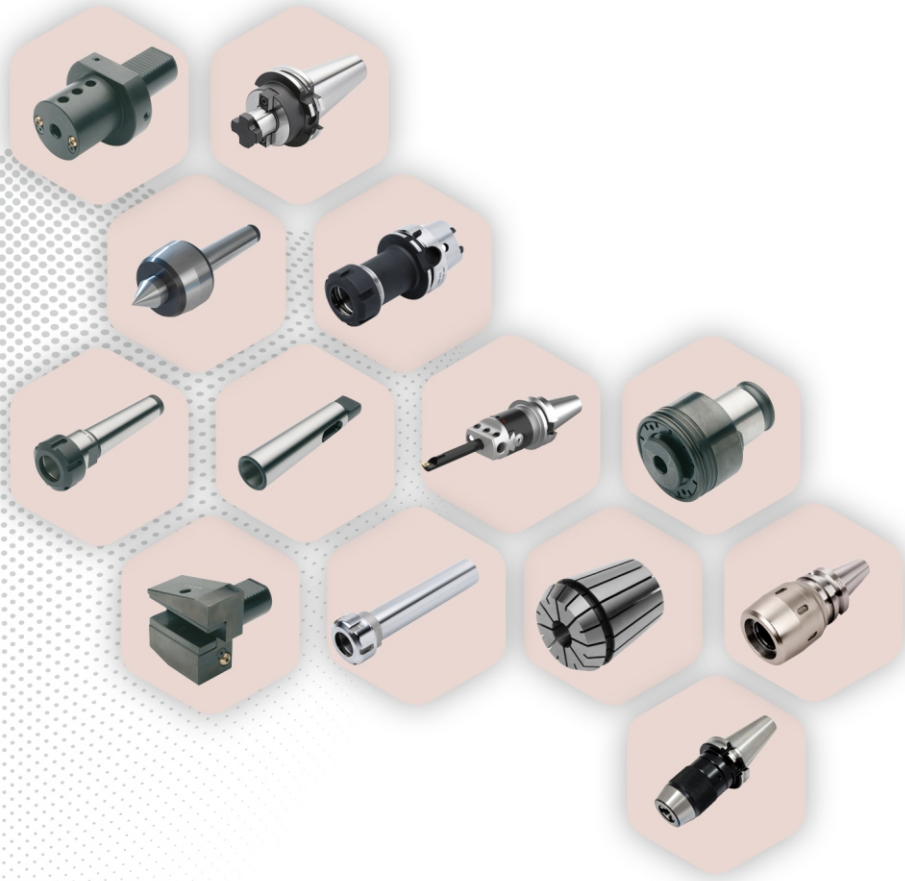




**PORTEK**  
**CNC MACHINE TOOL**



**PRECISION**

**BT . CAT . DAT . HSK**  
**TOOL HOLDERS**

**ACCESSORIES FOR MACHINING CENTER**

**MILLING MACHINE & LATHE**

# Contents

1

1

Spindle Wiper



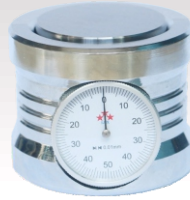
1

Spindle Wiper



1

Setter(Z-zero)fig1



1

Setter(Z-zero)fig2



1

Setter(z-zero)fig3



2

Touch Point Sensor



2

3D Point Sensor



3

Mechanical edge finder  
FIG1



3

Mechanical edge finder  
FIG2



3

Mechanical edge finder  
FIG3



3

Ceramic edge finder  
FIG1



3

Ceramic edge finder  
FIG2



3

Rotary edge finder  
FIG1



3

Rotary edge finder  
FIG2



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Morse Taper holder  
NT



5

Face Mill Holder  
NT



6

Spring Collet Chuck  
NT



6

Face Mill Holder  
NT



7

APU Drill Chuck  
NT



7

B TYPE Drill Chuck  
NT



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8 SLA End mill holder  
NT



8 Power Milling Chuck  
NT



9 SLA End mill holder  
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10 OZ Chuck  
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10 Adapter  
NT



10 APU Drill CHUCK  
NT



11 Morse Taper Holder  
NT



11 Morse Taper Sleeve  
MTA



12 SLA End Mill  
R8



12 Face Mill Holder  
R8



12 OZ Collet Chuck  
R8



13 Power Milling Chuck  
SK



13 Adapter  
SK



14 Face mill Holder  
SK



15 Tapping Chuck  
SK



16 APU Drill Chuck  
SK



16 Drill Chuck B type  
SK



17 MTA Morse Taper  
SK



18 High Speed Milling  
SK



18 Power Milling Chuck  
SK





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19 SLA End mill holder  
SK



20 High Speed Chuck  
SK



21 ER COLLET CHUCK  
SK



22 Face Mill Holder  
BT



23 OZ Collet Chuck  
BT



23 Adapter Collet chuck  
BT



23 APU Drill Chuck  
BT



24 ER Collet Chuck  
BT



25 Tapping Collet chuck  
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25 Power Milling Chuck  
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26 Morse Taper Holder  
BT



26 Extension Pull Stud  
BT



27 B Type Drill chuck  
BT



28 High Speed chuck  
BT



29 SLA End Mill Chuck  
BT



30 Morse Taper Holder  
BT



31 ER TOOL HOLDER  
ISO30



31 High Speed chuck  
ISO30



31 APU Drill Chuck  
ISO



32 ER Spring Chuck  
HSK





33 APU Drill Chuck  
HSK-A



33 Morse Taper Holder  
HSK-A



34 SLA END Mill Holder  
HSK-A



35 Face Mill Holder  
HSK-A



36 UNIVERSAL BORING  
HEAD



36 BORING HEAD  
F1



37 BORING HEAD  
NBH2084



38 PULL STUD  
CAT



38 PULL STUD  
ISO



38 PULL STUD  
OTT



39 PULL STUD  
MAZAK



39 PULL STUD  
JIS B6339-89



39 PULL STUD  
DIN



39 PULL STUD  
ISO7388



40 PULL STUD  
BT



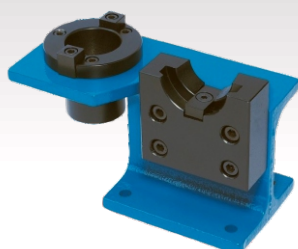
40 PULL STUD  
BT-COOLANT



40 PULL STUD  
BT-ADS



41 FIXTURE  
BT-SK-CAT



41 FIXTURE  
HSK



41 FIXTURE  
ISO30



# Contents

5



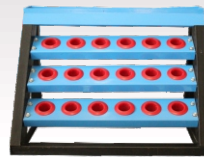
53 Ground Parallels



54 Arbore Press



54 Stand for Tool Holder



54 Stand for Tool Holder



55 Keyless Drill Chuck



56 Reversible Taping Attachment



56 Rubber Flex Collet



57 Tapping Machine Pnumatic



57 Tapping Machine Electronic



58 Grinding Machine Drill Bit-POD-13



58 Grinding Machine Drill Bit-POD-30



58 Grinding Machine End Mill-POE-13/30



59 Collet Chuck Kit ER BT



59 Collet Chuck Kit ER ST



60 Collet Chuck Kit ER SK



60 Collet Chuck Kit ER NT



61 Collet Chuck Kit OZ BT



61 Collet Chuck Kit OZ MT



62 Collet Chuck Kit ER ST



62 Collet Chuck Kit ER MTB







### Spindle Taper Wipers

Model No.	FIG.	Taper No.	Weight (kg)
ISO-30	1	#30	0.15
ISO-40		#40	0.15
ISO-50		#50	0.25
HSK40	2	HSK40	0.20
HSK50		HSK50	0.20
HSK63		HSK63	0.20
HSK100		HSK100	0.75

Unit: mm



- Made of plastic and wool.
- The spindle taper wiper can quick-clean machine spindle.

### Setter

# Z-ZERO



Fig.1



Fig.2



Fig.3

Model No.	FIG.	Setting High	Weight (kg)
ZDI50A	1	50mm+0.005	1.30
* ZDI100A	1	50mm+0.005	1.50
ZOP50	2	50mm+0.005	1.30
ZIP65	3	50mm+0.002	1.00

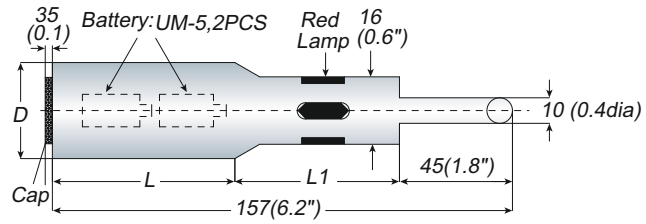
Unit: mm

- Easy, quick and simple for setting tool length on the machine center.
- Base with magnetic.

# High Sensitive Electronic Edge Finder

# Touch Point Sensor

Measuring series



- High sensitive edge sensor with red LED lamp and beep sound.
- Instant indication by red LED lamp at very light contact of sensor ball with workpiece.

- 
- Easy location of work face, O.D/I.D
  - Spring-retained sensor ball protects the unit against over-run.

Model No.	D	L	L1	Weight (kg)
PM20	20	77	35	0.35
PM32	32	71	41	0.70
PM3/4"	19.05 (3/4")	77	35	0.35
PM1-1/4"	31.75 (1-1/4")	71	41	0.70

Unit: mm

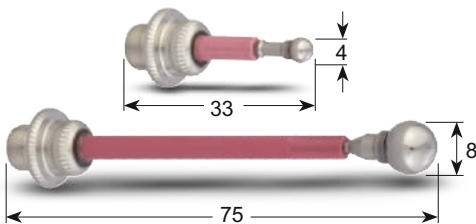
## 3D

## Sensor-Point



Model No.	Code No. (HAIMER)	Accuracy	Weight (kg)
3D Sensor	80.360.00	0.01mm	1.00
3D Short Needle	80.362.00	-	0.01
3D Long Needle	80.363.00	-	0.02

Unit: mm





# EDGE FINDER

## Mechanical Type

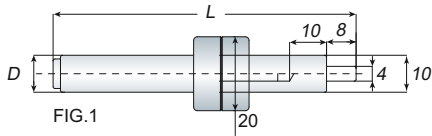


FIG.1

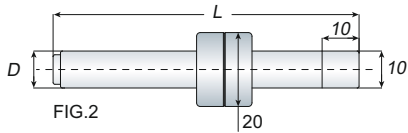


FIG.2

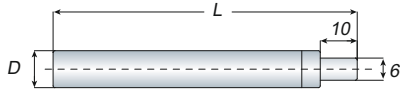


FIG.3

Model No.	FIG.	D	L	Weight (kg)
PM10-FIG.1	1	10	90	0.10
PM10-FIG.2	2	10	82.8	0.10
ME-610	3	10	65	0.05

Unit: mm



FIG.1



FIG.2



FIG.3

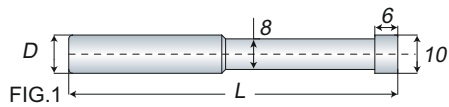


FIG.1

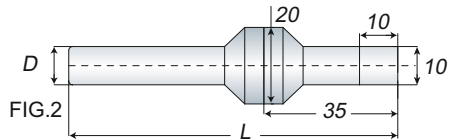


FIG.2

## Ceramic Type

Model No.	FIG.	D	L	Weight (kg)
WH-1010	1	10	86	0.05
WH-1020	2	10	83	0.10

Unit: mm



FIG.1



FIG.2

- Nonmagnetic and made of ceramic.

## Rotary Type

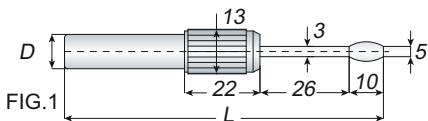


FIG.1

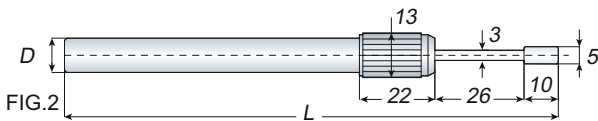


FIG.2

Model No.	FIG.	D	L	Weight (kg)
ME-P1	1	10	93	0.05
ME-P2	2	10	144	0.10
ME-P1+P2	-	-	-	0.15

Unit: mm



FIG.1



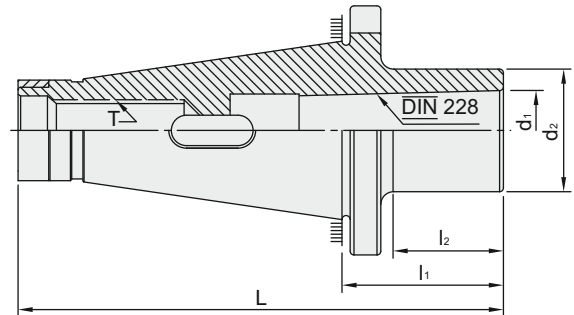
FIG.1

- The edge finder has made rust prevention processing.

# NT

## Morse Taper Holder

**NT**  
series  
DIN 2080



### Features:

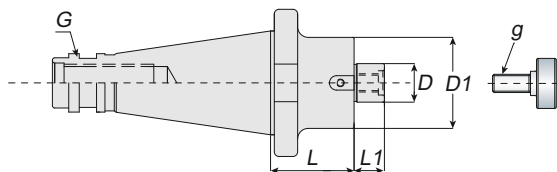
- Hardened & precision ground (I.D & O.D).
- Ronudness: 0.005mm.
- MTA=TANG TYPE=DIN 228-B.
- MTB=DRAW BAR TYPE=DIN 228-A.
- Best selected top quality tools steel fully hardened and ground. Morse taper inside hole and outside shank.
- Please inform draw bar size when making an order.

Order no	l1	L	d1	d2	T	WEIGHT (KG)
NT30-MT1	55.5	123.9	17.78	32	M12x1.75P	0.6
NT30-MT2	55.5	123.9	17.78	32	M12x1.75P	0.5
NT30-MT3	74	142.4	23.825	40	M12x1.75P	0.55
NT40-MT1	25	118.4	17.78	32	M16x2.0P	0.9
NT40-MT2	25	118.4	17.78	32	M16x2.0P	0.8
NT40-MT3	47	140.4	23.825	40	M16x2.0P	0.85
NT40-MT4	82	175.4	31.267	48	M16x2.0P	1.25
NT50-MT2	20	146.8	17.78	32	M24x3.0P	2.8
NT50-MT3	30	156.8	23.825	40	M24x3.0P	2.9
NT50-MT4	60	186.8	31.267	48	M24x3.0P	3
NT50-MT5	86.2	209.8	44.399	63	M24x3.0P	3.1

Unit: mm

**NT**  
series  
DIN 2080

# FMB Face Mill Holder - Metric



- Face mill holder equips with screw and drive keys to assemble the face mill cutter to the holder.

\* contact for long Length(250mm , 300mm)-

Order no	D	D1	L	L1	g	G
NT30-FMB16-45	16	38	45	17	M8	M8
NT30-FMB16-100	16	38	100	17	M8	M8
NT30-FMB22-45	22	48	45	19	M10	M8
NT30-FMB22-100	22	48	100	19	M10	M8
NT40-FMB16-45	16	38	45	17	M8	M16
NT40-FMB16-100	16	38	100	17	M8	M16
NT40-FMB22-45	22	48	45	19	M10	M16
NT40-FMB22-100	22	48	100	19	M10	M16
NT40-FMB22-150	22	48	150	19	M10	M16
NT40-FMB22-200	22	48	200	19	M10	M16
NT40-FMB27-45	27	58	45	21	M12	M16
NT40-FMB27-100	27	58	100	21	M12	M16
NT40-FMB27-150	27	58	150	21	M12	M16
NT40-FMB27-200	27	58	200	21	M12	M16
NT40-FMB32-45	32	78	45	24	M16	M16
NT40-FMB32-100	32	78	100	24	M16	M16
NT40-FMB32-150	32	78	150	24	M16	M16
NT40-FMB32-200	32	78	200	24	M16	M16
NT40-FMB40-45	40	88	45	24	M20	M16
NT40-FMB40-100	40	88	100	27	M20	M16
NT50-FMB22-45	22	48	45	19	M10	M24
NT50-FMB22-100	22	48	100	19	M10	M24
NT50-FMB22-150	22	48	150	19	M10	M24
NT50-FMB22-200	22	48	200	19	M10	M24
NT50-FMB32-45	32	78	45	24	M16	M24
NT50-FMB32-100	32	78	100	24	M16	M24
NT50-FMB32-150	32	78	150	24	M16	M24
NT50-FMB32-200	32	78	200	24	M16	M24
NT50-FMB40-45	40	88	45	27	M20	M24
NT50-FMB40-100	40	88	100	27	M20	M24
NT50-FMB40-150	40	88	150	27	M20	M24
NT50-FMB40-200	40	88	200	27	M20	M24



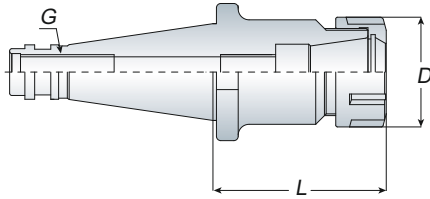
Unit: mm



# Spring Collet Chuck

# ER

**NT**  
series  
DIN 2080



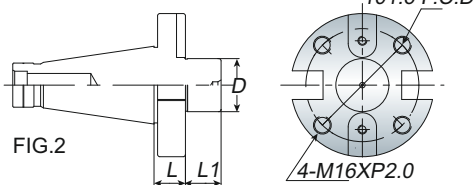
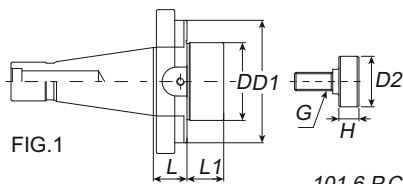
Order no	Clamping Range	D	L	Collet type	Wrench	G	WEIGHT (KG)
NT30-ER16-	1-10	31		ER16	ER16	M12	1
NT30-ER20-	1-13	35		ER20	ER20	M12	
NT30-ER25-	2-16	42		ER25	ER25	M12	
NT30-ER32-60	2-20	50	60	ER32	ER32	M12	1.2
NT30-ER40-70	2-26	63	70	ER40	ER40	M12	
NT40-ER16-70	1-10	31		ER16	ER16	M16	
NT40-ER20-	1-13	35		ER20	ER20	M16	
NT40-ER25-	2-16	42		ER25	ER25	M16	
NT40-ER32-	2-20	50		ER32	ER32	M16	
NT40-ER40-	2-26	63		ER40	ER40	M16	
NT40-ER50-	2-34	78		ER50	ER50	M16	
NT50-ER16-	1-10	31		ER16	ER16	M24	
NT50-ER20-	1-13	35		ER20	ER20	M24	
NT50-ER25-	2-16	42		ER25	ER25	M24	
NT50-ER32-	2-20	50		ER32	ER32	M24	
NT50-ER40-	2-26	63		ER40	ER40	M24	
NT50-ER50-	2-34	78		ER50	ER50	M24	

- ER collet chuck with the flexibility that can clamp drill, reamers, end mills and taps.
- ER16 / ER20 holder can make M type as your choice.
- ER collet chuck is also suitable for ER bearing nut and wrench.
- Wrench and Stop screw must be ordered separately.



Unit: mm

# FMB Face Mill Holder - Metric



Model No.	FIG.	D	D1	D2	L	L1	H	G	Draw Bolt	Weight (kg)
NT30 FMB22-020	1	22	53	-	20	18	-	M10	1/2"-12 M12x1.75P	0.60
FMB27-020	1	27	54	32	20	20	13	M12		0.80
FMB32-020	1	32	59	41	20	21	16	M16		1.00
NT40 FMB22-020	1	22	60	-	20	18	-	M10	5/8"-11 M16x2.0P	1.20
FMB27-020	1	27	58	32	20	20	13	M12		1.40
FMB32-020	1	32	69	41	20	21	16	M16		1.40
FMB40-020	1	40	80	47	20	24	15	M16		1.80
FMB60-024	2	60	128	-	24	32	-	-		4.00
NT50 FMB22-020	1	22	48	-	20	18	-	M10	1"-8 M24x3.0P	3.10
FMB27-020	1	27	70	31	20	20	13	M12		3.30
FMB32-020	1	32	76	41	20	21	16	M16		3.40
FMB40-020	1	40	88	47	20	24	15	M16		3.70
FMB60-024	2	60	128	-	24	32	-	-		5.50

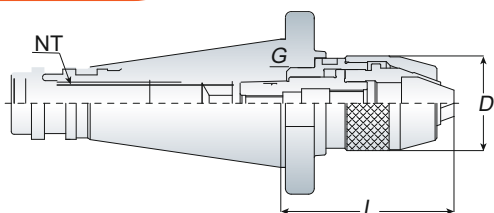
Unit: mm

- Face mill holder equips with screw and drive keys to assemble the face mill cutter to the holder.
- When ordering, please specify the draw bolt with inch size or metric size.
- Face mill cutter must be ordered separately.

**NT**  
series  
DIN 2080

**APU**

## Drill Chuck

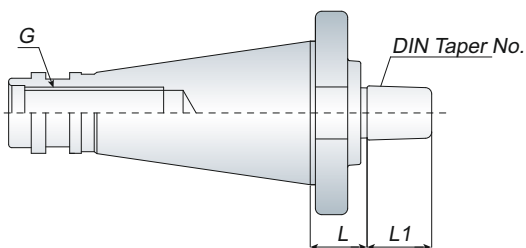


Model No.	Clamping Range	D	L		G	Weight (kg)
			Min.	Max.		
Nt40 APU08-075	0.3~8	37.5	69	76.5	M16	1.30
APU13-100	0.3~13	50.5	88	99	M16	1.90
APU16-120	3~16	57	106	120	M16	2.30
Nt50 APU08-085	0.3~8	37.5	80	87.5	M16	3.50
APU13-110	0.3~13	50.5	99	110	M16	3.80
-170	0.3~13	50.5	159	170	M24	4.50
APU16-120	3~16	57	106	120	M24	4.20
-180	3~16	57	166	180	M24	5.50

Unit: mm

- The shank and keyless drill chuck are combined together so that to avoid the drill chuck slipping out for heavy-duty and high-speed cutting.
- Wrench is attached for each APU drill chuck holder.

