

E2016-2017

ISO 9001 & 14001 Certified

WORLD BEST QUALITY & PRIDE



DONRAY PREMIUM TOOLING SYSTEM



www.ttoolz.ru

Accessory
& Others

Boring
System

NC Drill Chuck
& Other Tool
Holders

Face Mill
Arbor

Tapping
Chuck

Tapping ER
Chuck

Synchro
Tapping Chuck

SK Slim
Chuck

Morse Taper
Arbor

Milling
Chuck

Shell Mill Arbor &
Combi Shell Mill
Arbor

End Mill Holder &
Side Lock Arbor

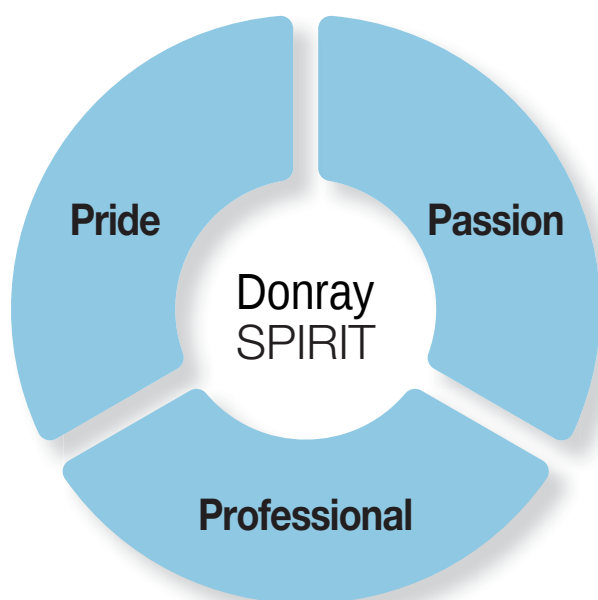
ER Collet
Chuck

Shrink Fit
Holder

Hydraulic
Chuck

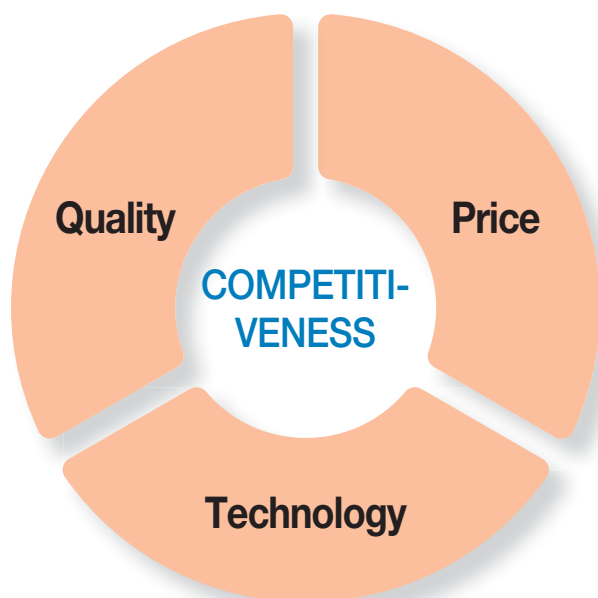
DONRAY VISION

THE WORLD LEADER IN THE
TOOL HOLDER INDUSTRY



Donray 3P SPRIT

is the basis for realization of its vision and customer satisfaction.



Donray COMPETITIVENESS

assures impeccable products, unparalleled quality and highest price performance ratio.



PRODUCT INDEX

HYDRAULIC CHUCK

HYDRAULIK SPANNFUTTER
MANDRIN HYDRAULIQUE
MANDRINI IDRAULICI
PORTAHERRAMIENTAS HIDRAULICO

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SCHRUMPFUTTER
MANDRIN DE FRETAGE
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PORTAHERRAMIENTAS DE COMPRESION POR CALOR

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ER COLLET CHUCK

FRÄSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

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ER COLLET CHUCK

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

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MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL

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SHELL MILL ARBOR & COMBI SHELL MILL ARBOR

AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES COMBINÉS
MANDRINO PORTA FRESE
PORTA FRESAS COMBINADO

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SHELL MILL ARBOR & COMBI SHELL MILL ARBOR

AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES COMBINÉS
MANDRINO PORTA FRESE
PORTA FRESAS COMBINADO

JIS B6339/MAS 403-BT & CBT

(CMA)



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MANDRIN PORTE FRAISE
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COLLET & SPANNER



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EINSATZHÜLSEN FÜR MORSEKEGEL
DOUILLES DE RÉDUCTION CÔNE MORSE
MANDRINO RIDUZIONE CONO MORSE
REDUCTORES A MORSE

DIN 69871-SK



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(MTA & MTB)



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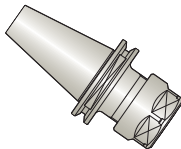
ANSI B5.18-NT



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SK SLIM CHUCK

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO

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SYNCHRO TAPPING CHUCK

SYNCHRO GEWINDESCHNEIDFUTTER (ER)
SYNCHRO TARAUDER (ER)
SINCRO MANDRINI PER MASCHIATURA (ER)
SINCRO PORTAMACHOS (ER)

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TAPPING ER CHUCK

ER - GEWINDESCHNEIDFUTTER
MANDRIN DE TARAUDAGE PINCE ER
MANDRINI PORTAPINZA ER PER MASCHIATURA
PORTAPINZAS ER PARA MACHOS

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TAPPING CHUCK

GEWINDESCHNEID-SCHNELLWECHSELFUTTER / TARAUDER À CHANGEMENT RAPIDE
MANDRINO PER MASCHIARE / PORTAMACHOS DE CAMBIO RAPIDO

DIN 69871-SK



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STRAIGHT-K



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TAP ADAPTER



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FACE MILL ARBOR

AUFNAHMEDORNE / ARBRE PORTE FRAISE À ALÉSAGE
SISTEMA PORTA FRESE FRONTALE / SISTEMA PARA PLATOS DE PLACAS

JIS B6339/MAS 403-BT & CBT

(FMA)



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DIN 69893/ISO 12164-1-HSK

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DIN 228-MTA

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JIS B6339/MAS 403-BT & CBT

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JIS B6339/MAS 403-BT & CBT

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DIN 69893/ISO 12164-1-HSK

(FMC & PARTS)



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NC DRILL CHUCK & OTHER TOOL HOLDERS

NC - BOHRFUTTER und ANDERE WERKZEUGHALTER
MANDRIN DE PERÇAGE NC et D'AUTRES PORTE-OUTIL
NC MANDRINI PORTA PUNTE e ALTRI PORTAUTENSILI
PORTABROCAS PARA BROCAS NC y OTRA PORTAHERRAMIENTAS

JIS B6339/MAS 403-BT & CBT

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JIS B6339/MAS 403-BT

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JIS B6339/MAS 403-BT

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DIN 69893/ISO 12164-1-HSK

(BLANK BAR)



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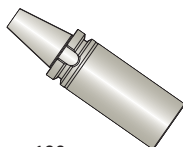
NC DRILL CHUCK & OTHER TOOL HOLDERS

NC - BOHRFUTTER / MANDRIN DE PERÇAGE NC

NC MANDRINI PORTA PUNTE / PORTABROCAS PARA BROCAS NC

JIS B6339/MAS 403-BT

(BLANK BAR)



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BORING SYSTEM

AUSBOHRSYSTEM / SYSTÈME D'ALÉSAGE

SISTEMA DI BARENATURA / SISTEMAS DE MANDRINADO

JIS B6339/MAS 403-BT

(FINE BAH : POP)



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(FINE BAH : POP)



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DIN 69871-SK

(FINE BAH : POP)



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JIS B6339/MAS 403-BT

(FINE SAS : POP)



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DIN 69871-SK

(FINE SAS : POP)



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FINE BORING BAR

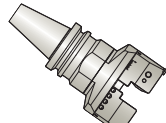
(SMALL BORE : PARTS)



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JIS B6339/MAS 403-BT

(BIG BORE : FBH & PARTS)



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JIS B6339/MAS 403-BT

(TWIN TBH)



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(TWIN TBH)



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JIS B6339/MAS 403-BT

(TWIN SAS)



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(TWIN SAS & PARTS)



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STRAIGHT

(TWIN TBH)



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JIS B6339/MAS 403-BT

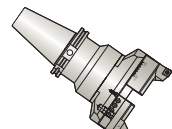
(TWIN TBH)



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(TWIN TBH)



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JIS B6339-BT / DIN 69871-SK

(TWIN SAS & PARTS)



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JIS B6339/MAS 403-BT

(MICRO BCA)



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STRAIGHT

(MICRO BCA & PARTS)



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JIS B6339/MAS 403-BT

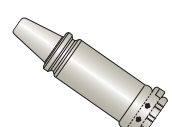
(SQUARE BSA)



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JIS B6339/MAS 403-BT

(SQUARE BSB & BITE)



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ACCESSORY & OTHERS

PULL STUD BOLT



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TOOL CLAMP



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HEIGHT PRESETTER

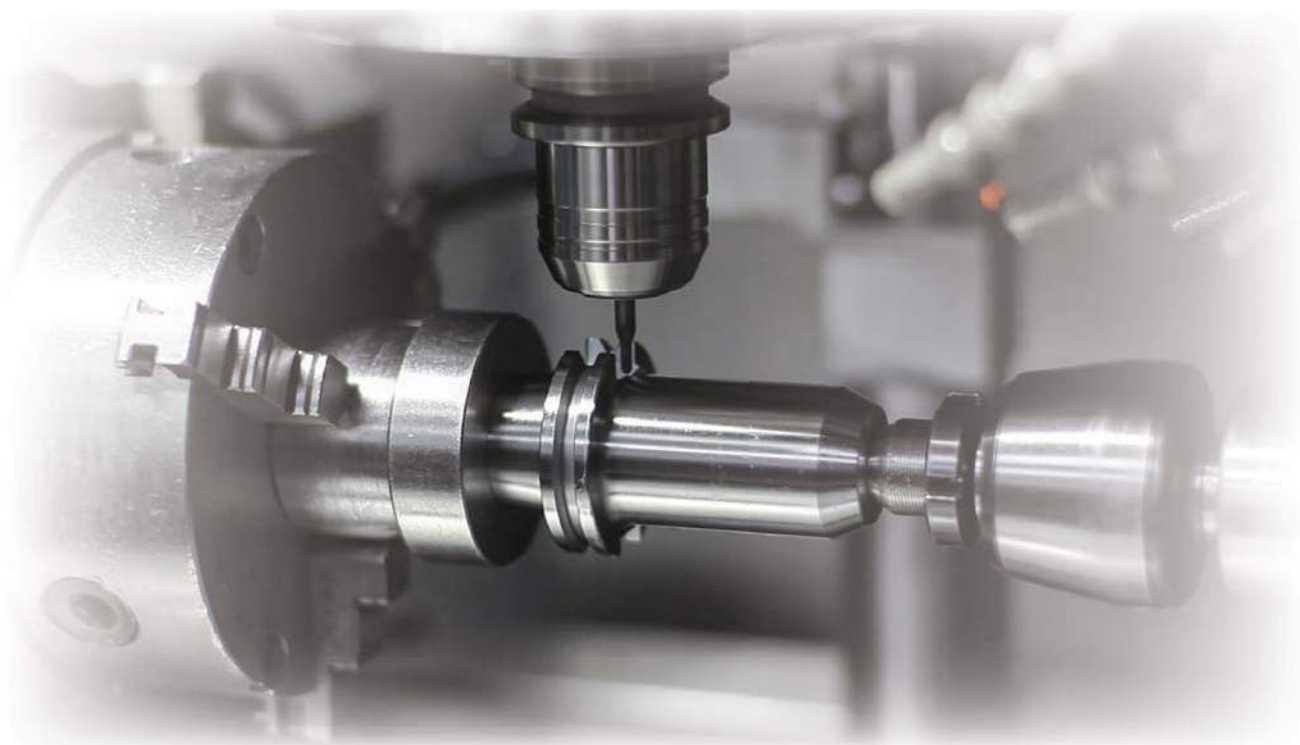


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SHRINK FIT HEATING MACHINE

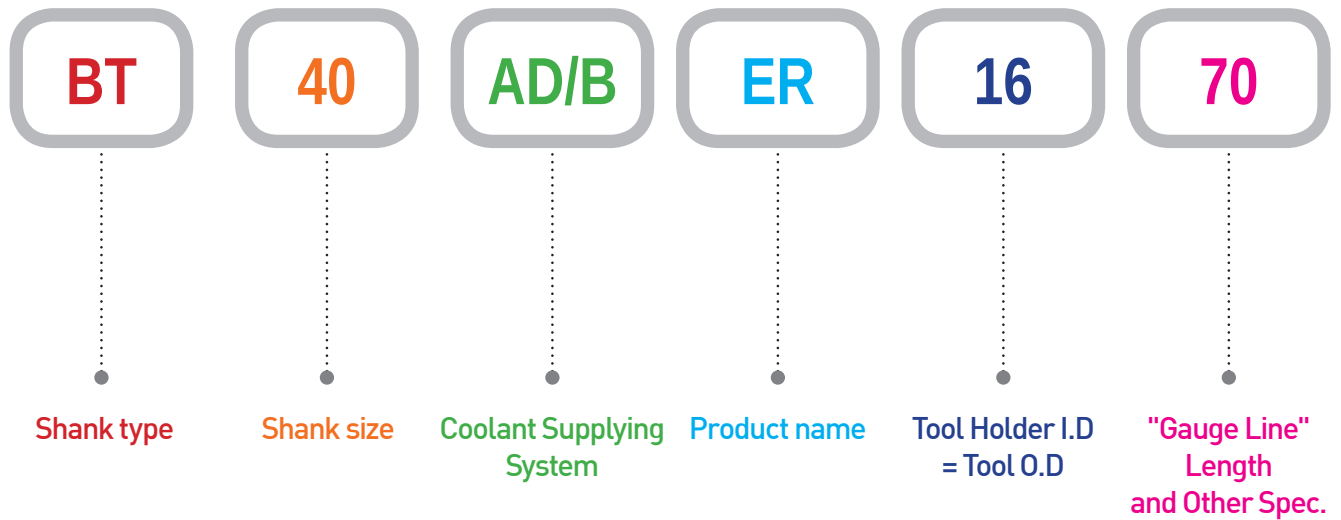


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MODEL NUMBERING SYSTEM & SURFACE FINISH

MODEL NUMBERING SYSTEM



SURFACE FINISH

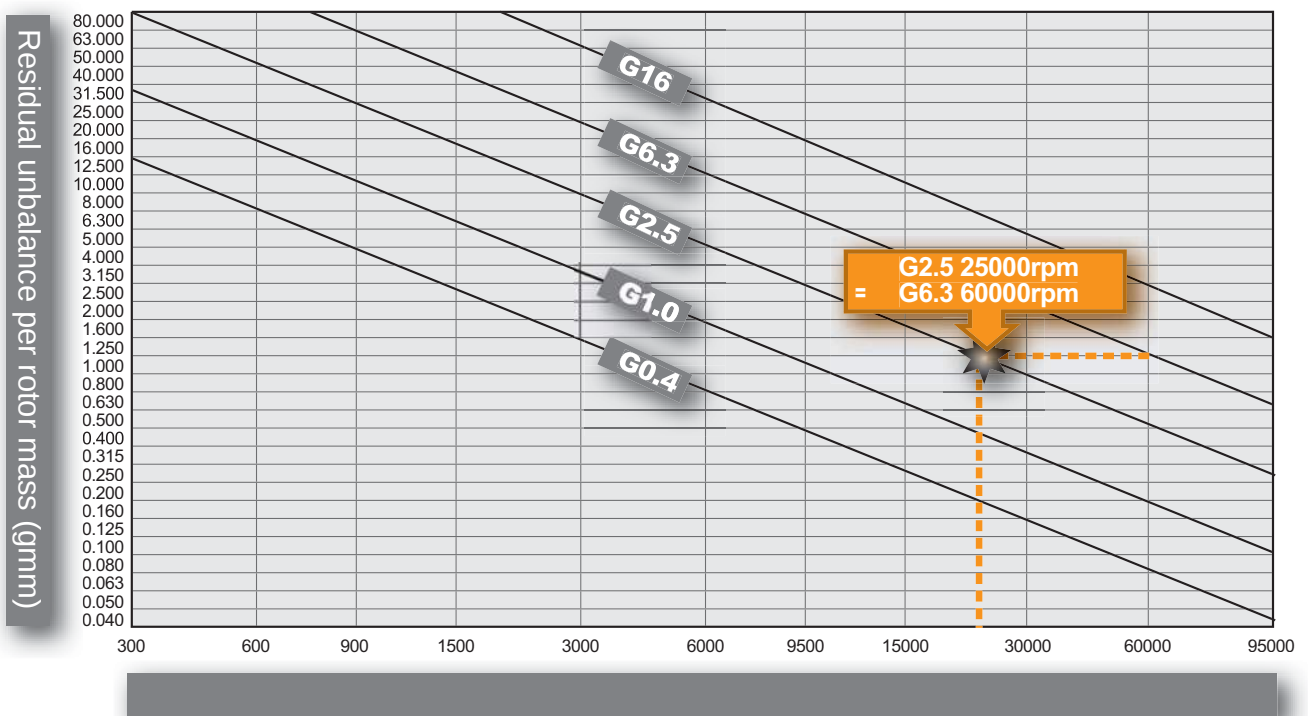


1. Definition of Balancing and Unbalancing

If the rotor(tool holder) is rotated around the axis, centrifugal forces generate in all parts. If these centrifugal forces are distributed symmetrically against the rotation axis, the centrifugal forces generating in the opposite direction are offset by one another, resulting in no forces to the rotation axis eventually. Therefore bearings are not vibrated. In this case tool holder is in the balanced state. On the contrary, if centrifugal forces are distributed asymmetrically against the rotation axis, or if the force of one part is greater than that of the opposite part, the forces equivalent to differences are added to the rotation axis, causing the rotor(tool holder) to vibrate. The imbalance of distribution of rotor mass is called “Unbalance”. In other words, “Unbalance” is mass existing unevenly in the rotor(tool holder).

2. Balancing Grade Quality According To ISO 1940

(DIN ISO 1940)



Calculation of G

$$\frac{G \times m}{\text{rpm}} \times 9549 = U$$

G : Balancing grade or circumference speed

m : Rotor(Holder) weight <— Unit : kg

9549 : Conversion constant

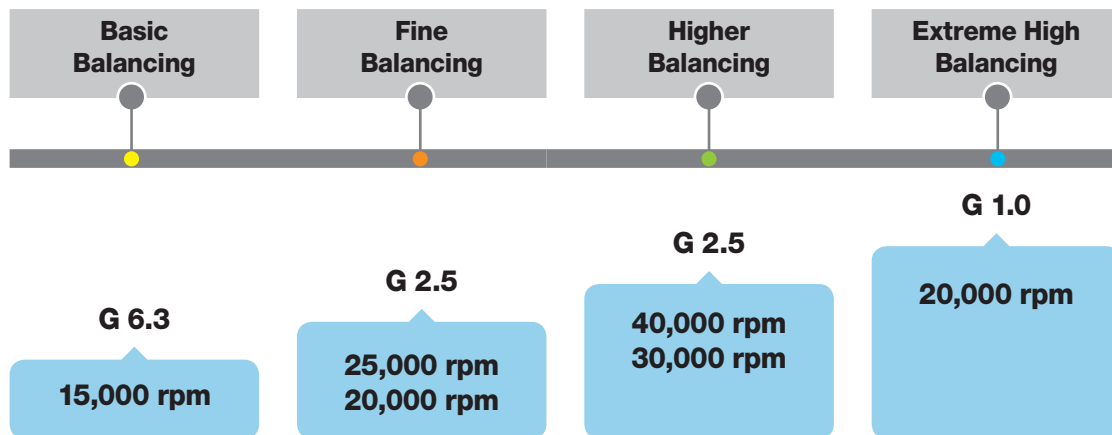
U : Degree of unbalance (Permissible unbalance) <— Unit : g.mm

rpm : Revolutions Per Minute

3. Merits of Balanced Machining

Recently, rotating machines are more sophisticated and operated at high speed with the technical advance. Also, they require more efficiency and more stable functions which are stricter conditions than ever before. In high speed machining, one of the largest factors which degrade performance of machines is chattering. It causes workers to suffer displeasure, noise, and fatigue which are main problems affecting productivity. Balancing of the rotor(tool holder) is the essential and effective factor in order to prevent vibration of the machine. It is widely recognized as the indispensable process in manufacturing rotation machinery.

4. Donray Premium Balancing Grade Standard



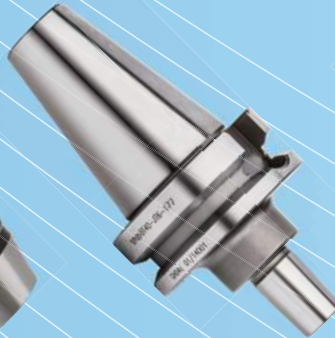
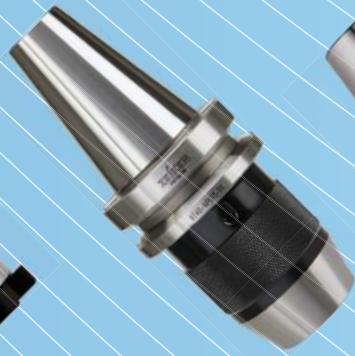
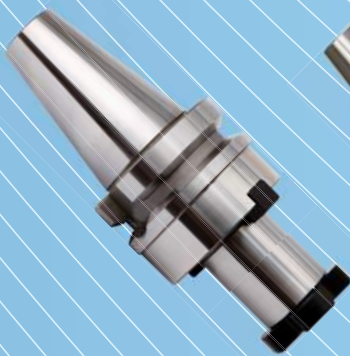
5. Balancing Specification (for Balancing Design Products)

PRODUCT	SHANK	GRADE	RPM	Conversion to G6.3
HYDRAULIC CHUCK	BT/CBT 30/40/50 SK 30/40/50 HSK 32/40/50/63/80/100	G2.5	25,000	G6.3/63,000rpm
SHRINK FIT HOLDER	BT/CBT 30/40/50 SK 30/40/50 HSK 25/32/40/50/63/80/100 ISO 25	G2.5	25,000	G6.3/63,000rpm
OTHER CHUCKS & TOOL HOLDERS	BT/CBT 30/40/50 SK 30/40/50 HSK 25/32/40/50/63/80/100 ISO 20/25	G6.3 G2.5	15,000 25,000	

* HIGHER BALANCING GRADE PRODUCT COULD BE SUPPLIED UPON CUSTOMER'S REQUEST.



DONRAY PREMIUM
**THE WORLD LEADR IN THE
TOOL HOLDER INDUSTRY**
www.ttoolz.ru



HYDRAULIC CHUCK • SHRINK FIT HOLDER • ER COLLET CHUCK • END MILL HOLDER & SIDE LOCK ARBOR
MILLING CHUCK • MORSE TAPER ARBOR • SK SLIM CHUCK • SYNCHRO TAPPING CHUCK
TAPPING ER CHUCK • TAPPING CHUCK • FACE MILL ARBOR
NC DRILL CHUCK & OTHER TOOL HOLDERS • BORING SYSTEM • ACCESSORY & OTHERS

HYDRAULIC CHUCK



HYDRAULIK SPANNFUTTER
MANDRIN HYDRAULIQUE
MANDRINI IDRAULICI
PORTAHERRAMIENTAS HIDRAULICO

DIN 69871 - SK

■ RADIAL TOOL LENGTH PRE-SETTING TYPE / STANDARD TYPE

DIN 69893 / ISO 12164 - 1 - HSK

■ RADIAL TOOL LENGTH PRE-SETTING TYPE / STANDARD TYPE

CBT (BT DUAL CONTACT)

■ RADIAL TOOL LENGTH PRE-SETTING TYPE / STANDARD TYPE

JIS B6339 / MAS 403 - BT

■ RADIAL TOOL LENGTH PRE-SETTING TYPE / STANDARD TYPE

HYDRAULIC CHUCK (FOR MOULD AND GRINDER)

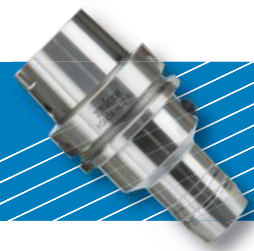
■ JIS B6339 (MAS 403)-BT, DIN 69871-SK, DIN 69893/ISO 12164-1-HSK, DIN228-MTB

ACCESSORY

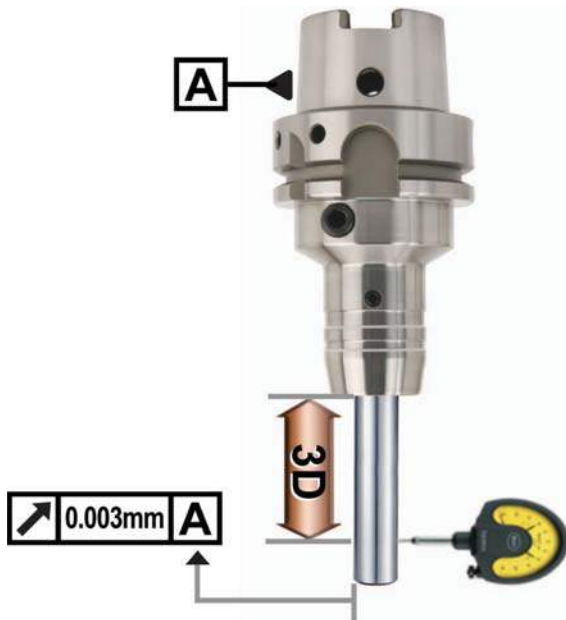
■ HYDRAULIC CHUCK COLLET (HK, HS, HF, HR)

TECHNICAL INFORMATION

HYDRAULIC CHUCK

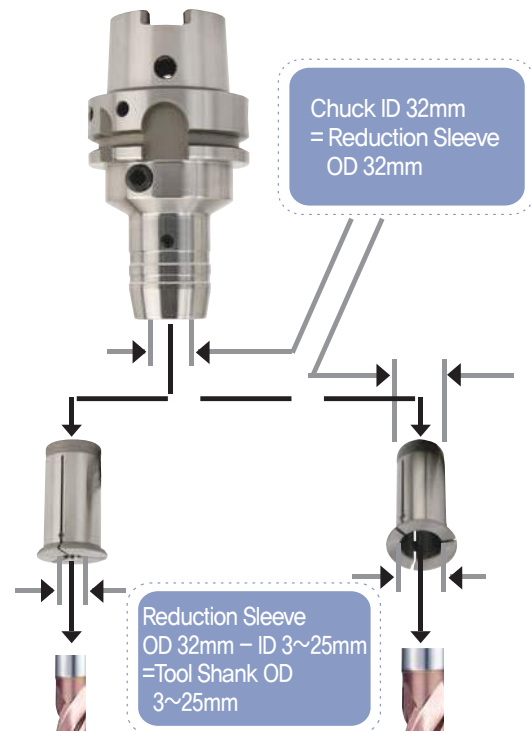


- High precision T.I.R :
 $\leq 0.003\text{mm}$ (Without Reduction Sleeve)



- Less than 0.003mm T.I.R
 => Suitable for high-speed precision machining

- Flexible use of cutting tools by using of reduction sleeves

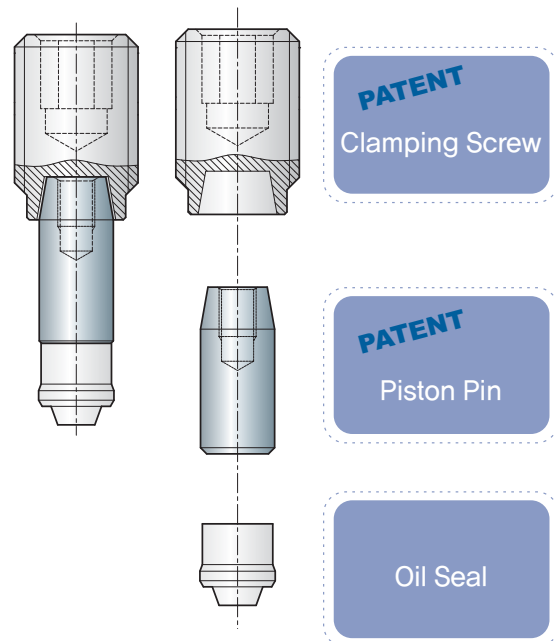


- Easy Tool Change



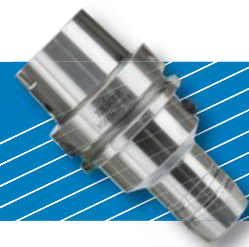
- Easy clamping and unclamping by use of T wrench
 => Reducing tool change time

CLAMPING SCREW



TECHNICAL INFORMATION

HYDRAULIC CHUCK



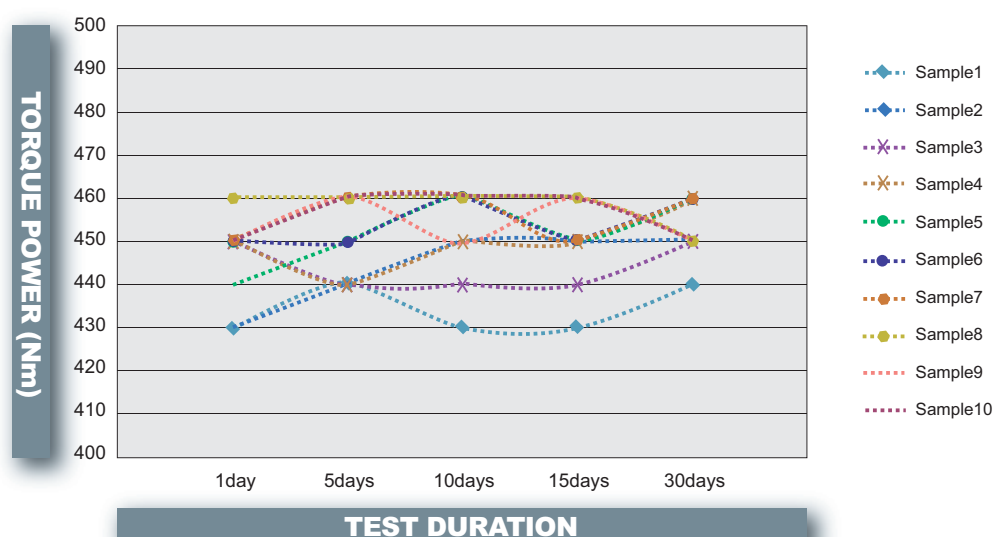
Strong Torque Power

Hydraulic Chuck ID (mm)	Tool Shank OD (mm)	Applicable RPM	Minimum clamping depth (mm)	Min. Torque Power (Nm)
6	6	40,000	27	16
8	8	40,000	27	23
10	10	40,000	32	45
12	12	40,000	27	90
14	14	40,000	37	110
16	16	40,000	42	185
18	18	40,000	42	240
20	20	40,000	42	330
25	25	25,000	48	400
32	32	25,000	55	650

- Tool holder ID Tolerance : H6
- Operating Temperature : 20~25℃
- Maximum oil pressure of coolant oil



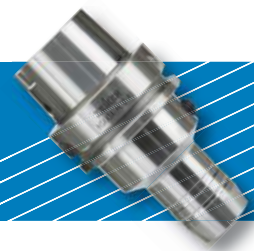
Test of torque power and hydraulic oil leakage



- TEST Model : BT40AD/B-HC20S-72,5
- No oil leakage for long period ⇒ Maintaining stable torque power

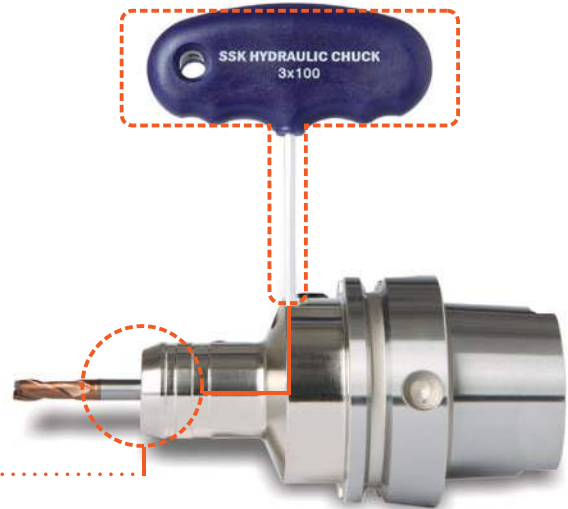
TECHNICAL INFORMATION

HYDRAULIC CHUCK



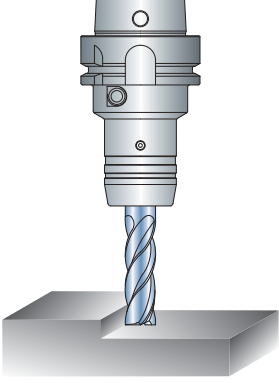
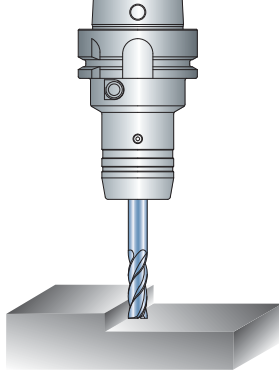
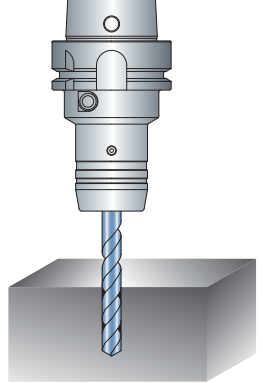
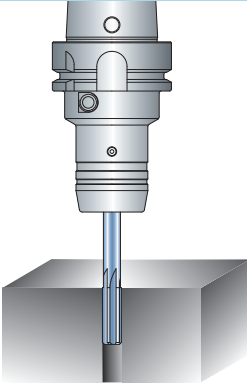
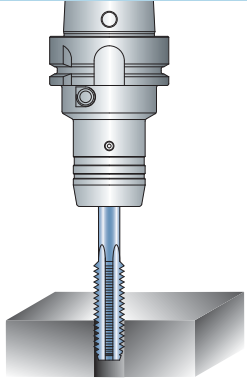
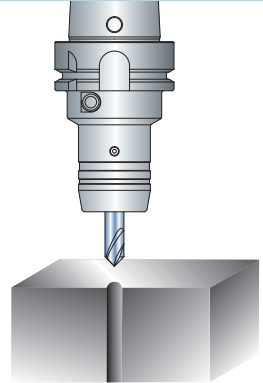
Radial tool length pre-setting type

- Easy to adjust pre-setting length of cutting tool
(Saving time to pre-set cutting tool to one fifth compared with conventional Hydraulic Chuck)
- Precise adjustment of cutting tool length
- Designed to separate tool length adjustment screw from clamping screw



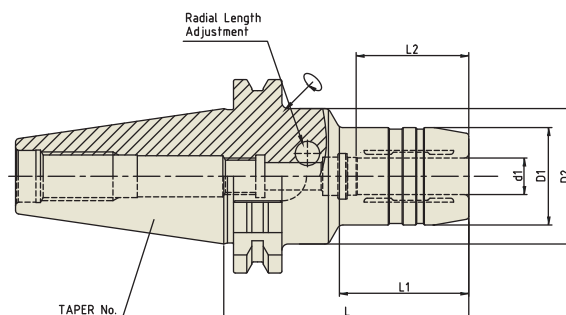
Adjustable range of cutting tool length : 0~10mm

APPLICATION

Milling	High Speed Cutting	Fine Drilling
		
Reaming	Tapping & Thread Milling	Chamfering
		

HYDRAULIC CHUCK (RADIAL TOOL LENGTH PRE-SETTING TYPE) HCR

HYDRAULIK SPANNFUTTER (RADIALE WERKZEUGLÄGEN VOREINSTELLUNG)
 MANDRIN HYDRAULIQUE (BANC DE PR -RÉLAGE RADIAL)
 MANDRINI IDRAULICI (UTENSILI RADIALI PER AZZERAMENTO)
 PORTAHERRAMIENTAS HIDRAULICO (AJUSTE DE LONGITUD TIPO PRE-SETTING)



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Run-Out
(at 3D)
≤30μm

Coolant
System
AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	Weight (Kg)	Stock
30	SK30AD/B-HCR12-85	12	32	44.5	85	40	37	0.90	●
	SK30AD/B-HCR20-85	20	44.5	—	85	—	42	1.00	
40	SK40AD/B-HCR12-80.5	12	32	49.5	80.5	31.5	37	1.50	●
	SK40AD/B-HCR20-80.5	20	42	49.5	80.5	34	42	1.60	●
	SK40AD/B-HCR32-110	32	63	80	110	50	55	2.20	
50	SK50AD/B-HCR12-80.5	12	32	49.5	80.5	31.5	37	3.90	
	SK50AD/B-HCR20-80.5	20	42	49.5	80.5	34	42	4.00	
	SK50AD/B-HCR32-100	32	60	—	100	—	55	4.70	●

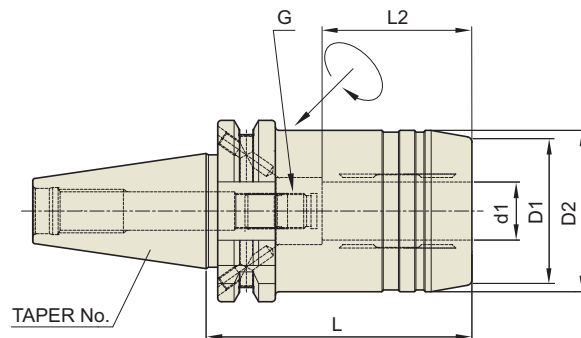
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SHORT & RIGID)

HC

HYDRAULIK SPANNFUTTER (KURZ und STARR)
MANDRIN HYDRAULIQUE (COURT et RIGIDE)
MANDRINI IDRAULICI (CORTO e RIGIDO)
PORTAHERRAMIENTAS HIDRAULICO (CORTO y RIGIDO)



DIN 69871 -SK	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (at 3D) ≤3Um	Coolant System AD/B
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■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	Weight (Kg)	Stock
30	SK30AD/B-HC20S-85	20	41	44	85	42	M10×1.0	0.53	●
40	SK40AD/B-HC12S-50	12	32	42	50	37	M8×1.0	1.1	●
	SK40AD/B-HC20S-64,5	20	37	49,25	64,5	42	M16×1.0	1.26	●
50	SK50AD/B-HC12S-50	12	32	42	50	37	M8×1.0	2.8	
	SK50AD/B-HC20S-64,5	20	37	49,5	64,5	42	M16×1.0	3.1	
	SK50AD/B-HC32S-81	32	55	72	81	55	M16×1.0	4.1	●

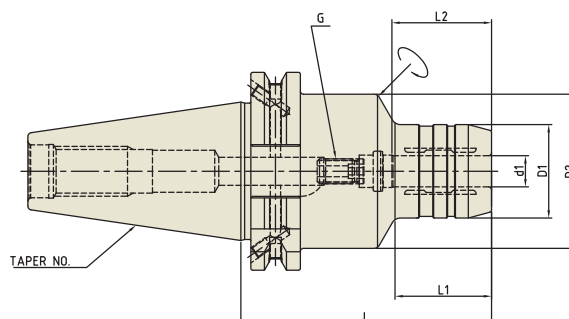
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
 MANDRIN HYDRAULIQUE (MINCE)
 MANDRINI IDRAULICI (SOTTILE)
 PORTAHERRAMIENTAS HIDRAULICO (DELGADO)



DIN 69871

-SK

Taper
Accuracy

AT3

G Value

2.5

RPM

25,000

Run-Out
(at 3D)

≤30μm

Coolant
System

AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
30	SK30AD/B-HC6-70	6	26	45	70	20	27	M5x0.8	0.65	●
	SK30AD/B-HC8-70	8	28	45	70	20	27	M6x1.0	0.65	
	SK30AD/B-HC10-75	10	30	45	75	21	32	M8x1.0	0.73	●
	SK30AD/B-HC12-85	12	32	45	85	22	37	M10x1.0	0.80	
	SK30AD/B-HC14-85	14	34	45	85	22	37	M10x1.0	0.80	
	SK30AD/B-HC16-90	16	38	45	90	50	42	M6x1.0	0.90	
	SK30AD/B-HC18-90	18	40	45	90	50	42	M6x1.0	0.90	
	SK30AD/B-HC20-90	20	42	45	90	50	42	M6x1.0	0.90	
40	SK40AD/B-HC6-80.5	6	26	49.5	80.5	29.5	27	M5x0.8	1.31	●
	SK40AD/B-HC6-110	6	26	49.5	110	29.5	27	M5x0.8	1.76	
	SK40AD/B-HC8-80.5	8	28	49.5	80.5	30	27	M6x1.0	1.34	●
	SK40AD/B-HC8-110	8	28	49.5	110	30	27	M6x1.0	1.76	
	SK40AD/B-HC10-80.5	10	30	49.5	80.5	31	32	M8x1.0	1.34	●
	SK40AD/B-HC10-110	10	30	49.5	110	31	32	M8x1.0	1.76	
	SK40AD/B-HC12-80.5	12	32	49.5	80.5	31.5	37	M10x1.0	1.34	●
	SK40AD/B-HC12-110	12	32	49.5	110	31.5	37	M10x1.0	1.76	
	SK40AD/B-HC16-80.5	16	38	49.5	80.5	33	42	M12x1.0	1.34	●
	SK40AD/B-HC16-110	16	38	49.5	110	33	42	M12x1.0	1.76	
	SK40AD/B-HC20-80.5	20	42	49.5	80.5	34	42	M16x1.0	1.35	●
	SK40AD/B-HC20-110	20	42	49.5	110	34	42	M16x1.0	1.78	
	SK40AD/B-HC25-80.5	25	55	66	80.5	22	48	M16x1.0	1.75	
	SK40AD/B-HC32-80.5	32	63	80	80.5	25.5	55	M16x1.0	2.60	
50	SK50AD/B-HC6-80.5	6	26	49.5	80.5	30	27	M5x0.8	3.00	
	SK50AD/B-HC8-80.5	8	28	49.5	80.5	30	27	M6x1.0	3.00	
	SK50AD/B-HC10-80.5	10	30	49.5	80.5	32	32	M8x1.0	3.00	
	SK50AD/B-HC12-80.5	12	32	49.5	80.5	35	37	M10x1.0	3.05	
	SK50AD/B-HC16-80.5	16	38	49.5	80.5	40	42	M12x1.0	3.10	
	SK50AD/B-HC20-80.5	20	42	49.5	80.5	40	42	M16x1.0	3.15	

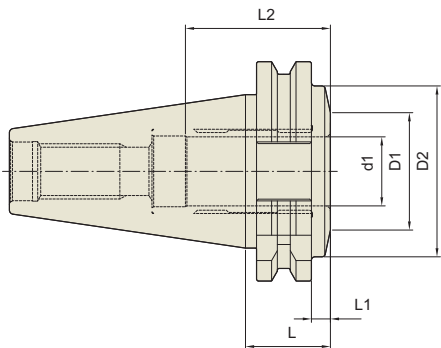
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (ULTRA SHORT)

HC

HYDRAULIK SPANNFUTTER (KURZ)
MANDRIN HYDRAULIQUE (COURT)
MANDRINI IDRAULICI (CORTO)
PORTAHERRAMIENTAS HIDRAULICO (CORTO)



DIN 69871 - SK	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (at 3D) ≤3Um	Coolant System AD
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■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
40	SK40-HC20-24.6	20	34	49.5	24.6	5.5	42	—		
50	SK50-HC32-30.9	32	44.5	70.5	30.9	11.85	55	—		

- CAT(ANSI B5.50) taper and Inch type products area available.
- For applicable Hydraulic Chuck collet, please refer to page 41~44.

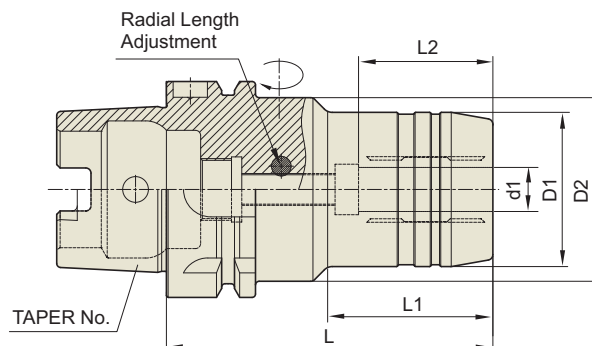
HYDRAULIC CHUCK (RADIAL TOOL LENGTH PRE-SETTING TYPE) HCR

HYDRAULIK SPANNFUTTER (RADIALE WERKZEUGLÄGEN VOREINSTELLUNG)

MANDRIN HYDRAULIQUE (BANC DE PR -RÉLAGE RADIAL)

MANDRINI IDRAULICI (UTENSILI RADIALI PER AZZERAMENTO)

PORTAHERRAMIENTAS HIDRAULICO (AJUSTE DE LONGITUD TIPO PRE-SETTING)



DIN 69893
- HSK

Taper
Accuracy

G Value

2.5

RPM

25,000

Run-Out
(at 3D)

≤3μm

Coolant
System

AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

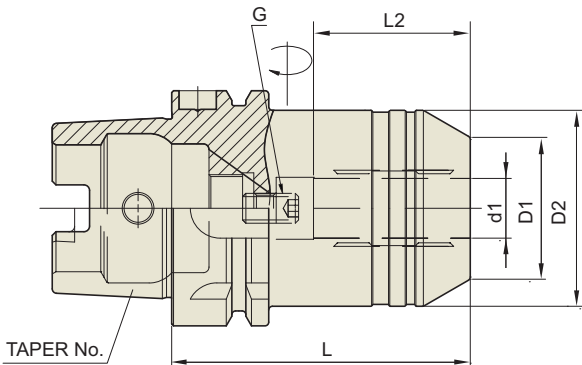
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	Weight (Kg)	Stock
40A	HSK40A-HCR6-80	6	26	34	80	36	27	0.55	
	HSK40A-HCR8-80	8	28	34	80	36	27	0.55	
	HSK40A-HCR10-85	10	30	34	85	43	32	0.65	
	HSK40A-HCR12-90	12	32	34	90	48	37	0.70	
50A	HSK50A-HCR6-80	6	26	40	80	35	27	0.70	
	HSK50A-HCR8-80	8	28	40	80	35	27	0.70	
	HSK50A-HCR10-85	10	30	40	85	38	32	0.73	
	HSK50A-HCR12-90	12	32	40	90	40	37	0.80	
	HSK50A-HCR14-90	14	34	40	90	40	37	0.80	
	HSK50A-HCR16-95	16	38	53	95	34	42	1.00	
	HSK50A-HCR18-95	18	40	57	95	34	42	1.00	
	HSK50A-HCR20-100	20	42	60	100	39	42	1.10	
63A	HSK63A-HCR6-80	6	26	50	80	33	27	0.96	
	HSK63A-HCR8-80	8	28	50	80	33	27	0.98	
	HSK63A-HCR10-85	10	30	50	85	38	32	1.04	
	HSK63A-HCR12-90	12	32	50	90	40	37	1.06	
	HSK63A-HCR14-90	14	34	50	90	46	37	1.08	
	HSK63A-HCR16-95	16	38	50	95	51	42	1.18	
	HSK63A-HCR18-95	18	40	50	95	52	42	1.20	
	HSK63A-HCR20-100	20	42	50	100	51	42	1.22	●
	HSK63A-HCR25-120	25	57	63	120	54.5	48	2.20	
100A	HSK63A-HCR32-125	32	64	75	125	57.5	55	2.60	●
	HSK100A-HCR6-85	6	26	63	85	33	27	3.60	
	HSK100A-HCR8-85	8	28	63	85	33	27	3.60	
	HSK100A-HCR10-90	10	30	63	90	36	32	3.80	
	HSK100A-HCR12-95	12	32	63	95	40	37	3.80	
	HSK100A-HCR14-95	14	34	63	95	41	37	3.80	
	HSK100A-HCR16-100	16	38	63	100	46	42	3.90	
	HSK100A-HCR18-100	18	40	63	100	46	42	3.90	
	HSK100A-HCR20-105	20	42	75	105	51	42	4.20	
	HSK100A-HCR25-115	25	57	75	115	55.5	48	4.40	
	HSK100A-HCR32-120	32	64	75	120	63.5	55	4.60	

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SHORT & RIGID)

HC

HYDRAULIK SPANNFUTTER (KURZ und STARR)
 MANDRIN HYDRAULIQUE (COURT et RIGIDE)
 MANDRINI IDRAULICI (CORTO e RIGIDO)
 PORTAHERRAMIENTAS HIDRAULICO (CORTO y RIGIDO)



DIN 69893
- HSK

Taper
Accuracy

—

G Value

2.5

RPM

25,000

Run-Out
(at 3D)

≤3Uμ

Coolant
System

AD

■ DIN 69893/ISO12164-1-HSK FORM A

Unit : mm

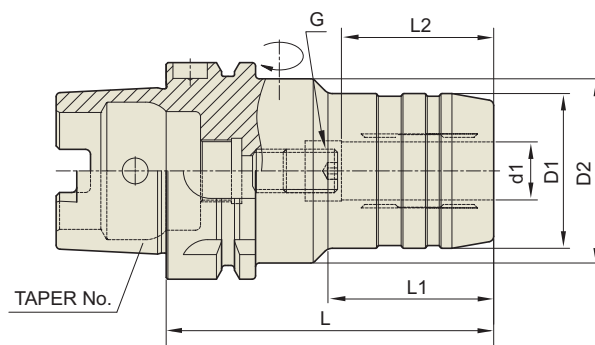
TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	Weight (Kg)	Stock
63A	HSK63A-HC12S-80	12	32	42	80	37	M8×1.0		●
	HSK63A-HC20S-80	20	38	52.5	80	42	M8×1.0		●

►For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
 MANDRIN HYDRAULIQUE (MINCE)
 MANDRINI IDRAULICI (SOTTILE)
 PORTAHERRAMIENTAS HIDRAULICO (DELGADO)



DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Run-Out (at 3D)	Coolant System
	—	2.5	25,000	≤30μm	AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

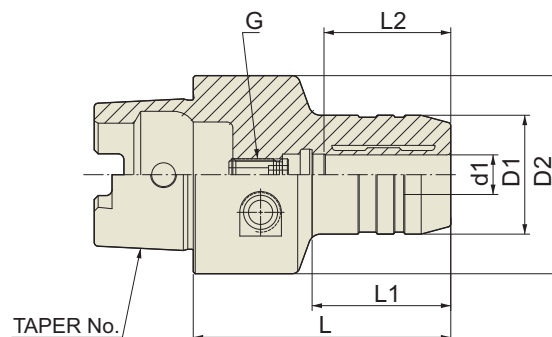
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
32A	HSK32A-HC6-80	6	26	40	80	29	27	M5×0.8	0.30	
	HSK32A-HC8-80	8	28	40	80	29	27	M6×1.0	0.30	
	HSK32A-HC10-85	10	30	40	85	35	32	M6×1.0	0.30	
	HSK32A-HC12-90	12	32	40	90	40	37	M6×1.0	0.30	
40A	HSK40A-HC6-70	6	26	34	70	36	27	M5×0.8	0.50	●
	HSK40A-HC8-70	8	28	34	70	36	27	M6×1.0	0.50	●
	HSK40A-HC10-75	10	30	34	75	42	32	M6×1.0	0.60	●
	HSK40A-HC12-80	12	32	34	80	48	37	M6×1.0	0.65	
50A	HSK50A-HC6-70	6	26	40	70	28	27	M5×0.8	0.65	●
	HSK50A-HC8-70	8	28	40	70	28	27	M6×1.0	0.65	●
	HSK50A-HC10-75	10	30	40	75	34	32	M8×1.0	0.70	●
	HSK50A-HC12-85	12	32	40	85	44	37	M10×1.0	0.75	●
	HSK50A-HC14-85	14	34	40	85	44	37	M10×1.0	0.75	●
	HSK50A-HC16-90	16	38	53	90	30	42	M12×1.0	0.90	●
	HSK50A-HC18-90	18	40	57	90	30	42	M12×1.0	0.90	
	HSK50A-HC20-90	20	42	60	90	29	42	M16×1.0	1.00	
63A	HSK63A-HC6-70	6	26	50	70	24	27	M5×0.8	0.53	●
	HSK63A-HC8-70	8	28	50	70	25	27	M6×1.0	0.55	●
	HSK63A-HC10-80	10	30	50	80	35	32	M8×1.0	1.00	●
	HSK63A-HC12-85	12	32	50	85	40	37	M10×1.0	1.03	●
	HSK63A-HC14-85	14	34	50	85	40	37	M10×1.0	1.05	
	HSK63A-HC16-90	16	38	50	90	46	42	M12×1.0	1.15	●
	HSK63A-HC18-90	18	40	50	90	47	42	M12×1.0	1.15	
	HSK63A-HC20-90	20	42	50	90	48	42	M16×1.0	1.20	●
	HSK63A-HC25-120	25	57	63	120	59	48	M16×1.0	2.20	●
80A	HSK80A-HC12-85	12	32	50	85	40	37	M10×1.0		
	HSK80A-HC20-95	20	42	50	95	52	42	M16×1.0		
	HSK80A-HC32-125	32	64	75	125	63	55	M16×1.0		
100A	HSK100A-HC6-75	6	26	50	75	26	27	M5×0.8	3.20	
	HSK100A-HC8-75	8	28	50	75	26	27	M6×1.0	3.20	
	HSK100A-HC10-90	10	30	50	90	42	32	M8×1.0	3.40	
	HSK100A-HC12-95	12	32	50	95	47	37	M10×1.0	3.40	
	HSK100A-HC14-95	14	34	50	95	47	37	M10×1.0	3.40	
	HSK100A-HC16-100	16	38	50	100	53	42	M12×1.0	3.50	
	HSK100A-HC18-100	18	40	50	100	53	42	M12×1.0	3.60	
	HSK100A-HC20-105	20	42	50	105	59	42	M16×1.0	4.00	
	HSK100A-HC25-110	25	57	63	110	62	48	M16×1.0	4.20	
	HSK100A-HC32-110	32	64	75	110	62	55	M16×1.0	4.30	

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
MANDRIN HYDRAULIQUE (MINCE)
MANDRINI IDRAULICI (SOTTILE)
PORTAHERRAMIENTAS HIDRAULICO (DELGADO)


DIN 69893
- HSK

Taper
Accuracy
–

G Value
2.5

RPM
25,000

Run-Out
(at 3D)
≤3Um

Coolant
System
AD

■ DIN 69893/ISO 12164-1-HSK FORM C

Unit : mm

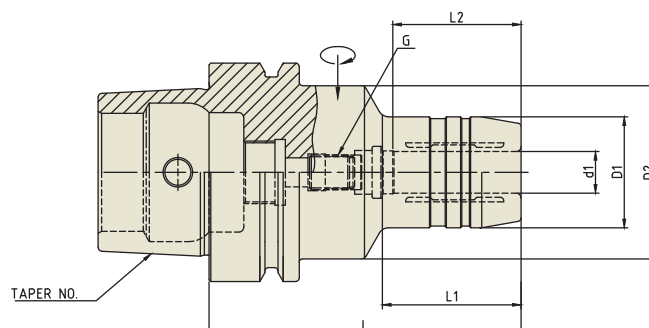
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
32C	HSK32C-HC6-65	6	26	32	65	33	27	M5x0.8		
	HSK32C-HC8-70	8	28	32	70	34	27	M6x1.0		
	HSK32C-HC10-75	10	30	32	75	39	32	M6x1.0		
	HSK32C-HC12-80	12	32	32	80	45	37	M6x1.0		
40C	HSK40C-HC6-60	6	26	40	60	35	27	M5x0.8		
	HSK40C-HC8-60	8	28	40	60	36	27	M6x1.0		
	HSK40C-HC10-65	10	30	40	65	41	32	M6x1.0		
	HSK40C-HC12-70	12	32	40	70	47	37	M6x1.0		
50C	HSK50C-HC6-60	6	26	50	60	30	27	M5x0.8		
	HSK50C-HC8-60	8	28	50	60	30	27	M6x1.0		
	HSK50C-HC10-65	10	30	50	65	35	32	M8x1.0		
	HSK50C-HC12-75	12	32	50	75	44	37	M10x1.0		
	HSK50C-HC14-75	14	34	50	75	46	37	M10x1.0		
	HSK50C-HC16-80	16	38	50	80	51	42	M12x1.0		
	HSK50C-HC18-80	18	40	50	80	51	42	M12x1.0		
	HSK50C-HC20-80	20	42	50	80	52	42	M16x1.0		
63C	HSK63C-HC6-60	6	26	63	60	25	27	M5x0.8		
	HSK63C-HC8-60	8	28	63	60	25	27	M6x1.0		
	HSK63C-HC10-65	10	30	63	65	31	32	M8x1.0		
	HSK63C-HC12-75	12	32	63	75	41	37	M10x1.0		
	HSK63C-HC14-75	14	34	63	75	42	37	M10x1.0		
	HSK63C-HC16-80	16	38	63	80	48	42	M12x1.0		
	HSK63C-HC18-80	18	40	63	80	48	42	M12x1.0		
	HSK63C-HC20-80	20	42	63	80	49	42	M16x1.0		
	HSK63C-HC25-95	25	57	63	95	63	48	M16x1.0		
	HSK63C-HC32-100	32	63	63	100	–	55	M16x1.0		

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
 MANDRIN HYDRAULIQUE (MINCE)
 MANDRINI IDRAULICI (SOTTILE)
 PORTAHERRAMIENTAS HIDRAULICO (DELGADO)

DIN 69893
- HSKTaper
Accuracy
—G Value
2.5RPM
25,000Run-Out
(at 3D)
≤3UμmCoolant
System
AD

■ DIN 69893/ISO 12164-1-HSK FORM E & F

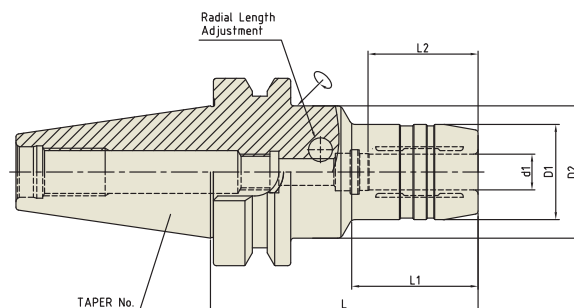
Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
40E	HSK40E-HC6-70	6	26	33.5	70	36	27	M5x0.8		
	HSK40E-HC8-70	8	28	33.5	70	36	27	M6x1.0		
	HSK40E-HC10-75	10	30	33.5	75	42	32	M6x1.0		
	HSK40E-HC12-80	12	32	33.5	80	48	37	M6x1.0		
50E	HSK50E-HC6-70	6	26	40	70	28	27	M5x1.0		
	HSK50E-HC8-70	8	28	40	70	28	27	M6x1.0		
	HSK50E-HC10-75	10	30	40	75	34	32	M8x1.0		
	HSK50E-HC12-85	12	32	40	85	44	37	M10x1.0		
	HSK50E-HC16-90	16	38	53	90	30	42	M12x1.0		
	HSK50E-HC20-90	20	42	60	90	29	42	M16x1.0		
63F	HSK63F-HC20-85	20	42	50	85	46	42	M12x1.0		

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (RADIAL TOOL LENGTH PRE-SETTING TYPE) HCR

HYDRAULIK SPANNFUTTER (SCHLANK)
MANDRIN HYDRAULIQUE (MINCE)
MANDRINI IDRAULICI (SOTTILE)
PORTAHERRAMIENTAS HIDRAULICO (DELGADO)



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (at 3D) ≤3Um	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

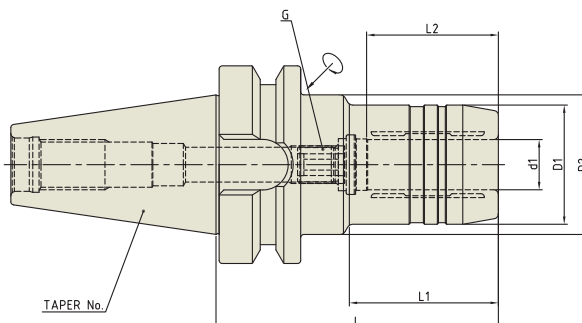
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	Weight (Kg)	Stock
30	CBT30-HCR12-85	12	32	44.5	85	40	37	0.90	
	CBT30-HCR20-85	20	44	44	85	—	42	1.00	●
40	CBT40-HCR12-90	12	32	44.5	90	44.5	37	1.50	
	CBT40-HCR20-90	20	42	49.5	90	47.5	42	1.60	●
	CBT40-HCR32-105	32	60	60	105	—	55	2.20	
50	CBT50-HCR12-95	12	32	44.5	95	34	37	3.90	
	CBT50-HCR20-100	20	42	44.5	100	44	42	4.00	
	CBT50-HCR32-115	32	60	60	115	—	55	4.10	●

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
 MANDRIN HYDRAULIQUE (MINCE)
 MANDRINI IDRAULICI (SOTTILE)
 PORTAHERRAMIENTAS HIDRAULICO (DELGADO)



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (at 3D) ≤3Um	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

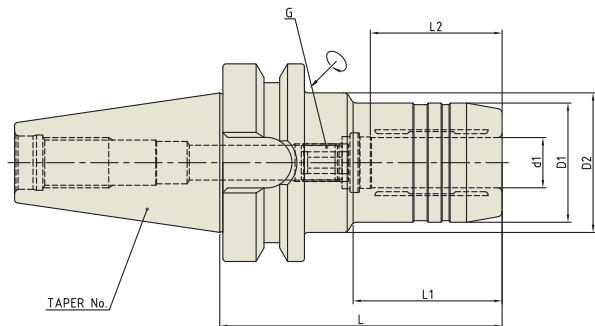
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
30	CBT30-HC6-70	6	26	44.5	70	29.5	27	M5x0.8	0.65	
	CBT30-HC8-70	8	28	44.5	70	30	27	M6x1.0	0.65	
	CBT30-HC10-75	10	30	44.5	75	31	32	M8x1.0	0.73	
	CBT30-HC12-85	12	32	45	85	45	37	M10x1.0	0.80	●
	CBT30-HC14-85	14	34	45	85	45	37	M10x1.0	0.80	
	CBT30-HC16-90	16	38	45	90	50	42	M10x1.0	0.90	
	CBT30-HC18-90	18	40	45	90	50	42	M10x1.0	0.90	
	CBT30-HC20-90	20	42	45	90	50	42	M6x1.0	0.90	●
40	CBT40-HC6-90	6	26	44.5	90	43	27	M5x0.8	1.30	
	CBT40-HC8-90	8	28	44.5	90	44.5	27	M6x1.0	1.30	
	CBT40-HC10-90	10	30	44.5	90	44.5	32	M8x1.0	1.35	
	CBT40-HC12-90	12	32	44.5	90	44.5	37	M10x1.0	1.35	●
	CBT40-HC14-90	14	34	44.5	90	44.5	37	M10x1.0	1.35	
	CBT40-HC16-90	16	38	44.5	90	47.5	42	M12x1.0	1.40	
	CBT40-HC18-90	18	40	44.5	90	47.5	42	M12x1.0	1.45	
	CBT40-HC20-90	20	42	44.5	90	47.5	42	M16x1.0	1.50	●
	CBT40-HC25-100	25	50	60	100	47.5	48	M16x1.0	1.70	
	CBT40-HC32-105	32	60	60	105	—	55	M16x1.0	2.10	●

►For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
MANDRIN HYDRAULIQUE (MINCE)
MANDRINI IDRAULICI (SOTTILE)
PORTAHERRAMIENTAS HIDRAULICO (DELGADO)



CBT

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Run-Out
(at 3D)
≤3Um

Coolant
System
AD

■ CBT (BT DUAL CONTACT)

