0	16.0	40.0	120
<b>TSK 16-165<sup>(1)</sup></b>	50	TSK16	3.0	16.0	40.0	165
<b>TSK 16-195<sup>(1)</sup></b>	50	TSK16	3.0	16.0	40.0	195
<b>TSK 25-120<sup>(1)</sup></b>	50	TSK25	8.0	25.4	55.0	120
<b>TSK 25-165<sup>(1)</sup></b>	50	TSK25	8.0	25.4	55.0	165
<b>TSK 25-195<sup>(1)</sup></b>	50	TSK25	8.0	25.4	55.0	195



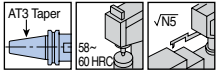
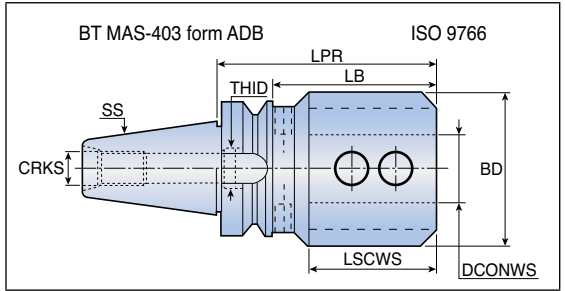
- Add B for coolant through flange
- <sup>(1)</sup> Balance to G6.3 at 20,000RPM



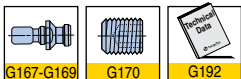
# FITBORE BT-EM ADB



Adjustable rotary toolholders



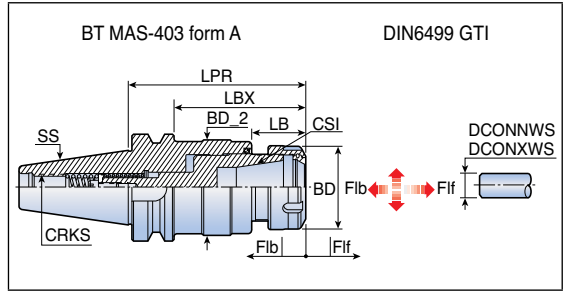
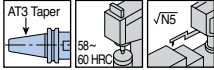
Designation	Dimension (mm)								
	SS	DCONWS	BD	LPR	LB	LSCWS	CRKS	THID	
<b>FITBORE BT40</b>	<b>EM16 ADB</b>	40	16	72	123.5	96.5	71	M16	M10
	<b>EM20 ADB</b>	40	20	72	123.5	96.5	71	M16	M10
	<b>EM25 ADB</b>	40	25	72	123.5	96.5	71	M16	M10
	<b>EM32 ADB</b>	40	32	72	123.5	96.5	71	M16	M10
	<b>EM40 ADB</b>	40	40	72	123.5	96.5	71	M16	M10
<b>FITBORE BT50</b>	<b>EM20 ADB</b>	50	20	72	134.5	96.5	71	M24	M10
	<b>EM25 ADB</b>	50	25	72	134.5	96.5	71	M24	M10
	<b>EM32 ADB</b>	50	32	72	134.5	96.5	71	M24	M10
	<b>EM40 ADB</b>	50	40	72	134.5	96.5	71	M24	M10



• Add B for coolant through flange

# GTI BT-ER

## GTI tap attachments

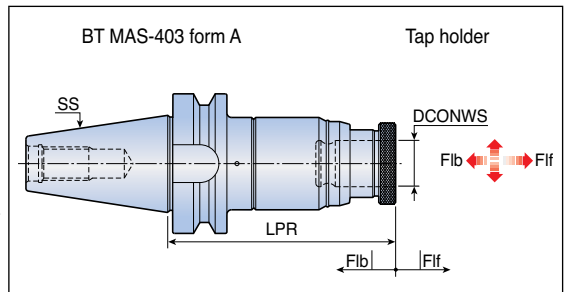
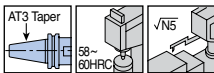


Designation	Dimension (mm)													
	SS	CSI	Tap <sub>min</sub>	Tap <sub>max</sub>	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	Fif	Fib	CRKS
<b>GTI BT40 ER16</b>	40	ER16	M3	M10	0.5	10.0	28	29.5	84.2	52.7	24.6	8	3	M16
<b>ER32</b>	40	ER32	M6	M20	2.0	20.0	50	56.5	106.8	79.8	33.0	9	4	M16
<b>ER40</b>	40	ER40	M6	M28	3.0	26.0	63	56.5	124.8	97.8	51.0	9	4	M16
<b>GTI BT50 ER16</b>	50	ER16	M3	M10	0.5	10.0	28	29.5	106.8	68.8	24.6	8	3	M24
<b>ER32</b>	50	ER32	M6	M20	2.0	20.0	50	56.5	114.2	77.2	33.0	9	4	M24
<b>ER40</b>	50	ER40	M6	M28	3.0	26.0	63	56.5	133.2	95.2	51.0	9	4	M24

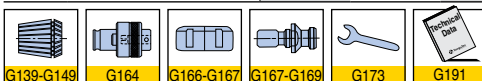
- No coolant should be induced through the tap chuck as it will cause malfunctioning of the mechanism

# BT-TC

## Tap holders

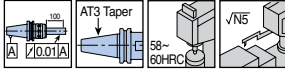
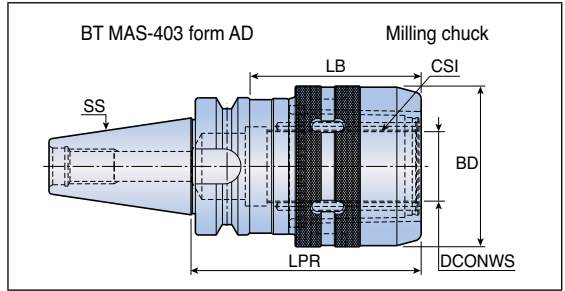


Designation	Dimension (mm)							
	SS	Tap <sub>min</sub>	Tap <sub>max</sub>	DCONWS	LPR	Fib	Fif	Tap adapter
<b>BT30 TC 12-105</b>	30	M3	M12	19	105	6.5	12	TA1
<b>BT40 TC 12-95</b>	40	M3	M12	19	95	6.5	12	TA1
<b>TC 12-110</b>	40	M3	M12	19	110	6.5	12	TA1
<b>TC 22-127</b>	40	M6	M24	31	127	14.5	13	TA2
<b>BT50 TC 12-125</b>	50	M6	M12	19	125	6.5	12	TA1
<b>TC 22-142</b>	50	M6	M24	31	142	14.5	13	TA2
<b>TC 38-195</b>	50	M18	M38	48	195	20.0	20	TA3

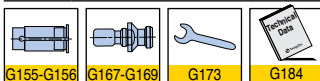


# BT-TMC

## Milling chucks



Designation	Dimension (mm)					
	SS	CSI	DCONWS	BD	LPR	LB
<b>BT30 TMC 20-75</b>	30	20	20	54.0	75	53
<b>TMC 25-80</b>	30	25	25	62.5	80	58
<b>BT40 TMC 20-80</b>	40	20	20	54.0	80	53
<b>TMC 20-105</b>	40	20	20	54.0	105	78
<b>TMC 25-90</b>	40	25	25	62.5	90	63
<b>TMC 25-105</b>	40	25	25	62.5	105	78
<b>TMC 32-90</b>	40	32	32	74.0	90	63
<b>TMC 32-105</b>	40	32	32	74.0	105	78
<b>TMC 32-135</b>	40	32	32	74.0	135	108
<b>BT50 TMC 20-105</b>	50	20	20	54.0	105	67
<b>TMC 20-135</b>	50	20	20	54.0	135	97
<b>TMC 20-165</b>	50	20	20	54.0	165	127
<b>TMC 25-105</b>	50	25	25	62.5	105	67
<b>TMC 25-135</b>	50	25	25	62.5	135	97
<b>TMC 25-165</b>	50	25	25	62.5	165	127
<b>TMC 32-105</b>	50	32	32	74.0	105	67
<b>TMC 32-115</b>	50	32	32	74.0	115	77
<b>TMC 32-135</b>	50	32	32	74.0	135	97
<b>TMC 32-165</b>	50	32	32	74.0	165	127
<b>TMC 42-115</b>	50	42	42	92.0	115	77
<b>TMC 42-135</b>	50	42	42	92.0	135	97
<b>TMC 42-165</b>	50	42	42	92.0	165	127

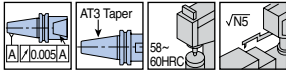
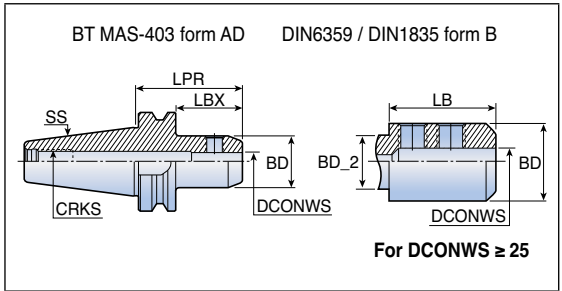


• Spanner not included

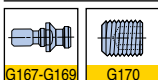


# BT-EM

## End mill holders



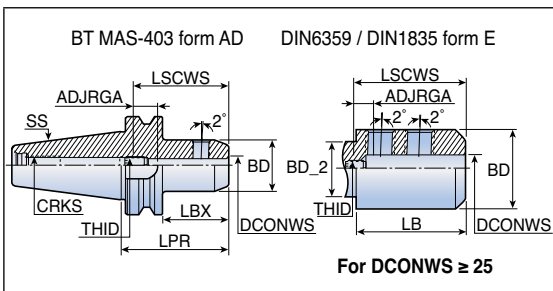
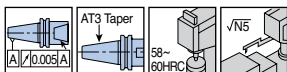
Designation	Dimension (mm)							
	SS	DCONWS	BD	BD_2	LPR	LBX	LB	CRKS
<b>BT30 EM 6x50</b>	30	6	25	-	50	28	-	M12
<b>EM 8x60</b>	30	8	28	-	60	38	-	M12
<b>EM 10x60</b>	30	10	35	-	60	38	-	M12
<b>EM 12x60</b>	30	12	42	-	60	38	-	M12
<b>EM 14x60</b>	30	14	44	-	60	38	-	M12
<b>EM 16x60</b>	30	16	46	-	60	38	-	M12
<b>EM 18x60</b>	30	18	50	-	60	38	-	M12
<b>EM 20x80</b>	30	20	52	-	80	58	-	M12
<b>BT40 EM 6x50</b>	40	6	25	-	50	23	-	M16
<b>EM 8x50</b>	40	8	28	-	50	23	-	M16
<b>EM 10x65</b>	40	10	35	-	65	38	-	M16
<b>EM 12x65</b>	40	12	42	-	65	38	-	M16
<b>EM 14x65</b>	40	14	44	-	65	38	-	M16
<b>EM 16x65</b>	40	16	48	-	65	38	-	M16
<b>EM 18x65</b>	40	18	50	-	65	38	-	M16
<b>EM 20x75</b>	40	20	52	-	75	48	-	M16
<b>EM 25x105</b>	40	25	65	61	105	78	68	M16
<b>EM 32x110</b>	40	32	72	61	110	83	73	M16
<b>BT50 EM 6x70</b>	50	6	25	-	70	32	-	M24
<b>EM 8x70</b>	50	8	28	-	70	32	-	M24
<b>EM 10x70</b>	50	10	35	-	70	32	-	M24
<b>EM 12x100</b>	50	12	42	-	100	62	-	M24
<b>EM 14x100</b>	50	14	44	-	100	62	-	M24
<b>EM 16x100</b>	50	16	48	-	100	62	-	M24
<b>EM 18x100</b>	50	18	50	-	100	62	-	M24
<b>EM 20x100</b>	50	20	52	-	100	62	-	M24
<b>EM 25x115</b>	50	25	65	-	115	77	-	M24
<b>EM 32x115</b>	50	32	72	-	115	77	-	M24
<b>EM 40x115</b>	50	40	90	-	115	77	-	M24
<b>EM 50x125</b>	50	50	100	-	125	87	-	M24



• Add B for coolant through flange

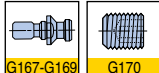
# BT-EM-E

## End mill holders - Whistle notch



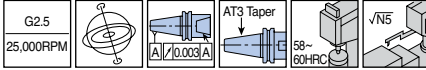
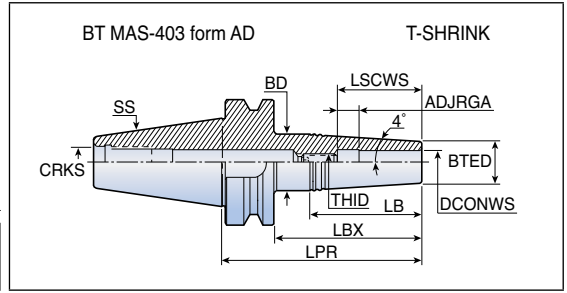
Designation	Dimension (mm)											
	SS	DCONWS	BD	BD_2	LPR	LBX	LB	ADJ RGA	LSCWS	CRKS	THID	Hex key
<b>BT40 EM 6x50E</b>	40	6	25	-	50	23	-	10	45	M16	M5	2.5
<b>EM 10x65E</b>	40	10	35	-	65	38	-	10	49	M16	M8	4.0
<b>EM 12x65E</b>	40	12	42	-	65	38	-	10	54	M16	M10	5.0
<b>EM 14x65E</b>	40	14	44	-	65	38	-	10	54	M16	M10	5.0
<b>EM 16x65E</b>	40	16	48	-	65	38	-	10	57	M16	M12	6.0
<b>EM 18x65E</b>	40	18	50	-	65	38	-	10	57	M16	M12	6.0
<b>EM 20x75E</b>	40	20	52	-	75	48	-	10	59	M16	M16	8.0
<b>EM 25x105E</b>	40	25	65	61	105	78	68	10	64	M16	M20x1.5	10.0
<b>EM 32x110E</b>	40	32	72	61	110	83	73	10	68	M16	M20x1.5	10.0
<b>BT50 EM 6x70E</b>	50	6	25	-	70	32	-	10	45	M24	M5	2.5
<b>EM 10x70E</b>	50	10	35	-	70	32	-	10	49	M24	M8	4.0
<b>EM 12x100E</b>	50	12	42	-	100	62	-	10	54	M24	M10	5.0
<b>EM 14x100E</b>	50	14	44	-	100	62	-	10	54	M24	M10	5.0
<b>EM 16x100E</b>	50	16	48	-	100	62	-	10	57	M24	M12	6.0
<b>EM 18x100E</b>	50	18	50	-	100	62	-	10	57	M24	M12	6.0
<b>EM 20x100E</b>	50	20	52	-	100	62	-	10	59	M24	M16	8.0
<b>EM 25x115E</b>	50	25	65	-	115	77	-	10	64	M24	M20x1.5	10.0
<b>EM 32x115E</b>	50	32	72	-	115	77	-	10	68	M24	M20x1.5	10.0
<b>EM 40x115E</b>	50	40	90	-	115	77	-	10	78	M24	M20x1.5	10.0
<b>EM 50x125E</b>	50	50	98	-	125	67	-	10	88	M24	M20x1.5	10.0

• Add B for coolant through flange

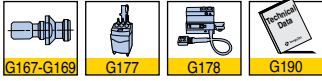




## Thermal shrinking chucks



Designation	Dimension (mm)											
	SS	DCONWS	BD	BTED	LPR	LBX	LB	ADJRGA	LSCWS	CRKS	THID	Hex key
<b>BT40 SRK 3x50</b>	40	3	15.0	10	77	50	35.5	6	16	M16	M6	3.0
<b>SRK 3x85</b>	40	3	19.0	10	112	85	64.1	6	16	M16	M6	3.0
<b>SRK 4x50</b>	40	4	15.0	10	77	50	35.5	6	18	M16	M6	3.0
<b>SRK 4x85</b>	40	4	19.0	10	112	85	64.1	6	18	M16	M6	3.0
<b>SRK 5x50</b>	40	5	15.0	10	77	50	35.5	6	21	M16	M6	3.0
<b>SRK 5x85</b>	40	5	19.0	10	112	85	64.1	6	21	M16	M6	3.0
<b>SRK 6x50</b>	40	6	16.0	11	77	50	35.5	6	24	M16	M8	4.0
<b>SRK 6x85</b>	40	6	20.0	11	112	85	64.1	6	24	M16	M8	4.0
<b>SRK 8x50</b>	40	8	20.0	14	77	50	42.5	6	31	M16	M10	5.0
<b>SRK 8x85</b>	40	8	23.0	14	112	85	63.9	6	31	M16	M10	5.0
<b>SRK 10x50</b>	40	10	22.0	16	77	50	42.4	6	36	M16	M12	6.0
<b>SRK 10x85</b>	40	10	24.5	16	112	85	60.2	6	36	M16	M12	6.0
<b>SRK 12x50</b>	40	12	26.0	20	77	50	42.3	10	42	M16	M10	5.0
<b>SRK 12x85</b>	40	12	28.0	20	112	85	56.6	10	42	M16	M10	5.0

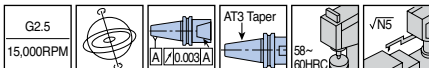
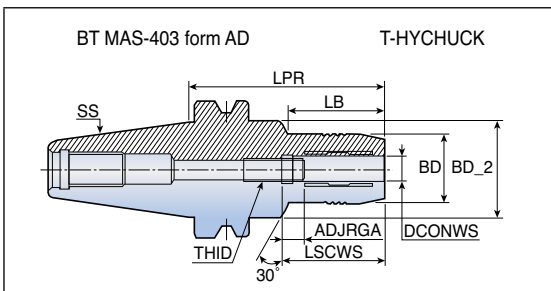




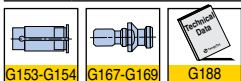
# BT-THC



## Hydraulic chucks

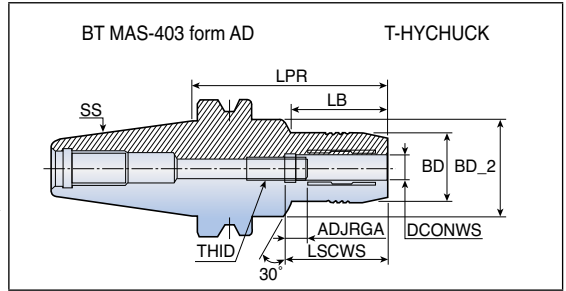


Designation	Dimension (mm)									
	SS	DCONWS	BD	BD_2	LPR	LB	ADJRGA	LSCWS	THID	
<b>BT30</b>	<b>THC 6-70</b> <sup>(1)</sup>	30	6	28	45	70	28.0	10	37.5	M5
	<b>THC 8-70</b> <sup>(1)</sup>	30	8	30	45	70	28.0	10	37.5	M6
	<b>THC 10-75</b> <sup>(1)</sup>	30	10	32	45	75	38.0	10	42.5	M8x1
	<b>THC 12-85</b> <sup>(1)</sup>	30	12	34	45	85	44.0	10	47.5	M10x1
	<b>THC 14-85</b> <sup>(1)</sup>	30	14	36	45	85	44.0	10	47.5	M10x1
	<b>THC 16-90</b> <sup>(1)</sup>	30	16	38	45	90	46.0	10	52.5	M10x1
	<b>THC 20-85</b> <sup>(1)</sup>	30	20	43	63	85	38.0	10	52.5	M10x1
	<b>THC 20-90</b> <sup>(1)</sup>	30	20	43	-	90	68.0	10	52.5	M10x1
<b>BT40</b>	<b>THC 6-65</b>	40	6	28	50	65	23.0	10	37.5	M5
	<b>THC 6-95</b>	40	6	28	50	65	43.0	10	37.5	M5
	<b>THC 8-95</b>	40	8	30	50	95	44.0	10	37.5	M6
	<b>THC 10-95</b>	40	10	32	50	95	44.0	10	42.5	M8x1
	<b>THC 12-95</b>	40	12	34	50	95	44.0	10	47.5	M10x1
	<b>THC 14-95</b>	40	14	36	50	95	44.0	10	47.5	M10x1
	<b>THC 16-95</b>	40	16	38	50	95	46.0	10	52.5	M10x1
	<b>THC 16-140</b>	40	16	38	50	140	47.5	10	52.5	M10x1
	<b>THC 20-95</b>	40	20	43	50	95	48.0	10	52.5	M10x1
	<b>THC 25-100</b>	40	25	57	-	100	73.0	10	61.0	M16x1
	<b>THC 25-135</b>	40	25	57	-	135	108.0	10	61.0	M16x1
	<b>THC 32-105</b>	40	32	63	-	105	78.0	10	61.0	M16x1



• <sup>(1)</sup> Balance to G2.5 at 20,000RPM

## Hydraulic chucks



G2.5  
10,000RPM

AT3 Taper  
A/0.003A

58-60HRC

√R5

Designation	Dimension (mm)								
	SS	DCONWS	BD	BD_2	LPR	LB	ADJRGA	LSCWS	THID
<b>BT50 THC 6-90</b>	50	6	28	50	90	32	10	37.5	M5
<b>THC 6-120</b>	50	6	28	50	120	38	10	37.5	M5
<b>THC 10-90</b>	50	10	32	50	90	32	10	42.5	M8x1
<b>THC 10-120</b>	50	10	32	50	120	42	10	42.5	M8x1
<b>THC 12-90</b>	50	12	34	50	90	32	10	47.5	M8x1
<b>THC 12-120</b>	50	12	34	50	120	44	10	47.5	M8x1
<b>THC 14-90</b>	50	14	36	50	90	32	10	47.5	M10x1
<b>THC 16-90</b>	50	16	38	50	90	32	10	52.5	M10x1
<b>THC 20-90</b>	50	20	43	50	90	32	10	52.5	M10x1
<b>THC 20-120</b>	50	20	43	50	120	48	10	52.5	M10x1
<b>THC 20-140</b>	50	20	43	50	140	48	10	52.5	M10x1
<b>THC 25-105</b>	50	25	57	-	105	67	10	61.0	M16x1
<b>THC 25-150</b>	50	25	57	-	150	112	10	61.0	M16x1
<b>THC 32-90</b>	50	32	63	-	90	52	10	65.0	M16x1
<b>THC 32-115</b>	50	32	63	-	115	77	10	65.0	M16x1
<b>THC 32-135</b>	50	32	63	-	135	97	10	65.0	M16x1
<b>THC 32-150</b>	50	32	63	-	150	112	10	65.0	M16x1

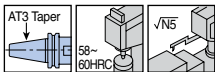
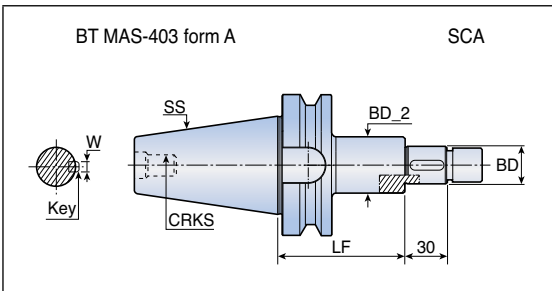
G153-G154

G167-G169

G188

# BT-SCA

## Slotting cutter arbors



Designation	Dimension (mm)					
	SS	BD	BD_2	LF	W	CRKS
<b>BT40 - SCA-22(22.225)-75</b>	40	22(22.225)	34	75	6(3.18)	M16
<b>SCA-22-120</b>	40	22	34	120	6(3.18)	M16
<b>SCA-27(25.4)-75</b>	40	27(25.4)	40	75	7(6.35)	M16
<b>SCA-27-120</b>	40	27	40	120	7(6.35)	M16
<b>SCA-32(31.75)-90</b>	40	32(31.75)	46	90	8(7.92)	M16
<b>SCA-22(22.225)-90</b>	40	22(22.225)	34	90	6(3.18)	M24
<b>BT50 - SCA-22-135</b>	50	22	34	135	6(3.18)	M24
<b>SCA-27(25.4)-90</b>	50	27(25.4)	40	90	7(6.35)	M24
<b>SCA-27-135</b>	50	27	40	135	7(6.35)	M24
<b>SCA-32(31.75)-90</b>	50	32(31.75)	46	90	8(7.92)	M24
<b>SCA-40(38.1)-90</b>	50	40(38.1)	55	90	10(9.52)	M24
<b>SCA-50-90</b>	50	50	68	90	12	M24

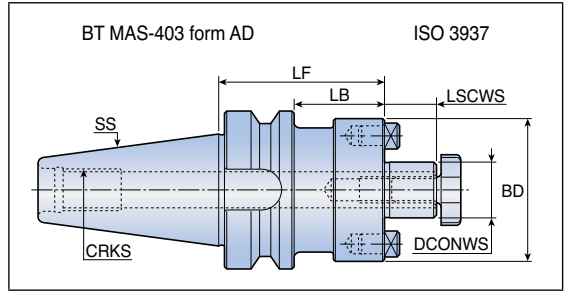
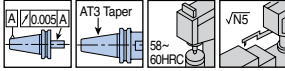


• Washers & key are included (Each 3, 5, 7, 8, 10, 12mm)

G167-G169

# BT-SEM

## Face mill arbors



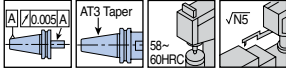
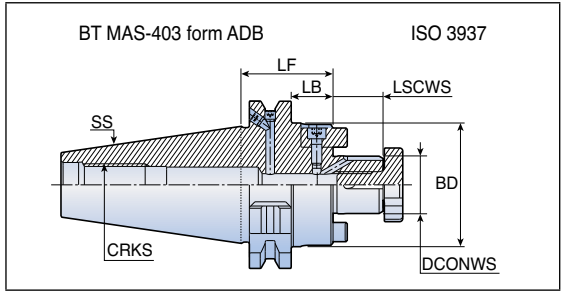
Designation	Dimension (mm)						
	SS	DCONWS	BD	LF	LB	LSCWS	CRKS
<b>BT30 SEM 16x50</b>	30	16	38	50	28	17	M12
<b>SEM 22x50</b>	30	22	47	50	28	19	M12
<b>SEM 27x50</b>	30	27	58	50	18	21	M12
<b>BT40 SEM 16x60</b>	40	16	38	60	33	17	M16
<b>SEM 16x120</b>	40	16	38	120	93	17	M16
<b>SEM 22x60</b>	40	22	47	60	33	19	M16
<b>SEM 22x120</b>	40	22	47	120	93	19	M16
<b>SEM 27x45</b>	40	27	58	45	18	21	M16
<b>SEM 27x105</b>	40	27	58	105	78	21	M16
<b>SEM 32x60</b>	40	32	65	60	23	24	M16
<b>SEM 32x75</b>	40	32	65	75	36	24	M16
<b>SEM 40x60</b>	40	40	82	60	23	27	M16
<b>SEM 40x75</b>	40	40	82	75	38	27	M16
<b>BT50 SEM 16x75</b>	50	16	38	75	37	17	M24
<b>SEM 16x120</b>	50	16	38	120	82	17	M24
<b>SEM 22x50x220</b>	50	22	50	220	182	19	M24
<b>SEM 22x64x320</b>	50	22	64	320	282	19	M24
<b>SEM 22x75</b>	50	22	47	75	37	19	M24
<b>SEM 22x120</b>	50	22	47	120	82	19	M24
<b>SEM 27x60</b>	50	27	58	60	22	21	M24
<b>SEM 27x105</b>	50	27	58	105	67	21	M24
<b>SEM 32x48</b>	50	32	66	48	10	24	M24
<b>SEM 32x75</b>	50	32	66	75	37	24	M24
<b>SEM 40x48</b>	50	40	82	48	10	27	M24
<b>SEM 40x75</b>	50	40	82	75	37	27	M24

• Wrench not included

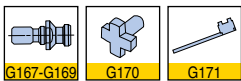


# BT-SEM-C

Face mill arbors with internal coolant hole



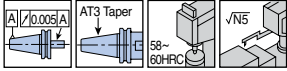
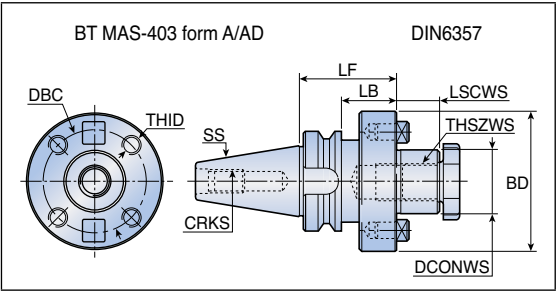
Designation	Dimension (mm)						
	SS	DCONWS	BD	LF	LB	LSCWS	CRKS
<b>BT40SEM 16x60C</b>	40	16	38	60	33	17	M16
<b>SEM 16x100C</b>	40	16	38	100	73	17	M16
<b>SEM 22x60C</b>	40	22	47	60	33	19	M16
<b>SEM 22x100C</b>	40	22	47	100	73	19	M16
<b>SEM 27x45C</b>	40	27	58	45	18	21	M16
<b>SEM 27x100C</b>	40	27	58	100	73	21	M16
<b>SEM 32x60C</b>	40	32	66	60	33	24	M16
<b>BT50SEM 16x75C</b>	50	16	38	75	37	17	M24
<b>SEM 16x100C</b>	50	16	38	100	62	17	M24
<b>SEM 22x75C</b>	50	22	47	75	37	19	M24
<b>SEM 22x100C</b>	50	22	47	100	62	19	M24
<b>SEM 27x60C</b>	50	27	58	60	22	21	M24
<b>SEM 27x100C</b>	50	27	58	100	62	21	M24
<b>SEM 32x75C</b>	50	32	66	75	37	24	M24
<b>SEM 32x100C</b>	50	32	66	100	62	24	M24
<b>BT50SEM 22x48x220C</b>	50	22	48	220	182	19	M24
<b>SEM 22x61x320C</b>	50	22	61	320	282	19	M24
<b>SEM 27x61x320C</b>	50	27	61	320	282	21	M24
<b>SEM 32x78x390C</b>	50	32	78	390	352	24	M24