## Drill Chuck Holder - B Type



Model No.	DIN Taper No.	L	L1	G	Weight (kg)
NT 40 B12	B12	15	18.5	M16	1.00
B16	B16	17	24	M16	1.00
B18	B18	17	32	M16	1.10
B22	B22	19	38	M16	1.20
NT 50 B16	B16	20	24	M24	2.50
B18	B18	20	32	M24	2.70
B22	B22	22	38	M24	2.90

Unit: mm

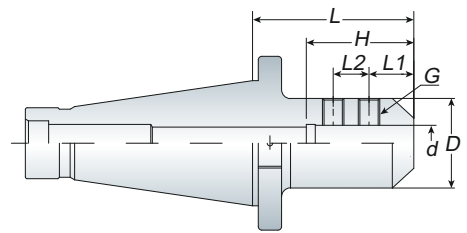
# End Mill Holder

# SLA

# NT series

Model No.	d	D	L	L1	L2	H	G	Draw Bolt	Weight (kg)
NT30 SLA06-055	6	25	55	12	10	32	M6	1/2"-12 M12x1.75P	0.60
SLA08-055	8	28	55	14	12	36	M8		0.60
SLA10-055	10	35	55	15	14	40	M10		0.65
SLA12-055	12	40	55	20	15	45	M10		0.80
SLA16-060	16	45	60	22	18	50	M10		0.90
SLA20-065	20	50	65	25	20	60	M12		1.00
SLA25-075	25	55	75	25	22	65	M12	1.30	
NT40 SLA06-055	6	25	55	12	10	32	M6	5/8"-11 M16x2.0P	1.10
SLA08-055	8	28	55	14	12	36	M8		1.10
SLA10-055	10	35	55	15	14	40	M10		1.20
SLA12-055	12	40	55	20	15	45	M10		1.20
SLA16-060	16	45	60	22	16	50	M10		1.35
SLA20-065	20	50	65	20	18	60	M12		1.50
SLA25-075	25	55	75	20	22	65	M12		1.75
SLA32-090	32	60	90	30	22	70	M16		2.10
SLA42-105	42	80	105	32	24	80	M16		3.60
NT50 SLA06-090	6	25	90	12	10	32	M6	1"-8 M24x3.0P	3.10
SLA08-090	8	28	90	14	12	36	M8		3.10
SLA10-090	10	35	90	15	14	40	M10		3.15
SLA12-090	12	40	90	20	16	45	M10		3.30
SLA16-090	16	45	90	22	18	50	M10		3.60
SLA20-090	20	50	90	25	20	60	M12		3.65
-150	20	50	150	25	20	60	M12		4.70
SLA25-090	25	55	90	25	22	65	M12		3.80
-150	25	55	150	25	22	65	M12		4.90
SLA32-090	32	60	90	30	22	70	M16		4.00
-150	32	60	150	30	22	70	M16		5.30
-200	32	60	200	30	22	70	M16		6.30
SLA42-105	42	80	105	32	24	80	M16		5.10
SLA50.8-105	50.8	95	105	35	25	90	M20	6.10	

Unit: mm

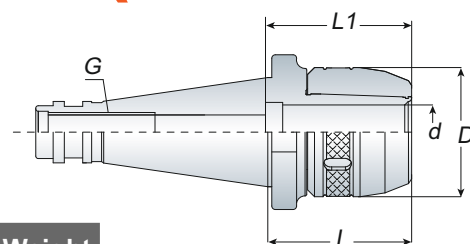


- When ordering, please specify the draw bolt with inch size or metric size.
- For straight shank end mill.
- End mill is held by two set screws.
- End mill holder comes equipped with set screws.

## Milling Chuck



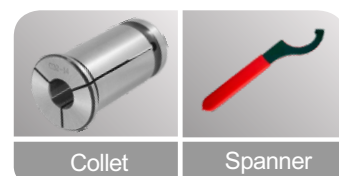
## NT(DIN2080)



Order No	Clamping Range	d	D	L	L1	Collet Type	G	Weight (kg)
NT 40 -C25-080	6~25	25	58	80	85	C25	M16	1.70
-130	6~25	25	58	130	85	C25	M16	2.60
-C32-085	6~32	32	68	85	95	C32	M16	2.20
-130	6~32	32	68	130	95	C32	M16	3.00
NT 50 -C25-085	6~25	25	58	85	85	C25	M24	3.90
-150	6~25	25	58	150	85	C25	M24	5.30
C32-090	6~32	32	68	90	95	C32	M24	4.60
-150	6~32	32	68	150	95	C32	M24	5.60
C42-095	6~42	42	84	95	100	C42	M24	4.70
-150	6~42	42	84	150	100	C42	M24	6.80

Unit: mm

- C-type wrench is attached for each C milling chuck.





- For straight shank end mill.
- End mill is held by one (FIG.1) or two (FIG.2) set screws.
- End mill holder comes equipped with set screws.

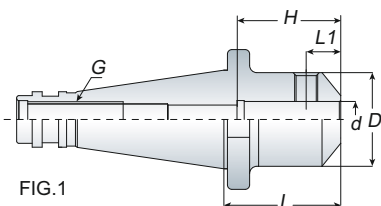


FIG.1

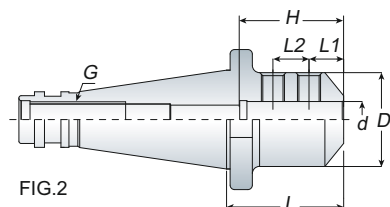


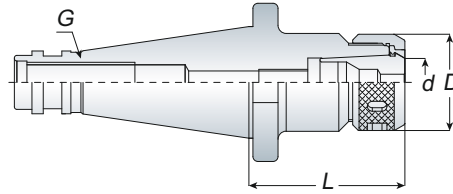
FIG.2

Order no	FIG	d	D	L	L1	L2	H	G	WEIGHT (KG)
NT30-SLA6-100	2	6	25	100	-	-	-	M12	-
NT30-SLA8-60	2	8	28	60	-	-	-	M12	-
NT30-SLA10-60	2	10	35	60	-	-	-	M12	-
NT30-SLA12-60	2	12	42	60	-	-	-	M12	-
NT30-SLA16-75	2	16	48	75	-	-	-	M12	-
NT30-SLA20-75	2	20	52	75	-	-	-	M12	-
NT30-SLA25-90	2	25	65	90	-	-	-	M12	-
NT40-SLA6-75	2	6	25	75	-	-	-	M16	-
NT40-SLA6-100	2	6	25	100	-	-	-	M16	-
NT40-SLA8-75	2	8	28	75	-	-	-	M16	-
NT40-SLA8-100	2	8	35	100	-	-	-	M16	-
NT40-SLA10-75	2	10	35	75	-	-	-	M16	-
NT40-SLA10-100	2	10	35	100	-	-	-	M16	-
NT40-SLA12-75	2	12	42	75	-	-	-	M16	-
NT40-SLA12-100	2	12	42	100	-	-	-	M16	-
NT40-SLA14-90	2	14	-	90	-	-	-	M16	-
NT40-SLA16-90	2	16	48	90	-	-	-	M16	-
NT40-SLA18-90	2	18	-	90	-	-	-	M16	-
NT40-SLA20-90	2	20	52	90	-	-	-	M16	-
NT40-SLA25-80	2	25	65	80	-	-	-	M16	-
NT40-SLA25-90	2	25	65	90	-	-	-	M16	-
NT40-SLA25-100	2	25	65	100	-	-	-	M16	-
NT40-SLA32-80	2	32	72	80	-	-	-	M16	-
NT40-SLA32-105	2	32	72	105	-	-	-	M16	-
NT50-SLA6-105	2	6	25	105	-	-	-	M16	-
NT50-SLA8-105	2	8	28	105	-	-	-	M24	-
NT50-SLA10-105	2	10	35	105	-	-	-	M24	-
NT50-SLA12-105	2	12	42	105	-	-	-	M24	-
NT50-SLA16-105	2	16	48	105	-	-	-	M24	-
NT50-SLA20-100	2	20	52	100	-	-	-	M24	-
NT50-SLA20-150	2	20	52	150	-	-	-	M24	-
NT50-SLA25-80	2	25	65	80	-	-	-	M24	-
NT50-SLA25-100	2	25	65	100	-	-	-	M24	-
NT50-SLA25-150	2	25	65	150	-	-	-	M24	-
NT50-SLA32-80	2	32	47	80	-	-	-	M24	-
NT50-SLA32-105	2	32	72	105	-	-	-	M24	-
NT50-SLA32-150	2	32	72	150	-	-	-	M24	-
NT50-SLA32-200	2	32	72	200	-	-	-	M24	-
NT50-SLA40-80	2	40	90	80	-	-	-	M24	-
NT50-SLA40-105	2	40	90	105	-	-	-	M24	-

# CHUCK

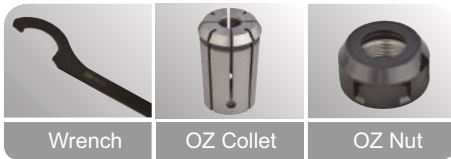
# OZ

# NT Series



## Features:

- OZ collet chuck can clamp drill, end mills and taps.
- Wrench must be ordered separately.

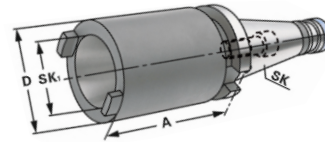


Order no	d	D	L	Collet type	G	WEIGHT (KG)
NT30-OZ25-70	3-25	60	70	OZ25	M12	
NT40-OZ25-80	3-25	60	80	OZ25	M16	
NT40-OZ32-80	3-32	72	80	OZ32	M24	
NT50-OZ25-80	3-25	60	80	OZ25	M16	
NT50-OZ25-150	3-25	60	150	OZ25	M16	
NT50-OZ32-80	3-32	72	80	OZ32	M24	
NT50-OZ32-105	3-32	72	105	OZ32	M24	

Unit: mm

# Adapter

# NT



## Features:

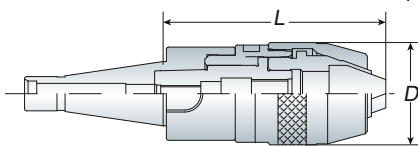
For holding tapers according to DIN 69871, JIS B 6339 and DIN 2080.

Model No.	D	A	Sk1
NT 40 NT 30	50	50	50
NT 50 NT 40	50	50	50

Unit: mm

# Drill Chuck

# APU

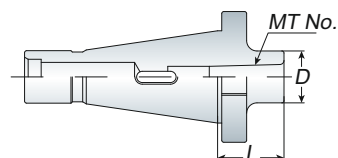


## Features:

- When ordering, please specify the draw bolt with inch size or metric size.
- The shank and keyless drill chuck are combined together so that to avoid the drill chuck slipping out for heavy-duty and high-speed cutting.
- Wrench is attached for each APU drill chuck holder.

Model No.	Clamping Range	D	L		Draw Bolt	Weight (kg)
			Min.	Max.		
NT30 APU08-080	0.3~8	37.5	75	82	1/2"-12 M12x1.75P	0.90
APU13-100	0.3~13	50.5	94	104.5		1.65
NT40 APU08-085	0.3~8	37.5	79	86.5	5/8"-11 M16x2.0P	1.50
APU13-110	0.3~13	50.5	98	109		2.10
APU16-130	3~16	57	116	130		2.50
NT50 APU08-095	0.3~8	37.5	90	97.5	1"-8 M24x3.0P	3.80
APU13-120	0.3~13	50.5	109	120		4.10
-180	0.3~13	50.5	169	180		4.80
APU16-130	3~16	57	116	130		4.50
-190	3~16	57	176	190		5.80

Unit: mm



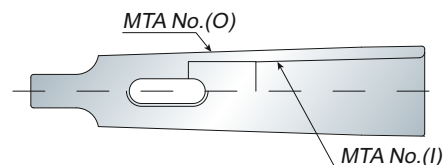
- The tool holder for morse taper shank with internal tang.
- When ordering, please specify the draw bolt with inch size or metric size.

Model No.	MT. NO.	D	L	Draw Bolt	Weight (kg)
NT30 MTA1-045	MTA1	25	45	1/2"-12 M12x1.75P	0.50
	MTA2	32	50		0.50
	MTA3	40	65		0.75
NT40 MTA1-030	MTA1	25	30	5/8"-11 M16x2.0P	0.90
	MTA2	32	40		0.95
	MTA3	40	70		1.20
	MTA4	50	90		1.50
NT50 MTA2-030	MTA2	32	30	1"- 8 M24x3.0P	2.80
	MTA3	40	30		2.80
	MTA4	50	70		3.10
	MTA5	65	105		4.00

Unit: mm



## Morse Taper Sleeve



- Morse taper sleeve is used to convert morse taper shank tools

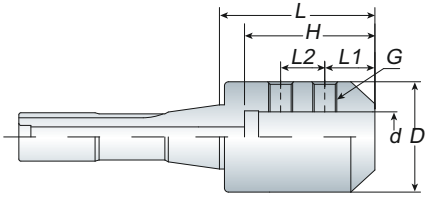
Model No.	MTA No. (O)	MTA No. (I)	Weight (kg)
MTA3-MTA1	MTA3	MTA1	0.25
	MTA3	MTA2	0.20
MTA4-MTA1	MTA4	MTA1	0.55
	MTA4	MTA2	0.50
	MTA4	MTA3	0.45
MTA5-MTA1	MTA5	MTA1	1.50
	MTA5	MTA2	1.45
	MTA5	MTA3	1.30
	MTA5	MTA4	1.10

Unit: mm

# R8 End mill

# SLA

# R8 series



Model No.	d	D	L	L1	L2	H	G	Weight (kg)
R8 SLA06-055	6	25	55	12	10	32	M6	0.60
SLA08-055	8	28	55	14	12	36	M8	0.77
SLA10-055	10	35	55	15	14	40	M10	0.77
SLA12-055	12	40	55	18	16	45	M10	0.90
SLA16-060	16	45	60	20	18	50	M10	1.04
SLA20-065	20	50	65	25	20	60	M12	1.21
SLA25-075	25	55	75	25	22	65	M12	1.39

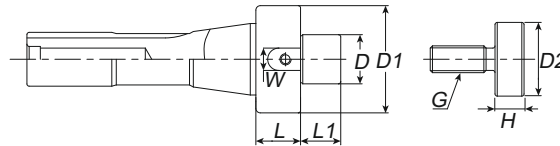
Unit: mm

- For straight shank end mill.
- End mill is held by two set screws.
- End mill holder comes equipped with set screws.



# FMB R8 face mill holder

- Face mill holder equips with screw and drive keys to assemble the face mill cutter to the holder.
- Face mill cutter must be ordered separately.



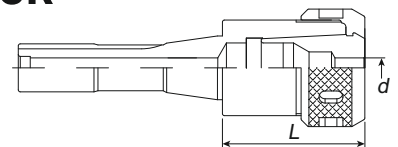
Model No.	D	D1	D2	L	L1	W	H	G	Weight (kg)
R8 FMB22-020	22	48	-	20	18	10	-	M10	0.80
FMB27-020	27	54	32	20	20	12	13	M12	1.00

Unit: mm



# OZ

# Collet chuck



- Wrench must be ordered separately.

Model No.	d	L	Collet Type	Weight (kg)
R8 OZ25	3~25	70	OZ25	1.25
OZ32	6~32	87	OZ32	2.20

Unit: mm



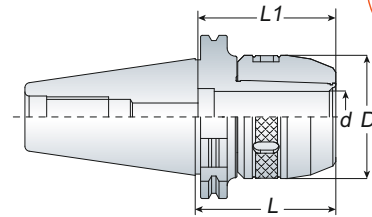
# SK

## SERIES

DIN 69871A

# SK(69871)

## Milling Chuck



• C-type wrench is attached for each C milling chuck.

Order No	Clamping Range	d	D	L	L1	Collet Type	Weight (kg)
SK40-C16-090	3~16	16	46	90	65	C16	1.80
C20-090	4~20	20	53	90	72	C20	2.00
C-25-095	6~25	25	58	95	85	C25	2.00
-130	6~25	25	58	130	85	C25	2.70
C32-095	6~32	32	68	95	95	C32	2.20
-130	6~32	32	68	130	95	C32	3.00
SK50-C16-105	3~16	16	46	105	65	C16	4.00
C20-105	4~20	20	53	105	72	C20	4.20
C25-095	6~25	25	58	95	85	C25	4.10
-150	6~25	25	58	150	85	C25	5.00
C32-105	6~32	32	68	105	95	C32	4.70
-150	6~32	32	68	150	95	C32	5.90
C42-110	6~42	42	84	110	100	C42	5.00
-160	6~42	42	84	160	100	C42	7.10

Unit: mm

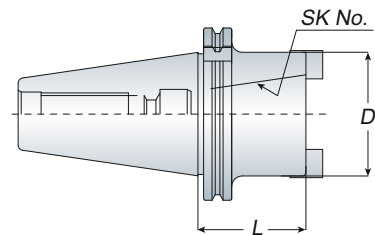


Collet

Spanner



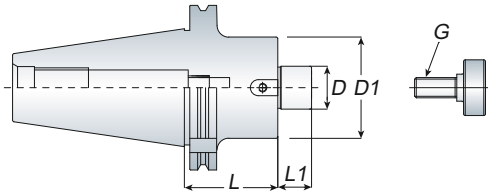
## SK Adapter



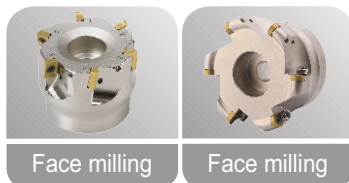
• Use the adapter to switch the taper shank.

Model No.	D	L
SK40 SKA30-050	50	50
SK50 SKA30-050	50	50
SKA40-070	70	70

Unit: mm



- Face mill holder equips with screw and drive keys to assemble the face mill cutter to the holder.
- FMB face mill holder - long type upon your request.
- Face mill cutter must be ordered separately.
- Available for long Length=250mm & 300mm
- Available for D=60



Order no	D	D1	L	L1	G	WEIGHT (KG)
SK30-FMB16-45	16	38	45	17	M08	-
SK30-FMB22-45	22	48	45	18	M10	-
SK30-FMB27-45	27	58	45	21	M12	-
SK30-FMB32-45	32	78	45	24	M16	-
SK40-FMB16-45	16	38	45	17	M08	-
SK40-FMB16-75	16	38	75	17	M08	-
SK40-FMB16-100	16	38	100	17	M08	-
SK40-FMB16-150	16	38	150	17	M08	-
SK40-FMB16-200	16	38	200	17	M08	-
SK40-FMB22-45	22	48	45	18	M10	-
SK40-FMB22-75	22	48	75	18	M10	-
SK40-FMB22-100	22	48	100	18	M10	-
SK40-FMB22-150	22	48	150	18	M10	-
SK40-FMB22-200	22	48	200	18	M10	-
SK40-FMB27-45	27	58	45	21	M12	-
SK40-FMB27-100	27	58	100	21	M12	-
SK40-FMB27-150	27	58	150	21	M12	-
SK40-FMB27-200	27	58	200	21	M12	-
SK40-FMB32-45	32	78	45	24	M16	-
SK40-FMB32-100	32	78	100	24	M16	-
SK40-FMB32-150	32	78	150	24	M16	-
SK40-FMB32-200	32	78	200	24	M16	-
SK40-FMB40-45	40	88	45	27	M20	-
SK40-FMB40-100	40	88	100	27	M20	-
SK40-FMB40-150	40	88	150	27	M20	-
SK40-FMB40-200	40	88	200	27	M20	-
SK50-FMB16-100	16	38	100	17	M08	-
SK50-FMB16-150	16	38	150	17	M08	-
SK50-FMB16-200	16	38	200	17	M08	-
SK50-FMB22-100	22	48	100	18	M10	-
SK50-FMB22-150	22	48	150	18	M10	-
SK50-FMB22-200	22	48	200	18	M10	-
SK50-FMB27-75	27	58	75	21	M12	-
SK50-FMB27-100	27	58	100	21	M12	-
SK50-FMB27-150	27	58	150	21	M12	-
SK50-FMB27-200	27	58	200	21	M12	-
SK50-FMB32-75	32	78	75	24	M16	-
SK50-FMB32-100	32	78	100	24	M16	-
SK50-FMB32-150	32	78	150	24	M16	-
SK50-FMB32-200	32	78	200	24	M16	-
SK50-FMB40-75	40	88	75	27	M20	-
SK50-FMB40-100	40	88	100	27	M20	-
SK50-FMB40-150	40	88	150	27	M20	-
SK50-FMB40-200	40	88	200	27	M20	-

Unit: mm



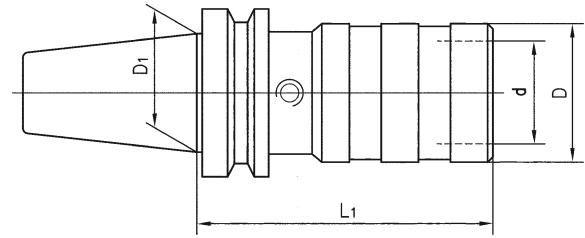
# SK SERIES

DIN 69871A

## TAPPING COLLET

## TAPPING CHUCK

This unit is consisted of chuck and tap collet. The chuck has installed compensating device for thread pitch. There are two different tap collets, one with overload protection and one without. When using the tap collet with overload protection, the protection device can automatically release to avoid tap-break. Just adjust nuts and you can get the different release torque quickly and conveniently.



Order no	Tapping range	D(mm)	D(mm)	d(mm)	L1(mm)
SK30	M3-M12	36	31.75	19	70.1
SK40	M3-M12	36	44.45	19	66.7
SK50	M3-M12	36	69.85	19	66.7
BT30	M3-M12	36	31.75	19	69.6
BT40	M3-M12	36	44.45	19	74.6
BT50	M3-M12	36	69.85	19	85.6
SK30	M5-M24	56	31.75	31	89.6
SK40	M5-M24	56	44.45	31	89.6
SK50	M5-M24	56	69.85	31	89.6
BT30	M5-M24	56	31.75	31	94.6
BT40	M5-M24	56	44.45	31	97.5
BT50	M5-M24	56	69.85	31	108.5
SK30	M14-M36	80	31.75	48	126.1
SK40	M14-M36	80	44.45	48	146
SK50	M14-M36	80	69.85	48	144
BT30	M14-M36	80	31.75	48	129
BT40	M14-M36	80	44.45	48	149
BT50	M14-M36	80	69.85	48	160

Unit: mm



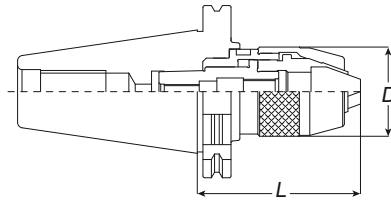
Tapping Collet  
without clutch



Tapping Collet  
with clutch

# APU | Drill Chuck Holder

**SK**  
series  
DIN 69871A

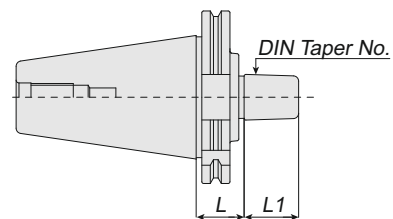


- The shank and keyless drill chuck are combined together so that to avoid the drill chuck slipping out for heavy-duty and high-speed cutting.
- Wrench is attached for each APU drill chuck holder.

Model No.	Clamping Range	D	L		Weight (kg)
			Min.	Max.	
SK30 APU08-063	0.3~8	37.5	57	64.5	0.90
APU13-100	0.3~13	50.5	88	99	1.60
SK40 APU08-085	0.3~8	37.5	69	86.5	1.40
APU13-100	0.3~13	50.5	88	99	1.80
APU16-120	3~16	57	106	120	2.40
SK50 APU13-120	0.3~13	50.5	99	120	4.10
-170	0.3~13	50.5	159	170	5.20
APU16-120	3~16	57	106	120	4.40
-180	3~16	57	166	180	5.50

Unit: mm

# B TYPE | Drill Chuck Holder - B Type



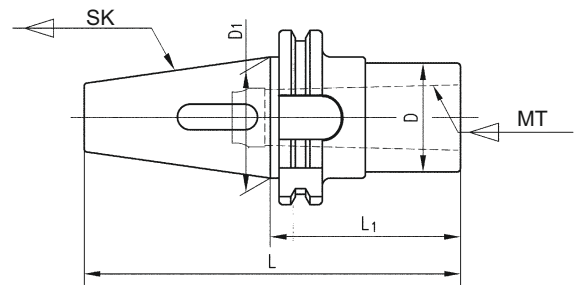
Model No.	DIN Taper No.	L	L1	Weight (kg)
SK40 B16	B16	32	24	1.20
B18	B18	32	32	1.30
SK50 B16	B16	43	24	2.80
B18	B18	43	32	3.00

Unit: mm

- Available SK30: B12 - B16 - B18 - B22
- Available for B22



1. When order please indicate the hilt the concrete form. If needs in the center cold and the flange water leakage hilt, please mark AD/B.
2. According to needs to be possible to provide the balanced hilt, the standard precision is G6.3/12000rpm, the precise precision is G2.5/20000rpm.