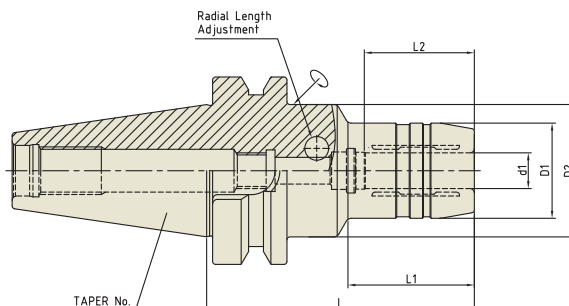
Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
50	CBT50-HC6-90	6	26	44.5	90	34	27	M5×0.8	3.75	
	CBT50-HC6-120	6	26	44.5	120	34	27	M5×0.8	4.10	
	CBT50-HC6-150	6	26	44.5	150	34	27	M5×0.8	4.70	
	CBT50-HC8-90	8	28	44.5	90	34	27	M6×1.0	3.75	
	CBT50-HC8-120	8	28	44.5	120	34	27	M6×1.0	4.10	
	CBT50-HC8-150	8	28	44.5	150	34	27	M6×1.0	4.10	
	CBT50-HC10-90	10	30	44.5	90	34	32	M8×1.0	3.90	
	CBT50-HC10-120	10	30	44.5	120	34	32	M8×1.0	4.30	
	CBT50-HC10-150	10	30	44.5	150	34	32	M8×1.0	4.90	
	CBT50-HC12-90	12	32	44.5	90	34	37	M10×1.0	3.90	●
	CBT50-HC12-120	12	32	44.5	120	34	37	M10×1.0	4.30	
	CBT50-HC12-150	12	32	44.5	150	34	37	M10×1.0	4.90	
	CBT50-HC14-90	14	34	44.5	90	34	37	M10×1.0	3.90	
	CBT50-HC14-120	14	34	44.5	120	34	37	M10×1.0	4.30	
	CBT50-HC14-150	14	34	44.5	150	34	37	M10×1.0	4.90	
	CBT50-HC16-90	16	38	44.5	90	34	42	M12×1.0	4.00	
	CBT50-HC16-120	16	38	44.5	120	34	42	M12×1.0	4.40	
	CBT50-HC16-150	16	38	44.5	150	34	42	M12×1.0	5.00	
	CBT50-HC18-90	18	40	44.5	90	34	42	M12×1.0	4.00	
	CBT50-HC18-120	18	40	44.5	120	34	42	M12×1.0	4.40	
	CBT50-HC18-150	18	40	44.5	150	34	42	M12×1.0	5.00	
	CBT50-HC20-90	20	42	44.5	90	34	42	M16×1.0	4.00	●
	CBT50-HC20-120	20	42	44.5	120	34	42	M16×1.0	4.40	
	CBT50-HC20-150	20	42	44.5	150	34	42	M16×1.0	5.00	
	CBT50-HC25-105	25	57	63	105	52	48	M16×1.0	4.40	
	CBT50-HC25-150	25	57	63	150	97	48	M16×1.0	5.60	
	CBT50-HC32-115	32	64	75	115	62	55	M16×1.0	4.70	●
	CBT50-HC32-150	32	64	75	150	97	55	M16×1.0	6.00	

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (RADIAL TOOL LENGTH PRE-SETTING TYPE) HCR

HYDRAULIK SPANNFUTTER (RADIALE WERKZEUGLÄGEN VOREINSTELLUNG)
 MANDRIN HYDRAULIQUE (BANC DE PR -RÉLAGE RADIAL)
 MANDRINI IDRAULICI (UTENSILI RADIALI PER AZZERAMENTO)
 PORTAHERRAMIENTAS HIDRAULICO (AJUSTE DE LONGITUD TIPO PRE-SETTING)

JIS B6339
-BTTaper
Accuracy
AT3G Value
2.5RPM
25,000Run-Out
(at 3D)
≤30μmCoolant
System
AD/B

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	Weight (Kg)	Stock
30	BT30AD/B-HCR12-85	12	32	44.5	85	40	37	0.90	●
	BT30AD/B-HCR20-85	20	44	44	85	—	42	1.00	●
40	BT40AD/B-HCR12-90	12	32	44.5	90	44.5	37	1.50	●
	BT40AD/B-HCR20-90	20	42	49.5	90	47.5	42	1.60	●
	BT40AD/B-HCR32-105	32	60	60	105	—	55	2.20	●
50	BT50AD/B-HCR12-95	12	32	44.5	95	34	37	3.90	●
	BT50AD/B-HCR20-100	20	42	44.5	100	44	42	4.00	●
	BT50AD/B-HCR32-115	32	60	60	115	—	55	4.10	●

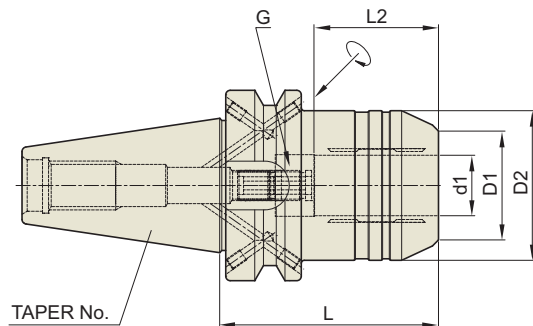
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SHORT & RIGID)

HC

HYDRAULIK SPANNFUTTER (KURZ und STARR)
MANDRIN HYDRAULIQUE (COURT et RIGIDE)
MANDRINI IDRAULICI (CORTO e RIGIDO)
PORTAHERRAMIENTAS HIDRAULICO (CORTO y RIGIDO)



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (at 3D) ≤3Um	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

Unit : mm

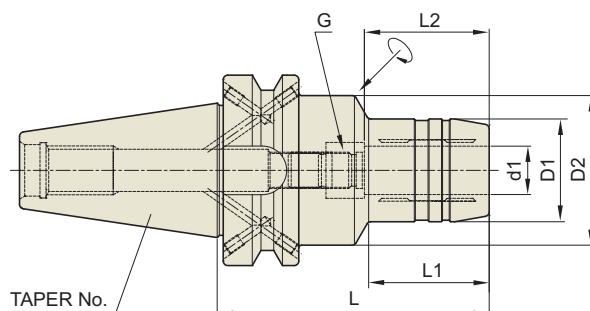
TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	Weight (Kg)	Stock
30	BT30AD/B-HC20S-85	20	41	44	85	42	M6x1.0	0.93	●
40	BT40AD/B-HC12S-58	12	32	42	58	37	M8x1.0		●
	BT40AD/B-HC20S-72.5	20	38	49.25	72.5	42	M8x1.0	1.40	●
50	BT50AD/B-HC12S-69	12	32	42	69	37	M8x1.0		●
	BT50AD/B-HC20S-90	20	37	49.25	90	42	M8x1.0	3.85	●
	BT50AD/B-HC32S-90	32	55	72	90	55	M8x1.0	4.53	●

- ▶ CAT(ANSI B5.50) taper and Inch type products are available.
- ▶ For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
 MANDRIN HYDRAULIQUE (MINCE)
 MANDRINI IDRAULICI (SOTTILE)
 PORTAHERRAMIENTAS HIDRAULICO (DELGADO)

JIS B6339
-BTTaper
Accuracy
AT3G Value
2.5RPM
25,000Run-Out
(at 3D)
≤30μmCoolant
System
AD/B

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
30	BT30AD/B-HC6-70	6	26	44.5	70	29.5	27	M5x0.8	0.65	●
	BT30AD/B-HC8-70	8	28	44.5	70	30	27	M6x1.0	0.65	●
	BT30AD/B-HC10-75	10	30	44.5	75	31	32	M8x1.0	0.73	●
	BT30AD/B-HC12-85	12	32	45	85	45	37	M10x1.0	0.80	●
	BT30AD/B-HC14-85	14	34	45	85	45	37	M10x1.0	0.80	
	BT30AD/B-HC16-90	16	38	45	90	50	42	M10x1.0	0.90	●
	BT30AD/B-HC18-90	18	40	45	90	50	42	M10x1.0	0.90	
	BT30AD/B-HC20-90	20	42	45	90	50	42	M6x1.0	0.90	●
40	BT40AD/B-HC6-90	6	26	44.5	90	43	27	M5x0.8	1.30	●
	BT40AD/B-HC8-90	8	28	44.5	90	44.5	27	M6x1.0	1.30	●
	BT40AD/B-HC10-90	10	30	44.5	90	44.5	32	M8x1.0	1.35	●
	BT40AD/B-HC12-90	12	32	44.5	90	44.5	37	M10x1.0	1.35	●
	BT40AD/B-HC14-90	14	34	44.5	90	44.5	37	M10x1.0	1.35	
	BT40AD/B-HC16-90	16	38	44.5	90	47.5	42	M12x1.0	1.40	●
	BT40AD/B-HC18-90	18	40	44.5	90	47.5	42	M12x1.0	1.45	
	BT40AD/B-HC20-90	20	42	44.5	90	47.5	42	M16x1.0	1.50	●
	BT40AD/B-HC25-100	25	50	60	100	47.5	48	M16x1.0	1.70	●
	BT40AD/B-HC32-105	32	60	—	105	—	55	M16x1.0	2.10	●

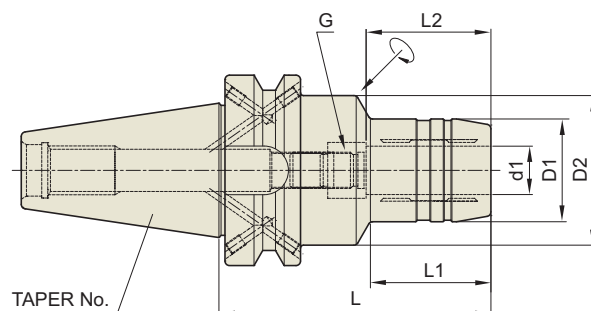
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (SLIM)

HC

HYDRAULIK SPANNFUTTER (SCHLANK)
 MANDRIN HYDRAULIQUE (MINCE)
 MANDRINI IDRAULICI (SOTTILE)
 PORTAHERRAMIENTAS HIDRAULICO (DELGADO)


**JIS B6339
-BT**
**Taper
Accuracy
AT3**
**G Value
2.5**
**RPM
25,000**
**Run-Out
(at 3D)
≤3Um**
**Coolant
System
AD/B**
■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
50	BT50AD/B-HC6-90	6	26	44.5	90	34	27	M5×0.8	3.75	●
	BT50AD/B-HC6-120	6	26	44.5	120	34	27	M5×0.8	4.10	
	BT50AD/B-HC6-150	6	26	44.5	150	34	27	M5×0.8	4.70	
	BT50AD/B-HC8-90	8	28	44.5	90	34	27	M6×1.0	3.75	●
	BT50AD/B-HC8-120	8	28	44.5	120	34	27	M6×1.0	4.10	
	BT50AD/B-HC8-150	8	28	44.5	150	34	27	M6×1.0	4.10	
	BT50AD/B-HC10-90	10	30	44.5	90	34	32	M8×1.0	3.90	●
	BT50AD/B-HC10-120	10	30	44.5	120	34	32	M8×1.0	4.30	
	BT50AD/B-HC10-150	10	30	44.5	150	34	32	M8×1.0	4.90	
	BT50AD/B-HC12-90	12	32	44.5	90	34	37	M10×1.0	3.90	●
	BT50AD/B-HC12-120	12	32	44.5	120	34	37	M10×1.0	4.30	
	BT50AD/B-HC12-150	12	32	44.5	150	34	37	M10×1.0	4.90	
	BT50AD/B-HC14-90	14	34	44.5	90	34	37	M10×1.0	3.90	
	BT50AD/B-HC14-120	14	34	44.5	120	34	37	M10×1.0	4.30	
	BT50AD/B-HC14-150	14	34	44.5	150	34	37	M10×1.0	4.90	
	BT50AD/B-HC16-90	16	38	44.5	90	34	42	M12×1.0	4.00	●
	BT50AD/B-HC16-120	16	38	44.5	120	34	42	M12×1.0	4.40	
	BT50AD/B-HC16-150	16	38	44.5	150	34	42	M12×1.0	5.00	
	BT50AD/B-HC18-90	18	40	44.5	90	34	42	M12×1.0	4.00	
	BT50AD/B-HC18-120	18	40	44.5	120	34	42	M12×1.0	4.40	
	BT50AD/B-HC18-150	18	40	44.5	150	34	42	M12×1.0	5.00	
	BT50AD/B-HC20-90	20	42	44.5	90	34	42	M16×1.0	4.00	●
	BT50AD/B-HC20-120	20	42	44.5	120	34	42	M16×1.0	4.40	
	BT50AD/B-HC20-150	20	42	44.5	150	34	42	M16×1.0	5.00	
	BT50AD/B-HC25-105	25	57	63	105	52	48	M16×1.0	4.40	●
	BT50AD/B-HC25-150	25	57	63	150	97	48	M16×1.0	5.60	
	BT50AD/B-HC32-115	32	64	75	115	62	55	M16×1.0	4.70	●
	BT50AD/B-HC32-150	32	64	75	150	97	55	M16×1.0	6.00	

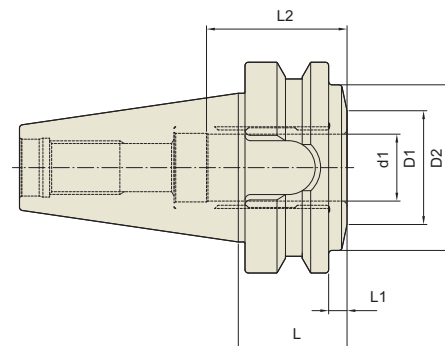
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (ULTRA SHORT) **NEW**

HC

HYDRAULIK SPANNFUTTER (KURZ)
 MANDRIN HYDRAULIQUE (COURT)
 MANDRINI IDRAULICI (CORTO)
 PORTAHERRAMIENTAS HIDRAULICO (CORTO)

JIS B6339
-BTTaper
Accuracy
AT3G Value
2.5RPM
25,000Run-Out
(at 3D)
≤30μmCoolant
System
AD

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
40	BT40-HC20-24.6	20	34	49.5	32.5	5.5	42	—		

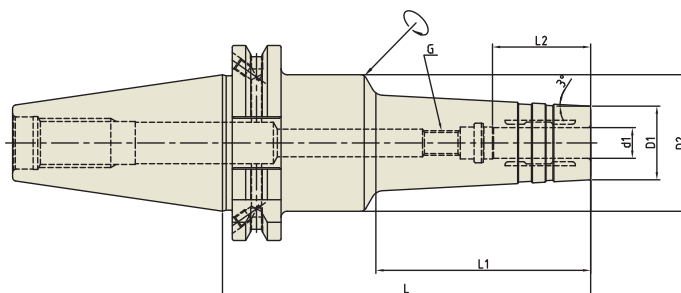
► CAT(ANSI B5.50) taper and Inch type products area available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (For MOULD)

HMC

HYDRAULIK SPANNFUTTER FÜ DEN FORMENBAU
MANDRIN HYDRAULIQUE POUR MOULISTE
MANDRINI IDRAULICI PER STAMPAGGIO
PORTAHERRAMIENTAS HIDRAULICO PARA MOLDES


DIN 69871
-SK

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Run-Out
(at 3D)
≤30μm

Coolant
System
AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
40	SK40AD/B-HMC6-120	6	20	49.5	120	70	27	M5×0.8	1.40	
	SK40AD/B-HMC6-150	6	20	49.5	150	100	27	M5×0.8	1.65	●
	SK40AD/B-HMC8-120	8	22	49.5	120	70	27	M6×1.0	1.40	
	SK40AD/B-HMC8-150	8	22	49.5	150	100	27	M6×1.0	1.65	●
	SK40AD/B-HMC10-120	10	24	49.5	120	70	32	M8×1.0	1.40	
	SK40AD/B-HMC10-150	10	24	49.5	150	100	32	M8×1.0	1.65	●
	SK40AD/B-HMC12-120	12	25	49.5	120	70	37	M10×1.0	1.40	
	SK40AD/B-HMC12-150	12	25	49.5	150	100	37	M10×1.0	1.65	
	SK40AD/B-HMC16-120	16	32	49.5	120	70	42	M12×1.0	1.45	
	SK40AD/B-HMC16-150	16	32	49.5	150	100	42	M12×1.0	1.70	●
	SK40AD/B-HMC20-120	20	34	49.5	120	70	42	M16×1.0	1.50	
	SK40AD/B-HMC20-150	20	34	49.5	150	100	42	M16×1.0	1.70	
50	SK50AD/B-HMC6-150	6	20	44.5	150	100	27	M5×0.8	4.50	
	SK50AD/B-HMC8-150	8	22	44.5	150	100	27	M6×1.0	4.50	
	SK50AD/B-HMC10-150	10	24	44.5	150	100	32	M8×1.0	4.50	
	SK50AD/B-HMC12-150	12	25	44.5	150	100	37	M10×1.0	4.50	
	SK50AD/B-HMC16-150	16	32	44.5	150	100	42	M12×1.0	4.70	
	SK50AD/B-HMC20-150	20	34	44.5	150	100	42	M16×1.0	5.00	

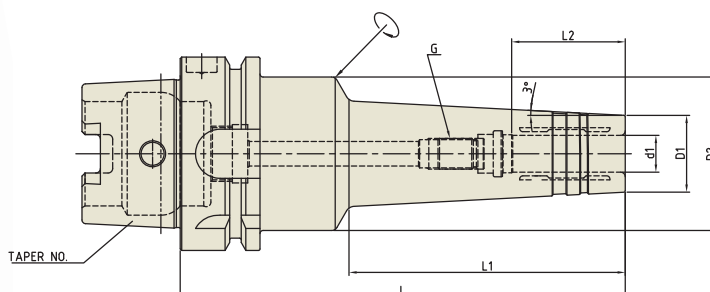
►CAT(ANSI B5.50) taper and Inch type products are available.

►For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (For MOULD)

HMC

HYDRAULIK SPANNFUTTER FÜ DEN FORMENBAU
 MANDRIN HYDRAULIQUE POUR MOULISTE
 MANDRINI IDRAULICI PER STAMPAGGIO
 PORTAHERRAMIENTAS HIDRAULICO PARA MOLDES

DIN 69893
- HSKTaper
Accuracy

-

G Value

2.5

RPM

25,000

Run-Out
(at 3D)

≤3Uμ

Coolant
System

AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

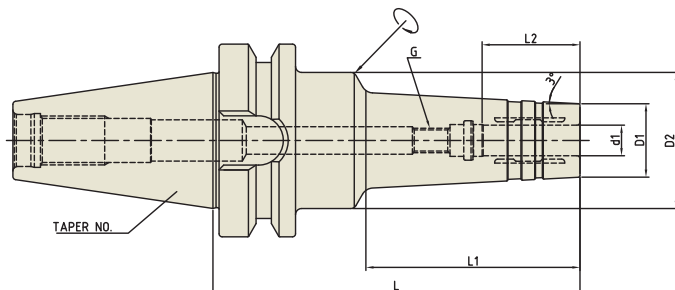
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
63A	HSK63A-HMC6-145	6	20	50	145	90	27	M5×0.8	1.40	●
	HSK63A-HMC8-145	8	22	50	145	90	27	M6×1.0	1.40	●
	HSK63A-HMC10-145	10	24	50	145	90	32	M8×1.0	1.40	●
	HSK63A-HMC12-145	12	25	50	145	90	37	M10×1.0	1.40	●
	HSK63A-HMC16-145	16	32	50	145	90	42	M12×1.0	1.45	●
	HSK63A-HMC20-145	20	34	50	145	90	42	M16×1.0	1.50	●
100A	HSK100A-HMC6-150	6	20	50	150	90	27	M5×0.8	4.50	
	HSK100A-HMC8-150	8	22	50	150	90	27	M6×1.0	4.50	
	HSK100A-HMC10-150	10	24	50	150	90	32	M8×1.0	4.50	
	HSK100A-HMC12-150	12	25	50	150	90	37	M10×1.0	4.50	●
	HSK100A-HMC16-150	16	32	50	150	90	42	M12×1.0	4.70	
	HSK100A-HMC20-150	20	34	50	150	90	42	M16×1.0	5.00	●

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (For MOULD)

HMC

HYDRAULIK SPANNFUTTER FÜ DEN FORMENBAU
MANDRIN HYDRAULIQUE POUR MOULISTE
MANDRINI IDRAULICI PER STAMPAGGIO
PORTAHERRAMIENTAS HIDRAULICO PARA MOLDES



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (at 3D) ≤30μm	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

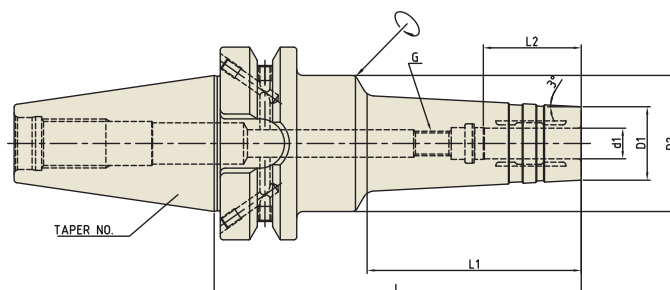
TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
40	CBT40-HMC6-120	6	20	44.5	120	70	27	M5×0.8	1.40	
	CBT40-HMC6-150	6	20	44.5	150	100	27	M5×0.8	1.65	
	CBT40-HMC8-120	8	22	44.5	120	70	27	M6×1.0	1.40	
	CBT40-HMC8-150	8	22	44.5	150	100	27	M6×1.0	1.65	
	CBT40-HMC10-120	10	24	44.5	120	70	32	M8×1.0	1.40	
	CBT40-HMC10-150	10	24	44.5	150	100	32	M8×1.0	1.65	
	CBT40-HMC12-120	12	25	44.5	120	70	37	M10×1.0	1.40	
	CBT40-HMC12-150	12	25	44.5	150	100	37	M10×1.0	1.65	
	CBT40-HMC16-120	16	32	44.5	120	70	42	M12×1.0	1.45	
	CBT40-HMC16-150	16	32	44.5	150	100	42	M12×1.0	1.70	
	CBT40-HMC20-120	20	34	43.8	120	93	42	M16×1.0	1.50	
	CBT40-HMC20-150	20	34	46.9	150	123	42	M16×1.0	1.80	
50	CBT50-HMC6-150	6	20	50	150	90	27	M5×0.8	4.70	
	CBT50-HMC8-150	8	22	50	150	90	27	M6×1.0	4.70	
	CBT50-HMC10-150	10	24	50	150	90	32	M8×1.0	4.70	
	CBT50-HMC12-150	12	25	50	150	90	37	M10×1.0	4.70	
	CBT50-HMC16-150	16	32	50	150	90	42	M12×1.0	4.90	
	CBT50-HMC20-150	20	34	50	150	90	42	M16×1.0	5.00	

►For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (For MOULD)

HMC

HYDRAULIK SPANNFUTTER FÜ DEN FORMENBAU
 MANDRIN HYDRAULIQUE POUR MOULISTE
 MANDRINI IDRAULICI PER STAMPAGGIO
 PORTAHERRAMIENTAS HIDRAULICO PARA MOLDES

JIS B6339
-BTTaper
Accuracy

AT3

G Value

2.5

RPM

25,000

Run-Out
(at 3D)≤3U_mCoolant
System

AD/B

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
40	BT40AD/B-HMC6-120	6	20	44.5	120	70	27	M5×0.8	1.40	
	BT40AD/B-HMC6-150	6	20	44.5	150	100	27	M5×0.8	1.65	
	BT40AD/B-HMC8-120	8	22	44.5	120	70	27	M6×1.0	1.40	
	BT40AD/B-HMC8-150	8	22	44.5	150	100	27	M6×1.0	1.65	
	BT40AD/B-HMC10-120	10	24	44.5	120	70	32	M8×1.0	1.40	
	BT40AD/B-HMC10-150	10	24	44.5	150	100	32	M8×1.0	1.65	
	BT40AD/B-HMC12-120	12	25	44.5	120	70	37	M10×1.0	1.40	●
	BT40AD/B-HMC12-150	12	25	44.5	150	100	37	M10×1.0	1.65	
	BT40AD/B-HMC16-120	16	32	44.5	120	70	42	M12×1.0	1.45	
	BT40AD/B-HMC16-150	16	32	44.5	150	100	42	M12×1.0	1.70	
	BT40AD/B-HMC20-120	20	34	43.8	120	93	42	M16×1.0	1.50	●
50	BT40AD/B-HMC20-150	20	34	46.9	150	123	42	M16×1.0	1.80	
	BT50AD/B-HMC6-150	6	20	50	150	90	27	M5×0.8	4.70	
	BT50AD/B-HMC8-150	8	22	50	150	90	27	M6×1.0	4.70	
	BT50AD/B-HMC10-150	10	24	50	150	90	32	M8×1.0	4.70	
	BT50AD/B-HMC12-150	12	25	50	150	90	37	M10×1.0	4.70	●
	BT50AD/B-HMC16-150	16	32	50	150	90	42	M12×1.0	4.90	
	BT50AD/B-HMC20-150	20	34	50	150	90	42	M16×1.0	5.00	●

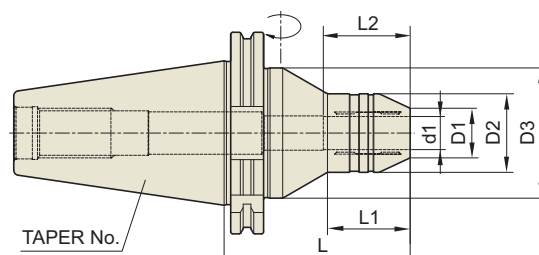
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Hydraulic Chuck collet, please refer to page 41~44.

HYDRAULIC CHUCK (For GRINDER)

HC

HYDRAULIK SPANNFUTTER FÜ DEN FORMENBAU
MANDRIN HYDRAULIQUE POUR MOULISTE
MANDRINI IDRAULICI PER STAMPAGGIO
PORTAHERRAMIENTAS HIDRAULICO PARA MOLDES


DIN 69871
-SK

Taper
Accuracy
AT3

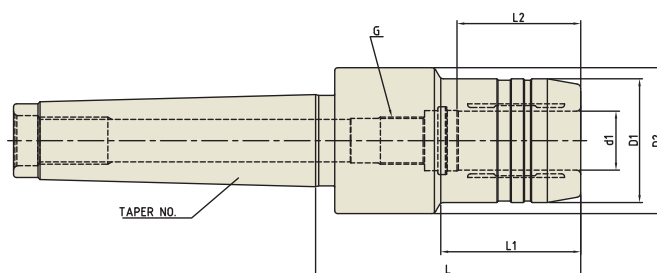
Run-Out
(at 3D)
≤3Um

Coolant
System
AD

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	D3	L	L1	L2	Weight (Kg)	Stock
50	SK50-HC6G-90	6	14	30	63	90	30	27	3.00	●
	SK50-HC8G-90	8	16	30	63	90	30	27	3.00	●
	SK50-HC10G-90	10	18	30	63	90	30	32	3.00	●
	SK50-HC12G-90	12	21	33	63	90	35	37	3.05	●
	SK50-HC14G-90	14	22	35	63	90	35	37	3.10	●
	SK50-HC16G-90	16	24	38	63	90	40	42	3.10	●
	SK50-HC18G-90	18	26	40	63	90	40	42	3.10	●
	SK50-HC20G-110	20	29	42	63	110	40	42	3.30	●
	SK50-HC25G-110	25	34	50	70	110	45	48	3.60	●
	SK50-HC32G-110	32	42	56	80	110	50	55	4.20	●



■ DIN 228-MTB

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L1	L2	G	Weight (Kg)	Stock
4	MTB4-HC20-90	20	42	49.5	90	47.5	42	M16×1.0	1.30	●
	MTB4-HC32-90	32	72	72	90	—	55	—	1.40	●
5	MTB5-HC20-90	20	42	49.5	90	47.5	42	M16×1.0	2.20	●
	MTB5-HC32-90	32	72	72	90	—	55	—	2.40	●

HYDRAULIC CHUCK COLLET (REDUCTION SLEEVE : OPEN TYPE)

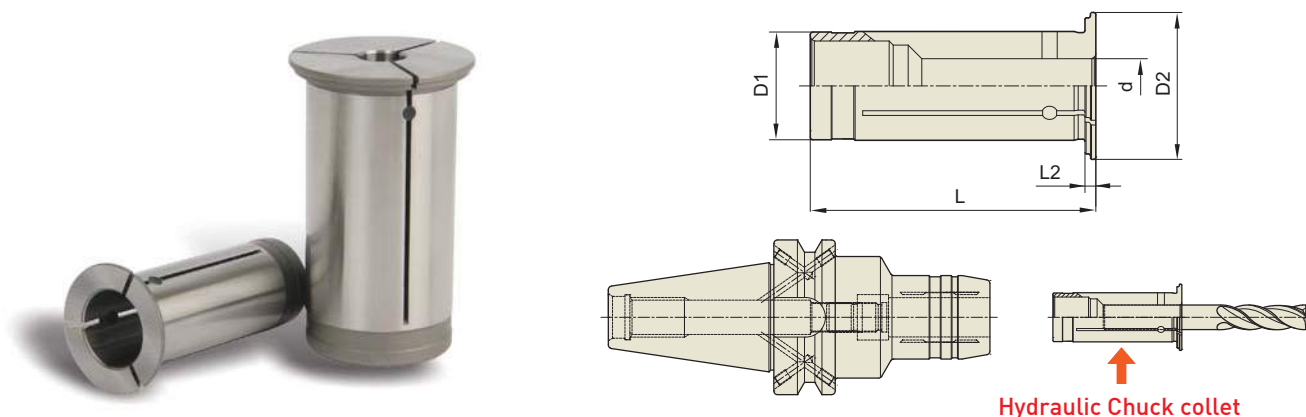
HK

HYDRAULIK SPANNFUTTER SPANNZANGE (GESCHLITZTE ZWISCHENBUCHSE)

MANDRIN HYDRAULIQUE PINCE DE SERRAGE (DOUILLE FENDUE)

MANDRINI IDRAULICI PINZA DI SERRAGGIO (BUSSOLA DI RIDUZIONE FESSURATA)

PORTAHERRAMIENTAS HIDRAULICO PINZA PORTAPIEZAS (CASQUILLOS INTERMEDIOS RANURADOS)



Unit : mm

MODEL No.	d	D1	D2	L	L2
HK12	3	12	19	47	2
	4	12	19	47	2
	5	12	19	47	2
	6	12	19	47	2
	7	12	19	47	2
	8	12	19	47	2
HK20	3	20	27	52.5	2
	4	20	27	52.5	2
	5	20	27	52.5	2
	6	20	27	52.5	2
	7	20	27	52.5	2
	8	20	27	52.5	2
	9	20	27	52.5	2
	10	20	27	52.5	2
	11	20	27	52.5	2
	12	20	27	52.5	2
	13	20	27	52.5	2
	14	20	27	52.5	2
	15	20	27	52.5	2
	16	20	27	52.5	2
HK32	6	32	39	63.5	3
	8	32	39	63.5	3
	10	32	39	63.5	3
	12	32	39	63.5	3
	14	32	39	63.5	3
	16	32	39	63.5	3
	18	32	39	63.5	3
	20	32	39	63.5	3
	25	32	39	63.5	3

▶ Stock Control Item

▶ Inch type products are available.

▶ Other special sizes of Hydraulic Chuck collets could be produced and supplied

Feature

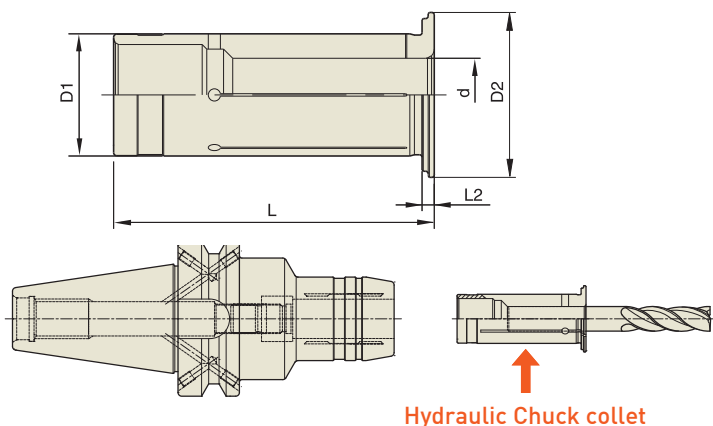
HK Hydraulic Chuck collet (reduction sleeve) is cut into trisection by high precision cutting to guarantee precise I.D and strong clamping power.

Chucking Method

Please assemble cutting tool with collet firstly, and then insert collet into Hydraulic Chuck.

HYDRAULIC CHUCK COLLET (REDUCTION SLEEVE : CLOSED TYPE) HS

HYDRAULIK SPANNFUTTER SPANNZANGE
MANDRIN HYDRAULIQUE PINCE DE SERRAGE
MANDRINI IDRAULICI PINZA DI SERRAGGIO
PORTAHERRAMIENTAS HIDRAULICO PINZA PORTAPIEZAS



Unit : mm

MODEL No.	d	D1	D2	L	L2
HS12	3	12	19	47	2
	4	12	19	47	2
	5	12	19	47	2
	6	12	19	47	2
	7	12	19	47	2
	8	12	19	47	2
HS20	3	20	27	52.5	2
	4	20	27	52.5	2
	5	20	27	52.5	2
	6	20	27	52.5	2
	7	20	27	52.5	2
	8	20	27	52.5	2
	9	20	27	52.5	2
	10	20	27	52.5	2
	11	20	27	52.5	2
	12	20	27	52.5	2
	13	20	27	52.5	2
	14	20	27	52.5	2
	15	20	27	52.5	2
	16	20	27	52.5	2
	17	20	27	52.5	2
HS32	6	32	39	63.5	3
	8	32	39	63.5	3
	10	32	39	63.5	3
	12	32	39	63.5	3
	14	32	39	63.5	3
	16	32	39	63.5	3
	18	32	39	63.5	3
	20	32	39	63.5	3
	25	32	39	63.5	3

► **Stock Control Item**

► **Inch type products are available.**

► **Other special sizes of Hydraulic Chuck collets could be produced and supplied**

Feature

HS Hydraulic Chuck collet (reduction sleeve) is cut by high precision wire-cutting to guarantee precise I.D and strong clamping power.

Chucking Method

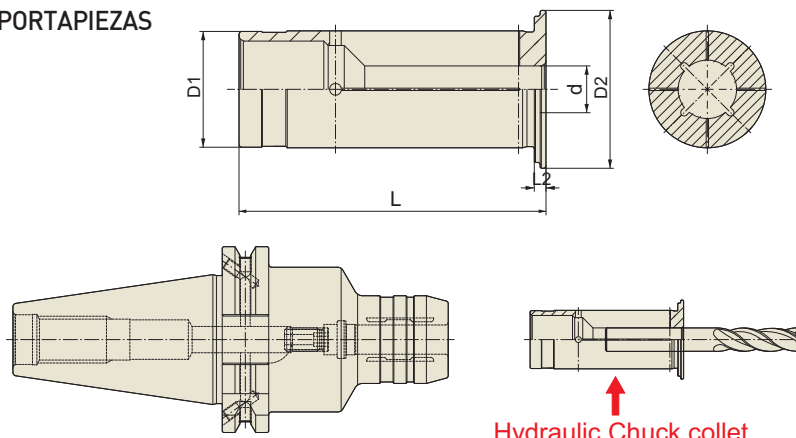
Please assemble cutting tool with collet firstly, and then insert collet into Hydraulic Chuck.

NEW

HYDRAULIC CHUCK COLLET (REDUCTION SLEEVE : COOLNT FLUSH TYPE)

HF

HYDRAULIK SPANNFUTTER SPANNZANGE
 MANDRIN HYDRAULIQUE PINCE DE SERRAGE
 MANDRINI IDRAULICI PINZA DI SERRAGGIO
 PORTAHERRAMIENTAS HIDRAULICO PINZA PORTAPIEZAS



Hydraulic Chuck collet

Unit : mm

MODEL No.		d	D1	D2	L	L2
HF12	3	3	12	19	47	2
	4	4	12	19	47	2
	5	5	12	19	47	2
	6	6	12	19	47	2
	7	7	12	19	47	2
	8	8	12	19	47	2
HF20	3	3	20	27	52,5	2
	4	4	20	27	52,5	2
	5	5	20	27	52,5	2
	6	6	20	27	52,5	2
	7	7	20	27	52,5	2
	8	8	20	27	52,5	2
	9	9	20	27	52,5	2
	10	10	20	27	52,5	2
	11	11	20	27	52,5	2
	12	12	20	27	52,5	2
	13	13	20	27	52,5	2
	14	14	20	27	52,5	2
	15	15	20	27	52,5	2
	16	16	20	27	52,5	2
HF32	6	6	32	39	63,5	3
	8	8	32	39	63,5	3
	10	10	32	39	63,5	3
	12	12	32	39	63,5	3
	14	14	32	39	63,5	3
	16	16	32	39	63,5	3
	18	18	32	39	63,5	3
	20	20	32	39	63,5	3
	25	25	32	39	63,5	3

► **Stock Control Item**

► **Inch type products are available.**

► Other special sizes of Hydraulic Chuck collets could be produced and supplied

► Feature

HF Hydraulic Chuck collet (reduction sleeve) is for internal coolant flush.

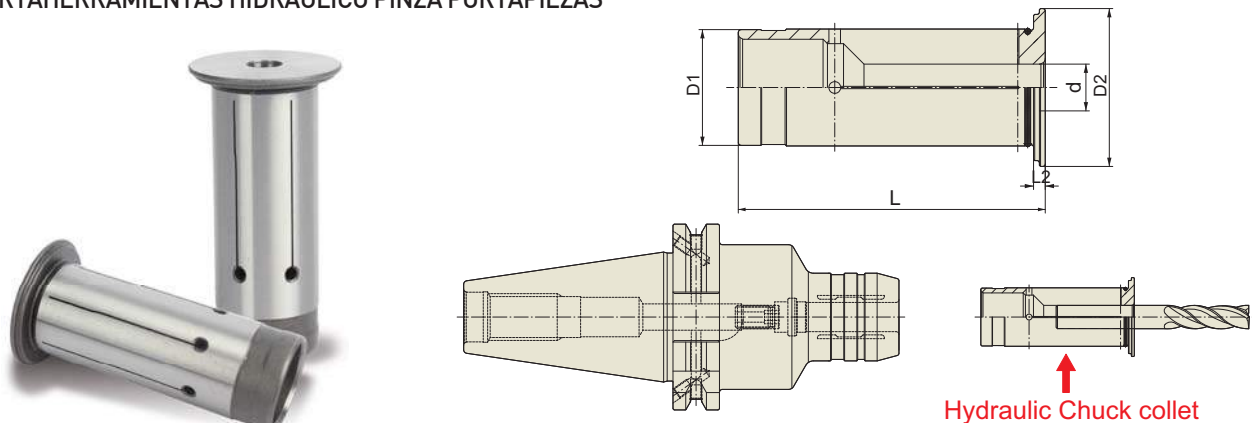
► Chucking Method

Please assemble cutting tool with collet firstly, and then insert collet into Hydraulic Chuck.

HYDRAULIC CHUCK COLLET (REDUCTION SLEEVE : for HIGH PRESSURE COOLANT)

HR

HYDRAULIK SPANNFUTTER SPANNZANGE
MANDRIN HYDRAULIQUE PINCE DE SERRAGE
MANDRINI IDRAULICI PINZA DI SERRAGGIO
PORTAHERRAMIENTAS HIDRAULICO PINZA PORTAPIEZAS



Unit : mm

MODEL No.	d	D1	D2	L	L2
HR12	3	12	19	47	2
	4	12	19	47	2
	5	12	19	47	2
	6	12	19	47	2
	7	12	19	47	2
	8	12	19	47	2
HR20	3	20	27	52.5	2
	4	20	27	52.5	2
	5	20	27	52.5	2
	6	20	27	52.5	2
	7	20	27	52.5	2
	8	20	27	52.5	2
	9	20	27	52.5	2
	10	20	27	52.5	2
	11	20	27	52.5	2
	12	20	27	52.5	2
	13	20	27	52.5	2
	14	20	27	52.5	2
	15	20	27	52.5	2
	16	20	27	52.5	2
HR32	6	32	39	63.5	3
	8	32	39	63.5	3
	10	32	39	63.5	3
	12	32	39	63.5	3
	14	32	39	63.5	3
	16	32	39	63.5	3
	18	32	39	63.5	3
	20	32	39	63.5	3
	25	32	39	63.5	3

► Stock Control Item

► Inch type products are available.

► Other special sizes of Hydraulic Chuck collets could be produced and supplied

Feature

HR Hydraulic Chuck collet (reduction sleeve) is for high pressure coolant supply.

Chucking Method

Please assemble cutting tool with collet firstly, and then insert collet into Hydraulic Chuck.

TOOLING SYSTEM

SHRINK FIT HOLDER



SCHRUMPFUTTER
MANDRIN DE FRETAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION
POR CALOR

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

CBT (BT DUAL CONTACT)

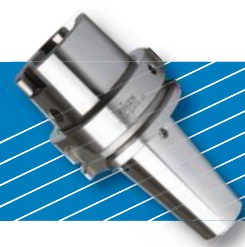
JIS B6339 / MAS 403 - BT

ISO 25

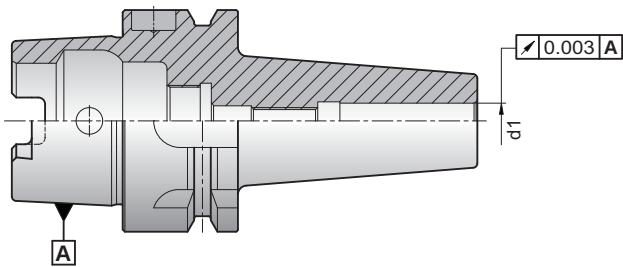
DONRAY PREMIUM

TECHNICAL INFORMATION

SHRINK FIT HOLDER

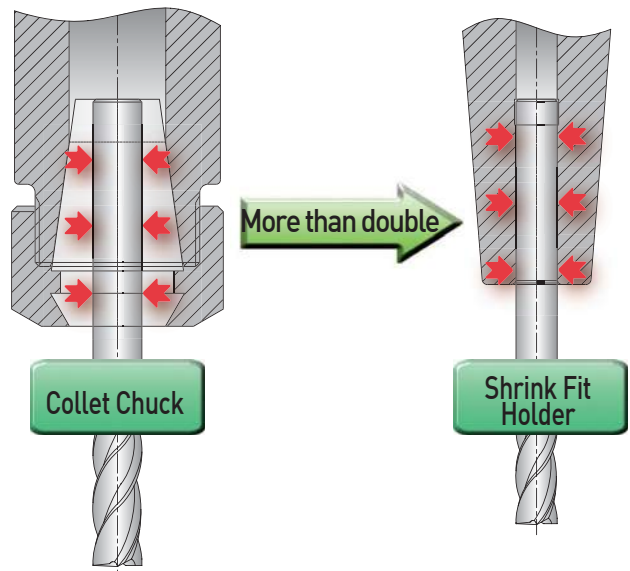


- High Precision ID
Run-out : $\leq 0.003\text{mm}$



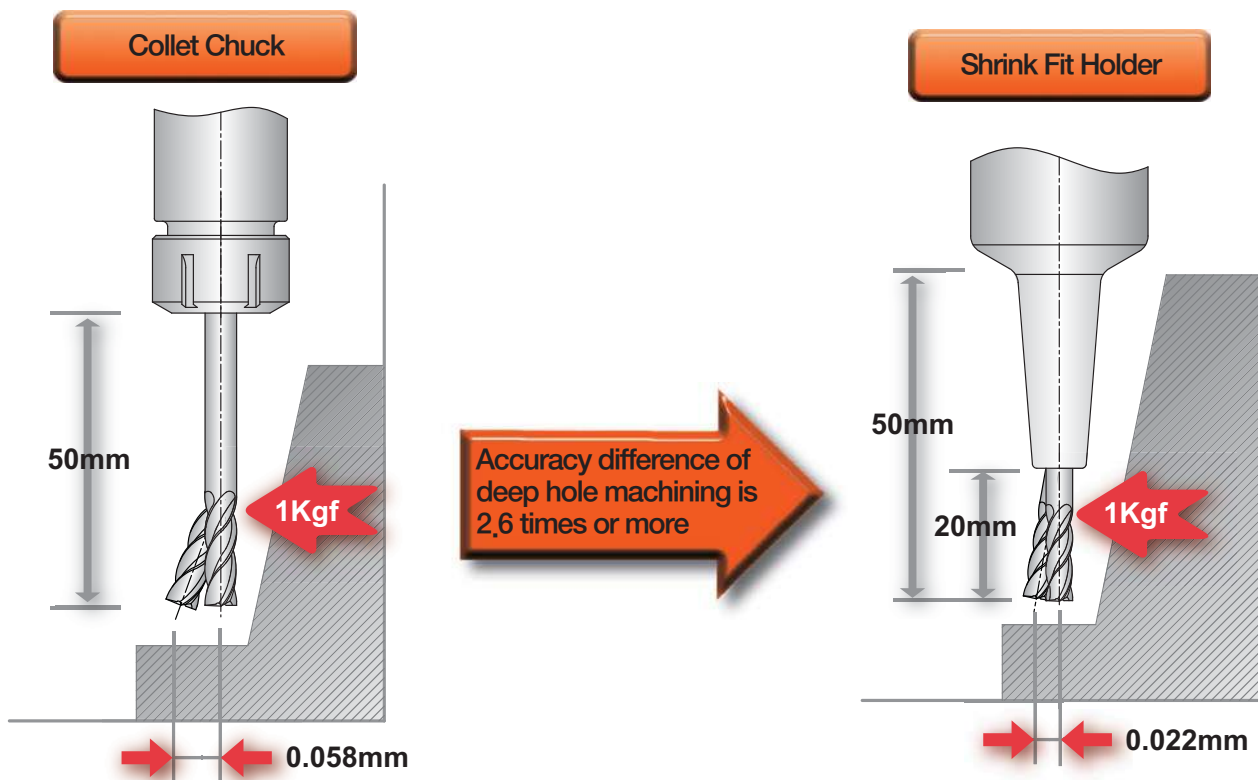
- Less than 0.003mm of Tool Holder accuracy at I.D.

- Strong and consistent torque power



- Achieving strong torque power by integration of chuck and tool

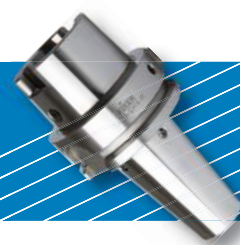
- Deep hole Machining

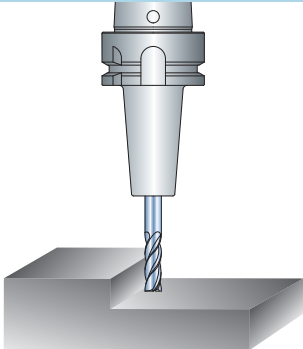
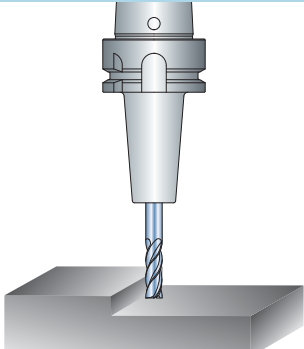
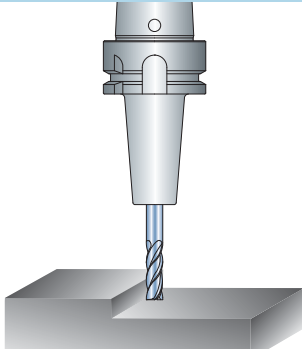
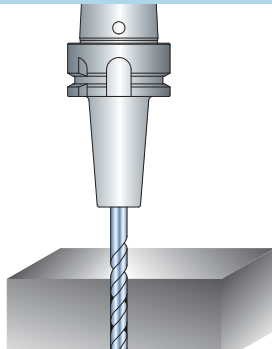
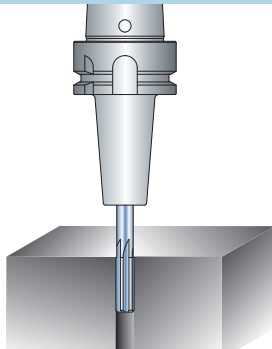
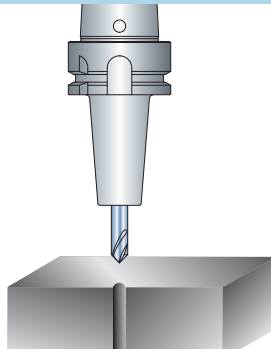


- Suitable for high-speed precision deep hole machining

TECHNICAL INFORMATION

SHRINK FIT HOLDER



APPLICATION		
Rough Milling	Finish Milling	High Speed Cutting
		
Drilling	Reaming	Countersinking
		

Shank type of cutting tool

Straight shank



One weldon flat shaft type



- One Weldon flat shaft type tool is usable, but there is a possibility that the I.D of shrink fit holder may be deformed.

Material of cutting tool

CARBIDE
TOOL

HSS TOOL

OK

NO



SHRINK FIT HEATING MACHINE

FEATURE

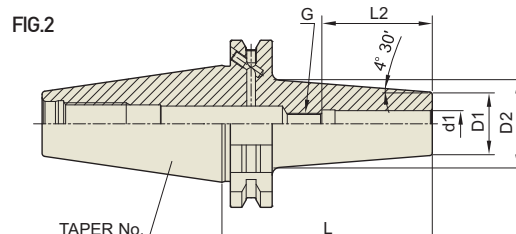
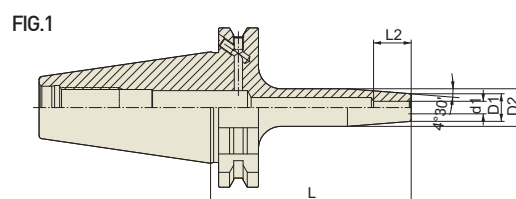
- ▶ Electromagnetic induction heating system
- ▶ Automatic voltage adjustment : AC 100V~240V
- ▶ Small size and light weight
- ▶ Easy to operate

SPECIFICATION

Heating	Induction
Power	100V~220V AC ,50/60Hz
Dimension	380 x 350 x 720mm
Weight	22Kg
Holder Support	SK , HSK, BT



SCHRUMPFUTTER
MANDRIN DE FRETAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



DIN 69871 -SK	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (I.D) ≤3Uμm	Coolant System AD/B
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■ DIN 69871-SK

Unit : mm

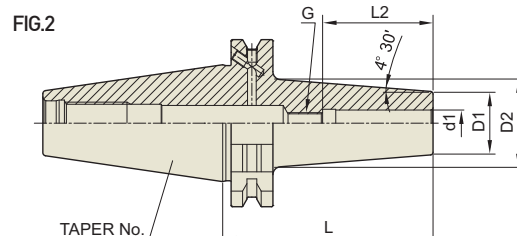
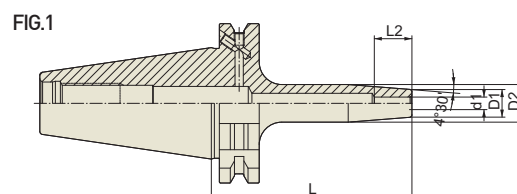
TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
30	SK30AD/B-SFH3-60	3	11	15	60	10	—	1	0.40	
	SK30AD/B-SFH4-60	4	11	15	60	12	—	1	0.40	
	SK30AD/B-SFH5-60	5	11	15	60	15	—	1	0.40	
	SK30AD/B-SFH6-60	6	21	27	60	36	M5×0.8	2	0.40	
	SK30AD/B-SFH8-60	8	21	27	60	36	M6×1.0	2	0.40	
	SK30AD/B-SFH10-80	10	24	32	80	42	M8×1.0	2	0.40	
	SK30AD/B-SFH12-80	12	24	32	80	47	M10×1.0	2	0.42	
	SK30AD/B-SFH14-80	14	27	34	80	47	M10×1.0	2		
	SK30AD/B-SFH16-80	16	27	34	80	50	M12×1.0	2	0.42	
	SK30AD/B-SFH18-80	18	33	42	80	50	M12×1.0	2		
40	SK30AD/B-SFH20-90	20	33	42	90	52	M16×1.0	2	0.44	
	SK40AD/B-SFH3-80	3	11	15	80	10	—	1	1.00	
	SK40AD/B-SFH4-80	4	11	15	80	12	—	1	1.00	
	SK40AD/B-SFH5-80	5	11	15	80	15	—	1	1.00	
	SK40AD/B-SFH6-80	6	21	27	80	36	M5×0.8	2	1.10	
	SK40AD/B-SFH6-160	6	21	27	160	36	M5×0.8	2	1.15	●
	SK40AD/B-SFH8-80	8	21	27	80	36	M6×1.0	2	1.11	●
	SK40AD/B-SFH8-160	8	21	27	160	36	M6×1.0	2	1.15	
	SK40AD/B-SFH10-80	10	24	32	80	42	M8×1.0	2	1.10	●
	SK40AD/B-SFH10-160	10	24	32	160	42	M8×1.0	2	1.15	●
	SK40AD/B-SFH12-80	12	24	32	80	47	M10×1.0	2	1.10	
	SK40AD/B-SFH12-160	12	24	32	160	47	M10×1.0	2	1.15	
	SK40AD/B-SFH14-80	14	27	34	80	47	M10×1.0	2	1.20	
	SK40AD/B-SFH14-160	14	27	34	160	47	M10×1.0	2	1.50	
	SK40AD/B-SFH16-80	16	27	34	80	50	M12×1.0	2	1.20	●
	SK40AD/B-SFH16-160	16	27	34	160	50	M12×1.0	2	1.50	●
	SK40AD/B-SFH18-80	18	33	42	80	50	M12×1.0	2	1.30	
	SK40AD/B-SFH18-160	18	33	42	160	50	M12×1.0	2	1.60	
	SK40AD/B-SFH20-80	20	33	42	80	52	M16×1.0	2	1.40	
	SK40AD/B-SFH20-160	20	33	42	160	52	M16×1.0	2	1.70	●
	SK40AD/B-SFH25-90	25	44	53	90	58	M16×1.0	2	1.70	
	SK40AD/B-SFH25-160	25	44	53	160	58	M16×1.0	2	2.00	

- ▶CAT(ANSI B5.50) taper and Inch type products are available.
- ▶Without balancing screw.

SHRINK FIT HOLDER

SFH

SCHRUMPFUTTER
MANDRIN DE FRETTAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Run-Out
(I.D)
≤30μm

Coolant
System
AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
50	SK50AD/B-SFH3-80	3	11	15	100	10	—	1	1.50	
	SK50AD/B-SFH4-80	4	11	15	100	12	—	1	1.50	
	SK50AD/B-SFH5-80	5	11	15	100	15	—	1	1.50	
	SK50AD/B-SFH6-80	6	21	27	80	36	M5×0.8	2	1.50	
	SK50AD/B-SFH6-160	6	21	27	160	36	M5×0.8	2	2.00	
	SK50AD/B-SFH8-80	8	21	27	80	36	M6×1.0	2	1.50	
	SK50AD/B-SFH8-160	8	21	27	160	36	M6×1.0	2	2.00	
	SK50AD/B-SFH10-80	10	24	32	80	42	M8×1.0	2	1.50	
	SK50AD/B-SFH10-160	10	24	32	160	42	M8×1.0	2	2.00	
	SK50AD/B-SFH12-80	12	24	32	80	47	M10×1.0	2	1.50	
	SK50AD/B-SFH12-160	12	24	32	160	47	M10×1.0	2	2.00	
	SK50AD/B-SFH14-80	14	27	34	80	47	M10×1.0	2	1.60	
	SK50AD/B-SFH14-160	14	27	34	160	47	M10×1.0	2	2.10	
	SK50AD/B-SFH16-80	16	27	34	80	50	M12×1.0	2	1.60	
	SK50AD/B-SFH16-160	16	27	34	160	50	M12×1.0	2	2.10	
	SK50AD/B-SFH18-80	18	33	42	80	50	M12×1.0	2	1.60	
	SK50AD/B-SFH18-160	18	33	42	160	50	M12×1.0	2	2.00	
	SK50AD/B-SFH20-80	20	33	42	80	52	M16×1.0	2	1.80	
	SK50AD/B-SFH20-160	20	33	42	160	52	M16×1.0	2	2.20	
	SK50AD/B-SFH25-90	25	44	53	90	58	M16×1.0	2	2.00	
	SK50AD/B-SFH25-160	25	44	53	160	58	M16×1.0	2	2.40	

► CAT(ANSI B5.50) taper and Inch type products are available.

► Without balancing screw.

SHRINK FIT HOLDER

SFH

SCHRUMPFUTTER
MANDRIN DE FRETAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR

Shrink Fit
Holder



FIG.1

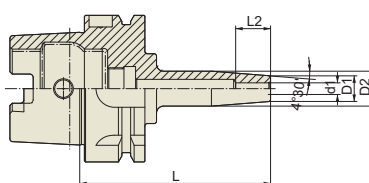
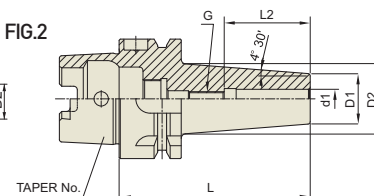


FIG.2



DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Run-Out (I.D.) ≤3Uμm	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
40A	HSK40A-SFH3-60	3	11	15	60	10	-	1	0.30	●
	HSK40A-SFH3-80	3	11	15	80	10	-	1	0.40	●
	HSK40A-SFH4-60	4	11	15	60	12	-	1	0.30	●
	HSK40A-SFH4-80	4	11	15	80	12	-	1	0.40	●
	HSK40A-SFH5-60	5	11	15	60	15	-	1	0.30	●
	HSK40A-SFH5-80	5	11	15	80	15	-	1	0.40	●
	HSK40A-SFH6-60	6	21	27	60	36	M5×0.8	2	0.40	●
	HSK40A-SFH6-80	6	21	27	80	36	M5×0.8	2	0.50	●
	HSK40A-SFH8-70	8	21	27	70	36	M6×1.0	2	0.40	●
	HSK40A-SFH8-90	8	21	27	90	36	M6×1.0	2	0.50	●
	HSK40A-SFH10-70	10	24	32	70	42	M8×1.0	2	0.50	●
	HSK40A-SFH10-90	10	24	32	90	42	M8×1.0	2	0.60	●

►Without balancing screw.



FIG.1

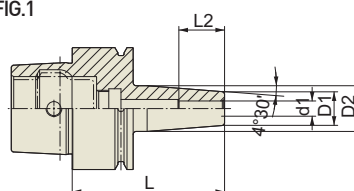
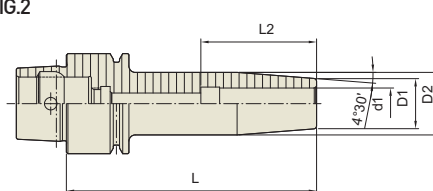


FIG.2



DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Run-Out (I.D.) ≤3Uμm	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM E

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
25E	HSK25E-SFH3-45	3	11	15	45	10	-	1		
	HSK25E-SFH4-45	4	11	15	45	12	-	1		
	HSK25E-SFH5-45	5	11	15	45	15	-	1		
	HSK25E-SFH6-45	6	12	17	45	18	-	2		
	HSK25E-SFH8-45	8	14	18	45	30	-	2		
	HSK25E-SFH10-50	10	16	20	50	37	-	2		
32E	HSK32E-SFH3-60	3	11	15	60	10	-	1		
	HSK32E-SFH4-60	4	11	15	60	12	-	1		
	HSK32E-SFH5-60	5	11	15	60	15	-	1		
	HSK32E-SFH6-70	6	12	17	70	18	-	2		
	HSK32E-SFH8-70	8	14	18	70	30	-	2		
	HSK32E-SFH10-80	10	16	20	80	37	-	2		
40E	HSK40E-SFH3-60	3	11	15	60	10	-	1	0.30	●
	HSK40E-SFH3-80	3	11	15	80	10	-	1	0.40	●
	HSK40E-SFH4-60	4	11	15	60	12	-	1	0.30	●
	HSK40E-SFH4-80	4	11	15	80	12	-	1	0.40	●
	HSK40E-SFH5-60	5	11	15	60	15	-	1	0.30	●
	HSK40E-SFH5-80	5	11	15	80	15	-	1	0.40	●
	HSK40E-SFH6-60	6	21	27	60	36	M5×0.8	2	0.40	●
	HSK40E-SFH6-80	6	21	27	80	36	M5×0.8	2	0.50	●
	HSK40E-SFH8-70	8	21	27	70	36	M6×1.0	2	0.40	●
	HSK40E-SFH8-90	8	21	27	90	36	M6×1.0	2	0.50	●
	HSK40E-SFH10-70	10	24	32	70	42	M8×1.0	2	0.50	●
	HSK40E-SFH10-90	10	24	32	90	42	M8×1.0	2	0.60	●

►Without balancing screw.

SHRINK FIT HOLDER

SFH

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MANDRIN DE FRETTAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



FIG.1

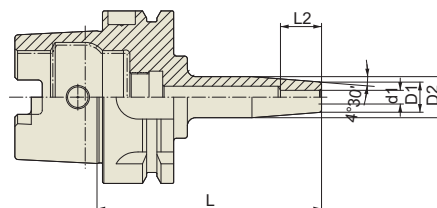
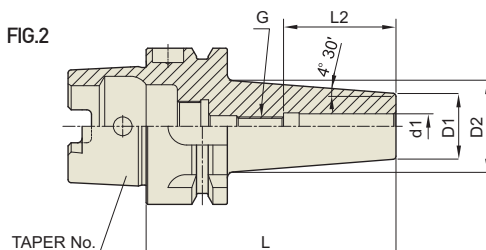


FIG.2



DIN 69893
- HSK

Taper
Accuracy
-

G Value
2.5

RPM
25,000

Run-Out
(I.D)
≤3Uμm

Coolant
System
AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
50A	HSK50A-SFH3-80	3	11	15	80	10	-	1	0.54	
	HSK50A-SFH4-80	4	11	15	80	12	-	1	0.55	
	HSK50A-SFH5-80	5	11	15	80	15	-	1	0.56	
	HSK50A-SFH6-80	6	21	27	80	36	M5×0.8	2	0.57	
	HSK50A-SFH8-80	8	21	27	80	36	M6×1.0	2	0.58	
	HSK50A-SFH10-85	10	24	32	85	42	M8×1.0	2	0.65	
	HSK50A-SFH12-90	12	24	32	90	47	M10×1.0	2	0.67	
	HSK50A-SFH14-90	14	27	34	90	47	M10×1.0	2	0.72	
	HSK50A-SFH16-95	16	27	34	95	50	M12×1.0	2	0.73	
	HSK50A-SFH18-95	18	33	42	95	50	M12×1.0	2	0.90	
63A	HSK50A-SFH20-100	20	33	42	100	52	M16×1.0	2	0.92	
	HSK63A-SFH3-80	3	11	15	80	10	-	1	0.70	●
	HSK63A-SFH4-80	4	11	15	80	12	-	1	0.70	●
	HSK63A-SFH5-80	5	11	15	80	15	-	1	0.70	●
	HSK63A-SFH6-80	6	21	27	80	36	M5×0.8	2	0.83	●
	HSK63A-SFH6-160	6	21	27	160	36	M5×0.8	2	1.00	
	HSK63A-SFH8-80	8	21	27	80	36	M6×1.0	2	0.83	●
	HSK63A-SFH8-160	8	21	27	160	36	M6×1.0	2	1.00	
	HSK63A-SFH10-85	10	24	32	85	42	M8×1.0	2	0.83	●
	HSK63A-SFH10-160	10	24	32	160	42	M8×1.0	2	1.00	
	HSK63A-SFH12-90	12	24	32	90	47	M10×1.0	2	0.83	
	HSK63A-SFH12-160	12	24	32	160	47	M10×1.0	2	1.00	
	HSK63A-SFH14-90	14	27	34	90	47	M10×1.0	2	0.91	
	HSK63A-SFH14-160	14	27	34	160	47	M10×1.0	2	1.30	
	HSK63A-SFH16-95	16	27	34	95	50	M12×1.0	2	0.98	●
	HSK63A-SFH16-160	16	27	34	160	50	M12×1.0	2	1.40	
	HSK63A-SFH18-95	18	33	42	95	50	M12×1.0	2	0.98	
	HSK63A-SFH18-160	18	33	42	160	50	M12×1.0	2	1.40	
	HSK63A-SFH20-100	20	33	42	100	52	M16×1.0	2	1.00	
	HSK63A-SFH20-160	20	33	42	160	52	M16×1.0	2	1.40	
	HSK63A-SFH25-115	25	44	53	115	58	M16×1.0	2	1.40	
	HSK63A-SFH25-160	25	44	53	160	58	M16×1.0	2	1.80	

►Without balancing screw.