- If the “B type” option is required, the plug screw must be removed from the flange cooling hole (Use a 2mm hex key)
- Wrench not included

# BT-FM

## Face mill arbors



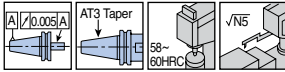
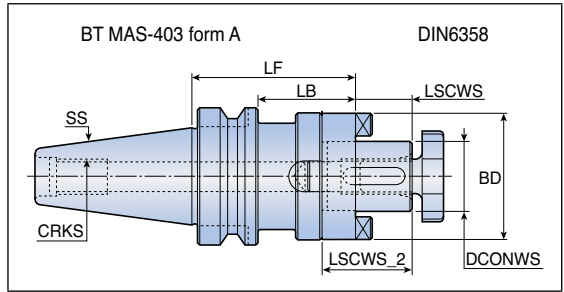
Designation	Dimension (mm)									
	SS	DCONWS	BD	DBC	LF	LB	LSCWS	CRKS	THID	THSZWS
<b>BT40 FM 40<sup>(1)</sup></b>	40	40	88	66.7	60	22	27	M16	M12	M20
<b>BT50 FM 40<sup>(1)</sup></b>	50	40	88	66.7	50	12	27	M24	M12	M20
<b>FM 60<sup>(2)</sup></b>	50	60	128	101.6	88	40	38	M24	M16	-



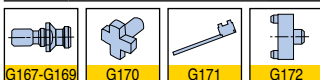
- Wrench not included
- <sup>(1)</sup> Form AD
- <sup>(2)</sup> Form A

# BT-SEMC

## Combi shell end mill arbors



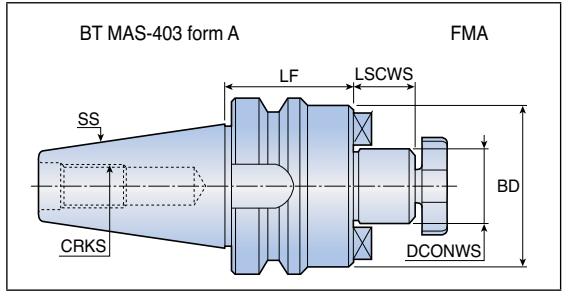
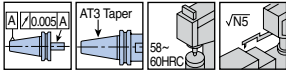
Designation	Dimension (mm)							
	SS	DCONWS	BD	LF	LB	LSCWS	LSCWS_2	CRKS
<b>BT40 SEMC 16x50</b>	40	16	32	50	23	17	27	M16
<b>SEMC 16x100</b>	40	16	32	100	73	17	27	M16
<b>SEMC 22x53</b>	40	22	40	53	26	19	31	M16
<b>SEMC 22x100</b>	40	22	40	100	73	19	31	M16
<b>SEMC 27x55</b>	40	27	48	55	28	21	33	M16
<b>SEMC 27x100</b>	40	27	48	100	73	21	33	M16
<b>SEMC 32x60</b>	40	32	58	60	33	24	38	M16
<b>SEMC 32x100</b>	40	32	58	100	73	24	38	M16
<b>SEMC 40x80</b>	40	40	70	80	53	27	41	M16
<b>BT50 SEMC 16x100</b>	50	16	32	100	62	17	27	M24
<b>SEMC 16x150</b>	50	16	32	150	112	17	27	M24
<b>SEMC 22x68</b>	50	22	40	68	30	19	31	M24
<b>SEMC 22x100</b>	50	22	40	100	62	19	31	M24
<b>SEMC 22x150</b>	50	22	40	150	112	19	31	M24
<b>SEMC 27x78</b>	50	27	48	78	40	21	33	M24
<b>SEMC 27x100</b>	50	27	48	100	62	21	33	M24
<b>SEMC 27x150</b>	50	27	48	150	112	21	33	M24
<b>SEMC 32x78</b>	50	32	58	78	40	24	38	M24
<b>SEMC 32x100</b>	50	32	58	100	62	24	38	M24
<b>SEMC 32x150</b>	50	32	58	150	112	24	38	M24
<b>SEMC 40x78</b>	50	40	70	78	40	27	41	M24
<b>SEMC 40x100</b>	50	40	70	100	62	27	41	M24
<b>SEMC 40x150</b>	50	40	70	150	112	27	41	M24
<b>SEMC 50x79</b>	50	50	90	79	41	30	46	M24
<b>SEMC 50x150</b>	50	50	90	150	112	30	46	M24



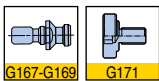
• Wrench not included

# BT-FMA

## Face mill arbors



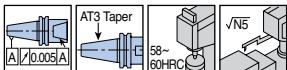
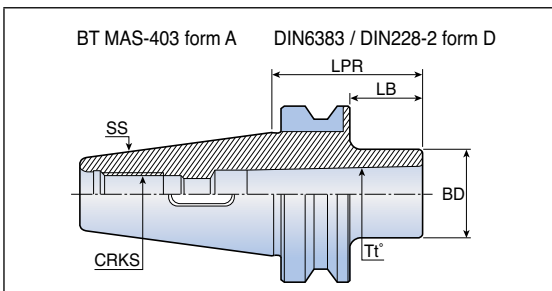
Designation	Dimension (mm)						
	SS	DCONWS	BD	LF	LSCWS	CRKS	Mounting screw
<b>BT30 FMA 25.4-45L</b>	30	25.400	50.00	45	22	M12	MBA M12
<b>BT40 FMA 25.4-45L</b>	40	25.400	50.00	45	22	M16	MBA M12
<b>FMA 25.4-90L</b>	40	25.400	50.00	90	22	M16	MBA M12
<b>FMA 31.75-45L</b>	40	31.750	60.00	45	30	M16	MBA M16
<b>FMA 31.75-75L</b>	40	31.750	60.00	75	30	M16	MBA M16
<b>FMA 38.1-60L</b>	40	38.100	78.00	60	34	M16	MBA M20
<b>BT50 FMA 25.4-45L</b>	50	25.400	50.00	45	22	M24	MBA M12
<b>FMA 25.4-90L</b>	50	25.400	50.00	90	22	M24	MBA M12
<b>FMA 25.4-150L</b>	50	25.400	50.00	150	22	M24	MBA M12
<b>FMA 31.75-45L</b>	50	31.750	60.00	45	30	M24	MBA M16
<b>FMA 31.75-75L</b>	50	31.750	60.00	75	30	M24	MBA M16
<b>FMA 31.75-105L</b>	50	31.750	60.00	105	30	M24	MBA M16
<b>FMA 38.1-45L</b>	50	38.100	80.00	45	34	M24	MBA M20
<b>FMA 38.1-75L</b>	50	38.100	80.00	75	34	M24	MBA M20
<b>FMA 50.8-45L</b>	50	50.800	98.00	45	36	M24	MBA M24
<b>FMA 50.8-75L</b>	50	50.800	98.00	75	36	M24	MBA M24
<b>FMA 47.625-75L</b>	50	47.625	128.57	75	38	M24	SH M16x2x40





# BT-MT

## Morse taper adapters

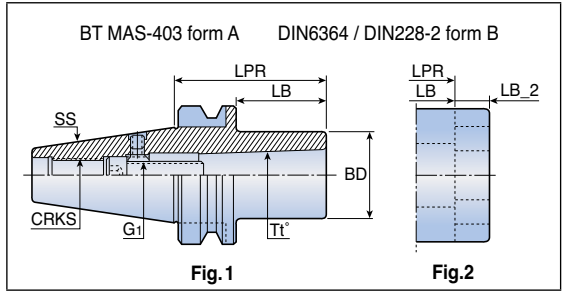
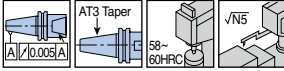


Designation	Dimension (mm)					
	SS	Tt°	BD	LPR	LB	CRKS
<b>BT30 MT 1x45</b>	30	MT1	25	45	23	M12
<b>MT 2x60</b>	30	MT2	32	60	38	M12
<b>BT40 MT 1x45</b>	40	MT1	25	45	25	M16
<b>MT 1x120</b>	40	MT1	25	120	25	M16
<b>MT 2x60</b>	40	MT2	32	60	32	M16
<b>MT 2x120</b>	40	MT2	32	120	32	M16
<b>MT 3x75</b>	40	MT3	40	75	40	M16
<b>MT 3x139</b>	40	MT3	40	139	40	M16
<b>MT 4x95</b>	40	MT4	50	95	50	M16
<b>BT50 MT 1x45</b>	50	MT1	25	45	7	M24
<b>MT 1x120</b>	50	MT1	25	120	82	M24
<b>MT 2x45</b>	50	MT2	32	45	7	M24
<b>MT 2x135</b>	50	MT2	32	135	97	M24
<b>MT 2x180</b>	50	MT2	32	180	142	M24
<b>MT 3x45</b>	50	MT3	40	45	7	M24
<b>MT 3x150</b>	50	MT3	40	150	112	M24
<b>MT 3x180</b>	50	MT3	40	180	142	M24
<b>MT 4x75</b>	50	MT4	50	75	37	M24
<b>MT 4x180</b>	50	MT4	50	180	142	M24
<b>MT 5x105</b>	50	MT5	70	105	67	M24



# BT-MT-DRW

## Morse taper adapters

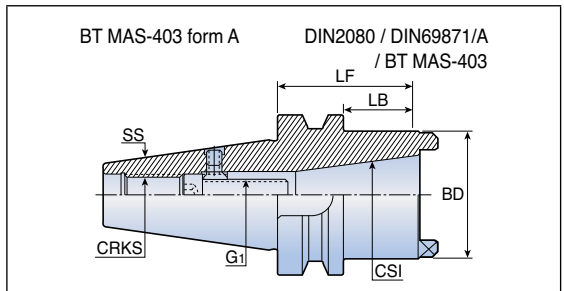
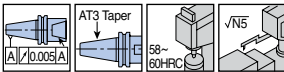


Designation	Dimension (mm)								Fig.
	SS	Tt°	BD	LPR	LB	LB_2	CRKS	G1	
<b>BT40 MT1 DRW</b>	40	MT1	25	50	23	-	M16	M6	1
<b>MT2 DRW</b>	40	MT2	32	50	23	-	M16	M10	1
<b>MT3 DRW</b>	40	MT3	40	70	43	-	M16	M12	1
<b>MT4 DRW<sup>(1)</sup></b>	40	MT4	63	95	68	15	M16	M16	2
<b>BT50 MT1 DRW</b>	50	MT1	25	45	7	-	M24	M6	1
<b>MT2 DRW</b>	50	MT2	32	60	22	-	M24	M10	1
<b>MT3 DRW</b>	50	MT3	40	65	27	-	M24	M12	1
<b>MT4 DRW<sup>(1)</sup></b>	50	MT4	63	70	32	15	M24	M16	2
<b>MT5 DRW<sup>(1)</sup></b>	50	MT5	78	100	62	18	M24	M20	2

• <sup>(1)</sup> DIN2201

# BT-AD

## Adapters

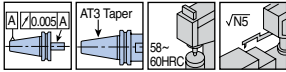
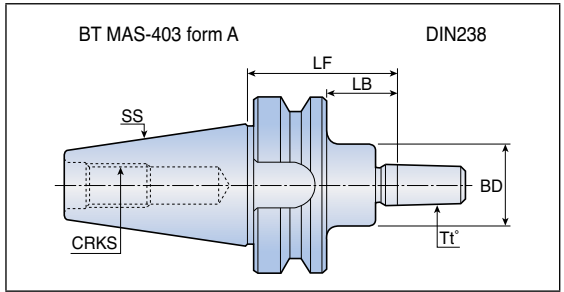


Designation	Dimension (mm)						
	SS	CSI	BD	LF	LB	CRKS	G1
<b>BT50 AD 40</b>	50	DIN 2080	63	75	32	M24	M16
<b>AD BT/SK 40</b>	50	DIN 69871/A, BT MAS	66	75	37	M24	M16



# BT-DC

## Drill chuck arbors

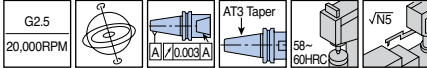
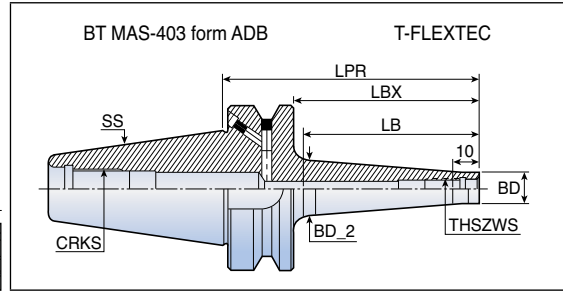


Designation	Dimension (mm)					
	SS	Tt°	BD	LF	LB	CRKS
<b>BT30 DC B12x30</b>	30	B12	-	30	8.0	M12
<b>DC B16x30</b>	30	B16	-	30	8.0	M12
<b>BT40 DC B12x45</b>	40	B12	24	45	18.0	M16
<b>DC B12x90</b>	40	B12	24	90	63.0	M16
<b>DC B16x45</b>	40	B16	30	45	18.0	M16
<b>DC B16x90</b>	40	B16	30	90	63.0	M16
<b>DC B18x45</b>	40	B18	30	45	18.0	M16
<b>DC B18x90</b>	40	B18	30	90	63.0	M16
<b>BT50 DC B12x45</b>	50	B12	-	45	6.7	M24
<b>DC B12x105</b>	50	B12	24	105	67.0	M24
<b>DC B16x45</b>	50	B16	-	45	7.0	M24
<b>DC B16x105</b>	50	B16	50	105	67.0	M24
<b>DC B18x45</b>	50	B18	-	45	7.0	M24
<b>DC B18x105</b>	50	B18	30	105	67.0	M24



• Without drill chuck

## T-FLEXTEC holders



Designation	Dimension (mm)							
	SS	THSZWS	BD	BD_2	LPR	LBX	LB	CRKS
<b>BT40 ODP 6x66</b>	40	M06	9.8	13.0	66	39	30	M16
<b>ODP 6x106</b>	40	M06	9.8	23.0	106	79	70	M16
<b>ODP 8x66</b>	40	M08	13.0	15.0	66	39	30	M16
<b>ODP 8x106</b>	40	M08	13.0	23.0	106	79	70	M16
<b>ODP 10x66</b>	40	M10	18.0	20.0	66	39	30	M16
<b>ODP 10x106</b>	40	M10	18.0	28.0	106	79	70	M16
<b>ODP 12x66</b>	40	M12	21.0	24.0	66	39	30	M16
<b>ODP 12x106</b>	40	M12	21.0	31.0	106	79	70	M16
<b>ODP 16x66</b>	40	M16	29.0	28.6	66	39	35	M16
<b>ODP 16x106</b>	40	M16	29.0	34.0	106	79	70	M16
<b>BT50 ODP 12x94<sup>(1)</sup></b>	50	M12	23.0	30.0	94	56	50	M24
<b>ODP 12x144<sup>(1)</sup></b>	50	M12	23.0	40.0	144	106	100	M24
<b>ODP 12x194<sup>(1)</sup></b>	50	M12	23.0	40.0	194	156	150	M24
<b>ODP 12x244<sup>(1)</sup></b>	50	M12	23.0	46.0	244	206	200	M24
<b>ODP 16x94<sup>(1)</sup></b>	50	M16	29.0	34.0	94	56	50	M24
<b>ODP 16x144<sup>(1)</sup></b>	50	M16	29.0	40.0	144	106	100	M24
<b>ODP 16x194<sup>(1)</sup></b>	50	M16	29.0	55.0	194	156	150	M24
<b>ODP 16x244<sup>(1)</sup></b>	50	M16	29.0	55.0	244	206	200	M24

- If the "B type" option is required, the plug screw must be removed from the flange cooling hole (Use a 2mm hex key)
- <sup>(1)</sup> Balance to G6.3 at 12,000RPM



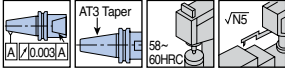
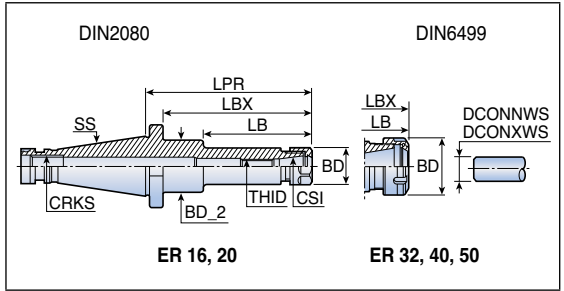
# DIN2080



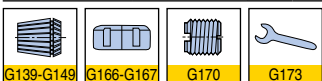


# DIN2080-ER

## ER collet chucks



Designation	Dimension (mm)											
	SS	CSI	DCONNWS	DCONXWS	BD	BD_2	LPR	LBX	LB	CRKS	THID	
<b>DIN2080 30</b>	<b>ER 16x75</b>	30	ER16	0.5	10.0	28	-	75	65.4	-	M12	M10
	<b>ER 32x55</b>	30	ER32	2.0	20.0	50	-	55	45.4	-	M12	M18x1.5
	<b>ER 40x83</b>	30	ER40	3.0	26.0	63	-	83	69.4	-	M12	M22x1.5
<b>DIN2080 40</b>	<b>ER 16x63</b>	40	ER16	0.5	10.0	28	-	63	51.4	-	M16	M12
	<b>ER 16x100</b>	40	ER16	0.5	10.0	28	-	100	88.4	-	M16	M12
	<b>ER 20x63</b>	40	ER20	1.0	13.0	34	-	63	51.4	-	M16	M12
	<b>ER 20x100</b>	40	ER20	1.0	13.0	34	-	100	88.4	-	M16	M12
	<b>ER 25x50</b>	40	ER25	1.0	16.0	42	-	50	38.4	-	M16	M16x1.5
	<b>ER 32x50</b>	40	ER32	2.0	20.0	50	-	50	38.4	-	M16	M22x1.5
	<b>ER 40x55</b>	40	ER40	3.0	26.0	63	-	55	43.4	-	M16	M22x1.5
	<b>ER 50x80</b>	40	ER50	10.0	34.0	78	-	80	68.4	-	M24	M22x1.5
<b>DIN2080 50</b>	<b>ER 16x100</b>	50	ER16	0.5	10.0	28	-	100	84.8	-	M24	M12
	<b>ER 16x160</b>	50	ER16	0.5	10.0	28	40	160	144.8	95	M24	M12
	<b>ER 20x100</b>	50	ER20	1.0	13.0	34	-	100	84.8	-	M24	M16
	<b>ER 20x160</b>	50	ER20	1.0	13.0	34	-	160	144.8	-	M24	M12
	<b>ER 40x58</b>	50	ER40	3.0	26.0	63	-	58	42.8	-	M24	M28x1.5
	<b>ER 50x63</b>	50	ER50	10.0	34.0	78	-	63	47.8	-	M24	M36x1.5

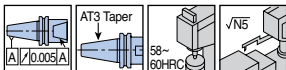
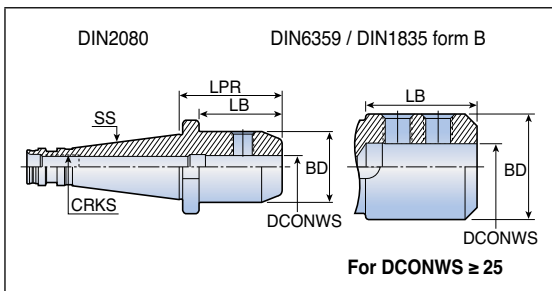






# DIN2080-EM

## End mill holders



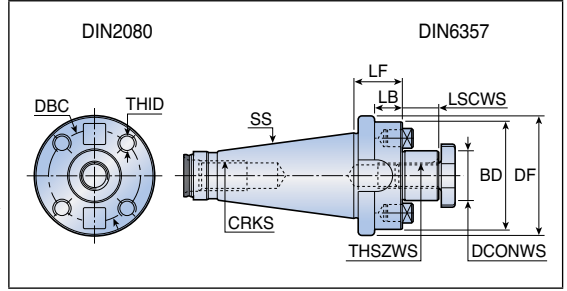
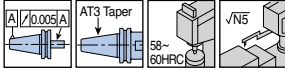
Designation	Dimension (mm)						
	SS	DCONWS	BD	LPR	LB	CRKS	
<b>DIN2080 30</b>	<b>EM 6x40</b>	30	6	25	40	30.4	M12
	<b>EM 8x40</b>	30	8	28	40	30.4	M12
	<b>EM 10x40</b>	30	10	35	40	30.4	M12
	<b>EM 16x50</b>	30	16	48	50	40.4	M12
	<b>EM 20x63</b>	30	20	52	63	53.4	M12
<b>DIN2080 40</b>	<b>EM 6x50</b>	40	6	25	50	38.4	M16
	<b>EM 8x50</b>	40	8	28	50	38.4	M16
	<b>EM 10x50</b>	40	10	35	50	38.4	M16
	<b>EM 12x50</b>	40	12	42	50	38.4	M16
	<b>EM 16x63</b>	40	16	48	63	51.4	M16
	<b>EM 20x63</b>	40	20	52	63	51.4	M16
	<b>EM 25x80</b>	40	25	65	80	68.4	M16
	<b>EM 32x80</b>	40	32	72	80	68.4	M16
<b>DIN2080 50</b>	<b>EM 6x63</b>	50	6	25	63	47.8	M24
	<b>EM 8x63</b>	50	8	28	63	47.8	M24
	<b>EM 10x63</b>	50	10	35	63	47.8	M24
	<b>EM 12x63</b>	50	12	42	63	47.8	M24
	<b>EM 16x63</b>	50	16	48	63	47.8	M24
	<b>EM 20x63</b>	50	20	52	63	47.8	M24
	<b>EM 25x80</b>	50	25	65	80	64.8	M24
	<b>EM 32x80</b>	50	32	72	80	64.8	M24
	<b>EM 40x90</b>	50	40	90	90	74.8	M24
	<b>EM 50x100</b>	50	50	100	100	84.8	M24



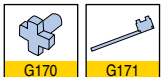
G170

# DIN2080-FM

Face mill arbors



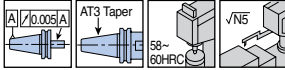
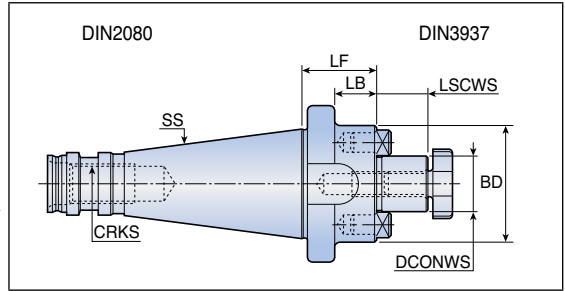
Designation	Dimension (mm)										
	SS	DCONWS	DF	BD	DBC	LF	LB	LSCWS	CRKS	THSZWS	THID
<b>DIN2080 40 FM40</b>	40	40	88.0	-	66.7	20.0	-	27	M16	M20	M12
<b>DIN2080 50 FM40</b>	50	40	97.3	88	66.7	36.0	20.8	27	M24	M20	M12
<b>FM60</b>	50	60	128.0	-	101.6	35.8	-	40	M24	-	M16



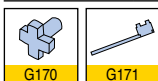
• Wrench not included

# DIN2080-SEM

## Shell end mill arbors



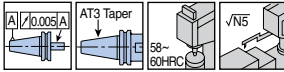
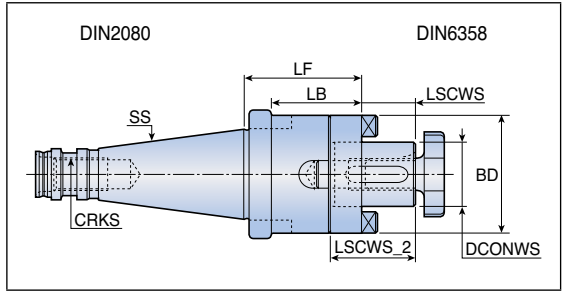
Designation	Dimension (mm)						
	SS	DCONWS	BD	LF	LB	LSCWS	CRKS
<b>DIN2080 30 SEM 16x28</b>	30	16	38	28	18.4	17	M12
<b>SEM 22x28</b>	30	22	47	28	18.4	19	M12
<b>SEM 27x32</b>	30	27	58	32	22.4	21	M12
<b>SEM 32x32</b>	30	32	66	32	22.4	24	M12
<b>DIN2080 40 SEM 16x28</b>	40	16	38	28	16.4	17	M16
<b>SEM 22x27</b>	40	22	47	27	15.4	19	M16
<b>SEM 27x26</b>	40	27	58	26	14.4	21	M16
<b>SEM 32x23</b>	40	32	66	23	11.4	24	M16
<b>SEM 40x34</b>	40	40	82	34	22.4	27	M16
<b>DIN2080 50 SEM 16x38</b>	50	16	38	38	22.8	17	M24
<b>SEM 22x38</b>	50	22	47	38	22.8	19	M24
<b>SEM 27x38</b>	50	27	58	38	22.8	21	M24
<b>SEM 32x36</b>	50	32	66	36	20.8	24	M24
<b>SEM 40x40</b>	50	40	82	40	24.8	27	M24



• Wrench not included

# DIN2080-SEMC

Combi shell end mill arbors



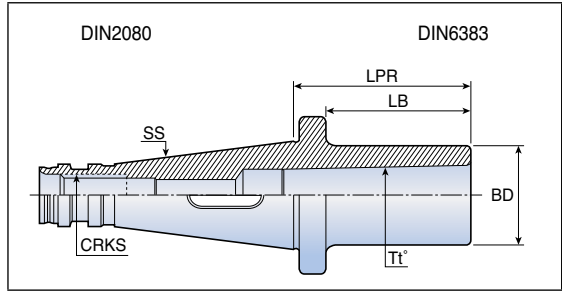
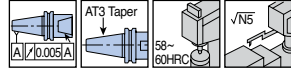
Designation	Dimension (mm)								
	SS	DCONWS	BD	LF	LB	LSCWS	LSCWS_2	CRKS	
<b>DIN2080 30 SEMC 16x35</b>	30	16	32	35	25.4	17	27	M12	
<b>SEMC 22x35</b>	30	22	40	35	25.4	19	31	M12	
<b>SEMC 27x35</b>	30	27	48	35	25.4	21	33	M12	
<b>SEMC 32x50</b>	30	32	58	50	40.4	24	38	M12	
<b>DIN2080 40 SEMC 22x52</b>	40	22	40	52	40.4	19	31	M16	
<b>SEMC 27x52</b>	40	27	48	52	40.4	21	33	M16	
<b>SEMC 32x52</b>	40	32	58	52	40.4	24	38	M16	
<b>SEMC 40x52</b>	40	40	70	52	40.4	27	41	M16	
<b>DIN2080 50 SEMC 16x55</b>	50	16	32	55	39.8	17	27	M24	
<b>SEMC 22x55</b>	50	22	40	55	39.8	19	31	M24	
<b>SEMC 27x55</b>	50	27	48	55	39.8	21	33	M24	
<b>SEMC 32x55</b>	50	32	58	55	39.8	24	38	M24	
<b>SEMC 40x55</b>	50	40	70	55	39.8	27	41	M24	
<b>SEMC 50x55</b>	50	50	90	55	39.8	30	46	M24	



• Wrench not included

# DIN2080-MT

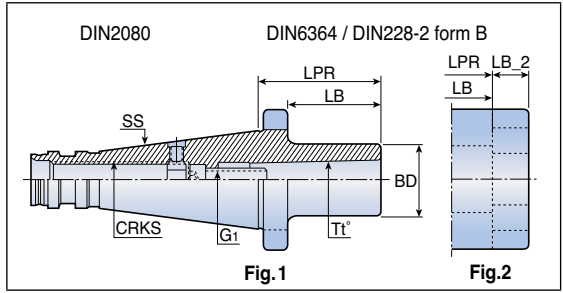
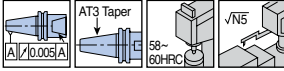
## Morse taper adapters



Designation	Dimension (mm)						
	SS	Tt°	BD	LPR	LB	CRKS	
<b>DIN2080 30</b>	<b>MT 1x50</b>	30	MT1	25	50	40.4	M12
	<b>MT 2x50</b>	30	MT2	32	50	40.4	M12
	<b>MT 3x70</b>	30	MT3	40	50	60.4	M12
<b>DIN2080 40</b>	<b>MT 1x50</b>	40	MT1	25	50	38.4	M16
	<b>MT 2x50</b>	40	MT2	32	50	38.4	M16
	<b>MT 3x65</b>	40	MT3	40	65	53.4	M16
	<b>MT 4x95</b>	40	MT4	48	95	83.4	M16
<b>DIN2080 50</b>	<b>MT 1x45</b>	50	MT1	25	45	29.8	M24
	<b>MT 2x60</b>	50	MT2	32	60	44.8	M24
	<b>MT 3x65</b>	50	MT3	40	65	49.8	M24
	<b>MT 4x70</b>	50	MT4	48	70	54.8	M24
	<b>MT 5x105</b>	50	MT5	63	105	89.2	M24