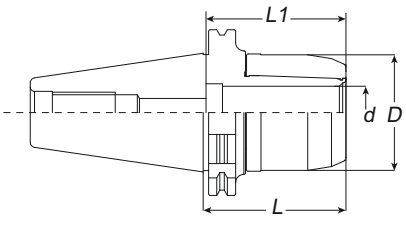


Order no	L1	L	D	D1	Kg
SK30-MT1	50	97.8	25	31.75	0.55
SK30-MT2	60	107.8	32	31.75	0.8
SK30-MT3	75	122.8	40	31.75	0.85
SK40-MT1	45	113.4	25	44.45	1.2
SK40-MT1	50	118.4	25	44.45	1.3
SK40-MT2	50	118.4	32	44.45	1.5
SK40-MT2	60	128.4	32	44.45	1.56
SK40-MT3	75	143.4	40	44.45	1.8
SK40-MT4	95	163.4	48	44.45	2.4
SK50-MT1	45	146.75	25	69.85	4.05
SK50-MT2	60	161.75	32	69.85	4.4
SK50-MT3	65	166.75	40	69.85	4.5
SK50-MT4	95	196.75	48	69.85	4.9
SK50-MT5	100	201.75	61	69.82	5.1
SK50-MT5	105	206.75	61	69.85	5.15

Unit: mm

# High Speed Milling Chuck | **ASG**

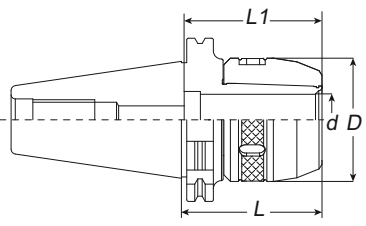
**SK**  
series  
DIN 69871A



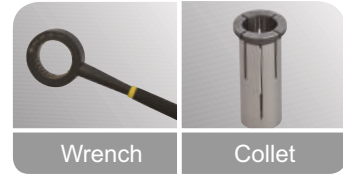
Model No.	Clamping Range	d	D	L	L1	Collet Type	Weight (kg)
SK40 ASG12-090	3~12	12	35	90	-	SC12	1.40
ASG16-090	3~16	16	46	90	65	SC16	1.80
ASG20-090	4~20	20	54	90	72	SC20	2.00
SK50 ASG12-075	3~12	12	35	75	-	SC12	3.20
-105	3~12	12	35	105	-	SC12	3.50
ASG16-105	3~16	16	46	105	65	SC16	4.10
ASG20-105	4~20	20	54	105	72	SC20	4.40

Unit: mm

- ASG tooling system is suitable for high speed and high precision cutting.
- When using without collet, ASG tooling system is designed for coolant type - THROUGH TOOLS.
- Dust-proof design could extend tool holder lifetime.
- Wrench must be ordered separately.
- Balancing:30,000 r.p.m G2.5



## Milling POWER CHUCK



Wrench

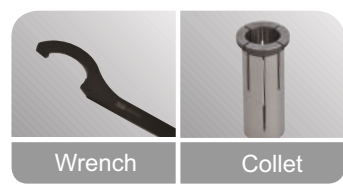
Collet



Model No.	Clamping Range	d	D	L	L1	Collet Type	Weight (kg)
SK40 ASC16-090	3~16	16	46	90	65	SC16	1.80
ASC20-090	4~20	20	53	90	72	SC20	2.00
ASC25-095	6~25	25	58	95	85	SC25	2.00
-130	6~25	25	58	130	85	SC25	2.70
ASC32-095	6~32	32	68	95	95	SC32	2.20
-130	6~32	32	68	130	95	SC32	3.00
SK50 ASC16-105	3~16	16	46	105	65	SC16	4.00
ASC20-105	4~20	20	53	105	72	SC20	4.20
ASC25-095	6~25	25	58	95	85	SC25	4.10
-150	6~25	25	58	150	85	SC25	5.00
ASC32-105	6~32	32	68	105	95	SC32	4.70
-150	6~32	32	68	150	95	SC32	5.90
ASC42-110	6~42	42	84	110	100	SC42	5.00
-160	6~42	42	84	160	100	SC42	7.10

Unit: mm

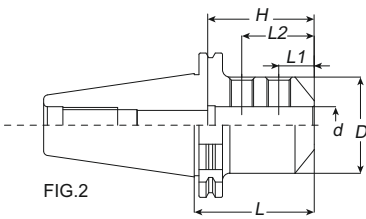
- C-type wrench is attached for each ASC milling chuck.



Wrench

Collet

- For straight shank end mill.
- End mill is held by one (FIG.1) or two (FIG.2) set screws.
- End mill holder comes equipped with set screws.
- Available for SLA=50

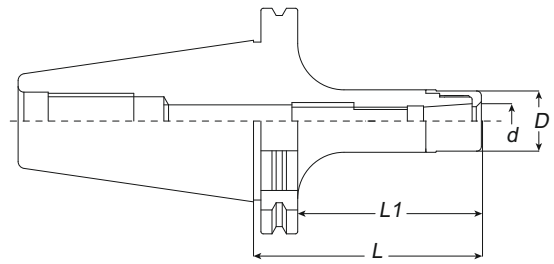


Order no	FIG	d	D	L	L1	L2	H	WEIGHT (KG)
SK30-SLA6-60	2	6	25	60	18	-	-	-
SK30-SLA10-60	2	10	35	60	20	-	-	-
SK30-SLA12-60	2	12	42	60	22.5	-	-	-
SK30-SLA16-75	2	16	48	75	24	-	-	-
SK30-SLA20-75	2	20	52	75	25	-	-	-
SK30-SLA25-90	2	25	65	90	24	49	-	-
SK40-SLA16-100	2	16	25	100	24	-	-	-
SK40-SLA16-150	2	16	25	150	24	-	-	-
SK40-SLA16-200	2	16	25	200	24	-	-	-
SK40-SLA20-150	2	20	52	150	25	-	-	-
SK40-SLA20-200	2	20	52	200	25	-	-	-
SK40-SLA25-100	2	25	65	100	24	49	-	-
SK40-SLA25-150	2	25	65	150	24	49	-	-
SK40-SLA25-200	2	25	65	200	24	49	-	-
SK40-SLA32-75	2	32	72	75	24	52	-	-
SK40-SLA32-100	2	32	72	100	24	52	-	-
SK40-SLA32-150	2	32	72	150	24	52	-	-
SK40-SLA32-200	2	32	72	200	24	52	-	-
SK40-SLA40-75	2	40	90	75	30	62	-	-
SK40-SLA40-100	2	40	90	100	30	62	-	-
SK40-SLA40-150	2	40	90	150	30	62	-	-
SK40-SLA40-200	2	40	90	200	30	62	-	-
SK50-SLA6-105	2	6	25	105	18	-	-	-
SK50-SLA8-105	2	8	28	105	18	-	-	-
SK50-SLA10-105	2	10	35	105	20	-	-	-
SK50-SLA12-105	2	12	42	105	22.5	-	-	-
SK50-SLA16-105	2	16	48	105	24	-	-	-
SK50-SLA20-105	2	20	52	105	25	-	-	-
SK50-SLA20-150	2	20	52	150	25	-	-	-
SK50-SLA25-110	2	25	65	110	24	49	-	-
SK50-SLA25-160	2	25	65	160	24	49	-	-
SK50-SLA32-100	2	32	72	100	24	52	-	-
SK50-SLA32-150	2	32	72	150	24	52	-	-
SK50-SLA32-200	2	32	72	200	24	52	-	-
SK50-SLA40-100	2	40	90	100	30	62	-	-
SK50-SLA40-150	2	40	90	150	30	62	-	-

Unit: mm

# High Speed Collet Chuck | SD

**SK**  
series  
DIN 69871A

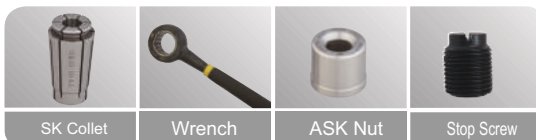


## Features

- SD tooling systems are suitable for high speed and high precision cutting.
- Special nut design provides better cutting condition and reducing cutting vibration.
- SD collet can be achieve the best cutting condition when using AA grade.
- Wrench and Stop Screw must be ordered separately.
- Balancing: 30,000 r.p.m G2.5

Model No.	Clamping Range (d)	D	L	L1	Weight (kg)
SK30 SD06-060	2~6	20	60	35.9	0.60
SD10-070	2~10	27	70	50.9	0.70
-090	2~10	27	90	75.9	0.80
SD16-060	3~16	40	60	40.9	0.90
-090	3~16	40	90	65.9	1.00
-120	3~16	40	120	80.9	1.10
SD20-060	4~20	48	60	40.9	0.80
SD25-085	6~25.4	54	85	65.9	1.20
SK40 SD06-080/090	2~6	20	80/90	60.9	1.10/1.20
-100	2~6	20	100	80.9	1.30
SD10-080/090	2~10	27	80/90	60.9	1.20/1.30
-100	2~10	27	100	80.9	1.40
SD13-080	3~13	33	80	60.9	1.30
-100	3~13	33	100	80.9	1.50
SD16-080	3~16	40	80	60.9	1.40
-100	3~16	40	100	80.9	1.50
SD20-090	4~20	48	90	70.9	1.80
SD25-095	6~25.4	54	95	75.9	1.90
-110	6~25.4	54	110	90.9	2.00
SK50 SD06-100	2~6	20	100	80.9	3.00
SD10-100	2~10	27	100	80.9	3.30
-130	2~10	27	130	110.9	3.40
-150	2~10	27	150	130.9	3.50
SD13-100	3~13	33	100	80.9	4.50
-130	3~13	33	130	110.9	4.70
-150	3~13	33	150	130.9	4.90
SD16-100	3~16	40	100	80.9	3.50
-130	3~16	40	130	110.9	3.70
-150	3~16	40	150	130.9	3.90
SD20-100	4~20	48	100	80.9	4.60
-130	4~20	48	130	110.9	5.00
-150	4~20	48	150	130.9	5.60
SD25-100	6~25.4	54	100	80.9	3.80
-130	6~25.4	54	130	110.9	4.00
-150	6~25.4	54	150	130.9	4.20

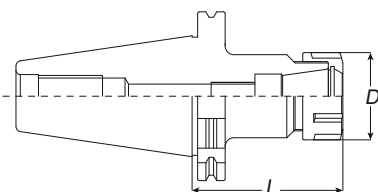
Unit: mm





## Features:

- ER collet chuck with the flexibility that can clamp drill ,reamers , end mills and taps.
- ER16 / ER20 holder can make M type as your choice.
- ER collet chuck is also suitable for ER bearing nut and wrench.
- ER spring collet chuck – long type upon your request.
- Wrench and stop screw must be ordered separately.

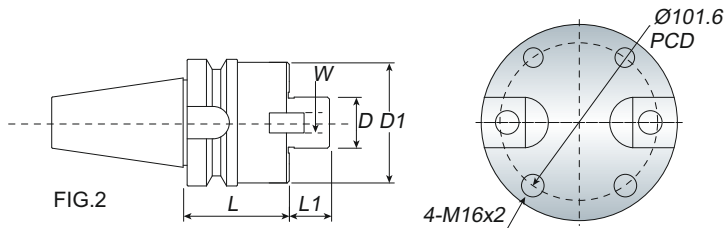
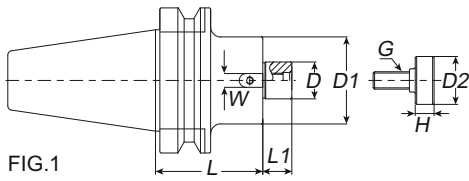


Order no	FIG	d	D	L	L1	L2	H	WEIGHT (KG)
SK30-SLA6-60	2	6	25	60	18	-	-	-
SK30-SLA10-60	2	10	35	60	20	-	-	-
SK30-SLA12-60	2	12	42	60	22.5	-	-	-
SK30-SLA16-75	2	16	48	75	24	-	-	-
SK30-SLA20-75	2	20	52	75	25	-	-	-
SK30-SLA25-90	2	25	65	90	24	49	-	-
SK40-SLA16-100	2	16	25	100	24	-	-	-
SK40-SLA16-150	2	16	25	150	24	-	-	-
SK40-SLA16-200	2	16	25	200	24	-	-	-
SK40-SLA20-150	2	20	52	150	25	-	-	-
SK40-SLA20-200	2	20	52	200	25	-	-	-
SK40-SLA25-100	2	25	65	100	24	49	-	-
SK40-SLA25-150	2	25	65	150	24	49	-	-
SK40-SLA25-200	2	25	65	200	24	49	-	-
SK40-SLA32-75	2	32	72	75	24	52	-	-
SK40-SLA32-100	2	32	72	100	24	52	-	-
SK40-SLA32-150	2	32	72	150	24	52	-	-
SK40-SLA32-200	2	32	72	200	24	52	-	-
SK40-SLA40-75	2	40	90	75	30	62	-	-
SK40-SLA40-100	2	40	90	100	30	62	-	-
SK40-SLA40-150	2	40	90	150	30	62	-	-
SK40-SLA40-200	2	40	90	200	30	62	-	-
SK50-SLA6-105	2	6	25	105	18	-	-	-
SK50-SLA8-105	2	8	28	105	18	-	-	-
SK50-SLA10-105	2	10	35	105	20	-	-	-
SK50-SLA12-105	2	12	42	105	22.5	-	-	-
SK50-SLA16-105	2	16	48	105	24	-	-	-
SK50-SLA20-105	2	20	52	105	25	-	-	-
SK50-SLA20-150	2	20	52	150	25	-	-	-
SK50-SLA25-110	2	25	65	110	24	49	-	-
SK50-SLA25-160	2	25	65	160	24	49	-	-
SK50-SLA32-100	2	32	72	100	24	52	-	-
SK50-SLA32-150	2	32	72	150	24	52	-	-
SK50-SLA32-200	2	32	72	200	24	52	-	-
SK50-SLA40-100	2	40	90	100	30	62	-	-
SK50-SLA40-150	2	40	90	150	30	62	-	-

Unit: mm

# FMB Face Mill Holder - Metric

**BT**  
series  
JIS B 6339



## Features

- Face mill holder equips with screw and drive keys to assemble the face mill cutter to the holder.
- Face mill cutter must be ordered separately.



Model No.	FIG.	D	D1	D2	L	L1	W	H	G	Weight (kg)
BT30 FMB22-045	1	22	46	-	45	18	10	-	M10	0.80
FMB27-045	1	27	60	32	45	20	12	13	M12	1.00
BT40 FMB16-045	1	16	38	-	45	15	8	-	M8	1.3
FMB22-045	1	22	48	-	45	18	10	-	M10	1.40
-060/090	1	22	48	-	60/90	18	10	-	M10	1.60/2.10
-105/125	1	22	48	-	105/125	18	10	-	M10	2.40/2.60
-150/200	1	22	48	-	150/200	18	10	-	M10	2.80/3.50
FMB27-045	1	27	60	32	45	20	12	13	M12	1.70
-060	1	27	60	32	60	20	12	13	M12	2.00
-090/105	1	27	60	32	90/105	20	12	13	M12	2.60/3.00
FMB32-045	1	32	63	41	45	21	14	16	M16	1.80
-060	1	32	63	41	60	21	14	16	M16	2.10
-090/105	1	32	63	41	90/105	21	14	16	M16	3.00/3.30
FMB40-045	1	40	68	47	45	23	16	15	M16	2.00
-060	1	40	68	47	60	23	16	15	M16	2.70
BT50 FMB16-045	1	16	38	-	45	15	8	-	M8	3.8
FMB22-045	1	22	48	-	45	18	10	-	M10	4.00
-075/105	1	22	48	-	75/105	18	10	-	M10	4.50/4.80
-125/150	1	22	48	-	125/150	18	10	-	M10	5.20/5.60
-175/200	1	22	48	-	175/200	18	10	-	M10	6.00/6.30
-250/300	1	22	48	-	250/300	18	10	-	M10	6.90/7.20
-350/400	1	22	48	-	350/400	18	10	-	M10	7.70/8.30
FMB27-045	1	27	65	32	45	20	12	13	M12	4.30
-075	1	27	65	32	75	20	12	13	M12	5.00
-090/105	1	27	65	32	90/105	20	12	13	M12	5.40/5.80
-150/200	1	27	65	32	150/200	20	12	13	M12	7.20/8.90
FMB32-045	1	32	73	41	45	21	14	16	M16	4.40
-075/105	1	32	73	41	75/105	21	14	16	M16	5.40/6.60
-150/200	1	32	73	41	150/200	21	14	16	M16	8.00/9.70
FMB40-045	1/2	40	85	47	45	23	16	15	M16	4.60
-075	1/2	40	85	47	75	23	16	15	M16	5.90
-105/150	1/2	40	85	47	105/150	23	16	15	M16	6.90/8.60
FMB60-075	2	60	128.57	-	75	32	25.4	-	-	7.30

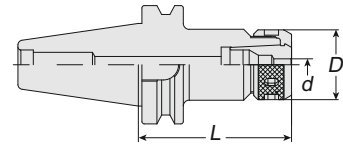
• Available long Length=250mm & 300mm

Unit: mm

**BT**  
series  
JIS B 6339

**OZ**

**Collet Chuck**



- OZ collet chuck can clamp drill, end mills and taps.
- Wrench must be ordered separately.

Model No.	d	D	L	Collet Type	Weight (kg)
BT40 OZ25-080	3~25	60	80	OZ25	1.70
-120	3~25	60	120	OZ25	2.60
OZ32-080	6~32	72	80	OZ32	2.10
-150	6~32	72	150	OZ32	3.60
BT50 OZ25-090	3~25	60	90	OZ25	4.50
-130	3~25	60	130	OZ25	5.10
OZ32-105	6~32	72	105	OZ32	5.40
-150	6~32	72	150	OZ32	6.60

Unit: mm

**BT**

**Adapter**

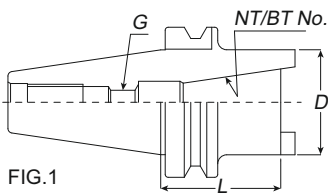


FIG.1

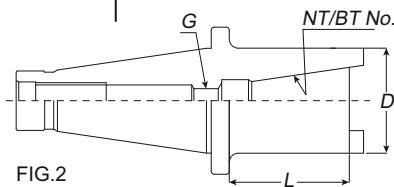


FIG.2



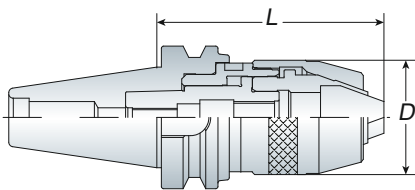
Model No.	FIG.	D	L	G	Draw Bolt	Weight (kg)
BT 50 BT40-075	1	70	75	M16x2.0P	-	4.50
BT40 BT30-075	2	60	75	M12x1.75P	5/8"-11 M16x2.0P	2.00
BT50 BT30-075	2	60	75	M12x1.75P	1"-8	3.00
BT40-075	2	70	75	M16x2.0P	M24x3.0P	4.10

Unit: mm

**Features:**

- Use the adapter to switch the taper shank.
- When ordering, please specify the draw bolt of NT shank with inch size or metric size.

**APU** Drill Chuck Holder



- The shank and keyless drill chuck are combined together so that to avoid the drill chuck slipping out for heavy-duty and high-speed cutting.
- Wrench is attached for each APU drill chuck holder.



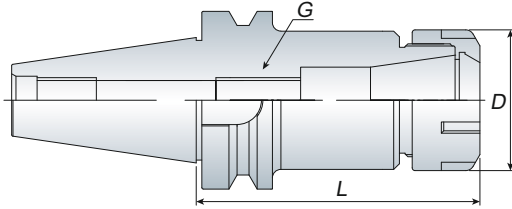
Model No.	Clamping Range	D	L		Weight (kg)
			Min.	Max.	
BT30 APU08-080	0.3~8	37.5	75	82	1.00
APU13-100	0.3~13	50.5	97	104.5	1.50
BT40 APU08-085	0.3~8	37.5	79	86.5	1.50
APU13-110	0.3~13	50.5	98	109	2.00
APU16-130	3~16	57	116	130	2.60
BT50 APU08-095	0.3~8	37.5	90	97.5	4.20
APU13-120	0.3~13	50.5	109	120	4.70
-180	0.3~13	50.5	169	180	5.80
APU16-130	3~16	57	116	130	5.10
-190	3~16	57	176	190	6.20

Unit: mm

# BT Spring Collet Chuck

# ER

**BT**  
series  
JIS B 6339



## Features

- ER collet chuck with the flexibility that can clamp drill, reamers, end mills and taps.
- ER16 / ER20 / ER25 / ER32 / ER40 are also suitable for ER power ball bearing nut, high speed bearing nut and wrench.
- Wrench and Stop screw must be ordered separately.

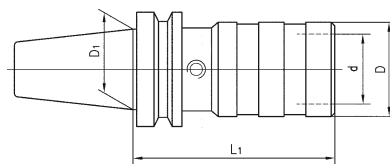


Model No.	Clamping Range	D	L	G	Collet Type	Wrench	Weight (kg)
BT30 ER08-060M	1~5	12	60	M6	ER08	WM08	0.50
-100M	1~5	12	100	M6	ER08	WM08	0.60
ER11-100M	1~7	16	100	M8	ER11	WM11	0.60
ER16-100M	1~10	22	100	M12	ER16	WM16	0.70
ER20-100M	1~13	28	100	M14	ER20	WM20	0.80
BT40 ER11-070M	1~7	16	70	M8	ER11	WM11	1.15
-100M	1~7	16	100	M8	ER11	WM11	1.20
ER16-100M	1~10	22	100	M12	ER16	WM16	1.25
ER20-100M	1~13	28	100	M14	ER20	WM20	1.30
BT30 ER11-060	1~7	19	60	M8	ER11	WER11	0.60
ER16-060	1~10	28	60	M12	ER16	WER16	0.60
-070	1~10	28	70	M12	ER16	WER16	0.70
ER20-060	1~13	34	60	M14	ER20	WER20	0.60
ER25-060	2~16	42	60	M18	ER25	WER25	0.70
ER32-060	2~20	50	60	M24	ER32	WER32	0.75
-070	2~20	50	70	M24	ER32	WER32	0.80
BT40 ER11-070	1~7	19	70	M8	ER11	WER11	1.20
-100	1~7	19	100	M8	ER11	WER11	1.25
ER16-070	1~10	28	70	M12	ER16	WER16	1.20
-100/150	1~10	28	100/150	M12	ER16	WER16	1.40/1.60
ER20-080	1~13	34	80	M14	ER20	WER20	1.30
-100/150	1~13	34	100/150	M14	ER20	WER20	1.50/1.80
ER25-080	2~16	42	80	M18	ER25	WER25	1.50
-100/150	2~16	42	100/150	M18	ER25	WER25	1.70/2.10
ER32-060	2~20	50	60	M24	ER32	WER32	1.30
-070	2~20	50	70	M24	ER32	WER32	1.40
-100/150	2~20	50	100/150	M24	ER32	WER32	1.80/2.60
ER40-080	3~26	63	80	M28	ER40	WER40	1.70
-100	3~26	63	100	M28	ER40	WER40	2.20
BT50 ER16-100/150	1~10	28	100/150	M12	ER16	WER16	4.10/4.30
-200/250/300	1~10	28	200/250/300	M12	ER16	WER16	4.60/5.10/5.40
ER20-100/150	1~13	34	100/150	M14	ER20	WER20	4.20/4.50
-200/250/300	1~13	34	200/250/300	M14	ER20	WER20	4.90/5.50/5.90
ER25-100/150	2~16	42	100/150	M18	ER25	WER25	4.20/4.80
-200/250/300	2~16	42	200/250/300	M18	ER25	WER25	5.30/6.10/6.80
ER32-100/150	2~20	50	100/150	M24	ER32	WER32	4.40/5.20
-200/250/300	2~20	50	200/250/300	M24	ER32	WER32	5.90/6.60/7.50
ER40-080	3~26	63	80	M28	ER40	WER40	4.30
-100/150	3~26	63	100/150	M28	ER40	WER40	4.70/5.90
-200/250/300	3~26	63	200/250/300	M28	ER40	WER40	7.10/8.20/9.30

Unit: mm

**BT**  
series  
JIS B 6339

**TC** | Rigid Tap Holder



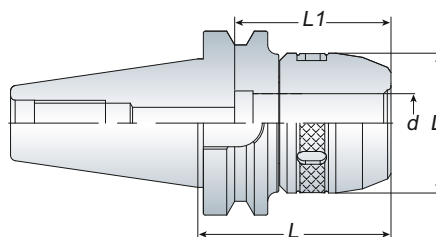
- TC tap holder is without floating.
- Tap collet is easy and quick to change
- Torque control type and positive drive type tap collets can be used for TC tap holder.