SCHRUMPFUTTER
MANDRIN DE FRETAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



FIG.1

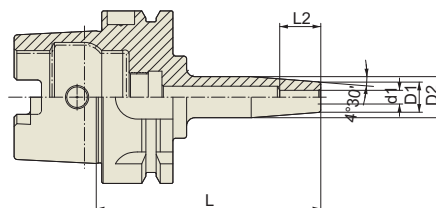
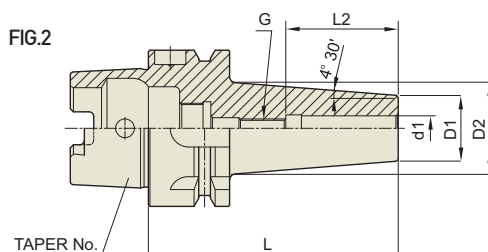


FIG.2



DIN 69893
- HSK

Taper
Accuracy
-

G Value
2.5

RPM
25,000

Run-Out
(I.D)
≤3Uμm

Coolant
System
AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
80A	HSK80A-SFH6-85	6	21	27	85	36	M5x0.8	2		
	HSK80A-SFH8-85	8	21	27	85	36	M6x1.0	2		
	HSK80A-SFH10-90	10	24	32	90	41	M8x1.0	2		
	HSK80A-SFH12-95	12	24	32	95	46	M10x1.0	2		
	HSK80A-SFH14-95	14	27	34	95	46	M10x1.0	2		
	HSK80A-SFH16-100	16	27	34	100	49	M12x1.0	2		
	HSK80A-SFH18-100	18	33	42	100	49	M12x1.0	2		
	HSK80A-SFH20-105	20	33	42	105	51	M16x1.0	2		
100A	HSK80A-SFH25-115	25	44	53	115	57	M16x1.0	2		
	HSK100A-SFH3-85	3	11	15	85	10	-	1	1.30	
	HSK100A-SFH4-85	4	11	15	85	12	-	1	1.30	
	HSK100A-SFH5-85	5	11	15	85	15	-	1	1.30	
	HSK100A-SFH6-85	6	21	27	85	36	M5x0.8	2	1.30	●
	HSK100A-SFH6-160	6	21	27	160	36	M5x0.8	2	1.80	
	HSK100A-SFH8-85	8	21	27	85	36	M6x1.0	2	1.30	●
	HSK100A-SFH8-160	8	21	27	160	36	M6x1.0	2	1.80	
	HSK100A-SFH10-90	10	24	32	90	42	M8x1.0	2	1.30	●
	HSK100A-SFH10-160	10	24	32	160	42	M8x1.0	2	1.80	
	HSK100A-SFH12-95	12	24	32	95	47	M10x1.0	2	1.30	
	HSK100A-SFH12-160	12	24	32	160	47	M10x1.0	2	1.80	
	HSK100A-SFH14-95	14	27	34	95	47	M10x1.0	2	1.40	
	HSK100A-SFH14-160	14	27	34	160	47	M10x1.0	2	1.90	
	HSK100A-SFH16-100	16	27	34	100	50	M12x1.0	2	1.40	●
	HSK100A-SFH16-160	16	27	34	160	50	M12x1.0	2	1.90	●
	HSK100A-SFH18-100	18	33	42	100	50	M12x1.0	2	1.50	
	HSK100A-SFH18-160	18	33	42	160	50	M12x1.0	2	2.00	
	HSK100A-SFH20-100	20	33	42	100	52	M16x1.0	2	1.50	●
	HSK100A-SFH20-160	20	33	42	160	52	M16x1.0	2	2.00	●
	HSK100A-SFH25-115	25	44	53	115	58	M16x1.0	2	1.80	
	HSK100A-SFH25-160	25	44	53	160	58	M16x1.0	2	2.30	

►Without balancing screw.

SHRINK FIT HOLDER

SFH

SCHRUMPFUTTER
MANDRIN DE FRETTAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



FIG.1

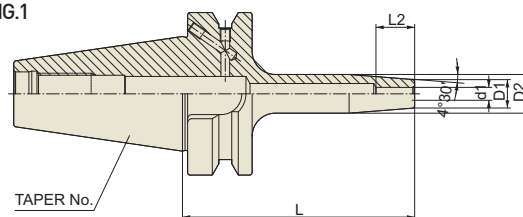
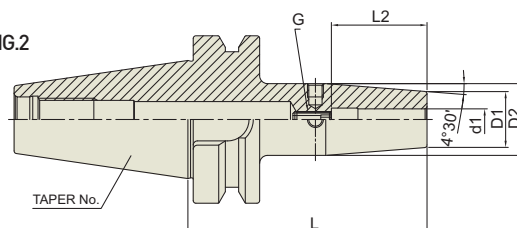


FIG.2



CBT

Taper Accuracy
AT3

G Value
2.5

RPM
25,000

Run-Out (I.D)
≤3Um

Coolant System
AD

■ CBT (BT DUAL CONTACT)

Unit : mm

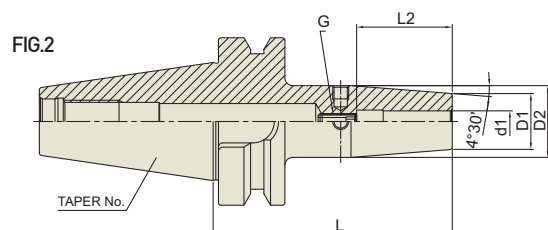
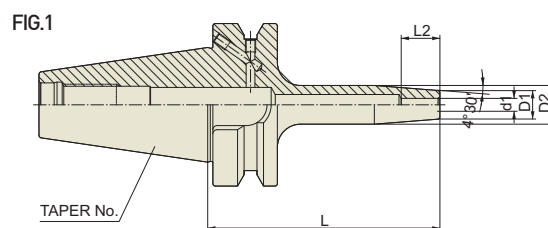
TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
30	CBT30-SFH3-60	3	11	15	60	14	—	1	0.40	
	CBT30-SFH4-60	4	11	15	60	17	—	1	0.40	
	CBT30-SFH5-60	5	11	15	60	23	—	1	0.40	
	CBT30-SFH6-60	6	21	27	60	36	M5×0.8	2	0.40	
	CBT30-SFH8-60	8	21	27	60	36	M6×1.0	2	0.40	
	CBT30-SFH10-80	10	24	32	80	42	M8×1.0	2	0.40	
	CBT30-SFH12-80	12	24	32	80	47	M10×1.0	2	0.42	
	CBT30-SFH14-80	14	27	34	80	47	M10×1.0	2		
	CBT30-SFH16-80	16	27	34	80	50	M12×1.0	2	0.42	
	CBT30-SFH18-80	18	33	42	80	50	M12×1.0	2		
40	CBT30-SFH20-90	20	33	42	90	52	M16×1.0	2	0.44	
	CBT40-SFH3-90	3	11	15	90	14	—	1	1.00	●
	CBT40-SFH4-90	4	11	15	90	17	—	1	1.00	●
	CBT40-SFH5-90	5	11	15	90	23	—	1	1.00	●
	CBT40-SFH6-90	6	21	27	90	36	M5×0.8	2	1.10	●
	CBT40-SFH6-160	6	21	27	160	36	M5×0.8	2	1.15	
	CBT40-SFH8-90	8	21	27	90	36	M6×1.0	2	1.11	●
	CBT40-SFH8-160	8	21	27	160	36	M6×1.0	2	1.15	
	CBT40-SFH10-90	10	24	32	90	42	M8×1.0	2	1.10	●
	CBT40-SFH10-160	10	24	32	160	42	M8×1.0	2	1.15	
	CBT40-SFH12-90	12	24	32	90	47	M10×1.0	2	1.10	●
	CBT40-SFH12-160	12	24	32	160	47	M10×1.0	2	1.15	
	CBT40-SFH14-90	14	27	34	90	47	M10×1.0	2	1.20	
	CBT40-SFH14-160	14	27	34	160	47	M10×1.0	2	1.50	
	CBT40-SFH16-90	16	27	34	90	50	M12×1.0	2	1.20	
	CBT40-SFH16-160	16	27	34	160	50	M12×1.0	2	1.50	
	CBT40-SFH18-90	18	33	42	90	50	M12×1.0	2	1.30	
	CBT40-SFH18-160	18	33	42	160	50	M12×1.0	2	1.60	
	CBT40-SFH20-90	20	33	42	90	52	M16×1.0	2	1.40	●
	CBT40-SFH20-160	20	33	42	160	52	M16×1.0	2	1.70	
	CBT40-SFH25-100	25	44	53	100	58	M16×1.0	2	1.70	●
	CBT40-SFH25-160	25	44	53	160	58	M16×1.0	2	2.00	

►Without balancing screw.

SHRINK FIT HOLDER

SFH

SCHRUMPFUTTER
MANDRIN DE FRETAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (I.D) ≤3Um	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

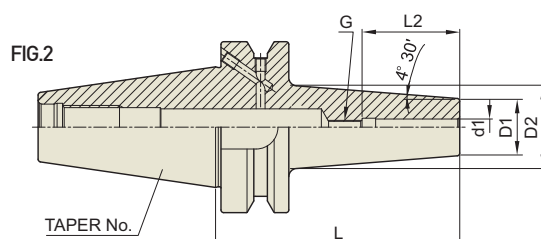
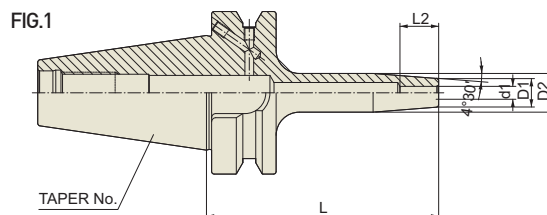
TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
50	CBT50-SFH3-100	3	11	15	100	10	—	1	1.50	
	CBT50-SFH4-100	4	11	15	100	12	—	1	1.50	
	CBT50-SFH5-100	5	11	15	100	15	—	1	1.50	
	CBT50-SFH6-100	6	21	27	100	36	M5×0.8	2	1.50	
	CBT50-SFH6-160	6	21	27	160	36	M5×0.8	2	2.00	
	CBT50-SFH8-100	8	21	27	100	36	M6×1.0	2	1.50	
	CBT50-SFH8-160	8	21	27	160	36	M6×1.0	2	2.00	
	CBT50-SFH10-100	10	24	32	100	42	M8×1.0	2	1.50	
	CBT50-SFH10-160	10	24	32	160	42	M8×1.0	2	2.00	
	CBT50-SFH12-100	12	24	32	100	47	M10×1.0	2	1.50	
	CBT50-SFH12-160	12	24	32	160	47	M10×1.0	2	2.00	
	CBT50-SFH14-100	14	27	34	100	47	M10×1.0	2	1.60	
	CBT50-SFH14-160	14	27	34	160	47	M10×1.0	2	2.10	
	CBT50-SFH16-100	16	27	34	100	50	M12×1.0	2	1.60	
	CBT50-SFH16-160	16	27	34	160	50	M12×1.0	2	2.10	
	CBT50-SFH18-100	18	33	42	100	50	M12×1.0	2	1.60	
	CBT50-SFH18-160	18	33	42	160	50	M12×1.0	2	2.00	
	CBT50-SFH20-100	20	33	42	100	52	M16×1.0	2	1.80	
	CBT50-SFH20-160	20	33	42	160	52	M16×1.0	2	2.20	
	CBT50-SFH25-100	25	44	53	100	58	M16×1.0	2	2.00	
	CBT50-SFH25-160	25	44	53	160	58	M16×1.0	2	2.40	

►Without balancing screw.

SHRINK FIT HOLDER

SFH

SCHRUMPFUTTER
MANDRIN DE FRETTAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (I.D) ≤3Uμm	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
30	BT30AD/B-SFH3-60	3	11	15	60	10	—	1	0.40	
	BT30AD/B-SFH4-60	4	11	15	60	12	—	1	0.40	
	BT30AD/B-SFH5-60	5	11	15	60	15	—	1	0.40	
	BT30AD/B-SFH6-60	6	21	27	60	36	M5×0.8	2	0.40	
	BT30AD/B-SFH8-60	8	21	27	60	36	M6×1.0	2	0.40	
	BT30AD/B-SFH10-80	10	24	32	80	42	M8×1.0	2	0.40	
	BT30AD/B-SFH12-80	12	24	32	80	47	M10×1.0	2	0.42	
	BT30AD/B-SFH14-80	14	27	34	80	47	M10×1.0	2		
	BT30AD/B-SFH16-80	16	27	34	80	50	M12×1.0	2	0.42	
	BT30AD/B-SFH18-80	18	33	42	80	50	M12×1.0	2		
40	BT30AD/B-SFH20-90	20	33	42	90	52	M16×1.0	2	0.44	
	BT40AD/B-SFH3-90	3	11	15	90	10	—	1	1.00	●
	BT40AD/B-SFH4-90	4	11	15	90	12	—	1	1.00	●
	BT40AD/B-SFH5-90	5	11	15	90	15	—	1	1.00	●
	BT40AD/B-SFH6-90	6	21	27	90	36	M5×0.8	2	1.10	●
	BT40AD/B-SFH6-160	6	21	27	160	36	M5×0.8	2	1.15	
	BT40AD/B-SFH8-90	8	21	27	90	36	M6×1.0	2	1.11	●
	BT40AD/B-SFH8-160	8	21	27	160	36	M6×1.0	2	1.15	
	BT40AD/B-SFH10-90	10	24	32	90	42	M8×1.0	2	1.10	●
	BT40AD/B-SFH10-160	10	24	32	160	42	M8×1.0	2	1.15	
	BT40AD/B-SFH12-90	12	24	32	90	47	M10×1.0	2	1.10	
	BT40AD/B-SFH12-160	12	24	32	160	47	M10×1.0	2	1.15	
	BT40AD/B-SFH14-90	14	27	34	90	47	M10×1.0	2	1.20	
	BT40AD/B-SFH14-160	14	27	34	160	47	M10×1.0	2	1.50	
	BT40AD/B-SFH16-90	16	27	34	90	50	M12×1.0	2	1.20	●
	BT40AD/B-SFH16-160	16	27	34	160	50	M12×1.0	2	1.50	
	BT40AD/B-SFH18-90	18	33	42	90	50	M12×1.0	2	1.30	
	BT40AD/B-SFH18-160	18	33	42	160	50	M12×1.0	2	1.60	
	BT40AD/B-SFH20-90	20	33	42	90	52	M16×1.0	2	1.40	●
	BT40AD/B-SFH20-160	20	33	42	160	52	M16×1.0	2	1.70	
	BT40AD/B-SFH25-100	25	44	53	100	58	M16×1.0	2	1.70	●
	BT40AD/B-SFH25-160	25	44	53	160	58	M16×1.0	2	2.00	

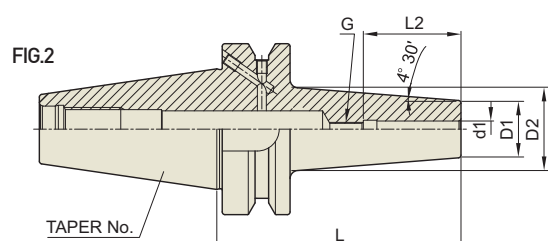
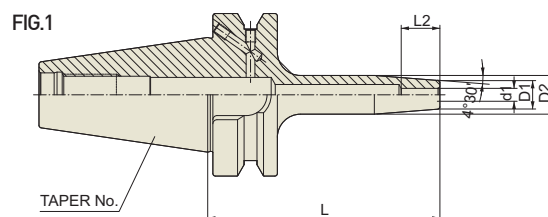
▶CAT(ANSI B5.50) taper and Inch type products are available.

▶Without balancing screw.

SHRINK FIT HOLDER

SFH

SCHRUMPFUTTER
MANDRIN DE FRETAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Run-Out (I.D) ≤3Uμm	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

Unit : mm

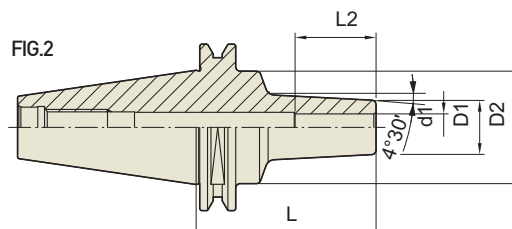
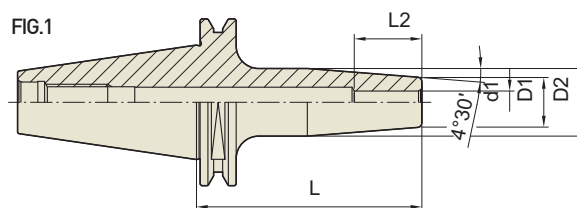
TAPER No.	MODEL No.	d1	D1	D2	L	L2	G	FIG.	Weight (Kg)	Stock
50	BT50AD/B-SFH3-100	3	11	15	100	10	—	1	1.50	
	BT50AD/B-SFH4-100	4	11	15	100	12	—	1	1.50	
	BT50AD/B-SFH5-100	5	11	15	100	15	—	1	1.50	
	BT50AD/B-SFH6-100	6	21	27	100	36	M5×0.8	2	1.50	
	BT50AD/B-SFH6-160	6	21	27	160	36	M5×0.8	2	2.00	
	BT50AD/B-SFH8-100	8	21	27	100	36	M6×1.0	2	1.50	
	BT50AD/B-SFH8-160	8	21	27	160	36	M6×1.0	2	2.00	
	BT50AD/B-SFH10-100	10	24	32	100	42	M8×1.0	2	1.50	
	BT50AD/B-SFH10-160	10	24	32	160	42	M8×1.0	2	2.00	
	BT50AD/B-SFH12-100	12	24	32	100	47	M10×1.0	2	1.50	
	BT50AD/B-SFH12-160	12	24	32	160	47	M10×1.0	2	2.00	
	BT50AD/B-SFH14-100	14	27	34	100	47	M10×1.0	2	1.60	
	BT50AD/B-SFH14-160	14	27	34	160	47	M10×1.0	2	2.10	
	BT50AD/B-SFH16-100	16	27	34	100	50	M12×1.0	2	1.60	
	BT50AD/B-SFH16-160	16	27	34	160	50	M12×1.0	2	2.10	
	BT50AD/B-SFH18-100	18	33	42	100	50	M12×1.0	2	1.60	
	BT50AD/B-SFH18-160	18	33	42	160	50	M12×1.0	2	2.00	
	BT50AD/B-SFH20-100	20	33	42	100	52	M16×1.0	2	1.80	
	BT50AD/B-SFH20-160	20	33	42	160	52	M16×1.0	2	2.20	
	BT50AD/B-SFH25-100	25	44	53	100	58	M16×1.0	2	2.00	
	BT50AD/B-SFH25-160	25	44	53	160	58	M16×1.0	2	2.40	

- CAT(ANSI B5.50) taper and Inch type products are available.
- Without balancing screw.

SHRINK FIT HOLDER **NEW**

SFH

SCHRUMPFUTTER
MANDRIN DE FRETTAGE
MADRINI PER CALLETAMENTO A CALDO
PORTAHERRAMIENTAS DE COMPRESION POR CALOR



ISO 25

Taper
Accuracy
AT3

G Value
2.5

RPM
30,000

Run-Out
(I.D)
≤3Um

Coolant
System
AD

■ ISO25

Unit : mm

TAPER No.	MODEL No.	d1	D1	D2	L	L2	FIG.	Weight (Kg)	Stock
25	ISO25-SFH3-50	3	11	15	50	10	1		
	ISO25-SFH4-50	4	11	15	50	12	1		
	ISO25-SFH5-50	5	11	15	50	15	1		
	ISO25-SFH6-40	6	12	17	40	18	2		
	ISO25-SFH8-50	8	14	18	50	30	2		
	ISO25-SFH10-50	10	16	20	50	37	2		

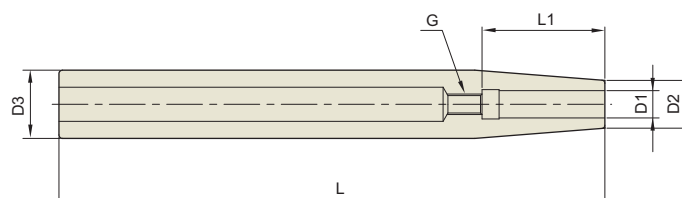
- Higher balancing grade is available upon request.
- To be supplied with assembling of pull stud bolt.
- Without balancing screw.

SCHRUMPFUTTER (VERLÄGERUNG)

MANDRIN DE FRETTAGE (EXTENSION)

MADRINI PER CALLETAMENTO A CALDO (PROLUNGHE)

PORTAHERRAMIENTAS DE COMPRESION POR CALOR (EXTENSION)



STANDARD

Unit : mm

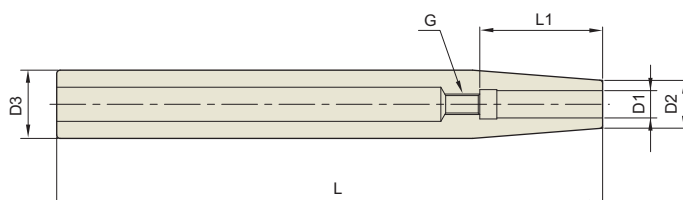
TAPER No.	MODEL No.	D1	D2	D3	L	L2	G	Weight (Kg)	Stock
12	ST12-SFH3-120	3	8	12	19	120	—		●
	ST12-SFH4-120	4	8	12	22	120	—		●
	ST12-SFH5-120	5	10	12	28	120	—		●
	ST12-SFH6-120	6	10	12	36	120	M5×0.8		●
16	ST16-SFH3-120	3	10	16	19	120	—		●
	ST16-SFH4-120	4	10	16	22	120	—		●
	ST16-SFH5-120	5	10	16	28	120	—		●
	ST16-SFH6-120	6	10	16	36	120	M5×0.8		●
	ST16-SFH8-120	8	12	16	36	120	M6×1.0		●
20	ST20-SFH3-120	3	10	20	19	120	—		●
	ST20-SFH4-120	4	10	20	22	120	—		●
	ST20-SFH5-120	5	10	20	28	120	—		●
	ST20-SFH6-120	6	10	20	36	120	M5×0.8		●
	ST20-SFH8-120	8	12	20	36	120	M6×1.0		●
	ST20-SFH10-120	10	14	20	42	120	M8×1.0		●
	ST20-SFH12-120	12	16	20	47	120	M10×1.0		●

►Inch type products are available.

SHRINK FIT HOLDER (EXTENSION)

SFH

SCHRUMPFUTTER (VERLÄGERUNG)
MANDRIN DE FRETAGE (EXTENSION)
MADRINI PER CALLETAMENTO A CALDO (PROLUNGHE)
PORTAHERRAMIENTAS DE COMPRESION POR CALOR (EXTENSION)



STANDARD

Unit : mm

TAPER No.	MODEL No.	D1	D2	D3	L	L2	G	Weight (Kg)	Stock
12	ST12-SFH3-160	3	8	12	19	160	—		●
	ST12-SFH4-160	4	8	12	22	160	—		●
	ST12-SFH5-160	5	10	12	28	160	—		●
	ST12-SFH6-160	6	10	12	36	160	M5×0,8		●
16	ST16-SFH3-160	3	10	16	19	160	—		●
	ST16-SFH4-160	4	10	16	22	160	—		●
	ST16-SFH5-160	5	10	16	28	160	—		●
	ST16-SFH6-160	6	10	16	36	160	M5×0,8		●
	ST16-SFH8-160	8	12	16	36	160	M6×1,0		●
20	ST20-SFH3-160	3	10	20	19	160	—		●
	ST20-SFH4-160	4	10	20	22	160	—		●
	ST20-SFH5-160	5	10	20	28	160	—		●
	ST20-SFH6-160	6	10	20	36	160	M5×0,8		●
	ST20-SFH8-160	8	12	20	36	160	M6×1,0		●
	ST20-SFH10-160	10	14	20	42	160	M8×1,0		●
	ST20-SFH12-160	12	16	20	47	160	M10×1,0		●
25	ST25-SFH3-160	3	10	25	19	160	—		●
	ST25-SFH4-160	4	10	25	22	160	—		●
	ST25-SFH5-160	5	15	25	28	160	—		●
	ST25-SFH6-160	6	20	25	36	160	M5×0,8		●
	ST25-SFH8-160	8	20	25	36	160	M6×1,0		●
	ST25-SFH10-160	10	20	25	42	160	M8×1,0		●
	ST25-SFH12-160	12	20	25	47	160	M10×1,0		●
	ST25-SFH14-160	14	20	25	47	160	M10×1,0		●
	ST25-SFH16-160	16	22	25	50	160	M12×1,0		●
32	ST32-SFH6-160	6	20	32	36	160	M5×0,8		●
	ST32-SFH8-160	8	20	32	36	160	M6×1,0		●
	ST32-SFH10-160	10	24	32	42	160	M8×1,0		●
	ST32-SFH12-160	12	24	32	47	160	M10×1,0		●
	ST32-SFH14-160	14	27	32	47	160	M10×1,0		●
	ST32-SFH16-160	16	27	32	50	160	M12×1,0		●
	ST32-SFH18-160	18	27	32	50	160	M12×1,0		●
	ST32-SFH20-160	20	27	32	52	160	M16×1,0		●

► Inch type products are available.

TOOLING SYSTEM

ER COLLET CHUCK



FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

ISO 20 / 25

DIN 228 - MTA / MTB

STRAIGHT - K

NC AND R8

ACCESSORY & PART

■ ER COLLET ■ TAP ER COLLET ■ ER NUT & SEALING DISK ■ SPANNER

DONRAY PREMIUM

ER COLLET CHUCK

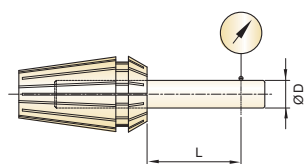


FEATURES

- Powerful chucking, high precision and easy operation
- Precise machining is stably maintained without chattering in high-speed rotation.
- Due to nut designed with small bore, interference with work piece can be minimized and it enables speedy operation.
- Various nuts can be selected and used according to usage.
- Unlike single taper, double taper has long chucking part providing excellent torque power.

HIGH PRECISION

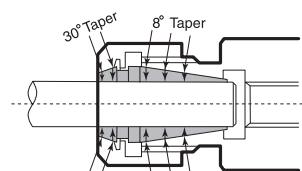
- Highest precision
- By using high precision collet, excellent TIR can be achievable.
- With fine cutting of 16 sections, it has excellent contractile force, which makes higher precision can be achieved.



D	L
Ø1 ~ Ø1.6	6
Ø1.6 ~ Ø3	10
Ø3 ~ Ø6	16
Ø6 ~ Ø10	25
Ø10 ~ Ø18	40
Ø18 ~ Ø26	50
Ø26 ~ Ø34	60

STRONG TORQUE POWER

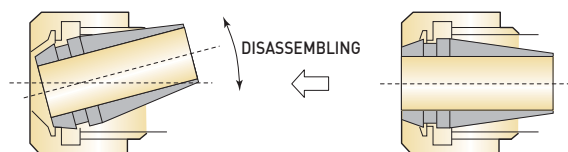
- Longer clamping part of double taper collet provides stronger torque power.
- Stronger torque power can be achieved if ball bearing nut is used.



EASY ASSEMBLING AND DISASSEMBLING

- For assembling or disassembling of collet, first gently insert groove part of collet into eccentric portion inside nut, and fasten it to same direction as screw or loosen it reversely.

Notice : In case of Ø12.2mm tool, don't use Ø12~11 collet. But use collet with Ø12.5~11.5mm, (In case of general cutting process, Ø13~12mm collet is usable.

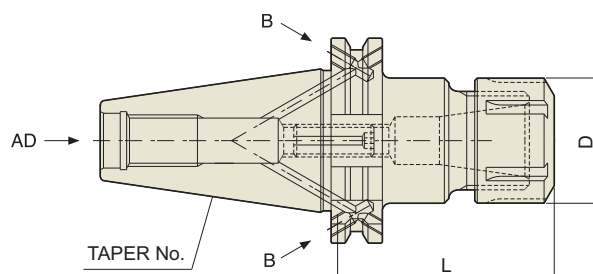


ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

ER Collet
Chuck



■ DIN 69871-SK

DIN 69871
- SK

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Coolant
System
AD/B

◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
30	SK30AD/B-ER11-55	0.5 ~ 7.0	19	55	ER11		
	SK30AD/B-ER16-55	0.5 ~ 10.0	28	55	ER16		
	SK30AD/B-ER20-55	0.5 ~ 13.0	34	55	ER20		
	SK30AD/B-ER25-55	1.0 ~ 16.0	42	55	ER25		
	SK30AD/B-ER32-60	1.0 ~ 20.0	50	60	ER32		
40	SK40AD/B-ER11-70	0.5 ~ 7.0	19	70	ER11		
	SK40AD/B-ER16-70	0.5 ~ 10.0	28	70	ER16		
	SK40AD/B-ER20-70	0.5 ~ 13.0	34	70	ER20		
	SK40AD/B-ER25-70	1.0 ~ 16.0	42	70	ER25		
	SK40AD/B-ER32-70	1.0 ~ 20.0	50	70	ER32		
	SK40AD/B-ER40-80	2.0 ~ 30.0	63	80	ER40		
50	SK50AD/B-ER16-70	0.5 ~ 10.0	28	70	ER16		
	SK50AD/B-ER20-70	0.5 ~ 13.0	34	70	ER20		
	SK50AD/B-ER25-70	1.0 ~ 16.0	42	70	ER25		
	SK50AD/B-ER32-70	1.0 ~ 20.0	50	70	ER32		
	SK50AD/B-ER40-80	2.0 ~ 30.0	63	80	ER40		

◆ EXTENDED

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
30	SK40AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16		
	SK40AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20		
	SK40AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25		
	SK40AD/B-ER32-100	1.0 ~ 20.0	50	100	ER32		
40	SK50AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16		
	SK50AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20		
	SK50AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25		
	SK50AD/B-ER32-100	1.0 ~ 20.0	50	100	ER32		
	SK50AD/B-ER40-100	2.0 ~ 30.0	63	100	ER40		

▶ CAT(ANSI B5.50) taper and Inch type products are available.

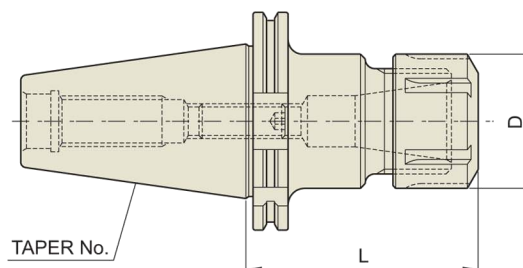
▶ For applicable ER collet, please refer to page 84~87.

▶ For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



■ DIN 69871-SK

DIN 69871 -SK	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
30	SK30-ER11-55	0.5 ~ 7.0	19	55	ER11		
	SK30-ER16-55	0.5 ~ 10.0	28	55	ER16		●
	SK30-ER20-55	0.5 ~ 13.0	34	55	ER20		●
	SK30-ER25-55	1.0 ~ 16.0	42	55	ER25		
	SK30-ER32-60	1.0 ~ 20.0	50	60	ER32		●
40	SK40-ER11-70	0.5 ~ 7.0	19	70	ER11		
	SK40-ER16-70	0.5 ~ 10.0	28	70	ER16		●
	SK40-ER20-70	0.5 ~ 13.0	34	70	ER20		●
	SK40-ER25-70	1.0 ~ 16.0	42	70	ER25		●
	SK40-ER32-70	1.0 ~ 20.0	50	70	ER32		●
	SK40-ER40-80	2.0 ~ 30.0	63	80	ER40		
50	SK50-ER16-70	0.5 ~ 10.0	28	70	ER16		
	SK50-ER20-70	0.5 ~ 13.0	34	70	ER20		●
	SK50-ER25-70	1.0 ~ 16.0	42	70	ER25		●
	SK50-ER32-70	1.0 ~ 20.0	50	70	ER32		●
	SK50-ER40-80	2.0 ~ 30.0	63	80	ER40		

◆ EXTENDED

Unit : mm

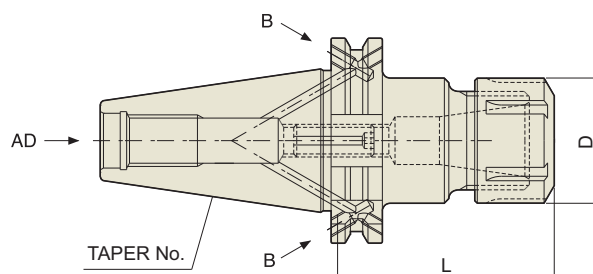
TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
40	SK40-ER16-100	0.5 ~ 10.0	28	100	ER16		●
	SK40-ER20-100	0.5 ~ 13.0	34	100	ER20		●
	SK40-ER25-100	1.0 ~ 16.0	42	100	ER25		●
	SK40-ER32-100	1.0 ~ 20.0	50	100	ER32		●
	SK40-ER32-120	1.0 ~ 20.0	50	120	ER32		●
50	SK50-ER16-100	0.5 ~ 10.0	28	100	ER16		●
	SK50-ER20-100	0.5 ~ 13.0	34	100	ER20		●
	SK50-ER25-100	1.0 ~ 16.0	42	100	ER25		●
	SK50-ER32-100	1.0 ~ 20.0	50	100	ER32		●
	SK50-ER40-100	2.0 ~ 30.0	63	100	ER40		

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

ER Collet
Chuck



■ DIN 69871-SK

DIN 69871 - SK	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD/B
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◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
40	SK40AD/B-ER11-70	0.5 ~ 7.0	19	70	ER11	0.80	●
	SK40AD/B-ER16-70	0.5 ~ 10.0	28	70	ER16	0.90	●
	SK40AD/B-ER20-70	0.5 ~ 13.0	34	70	ER20	1.20	●
	SK40AD/B-ER25-70	1.0 ~ 16.0	42	70	ER25	1.30	●
	SK40AD/B-ER32-70	1.0 ~ 20.0	50	70	ER32	1.50	●
	SK40AD/B-ER40-80	2.0 ~ 30.0	63	80	ER40	1.70	●
50	SK50AD/B-ER16-70	0.5 ~ 10.0	28	70	ER16	2.80	●
	SK50AD/B-ER20-70	0.5 ~ 13.0	34	70	ER20	2.90	●
	SK50AD/B-ER25-70	1.0 ~ 16.0	42	70	ER25	3.10	●
	SK50AD/B-ER32-70	1.0 ~ 20.0	50	70	ER32	3.30	●
	SK50AD/B-ER40-80	2.0 ~ 30.0	63	80	ER40	3.50	●

◆ EXTENDED

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
40	SK40AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16	1.05	●
	SK40AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20	1.13	●
	SK40AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25	1.35	●
	SK40AD/B-ER32-100	1.0 ~ 20.0	50	100	ER32	1.43	●
50	SK50AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16	2.90	●
	SK50AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20	3.10	●
	SK50AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25	3.30	●
	SK50AD/B-ER32-100	1.0 ~ 20.0	50	100	ER32	3.50	●
	SK50AD/B-ER40-100	2.0 ~ 30.0	63	100	ER40	3.80	●

▶ CAT(ANSI B5.50) taper and Inch type products are available.

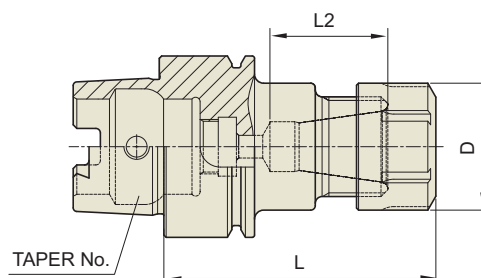
▶ For applicable ER collet, please refer to page 84~87.

▶ For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



■ DIN 69893/ISO 12164-1-HSK FORM A

DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Coolant System AD
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◆ Standard Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
32A	HSK32A-ER11-50	0.5 ~ 7.0	19	50	22	ER11		
	HSK32A-ER16-60	0.5 ~ 10.0	28	60	26	ER16		
40A	HSK40A-ER11-60	0.5 ~ 7.0	19	60	22	ER11	0.40	
	HSK40A-ER16-60	0.5 ~ 10.0	28	60	26	ER16	0.50	
	HSK40A-ER20-70	0.5 ~ 13.0	34	70	33	ER20	0.80	

◆ Slim Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
32A	HSK32A-ER8M-40	0.5 ~ 5.0	12	40	13	ER8M / ER8		
	HSK32A-ER11M-40	0.5 ~ 7.0	16	40	22	ER11M / ER11		
	HSK32A-ER16M-60	0.5 ~ 10.0	22	60	26	ER16M / ER16		
	HSK32A-ER20M-60	0.5 ~ 13.0	28	60	33	ER20M / ER20		
40A	HSK40A-ER11M-75	0.5 ~ 7.0	16	75	22	ER11M / ER11	0.40	
	HSK40A-ER16M-80	0.5 ~ 10.0	22	80	26	ER16M / ER16	0.50	
	HSK40A-ER20M-80	0.5 ~ 13.0	28	80	33	ER20M / ER20	0.70	
	HSK40A-ER25M-80	1.0 ~ 16.0	35	80	40	ER25M / ER25	0.80	

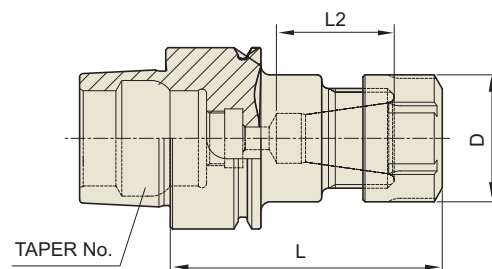
► For applicable ER collet, please refer to page 84~87.

► For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



ER Collet
Chuck

■ DIN 69893/ISO 12164-1-HSK FORM E

DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Coolant System AD
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◆ Standard Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
25E	HSK25E-ER11-40	0.5 ~ 7.0	19	40	20	ER11		
	HSK25E-ER16-50	0.5 ~ 10.0	22	50	26	ER16		
32E	HSK32E-ER11-50	0.5 ~ 7.0	19	50	22	ER11		
	HSK32E-ER16-60	0.5 ~ 10.0	28	60	26	ER16		
40E	HSK40E-ER11-60	0.5 ~ 7.0	19	60	22	ER11	0.40	
	HSK40E-ER16-60	0.5 ~ 10.0	28	60	26	ER16	0.50	
	HSK40E-ER20-70	0.5 ~ 13.0	34	70	33	ER20	0.80	

◆ Slim Type

Unit : mm

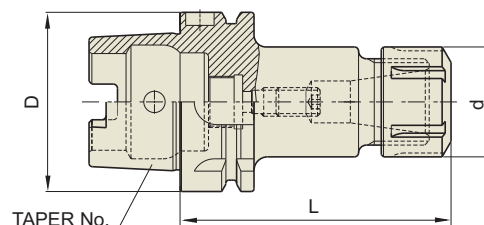
TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
25E	HSK25E-ER8M-35	0.5 ~ 5.0	12	35	13	ER8M / ER8		
	HSK25E-ER11M-40	0.5 ~ 7.0	16	40	20	ER11M / ER11		
32E	HSK32E-ER8M-40	0.5 ~ 5.0	12	40	13	ER8M / ER8		
	HSK32E-ER11M-40	0.5 ~ 7.0	16	40	22	ER11M / ER11		
	HSK32E-ER16M-60	0.5 ~ 10.0	22	60	26	ER16M / ER16		
	HSK32E-ER20M-60	0.5 ~ 13.0	28	60	33	ER20M / ER20		
40E	HSK40E-ER11M-75	0.5 ~ 7.0	16	75	22	ER11M / ER11	0.40	
	HSK40E-ER16M-80	0.5 ~ 10.0	22	80	26	ER16M / ER16	0.50	
	HSK40E-ER20M-80	0.5 ~ 13.0	28	80	33	ER20M / ER20	0.70	
	HSK40E-ER25M-80	1.0 ~ 16.0	35	80	40	ER25M / ER25	0.80	

▶ For applicable ER collet, please refer to page 84~87.

▶ For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

ER Collet
Chuck



■ DIN 69893/ISO 12164-1-HSK FORM A

DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Coolant System AD
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◆ Standard Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	d	D	L	NUT / COLLET	Weight (Kg)	Stock
50A	HSK50A-ER16-100	0.5 ~ 10.0	28	50	100	ER16	0.70	
	HSK50A-ER20-100	0.5 ~ 13.0	35	50	100	ER20	0.90	
	HSK50A-ER25-100	1.0 ~ 16.0	42	50	100	ER25	1.20	
	HSK50A-ER32-100	1.0 ~ 20.0	50	50	100	ER32	1.50	
63A	HSK63A-ER16-100	0.5 ~ 10.0	28	63	100	ER16	1.20	
	HSK63A-ER20-100	0.5 ~ 13.0	35	63	100	ER20	1.50	
	HSK63A-ER25-100	1.0 ~ 16.0	42	63	100	ER25	1.80	
	HSK63A-ER32-100	1.0 ~ 20.0	50	63	100	ER32	2.00	
	HSK63A-ER40-120	2.0 ~ 30.0	63	63	120	ER40	2.30	
80A	HSK80A-ER16-100	0.5 ~ 10.0	28	80	100	ER16		
	HSK80A-ER25-100	1.0 ~ 16.0	42	80	100	ER25		
	HSK80A-ER32-100	1.0 ~ 20.0	50	80	100	ER32		
100A	HSK100A-ER16-100	0.5 ~ 10.0	28	100	100	ER16	2.60	
	HSK100A-ER20-100	0.5 ~ 13.0	35	100	100	ER20	2.70	
	HSK100A-ER25-100	1.0 ~ 16.0	42	100	100	ER25	2.90	
	HSK100A-ER32-100	1.0 ~ 20.0	50	100	100	ER32	3.10	
	HSK100A-ER40-120	2.0 ~ 30.0	63	100	120	ER40	3.30	

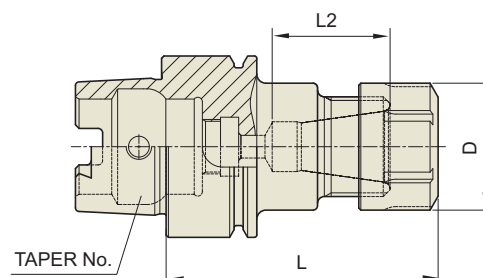
► For applicable ER collet, please refer to page 84~87.

► For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



ER Collet
Chuck

■ DIN 69893/ISO 12164-1-HSK FORM A

DIN 69893 - HSK	Taper Accuracy —	G Value 6.3	RPM 15,000	Coolant System AD
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◆ Standard Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
32A	HSK32A-ER11-50	0.5 ~ 7.0	19	50	22	ER11		
	HSK32A-ER16-60	0.5 ~ 10.0	28	60	26	ER16		
40A	HSK40A-ER11-60	0.5 ~ 7.0	19	60	22	ER11	0.40	●
	HSK40A-ER16-60	0.5 ~ 10.0	28	60	26	ER16	0.50	●
	HSK40A-ER20-70	0.5 ~ 13.0	34	70	33	ER20	0.80	●

◆ Slim Type

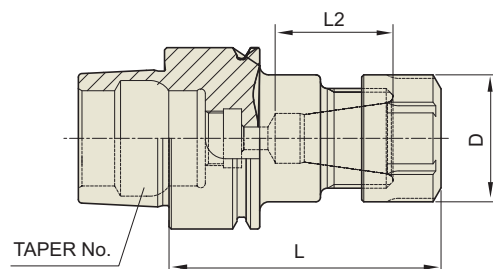
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
32A	HSK32A-ER8M-40	0.5 ~ 5.0	12	40	13	ER8M / ER8		
	HSK32A-ER11M-40	0.5 ~ 7.0	16	40	22	ER11M / ER11		
	HSK32A-ER16M-60	0.5 ~ 10.0	22	60	26	ER16M / ER16		
	HSK32A-ER20M-60	0.5 ~ 13.0	28	60	33	ER20M / ER20		
40A	HSK40A-ER11M-75	0.5 ~ 7.0	16	75	22	ER11M / ER11	0.40	●
	HSK40A-ER16M-80	0.5 ~ 10.0	22	80	26	ER16M / ER16	0.50	●
	HSK40A-ER20M-80	0.5 ~ 13.0	28	80	33	ER20M / ER20	0.70	●
	HSK40A-ER25M-80	1.0 ~ 16.0	35	80	40	ER25M / ER25	0.80	●

► For applicable ER collet, please refer to page 84~87.

► For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



■ DIN 69893/ISO 12164-1-HSK FORM E

DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	—	6.3	15,000	AD

◆ Standard Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
32E	HSK32E-ER11-50	0.5 ~ 7.0	19	50	22	ER11		
	HSK32E-ER16-60	0.5 ~ 10.0	28	60	26	ER16		
40E	HSK40E-ER11-60	0.5 ~ 7.0	19	60	22	ER11	0.40	●
	HSK40E-ER16-60	0.5 ~ 10.0	28	60	26	ER16	0.50	●
	HSK40E-ER20-70	0.5 ~ 13.0	34	70	33	ER20	0.80	●

◆ Slim Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	L2	NUT / COLLET	Weight (Kg)	Stock
32E	HSK32E-ER8M-40	0.5 ~ 5.0	12	40	13	ER8M / ER8		
	HSK32E-ER11M-40	0.5 ~ 7.0	16	40	22	ER11M / ER11		
	HSK32E-ER16M-60	0.5 ~ 10.0	22	60	26	ER16M / ER16		
	HSK32E-ER20M-60	0.5 ~ 13.0	28	60	33	ER20M / ER20		
40E	HSK40E-ER11M-75	0.5 ~ 7.0	16	75	22	ER11M / ER11	0.40	●
	HSK40E-ER16M-80	0.5 ~ 10.0	22	80	26	ER16M / ER16	0.50	●
	HSK40E-ER20M-80	0.5 ~ 13.0	28	80	33	ER20M / ER20	0.70	●
	HSK40E-ER25M-80	1.0 ~ 16.0	35	80	40	ER25M / ER25	0.80	●

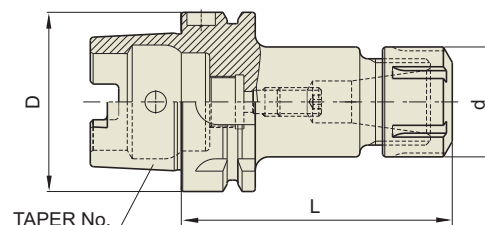
► For applicable ER collet, please refer to page 84~87.

► For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



ER Collet
Chuck

■ DIN 69893/ISO 12164-1-HSK FORM A

DIN 69893 - HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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◆ Standard Type

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	d	D	L	NUT / COLLET	Weight (Kg)	Stock
50A	HSK50A-ER16-100	0.5 ~ 10.0	28	50	100	ER16	0.70	
	HSK50A-ER20-100	0.5 ~ 13.0	35	50	100	ER20	0.90	
	HSK50A-ER25-100	1.0 ~ 16.0	42	50	100	ER25	1.20	
	HSK50A-ER32-100	1.0 ~ 20.0	50	50	100	ER32	1.50	
63A	HSK63A-ER16-100	0.5 ~ 10.0	28	63	100	ER16	1.20	●
	HSK63A-ER20-100	0.5 ~ 13.0	35	63	100	ER20	1.50	●
	HSK63A-ER25-100	1.0 ~ 16.0	42	63	100	ER25	1.80	●
	HSK63A-ER32-100	1.0 ~ 20.0	50	63	100	ER32	2.00	●
	HSK63A-ER40-120	2.0 ~ 30.0	63	63	120	ER40	2.30	●
80A	HSK80A-ER16-100	0.5 ~ 10.0	28	80	100	ER16		
	HSK80A-ER25-100	1.0 ~ 16.0	42	80	100	ER25		
	HSK80A-ER32-100	1.0 ~ 20.0	50	80	100	ER32		
100A	HSK100A-ER16-100	0.5 ~ 10.0	28	100	100	ER16	2.60	
	HSK100A-ER20-100	0.5 ~ 13.0	35	100	100	ER20	2.70	
	HSK100A-ER25-100	1.0 ~ 16.0	42	100	100	ER25	2.90	
	HSK100A-ER32-100	1.0 ~ 20.0	50	100	100	ER32	3.10	
	HSK100A-ER40-120	2.0 ~ 30.0	63	100	120	ER40	3.30	

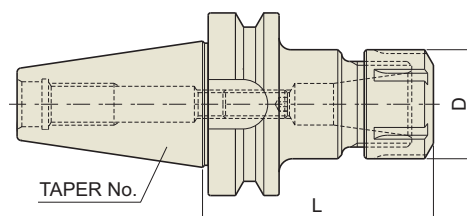
►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
30	CBT30-ER11-70	0.5 ~ 7.0	19	70	ER11	0.5	
	CBT30-ER11-100	0.5 ~ 7.0	19	100	ER11	0.5	
	CBT30-ER16-70	0.5 ~ 10.0	28	70	ER16	1.0	●
	CBT30-ER16-100	0.5 ~ 10.0	28	100	ER16	1.1	
	CBT30-ER20-80	0.5 ~ 13.0	34	80	ER20	1.2	●
	CBT30-ER20-100	0.5 ~ 13.0	34	100	ER20	1.3	
	CBT30-ER25-70	1.0 ~ 16.0	42	70	ER25	1.2	●
	CBT30-ER25-100	1.0 ~ 16.0	42	100	ER25	1.3	
	CBT30-ER32-60	1.0 ~ 20.0	50	60	ER32	1.4	●
	CBT30-ER32-90	1.0 ~ 20.0	50	90	ER32	1.9	
40	CBT40-ER11-75	0.5 ~ 7.0	19	75	ER11	1.0	
	CBT40-ER11-100	0.5 ~ 7.0	19	100	ER11	1.1	
	CBT40-ER16-75	0.5 ~ 10.0	28	75	ER16	1.1	
	CBT40-ER16-100	0.5 ~ 10.0	28	100	ER16	1.2	●
	CBT40-ER16-120	0.5 ~ 10.0	28	120	ER16	1.4	
	CBT40-ER20-75	0.5 ~ 13.0	34	75	ER20	1.4	
	CBT40-ER20-100	0.5 ~ 13.0	34	100	ER20	1.8	●
	CBT40-ER20-135	0.5 ~ 13.0	34	135	ER20	2.2	
	CBT40-ER25-75	1.0 ~ 16.0	42	75	ER25	1.4	
	CBT40-ER25-100	1.0 ~ 16.0	42	100	ER25	1.8	●
	CBT40-ER25-135	1.0 ~ 16.0	42	135	ER25	2.2	
	CBT40-ER25-150	1.0 ~ 16.0	42	150	ER25	2.4	
	CBT40-ER32-60	1.0 ~ 20.0	50	60	ER32	1.8	
	CBT40-ER32-100	1.0 ~ 20.0	50	100	ER32	2.2	●
	CBT40-ER32-120	1.0 ~ 20.0	50	120	ER32	2.4	
	CBT40-ER32-150	1.0 ~ 20.0	50	150	ER32	2.6	
	CBT40-ER40-80	2.0 ~ 30.0	63	80	ER40	1.5	

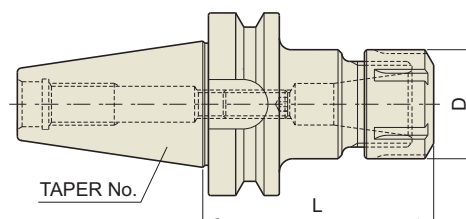
►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
50	CBT50-ER16-100	0.5 ~ 10.0	28	100	ER16	4.2	
	CBT50-ER16-120	0.5 ~ 10.0	28	120	ER16	4.4	
	CBT50-ER16-165	0.5 ~ 10.0	28	165	ER16	4.6	
	CBT50-ER20-100	0.5 ~ 13.0	34	100	ER20	4.6	
	CBT50-ER20-135	0.5 ~ 13.0	34	135	ER20	4.8	
	CBT50-ER20-165	0.5 ~ 13.0	34	165	ER20	5.0	
	CBT50-ER25-100	1.0 ~ 16.0	42	100	ER25	4.7	
	CBT50-ER25-135	1.0 ~ 16.0	42	135	ER25	4.8	
	CBT50-ER25-165	1.0 ~ 16.0	42	165	ER25	5.0	
	CBT50-ER32-100	1.0 ~ 20.0	50	100	ER32	5.2	
	CBT50-ER32-135	1.0 ~ 20.0	50	135	ER32	5.7	
	CBT50-ER32-165	1.0 ~ 20.0	50	165	ER32	5.8	
	CBT50-ER40-100	2.0 ~ 30.0	63	100	ER40	5.6	
	CBT50-ER40-150	2.0 ~ 30.0	63	150	ER40	6.1	
	CBT50-ER50-100	4.0 ~ 34.0	78	100	ER50	5.8	
	CBT50-ER50-150	4.0 ~ 34.0	78	150	ER50	6.3	

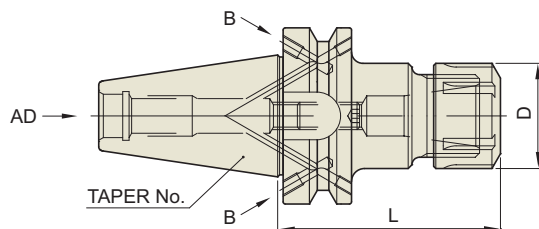
►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Coolant
System
AD/B

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
30	BT30AD/B-ER11-70	0.5 ~ 7.0	19	70	ER11	0.5	
	BT30AD/B-ER11-100	0.5 ~ 7.0	19	100	ER11	0.5	
	BT30AD/B-ER16-70	0.5 ~ 10.0	28	70	ER16	1.0	
	BT30AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16	1.1	
	BT30AD/B-ER20-80	0.5 ~ 13.0	34	80	ER20	1.2	
	BT30AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20	1.3	
	BT30AD/B-ER25-70	1.0 ~ 16.0	42	70	ER25	1.2	
	BT30AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25	1.3	
	BT30AD/B-ER32-60	1.0 ~ 20.0	50	60	ER32	1.4	
40	BT30AD/B-ER32-90	1.0 ~ 20.0	50	90	ER32	1.9	
	BT40AD/B-ER11-75	0.5 ~ 7.0	19	75	ER11	1.0	
	BT40AD/B-ER11-100	0.5 ~ 7.0	19	100	ER11	1.1	
	BT40AD/B-ER16-75	0.5 ~ 10.0	28	75	ER16	1.1	
	BT40AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16	1.2	
	BT40AD/B-ER16-120	0.5 ~ 10.0	28	120	ER16	1.4	
	BT40AD/B-ER20-75	0.5 ~ 13.0	34	75	ER20	1.4	
	BT40AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20	1.8	
	BT40AD/B-ER20-135	0.5 ~ 13.0	34	135	ER20	2.2	
	BT40AD/B-ER25-75	1.0 ~ 16.0	42	75	ER25	1.4	
	BT40AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25	1.8	
	BT40AD/B-ER25-135	1.0 ~ 16.0	42	135	ER25	2.2	
	BT40AD/B-ER25-150	1.0 ~ 16.0	42	150	ER25	2.4	
	BT40AD/B-ER32-60	1.0 ~ 20.0	50	60	ER32	1.8	
	BT40AD/B-ER32-100	1.0 ~ 20.0	50	100	ER32	2.2	
	BT40AD/B-ER32-120	1.0 ~ 20.0	50	120	ER32	2.4	
	BT40AD/B-ER32-150	1.0 ~ 20.0	50	150	ER32	2.6	
	BT40AD/B-ER40-80	2.0 ~ 30.0	63	80	ER40	1.5	

► CAT(ANSI B5.50) taper and Inch type products are available.

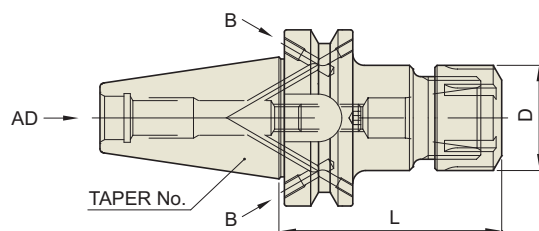
► For applicable ER collet, please refer to page 84~87.

► For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

Unit : mm

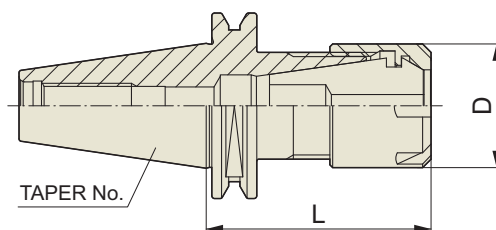
TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
50	BT50AD/B-ER16-100	0.5 ~ 10.0	28	100	ER16	4.2	
	BT50AD/B-ER16-120	0.5 ~ 10.0	28	120	ER16	4.4	
	BT50AD/B-ER16-165	0.5 ~ 10.0	28	165	ER16	4.6	
	BT50AD/B-ER20-100	0.5 ~ 13.0	34	100	ER20	4.6	
	BT50AD/B-ER20-135	0.5 ~ 13.0	34	135	ER20	4.8	
	BT50AD/B-ER20-165	0.5 ~ 13.0	34	165	ER20	5.0	
	BT50AD/B-ER25-100	1.0 ~ 16.0	42	100	ER25	4.7	
	BT50AD/B-ER25-135	1.0 ~ 16.0	42	135	ER25	4.8	
	BT50AD/B-ER25-165	1.0 ~ 16.0	42	165	ER25	5.0	
	BT50AD/B-ER32-100	1.0 ~ 20.0	50	100	ER32	5.2	
	BT50AD/B-ER32-135	1.0 ~ 20.0	50	135	ER32	5.7	
	BT50AD/B-ER32-165	1.0 ~ 20.0	50	165	ER32	5.8	
	BT50AD/B-ER40-100	2.0 ~ 30.0	63	100	ER40	5.6	
	BT50AD/B-ER40-150	2.0 ~ 30.0	63	150	ER40	6.1	
	BT50AD/B-ER50-100	4.0 ~ 34.0	78	100	ER50	5.8	
	BT50AD/B-ER50-150	4.0 ~ 34.0	78	150	ER50	6.3	

►CAT(ANSI B5.50) taper and Inch type products are available.

►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



ISO 20/25	Taper Accuracy AT3	G Value 2.5	RPM 30,000	Coolant System AD
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■ ISO20/25 (SLIM TYPE)

Unit : mm

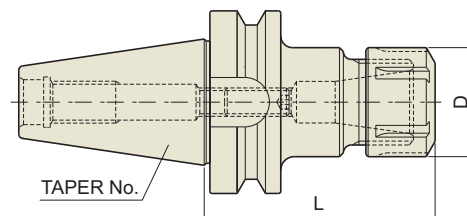
TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
20	ISO20-ER16M-35	0.5 ~ 10.0	22	35	ER16M / ER16		
25	ISO25-ER16M-35	0.5 ~ 10.0	22	35	ER16M / ER16		
	ISO25-ER20M-36	0.5 ~ 13.0	28	35	ER20M / ER20		

- Higher balancing grade is available upon request.
- To be supplied with assembling of pull stud bolt.
- For applicable ER collet, please refer to page 84~87.
- For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

ER COLLET CHUCK

ER

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
30	BT30-ER11-70	0.5 ~ 7.0	19	70	ER11	0.5	
	BT30-ER11-100	0.5 ~ 7.0	19	100	ER11	0.5	
	BT30-ER16-70	0.5 ~ 10.0	28	70	ER16	1.0	●
	BT30-ER16-100	0.5 ~ 10.0	28	100	ER16	1.1	●
	BT30-ER20-80	0.5 ~ 13.0	34	80	ER20	1.2	●
	BT30-ER20-100	0.5 ~ 13.0	34	100	ER20	1.3	●
	BT30-ER25-70	1.0 ~ 16.0	42	70	ER25	1.2	●
	BT30-ER25-100	1.0 ~ 16.0	42	100	ER25	1.3	●
	BT30-ER32-60	1.0 ~ 20.0	50	60	ER32	1.4	●
40	BT30-ER32-90	1.0 ~ 20.0	50	90	ER32	1.9	●
	BT40-ER11-75	0.5 ~ 7.0	19	75	ER11	1.0	
	BT40-ER11-100	0.5 ~ 7.0	19	100	ER11	1.1	
	BT40-ER16-75	0.5 ~ 10.0	28	75	ER16	1.1	●
	BT40-ER16-100	0.5 ~ 10.0	28	100	ER16	1.2	●
	BT40-ER16-120	0.5 ~ 10.0	28	120	ER16	1.4	
	BT40-ER20-75	0.5 ~ 13.0	34	75	ER20	1.4	
	BT40-ER20-100	0.5 ~ 13.0	34	100	ER20	1.8	●
	BT40-ER20-135	0.5 ~ 13.0	34	135	ER20	2.2	
	BT40-ER25-75	1.0 ~ 16.0	42	75	ER25	1.4	
	BT40-ER25-100	1.0 ~ 16.0	42	100	ER25	1.8	●
	BT40-ER25-135	1.0 ~ 16.0	42	135	ER25	2.2	
	BT40-ER25-150	1.0 ~ 16.0	42	150	ER25	2.4	
	BT40-ER32-60	1.0 ~ 20.0	50	60	ER32	1.8	●
	BT40-ER32-100	1.0 ~ 20.0	50	100	ER32	2.2	●
	BT40-ER32-120	1.0 ~ 20.0	50	120	ER32	2.4	●
	BT40-ER32-150	1.0 ~ 20.0	50	150	ER32	2.6	
	BT40-ER40-80	2.0 ~ 30.0	63	80	ER40	1.5	

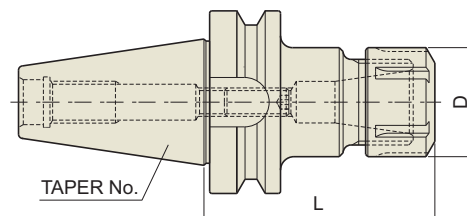
▶CAT(ANSI B5.50) taper and Inch type products are available.

▶For applicable ER collet, please refer to page 84~87.

▶For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER

ER Collet
Chuck



JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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■ JIS B6339/MAS 403-BT

Unit : mm

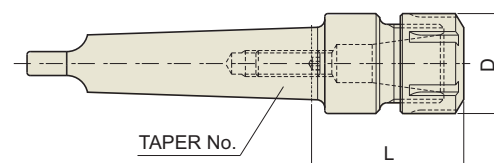
TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
50	BT50-ER16-100	0.5 ~ 10.0	28	100	ER16	4.2	
	BT50-ER16-120	0.5 ~ 10.0	28	120	ER16	4.4	●
	BT50-ER16-165	0.5 ~ 10.0	28	165	ER16	4.6	
	BT50-ER20-100	0.5 ~ 13.0	34	100	ER20	4.6	●
	BT50-ER20-135	0.5 ~ 13.0	34	135	ER20	4.8	●
	BT50-ER20-165	0.5 ~ 13.0	34	165	ER20	5.0	
	BT50-ER25-100	1.0 ~ 16.0	42	100	ER25	4.7	
	BT50-ER25-135	1.0 ~ 16.0	42	135	ER25	4.8	●
	BT50-ER25-165	1.0 ~ 16.0	42	165	ER25	5.0	●
	BT50-ER32-100	1.0 ~ 20.0	50	100	ER32	5.2	●
	BT50-ER32-135	1.0 ~ 20.0	50	135	ER32	5.7	●
	BT50-ER32-165	1.0 ~ 20.0	50	165	ER32	5.8	●
	BT50-ER40-100	2.0 ~ 30.0	63	100	ER40	5.6	
	BT50-ER40-150	2.0 ~ 30.0	63	150	ER40	6.1	●
	BT50-ER50-100	4.0 ~ 34.0	78	100	ER50	5.8	
	BT50-ER50-150	4.0 ~ 34.0	78	150	ER50	6.3	●

►CAT(ANSI B5.50) taper and Inch type products are available.

►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



■ DIN 228-MTA

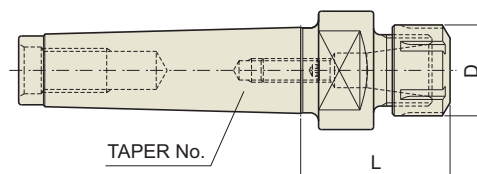
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
1	MTA1-ER11	0.5 ~ 7.0	19	35	ER11	0.30	
	MTA1-ER16	0.5 ~ 10.0	28	40	ER16	0.35	
2	MTA2-ER20	0.5 ~ 13.0	34	50	ER20	0.50	
	MTA2-ER25	1.0 ~ 16.0	42	50	ER25	0.60	
3	MTA3-ER25	1.0 ~ 16.0	42	60	ER25	0.60	
	MTA3-ER32	1.0 ~ 20.0	50	70	ER32	0.65	
4	MTA4-ER20	0.5 ~ 13.0	34	60	ER20	1.00	
	MTA4-ER25	1.0 ~ 16.0	42	60	ER25	1.10	
	MTA4-ER32	1.0 ~ 20.0	50	70	ER32	1.30	●
	MTA4-ER40	2.0 ~ 30.0	63	80	ER40	1.50	
5	MTA5-ER32	1.0 ~ 20.0	50	70	ER32	2.20	●
	MTA5-ER40	2.0 ~ 30.0	63	80	ER40	2.40	●
	MTA5-ER50	4.0 ~ 34.0	78	80	ER50	2.80	

►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



■ DIN 228-MTB

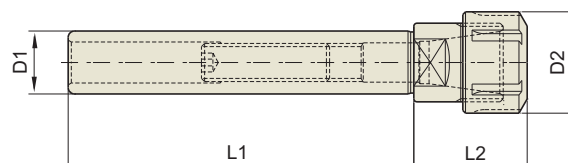
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	L	NUT / COLLET	Weight (Kg)	Stock
1	MTB1-ER16	0.5 ~ 10.0	28	40	ER16	0.35	
2	MTB2-ER20	0.5 ~ 13.0	34	50	ER20	0.50	
	MTB2-ER25	1.0 ~ 16.0	42	50	ER25	0.60	
3	MTB3-ER25	1.0 ~ 16.0	42	60	ER25	0.60	
	MTB3-ER32	1.0 ~ 20.0	50	70	ER32	0.65	
4	MTB4-ER32	1.0 ~ 20.0	50	70	ER32	1.10	●
	MTB4-ER40	2.0 ~ 30.0	63	80	ER40	1.30	
5	MTB5-ER32	1.0 ~ 20.0	50	70	ER32	2.00	●
	MTB5-ER40	2.0 ~ 30.0	63	80	ER40	2.20	●
	MTB5-ER50	4.0 ~ 34.0	78	80	ER50	2.60	●

► For applicable ER collet, please refer to page 84~87.