# DIN2080-MT-DRW

Morse taper draw bar adapters

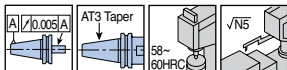
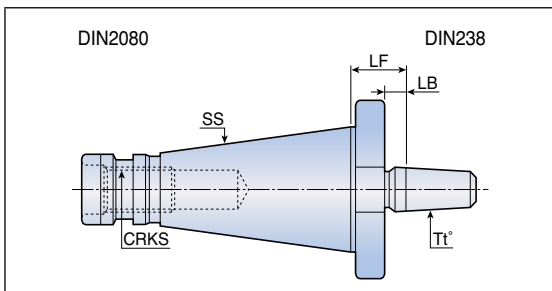


Designation	Dimension (mm)								Fig.
	SS	Tt°	BD	LPR	LB	LB_2	G1	CRKS	
<b>DIN2080 40 MT1 DRW</b>	40	MT1	25	50	38.4	-	M6	M16	1
<b>MT2 DRW</b>	40	MT2	32	50	38.4	-	M10	M16	1
<b>MT3 DRW</b>	40	MT3	40	65	53.4	-	M12	M16	1
<b>MT4 DRW</b>	40	MT4	63	110	-	15	M16	M16	2
<b>DIN2080 50 MT1 DRW</b>	50	MT1	25	60	44.8	-	M6	M24	1
<b>MT2 DRW</b>	50	MT2	32	60	44.8	-	M10	M24	1
<b>MT3 DRW</b>	50	MT3	40	65	49.8	-	M12	M24	1
<b>MT4 DRW</b>	50	MT4	63	80	49.8	15	M16	M24	2
<b>MT5 DRW</b>	50	MT5	78	100	84.4	18	M20	M24	2

• MT4 & MT5: DIN2201

# DIN2080-DC

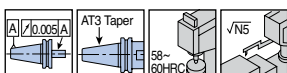
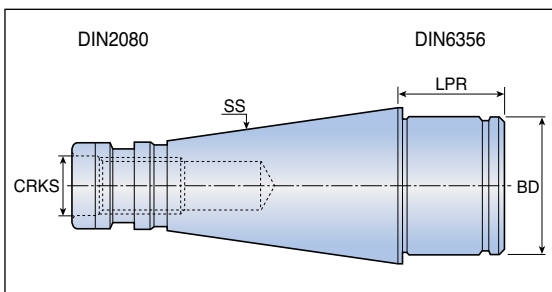
## Drill chuck arbors



Designation	Dimension (mm)				
	SS	Tt°	LF	LB	CRKS
<b>DIN2080 30 DC B16x20</b>	30	B16	20	5.4	M12
<b>DIN2080 40 DC B16x22</b>	40	B16	22	10.4	M16
<b>DC B18x25</b>	40	B18	25	13.4	M16
<b>DIN2080 50 DC B16x25</b>	50	B16	25	9.8	M24
<b>DC B18x25</b>	50	B18	25	9.8	M24

# DIN2080-CP

## Centering plug



Designation	Dimension (mm)			
	SS	BD	LPR	CRKS
<b>DIN2080 40 CP 40</b>	40	40	29	M16
<b>DIN2080 50 CP 60</b>	50	60	39	M24

# CADAPTER

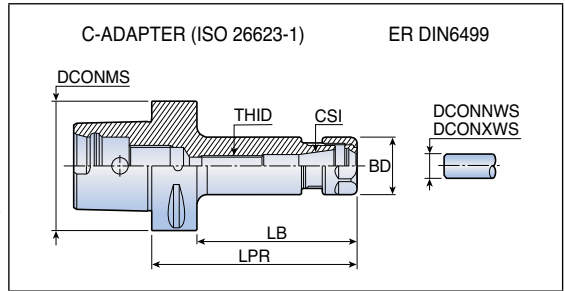
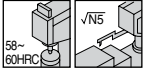




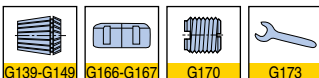


# C-ER

## ER collet chucks



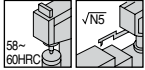
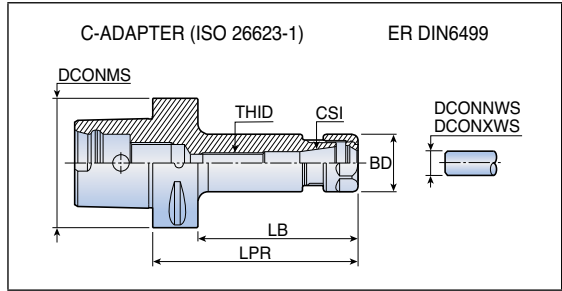
Designation	Dimension (mm)							
	DCONMS	CSI	DCONWS	DCONXWS	BD	LPR	LB	THID
<b>C4 ER 16x70</b>	40	ER16	1.0	10.0	28	70	50	M10
<b>ER 20x35<sup>(1)</sup></b>	40	ER20	1.0	13.0	34	35	27	-
<b>ER 20x52</b>	40	ER20	1.0	13.0	34	52	32	-
<b>ER 25x38<sup>(1)</sup></b>	40	ER25	1.0	16.0	42	38	30	-
<b>ER 25x52</b>	40	ER25	1.0	16.0	42	52	32	-
<b>ER 32x54</b>	40	ER32	2.0	20.0	50	54	34	-
<b>C5 ER 16x100</b>	50	ER16	1.0	10.0	28	100	80	M10
<b>ER 16x130</b>	50	ER16	1.0	10.0	28	130	110	M10
<b>ER 20x055</b>	50	ER20	1.0	13.0	34	55	35	-
<b>ER 20x100</b>	50	ER20	1.0	13.0	34	100	80	M12
<b>ER 20x130</b>	50	ER20	1.0	13.0	34	130	110	M12
<b>ER 25x055</b>	50	ER25	1.0	16.0	42	55	35	-
<b>ER 25x100</b>	50	ER25	1.0	16.0	42	100	80	M16
<b>ER 32x057</b>	50	ER32	2.0	20.0	50	57	36	-
<b>ER 32x100</b>	50	ER32	2.0	20.0	50	100	80	M22x1.5
<b>C6 ER 16x100</b>	63	ER16	1.0	10.0	28	100	78	M10
<b>ER 16x130</b>	63	ER16	1.0	10.0	28	130	108	M10
<b>ER 16x160</b>	63	ER16	1.0	10.0	28	160	138	M10
<b>ER 20x060</b>	63	ER20	1.0	13.0	34	60	38	-
<b>ER 20x100</b>	63	ER20	1.0	13.0	34	100	78	M12
<b>ER 20x130</b>	63	ER20	1.0	13.0	34	130	108	M12
<b>ER 20x160</b>	63	ER20	1.0	13.0	34	160	138	M12
<b>ER 25x060</b>	63	ER25	1.0	16.0	42	60	38	-
<b>ER 25x100</b>	63	ER25	1.0	16.0	42	100	78	M16
<b>ER 25x130</b>	63	ER25	1.0	16.0	42	130	108	M16
<b>ER 25x160</b>	63	ER25	1.0	16.0	42	160	138	M16
<b>ER 32x060</b>	63	ER32	2.0	20.0	50	60	36	-
<b>ER 32x100</b>	63	ER32	2.0	20.0	50	100	78	M22x1.5
<b>ER 32x130</b>	63	ER32	2.0	20.0	50	130	108	M22x1.5
<b>ER 32x160</b>	63	ER32	2.0	20.0	50	160	138	M22x1.5
<b>ER 40x065</b>	63	ER40	3.0	26.0	63	65	37	-
<b>ER 40x100</b>	63	ER40	3.0	26.0	63	100	78	M28x1.5
<b>ER 40x130</b>	63	ER40	3.0	26.0	63	130	108	M28x1.5



• <sup>(1)</sup> Without V grooves, for manual use only

# C-ER

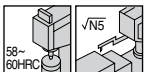
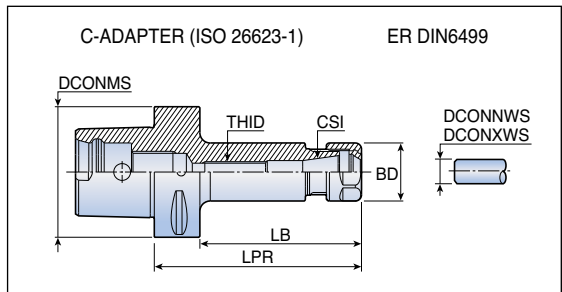
## ER collet chucks



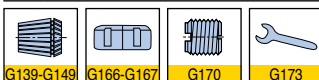
Designation	Dimension (mm)							
	DCONMS	CSI	DCONNWS	DCONXWS	BD	LPR	LB	THID
<b>C8 ER 32x70</b>	80	ER32	2.0	20.0	50	70	40	-
<b>ER 32x100</b>	80	ER32	2.0	20.0	50	100	70	M22x1.5
<b>ER 32x160</b>	80	ER32	2.0	20.0	50	160	130	M22x1.5
<b>ER 40x70</b>	80	ER40	3.0	26.0	63	70	40	-
<b>ER 40x100</b>	80	ER40	3.0	26.0	63	100	70	M28x1.5
<b>ER 40x160</b>	80	ER40	3.0	26.0	63	160	130	M28x1.5

# C-ER-M

## ER mini collet chucks

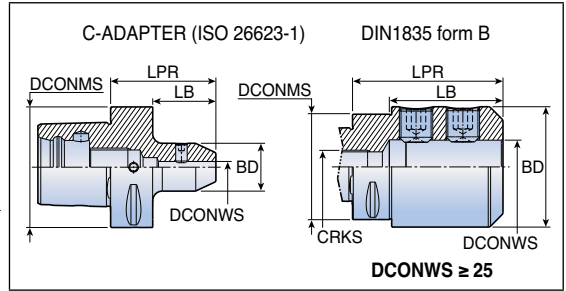
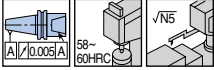


Designation	Dimension (mm)							
	DCONMS	CSI	DCONNWS	DCONXWS	BD	LPR	LB	THID
<b>C4 ER 16x70 M</b>	40	ER16	0.5	10.0	22	70	50	M10
<b>C5 ER 16x100 M</b>	50	ER16	0.5	10.0	22	100	80	M10
<b>ER 16x130 M</b>	50	ER16	0.5	10.0	22	130	120	M10
<b>C6 ER 16x100 M</b>	63	ER16	0.5	10.0	22	100	78	M10
<b>ER 16x130 M</b>	63	ER16	0.5	10.0	22	130	108	M10
<b>ER 16x160 M</b>	63	ER16	0.5	10.0	22	160	138	M10



# C-EM

## End mill holders

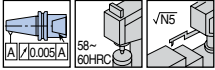
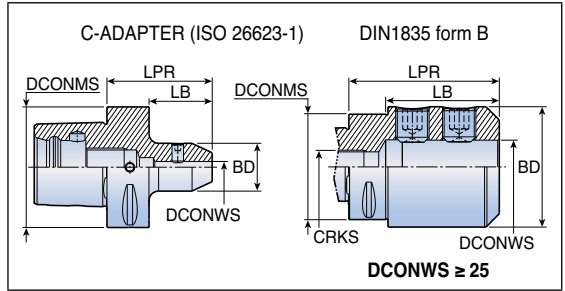


Designation	Dimension (mm)					
	DCONMS	DCONWS	BD	LPR	LB	CRKS
<b>C4 EM 6x50</b>	40	6	25	50	30	M14
<b>EM 8x50</b>	40	8	28	50	30	M14
<b>EM 10x50</b>	40	10	35	50	30	M14
<b>EM 12x55</b>	40	12	42	55	35	M14
<b>EM 14x55</b>	40	14	44	55	35	M14
<b>EM 16x60</b>	40	16	48	60	40	M14
<b>C5 EM 6x50</b>	50	6	25	50	30	M16
<b>EM 8x50</b>	50	8	28	50	30	M16
<b>EM 10x55</b>	50	10	35	55	35	M16
<b>EM 12x60</b>	50	12	42	60	40	M16
<b>EM 14x60</b>	50	14	44	60	40	M16
<b>EM 16x60</b>	50	16	48	60	40	M16
<b>EM 18x60</b>	50	18	50	60	40	M16
<b>EM 20x60</b>	50	20	52	60	40	M16
<b>EM 25x85</b>	50	25	65	85	65	M16
<b>C6 EM 6x55</b>	63	6	25	55	33	M20
<b>EM 8x55</b>	63	8	28	55	33	M20
<b>EM 10x60</b>	63	10	35	60	38	M20
<b>EM 12x60</b>	63	12	42	60	38	M20
<b>EM 14x60</b>	63	14	44	60	38	M20
<b>EM 16x65</b>	63	16	48	65	43	M20
<b>EM 18x65</b>	63	18	50	65	43	M20
<b>EM 20x65</b>	63	20	52	65	43	M20
<b>EM 25x80</b>	63	25	65	80	58	M20
<b>EM 32x90</b>	63	32	72	90	68	M20
<b>EM 40x100</b>	63	40	90	100	78	M20



# C-EM

## End mill holders

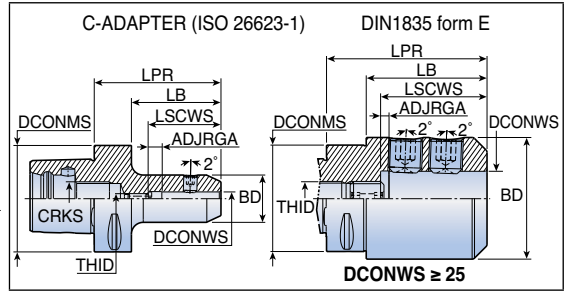
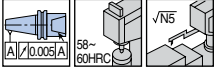


Designation	Dimension (mm)					
	DCONMS	DCONWS	BD	LPR	LB	CRKS
<b>C8 EM 6x70</b>	80	6	25	70	40	M20
<b>EM 8x70</b>	80	8	28	70	40	M20
<b>EM 10x70</b>	80	10	35	70	40	M20
<b>EM 12x70</b>	80	12	42	70	40	M20
<b>EM 14x70</b>	80	14	44	70	40	M20
<b>EM 16x70</b>	80	16	48	70	40	M20
<b>EM 18x70</b>	80	18	50	70	40	M20
<b>EM 20x70</b>	80	20	52	70	40	M20
<b>EM 25x90</b>	80	25	65	90	60	M20
<b>EM 32x95</b>	80	32	72	95	65	M20
<b>EM 40x110</b>	80	40	90	110	80	M20
<b>EM 50x120</b>	80	50	98	120	90	M20



# C-EM-E

## End mill holders - Whistle notch type



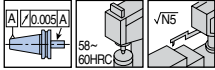
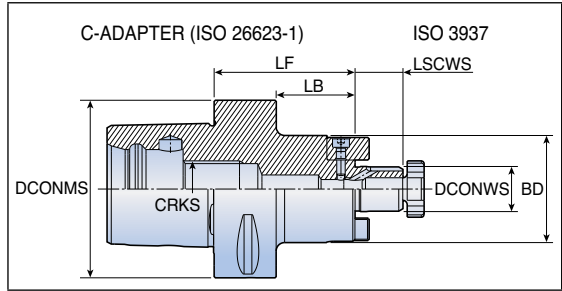
Designation	Dimension (mm)									
	DCONMS	DCONWS	BD	LPR	LB	ADJRGA	LSCWS	CRKS	THID	
<b>C4 EM 6x70 E</b>	40	6	25	70	50	5	35	M14	M5	
<b>EM 8x70 E</b>	40	8	28	70	50	8	43	M14	M6	
<b>EM 10x70 E</b>	40	10	35	70	50	6	45	M14	M8	
<b>EM 12x75 E</b>	40	12	42	75	55	5	49	M14	M10	
<b>EM 14x75 E</b>	40	14	44	75	55	5	49	M14	M10	
<b>C5 EM 6x70 E</b>	50	6	25	70	50	5	35	M16	M5	
<b>EM 8x70 E</b>	50	8	28	70	50	8	43	M16	M6	
<b>EM 10x70 E</b>	50	10	35	70	50	6	45	M16	M8	
<b>EM 12x75 E</b>	50	12	42	75	55	5	49	M16	M10	
<b>EM 14x75 E</b>	50	14	44	75	55	5	49	M16	M10	
<b>EM 16x80 E</b>	50	16	48	80	60	5	52	M16	M12	
<b>EM 18x80 E</b>	50	18	50	80	60	5	52	M16	M12	
<b>EM 20x85 E</b>	50	20	52	85	65	6	55	M16	M16	
<b>C6 EM 6x75 E</b>	63	6	25	75	53	6	36	M20	M5	
<b>EM 8x75 E</b>	63	8	28	75	53	8	43	M20	M6	
<b>EM 10x75 E</b>	63	10	35	75	53	7	46	M20	M8	
<b>EM 12x80 E</b>	63	12	42	80	58	5	49	M20	M10	
<b>EM 14x80 E</b>	63	14	44	80	58	5	49	M20	M10	
<b>EM 16x85 E</b>	63	16	48	85	63	5	52	M20	M12	
<b>EM 18x85 E</b>	63	18	50	85	63	5	52	M20	M12	
<b>EM 20x85 E</b>	63	20	52	85	63	6	55	M20	M16	
<b>EM 25x90 E</b>	63	25	65	90	68	6	60	M20	M20	
<b>EM 32x95 E</b>	63	32	72	95	73	5	63	M20	M20	
<b>C8 EM 6x65 E</b>	80	6	25	65	35	6	36	M20	M5	
<b>EM 8x65 E</b>	80	8	28	65	35	8	43	M20	M6	
<b>EM 10x65 E</b>	80	10	35	65	35	7	46	M20	M8	
<b>EM 12x70 E</b>	80	12	42	70	40	5	49	M20	M10	
<b>EM 14x70 E</b>	80	14	44	70	40	5	49	M20	M10	
<b>EM 16x75 E</b>	80	16	48	75	45	5	52	M20	M12	
<b>EM 18x75 E</b>	80	18	50	75	45	5	52	M20	M12	
<b>EM 20x80 E</b>	80	20	52	80	50	8	57	M20	M16	
<b>EM 25x90 E</b>	80	25	65	90	60	6	60	M20	M20	
<b>EM 32x95 E</b>	80	32	72	95	65	6	64	M20	M20	



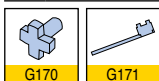
G170

# C-SEM-C

Face mill arbors

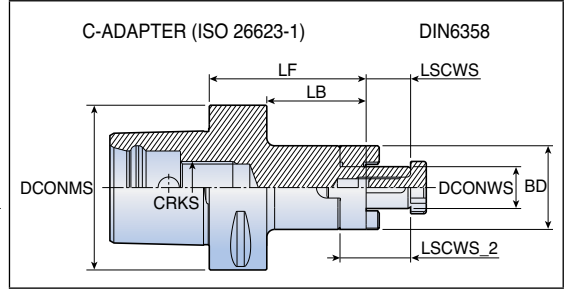
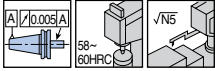


Designation	Dimension (mm)						
	DCONMS	DCONWS	BD	LF	LB	LSCWS	CRKS
<b>C4 SEM 16x32 C</b>	40	16	38	32	12	17	M14
<b>SEM 16x55 C</b>	40	16	38	55	35	17	M14
<b>SEM 22x40 C</b>	40	22	47	40	20	19	M14
<b>SEM 22x55 C</b>	40	22	47	55	35	19	M14
<b>C5 SEM 16x35 C</b>	50	16	38	35	15	17	M16
<b>SEM 16x70 C</b>	50	16	38	70	50	17	M16
<b>SEM 22x35 C</b>	50	22	47	35	15	19	M16
<b>SEM 22x70 C</b>	50	22	47	70	50	19	M16
<b>SEM 27x40 C</b>	50	27	58	40	20	21	M16
<b>SEM 32x40 C</b>	50	32	63	40	20	24	M16
<b>C6 SEM 16x50 C</b>	63	16	38	50	28	17	M20
<b>SEM 16x100 C</b>	63	16	38	100	78	17	M20
<b>SEM 22x50 C</b>	63	22	47	50	28	19	M20
<b>SEM 22x100 C</b>	63	22	47	100	78	19	M20
<b>SEM 27x60 C</b>	63	27	58	60	38	21	M20
<b>SEM 27x100 C</b>	63	27	58	100	78	21	M20
<b>SEM 32x60 C</b>	63	32	66	60	38	24	M20
<b>SEM 40x60 C</b>	63	40	82	60	38	27	M20
<b>C8 SEM 16x50 C</b>	80	16	38	50	20	17	M20
<b>SEM 16x100 C</b>	80	16	38	100	70	17	M20
<b>SEM 22x50 C</b>	80	22	47	50	20	19	M20
<b>SEM 22x100 C</b>	80	22	47	100	70	19	M20
<b>SEM 27x50 C</b>	80	27	58	50	20	21	M20
<b>SEM 27x100 C</b>	80	27	58	100	70	21	M20
<b>SEM 32x50 C</b>	80	32	66	50	20	24	M20
<b>SEM 32x100 C</b>	80	32	66	100	70	24	M20
<b>SEM 40x60 C</b>	80	40	82	60	30	27	M20



# C-SEMC

## Combi shell mill arbors



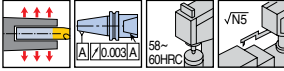
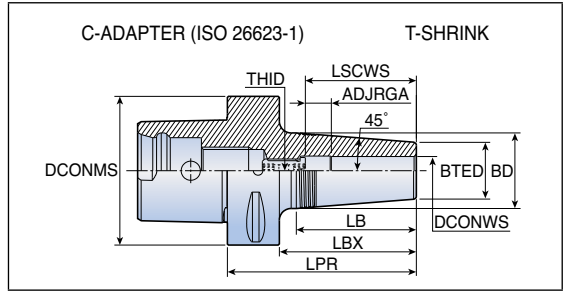
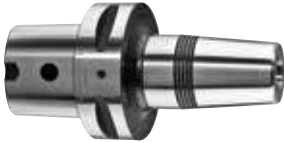
Designation	Dimension (mm)							
	DCONMS	DCONWS	BD	LF	LB	LSCWS	LSCWS_2	CRKS
<b>C4 SEMC 16x45</b>	40	16	32	45	25	17	27	M14
<b>SEMC 22x45</b>	40	22	40	45	25	19	31	M14
<b>SEMC 27x50</b>	40	27	48	50	30	21	33	M14
<b>C5 SEMC 16x55</b>	50	16	32	55	35	17	27	M16
<b>SEMC 16x85</b>	50	16	32	85	65	17	27	M16
<b>SEMC 22x65</b>	50	22	40	65	45	19	31	M16
<b>SEMC 27x85</b>	50	27	48	85	65	21	33	M16
<b>C6 SEMC 16x60</b>	63	16	32	60	38	17	27	M20
<b>SEMC 16x100</b>	63	16	32	100	78	17	27	M20
<b>SEMC 22x60</b>	63	22	40	60	38	19	31	M20
<b>SEMC 22x100</b>	63	22	40	100	78	19	31	M20
<b>SEMC 27x60</b>	63	27	48	60	38	21	33	M20
<b>SEMC 27x100</b>	63	27	48	100	78	21	33	M20
<b>SEMC 32x60</b>	63	32	58	60	38	24	38	M20
<b>SEMC 40x70</b>	63	40	70	70	48	27	41	M20







## Thermal shrinking chucks



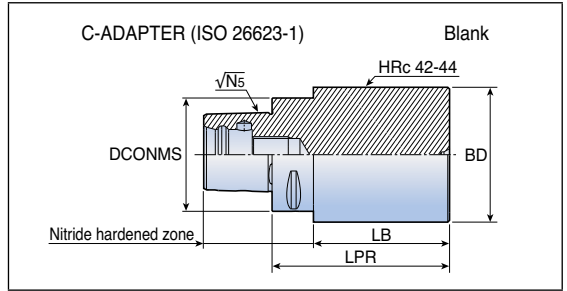
Designation	Dimension (mm)										
	DCONMS	DCONWS	BTED	BD	LPR	LBX	LB	ADJRGA	LSCWS	THID	Hex key
<b>C4 SRKIN 6x75</b>	40	6	21	27	75	55	38.1	11	36	M5	2.5
<b>SRKIN 8x75</b>	40	8	21	27	75	55	38.1	11	36	M6	3.0
<b>SRKIN 10x75</b>	40	10	24	32	75	55	50.8	11	42	M8	4.0
<b>SRKIN 12x75</b>	40	12	24	32	75	55	50.8	11	47	M10	5.0
<b>SRKIN 14x80</b>	40	14	27	34	80	60	44.5	11	47	M10	5.0
<b>SRKIN 16x80</b>	40	16	27	34	80	60	44.5	11	50	M12	6.0
<b>SRKIN 18x80</b>	40	18	33	42	80	60	57.2	11	50	M12	6.0
<b>SRKIN 20x85</b>	40	20	33	42	85	65	57.2	11	52	M16	8.0
<b>C5 SRKIN 6x75</b>	50	6	21	27	75	55	38.1	11	36	M5	2.5
<b>SRKIN 8x75</b>	50	8	21	27	75	55	38.1	11	36	M6	3.0
<b>SRKIN 10x75</b>	50	10	24	32	75	55	50.8	11	42	M8	4.0
<b>SRKIN 12x75</b>	50	12	24	32	75	55	50.8	11	47	M10	5.0
<b>SRKIN 14x80</b>	50	14	27	34	80	60	44.5	11	47	M10	5.0
<b>SRKIN 16x80</b>	50	16	27	34	80	60	44.5	11	50	M12	6.0
<b>SRKIN 18x80</b>	50	18	33	42	80	60	57.2	11	50	M12	6.0
<b>SRKIN 20x85</b>	50	20	33	42	85	65	57.2	11	52	M16	8.0
<b>SRKIN 25x90</b>	50	25	44	53	90	70	57.2	11	58	M16	8.0
<b>C6 SRKIN 6x80</b>	63	6	21	27	80	58	38.1	11	36	M5	2.5
<b>SRKIN 8x80</b>	63	8	21	27	80	58	38.1	11	36	M6	3.0
<b>SRKIN 10x80</b>	63	10	24	32	80	58	50.8	11	42	M8	4.0
<b>SRKIN 12x80</b>	63	12	24	32	80	58	50.8	11	47	M10	5.0
<b>SRKIN 14x85</b>	63	14	27	34	85	63	44.5	11	47	M10	5.0
<b>SRKIN 16x85</b>	63	16	27	34	85	63	44.5	11	50	M12	6.0
<b>SRKIN 18x85</b>	63	18	33	42	85	63	57.2	11	50	M12	6.0
<b>SRKIN 20x85</b>	63	20	33	42	85	63	57.2	11	52	M16	8.0
<b>SRKIN 25x90</b>	63	25	44	53	90	68	57.2	11	58	M16	8.0
<b>SRKIN 32x95</b>	63	32	44	53	95	73	57.2	11	58	M16	8.0





# C-B4340

Blank



Designation	Dimension (mm)			
	DCONWS	BD	LPR	LB
<b>C4</b> B4340 040095	40	40	95	75
B4340 060165	40	60	165	144
B4340 080075	40	80	75	54
B4340 100085	40	100	85	64
<b>C5</b> B4340 050125	50	50	125	105
B4340 075175	50	75	175	154
B4340 090080	50	90	80	59
B4340 110090	50	110	90	69
<b>C6</b> B4340 075195	63	75	195	172
B4340 110085	63	110	85	62
B4340 130095	63	130	95	72
B4340 120180	63	120	180	157
<b>C8</b> B4340 080200	80	80	200	170
B4340 120160	80	120	160	129
B4340 130090	80	130	90	59
B4340 145200	80	145	200	169

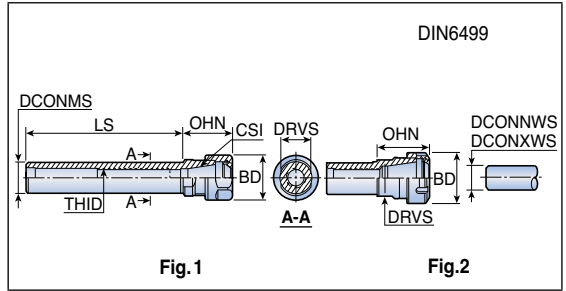
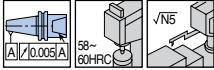
# Straight & Morse Taper Shank