Model No.	d	D	L	Tapping Range	Collet Type	Weight (kg)
BT30 TC 312	19	36	60	M3~M12	TC 312	0.60
BT40 TC 312	19	36	65	M3~M12	TC 312	1.20
BT50 TC 312	19	36	80	M3~M12	TC 312	4.00
BT40 TC 820	31	53	85	M8~M22	TC 820	1.60
BT50 TC 820	31	53	95	M8~M22	TC 820	4.40

Unit: mm

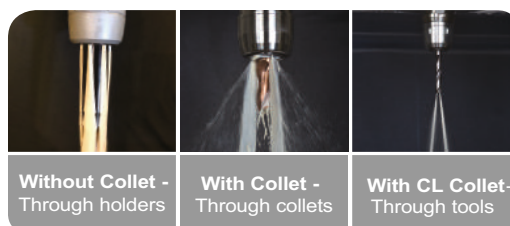
**BT**

**POWER MILLING CHUCK**



Model No.	Clamping Range	d	D	L	L1	Collet Type	Weight (kg)
BT30 -C25-085	6~25	25	58	85	85	C25	1.30
BT40 -C25-090	6~25	25	58	90	85	C25	1.90
-130	6~25	25	58	130	85	C25	2.70
C32-095	6~32	32	68	95	95	C32	2.20
-105	6~32	32	68	105	95	C32	2.80
-130	6~32	32	68	130	95	C32	3.30
BT50 -C25-100	6~25	25	58	100	85	C25	4.60
-150	6~25	25	58	150	85	C25	5.50
C32-105	6~32	32	76	105	95	C32	5.20
-150	6~32	32	76	150	95	C32	6.40
-200	6~32	32	76	200	95	C32	8.50
-250	6~32	32	76	250	95	C32	9.70
C42-110	6~42	42	84	110	100	C42	5.50
-160	6~42	42	84	160	100	C42	7.60

Unit: mm

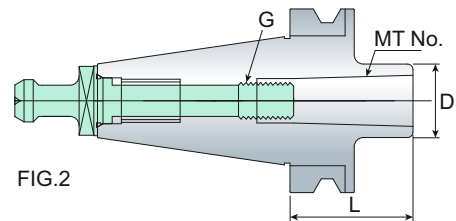
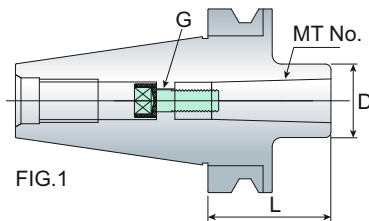


- C-type wrench is attached for each C milling chuck.

# Morse Taper Holder

# MTB

**BT**  
series  
JIS B 6339



Stop screw

- The tool holder for morse taper shank with internal draw bolt thread.
- MTB-FIG.1 type include 1pc stop screw.
- MTB-FIG.2 type should be fitted for extension pull stud.
- The extension pull stud must be ordered separately.

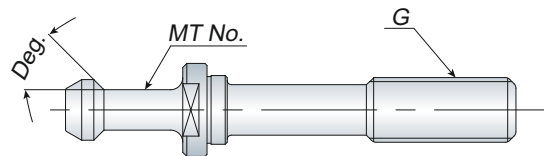
Model No.	FIG.	MT. No.	L	D	G	Capacity			Weight (kg)
						Drill	Reamer	End mill	
BT40 MTB1-045	1	MTB1	45	25	M6x1.0P	2~14	5~14	10~14	1.10
	1	MTB2	45	32	M10x1.5P	14~23	14.5~23	16~22	1.10
	1	MTB3	75	40	M12x1.75P	23~32	24~32	24~32	1.30
	2	MTB4	75	48	M16x2.0P	32~50	32~50	35~50	1.30
BT50 MTB1-045	1	MTB1	45	25	M6x1.0P	2~14	5~14	10~14	3.80
	1	MTB2	45	32	M10x1.5P	14~23	14.5~23	16~22	3.85
	1	MTB3	60	40	M12x1.75P	23~32	24~32	24~32	3.90
	1	MTB4	75	50	M16x2.0P	32~50	32~50	35~50	4.00
	2	MTB5	120	70	M20x2.5P	50~75	50	40~75	4.90

Unit: mm



## Extension Pull Stud

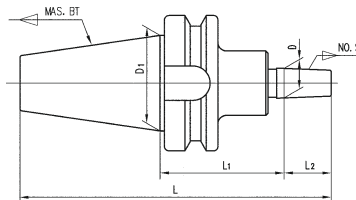
- When ordering, please specify the degree is 45, 60 or 90deg.



Model No.	MT. No.	G	Deg.	Weight (kg)
MTB4 (M16)	MTB4	M16x2.0P	45/60/90	0.15
MTB5 (M20)	MTB5	M20x2.5P		0.45

Unit: mm

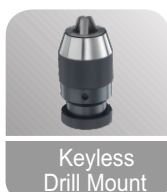




- Keyless drill mount must be ordered separately

Order no	NO.S	L2	L	D	D1	Thread	WEIGHT (KG)
BT30-B10-45	B10	14.5	107.9	10.094	31.75	M12	0.60
BT30-B12-45	B12	18.5	111.9	12.065	31.75	M12	0.60
BT30-B16-45	B16	24	117.4	15.733	31.75	M12	0.70
BT30-B18-45	B18	32	125.4	17.78	31.75	M12	0.82
BT40-B10-45	B10	14.5	124.9	10.094	44.45	M16	1.40
BT40-B10-120	B10	14.5	199.9	10.094	44.45	M16	1.76
BT40-B12-45	B12	18.5	128.9	12.065	44.45	M16	1.34
BT40-B16-45	B16	24	134.4	15.733	44.45	M16	1.45
BT40-B16-75	B16	24	164.4	15.733	44.45	M16	1.55
BT40-B16-90	B16	24	179.4	15.733	44.45	M16	1.40
BT40-B18-45	B18	32	142.4	17.78	44.45	M16	1.70
BT40-B18-75	B18	32	172.4	17.78	44.45	M16	1.76
BT50-B10-45	B10	14.5	161.3	10.094	69.85	M24	3.60
BT50-B12-45	B12	18.5	165.3	12.065	69.85	M24	3.60
BT50-B16-75	B16	24	200.8	15.733	69.85	M24	3.74
BT50-B16-90	B16	24	215.8	15.733	69.85	M24	3.78
BT50-B18-45	B18	32	178.8	17.78	69.85	M24	3.70

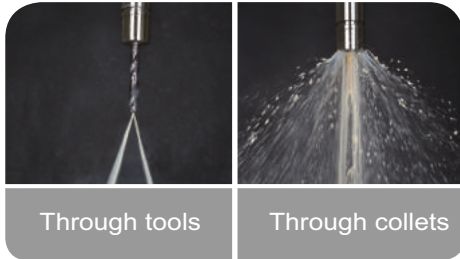
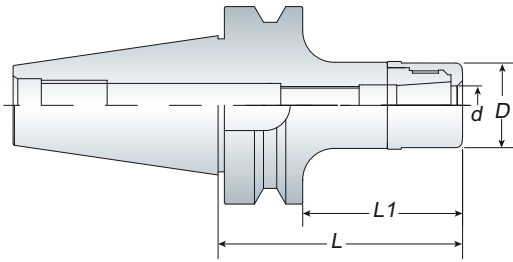
Unit: mm



# SD

# High Speed Collet Chuck

**BT**  
series  
JIS B 6339



Through tools must use integer collet and coolant nut together.

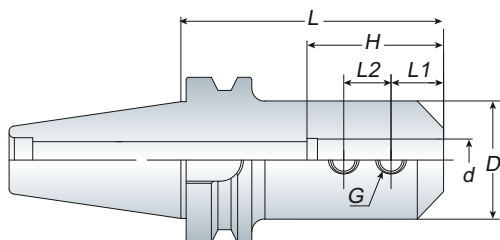
## Features

- ASK tooling systems are suitable for high speed and high precision cutting.
- Special nut design provides better cutting condition and reducing cutting vibration.
- SD collet can be achieve the best cutting condition when using AA grade.
- Wrench and Stop Screw must be ordered separately.
- Balancing: 30,000 r.p.m G2.5

Model No.	Clamping Range (d)	D	L1	L	Weight (kg)
BT30 SD06-060	2~6	19.05	38	60	0.60
-090	2~6	19.05	68	90	0.60
SD10-070	2~10	27	48	70	0.70
-090	2~10	27	68	90	0.80
SD13-060	3~13	33	38	60	1.00
-075	3~13	33	53	75	1.10
-090	3~13	33	68	90	1.10
SD16-060	3~16	40	38	60	0.70
-090	3~16	40	68	90	0.90
-120	3~16	40	98	120	1.10
SD20-060	4~20	48	38	60	0.80
SD25-085	6~25.4	54	63	85	1.20
BT40 SD06-060	2~6	19.05	33	60	1.10
-090	2~6	19.05	63	90	1.30
-120	2~6	19.05	93	120	1.50
SD10-060	2~10	27	33	60	1.20
-080	2~10	27	53	80	1.30
-090	2~10	27	63	90	1.35
-100	2~10	27	73	100	1.40
-120	2~10	27	93	120	1.50
-150	2~10	27	123	150	1.60
SD13-060	3~13	33	33	60	1.20
-080	3~13	33	53	80	1.30
-090	3~13	33	63	90	1.40
-100	3~13	33	73	100	1.50
-120	3~13	33	93	120	1.60
-150	3~13	33	123	150	1.80
SD16-060	3~16	40	33	60	1.30
-080	3~16	40	53	80	1.50
-090	3~16	40	63	90	1.55
-100	3~16	40	73	100	1.60
-120	3~16	40	93	120	1.90
-150	3~16	40	123	150	2.10
SD20-060	4~20	48	33	60	1.30
-090	4~20	48	63	90	1.80
-120	4~20	48	93	120	2.40
SD25-070	6~25.4	54	43	70	1.50
-090	6~25.4	54	63	90	1.90
-120	6~25.4	54	93	120	2.20

Unit: mm





## Features

- For straight shank end mill.
- End mill is held by two set screws.
- End mill holder comes equipped with set screws.

Model No.	d	D	L	L1	L2	H	G	Weight (kg)
BT30 SLA06-060	6	25	60	12	10	32	M6	0.60
SLA08-060	8	28	60	14	12	36	M8	0.65
SLA10-060	10	35	60	15	14	40	M10	0.70
SLA12-060	12	40	60	18	16	45	M10	0.80
SLA16-075	16	45	75	22	18	50	M10	0.80
SLA20-075	20	50	75	25	20	60	M12	1.10
SLA25-075	25	55	75	25	22	65	M12	1.10
BT40 SLA06-075	6	25	75	12	10	32	M6	1.20
-100	6	25	100	12	10	32	M6	1.30
SLA08-075	8	28	75	14	12	36	M8	1.25
-100	8	28	100	14	12	36	M8	1.40
SLA10-075	10	35	75	15	14	40	M10	1.35
-100	10	35	100	15	14	40	M10	1.50
SLA12-075	12	40	75	20	16	45	M10	1.45
-100	12	40	100	20	16	45	M10	1.65
SLA14-075	14	42	75	18	16	45	M10	1.50
-100	14	42	100	18	16	45	M10	1.75
SLA16-075	16	45	75	20	18	50	M10	1.50
-100	16	45	100	20	18	50	M10	1.85
SLA18-075	18	48	75	20	18	50	M12	1.60
-100	18	48	100	22	18	50	M12	1.90
SLA20-075	20	50	75	20	18	60	M12	1.60
-100	20	50	100	25	20	60	M12	2.00
SLA25-075	25	55	75	22	18	65	M12	1.60
-100	25	55	100	25	22	65	M12	2.00
SLA32-090	32	60	90	30	22	70	M16	2.00
SLA40-105	40	80	105	30	22	80	M16	3.10
SLA42-105	42	80	105	30	22	80	M16	3.10
BT50 SLA06-105/150/200	6	25	105/150/200	12	10	32	M6	4.10/4.30/4.60
SLA08-105/150/200	8	28	105/150/200	14	12	36	M8	4.10/4.35/4.65
SLA10-105/150/200	10	35	105/150/200	15	14	40	M10	4.20/4.50/5.10
SLA12-105/150/200	12	40	105/150/200	20	16	45	M10	4.35/4.80/5.30
SLA14-105	14	42	105	18	16	45	M10	4.35
SLA16-105/150/200	16	45	105/150/200	22	18	50	M10	4.45/4.90/5.60
-250/300	16	45	250/300	22	18	50	M10	6.60/6.90
SLA18-105	18	48	105	22	18	55	M10	4.50
SLA20-105/150/200	20	50	105/150/200	25	20	60	M12	4.50/5.20/5.90
-250/300	20	50	250/300	25	20	60	M12	6.60/7.75
SLA25-105/150/200	25	55	105/150/200	25	22	65	M12	4.60/5.40/6.50
-250/300	25	55	250/300	25	22	65	M12	7.00/8.50
SLA32-105/150/200	32	60	105/150/200	30	22	70	M16	4.70/5.80/6.60
-250/300	32	60	250/300	30	22	70	M16	7.60/9.30
SLA40-105/150/200	40	80	105/150/200	30	22	80	M16	5.40/7.00/9.00
-250	40	80	250	30	22	80	M16	10.80
SLA42-105/150/200	42	80	105/150/200	35	25	80	M20	5.50/7.00/8.90
-250	42	80	250	35	25	80	M20	10.80
SLA50.8-105	50.8	95	105	35	25	90	M20	6.00
SLA50.8-150	50.8	95	150	35	25	90	M20	8.50



# Morse Taper Holder

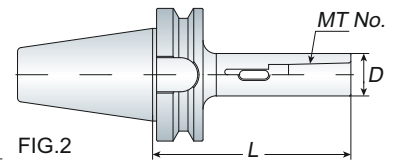
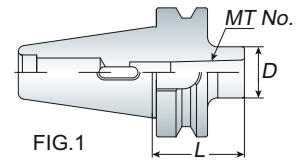
# MTA

**BT**  
series  
JIS B 6339



- The tool holder for morse taper shank with internal tang.

Model No.	FIG.	MT. NO.	D	L	Capacity			Weight (kg)		
					Drill	Reamer	End mill			
BT30 MTA1-045	1	MTA1	25	45	2~14	5~14	10~14	0.50		
	2	MTA1	25	120	2~14	5~14	10~14	0.80		
	MTA2-060	1	MTA2	32	60	14~23	14.5~23	16~22	0.60	
		2	MTA2	32	120	14~23	14.5~23	16~22	1.00	
	MTA3-090	1	MTA3	40	90	23~32	24~32	24~32	0.90	
		2	MTA3	40	135	23~32	24~32	24~32	1.30	
BT40	MTA1-045	1	MTA1	25	45	2~14	5~14	10~14	1.10	
	-120	2	MTA1	25	120	2~14	5~14	10~14	1.40	
	-180	2	MTA1	25	180	2~14	5~14	10~14	1.70	
	MTA2-045	1	MTA2	32	45	14~23	14.5~23	16~22	1.10	
		2	MTA2	32	120	14~23	14.5~23	16~22	1.60	
	-120	2	MTA2	32	180	14~23	14.5~23	16~22	2.00	
	MTA3-075	1	MTA3	40	75	23~32	24~32	24~32	1.20	
		2	MTA3	40	135	23~32	24~32	24~32	1.90	
	-135	2	MTA3	40	180	23~32	24~32	24~32	2.40	
	MTA4-090	1	MTA4	50	90	32~50	32~50	35~50	1.50	
		2	MTA4	50	165	32~50	32~50	35~50	2.60	
	BT50	MTA1-045	1	MTA1	25	45	2~14	5~14	10~14	3.80
		-120	2	MTA1	25	120	2~14	5~14	10~14	4.20
		-180	2	MTA1	25	180	2~14	5~14	10~14	4.50
		MTA2-045	1	MTA2	32	45	14~23	14.5~23	16~22	3.80
			2	MTA2	32	135	14~23	14.5~23	16~22	4.40
		-135	2	MTA2	32	180	14~23	14.5~23	16~22	4.70
		MTA3-045	1	MTA3	40	45	23~32	24~32	24~32	3.60
2			MTA3	40	150	23~32	24~32	24~32	4.70	
-150		2	MTA3	40	180	23~32	24~32	24~32	5.10	
MTA4-075		1	MTA4	50	75	32~50	32~50	35~50	3.80	
		2	MTA4	50	180	32~50	32~50	35~50	5.50	
MTA5-105		1	MTA5	65	105	50~75	50	40~75	4.10	
		2	MTA5	65	210	50~75	50	40~75	6.80	

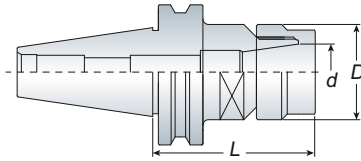


Unit: mm

**ISO**  
series

## ER Balanced Tool Holder

**ISO**

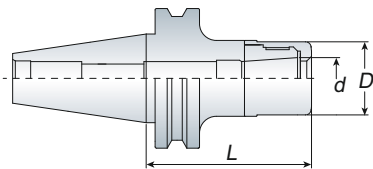


Model No.	Clamping Range(d)	D	L	Collet Type	Wrench	Weight (kg)
ISO20 ER16-030M	1~10	22	30	ER16	WM16	0.20
ISO25 ER20-030M	1~13	28	30	ER20	WM20	0.20
PISO25 ER20-030M	1~13	28	30	ER20	WM20	0.20
ISO30 ER16-055	1~10	28	55	ER16	WER16	0.60
ER20-060	1~13	34	60	ER20	WER20	0.60
ER25-060	2~16	42	60	ER25	WER25	0.70
ER32-060	2~20	50	60	ER32	WER32	0.70

Unit: mm



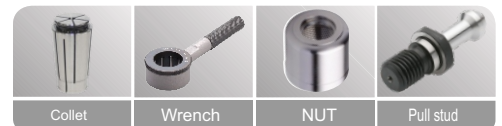
## SD Balanced TOOL Holder



**SD**

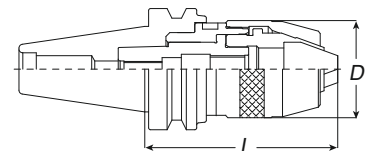
Model No.	Clamping Range (d)	D	L	Collet Type	Wrench	Weight (kg)
ISO20 SD10-040	2~10	27	40	SD 10	SD 10	0.30
ISO25 SD10-040	2~10	27	40	SD 10	SD 10	0.30
AISO25 SD10-040	2~10	27	40	SD 10	SD 10	0.30
ISO25 SD13-040	3~13	33	40	SD 13	SD 13	0.50
AISO25 SD13-040	3~13	33	40	SD 13	SD 13	0.50
ISO30 SD10-060	2~10	27	60	SD 10	SD 10	0.70
SD16-060	3~16	40	60	SD 16	SD 16	0.80

Unit: mm



**APU**

## APU Drill Chuck Holder (Without Keyway)



- The shank and keyless drill chuck are combined together so that to avoid the drill chuck slipping out for heavy-duty and high-speed cutting.
- Wrench is attached for each APU drill chuck holder.

Model No.	Clamping Range	D	L		Weight (kg)
			Min.	Max.	
ISO30 APU08-080	0.3~8	36.3	75	82	1.20
APU13-100	0.3~13	51.5	97	104.5	1.60

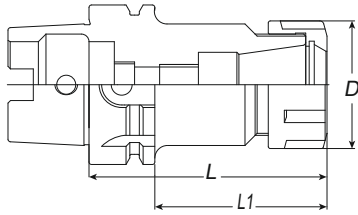
Unit: mm



# Spring Collet Chuck

# ER

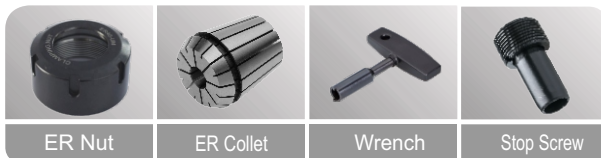
**HSK**  
series  
DIN 69893



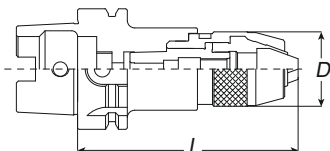
## Features

- ER collet chuck with the flexibility that can clamp drill, reamers, end mills and taps.
- ER16 / ER20 holder can make M type as your choice.
- ER collet chuck is also suitable for ER bearing nut and wrench.
- Wrench and Stop screw must be ordered separately.