► For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

FRÄSERSPANNFUTTER - ER
MANDRIN À PINCES - ER
MANDRINO PORTA PINZE - ER
PORTAPINZAS - ER



■ STRAIGHT-K

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D1	D2	L1	L2	NUT / COLLET	Weight (Kg)	Stock
16	K16-ER11-100	0.5 ~ 7.0	16	19	100	32	ER11	0.15	●
	K16-ER16-100	0.5 ~ 10.0	16	28	100	36	ER16	0.18	
20	K20-ER16-100	0.5 ~ 10.0	20	28	100	36	ER16	0.25	●
	K20-ER20-100	0.5 ~ 13.0	20	34	100	40	ER20	0.29	●
	K20-ER25-100	1.0 ~ 16.0	20	42	100	50	ER25	0.35	
25	K25-ER20-100	0.5 ~ 13.0	25	34	100	40	ER20	0.40	●
	K25-ER25-100	1.0 ~ 16.0	25	42	100	50	ER25	0.45	●
32	K32-ER16-100	0.5 ~ 10.0	32	28	100	36	ER16	0.50	●
	K32-ER20-100	0.5 ~ 13.0	32	34	100	40	ER20	0.66	●
	K32-ER25-100	1.0 ~ 16.0	32	42	100	50	ER25	0.75	●
	K32-ER32-100	1.0 ~ 20.0	32	50	100	58	ER32	1.00	●

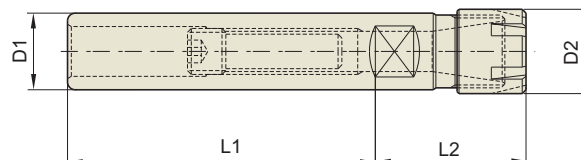
►For applicable ER collet, please refer to page 84~87.

►For applicable ER nut, Sealing disk and Spanner, please refer to page 88~92.

EXTENSION ER COLLET CHUCK

ER

VERLÄNGERUNG FRÄSERSPANNFUTTER - SCHLANKER TYP
EXTENSION MANDRIN À PINCES - TYPE MINCE
PROLUNGHE MANDRINO PORTA PINZE - TIPO SOTTILE
EXTENSION PORTAPINZAS - TIPO DELGADO



■ STRAIGHT-K (SLIM TYPE)

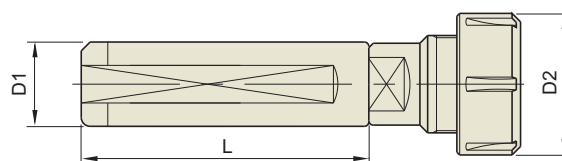
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D1	D2	L1	L2	NUT / COLLET	Weight (Kg)	Stock
12	K12-ER8M-70	0.5 ~ 5.0	12	12	70	25	ER8M / ER8	0.10	●
16	K16-ER11M-140	0.5 ~ 7.0	16	16	140	32	ER11M / ER11	0.22	●
20	K20-ER16M-140	0.5 ~ 10.0	20	22	140	41	ER16M / ER16	0.32	●
	K20-ER20M-140	0.5 ~ 13.0	20	28	140	41	ER20M / ER20	0.35	●
25	K25-ER16M-140	0.5 ~ 10.0	25	22	140	41	ER16M / ER16	0.45	●
	K25-ER20M-140	0.5 ~ 13.0	25	28	140	41	ER20M / ER20	0.52	●
	K25-ER25M-140	1.0 ~ 16.0	25	35	140	45	ER25M / ER25	0.55	●

TENSION ER CHUCK (For TAPPING)

ERT

SPANNUNG FRÄSERSPANNFUTTER - FÜR GEWINDESCHNEID
TENSION MANDRIN À PINCES - POUR TARAUDER
TENSIONAMENTO MANDRINO PORTA PINZE - PER MASCHIARE
TENSÓN PORTAPINZAS - PARA HILO

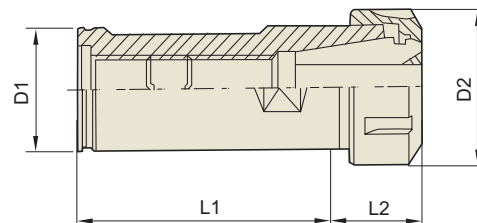


■ STRAIGHT-K

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D1	D2	L	NUT / COLLET	Weight (Kg)	Stock
20	K20-ERT16-70	0.5 ~ 10.0	20	28	70	ER16	0.4	●
25	K25-ERT16-70	0.5 ~ 10.0	25	28	80	ER16	0.45	●
	K25-ERT20-80	0.5 ~ 13.0	25	34	80	ER20	0.50	●
32	K32-ERT16-70	0.5 ~ 10.0	32	28	80	ER16	0.70	●
	K32-ERT20-80	0.5 ~ 13.0	32	34	80	ER20	0.80	●
	K32-ERT25-80	1.0 ~ 16.0	32	42	80	ER25	1.00	●
	K32-ERT32-80	1.0 ~ 20.0	32	50	80	ER32	1.20	●

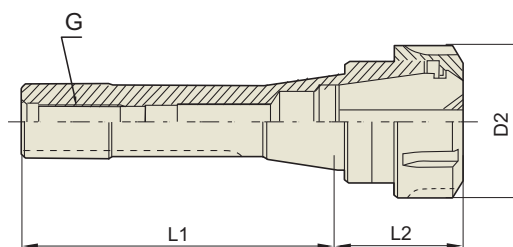
FRÄSERSPANNFUTTER FÜR CNC DREHBANK
MANDRIN À PINCES POUR CNC TOUR
MANDRINO PORTA PINZE PER CNC TORNIO
PORTAPINZAS PARA CNC TORNO



■ NC- for CNC LATHE

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D1	D2	L1	L2	NUT / COLLET	Weight (Kg)	Stock
25	NC25-ER11	0.5 ~ 7.0	25	19	65	32	ER11	0.30	
	NC25-ER16	0.5 ~ 10.0	25	28	65	32	ER16	0.45	
	NC25-ER20	0.5 ~ 13.0	25	34	65	32	ER20	0.50	●
	NC25-ER25	1.0 ~ 16.0	25	42	65	32	ER25	0.55	●
32	NC32-ER20	0.5 ~ 13.0	32	34	70	32	ER20	0.60	●
	NC32-ER25	1.0 ~ 16.0	32	42	70	38	ER25	0.70	●
	NC32-ER32	1.0 ~ 20.0	32	50	60	38	ER32	0.75	●
40	NC40-ER32	1.0 ~ 20.0	40	50	75	45	ER32	1.25	●
	NC40-ER40	2.0 ~ 30.0	40	63	75	53	ER40	1.30	

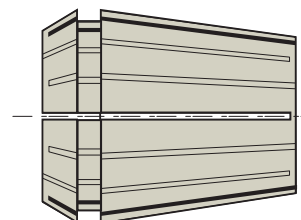


■ BRIDGEPORT-R8

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	G	D2	L1	L2	NUT / COLLET	Weight (Kg)	Stock
R8	R8-ER32	1.0 ~ 20.0	U7/16	50	101.5	50	ER32	1.00	
	R8-ER40	2.0 ~ 30.0	U7/16	63	101.5	75	ER40	1.20	

ER SPANNZANGE - GER
ER PINCE DE SERRAGE - GER
ER PINZA DI SERRAGGIO - GER
ER PINZA PORTAPIEZAS - GER



* T.I.R : $\leq 0.005\text{mm}$ at 3D

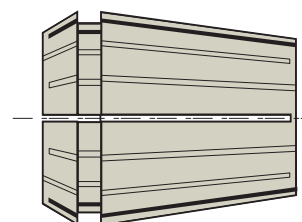
Unit : mm

TYPE GER 8		TYPE GER 16		TYPE GER 25		TYPE GER 32		TYPE GER 40	
CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.
1.0 ~ 0.5	108010	1.0 ~ 0.5	116010	2.0 ~ 1.0	125020	3.0 ~ 2.0	132030	4.0 ~ 3.0	140040
1.5 ~ 1.0	108015	2.0 ~ 1.0	116020	3.0 ~ 2.0	125030	4.0 ~ 3.0	132040	5.0 ~ 4.0	140050
2.0 ~ 1.5	108020	3.0 ~ 2.0	116030	4.0 ~ 3.0	125040	5.0 ~ 4.0	132050	6.0 ~ 5.0	140060
2.5 ~ 2.0	108025	4.0 ~ 3.0	116040	5.0 ~ 4.0	125050	6.0 ~ 5.0	132060	7.0 ~ 6.0	140070
3.0 ~ 2.5	108030	5.0 ~ 4.0	116050	6.0 ~ 5.0	125060	7.0 ~ 6.0	132070	8.0 ~ 7.0	140080
3.5 ~ 3.0	108035	6.0 ~ 5.0	116060	7.0 ~ 6.0	125070	8.0 ~ 7.0	132080	9.0 ~ 8.0	140090
4.0 ~ 3.5	108040	7.0 ~ 6.0	116070	8.0 ~ 7.0	125080	9.0 ~ 8.0	132090	10.0 ~ 9.0	140100
4.5 ~ 4.0	108045	8.0 ~ 7.0	116080	9.0 ~ 8.0	125090	10.0 ~ 9.0	132100	11.0 ~ 10.0	140110
5.0 ~ 4.5	108050	9.0 ~ 8.0	116090	10.0 ~ 9.0	125100	11.0 ~ 10.0	132110	12.0 ~ 11.0	140120
		10.0 ~ 9.0	116100	11.0 ~ 10.0	125110	12.0 ~ 11.0	132120	13.0 ~ 12.0	140130
TYPE GER 11		1.5 ~ 1.0	116015	12.0 ~ 11.0	125120	13.0 ~ 12.0	132130	14.0 ~ 13.0	140140
CLAMPING RANGE	CODE No.	2.5 ~ 2.0	116025	13.0 ~ 12.0	125130	14.0 ~ 13.0	132140	15.0 ~ 14.0	140150
				14.0 ~ 13.0	125140	15.0 ~ 14.0	132150	16.0 ~ 15.0	140160
1.0 ~ 0.5	111010	TYPE GER 20		15.0 ~ 14.0	125150	16.0 ~ 15.0	132160	17.0 ~ 16.0	140170
1.5 ~ 1.0	111015	CLAMPING RANGE	CODE No.	16.0 ~ 15.0	125160	17.0 ~ 16.0	132170	18.0 ~ 17.0	140180
2.0 ~ 1.5	111020			1.0 ~ 1.5	125010	18.0 ~ 17.0	132180	19.0 ~ 18.0	140190
2.5 ~ 2.0	111025	2.0 ~ 1.0	120020	1.5 ~ 1.0	125015	19.0 ~ 18.0	132190	20.0 ~ 19.0	140200
3.0 ~ 2.5	111030	3.0 ~ 2.0	120030	2.5 ~ 2.0	125025	20.0 ~ 19.0	132200	21.0 ~ 20.0	140210
3.5 ~ 3.0	111035	4.0 ~ 3.0	120040			2.0 ~ 1.0	132020	22.0 ~ 21.0	140220
4.0 ~ 3.5	111040	5.0 ~ 4.0	120050			2.5 ~ 2.0	132025	23.0 ~ 22.0	140230
4.5 ~ 4.0	111045	6.0 ~ 5.0	120060					24.0 ~ 23.0	140240
5.0 ~ 4.5	111050	7.0 ~ 6.0	120070					25.0 ~ 24.0	140250
5.5 ~ 5.0	111055	8.0 ~ 7.0	120080					26.0 ~ 25.0	140260
6.0 ~ 5.5	111060	9.0 ~ 8.0	120090					3.0 ~ 2.0	140030
6.5 ~ 6.0	111065	10.0 ~ 9.0	120100					27.0 ~ 26.0	140270
7.0 ~ 6.5	111070	11.0 ~ 10.0	120110					28.0 ~ 27.0	140280
		12.0 ~ 11.0	120120					29.0 ~ 28.0	140290
		13.0 ~ 12.0	120130					30.0 ~ 29.0	140300
		1.0 ~ 0.5	120010						
		1.5 ~ 1.0	120015						
		2.5 ~ 2.0	120025						

► Stock Control Item

ER SPANNZANGE - UF
ER PINCE DE SERRAGE - UF
ER PINZA DI SERRAGGIO - UF
ER PINZA PORTAPIEZAS - UF

ER Collet
Chuck



Unit : mm

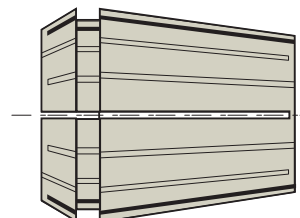
TYPE ER 8		TYPE ER 11		TYPE ER 16		TYPE ER 20	
CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.
1.0 ~ 0.5	208010	1.0 ~ 0.5	211010	1.0 ~ 0.5	216010	2.0 ~ 1.0	220020
1.5 ~ 1.0	208015	1.5 ~ 1.0	211015	2.0 ~ 1.0	216020	3.0 ~ 2.0	220030
2.0 ~ 1.5	208020	2.0 ~ 1.5	211020	3.0 ~ 2.0	216030	4.0 ~ 3.0	220040
2.5 ~ 2.0	208025	2.5 ~ 2.0	211025	4.0 ~ 3.0	216040	5.0 ~ 4.0	220050
3.0 ~ 2.5	208030	3.0 ~ 2.5	211030	5.0 ~ 4.0	216050	6.0 ~ 5.0	220060
3.5 ~ 3.0	208035	3.5 ~ 3.0	211035	6.0 ~ 5.0	216060	7.0 ~ 6.0	220070
4.0 ~ 3.5	208040	4.0 ~ 3.5	211040	7.0 ~ 6.0	216070	8.0 ~ 7.0	220080
4.5 ~ 4.0	208045	4.5 ~ 4.0	211045	8.0 ~ 7.0	216080	9.0 ~ 8.0	220090
5.0 ~ 4.5	208050	5.0 ~ 4.5	211050	9.0 ~ 8.0	216090	10.0 ~ 9.0	220100
		5.5 ~ 5.0	211055	10.0 ~ 9.0	216100	11.0 ~ 10.0	220120
		6.0 ~ 5.5	211060	1.5 ~ 1.0	216015	12.0 ~ 11.0	220130
		6.5 ~ 6.0	211065	2.5 ~ 2.0	216025	13.0 ~ 12.0	220140
		7.0 ~ 6.5	211070			1.0 ~ 0.5	220010
						1.5 ~ 1.0	220015
						2.5 ~ 2.0	220025
STANDARD SET	208000	STANDARD SET	211000	STANDARD SET	216000	STANDARD SET	220000
Ø 1.0-5.0mm		Ø 1.0-7.0mm		Ø 1.0-10.0mm		Ø 2.0-13.0mm	
9PCS		13PCS		10PCS		12PCS	
WOODEN TRAY ZWT 8	108110	WOODEN TRAY ZWT 11	011110	WOODEN TRAY ZWT 16	016110	WOODEN TRAY ZWT 20	020110

►Stock Control Item

►Inch type products are available.

ER SPANNZANGE - UF
ER PINCE DE SERRAGE - UF
ER PINZA DI SERRAGGIO - UF
ER PINZA PORTAPIEZAS - UF

ER Collet
Chuck



Unit : mm

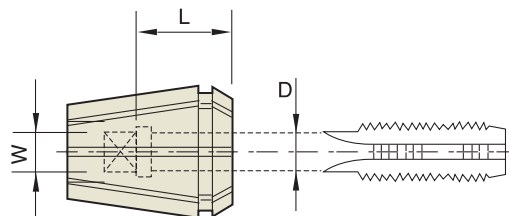
TYPE ER 25		TYPE ER 32		TYPE ER 40		TYPE ER 50	
CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.	CLAMPING RANGE	CODE No.
2.0 ~ 1.0	225020	3.0 ~ 2.0	232030	4.0 ~ 3.0	240040	12.0 ~ 10.0	250120
3.0 ~ 2.0	225030	4.0 ~ 3.0	232040	5.0 ~ 4.0	240050	14.0 ~ 12.0	250140
4.0 ~ 3.0	225040	5.0 ~ 4.0	232050	6.0 ~ 5.0	240060	16.0 ~ 14.0	250160
5.0 ~ 4.0	225050	6.0 ~ 5.0	232060	7.0 ~ 6.0	240070	18.0 ~ 16.0	250180
6.0 ~ 5.0	225060	7.0 ~ 6.0	232070	8.0 ~ 7.0	240080	20.0 ~ 18.0	250200
7.0 ~ 6.0	225070	8.0 ~ 7.0	232080	9.0 ~ 8.0	240090	22.0 ~ 20.0	250220
8.0 ~ 7.0	225080	9.0 ~ 8.0	232090	10.0 ~ 9.0	240100	24.0 ~ 22.0	250240
9.0 ~ 8.0	225090	10.0 ~ 9.0	232100	11.0 ~ 10.0	240110	26.0 ~ 24.0	250260
10.0 ~ 9.0	225100	11.0 ~ 10.0	232110	12.0 ~ 11.0	240120	28.0 ~ 26.0	250280
11.0 ~ 10.0	225110	12.0 ~ 11.0	232120	13.0 ~ 12.0	240130	30.0 ~ 28.0	250300
12.0 ~ 11.0	225120	13.0 ~ 12.0	232130	14.0 ~ 13.0	240140	32.0 ~ 30.0	250320
13.0 ~ 12.0	225130	14.0 ~ 13.0	232140	15.0 ~ 14.0	240150	34.0 ~ 32.0	250340
14.0 ~ 13.0	225140	15.0 ~ 14.0	232150	16.0 ~ 15.0	240160	6.0 ~ 4.0	250060
15.0 ~ 14.0	225150	16.0 ~ 15.0	232160	17.0 ~ 16.0	240170	8.0 ~ 6.0	250080
16.0 ~ 15.0	225160	17.0 ~ 16.0	232170	18.0 ~ 17.0	240180	10.0 ~ 8.0	250100
1.0 ~ 1.5	225010	18.0 ~ 17.0	232180	19.0 ~ 18.0	240190	25.0 ~ 23.0	250250
1.5 ~ 1.0	225015	19.0 ~ 18.0	232190	20.0 ~ 19.0	240200		
2.5 ~ 2.0	225025	20.0 ~ 19.0	232200	21.0 ~ 20.0	240210		
		2.0 ~ 1.0	232020	22.0 ~ 21.0	240220		
		2.5 ~ 2.0	232025	23.0 ~ 22.0	240230		
				24.0 ~ 23.0	240240		
				25.0 ~ 24.0	240250		
				26.0 ~ 25.0	240260		
				3.0 ~ 2.0	240030		
				27.0 ~ 26.0	240270		
				28.0 ~ 27.0	240280		
				29.0 ~ 28.0	240290		
				30.0 ~ 29.0	240300		
STANDARD SET	225000	STANDARD SET	232000	STANDARD SET	240000	STANDARD SET	250000
Ø 2.0-16.0mm		Ø 3.0-20.0mm		Ø 4.0-26.0mm		Ø 12.0-34.0mm	
15PCS		18PCS		23PCS		12PCS	
WOODEN TRAY ZWT 25	025110	WOODEN TRAY ZWT 32	032110	WOODEN TRAY ZWT 40	040110	WOODEN TRAY ZWT50	050110

- Stock Control Item
- Inch type products are available.

TAP ER COLLET

RDT

ER SPANNZANGE FÜ GEWINDESCHNEID
ER PINCE DE SERRAGE POUR TARAUDER
ER PINZA DI SERRAGGIO PER MASCHIARE
ER PINZA PORTAPIEZAS PARA HILO



Unit : mm

RDT 16				RDT 20				RDT 25				RDT 32				RDT 40			
TAP	D(Ø)	W(□)	L	TAP	D(Ø)	W(□)	L	TAP	D(Ø)	W(□)	L	TAP	D(Ø)	W(□)	L	TAP	D(Ø)	W(□)	L
M2	3.0	2.5	15																
M3	4.0	3.2	15	M3	4.0	3.2	15	M3	4.0	3.2	15								
M4	5.0	4.0	15	M4	5.0	4.0	15	M4	5.0	4.0	15	M4	5.0	4.0	15				
M5	5.5	4.5	15	M5	5.5	4.5	15	M5	5.5	4.5	15	M5	5.5	4.5	15				
M6	6.0	4.5	15	M6	6.0	4.5	15	M6	6.0	4.5	15	M6	6.0	4.5	15				
M8	6.2	5.0	15	M8	6.2	5.0	20	M8	6.2	5.0	20	M8	6.2	5.0	20	M8	6.2	5.0	20
				M10	7.0	5.5	20	M10	7.0	5.5	20	M10	7.0	5.5	20	M10	7.0	5.5	20
								M12	8.5	6.5	20	M12	8.5	6.5	20	M12	8.5	6.5	25
								M14	10.5	8.0	20	M14	10.5	8.0	20	M14	10.5	8.0	25
												M16	12.5	10.0	20	M16	12.5	10.0	25
												M18	14.0	11.0	20	M18	14.0	11.0	25
																M20	15.0	12.0	28
																M22	17.0	13.0	28
																M24	19.0	15.0	28

► **Stock Control Item**

► These ER collets are for exclusive use of tap.

► Various sizes of taps ranging from M2 to M24 (according to **JIS**) can be used.

► [Inch type products are available.](#)

ER NUSS
ER ÉCROU
ER DADO
ER TUERCA

■ DIN 6499/ISO 15488

◆ SQ-ER (Standard : Hex.)

Unit : mm

MODEL No.	Thread	Dia.	Length
SQ-ER11	M14×0.75	19.0	12.0
SQ-ER16	M22×1.50	28.0	18.0
SQ-ER20	M25×1.50	34.0	19.5



◆ SQ-ER(Standard : Round)

Unit : mm

MODEL No.	Thread	Dia.	Length
SQ-ER25	M32×1.50	42.0	20.5
SQ-ER32	M40×1.50	50.0	23.0
SQ-ER40	M50×1.50	63.0	26.0
SQ-ER50	M64×2.00	78.0	35.0



◆ XSQ-R (Standard : Hex.)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-R11	M14×0.75	19.0	12.0
XSQ-R16	M22×1.50	28.0	18.0
XSQ-R20	M25×1.50	34.0	19.5



◆ XSQ-RU (Standard : Round)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RU25	M32×1.50	42.0	20.5
XSQ-RU32	M40×1.50	50.0	23.0
XSQ-RU40	M50×1.50	63.0	26.0
XSQ-RU50	M64×2.00	78.0	35.0



◆ XSQ-RH (Open Groove Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RH11	M14×0.75	19.0	12.0
XSQ-RH16	M22×1.50	32.0	18.0
XSQ-RH20	M25×1.50	35.0	19.5
XSQ-RH25	M32×1.50	42.0	20.5
XSQ-RH32	M40×1.50	50.0	23.0
XSQ-RH40	M50×1.50	63.0	26.0



► Stock Control Item

ER NUSS
ER ÉCROU
ER DADO
ER TUERCA



◆XSQ-RT (Sealing Disk Type : Hex.)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RT16	M22×1.50	28.0	22.5
XSQ-RT20	M25×1.50	34.0	24.0



◆XSQ-RUT (Sealing Disk Type : Round)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RUT16	M22×1.50	32.0	22.5
XSQ-RUT20	M25×1.50	35.0	24.0
XSQ-RUT25	M32×1.50	42.0	25.0
XSQ-RUT32	M40×1.50	50.0	27.5
XSQ-RUT40	M50×1.50	63.0	30.5



◆XSQ-RSU (Sleeve Bearing Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RSU16	M22×1.50	32.0	18.0
XSQ-RSU20	M25×1.50	35.0	20.0
XSQ-RSU25	M32×1.50	42.0	20.5
XSQ-RSU32	M40×1.50	50.0	23.0
XSQ-RSU40	M50×1.50	63.0	26.0



◆XSQ-RST (Sleeve Bearing/Sealing Disk Type: Hex.)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RST16	M22×1.50	28.0	22.5
XSQ-RST20	M25×1.50	34.0	24.5



◆XSQ-RSUT (Sleeve Bearing/Sealing Disk Type: Round)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RSUT16	M22×1.50	32.0	22.5
XSQ-RSUT20	M25×1.50	35.0	24.5
XSQ-RSUT25	M32×1.50	42.0	25.0
XSQ-RSUT32	M40×1.50	50.0	27.5
XSQ-RSUT40	M50×1.50	63.0	30.5

▶Stock Control Item

ER NUSS
ER ÉCROU
ER DADO
ER TUERCA

ER Collet
Chuck



◆XSQ-RKU (Ball Bearing Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RKU16	M22×1.50	32.0	18.0
XSQ-RKU20	M25×1.50	35.0	20.0
XSQ-RKU25	M32×1.50	42.0	21.5
XSQ-RKU32	M40×1.50	50.0	23.0
XSQ-RKU40	M50×1.50	63.0	26.0



◆XSQ-RKUT (Ball Bearing/Sealing Disk Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XQ-RKUT16	M22×1.50	32.0	22.5
XQ-RKUT20	M25×1.50	35.0	24.5
XQ-RKUT25	M32×1.50	42.0	25.0
XQ-RKUT32	M40×1.50	50.0	27.5
XQ-RKUT40	M50×1.50	63.0	30.5



◆XSQ-RM (Mini Nut : Standard)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-R08M	M10×0.75	12.0	11.0
XSQ-R11M	M13×0.75	16.0	12.0
XSQ-R16M	M19×1.00	22.0	18.0
XSQ-R20M	M24×1.00	28.0	19.5
XSQ-R25M	M30×1.00	35.0	20.5



◆XSQ-RTM (Mini Nut : Sealing Disk Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RT16M	M19×1.00	22.0	22.5
XSQ-RT20M	M24×1.00	28.0	24.0
XSQ-RT25M	M30×1.00	35.0	25.0

►Stock Control Item



◆XSQ-RA (External Thread Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RA11	M18×1.00	18.0	6.0
XSQ-RA16	M24×1.00	24.0	8.0
XSQ-RA20	M28×1.50	28.0	11.0
XSQ-RA25	M32×1.50	32.0	12.5
XSQ-RA32	M40×1.50	40.0	14.0



◆XSQ-RAT (External Thread/ Sealing Disk Type)

Unit : mm

MODEL No.	Thread	Dia.	Length
XSQ-RAT11*	M18×1.00	18.0	8.0
XSQ-RAT16	M24×1.00	24.0	11.0
XSQ-RAT20	M28×1.50	28.0	12.5
XSQ-RAT25	M32×1.50	32.0	14.0
XSQ-RAT32	M40×1.50	40.0	17.5

* Without sealing disk



◆ SEALING DISK

Unit : mm

MODEL No.	Dia.	Thickness
DS16	13.0	4.0
DS20	16.0	4.0
DS25	21.0	4.0
DS32	27.0	4.0
DS40	33.5	4.0
DS50	31.0	4.0

►Stock Control Item



◆SEALING DISK SET

Unit : mm

MODEL No.	Dia.	Thickness	Sealing disks/set
DS16S2	13.0	4.0	7pcs/set
DS20S2	16.0	4.0	10pcs/set
DS25S2	21.0	4.0	13pcs/set
DS32S2	27.0	4.0	17pcs/set
DS40S2	33.5	4.0	23pcs/set
DS50S2	31.0	4.0	22pcs/set

ER MAULSCHLÜSEL
ER CL
ER CHIAVE
ER LLAVE



FIG. 1



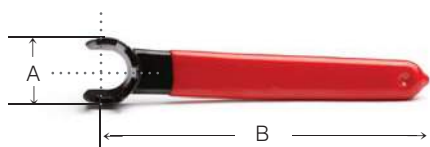
FIG. 2

◆ FOR ER/SKN NUT

Unit : mm

MODEL No.	A	B	APPLICABLE NUT
ER11 SP	—	—	ER11, SKN6 (FIG 1.)
ER16 SP	50	160	ER16, SKN10 (FIG 1.)
ER20 SP	55	180	ER20 (FIG 1.)
ER25 SP	65	210	ER25, SKN16 (FIG 2.)
ER32 SP	75	250	ER32 (FIG 2.)
ER40 SP	90	290	ER40 (FIG 2.)
ER50 SP	110	350	ER50 (FIG 2.)

► Design and shape could be changed without prior notice.



◆ FOR ER Mini NUT

Unit : mm

MODEL No.	A	B	APPLICABLE NUT
GE 8M	12,4	70	ER 8M
GE 11M	16,8	90	ER 11M
GE 16M	22,5	110	ER 16M
GE 20M	29,0	120	ER 20M
GE 25M	36,0	130	ER 25M

► Stock Control Item

TOOLING SYSTEM

END MILL HOLDER & SIDE LOCK ARBOR



FRÄERFUTTER UND FLÄHENSPANNFUTTER
MANDRIN PORTE FRAISE QUEUE
CYLINDRIQUE, MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL

END MILL HOLDER

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

JIS B6339 / MAS 403 - BT

SIDE LOCK ARBOR

CBT (BT DUAL CONTACT)

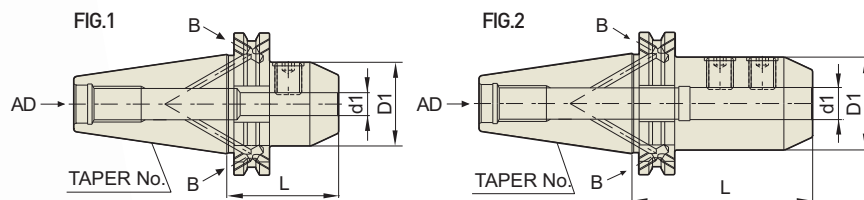
JIS B6339 / MAS 403 - BT

DONRAY PREMIUM

END MILL HOLDER

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Coolant
System
AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	FIG.	Weight (Kg)	Stock
30	SK30AD/B-EMH6-50	6	25	50	1	0.73	
	SK30AD/B-EMH8-50	8	28	50	1	0.83	
	SK30AD/B-EMH10-50	10	35	50	1	0.9	
	SK30AD/B-EMH12-50	12	42	50	1	0.9	
	SK30AD/B-EMH16-63	16	48	63	1	1.1	
40	SK40AD/B-EMH6-50	6	25	50	1	0.86	
	SK40AD/B-EMH8-50	8	28	50	1	0.89	
	SK40AD/B-EMH10-50	10	35	50	1	0.95	
	SK40AD/B-EMH12-50	12	42	50	1	1.03	
	SK40AD/B-EMH16-63	16	48	63	1	1.26	
	SK40AD/B-EMH20-63	20	52	63	1	1.28	
	SK40AD/B-EMH25-100	25	65	100	2	2.28	
	SK40AD/B-EMH32-100	32	72	100	2	2.5	
50	SK50AD/B-EMH6-63	6	25	63	1	2.7	
	SK50AD/B-EMH8-63	8	28	63	1	2.7	
	SK50AD/B-EMH10-63	10	35	63	1	2.9	
	SK50AD/B-EMH12-63	12	42	63	1	2.9	
	SK50AD/B-EMH16-63	16	48	63	1	3	
	SK50AD/B-EMH20-63	20	52	63	1	3.05	
	SK50AD/B-EMH25-80	25	65	80	2	3.73	
	SK50AD/B-EMH32-100	32	72	100	2	4.53	
	SK50AD/B-EMH40-100	40	80	100	2	4.77	
	SK50AD/B-EMH50-125	50	98	125	2	7.03	

► Holder for cutting tools with Whistle notch shank is available.

► Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.

► CAT(ANSI B5.50) taper and Inch type products are available.

END MILL HOLDER (SPRAY NOZZLE TYPE)

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER (SPRAYDÜSE)
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT (BEC DE PULVÉRISATION)
MANDRINI PORTA FRESA TIPO WELDON (UGELLO DI SPRUZZO)
PORTAFRESAS Y EJES DE SUJECCION LATERAL (INYECTOR DE AEROSOL)

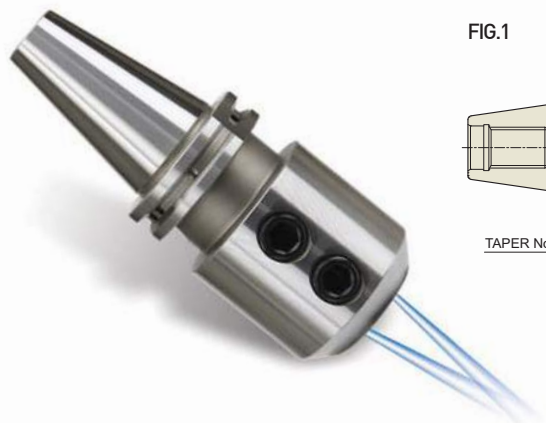


FIG.1

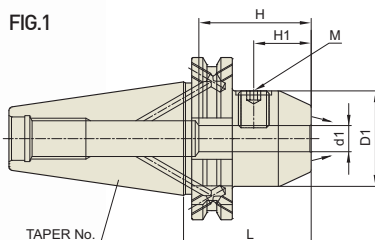
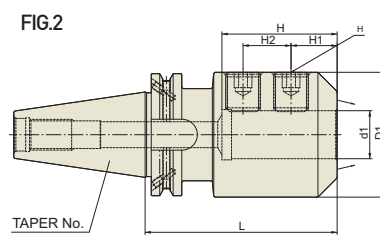


FIG.2



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
2.5

RPM
25,000

Coolant
System
AD/B+C

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40	SK40AD/B-EMH6C-50	6	25	50	35	18	M6	1	0.86	
	SK40AD/B-EMH8C-50	8	28	50	35	18	M8	1	0.89	
	SK40AD/B-EMH10C-50	10	35	50	35.5	20	M10	1	0.95	
	SK40AD/B-EMH12C-50	12	42	50	36	22.5	M12	1	1.03	
	SK40AD/B-EMH14C-50	14	44	50	36	22.5	M12	1	1.26	
	SK40AD/B-EMH16C-63	16	48	63	46	24	M14	1	1.28	
	SK40AD/B-EMH18C-63	18	50	63	46	24	M14	1	1.35	
	SK40AD/B-EMH20C-63	20	52	63	48	25	M16	1	1.40	
	SK40AD/B-EMH25C-100	25	65	100	55	25	M18	2	2.29	
50	SK40AD/B-EMH32C-100	32	72	100	57	28	M20	2	2.50	
	SK50AD/B-EMH6C-63	6	25	63	35	18	M6	1	2.70	
	SK50AD/B-EMH8C-63	8	28	63	35	18	M8	1	2.70	
	SK50AD/B-EMH10C-63	10	35	63	35.5	20	M10	1	2.90	
	SK50AD/B-EMH12C-63	12	42	63	36	22.5	M12	1	2.90	
	SK50AD/B-EMH14C-63	14	44	63	36	22.5	M12	1	3.00	
	SK50AD/B-EMH16C-63	16	48	63	46	24	M14	1	3.00	
	SK50AD/B-EMH18C-63	18	50	63	46	24	M14	1	3.00	
	SK50AD/B-EMH20C-63	20	52	63	48	25	M16	1	3.05	
	SK50AD/B-EMH25C-80	25	65	80	55	25	M18	2	3.73	
	SK50AD/B-EMH32C-100	32	72	100	57	28	M20	2	4.53	
	SK50AD/B-EMH40C-120	40	90	120	68	32	M20	2	4.80	

- ▶ Holder for cutting tools with Whistle notch shank is available.
- ▶ Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

END MILL HOLDER

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



FIG.1

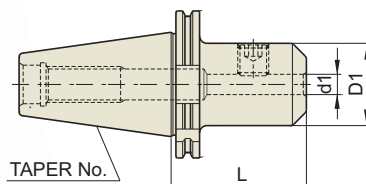
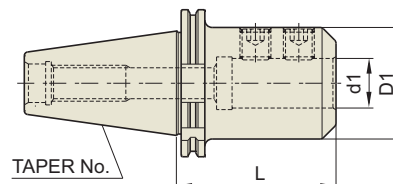


FIG.2



■ DIN 69871-SK

DIN 69871 -SK	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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◆ STUB

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	FIG.	Weight (Kg)	Stock
40	SK40-EMH16-35	16	44	35	1	0.86	
	SK40-EMH20-35	20	44	35	1	0.91	
	SK40-EMH25-60	25	50	60	1	0.97	

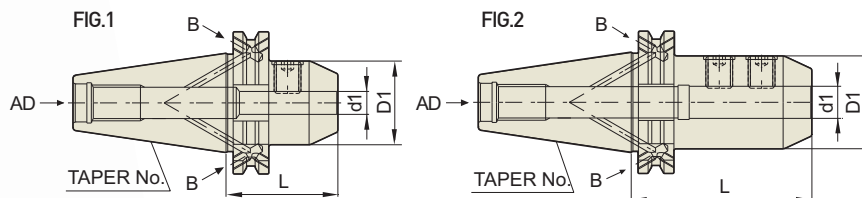
◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	FIG.	Weight (Kg)	Stock
30	SK30-EMH6-50	6	25	50	1	0.73	
	SK30-EMH8-50	8	28	50	1	0.83	
	SK30-EMH10-50	10	35	50	1	0.90	
	SK30-EMH12-50	12	42	50	1	0.90	
	SK30-EMH16-63	16	48	63	1	1.10	
40	SK40-EMH6-50	6	25	50	1	0.86	●
	SK40-EMH8-50	8	28	50	1	0.89	●
	SK40-EMH10-50	10	35	50	1	0.95	●
	SK40-EMH12-50	12	42	50	1	1.03	●
	SK40-EMH16-63	16	48	63	1	1.26	●
	SK40-EMH20-63	20	52	63	1	1.28	●
	SK40-EMH25-100	25	65	100	2	2.28	●
	SK40-EMH32-100	32	72	100	2	2.50	
50	SK50-EMH6-63	6	25	63	1	2.70	●
	SK50-EMH8-63	8	28	63	1	2.70	●
	SK50-EMH10-63	10	35	63	1	2.90	●
	SK50-EMH12-63	12	42	63	1	2.90	●
	SK50-EMH16-63	16	48	63	1	3.00	●
	SK50-EMH20-63	20	52	63	1	3.05	●
	SK50-EMH25-80	25	65	80	2	3.73	●
	SK50-EMH32-100	32	72	100	2	4.53	●
	SK50-EMH40-100	40	80	100	2	4.77	
	SK50-EMH50-125	50	98	125	2	7.03	

- ▶ Holder for cutting tools with Whistle notch shank is available.
- ▶ Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	FIG.	Weight (Kg)	Stock
40	SK40AD/B-EMH6-50	6	25	50	1	0.86	●
	SK40AD/B-EMH8-50	8	28	50	1	0.89	●
	SK40AD/B-EMH10-50	10	35	50	1	0.95	●
	SK40AD/B-EMH12-50	12	42	50	1	1.03	●
	SK40AD/B-EMH16-63	16	48	63	1	1.26	●
	SK40AD/B-EMH20-63	20	52	63	1	1.28	●
	SK40AD/B-EMH25-100	25	65	100	2	2.29	●
50	SK40AD/B-EMH32-100	32	72	100	2	2.50	●
	SK50AD/B-EMH6-63	6	25	63	1	2.70	●
	SK50AD/B-EMH8-63	8	28	63	1	2.70	●
	SK50AD/B-EMH10-63	10	35	63	1	2.90	●
	SK50AD/B-EMH12-63	12	42	63	1	2.90	●
	SK50AD/B-EMH16-63	16	48	63	1	3.00	●
	SK50AD/B-EMH20-63	20	52	63	1	3.05	●
	SK50AD/B-EMH25-80	25	65	80	2	3.73	●
	SK50AD/B-EMH32-100	32	72	100	2	4.53	●
	SK50AD/B-EMH40-100	40	80	100	2	4.77	
	SK50AD/B-EMH50-125	50	98	125	2	7.03	

- ▶ Holder for cutting tools with Whistle notch shank is available.
- ▶ Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

END MILL HOLDER (SPRAY NOZZLE TYPE)

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER (SPRAYDÜSE)
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT (BEC DE PULVÉRISATION)
MANDRINI PORTA FRESA TIPO WELDON (UGELLO DI SPRUZZO)
PORTAFRESAS Y EJES DE SUJECCION LATERAL (INYECTOR DE AEROSOL)



FIG.1

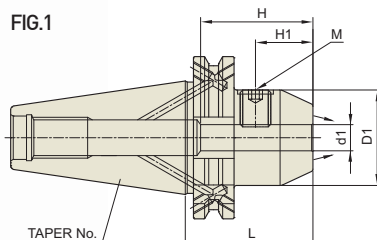
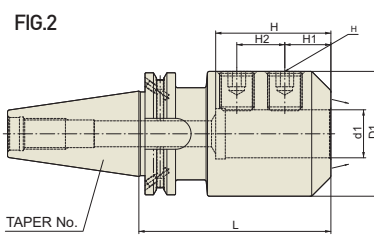


FIG.2



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD/B+C

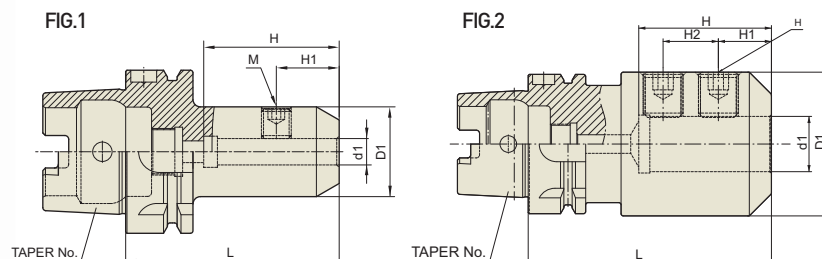
■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40	SK40AD/B-EMH6C-50	6	25	50	35	18	M6	1	0.86	
	SK40AD/B-EMH8C-50	8	28	50	35	18	M8	1	0.89	
	SK40AD/B-EMH10C-50	10	35	50	35.5	20	M10	1	0.95	
	SK40AD/B-EMH12C-50	12	42	50	36	22.5	M12	1	1.03	
	SK40AD/B-EMH14C-50	14	44	50	36	22.5	M12	1	1.26	
	SK40AD/B-EMH16C-63	16	48	63	46	24	M14	1	1.28	
	SK40AD/B-EMH18C-63	18	50	63	46	24	M14	1	1.35	
	SK40AD/B-EMH20C-63	20	52	63	48	25	M16	1	1.40	
	SK40AD/B-EMH25C-100	25	65	100	55	25	M18	2	2.29	
	SK40AD/B-EMH32C-100	32	72	100	57	28	M20	2	2.50	
50	SK50AD/B-EMH6C-63	6	25	63	35	18	M6	1	2.70	
	SK50AD/B-EMH8C-63	8	28	63	35	18	M8	1	2.70	
	SK50AD/B-EMH10C-63	10	35	63	35.5	20	M10	1	2.90	
	SK50AD/B-EMH12C-63	12	42	63	36	22.5	M12	1	2.90	
	SK50AD/B-EMH14C-63	14	44	63	36	22.5	M12	1	3.00	
	SK50AD/B-EMH16C-63	16	48	63	46	24	M14	1	3.00	
	SK50AD/B-EMH18C-63	18	50	63	46	24	M14	1	3.00	
	SK50AD/B-EMH20C-63	20	52	63	48	25	M16	1	3.05	
	SK50AD/B-EMH25C-80	25	65	80	55	25	M18	2	3.73	
	SK50AD/B-EMH32C-100	32	72	100	57	28	M20	2	4.53	
	SK50AD/B-EMH40C-120	40	90	120	68	32	M20	2	4.80	

- ▶ Holder for cutting tools with Whistle notch shank is available.
- ▶ Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40A	HSK40A-EMH6-60	6	25	60	35	18	M6	1	0.30	
	HSK40A-EMH8-60	8	28	60	35	18	M8	1	0.30	
	HSK40A-EMH10-60	10	35	60	35.5	20	M10	1	0.30	
	HSK40A-EMH12-70	12	42	70	36	22.5	M12	1	0.40	
	HSK40A-EMH14-70	14	44	70	36	22.5	M12	1	0.40	
	HSK40A-EMH16-80	16	48	80	46	24	M14	1	0.60	
50A	HSK50A-EMH6-65	6	25	65	35	18	M6	1	0.70	
	HSK50A-EMH8-65	8	28	65	35	18	M8	1	0.80	
	HSK50A-EMH10-65	10	35	65	35.5	20	M10	1	0.80	
	HSK50A-EMH12-80	12	42	80	36	22.5	M12	1	1.20	
	HSK50A-EMH14-80	14	44	80	36	22.5	M12	1	1.30	
	HSK50A-EMH16-80	16	48	80	46	24	M14	1	1.30	
	HSK50A-EMH18-80	18	50	80	46	24	M14	1	1.40	
	HSK50A-EMH20-80	20	52	80	48	25	M16	1	1.50	
63A	HSK63A-EMH6-65	6	25	65	35	18	M6	1	0.80	
	HSK63A-EMH8-65	8	28	65	35	18	M8	1	0.80	
	HSK63A-EMH10-65	10	35	65	35.5	20	M10	1	0.90	
	HSK63A-EMH12-80	12	42	80	36	22.5	M12	1	1.10	
	HSK63A-EMH14-80	14	44	80	36	22.5	M12	1	1.20	
	HSK63A-EMH16-80	16	48	80	46	24	M14	1	1.30	
	HSK63A-EMH18-80	18	50	80	46	24	M14	1	1.40	
	HSK63A-EMH20-80	20	52	80	48	25	M16	1	1.50	
	HSK63A-EMH25-110	25	65	110	55	25	M18	2	2.30	
100A	HSK100A-EMH32-110	32	72	110	57	28	M20	2	2.60	
	HSK100A-EMH6-80	6	25	80	35	18	M6	1	2.15	
	HSK100A-EMH8-80	8	28	80	35	18	M8	1	2.20	
	HSK100A-EMH10-80	10	35	80	35.5	20	M10	1	2.35	
	HSK100A-EMH12-80	12	42	80	36	22.5	M12	1	2.45	
	HSK100A-EMH14-80	14	44	80	36	22.5	M12	1	2.65	
	HSK100A-EMH16-100	16	48	100	46	24	M14	1	2.85	
	HSK100A-EMH18-100	18	50	100	46	24	M14	1	2.90	
	HSK100A-EMH20-100	20	52	100	48	25	M16	1	2.95	
	HSK100A-EMH25-100	25	65	100	55	25	M18	2	3.45	
	HSK100A-EMH32-100	32	72	100	57	28	M20	2	3.65	
	HSK100A-EMH40-120	40	90	120	68	32	M20	2	5.50	

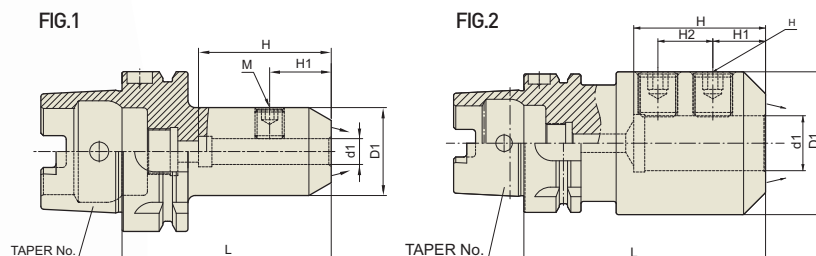
► Holder for cutting tools with Whistle notch shank is available.

► Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.

END MILL HOLDER (SPRAY NOZZLE TYPE)

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER (SPRAYDÜSE)
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT (BEC DE PULVÉRISATION)
MANDRINI PORTA FRESA TIPO WELDON (UGELLO DI SPRUZZO)
PORTAFRESAS Y EJES DE SUJECCION LATERAL (INYECTOR DE AEROSOL)



DIN 69893 - HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Coolant System AD+C
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■ DIN 69893/ISO 12164-1-HSK FORM A

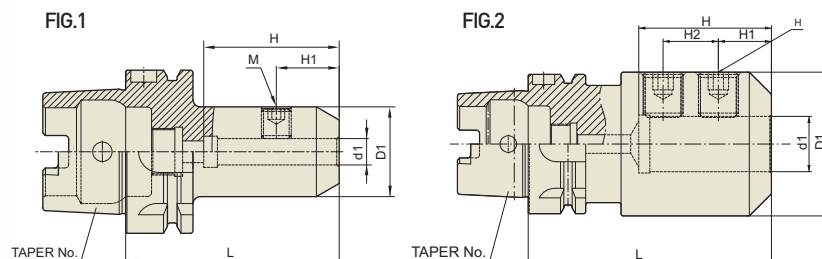
Unit : mm

TAPER N2	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40A	HSK40A-EMH6C-60	6	25	60	35	18	M6	1	0.30	
	HSK40A-EMH8C-60	8	28	60	35	18	M8	1	0.30	
	HSK40A-EMH10C-60	10	35	60	35.5	20	M10	1	0.30	
	HSK40A-EMH12C-70	12	42	70	36	22.5	M12	1	0.40	
	HSK40A-EMH14C-70	14	44	70	36	22.5	M12	1	0.40	
	HSK40A-EMH16C-80	16	48	80	46	24	M14	1	0.60	
50A	HSK50A-EMH6C-65	6	25	65	35	18	M6	1	0.70	
	HSK50A-EMH8C-65	8	28	65	35	18	M8	1	0.80	
	HSK50A-EMH10C-65	10	35	65	35.5	20	M10	1	0.80	
	HSK50A-EMH12C-80	12	42	80	36	22.5	M12	1	1.20	
	HSK50A-EMH14C-80	14	44	80	36	22.5	M12	1	1.30	
	HSK50A-EMH16C-80	16	48	80	46	24	M14	1	1.30	
	HSK50A-EMH18C-80	18	50	80	46	24	M14	1	1.40	
	HSK50A-EMH20C-80	20	52	80	48	25	M16	1	1.50	
63A	HSK63A-EMH6C-65	6	25	65	35	18	M6	1	0.80	
	HSK63A-EMH8C-65	8	28	65	35	18	M8	1	0.80	
	HSK63A-EMH10C-65	10	35	65	35.5	20	M10	1	0.90	
	HSK63A-EMH12C-80	12	42	80	36	22.5	M12	1	1.10	
	HSK63A-EMH14C-80	14	44	80	36	22.5	M12	1	1.20	
	HSK63A-EMH16C-80	16	48	80	46	24	M14	1	1.30	
	HSK63A-EMH18C-80	18	50	80	46	24	M14	1	1.40	
	HSK63A-EMH20C-80	20	52	80	48	25	M16	1	1.50	
	HSK63A-EMH25C-110	25	65	110	55	25	M18	2	2.30	
100A	HSK63A-EMH32C-110	32	72	110	57	28	M20	2	2.60	
	HSK100A-EMH6C-80	6	25	80	35	18	M6	1	2.15	
	HSK100A-EMH8C-80	8	28	80	35	18	M8	1	2.20	
	HSK100A-EMH10C-80	10	35	80	35.5	20	M10	1	2.35	
	HSK100A-EMH12C-80	12	42	80	36	22.5	M12	1	2.45	
	HSK100A-EMH14C-80	14	44	80	36	22.5	M12	1	2.65	
	HSK100A-EMH16C-100	16	48	100	46	24	M14	1	2.85	
	HSK100A-EMH18C-100	18	50	100	46	24	M14	1	2.90	
	HSK100A-EMH20C-100	20	52	100	48	25	M16	1	2.95	
	HSK100A-EMH25C-100	25	65	100	55	25	M18	2	3.45	
	HSK100A-EMH32C-100	32	72	100	57	28	M20	2	3.65	
	HSK100A-EMH40C-120	40	90	120	68	32	M20	2	5.50	

► Holder for cutting tools with Whistle notch shank is available.

► Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



DIN 69893 - HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40A	HSK40A-EMH6-60	6	25	60	35	18	M6	1	0.30	
	HSK40A-EMH8-60	8	28	60	35	18	M8	1	0.30	
	HSK40A-EMH10-60	10	35	60	35.5	20	M10	1	0.30	
	HSK40A-EMH12-70	12	42	70	36	22.5	M12	1	0.40	
	HSK40A-EMH14-70	14	44	70	36	22.5	M12	1	0.40	
	HSK40A-EMH16-80	16	48	80	46	24	M14	1	0.60	
50A	HSK50A-EMH6-65	6	25	65	35	18	M6	1	0.70	
	HSK50A-EMH8-65	8	28	65	35	18	M8	1	0.80	
	HSK50A-EMH10-65	10	35	65	35.5	20	M10	1	0.80	
	HSK50A-EMH12-80	12	42	80	36	22.5	M12	1	1.20	
	HSK50A-EMH14-80	14	44	80	36	22.5	M12	1	1.30	
	HSK50A-EMH16-80	16	48	80	46	24	M14	1	1.30	
	HSK50A-EMH18-80	18	50	80	46	24	M14	1	1.40	
	HSK50A-EMH20-80	20	52	80	48	25	M16	1	1.50	
63A	HSK63A-EMH6-65	6	25	65	35	18	M6	1	0.80	●
	HSK63A-EMH8-65	8	28	65	35	18	M8	1	0.80	●
	HSK63A-EMH10-65	10	35	65	35.5	20	M10	1	0.90	●
	HSK63A-EMH12-80	12	42	80	36	22.5	M12	1	1.10	●
	HSK63A-EMH14-80	14	44	80	36	22.5	M12	1	1.20	●
	HSK63A-EMH16-80	16	48	80	46	24	M14	1	1.30	●
	HSK63A-EMH18-80	18	50	80	46	24	M14	1	1.40	●
	HSK63A-EMH20-80	20	52	80	48	25	M16	1	1.50	●
	HSK63A-EMH25-110	25	65	110	55	25	M18	2	2.30	●
100A	HSK63A-EMH32-110	32	72	110	57	28	M20	2	2.60	●
	HSK100A-EMH6-80	6	25	80	35	18	M6	1	2.15	
	HSK100A-EMH8-80	8	28	80	35	18	M8	1	2.20	
	HSK100A-EMH10-80	10	35	80	35.5	20	M10	1	2.35	
	HSK100A-EMH12-80	12	42	80	36	22.5	M12	1	2.45	
	HSK100A-EMH14-80	14	44	80	36	22.5	M12	1	2.65	
	HSK100A-EMH16-100	16	48	100	46	24	M14	1	2.85	
	HSK100A-EMH18-100	18	50	100	46	24	M14	1	2.90	
	HSK100A-EMH20-100	20	52	100	48	25	M16	1	2.95	
	HSK100A-EMH25-100	25	65	100	55	25	M18	2	3.45	
	HSK100A-EMH32-100	32	72	100	57	28	M20	2	3.65	
	HSK100A-EMH40-120	40	90	120	68	32	M20	2	5.50	

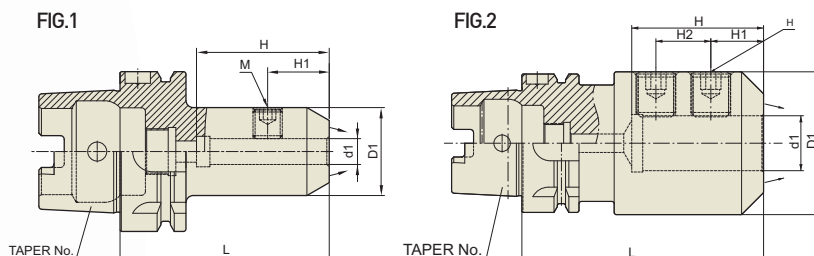
► Holder for cutting tools with Whistle notch shank is available.

► Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.

END MILL HOLDER (SPRAY NOZZLE TYPE)

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER (SPRAYDÜSE)
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT (BEC DE PULVÉRISATION)
MANDRINI PORTA FRESA TIPO WELDON (UGELLO DI SPRUZZO)
PORTAFRESAS Y EJES DE SUJECCION LATERAL (INYECTOR DE AEROSOL)



DIN 69893 - HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD+C
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■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40A	HSK40A-EMH6C-60	6	25	60	35	18	M6	1	0.30	
	HSK40A-EMH8C-60	8	28	60	35	18	M8	1	0.30	
	HSK40A-EMH10C-60	10	35	60	35.5	20	M10	1	0.30	
	HSK40A-EMH12C-70	12	42	70	36	22.5	M12	1	0.40	
	HSK40A-EMH14C-70	14	44	70	36	22.5	M12	1	0.40	
	HSK40A-EMH16C-80	16	48	80	46	24	M14	1	0.60	
50A	HSK50A-EMH6C-65	6	25	65	35	18	M6	1	0.70	
	HSK50A-EMH8C-65	8	28	65	35	18	M8	1	0.80	
	HSK50A-EMH10C-65	10	35	65	35.5	20	M10	1	0.80	
	HSK50A-EMH12C-80	12	42	80	36	22.5	M12	1	1.20	
	HSK50A-EMH14C-80	14	44	80	36	22.5	M12	1	1.30	
	HSK50A-EMH16C-80	16	48	80	46	24	M14	1	1.30	
	HSK50A-EMH18C-80	18	50	80	46	24	M14	1	1.40	
	HSK50A-EMH20C-80	20	52	80	48	25	M16	1	1.50	
63A	HSK63A-EMH6C-65	6	25	65	35	18	M6	1	0.80	
	HSK63A-EMH8C-65	8	28	65	35	18	M8	1	0.80	
	HSK63A-EMH10C-65	10	35	65	35.5	20	M10	1	0.90	
	HSK63A-EMH12C-80	12	42	80	36	22.5	M12	1	1.10	
	HSK63A-EMH14C-80	14	44	80	36	22.5	M12	1	1.20	
	HSK63A-EMH16C-80	16	48	80	46	24	M14	1	1.30	
	HSK63A-EMH18C-80	18	50	80	46	24	M14	1	1.40	
	HSK63A-EMH20C-80	20	52	80	48	25	M16	1	1.50	
	HSK63A-EMH25C-110	25	65	110	55	25	M18	2	2.30	
100A	HSK63A-EMH32C-110	32	72	110	57	28	M20	2	2.60	
	HSK100A-EMH6C-80	6	25	80	35	18	M6	1	2.15	
	HSK100A-EMH8C-80	8	28	80	35	18	M8	1	2.20	
	HSK100A-EMH10C-80	10	35	80	35.5	20	M10	1	2.35	
	HSK100A-EMH12C-80	12	42	80	36	22.5	M12	1	2.45	
	HSK100A-EMH14C-80	14	44	80	36	22.5	M12	1	2.65	
	HSK100A-EMH16C-100	16	48	100	46	24	M14	1	2.85	
	HSK100A-EMH18C-100	18	50	100	46	24	M14	1	2.90	
	HSK100A-EMH20C-100	20	52	100	48	25	M16	1	2.95	
	HSK100A-EMH25C-100	25	65	100	55	25	M18	2	3.45	
	HSK100A-EMH32C-100	32	72	100	57	28	M20	2	3.65	
	HSK100A-EMH40C-120	40	90	120	68	32	M20	2	5.50	

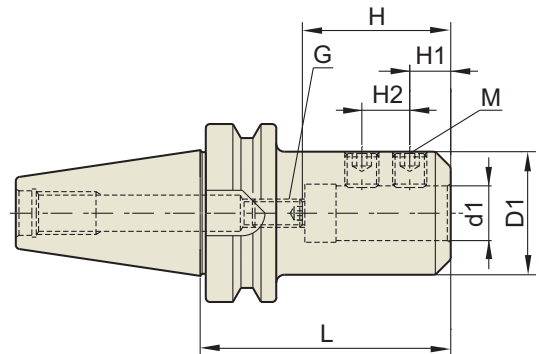
► Holder for cutting tools with Whistle notch shank is available.

► Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.

SIDE LOCK ARBOR

SLA

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



End Mill Holder &
Side Lock Arbor

CBT	Taper Accuracy AT3	G Value	RPM -	Coolant System AD
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■ CBT (BT DUAL CONTACT)

Unit : mm

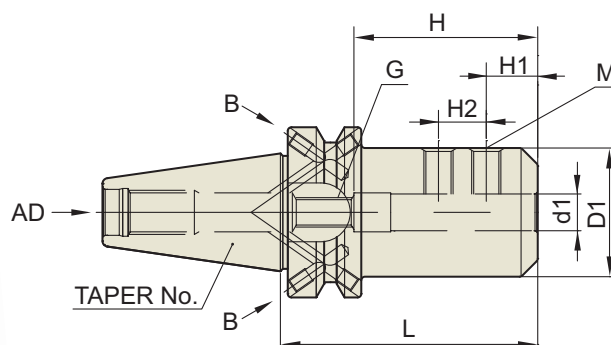
TAPER No.	MODEL No.	d1	L	D1	H		H1	H2	M	G	Weight (Kg)	Stock
					MIN	MAX						
30	CBT30-SLA6-60	6	60	25	20	35	18	-	M5	M5	0.7	
	CBT30-SLA8-60	8	60	28	20	35	18	-	M6	M6	0.8	
	CBT30-SLA10-60	10	60	35	35	50	14	13	M8	M8	0.9	
	CBT30-SLA12-60	12	60	40	35	50	14	13	M10	M10	1.1	
	CBT30-SLA14-60	14	60	40	35	50	14	13	M10	M10	1.2	
	CBT30-SLA16-75	16	75	40	55	70	25	20	M12	M12	1.3	
	CBT30-SLA20-75	20	75	50	55	70	25	20	M12	M12	1.4	●
	CBT30-SLA25-75	25	75	50	55	70	25	20	M14	M12	1.5	●
	CBT30-SLA32-105	32	105	60	65	80	30	20	M16	M12	1.6	
40	CBT40-SLA 6-60	6	60	25	20	35	18	-	M5	M5	1.1	
	CBT40-SLA 8-60	8	60	28	20	35	18	-	M6	M6	1.1	
	CBT40-SLA10-60	10	60	35	35	50	14	13	M8	M8	1.2	
	CBT40-SLA12-60	12	60	40	35	50	14	13	M10	M10	1.4	
	CBT40-SLA16-90	16	90	40	55	70	25	20	M12	M12	1.5	
	CBT40-SLA20-90	20	90	50	55	70	25	20	M12	M12	1.8	●
	CBT40-SLA25-90	25	90	50	55	70	25	20	M14	M12	1.7	●
	CBT40-SLA32-90	32	90	60	65	80	30	20	M16	M12	1.9	●
	CBT40-SLA40-90	40	90	70	65	80	30	20	M16	M12	1.8	
50	CBT40-SLA42-90	42	90	70	65	80	30	20	M16	M12	1.8	
	CBT50-SLA 6-90	6	90	25	25	40	18	-	M5	M5	3.7	
	CBT50-SLA 8-90	8	90	28	25	40	18	-	M6	M6	3.9	
	CBT50-SLA10-90	10	90	35	35	50	15	15	M8	M8	4.1	
	CBT50-SLA12-90	12	90	40	40	55	15	15	M10	M10	4.3	
	CBT50-SLA14-90	14	90	40	40	55	15	15	M10	M10	4.3	
	CBT50-SLA16-105	16	105	40	55	70	25	20	M12	M12	4.4	
	CBT50-SLA20-105	20	105	50	55	70	25	20	M12	M12	4.8	●
	CBT50-SLA25-105	25	105	50	55	70	25	20	M14	M12	4.7	●
	CBT50-SLA32-105	32	105	60	65	80	25	25	M16	M12	4.0	●
	CBT50-SLA40-105	40	105	70	65	80	25	25	M16	M12	4.5	●
	CBT50-SLA42-105	42	105	70	65	80	25	25	M16	M12	4.7	
	CBT50-SLA50.8-121	50.8	121	95	-	87	34	36	M20	-	5.0	

- ▶ Standard design of side lock arbor is for cutting tools with straight shank having flat face.
- ▶ Regarding Balancing Grade, please discuss separately.