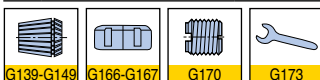


# ST-ER-F

## ER collet chucks



Designation	Dimension (mm)									Fig.
	DCONMS	CSI	DCONNWS	DCONXWS	BD	OHN	LS	THID	DRVS	
<b>ST 16x50 ER11 F</b>	16	ER11	0.5	7.0	19	18.5	50	M8	13	1
<b>20x50 ER11 F</b>	20	ER11	0.5	7.0	19	18.5	50	M10	17	1
<b>20x100 ER11</b>	20	ER11	0.5	7.0	19	18.5	100	M10	17	1
<b>20x100 ER11 F</b>	20	ER11	0.5	7.0	19	18.5	100	M10	17	1
<b>20x150 ER11</b>	20	ER11	0.5	7.0	19	18.5	150	M10	17	1
<b>20x50 ER16 F</b>	20	ER16	0.5	10.0	28	32.3	50	M12	19	1
<b>20x100 ER16</b>	20	ER16	0.5	10.0	28	30.0	100	M12	19	1
<b>20x100 ER16 F</b>	20	ER16	0.5	10.0	28	30.0	100	M12	19	1
<b>20x150 ER16</b>	20	ER16	0.5	10.0	28	30.0	150	M12	19	1
<b>20x50 ER20 F</b>	20	ER20	1.0	13.0	34	42.5	50	M12	22	1
<b>25x100 ER20</b>	25	ER20	1.0	13.0	34	36.0	100	M16	22	1
<b>25x150 ER20</b>	25	ER20	1.0	13.0	34	36.0	150	M16	22	1
<b>20x50 ER25 F</b>	20	ER25	1.0	16.0	42	46.0	50	M12	28	2
<b>20x100 ER25</b>	20	ER25	1.0	16.0	42	46.0	100	M12	28	2
<b>20x100 ER25 F</b>	20	ER25	1.0	16.0	42	46.0	100	M12	28	2
<b>25x50 ER25 F</b>	25	ER25	1.0	16.0	42	46.0	50	M16	28	2
<b>25x100 ER25</b>	25	ER25	1.0	16.0	42	46.0	100	M16	28	2
<b>20x50 ER32 F</b>	20	ER32	2.0	20.0	50	54.0	50	M12	36	2
<b>20x100 ER32</b>	20	ER32	2.0	20.0	50	54.0	100	M12	36	2
<b>20x100 ER32 F</b>	20	ER32	2.0	20.0	50	54.0	100	M12	36	2
<b>25x50 ER32 F</b>	25	ER32	2.0	20.0	50	52.0	50	M16x2	36	2
<b>30x50 ER32 F</b>	30	ER32	2.0	20.0	50	52.0	50	M18x1.5	36	2
<b>32x50 ER32 F</b>	32	ER32	2.0	20.0	50	52.0	50	M18x1.5	36	2
<b>32x150 ER32</b>	32	ER32	2.0	20.0	50	52.0	150	M18x1.5	36	2
<b>40x75 ER32 F</b>	40	ER32	2.0	20.0	50	46.0	75	M22x1.5	44	2
<b>25x50 ER40 F</b>	25	ER40	3.0	26.0	63	60.0	50	M16x2	45	2
<b>30x50 ER40 F</b>	32	ER40	3.0	26.0	63	60.0	50	M18x1.5	45	2
<b>32x50 ER40 F</b>	32	ER40	3.0	26.0	63	60.0	50	M18x1.5	45	2
<b>40x75 ER40 F</b>	40	ER40	3.0	26.0	63	55.0	75	M22x1.5	45	2
<b>50x80 ER40 F</b>	50	ER40	3.0	26.0	63	60.0	80	M28x1.5	54	2
<b>50x80 ER50 F</b>	50	ER50	10.0	34.0	78	77.0	80	M36x1.5	58	2



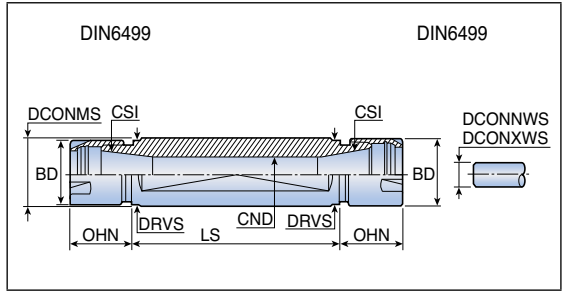
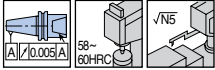
• F: Flat on the shank



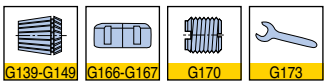


# ST-ER-MF D

Straight shanks - Double mini collet



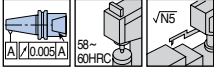
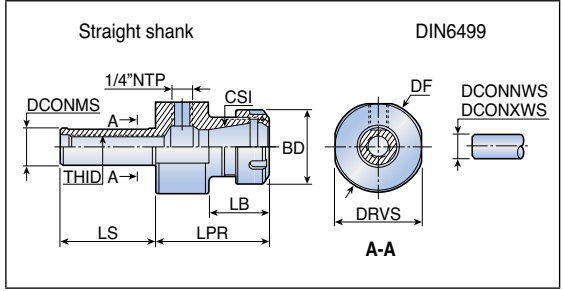
Designation	Dimension (mm)								
	DCONMS	CSI	DCONNWS	DCONXWS	CND	BD	OHN	LS	DRVS
<b>ST 16x50 ER11 MF D</b>	16	ER11	0.5	7.0	7.5	16	18.5	50	14
<b>20x30 ER11 MF D</b>	20	ER11	0.5	7.0	7.5	16	18.5	30	17
<b>20x50 ER11 MF D</b>	20	ER11	0.5	7.0	7.5	16	18.5	50	17
<b>20x55 ER16 MF D</b>	20	ER16	0.5	10.0	10.5	22	25.0	55	17
<b>22x55 ER16 MF D</b>	22	ER16	0.5	10.0	10.5	22	28.0	55	19
<b>22x75 ER16 MF D</b>	22	ER16	0.5	10.0	10.5	22	28.0	75	19
<b>25x62 ER16 MF D</b>	25	ER16	0.5	10.0	10.5	22	28.0	62	22
<b>32x55 ER20 MF D</b>	32	ER20	1.0	13.0	13.5	28	28.0	55	27
<b>32x75 ER20 MF D</b>	32	ER20	1.0	13.0	13.5	28	28.0	75	27



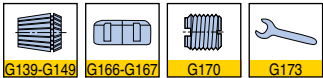
• MF D: Mini flat double

# ST-ER-S

Straight shanks - Internal coolant



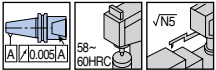
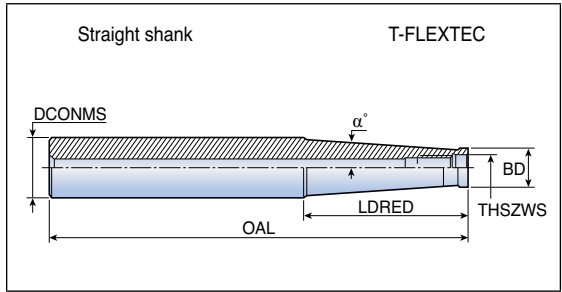
Designation	Dimension (mm)										
	DCONMS	CSI	DCONNWS	DCONXWS	DF	BD	LPR	LB	LS	THID	DRVS
<b>ST 20x65 ER16 S</b>	20	ER16	0.5	10.0	40	28	54	29.6	65	M12	34
<b>20x65 ER20 S</b>	20	ER20	1.0	13.0	40	34	63	31.0	65	M12	34
<b>20x65 ER25 S</b>	20	ER25	1.0	16.0	54	42	72	32.0	65	M12	51
<b>20x65 ER32 S</b>	20	ER32	2.0	20.0	63	50	77	41.0	65	M12	59
<b>25x65 ER25 S</b>	25	ER25	1.0	16.0	54	42	72	32.0	65	M12	50
<b>25x65 ER32 S</b>	25	ER32	2.0	20.0	63	50	77	41.0	65	M16	59
<b>32x65 ER32 S</b>	32	ER32	2.0	20.0	63	50	77	41.0	65	M18x1.5	59
<b>40x75 ER32 S</b>	40	ER32	2.0	20.0	63	50	77	41.0	75	M22x1.5	59



# S M-L-C



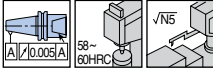
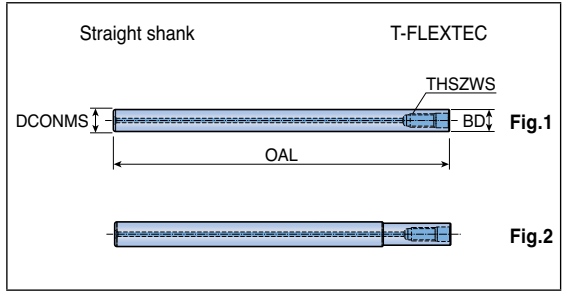
**Straight shanks**



Designation	Dimension (mm)						Shank type
	THSZWS	DCONMS	BD	OAL	LDRED	$\alpha^\circ$	
<b>S M06 - L60 C10</b>	M06	10	9.7	60	20.0	-	C
<b>L105-C12</b>	M06	12	9.7	105	60.0	1.2	C
<b>L125-C16</b>	M06	16	9.7	125	60.0	3.3	C
<b>S M08 - L73 C16</b>	M08	16	13.0	73	25.0	-	C
<b>L128-C 16</b>	M08	16	13.0	128	80.0	0.9	C
<b>L170-C20</b>	M08	20	13.0	170	66.8	3.3	C
<b>S M10 - L80 C20</b>	M10	20	18.0	80	30.0	-	C
<b>L130-C20</b>	M10	20	18.0	130	80.0	0.6	C
<b>L200-C25</b>	M10	25	19.0	200	57.2	3.3	C
<b>S M12 - L86-C25</b>	M12	25	21.0	86	30.0	5.1	C
<b>L200-C32</b>	M12	32	21.0	200	78.0	4.4	C
<b>S M16 - L95-C32</b>	M16	32	29.0	95	35.0	1.7	C
<b>L230-C32</b>	M16	32	29.0	230	50.0	1.8	C

- All shanks have coolant holes

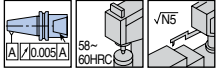
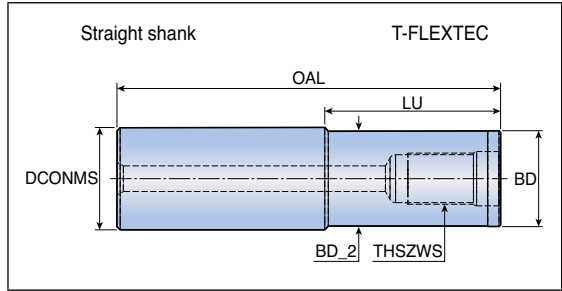
## Carbide T-FLEXTEC shanks with internal coolant hole



Designation	Dimension (mm)				Fig.
	THSZWS	DCONMS	BD	OAL	
<b>S M06 - CT10-L100</b>	M06	10	10	100	1
<b>CT10-L150</b>	M06	10	10	150	1
<b>CT12-L100</b>	M06	12	12	100	1
<b>CT12-L150</b>	M06	12	12	150	1

- All shanks have coolant holes
- Fig.2 can be supplied as special

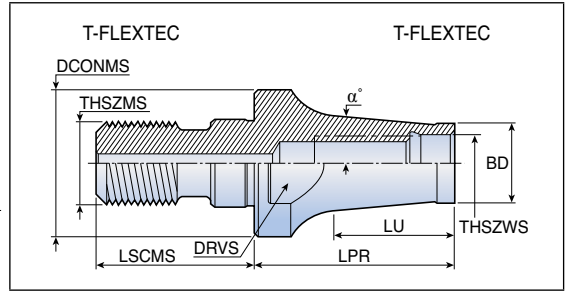
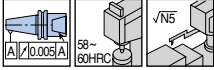
## Carbide T-FLEXTEC shanks with internal coolant hole



Designation	Dimension (mm)					
	THSZWS	DCONMS	BD	BD_2	OAL	LU
<b>S M08-CT16 - 20-L80</b>	M08	16	15.3	15.3	80	20
<b>40-L100</b>	M08	16	15.3	15.3	100	40
<b>80-L150</b>	M08	16	15.3	15.3	150	80
<b>100-L200</b>	M08	16	13.0	12.5	200	100
<b>140-L200</b>	M08	16	15.3	15.3	200	140
<b>180-L250</b>	M08	16	15.3	15.3	250	180
<b>S M10-CT20 - 20-L80</b>	M10	20	18.5	18.5	80	20
<b>40-L100</b>	M10	20	18.5	18.5	100	40
<b>80-L150</b>	M10	20	18.5	18.5	150	80
<b>100-L200</b>	M10	20	18.5	18.5	200	100
<b>130-L250</b>	M10	20	18.0	17.5	250	130
<b>140-L200</b>	M10	20	18.0	17.5	200	140
<b>180-L250</b>	M10	20	18.0	17.5	250	180
<b>180-L300</b>	M10	20	18.0	17.5	300	180
<b>230-L300</b>	M10	20	18.0	17.5	300	230
<b>S M12-CT25 - 40-L100</b>	M12	25	24.0	24.0	100	40
<b>80-L150</b>	M12	25	21.0	20.5	150	80
<b>100-L200</b>	M12	25	21.0	20.5	200	100
<b>130-L250</b>	M12	25	21.0	20.5	250	130
<b>140-L200</b>	M12	25	21.0	20.5	200	140
<b>180-L250</b>	M12	25	24.0	24.0	250	180
<b>180-L300</b>	M12	25	21.0	20.5	300	180
<b>230-L300</b>	M12	25	21.0	20.5	300	230
<b>S M16-CT32 - 40-L100</b>	M16	32	29.0	29.0	100	40
<b>80-L150</b>	M16	32	29.0	29.0	150	80
<b>100-L200</b>	M16	32	29.0	29.0	200	100
<b>130-L250</b>	M16	32	29.0	29.0	250	130
<b>140-L200</b>	M16	32	29.0	29.0	200	140
<b>180-L250</b>	M16	32	29.0	29.0	250	180
<b>180-L300</b>	M16	32	29.0	29.0	300	180
<b>230-L300</b>	M16	32	29.0	29.0	300	230
<b>230-L350</b>	M16	32	29.0	29.0	350	230
<b>280-L350</b>	M16	32	29.0	29.0	350	280

• All shanks have coolant holes

## Reducers

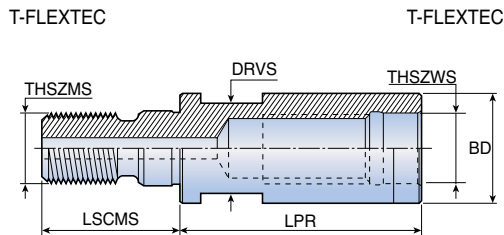
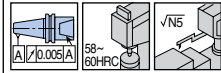


Designation	Dimension (mm)								
	THSZWS	THSZMS	BD	DCONMS	LPR	LSCMS	LU	DRVS	$\alpha^\circ$
<b>CAB M06M08</b>	M06	M08	9.7	13	30	17.5	24.8	9.5	5.7
<b>M08M10</b>	M08	M10	13.0	18	40	20.0	33.4	15.0	5.2
<b>M10M12</b>	M10	M12	18.0	21	45	22.0	36.4	17.0	2.5
<b>M12M16</b>	M12	M16	21.0	29	50	25.0	42.5	25.0	6.3

- With coolant holes

# CAB M-M-C

## Extensions



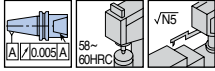
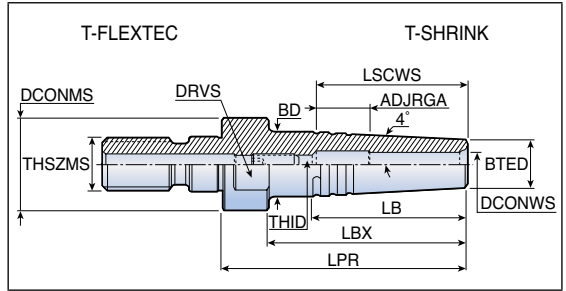
Designation	Dimension (mm)					
	THSZWS	THSZMS	BD	LPR	LSCMS	DRVS
<b>CAB M08M08-C</b>	M08	M08	13	30	17.5	9.6
<b>M10M10-C</b>	M10	M10	18	35	20.0	15.0
<b>M12M12-C</b>	M12	M12	21	40	22.0	17.0
<b>M16M16-C</b>	M16	M16	29	40	25.0	25.0

- With coolant holes

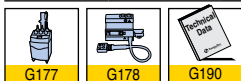
# CDP M-SRK



## Adapters with SRK T-SHRINK



Designation	Dimension (mm)													
	THSZMS	DCONWS	BTED	BD	DCONMS	LPR	LBX	LB	ADJRGA	LSCWS	THID	DRVS	Hex key	
<b>CDP M10 SRK 3x40</b>	M10	3	10	14	18	40	31.5	28.4	6	16	M4	15	2.0	
	<b>SRK 4x40</b>	M10	4	10	14	18	40	31.5	28.4	7	19	M4	15	2.0
	<b>SRK 5x40</b>	M10	5	10	14	18	40	31.5	28.4	10	25	M4	15	2.0
<b>CDP M12 SRK 3x45</b>	M12	3	10	14	21	45	36.5	28.8	6	16	M5	18	2.5	
	<b>SRK 4x45</b>	M12	4	10	14	21	45	36.5	28.8	6	18	M5	18	2.5
	<b>SRK 5x45</b>	M12	5	10	14	21	45	36.5	28.8	10	25	M5	18	2.5
	<b>SRK 6x45</b>	M12	6	11	15	21	45	36.5	28.4	10	28	M5	18	2.5
	<b>SRK 8x45</b>	M12	8	14	18	21	45	36.5	28.8	10	35	M5	18	2.5
	<b>SRK 10x45</b>	M12	10	16	21	21	45	-	35.6	10	40	M5	18	2.5
	<b>SRK 12x45</b>	M12	12	20	25	21	45	-	36.0	10	42	M5	18	2.5

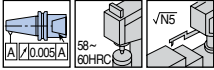
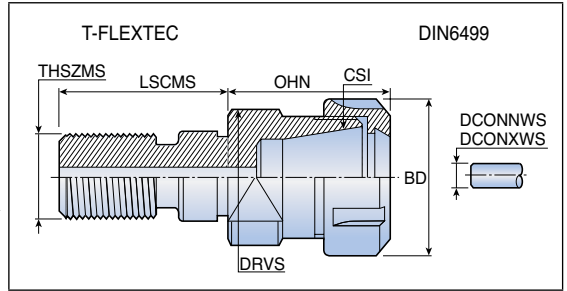


• With coolant holes

# CDP ER-M



Adapters with ER collet chuck



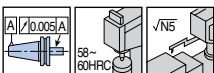
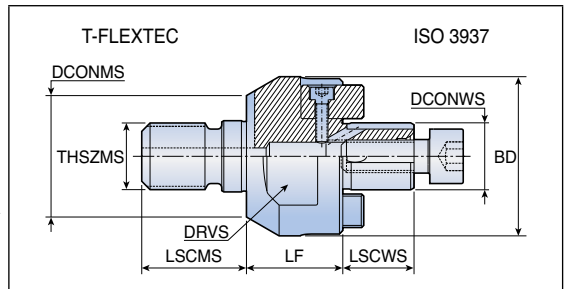
Designation	Dimension (mm)							
	CSI	THSZMS	DCONNWS	DCONXWS	BD	OHN	LSCMS	DRVS
<b>CDP ER11 M10 M</b>	ER11	M10	0.5	7.0	16	27.0	20	15
<b>ER11 M12 M</b>	ER11	M12	0.5	7.0	16	27.0	22	17
<b>ER16 M10 M</b>	ER16	M10	0.5	10.0	22	38.1	20	17
<b>ER16 M12 M</b>	ER16	M12	0.5	10.0	22	37.1	22	17
<b>ER16 M16</b>	ER16	M16	0.5	10.0	28	36.6	25	25
<b>ER20 M16</b>	ER20	M16	1.0	13.0	34	45.5	25	25
<b>ER25 M16</b>	ER25	M16	1.0	16.0	42	44.5	25	28

- With coolant holes

# CAB M-SEM-C

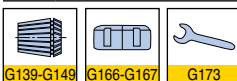


Shell mill arbors



Designation	Dimension (mm)							
	THSZMS	DCONWS	DCONMS	BD	LF	LSCWS	LSCMS	DRVS
<b>CAB M16 SEM 16C</b>	M16	16	29	38	23	17	25	32

- With coolant holes

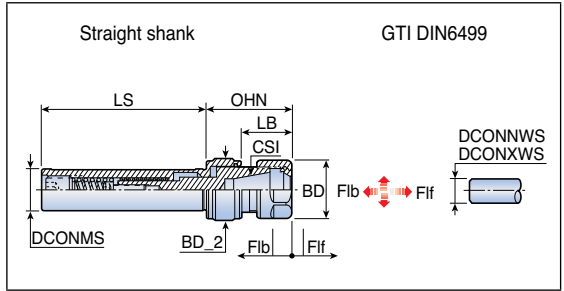
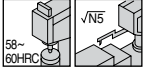






# GTI ER-ST

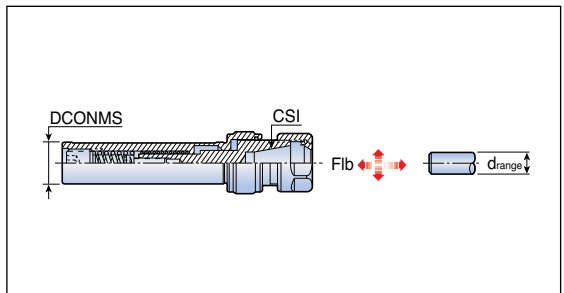
## GTI tap attachments



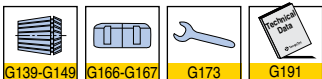
Designation	Dimension (mm)												
	DCONMS	CSI	Tap <sub>min</sub>	Tap <sub>max</sub>	DCONNWS	DCONXWS	BD	BD_2	OHN	LB	LS	Flb	Fif
<b>GTI ER11 ST16x150 M</b>	16	ER11	M2	M7	0.5	7.0	16	-	-	19.0	150	6	3
<b>ER16 ST20x80</b>	20	ER16	M3	M10	0.5	10.0	28	29.5	41.6	24.6	80	8	3
<b>ER20 ST20x80</b>	20	ER20	M4	M14	1.0	13.0	34	33.5	49.0	28.0	80	8	3
<b>ER25 ST25x80</b>	25	ER25	M5	M16	1.0	16.0	42	40.5	53.0	32.0	80	9	4
<b>ER32 ST25x80</b>	25	ER32	M6	M20	1.0	16.0	50	56.5	77.2	32.0	80	9	4
<b>ER40 ST32x80</b>	32	ER40	M6	M27	2.0	20.0	63	56.5	95.2	51.0	80	9	4

# KIT GTI ER-ST

## GTI tap attachment kits



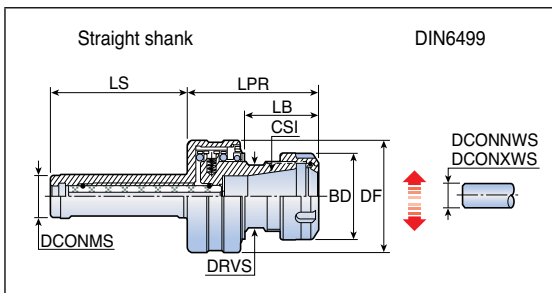
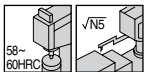
Designation	Dimension (mm)		
	DCONMS	CSI	drange
<b>KIT GTI ER11 ST16x150 4M</b>	16	ER11	3, 4, 5, 6
<b>ER16 ST20x80 4</b>	20	ER16	4, 5, 6, 7
<b>ER20 ST20x80 4</b>	20	ER20	5, 6, 8, 9
<b>ER25 ST25x80 5</b>	25	ER25	6, 7, 9, 11, 12
<b>ER32 ST25x80 6</b>	25	ER32	6, 7, 9, 11, 12, 16
<b>ER40 ST32x80 6</b>	32	ER40	9, 11, 14, 16, 18, 20



• GTI, collet, wrench included

# GFI ST-ER

## GFI floating reamer ER collet chucks

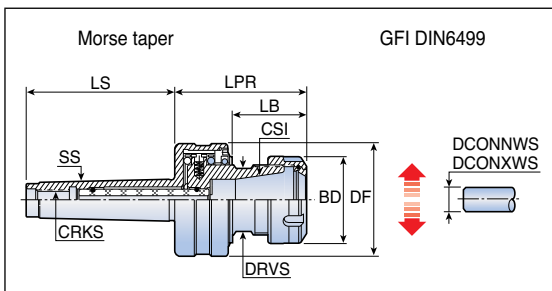
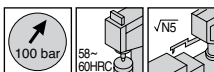


Designation	Dimension (mm)										
	DCONMS	CSI	DCONNWS	DCONXWS	DF	BD	LPR	LB	LS	Radial float	DRVS
<b>GFI ST20 ER20</b>	20	ER20	1.0	13.0	50	34	55.5	34.5	65	1.0	22
<b>ST25 ER32</b>	25	ER32	2.0	20.0	65	50	76.9	45.9	80	1.6	36

• Max. 2,000RPM

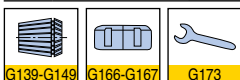
# GFI MT-ER

## Morse taper GFI reamer holders



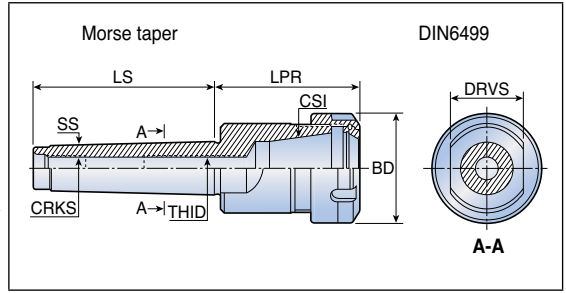
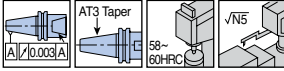
Designation	Dimension (mm)											
	SS	CSI	DCONNWS	DCONXWS	DF	BD	LPR	LB	LS	CRKS	Radial float	DRVS
<b>GFI MT2 ER20</b>	2	ER20	1.0	13.0	50	34	60.5	34.5	64	M10	1.0	22
<b>MT3 ER32</b>	3	ER32	2.0	20.0	65	50	81.9	45.9	81	M12	1.6	36

• Max. 2,000RPM



# MT-ER

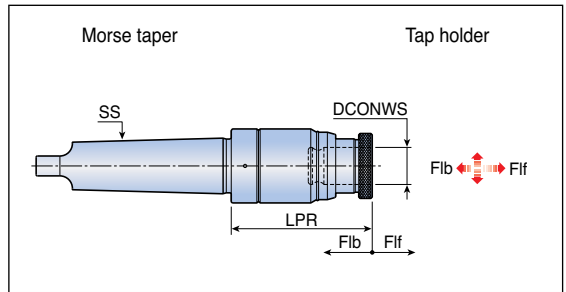
## Morse taper collet chucks



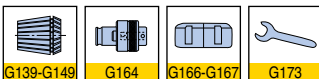
Designation	Dimension (mm)									
	SS	CSI	DCONWS	DCONXWS	BD	LPR	LS	CRKS	THID	DRVS
<b>MT2 ER 20x48.5</b>	2	ER20	1.0	13.0	34	48.5	64.0	M10	M10	22
<b>ER 25x52</b>	2	ER25	1.0	16.0	42	52.0	64.0	M10	M10	28
<b>MT3 ER 32x69</b>	3	ER32	2.0	20.0	50	69.0	81.0	M12	M12	24
<b>ER 40x79</b>	3	ER40	3.0	26.0	63	79.0	81.0	M12	M12	24
<b>MT4 ER 32x61</b>	4	ER32	2.0	20.0	50	60.5	102.5	M16	M16	32
<b>ER 40x82</b>	4	ER40	3.0	26.0	63	81.5	102.5	M16	M16	32
<b>ER 50x108</b>	4	ER50	10.0	34.0	78	107.5	102.5	M16	M16	32
<b>MT5 ER 40x82</b>	5	ER40	3.0	26.0	63	82.0	129.5	M20	M28x1.5	45
<b>ER 50x85</b>	5	ER50	10.0	34.0	78	85.0	129.5	M20	M28x1.5	45

# MTA-TC

## Tap holders - MTA

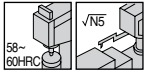
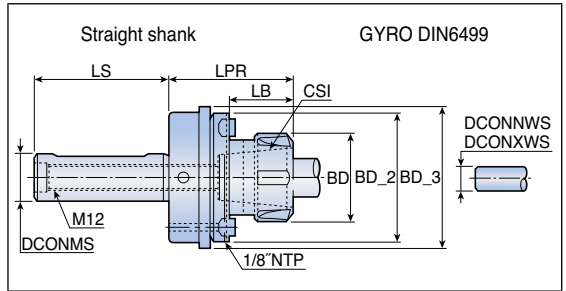


Designation	Dimension (mm)							
	SS	Tapmin	Tapmax	DCONWS	LPR	Flb	Flf	Tap adapter
<b>MTA3 TC12-90</b>	12	M3	M12	19	90	6.5	12	TA1
<b>TC22-115</b>	22	M6	M24	31	115	14.5	13	TA2
<b>MTA4 TC12-105</b>	12	M3	M12	19	105	6.5	12	TA1
<b>TC22-115</b>	22	M6	M24	31	115	14.5	13	TA2
<b>MTA5 TC12-145</b>	12	M3	M12	19	145	6.5	12	TA1
<b>TC22-175</b>	22	M6	M24	31	175	14.5	13	TA2



# GYRO ST-ER

## GYRO center alignment ER collet chucks

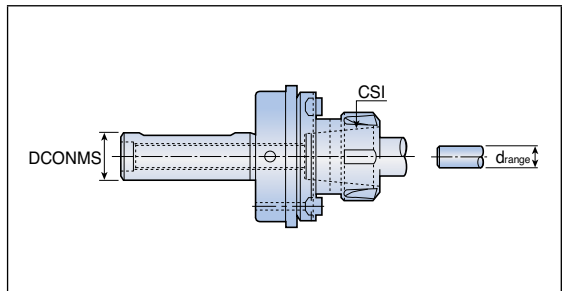


Designation	Dimension (mm)									
	SS	CSI	DCONNWS	DCONXWS	BD	BD_2	BD_3	LPR	LB	LS
<b>GYRO ST20 ER20</b>	20	ER20	1.0	13.0	34	57	63	58.80	28.5	80
<b>ST25 ER25</b>	25	ER25	1.0	16.0	42	74	79	65.65	35.5	80
<b>ST25 ER32</b>	25	ER32	2.0	20.0	50	74	79	66.65	36.5	80
<b>ST32 ER32</b>	32	ER32	2.0	20.0	50	74	79	66.65	36.5	80
<b>ST40 ER32</b>	40	ER32	2.0	20.0	50	74	79	66.65	36.5	80