Model No.	Clamping Range	D	L1	L	Collet Type	Wrench	Weight (kg)
HSK50A ER16-080	1~10	28	54	80	ER16	WER16	0.70
	-100	28	74	100	ER16	WER16	0.90
ER20-080	1~13	34	54	80	ER20	WER20	0.70
	-100	34	74	100	ER20	WER20	0.90
ER25-080	2~16	42	54	80	ER25	WER25	0.90
	-100	42	74	100	ER25	WER25	1.10
ER32-100	2~20	50	74	100	ER32	WER32	1.20
HSK63A ER16-080	1~10	28	54	80	ER16	WER16	1.00
	-100	28	74	100	ER16	WER16	1.10
	-120	28	94	120	ER16	WER16	1.20
	-150	28	124	150	ER16	WER16	1.40
ER20-080	1~13	34	54	80	ER20	WER20	1.00
	-100	34	74	100	ER20	WER20	1.10
	-120	34	94	120	ER20	WER20	1.30
	-150	34	124	150	ER20	WER20	1.50
	ER25-080	2~16	42	54	80	ER25	WER25
-100		42	74	100	ER25	WER25	1.40
-120		42	94	120	ER25	WER25	1.60
	-150	42	124	150	ER25	WER25	2.00
	ER32-080	2~20	50	54	80	ER32	WER32
-100		50	74	100	ER32	WER32	1.60
-150		50	124	150	ER32	WER32	2.40
ER40-080	3~26	63	54	80	ER40	WER40	1.40
	-100	63	74	100	ER40	WER40	1.80
	-150	63	124	150	ER40	WER40	2.90
HSK100A ER16-100	1~10	28	71	100	ER16	WER16	2.60
	-160	28	131	160	ER16	WER16	3.00
ER20-100	1~13	34	71	100	ER20	WER20	2.70
	-160	34	131	160	ER20	WER20	3.20
ER25-100	2~16	42	71	100	ER25	WER25	2.90
	-160	42	131	160	ER25	WER25	3.50
ER32-100	2~20	50	71	100	ER32	WER32	3.00
	-160	50	131	160	ER32	WER32	3.80
ER40-100	3~26	63	71	100	ER40	WER40	3.30
	-160	63	131	160	ER40	WER40	4.20



Unit: mm



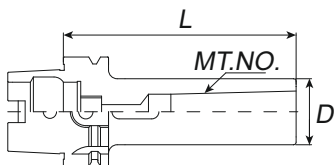
Model No.	Clamping Range	D	L	Weight (kg)
HSK40A APU08-120	0.3~8	37.5	120	1.10
HSK50A APU08-120	0.3~8	37.5	120	1.30
HSK63A APU08-120	0.3~8	37.5	120	1.50
APU13-155	0.3~13	50.5	155	2.60
APU16-165	3~16	57	165	2.90
HSK100A APU13-155	0.3~13	50.5	155	3.70
APU16-180	3~16	57	180	4.00

Unit: mm

- The shank and keyless drill chuck are combined together so that to avoid the drill chuck slipping out for heavy-duty and high-speed cutting.
- Wrench is attached for each APU drill chuck holder.
- Balancing: 30,000 r.p.m G2.5

## Morse Taper Holder

# MTA



Model No.	MT. No.	D	L	Weight (kg)
HSK50A MTA1-100	MTA1	25	100	0.70
MTA2-120	MTA2	32	120	0.90
MTA3-140	MTA3	40	140	1.30
HSK63A MTA1-100	MTA1	25	100	1.00
MTA2-120	MTA2	32	120	1.20
MTA3-140	MTA3	40	140	1.60
MTA4-160	MTA4	48	160	2.00
HSK100A MTA1-110	MTA1	25	110	2.30
MTA2-120	MTA2	32	120	2.40
MTA3-140	MTA3	40	140	2.70
MTA4-170	MTA4	48	170	3.10

Unit: mm



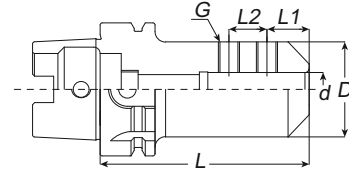
- The tool holder for morse taper shank with internal tang.
- Balancing: 30,000 r.p.m G2.5



# End Mill Holder

# SLA

**HSK**  
series  
DIN 69893



- For straight shank end mill.
- End mill is held by two set screws.
- End mill holder comes equipped with set screws.
- Balancing: 30,000 r.p.m G2.5

Model No.	d	D	L	L1	L2	H	G	Weight (kg)
HSK50A SLA06-080	6	25	80	12	10	28	M06x1.0P	0.80
SLA08-080	8	28	80	14	12	35	M08x1.25P	0.80
SLA10-080	10	35	80	15	14	40	M10x1.5P	0.90
SLA12-080	12	42	80	20	16	45	M10x1.5P	1.00
SLA16-090	16	48	90	22	18	50	M10x1.5P	1.10
SLA20-090	20	50	90	25	20	58	M12x1.75P	1.20
HSK63A SLA06-080	6	25	80	12	10	32	M06x1.0P	1.00
SLA08-080	8	28	80	14	12	35	M08x1.25P	1.10
SLA10-080	10	35	80	15	14	40	M10x1.5P	1.20
SLA12-080	12	40	80	20	16	45	M10x1.5P	1.30
SLA16-100	16	45	100	22	18	50	M10x1.5P	1.70
SLA20-100	20	50	100	25	20	65	M12x1.75P	1.90
SLA25-110	25	55	110	25	22	65	M12x1.75P	2.00
SLA32-110	32	60	110	30	22	70	M16x2.0P	2.80
HSK100A SLA06-080	6	25	80	12	10	32	M06x1.0P	2.10
SLA08-080	8	28	80	14	12	35	M08x1.25P	2.20
SLA10-080	10	35	80	15	14	40	M10x1.5P	2.30
SLA12-080	12	40	80	20	16	45	M10x1.5P	2.40
SLA16-100	16	48	100	22	18	50	M10x1.5P	2.80
SLA20-100	20	52	100	25	20	55	M12x1.75P	2.90
SLA25-100	25	65	100	25	22	60	M12x1.75P	3.50
SLA32-100	32	75	100	30	22	65	M16x2.0P	3.90
SLA40-105	40	80	105	30	22	70	M16x2.0P	4.30

Unit: mm



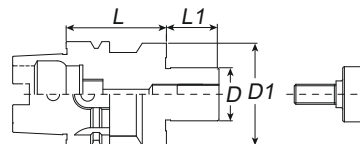
END MILL

HSK coolant



Fixture

Wrench



**Features**

- Face mill holder equips with screw and drive keys to assemble the face mill cutter to the holder.
- Face mill cutter must be ordered separately.
- Face mill holder - long type upon your request.
- Balancing: 30,000 r.p.m G2.5

Model No.	D	D1	L	L1	Weight (kg)
HSK50A FMA25.4-055	25.4	45	55	20	1.00
HSK63A FMA25.4-060/090	25.4	60	60/90	20	1.50/2.10
-120/150	25.4	60	120/150	20	2.40/2.70
FMA31.75-060/090	31.75	70	60/90	22	1.50/2.40
HSK100A FMA25.4-060/090	25.4	60	60/90	20	4.10/4.70
-105/150	25.4	60	105/150	20	5.00/5.90
-200	25.4	60	200	20	6.80
FMA31.75-060/090	31.75	70	60/90	22	4.10/4.90
-105/150	31.75	70	105/150	22	5.40/6.70
-200	31.75	70	200	22	8.20
FMA38.1-060/090	38.1	85	60/90	23	4.20/5.40
-105/150	38.1	85	105/150	23	6.00/7.90
FMA50.8-075	50.8	95	75	24	5.90

Unit: mm



Model No.	D	D1	L	L1	Weight (kg)
HSK63A-FMB16-50	16	38	50	24	-
FMB16-100/150	16	38	100/150	74/135	2.5/3.0
FMB22-50/100	22	48	50/100	74/125	2.0/2.5
FMB22-150/200	22	48	150/200	175/225	-
FMB27-60	27	58	60	34	2.0
-100/150	27	58	100/150	74/125	3.0/3.5
FMB32-60	32	78	60	34	2.0
FMB32-100/150	32	78	100/150	74/125	3.5/3.8
FMB40-60	40	89	60	34	3.65
FMB40-100	40	89	100	74	4.90
FMB40-150	40	89	150	125	5.20

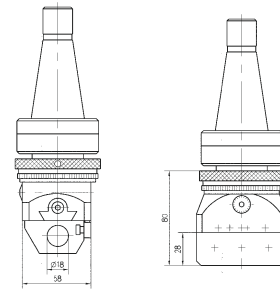
Unit: mm

Model No.	D	D1	L	L1	Weight (kg)
HSK63A FMH25.4-060/090	25.4	60	60/90	20	1.50/2.10
-120/150	25.4	60	120/150	20	2.40/2.70
FMH31.75-060/090	31.75	70	60/90	22	1.50/2.40
HSK63A FMH16-045	16	38	45	17	1.00
FMH22-045/060	22	48	60	18	1.10/1.20
-090/120/150	22	48	90/120/150	18	1.60/1.60/2.10
FMH27-060/090	27	60	60/90	20	1.70/2.30
HSK100A FMH22-060/090	22	48	60/90	18	3.00/3.60
-105/150	22	48	105/150	18	3.80/4.60
-200/250	22	48	200/250	18	5.35/6.10
FMH27-060/090/150	27	60	60/90/150	20	4.10/4.90/6.00
FMH32-060/090/150	32	73	60/90/150	21	4.00/5.00/7.00
FMH40-075/105	40	85	75/105	23	5.60/5.90

Unit: mm

# UNIVERSLA BORING HEAD

**BORING**  
series



It is a major accessory of the machine tools, such as jig boring machine, horizontal boring machine, milling machine, cnc machine, etc. It is possible to carry out such operation as facing, outside inside diameter boring, boring step holes and inner and outside groove cutting etc.

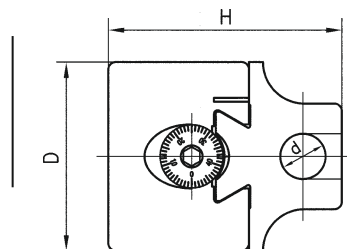
It has the mechanism of manual fine feed, rapid adjustment, various velocities for radial automatic feed and overload protection

Order no	Dia. of boring	boring bar hole size	center dist between holes	Find feed per graduation	Offset
F4-18	5-250	18	23	0.005	±15

Unit: mm

Available optional shanks: MS ∙ R8 ∙ 7:24 ∙ BT ∙ DIN69871 etc.

## TYPE F1 BORING HEAD



### WITH CARBIDE TIPPED BORING BARS

Order no	D mm	H mm	Max offset	Boring dia	Min graduation	Dia of boring
BT40/F1-12	50	61.6	16mm	12mm	0.01mm	10-125mm
	75	80.2	25mm	18mm	0.01mm	12-225mm
	100	93.2	41mm	25mm	0.01mm	15-320mm
SK40/F1-12	50	61.6	16mm	12mm	0.01mm	10-125mm
	75	80.2	25mm	18mm	0.01mm	12-225mm
	100	93.2	41mm	25mm	0.01mm	15-320mm
NT40/F1-12	50	61.6	16mm	12mm	0.01mm	10-125mm
	75	80.2	25mm	18mm	0.01mm	12-225mm
	100	93.2	41mm	25mm	0.01mm	15-320mm

Unit: mm

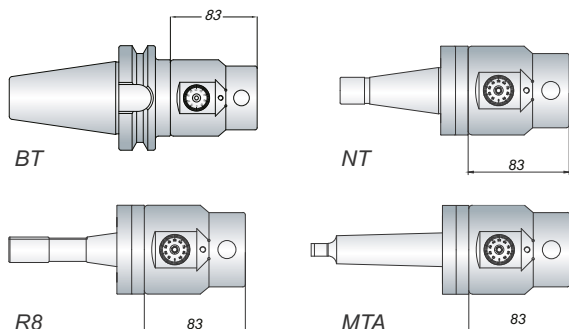




# BORING series

## NBH2084 Micro Boring System

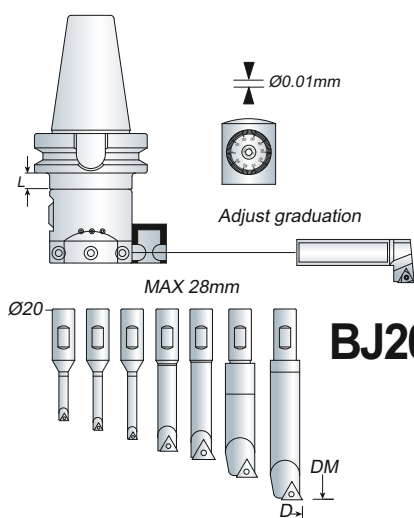
# NBH



Model No.	Boring Range	Holder	Draw Bolt	Weight (kg)
BT40 NBH2084/SET	8~280	BT40 NBH2084	-	7.00
BT50 NBH2084/SET	8~280	BT50 NBH2084	-	9.50
NT30 NBH2084/SET	8~280	NT30 NBH2084	1/2"-12 M12x1.75P	6.00
NT40 NBH2084/SET	8~280	NT40 NBH2084	5/8"-11 M16x2.0P	6.35
NT50 NBH2084/SET	8~280	NT50 NBH2084	1"-8 M24x3.0P	8.90
NT 40 NBH2084/SET	8~280	MTA4 NBH2084	-	6.80
NT 50 NBH2084/SET	8~280	MTA5 NBH2084	-	7.40
R8 NBH2084/SET	8~280	R8 NBH2084	7/16"x20UNF	6.20

Unit: mm

- NBH2084 micro boring system which boring range is from 8 ~ 280mm.
- NBH2084 tool holder set is attached 3pcs of BJ20 boring bars which are according to your request to choice.



## BJ20 Boring Bar Set

BJ20



Model No.	Boring Range (D Min.~D Max.)	Dimension (DM)	Insert	Screw	Wrench	Weight (kg)
BJ2008-32	8~11	32	TBGT0601..L	MS2004A	T6	0.15
BJ2010-40	10~13	40		MS2005A		0.15
BJ2012-53	12~17	53	TPGH0902..L	MS2506A	T9	0.15
BJ2016-68	16~21	68				0.20
BJ2020-83	20~130	83	TPGH1103..L	MS3008A	T9	0.25
BJ2025-96	25~135	96				0.35
BJ2030-115	30~140	115				0.40
BJ20-20L	120~280	83 + L				0.30

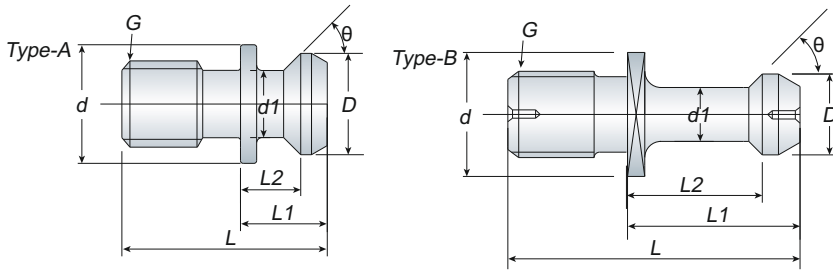
- Insert must be ordered separately.

Unit: mm

# Pull Stud

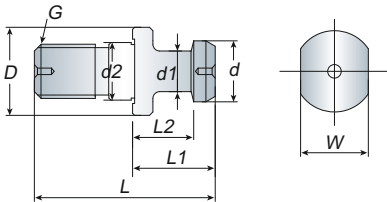
# CAT

# ACCESSORIES



Model No.	Type	L	L1	L2	D	d	d1	G	θ	Weight (kg)
CAT40 45-A	A	38.10	16.20	11.20	18.80	23.80	12.40	5/8"-11	45	0.06
CAT50 45-A	A	58.40	25.40	17.80	28.90	36.00	20.80	1"-8	45	0.25
CAT40 45-B	B	57.00	1.266	0.990	0.590	0.905	0.394	5/8"-11	45	0.05
CAT40 60-B	B	57.00	1.266	0.990	0.590	0.905	0.394	5/8"-11	60	0.05
CAT40 90-B	B	57.00	1.266	0.990	0.590	0.905	0.394	5/8"-11	90	0.05
CAT50 45-B	B	78.60	1.772	1.378	0.906	1.102	0.669	1"-8	45	0.20
CAT50 60-B	B	78.60	1.772	1.378	0.906	1.102	0.669	1"-8	60	0.20
CAT50 90-B	B	78.60	1.772	1.378	0.906	1.102	0.669	1"-8	90	0.20

Unit: inch



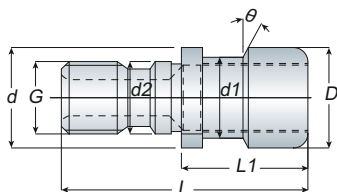
# Pull Stud

# ISO

Model No.	D	d	d1	d2	L	L1	L2	W	G	Weight (kg)
ISO20 15	12	9	6	8.5	26	12	9	10	M8	0.01
ISO25 15	12	10	7	9	32	16	11.6	10	M8	0.02
ISO30 15	17	13	9	13	45	24	19	14	M12	0.03

Unit: mm

\* For engraving machine.



# Pull Stud

# OTT

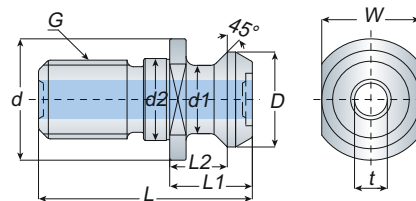
Model No.	L	L1	D	d	d1	d2	G	θ	Weight (kg)
OTT-P16D	53.00	26.50	25.3	25	21.1	17	M16	15	0.09
OTT-P24D	65.00	32.50	39.2	32	25.0	19	M24	15	0.21

Unit: mm



# ACCESSORIES

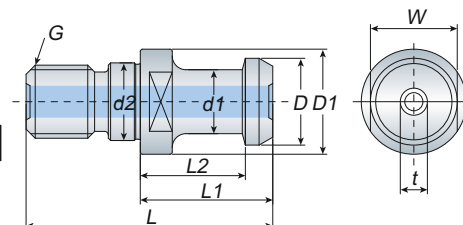
## MAZAK Pull Stud



Model No.	L	L1	L2	D	d	d1	d2	W	G	t	Weight (kg)
BT40 MAZAK	44.1	19.1	14.03	18.8	22	12.45	17	19	M16	7	0.06
BT50 MAZAK	65.2	25.2	17.56	29	36	20.83	25	30	M24	10	0.20

Unit: mm

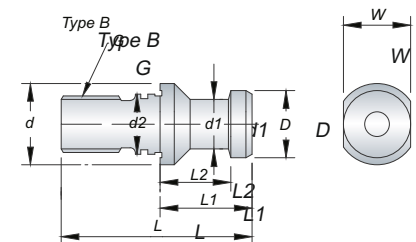
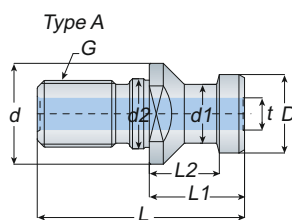
## P323-1 (JIS B6339-89) Pull Stud



Model No.	L	L1	L2	D	D1	d1	d2	W	t	Weight (kg)
P323-1	54	29	23	19	23	14	17	19	7	0.08

Unit: mm

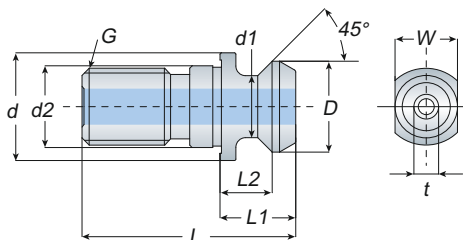
## DIN Pull Stud



Model No.	Type	L	L1	L2	D	d	d1	d2	W	t	Weight (kg)
DIN69872A-M16	A	54	26	20	19	23	14	17	19	7.5	0.08
DIN69872A-M24	A	74	34	25	28	36	21	25	30	11.5	0.30
DIN69872B-M12	B	44	24	19	13	17	9	13	14	-	0.03
DIN69872B-M16	B	54	26	20	19	23	14	17	19	-	0.08
DIN69872B-M24	B	74	34	25	28	36	21	25	30	-	0.30

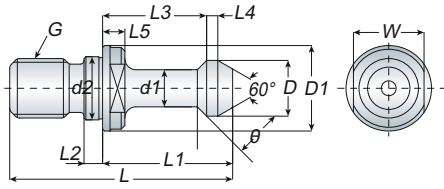
Unit: mm

## ISO7388 Pull Stud



Model No.	L	L1	L2	D	d	d1	d2	W	G	t	Weight (kg)
ISO7388/2B-M16	44.5	16.4	11.15	18.9	22.5	12.9	17	19	M16	7.5	0.06
ISO7388/2B-M24	65.5	25.55	17.95	29.1	36	19.6	25	30	M24	11.5	0.20

Unit: mm



## Pull Stud

# MAS 403-BT

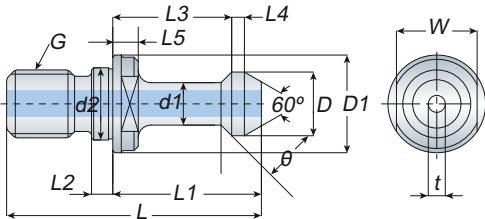
# ACCESSERIES



Model No.	L	L1	L2	L3	L4	L5	D	D1	d1	d2	W	G	θ	Weight (kg)
BT30 30	43	23	4	18	2.5	5	11	16.5	7	12.5	13	M12	60	0.04
BT30 45	43	23	4	18	2.5	5	11	16.5	7	12.5	13	M12	45	0.04
BT30 60	43	23	4	18	2.5	5	11	16.5	7	12.5	13	M12	60	0.04
BT40 30	60	35	5	28	3	6	15	23	10	17	19	M16	60	0.08
BT40 45	60	35	5	28	3	6	15	23	10	17	19	M16	45	0.08
BT40 60	60	35	5	28	3	6	15	23	10	17	19	M16	60	0.08
BT40 90	60	35	5	28	3	6	15	23	10	17	19	M16	90	0.08
BT50 30	85	45	8	35	5	10	23	38	17	25	30	M24	60	0.30
BT50 45	85	45	8	35	5	10	23	38	17	25	30	M24	45	0.30
BT50 60	85	45	8	35	5	10	23	38	17	25	30	M24	60	0.30
BT50 90	71	31	8	23	5	10	24	36	18	25	30	M24	90	0.30
BT50 90L	85	45	8	35	5	10	23	38	17	25	30	M24	90	0.30

Unit: mm

## Pull Stud - Coolant Type

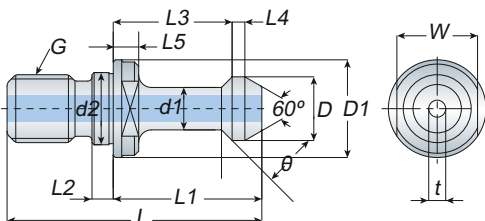


Model No.	L	L1	L2	L3	L4	L5	D	D1	d1	d2	W	G	t	θ	Weight (kg)
BT30 30-COOLANT	43	23	4	18	2.5	5	11	16.5	7	12.5	13	M12	2.5	60	0.03
BT30 45-COOLANT	43	23	4	18	2.5	5	11	16.5	7	12.5	13	M12	2.5	45	0.03
BT30 60-COOLANT	43	23	4	18	2.5	5	11	16.5	7	12.5	13	M12	2.5	60	0.03
BT40 30-COOLANT	60	35	5	28	3	6	15	23	10	17	19	M16	4	60	0.07
BT40 45-COOLANT	60	35	5	28	3	6	15	23	10	17	19	M16	4	45	0.07
BT40 60-COOLANT	60	35	5	28	3	6	15	23	10	17	19	M16	4	60	0.07
BT40 90-COOLANT	60	35	5	28	3	6	15	23	10	17	19	M16	4	90	0.07
BT50 30-COOLANT	85	45	8	35	5	10	23	38	17	25	30	M24	6	60	0.30
BT50 45-COOLANT	85	45	8	35	5	10	23	38	17	25	30	M24	6	45	0.30
BT50 60-COOLANT	85	45	8	35	5	10	23	38	17	25	30	M24	6	60	0.30
BT50 90-COOLANT	71	31	8	23	5	10	24	36	18	25	30	M24	6	90	0.30
BT50 90L-COOLANT	85	45	8	35	5	10	23	38	17	25	30	M24	6	90	0.30

Unit: mm

## Pull Stud

# ADS



Model No.	L	L1	L2	L3	L4	L5	D	D1	d1	d2	W	G	t	θ	Weight (kg)
BT40 45 (t=5.2)	60	35	5	28	3	6	15	23	10	17	19	M16	5.2	45	0.07
BT50 45 (t=7.5)	85	45	8	35	5	10	23	38	17	25	30	M24	7.5	45	0.30

Unit: mm

## Tool Locking Device

### FIXTURE

- To be used for fixing the tools on the tool holder.
- Horizontal or vertical locking device selection is for quick and simple operations.