SIDE LOCK ARBOR

SLA

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

Unit : mm

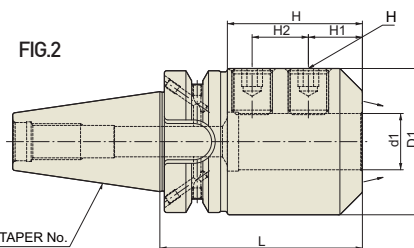
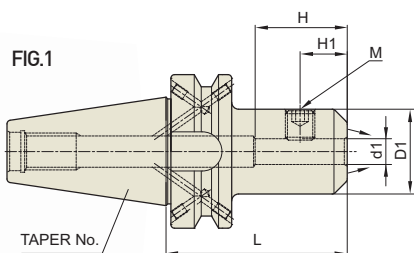
TAPER No.	MODEL No.	d1	L	D1	H		H1	H2	M	G	Weight (Kg)	Stock
					MIN	MAX						
30	BT30AD/B-SLA6-60	6	60	25	20	35	18	—	M5	M5	0.7	
	BT30AD/B-SLA8-60	8	60	28	20	35	18	—	M6	M6	0.8	
	BT30AD/B-SLA10-60	10	60	35	35	50	14	13	M8	M8	0.9	
	BT30AD/B-SLA12-60	12	60	40	35	50	14	13	M10	M10	1.1	
	BT30AD/B-SLA14-60	14	60	40	35	50	14	13	M10	M10	1.2	
	BT30AD/B-SLA16-75	16	75	40	55	70	25	20	M12	M12	1.3	
	BT30AD/B-SLA20-75	20	75	50	55	70	25	20	M12	M12	1.4	
	BT30AD/B-SLA25-75	25	75	50	55	70	25	20	M14	M12	1.5	
	BT30AD/B-SLA32-105	32	105	60	65	80	30	20	M16	M12	1.6	
40	BT40AD/B-SLA 6-60	6	60	25	20	35	18	—	M5	M5	1.1	
	BT40AD/B-SLA 8-60	8	60	28	20	35	18	—	M6	M6	1.1	
	BT40AD/B-SLA10-60	10	60	35	35	50	14	13	M8	M8	1.2	
	BT40AD/B-SLA12-60	12	60	40	35	50	14	13	M10	M10	1.4	
	BT40AD/B-SLA16-90	16	90	40	55	70	25	20	M12	M12	1.5	
	BT40AD/B-SLA20-90	20	90	50	55	70	25	20	M12	M12	1.8	
	BT40AD/B-SLA25-90	25	90	50	55	70	25	20	M14	M12	1.7	
	BT40AD/B-SLA32-90	32	90	60	65	80	30	20	M16	M12	1.9	
	BT40AD/B-SLA40-90	40	90	70	65	80	30	20	M16	M12	1.8	
	BT40AD/B-SLA42-90	42	90	70	65	80	30	20	M16	M12	1.8	
50	BT50AD/B-SLA 6-90	6	90	25	25	40	18	—	M5	M5	3.7	
	BT50AD/B-SLA 8-90	8	90	28	25	40	18	—	M6	M6	3.9	
	BT50AD/B-SLA10-90	10	90	35	35	50	15	15	M8	M8	4.1	
	BT50AD/B-SLA12-90	12	90	40	40	55	15	15	M10	M10	4.3	
	BT50AD/B-SLA14-90	14	90	40	40	55	15	15	M10	M10	4.3	
	BT50AD/B-SLA16-105	16	105	40	55	70	25	20	M12	M12	4.4	
	BT50AD/B-SLA20-105	20	105	50	55	70	25	20	M12	M12	4.8	
	BT50AD/B-SLA25-105	25	105	50	55	70	25	20	M14	M12	4.7	
	BT50AD/B-SLA32-105	32	105	60	65	80	25	25	M16	M12	4.0	
	BT50AD/B-SLA40-105	40	105	70	65	80	25	25	M16	M12	4.5	
	BT50AD/B-SLA42-105	42	105	70	65	80	25	25	M16	M12	4.7	
	BT50AD/B-SLA50.8-121	50.8	121	95	—	87	34	36	M20	—	5.0	

- ▶ Standard design of side lock arbor is for cutting tools with straight shank having flat face.
- ▶ Regarding Balancing Grade, please discuss separately.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

END MILL HOLDER (SPRAY NOZZLE TYPE)

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER (SPRAYDÜSE)
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT (BEC DE PULVÉRISATION)
MANDRINI PORTA FRESA TIPO WELDON (UGELLO DI SPRUZZO)
PORTAFRESAS Y EJES DE SUJECCION LATERAL (INYECTOR DE AEROSOL)



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD/B+C
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■ JIS B6339/MAS 403-BT

Unit : mm

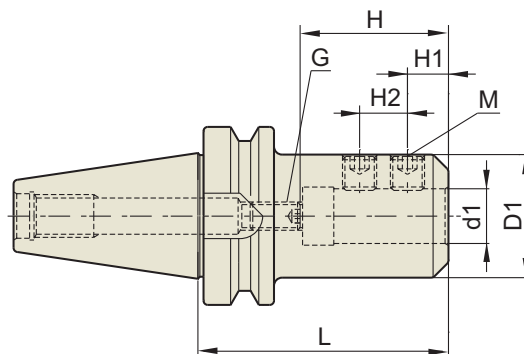
TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40	BT40AD/B-EMH6C-50	6	25	50	35	18	M6	1	1.00	
	BT40AD/B-EMH8C-50	8	28	50	35	18	M8	1	1.00	
	BT40AD/B-EMH10C-63	10	35	63	35.5	20	M10	1	1.10	
	BT40AD/B-EMH12C-63	12	42	63	36	22.5	M12	1	1.30	
	BT40AD/B-EMH14C-63	14	44	63	36	22.5	M12	1	1.40	
	BT40AD/B-EMH16C-63	16	48	63	46	24	M14	1	1.70	
	BT40AD/B-EMH18C-63	18	50	63	46	24	M14	1	1.70	
	BT40AD/B-EMH20C-63	20	52	63	48	25	M16	1	1.80	
	BT40AD/B-EMH25C-90	25	65	90	55	25	M18	2	1.80	
	BT40AD/B-EMH32C-100	32	72	100	57	28	M20	2	2.00	
50	BT50AD/B-EMH6C-63	6	25	63	35	18	M6	1	3.30	
	BT50AD/B-EMH8C-63	8	28	63	35	18	M8	1	3.60	
	BT50AD/B-EMH10C-65	10	35	65	35.5	20	M10	1	3.80	
	BT50AD/B-EMH12C-80	12	42	80	36	22.5	M12	1	3.80	
	BT50AD/B-EMH14C-80	14	44	80	36	22.5	M12	1	4.00	
	BT50AD/B-EMH16C-80	16	48	80	46	24	M14	1	4.00	
	BT50AD/B-EMH18C-80	18	50	80	46	24	M14	1	4.20	
	BT50AD/B-EMH20C-80	20	52	80	48	25	M16	1	4.20	
	BT50AD/B-EMH25C-100	25	65	100	55	25	M18	2	4.60	
	BT50AD/B-EMH32C-105	32	72	105	57	28	M20	2	4.70	
	BT50AD/B-EMH40C-120	40	90	120	68	32	M20	2	4.90	

- ▶ Holder for cutting tools with Whistle notch shank is available.
- ▶ Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

SIDE LOCK ARBOR

SLA

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

RPM
-

Coolant
System
AD

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	L	D1	H		H1	H2	M	G	Weight (Kg)	Stock
					MIN	MAX						
30	BT30-SLA 6-60	6	60	25	20	35	18	-	M5	M5	0.7	
	BT30-SLA 8-60	8	60	28	20	35	18	-	M6	M6	0.8	
	BT30-SLA10-60	10	60	35	35	50	14	13	M8	M8	0.9	
	BT30-SLA12-60	12	60	40	35	50	14	13	M10	M10	1.1	
	BT30-SLA14-60	14	60	40	35	50	14	13	M10	M10	1.2	
	BT30-SLA16-75	16	75	40	55	70	25	20	M12	M12	1.3	●
	BT30-SLA20-75	20	75	50	55	70	25	20	M12	M12	1.4	●
	BT30-SLA25-75	25	75	50	55	70	25	20	M14	M12	1.5	●
40	BT30-SLA32-105	32	105	60	65	80	30	20	M16	M12	1.6	●
	BT40-SLA 6-60	6	60	25	20	35	18	-	M5	M5	1.1	
	BT40-SLA 8-60	8	60	28	20	35	18	-	M6	M6	1.1	
	BT40-SLA10-60	10	60	35	35	50	14	13	M8	M8	1.2	
	BT40-SLA12-60	12	60	40	35	50	14	13	M10	M10	1.4	
	BT40-SLA16-90	16	90	40	55	70	25	20	M12	M12	1.5	●
	BT40-SLA20-90	20	90	50	55	70	25	20	M12	M12	1.8	●
	BT40-SLA25-90	25	90	50	55	70	25	20	M14	M12	1.7	●
50	BT40-SLA32-90	32	90	60	65	80	30	20	M16	M12	1.9	●
	BT40-SLA40-90	40	90	70	65	80	30	20	M16	M12	1.8	●
	BT40-SLA42-90	42	90	70	65	80	30	20	M16	M12	1.8	●
	BT50-SLA 6-90	6	90	25	25	40	18	-	M5	M5	3.7	
	BT50-SLA 8-90	8	90	28	25	40	18	-	M6	M6	3.9	
	BT50-SLA10-90	10	90	35	35	50	15	15	M8	M8	4.1	
	BT50-SLA12-90	12	90	40	40	55	15	15	M10	M10	4.3	
	BT50-SLA14-90	14	90	40	40	55	15	15	M10	M10	4.3	
	BT50-SLA16-105	16	105	40	55	70	25	20	M12	M12	4.4	●
	BT50-SLA20-105	20	105	50	55	70	25	20	M12	M12	4.8	●
	BT50-SLA25-105	25	105	50	55	70	25	20	M14	M12	4.7	●
	BT50-SLA32-105	32	105	60	65	80	25	25	M16	M12	4.0	●
	BT50-SLA40-105	40	105	70	65	80	25	25	M16	M12	4.5	●
	BT50-SLA42-105	42	105	70	65	80	25	25	M16	M12	4.7	●
	BT50-SLA50.8-121	50.8	121	95	-	87	34	36	M20	-	5.0	●

▶Standard design of side lock arbor is for cutting tools with straight shank having flat face.

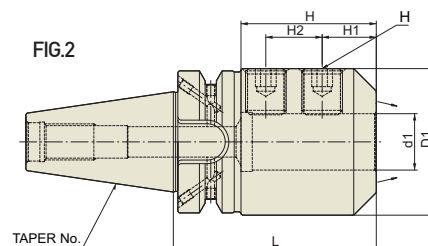
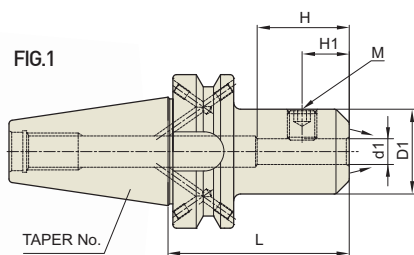
▶Regarding Balancing Grade, please discuss separately.

▶CAT(ANSI B5.50) taper and Inch type products are available.

END MILL HOLDER (SPRAY NOZZLE TYPE)

EMH

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER (SPRAYDÜSE)
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT (BEC DE PULVÉRISATION)
MANDRINI PORTA FRESA TIPO WELDON (UGELLO DI SPRUZZO)
PORTAFRESAS Y EJES DE SUJECCION LATERAL (INYECTOR DE AEROSOL)



JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD/B+C
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■ JIS B6339/MAS 403-BT

Unit : mm

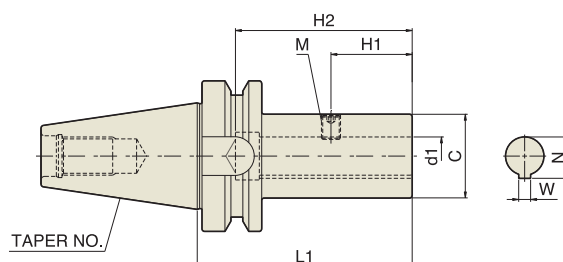
TAPER No.	MODEL No.	d1	D1	L	H	H1	M	FIG.	Weight (Kg)	Stock
40	BT40AD/B-EMH6C-50	6	25	50	35	18	M6	1	1.00	
	BT40AD/B-EMH8C-50	8	28	50	35	18	M8	1	1.00	
	BT40AD/B-EMH10C-63	10	35	63	35.5	20	M10	1	1.10	
	BT40AD/B-EMH12C-63	12	42	63	36	22.5	M12	1	1.30	
	BT40AD/B-EMH14C-63	14	44	63	36	22.5	M12	1	1.40	
	BT40AD/B-EMH16C-63	16	48	63	46	24	M14	1	1.70	
	BT40AD/B-EMH18C-63	18	50	63	46	24	M14	1	1.70	
	BT40AD/B-EMH20C-63	20	52	63	48	25	M16	1	1.80	
	BT40AD/B-EMH25C-90	25	65	90	55	25	M18	2	1.80	
	BT40AD/B-EMH32C-100	32	72	100	57	28	M20	2	2.00	
50	BT50AD/B-EMH6C-63	6	25	63	35	18	M6	1	3.30	
	BT50AD/B-EMH8C-63	8	28	63	35	18	M8	1	3.60	
	BT50AD/B-EMH10C-65	10	35	65	35.5	20	M10	1	3.80	
	BT50AD/B-EMH12C-80	12	42	80	36	22.5	M12	1	3.80	
	BT50AD/B-EMH14C-80	14	44	80	36	22.5	M12	1	4.00	
	BT50AD/B-EMH16C-80	16	48	80	46	24	M14	1	4.00	
	BT50AD/B-EMH18C-80	18	50	80	46	24	M14	1	4.20	
	BT50AD/B-EMH20C-80	20	52	80	48	25	M16	1	4.20	
	BT50AD/B-EMH25C-100	25	65	100	55	25	M18	2	4.60	
	BT50AD/B-EMH32C-105	32	72	105	57	28	M20	2	4.70	
	BT50AD/B-EMH40C-120	40	90	120	68	32	M20	2	4.90	

- ▶ Holder for cutting tools with Whistle notch shank is available.
- ▶ Combi-style holder with ball jointed clamping screw which can be used with cutting tools with Weldon and Whistle notch shank is available.
- ▶ CAT(ANSI B5.50) taper and Inch type products are available.

SIDE LOCK ARBOR

SLB

FRÄSERFUTTER UND FLÄCHENSPANNFUTTER
MANDRIN PORTE FRAISE À QUEUE CYLINDRIQUE, À MÉPLAT
MANDRINI PORTA FRESA TIPO WELDON
PORTAFRESAS Y EJES DE SUJECCION LATERAL



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

RPM
-

Coolant
System
-

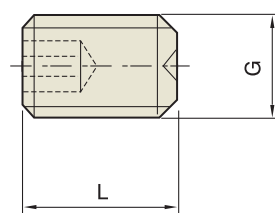
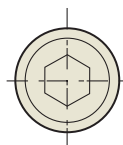
■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H1	H2	M	W	N	Weight (Kg)	Stock
40	BT40-SLB26-105	26	50	105	40	85	M10	5	28,2	1,3	
	BT40-SLB35-135	35	60	135	55	105	M10	6	37,6	2,2	
	BT40-SLB35T-135	35	60	135	55	105	M10	7	38,2	2,2	
50	BT50-SLB26-105	26	50	105	40	85	M10	5	28,2	4,4	
	BT50-SLB35-135	35	60	135	55	106	M10	6	37,6	4,7	
	BT50-SLB35T-135	35	60	135	55	106	M10	7	38,2	4,7	
	BT50-SLB48-165	48	80	165	65	129	M10	8	51,0	6,5	

► Standard design of side lock arbor is for cutting tools with straight shank having flat face.

SIDE LOCK SCREW (for END MILL HOLDER & SIDE LOCK ARBOR)



Unit : mm

SCREW	G	L	Applicable Holder & Arbor
M5×08 SL	M5×0.8	8	EMH & SLA6
M6×10 SL	M6×1.0	10	EMH & SLA8
M8×10 SL	M8×1.25	10	EMH & SLA10
M10×12 SL	M10×1.5	12	EMH & SLA12/14
M12×16 SL	M12×1.75	16	EMH & SLA16/20
M14×16 SL	M14×2.0	16	EMH & SLA25
M16×16 SL	M16×2.0	16	EMH & SLA32/40/42
M20×25 SL	M20×2.5	25	SLA50,8

TOOLING SYSTEM

SHELL MILL ARBOR



AUFNAHMEDORN FÜR FRÄSER MIT
BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS

SHELL MILL ARBOR

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

COMBI SHELL MILL ARBOR

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

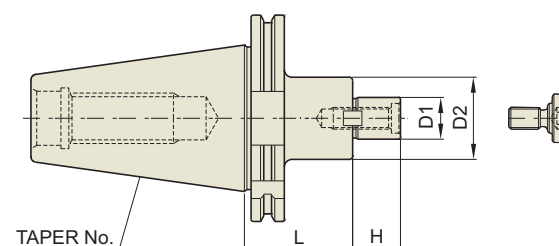
CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

DIN 2080 - ISO

DONRAY PREMIUM

AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS



■ DIN 69871-SK

DIN 69871 -SK	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
30	SK30-SMA16-50	16	32	50	17	0.85	
	SK30-SMA22-50	22	40	50	19	0.90	
	SK30-SMA27-50	27	48	50	21	1.03	
40	SK40-SMA16-60	16	32	60	17	0.35	
	SK40-SMA22-60	22	40	60	19	1.45	
	SK40-SMA27-60	27	48	60	21	1.70	
	SK40-SMA32-60	32	58	60	24	1.80	
	SK40-SMA40-60	40	70	60	27	3.10	
50	SK50-SMA16-75	16	32	75	17	2.80	
	SK50-SMA22-75	22	40	75	19	3.10	
	SK50-SMA27-75	27	48	75	21	3.40	
	SK50-SMA32-75	32	58	75	24	3.80	
	SK50-SMA40-75	40	70	75	27	4.50	
	SK50-SMA50-75	50	90	75	30	5.90	

◆ EXTENDED

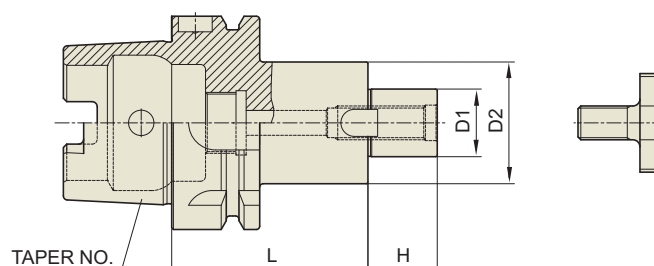
Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
40	SK40-SMA16-120	16	32	120	17	1.70	
	SK40-SMA22-120	22	40	120	19	1.80	
	SK40-SMA27-120	27	48	120	21	2.40	
	SK40-SMA32-120	32	58	120	24	3.70	
50	SK50-SMA16-120	16	32	120	17	3.90	
	SK50-SMA22-120	22	40	120	19	4.40	
	SK50-SMA27-120	27	48	120	21	4.70	
	SK50-SMA32-120	32	58	120	24	5.00	
	SK50-SMA40-120	40	70	120	27	6.05	

► CAT(ANSI B5.50) taper and Inch type products are available.

► For parts, please refer to page 114.

AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS



DIN 69893
- HSK

Taper
Accuracy
-

G Value
6.3

RPM
15,000

Coolant
System
AD

Shell Mill Arbor &
Combi Shell Mill
Arbor

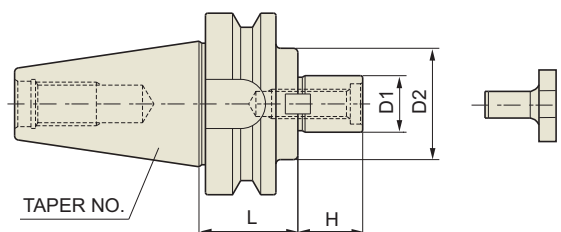
■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
40A	HSK40A-SMA16-50	16	32	50	17	0.40	
	HSK40A-SMA22-50	22	40	50	19	0.50	
	HSK40A-SMA27-60	27	48	60	21	0.60	
50A	HSK50A-SMA16-50	16	32	50	17	0.50	
	HSK50A-SMA22-60	22	40	60	19	0.57	
	HSK50A-SMA27-60	27	48	60	21	0.75	
	HSK50A-SMA32-60	32	58	60	24	0.90	
63A	HSK63A-SMA16-50	16	32	50	17	0.81	●
	HSK63A-SMA22-50	22	40	50	19	0.93	●
	HSK63A-SMA27-60	27	48	60	21	1.22	●
	HSK63A-SMA32-60	32	58	60	24	1.46	●
	HSK63A-SMA40-60	40	70	60	27	1.80	●
100A	HSK100A-SMA16-50	16	32	50	17	2.14	
	HSK100A-SMA22-50	22	40	50	19	2.25	
	HSK100A-SMA27-50	27	48	50	21	2.40	
	HSK100A-SMA32-50	32	58	50	24	2.60	
	HSK100A-SMA40-60	40	70	60	27	3.25	
	HSK100A-SMA50-70	50	90	70	30	5.40	

►For parts, please refer to page 114.

AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS



■ CBT (BT DUAL CONTACT)

CBT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	2.5	25,000	AD

◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
30	CBT30-SMA16-50	16	32	50	17		
	CBT30-SMA22-50	22	40	50	19		
	CBT30-SMA27-50	27	48	50	21		
40	CBT40-SMA16-60	16	32	60	17		●
	CBT40-SMA22-60	22	40	60	19		●
	CBT40-SMA27-60	27	48	60	21		●
	CBT40-SMA32-60	32	58	60	24		●
	CBT40-SMA40-60	40	70	60	27		●
50	CBT50-SMA16-75	16	32	75	17		
	CBT50-SMA22-75	22	40	75	19		●
	CBT50-SMA27-75	27	48	75	21		●
	CBT50-SMA32-75	32	58	75	24		●
	CBT50-SMA40-75	40	70	75	27		●
	CBT50-SMA50-75	50	90	75	30		

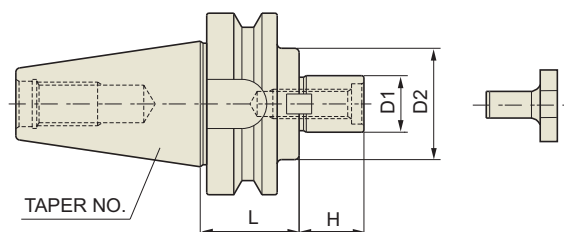
◆ EXTENDED

Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
40	CBT40-SMA16-120	16	32	120	17		
	CBT40-SMA22-120	22	40	120	19		
	CBT40-SMA27-120	27	48	120	21		
	CBT40-SMA32-120	32	58	120	24		
50	CBT50-SMA16-120	16	32	120	17		
	CBT50-SMA22-120	22	40	120	19		
	CBT50-SMA27-120	27	48	120	21		
	CBT50-SMA32-120	32	58	120	24		
	CBT50-SMA40-120	40	70	120	27		

► For parts, please refer to page 114.

AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES
MANDRINO CON TRASCINAMENTO FISSO
PORTA FRESAS



Shell Mill Arbor &
Combi Shell Mill
Arbor

■ JIS B6339/MAS 403-BT

JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
30	BT30-SMA16-50	16	32	50	17		
	BT30-SMA22-50	22	40	50	19		
	BT30-SMA27-50	27	48	50	21		
40	BT40-SMA16-60	16	32	60	17		●
	BT40-SMA22-60	22	40	60	19		●
	BT40-SMA27-60	27	48	60	21		●
	BT40-SMA32-60	32	58	60	24		●
	BT40-SMA40-60	40	70	60	27		●
50	BT50-SMA16-75	16	32	75	17		
	BT50-SMA22-75	22	40	75	19		
	BT50-SMA27-75	27	48	75	21		
	BT50-SMA32-75	32	58	75	24		
	BT50-SMA40-75	40	70	75	27		
	BT50-SMA50-75	50	90	75	30		

◆ EXTENDED

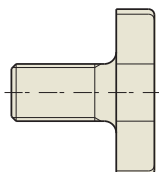
Unit : mm

TAPER No.	MODEL No.	D1	D2	L	H	Weight (Kg)	Stock
40	BT40-SMA16-120	16	32	120	17		●
	BT40-SMA22-120	22	40	120	19		●
	BT40-SMA27-120	27	48	120	21		●
	BT40-SMA32-120	32	58	120	24		●
50	BT50-SMA16-120	16	32	120	17		
	BT50-SMA22-120	22	40	120	19		
	BT50-SMA27-120	27	48	120	21		
	BT50-SMA32-120	32	58	120	24		
	BT50-SMA40-120	40	70	120	27		

► CAT(ANSI B5.50) taper and Inch type products are available.

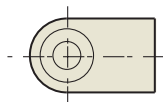
► For parts, please refer to page 114.

PARTS (for SHELL MILL ARBOR)



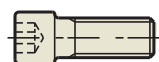
■ COLLAR BOLT

No.	COLLAR BOLT	Q' TY	SMA DIA.
33	M8×1,25	1	16
34	M10×1,5	1	22
35	M12×1,75	1	27
36	M16×2,0	1	32
37	M20×2,5	1	40
38	M24×3,0	1	50



■ DRIVE KEY

No.	DRIVE KEY	Q' TY	SMA DIA.
45	8×7×2,8	2	16
46	10×7,8×15,5	2	22
47	12×9×18,5	2	27
48	14×11,5×20,5	2	32
49	16×13,5×23,5	2	40
50	18×18×28,5	2	50



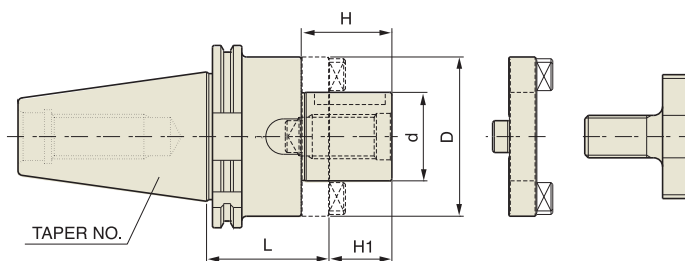
■ KEY BOLT

No.	KEY BOLT	Q' TY	SMA DIA.
51	M3×0,5×8L	2	16
52	M4×0,7×10L	2	22
53	M5×0,8×12L	2	27
54	M6×1,0×15L	2	32
55	M6×1,0×15L	2	40
56	M6×1,0×20L	2	50

COMBI-SHELL MILL ARBOR

CMA

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES COMBINÉS
MANDRINO PORTA FRESE
PORTA FRESAS COMBINADO



Shell Mill Arbor &
Combi Shell Mill
Arbor

■ DIN 69871-SK

DIN 69871
- SK

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD

◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
30	SK30-CMA16-50	16	50	32	17	27	27,33,39		
	SK30-CMA22-50	22	50	40	19	31	28,34,40		
	SK30-CMA27-55	27	55	48	21	33	29,35,41		
40	SK40-CMA16-55	16	55	32	17	27	27,33,39		●
	SK40-CMA22-55	22	55	40	19	31	28,34,40		●
	SK40-CMA27-55	27	55	48	21	33	29,35,41		●
	SK40-CMA32-60	32	60	58	24	38	30,36,42		●
	SK40-CMA40-60	40	60	70	27	41	31,37,43		●
50	SK50-CMA16-55	16	55	32	17	27	27,33,39		
	SK50-CMA22-55	22	55	40	19	31	28,34,40		
	SK50-CMA27-55	27	55	48	21	33	29,35,41		
	SK50-CMA32-55	32	55	58	24	38	30,36,42		
	SK50-CMA40-55	40	55	70	27	41	31,37,43		
	SK50-CMA50-70	50	70	90	30	46	32,38,44		

◆ EXTENDED

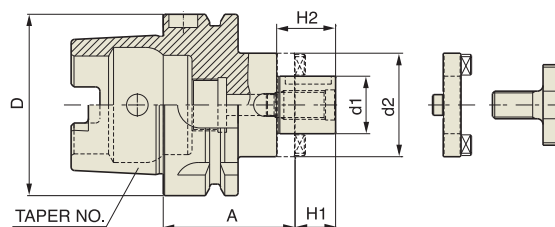
Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
40	SK40-CMA16-100	16	100	32	17	27	27,33,39		●
	SK40-CMA22-100	22	100	40	19	31	28,34,40		●
	SK40-CMA27-100	27	100	48	21	33	29,35,41		●
	SK40-CMA32-100	32	100	58	24	38	30,36,42		●
50	SK50-CMA16-100	16	100	32	17	27	27,33,39		
	SK50-CMA22-100	22	100	40	19	31	28,34,40		
	SK50-CMA27-100	27	100	48	21	33	29,35,41		
	SK50-CMA32-100	32	100	58	24	38	30,36,42		
	SK50-CMA40-100	40	100	70	27	41	31,37,43		

► CAT(ANSI B5.50) taper and Inch type products are available.

► For parts, please refer to page 120.

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
 MANDRIN PORTE-FRAISES COMBINÉS
 MANDRINO PORTA FRESE
 PORTA FRESAS COMBINADO



DIN 69893
- HSK

Taper
Accuracy
-

G Value
6.3

RPM
15,000

Coolant
System
AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

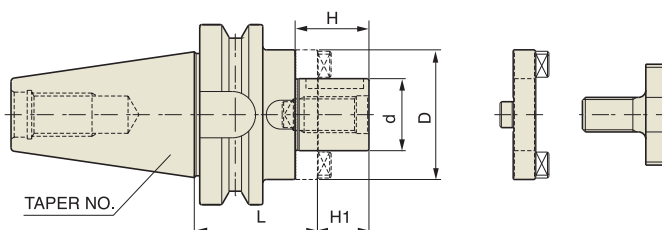
TAPER No.	MODEL No.	D	d1	d2	A	H1	H2	PART No.	Weight (Kg)	Stock
50A	HSK50A-CMA16-50	50	16	32	50	17	27	27,33,39		
	HSK50A-CMA22-50	50	22	40	50	19	31	28,34,40		
	HSK50A-CMA27-65	50	27	48	65	21	33	29,35,41		
	HSK50A-CMA32-65	50	32	58	65	24	38	30,36,42		
63A	HSK63A-CMA16-60	63	16	32	60	17	27	27,33,39		●
	HSK63A-CMA22-60	63	22	40	60	19	31	28,34,40		●
	HSK63A-CMA27-60	63	27	48	60	21	33	29,35,41		●
	HSK63A-CMA32-60	63	32	53	60	24	38	30,36,42		●
	HSK63A-CMA40-70	63	40	70	70	27	41	31,37,43		●
100A	HSK100A-CMA16-60	100	16	32	60	17	27	27,33,39		
	HSK100A-CMA22-60	100	22	40	60	19	31	28,34,40		
	HSK100A-CMA27-60	100	27	48	60	21	33	29,35,41		
	HSK100A-CMA32-60	100	32	58	60	24	38	30,36,42		
	HSK100A-CMA40-70	100	40	70	70	27	41	31,37,43		
	HSK100A-CMA50-80	100	50	90	80	30	46	32,38,44		

► For parts, please refer to page 120.

COMBI-SHELL MILL ARBOR

CMA

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES COMBINÉS
MANDRINO PORTA FRESE
PORTA FRESAS COMBINADO



Shell Mill Arbor &
Combi Shell Mill
Arbor

■ CBT (BT DUAL CONTACT)

CBT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	2.5	25,000	AD

◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
30	CBT30-CMA16-50	16	50	32	17	27	27,33,39		
	CBT30-CMA22-50	22	50	40	19	31	28,34,40		
	CBT30-CMA27-55	27	55	48	21	33	29,35,41		
40	CBT40-CMA16-55	16	55	32	17	27	27,33,39		
	CBT40-CMA22-55	22	55	40	19	31	28,34,40		
	CBT40-CMA27-55	27	55	48	21	33	29,35,41		
	CBT40-CMA32-60	32	60	58	24	38	30,36,42		
	CBT40-CMA40-70	40	70	70	27	41	31,37,43		
50	CBT50-CMA16-70	16	70	32	17	27	27,33,39		
	CBT50-CMA22-70	22	70	40	19	31	28,34,40		
	CBT50-CMA27-70	27	70	48	21	33	29,35,41		
	CBT50-CMA32-70	32	70	58	24	38	30,36,42		
	CBT50-CMA40-70	40	70	70	27	41	31,37,43		
	CBT50-CMA50-70	50	70	90	30	46	32,38,44		

◆ EXTENDED

Unit : mm

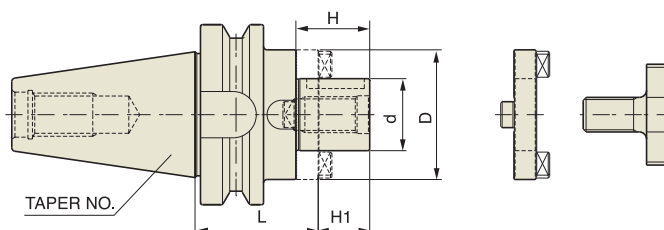
TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
40	CBT40-CMA16-100	16	100	32	17	27	27,33,39		
	CBT40-CMA22-100	22	100	40	19	31	28,34,40		
	CBT40-CMA27-100	27	100	48	21	33	29,35,41		
	CBT40-CMA32-100	32	100	58	24	38	30,36,42		
50	CBT50-CMA16-100	16	100	32	17	27	27,33,39		
	CBT50-CMA22-100	22	100	40	19	31	28,34,40		
	CBT50-CMA27-100	27	100	48	21	33	29,35,41		
	CBT50-CMA32-100	32	100	58	24	38	30,36,42		
	CBT50-CMA40-100	40	100	70	27	41	31,37,43		

► For parts, please refer to page 120.

COMBI-SHELL MILL ARBOR

CMA

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES COMBINÉS
MANDRINO PORTA FRESE
PORTA FRESAS COMBINADO



■ JIS B6339/MAS 403-BT

JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
30	BT30-CMA16-50	16	50	32	17	27	27,33,39		
	BT30-CMA22-50	22	50	40	19	31	28,34,40		
	BT30-CMA27-55	27	55	48	21	33	29,35,41		
40	BT40-CMA16-55	16	55	32	17	27	27,33,39		
	BT40-CMA22-55	22	55	40	19	31	28,34,40		
	BT40-CMA27-55	27	55	48	21	33	29,35,41		
	BT40-CMA32-60	32	60	58	24	38	30,36,42		
	BT40-CMA40-70	40	70	70	27	41	31,37,43		
50	BT50-CMA16-70	16	70	32	17	27	27,33,39		
	BT50-CMA22-70	22	70	40	19	31	28,34,40		
	BT50-CMA27-70	27	70	48	21	33	29,35,41		
	BT50-CMA32-70	32	70	58	24	38	30,36,42		
	BT50-CMA40-70	40	70	70	27	41	31,37,43		
	BT50-CMA50-70	50	70	90	30	46	32,38,44		

◆ EXTENDED

Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
40	BT40-CMA16-100	16	100	32	17	27	27,33,39		
	BT40-CMA22-100	22	100	40	19	31	28,34,40		
	BT40-CMA27-100	27	100	48	21	33	29,35,41		
	BT40-CMA32-100	32	100	58	24	38	30,36,42		
50	BT50-CMA16-100	16	100	32	17	27	27,33,39		
	BT50-CMA22-100	22	100	40	19	31	28,34,40		
	BT50-CMA27-100	27	100	48	21	33	29,35,41		
	BT50-CMA32-100	32	100	58	24	38	30,36,42		
	BT50-CMA40-100	40	100	70	27	41	31,37,43		

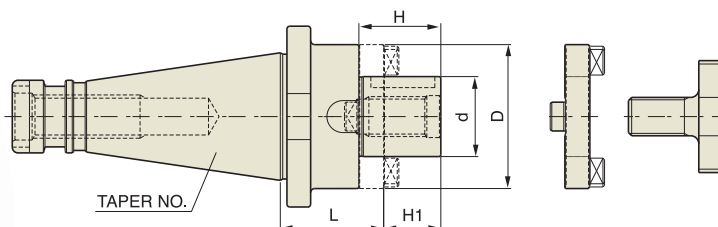
► CAT(ANSI B5.50) taper and Inch type products are available.

► For parts, please refer to page 120.

COMBI-SHELL MILL ARBOR

CMA

KOMBI-AUFNAHMEDORN FÜR FRÄSER MIT BOHRUNG
MANDRIN PORTE-FRAISES COMBINÉS
MANDRINO PORTA FRESE
PORTA FRESAS COMBINADO



Shell Mill Arbor &
Combi Shell Mill
Arbor

■ DIN 2080-ISO

DIN 2080 -ISO	Taper Accuracy	G Value	RPM	Coolant System
	AT3	-	-	-

◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
30	ISO30-CMA16-35	16	35	32	17	27	27,33,39		
	ISO30-CMA22-35	22	35	40	19	31	28,34,40		
	ISO30-CMA27-35	27	35	48	21	33	29,35,41		
40	ISO40-CMA16-52	16	52	32	17	27	27,33,39		
	ISO40-CMA22-52	22	52	40	19	31	28,34,40		
	ISO40-CMA27-52	27	52	48	21	33	29,35,41		
	ISO40-CMA32-52	32	52	58	24	38	30,36,42		
	ISO40-CMA40-52	40	52	70	27	41	31,37,43		
50	ISO50-CMA16-55	16	55	32	17	27	27,33,39		
	ISO50-CMA22-55	22	55	40	19	31	28,34,40		
	ISO50-CMA27-55	27	55	48	21	33	29,35,41		
	ISO50-CMA32-55	32	55	58	24	38	30,36,42		
	ISO50-CMA40-55	40	55	70	27	41	31,37,43		
	ISO50-CMA50-55	50	55	90	30	46	32,38,44		

◆ EXTENDED

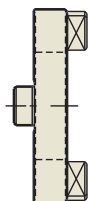
Unit : mm

TAPER No.	MODEL No.	d	L	D	H1	H	PART No.	Weight (Kg)	Stock
40	ISO40-CMA16-125	16	125	32	17	27	27,33,39		
	ISO40-CMA22-125	22	125	40	19	31	28,34,40		
	ISO40-CMA27-125	27	125	48	21	33	29,35,41		
	ISO40-CMA32-125	32	125	58	24	38	30,36,42		
50	ISO50-CMA16-125	16	125	32	17	27	27,33,39		
	ISO50-CMA22-125	22	125	40	19	31	28,34,40		
	ISO50-CMA27-125	27	125	48	21	33	29,35,41		
	ISO50-CMA32-125	32	125	58	24	38	30,36,42		
	ISO50-CMA40-125	40	125	70	27	41	31,37,43		

► CAT(ANSI B5.50) taper and Inch type products are available.

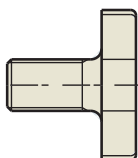
► For parts, please refer to page 120.

PARTS (for COMBI-SHELL MILL ARBOR)



■ CLUTCH DRIVE RING

No.	CLUTCH DRIVE RING	Q' TY	CMA DIA.
27	#16	1	16
28	#22	1	22
29	#27	1	27
30	#32	1	32
31	#40	1	40
32	#50	1	50



■ COLLAR BOLT

No.	COLLAR BOLT	Q' TY	CMA DIA.
33	M8×1,25	1	16
34	M10×1,5	1	22
35	M12×1,75	1	27
36	M16×2,0	1	32
37	M20×2,5	1	40
38	M24×3,0	1	50

■ KEY



No.	KEY	Q' TY	CMA DIA.
39	4×4×20	1	16
40	6×6×25	1	22
41	7×7×25	1	27
42	8×7×28	1	32
43	10×8×32	1	40
44	12×8×36	1	50

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO

DIN 69871 - SK

■ HIGH-SPEED TYPE / STANDARD TYPE

DIN 69893 / ISO 12164 - 1 - HSK

■ HIGH-SPEED TYPE / STANDARD TYPE

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

■ HIGH-SPEED TYPE / STANDARD TYPE

DIN 228 - MTA / MTB, R8

MILLING CHUCK SET

■ STANDARD MILLING CHUCK SET

■ Q.C MILLING CHUCK SET

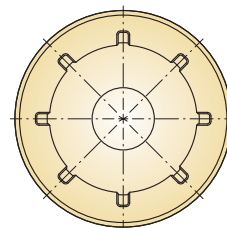
ACCESSORY

■ END MILL COLLET (K, CK, MT, JT)

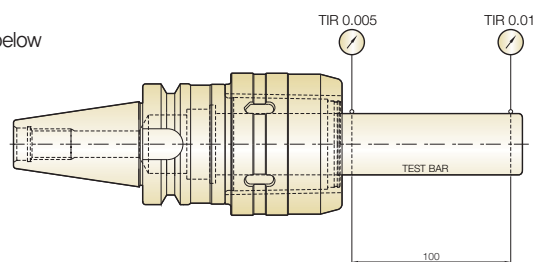
■ SPANNER

MILLING CHUCK

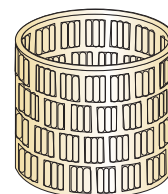
- Rigidity is strengthened through slot made at inside milling chuck, which prevents deformation of milling chuck. Smooth cutting is achieved by maximizing end mill clamping power.
- Enough thickness of clamping part prevents chattering and ensures durability.
- O-ring inserted into milling chuck body prevents cap and body from directly contacting each other thus extending durability of milling chuck.



- High precision can be achieved through accurate roundness of clamping part, deburred surface and rigidity (deviation of concentricity : below 2, roughness : below RZ B1.0~1.5)
- Maintaining TIR not exceeding 0.01mm at 100mm from nose part



- 160% more of bearings are used in needle roller than other make's chucks, which provides strong clamping power and high durability by dispersing surface pressure even in case strong load is applied.



- In order to improve durability, SSK milling chuck is passed through following processes.
 - "Normalizing" treatment for unifying material composition and removal internal stress.
 - Ultralow temperature (-90°C) treatment called "Sub-Zero treatment" after carburizing heat treatment for prior removal of any deformation of milling chuck after use for long periods of time.



High Speed Milling Chuck

- Achieving optimum cutting for high-speed heavy duty cutting and finishing with strong torque power
- Perfect clamping from 3mm depth of ID entrance
- Achieving stability when exchanging and setting tools by stable fastening and unfastening torque



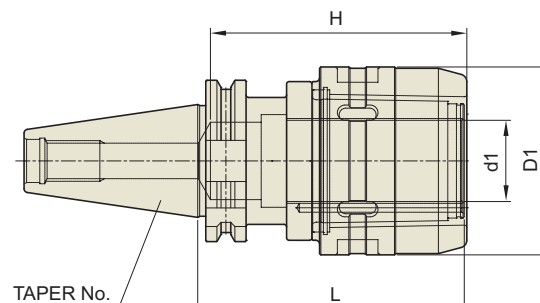
Strong torque power

Milling chuck (ID)	Standard	Tolerance (Taper shank)	Run-out (3D)	Clamping torque
C20	AT3	ISO30 (0~+0.002) ISO40 (0~+0.003) ISO50 (0~+0.004)	100mm	980Nm
C25				1,760Nm
C32				3,430Nm
C42				4,900Nm

HIGH SPEED MILLING CHUCK



HOCHGESCHWINDIGKEITS FRÄSERFUTTER
MANDRIN PORTE FRAISE À GRANDE VITESSE
MANDRINI PORTA FRESA PER ALTA VELOCITÀ
PORTAHERRAMIENTAS PARA FRESADO DE ALTA VELOCIDAD



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
6.3

RPM
20,000

Coolant
System
-

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
30	SK30-C20-80HS	20	54	80	70	1.15	
	SK30-C25-80HS	25	62.5	80	80	1.48	
40	SK40-C20-105HS	20	54	105	70	1.77	●
	SK40-C25-105HS	25	62.5	105	80	2.10	●
	SK40-C32-105HS	32	74	105	100	2.40	●
	SK40-C32-135HS	32	74	135	100	3.10	●
50	SK50-C20-105HS	20	54	105	70	3.40	
	SK50-C25-105HS	25	62.5	105	80	3.80	
	SK50-C32-105HS	32	74	105	100	4.30	
	SK50-C32-135HS	32	74	135	100	4.90	
	SK50-C32-165HS	32	74	165	100	5.60	
	SK50-C42-115HS	42	92	115	110	4.60	
	SK50-C42-135HS	42	92	135	110	5.60	
	SK50-C42-165HS	42	92	165	110	6.10	

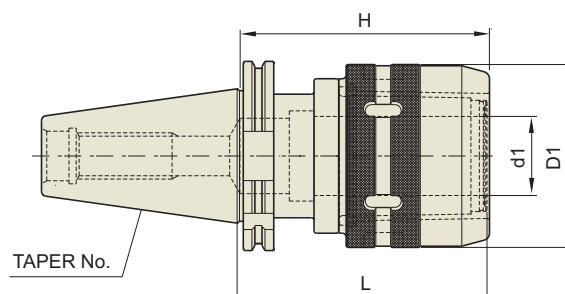
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable collet and spanner, please refer to page 136.

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO



■ DIN 69871-SK

DIN 69871 - SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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Milling
Chuck

◆ STUB

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
30	SK30-C20-80	20	54	80	70	1.15	
	SK30-C25-80	25	62.5	80	80	1.48	
40	SK40-C20-90	20	54	90	70	1.60	
	SK40-C32-90	32	72	90	100	2.00	
50	SK50-C20-80	20	54	80	70	3.22	
	SK50-C25-90	25	62.5	90	80	3.61	
	SK50-C32-90	32	72	90	100	3.87	

◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
40	SK40-C20-105	20	54	105	70	1.77	●
	SK40-C25-105	25	62.5	105	80	2.01	●
	SK40-C32-105	32	72	105	100	2.42	●
50	SK50-C20-105	20	54	105	70	3.39	●
	SK50-C25-105	25	62.5	105	80	3.78	●
	SK50-C32-105	32	72	105	100	4.31	●
	SK50-C42-115	42	92	115	110	4.53	●

◆ EXTENDED

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
40	SK40-C32-135	32	72	135	100	3.11	●
50	SK50-C32-135	32	72	135	100	4.94	●
	SK50-C42-135	42	92	135	110	5.62	●

◆ EXTRA EXTENDED

Unit : mm

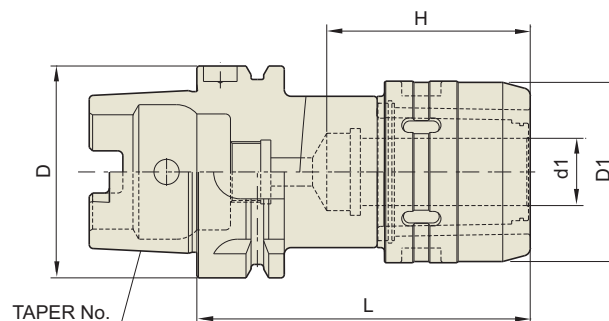
TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
50	SK50-C32-165	32	72	165	100	5.59	●
	SK50-C42-165	42	92	165	110	6.10	●

- ▶ CAT(ANSI B5.50) taper and Inch type products are available.
- ▶ For applicable collet and spanner, please refer to page 136.

HIGH SPEED MILLING CHUCK



HOCHGESCHWINDIGKEITS FRÄSERFUTTER
MANDRIN PORTE FRAISE À GRANDE VITESSE
MANDRINI PORTA FRESA PER ALTA VELOCITÀ
PORTAHERRAMIENTAS PARA FRESADO DE ALTA VELOCIDAD



DIN 69893
- HSK

Taper
Accuracy
-

G Value
6.3

RPM
20,000

Coolant
System
-

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

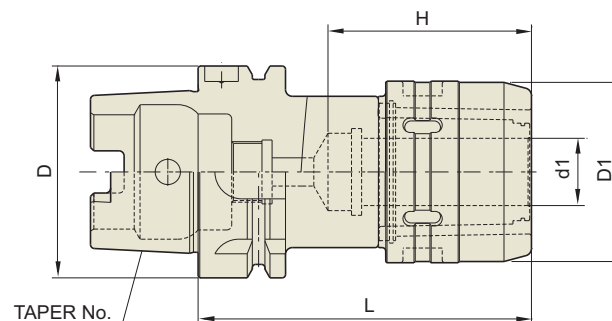
TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
50A	HSK50A-C20-100HS	20	54	100	70	1.30	
63A	HSK63A-C20-105HS	20	54	105	70	1.50	●
	HSK63A-C25-120HS	25	62.5	120	80	2.20	
	HSK63A-C32-130HS	32	74	130	100	2.70	●
100A	HSK100A-C20-110HS	20	54	110	70	3.50	
	HSK100A-C25-130HS	25	62.5	130	80	3.80	
	HSK100A-C32-135HS	32	74	135	100	4.20	●
	HSK100A-C42-135HS	42	74	135	100	5.30	

► For applicable collet and spanner, please refer to page 136.

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO



DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	-	-	-	-

Milling
Chuck

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

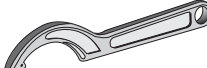
TAPER No.	MODEL No.	D	d1	D1	L	H	Weight (Kg)	Stock
50A	HSK50A-C20-100	50	20	54	100	70	1.30	
63A	HSK63A-C20-105	63	20	54	105	70	1.50	●
	HSK63A-C32-130	63	32	72	130	100	2.70	●
100A	HSK100A-C20-110	100	20	54	110	70	3.50	
	HSK100A-C32-135	100	32	72	135	100	4.20	●
	HSK100A-C42-135	100	42	92	135	100	5.30	

◆ ACCESSORY

END MILL COLLET	MODEL No.
	K20 - 6, 8, 10, 12, 16
	K32 - 6, 8, 10, 12, 16, 20, 25
	K42 - 6, 8, 10, 12, 16, 20, 25, 32

► Special size of Ø3, Ø4 or Ø5 can be produced and supplied upon request.

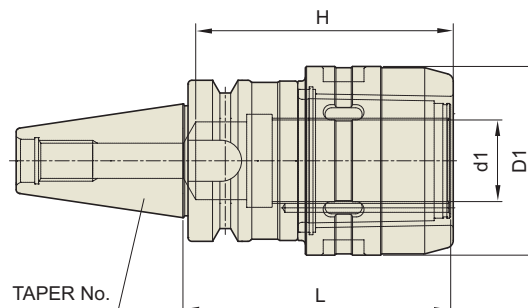
END MILL COLLET	MODEL No.
	CK20 - 6, 8, 10, 12, 16
	CK25 - 6, 8, 10, 12, 16, 20
	CK32 - 6, 8, 10, 12, 16, 20, 25
	CK42 - 6, 8, 10, 12, 16, 20, 25, 32

SPANNER	MODEL No.
	C20 SP
	C25 SP
	C32 SP
	C42 SP

HIGH SPEED MILLING CHUCK



HOCHGESCHWINDIGKEITS FRÄSERFUTTER
MANDRIN PORTE FRAISE À GRANDE VITESSE
MANDRINI PORTA FRESA PER ALTA VELOCITÀ
PORTAHERRAMIENTAS PARA FRESADO DE ALTA VELOCIDAD



CBT

Taper Accuracy
AT3

G Value
6.3

RPM
20,000

Coolant System
-

■ CBT (BT DUAL CONTACT)

Unit : mm

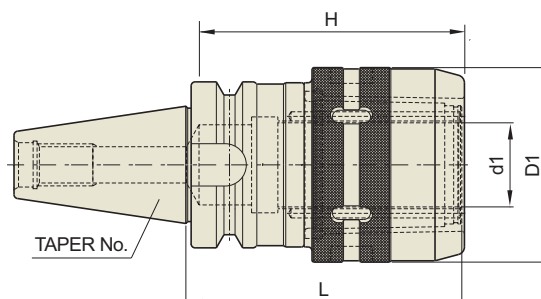
TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
30	CBT30-C20-75HS	20	54	75	70	1.50	
	CBT30-C25-80HS	25	62.5	80	80	2.00	
40	CBT40-C20-80HS	20	54	80	70	2.00	
	CBT40-C20-105HS	20	54	105	70	2.10	
	CBT40-C25-105HS	25	62.5	105	80	2.50	
	CBT40-C32-90HS	32	74	90	100	3.00	
	CBT40-C32-105HS	32	74	105	100	3.10	
	CBT40-C32-135HS	32	74	135	100	3.30	
50	CBT50-C20-105HS	20	54	105	70	4.50	
	CBT50-C20-135HS	20	54	135	70	4.90	
	CBT50-C20-165HS	20	54	165	70	5.40	
	CBT50-C25-105HS	25	62.5	105	80	5.20	
	CBT50-C25-135HS	25	62.5	135	80	5.80	
	CBT50-C25-165HS	25	62.5	165	80	6.20	
	CBT50-C32-105HS	32	74	105	100	6.00	
	CBT50-C32-135HS	32	74	135	100	6.70	
	CBT50-C32-165HS	32	74	165	100	7.40	
	CBT50-C42-115HS	42	92	115	110	6.70	
	CBT50-C42-135HS	42	92	135	110	7.60	
	CBT50-C42-165HS	42	92	165	110	8.30	

►For applicable collet and spanner, please refer to page 136.

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO



CBT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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Milling
Chuck

■ CBT (BT DUAL CONTACT)

Unit : mm

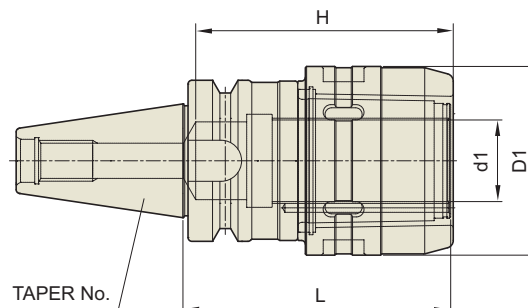
TAPER No.	MODEL No.	d1	D1	L	H	Applicable collet	Weight (Kg)	Stock
30	CBT30-C20-75	20	54	75	70	K20, CK20	1.5	●
	CBT30-C25-80	25	62.5	80	80	K25, CK25	2.0	
40	CBT40-C20-80	20	54	80	70	K20, CK20	2.0	●
	CBT40-C20-105	20	54	105	70	K20, CK20	2.1	
	CBT40-C25-105	25	62.5	105	80	K25, CK25	2.5	
	CBT40-C32-90	32	72	90	100	K32, CK32	3	●
	CBT40-C32-105	32	72	105	100	K32, CK32	3.1	●
	CBT40-C32-135	32	72	135	100	K32, CK32	3.3	
50	CBT50-C20-105	20	54	105	70	K20, CK20	4.5	●
	CBT50-C20-135	20	54	135	70	K20, CK20	4.9	
	CBT50-C20-165	20	54	165	70	K20, CK20	5.4	
	CBT50-C25-105	25	62.5	105	80	K25, CK25	5.2	
	CBT50-C25-135	25	62.5	135	80	K25, CK25	5.8	
	CBT50-C25-165	25	62.5	165	80	K25, CK25	6.2	
	CBT50-C32-105	32	72	105	100	K32, CK32	6	●
	CBT50-C32-115	32	72	115	100	K32, CK32	6.2	
	CBT50-C32-135	32	72	135	100	K32, CK32	6.7	●
	CBT50-C32-165	32	72	165	100	K32, CK32	7.4	
	CBT50-C42-115	42	92	115	110	K42, CK42	6.7	●
	CBT50-C42-135	42	92	135	110	K42, CK42	7.6	●
	CBT50-C42-165	42	92	165	110	K42, CK42	8.3	

►For applicable collet and spanner, please refer to page 136.

HIGH SPEED MILLING CHUCK



HOCHGESCHWINDIGKEITS FRÄSERFUTTER
MANDRIN PORTE FRAISE À GRANDE VITESSE
MANDRINI PORTA FRESA PER ALTA VELOCITÀ
PORTAHERRAMIENTAS PARA FRESADO DE ALTA VELOCIDAD



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
6.3

RPM
20,000

Coolant
System
-

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Weight (Kg)	Stock
30	BT30-C20-75HS	20	54	75	70	1.50	●
	BT30-C25-80HS	25	62.5	80	80	2.00	●
40	BT40-C20-80HS	20	54	80	70	2.00	●
	BT40-C20-105HS	20	54	105	70	2.10	
	BT40-C25-105HS	25	62.5	105	80	2.50	
	BT40-C32-90HS	32	74	90	100	3.00	●
	BT40-C32-105HS	32	74	105	100	3.10	●
	BT40-C32-135HS	32	74	135	100	3.30	●
50	BT50-C20-105HS	20	54	105	70	4.50	●
	BT50-C20-135HS	20	54	135	70	4.90	
	BT50-C20-165HS	20	54	165	70	5.40	
	BT50-C25-105HS	25	62.5	105	80	5.20	
	BT50-C25-135HS	25	62.5	135	80	5.80	
	BT50-C25-165HS	25	62.5	165	80	6.20	
	BT50-C32-105HS	32	74	105	100	6.00	●
	BT50-C32-135HS	32	74	135	100	6.70	●
	BT50-C32-165HS	32	74	165	100	7.40	
	BT50-C42-115HS	42	92	115	110	6.70	●
	BT50-C42-135HS	42	92	135	110	7.60	●
	BT50-C42-165HS	42	92	165	110	8.30	

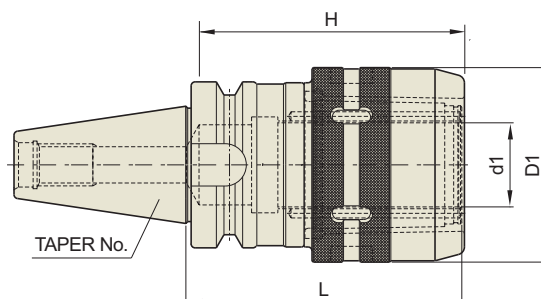
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable collet and spanner, please refer to page 136.

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

RPM
-

Coolant
System
-

Milling
Chuck

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Applicable collet	Weight (Kg)	Stock
30	BT30-C20-75	20	54	75	70	K20, CK20	1.5	●
	BT30-C25-80	25	62.5	80	80	K25, CK25	2.0	●
40	BT40-C20-80	20	54	80	70	K20, CK20	2.0	●
	BT40-C20-105	20	54	105	70	K20, CK20	2.1	●
	BT40-C25-105	25	62.5	105	80	K25, CK25	2.5	
	BT40-C32-90	32	72	90	100	K32, CK32	3	●
	BT40-C32-105	32	72	105	100	K32, CK32	3.1	●
	BT40-C32-135	32	72	135	100	K32, CK32	3.3	
50	BT50-C20-105	20	54	105	70	K20, CK20	4.5	●
	BT50-C20-135	20	54	135	70	K20, CK20	4.9	
	BT50-C20-165	20	54	165	70	K20, CK20	5.4	●
	BT50-C25-105	25	62.5	105	80	K25, CK25	5.2	
	BT50-C25-135	25	62.5	135	80	K25, CK25	5.8	
	BT50-C25-165	25	62.5	165	80	K25, CK25	6.2	
	BT50-C32-105	32	72	105	100	K32, CK32	6	●
	BT50-C32-115	32	72	115	100	K32, CK32	6.2	
	BT50-C32-135	32	72	135	100	K32, CK32	6.7	●
	BT50-C32-165	32	72	165	100	K32, CK32	7.4	●
	BT50-C42-115	42	92	115	110	K42, CK42	6.7	●
	BT50-C42-135	42	92	135	110	K42, CK42	7.6	●
	BT50-C42-165	42	92	165	110	K42, CK42	8.3	

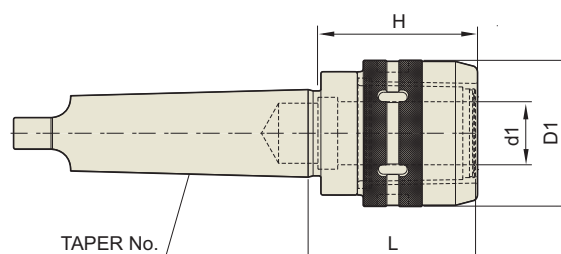
►CAT(ANSI B5.50) taper and Inch type products are available.

►For applicable collet and spanner, please refer to page 136.

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO

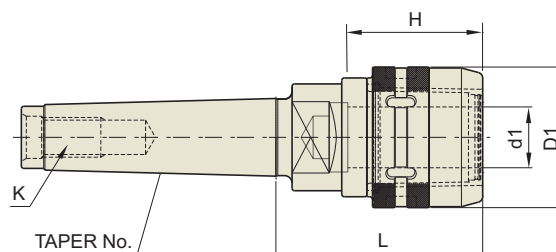


■ DIN 228-MTA

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	H	Applicable collet	Weight (Kg)	Stock
4	MTA4-C32	32	72	98	100	K32, CK32	2.57	
5	MTA5-C32	32	72	85	100	K32, CK32	3.06	
	MTA5-C42	42	92	114	110	K42, CK42	3.45	
6	MTA6-C42	42	92	99	110	K42, CK42	4.14	●

► In case of MT6, it is required to inform machine model number and company name for selection of cutter groove.



■ DIN 228-MTB

Unit : mm

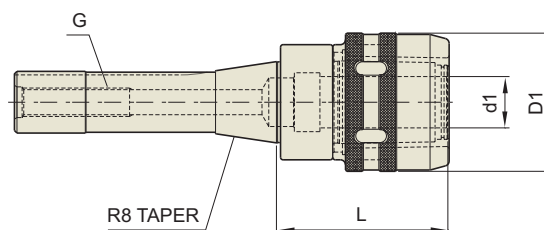
TAPER No.	MODEL No.	d1	D1	L	H	K	Applicable collet	Weight (Kg)	Stock
3	MTB3-C20	20	54	74	70	M12	K20, CK20	2.10	●
4	MTB4-C32	32	72	98	100	M16	K32, CK32	2.57	
	MTB5-C32	32	72	85	100	M20	K32, CK32	3.06	●
5	MTB5-C42	42	92	114	110	M20	K42, CK42	3.45	

► For applicable collet and spanner, please refer to page 136.

MILLING CHUCK



FRÄSERSPANNFUTTER
MANDRIN PORTE FRAISE
MANDRINI PORTA FRESA
PORTAHERRAMIENTAS PARA FRESADO



■ BRIDGEPORT-R8

Unit : mm

TAPER No.	MODEL No.	d1	D1	L	G	Applicable collet	Weight (Kg)	Stock
R8	R8-C20	20	54	69	U7/16-20	K20, CK20	1,40	

► For applicable collet and spanner, please refer to page 136.