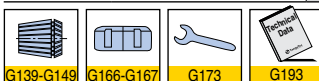
- First time users should buy a kit GYRO for performing the alignment procedure

# KIT GYRO ST-ER

## GYRO center alignment ER collet chuck kits



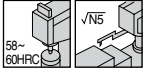
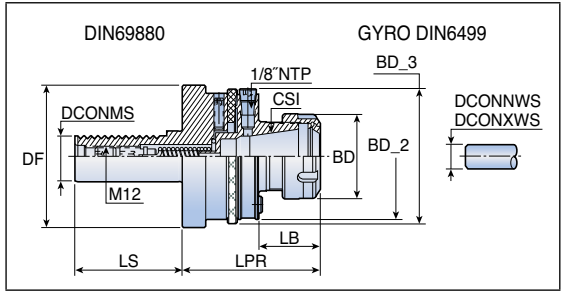
Designation	Dimension (mm)		
	DCONMS	CSI	d <sub>range</sub>
<b>KIT GYRO ST20 ER20</b>	20	ER20	1-13
<b>ST25 ER25</b>	25	ER25	1-16
<b>ST25 ER32</b>	25	ER32	2-20
<b>ST32 ER32</b>	32	ER32	2-20
<b>ST40 ER32</b>	40	ER32	2-20



- Kit includes: GYRO, test bar and bushing

# GYRO DIN69880-ER

GYRO center alignment ER collet chucks

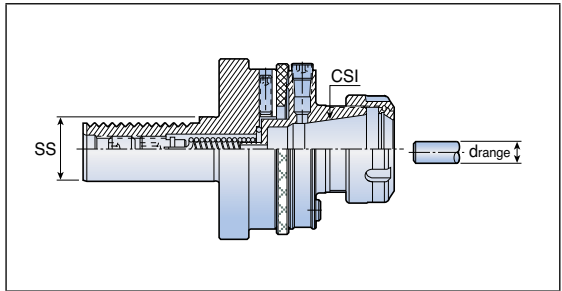


Designation	Dimension (mm)											
	DCONMS	CSI	DCONNWS	DCONXWS	BD	BD_2	BD_3	DF	LPR	LB	LS	
<b>GYRO DIN69880 30 ER32</b>	30	ER32	2.0	20.0	50	74	79	68.0	81.65	36.5	55	
<b>40 ER32</b>	40	ER32	2.0	20.0	50	74	79	83.2	81.65	36.5	63	
<b>50 ER32</b>	50	ER32	2.0	20.0	50	74	79	98.0	81.65	36.5	78	

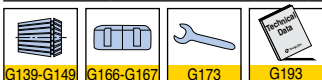
- First time users should buy a kit GYRO for performing the alignment procedure

# KIT GYRO DIN69880-ER

GYRO center alignment ER collet chuck kits



Designation	Dimension (mm)		
	SS	CSI	drange
<b>KIT GYRO 40 DIN69880 ER32</b>	VDI40	ER32	2-20
<b>50 DIN69880 ER32</b>	VDI50	ER32	2-20



- Kit includes: GYRO, test bar and bushing

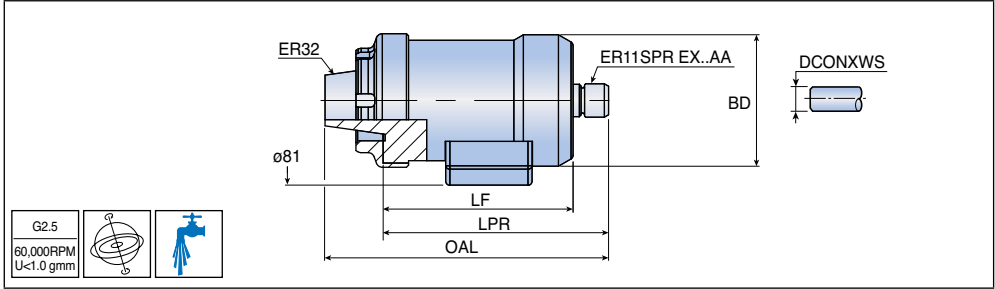
# TYPHOON GREEN



# TJS GJET ER



Coolant driven high-speed compact spindles with ER32 shank



Designation	Dimension (mm)					Kg
	DCONXWS	LF	LPR	OAL	BD	
<b>TJS GJET ER32</b>	7.0	92.0	109.0	136.0	63.0	1.3

- Minimum coolant pressure 20 bar and flow rate 12 l/min
- The spindle provides only external strong coolant jet around the tool
- DCONXWS: Maximum tool shank diameter

## Spare parts

Designation	Mini ER nut	ER wrench	Key	Locking pin	Display*
<b>TJS-GJET-ER32</b>	NUT ER11 GHS	WRENCH ER11 SMS	HW 2.0	TJS SHAFT LOCK KEY	TJS TSD DISPLAY

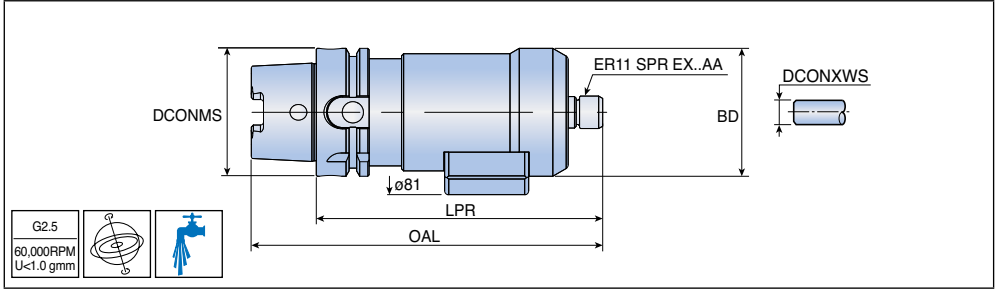
\* Optional, sold separately





# TJS GJET HSK

Coolant driven high-speed compact spindles with HSK shank



Designation	Dimension (mm)					Kg
	DCONMS	DCONXWS	LPR	OAL	BD	
<b>TJS GJET HSK A63</b>	63.0	7.0	141.0	173.0	63.0	1.8

- Minimum coolant pressure 20 bar and flow rate 12 l/min
- The spindle provides only external strong coolant jet around the tool
- DCONXWS: Maximum tool shank diameter

### Spare parts

Designation	Mini ER nut	ER wrench	Key	Locking pin	Display*
<b>TJS-GJET-HSK A63</b>	NUT ER11 GHS	WRENCH ER11 SMS	HW 2.0	TJS SHAFT LOCK KEY	TJS TSD DISPLAY

\* Optional, sold separately

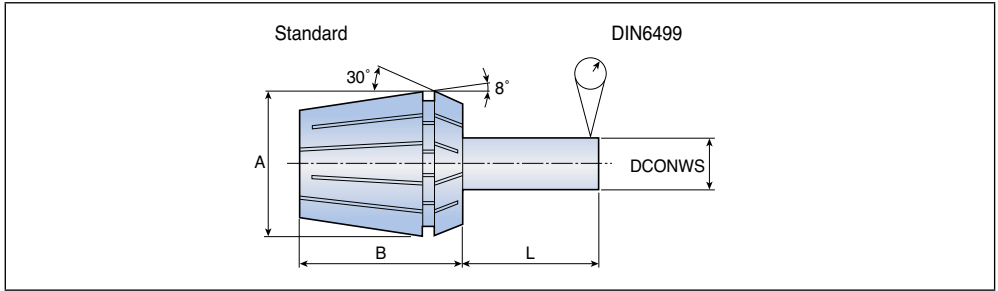




# Collet



# Collet



## Precision

(mm)

DCONWSrange	L	Run-out		
		Standard precision	Ultra precision	DIN6499
<b>1.0-1.6</b>	<b>6</b>	0.01	0.005	-
<b>1.6-3.0</b>	<b>10</b>	0.01	0.005	0.015
<b>3.0-6.0</b>	<b>16</b>	0.01	0.005	0.015
<b>6.0-10.0</b>	<b>25</b>	0.01	0.005	0.015
<b>10.0-18.0</b>	<b>40</b>	0.01	0.005	0.020
<b>18.0-26.0</b>	<b>50</b>	0.01	0.005	0.020
<b>26.0-34</b>	<b>60</b>	-	-	0.025

## Dimension

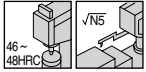
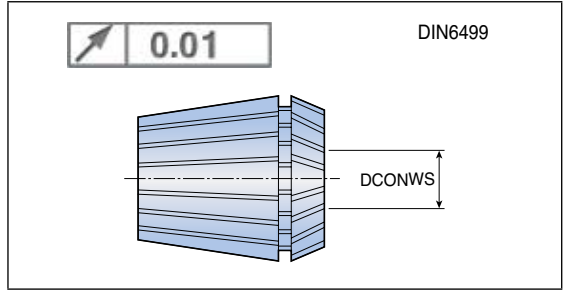
(mm)

Type	A	B
<b>ER11</b>	11.5	18
<b>ER16</b>	17.0	27
<b>ER20</b>	21.0	31
<b>ER25</b>	26.0	35
<b>ER32</b>	33.0	40
<b>ER40</b>	41.0	46
<b>ER50</b>	52.0	60



# ER-SPR

## ER collets



DCONWSrange	ER11	ER16	ER20	ER25	ER32	ER40	ER50
<b>0.5-1</b>	ER11 SPR 0.5-1	ER16 SPR 0.5-1					
<b>1-2</b>	1-2	1-2	ER20 SPR 1-2	ER25 SPR 1-2			
<b>2-3</b>	2-3	2-3	2-3	2-3	ER32 SPR 2-3		
<b>3-4</b>	3-4	3-4	3-4	3-4	3-4	ER40 SPR 3-4	
<b>4-5</b>	4-5	4-5	4-5	4-5	4-5	4-5	4-5
<b>5-6</b>	5-6	5-6	5-6	5-6	5-6	5-6	5-6
<b>6-7</b>	6-7	6-7	6-7	6-7	6-7	6-7	6-7
<b>7-8</b>		7-8	7-8	7-8	7-8	7-8	7-8
<b>8-9</b>		8-9	8-9	8-9	8-9	8-9	8-9
<b>9-10</b>		9-10	9-10	9-10	9-10	9-10	9-10
<b>10-11</b>			10-11	10-11	10-11	10-11	ER50 SPR 10-12
<b>11-12</b>			11-12	11-12	11-12	11-12	ER50 SPR 10-12
<b>12-13</b>			12-13	12-13	12-13	12-13	12-14
<b>13-14</b>				13-14	13-14	13-14	12-14
<b>14-15</b>				14-15	14-15	14-15	14-16
<b>15-16</b>				15-16	15-16	15-16	14-16
<b>16-17</b>					16-17	16-17	16-18
<b>17-18</b>					17-18	17-18	16-18
<b>18-19</b>					18-19	18-19	18-20
<b>19-20</b>					19-20	19-20	18-20
<b>20-21</b>						20-21	20-22
<b>21-22</b>						21-22	20-22
<b>22-23</b>						22-23	22-24
<b>23-24</b>						23-24	22-24
<b>24-25</b>						24-25	24-26
<b>25-26</b>						25-26	24-26
<b>26-28</b>							26-28
<b>28-30</b>							28-30
<b>30-32</b>							30-32
<b>32-34</b>							32-34



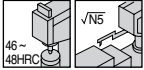
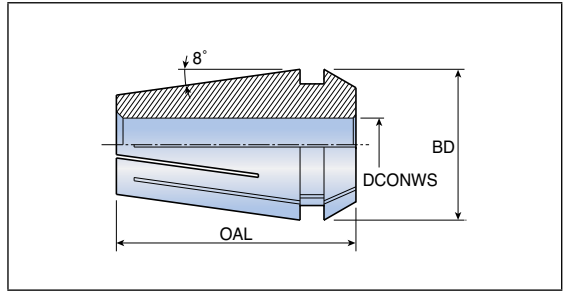






# EROH

## ER collets for internal coolant



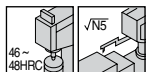
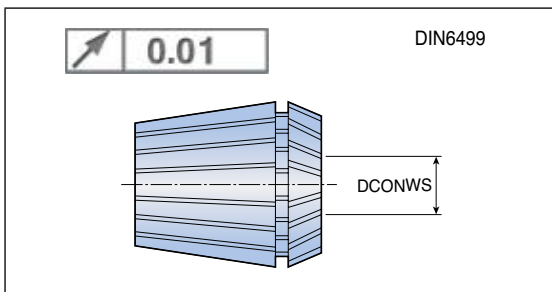
Designation	Dimension (mm)		
	DCONWS <sub>range</sub>	BD	OAL
<b>EROH 16</b>	4.0-10.0	17	27.5
<b>EROH 20</b>	6.0-13.0	21	31.5
<b>EROH 25</b>	6.0-16.0	26	34.0
<b>EROH 32</b>	8.0-20.0	33	40.0
<b>EROH 40</b>	10.0-26.0	41	46.0

DCONWS	ER16	ER20	ER25	ER32	ER40
4	EROH 16-4				
5	EROH 16-5				
6	EROH 16-6	EROH 20-6	EROH 25-6		
7	EROH 16-7	EROH 20-7	EROH 25-7		
8	EROH 16-8	EROH 20-8	EROH 25-8	EROH 32-8	
9	EROH 16-9	EROH 20-9	EROH 25-9	EROH 32-9	
10	EROH 16-10	EROH 20-10	EROH 25-10	EROH 32-10	EROH 40-10
11		EROH 20-11	EROH 25-11	EROH 32-11	EROH 40-11
12		EROH 20-12	EROH 25-12	EROH 32-12	EROH 40-12
13		EROH 20-13	EROH 25-13	EROH 32-13	EROH 40-13
14			EROH 25-14	EROH 32-14	EROH 40-14
15			EROH 25-15	EROH 32-15	EROH 40-15
16			EROH 25-16	EROH 32-16	EROH 40-16
17				EROH 32-17	EROH 40-17
18				EROH 32-18	EROH 40-18
19				EROH 32-19	EROH 40-19
20				EROH 32-20	EROH 40-20
21					EROH 40-21
22					EROH 40-22
23					EROH 40-23
24					EROH 40-24
25					EROH 40-25
26					EROH 40-26



# SET ER-SPR

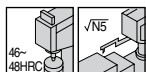
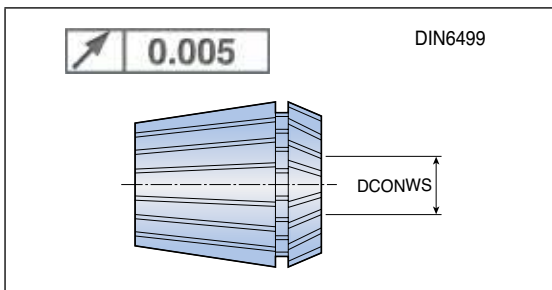
ER type collet sets - TaeguTec standard precision



Designation	Pieces / set	DCONWS <sub>range</sub>
<b>SET ER11 SPR 7</b>	7	0.5-7
<b>ER16 SPR 10</b>	10	0.5-10
<b>ER20 SPR 12</b>	12	1-13
<b>ER25 SPR 15</b>	15	1-16
<b>ER32 SPR 18</b>	18	2-20
<b>ER40 SPR 23</b>	23	3-26
<b>ER50 SPR 12</b>	12	10-34

# SET ER-SPR-AA

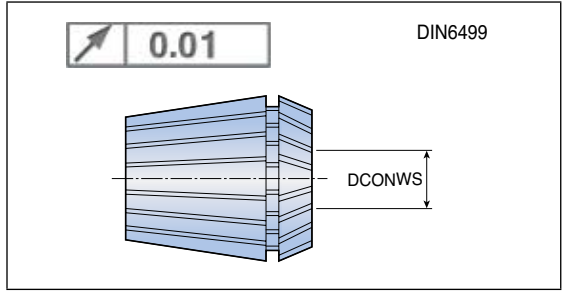
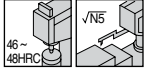
ER type collet sets - TaeguTec ultra precision "AA"



Designation	Pieces / set	DCONWS <sub>range</sub>
<b>SET ER11 SPR 7AA</b>	7	0.5-7
<b>ER16 SPR 10AA</b>	10	0.5-10
<b>ER20 SPR 12AA</b>	12	1-13
<b>ER25 SPR 15AA</b>	15	1-16
<b>ER32 SPR 18AA</b>	18	2-20
<b>ER40 SPR 23AA</b>	23	3-26

# SET ER-SEAL

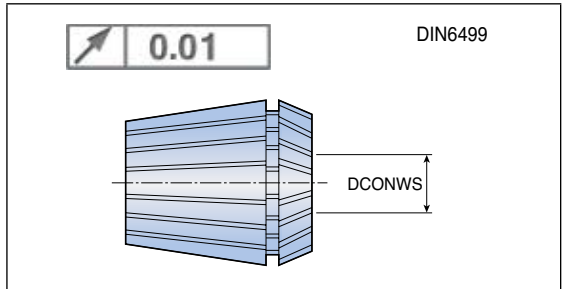
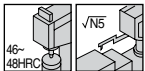
Sealed JET collet sets - TaeguTec standard precision



Designation	Pieces / set	DCONWSrange
<b>SET ER16 SEAL 7</b>	7	3-10
<b>ER20 SEAL 10</b>	10	3-13
<b>ER25 SEAL 13</b>	13	3-16
<b>ER32 SEAL 17</b>	17	3-20
<b>ER40 SEAL 23</b>	23	3-26

# SET ER-SEAL-JET2

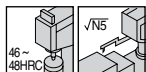
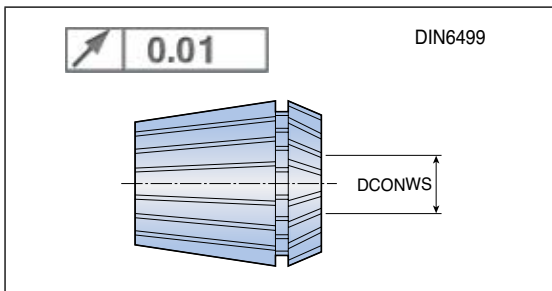
Sealed JET2 collet sets - TaeguTec standard precision



Designation	Pieces / set	DCONWSrange
<b>SET ER16 SEAL 7JET2</b>	7	3-10
<b>ER20 SEAL 10JET2</b>	10	3-13
<b>ER25 SEAL 13JET2</b>	13	3-16
<b>ER32 SEAL 17JET2</b>	17	3-20
<b>ER40 SEAL 23JET2</b>	23	3-26

# SET ER-SPR-EM

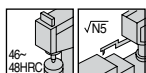
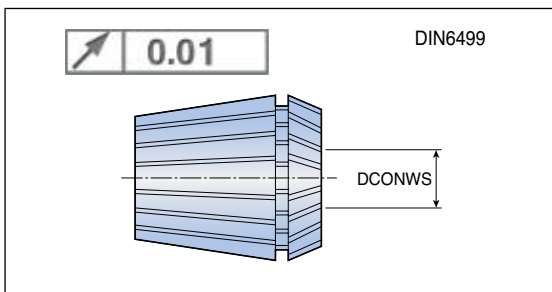
ER collet start sets - TaeguTec standard precision



Designation	Pieces / set	DCONWSrange
<b>SET ER16 SPR 8 EM</b>	8	3, 4, 5, 6, 7, 8, 9, 10
<b>ER20 SPR 5 EM</b>	5	4, 6, 8, 10, 12
<b>ER25 SPR 6 EM</b>	6	4, 6, 8, 10, 12, 16
<b>ER32 SPR 6 EM</b>	6	6, 8, 10, 12, 16, 20
<b>ER40 SPR 7 EM</b>	7	6, 8, 10, 12, 16, 20, 25

# SET ER-SEAL-EM

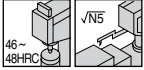
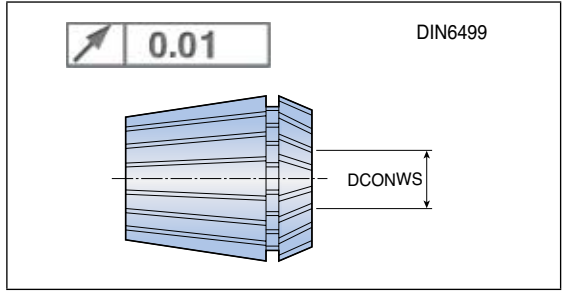
ER collet start sets - TaeguTec standard precision



Designation	Pieces / set	DCONWSrange
<b>SET ER16 SEAL 5 EM</b>	5	4, 5, 6, 8, 10
<b>ER20 SEAL 5 EM</b>	5	4, 6, 8, 10, 12
<b>ER25 SEAL 6 EM</b>	6	4, 6, 8, 10, 12, 16
<b>ER32 SEAL 6 EM</b>	6	6, 8, 10, 12, 16, 20
<b>ER40 SEAL 7 EM</b>	7	6, 8, 10, 12, 16, 20, 25

# SET ER-SEAL-EM JET2

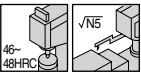
ER collet start sets - TaeguTec standard precision



Designation	Pieces / set	DCONWSrange
<b>SET ER25 SEAL 6 EM JET2</b>	6	4, 6, 8, 10, 12, 16
<b>ER32 SEAL 6 EM JET2</b>	6	6, 8, 10, 12, 16, 20
<b>ER40 SEAL 7 EM JET2</b>	7	6, 8, 10, 12, 16, 20, 25

# KIT-ER

ER collet sets - Taper shank



Designation	Pieces / set	DCONWSrange
<b>KIT DIN2080 30 18 ER32</b>	18	2-20
<b>DIN2080 40 18 ER32</b>	18	2-20
<b>DIN2080 40 23 ER40</b>	23	3-26
<b>DIN2080 50 23 ER40</b>	23	3-26
<b>MT3 18 ER32</b>	18	2-20

- Each kit contains one collet chuck, a full set of ER collets and a wrench



# KIT ST-ER M

## ER collet chuck sets - Straight shank



Designation	Pieces / set	DCONWSrange
<b>KIT ST 12x80 7 ER11 M</b>	7	0.5-7
<b>ST 16x50 7 ER11 MF</b>	7	0.5-7
<b>ST 16x100 7 ER11 M</b>	7	0.5-7
<b>ST 16x150 7 ER11 M</b>	7	0.5-7
<b>ST 12x80 10 ER16 M</b>	10	0.5-10
<b>ST 20x100 10 ER16 M</b>	10	0.5-10
<b>ST 20x150 10 ER16 M</b>	10	0.5-10
<b>ST 20x100 12 ER20 M</b>	12	1-12
<b>ST 20x150 12 ER20 M</b>	12	1-12

- Each kit contains one collet chuck, a full set of ER collets and a wrench

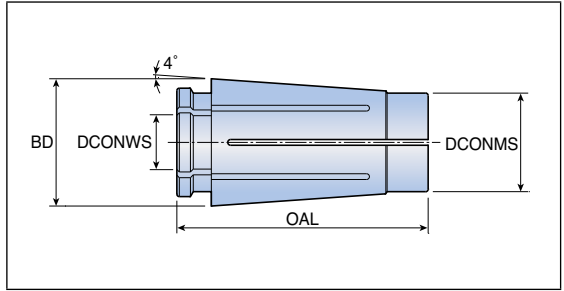
# KIT ST-ER

## ER type collet chuck sets - Straight shank



Designation	Pieces / set	DCONWSrange
<b>KIT ST 16x50 7 ER11 F</b>	7	0.5-7
<b>ST 20x50 7 ER11 F</b>	7	0.5-7
<b>ST 20x100 7 ER11</b>	7	0.5-7
<b>ST 20x150 7 ER11</b>	10	0.5-10
<b>ST 20x50 10 ER16 F</b>	10	0.5-10
<b>ST 20x100 10 ER16</b>	10	0.5-10
<b>ST 20x150 10 ER16</b>	12	1-12
<b>ST 20x50 12 ER20 F</b>	12	1-12

- Each kit contains one collet chuck, a full set of ER collets and a wrench

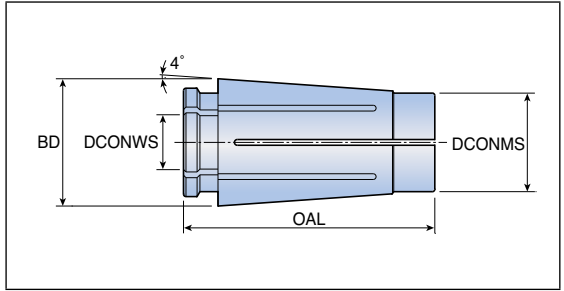


Designation	Dimension (mm)		
	BD	DCONMS	OAL
<b>TSK 06</b>	10.4	7.5	25.0
<b>TSK 10</b>	15.5	12.0	30.6
<b>TSK 16</b>	24.6	18.8	45.0
<b>TSK 25</b>	35.7	28.8	57.0

DCONWS <sub>range</sub>	TSK 06	TSK 10	TSK 16	TSK 25
<b>1.5-2.0</b>	TSK 06-2.0	TSK 10-2.0		
<b>2.0-2.5</b>	TSK 06-2.5	TSK 10-2.5		
<b>2.5-3.0</b>	TSK 06-3.0	TSK 10-3.0	TSK 16-3.0	
<b>3.0-3.5</b>	TSK 06-3.5	TSK 10-3.5	TSK 16-3.5	
<b>3.5-4.0</b>	TSK 06-4.0	TSK 10-4.0	TSK 16-4.0	
<b>4.0-4.5</b>	TSK 06-4.5	TSK 10-4.5	TSK 16-4.5	
<b>4.5-5.0</b>	TSK 06-5.0	TSK 10-5.0	TSK 16-5.0	
<b>5.0-5.5</b>	TSK 06-5.5	TSK 10-5.5	TSK 16-5.5	
<b>5.5-6.0</b>	TSK 06-6.0	TSK 10-6.0	TSK 16-6.0	
<b>6.0-6.5</b>		TSK 10-6.5	TSK 16-6.5	
<b>6.5-7.0</b>		TSK 10-7.0	TSK 16-7.0	
<b>7.0-7.5</b>		TSK 10-7.5	TSK 16-7.5	
<b>7.5-8.0</b>		TSK 10-8.0	TSK 16-8.0	
<b>8.0-8.5</b>		TSK 10-8.5	TSK 16-8.5	
<b>8.5-9.0</b>		TSK 10-9.0	TSK 16-9.0	
<b>9.0-9.5</b>		TSK 10-9.5	TSK 16-9.5	
<b>9.5-10.0</b>		TSK 10-10.0	TSK 16-10.0	
<b>10.0-10.5</b>			TSK 16-10.5	
<b>10.5-11.0</b>			TSK 16-11.0	
<b>11.0-11.5</b>			TSK 16-11.5	
<b>11.5-12.0</b>			TSK 16-12.0	
<b>12.0-12.5</b>			TSK 16-12.5	
<b>12.5-13.0</b>			TSK 16-13.0	
<b>13.0-13.5</b>			TSK 16-13.5	
<b>13.5-14.0</b>			TSK 16-14.0	
<b>14.0-14.5</b>			TSK 16-14.5	
<b>14.5-15.0</b>			TSK 16-15.0	
<b>15.0-15.5</b>			TSK 16-15.5	
<b>15.5-16.0</b>			TSK 16-16.0	TSK 25-16.0
<b>16.0-16.5</b>				TSK 25-16.5
<b>16.5-17.0</b>				TSK 25-17.0

# TSK

## TSK collets

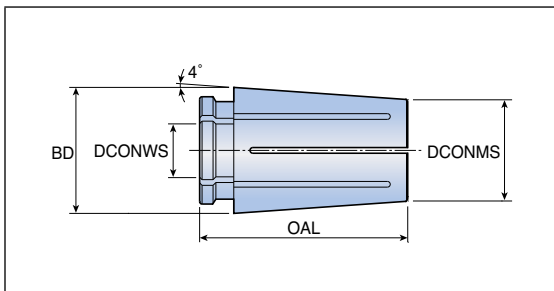


Designation	Dimension (mm)		
	BD	DCONMS	OAL
<b>TSK 06</b>	10.4	7.5	25.0
<b>TSK 10</b>	15.5	12.0	30.6
<b>TSK 16</b>	24.6	18.8	45.0
<b>TSK 25</b>	35.7	28.8	57.0

DCONWSrange	TSK 06	TSK 10	TSK 16	TSK 25
17.0-17.5				TSK 25-17.5
17.5-18.0				TSK 25-18.0
18.0-18.5				TSK 25-18.5
18.5-19.0				TSK 25-19.0
19.0-19.5				TSK 25-19.5
19.5-20.0				TSK 25-20.0
20.0-20.5				TSK 25-20.5
20.5-21.0				TSK 25-21.0
21.0-21.5				TSK 25-21.5
21.5-22.0				TSK 25-22.0
22.0-22.5				TSK 25-22.5
22.5-23.0				TSK 25-23.0
23.0-23.5				TSK 25-23.5
23.5-24.0				TSK 25-24.0
24.0-24.5				TSK 25-24.5
24.5-25.0				TSK 25-25.0