Model No.	Taper Shank	Weight (kg)
BT30 (BT30-100-000)	MAS403-BT	4.10
BT40 (BT40-100-001)		4.20
BT50 (BT50-100-003)		8.90
SK30 (SK30-100-000)	SK-DIN69871A	4.10
SK40 (SK40-100-001)		4.20
SK50 (SK50-100-003)		8.90
CAT30 (CAT30-100-000)	CAT	4.10
CAT40 (CAT40-100-001)		4.20
CAT50 (CAT50-100-003)		8.90

Unit: mm



### HSK

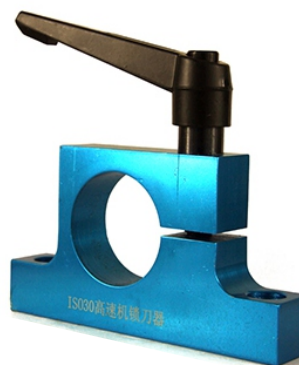
- Light weight & compact design
- Quick setup time
- For Hsk tool holder locking
- Space saving

Order no	Modle	Weight(kg)
HSK63	DIN69873	10.5
HSK100	DIN69873	11.5

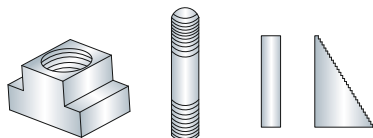
Unit: mm



## ISO30 tool locking Device



## CK 52PCS Clamping Kit



Order no	Table slot	Stud size	G.W.KG
CK-08	10	M8*1.25P	7.4
CK-10	12	M10*1.5P	7.6
CK-12	14	M12*1.75P	9.4
CK-14	16	M14*2P	11.1
CK-16	18	M16*2P	12.6
CK-18	20	M18*2.5P	25.3
CK-20	22	M20*2.5P	27

Unit: mm

Carton package



Plastic package

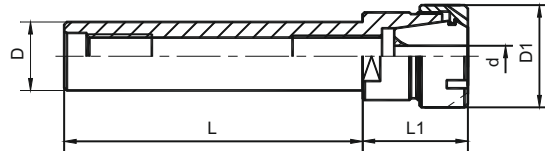


- 24pcs Stud. Each Size with 4pcs: 3", 4", 5", 6", 7", 8"
- 6pcs Table Slot (T-slot)
- 6pcs Flanged Nuts
- 4pcs Coupling Nuts
- 6pcs Step Clamps
- 6pcs Step Blocks

# ST-ER collet chuck with mini Nut

# ST

# ACCESSORIES



Order no	d	D	D1	L	L1
ST10-ER8M	1-5	10	12	95	17
ST10-ER8M	1-5	10	12	120	17
ST12-ER11M	1-7	12	16	95	28
ST12-ER11M	1-7	12	16	150	30
ST12-ER16M	1-10	12	22	50	36
ST12-ER16M	1-10	12	22	100	40
ST16-ER8M	1-5	16	12	100	17
ST16-ER11M	1-7	16	16	100	19
ST16-ER11M	1-7	16	16	150	19
ST16-ER16M	1-10	16	22	80	37
ST16-ER16M	1-10	16	22	150	40
ST16-ER20M	1-13	16	28	60	40
ST16-ER20M	1-13	16	28	100	40
ST16-ER20M	1-13	16	28	150	40
ST20-ER16M	1-10	20	22	50	35
ST20-ER16M	1-10	20	22	100	25
ST20-ER16M	1-10	20	22	150	25
ST20-ER20M	1-13	20	28	80	40
ST20-ER20M	1-13	20	28	100	40
ST20-ER20M	1-13	20	28	120	40
ST20-ER20M	1-13	20	28	150	40
ST20-ER25M	1-16	20	35	150	50
ST25-ER25M	1-16	25	35	145	45

Unit: mm



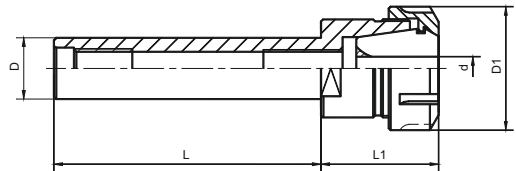
NUT

ER SPRING

SPANNER



# ST-ER COLLET CHUCK WITH UM/A-NUT



Order no	d	D	D1	L	L1
ST12-ER11	1-7	12	19	100	45
ST12-ER16	1-10	12	28	100	35
ST16-ER11	1-7	16	19	60	40
ST16-ER11	1-7	16	19	100	21
ST16-ER16	1-10	16	28	100	50
ST16-ER16	1-10	16	2	150	50
ST20-ER16	1-10	20	28	100	50
ST20-ER16	1-10	20	28	150	50
ST20-ER20	1-13	20	34	80	50
ST20-ER20	1-13	20	34	100	50
ST20-ER20	1-13	20	34	150	36
ST20-ER25	1-16	20	42	100	50
ST20-ER25	1-16	20	42	150	50
ST25-ER16	1-10	25	28	100	27
ST25-ER16	1-10	25	28	150	27
ST25-ER20	1-13	25	34	50	50
ST25-ER20	1-13	25	34	100	45
ST25-ER20	1-13	25	34	150	45
ST25-ER25	1-16	25	42	80	50
ST25-ER25	1-16	25	42	100	50
ST25-ER25	1-16	25	42	150	36
ST25-ER32	1-20	25	50	80	55
ST25-ER32	1-20	25	50	100	55
ST32-ER25	1-16	32	42	60	45
ST32-ER25	1-16	32	42	100	45
ST32-ER32	1-20	32	50	55	45
ST32-ER32	1-20	32	50	100	55
ST32-ER40	1-26	32	63	80	60
ST40-ER32	1-20	40	50	75	50
ST40-ER32	1-20	40	50	100	50
ST40-ER40	1-16	40	63	100	60



Unit: mm

# Morse Taper Shank

# APU

# ACCESSORIES

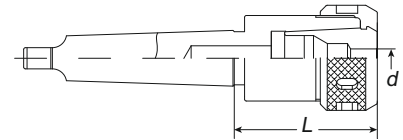


Model No.	Code No.	Size Type	Clamping Range		Taper Type	A	B	D	Wrench	Weight (kg)
			mm	inch						
MTA2 APU08	12601	8S	0.3~8	1/64~5/16	MTA2	142	61	37.5	12802	0.70
MTA2 APU10	12601-1	10S	0.3~10	1/64~3/8	MTA2	151	70	43	12804	1.00
MTA2 APU13	12602-1	13S	0.3~13	1/64~1/2	MTA2	162	81	50.5	12806	1.25
MTA3 APU13	12602	13S	0.3~13	1/64~1/2	MTA3	180	81	50.5	12806	1.40
MTA4 APU13	12603	13S	0.3~13	1/64~1/2	MTA4	206	81	50.5	12806	1.70
MTA3 APU16	12604	16S	3~16	1/8~5/8	MTA3	186	85	57	12808	1.70
MTA4 APU16	12605	16S	3~16	1/8~5/8	MTA4	212	85	57	12808	2.00

Unit: mm

# MTA

## Morse Taper Shank - Tang Type



- Wrench must be ordered separately.
- MTB type upon your request.

Model No.	d	L	Collet Type	Weight (kg)
MTA5 OZ25-075	3~25	75	OZ25	2.80
OZ32-075	6~32	75	OZ32	3.00

Unit: mm



## R8 Taper Shank

- Designed together with arbor structure makes its performance perfect for drilling press and machine center.
- Precisely machine and ground component ensure the tolerance and accuracy.
- Wrench is attached for each APU drill chuck holder.

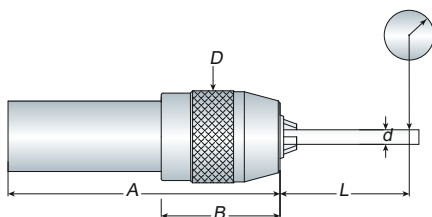
Model No.	Code No.	Size Type	Clamping Range		Taper Type	A	B	D	Wrench	Weight (kg)
			mm	inch						
R8 APU13	12613	13S	0.3~13	1/64~1/2	R8	182	81	50.5	12806	1.50
R8 APU16	12614	16S	3~16	1/8~5/8	R8	188	85	57	12808	1.80

Unit: mm

Run Out inspection Table

Size Type	d	L	Max. Run-Out
3S	1.5	30	0.05
	3	30	
6S	3	35	0.05
	4	35	
8S	6	35	0.05
	8	50	
10S	5	35	0.05
	6	35	
13S	6	55	0.05
	10	55	
16S	13	75	0.05
	6	55	
	10	55	0.05
	16	80	

Unit: mm



Keyless Drill Mount

**TC 820 Tap Collet Torque Control Type (Fig.1)**

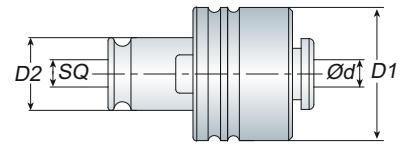


Fig.1

**Positive Drive Type (Fig.2)**

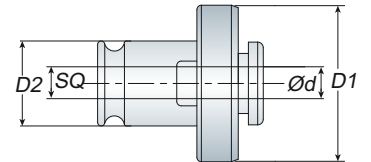


Fig.2

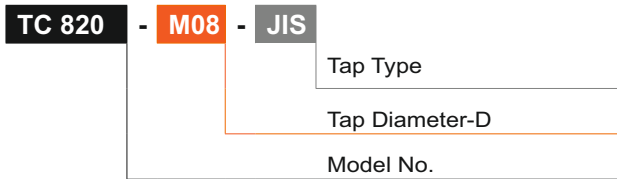


- TC tap collet has extended length L=100 for choice.

Model No.	Tap Diameter (D)	D1	D2	Weight (kg)
TC820-D	M08,M10,M12,M14, M16,M18,M20,M22	50	31	0.70
	W7/16,W1/2,W5/8, W3/4,W7/8,PT1/8, PT1/4,PT3/8	48	31	0.70

Unit: mm

For example:



**Tc820 Tap Collet Specification**

JIS	Ød	□
TC 820 M08	6.2	5
TC 820 M10 W3/8	7	5.5
TC 820 M12	8.5	6.5
TC 820 M14	10.5	8
TC 820 M16	12.5	10
TC 820 M18 W3/4 PT3/8	14	11
TC 820 M20	15	12
TC 820 M22 W7/8	17	13
TC 820 W1/2	9	7
TC 820 W5/8	12	9
TC 820 W5/16	6.1	5
TC 820 PT1/2	18	14
TC 820 PT1/4	11	9
TC 820 W7/16 PT1/8	8	6

Unit: mm

ISO	Ød	□
TC 820 M08	8	6.3
TC 820 M10	10	8
TC 820 M12	9	7.1
TC 820 M14	11.2	9
TC 820 M16	12.5	10
TC 820 M18 M20	14	11.2
TC 820 M22	16	12.5

Unit: mm

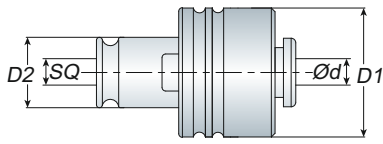
DIN371	Ød	□
TC 820 M08	8	6.2
TC 820 M10	10	8

Unit: mm

DIN376	Ød	□
TC 822 M08	6	4.9
TC 820 M10	7	5.5
TC 820 M12	9	7
TC 820 M14	11	9
TC 820 M16	12	9
TC 820 M18	14	11
TC 820 M20	16	12
TC 820 M22 M24	18	14.5

Unit: mm

# TC 312 Tap Collet Torque Control Type (Fig.1)



# TC

# ACCESSORIES

## Positive Drive Type (Fig.2)

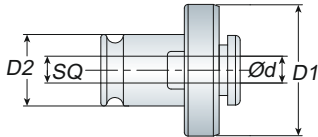


FIG.1



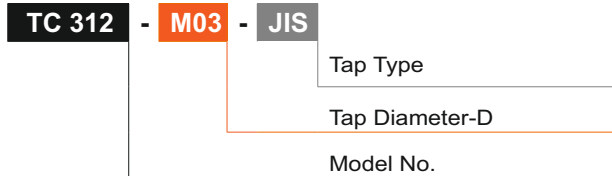
FIG.2



Model No.	Tap Diameter (D)	D1	D2	Weight (kg)
TC312-D	M03,M04,M05, M06,M08,M10,M12,M14	32	19	0.30
	W1/8,W3/16,W1/4, W5/16,W3/8,W7/16	30	19	0.30

Unit: mm

For example:



### Features :

- Torque is factory-set to protect the tap for which a particular collet is designed. Small adjustments can be made by a trained user to accommodate tap strength and material variations.
- Collet stops driving when set torque is exceeded.
- Every tap needs a match size tapping collet.
- D1 is chuck suit for dia.



- TC tap collet has extended length L=100 for choice.

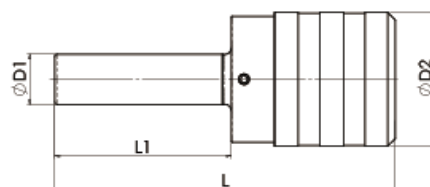
## TC 312 Tap Collet Specification

JIS	Ød	□	ISO	Ød	□	DIN371	Ød	□	DIN376	Ød	□
TC 312 M03 W1/8	4	3.2	TC 312 M03	3.15	2.5	TC 312 M03	3.5	2.7	TC 312 M04	2.8	2.1
TC 312 M04	5	4	TC 312 M04	4	3.15	TC 312 M04	4.5	3.4	TC 312 M05	3.5	2.7
TC 312 M05 W3/16	5.5	4.5	TC 312 M05	5	4	TC 312 M05 M06	6	4.9	TC 312 M06	4.5	3.4
TC 312 M06 W1/4	6	4.5	TC 312 M06	6.3	5	TC 312 M08	8	6.2	TC 312 M08	6	4.9
TC 312 M08	6.2	5	Tc312 M08	8	6.3	TC 312 M10	10	8	TC 312 M10	7	5.5
TC 312 M10 W3/8	7	5.5	TC 312 M10	10	8	Unit: mm		TC 312 M12	9	7	
TC 312 M12	8.5	6.5	TC 312 M12	9	7.1	Unit: mm		Unit: mm			
TC 312 M14	10.5	8	Unit: mm								
TC 312 W7/16 PT1/8	8	6									
TC 312 W1/2	9	7									
TC 312 W5/16	6.1	5									

Unit: mm

## ST

### Straight Shank



- ATP tap holder is with tension and compression, so it could extend the tap lifetime.
- Torque control type and positive drive type tap collets can be used for ATP tool holder.



Model No.	C	d	D	L	L1	L2	L3	Tapping Range	Collet Type	Weight (kg)
C20 TC 312	20	19	36	155	6~10	6~10	65	M3~M12	TC 312	0.90
C25 TC 312	25	19	36	155	6~10	6~10	65	M3~M12	TC 312	1.00
C25 TC 820	25	31	53	185	6~10	6~10	70	M8~M22	TC 820	1.70
C32 TC 820	32	31	53	185	6~10	6~10	70	M8~M22	TC 820	1.90

Unit: mm

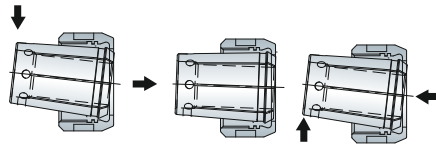
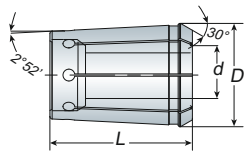


## APU

### Straight Shank

Model No.	Code No.	Size Type	Clamping Range		Taper Type	A	B	D	Wrench	Weight (kg)
			mm	inch						
C12 APU03	12605-1	3S	0.3~3	1/64~1/8	C12	88.5	38.5	24	-	0.20
C16 APU06	12605-2	6S	0.3~6	1/64~1/4	C16	104	54	33	12801	0.50
C20 APU08	12606	8S	0.3~8	1/64~5/16	C20	121	61	37.5	12802	0.70
C20 APU13	12607	13S	0.3~13	1/64~1/2	C20	141	81	50.5	12806	1.30
C25 APU13	12608	13S	0.3~13	1/64~1/2	C25	161	81	50.5	12806	1.40
C32 APU13	12609	13S	0.3~13	1/64~1/2	C32	162	81	50.5	12806	1.65
C20 APU16	12610	16S	3~16	1/8~5/8	C20	145	85	57	12808	1.55
C25 APU16	12611	16S	3~16	1/8~5/8	C25	165	85	57	12808	1.70
C32 APU16	12612	16S	3~16	1/8~5/8	C32	167	85	57	12808	1.90

Unit: mm



# Collet

# OZ

# ACCESSORIES

- Collet must be assembled into the clamping nut before inserting into the chuck
- Attaching, and detaching collets

### Metric Size

Model No.	D	L	d	Weight (kg)
OZ25	35.05	52	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25	0.17
OZ32	44	60	6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32	0.36

### Inch Size

Model No.	D	L	d (Inch)	Weight (kg)
OZ25	35.05	52	1/8,3/16,1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1	0.18
OZ32	44	60	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1,1-1/8,1-1/4	0.36



# Collet Set

OZ25 Metric Size	Model No.	Specification	PCS/SET	Weight (kg)
	OZ25-07PCS	6,8,10,12,16,20,25	7PCS/SET	2.00
	OZ25-15PCS	3,4,5,6,7,8,9,10,11,12,13,16,18,20,25	15PCS/SET	3.50

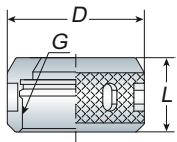
OZ25 Inch Size	Model No.	Specification	PCS/SET	Weight (kg)
	OZ25-07PCS	1/4,5/16,3/8,1/2,5/8,3/4,1	7PCS/SET	2.10
	OZ25-15PCS	1/8,3/16,1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1	15PCS/SET	3.30

OZ32 Metric Size	Model No.	Specification	PCS/SET	Weight (kg)
	OZ32-08PCS	6,8,10,12,16,20,25,32	8PCS/SET	4.20
	OZ32-15PCS	6,8,10,12,13,14,15,16,18,20,22,25,26,30,	15PCS/SET	6.50

OZ32 Inch Size	Model No.	Specification	PCS/SET	Weight (kg)
	OZ32-10PCS	1/4,5/16,3/8,1/2,5/8,3/4,7/8,1,1-1/8,1-1/4	10PCS/SET	4.10
	OZ32-15PCS	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1,1-1/8,1-1/4	15PCS/SET	6.30



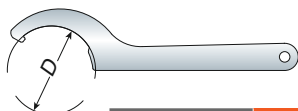
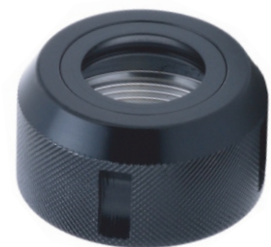
- When ordering, please specify the collet with inch size or metric size.



# Nut

Model No.	L	D	G	Collet Type	Weight (kg)
OZ 25	30	60	M48x2.0P	OZ25	0.30
OZ 32	33	78	M60x2.5P	OZ32	0.65
OZ 40				Oz40	

Unit: mm



# Wrench

Model No.	D	Suit For	Weight (kg)
WOZ25	60	BN25	0.30
WOZ32	72-84	BN32	0.40

Unit: mm





# NUT

# Clamping Nut

Standard Nut	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	ER11A	1	19	13	30	M14x0.75P	ER11	0.01
	ER16A/UM	1	28	18.5	70	M22x1.5P	ER16	0.04
	ER20A/UM	1	34	21	100	M25x1.5P	ER20	0.07
	ER25UM	2	42	21.5	130	M32x1.5P	ER25	0.11
	ER32UM	2	50	24	170	M40x1.5P	ER32	0.15
	ER40UM	2	63	26	220	M50x1.5P	ER40	0.30
	ER50UM	2	78	35		M64x2.0P	ER50	0.50

Unit: mm

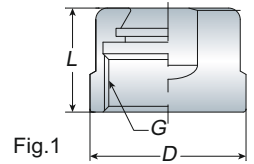


Fig.1

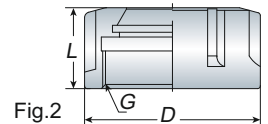


Fig.2

M Type Nut	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	ER8M	3	12	10.8	10	M10x0.75P	ER08	0.01
	ER11M	3	16	12	30	M13x0.75P	ER11	0.01
	ER16M	3	22	17	70	M19x1.0P	ER16	0.02
	ER20M	3	28	19.2	100	M24x1.0P	ER20	0.03

Unit: mm

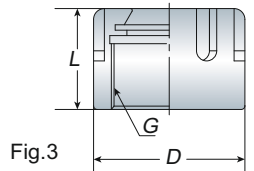


Fig.3

OZ CLAMP Nut	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	OZ 16	4	32	19	70	M22x1.5P	OZ 16	0.07
	OZ 20	4	35	21	100	M25x1.5P	OZ 20	0.09
	OZ 25	4	43	22	130	M32x1.5P	OZ 25	0.13
	OZ 32	4	51	24	170	M40x1.5P	OZ 32	0.16
	OZ 40	4	63	29	220	M50x1.5P	OZ 40	0.31

Unit: mm

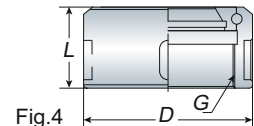
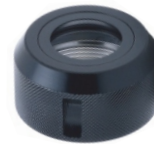


Fig.4

SD NUT	Model No.	FIG.	D	L	Nm	G	Collet Type	Weight (kg)
	SD 16	5	30	19	70	M22x1.5P	SD 16	0.08
	SD 20	5	35	21	100	M25x1.5P	SD 20	0.10
	SD 25	5	40	22	130	M32x1.5P	SD 25	0.13
	SD 32	5	50	25	170	M40x1.5P	SD 32	0.15

Unit: mm

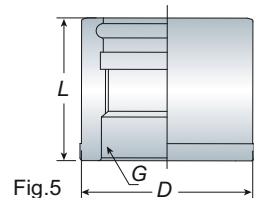
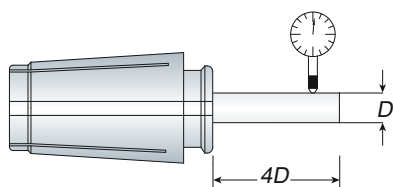
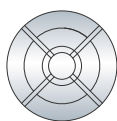
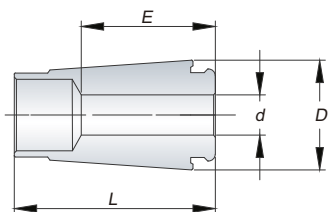


Fig.5

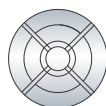
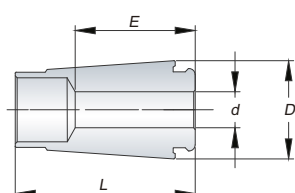
# SD High Speed Collet

ACCESSORIES



Collet Grade	Runout - Max $\mu$ 4xD
A	10 $\mu$
AA	5 $\mu$

- When ordering, please specify the collet grade with A or AA.  
For example:  
SD10-06 AA or SD10E-04 AA  
SD10-8PCS AA or SD10E-6PCS AA
- The clamping range is 0.25mm if the inside diameter is less than 3mm;  
clamping range is 0.5mm if the inside diameter is over than 3mm.