MILLING CHUCK STANDARD SET



GEGENSTÜCK FÜR FRÄSERSPANNFUTTER
 ETUI AVEC PORTE-FRAISE ET CLEF
 CASSETTA COMPLETA DI MANDRINO, CHIAVE E PINZE
 ESTUCHE CON PORTAPINZAS, PINZAS Y LLAVE



TAPER	STANDARD SET MODEL No.	MILLING CHUCK	END MILL COLLET	Stock
SK	SSK40-C20	SK40-C20-105	K20-6,8,10,12,16(5PS)	
	SSK40-C32	SK40-C32-105	K32-6,8,10,12,16,20,25(7PS)	
	SSK50-C32	SK50-C32-105	K32-6,8,10,12,16,20,25(7PS)	
	SSK50-C42	SK50-C42-115	K42-6,8,10,12,16,20,25,32(8PS)	
BT	SBT40-C20	BT40-C20-105	K20-6,8,10,12,16(5PS)	
	SBT40-C32	BT40-C32-105	K32-6,8,10,12,16,20,25(7PS)	
	SBT50-C32	BT50-C32-105	K32-6,8,10,12,16,20,25(7PS)	
	SBT50-C42	BT50-C42-115	K42-6,8,10,12,16,20,25,32(8PS)	
ISO	SISO40-C20	ISO40-C20-78	K20-6,8,10,12,16(5PS)	
	SISO40-C32	ISO40-C32-78	K32-6,8,10,12,16,20,25(7PS)	
	SISO50-C32	ISO50-C32-85	K32-6,8,10,12,16,20,25(7PS)	
	SISO50-C42	ISO50-C42-102	K42-6,8,10,12,16,20,25,32(8PS)	
NT	SNT40-C32	NT40-C32	K32-6,8,10,12,16,20,25(7PS)	
	SNT50-C32	NT50-C32	K32-6,8,10,12,16,20,25(7PS)	
	SNT50-C42	NT50-C42	K42-6,8,10,12,16,20,25,32(8PS)	

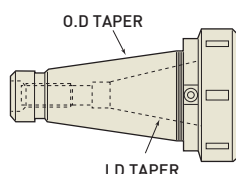
QUICK CHANGE MILLING CHUCK SET

MH

SCHNELLWECHSEL GEGENSTÜCK FÜR FRÄSERSPANNFUTTER
CHANGEMENT RAPIDE ETUI AVEC PORTE-FRAISE ET CLEF
CAMBIO RAPIDO CASSETTA COMPLETA DI MANDRINO, CHIAVE E PINZE
CAMBIO RAPIDO ESTUCHE CON PORTAPINZAS, PINZAS Y LLAVE

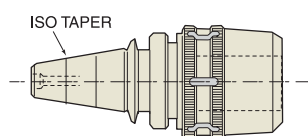


TAPER	Q.C MILLING HOLDER SET MODEL No.	Q.C MASTER HOLDER	Q.C MILLING CHUCK	END MILL COLLETS	Q.C FACE MILL ARBOR	Q.C DRILL CHUCK BAR	DRILL CHUCK ARBOR	Q.C TAPER SLEEVE
NT40	SMH40-T35-32 A	MH40-T35	QT35-32	K32-(6-25)(7PCS)	QT35-4R	-	K32-J6	-
	SMH40-T35-32 B	MH40-T35	QT35-32	K32-(6-25)(7PCS)	QT35-4R	QT35-J6	-	QT35-MT2,3,4
NT50	SMH50-T45-32 A	MH50-T45	QT45-32	K32-(6-25)(7PCS)	QT45-5R	-	K32-J6	-
	SMH50-T45-32 B	MH50-T45	QT45-32	K32-(6-25)(7PCS)	QT45-5R	QT45-J6	-	QT45-MT2,3,4
	SMH50-T45-42 A	MH50-T45	QT45-42	K42-(6-32)(8PCS)	QT45-5R	-	K42-J6	-
	SMH50-T45-42 B	MH50-T45	QT45-42	K42-(6-32)(8PCS)	QT45-5R	QT45-J6	-	QT45-MT2,3,4



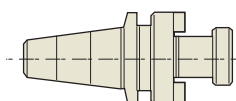
■ Q.C MASTER HOLDER

MODEL No.	O.D TAPER	I.D TAPER	DRAW THREADS
MH40-T35	NT40	NT35	U5/8-11(M16-2)
MH50-T45	NT50	NT45	U1-8(M24-3)



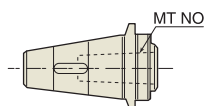
■ Q.C MILLING CHUCK

Q.C MASTER HOLDER	MODEL No.
MH40	QT35-C32
MH50	QT45-C32
MH50	QT45-C42



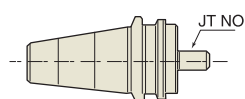
■ Q.C FACE MILL ARBOR

Q.C MASTER HOLDER	MODEL No.
MH40	QT35-3,4,5R
MH50	QT45-3,4,5,6R



■ Q.C TAPER SLEEVE

Q.C MASTER HOLDER	MODEL No.
MH40	QT35 - MT1, 2, 3
MH50	QT45 - MT1, 2, 3, 4



■ Q.C DRILL CHUCK ARBOR

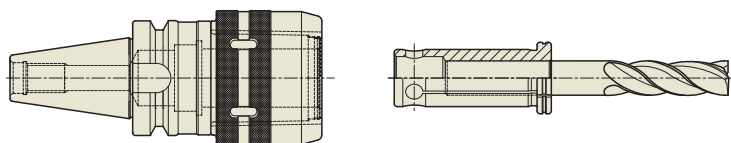
Q.C MASTER HOLDER	MODEL No.	DRILL Ø
MH40	QT35-J6	1-13mm
MH50	QT45-J6	1-13mm

COLLET & SPANNER



■ END MILL COLLET (K TYPE)

MODEL No.	SET
K20-6,8,10,12,16	5pcs
K25-6,8,10,12,16,20	6pcs
K32-6,8,10,12,16,20,25	7pcs
K42-6,8,10,12,16,20,25,32	8pcs



■ END MILL COLLET (CK TYPE)

MODEL No.	SET
CK20-6,8,10,12,16	5pcs
CK25-6,8,10,12,16,20	6pcs
CK32-6,8,10,12,16,20,25	7pcs
CK42-6,8,10,12,16,20,25,32	8pcs



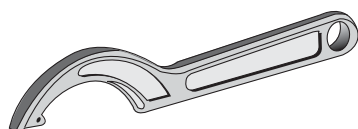
■ MT COLLET

MODEL No.
K20 - MT1, 2
K25 - MT1, 2, 3
K32 - MT1, 2, 3
K42 - MT1, 2, 3, 4



■ DRILL CHUCK ARBOR

MODEL No.
K20-JTA6
K25-JTA6
K32-JTA6
K42-JTA6



■ SPANNER

MODEL No.
C20 SP
C25 SP
C32 SP
C42 SP

► Stock Control Item

TOOLING SYSTEM

MORSE TAPER ARBOR



EINSATZHÜLSEN FÜR MORSEKEGEL
DOUILLES DE RÉDUCTION CÔNE MORSE
MANDRINO RIDUZIONE CONO MORSE
REDUCTORES A MORSE

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

JIS B6339 / MAS 403 - BT

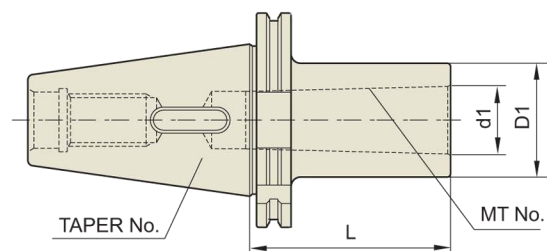
ANSI B5.18 - NT

DONRAY PREMIUM

MORSE TAPER ARBOR

MTA

EINSATZHÜLSEN FÜR MORSEKEGEL
DOUILLES DE RÉDUCTION CÔNE MORSE
MANDRINO RIDUZIONE CONO MORSE
REDUCTORES A MORSE



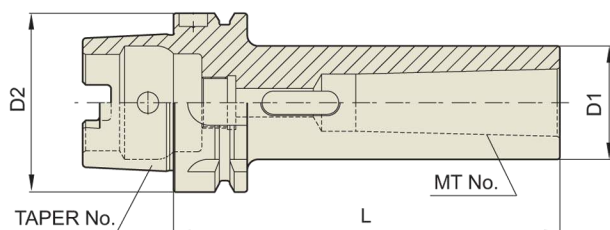
■ DIN 69871-SK

DIN 69871-SK	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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◆ STANDARD

Unit : mm

TAPER No.	MODEL No.	MT No.	d1	D1	L	Weight (Kg)	Stock
30	SK30-MTA1-50	1	12.065	25	50	0.72	
	SK30-MTA2-60	2	17.78	32	60	0.87	
	SK30-MTA3-80	3	23.825	40	80	1.02	
40	SK40-MTA1-50	1	12.065	25	50	1.49	●
	SK40-MTA1-115	1	12.065	25	115	2.10	●
	SK40-MTA2-50	2	17.78	32	50	1.62	●
	SK40-MTA3-70	3	23.825	40	70	1.65	●
	SK40-MTA4-95	4	31.267	48	95	1.90	●
50	SK50-MTA1-45	1	12.065	25	45	2.60	
	SK50-MTA2-60	2	17.78	32	60	2.66	
	SK50-MTA3-65	3	23.825	40	65	2.75	
	SK50-MTA4-95	4	31.267	48	95	3.00	
	SK50-MTA5-105	5	44.399	63	105	3.30	



DIN 69893-HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

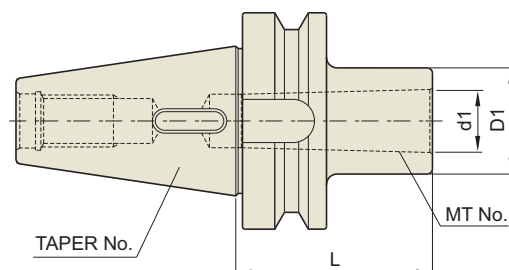
Unit : mm

TAPER No.	MODEL No.	MT No.	D1	D2	L	Weight (Kg)	Stock
50A	HSK50A-MTA1-100	1	25	50	100	0.67	
	HSK50A-MTA2-120	2	32	50	120	0.78	
	HSK50A-MTA3-140	3	40	50	140	0.91	
63A	HSK63A-MTA1-100	1	25	63	100	0.87	
	HSK63A-MTA2-120	2	32	63	120	1.28	
	HSK63A-MTA3-140	3	40	63	140	1.44	
	HSK63A-MTA4-160	4	48	63	160	1.86	
100A	HSK100A-MTA1-110	1	25	100	110	2.12	
	HSK100A-MTA2-120	2	32	100	120	2.41	
	HSK100A-MTA3-150	3	40	100	150	2.82	
	HSK100A-MTA4-170	4	48	100	170	3.63	
	HSK100A-MTA5-200	5	63	100	200	4.80	

MORSE TAPER ARBOR

MTA

EINSATZHÜLSEN FÜR MORSEKEGEL
DOUILLES DE RÉDUCTION CÔNE MORSE
MANDRINO RIDUZIONE CONO MORSE
REDUCTORES A MORSE



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	MT No.	L	d1	D1	Weight (Kg)	Stock
30	BT30-MTA1-45	1	45	12,065	25	0.4	●
	BT30-MTA2-60	2	60	17,780	32	0.5	●
	BT30-MTA2-120	2	120	17,780	32	0.6	
	BT30-MTA3-75	3	75	23,825	40	0.7	●
40	BT40-MTA1-45	1	45	12,065	25	1.0	●
	BT40-MTA1-120	1	120	12,065	25	1.3	
	BT40-MTA2-60	2	60	17,780	32	1.0	●
	BT40-MTA2-120	2	120	17,780	32	1.4	
	BT40-MTA3-75	3	75	23,825	40	1.2	●
	BT40-MTA3-135	3	135	23,825	40	1.8	
	BT40-MTA4-95	4	95	31,267	50	1.1	●
50	BT40-MTA4-165	4	165	31,267	50	2.4	
	BT50-MTA1-45	1	45	12,065	25	4.0	
	BT50-MTA1-120	1	120	12,065	25	4.3	
	BT50-MTA1-180	1	180	12,065	25	4.3	
	BT50-MTA2-45	2	45	17,780	32	4.0	
	BT50-MTA2-135	2	135	17,780	32	4.4	
	BT50-MTA2-180	2	180	17,780	32	4.6	
	BT50-MTA3-45	3	45	23,825	40	3.9	
	BT50-MTA3-150	3	150	23,825	40	4.7	
	BT50-MTA3-180	3	180	23,825	40	4.9	
	BT50-MTA4-75	4	75	31,267	50	4.0	
	BT50-MTA4-105	4	105	31,267	50	4.5	
	BT50-MTA4-180	4	180	31,267	50	5.4	
	BT50-MTA5-105	5	105	44,399	65	4.5	
	BT50-MTA5-210	5	210	44,399	65	7.2	
	BT50-MTA5-270	5	270	44,399	65	7.5	

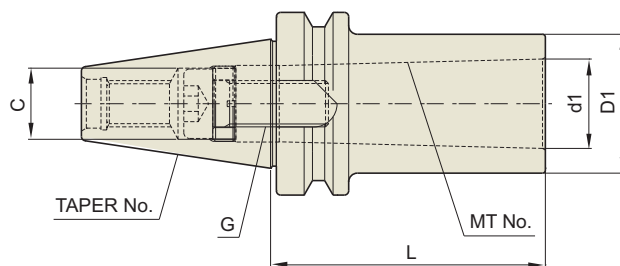
►CAT(ANSI B5.50) taper and Inch type products are available.

Morse Taper
Arbor

MORSE TAPER ARBOR

MTA/MTB

EINSATZHÜLSEN FÜR MORSEKEGEL
DOUILLES DE RÉDUCTION CÔNE MORSE
MANDRINO RIDUZIONE CONO MORSE
REDUCTORES A MORSE

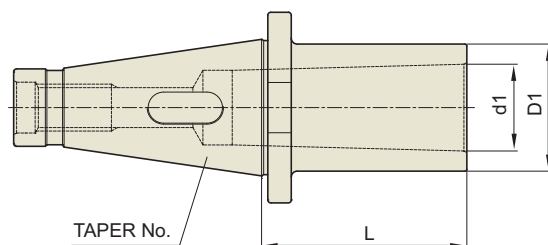


JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	MT No.	d1	D1	D1	C	G	Weight (Kg)	Stock
30	BT30-MTB1-45	1	45	12,065	25	10	M6×1.0	0.8	
	BT30-MTB2-45	2	45	17,780	32	—	M10×1.5	0.8	
40	BT40-MTB1-45	1	45	12,065	25	10	M6×1.0	1.0	
	BT40-MTB2-45	2	45	17,780	32	13,5	M10×1.5	1.1	
	BT40-MTB3-60	3	60	23,825	40	—	M12×1.75	1.1	
	BT40-MTB4-85	4	85	31,267	50	—	M16×2.0	1.3	
50	BT50-MTB1-45	1	45	12,065	25	10	M6×1.0	3.9	
	BT50-MTB2-45	2	45	17,780	32	16	M10×1.5	3.9	
	BT50-MTB3-60	3	60	23,825	40	18	M12×1.75	3.9	
	BT50-MTB4-75	4	75	31,267	50	20,5	M16×2.0	3.9	



Taper Accuracy AT3	G Value —	RPM —	Coolant System —
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■ ANSI B5.18-NT

Unit : mm

TAPER No.	MODEL No.	MT No.	RANGE OF DRILL		D1	L	DRAW THREAD	Weight (Kg)	Stock
			MIN	MAX					
40	NT40-MTA1-30	1	2.0	14.0	25	30	U 5/8-11(M16×2)	0.90	
	NT40-MTA2-30	2	14.1	23.0	32	30	U 5/8-11(M16×2)	1.00	
	NT40-MTA3-35	3	23.1	32.0	40	45	U 5/8-11(M16×2)	1.00	
	NT40-MTA4-90	4	32.1	50.0	50	90	U 5/8-11(M16×2)	1.20	
50	NT50-MTA1-30	1	2.0	14.0	25	30	U 1-8(M24×3)	3.50	
	NT50-MTA2-30	2	14.1	23.0	32	30	U 1-8(M24×3)	3.50	
	NT50-MTA3-30	3	23.1	32.0	40	30	U 1-8(M24×3)	3.50	
	NT50-MTA4-45	4	32.1	50.0	50	45	U 1-8(M24×3)	3.50	
	NT50-MTA5-105	5	50.1	75.0	60	105	U 1-8(M24×3)	4.00	

►CAT(ANSI B5.50) taper and Inch type products are available.

TOOLING SYSTEM

SK SLIM CHUCK



SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE
REDUCIDO

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

DIN 69893 / ISO 12164 - 1 - HSK

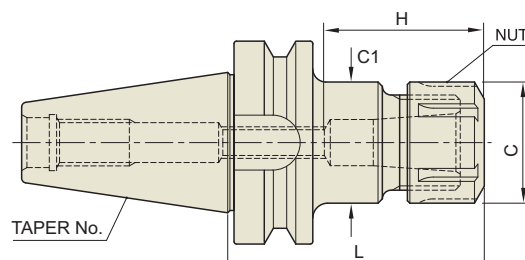
STRAIGHT - K

ACCESSORY & PART

- SK COLLET
- SK NUT

DONRAY PREMIUM

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD
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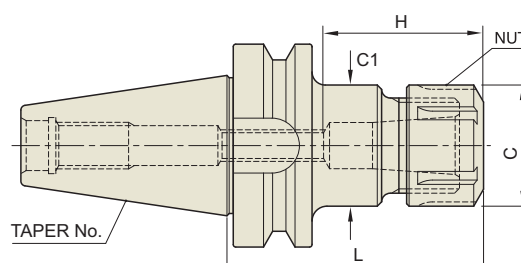
■ CBT (BT DUAL CONTACT)

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
30	CBT30-SKA06-60	1.8 ~ 6.0	60	20	19.5	21	35	SKC6	0.7	
	CBT30-SKA06-90	1.8 ~ 6.0	90	20	19.5	21	35	SKC6	0.8	
	CBT30-SKA10-60	1.75 ~ 10.0	60	28	27.5	30	50	SKC10	0.9	
	CBT30-SKA10-90	1.75 ~ 10.0	90	28	27.5	30	50	SKC10	1	
	CBT30-SKA13-60	2.75 ~ 13.0	60	33	33	31	65	SKC13	1	
	CBT30-SKA13-90	2.75 ~ 13.0	90	33	33	31	65	SKC13	1.1	
	CBT30-SKA16-60	2.75 ~ 16.0	60	40	40	45	60	SKC16	1.1	
	CBT30-SKA16-90	2.75 ~ 16.0	90	40	40	45	60	SKC16	1.2	
	CBT30-SKA20-60	3.5 ~ 20.0	60	48.5	48.5	65	75	SKC20	1.3	
	CBT30-SKA20-90	3.5 ~ 20.0	90	48.5	48.5	65	75	SKC20	1.4	
	CBT30-SKA25-90	16.0 ~ 25.4	90	55	55	55	75	SKC25	1.5	
40	CBT40-SKA06-90	1.8 ~ 6.0	90	20	19.5	21	35	SKC6	1.1	
	CBT40-SKA06-120	1.8 ~ 6.0	120	20	19.5	21	35	SKC6	1.4	
	CBT40-SKA06-150	1.8 ~ 6.0	150	20	19.5	21	35	SKC6	1.5	
	CBT40-SKA10-90	1.75 ~ 10.0	90	28	27.5	30	50	SKC10	1.2	
	CBT40-SKA10-120	1.75 ~ 10.0	120	28	27.5	30	50	SKC10	1.4	
	CBT40-SKA10-150	1.75 ~ 10.0	150	28	27.5	30	50	SKC10	1.6	
	CBT40-SKA13-90	2.75 ~ 13.0	90	33	33	31	65	SKC13	1.4	
	CBT40-SKA13-120	2.75 ~ 13.0	120	33	33	31	65	SKC13	1.6	
	CBT40-SKA13-150	2.75 ~ 13.0	150	33	40	31	65	SKC13	1.8	
	CBT40-SKA16-90	2.75 ~ 16.0	90	40	40	45	70	SKC16	1.5	
	CBT40-SKA16-120	2.75 ~ 16.0	120	40	40	45	70	SKC16	1.7	
	CBT40-SKA16-150	2.75 ~ 16.0	150	40	40	45	70	SKC16	1.9	
	CBT40-SKA20-90	3.5 ~ 20.0	90	48.5	48.5	47	80	SKC20	1.6	
	CBT40-SKA20-120	3.5 ~ 20.0	120	48.5	48.5	47	80	SKC20	2	
	CBT40-SKA20-150	3.5 ~ 20.0	150	48.5	48.5	47	80	SKC20	2.4	
	CBT40-SKA25-90	16.0 ~ 25.4	90	55	55	55	85	SKC25	1.8	
	CBT40-SKA25-120	16.0 ~ 25.4	120	55	55	55	85	SKC25	2	
	CBT40-SKA25-150	16.0 ~ 25.4	150	55	55	55	85	SKC25	2.3	

► For applicable SKC collet, please refer to page 152~153.

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



CBT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD
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■ CBT (BT DUAL CONTACT)

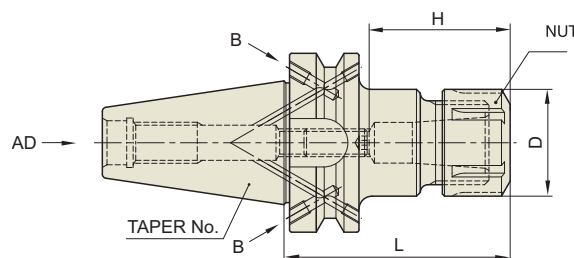
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
50	CBT50-SKA06-105	1.8 ~ 6.0	105	20	19.5	21	35	SKC6	3.8	
	CBT50-SKA06-135	1.8 ~ 6.0	135	20	19.5	21	35	SKC6	3.9	
	CBT50-SKA06-165	1.8 ~ 6.0	165	20	32.5	21	35	SKC6	4	
	CBT50-SKA06-195	1.8 ~ 6.0	195	20	32.5	21	35	SKC6	4.2	
	CBT50-SKA10-105	1.75 ~ 10.0	105	28	27.5	30	50	SKC10	4.2	
	CBT50-SKA10-135	1.75 ~ 10.0	135	28	27.5	30	50	SKC10	4.4	
	CBT50-SKA10-165	1.75 ~ 10.0	165	28	37.4	30	50	SKC10	4.6	
	CBT50-SKA10-195	1.75 ~ 10.0	195	28	37.4	30	50	SKC10	4.8	
	CBT50-SKA13-105	2.75 ~ 13.0	105	33	33	31	65	SKC13	4.5	
	CBT50-SKA13-135	2.75 ~ 13.0	135	33	33	31	65	SKC13	4.7	
	CBT50-SKA13-165	2.75 ~ 13.0	165	33	45	31	65	SKC13	4.9	
	CBT50-SKA13-195	2.75 ~ 13.0	195	33	45	31	65	SKC13	5.2	
	CBT50-SKA16-105	2.75 ~ 16.0	105	40	40	45	70	SKC16	4.7	
	CBT50-SKA16-135	2.75 ~ 16.0	135	40	40	45	70	SKC16	4.9	
	CBT50-SKA16-165	2.75 ~ 16.0	165	40	40	45	70	SKC16	5.1	
	CBT50-SKA16-195	2.75 ~ 16.0	195	40	40	45	70	SKC16	5.5	
	CBT50-SKA20-105	3.5 ~ 20.0	105	48.5	48.5	47	80	SKC20	4.3	
	CBT50-SKA20-135	3.5 ~ 20.0	135	48.5	48.5	47	80	SKC20	4.6	
	CBT50-SKA20-165	3.5 ~ 20.0	165	48.5	48.5	47	80	SKC20	5	
	CBT50-SKA20-195	3.5 ~ 20.0	195	48.5	48.5	47	80	SKC20	5.4	
	CBT50-SKA25-105	16.0 ~ 25.4	105	55	55	55	85	SKC25	5.2	
	CBT50-SKA25-135	16.0 ~ 25.4	135	55	55	55	85	SKC25	5.4	
	CBT50-SKA25-165	16.0 ~ 25.4	165	55	55	55	85	SKC25	5.6	
	CBT50-SKA25-195	16.0 ~ 25.4	195	55	55	55	85	SKC25	6	

► For applicable SKC collet, please refer to page 152~153.

SK Slim
Chuck

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD/B
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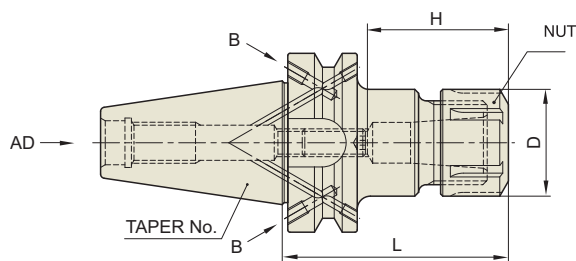
■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
30	BT30AD/B-SKA06-60	1.8 ~ 6.0	60	20	19.5	21	35	SKC6	0.7	
	BT30AD/B-SKA06-90	1.8 ~ 6.0	90	20	19.5	21	35	SKC6	0.8	
	BT30AD/B-SKA10-60	1.75 ~ 10.0	60	28	27.5	30	50	SKC10	0.9	
	BT30AD/B-SKA10-90	1.75 ~ 10.0	90	28	27.5	30	50	SKC10	1	
	BT30AD/B-SKA13-60	2.75 ~ 13.0	60	33	33	31	65	SKC13	1	
	BT30AD/B-SKA13-90	2.75 ~ 13.0	90	33	33	31	65	SKC13	1.1	
	BT30AD/B-SKA16-60	2.75 ~ 16.0	60	40	40	45	60	SKC16	1.1	
	BT30AD/B-SKA16-90	2.75 ~ 16.0	90	40	40	45	60	SKC16	1.2	
	BT30AD/B-SKA20-60	3.5 ~ 20.0	60	48.5	48.5	65	75	SKC20	1.3	
	BT30AD/B-SKA20-90	3.5 ~ 20.0	90	48.5	48.5	65	75	SKC20	1.4	
40	BT30AD/B-SKA25-90	16.0 ~ 25.4	90	55	55	55	75	SKC25	1.5	
	BT40AD/B-SKA06-90	1.8 ~ 6.0	90	20	19.5	21	35	SKC6	1.1	
	BT40AD/B-SKA06-120	1.8 ~ 6.0	120	20	19.5	21	35	SKC6	1.4	
	BT40AD/B-SKA06-150	1.8 ~ 6.0	150	20	19.5	21	35	SKC6	1.5	
	BT40AD/B-SKA10-90	1.75 ~ 10.0	90	28	27.5	30	50	SKC10	1.2	
	BT40AD/B-SKA10-120	1.75 ~ 10.0	120	28	27.5	30	50	SKC10	1.4	
	BT40AD/B-SKA10-150	1.75 ~ 10.0	150	28	27.5	30	50	SKC10	1.6	
	BT40AD/B-SKA13-90	2.75 ~ 13.0	90	33	33	31	65	SKC13	1.4	
	BT40AD/B-SKA13-120	2.75 ~ 13.0	120	33	33	31	65	SKC13	1.6	
	BT40AD/B-SKA13-150	2.75 ~ 13.0	150	33	40	31	65	SKC13	1.8	
	BT40AD/B-SKA16-90	2.75 ~ 16.0	90	40	40	45	70	SKC16	1.5	
	BT40AD/B-SKA16-120	2.75 ~ 16.0	120	40	40	45	70	SKC16	1.7	
	BT40AD/B-SKA16-150	2.75 ~ 16.0	150	40	40	45	70	SKC16	1.9	
	BT40AD/B-SKA20-90	3.5 ~ 20.0	90	48.5	48.5	47	80	SKC20	1.6	
	BT40AD/B-SKA20-120	3.5 ~ 20.0	120	48.5	48.5	47	80	SKC20	2	
	BT40AD/B-SKA20-150	3.5 ~ 20.0	150	48.5	48.5	47	80	SKC20	2.4	
	BT40AD/B-SKA25-90	16.0 ~ 25.4	90	55	55	55	85	SKC25	1.8	
	BT40AD/B-SKA25-120	16.0 ~ 25.4	120	55	55	55	85	SKC25	2	
	BT40AD/B-SKA25-150	16.0 ~ 25.4	150	55	55	55	85	SKC25	2.3	

► For applicable SKC collet, please refer to page 152~153.

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



JIS B6339 -BT	Taper Accuracy AT3	G Value 2.5	RPM 25,000	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

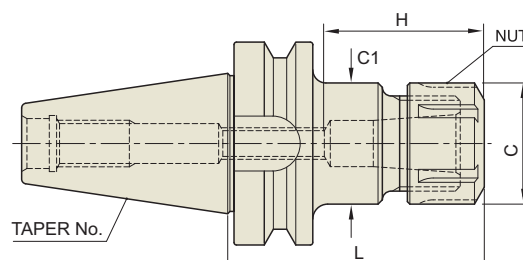
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
50	BT50AD/B-SKA06-105	1.8 ~ 6.0	105	20	19.5	21	35	SKC6	3.8	
	BT50AD/B-SKA06-135	1.8 ~ 6.0	135	20	19.5	21	35	SKC6	3.9	
	BT50AD/B-SKA06-165	1.8 ~ 6.0	165	20	32.5	21	35	SKC6	4	
	BT50AD/B-SKA06-195	1.8 ~ 6.0	195	20	32.5	21	35	SKC6	4.2	
	BT50AD/B-SKA10-105	1.75 ~ 10.0	105	28	27.5	30	50	SKC10	4.2	
	BT50AD/B-SKA10-135	1.75 ~ 10.0	135	28	27.5	30	50	SKC10	4.4	
	BT50AD/B-SKA10-165	1.75 ~ 10.0	165	28	37.4	30	50	SKC10	4.6	
	BT50AD/B-SKA10-195	1.75 ~ 10.0	195	28	37.4	30	50	SKC10	4.8	
	BT50AD/B-SKA13-105	2.75 ~ 13.0	105	33	33	31	65	SKC13	4.5	
	BT50AD/B-SKA13-135	2.75 ~ 13.0	135	33	33	31	65	SKC13	4.7	
	BT50AD/B-SKA13-165	2.75 ~ 13.0	165	33	45	31	65	SKC13	4.9	
	BT50AD/B-SKA13-195	2.75 ~ 13.0	195	33	45	31	65	SKC13	5.2	
	BT50AD/B-SKA16-105	2.75 ~ 16.0	105	40	40	45	70	SKC16	4.7	
	BT50AD/B-SKA16-135	2.75 ~ 16.0	135	40	40	45	70	SKC16	4.9	
	BT50AD/B-SKA16-165	2.75 ~ 16.0	165	40	40	45	70	SKC16	5.1	
	BT50AD/B-SKA16-195	2.75 ~ 16.0	195	40	40	45	70	SKC16	5.5	
	BT50AD/B-SKA20-105	3.5 ~ 20.0	105	48.5	48.5	47	80	SKC20	4.3	
	BT50AD/B-SKA20-135	3.5 ~ 20.0	135	48.5	48.5	47	80	SKC20	4.6	
	BT50AD/B-SKA20-165	3.5 ~ 20.0	165	48.5	48.5	47	80	SKC20	5	
	BT50AD/B-SKA20-195	3.5 ~ 20.0	195	48.5	48.5	47	80	SKC20	5.4	
	BT50AD/B-SKA25-105	16.0 ~ 25.4	105	55	55	55	85	SKC25	5.2	
	BT50AD/B-SKA25-135	16.0 ~ 25.4	135	55	55	55	85	SKC25	5.4	
	BT50AD/B-SKA25-165	16.0 ~ 25.4	165	55	55	55	85	SKC25	5.6	
	BT50AD/B-SKA25-195	16.0 ~ 25.4	195	55	55	55	85	SKC25	6	

► For applicable SKC collet, please refer to page 152~153.

SK Slim
Chuck

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD

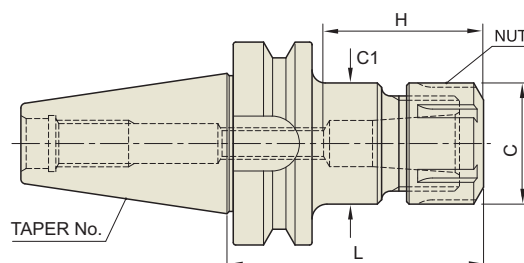
■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
30	BT30-SKA06-60	1.8 ~ 6.0	60	20	19.5	21	35	SKC6	0.7	●
	BT30-SKA06-90	1.8 ~ 6.0	90	20	19.5	21	35	SKC6	0.8	●
	BT30-SKA10-60	1.75 ~ 10.0	60	28	27.5	30	50	SKC10	0.9	●
	BT30-SKA10-90	1.75 ~ 10.0	90	28	27.5	30	50	SKC10	1	●
	BT30-SKA13-60	2.75 ~ 13.0	60	33	33	31	65	SKC13	1	
	BT30-SKA13-90	2.75 ~ 13.0	90	33	33	31	65	SKC13	1.1	
	BT30-SKA16-60	2.75 ~ 16.0	60	40	40	45	60	SKC16	1.1	●
	BT30-SKA16-90	2.75 ~ 16.0	90	40	40	45	60	SKC16	1.2	●
	BT30-SKA20-60	3.5 ~ 20.0	60	48.5	48.5	65	75	SKC20	1.3	
	BT30-SKA20-90	3.5 ~ 20.0	90	48.5	48.5	65	75	SKC20	1.4	
40	BT30-SKA25-90	16.0 ~ 25.4	90	55	55	55	75	SKC25	1.5	
	BT40-SKA06-90	1.8 ~ 6.0	90	20	19.5	21	35	SKC6	1.1	●
	BT40-SKA06-120	1.8 ~ 6.0	120	20	19.5	21	35	SKC6	1.4	●
	BT40-SKA06-150	1.8 ~ 6.0	150	20	19.5	21	35	SKC6	1.5	
	BT40-SKA10-90	1.75 ~ 10.0	90	28	27.5	30	50	SKC10	1.2	●
	BT40-SKA10-120	1.75 ~ 10.0	120	28	27.5	30	50	SKC10	1.4	●
	BT40-SKA10-150	1.75 ~ 10.0	150	28	27.5	30	50	SKC10	1.6	
	BT40-SKA13-90	2.75 ~ 13.0	90	33	33	31	65	SKC13	1.4	
	BT40-SKA13-120	2.75 ~ 13.0	120	33	33	31	65	SKC13	1.6	
	BT40-SKA13-150	2.75 ~ 13.0	150	33	40	31	65	SKC13	1.8	
	BT40-SKA16-90	2.75 ~ 16.0	90	40	40	45	70	SKC16	1.5	●
	BT40-SKA16-120	2.75 ~ 16.0	120	40	40	45	70	SKC16	1.7	●
	BT40-SKA16-150	2.75 ~ 16.0	150	40	40	45	70	SKC16	1.9	
	BT40-SKA20-90	3.5 ~ 20.0	90	48.5	48.5	47	80	SKC20	1.6	
	BT40-SKA20-120	3.5 ~ 20.0	120	48.5	48.5	47	80	SKC20	2	
	BT40-SKA20-150	3.5 ~ 20.0	150	48.5	48.5	47	80	SKC20	2.4	
	BT40-SKA25-90	16.0 ~ 25.4	90	55	55	55	85	SKC25	1.8	●
	BT40-SKA25-120	16.0 ~ 25.4	120	55	55	55	85	SKC25	2	●
	BT40-SKA25-150	16.0 ~ 25.4	150	55	55	55	85	SKC25	2.3	

► For applicable SKC collet, please refer to page 152~153.

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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■ JIS B6339/MAS 403-BT

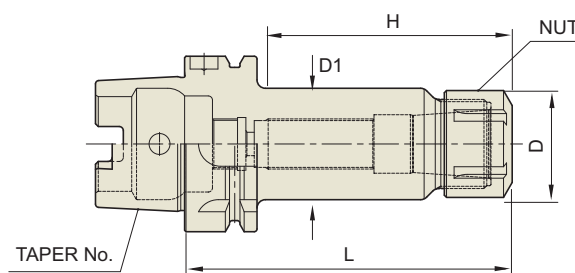
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
50	BT50-SKA06-105	1.8 ~ 6.0	105	20	19.5	21	35	SKC6	3.8	●
	BT50-SKA06-135	1.8 ~ 6.0	135	20	19.5	21	35	SKC6	3.9	●
	BT50-SKA06-165	1.8 ~ 6.0	165	20	32.5	21	35	SKC6	4	
	BT50-SKA06-195	1.8 ~ 6.0	195	20	32.5	21	35	SKC6	4.2	
	BT50-SKA10-105	1.75 ~ 10.0	105	28	27.5	30	50	SKC10	4.2	●
	BT50-SKA10-135	1.75 ~ 10.0	135	28	27.5	30	50	SKC10	4.4	●
	BT50-SKA10-165	1.75 ~ 10.0	165	28	37.4	30	50	SKC10	4.6	●
	BT50-SKA10-195	1.75 ~ 10.0	195	28	37.4	30	50	SKC10	4.8	
	BT50-SKA13-105	2.75 ~ 13.0	105	33	33	31	65	SKC13	4.5	
	BT50-SKA13-135	2.75 ~ 13.0	135	33	33	31	65	SKC13	4.7	
	BT50-SKA13-165	2.75 ~ 13.0	165	33	45	31	65	SKC13	4.9	
	BT50-SKA13-195	2.75 ~ 13.0	195	33	45	31	65	SKC13	5.2	
	BT50-SKA16-105	2.75 ~ 16.0	105	40	40	45	70	SKC16	4.7	●
	BT50-SKA16-135	2.75 ~ 16.0	135	40	40	45	70	SKC16	4.9	●
	BT50-SKA16-165	2.75 ~ 16.0	165	40	40	45	70	SKC16	5.1	●
	BT50-SKA16-195	2.75 ~ 16.0	195	40	40	45	70	SKC16	5.5	●
	BT50-SKA20-105	3.5 ~ 20.0	105	48.5	48.5	47	80	SKC20	4.3	
	BT50-SKA20-135	3.5 ~ 20.0	135	48.5	48.5	47	80	SKC20	4.6	
	BT50-SKA20-165	3.5 ~ 20.0	165	48.5	48.5	47	80	SKC20	5	
	BT50-SKA20-195	3.5 ~ 20.0	195	48.5	48.5	47	80	SKC20	5.4	
	BT50-SKA25-105	16.0 ~ 25.4	105	55	55	55	85	SKC25	5.2	●
	BT50-SKA25-135	16.0 ~ 25.4	135	55	55	55	85	SKC25	5.4	●
	BT50-SKA25-165	16.0 ~ 25.4	165	55	55	55	85	SKC25	5.6	●
	BT50-SKA25-195	16.0 ~ 25.4	195	55	55	55	85	SKC25	6	●

► For applicable SKC collet, please refer to page 152~153.

SK Slim
Chuck

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



DIN 69893- HSK	Taper Accuracy -	G Value 2.5	RPM 25,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	D1	L	H		COLLET	Weight (Kg)	Stock
						Min	Max			
32A	HSK32A-SKA06-50	1.8 ~ 6.0	20	19.5	50	21	35	SKC06	0.5	
	HSK32A-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.7	
40A	HSK40A-SKA06-60	1.8 ~ 6.0	20	19.5	60	21	35	SKC06	0.7	
	HSK40A-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.9	
	HSK40A-SKA13-80	2.75 ~ 13.0	33	33	80	31	65	SKC13	1	
50A	HSK50A-SKA06-80	1.8 ~ 6.0	20	19.5	80	21	35	SKC06	0.9	
	HSK50A-SKA10-100	1.75 ~ 10.0	28	27.5	100	30	50	SKC10	1.1	
	HSK50A-SKA13-100	2.75 ~ 13.0	33	33	100	31	65	SKC13	1.2	
63A	HSK63A-SKA06-100	1.8 ~ 6.0	20	19.5	100	21	35	SKC06	1.4	
	HSK63A-SKA10-100	1.75 ~ 10.0	28	27.5	100	30	50	SKC10	1.6	
	HSK63A-SKA13-100	2.75 ~ 13.0	33	33	100	31	65	SKC13	1.7	
	HSK63A-SKA16-120	2.75 ~ 16.0	40	40	120	45	70	SKC16	1.7	
	HSK63A-SKA20-120	3.5 ~ 20.0	48.5	48.5	120	65	75	SKC20	2.1	
	HSK63A-SKA25-150	16.0 ~ 25.4	55	55	150	55	85	SKC25	2.4	
80A	HSK80A-SKA6-100	1.8 ~ 6.0	20	19.5	120	21	35	SKC6		
	HSK80A-SKA10-120	1.75 ~ 10.0	28	27.5	120	30	50	SKC10		
	HSK80A-SKA13-120	2.75 ~ 13.0	33	33	120	31	65	SKC13		
	HSK80A-SKA16-120	2.75 ~ 16.0	40	40	120	45	70	SKC16		
	HSK80A-SKA20-130	3.5 ~ 20.0	48.5	48.5	130	65	75	SKC20		
	HSK80A-SKA25-150	16.0 ~ 25.4	55	55	150	55	85	SKC25		
100A	HSK100A-SKA06-120	1.8 ~ 6.0	20	19.5	120	21	35	SKC06	4	
	HSK100A-SKA10-150	1.75 ~ 10.0	28	27.5	150	30	50	SKC10	4.5	
	HSK100A-SKA13-150	2.75 ~ 13.0	33	40	150	31	65	SKC13	4.6	
	HSK100A-SKA16-150	2.75 ~ 16.0	40	40	150	45	70	SKC16	5.1	
	HSK100A-SKA20-150	3.5 ~ 20.0	48.5	48.5	150	65	75	SKC20	5.4	
	HSK100A-SKA25-160	16.0 ~ 25.4	55	55	160	55	85	SKC25	5.5	

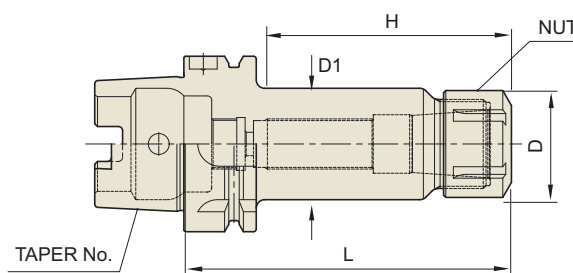
■ DIN 69893/ISO 12164-1-HSK FORM E

Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	D1	L	H		COLLET	Weight (Kg)	Stock
						Min	Max			
25E	HSK25E-SKA06-45	1.8 ~ 6.0	20	19.5	45	21	21	SKC06	-	
	HSK25E-SKA10-50	1.75 ~ 10.0	28	21.5	50	25	25	SKC10	-	
32E	HSK32E-SKA06-50	1.8 ~ 6.0	20	19.5	50	21	35	SKC06	0.5	
	HSK32E-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.7	
40E	HSK40E-SKA06-60	1.8 ~ 6.0	20	19.5	60	21	35	SKC06	0.7	
	HSK40E-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.9	
	HSK40E-SKA13-80	2.75 ~ 13.0	33	33	80	31	65	SKC13	1	

► For applicable SKC collet, please refer to page 152~153.

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



DIN 69893- HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

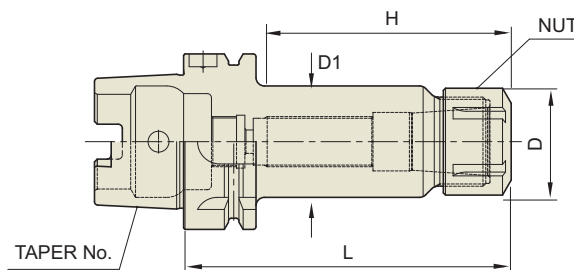
TAPER No.	MODEL No.	CLAMPING RANGE	D	D1	L	H		COLLET	Weight (Kg)	Stock
						Min	Max			
32A	HSK32A-SKA06-50	1.8 ~ 6.0	20	19.5	50	21	35	SKC06	0.5	
	HSK32A-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.7	
40A	HSK40A-SKA06-60	1.8 ~ 6.0	20	19.5	60	21	35	SKC06	0.7	●
	HSK40A-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.9	●
	HSK40A-SKA13-80	2.75 ~ 13.0	33	33	80	31	65	SKC13	1	●
50A	HSK50A-SKA06-80	1.8 ~ 6.0	20	19.5	80	21	35	SKC06	0.9	
	HSK50A-SKA10-100	1.75 ~ 10.0	28	27.5	100	30	50	SKC10	1.1	
	HSK50A-SKA13-100	2.75 ~ 13.0	33	33	100	31	65	SKC13	1.2	
63A	HSK63A-SKA06-100	1.8 ~ 6.0	20	19.5	100	21	35	SKC06	1.4	●
	HSK63A-SKA10-100	1.75 ~ 10.0	28	27.5	100	30	50	SKC10	1.6	●
	HSK63A-SKA13-100	2.75 ~ 13.0	33	33	100	31	65	SKC13	1.7	
	HSK63A-SKA16-120	2.75 ~ 16.0	40	40	120	45	70	SKC16	1.7	●
	HSK63A-SKA20-120	3.5 ~ 20.0	48.5	48.5	120	65	75	SKC20	2.1	
	HSK63A-SKA25-150	16.0 ~ 25.4	55	55	150	55	85	SKC25	2.4	●
80A	HSK80A-SKA6-100	1.8 ~ 6.0	20	19.5	120	21	35	SKC6		
	HSK80A-SKA10-120	1.75 ~ 10.0	28	27.5	120	30	50	SKC10		
	HSK80A-SKA13-120	2.75 ~ 13.0	33	33	120	31	65	SKC13		
	HSK80A-SKA16-120	2.75 ~ 16.0	40	40	120	45	70	SKC16		
	HSK80A-SKA20-130	3.5 ~ 20.0	48.5	48.5	130	65	75	SKC20		
	HSK80A-SKA25-150	16.0 ~ 25.4	55	55	150	55	85	SKC25		
100A	HSK100A-SKA06-120	1.8 ~ 6.0	20	19.5	120	21	35	SKC06	4	
	HSK100A-SKA10-150	1.75 ~ 10.0	28	27.5	150	30	50	SKC10	4.5	
	HSK100A-SKA13-150	2.75 ~ 13.0	33	40	150	31	65	SKC13	4.6	
	HSK100A-SKA16-150	2.75 ~ 16.0	40	40	150	45	70	SKC16	5.1	
	HSK100A-SKA20-150	3.5 ~ 20.0	48.5	48.5	150	65	75	SKC20	5.4	
	HSK100A-SKA25-160	16.0 ~ 25.4	55	55	160	55	85	SKC25	5.5	

► For applicable SKC collet, please refer to page 152~153.

SK SLIM CHUCK

SKA

SK SCHLANKE FUTTER
MANDRIN TYPE SK MINCE
SK MANDRINI SOTTILI
PORTAHERRAMIENTAS SK EJE REDUCIDO



DIN 69893- HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM E

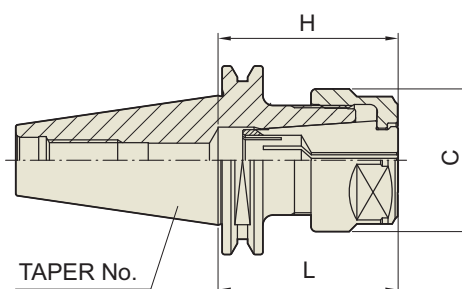
Unit : mm

TAPER No.	MODEL No.	CLAMPING RANGE	D	D1	L	H		COLLET	Weight (Kg)	Stock
						Min	Max			
25E	HSK25E-SKA06-45	1.8 ~ 6.0	20	19.5	45	21	21	SKC06	-	
	HSK25E-SKA10-50	1.75 ~ 10.0	28	21.5	50	25	25	SKC10	-	
32E	HSK32E-SKA06-50	1.8 ~ 6.0	20	19.5	50	21	35	SKC06	0.5	
	HSK32E-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.7	
40E	HSK40E-SKA06-60	1.8 ~ 6.0	20	19.5	60	21	35	SKC06	0.7	●
	HSK40E-SKA10-60	1.75 ~ 10.0	28	27.5	60	30	50	SKC10	0.9	●
	HSK40E-SKA13-80	2.75 ~ 13.0	33	33	80	31	65	SKC13	1	●

► For applicable SKC collet, please refer to page 152~153.

SK SLIM CHUCK **NEW**

SKA



ISO20/25	Taper Accuracy AT3	G Value 2.5	RPM 30,000	Coolant System AD
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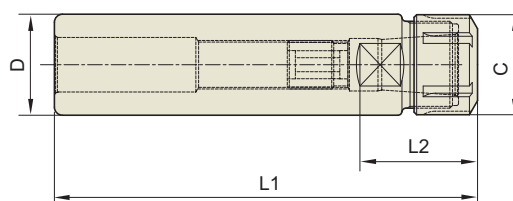
■ ISO20/25

Unit : mm

TAPER NO.	CODE No.	CLAMPING RANGE	L	C	C1	H		COLLET	Weight (Kg)	Stock
						Min	Max			
20	ISO20-SKA10-35	1.75 ~ 10.0	35	28	-	30	50	SKC10	0.5	
25	ISO25-SKA10-35	1.75 ~ 10.0	35	28	-	30	50	SKC10	0.7	

- Higher balancing grade is available upon request.
- To be supplied with assembling of pull stud bolt.

SK SCHLANKE FUTTER - GERADEAUS SCHAFT
 MANDRIN TYPE SK MINCE - TOUT DROIT TIGE
 SK MANDRINI SOTTILI - TIBIA DIRITTA
 PORTAHERRAMIENTAS SK EJE REDUCIDO - CANA RECTA



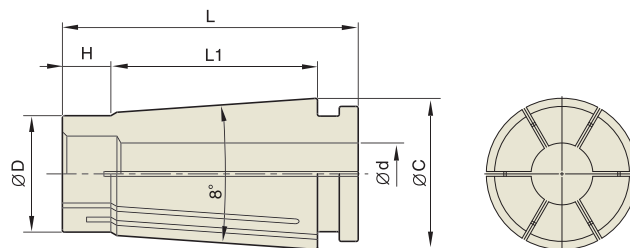
■ STRAIGHT-K

Unit : mm

TAPER No.	MODEL No.	RANGE	C	D	L1	L2	COLLET	Weight (Kg)	Stock
20	K20-SKA06-100	1.8 ~ 6.0	20	20	100	21 - 35	SKC06	0.2	●
	K20-SKA06-140	1.8 ~ 6.0	20	20	140	21 - 35	SKC06	0.3	●
	K20-SKA10-100	1.75 ~ 10.0	28	20	100	30 - 50	SKC10	0.2	●
	K20-SKA10-140	1.75 ~ 10.0	28	20	140	30 - 50	SKC10	0.3	●
25	K25-SKA06-100	1.8 ~ 6.0	20	25	100	21 - 35	SKC06	0.3	●
	K25-SKA06-140	1.8 ~ 6.0	20	25	140	21 - 35	SKC06	0.5	●
	K25-SKA10-100	1.75 ~ 10.0	28	25	100	30 - 50	SKC10	0.3	●
	K25-SKA10-150	1.75 ~ 10.0	28	25	150	30 - 50	SKC10	0.5	●
	K25-SKA13-100	2.75 ~ 13.0	33	25	100	31 - 65	SKC13	0.4	●
	K25-SKA13-150	2.75 ~ 13.0	33	25	150	31 - 65	SKC13	0.6	●
32	K32-SKA10-100	1.75 ~ 10.0	28	32	100	30 - 50	SKC10	0.5	●
	K32-SKA10-150	1.75 ~ 10.0	28	32	150	30 - 50	SKC10	0.7	●
	K32-SKA13-100	2.75 ~ 13.0	33	32	100	31 - 65	SKC13	1	●
	K32-SKA13-150	2.75 ~ 13.0	33	32	150	31 - 65	SKC13	1.2	●
	K32-SKA16-100	2.75 ~ 16.0	40	32	100	40 - 70	SKC16	1	●
	K32-SKA16-150	2.75 ~ 16.0	40	32	150	40 - 70	SKC16	1.2	●
	K32-SKA20-100	3.5 ~ 20.0	48.5	32	100	47 - 80	SKC20	1.1	●
	K32-SKA20-150	3.5 ~ 20.0	48.5	32	150	47 - 80	SKC20	1.3	●

► For applicable SKC collet, please refer to page 152~153.

SK SCHLANKE FUTTER SPANNZANGE
MANDRIN TYPE SK MINCE PINCE DE SERRAGE
SK MANDRINI SOTTILI PINZA DI SERRAGGIO
PORTAHERRAMIENTAS SK EJE REDUCIDO PINZA PORTAPIEZAS



◇ T.I.R : $\leq 0.005\text{mm}$ at 3D.
(Special collet with 0.003mm T.I.R at 3D is available upon request.)

Unit : mm

TYPE	MODEL No.	CLAMPING RANGE (d)	TYPE	MODEL No.	CLAMPING RANGE (d)	TYPE	MODEL No.	CLAMPING RANGE (d)
SKC6	SKC6-2	1.8 ~ 2.0	SKC10	SKC10-2	1.75 ~ 2.0	SKC13	SKC13-3	2.75 ~ 3.0
	SKC6-2.5	2.3 ~ 2.5		SKC10-2.5	2.25 ~ 2.5		SKC13-3.5	3.0 ~ 3.5
	SKC6-3	2.8 ~ 3.0		SKC10-3	2.75 ~ 3.0		SKC13-4	3.5 ~ 4.0
	SKC6-3.5	3.0 ~ 3.5		SKC10-3.5	3.0 ~ 3.5		SKC13-4.5	4.0 ~ 4.5
	SKC6-4	3.5 ~ 4.0		SKC10-4	3.5 ~ 4.0		SKC13-5	4.5 ~ 5.0
	SKC6-4.5	4.0 ~ 4.5		SKC10-4.5	4.0 ~ 4.5		SKC13-5.5	5.0 ~ 5.5
	SKC6-5	4.5 ~ 5.0		SKC10-5	4.5 ~ 5.0		SKC13-6	5.5 ~ 6.0
	SKC6-5.5	5.0 ~ 5.5		SKC10-5.5	5.0 ~ 5.5		SKC13-6.5	6.0 ~ 6.5
	SKC6-6	5.5 ~ 6.0		SKC10-6	5.5 ~ 6.0		SKC13-7	6.5 ~ 7.0
				SKC10-6.5	6.0 ~ 6.5		SKC13-7.5	7.0 ~ 7.5
				SKC10-7	6.5 ~ 7.0		SKC13-8	7.5 ~ 8.0
				SKC10-7.5	7.0 ~ 7.5		SKC13-8.5	8.0 ~ 8.5
				SKC10-8	7.5 ~ 8.0		SKC13-9	8.5 ~ 9.0
				SKC10-8.5	8.0 ~ 8.5		SKC13-9.5	9.0 ~ 9.5
				SKC10-9	8.5 ~ 9.0		SKC13-10	9.5 ~ 10.0
				SKC10-9.5	9.0 ~ 9.5		SKC13-10.5	10.0 ~ 10.5
				SKC10-10	9.5 ~ 10.0		SKC13-11	10.5 ~ 11.0
							SKC13-11.5	11.0 ~ 11.5
							SKC13-12	11.5 ~ 12.0
							SKC13-12.5	12.0 ~ 12.5
							SKC13-13	12.5 ~ 13.0

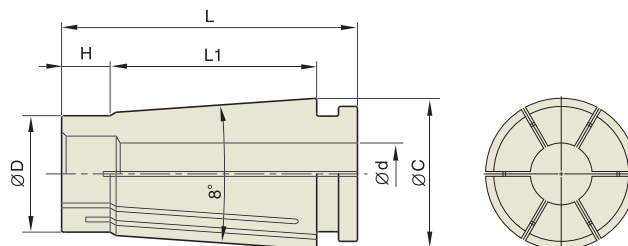
► Stock Control Item

SKC COLLET DIMENSION

Unit : mm

TYPE	D	L	L1	H	C	Weight (Kg)	Stock
SKC6	7.5	25.7	17.6	3.8	10	0.03	
SKC10	12	32	21.3	5	15	0.04	
SKC13	15.4	39	28.3	5.5	20		
SKC16	18.8	46	32	8	24	0.06	
SKC20	22.5	54.2	41	8	29		
SKC25	28.9	58.2	43	8.5	35	0.10	

SK SCHLANKE FUTTER SPANNZANGE
MANDRIN TYPE SK MINCE PINCE DE SERRAGE
SK MANDRINI SOTTILI PINZA DI SERRAGGIO
PORTAHERRAMIENTAS SK EJE REDUCIDO PINZA PORTAPIEZAS



◇ T.I.R : $\leq 0.005\text{mm}$ at 3D.
(Special collet with 0.003mm T.I.R at 3D is available upon request.)

Unit : mm

TYPE	MODEL No.	CLAMPING RANGE (d)	TYPE	MODEL No.	CLAMPING RANGE (d)	TYPE	MODEL No.	CLAMPING RANGE (d)
SKC16	SKC16-3	2.75 ~ 3.0	SKC20	SKC20-4	3.5 ~ 4.0	SKC25	SKC25-16,5	16.0 ~ 16.5
	SKC16-3.5	3.0 ~ 3.5		SKC20-4,5	4.0 ~ 4.5		SKC25-17	16.5 ~ 17.0
	SKC16-4	3.5 ~ 4.0		SKC20-5	4.5 ~ 5.0		SKC25-17,5	17.0 ~ 17.5
	SKC16-4,5	4.0 ~ 4.5		SKC20-5,5	5.0 ~ 5.5		SKC25-18	17.5 ~ 18.0
	SKC16-5	4.5 ~ 5.0		SKC20-6	5.5 ~ 6.0		SKC25-18,5	18.0 ~ 18.5
	SKC16-5,5	5.0 ~ 5.5		SKC20-6,5	6.0 ~ 6.5		SKC25-19	18.5 ~ 19.0
	SKC16-6	5.5 ~ 6.0		SKC20-7	6.5 ~ 7.0		SKC25-19,5	19.0 ~ 19.5
	SKC16-6,5	6.0 ~ 6.5		SKC20-7,5	7.0 ~ 7.5		SKC25-20	19.5 ~ 20.0
	SKC16-7	6.5 ~ 7.0		SKC20-8	7.5 ~ 8.0		SKC25-20,5	20.0 ~ 20.5
	SKC16-7,5	7.0 ~ 7.5		SKC20-8,5	8.0 ~ 8.5		SKC25-21	20.5 ~ 21.0
	SKC16-8	7.5 ~ 8.0		SKC20-9	8.5 ~ 9.0		SKC25-21,5	21.0 ~ 21.5
	SKC16-8,5	8.0 ~ 8.5		SKC20-9,5	9.0 ~ 9.5		SKC25-22	21.5 ~ 22.0
	SKC16-9	8.5 ~ 9.0		SKC20-10	9.5 ~ 10.0		SKC25-22,5	22.0 ~ 22.5
	SKC16-9,5	9.0 ~ 9.5		SKC20-10,5	10.0 ~ 10.5		SKC25-23	22.5 ~ 23.0
	SKC16-10	9.5 ~ 10.0		SKC20-11	10.5 ~ 11.0		SKC25-23,5	23.0 ~ 23.5
	SKC16-10,5	10.0 ~ 10.5		SKC20-11,5	11.0 ~ 11.5		SKC25-24	23.5 ~ 24.0
	SKC16-11	10.5 ~ 11.0		SKC20-12	11.5 ~ 12.0		SKC25-24,5	24.0 ~ 24.5
	SKC16-11,5	10.0 ~ 11.5		SKC20-12,5	12.0 ~ 12.5		SKC25-25	24.5 ~ 25.0
	SKC16-12	11.5 ~ 12.0		SKC20-13	12.5 ~ 13.0		SKC25-25,4	25.0 ~ 25.4
	SKC16-12,5	12.0 ~ 12.5		SKC20-13,5	13.0 ~ 13.5			
SKC16	SKC16-13	12.5 ~ 13.0		SKC20-14	13.5 ~ 14.0			
	SKC16-13,5	13.0 ~ 13.5		SKC20-14,5	14.0 ~ 14.5			
	SKC16-14	13.5 ~ 14.0		SKC20-15	14.5 ~ 15.0			
	SKC16-14,5	14.0 ~ 14.5		SKC20-15,5	15.0 ~ 15.5			
	SKC16-15	14.5 ~ 15.0		SKC20-16	15.5 ~ 16.0			
	SKC16-15,5	15.0 ~ 15.5		SKC20-16,5	16.0 ~ 16.5			
	SKC16-16	15.5 ~ 16.0		SKC20-17	16.5 ~ 17.0			
				SKC20-17,5	17.0 ~ 17.5			
				SKC20-18	17.5 ~ 18.0			
				SKC20-18,5	18.0 ~ 18.5			
				SKC20-19	18.5 ~ 19.0			
				SKC20-19,5	19.0 ~ 19.5			
				SKC20-20,0	19.5 ~ 20.0			

SK Slim
Chuck

► Stock Control Item

SKN NUSS
SKN ÉCROU
SKN DADO
SKN TUERCA

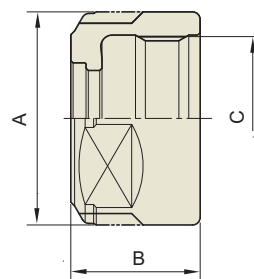


FIG 1

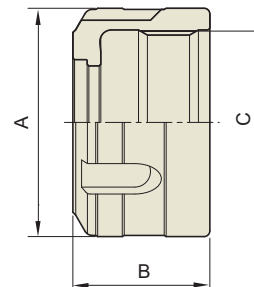


FIG 2

Unit : mm

TYPE	FIG	A	B	C	Weight (Kg)
SKN06	1	20	15	M15,5X1,0	0.02
SKN10	1	28	17	M21,5X1,0	0.04
SKN13	2	33	21	M27X1,0	0.05
SKN16	2	40	24	M32X1,5	0.06
SKN20	2	48,5	24	M40X1,0	0.08
SKN25	2	55	30	M42X1,5	0.10

► Stock Control Item

TOOLING SYSTEM

SYNCHRO TAPPING CHUCK



SYNCHRO GEWINDESCHNEIDFUTTER
SYNCHRO TARAUDER
SINCRO MANDRINI PER MASCHIATURA
SINCRO PORTAMACHOS

SYNCHRO TAPPING CHUCK (ER TYPE)

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

STRAIGHT - K

SYNCHRO TAPPING CHUCK (QUICK CHANGE TYPE)

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

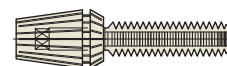
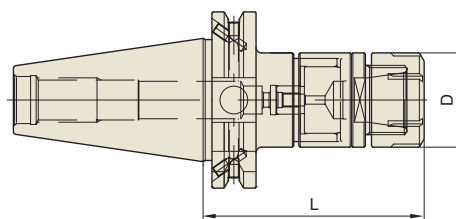
STRAIGHT - K

DONRAY PREMIUM

SYNCHRO TAPPING CHUCK (ER TYPE)

SYTER

SYNCHRO GEWINDESCHNEIDFUTTER (ER)
SYNCHRO TARAUDER (ER)
SINCRO MANDRINI PER MASCHIATURA (ER)
SINCRO PORTAMACHOS (ER)



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
-

RPM
-

Coolant
System
AD/B

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	CLAMPING RANGE	NUT	D	L	Weight (Kg)	Stock
40	SK40AD/B-SYTER12-79	M2~M8	3.0 ~ 6.2	ER16	28	79		●
	SK40AD/B-SYTER16-85	M3~M10	4.0 ~ 7.0	ER20	34	85		●
	SK40AD/B-SYTER20-90	M3~M14	4.0 ~ 10.5	ER25	42	90		●
	SK40AD/B-SYTER27-100	M4~M18	5.0 ~ 14.0	ER32	50	100		●
	SK40AD/B-SYTER33-120	M8~M24	6.2 ~ 19.0	ER40	63	120		●
50	SK50AD/B-SYTER12-79	M2~M8	3.0 ~ 6.2	ER16	28	79		
	SK50AD/B-SYTER16-85	M3~M10	4.0 ~ 7.0	ER20	34	85		
	SK50AD/B-SYTER20-90	M3~M14	4.0 ~ 10.5	ER25	42	90		
	SK50AD/B-SYTER27-100	M4~M18	5.0 ~ 14.0	ER32	50	100		
	SK50AD/B-SYTER33-105	M8~M24	6.2 ~ 19.0	ER40	63	105		

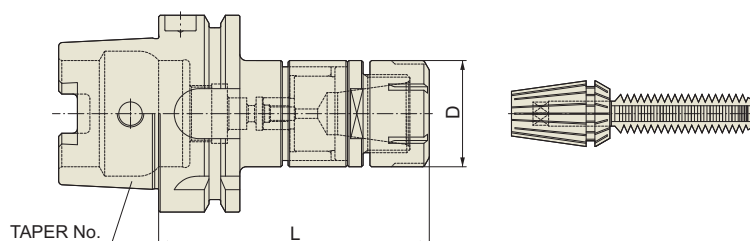
► Feature :

- To compensate for synchronization errors to extend tap life and to improve thread quality
- To compensate for pitch tolerances of taps.
- For machine with synchronized spindle.

► CAT(ANSI B5.50) taper and Inch type products are available.

► ER collet of page 84~86, and Tap ER collet of page 87 are applicable.

SYNCHRO GEWINDESCHNEIDFUTTER (ER)
 SYNCHRO TARAUDER (ER)
 SINCRO MANDRINI PER MASCHIATURA (ER)
 SINCRO PORTAMACHOS (ER)



DIN 69893 - HSK	Taper Accuracy -	G Value -	RPM -	Coolant System AD
--------------------	------------------------	--------------	----------	-------------------------

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	CLAMPING RANGE	NUT	D	L	Weight (Kg)	Stock
63A	HSK63A-SYTER16-90	M3~M10	4.0 ~ 7.0	ER20	34	90		
	HSK63A-SYTER20-94	M3~M14	4.0 ~ 10.5	ER25	42	94		
	HSK63A-SYTER27-105	M4~M18	5.0 ~ 14.0	ER32	50	105		

► Feature :

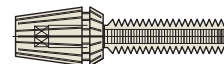
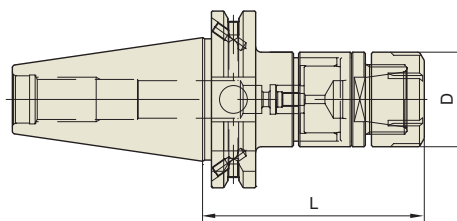
- To compensate for synchronization errors to extend tap life and to improve thread quality
- To compensate for pitch tolerances of taps.
- For machine with synchronized spindle.

► ER collet of page 84~86, and Tap ER collet of page 87 are applicable.

SYNCHRO TAPPING CHUCK (ER TYPE)

SYTER

SYNCHRO GEWINDESCHNEIDFUTTER (ER)
SYNCHRO TARAUDER (ER)
SINCRO MANDRINI PER MASCHIATURA (ER)
SINCRO PORTAMACHOS (ER)



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System AD/B
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■ JIS B6339/MAS 403-BT

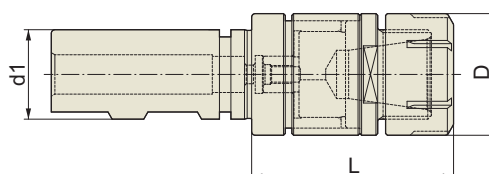
Unit : mm

TAPER No.	MODEL No.	TAP SIZE	CLAMPING RANGE	NUT	D	L	Weight (Kg)	Stock
40	BT40AD/B-SYTER12-79	M2~M8	3.0 ~ 6.2	ER16	28	79		●
	BT40AD/B-SYTER16-85	M3~M10	4.0 ~ 7.0	ER20	34	85		●
	BT40AD/B-SYTER20-90	M3~M14	4.0 ~ 10.5	ER25	42	90		●
	BT40AD/B-SYTER27-100	M4~M18	5.0 ~ 14.0	ER32	50	100		●
	BT40AD/B-SYTER33-125	M8~M24	6.2 ~ 19.0	ER40	63	125		●
50	BT50AD/B-SYTER12-100	M2~M8	3.0 ~ 6.2	ER16	28	100		
	BT50AD/B-SYTER16-100	M3~M10	4.0 ~ 7.0	ER20	34	100		
	BT50AD/B-SYTER20-100	M3~M14	4.0 ~ 10.5	ER25	42	100		
	BT50AD/B-SYTER27-110	M4~M18	5.0 ~ 14.0	ER32	50	110		
	BT50AD/B-SYTER33-125	M8~M24	6.2 ~ 19.0	ER40	63	125		

► Feature :

- To compensate for synchronization errors to extend tap life and to improve thread quality
- To compensate for pitch tolerances of taps.
- For machine with synchronized spindle.