# TSKC

## Internal coolant type collets for TSK chucks

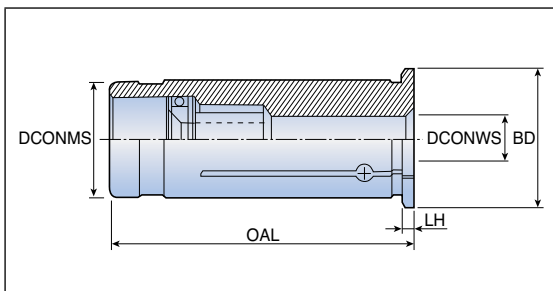


Designation	Dimension (mm)		
	BD	DCONMS	OAL
<b>TSKC 06</b>	10.4	8.00	21.0
<b>TSKC 10</b>	15.5	12.50	25.6
<b>TSKC 16</b>	24.6	20.12	37.0
<b>TSKC 25</b>	35.7	29.70	48.5

DCONWS <sub>range</sub>	TSKC 06	TSKC 10	TSKC 16	TSKC 25
4	TSKC 06-4.0			
5	TSKC 06-5.0			
6	TSKC 06-6.0	TSKC 10-6.0		
7		TSKC 10-7.0		
8		TSKC 10-8.0	TSKC 16-8.0	
9		TSKC 10-9.0	TSKC 16-9.0	
10		TSKC 10-10.0	TSKC 16-10.0	
11			TSKC 16-11.0	
12			TSKC 16-12.0	
13			TSKC 16-13.0	
14			TSKC 16-14.0	
15			TSKC 16-15.0	
16			TSKC 16-16.0	TSKC 25-16.0
17				TSKC 25-17.0
18				TSKC 25-18.0
19				TSKC 25-19.0
20				TSKC 25-20.0
21				TSKC 25-21.0
22				TSKC 25-22.0
23				TSKC 25-23.0
24				TSKC 25-24.0
25				TSKC 25-25.0

# THC

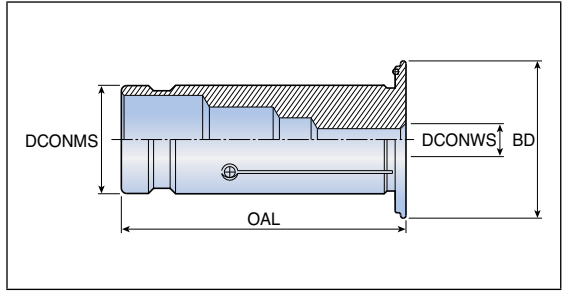
## Straight collets for hydraulic chucks



Designation	Dimension (mm)				
	DCONMS	DCONWS	BD	OAL	LH
<b>THC 12-3</b>	12	3	16	46.5	2
<b>12-4</b>	12	4	16	46.5	2
<b>12-5</b>	12	5	16	46.5	2
<b>12-6</b>	12	6	16	46.5	2
<b>12-7</b>	12	7	16	46.5	2
<b>12-8</b>	12	8	16	46.5	2
<b>12-9</b>	12	9	16	46.5	2
<b>20-3</b>	20	3	24	50.5	2
<b>20-4</b>	20	4	24	50.5	2
<b>20-5</b>	20	5	24	50.5	2
<b>20-6</b>	20	6	24	50.5	2
<b>20-7</b>	20	7	24	50.5	2
<b>20-8</b>	20	8	24	50.5	2
<b>20-9</b>	20	9	24	50.5	2
<b>20-10</b>	20	10	24	50.5	2
<b>20-11</b>	20	11	24	50.5	2
<b>20-12</b>	20	12	24	50.5	2
<b>20-13</b>	20	13	24	50.5	2
<b>20-14</b>	20	14	24	50.5	2
<b>20-15</b>	20	15	24	50.5	2
<b>20-16</b>	20	16	24	50.5	2
<b>20-17</b>	20	17	24	50.5	2
<b>32-6</b>	32	6	36	60.5	3
<b>32-8</b>	32	8	36	60.5	3
<b>32-10</b>	32	10	36	60.5	3
<b>32-12</b>	32	12	36	60.5	3
<b>32-14</b>	32	14	36	60.5	3
<b>32-16</b>	32	16	36	60.5	3
<b>32-18</b>	32	18	36	60.5	3
<b>32-20</b>	32	20	36	60.5	3
<b>32-25</b>	32	25	36	60.5	3

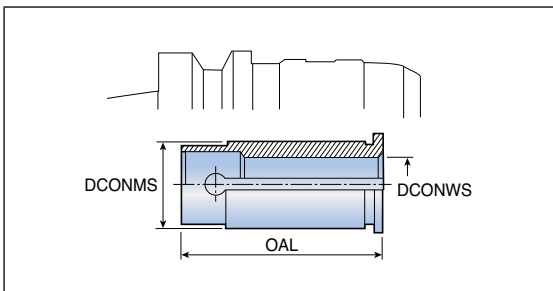
# THC C

## Straight collets of internal coolant type for hydraulic chucks



Designation	Dimension (mm)			
	DCONMS	DCONWS	BD	OAL
<b>THC C12-3</b>	12	3	19	47.0
<b>C12-4</b>	12	4	19	47.0
<b>C12-5</b>	12	5	19	47.0
<b>C12-6</b>	12	6	19	47.0
<b>C12-7</b>	12	7	19	47.0
<b>C12-8</b>	12	8	19	47.0
<b>C20-3</b>	20	3	29	52.5
<b>C20-4</b>	20	4	29	52.5
<b>C20-5</b>	20	5	29	52.5
<b>C20-6</b>	20	6	29	52.5
<b>C20-7</b>	20	7	29	52.5
<b>C20-8</b>	20	8	29	52.5
<b>C20-9</b>	20	9	29	52.5
<b>C20-10</b>	20	10	29	52.5
<b>C20-11</b>	20	11	29	52.5
<b>C20-12</b>	20	12	29	52.5
<b>C20-13</b>	20	13	29	52.5
<b>C20-14</b>	20	14	29	52.5
<b>C20-15</b>	20	15	29	52.5
<b>C20-16</b>	20	16	29	52.5
<b>C20-17</b>	20	17	29	52.5
<b>C32-6</b>	32	6	39	63.5
<b>C32-8</b>	32	8	39	63.5
<b>C32-10</b>	32	10	39	63.5
<b>C32-12</b>	32	12	39	63.5
<b>C32-14</b>	32	14	39	63.5
<b>C32-16</b>	32	16	39	63.5
<b>C32-18</b>	32	18	39	63.5
<b>C32-20</b>	32	20	39	63.5
<b>C32-25</b>	32	25	39	63.5

## Straight collets for milling chucks



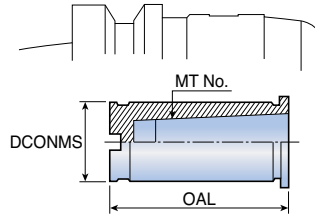
Designation	Dimension (mm)		
	DCONMS	DCONWS	OAL
<b>CSR 20-4</b>	20	4	50
<b>20-6</b>	20	6	50
<b>20-8</b>	20	8	50
<b>20-10</b>	20	10	50
<b>20-12</b>	20	12	50
<b>20-16</b>	20	16	50
<b>25-4</b>	25	4	60
<b>25-6</b>	25	6	60
<b>25-8</b>	25	8	60
<b>25-10</b>	25	10	60
<b>25-12</b>	25	12	60
<b>25-16</b>	25	16	60
<b>25-20</b>	25	20	60
<b>32-4</b>	32	4	65
<b>32-6</b>	32	6	65
<b>32-8</b>	32	8	65
<b>32-10</b>	32	10	65
<b>32-12</b>	32	12	65
<b>32-16</b>	32	16	65
<b>32-20</b>	32	20	65
<b>32-25</b>	32	25	65
<b>42-4</b>	42	4	75
<b>42-6</b>	42	6	75
<b>42-8</b>	42	8	75
<b>42-10</b>	42	10	75
<b>42-12</b>	42	12	75
<b>42-16</b>	42	16	75
<b>42-20</b>	42	20	75
<b>42-25</b>	42	25	75
<b>42-32</b>	42	32	75

# CMR

## Collet for milling chucks - Morse taper adapter for milling chuck



CMR type



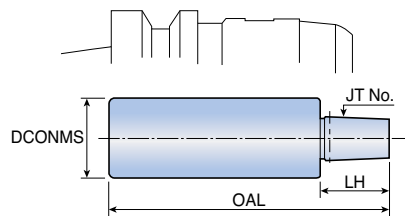
Designation	MT No.	Dimension (mm)		Application chuck
		DCONMS	OAL	
<b>CMR 32-1</b>	1	32	58	TMC 32
<b>32-2</b>	2	32	71	TMC 32
<b>32-3</b>	3	32	89	TMC 32
<b>42-1</b>	1	42	58	TMC 42
<b>42-2</b>	2	42	71	TMC 42
<b>42-3</b>	3	42	89	TMC 42
<b>42-4</b>	4	42	111	TMC 42

# CJA

## Collet for milling chucks - Jacobs taper adapter for milling chuck

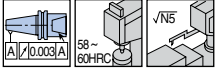
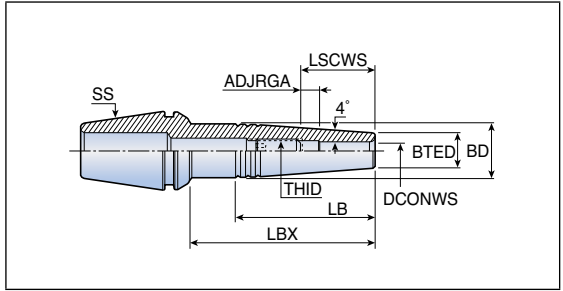


CJA type



Designation	JT No.	Dimension (mm)			Application chuck
		DCONMS	OAL	LH	
<b>CJA 32-6</b>	6	32	118	28	TMC 32
<b>42-6</b>	6	42	128	28	TMC 42

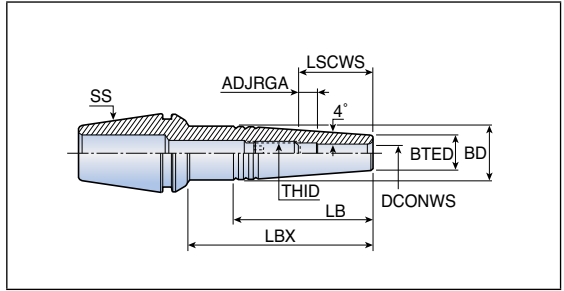
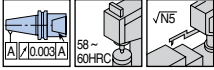




Designation	Dimension (mm)									
	SS	DCONWS	BTED	BD	LBX	LB	ADJRGA	LSCWS	THID	Hex key
<b>ER11 SRK 3x10<sup>(1)</sup></b>	ER11	3	7.6	8.5	10	-	-	10	-	-
<b>SRK 3x25<sup>(1)</sup></b>	ER11	3	7.6	8.5	25	-	-	10	-	-
<b>SRK 4x10<sup>(1)</sup></b>	ER11	4	7.6	8.5	10	-	-	12	-	-
<b>SRK 4x25<sup>(1)</sup></b>	ER11	4	7.6	8.5	25	-	-	12	-	-
<b>ER20 SRK 3x35</b>	ER20	3	10	13.5	35	24.5	6	16	M6	3.0
<b>SRK 3x60</b>	ER20	3	10	13.5	60	24.5	6	16	M6	3.0
<b>SRK 4x35</b>	ER20	4	10	13.5	35	24.5	6	18	M6	3.0
<b>SRK 4x60</b>	ER20	4	10	13.5	60	24.5	6	18	M6	3.0
<b>SRK 5x35</b>	ER20	5	10	13.5	35	24.5	6	21	M6	3.0
<b>SRK 5x60</b>	ER20	5	10	13.5	60	24.5	6	21	M6	3.0
<b>SRK 6x35</b>	ER20	6	11	13.5	35	25.5	6	24	M8	4.0
<b>SRK 6x60</b>	ER20	6	11	13.5	60	29.5	6	24	M8	4.0
<b>ER25 SRK 3x35</b>	ER25	3	10	13.5	35	24.5	6	16	M6	3.0
<b>SRK 3x60</b>	ER25	3	10	16.3	60	44.5	6	16	M6	3.0
<b>SRK 4x35</b>	ER25	4	10	13.5	35	24.5	6	18	M6	3.0
<b>SRK 4x60</b>	ER25	4	10	16.3	60	44.5	6	18	M6	3.0
<b>SRK 5x35</b>	ER25	5	10	13.5	35	24.5	6	21	M6	3.0
<b>SRK 5x60</b>	ER25	5	10	16.3	60	44.5	6	21	M6	3.0
<b>SRK 6x35</b>	ER25	6	11	14.7	35	26.0	6	24	M8	4.0
<b>SRK 6x60</b>	ER25	6	11	17.3	60	44.5	6	24	M8	4.0
<b>SRK 8x35</b>	ER25	8	14	17.8	35	26.5	5	30	M10	5.0
<b>SRK 8x60</b>	ER25	8	14	17.9	60	39.5	6	31	M10	5.0

• <sup>(1)</sup> To be used only for TYPHOON spindles

## T-SHRINK ER collets DIN6499

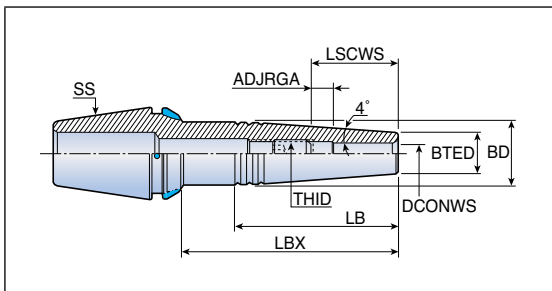


Designation	Dimension (mm)									
	SS	DCONWS	BTED	BD	LBX	LB	ADJRGA	LSCWS	THID	Hex key
<b>ER32 SRK 3x35</b>	ER32	3	10	13.5	35	22.5	6	16	M6	3.0
<b>SRK 3x60</b>	ER32	3	10	16.3	60	44.5	6	16	M6	3.0
<b>SRK 3x85</b>	ER32	3	10	19.8	85	70.0	6	16	M6	3.0
<b>SRK 4x35</b>	ER32	4	10	13.5	35	23.5	6	18	M6	3.0
<b>SRK 4x60</b>	ER32	4	10	16.3	60	44.5	6	18	M6	3.0
<b>SRK 4x85</b>	ER32	4	10	19.8	85	70.0	6	18	M6	3.0
<b>SRK 5x35</b>	ER32	5	10	13.5	35	24.5	6	21	M6	3.0
<b>SRK 5x60</b>	ER32	5	10	16.3	60	44.5	6	21	M6	3.0
<b>SRK 5x85</b>	ER32	5	10	19.8	85	70.0	6	21	M6	3.0
<b>SRK 6x35</b>	ER32	6	11	14.7	35	25.5	6	24	M8	4.0
<b>SRK 6x60</b>	ER32	6	11	17.3	60	45.0	6	24	M8	4.0
<b>SRK 6x85</b>	ER32	6	11	20.8	85	69.5	8	26	M8	4.0
<b>SRK 8x35</b>	ER32	8	14	18.9	35	33.0	6	31	M10	5.0
<b>SRK 8x60</b>	ER32	8	14	20.4	60	45.0	6	31	M10	5.0
<b>SRK 8x85</b>	ER32	8	14	23.2	85	65.0	6	31	M10	5.0
<b>SRK 10x35</b>	ER32	10	16	20.8	35	34.0	5	35	M12	6.0
<b>SRK 10x60</b>	ER32	10	16	22.4	60	44.5	6	36	M12	6.0
<b>SRK 10x85</b>	ER32	10	16	23.0	85	49.5	6	36	M12	6.0
<b>SRK 12x35</b>	ER32	12	20	24.0	35	28.0	-	-	-	-
<b>SRK 12x60</b>	ER32	12	20	24.0	60	28.0	6	38	M14	6.0
<b>SRK 12x85</b>	ER32	12	20	24.0	85	28.0	6	38	M14	6.0

# ER-SRK-JET2



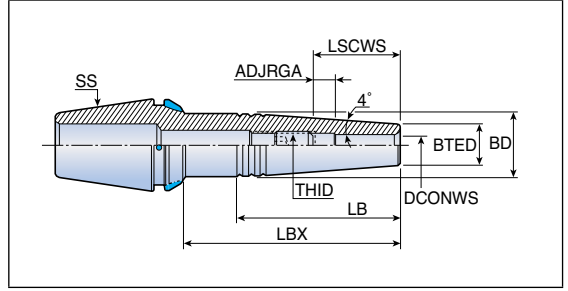
T-SHRINK ER collets DIN6499



Designation	Dimension (mm)										
	SS	DCONWS	BTED	BD	LBX	LB	ADJRGA	LSCWS	THID	Hex key	
<b>ER20 SRK 3x35 JET2</b>	ER20	3	10	13.5	35	24.5	6	16	M6	3.0	
<b>SRK 4x35 JET2</b>	ER20	4	10	13.5	35	24.5	6	18	M6	3.0	
<b>SRK 5x35 JET2</b>	ER20	5	10	13.5	35	24.5	6	21	M6	3.0	
<b>SRK 6x35 JET2</b>	ER20	6	11	13.5	35	25.5	6	24	M8	4.0	
<b>SRK 6x60 JET2</b>	ER20	6	11	13.5	60	29.5	6	24	M8	4.0	
<b>ER25 SRK 3x35 JET2</b>	ER25	3	10	13.5	35	24.5	6	16	M6	3.0	
<b>SRK 3x60 JET2</b>	ER25	3	10	16.3	60	44.5	6	16	M6	3.0	
<b>SRK 4x35 JET2</b>	ER25	4	10	13.5	35	24.5	6	18	M6	3.0	
<b>SRK 4x60 JET2</b>	ER25	4	10	16.3	60	44.5	6	18	M6	3.0	
<b>SRK 5x35 JET2</b>	ER25	5	10	13.5	35	24.5	6	21	M6	3.0	
<b>SRK 5x60 JET2</b>	ER25	5	10	16.3	60	44.5	6	21	M6	3.0	
<b>SRK 6x35 JET2</b>	ER25	6	11	14.7	35	26.0	6	24	M8	4.0	
<b>SRK 6x60 JET2</b>	ER25	6	11	17.3	60	44.5	6	24	M8	4.0	
<b>SRK 8x35 JET2</b>	ER25	8	14	17.8	35	26.5	5	30	M10	5.0	
<b>SRK 8x60 JET2</b>	ER25	8	14	17.9	60	39.5	6	31	M10	5.0	

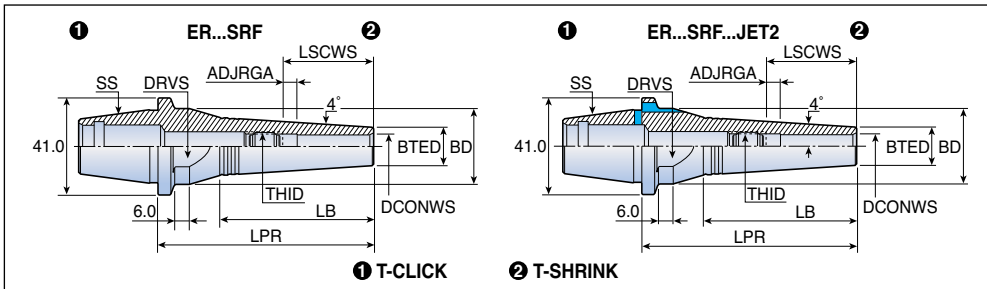
# ER-SRK-JET2

T-SHRINK ER collets DIN6499



Designation	Dimension (mm)									
	SS	DCONWS	BTED	BD	LBX	LB	ADJRGA	LSCWS	THID	Hex key
<b>ER32 SRK 3x35 JET2</b>	ER32	3	10	13.5	35	22.5	6	16	M6	3.0
<b>SRK 3x60 JET2</b>	ER32	3	10	16.3	60	44.5	6	16	M6	3.0
<b>SRK 3x85 JET2</b>	ER32	3	10	19.8	85	70.0	6	16	M6	3.0
<b>SRK 4x35 JET2</b>	ER32	4	10	13.5	35	23.5	6	18	M6	3.0
<b>SRK 4x60 JET2</b>	ER32	4	10	16.3	60	44.5	6	18	M6	3.0
<b>SRK 4x85 JET2</b>	ER32	4	10	19.8	85	70.0	6	18	M6	3.0
<b>SRK 5x35 JET2</b>	ER32	5	10	13.5	35	24.5	6	21	M6	3.0
<b>SRK 5x60 JET2</b>	ER32	5	10	16.3	60	44.5	6	21	M6	3.0
<b>SRK 5x85 JET2</b>	ER32	5	10	19.8	85	70.0	6	21	M6	3.0
<b>SRK 6x35 JET2</b>	ER32	6	11	14.7	35	25.5	6	24	M8	4.0
<b>SRK 6x60 JET2</b>	ER32	6	11	17.3	60	45.0	6	24	M8	4.0
<b>SRK 6x85 JET2</b>	ER32	6	11	20.8	85	69.5	8	26	M8	4.0
<b>SRK 8x35 JET2</b>	ER32	8	14	18.8	35	33.0	6	31	M10	5.0
<b>SRK 8x60 JET2</b>	ER32	8	14	20.4	60	45.0	6	31	M10	5.0
<b>SRK 8x85 JET2</b>	ER32	8	14	23.2	85	65.0	6	31	M10	5.0
<b>SRK 10x35 JET2</b>	ER32	10	16	20.8	35	34.0	5	35	M12	6.0
<b>SRK 10x60 JET2</b>	ER32	10	16	22.4	60	44.5	6	36	M12	6.0
<b>SRK 10x85 JET2</b>	ER32	10	16	23.0	85	49.5	6	36	M12	6.0
<b>SRK 12x35 JET2</b>	ER32	12	20	24.0	35	28.0	-	-	-	-
<b>SRK 12x60 JET2</b>	ER32	12	20	24.0	60	28.0	6	38	M14	6.0
<b>SRK 12x85 JET2</b>	ER32	12	20	24.0	85	28.0	6	38	M14	6.0

## ER collets

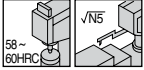
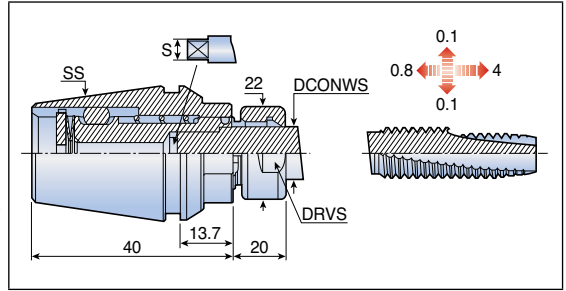


Designation	Dimension (mm)										
	SS	DCONWS	BTED	BD	LPR	LB	ADJRGA	LSCWS	THID	DRVS	
<b>ER32 SRF 3x50</b>	32 SRF	3	10	32	50	31.0	6	16	M6	27	
<b>SRF 3x85</b>	32 SRF	3	10	32	85	60.5	6	16	M6	27	
<b>SRF 4x50</b>	32 SRF	4	10	32	50	31.0	6	18	M6	27	
<b>SRF 4x85</b>	32 SRF	4	10	32	85	60.5	6	18	M6	27	
<b>SRF 5x50</b>	32 SRF	5	10	32	50	31.0	6	21	M6	27	
<b>SRF 5x85</b>	32 SRF	5	10	32	85	60.5	6	21	M6	27	
<b>SRF 6x50</b>	32 SRF	6	11	32	50	31.0	6	24	M8	27	
<b>SRF 6x85</b>	32 SRF	6	11	32	85	60.5	6	24	M8	27	
<b>SRF 8x50</b>	32 SRF	8	14	32	50	33.0	6	31	M10	27	
<b>SRF 8x85</b>	32 SRF	8	14	32	85	60.5	6	31	M10	27	
<b>SRF 10x50</b>	32 SRF	10	16	32	50	35.0	5	35	M12	27	
<b>SRF 10x85</b>	32 SRF	10	16	32	85	60.5	6	36	M12	27	
<b>SRF 12x50</b>	32 SRF	12	20	32	50	35.0	5	37	M14	27	
<b>SRF 12x85</b>	32 SRF	12	20	32	85	50.0	6	38	M14	27	
<b>ER32 SRF 3x50 JET2</b>	32 SRF	3	10	32	50	31.0	6	16	M6	27	
<b>SRF 3x85 JET2</b>	32 SRF	3	10	32	85	60.5	6	16	M6	27	
<b>SRF 4x50 JET2</b>	32 SRF	4	10	32	50	31.0	6	18	M6	27	
<b>SRF 4x85 JET2</b>	32 SRF	4	10	32	85	60.5	6	18	M6	27	
<b>SRF 5x85 JET2</b>	32 SRF	5	10	32	85	60.5	6	21	M6	27	
<b>SRF 6x50 JET2</b>	32 SRF	6	11	32	50	31.0	6	24	M8	27	
<b>SRF 6x85 JET2</b>	32 SRF	6	11	32	85	60.5	6	24	M8	27	
<b>SRF 8x50 JET2</b>	32 SRF	8	14	32	50	33.0	6	31	M10	27	
<b>SRF 8x85 JET2</b>	32 SRF	8	14	32	85	60.5	6	31	M10	27	
<b>SRF 10x50 JET2</b>	32 SRF	10	16	32	50	35.0	5	35	M12	27	
<b>SRF 10x85 JET2</b>	32 SRF	10	16	32	85	60.5	6	36	M12	27	
<b>SRF 12x50 JET2</b>	32 SRF	12	20	32	50	35.0	5	37	M14	27	
<b>SRF 12x85 JET2</b>	32 SRF	12	20	32	85	50.0	6	38	M14	27	

• Tightening torque: 24 kg x m

# GTIN ER

## GTIN ER collets



### GTIN ER 32 - DIN 371 / 352

Designation	Dimension (mm)					
	SS	DCONWS	Tap <sub>min</sub>	Tap <sub>max</sub>	S	DRVS
<b>GTIN ER32 DIN 2.50x2.10</b>	ER32	2.5	M1	M1.8	2.1	20
<b>DIN 2.80x2.10</b>	ER32	2.8	M2	M4	2.1	20
<b>DIN 3.50x2.70</b>	ER32	3.5	M3	M5	2.7	20
<b>DIN 4.00x3.00</b>	ER32	4.0	M3.5	M3.5	3.0	20
<b>DIN 4.50x3.40</b>	ER32	4.5	M4	M6	3.4	20
<b>DIN 6.00x4.90</b>	ER32	6.0	M5	M8	4.9	20
<b>DIN 7.00x5.50</b>	ER32	7.0	M7	M10	5.5	20
<b>DIN 8.00x6.20</b>	ER32	8.0	M8	M8	6.2	20
<b>DIN 9.00x7.00</b>	ER32	9.0	M12	M12	7.0	20
<b>DIN 10.00x8.00</b>	ER32	10.0	M10	M10	8.0	20
<b>DIN 11.00x9.00</b>	ER32	11.0	M14	M14	9.0	20
<b>DIN 12.00x9.00</b>	ER32	12.0	M16	M16	9.0	20

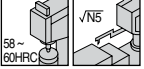
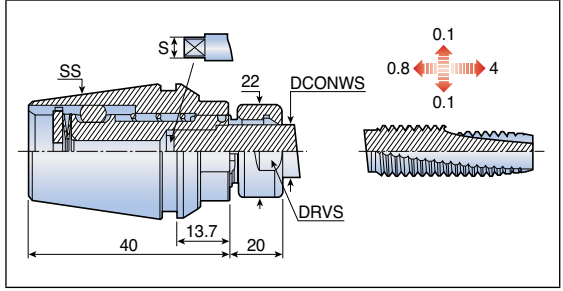
### GTIN ER 32 - JIS

Designation	Dimension (mm)					
	SS	DCONWS	Tap <sub>min</sub>	Tap <sub>max</sub>	S	DRVS
<b>GTIN ER32 JIS 3.00x2.50</b>	ER32	3.0	M1	M2.6	2.5	20
<b>JIS 4.00x3.20</b>	ER32	4.0	M3	M3.5	3.2	20
<b>JIS 5.00x4.00</b>	ER32	5.0	M4	M4	4.0	20
<b>JIS 6.00x4.50</b>	ER32	6.0	M6	M6	4.5	20
<b>JIS 6.20x5.00</b>	ER32	6.2	M8	M8	5.0	20
<b>JIS 7.00x5.50</b>	ER32	7.0	M10	M10	5.5	20
<b>JIS 8.50x6.50</b>	ER32	8.5	M12	M12	6.5	20
<b>JIS 10.50x8.00</b>	ER32	10.5	M14	M14	8.0	20
<b>JIS 12.50x10.00</b>	ER32	12.5	M16	M16	10.0	20

• No coolant should be induced through the tap collet, as it will cause malfunctioning of the mechanism