## SD 20 (approx. 0.14kgs/pc)

Model No.	d	E	Range	D	L
SD20-04	4	18	3.5~4	19.1	54.3
SD20-05	5	18	4.5~5		
SD20-06	6	24	5.5~6		
SD20-07	7	24	6.5~7		
SD20-08	8	32	7.5~8		
SD20-09	9	32	8.5~9		
SD20-10	10	38	9.5~10		
SD20-11	11	38	10.5~11		
SD20-12	12	38	11.5~12		
SD20-13	13	38	12.5~13		
SD20-14	14	38	13.5~14		
SD20-15	15	38	14.5~15		
SD20-16	16	39	15.5~16		
SD20-17	17	39	16.5~17		
SD20-18	18	39	17.5~18		
SD20-19	19	45	18.5~19		
SD20-20	20	50	19.5~20		

Unit: mm

## SD 25 (approx. 0.24kgs/pc)

Model No.	d	E	Range	D	L
SD25-06	6	24	5.5~6	35.7	57
SD25-08	8	32	7.5~8		
SD25-10	10	40	9.5~10		
SD25-12	12	42	11.5~12		
SD25-14	14	42	13.5~14		
SD25-16	16	44	15.5~16		
SD25-17	17	44	16.5~17		
SD25-18	18	44	17.5~18		
SD25-19	19	44	18.5~19		
SD25-20	20	46	19.5~20		
SD25-21	21	46	20.5~21		
SD25-22	22	46	21.5~22		
SD25-23	23	46	22.5~23		
SD25-24	24	46	23.5~24		
SD25-25	25	57	24.5~25		

Unit: mm

## Collet - Coolant Type

Model No.	d	E	D	L
SD10-3CL	3	15	15.6	31
SD10-4CL	4	20	15.6	31
SD10-5CL	5	20	15.6	31
SD10-6CL	6	24	15.6	31
SD10-8CL	8	24	15.6	31
SD10-10CL	10	30.5	15.6	31

Unit: mm

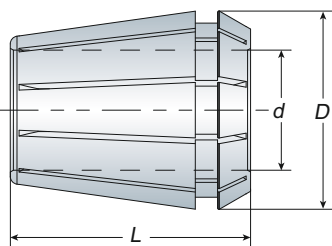
Model No.	d	E	D	L
SD16-3CL	3	18	24.6	45
SD16-4CL	4	20	24.6	45
SD16-5CL	5	22	24.6	45
SD16-6CL	6	25	24.6	45
SD16-8CL	8	34	24.6	45
SD16-10CL	10	34	24.6	45
SD16-12CL	12	34	24.6	45
SD16-14CL	14	37	24.6	45
SD16-16CL	16	45	24.6	45

Unit: mm

# ER

# Spring Collet

- DIN6499 ISO15488 Collet must be assembled into the clamping nut before inserting into the chuck



### Metric Size

Model No.	D	L	d	Weight (kg)
ER08	8.5	13.5	1,1.5,2,2.5,3,3.5,4,4.5,5	0.01
ER11	11.5	18	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7	0.01
ER16	17	27	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10	0.03
ER20	21	31	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10,10.5,11,11.5,12,12.5,13	0.04
ER25	26	35	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16	0.07
ER32	33	40	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	0.15
ER40	41	46	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	0.27
ER50	52	60	12,14,16,18,20,22,24,26,28,30,32,34	0.45

Unit: mm

### Inch Size

Model No.	D	L	d	Weight (kg)
ER11	11.5	18	1/8,5/32,3/16,7/32,1/4	0.01
ER16	17	27	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8	0.03
ER20	21	31	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8,13/32,7/16,1/2	0.04
ER25	26	35	1/8,5/32,3/16,7/32,1/4,9/32,5/16,11/32,3/8,7/16,15/32,1/2,9/16,19/32,5/8	0.07
ER32	33	40	1/8,5/32,3/16,7/32,1/4,5/16,11/32,3/8,7/16,15/32,1/2,17/32,9/16,5/8,18/32,11/16,3/4,25/32	0.15
ER40	41	46	1/8,5/32,3/16,1/4,9/32,5/16,3/8,7/16,15/32,1/2,9/16,5/8,19/32,11/16,23/32,3/4,25/32,13/16,27/32,7/8,15/16,31/32,1	0.27

Unit: mm

ER08		ER11		ER16		ER20		ER25		ER32		ER40		ER50	
No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range	No.	Range
ER08-01	1.0	ER11-01	1.0	ER16-01	1.0~0.5	ER20-01	1.0~0.5	ER25-02	2.0~1.0	ER32-02	2.0~1.0	ER40-03	3.0~2.0	ER50-12	12~10
ER08-1.5	1.5	ER11-1.5	1.5	ER16-1.5	1.5~1.0	ER20-1.5	1.5~1.0	ER25-03	3.0~2.0	ER32-03	3.0~2.0	ER40-04	4.0~3.0	ER50-14	14~12
ER08-02	2.0~1.5	ER11-02	2.0~1.5	ER16-02	2.0~1.0	ER20-02	2.0~1.0	ER25-04	4.0~3.0	ER32-04	4.0~3.0	ER40-05	5.0~4.0	ER50-16	16~14
ER08-2.5	2.5~2.0	ER11-2.5	2.5~2.0	ER16-2.5	2.5~2.0	ER20-2.5	2.5~2.0	ER25-05	5.0~4.0	ER32-05	5.0~4.0	ER40-06	6.0~5.0	ER50-18	18~16
ER08-03	3.0~2.5	ER11-03	3.0~2.5	ER16-03	3.0~2.0	ER20-03	3.0~2.0	ER25-06	6.0~5.0	ER32-06	6.0~5.0	ER40-07	7.0~6.0	ER50-20	20~18
ER08-3.5	3.5~3.0	ER11-3.5	3.5~3.0	ER16-3.5	3.5~3.0	ER20-3.5	3.5~3.0	ER25-07	7.0~6.0	ER32-07	7.0~6.0	ER40-08	8.0~7.0	ER50-22	22~20
ER08-04	4.0~3.5	ER11-04	4.0~3.5	ER16-04	4.0~3.0	ER20-04	4.0~3.0	ER25-08	8.0~7.0	ER32-08	8.0~7.0	ER40-09	9.0~8.0	ER50-24	24~22
ER08-4.5	4.5~4.0	ER11-4.5	4.5~4.0	ER16-4.5	4.5~4.0	ER20-4.5	4.5~4.0	ER25-09	9.0~8.0	ER32-09	9.0~8.0	ER40-10	10~9.0	ER50-26	26~24
ER08-05	5.0~4.5	ER11-05	5.0~4.5	ER16-05	5.0~4.0	ER20-05	5.0~4.0	ER25-10	10~9.0	ER32-10	10~9.0	ER40-11	11~10	ER50-28	28~26
		ER11-5.5	5.5~5.0	ER16-5.5	5.5~5.0	ER20-5.5	5.5~5.0	ER25-11	11~10	ER32-11	11~10	ER40-12	12~11	ER50-30	30~28
		ER11-06	6.0~5.5	ER16-06	6.0~5.0	ER20-06	6.0~5.0	ER25-12	12~11	ER32-12	12~11	ER40-13	13~12	ER50-32	32~30
		ER11-6.5	6.5~6.0	ER16-6.5	6.5~6.0	ER20-6.5	6.5~6.0	ER25-13	13~12	ER32-13	13~12	ER40-14	14~13	ER50-34	34~32
		ER11-07	7.0~6.5	ER16-07	7.0~6.0	ER20-07	7.0~6.0	ER25-14	14~13	ER32-14	14~13	ER40-15	15~14		
				ER16-7.5	7.5~7.0	ER20-7.5	7.5~7.0	ER25-15	15~14	ER32-15	15~14	ER40-16	16~15		
				ER16-08	8.0~7.0	ER20-08	8.0~7.0	ER25-16	16~15	ER32-16	16~15	ER40-17	17~16		
				ER16-8.5	8.5~8.0	ER20-8.5	8.5~8.0			ER32-17	17~16	ER40-18	18~17		
				ER16-09	9.0~8.0	ER20-09	9.0~8.0			ER32-18	18~17	ER40-19	19~18		
				ER16-9.5	9.5~9.0	ER20-9.5	9.5~9.0			ER32-19	19~18	ER40-20	20~19		
				ER16-10	10~9.0	ER20-10	10~9.0			ER32-20	20~19	ER40-21	21~20		
						ER20-10.5	10.5~10					ER40-22	22~21		
						ER20-11	11~10					ER40-23	23~22		
						ER20-11.5	11.5~11					ER40-24	24~23		
						ER20-12	12~11					ER40-25	25~24		
						ER20-12.5	12.5~12					ER40-26	26~25		
						ER20-13	13~12								

- ER08 ~ Er20 0.5mm  
(Suggested clamping range should be 0.5mm)

# Spring Collet Set

# ER

# ACCESSORIES



## ER11

Model No.	Specification	PCS/SET	Weight (kg)
ER11-07PCS	1,2,3,4,5,6,7	7PCS/SET	0.30
ER11-13PCS	1,1.5,2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7	13PCS/SET	0.40

Unit: mm

## ER16

Model No.	Specification	PCS/SET	Weight (kg)
ER16-08PCS	3,4,5,6,7,8,9,10	8PCS/SET	0.50
ER16-10PCS	1,2,3,4,5,6,7,8,9,10	10PCS/SET	0.70
ER16-07PCS	4,5,6,7,8,9,10	7PCS/SET	0.50

Unit: mm

## ER20

Model No.	Specification	PCS/SET	Weight (kg)
ER20-10PCS	4,5,6,7,8,9,10,11,12,13	10PCS/SET	0.70
ER20-12PCS	2,3,4,5,6,7,8,9,10,11,12,13	12PCS/SET	0.80
ER20-10PCS	4,5,6,7,8,9,10,11,12,13	10PCS/SET	0.70

Unit: mm

## ER25

Model No.	Specification	PCS/SET	Weight (kg)
ER25-07PCS	4,6,8,10,12,14,16	7PCS/SET	1.20
ER25-15PCS	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16	15PCS/SET	1.70
ER25-13PCS	4,5,6,7,8,9,10,11,12,13,14,15,16	13PCS/SET	1.70

Unit: mm

## ER32

Model No.	Specification	PCS/SET	Weight (kg)
ER32-06PCS	6,8,10,12,16,20	6PCS/SET	1.60
ER32-11PCS	4,5,6,8,10,12,13,15,16,18,20	11PCS/SET	2.20
ER32-18PCS	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	18PCS/SET	3.10
ER32-17PCS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20	17PCS/SET	3.00

Unit: mm

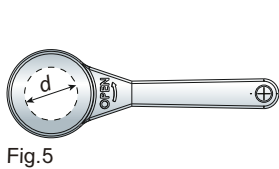
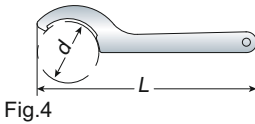
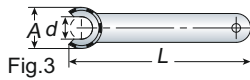
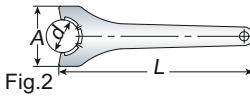
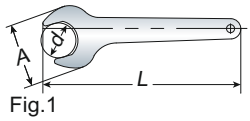


## ER40

Model No.	Specification	PCS/SET	Weight (kg)
ER40-07PCS	6,8,10,12,16,20,25	7PCS/SET	2.50
ER40-15PCS	4,5,6,8,10,12,13,15,16,18,20,21,22,25,26	15PCS/SET	4.30
ER40-23PCS	4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	23PCS/SET	6.20
ER40-26PCS	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26	26PCS/SET	6.50

# ACCESSORIES

# Wrench



	Model No.	FIG.	A	d	L	Suit For	Weight (kg)
Standard Wrench	ER11A	1	29	17	140	ER 11	0.08
	ER16A/UM	1	45	25	142	ER 16	0.12
	ER20A/UM	1	54	30	162	ER 20	0.17
	ER25UM	2	65	37	206	ER 25	0.22
	ER32UM	2	75	46.5	253	ER 32	0.30
	ER40UM	2	90	58	289	ER 40	0.36
	ER50UM	2	110	-	350	ER 50	0.70

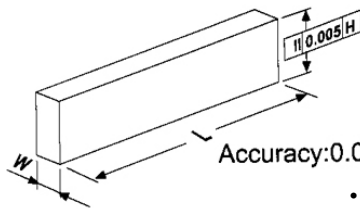
	Model No.	FIG.	A	d	L	Suit For	Weight (kg)
Wrench M TYPE	ER8M	3	13	-	75	ER 8	0.02
	ER11M	3	17	8.5	95	ER 11	0.03
	ER16M	3	22.5	12.5	117	ER 16	0.05
	ER20M	3	28.5	15.5	127	ER 20	0.07

	Model No.	FIG.	d	L	Suit For	Weight (kg)
Wrench C TYPE	C42(38-42)	4	32	205		0.16
	C52(45-52)	4	36	220		0.18
	C63(55-63)	4	43	235		0.21
	C85(78-85)	4	51	255		0.22
	APU13	4	-	-	-	0.25

	Model No.	FIG.	d	L	Suit For	Weight (kg)
Wrench SD TYPE	SD 16	5	30	-	SD 16	0.60
	SD 20	5	35	-	SD 20	0.65
	SD 25	5	40	-	SD 25	0.80
	SD 32	5	50	-	SD 32	0.83

Unit: mm

# Ground Parallels



Accuracy: 0.01mm



- Hardness : HRC48° 53°  
Made high grade alloy steel  
hard ened and ground
- Dimen sion : 290x228x80mm

- Hardness : HRC 48° - 53°  
M ade high grade alloy steel  
hard ened and ground
- Dimen sion : 390x292x82mm

WxHxLxpcs	
8.5x14x150x2	8.5x32x150x2
8.5x16x150x2	8.5x36x150x2
8.5x20x150x2	8.5x40x150x2
8.5x24x150x2	8.5x44x150x2
8.5x30x150x2	

Unit: mm

WxHxLxpcs	
10x14x150x2	10x28x150x2
10x16x150x2	10x30x150x2
10x18x150x2	10x32x150x2
10x20x150x2	10x35x150x2
10x22x150x2	10x40x150x2
10x24x150x2	10x45x150x2
10x26x150x2	10x50x150x2

Unit: mm



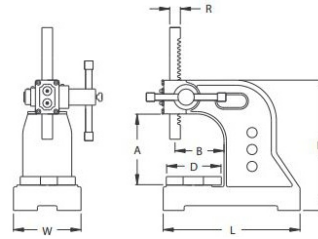
# ARBORE PRESS

# Press

# ACCESSORIES

## Features

- All main parts made of ductile cast iron adjustable handle gives convenient handle positioning
  - Ram finite control by smooth gears.
  - 4-90 degree equally divided slotted round table.
- color may vary . (silver,blue)

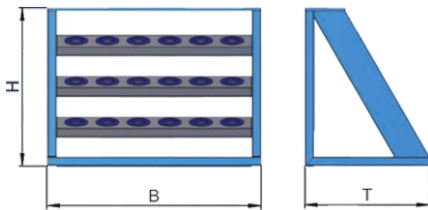


order no	Base LxW(mm)	Height H(mm)	Max Work Height A(mm) Stroke	Swing B	Table Diameter D	Ram Dimension RxR	Weight (kgs)
PO-0	235x102mm	254	114	85	90	19x19	8.5
PO-1	270x127mm	320	140	105	110	25.4x25.4	12
PO-2	400x170mm	445	215	135	170	31.7x31.7	29
PO-3	470x200mm	570	317	135	170	38.1x38.1	47
PO-5	680x250mm	800	470	245	250	50.8x50.8	140

Unit: mm

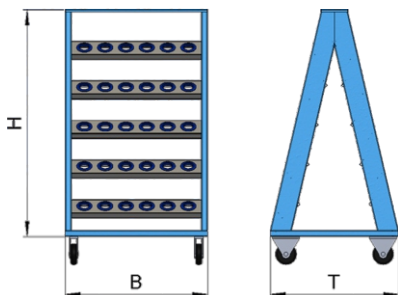
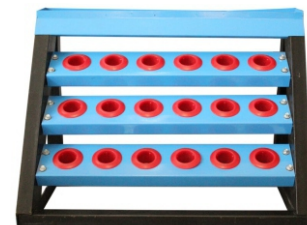
## STAND FOR TOOL HOLDER

## Stand



order no	Collet type	Pcs	B	T	H
PO-S1	ISO30	21	700	400	500
PO-S2	ISO40	18	700	400	500
PO-S3	ISO50	15	700	400	500

Unit: mm



order no	Collet type	Pcs	B	T	H
PO-SL1	ISO30	70	700	600	1260
PO-SL2	ISO40	60	700	600	1260
PO-SL3	ISO50	50	700	600	1260

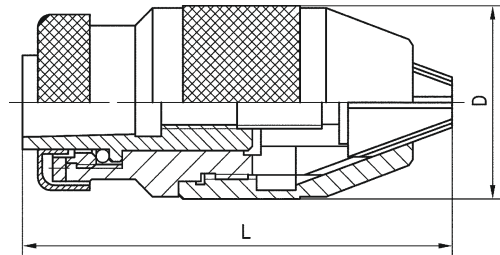
Unit: mm





# KEYLESS DRILL CHUCK

## TAPER MOUNTED



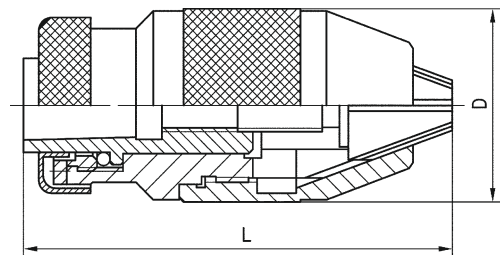
- This type chuck can grip the tool more tightly when the working torque is more big , it is suitable for high grade drill & bench drill and CNC etc.

Order no	Mount	D	L
0.5-6mm	B10	34	72
0.5-8mm	B12	42	82
1-10mm	B12	42	82
1-13mm	B16	44	97
3-16mm	B16	54	110
3-16mm	B18	54	110
5-20mm	B22	60	125

Unit: mm

# KEYLESS DRILL CHUCK

## THREAD MOUNTED



- This type chuck can grip the tool more tightly when the working torque is more big , it is suitable for high grade drill & bench drill and CNC etc.

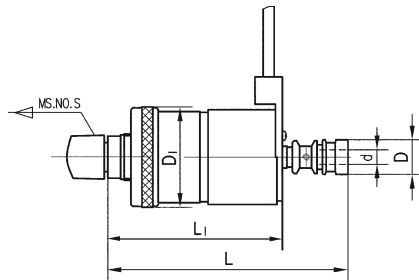
Order no	Mount	D	L
0.5-6mm	M10x1	34	64
0.5-8mm	M10x1	40	80
1-10mm	M10x1	40	80
1-13mm	M10x1	44	97
3-16mm	M12x1.25	48	107
5-20mm		60	120

Unit: mm

# Reversible tapping attachment

# TAP TYPE

# MACHINE series

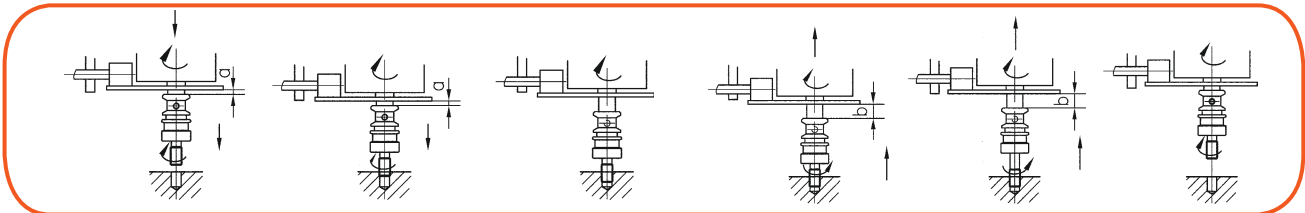


Order no	TAPPING RANGE	d	D	D1	L	L1	MS.NO.S
TC 467	M2-M7	2.5-6.5	23	55	135	95	MS2-JT33 / MS3-JT33
TC 4612	M5-M12	3.5-10.0	28	75	164	115	MS3-M16 / MS4-M16
TC 4620	M8-M20	6.0-14.0	38	90	205	135	MS3-M20 / MS4-M20

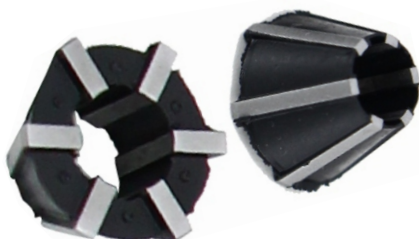
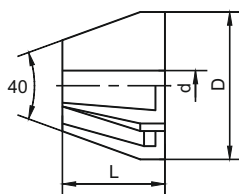
## Features:

Unit: mm

- Radial float self centering to compensate for hole center misalignment.
- Unique double spring mechanism produce automatic feed and cushion drive. There are two spring for the feed and two spring for the reversal. Each set gives you double smoothness for ultra accurate tapping applications (not possible with this type of tapping head in the past).
- Pre-set torque control permits easy operation of tap brake torque control.
- Jacobs rubber flex collets are standard accessory.



## Rubber flex collet for TC46



Order no	D	d	L
TC467-1	15	2.5-4.2	11
TC467-2	15	4.2-6.5	11
TC4612-1	21	3.5-7.0	13
TC4612-2	21	7.0-10	13
TC4620-1	26.5	6.0-9.0	15
TC4620-2	26.5	9.0-14	15
TC4620-3	26.9	12.7-19.05	12

Unit: mm

# MACHINE

series

# PNEUMATIC

# PNEUMATIC TAPPING MACHINE

## Features:

- The machine is driven by compressed air ,safe and high efficiency ,small air pressure and volume(0.6-0.8mpa),very powerful torque output.
- Can tapping all kinds of steel , iron ,copper ,aluminum ,plastic and other materials.
- Cylinder with overload protection device , low tapping breakage ,high precision of screw thread ,simple operation ,no need much experience and technique .



order no	tapping range	air pressure	no-load speed	max work radius	gross weight	tapping direction	standard collets
PO-13	M3-M12	6-8kg/cm	400rpm	1000mm(3-arm:1500mm)	20kg	universal direction	standard
PO-16	M3-M16	6-8kg/cm	250rpm	1000mm(3-arm:1500mm)	25kg	universal direction	standard

Unit: mm

# ELECTRONIC TAPPING MACHINE

# ELECTRONIC

## Features:

- The machine adopt servo drive control, with intelligent torque protection, supersede traditional lathe and drilling machine, overcome limitation of manual tapping.
- Advanced mechanical design, various of parts casted by mould, with very high rigidity, durable without deformation, attractive appearance.
- HD Touch Screen makes the operation much more convenient and flexible, can realize work vertical and universal direction to complicated and cumbersome work, positioning rapidly and process accurately.
- Stepless speed changes, Manual Mode, Automatic Mode and Deep Hole Mode, three work mode optional.
- Automatic Mode can control tapping depth precisely, no need button operation, controlled by depth controller automatically.
- Repetitive positioning rapidly, fast tapping speed, high work efficiency.
- Can tapping all kinds of lead, steel, iron, copper, aluminum, plastic and other materials.



order no	tapping range	Highest speed	max work radius	vertical extension	tapping direction	Gross Weight	standard collets
PO-6-16	M6-M16	625rpm	1200mm(3-arm:1700mm)	600mm	universal direction	48kg	standard
PO-6-20	M6-M20	312rpm					
PO-6-24	M6-M24	250rpm					
PO-6-30	M6-M30	200rpm					
PO-6-36	M6-M36	156rpm				50kg	

Unit: mm

# DRILL BIT GRINDING MACHINE

## POD-13 POD-30

## MACHINE series



PO-30



PO-13

order no	range	collet size	Voltage	power	speed (rpm/min)	Apex Angle	Diamond grinding wheel	Gross/net weight(kg)
POD-13	normal twist drill Ø3-Ø13 90° center drill Ø3-Ø8	ER 20	220V 50/60Hz	120W	5500	90°-145°	CBN/SDC230 Ø78*10.2*12mm	13.1
POD-30	normal twist drill Ø13-Ø30 90° center drill Ø3-Ø8	ER 40	220V 50/60Hz	300W	5500	90°-145°	CBN/SDC230 Ø125*20.2*19mm	32.27

Unit: mm

### Features:

- Professional drill bit grinder , grinding is accurate and quick , no special skills required.
- Economical and practical , significant cost saving , improve use efficiency.
- The grinder use diamond grinding wheel with an accurate angle and long service life.
- The machine is set up with the function of adjusting control point size , control the quality and accuracy of the workpiece and excellent the service life of the drill bit

# END MILL

## POE-13 POE-30



order no	range	collet size	Voltage	power	speed (rpm/min)	Apex Angle	Diamond grinding wheel	Gross/net weight(kg)
POE-13	Ø3-Ø13	ER20	220V	300W	4000	0°-5°	CBN/SDC	15.13
POE-30	Ø13-Ø30	ER40	220V	4500W	4500	0°-5°	CBN/SDC	31.5

Unit: mm

### Features:

- Portable type end mill grinder , grinding 2,3,4,6 blade of straight shank end milling cutter.
- Rapid and precise grinding , easy operation.
- Diamond grinding wheel can complete all the processes, long life ,save cost and improve efficiency.
- Only suitable for straight shank end mills.