► ER collet of page 84~86, and Tap ER collet of page 87 are applicable.



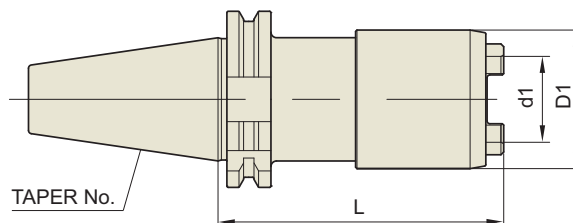
■ STRAIGHT-K

Unit : mm

MODEL No.	TAP SIZE	CLAMPING RANGE	NUT/COLLET	D	L	d1	Weight (Kg)	Stock
K20-SYTER16	M3~M10	4.0 ~ 7.0	ER20	34	58	Ø20		
K25-SYTER16	M3~M10	4.0 ~ 7.0	ER20	34	61	Ø25		
K25-SYTER27	M4~M18	5.0 ~ 14.0	ER32	50	69	Ø25		

SYNCHRO TAPPING CHUCK (QUICK CHANGE TYPE) SYTC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
SYNCHRO TARAUDER À CHANGEMENT RAPIDE
SINCRO MANDRINO PER MASCHIARE
SINCRO PORTAMACHOS DE CAMBIO RAPIDO



DIN 69871 - SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
-------------------	--------------------------	--------------	----------	------------------------

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	Matching inserts	d1	D1	L	Weight (Kg)	Stock
30	SK30-SYTC12-65	M3~M12	1	19	36	65	0.5	
	SK30-SYTC20-89	M6~M24	2	31	50	89	1	
40	SK40-SYTC12-65	M3~M12	1	19	36	65	1.1	●
	SK40-SYTC20-79	M6~M24	2	31	50	79	1.5	●
	SK40-SYTC33-115	M18~M38	3	48	74	115	3.3	●
50	SK50-SYTC12-65	M3~M12	1	19	36	65	3	
	SK50-SYTC20-79	M6~M24	2	31	50	79	3.3	
	SK50-SYTC33-115	M18~M38	3	48	74	115	5.2	

► Feature :

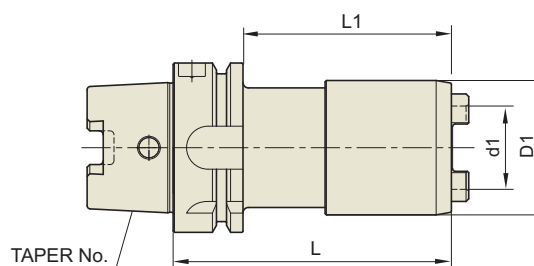
- To compensate for synchronization errors to extend tap life and to improve thread quality
- To compensate for pitch tolerances of taps.
- For machine with synchronized spindle.

► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Tap Adaptor, please refer to page 175~176.

SYNCHRO TAPPING CHUCK (QUICK CHANGE TYPE) SYTC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
SYNCHRO TARAUDER À CHANGEMENT RAPIDE
SINCRO MANDRINO PER MASCHIARE
SINCRO PORTAMACHOS DE CAMBIO RAPIDO



DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	-	-	-	-

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	Matching inserts	d1	D1	L	L1	Weight (Kg)	Stock
32A	HSK32A-SYTC12-75	M3~M12	1	19	36	75	55		
50A	HSK50A-SYTC12-72	M3~M12	1	19	36	72	46		
	HSK50A-SYTC20-91	M6~M24	2	31	50	91	65		
63A	HSK63A-SYTC12-75	M3~M12	1	19	36	75	49		●
	HSK63A-SYTC12-80	M3~M12	1	19	36	80	54		●
	HSK63A-SYTC12-120	M3~M12	1	19	36	120	94		●
	HSK63A-SYTC12-152	M3~M12	1	19	36	152	126		●
	HSK63A-SYTC12-180	M3~M12	1	19	36	180	154		●
	HSK63A-SYTC20-89	M6~M24	2	31	50	89	63		●
	HSK63A-SYTC33-121	M18~M38	3	48	74	121	95		●
100A	HSK100A-SYTC12-75	M3~M12	1	19	36	75	43		
	HSK100A-SYTC12-160	M3~M12	1	19	36	160	131		
	HSK100A-SYTC20-94	M6~M24	2	31	50	94	65		
	HSK100A-SYTC20-160	M6~M24	2	31	50	160	131		
	HSK100A-SYTC33-127	M18~M38	3	48	74	127	98		
	HSK100A-SYTC33-160	M18~M38	3	48	74	160	131		

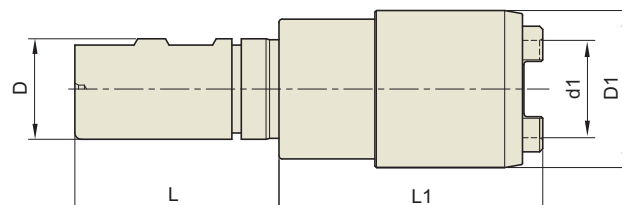
► Feature :

- To compensate for synchronization errors to extend tap life and to improve thread quality
- To compensate for pitch tolerances of taps.
- For machine with synchronized spindle.

► For applicable Tap Adaptor, please refer to page 175~176.

SYNCHRO TAPPING CHUCK (QUICK CHANGE TYPE) SYTC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
 SYNCHRO TARAUDER À CHANGEMENT RAPIDE
 SINCRO MANDRINO PER MASCHIARE
 SINCRO PORTAMACHOS DE CAMBIO RAPIDO



■ STRAIGHT-K

Unit : mm

TAPER No.	MODEL No.	For tap sizes	Matching inserts	d1	D1	L	L1	Weight (Kg)	Stock
20	K20-SYTC12-46	M3~M12	1	19	36	50	46		
	K20-SYTC12-107.5	M3~M12	1	19	36	50	107.5		
25	K25-SYTC12-46	M3~M12	1	19	36	56	46		
	K25-SYTC20-74	M6~M24	2	31	50	56	74		
	K25-SYTC33-107.5	M18~M38	3	48	74	56	107.5		
32	K32-SYTC12-74	M3~M12	1	31	50	60	74		

► Feature :

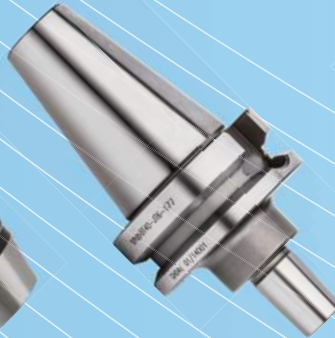
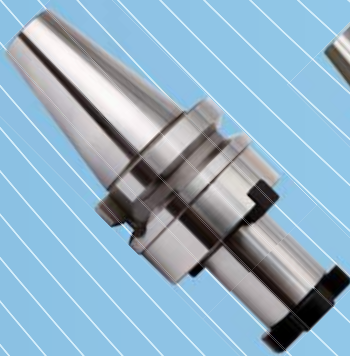
- To compensate for synchronization errors to extend tap life and to improve thread quality
- To compensate for pitch tolerances of taps.
- For machine with synchronized spindle.

► For applicable Tap Adaptor, please refer to page 175~176.



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MILLING CHUCK • MORSE TAPER ARBOR • SK SLIM CHUCK • SYNCHRO TAPPING CHUCK
TAPPING ER CHUCK • TAPPING CHUCK • FACE MILL ARBOR
NC DRILL CHUCK & OTHER TOOL HOLDERS • BORING SYSTEM • ACCESSORY & OTHERS

TOOLING SYSTEM

TAPPING ER CHUCK



ER - GEWINDESCHNEIDFUTTER
MANDRIN DE TARAUDAGE PINCE ER
MANDRINI PORTAPINZA ER PER
MASCHIATURA
PORTAPINZAS ER PARA MACHOS

DIN 69871 - SK

DIN 69893 / ISO 12164 - 1 - HSK

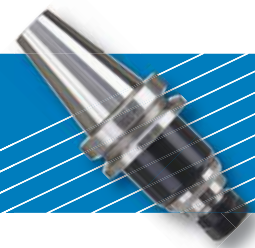
CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

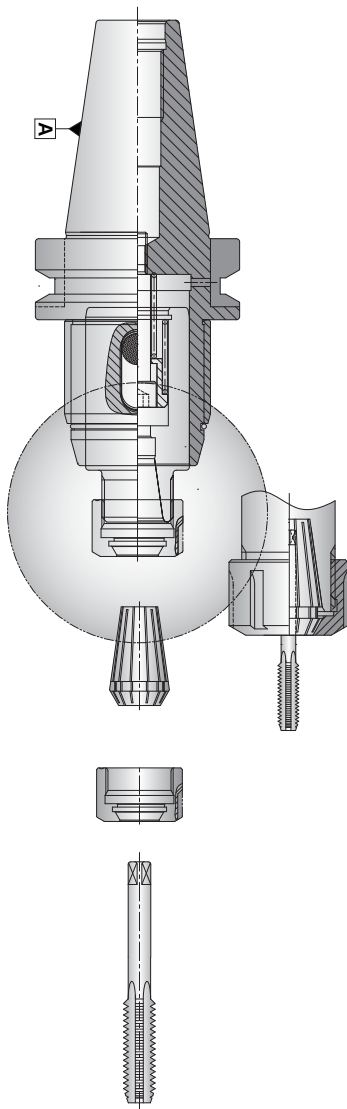
DONRAY PREMIUM

TECHNICAL INFORMATION

TAPPING ER CHUCK & TAPPING CHUCK



Tapping ER chuck

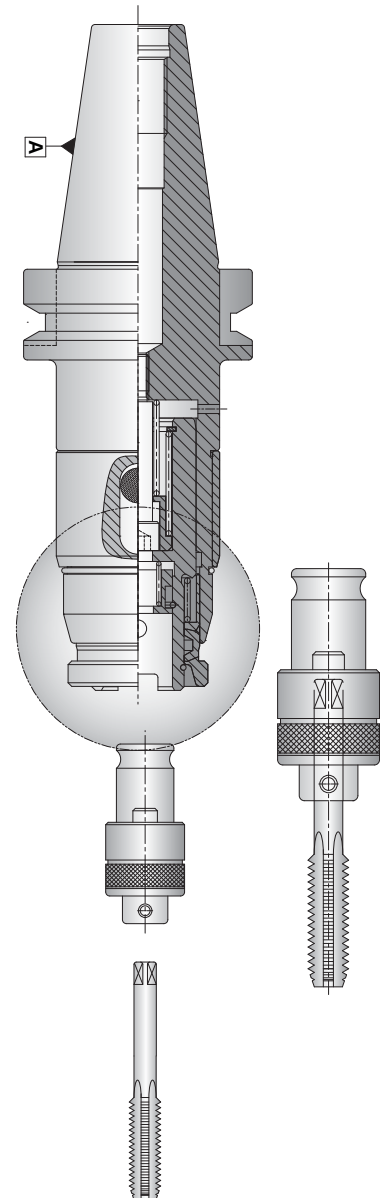


Minimizing tool interference during machining with short gauge line

Combining strength of strong torque power of ER chuck and tension and compression function of tapping chuck

Possible to change suitable tap for machining conditions by replacement of cheaper ER collet (Sharing collet with ER chuck) -> Saving costs

Tapping chuck



Interfered with tool during machining due to long gauge line

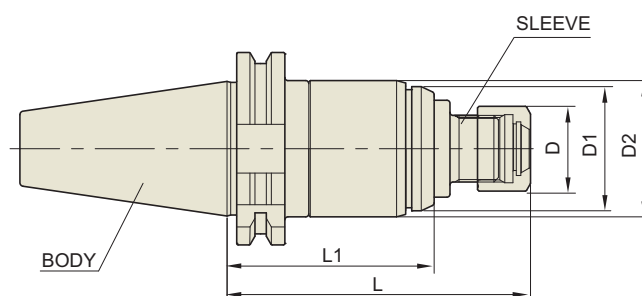
Tension and compression function

Preparing and changing expensive tap adaptor according to machining conditions

TAPPING ER CHUCK

TER

ER - GEWINDESCHNEIDFUTTER
MANDRIN DE TARAUDAGE PINCE ER
MANDRINI PORTAPINZA ER PER MASCHIATURA
PORTAPINZAS ER PARA MACHOS



DIN 69871 -SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	D	D1	D2	L	L1	NUT	Weight (Kg)	Stock
40	SK40-TER16-100	28	41	45	100	68,4	ER16	1,65	●
	SK40-TER16-150	28	41	45	150	118,4	ER16	1,85	●
	SK40-TER32-130	50	58	63	130	92	ER32	2,10	●
	SK40-TER32-150	50	58	63	150	112	ER32	2,30	●
50	SK50-TER16-115	28	41	45	115	79,4	ER16	4,30	
	SK50-TER16-150	28	41	45	150	114,4	ER16	4,50	
	SK50-TER32-120	50	58	63	120	83	ER32	4,65	
	SK50-TER32-150	50	58	63	150	113	ER32	4,85	

► CAT(ANSI B5.50) taper and Inch type products area available.

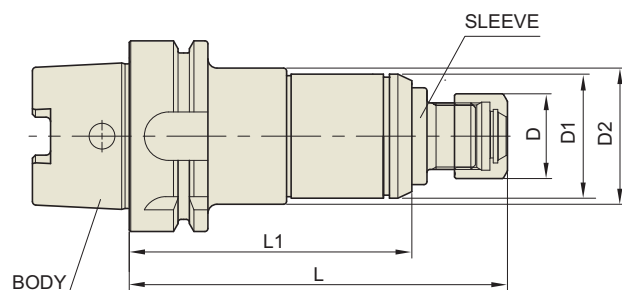
► ER collet of page 84~86, and Tap ER collet of page 87 are applicable.

Tapping ER
Chuck

TAPPING ER CHUCK

TER

ER - GEWINDESCHNEIDFUTTER
MANDRIN DE TARAUDAGE PINCE ER
MANDRINI PORTAPINZA ER PER MASCHIATURA
PORTAPINZAS ER PARA MACHOS



DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	-	-	-	-

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

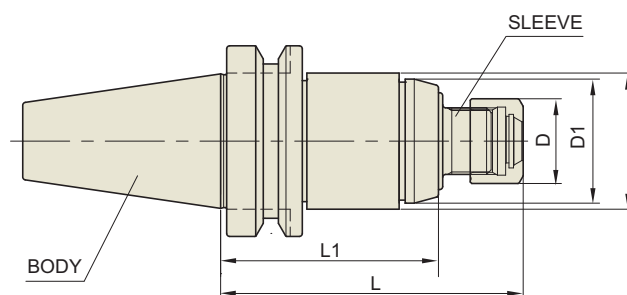
TAPER No.	MODEL No.	D	D1	D2	L	L1	NUT	Weight (Kg)	Stock
50A	HSK50A-TER16-125	28	41	45	125	93,4	ER16	1,20	
	HSK50A-TER16-150	28	41	45	150	118,4	ER16	1,30	
63A	HSK63A-TER16-125	28	41	45	125	93,4	ER16	1,70	●
	HSK63A-TER16-150	28	41	45	150	118,4	ER16	1,85	
	HSK63A-TER32-150	50	58	63	150	112	ER32	2,10	●
	HSK63A-TER32-180	50	58	63	180	142	ER32	2,30	
100A	HSK100A-TER16-130	28	41	45	130	98,4	ER16	4,00	
	HSK100A-TER16-150	28	41	45	150	118,4	ER16	4,20	
	HSK100A-TER32-150	50	58	63	150	112	ER32	4,40	
	HSK100A-TER32-180	50	58	63	180	142	ER32	4,60	

► ER collet of page 84~86, and Tap ER collet of page 87 are applicable.

TAPPING ER CHUCK

TER

ER - GEWINDESCHNEIDFUTTER
MANDRIN DE TARAUDAGE PINCE ER
MANDRINI PORTAPINZA ER PER MASCHIATURA
PORTAPINZAS ER PARA MACHOS



CBT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	-	-	-

■ CBT (BT DUAL CONTACT)

Unit : mm

TAPER No.	MODEL No.	D	D1	D2	L	L1	NUT	Weight (Kg)	Stock
40	CBT40-TER16-100	28	41	45	100	68.4	ER16	1.45	
	CBT40-TER16-150	28	41	45	150	118.4	ER16	2.00	
	CBT40-TER32-110	50	58	63	110	72	ER32	2.20	
	CBT40-TER32-150	50	58	63	150	112	ER32	2.70	
50	CBT50-TER16-115	28	41	45	115	79.4	ER16	3.95	
	CBT50-TER16-150	28	41	45	150	114.4	ER16	4.35	
	CBT50-TER32-120	50	58	63	120	83	ER32	4.70	
	CBT50-TER32-150	50	58	63	150	113	ER32	5.20	

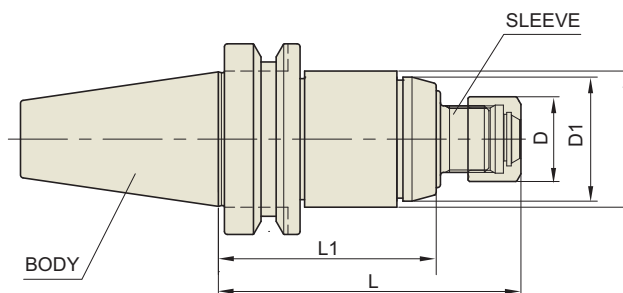
►ER collet of page 84~86, and Tap ER collet of page 87 are applicable.

Tapping ER
Chuck

TAPPING ER CHUCK

TER

ER - GEWINDESCHNEIDFUTTER
MANDRIN DE TARAUDAGE PINCE ER
MANDRINI PORTAPINZA ER PER MASCHIATURA
PORTAPINZAS ER PARA MACHOS



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	D	D1	D2	L	L1	NUT	Weight (Kg)	Stock
40	BT40-TER16-100	28	41	45	100	68.4	ER16	1.45	●
	BT40-TER16-150	28	41	45	150	118.4	ER16	2.00	●
	BT40-TER32-110	50	58	63	110	72	ER32	2.20	●
	BT40-TER32-150	50	58	63	150	112	ER32	2.70	●
50	BT50-TER16-115	28	41	45	115	79.4	ER16	3.95	●
	BT50-TER16-150	28	41	45	150	114.4	ER16	4.35	●
	BT50-TER32-120	50	58	63	120	83	ER32	4.70	●
	BT50-TER32-150	50	58	63	150	113	ER32	5.20	●

► CAT(ANSI B5.50) taper and Inch type products area available.

► ER collet of page 84~86, and Tap ER collet of page 87 are applicable.

TOOLING SYSTEM

TAPPING CHUCK



GEWINDESCHNEID -
SCHNELLWECHSELFUTTER
TARAUDER À CHANGEMENT RAPIDE
MANDRINO PER MASCHIARE
PORTAMACHOS DE CAMBIO RAPIDO

DIN 69871 - SK

DIN 69893 / ISO 12164-1-HSK

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

STRAIGHT - K

DIN 228 - MTA

ACCESSORY

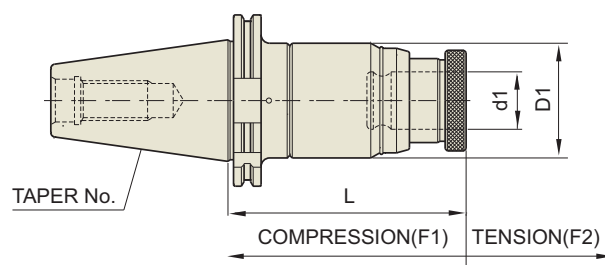
■ TAP ADAPTER

DONRAY PREMIUM

TAPPING CHUCK

TC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
SYNCHRO TARAUDER À CHANGEMENT RAPIDE
SINCRO MANDRINO PER MASCHIARE
SINCRO PORTAMACHOS DE CAMBIO RAPIDO



DIN 69871 -SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	d1	D1	L	F1	F2	Weight (Kg)	Stock
40	SK40-TC12-90	M3~M12	19	45	90	5	15	1.30	●
	SK40-TC12-130	M3~M12	19	45	130	5	15	1.80	●
	SK40-TC24-120	M6~M24	31	63	120	5	20	2.50	●
	SK40-TC24-142	M6~M24	31	63	142	5	20	2.80	●
50	SK50-TC12-130	M3~M12	19	45	130	5	15	4.30	
	SK50-TC12-175	M3~M12	19	45	175	5	15	5.50	
	SK50-TC24-142	M6~M24	31	63	142	5	20	5.30	
	SK50-TC24-187	M6~M24	31	63	187	5	20	7.80	
	SK50-TC38-175	M18~M38	48	98	175	10	25	7.50	

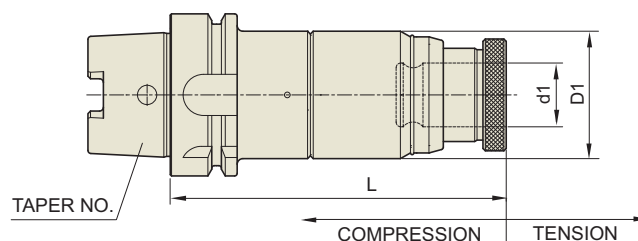
► CAT(ANSI B5.50) taper and Inch type products are available.

► For applicable Tap Adaptor, please refer to page 175~176.

TAPPING CHUCK

TC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
SYNCHRO TARAUDER À CHANGEMENT RAPIDE
SINCRO MANDRINO PER MASCHIARE
SINCRO PORTAMACHOS DE CAMBIO RAPIDO



DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	-	-	-	-

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	LENGTH COMPENSATION		d1	D1	L	Weight (Kg)	Stock
			COMP.	TEN.					
50A	HSK50A-TC12-120	M3~M12	5	15	19	45	120	0.8	
63A	HSK63A-TC12-120	M3~M12	5	15	19	45	120	1.00	
	HSK63A-TC12-150	M3~M12	5	15	19	45	150	1.70	
	HSK63A-TC24-142	M6~M24	5	20	31	63	142	2.40	
	HSK63A-TC24-172	M6~M24	5	20	31	63	172	2.70	
100A	HSK100A-TC12-130	M3~M12	5	15	19	45	130	4.30	
	HSK100A-TC12-175	M3~M12	5	15	19	45	175	4.80	
	HSK100A-TC12-220	M3~M12	5	15	19	45	220	5.30	
	HSK100A-TC24-142	M6~M24	5	20	31	63	142	5.20	
	HSK100A-TC24-187	M6~M24	5	20	31	63	187	6.60	
	HSK100A-TC38-200	M18~M38	10	25	48	98	200	8.00	

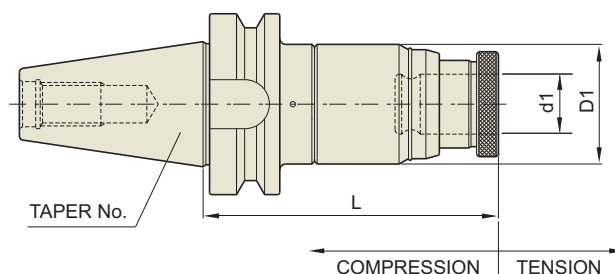
►For applicable Tap Adaptor, please refer to page 175~176.

Tapping
Chuck

TAPPING CHUCK

TC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
SYNCHRO TARAUDER À CHANGEMENT RAPIDE
SINCRO MANDRINO PER MASCHIARE
SINCRO PORTAMACHOS DE CAMBIO RAPIDO



CBT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ CBT (BT DUAL CONTACT)

Unit : mm

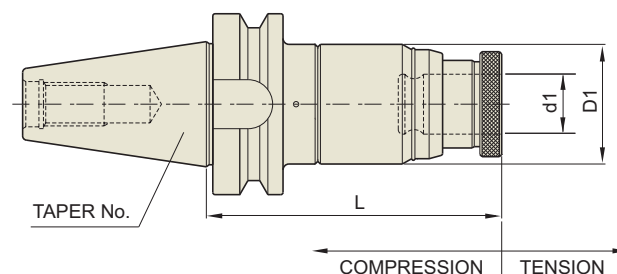
TAPER No.	MODEL No.	TAP SIZE	LENGTH COMPENSATION		d1	D1	L	Weight (Kg)	Stock
			COMP.	TEN.					
30	CBT30-TC12-105	M3~M12	5	15	19	45	105	1.0	
40	CBT40-TC12-90	M3~M12	5	15	19	45	90	1.5	●
	CBT40-TC12-130	M3~M12	5	15	19	45	130	1.6	
	CBT40-TC24-100	M6~M24	5	20	31	63	100	2.1	●
	CBT40-TC24-142	M6~M24	5	20	31	63	142	2.9	
50	CBT50-TC12-130	M3~M12	5	15	19	45	130	4.2	
	CBT50-TC12-175	M3~M12	5	15	19	45	175	4.8	
	CBT50-TC12-220	M3~M12	5	15	19	45	220	5.1	
	CBT50-TC24-142	M6~M24	5	20	31	63	142	5.8	
	CBT50-TC24-187	M6~M24	5	20	31	63	187	6.0	
	CBT50-TC38-175	M18~M38	10	25	48	98	175	8.3	

►For applicable Tap Adaptor, please refer to page 175~176.

TAPPING CHUCK

TC

SYNCHRO GEWINDESCHNEID-SCHNELLWECHSELFUTTER
SYNCHRO TARAUDER À CHANGEMENT RAPIDE
SINCRO MANDRINO PER MASCHIARE
SINCRO PORTAMACHOS DE CAMBIO RAPIDO



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	LENGTH COMPENSATION		d1	D1	L	Weight (Kg)	Stock
			COMP.	TEN.					
30	BT30-TC12-105	M3~M12	5	15	19	45	105	1.0	●
	BT40-TC12-90	M3~M12	5	15	19	45	90	1.5	●
40	BT40-TC12-130	M3~M12	5	15	19	45	130	1.6	
	BT40-TC24-100	M6~M24	5	20	31	63	100	2.1	●
	BT40-TC24-142	M6~M24	5	20	31	63	142	2.9	
50	BT50-TC12-130	M3~M12	5	15	19	45	130	4.2	●
	BT50-TC12-175	M3~M12	5	15	19	45	175	4.8	●
	BT50-TC12-220	M3~M12	5	15	19	45	220	5.1	
	BT50-TC24-142	M6~M24	5	20	31	63	142	5.8	●
	BT50-TC24-187	M6~M24	5	20	31	63	187	6.0	●
	BT50-TC38-175	M18~M38	10	25	48	98	175	8.3	●

► CAT(ANSI B5.50) taper and Inch type products are available.

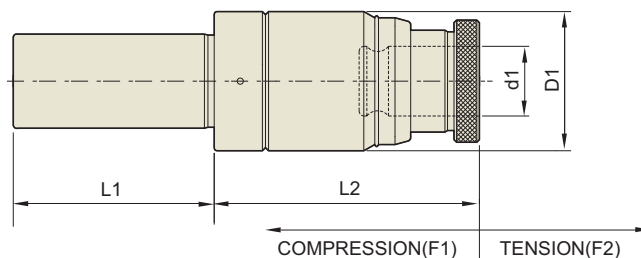
► For applicable Tap Adaptor, please refer to page 175~176.

Tapping
Chuck

TAPPING CHUCK

TC

GEWINDESCHNEID-SCHNELLWECHSELFUTTER - GERADEAUS SCHAFT
TARAUDER À CHANGEMENT RAPIDE - TOUT DROIT TIGE
MANDRINO PER MASCHIARE - TIBIA DIRITTA
PORTAMACHOS DE CAMBIO RAPIDO - CANA RECTA

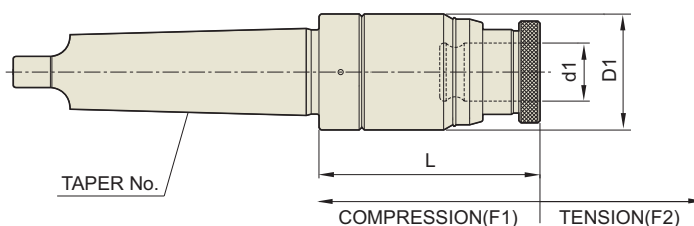


■ STRAIGHT-K

Unit : mm

TAPER No.	MODEL No.	TAP SIZE	LENGTH COMPENSATION		d1	D1	L1	L2	Weight (Kg)	Stock
			COMP.	TEN.						
32	K32-TC12-100	M3~M12	5	15	32	45	60	100	0.90	●
	K32-TC24-120	M6~M24	5	20	32	63	60	120	1.40	●
42	K42-TC12-100	M3~M12	5	15	42	45	70	100	1.10	
	K42-TC24-120	M6~M24	5	20	42	63	70	120	1.60	

►For applicable Tap Adaptor, please refer to page 175~176.



■ DIN 228-MTA

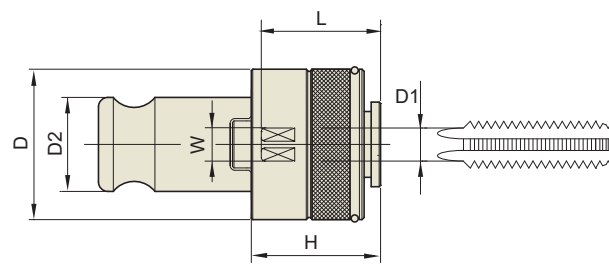
Unit : mm

TAPER No.	MODEL No.	TAP SIZE	LENGTH COMPENSATION		d1	D1	L	Weight (Kg)	Stock
			COMP.	TEN.					
3	MTA3-TC12-90	M3~M12	5	15	19	45	90	1.00	
	MTA3-TC24-115	M6~M24	5	20	31	63	115	2.00	
4	MTA4-TC12-105	M3~M12	5	15	19	45	105	1.20	
	MTA4-TC24-115	M6~M24	5	20	31	63	115	2.20	
5	MTA5-TC12-145	M3~M12	5	15	19	45	145	1.50	
	MTA5-TC24-175	M6~M24	5	20	31	63	175	2.60	

TAP ADAPTER (JIS)

TC

SCHNELLWECHSEL-EINSATZ
ADAPTATEUR CHANGEMENT RAPIDE
BUSSOLA A INNESTO RAPIDO
INSERTO DE CAMBIO RAPIDO



■ Below standard Tap Adaptor conforms to JIS.

Unit : mm

TAPER No.	MODEL No.	D	D1(Ø)	D2	H	W(□)	L	Weight (Kg)
TCS12	TCS12-M3	32	4	19	25	3.2	24	0.18
	TCS12-M4	32	5	19	25	4.	24	0.18
	TCS12-M5	32	5.5	19	25	4.5	24	0.18
	TCS12-M6, U1/4	32	6	19	25	4.5	24	0.18
	TCS12-M8	32	6.2	19	25	5	25	0.18
	TCS12-M10, U3/8	32	7	19	25	5.5	25	0.18
	TCS12-M12	32	8.5	19	25	6.5	26	0.18
TCS24	TCS24-M6	52	6	31	33	4.5	38	0.60
	TCS24-M8	52	6.2	31	33	5	38	0.60
	TCS24-M10	52	7	31	33	5.5	38	0.60
	TCS24-M12	52	8.5	31	33	6.5	39	0.60
	TCS24-M14, U3/4	52	10.5	31	33	8	41	0.60
	TCS24-M16	52	12.5	31	33	10	43	0.60
	TCS24-M18, P3/8	52	14	31	33	11	43	0.60
	TCS24-M20	52	15	31	33	12	43.5	0.60
	TCS24-M22, U7/8	52	17	31	33	13	46	0.60
	TCS24-M24, PF5/8	52	19	31	33	15	46	0.60
TCS38	TCS38-M18	72	14	48	45	11	43	1.80
	TCS38-M20	72	15	48	45	12	43.5	1.80
	TCS38-M22	72	17	48	45	13	45	1.80
	TCS38-M24	72	19	48	45	15	45	1.80
	TCS38-M27, U1	72	20	48	45	15	62	1.80
	TCS38-M30, PT3/4	72	23	48	45	17	64	1.80
	TCS38-M33	72	25	48	45	19	66	1.80
	TCS38-M36 / M38	72	28	48	45	21	68	1.80

► Stock Control Item

► Feature : Quick Change Type with Built-in Torque Safety Device

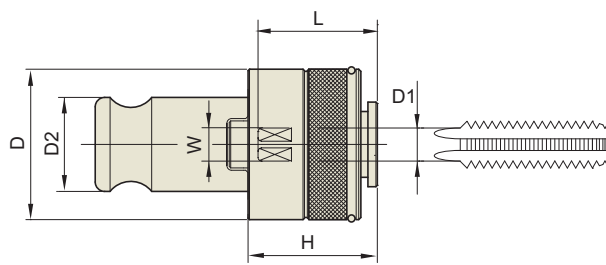
► For Pipe Type Tap, please discuss separately.

Tapping
Chuck

TAP ADAPTER (DIN)

TC

SCHNELLWECHSEL-EINSATZ
ADAPTATEUR CHANGEMENT RAPIDE
BUSSOLA A INNESTO RAPIDO
INSERTO DE CAMBIO RAPIDO



Below standard Tap Adaptor conforms to **DIN**.

Unit : mm

TAPER No.	MODEL No.	D	D1(Ø)	D2	H	W(□)	L	DIN No.	Weight (Kg)
TCS12-D	12 D-2821	32	2.8	19	25	2.1	24	371	0.2
	12 D-3527	32	3.5	19	25	2.7	24	371	0.2
	12 D-4534	32	4.5	19	25	3.4	24	371	0.2
	12 D-43	32	4	19	25	3	24	371	0.2
	12 D-5543	32	5.5	19	25	4.3	25	376	0.2
	12 D-649	32	6	19	25	4.9	25	371	0.2
	12 D-755	32	7	19	25	5.5	25	376	0.2
	12 D-862	32	8	19	25	6.2	25	371	0.2
	12 D-97	32	9	19	25	7	26	376	0.2
	12 D-108	32	10	19	25	8	26	371	0.2
TCS24-D	12 D-119	32	11	19	25	9	26	376	0.2
	24 D-649	52	6	31	33	4.9	38	371	0.6
	24 D-755	52	7	31	33	5.5	38	376	0.6
	24 D-862	52	8	31	33	6.2	38	371	0.6
	24 D-97	52	9	31	33	7	38	376	0.6
	24 D-108	52	10	31	33	8	39	371	0.6
	24 D-119	52	11	31	33	9	41	376	0.6
	24 D-129	52	12	31	33	9	43	376	0.6
	24 D-1411	52	14	31	33	11	43	376	0.6
	24 D-1612	52	16	31	33	12	46	376	0.6
TCS38-D	24 D-18145	52	18	31	33	14.5	46	376	0.6
	38 D-119	72	11	48	45	9	43	376	1.8
	38 D-129	72	12	48	45	9	43	376	1.8
	38 D-1411	72	14	48	45	11	45	376	1.8
	38 D-1612	72	16	48	45	12	45	376	1.8
	38 D-18145	72	18	48	45	14.5	62	376	1.8
	38 D-2016	72	20	48	45	16	64	376	1.8
	38 D-2218	72	22	48	45	18	66	376	1.8
	38 D-2520	72	25	48	45	20	68	376	1.8
	38 D-2822	72	28	48	45	22	68	376	1.8

► Stock Control Item

► Feature : Quick Change Type with Built-in Torque Safety Device

► For Pipe Type Tap, please discuss separately.

TOOLING SYSTEM

FACE MILL ARBOR



AUFNAHMEDORNE
MANDRIN PORTE FRAISE À ALÉSAGE
SISTEMA PORTA FRESE FRONTALE
SISTEMA PARA PLATOS DE PLACAS

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

■ FMA

DIN 69893 / ISO 12164 - 1 - HSK

■ FMA

ANSI B5.18 - NT

■ FMA

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

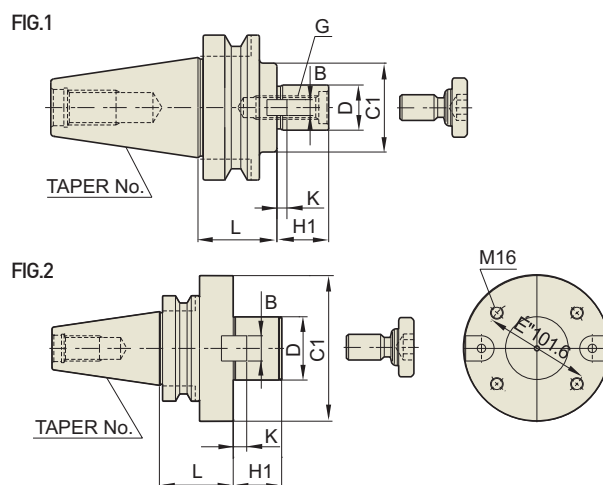
■ FMB ■ FMC

DIN 69893 / ISO 12164 - 1 - HSK

■ FMC

DONRAY PREMIUM

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



CBT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	2.5	25,000	AD

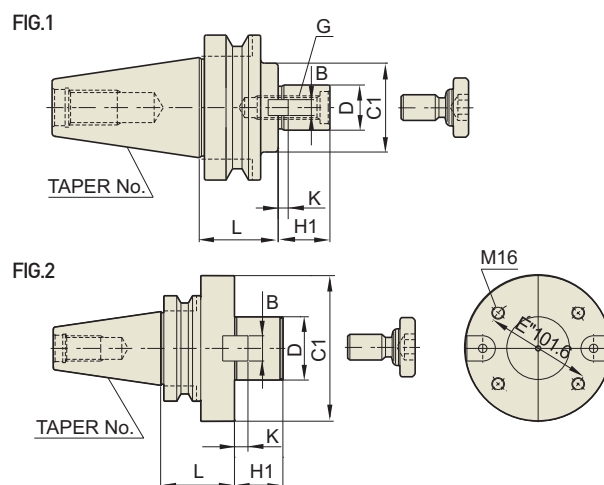
■ CBT (BT DUAL CONTACT)

Unit : mm

TAPER No.	MODEL No.	D	L1	C1	H1	B	K	G	FIG.	Weight (Kg)	Stock
30	CBT30-FMA25.4-45	25.4	45	50	22	9.5	5	M12	1	1.1	
	CBT30-FMA31.75-45	31.75	45	60	30	12.7	7	M16	1	1.2	
40	CBT40-FMA25.4-45	25.4	45	50	22	9.5	5	M12	1	1.5	●
	CBT40-FMA25.4-90	25.4	90	50	22	9.5	5	M12	1	3.1	
	CBT40-FMA31.75-45	31.75	45	60	30	12.7	7	M16	1	1.9	●
	CBT40-FMA31.75-75	31.75	75	60	30	12.7	7	M16	1	2.7	
	CBT40-FMA38.1-60	38.1	60	80	34	15.9	9	M20	1	2.9	●
	CBT40-FMA38.1-75	38.1	75	80	34	15.9	9	M20	1	3.6	
50	CBT50-FMA25.4-45	25.4	45	50	22	9.5	5	M12	1	3.7	
	CBT50-FMA25.4-90	25.4	90	50	22	9.5	5	M12	1	4.6	
	CBT50-FMA25.4-150	25.4	150	50	22	9.5	5	M12	1	5.5	
	CBT50-FMA31.75-45	31.75	45	60	30	12.7	7	M16	1	4.5	
	CBT50-FMA31.75-75	31.75	75	60	30	12.7	7	M16	1	5.3	
	CBT50-FMA31.75-105	31.75	105	60	30	12.7	7	M16	1	5.8	
	CBT50-FMA31.75-150	31.75	150	60	30	12.7	7	M16	1	6.3	
	CBT50-FMA38.1-45	38.1	45	80	34	15.9	9	M20	1	4.3	
	CBT50-FMA38.1-75	38.1	75	80	34	15.9	9	M20	1	5.6	
	CBT50-FMA38.1-105	38.1	105	80	34	15.9	9	M20	1	6.0	
	CBT50-FMA38.1-150	38.1	150	80	34	15.9	9	M20	1	6.5	
	CBT50-FMA50.8-45	50.8	45	100	36	19.05	10	M24	1	4.9	
	CBT50-FMA50.8-75	50.8	75	100	36	19.05	10	M24	1	6.8	
	CBT50-FMA47.625-75	47.625	75	128.57	38	25.4	12.5	—	2	7.7	

►For parts, please refer to page 187.

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



JIS B6339 -BT	Taper Accuracy AT3	G Value 6.3	RPM 15,000	Coolant System AD
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	D	L1	C1	H1	B	K	G	FIG.	Weight (Kg)	Stock
30	BT30-FMA25.4-45	25.4	45	50	22	9.5	5	M12	1	1.1	●
	BT30-FMA31.75-45	31.75	45	60	30	12.7	7	M16	1	1.2	●
40	BT40-FMA25.4-45	25.4	45	50	22	9.5	5	M12	1	1.5	●
	BT40-FMA25.4-90	25.4	90	50	22	9.5	5	M12	1	3.1	●
	BT40-FMA31.75-45	31.75	45	60	30	12.7	7	M16	1	1.9	●
	BT40-FMA31.75-75	31.75	75	60	30	12.7	7	M16	1	2.7	●
	BT40-FMA38.1-60	38.1	60	80	34	15.9	9	M20	1	2.9	●
	BT40-FMA38.1-75	38.1	75	80	34	15.9	9	M20	1	3.6	●
50	BT50-FMA25.4-45	25.4	45	50	22	9.5	5	M12	1	3.7	●
	BT50-FMA25.4-90	25.4	90	50	22	9.5	5	M12	1	4.6	●
	BT50-FMA25.4-150	25.4	150	50	22	9.5	5	M12	1	5.5	●
	BT50-FMA31.75-45	31.75	45	60	30	12.7	7	M16	1	4.5	●
	BT50-FMA31.75-75	31.75	75	60	30	12.7	7	M16	1	5.3	●
	BT50-FMA31.75-105	31.75	105	60	30	12.7	7	M16	1	5.8	●
	BT50-FMA31.75-150	31.75	150	60	30	12.7	7	M16	1	6.3	●
	BT50-FMA38.1-45	38.1	45	80	34	15.9	9	M20	1	4.3	●
	BT50-FMA38.1-75	38.1	75	80	34	15.9	9	M20	1	5.6	●
	BT50-FMA38.1-105	38.1	105	80	34	15.9	9	M20	1	6.0	●
	BT50-FMA38.1-150	38.1	150	80	34	15.9	9	M20	1	6.5	●
	BT50-FMA50.8-45	50.8	45	100	36	19.05	10	M24	1	4.9	●
	BT50-FMA50.8-75	50.8	75	100	36	19.05	10	M24	1	6.8	●
	BT50-FMA47.625-75	47.625	75	128.57	38	25.4	12.5	—	2	7.7	●

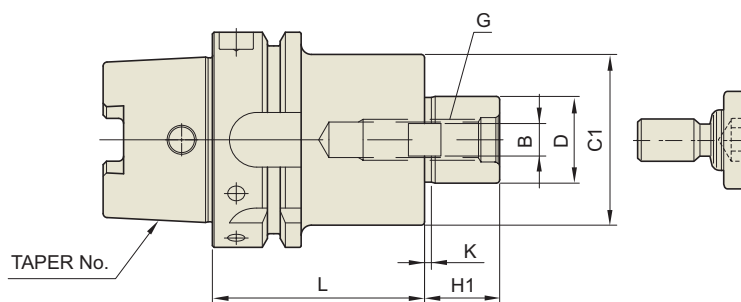
►CAT(ANSI B5.50) taper and Inch type products are available.

►For parts, please refer to page 187.

FACE MILL ARBOR

FMA

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



DIN 69893 - HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

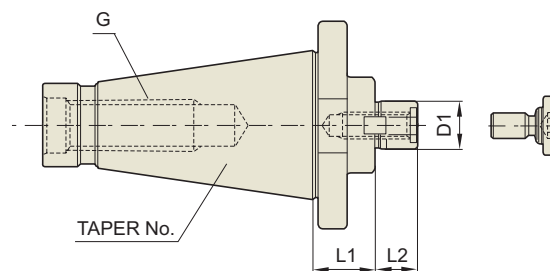
Unit : mm

TAPER No.	MODEL No.	D	C1	L	H1	B	K	G	Weight (Kg)	Stock
40A	HSK40A-FMA25,4-50	25,4	50	50	22	9,5	5	M12		
50A	HSK50A-FMA25,4-60	25,4	50	60	22	9,5	5	M12		
63A	HSK63A-FMA25,4-45	25,4	50	45	22	9,5	5	M12		
	HSK63A-FMA31,75-50	31,75	60	50	30	12,7	7	M16		
100A	HSK100A-FMA25,4-45	25,4	50	45	22	9,5	5	M12		
	HSK100A-FMA31,75-50	31,75	60	50	30	12,7	7	M16		
	HSK100A-FMA38,1-55	38,1	80	55	34	15,9	9	M20		
	HSK100A-FMA50,8-60	50,8	100	60	36	19,05	10	M24		

FACE MILL ARBOR

FMA

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS

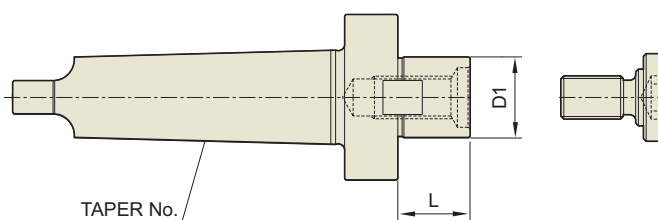


DIN 2080 -NT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ ANSI B5.18-NT

Unit : mm

TAPER No.	MODEL No.	CUTTERØ	D1	L1	L2	DRAW THREAD	OLD MODEL No.	Weight (Kg)	Stock
40	NT40-FMA25.4	3"(75Ø)	25.4	30	22	U5/8-11(M16×2)	NT40-3R	1.45	
	NT40-FMA31.75	4"(100Ø)	31.75	30	30	U5/8-11(M16×2)	NT40-4R	1.75	
	NT40-FMA38.1	5"(125Ø)	38.1	30	34	U5/8-11(M16×2)	NT40-5R	1.93	
	NT40-FMA50.8	6"(150Ø)	50.8	30	36	U5/8-11(M16×2)	NT40-6R	2.55	
50	NT50-FMA25.4	3"(75Ø)	25.4	30	22	U1-8(M24×3)	NT50-3R	3.30	
	NT50-FMA31.75	4"(100Ø)	31.75	30	30	U1-8(M24×3)	NT50-4R	3.40	
	NT50-FMA38.1	5"(125Ø)	38.1	30	34	U1-8(M24×3)	NT50-5R	3.60	
	NT50-FMA50.8	6"(150Ø)	50.8	30	36	U1-8(M24×3)	NT50-6R	3.90	
	NT50-FMA47.625	8"(200Ø)	47.625	45	38	U1-8(M24×3)	NT50-8R	4.90	



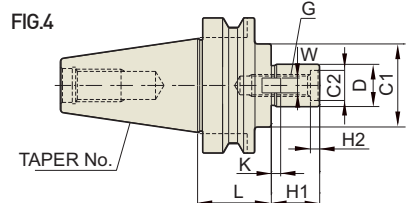
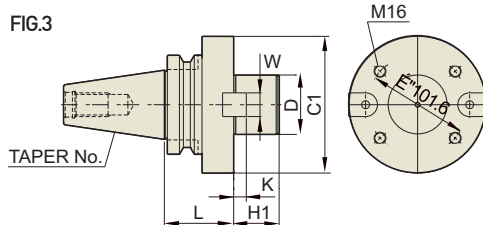
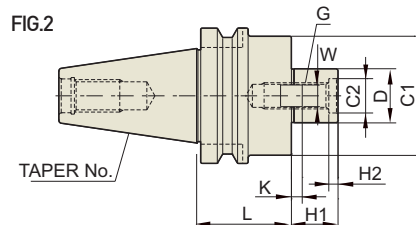
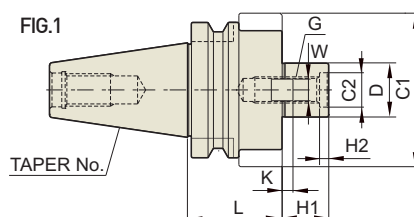
■ DIN 228-MTA

Unit : mm

TAPER No.	MODEL No.	CUTTERØ	D1	L	Weight (Kg)	Stock
5	MTA5-FMA25.4	3"(75Ø)	25.4	22	1.60	
	MTA5-FMA31.75	4"(100Ø)	31.75	30	1.90	
	MTA5-FMA38.1	5"(125Ø)	38.1	34	2.20	
6	MTA6-FMA25.4	3"(75Ø)	25.4	22	3.50	
	MTA6-FMA31.75	4"(100Ø)	31.75	30	3.80	
	MTA6-FMA38.1	5"(125Ø)	38.1	34	4.10	
	MTA6-FMA50.8	6"(150Ø)	50.8	36	4.60	
	MTA6-FMA47.625	8"(200Ø)	47.625	38	5.40	

► For parts, please refer to page 130.

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



■ CBT (BT DUAL CONTACT)

CBT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	2.5	25,000	AD

◆ METRIC TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C1	C2	H1	H2	W	K	G	FIG.	Weight (Kg)	Stock
30	CBT30-FMB27-45	27	45	80	—	26	—	12	6	M12	4	2.1	●
40	CBT40-FMB27-60	27	60	80	—	26	—	12	6	M12	4	2.5	●
	CBT40-FMB27-90	27	90	80	—	26	—	12	6	M12	4	4.7	●
	CBT40-FMB40-60	40	60	85	28	26	6	16	8.5	M20	4	7.4	●
	CBT40-FMB40-75	40	75	85	28	26	6	16	8.5	M20	1	6.1	
50	CBT50-FMB27-45	27	45	80	—	26	—	12	6	M12	1	4.0	
	CBT50-FMB27-90	27	90	80	—	26	—	12	6	M12	1	5.8	
	CBT50-FMB27-150	27	150	80	—	26	—	12	6	M12	1	8.2	
	CBT50-FMB40-45	40	45	85	28	26	6	16	8.5	M20	1	4.7	
	CBT50-FMB40-75	40	75	85	28	26	6	16	8.5	M20	1	6.1	
	CBT50-FMB40-105	40	105	85	28	26	6	16	8.5	M20	1	8.1	
	CBT50-FMB40F-75	40	75	110	28	26	6	16	8.5	M20	2	6.6	
	CBT50-FMB60-75	60	75	140	—	25	—	25.4	12.5	—	3	7.9	

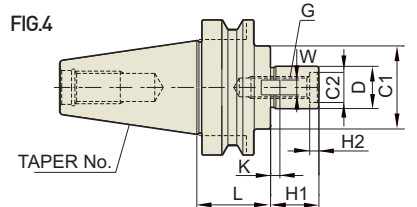
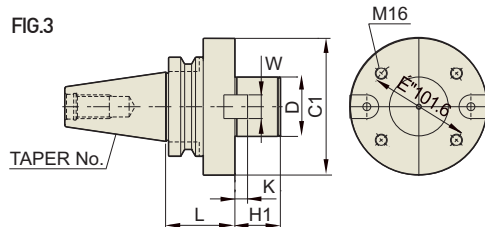
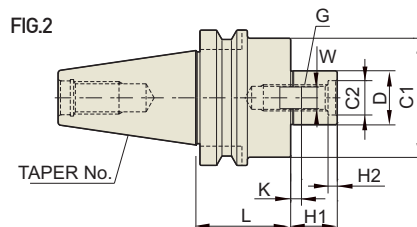
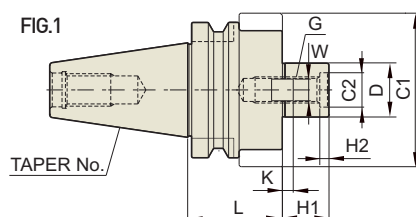
◆ INCH TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C1	C2	H1	H2	W	K	G	FIG.	Weight (Kg)	Stock
30	CBT30-FMB25.4-40	25.4	40	80	—	26	—	9.5	5	M12	4	2.1	
40	CBT40-FMB25.4-60	25.4	60	80	—	26	—	9.5	5	M12	4	2.5	
	CBT40-FMB25.4-90	25.4	90	80	—	26	—	9.5	5	M12	4	4.7	
	CBT40-FMB38.1-60	38.1	60	85	28	26	6	15.9	9	M20	4	7.4	
	CBT40-FMB38.1-75	38.1	75	85	28	26	6	15.9	9	M20	1	6.1	
50	CBT50-FMB25.4-45	25.4	45	80	—	26	—	9.5	5	M12	1	4.0	
	CBT50-FMB25.4-90	25.4	90	80	—	26	—	9.5	5	M12	1	5.8	
	CBT50-FMB25.4-150	25.4	150	80	—	26	—	9.5	5	M12	1	8.2	
	CBT50-FMB38.1-45	38.1	45	85	28	26	6	15.9	9	M20	1	4.7	
	CBT50-FMB38.1-75	38.1	75	85	28	26	6	15.9	9	M20	1	6.1	
	CBT50-FMB38.1-105	38.1	105	85	28	26	6	15.9	9	M20	1	8.7	
	CBT50-FMB38.1F-75	38.1	75	110	28	26	6	15.9	9	M20	2	6.6	
	CBT50-FMB38.1F-75	38.1	75	110	28	26	6	15.9	9	M20	2	6.6	

►For parts, please refer to page 187.

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



■ JIS B6339/MAS 403-BT

JIS B6339 -BT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	6.3	15,000	AD

◆ METRIC TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C1	C2	H1	H2	W	K	G	FIG.	Weight (Kg)	Stock
30	BT30-FMB27-45	27	45	80	—	26	—	12	6	M12	4	2.1	
40	BT40-FMB27-60	27	60	80	—	26	—	12	6	M12	4	2.5	
	BT40-FMB27-90	27	90	80	—	26	—	12	6	M12	4	4.7	
	BT40-FMB40-60	40	60	85	28	26	6	16	8.5	M20	4	7.4	
	BT40-FMB40-75	40	75	85	28	26	6	16	8.5	M20	1	6.1	●
50	BT50-FMB27-45	27	45	80	—	26	—	12	6	M12	1	4.0	
	BT50-FMB27-90	27	90	80	—	26	—	12	6	M12	1	5.8	
	BT50-FMB27-150	27	150	80	—	26	—	12	6	M12	1	8.2	
	BT50-FMB40-45	40	45	85	28	26	6	16	8.5	M20	1	4.7	●
	BT50-FMB40-75	40	75	85	28	26	6	16	8.5	M20	1	6.1	●
	BT50-FMB40-105	40	105	85	28	26	6	16	8.5	M20	1	8.1	●
	BT50-FMB40F-75	40	75	110	28	26	6	16	8.5	M20	2	6.6	●
	BT50-FMB60-75	60	75	140	—	25	—	25.4	12.5	—	3	7.9	●

◆ INCH TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C1	C2	H1	H2	W	K	G	FIG.	Weight (Kg)	Stock
30	BT30-FMB25.4-40	25.4	40	80	—	26	—	9.5	5	M12	4	2.1	
40	BT40-FMB25.4-60	25.4	60	80	—	26	—	9.5	5	M12	4	2.5	
	BT40-FMB25.4-90	25.4	90	80	—	26	—	9.5	5	M12	4	4.7	
	BT40-FMB38.1-60	38.1	60	85	28	26	6	15.9	9	M20	4	7.4	
	BT40-FMB38.1-75	38.1	75	85	28	26	6	15.9	9	M20	1	6.1	
50	BT50-FMB25.4-45	25.4	45	80	—	26	—	9.5	5	M12	1	4.0	
	BT50-FMB25.4-90	25.4	90	80	—	26	—	9.5	5	M12	1	5.8	
	BT50-FMB25.4-150	25.4	150	80	—	26	—	9.5	5	M12	1	8.2	
	BT50-FMB38.1-45	38.1	45	85	28	26	6	15.9	9	M20	1	4.7	
	BT50-FMB38.1-75	38.1	75	85	28	26	6	15.9	9	M20	1	6.1	
	BT50-FMB38.1-105	38.1	105	85	28	26	6	15.9	9	M20	1	8.7	
	BT50-FMB38.1F-75	38.1	75	110	28	26	6	15.9	9	M20	2	6.6	

► CAT(ANSI B5.50) taper and Inch type products are available.

► For parts, please refer to page 187.

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



FIG.1

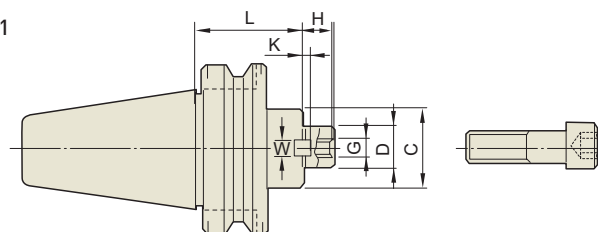
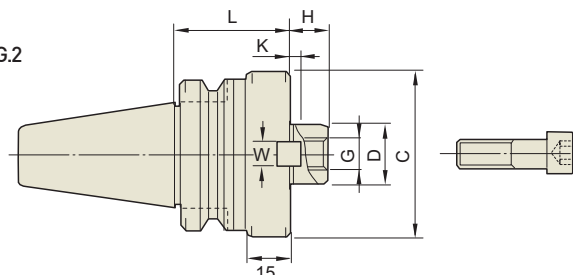


FIG.2



■ CBT (BT DUAL CONTACT)

CBT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	2.5	25,000	AD

◆ METRIC TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C	H	W	K	G	FIG.	Weight (Kg)	Stock
30	CBT30-FMC22-45	22	45	45	18	10	5	M10	2	0.8	
40	CBT40-FMC22-45	22	45	45	18	10	5	M10	1	1.3	
	CBT40-FMC27-60	27	60	70	20	12	6	M12	2	1.5	
	CBT40-FMC32-60	32	60	85	22	14	7	M16	2	2.3	
50	CBT50-FMC22-60	22	60	45	18	10	5	M10	1	4.2	
	CBT50-FMC22-105	22	105	45	18	10	5	M10	1	4.7	
	CBT50-FMC22-150	22	150	45	18	10	5	M10	1	5.3	
	CBT50-FMC27-45	27	45	70	20	12	6	M12	1	4.1	
	CBT50-FMC27-90	27	90	70	20	12	6	M12	1	5.5	
	CBT50-FMC27-150	27	150	70	20	12	6	M12	1	7.3	
	CBT50-FMC32-60	32	60	85	22	14	7	M16	1	4.2	
	CBT50-FMC32-105	32	105	85	22	14	7	M16	1	5.5	
	CBT50-FMC32-150	32	150	85	22	14	7	M16	1	7.0	

◆ INCH TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C	H	W	K	G	FIG.	Weight (Kg)	Stock
30	CBT30-FMC25.4-45	25.4	45	70	20	9.5	6	M12	2	1.1	
40	CBT40-FMC25.4-60	25.4	60	70	20	9.5	6	M12	2	1.5	
	CBT40-FMC25.4-90	25.4	90	70	20	9.5	6	M12	2	2.2	
	CBT40-FMC38.1-60	38.1	60	85	22	15.9	7	M16	2	2.3	
	CBT40-FMC38.1-75	38.1	75	85	22	15.9	7	M16	2	2.6	
50	CBT50-FMC25.4-45	25.4	45	70	20	9.5	6	M12	1	4.1	
	CBT50-FMC25.4-90	25.4	90	70	20	9.5	6	M12	1	5.5	
	CBT50-FMC25.4-150	25.4	150	70	20	9.5	6	M12	1	7.3	
	CBT50-FMC38.1-45	38.1	45	85	22	15.9	7	M16	1	4.2	
	CBT50-FMC38.1-75	38.1	75	85	22	15.9	7	M16	1	5.5	
	CBT50-FMC38.1-105	38.1	105	85	22	15.9	7	M16	1	7.0	

► For parts, please refer to page 187.

AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



FIG.1

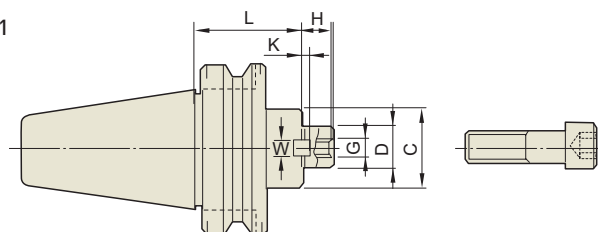
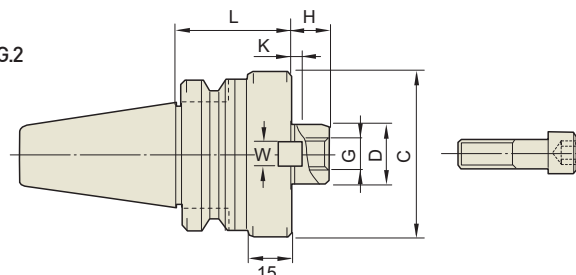


FIG.2



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD

■ JIS B6339/MAS 403-BT

◆ METRIC TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C	H	W	K	G	FIG.	Weight (Kg)	Stock
30	BT30-FMC22-45	22	45	45	18	10	5	M10	2	0.8	●
40	BT40-FMC22-45	22	45	45	18	10	5	M10	1	1.3	●
	BT40-FMC27-60	27	60	70	20	12	6	M12	2	1.5	●
	BT40-FMC32-60	32	60	85	22	14	7	M16	2	2.3	●
	BT50-FMC22-60	22	60	45	18	10	5	M10	1	4.2	
50	BT50-FMC22-105	22	105	45	18	10	5	M10	1	4.7	●
	BT50-FMC22-150	22	150	45	18	10	5	M10	1	5.3	●
	BT50-FMC27-45	27	45	70	20	12	6	M12	1	4.1	
	BT50-FMC27-90	27	90	70	20	12	6	M12	1	5.5	●
	BT50-FMC27-150	27	150	70	20	12	6	M12	1	7.3	
	BT50-FMC32-60	32	60	85	22	14	7	M16	1	4.2	
	BT50-FMC32-105	32	105	85	22	14	7	M16	1	5.5	●
	BT50-FMC32-150	32	150	85	22	14	7	M16	1	7.0	

◆ INCH TYPE

Unit : mm

TAPER No.	MODEL No.	D	L	C	H	W	K	G	FIG.	Weight (Kg)	Stock
30	BT30-FMC25.4-45	25.4	45	70	20	9.5	6	M12	2	1.1	
40	BT40-FMC25.4-60	25.4	60	70	20	9.5	6	M12	2	1.5	
	BT40-FMC25.4-90	25.4	90	70	20	9.5	6	M12	2	2.2	
	BT40-FMC38.1-60	38.1	60	85	22	15.9	7	M16	2	2.3	
	BT40-FMC38.1-75	38.1	75	85	22	15.9	7	M16	2	2.6	
50	BT50-FMC25.4-45	25.4	45	70	20	9.5	6	M12	1	4.1	
	BT50-FMC25.4-90	25.4	90	70	20	9.5	6	M12	1	5.5	
	BT50-FMC25.4-150	25.4	150	70	20	9.5	6	M12	1	7.3	
	BT50-FMC38.1-45	38.1	45	85	22	15.9	7	M16	1	4.2	
	BT50-FMC38.1-75	38.1	75	85	22	15.9	7	M16	1	5.5	
	BT50-FMC38.1-105	38.1	105	85	22	15.9	7	M16	1	7.0	

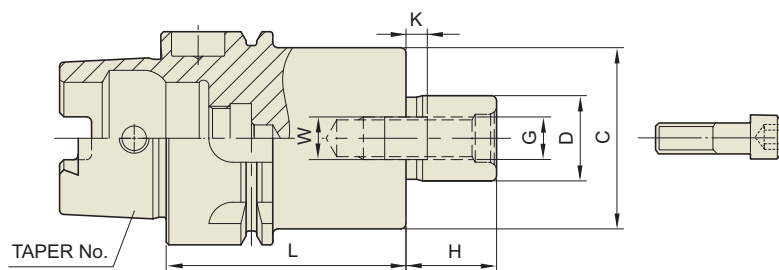
► CAT(ANSI B5.50) taper and Inch type products are available.

► For parts, please refer to page 187.