# GTIN ER

## GTIN ER collets



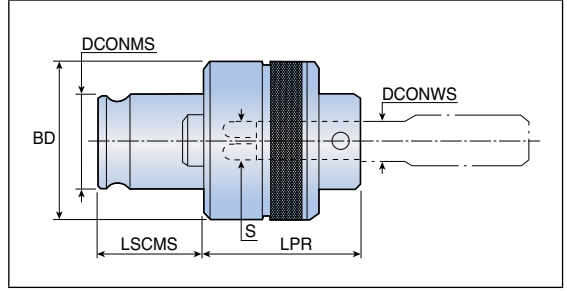
### GTIN ER32 - ISO metric ISO 529/2283

Designation	Dimension (mm)					
	SS	DCONWS	Tapmin	Tapmax	S	DRVS
<b>GTIN ER32 ISO 2.24x1.80</b>	ER32	2.24	M3	M3	1.80	20
<b>ISO 2.50x2.00</b>	ER32	2.50	M3.5	M3.5	2.00	20
<b>ISO 2.80x2.24</b>	ER32	2.80	M2.2	M2.5	2.24	20
<b>ISO 3.15x2.50</b>	ER32	3.15	M3	M4	2.50	20
<b>ISO 3.55x2.80</b>	ER32	3.55	M3.5	M4.5	2.80	20
<b>ISO 4.00x3.15</b>	ER32	4.00	M4	M5	3.15	20
<b>ISO 4.50x3.55</b>	ER32	4.50	M6	M6	3.55	20
<b>ISO 5.00x4.00</b>	ER32	5.00	M5	M5	4.00	20
<b>ISO 5.60x4.50</b>	ER32	5.60	UNC#12-24	UNC (ONLY)	4.50	20
<b>ISO 6.30x5.00</b>	ER32	6.30	M6	M8	5.00	20
<b>ISO 7.10x5.60</b>	ER32	7.10	UNC#3/8-16	UNC (ONLY)	5.60	20
<b>ISO 8.00x6.30</b>	ER32	8.00	M8	M10	6.30	20
<b>ISO 9.00x7.10</b>	ER32	9.00	M12	M12	7.10	20
<b>ISO 10.00x8.00</b>	ER32	10.00	M10	M10	8.00	20
<b>ISO 11.20x9.00</b>	ER32	11.20	M14	M14	9.00	20
<b>ISO 12.50x10.00</b>	ER32	12.50	M16	M16	10.00	20

• No coolant should be induced through the tap collet, as it will cause malfunctioning of the mechanism

# TA

## Tap adapters



Designation	Dimension (mm)					
	DCONMS	DCONWS	BD	LPR	LSCMS	S
<b>TA 1-M3</b>	19	4.0	32	25	21.5	3.2
<b>1-M4</b>	19	5.0	32	25	21.5	4.0
<b>1-M5</b>	19	5.5	32	25	21.5	4.5
<b>1-M6</b>	19	6.0	32	25	21.5	4.5
<b>1-M8</b>	19	6.2	32	25	21.5	5.0
<b>1-M10</b>	19	7.0	32	25	21.5	5.5
<b>1-M12</b>	19	8.5	32	25	21.5	6.5
<b>2-M6</b>	31	6.0	50	33	35.5	4.5
<b>2-M8</b>	31	6.2	50	33	35.5	5.0
<b>2-M10</b>	31	7.0	50	33	35.5	5.5
<b>2-M12</b>	31	8.5	50	33	35.5	6.5
<b>2-M14</b>	31	10.5	50	33	35.5	8.0
<b>2-M16</b>	31	12.5	50	33	35.5	10.0
<b>2-M18</b>	31	14.0	50	33	35.5	11.0
<b>2-M20</b>	31	15.0	50	33	35.5	12.0
<b>2-M22</b>	31	17.0	50	33	35.5	13.0
<b>2-M24</b>	31	19.0	50	33	35.5	15.0
<b>3-M18</b>	48	14.0	72	45	55.5	11.0
<b>3-M20</b>	48	15.0	72	45	55.5	12.0
<b>3-M22</b>	48	17.0	72	45	55.5	13.0
<b>3-M24</b>	48	19.0	72	45	55.5	15.0
<b>3-M27</b>	48	20.0	72	45	55.5	15.0
<b>3-M30</b>	48	23.0	72	45	55.5	17.0
<b>3-M33</b>	48	25.0	72	45	55.5	19.0
<b>3-M36</b>	48	28.0	72	45	55.5	19.0
<b>3-M38</b>	48	28.0	72	45	55.5	21.0

• Based on JIS standard tap

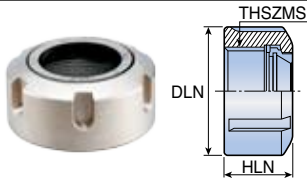


# Accessories



# NUT ER TOP

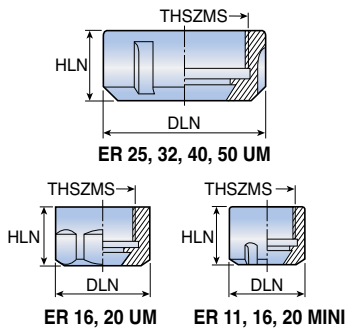
## ER - Top™ clamping nuts



Designation	Dimension (mm)		
	DLN	HLN	THSZMS
<b>NUT ER16 TOP</b>	28	17	M22x1.5
<b>ER20 TOP</b>	34	19	M25x1.5
<b>ER25 TOP</b>	42	20	M32x1.5
<b>ER32 TOP</b>	50	22	M40x1.5
<b>ER40 TOP</b>	63	25	M50x1.5

# NUT ER MINI/UM

## ER clamping nuts

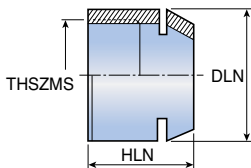


Designation	Dimension (mm)		
	DLN	HLN	THSZMS
<b>NUT ER11 MINI</b>	16	10.8	M13x0.75
<b>ER11 UM</b>	19	11.3	M14x0.75
<b>ER16 MINI</b>	22	18.0	M19x1.0
<b>ER16 UM</b>	28	17.0	M22x1.5
<b>ER20 MINI</b>	28	19.0	M24x1.0
<b>ER20 UM</b>	34	19.0	M25x1.5
<b>ER25 MINI</b>	35	20.0	M30x1.5
<b>ER25 UM</b>	42	20.0	M32x1.5
<b>ER32 UM</b>	50	22.0	M40x1.5
<b>ER40 UM</b>	63	25.0	M50x1.5
<b>ER50 UM</b>	78	55.0	M64x2.0

# NUT ER11 GHS



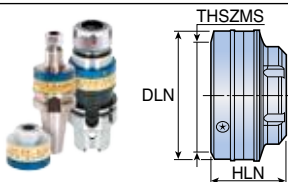
## Tightening nuts



Designation	Dimension (mm)			
	DLN	HLN	THSZMS	Wrench
<b>NUT ER11 GHS</b>	16	11.5	M13x0.75	WRENCH ER11 SMS

# NUT ER TOP BIN


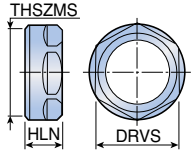
## Balanceable ER top nuts



Designation	Dimension (mm)		
	DLN	HLN	THSZMS
<b>NUT ER16 TOP BIN</b>	44	36.0	M22x1.5
<b>ER20 TOP BIN</b>	50	37.0	M25x1.5
<b>ER25 TOP BIN</b>	58	37.5	M32x1.5

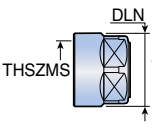
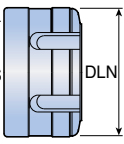
# NUT ER SHORT

## T-SHORT nuts

		Designation	Dimension (mm)		
			DRVS	HLN	THSZMS
		<b>NUT ER20 SHORT</b>	22	10.7	M25x1.5
		<b>ER32 SHORT</b>	36	15.0	M40x1.5

# TSKN

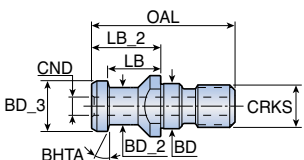
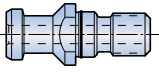
## TSK clamping nuts

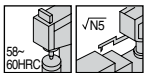
		Designation	Dimension (mm)		Fig.
			DLN	THSZMS	
		<b>TSKN 6</b>	20	M15x1.0	1
		<b>10</b>	28	M21.5x1.0	1
<b>16</b>	40	M32x1.5	2		
<b>25</b>	55	M45x1.5	2		

# PS SK-DIN

## Pull studs DIN69872 with JIS63398 retention knob



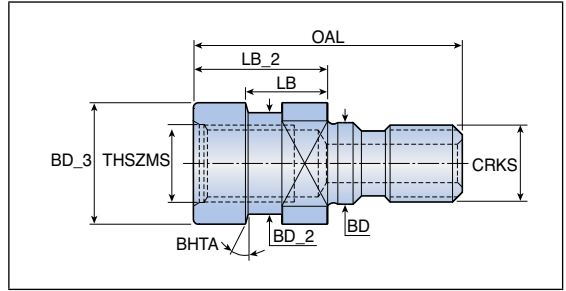


Designation	Dimension (mm)									Fig.
	CRKS	BD	BD_2	BD_3	CND	LB	LB_2	OAL	BHTA	
<b>PS SK30 15° M12 DIN</b>	M12	13	9.0	13.00	-	19.00	24.00	44.0	15	1
<b>PS SK40 15° M16 DIN</b>	M16	17	14.0	19.00	-	20.00	26.00	54.0	15	1
<b>15° M16 DIN O</b>	M16	17	14.0	19.00	-	20.00	26.00	54.0	15	2
<b>15° M16 DIN B</b>	M16	17	14.0	19.00	7.00	20.00	26.00	54.0	15	1
<b>15° M16 DIN OB</b>	M16	17	14.0	19.00	7.00	20.00	26.00	54.0	15	2
<b>PS SK50 15° M24 DIN</b>	M24	25	21.0	28.00	-	25.00	34.00	74.0	15	1
<b>15° M24 DIN O</b>	M24	25	21.0	28.00	-	25.00	34.00	74.0	15	2
<b>15° M24 DIN B</b>	M24	25	21.0	28.00	11.50	25.00	34.00	74.0	15	1

- Coolant holes only in items with a "B" suffix
- Fig. 2: With external O-ring

# PS OTT BT/SK

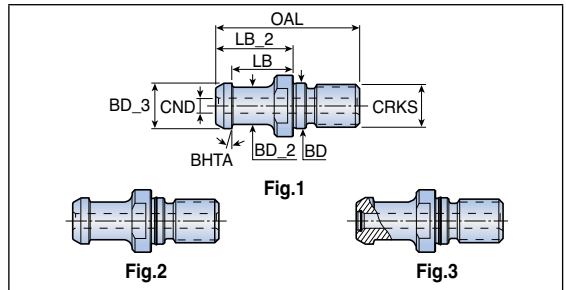
Pull studs OTT system



Designation	Dimension (mm)									
	CRKS	THSZMS	BD	BD_2	BD_3	LB	LB_2	OAL	BHTA	
<b>PS OTT BT40 M16</b>	M16	M16	17	21.1	25.0	16.60	28	56	15	
<b>BT50 M24</b>	M24	M24	24	32.0	39.3	13.35	25	65	15	
<b>SK40 M16</b>	M16	M16	17	21.1	25.0	13.60	25	53	15	

# PS BT-JIS/MAZAK

Pull studs BT-JIS 63398 / ANSI-metric for MAZAK machine



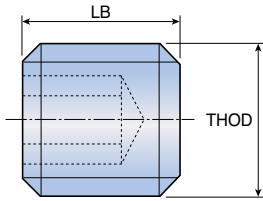
Designation	Dimension (mm)										Fig.
	CRKS	BD	BD_2	BD_3	CND	LB	LB_2	OAL	BHTA		
<b>PS BT30 15° M12 JIS B</b>	M12	13	8.00	12.00	4.0	18.40	23.4	43.0	15	1	
<b>BT40 15° M16 JIS B</b>	M16	17	14.00	19.00	5.5	23.00	29.0	54.0	15	1	
<b>BT40 15° M16 JIS O B</b>	M16	17	14.00	19.00	5.5	23.00	29.0	54.0	15	2	
<b>BT40 15° M16 JIS O B O</b>	M16	17	14.00	19.00	5.5	23.00	29.0	54.0	15	3	
<b>BT50 15° M24 JIS B</b>	M24	25	21.00	28.00	8.0	25.00	34.0	74.0	15	1	
<b>BT50 15° M24 JIS O B</b>	M24	25	21.00	28.00	8.0	25.00	34.0	74.0	15	2	
<b>BT50 15° M24 JIS O B O</b>	M24	25	21.00	28.00	8.0	25.00	34.0	74.0	15	3	
<b>BT40 45° M16 MAZAK B</b>	M16	17	12.45	18.79	7.0	14.02	19.1	44.1	45	1	
<b>BT50 45° M24 MAZAK B</b>	M24	25	20.83	28.95	8.0	17.58	25.2	65.2	45	1	

- Fig. 1: Coolant holes only in items with a "B" suffix
- Fig. 2: With external O-ring and coolant hole
- Fig. 3: With external and internal O-rings and coolant hole



# SR-DIN

Lock screw DIN1835 B/E for end mill holders



Designation	Dimension (mm)		
	THOD	LB	Used for shanks
<b>SR M6x10 DIN 1835-B</b>	M6	10	6
<b>M8x10 DIN 1835-B</b>	M8	10	8
<b>M10x12 DIN 1835-B</b>	M10	12	10
<b>M12x16 DIN 1835-B</b>	M12	16	12, 14
<b>M14x16 DIN 1835-B</b>	M14	16	16
<b>M16x16 DIN 1835-B</b>	M16	16	20
<b>M18x2x20 DIN 1835-B</b>	M18x2	20	25
<b>M20x2x20 DIN 1835-B</b>	M20x2	20	32, 40
<b>M24x2x25 DIN 1835-B</b>	M24x2	25	50

# PRESET ER-JET

Preset screw with oil hole for ER collets

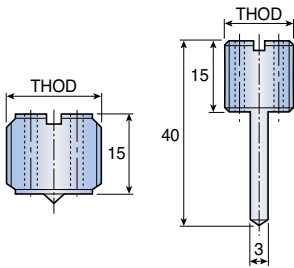


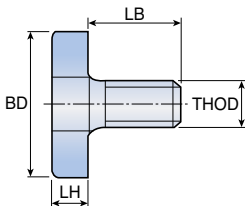
Fig.1

Fig.2

Designation	Dimension (mm)	Fig.
	THOD	
<b>PRESET ER-JET 8x1.25</b>	M8x1.25	1
<b>10x1.5</b>	M10x1.5	1
<b>12x1.75</b>	M12x1.75	1
<b>12x1.75L</b>	M12x1.75	2
<b>16x2</b>	M16x2	1
<b>16x2L</b>	M16x2	2
<b>18x1.5</b>	M18x1.5	1
<b>18x1.5L</b>	M18x1.5	2
<b>22x1.5</b>	M22x1.5	1
<b>22x1.5L</b>	M22x1.5	2
<b>28x1.5</b>	M28x1.5	1

# M-CLAMP SCREW SEM

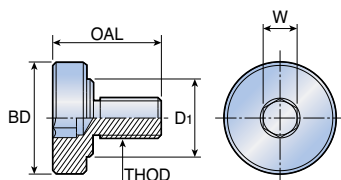
Lock screw DIN6367 for face mill arbors



Designation	Dimension (mm)				
	S.M.C	THOD	BD	LH	LB
<b>M8 CLAMP SCREW SEM 16</b>	16	M8	20	6	16
<b>M10 CLAMP SCREW SEM 22</b>	22	M10	28	7	18
<b>M12 CLAMP SCREW SEM 27</b>	27	M12	35	8	22
<b>M16 CLAMP SCREW SEM 32</b>	32	M16	42	9	26
<b>M20 CLAMP SCREW SEM 40</b>	40	M20	52	10	30
<b>M24 CLAMP SCREW SEM 50</b>	50	M24	63	12	36

# MBA M

## Lock screw for FMA

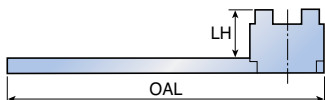


Designation	Dimension (mm)				
	THOD	BD	D <sub>1</sub>	OAL	W
<b>MBA M8</b>	M8x1.25	20	15	24	6
<b>M10</b>	M10x1.5	28	18	28	8
<b>M12</b>	M12x1.75	33	23	32	10
<b>M16</b>	M16x2.0	40	23	40	14
<b>M20</b>	M20x2.5	50	27	50	17
<b>M24</b>	M24x3.0	65	37	60	19

• Wrench for MBA screw: L-W

# WRENCH M-SEMC

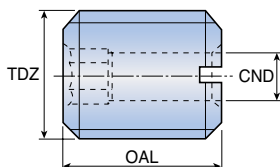
## Wrench DIN6368 for combi shell end mill holders



Designation	Dimension (mm)			
	DRVS	FTDZ	LH	OAL
<b>WRENCH M8 SEMC 16</b>	16	M8	20	180
<b>M10 SEMC 22</b>	22	M10	25	200
<b>M12 SEMC 27</b>	27	M12	32	225
<b>M16 SEMC 32</b>	32	M16	36	250
<b>M20 SEMC 40</b>	40	M20	40	280
<b>M24 SEMC 50</b>	50	M24	50	315

# PRESET SCREW

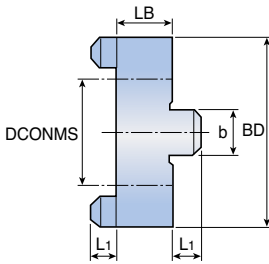
## SRKIN thermal shrink collets



Designation	Dimension (mm)					
	TDZ	OAL	CND	Used for shanks	Hey key	
<b>PRESET SCREW M5x20 B</b>	M5	20	2.1	EM E / SRKIN	2.5	
<b>M6x20 B</b>	M6	20	2.5	EM E / SRKIN	3.0	
<b>M8x20 B</b>	M8	20	3.5	EM E / SRKIN	4.0	
<b>M10x18 B</b>	M10	18	4.5	EM E / SRKIN	5.0	
<b>M12x18 B</b>	M12	18	5.5	EM E / SRKIN	6.0	
<b>M16x20 B</b>	M16	20	7.5	EM E / SRKIN	6.0	
<b>M16x25 B</b>	M16	25	7.5	SRKIN	6.0	
<b>M20x20 B</b>	M20	20	6.0	EM E	6.0	

# D-RING SEMC

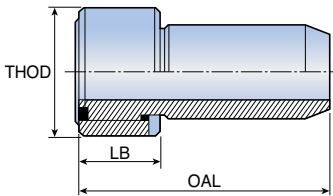
Driving ring DIN6366/1 for combi shell end mill holders



Designation	Dimension (mm)				
	DCONMS	BD	LB	b	L1
<b>16 D - RING SEMC</b>	16	32	10	8	5.0
<b>22 D - RING SEMC</b>	22	40	12	10	5.6
<b>27 D - RING SEMC</b>	27	48	12	12	6.3
<b>32 D - RING SEMC</b>	32	58	14	14	7.0
<b>40 D - RING SEMC</b>	40	70	14	16	8.0
<b>50 D - RING SEMC</b>	50	90	16	18	9.0

# COOLING TUBE HSK A

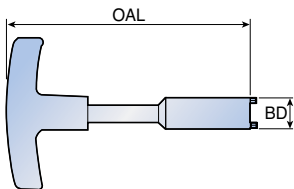
HSK A cooling tube



Designation	Dimension (mm)		
	OAL	LB	THOD
<b>COOLING TUBE HSK A 50</b>	33.0	9.5	M16x1
<b>HSK A 63</b>	36.5	11.5	M18x1
<b>HSK A 80</b>	40.0	13.5	M20x1.5
<b>HSK A 100</b>	44.0	15.5	M24x1.5

# WRENCH COOL TUBE HSK A

HSK A cooling tube wrench

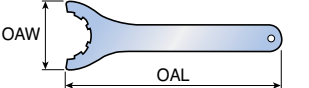
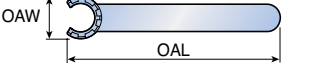
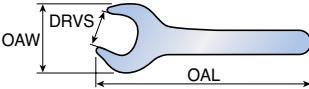


Designation	Dimension (mm)	
	BD	OAL
<b>WRENCH COOL TUBE HSK A 50</b>	15.0	120
<b>HSK A 63</b>	17.0	122
<b>HSK A 83</b>	18.5	186
<b>HSK A 100</b>	22.0	141



# WRENCH ER-MINI/SHORT/CLICKIN

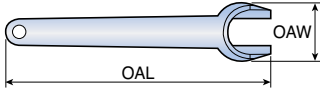
## ER wrench

DIN6499	Designation	Dimension (mm)		
		OAW	DRVS	OAL
 <p>Wrench ER 25, 32, 40, 50</p>	<b>WRENCH ER11 MINI</b>	16.8	-	95
	<b>ER11</b>	32.0	17	95
	<b>ER16 MINI</b>	22.5	-	117
 <p>Wrench ER 11, 16, 20, 25 MINI</p>	<b>ER16</b>	42.8	25	143
	<b>ER20 MINI</b>	28.0	-	128
	<b>ER20</b>	53.5	30	172
	<b>ER25 MINI</b>	29.0	-	120
	<b>ER25</b>	70.0	-	207
 <p>Wrench ER 11, 16, 20, SHORT, CLICKIN</p>	<b>ER32</b>	78.0	-	255
	<b>ER40</b>	95.0	-	285
	<b>ER50</b>	110.0	-	350
	<b>ER32 SHORT</b>	75.0	36	303
	<b>ER40 SHORT</b>	94.0	46	378
	<b>ER32 CLICKIN 27</b>	57.0	27	239
	<b>ER32 CLICKIN 32</b>	67.0	32	273

# WRENCH ER11 SMS

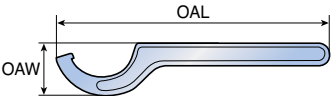


## ER11 Tightening wrench

	Designation	Dimension (mm)	
		OAW	OAL
	<b>WRENCH ER11 SMS</b>	22	100

# SPANNER TMC

## TMC milling chuck wrench

	Designation	Dimension (mm)	
		OAW	OAL
	<b>SPANNER TMC 20</b>	15.8	84.1
	<b>TMC 25</b>	18.1	94.3
	<b>TMC 32</b>	21.7	109.1
	<b>TMC 42</b>	23.2	108.0

# TSKS

## TSK slim chuck wrench

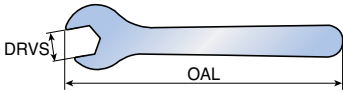


Fig.1

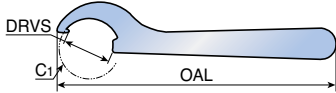


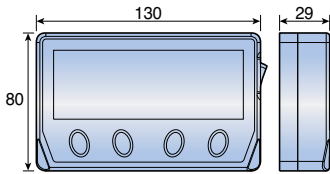
Fig.2

Designation	Dimension (mm)			Fig.
	DRVS	OAL	C1	
<b>TSKS - 6</b>	18.0	174	-	1
<b>10</b>	25.4	177	-	1
<b>16</b>	39.0	225	40	2
<b>25</b>	52.0	228	55	2

# TJS TSD DISPLAY



## RPM speed display for TYPHOON high-speed spindles

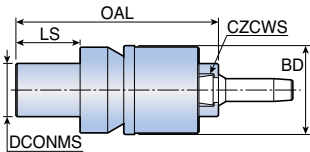


Designation	Machines
<b>TJS TSD DISPLAY</b>	TTS spindles

# IND ER11 TOOL ADAPTER



## ER 11 shrink collet adapter for induction heating device

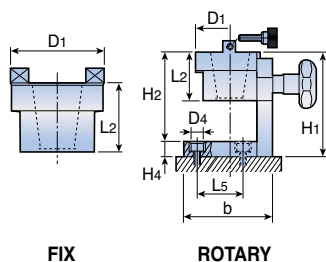


Designation	Dimension (mm)				
	CZCWS	BD	DCONMS	OAL	LS
<b>IND ER11 TOOL ADAPTER</b>	ER11	33.2	19.9	75.7	24

# TOOL CLAMP-ROTARY/FIX

Tool clamp fixture - ISO, DIN69871, BT MAS-403

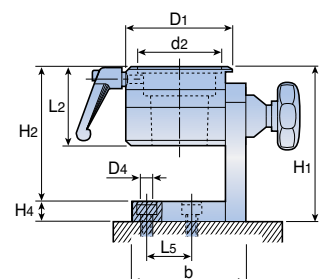
Designation	Dimension (mm)									
	CSI	b	D1	D4	L2	H1	H2	H4	L5	
<b>TOOL CLAMP 30 ROTARY</b>	ROTARY	104	70	12.5	56	128	109	19	40	
<b>40 ROTARY</b>	ROTARY	104	82	12.5	56	128	109	19	40	
<b>50 ROTARY</b>	ROTARY	144	103	12.5	71	170	151	19	85	
<b>30 FIX</b>	FIX	-	82	-	58	-	-	-	-	
<b>40 FIX</b>	FIX	-	82	-	58	-	-	-	-	
<b>50 FIX</b>	FIX	-	103	-	71	-	-	-	-	



# MULTI CLAMP-E/F, A/C

Tool clamp fixture rotary - For HSK shanks

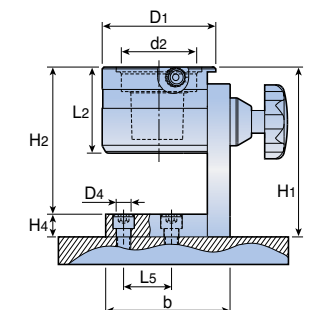
Designation	Dimension (mm)									
	CSI	b	d2	D1	D4	L2	L5	H1	H2	H4
<b>MULTI CLAMP 40E/F</b>	40	144	40	113.2	12.5	70	40	133	114	19
<b>50E/F</b>	50	144	50	113.2	12.5	70	40	133	114	19
<b>63E/F</b>	63	144	63	113.2	12.5	70	40	133	114	19
<b>50 A/C</b>	50	104	50	82.0	12.5	72	40	142	123	19
<b>63 A/C</b>	63	104	63	95.0	12.5	72	40	142	123	19
<b>100 A/C</b>	100	144	100	130.0	12.5	90	85	178	159	19



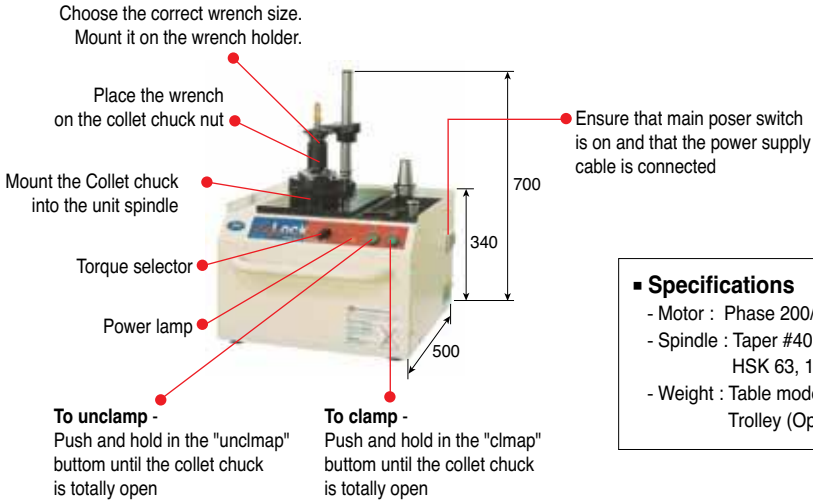
# MULTI CLAMP C

C-ADAPTER rotary clamp

Designation	Dimension (mm)									
	SS	b	d2	D1	D4	L2	L5	H1	H2	H4
<b>MULTI CLAMP C6</b>	63	104	63	95	12.5	72	40	142	123	19



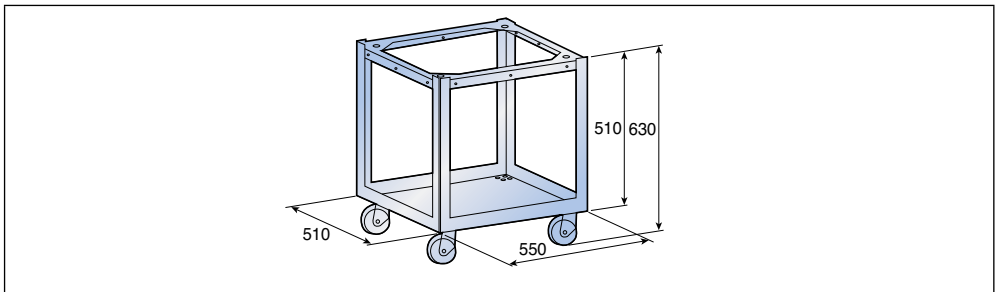
# EASYLOCK T.C EU



**Note:** Assemble the collet and cutting tools. By hand, place the nut onto the collet chuck.

Designation	TaeguTec No.	Accssories	
		Standard	Optional
<b>EASYLOCK T.C EU</b>	4651108	TP50 AD 40 EASY	EASY LOCK TROLLEY
		WRENCH ER16 EASY LOCK	TP40 AD 30 EASY
		WRENCH ER20 EASY LOCK	TP50 AD HSK 63 EASY
		WRENCH ER25 EASY LOCK	TP50 AD HSK 100 EASY
		WRENCH ER32 EASY LOCK	WRENCH ER50 EASY LOCK
		WRENCH ER40 EASY LOCK	WRENCH TG100 OPEN EASY

# EASYLOCK TROLLEY

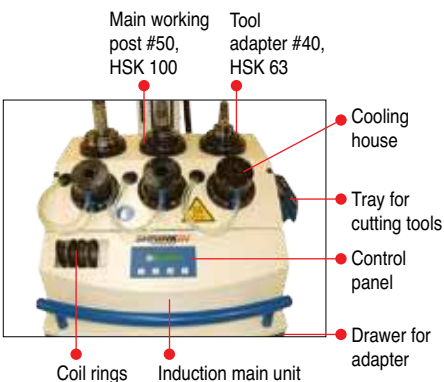


Designation	TaeguTec No.
<b>EASYLOCK TROLLEY</b>	4651109

## Induction heating units



Technical specifications		
Clamping range	3-32mm	Carbide tool shank
Clamping range	6-32mm	
Main power supply	3x380 - 500V 50/60Hz	
Nominal power	13kW	
Nominal current	16 AMP	
Cooling unit power supply	220V 50Hz	
Nominal power	0.5kW	
Max. tool length	440mm (From gauge line)	
Max. dia. clamping chuck	52mm	
Effective induction field length	45mm	
Expansion time	5-12 seconds	
Cooling time	50-90 seconds	
Weight	150kg	
Overall dimensions	170x73x60cm	