# BT | ER Collet chuck kit

**Features :**

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
BT30-ER16	1-10	ER16/10PCS	2
BT30-ER20	2-13	ER20/12PCS	2.5
BT30-ER25	2-16	ER25/15PCS	2.5
BT30-ER25	4-16	ER25/7PCS	2.8
BT30-ER32	3-20	ER32/18PCS	4.4
BT30-ER32	4-20	ER32/11PCS	3.8
BT30-ER32	6-20	ER32/6PCS	3.4
BT40-ER16	1-10	ER16/10PCS	2.3
BT40-ER20	2-13	ER20/12PCS	2.8
BT40-ER25	2-16	ER25/15PCS	3.2
BT40-ER25	4-16	ER25/7PCS	3
BT40-ER32	3-20	ER32/18PCS	5.6
BT40-ER32	4-20	ER32/11PCS	4.6
BT40-ER32	6-20	ER32/6PCS	4.2
BT40-ER40	4-26	ER40/15PCS	7.6
BT40-ER40	6-25	ER40/7PCS	4.5
BT40-ER50	12-34	ER50/12PCS	9
BT50-ER32	3-20	ER32/18PCS	4.5
BT50-ER40	4-26	ER40/23PCS	11.3
BT50-ER50	12-34	ER50/12PCS	12

Unit: mm



# ST-M | ER Collet chuck kit

**Features :**

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
ST16-ER11	1-7	ER11/13PCS	0.6
ST16-ER16	1-10	ER16/10PCS	1
ST20-ER16	1-10	ER16/10PCS	1.1
ST25-ER16	1-10	ER16/10PCS	1.2
ST20-ER20	2-13	ER20/12PCS	1.2
ST25-ER20	2-13	ER20/12PCS	1.4
ST25-ER25	2-13	ER25/15PCS	1.9





# Collet chuck kit | SK

**KIT**  
SERIES

## Features :

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
SK30-ER16	1-10	ER16/10PCS	1.8
SK30-ER20	2-13	ER20/12PCS	2.4
SK30-ER25	2-16	ER25/15PCS	2.7
SK30-ER32	3-20	ER32/18PCS	4.2
SK40-ER16	1-10	ER16/10PCS	2.2
SK40-ER20	2-13	ER20/12PCS	2.7
SK40-ER25	2-16	ER25/15PCS	3.1
SK40-ER32	3-20	ER32/18PCS	5.2
SK40-ER40	4-26	ER40/15PCS	7
SK50-ER32	3-20	ER32/18PCS	7
SK50-ER40	4-26	ER40/15PCS	9.5

Unit: mm



# Collet chuck kit | NT

## Features :

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
NT30-ER25	2-16	ER25/15PCS	2.8
NT30-ER32	3-20	ER32/18PCS	4.2
NT30-ER40	4-26	ER40/23PCS	7.3
NT40-ER16	1-10	ER16/10PCS	2.4
NT40-ER20	2-13	ER20/12PCS	2.5
NT40-ER25	2-16	ER25/15PCS	3.3
NT40-ER32	3-20	ER32/18PCS	4.8
NT40-ER40	4-26	ER40/23PCS	8.2
NT40-ER50	12-34	ER50/12PCS	10
NT50-ER32	3-20	ER32/18PCS	6.4
NT50-ER40	4-26	ER40/23PCS	9.8
NT50-ER50	12-34	ER50/12PCS	11

Unit: mm





**Features :**

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
BT40-OZ25	3-25	OZ25/15PCS	5.9
BT40-OZ32	6-32	OZ32/15PCS	9.4
BT50-OZ25	3-25	OZ25/15PCS	9.5
BT50-OZ32	6-32	OZ32/15PCS	12

Unit: mm



**Features :**

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
MTB2-OZ25	3-25	OZ25/15PCS	5.1
MTB3-OZ25	3-25	OZ25/15PCS	5.2
MTB4-OZ25	3-25	OZ25/15PCS	5.4
MTB5-OZ25	3-25	OZ25/15PCS	6.2
MTB5-OZ32	6-32	OZ32/15PCS	10

Unit: mm



# ER Straight shank collet chuck

# ST

# KIT SERIES

## Features :

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
ST16-ER11A	1-7	ER11/13PCS	0.6
ST16-ER16A/UM	1-10	ER16/10PCS	1
ST25-ER16A/UM	1-10	ER16/10PCS	1.1
ST20-ER20A/UM	2-13	ER20/12PCS	1.15
ST25-ER20A/UM	2-13	ER20/12PCS	1.3
ST20-ER25A/UM	2-16	ER25/15PCS	2.4
ST25-ER25A/UM	2-16	ER25/15PCS	2.5
ST32-ER25A/UM	2-16	ER25/15PCS	2.5
ST25-ER32A/UM	3-20	ER32/18PCS	4.1
ST32-ER32A/UM	3-20	ER32/18PCS	4.3
ST40-ER32A/UM	3-20	ER32/18PCS	4.5
ST32-ER40A/UM	4-26	ER40/23PCS	7.3
ST40-ER40A/UM	4-26	ER40/23PCS	6.5

Unit: mm



# ER Morse Taper collet chuck

# MTB

## Features :

including some collets , wrench and tool holder

Order no	Set range	Collet	Draw Bar	Weight (kg)
MTB2-ER16	1-10	ER16/10PCS	M10x1.5	1.05
MTB2-ER20	2-13	ER20/12PCS	M10x1.5	1.35
MTB2-ER25	2-16	ER25/15PCS	M10x1.5	2.4
MTB3-ER16	1-10	ER16/10PCS	M12x1.75	1.15
MTB3-ER20	2-13	ER20/12PCS	M12x1.75	1.35
MTB3-ER25	2-16	ER25/15PCS	M12x1.75	2.5
MTB3-ER32	3-20	ER32/18PCS	M12x1.75	4.1
MTB3-ER40	4-26	ER40/23PCS	M12x1.75	7.2
MTB4-ER32	3-20	ER32/18PCS	M16x2	4.3
MTB4-ER40	4-26	ER40/23PCS	M16x2	7.3
MTB4-ER50	12-34	ER50/12PCS	M16x2	8.5
MTB5-ER40	4-26	ER40/23PCS	M24x3	8.2
MTB5-ER50	12-34	ER50/12PCS	M24x3	9.5

Unit: mm



# OZ COLLET CHUCK KIT

**Features :**

including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
SK40-OZ25	3-25	OZ25/15PCS	5.7
SK40-OZ32	6-32	OZ32/15PCS	9.2
SK50-OZ25	3-25	OZ25/15PCS	9.3
SK50-OZ32	6-32	OZ32/15PCS	11.8

Unit: mm



# OZ COLLET CHUCK KIT

**Features :**

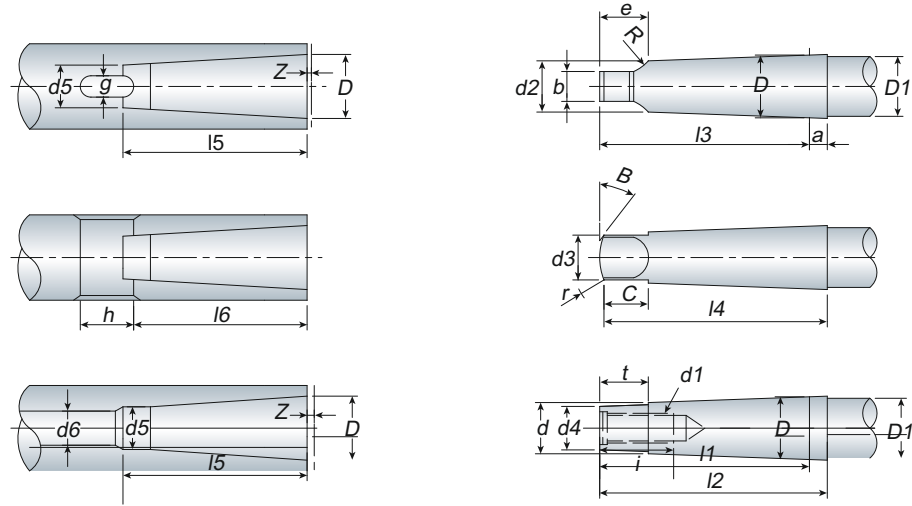
including some collets , wrench and tool holder

Order no	Set range	Collet	Weight (kg)
NT40-OZ25	3-25	OZ25/15PCS	5.5
NT40-OZ32	6-32	OZ32/15PCS	9.2
NT50-OZ25	3-25	OZ25/15PCS	8.5
NT50-OZ32	6-32	OZ32/15PCS	11.8



# Morse Taper Shank

Technical information

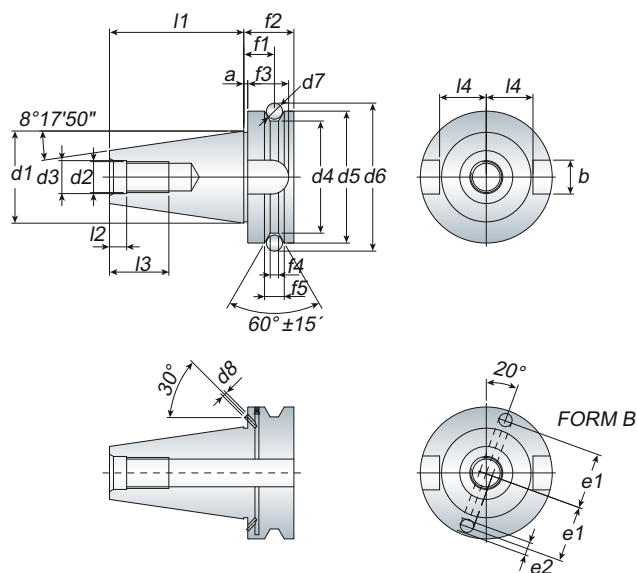


Code Number		Morse Taper Shank							
		0	1	2	3	4	5	6	7
		1:19.212 =0.05205	1:20.047 =0.04988	1:20.020 =0.04995	1:19.922 =0.05020	1:19.254 =0.05194	1:19.002 =0.05263	1:19.180 =0.05214	1:19.231 =0.05200
Outside Taper	D	9.045	12.065	17.780	23.825	31.267	44.399	63.348	83.058
	a	3	3.5	5	5	6.5	6.5	8	10
	D1	9.2	12.2	18	24.1	31.6	44.7	63.8	83.6
	d	6.4	9.4	14.6	19.8	25.9	37.6	53.9	70
	d1	-	M6	M10	M12	M16	*M20	M24	M33
	d2	6.1	9	14	19.1	25.2	36.5	52.4	68.2
	d3 Max.	6	8.7	13.5	18.5	24.5	35.7	51	66.8
	d4 Max.	6	9	14	19	25	35.7	51	65
	l1 Max.	50	53.5	64	81	102.5	129.5	182	250
	l2 Max.	53	57	69	86	109	136	190	260
	l3 Max.	56.5	62	75	94	117.5	149.5	210	286
	l4 Max.	59.5	65.5	80	99	124	156	218	296
	b h13	3.9	5.2	6.3	7.9	11.9	15.9	19	28.5
	C	6.5	8.5	10	13	16	19	27	35
e Max.	10.5	13.5	16	20	24	29	40	54	
i Min.	-	16	24	28	32	40	50	80	
R Max.	4	5	6	7	8	10	13	19	
r	1	1.2	1.6	2	2.5	3	4	5	
t Max.	4	5	5	7	9	9	12	185	
Inside Taper	d5 H11	6.7	9.7	14.9	20.2	26.5	38.2	54.6	71.1
	d6	-	7	11.5	14	18	23	27	30
	l5 Min.	52	56	67	84	107	135	188	258
	l6	49	52	62	78	98	125	177	241
	g A13	41	5.4	6.6	8.2	12.2	16.2	19.3	28.8
	h	15	19	22	27	32	38	47	69
	z	1	1	1	1	1.5	15	2	2

Unit: mm

# BT / NT SHANK

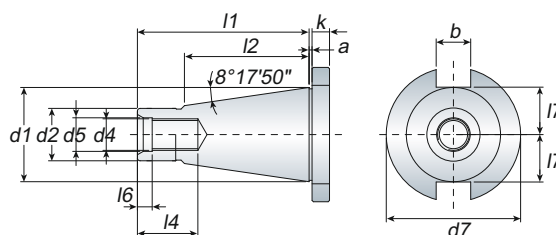
## BT Shank



Shank Size	a	b	d1	d2	d3	d4	d5	d6	d7	d8	e1	e2	f1	f2	f3	f4	f5	l1	l2	l3	l4
BT30	2	16.1	31.75	M12	12.5	38	46	56.144	8	4	21	5	13.6	22	17	4	8	48.4	7	24	16.3
BT40	2	16.1	44.45	M16	17	53	63	75.679	10	4	27	5	16.6	27	21	5	10	65.4	9	30	22.6
BT50	3	25.7	69.85	M24	25	85	100	119.019	15	6	42	7	23.2	38	31	7	15	101.8	13	45	35.4

Unit: mm

## NT Shank

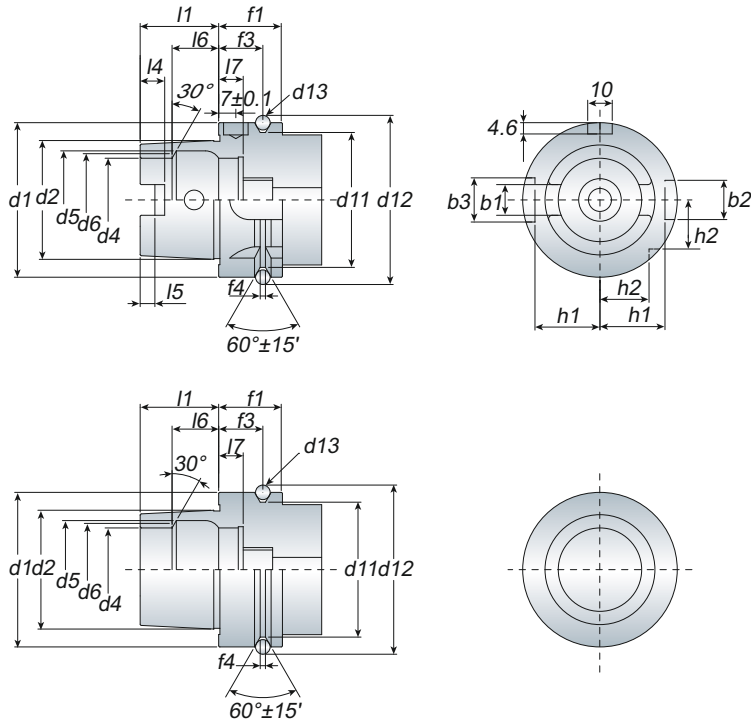


Shank Size	a	b	d1	d2	d4	d5	d7	k	l1	l2	l4	l6	l7
NT30	1.6	16.1	31.75	17.4	1/2"-12 M12x1.75P	13	50	8	68.4	48.4	24	5.5	16.2
NT40	1.6	16.1	44.45	25.3	5/8"-11 M16x2.0P	17	63	10	93.4	65.4	32	8.2	22.5
NT50	3.2	25.7	69.85	39.6	1"-8 M24x3.0P	26	97.5	12	126.8	101.8	47	11.5	35.3

Unit: mm

# HSK-A/E Shank

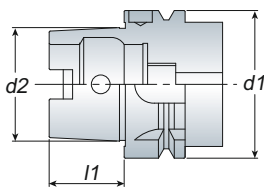
Technical information



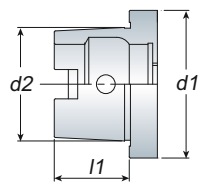
Shank Size	b1	b2	b3	d1	d2	d4	d5	d6	d11	d12	d13	f1	f3	f4	h1	h2	l1	l4	l5	l6	l7
HSK32	7.05	7	9	32	24	17	21	19	26.5	37	4	20	16	2	13	9.5	16	5	3	8.92	8
HSK40	8.05	9	11	40	30	21	25.5	23	34.8	45	4	20	16	2	17	12	20	6	3.5	11.42	8
HSK50	10.54	12	14	50	38	26	32	29	43	59.3	7	26	18	3.75	21	15.5	25	7.5	4.5	14.13	10
HSK63	12.54	16	18	63	48	34	40	37	55	72.3	7	26	18	3.75	26.5	20	32	10	6	18.13	10
HSK100	20.02	20	22	100	75	53	63	58	92	109.75	7	29	20	3.75	44	31.5	50	15	10	28.56	12.5

Unit: mm

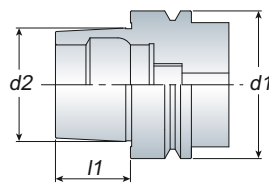
HSK-A



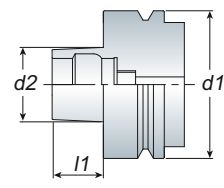
HSK-C



HSK-E



HSK-F



HSK-A

HSK-A	d1	d2	l1
32	32	24	16
40	40	30	20
50	50	38	25
63	63	48	32
100	100	75	50

Unit: mm

HSK-C

HSK-C	d1	d2	l1
32	32	24	16
40	40	30	20
50	50	38	25
63	63	48	32
100	100	75	50

Unit: mm

HSK-E

HSK-E	d1	d2	l1
32	32	24	16
40	40	30	20
50	50	38	25
63	63	48	32

Unit: mm

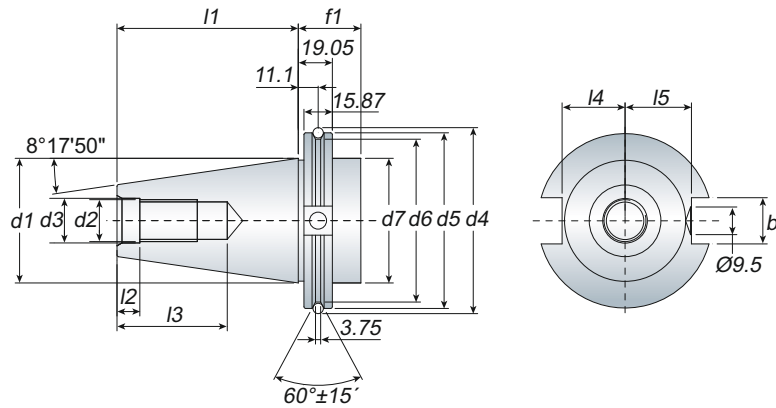
HSK-F

HSK-F	d1	d2	l1
50	50	30	20
63	63	38	25

Unit: mm

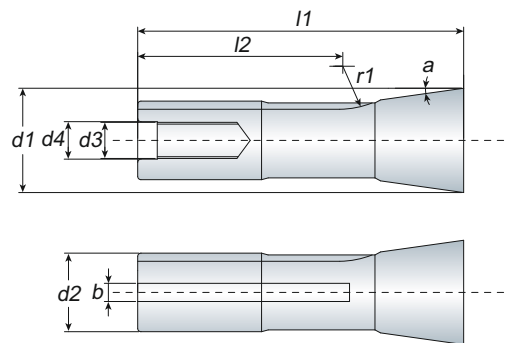


## CAT Shank



Shank Size	b	d1	d2	d3	d4	d5	d6	d7	f1	l1	l2	l3	l4	l5
CAT40	16.1	44.45	5/8"-11	17	72.3	63.55	56.25	44.45	35	68.25	4.75	30	22.8	26
CAT50	25.7	69.85	1"-8	25	107.25	98.45	91.25	69.85	36.5	101.75	5.75	45	35.5	40.4

Unit: mm



## R8 Shank

Shank Size	a	b	d1	d2	d3	d4	l1	l2	r1
R8	8°25'30"	4.2	31.75	24.109	7/16"x20 UNF	12.5	101	60	20

Unit: mm

# MEMO



## *Holding Your Future*

A series of horizontal dashed lines for writing a memo.

# MEMO



## *Holding Your Future*

A series of horizontal dashed lines for writing, spanning the width of the page.

# MEMO



## *Holding Your Future*

A large area of the page is filled with horizontal dashed lines, providing space for writing a memo.

# MEMO



## *Holding Your Future*

A series of horizontal dashed lines for writing a memo.

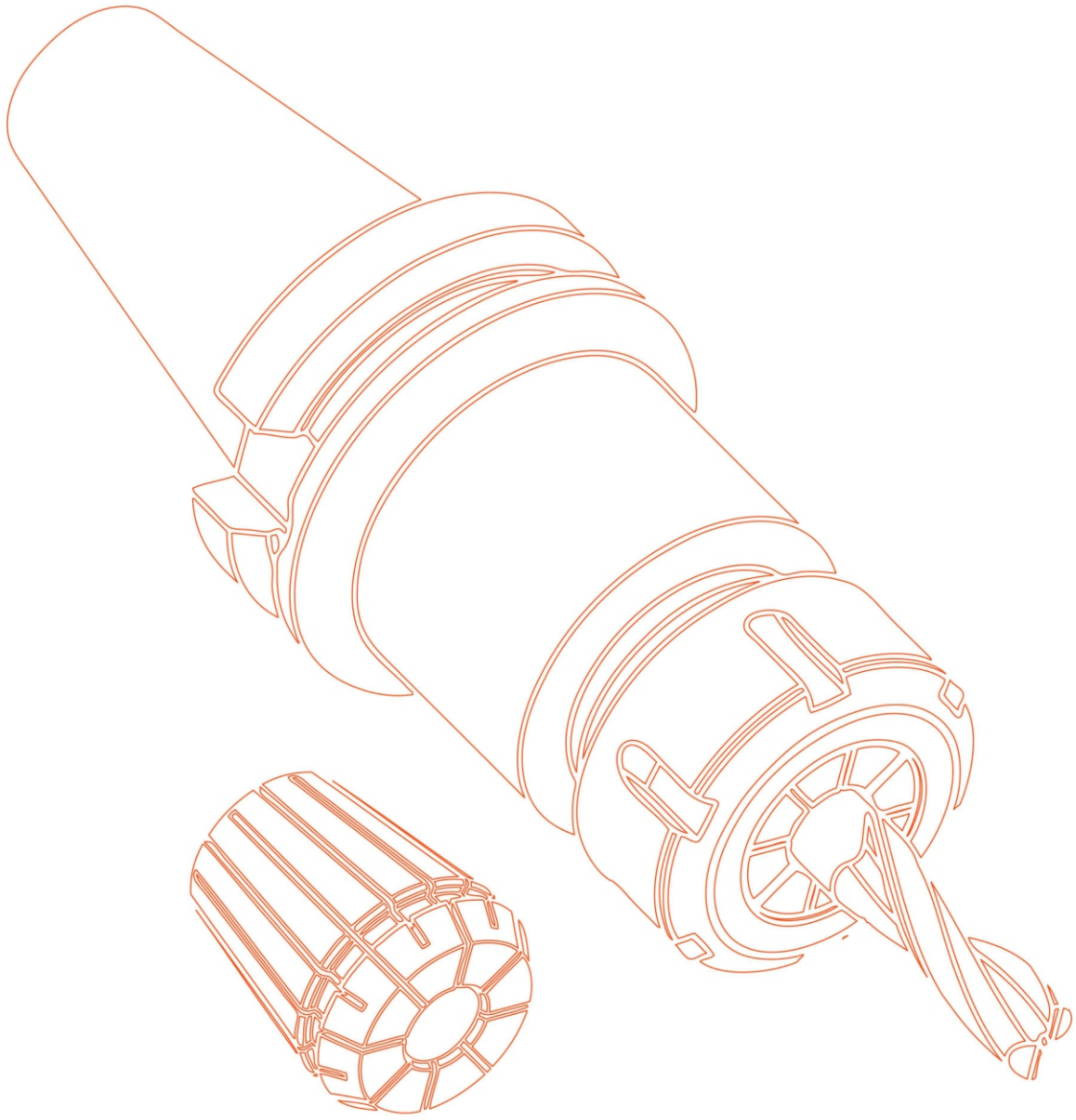
# MEMO



## *Holding Your Future*

A series of horizontal dashed lines for writing a memo.





agents