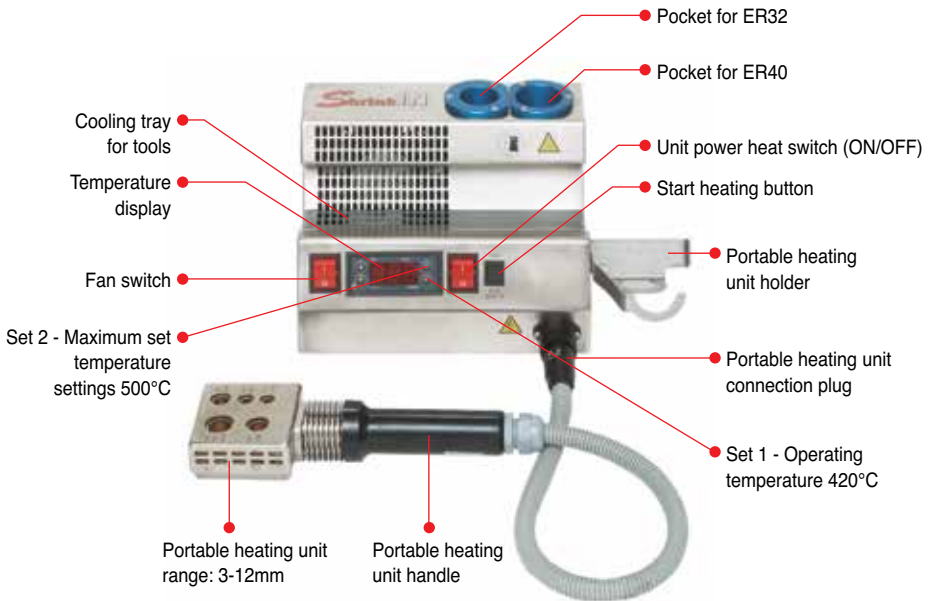
INDUCTION starter unit  
4654106 IND SHRINK START UNIT EUR  
• One working post without cooling unit

TaeguTec No.	Designation	Includes
<b>4652264</b>	<b>IND SHRINKIN UNIT EUR</b>	Induction unit, cooling unit, trolley, three tool adapters

Cooling sleeves		Used for
<b>IND COOLING COLLET 6-8</b>		SRKIN
<b>10-12</b>		SRKIN
<b>14-16</b>		SRKIN
<b>18-20</b>		SRKIN
<b>ER 3-5</b>		SRK
<b>ER 6</b>		SRK
<b>ER 8</b>		SRK
<b>ER 10</b>		SRK
<b>ER 12</b>		SRK

Optional tool adapter for HSK	
<b>IND 32 HSK TOOL ADAPTER</b>	
<b>40 HSK TOOL ADAPTER</b>	
<b>50 HSK TOOL ADAPTER<sup>(1)</sup></b>	
<b>63 HSK TOOL ADAPTER</b>	
<b>80 HSK TOOL ADAPTER</b>	

• <sup>(1)</sup> For taper #30



## ■ T-SHRINK thermal electric unit

TaeguTec No.	Designation
4651950	<b>SHRINKIN UNIT V2 EUR</b>

220V 50/60 HZ

- Unit includes heating handle 220V V2.0
- Available for ER...SRK, ER...SRF collet

## ■ Portable heating unit handle

TaeguTec No.	Designation
4651952	<b>HEATING HANDLE 220V V2</b>

## ▶ T-SHRINK / ER32 collet set and kit

### ■ ER32 T-SHRINK set 6 collets (4-12)

Designation	Collet size
<b>SET ER32 SRK S 6 EUR</b>	4, 5, 6, 8, 10, 12
<b>SRK M 6 EUR</b>	4, 5, 6, 8, 10, 12
<b>SRK L 6 EUR</b>	4, 5, 6, 8, 10, 12



### ■ T-SHRINK thermal electric unit kit with ER32 T-SHRINK 6 pieces collet set (4-12)

Designation	Power supply	Collet size
<b>KIT SHRINKINS V2 EUR</b>	220V 50/60 HZ	4, 5, 6, 8, 10, 12
<b>M V2 EUR</b>	220V 50/60 HZ	4, 5, 6, 8, 10, 12



# Technical Data

## ▶ Sealed collet

### ■ Application

ER collets are used for applications requiring through coolant, as well as for standard cutting tools such as drills, boring bars, end mills, reamers, taps and special tools.

They provide an effective solution for accurate controlled coolant flow.

Front sealing collets are available for advanced high speed machines with through coolant spindles/turrets.

They provide maximum performance, high cutting speeds, extended tool life and high quality surface finish.

### ■ Features

- A revolutionary high precision front sealing collet with 1.00mm collapsibility that has through coolant capability
- Increased machining efficiency
- Extended tool life
- Has powerful gripping and parallel clamping
- Front sealing provides protection from contamination
- Fast chip removal from work piece

### ■ Advantages

- High-pressure coolant supply up to 100 bar
- Eliminates coolant flow interference

### ■ Notes

- For maximum security and clamping power, the cutting tool shank must be inserted into the collet to a minimum depth of 2 x shank diameter
- In sealed collet JET2 the nozzle must be adjusted directly to the flute of the cutting tool
- Suitable for all shank standards

## ▶ TaeguTec ER coolant sealed collet

### ■ Two types:

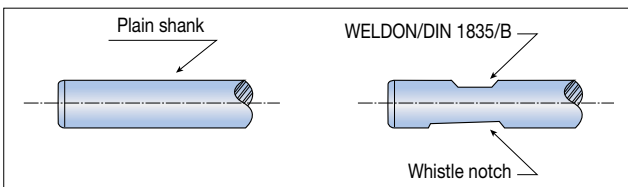


Sealed collet JET  
For straight shank cutting tools  
with internal coolant supply



Sealed collet JET 2  
With angular double nozzle.  
Coolant flow is direct to the cutting edge  
- For use with standard straight shank  
cutting tools (Without coolant hole)

## ▶ Shank standards



# Technical Data

## ► ER - Top clamping nut DIN6499

### ■ Description

The friction ER Nut has a unique two piece exclusive friction mechanism combining radial and angular self-centering movements.

### ■ Features

- Unique two piece friction bearing
- Radial and angular float for better concentricity
- Powerful gripping force, 50-100% higher than standard ER nut due to the friction bearing mechanism
- Balanced for higher spindle speed due to unique extractor teeth design
- Compact design: General dimensions and size range are the same as the standard nut sealed design for use with sealed collets.

### ■ Operation

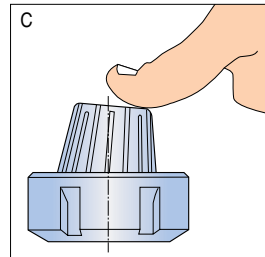
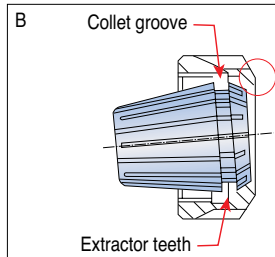
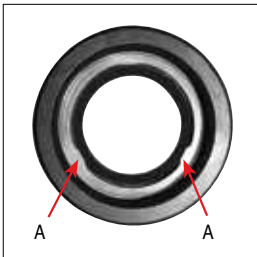
To insert collet: Always assemble the collet into the nut before mounting onto the collet chuck.

### ■ Inserting procedure

Insert the collet slantwise, fitting the two protruding extractor teeth (A) into the collet groove (B).

Place the two parts onto a clean and horizontal surface.

Press down with your thumb on the back end of the collet until it clicks into place (C).



### ■ Important

Never insert the collet parallel to the extractor ring. This will chip or break the teeth of the extractor.

When unclamping the nut, the collet will self release from the chuck by means of the extractor teeth.

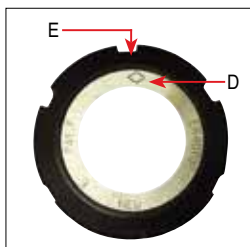


# Technical Data

## ► ER - Top clamping nut DIN6499

### ■ Extracting procedure

- 1 Align the diamond-shaped engraved logo which is on the silver ring (D) to any of the key slots (E) of the nut.
- 2 Place the nut with the collet facing down on a clean and horizontal work surface.
- 3 Insert a screwdriver vertically between the nut slots and the collet - on the reverse side of the diamond shaped engraved logo (D).
- 4 Tilt the screwdriver outwards while helping the extraction by pushing the back of the collet in the opposite direction (F).



### Note:

For maximum performance the clamping nut thread and collet taper must be cleaned and oiled before use.

**Recommended clamping torque for standard ER & ER-Top clamping nut.**

Nut type	Kg × m
ER-11	5
ER-11M	3
ER-16	7
ER-16M	4
ER-20	12
ER-20M	8
ER-25	20
ER-32	22
ER-40	25
ER-50	35

### Important:

The torque is calculated to suit the maximum diameter capacity of each collet. The torque should be gradually reduced when used with a smaller shank size.

# Technical Data

## ► TSK slim collet chuck

### ■ Features & advantages

- Excellent accuracy & good gripping power by gentle taper angle (ER collet : 8°, TSK collet : 4°)
- Slim design for deep and cavity machining
- Suitable on high speed machining
- Variety of TSK collets (Normal & coolant type)
- General machining using drill & end mill

### ■ Application

- General machining using drill & end mill
- High speed machining for mold & die industry
- Accurate machining using reamer & end mill

### ■ How to assemble the collet with a nut



a. Assembly device  
(Provided with the set)



b. Nut



c. Collet

❶ Insert the back end of the collet (c) into the assembly device (a)

❷ Insert the combined part (a+c) in the nut (b)

❸ Pluck out the assembly device (a) from the remaining part (b+c)



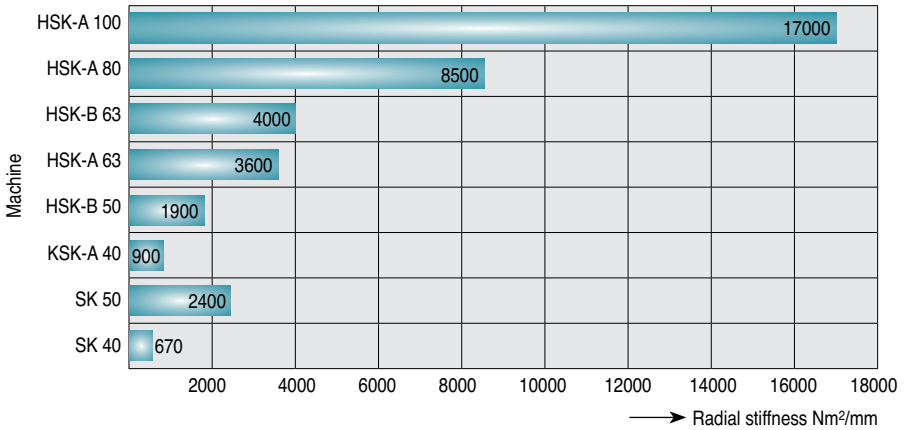
# Technical Data

## ▶ HSK (DIN69893) system

### ■ Features

- DIN standard
- For high speed machining
- Size: #32, 40, 50, 63, 100
- For A.T.C. & manual machine
- Double face contact
- High stiffness

## ▶ Radial stiffness of different machine tool interface

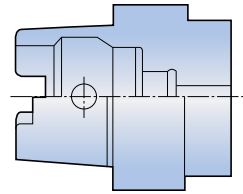
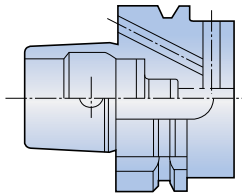
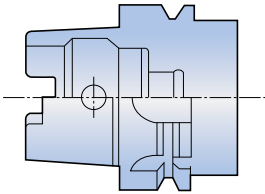


## ▶ Type

■ A type: Automatic tool change

■ B type: With coolant through face

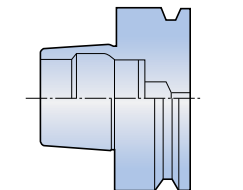
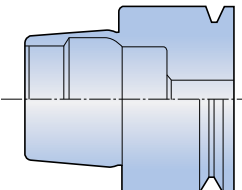
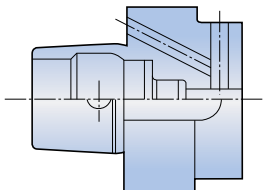
■ C type: Manual clamp



■ D type: With coolant through face

■ E type: Super high speed

■ F type: Ultra high speed

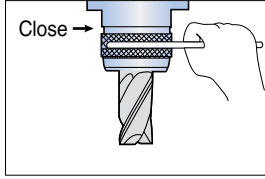
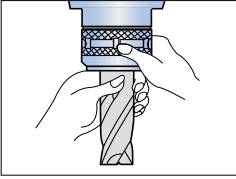


# Technical Data

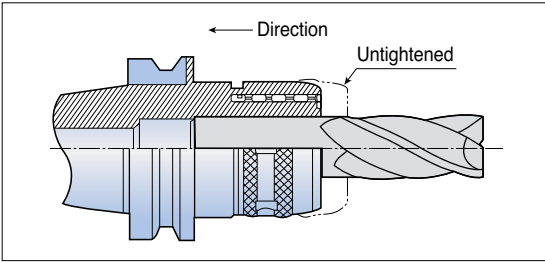
## ► Milling chuck

- Exceptional gripping power and simple operation
- Torque

Type	Torque (kgf•m)
TMC 25	160
TMC 32	300
TMC 42	500

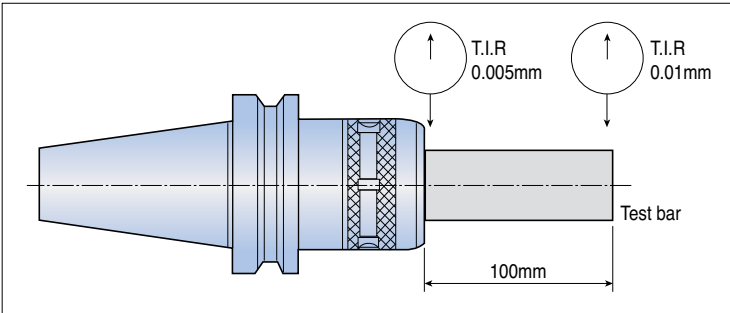


Tighten slightly when collar is close to body (Avoid hammering)



- Improved accuracy prolongs tool life

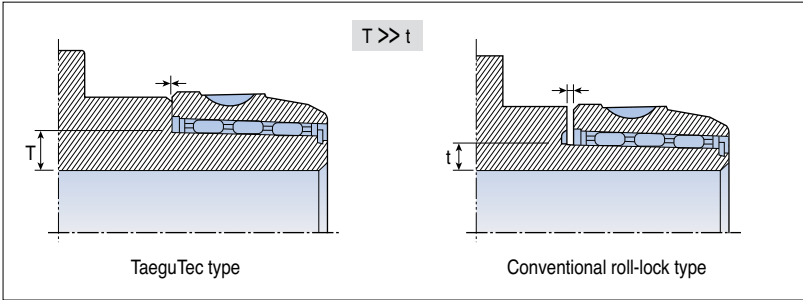
The accuracy and low runout has been achieved by utilizing precise grinding and spiral laser slitting to avoid damage and tool distortion.



# Technical Data

- Improved rigidity

Improved rigidity and body stiffness is achieved by maximising body thickness. This is again achieved via the laser machined spiral slit.

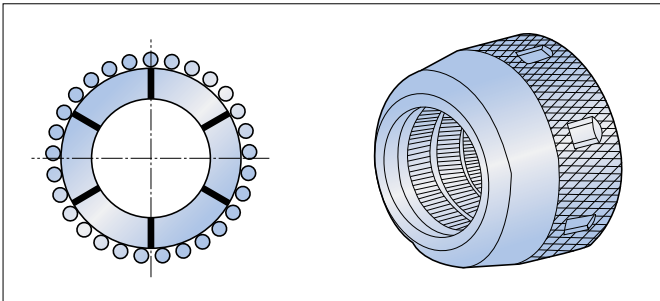


- Excellent durability

Excellent durability through dispersing surface pressure on the roller by maximizing number of rollers in the retainer

Type	TaeguTec	A Co.	B Co.
Ø32	60	55	60
Ø42	75	72	72

< Number of rollers in one row >



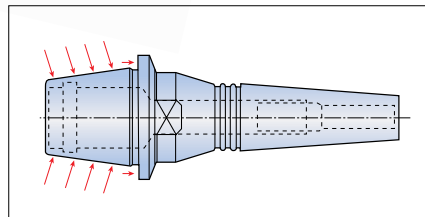
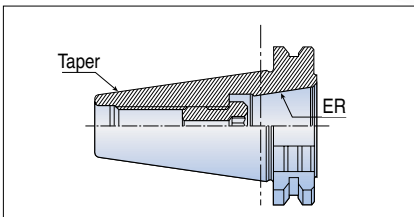
## ► Quick-change system

- DIN 69871
  - HSK
  - BT MAS 403
- T-CLICK advantages
  - Taper and face contact
  - Ideal for high speed machining
  - High precision: Low run-out
  - Excellent rigidity
  - Quick and easy clamping



- Quick-change advantages
    - Quick tool change: The taper shank and the holder connect in a quick half turn
    - No thermal shock on holder taper
    - Flexibility in diameter and length
    - Eliminates the use of extension chuck
    - No spare parts required
    - T-CLICK blanks available to provide custom made tooling
    - Shrink clamping for solid carbide tooling
- Tightening torque: 235N•m

G2.5
20,000 RPM



## ► Balanceable collet chuck system

- Direct reading precision rings for high grade balance
- Simple procedure on all types of balancing machines
- Static and dynamic balance

DIN 69871  
HSK  
BT MAS 403



### ■ Operating instructions

The following procedure should be adjusted according to the specific type of balancing machine being used.

- ❶ Loosen the 3 locking screws on the angle reference ring (blue).  
Align the two balancing rings (gold-colored) to the '0' position on the angle reference ring.  
After the rings are all aligned, tighten the 3 locking screws.
- ❷ Insert the collet chuck into the spindle and tighten it using the pull stud.  
Insert the cutting tool into the collet chuck, adjust to desired projection and clamp it.
- ❸ Enter the required parameters on the balancing machine: balancing grade (G..), RPM, etc.
- ❹ Run a test with the assembled collet chuck on the balancing machine.  
Read the results for the unbalance angle orientation and the gr x mm unbalance value.
- ❺ Loosen the 3 locking screws on the angle reference ring and align the two balancing rings with the measured unbalance value. Rotate both balancing rings to the unbalance angle on the angle reference ring (or to the laser mark on balancing machines with a laser indicator). Tighten the locking screws.
- ❻ Run a second test with the assembled collet chuck and read the results.

- Note: The reading should be within tolerance or very close.

### ■ If the necessary balance on the machine has been achieved, the tool is ready for operation.

If the balance is out of tolerance, one of the following procedures should be performed:

#### - First option

- a) IF unbalance is within 0-3 gr x mm and within  $\pm 20^\circ$  from original angle,  
**THEN** increase the original value of gr x mm on the balancing rings according to the reading on the machine, without changing the original angle position.

#### - Second option

- a) IF unbalance is within 0-3 gr x mm at an angle of approximately  $180^\circ$  from original angle,  
**THEN** decrease the original value of gr x mm on the balancing rings according to the reading on the machine without changing the original angle position.

#### - Third option

- a) IF unbalance is less than 1 gr x mm at an angle between  $20^\circ$  to  $90^\circ$  from the original angle,  
**THEN** rotate both balancing rings approximately  $5^\circ$  towards the indicated direction.

#### - Fourth option

- a) On some balancing machines it is possible to adjust the unbalance by rotating the peak point marked on the balancing rings to the required angular position.



## ► Hydraulic chuck

### ■ Features & advantages

- Consistent gripping force
- Excellent accuracy (Run-out : within  $5\mu\text{m}$ )
- Convenient and safe tool change using a clamping screw
- Can use THC straight collets (Normal & coolant type)

### ■ Application

- Accurate machining
  - a) Fine milling, reaming, fine boring
- Drilling: Small diameter using carbide drill
  - a) For Al or Cast iron

### ■ Operation

- Tool mounting
  - a) Insert the tool shank between  $L_{\text{max}}$  and  $L_{\text{min}}$  (Fig 1.) and then, turn the clamping screw clockwise until it can no longer rotate.
- Tool releasing
  - a) To release the tool from the hydraulic chuck, turn the clamping screw in a counter clock-wise direction approximately 5 or 6 evolutions and remove the tool shank.

### - Notice

- a) **Eliminate grease, coolant oil and any dirt** from the internal bore of the hydraulic chuck and tool shank prior to mounting.
- b) **Ensure the minimum chucking length ( $L_{\text{min}}$ )** is maintained. (see Fig 1. & Table 1.)
- c) Cylindrical tool shanks available in accordance with  **$h6$  tolerance** (Table 2.) and  **$Ra \text{ min} = 0.3\mu\text{m}$  (ground)** and weldon shanks should be used in collet only.
- d) Remove the end tool from the hydraulic chuck when not in use for long periods of time.
- e) Do not turn the clamping screw prior to tool mounting in the hydraulic chuck.

\* Please refer to the backface for information tables.

Figure 1. Tool structure

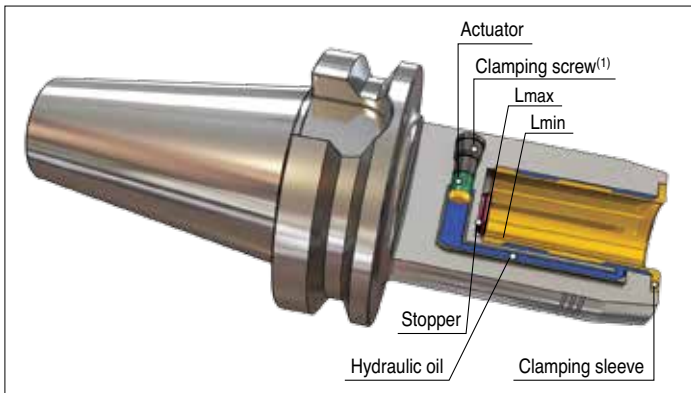




Table 1. Recommended minimum & maximum depth (L) of end tool insertion

Inner bore diameter Ø (mm)	Lmin (mm)	Lmax (mm)
6	27.5	37.5
8	27.5	37.5
10	32.5	42.5
12	37.5	47.5
14	37.5	47.5
16	42.5	52.5
20	42.5	52.5
25	51.0	61.0
32	55.0	65.0

Table 2. h6 tolerance range

Shank size Ø (mm)		h6 tolerance range (µm)
	3	0
		-6
3	6	0
		-8
6	10	0
		-9
10	18	0
		-11
18	30	0
		-13
30	50	0
		-16

Table 3. Clamping torque

Inner bore diameter Ø (mm)	Clamping torque (N·m)
6	10
8	25
10	40
12	65
14	90
16	120
20	240
25	260
32	450

## ► Thermal T-SHRINK chucking system



## ► T-SHRINK chucking system

The thermal T-SHRINK ER collet chucking system is an enhancement to the existing popular ER system. The T-SHRINK collets utilize the thermal shrink phenomena for rigid clamping of solid carbide cutters. This new system provides higher torque, precision runout and better repeatability. The T-SHRINK collets with their slim design and different projection length allows the user to reach into deeper cavities and perform narrow milling applications. TaeguTec offers a complete system for T-SHRINK ER collets, including a uniquely designed heating unit with a portable heating handle. The unit is equipped with a high-tech temperature control for easy and practical use at the machining center or in the tool room.



■ For carbide tools only



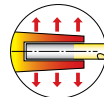
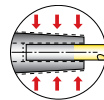
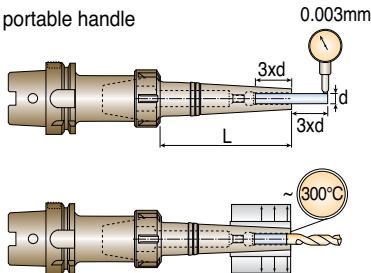
L(mm)	Max. T.I.R
35	7 $\mu$ m
60	9 $\mu$ m
85	10 $\mu$ m

■ Features

- Slim design to maximize effectiveness and application access
- Flexible: Fits into standard ER chucks
- High torque transfer
- Rigid clamping of carbide tools
- High precision: Low run-out
- Perfect repeatability
- Vibration damping
- Coolant JET2 available
- Symmetrical design for high speed machining
- Quick and easy tool changing
- Unique T-SHRINK heating unit with portable handle



Clamping time  
15-45 sec



## ▶ GTI-Tap attachment

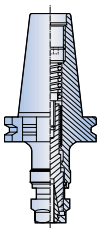
### ■ Description

Short tap chucks for ER collets

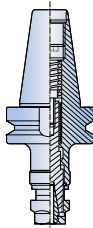


### ■ Application

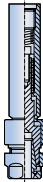
Axial-float/tension/compression type for CNC milling machines and lathes with reversing motors and rigid tapping



DIN 69871



BT MAS-403



Straight shank

### ■ Features

- Compensates for machine feed and tap pitch variance
- Floating mechanism compensates for misalignment between tap and workpiece
- Right and left-hands tapping

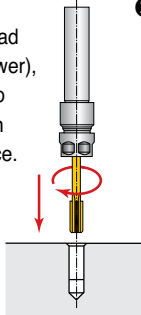
### ■ Advantages

- Practical and efficient tap holding by the ER spring collet without using drive jaw
- Compact design for minimal clearance applications
- Heavy-duty design for high torque drive ensures the same accuracy as the tap itself

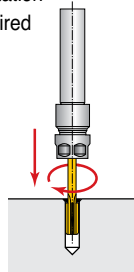
### ■ Operation

For through and blind hole tapping

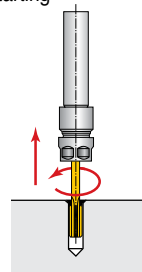
- 1** Enter feed rate according to thread pitch (or 1-2% lower), and set spindle to starting point with 0.08mm clearance.



- 2** Start spindle forward with right hand rotation until reaching desired depth.



- 3** Stop feed and rotation and reverse to starting point.



## ► Adjustable rotary toolholder indexable insert drills

### ■ Application

For use on machining centres and drilling machines

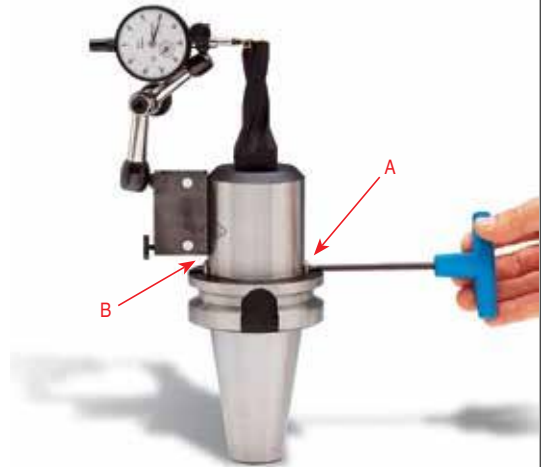
### ■ Features

- Diameter adjustment range – 0.30mm to +1.30mm
- Guaranteed bore tolerance of  $\pm 0.02$ mm
- Through the shank coolant design or “type B” coolant through the flange
- Coolant pressure up to 70 bar

### ■ Operation

Best results are achieved on a preset machine or similar device.

- Adjust with screws A or B. Preset should be made on a pre-setter to minus 0.3mm on required diameter
- Tighten the clamp screws A and B
- On the machine, make a test cut, measure the bore diameter and then adjust to required diameter
- Final adjustment to the desired diameter can be made on the machine with dial indicator or on the pre-setter



## ► GYRO - Radial and angular alignment of toolholder

### ■ Advantages

- Easy adjustment for correcting misalignment between chuck and turret axis (drill and workpiece)
- Precise and efficient tool clamping with ER collets and ER sealed coolant jet collets
- Quick functional adjustment is made on machine by using plug and ring gauge kit

### ■ Operation

Operating instructions are included with each tool supplied.

### ■ Notes

- Coolant supply should be minimum 10 bar and maximum 80 bar for small diameter oil hole drills  
: Ranging from 3-20mm (the normal machine pressure of 4 bar is insufficient)
- Coolant filtration is important to eliminate chips from blocking the drill oil hole
- To ensure maximum performance of the GYRO, the backlash of the turret indexing and support axis mechanism should be checked and re-adjusted according to the machine standard



## ► GYRO - Radial and angular alignment of toolholder

Adjustable toolholder for easy adjustment of radial and angular misalignment

### ■ Application

Gyro is a rugged and adjustable toolholder to solve drilling, tapping and reaming problems encountered on CNC and turret lathes. Its unique design allows smooth and easy adjustment of radial and angular misalignment between chuck and turret.

Gyro reduces total machining time by making it possible to complete machining of holes in one drilling step and achieve tolerances as close as 0.01mm, thereby eliminating subsequent boring or reaming operations.

- A breakthrough in drilling technology for CNC lathes
- Dramatic increase in tool performance at reduced cost

### ■ Features

- Enables high precision drilling to a close tolerance of 0.01mm, to be performed as a final boring operation on CNC lathes
- Reduces machining cycle time by completing the bore in one drilling step, eliminating secondary turning and boring operations
- Prolongs tool life tenfold, especially when using HSS, solid and brazed carbide drills, taps and reamers
- Permits increase in speeds and feeds by up to 300%
- Coolant supply through the centre of the unit via the tool shoulder for oil fed drilling