FACE MILL ARBOR

FMC

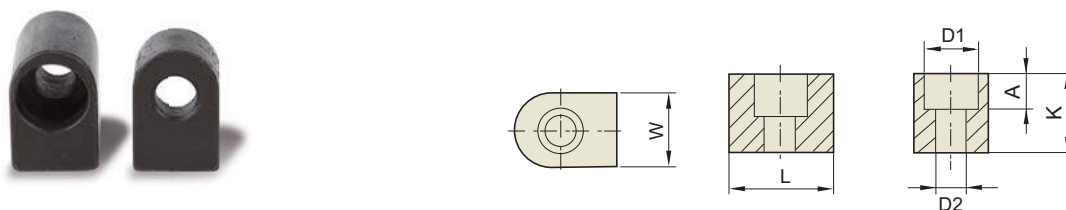
AUFNAHMEDORN FÜR MESSERKÖPFE
ARBRE PORTE FRAISE À ALÉSAGE
MANDRINO PORTA FRESE FRONTALE
EJE PARA PLATOS DE PLACAS



DIN 69893 - HSK	Taper Accuracy -	G Value 6.3	RPM 15,000	Coolant System AD
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■ DIN 69893/ISO 12164-1-HSK FORM A

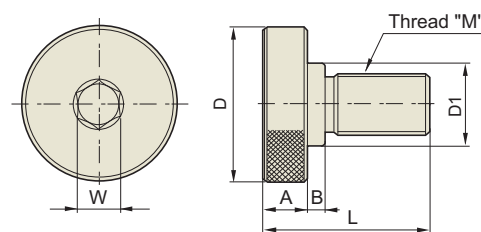
TAPER No.	MODEL No.	D	C	L	H	W	K	G	Weight (Kg)	Stock
40A	HSK40A-FMC16-45	16	34	45	17	8	4	M8	0.40	
	HSK40A-FMC22-50	22	45	50	18	10	5	M10	0.50	●
	HSK40A-FMC27-60	27	68	60	20	12	7	M12	0.70	
50A	HSK50A-FMC16-40	16	34	40	17	8	4	M8		
	HSK50A-FMC22-50	22	45	50	18	10	5	M10		
	HSK50A-FMC27-60	27	70	60	20	12	6	M12		
63A	HSK63A-FMC22-45	22	45	45	18	10	5	M10		●
	HSK63A-FMC27-60	27	70	60	20	12	6	M12		●
	HSK63A-FMC32-60	32	85	60	22	14	7	M16		●
100A	HSK100A-FMC22-50	22	45	50	18	10	5	M10		
	HSK100A-FMC27-60	27	70	60	20	12	6	M12		
	HSK100A-FMC32-60	32	85	60	22	14	7	M16		



■ KEY

Unit : mm

Size	W	K	L	D1	D2	A	Applicable arbor
8×7×12,8	8	7	12,8	5,8	3,2	3,2	SMA16
10×7,8×15,5	10	7,8	15,5	7,5	4,2	4,3	SMA22
9,52×9,52×10,2	9,52	9,52	10,2	7,5	4,5	5,2	FMA25,4 / FMB25,4
9,5×12×11	9,5	12	11	7,5	4,2	5	FMC25,4
12×9×18,5	12	9	18,5	9	5,3	5,5	SMA27
10×10×11	10	10	11	7,5	4,2	5	FMC22
14×11,5×20,5	14	11,5	20,5	10,5	6,5	6,5	SMA32
12×13×18	12	13	18	9	5,3	8	FMB27 / FMC27
16×13,5×23,5	16	13,5	23,5	10,5	6,5	6,5	SMA40
12,7×12,7×12,7	12,7	12,7	12,7	7,5	4,5	5,2	FMA31,75
15,87×15,87×18,5	15,87	15,87	18,5	10,3	6,6	7,5	FMA38,1 / FMB40 / FMB40F
14×15×20	14	15	20	10,5	6,3	8	FMC32
18×18×28,5	18	18	28,5	10,5	6,5	10	SMA50
19×18×22	19	18	22	10,5	6,3	7	FMA50,8



■ MOUNTING BOLT

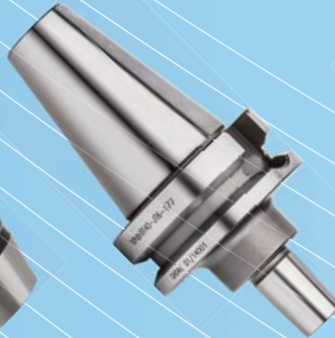
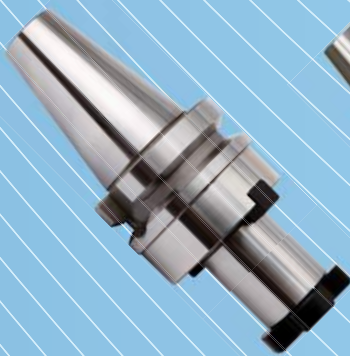
Unit : mm

Size	M	D	D1	L	A	B	W	Applicable arbor
MB8	8X1,25	20	15	23	7	2	6	FMC16
MB10	10X1,5	28	18	29	9	2	8	FMC22
MB12	12×1,75	33	23	32	10	2	10	FMC27 / FMB27 / FMA25,4
MB16	16×2,0	40	23	42	10	6	12	FMC32 / FMA3,175
MB20	20×2,5	50	27	54	14	6	14	FMC40 / FMA38,1 / FMB40 / FMB40F
MB24	24×3,0	65	37	62	14	10	17	FMA50,8



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NC - BOHRFUTTER und ANDERE WERKZEUGHALTER
MANDRIN DE PERÇAGE NC et D'AUTRES PORTE-OUTIL
NC MANDRINI PORTA PUNTE e ALTRI PORTAUTENSILI
PORTABROCAS PARA BROCAS NC y OTRA PORTAHERRAMIENTAS

NC DRILL CHUCK

CBT (BT DUAL CONTACT)

JIS B6339 / MAS 403 - BT

DIN 69893 / ISO 12164 - 1 - HSK

STRAIGHT - K

SIDE CUTTER ARBOR

JIS B6339 / MAS 403 - BT

JACOBS TAPER ADAPTER

JIS B6339 / MAS 403 - BT

BLANK BAR

DIN 69893 / ISO 12164 - 1 - HSK FORM A

JIS B6339 / MAS 403 - BT

DONRAY PREMIUM

NC DRILL CHUCK



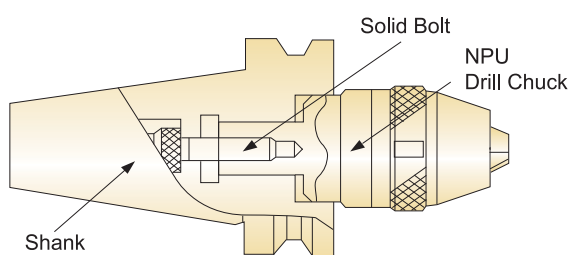
- drill chuck is completely tightened with solid bolt, and there is no danger of falling during rotating or cutting.

● Strong chucking power

Drill may be damaged due to reverse thrust during perforation, but with Donray premium drill chuck strongly tightened with wrench, there is no possibility of damage to drill.

HIGH PRECISION

● HIGHEST PRECISION



- Drill chuck with excellent high precision (TIR 0.05) and shank are integrated, which guarantees excellent TIR.

● Safety

Donray premium drill chuck with strong rigidity contributes to factory automation by unmanned operation by preventing accident from occurring during operation.

- Falling of drill occurring by sudden stopping
- Falling of drill occurring by rapid rotation
- Damage to drill caused by reverse thrust during perforation process

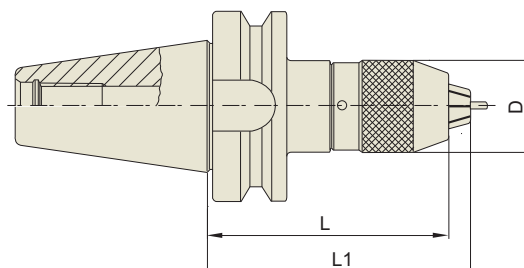
● Comparison of drill chuck torque

DESCRIPTION	CHUCKING	TWISTING
KEYLESS CHUCK	HAND	0.7kgf-m
ZEIKEN NPU CHUCK	HAND	0.7kgf-m
ZEIKEN NPU + WRENCH	WRENCH	2.2kgf-m

NC DRILL CHUCK

NPU

NC - BOHRFUTTER
MANDRIN DE PERÇAGE NC
NC MANDRINI PORTA PUNTE
PORTABROCAS PARA BROCAS NC



CBT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ CBT (BT DUAL CONTACT)

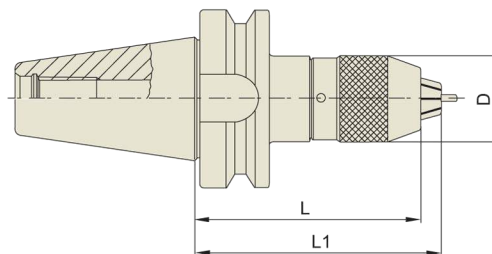
Unit : mm

TAPER No.	MODEL No.	RANGE	D	L(MIN)	L1(MAX)	Weight (Kg)	Stock
30	CBT30-NPU8-70	0.3~8	36.5	70	75.7	0.80	●
	CBT30-NPU13-100	1~13	50.4	100	110	1.80	●
40	CBT40-NPU8-70	0.3~8	36.5	70	75.7	1.50	●
	CBT40-NPU8-110	0.3~8	36.5	110	115.7	1.80	
	CBT40-NPU8-150	0.3~8	36.5	150	155.7	2.60	
	CBT40-NPU13-90	1~13	50.4	90	95.7	2.10	●
	CBT40-NPU13-130	1~13	50.4	130	140	2.70	●
	CBT40-NPU13-150	1~13	50.4	150	160	3.40	
50	CBT50-NPU8-90	0.3~8	36.5	90	95.7	4.20	
	CBT50-NPU8-110	0.3~8	36.5	110	115.7	4.50	
	CBT50-NPU8-170	0.3~8	36.5	170	180.7	5.20	
	CBT50-NPU13-100	1~13	50.4	100	110	4.80	
	CBT50-NPU13-130	1~13	50.4	130	140	5.20	
	CBT50-NPU13-150	1~13	50.4	150	160	5.50	
	CBT50-NPU13-190	1~13	50.4	190	200	5.90	

NC DRILL CHUCK

NPU

NC - BOHRFUTTER
MANDRIN DE PERÇAGE NC
NC MANDRINI PORTA PUNTE
PORTABROCAS PARA BROCAS NC



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

RPM
-

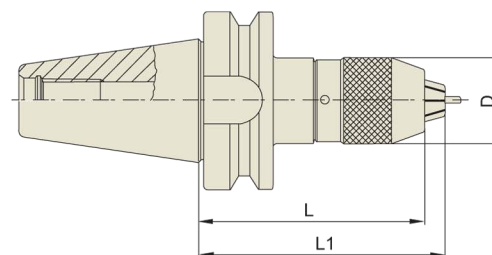
Coolant
System
-

■ JISB6339/MAS403-BT

Unit:mm

TAPERNo.	MODELNo.	RANGE	D	L(MIN)	L1(MAX)	Weight(Kg)	Stock
30	BT30-NPU8-70	0.3~8	36.5	70	75.7	0.80	●
	BT30-NPU13-100	1~13	50.4	100	110	1.80	●
40	BT40-NPU8-70	0.3~8	36.5	70	75.7	1.50	●
	BT40-NPU8-110	0.3~8	36.5	110	115.7	1.80	
	BT40-NPU8-150	0.3~8	36.5	150	155.7	2.60	
	BT40-NPU13-90	1~13	50.4	90	95.7	2.10	●
	BT40-NPU13-130	1~13	50.4	130	140	2.70	●
	BT40-NPU13-150	1~13	50.4	150	160	3.40	
50	BT50-NPU8-90	0.3~8	36.5	90	95.7	4.20	
	BT50-NPU8-110	0.3~8	36.5	110	115.7	4.50	●
	BT50-NPU8-170	0.3~8	36.5	170	180.7	5.20	●
	BT50-NPU13-100	1~13	50.4	100	110	4.80	●
	BT50-NPU13-130	1~13	50.4	130	140	5.20	●
	BT50-NPU13-150	1~13	50.4	150	160	5.50	●
	BT50-NPU13-190	1~13	50.4	190	200	5.90	●

► CAT(ANSI B5.50) taper and In-ch type products are available.



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
6.3

RPM
15,000

Coolant
System
AD

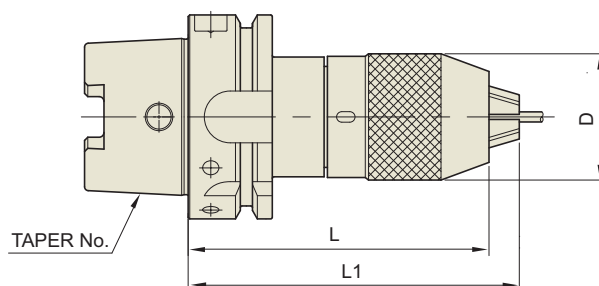
Unit:mm

TAPERNo.	MODELNo.	RANGE	D	L(MIN)	L1(MAX)	Weight(Kg)	Stock
40	SK40-NPU8-70	0.5~8	36	70	75.7	1.50	●
	SK40-NPU13-90	1~13	50	90	95.7	1.80	
	SK40-NPU16-95	2.5~16	50	95	100.7	2.60	
50	SK50-NPU8-70	0~8	36	70	75.7	1.50	●
	SK50-NPU13-90	1~13	50	90	95.7	1.80	●
	SK50-NPU16-95	2.5~16	50	95	100.7	2.60	

NC DRILL CHUCK

NPU

NC - BOHRFUTTER
MANDRIN DE PERÇAGE NC
NC MANDRINI PORTA PUNTE
PORTABROCAS PARA BROCAS NC

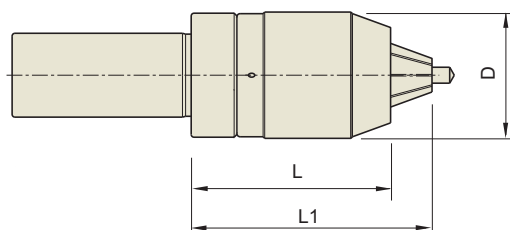


DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	-	-	-	-

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	CAPACITY	D	L(MIN)	L1(MAX)	Weight (Kg)	Stock
40A	HSK40A-NPU 8-120	0.3~8	36.5	120	125.7	1	
50A	HSK50A-NPU 8-120	0.3~8	36.5	120	125.7	1.2	
	HSK50A-NPU13-150	1~13	50.4	150	160	2.1	
63A	HSK63A-NPU 8-125	0.3~8	36.5	125	130.7	2.1	
	HSK63A-NPU13-150	1~13	50.4	150	150	3	●
100A	HSK100A-NPU 8-130	0.3~8	36.5	130	135.7	4.8	
	HSK100A-NPU13-150	1~13	50.4	150	160	5.5	



■ STRAIGHT-K

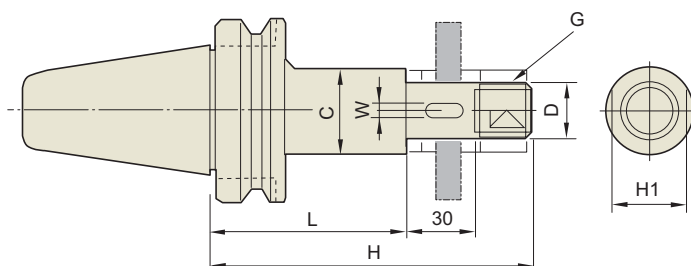
Unit : mm

TAPER No.	MODEL No.	RANGE	D	L(MIN)	L1(MAX)	d	Weight (Kg)	Stock
32	K32-NPU8-70	0.3~8	36.5	70	75.7	32	0.70	
	K32-NPU13-100	1~13	50.4	100	110	32	1.50	
42	K42-NPU8-70	0.3~8	36.5	70	75.7	42	0.80	
	K42-NPU13-100	1~13	50.4	100	110	42	1.60	

SIDE CUTTER ARBOR

SCA

SEITENSCHNEIDER LAUBE
TONNELLE PINCE COUPANTE
LATO CUTTER PERGOLATO
LADO DEL EJE DE CORTE



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

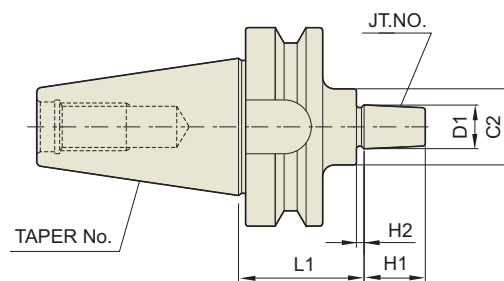
Unit : mm

TAPER No.	MODEL No.	H	H1	C	W	G	D	L	Weight (Kg)	Stock
30	BT30-SCA12.7-60	105	17	20	-	M12	12.7	60	1.0	
	BT30-SCA15.875-60	106	23	26	3.18	M14	15.875	60	1.1	
	BT30-SCA22.225-60	110	29	34	3.18	M20	22.225	60	1.2	
	BT30-SCA25.4-60	115	32	40	6.35	M24	25.4	60	1.3	●
40	BT40-SCA12.7-75	120	17	20	-	M12	12.7	75	1.2	
	BT40-SCA12.7-105	150	17	20	-	M12	12.7	105	1.3	
	BT40-SCA15.875-75	121	23	26	3.18	M14	15.875	75	1.4	
	BT40-SCA15.875-120	151	23	26	3.18	M14	15.875	120	1.5	
	BT40-SCA22.225-75	126	29	34	3.18	M20	22.225	75	1.7	
	BT40-SCA22.225-120	171	29	34	3.18	M20	22.225	120	2.0	
	BT40-SCA25.4-75	130	32	40	6.35	M24	25.4	75	2.0	●
	BT40-SCA25.4-120	175	32	40	6.35	M24	25.4	120	2.4	●
50	BT40-SCA31.75-90	150	41	46	7.92	M30	31.75	90	2.6	
	BT50-SCA12.7-75	120	17	20	-	M12	12.7	75	4.1	
	BT50-SCA12.7-105	150	17	20	-	M12	12.7	105	4.2	
	BT50-SCA15.875-90	136	23	26	3.18	M14	15.875	90	4.2	
	BT50-SCA15.875-120	166	23	26	3.18	M14	15.875	120	4.2	
	BT50-SCA22.225-90	144	29	34	3.18	M20	22.225	90	4.4	
	BT50-SCA22.225-135	186	29	34	3.18	M20	22.225	135	4.7	
	BT50-SCA25.4-90	145	32	40	6.35	M24	25.4	90	4.5	
	BT50-SCA25.4-135	190	32	40	6.35	M24	25.4	135	4.9	●
	BT50-SCA31.75-90	150	41	46	7.92	M30	31.75	90	4.7	
	BT50-SCA31.75-135	195	41	46	7.92	M30	31.75	135	5.2	●
	BT50-SCA38.1-90	156	46	55	9.52	M36	38.1	90	4.9	
	BT50-SCA38.1-135	201	46	55	9.52	M36	38.1	135	5.9	

JACOBS TAPER ADAPTER



JACOBS KEGELZAPFEN ADAPTER
JACOBS ADAPTEUR DE CÔNE
JACOBS ADATTATORE DEL CONO
JACOBS ADAPTADOR DE LA FORMA CONICA



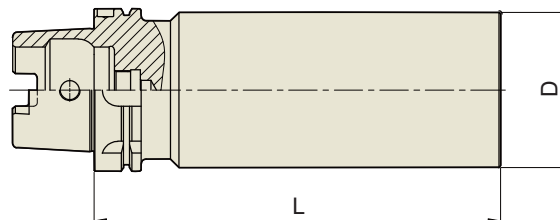
JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	JT. No.	D1	L1	H1	H2	C1	Weight (Kg)	Stock
30	BT30-JTA1-45	1	9,754	45	14	3	30	0.9	
	BT30-JTA2-45	2	14,199	45	20	4	30	1.0	
	BT30-JTA6-45	6	17,17	45	24	4	30	1.0	●
40	BT40-JTA1-45	1	9,754	45	14	3	30	1.1	
	BT40-JTA1-90	1	9,754	90	14	3	30	1.1	
	BT40-JTA2S-45	2(SHORT)	13,94	45	18	3	30	1.4	
	BT40-JTA2S-90	2(SHORT)	13,94	90	18	3	30	1.4	
	BT40-JTA2-45	2	14,199	45	20	4	30	1.1	
	BT40-JTA2-90	2	14,199	90	20	4	30	1.4	
	BT40-JTA33-45	33	15,85	45	24	4	30	1.1	
	BT40-JTA33-90	33	15,85	90	24	4	30	1.4	
	BT40-JTA6-45	6	17,17	45	24	4	30	1.1	●
	BT40-JTA6-90	6	17,17	90	24	4	30	1.4	●
	BT40-JTA3-45	3	20,599	45	28	5	35	1.2	
50	BT40-JTA3-90	3	20,599	90	28	5	35	1.5	
	BT50-JTA1-45	1	9,754	45	14	3	30	4.0	
	BT50-JTA1-105	1	9,754	105	14	3	30	4.4	
	BT50-JTA2S-45	2(SHORT)	13,94	45	18	3	30	4.0	
	BT50-JTA2S-105	2(SHORT)	13,94	105	18	3	30	4.4	
	BT50-JTA2-45	2	14,199	45	20	4	30	4.0	
	BT50-JTA2-105	2	14,199	105	20	4	30	4.4	
	BT50-JTA33-45	33	15,85	45	24	4	30	4.0	
	BT50-JTA33-105	33	15,85	105	24	4	30	4.4	
	BT50-JTA6-45	6	17,17	45	24	4	30	4.0	●
	BT50-JTA6-105	6	17,17	105	24	4	30	4.4	●
	BT50-JTA3-45	3	20,599	45	28	5	35	4.0	
	BT50-JTA3-105	3	20,599	105	28	5	35	4.6	

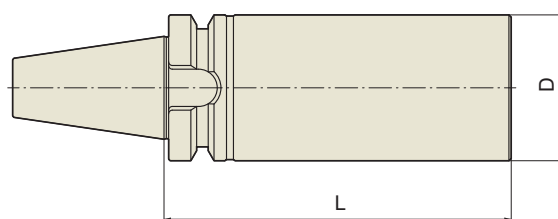
►CAT(ANSI B5.50) taper and Inch type products are available.



■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

MODEL No.	TAPER No.	D	L	Stock
HSK40A-BL42-180	HSK40	42	180	
HSK50A-BL52-200	HSK50	52	200	
HSK63A-BL63-150	HSK63	63	150	
HSK63A-BL63-250	HSK63	63	250	
HSK63A-BL82-200	HSK63	82	200	
HSK100A-BL102-150	HSK100	102	150	
HSK100A-BL102-250	HSK100	102	250	
HSK100A-BL126-200	HSK100	126	200	



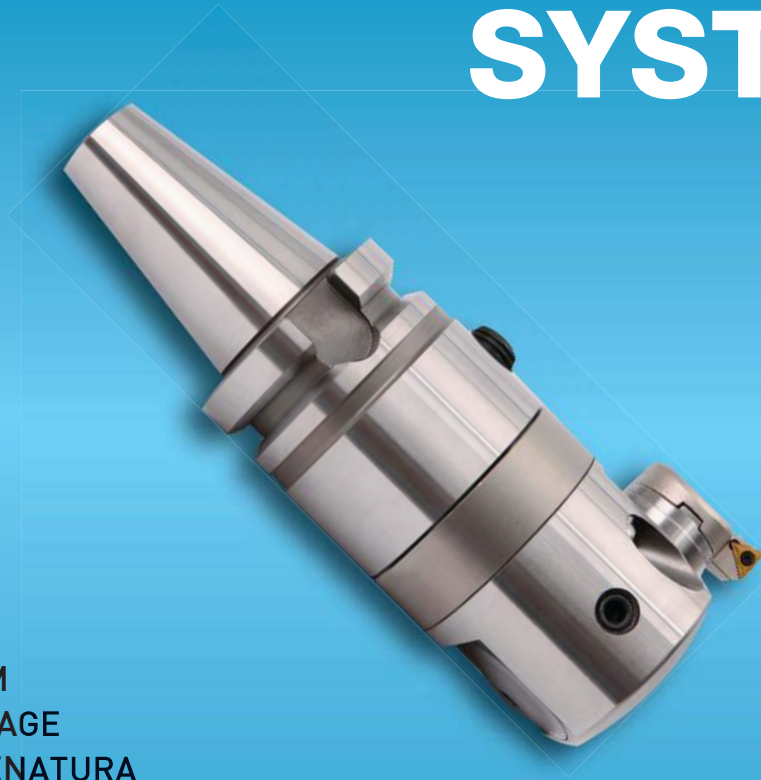
■ JIS B6339/MAS 403-BT

Unit : mm

MODEL No.	TAPER No.	D	L	Stock
BT30-BL48-180	BT30	48	180	
BT40-BL63-150	BT40	63	150	
BT40-BL63-250	BT40	63	250	
BT40-BL82-200	BT40	82	200	
BT50-BL102-150	BT50	102	150	
BT50-BL102-250	BT50	102	250	
BT50-BL126-200	BT50	126	200	

TOOLING SYSTEM

BORING SYSTEM



AUSBOHRSYSTEM
SYSTÈME D'ALÉSAGE
SISTEMA DI BARENATURA
SISTEMAS DE MANDRINADO

FINE BORING BAR

■ BORING BAR SET ■ BASIC HOLDER ■ EXTENSION BAR ■ FINE BORING HEAD

TWIN EDGE BORING BAR : JIS B6339/MAS 403-BT, DIN 69871-SK

■ BORING BAR SET ■ STRAIGHT TWIN EDGE BORING BAR ■ BASIC HOLDER
■ TWIN BORE HEAD ■ INSERT HOLDER ■ REDUCTION / EXTENSION BAR

MICRO BORING BAR : JIS B6339/MAS 403-BT

■ BT / ST (BCA) ■ MICRO UNIT PARTS

SQUARE BORING BAR : JIS B6339/MAS 403-BT

■ BT (BSA) ■ ST (BSB) ■ SQUARE BITE (BAS, BSB)

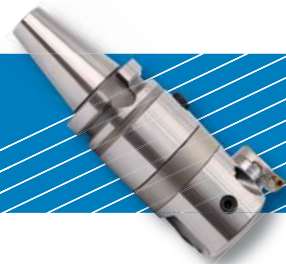
BIG MICRO CUT BORING BAR : JIS B6339/MAS 403-BT

■ BT (BRA) ■ (RING ADAPTER, RING HEAD)

DONRAY PREMIUM

TECHNICAL INFORMATION

FINE BORING BAR (for Fine Boring of Small Bore)



Boring Range 20mm ~153mm

MODULAR SYSTEM



FEATURE

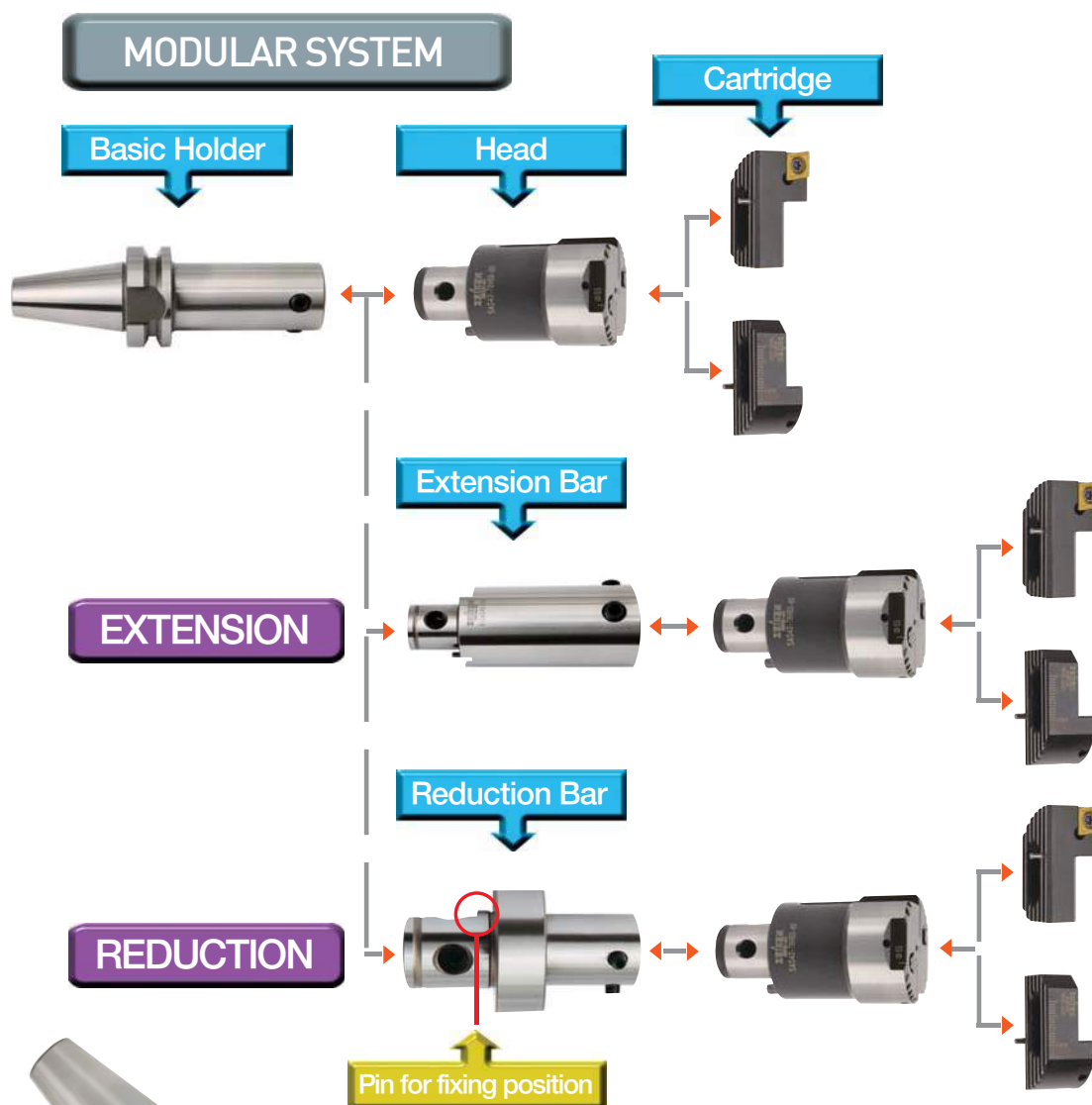
- Excellent roughness of boring surface by precise boring.
- Precise boring range adjustment by adjustment Dial with 1/100mm unit .
- Ease to adjust length by employing modular system to use extension bar with various size .
- Double rigid fixing of extension bar with
 - Side locking
 - Fixing pin inside
- Design to use insert conforming to ISO standard .

TECHNICAL INFORMATION

TWIN EDGE BORING BAR (for Rough Boring of Small Bore)



Boring Range : 25mm~156mm

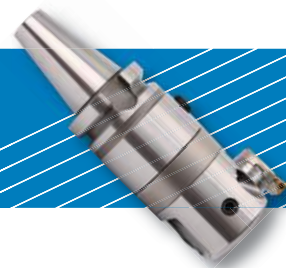


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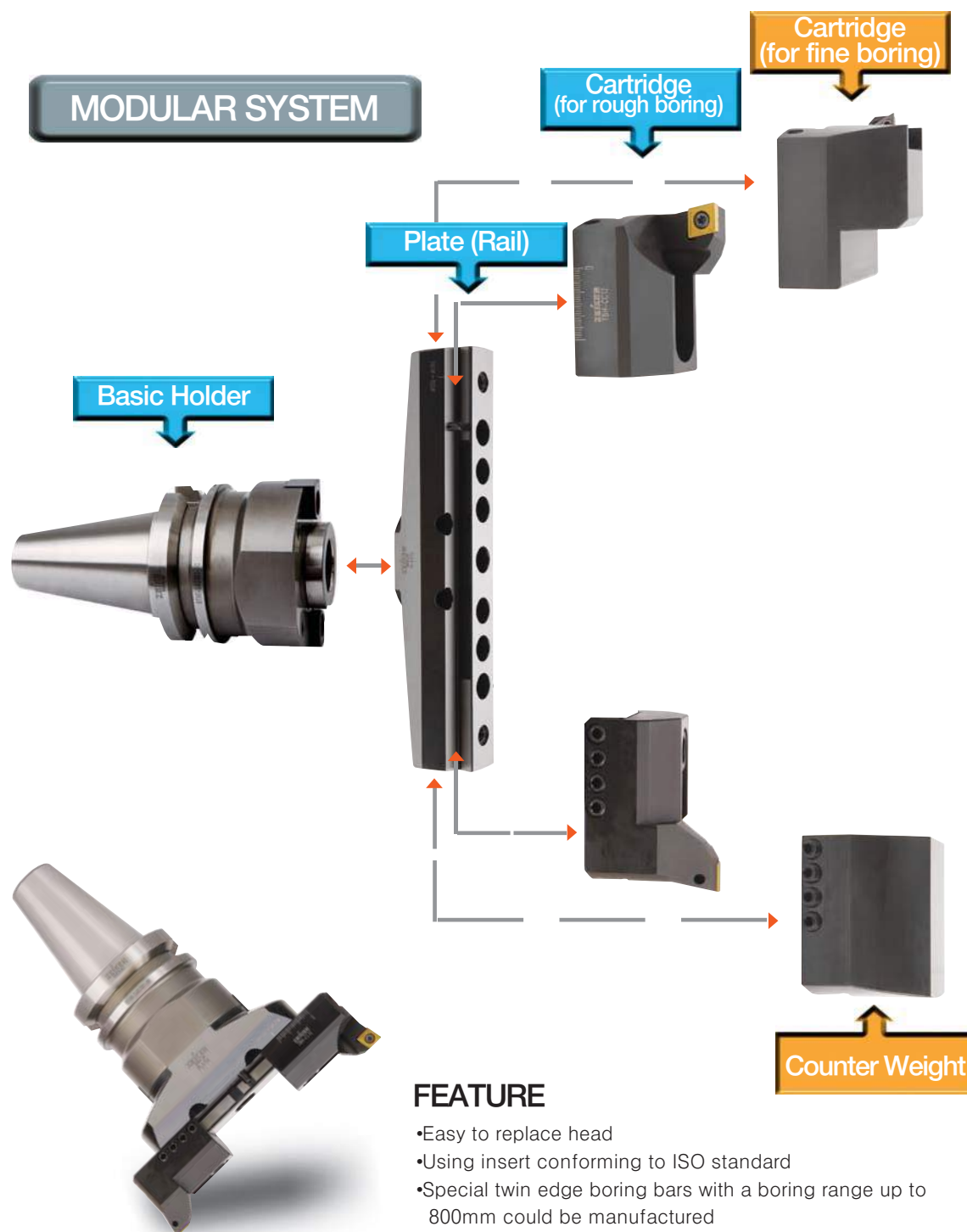
- Easy to replace head
- Extension Bar : Adjusting length according to machining conditions
- Reduction Bar : Adjusting boring range according to machining conditions
- Precision of extension, reduction, and repeatedly attaching and detaching Head ; $\leq 0.002\text{mm}$
- Using insert conforming to ISO standard

TECHNICAL INFORMATION

FINE and TWIN EDGE BORING (for Big Bore)



Boring Range : 153mm~576mm (FINE BORING BAR)
156mm~576mm (TWIN EDGE BORING BAR)



FEINBOHRHALTER
ALÉSAGE PROFOND
BARRE DI ALESATURA FINE
BARRA DE MANDRINADO FINO

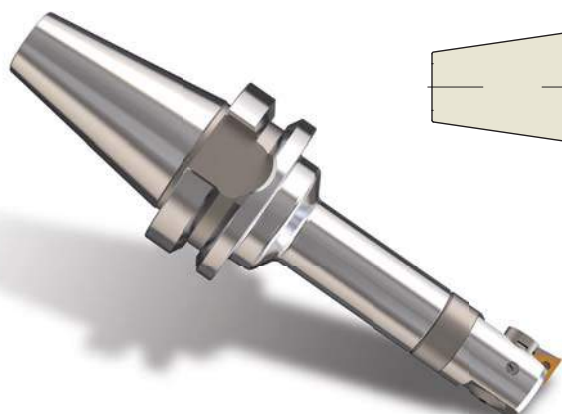


FIG. 1

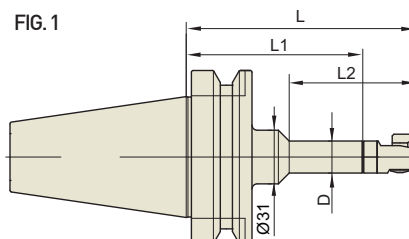
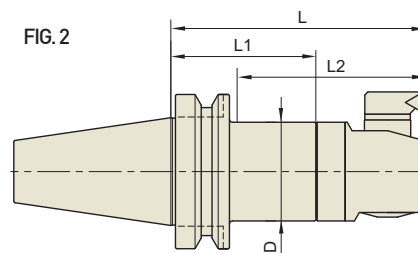


FIG. 2



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

RPM
-

Coolant
System
AD

■ JIS B6339/MAS 403-BT

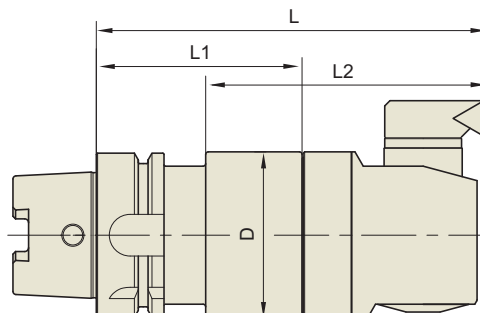
Unit : mm

TAPER No.	MODEL No.	BORE RANGE (FRONT)	D	L	L1	L2	Fig.	Weight (Kg)	Stock
30	BT30-BAH1-105	20~26	19	104,5	72	73	1		
	BT30-BAH2-75	25~33	24	73	37,5	48	2		
	BT30-BAH2-120	25~33	24	118	82,5	93	2		
	BT30-BAH3-80	32~42	31	79	39	53	2		
	BT30-BAH3-120	32~42	31	119	79	93	2		
	BT30-BAH4-85	41~54	39	85	38	58	2		
	BT30-BAH4-120	41~54	39	120	73	93	2		
	BT30-BAH5-120	53~70	50	120	63	93	2		
40	BT40-BAH1-105	20~26	19	104,5	72	73	2		●
	BT40-BAH2-80	25~33	24	78	42,5	48	2		●
	BT40-BAH2-120	25~33	24	118	82,5	88	2		●
	BT40-BAH3-85	32~42	31	84	44	53	2		●
	BT40-BAH3-135	32~42	31	134	94	103	2		●
	BT40-BAH4-90	41~54	39	90	43	58	2		●
	BT40-BAH4-135	41~54	39	135	88	103	2		●
	BT40-BAH5-105	53~70	50	105	48	73	2		●
	BT40-BAH5-135	53~70	50	135	79	103	2		●
	BT40-BAH6-135	68~100	64	135	64	103	2		●
50	BT50-BAH1-135	20~26	19	134,5	102	73	1		
	BT50-BAH2-90	25~33	24	88	52,5	47	2		
	BT50-BAH2-150	25~33	24	148	112,5	107	2		
	BT50-BAH3-95	32~42	31	94	54	52	2		
	BT50-BAH3-165	32~42	31	164	124	122	2		
	BT50-BAH4-105	41~54	39	105	58	62	2		
	BT50-BAH4-165	41~54	39	165	118	122	2		
	BT50-BAH4-225	41~54	39	225	178	182	2		
	BT50-BAH5-120	53~70	50	120	63	77	2		
	BT50-BAH5-165	53~70	50	165	108	122	2		
	BT50-BAH5-240	53~70	50	240	183	197	2		
	BT50-BAH5-285	53~70	50	285	228	242	2		
	BT50-BAH6-165	68~100	64	165	94	122	2		
	BT50-BAH6-240	68~100	64	240	169	197	2		
	BT50-BAH6-300	68~100	64	300	229	257	2		
	BT50-BAH7-180	100~153	90	180	93	142	2		
	BT50-BAH7-330	100~153	90	330	243	292	2		

FINE BORING BAR (SMALL BORE)

BAH

FEINBOHRHALTER
ALÉSAGE PROFOND
BARRE DI ALESATURA FINE
BARRA DE MANDRINADO FINO



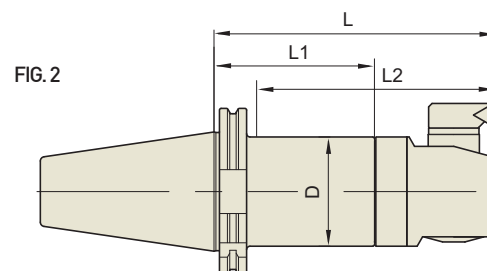
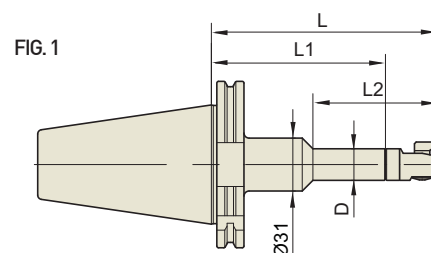
DIN 69893 - HSK	Taper Accuracy	G Value	RPM	Coolant System
	-	-	-	AD

■ DIN 69893/ISO 12164-1-HSK FORM A

Unit : mm

TAPER No.	MODEL No.	BORE RANGE (FRONT)	D	L	L1	L2	Weight (Kg)	Stock
40A	HSK40A-BAH1-72.5	20~26	19	105	72.5	73		
	HSK40A-BAH2-39.5	25~33	24	75	39.5	44		
	HSK40A-BAH2-84.5	25~33	24	120	84.5	89		
	HSK40A-BAH3-45	32~42	31	85	45	57		
	HSK40A-BAH3-80	32~42	31	120	80	92		
	HSK40A-BAH4-53	41~54	39	100	53			
	HSK40A-BAH4-73	41~54	39	120	73			
50A	HSK50A-BAH1-72.5	20~26	19	105	72.5	65		●
	HSK50A-BAH2-84.5	25~33	24	117	84.5	80		●
	HSK50A-BAH3-80	32~42	31	120	80	82		●
	HSK50A-BAH4-73	41~54	39	120	73	76		●
	HSK50A-BAH5-83	53~70	50	140	83			●
63A	HSK63A-BAH1-77.5	20~26	19	110	77.5	73		●
	HSK63A-BAH2-89.5	25~33	24	125	89.5	88		●
	HSK63A-BAH3-100	32~42	31	140	100	103		●
	HSK63A-BAH4-93	41~54	39	140	93	103		●
	HSK63A-BAH5-83	53~70	50	140	83	105		●
	HSK63A-BAH6-79	68~100	64	150	79			●
100A	HSK100A-BAH1-102.5	20~26	19	135	102.5	73		
	HSK100A-BAH2-114.5	25~33	24	150	114.5	107		
	HSK100A-BAH3-125	32~42	31	165	125	122		
	HSK100A-BAH4-118	41~54	39	165	118	122		
	HSK100A-BAH4-178	41~54	39	225	178	182		
	HSK100A-BAH5-108	53~70	50	165	108	122		
	HSK100A-BAH5-183	53~70	50	240	183	197		
	HSK100A-BAH5-228	53~70	50	285	228	242		
	HSK100A-BAH6-94	68~100	64	165	94	122		
	HSK100A-BAH6-169	68~100	64	240	169	197		
	HSK100A-BAH6-229	68~100	64	300	229	257		
	HSK100A-BAH7-123	100~153	90	210	123	181		
	HSK100A-BAH7-273	100~153	90	360	273	331		

FEINBOHRHALTER
ALÉSAGE PROFOND
BARRE DI ALESATURA FINE
BARRA DE MANDRINADO FINO



DIN 69871
-SK

Taper
Accuracy
AT3

G Value
-

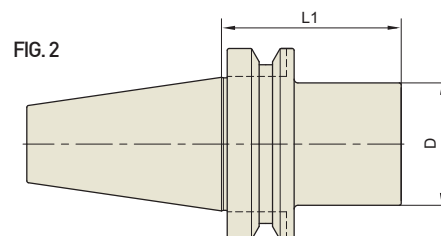
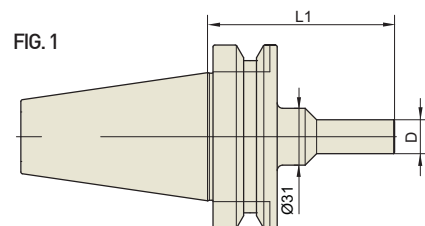
RPM
-

Coolant
System
AD

■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	BORE RANGE (FRONT)	D	L	L1	L2	Fig.	Weight (Kg)	Stock
40	SK40-BAH1-105	20~26	19	104,5	72	73	2		
	SK40-BAH2-80	25~33	24	78	42,5	48	2		
	SK40-BAH2-120	25~33	24	118	82,5	88	2		
	SK40-BAH3-85	32~42	31	84	44	53	2		
	SK40-BAH3-135	32~42	31	134	94	103	2		
	SK40-BAH4-90	41~54	39	90	43	58	2		
	SK40-BAH4-135	41~54	39	135	88	103	2		
	SK40-BAH5-105	53~70	50	105	48	73	2		
	SK40-BAH5-135	53~70	50	135	79	103	2		
50	SK40-BAH6-135	68~100	64	135	64	103	2		
	SK50-BAH1-135	20~26	19	134,5	102	73	1		
	SK50-BAH2-90	25~33	24	88	52,5	66	2		
	SK50-BAH2-150	25~33	24	148	112,5	126	2		
	SK50-BAH3-95	32~42	31	94	54	71	2		
	SK50-BAH3-165	32~42	31	164	124	141	2		
	SK50-BAH4-105	41~54	39	105	58	81	2		
	SK50-BAH4-165	41~54	39	165	118	141	2		
	SK50-BAH4-225	41~54	39	225	178	201	2		
	SK50-BAH5-120	53~70	50	120	63	96	2		
	SK50-BAH5-165	53~70	50	165	105	141	2		
	SK50-BAH5-240	53~70	50	240	183	216	2		
	SK50-BAH5-285	53~70	50	285	228	261	2		
	SK50-BAH6-165	68~100	64	165	94	141	2		
	SK50-BAH6-240	68~100	64	240	169	216	2		
	SK50-BAH6-300	68~100	64	300	229	276	2		
	SK50-BAH7-210	100~153	90	210	93	191	2		
	SK50-BAH7-360	100~153	90	360	243	341	2		



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

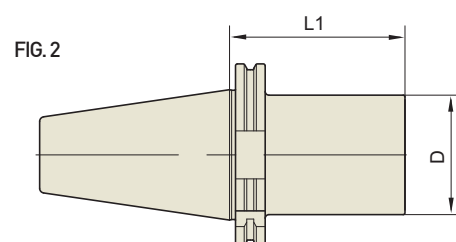
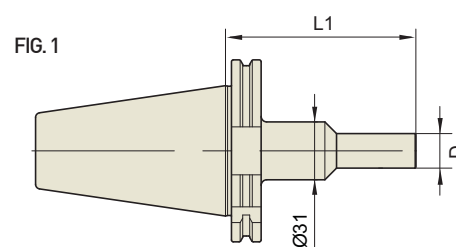
RPM
-

Coolant
System
AD

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	D	L1	Fig.	Weight (Kg)
30	BT30-SAS19-72	19	72	1	
	BT30-SAS24-37.5	24	37.5	2	
	BT30-SAS24-82.5	24	82.5	2	
	BT30-SAS31-39	31	39	2	
	BT30-SAS31-79	31	79	2	
	BT30-SAS39-38	39	38	2	
	BT30-SAS39-73	39	73	2	
40	BT30-SAS50-63	50	63	2	
	BT40-SAS19-72	19	72	2	
	BT40-SAS24-42.5	24	42.5	2	
	BT40-SAS24-82.5	24	82.5	2	
	BT40-SAS31-44	31	44	2	
	BT40-SAS31-94	31	94	2	
	BT40-SAS39-43	39	43	2	
	BT40-SAS39-88	39	88	2	
	BT40-SAS50-48	50	48	2	
50	BT40-SAS50-79	50	79	2	
	BT40-SAS64-64	64	64	2	
	BT50-SAS19-102	19	102	1	
	BT50-SAS24-52.5	24	52.5	2	
	BT50-SAS24-112.5	24	112.5	2	
	BT50-SAS31-54	31	54	2	
	BT50-SAS31-124	31	124	2	
	BT50-SAS39-58	39	58	2	
	BT50-SAS39-118	39	118	2	
	BT50-SAS39-178	39	178	2	
	BT50-SAS50-63	50	63	2	
	BT50-SAS50-108	50	108	2	
	BT50-SAS50-183	50	183	2	
	BT50-SAS50-228	50	228	2	
	BT50-SAS64-94	64	94	2	
	BT50-SAS64-169	64	169	2	
	BT50-SAS64-229	64	229	2	
	BT50-SAS90-93	90	93	2	
	BT50-SAS90-243	90	243	2	



DIN 69871 -SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System AD
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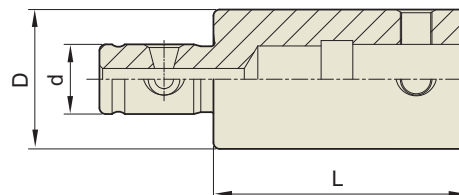
■ DIN 69871-SK

Unit : mm

TAPER No.	MODEL No.	D	L1	Fig.	Weight (Kg)
40	SK40-SAS19-72	19	72	2	
	SK40-SAS24-42,5	24	42,5	2	
	SK40-SAS24-82,5	24	82,5	2	
	SK40-SAS31-44	31	44	2	
	SK40-SAS31-94	31	94	2	
	SK40-SAS39-43	39	43	2	
	SK40-SAS39-88	39	88	2	
	SK40-SAS50-48	50	48	2	
	SK40-SAS50-79	50	79	2	
	SK40-SAS64-64	64	64	2	
50	SK50-SAS19-102	19	102	1	
	SK50-SAS24-52,5	24	52,5	2	
	SK50-SAS24-112,5	24	112,5	2	
	SK50-SAS31-54	31	54	2	
	SK50-SAS31-124	31	124	2	
	SK50-SAS39-58	39	58	2	
	SK50-SAS39-118	39	118	2	
	SK50-SAS39-178	39	178	2	
	SK50-SAS50-63	50	63	2	
	SK50-SAS50-105	50	105	2	
	SK50-SAS50-183	50	183	2	
	SK50-SAS50-228	50	228	2	
	SK50-SAS64-94	64	94	2	
	SK50-SAS64-169	64	169	2	
	SK50-SAS64-229	64	229	2	
	SK50-SAS90-93	90	93	2	
	SK50-SAS90-243	90	243	2	

EXTENSION BAR (for FINE BORING BAR - SMALL BORE)

BAH

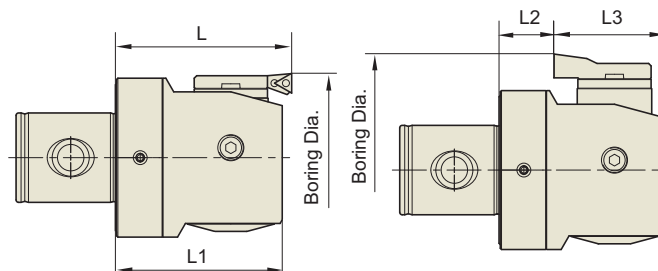


Unit : mm

MODEL No.	d	D	L	Weight (Kg)
E-BAH1-20	11	19	20	
E-BAH1-30	11	19	30	
E-BAH2-30	14	24	30	
E-BAH2-45	14	24	45	
E-BAH3-30	18	31	30	
E-BAH3-45	18	31	45	
E-BAH4-45	22	39	45	
E-BAH4-60	22	39	60	
E-BAH5-60	28	50	60	
E-BAH5-90	28	50	90	
E-BAH6-60	36	64	60	
E-BAH6-100	36	64	100	
E-BAH7-105	46	90	105	

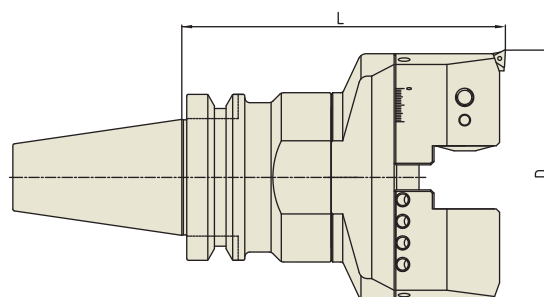
FINE BORING HEAD (SMALL BORE)

FBH



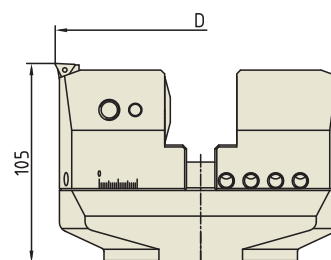
Unit : mm

MODEL No.	CARTRIDGE	FRONT BORE			BACK BORE			INSERT	Weight (Kg)
		BORE RANGE	L	L1	BORE RANGE	L2	L3		
FBH20	FBH1-1	20~26	32.5	29.5	—	10.5	19	TP08	
FBH25	FBH2-1	25~33	35.5	32.5	—	10.5	19	TP08	
FBH32	FBH3-1	32~42	40	35	—	10	25	TP08	
FBH41	FBH4-1	41~54	47	43	—	14	29	TP11	
FBH53	FBH5-1	53~70	57	53	52~70	19	34	TP11	
FBH68	FBH6-1	68~100	71	67.2	80~100	22	45.2	TP11	
FBH100	FBH6-1	100~153	71	67.2	112~153	22	45.2	TP11	
FBH100-2	FBH6-1	100~153	87	83.2	112~153	38	45.2	TP11	



Unit : mm

MODEL No.	D (BORE RANGE)		Body (Basic Holder)	Boring Head	Weight (Kg)	Stock
	min	max				
BT50-FBH153-195	153	216	BT50-SAS102-90	FBH153S		
BT50-FBH153-265			BT50-SAS102-160			
BT50-FBH153-315			BT50-SAS102-210			
BT50-FBH153-365			BT50-SAS102-260			
BT50-FBH216-195	216	276	BT50-SAS102-90	FBH216S		
BT50-FBH216-265			BT50-SAS102-160			
BT50-FBH216-315			BT50-SAS102-210			
BT50-FBH216-365			BT50-SAS102-260			
BT50-FBH276-195	276	336	BT50-SAS102-90	FBH276S		
BT50-FBH276-265			BT50-SAS102-160			
BT50-FBH276-315			BT50-SAS102-210			
BT50-FBH276-365			BT50-SAS102-260			
BT50-FBH336-195	336	396	BT50-SAS102-90	FBH336S		
BT50-FBH336-265			BT50-SAS102-160			
BT50-FBH336-315			BT50-SAS102-210			
BT50-FBH336-365			BT50-SAS102-260			
BT50-FBH396-195	396	456	BT50-SAS102-90	FBH396S		
BT50-FBH396-265			BT50-SAS102-160			
BT50-FBH396-315			BT50-SAS102-210			
BT50-FBH396-365			BT50-SAS102-260			
BT50-FBH456-195	456	516	BT50-SAS102-90	FBH456S		
BT50-FBH456-265			BT50-SAS102-160			
BT50-FBH456-315			BT50-SAS102-210			
BT50-FBH456-365			BT50-SAS102-260			
BT50-FBH516-195	516	576	BT50-SAS102-90	FBH516S		
BT50-FBH516-265			BT50-SAS102-160			
BT50-FBH516-315			BT50-SAS102-210			
BT50-FBH516-365			BT50-SAS102-260			



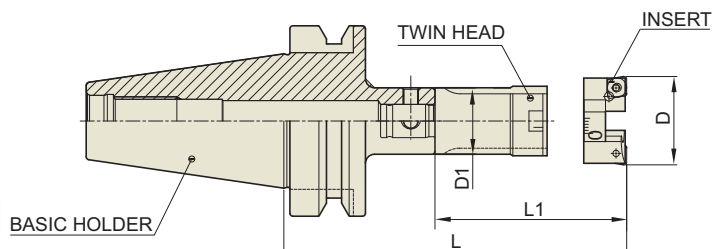
MODEL No.	D (BORE RANGE)		L (HEIGHT)	Weight (Kg)
	min	max		
FBH153S	153	216	105	
FBH216S	216	276	105	
FBH276S	276	336	105	
FBH336S	336	396	105	
FBH396S	396	456	105	
FBH456S	456	516	105	
FBH516S	516	576	105	

SPARE PART							
BORING HEAD	Plate	Cartridge	Clamp Bolt	Counter Weight	Wrench	Clamp Screw	T-Wrench
FBH153S	PLA153	FTP11	M10*30L	FBB153	L-W 5	FTNA0307	T7
FBH216S	PLA216						
FBH276S	PLA276						
FBH336S	PLA336						
FBH396S	PLA396						
FBH456S	PLA456						
FBH516S	PLA516						

TWIN EDGE BORING BAR (SMALL BORE)

TBH

DOPPELSCHNEIDER - BOHRSTANGE
BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
PORTA TESTINE BILAMA
BARRAS DE MANDRINAR DE DOS PLACAS



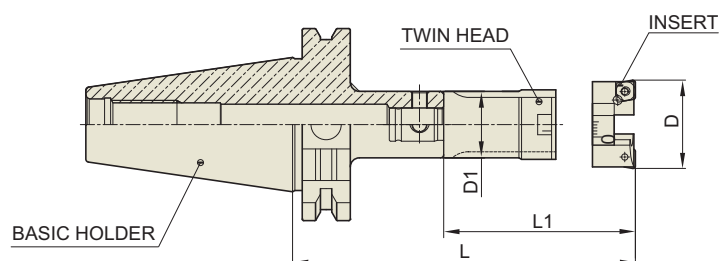
JIS B6339 - BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

Unit : mm

MODEL No.	D	L	BASIC HOLDER	TWIN HEAD	D1	L1	INSERT	Weight (Kg)	Stock
	Min - Max								
BT30-TBH25-90	25 - 34	90	BT30-SAS22-40	SAS22-TBH25-50	22	50	CCMT060200		
BT30-TBH25-140	25 - 34	140	BT30-SAS22-90	SAS22-TBH25-50	22	50	CCMT060200		
BT30-TBH34-110	34 - 50	110	BT30-SAS31-50	SAS31-TBH34-60	31	60	CCMT060200		
BT30-TBH34-150	34 - 50	150	BT30-SAS31-90	SAS31-TBH34-60	31	60	CCMT060200		
BT40-TBH25-100	25 - 34	100	BT40-SAS22-50	SAS22-TBH25-50	22	50	CCMT060200		
BT40-TBH25-140	25 - 34	140	BT40-SAS22-90	SAS22-TBH25-50	22	50	CCMT060200		
BT40-TBH25-155	25 - 34	155	BT40-SAS22-105	SAS22-TBH25-50	22	50	CCMT060200		
BT40-TBH34-120	34 - 50	120	BT40-SAS31-60	SAS31-TBH34-60	31	60	CCMT060200		
BT40-TBH34-160	34 - 50	160	BT40-SAS31-100	SAS31-TBH34-60	31	60	CCMT060200		
BT40-TBH34-180	34 - 50	180	BT40-SAS31-120	SAS31-TBH34-60	31	60	CCMT060200		
BT40-TBH50-140	50 - 76	140	BT40-SAS42-60	SAS42-TBH50-80	42	80	CCMT09T300		
BT40-TBH50-185	50 - 76	185	BT40-SAS42-105	SAS42-TBH50-80	42	80	CCMT09T300		
BT40-TBH50-200	50 - 76	200	BT40-SAS42-120	SAS42-TBH50-80	42	80	CCMT09T300		
BT40-TBH76-180	76 - 116	180	BT40-SAS65-70	SAS65-TBH76-110	65	110	CCMT120400		
BT40-TBH76-200	76 - 116	200	BT40-SAS65-90	SAS65-TBH76-110	65	110	CCMT120400		
BT40-TBH76-220	76 - 116	220	BT40-SAS65-110	SAS65-TBH76-110	65	110	CCMT120400		
BT40-TBH76-240	76 - 116	240	BT40-SAS65-130	SAS65-TBH76-110	65	110	CCMT120400		
BT50-TBH25-110	25 - 34	110	BT50-SAS22-60	SAS22-TBH25-50	22	50	CCMT060200		
BT50-TBH25-130	25 - 34	130	BT50-SAS22-80	SAS22-TBH25-50	22	50	CCMT060200		
BT50-TBH25-150	25 - 34	150	BT50-SAS22-100	SAS22-TBH25-50	22	50	CCMT060200		
BT50-TBH34-130	34 - 50	130	BT50-SAS31-70	SAS31-TBH34-60	31	60	CCMT060200		
BT50-TBH34-160	34 - 50	160	BT50-SAS31-100	SAS31-TBH34-60	31	60	CCMT060200		
BT50-TBH34-190	34 - 50	190	BT50-SAS31-130	SAS31-TBH34-60	31	60	CCMT060200		
BT50-TBH50-150	50 - 76	150	BT50-SAS42-70	SAS42-TBH50-80	42	80	CCMT09T300		
BT50-TBH50-190	50 - 76	190	BT50-SAS42-110	SAS42-TBH50-80	42	80	CCMT09T300		
BT50-TBH50-240	50 - 76	240	BT50-SAS42-150	SAS42-TBH50-80	42	80	CCMT09T300		
BT50-TBH76-200	76 - 116	200	BT50-SAS65-90	SAS65-TBH76-110	65	110	CCMT120400		
BT50-TBH76-240	76 - 116	240	BT50-SAS65-130	SAS65-TBH76-110	65	110	CCMT120400		
BT50-TBH76-280	76 - 116	280	BT50-SAS65-170	SAS65-TBH76-110	65	110	CCMT120400		
BT50-TBH116-225	116 - 156	225	BT50-SAS84-80	SAS84-TBH116-145	84	145	CCMT120400		
BT50-TBH116-275	116 - 156	275	BT50-SAS84-130	SAS84-TBH116-145	84	145	CCMT120400		
BT50-TBH116-325	116 - 156	325	BT50-SAS84-180	SAS84-TBH116-145	84	145	CCMT120400		

DOPPELSCHNEIDER - BOHRSTANGE
BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
PORTA TESTINE BILAMA
BARRAS DE MANDRINAR DE DOS PLACAS



DIN 69871 -SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ DIN 69871-SK

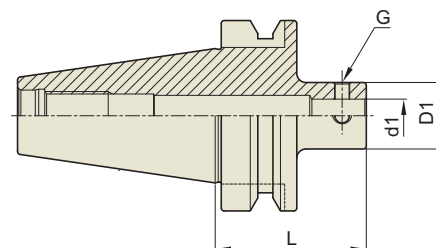
Unit : mm

MODEL No.	D Min - Max	L	BASIC HOLDER	TWIN HEAD	D1	L1	INSERT	Weight (Kg)	Stock
SK30-TBH25-90	25 - 34	90	SK30-SAS22-40	SAS22-TBH25-50	22	50	CCMT060200		
SK30-TBH25-140	25 - 34	140	SK30-SAS22-90	SAS22-TBH25-50	22	50	CCMT060200		
SK30-TBH34-110	34 - 50	110	SK30-SAS31-50	SAS31-TBH34-60	31	60	CCMT060200		
SK30-TBH34-150	34 - 50	150	SK30-SAS31-90	SAS31-TBH34-60	31	60	CCMT060200		
SK40-TBH25-100	25 - 34	100	SK40-SAS22-50	SAS22-TBH25-50	22	50	CCMT060200		
SK40-TBH25-140	25 - 34	140	SK40-SAS22-90	SAS22-TBH25-50	22	50	CCMT060200		
SK40-TBH25-155	25 - 34	155	SK40-SAS22-105	SAS22-TBH25-50	22	50	CCMT060200		
SK40-TBH34-120	34 - 50	120	SK40-SAS31-60	SAS31-TBH34-60	31	60	CCMT060200		
SK40-TBH34-160	34 - 50	160	SK40-SAS31-100	SAS31-TBH34-60	31	60	CCMT060200		
SK40-TBH34-180	34 - 50	180	SK40-SAS31-120	SAS31-TBH34-60	31	60	CCMT060200		
SK40-TBH50-140	50 - 76	140	SK40-SAS42-60	SAS42-TBH50-80	42	80	CCMT09T300		
SK40-TBH50-185	50 - 76	185	SK40-SAS42-105	SAS42-TBH50-80	42	80	CCMT09T300		
SK40-TBH50-200	50 - 76	200	SK40-SAS42-120	SAS42-TBH50-80	42	80	CCMT09T300		
SK40-TBH76-180	76 - 116	180	SK40-SAS65-70	SAS65-TBH76-110	65	110	CCMT120400		
SK40-TBH76-200	76 - 116	200	SK40-SAS65-90	SAS65-TBH76-110	65	110	CCMT120400		
SK40-TBH76-220	76 - 116	220	SK40-SAS65-110	SAS65-TBH76-110	65	110	CCMT120400		
SK40-TBH76-240	76 - 116	240	SK40-SAS65-130	SAS65-TBH76-110	65	110	CCMT120400		
SK50-TBH25-110	25 - 34	110	SK50-SAS22-60	SAS22-TBH25-50	22	50	CCMT060200		
SK50-TBH25-130	25 - 34	130	SK50-SAS22-80	SAS22-TBH25-50	22	50	CCMT060200		
SK50-TBH25-150	25 - 34	150	SK50-SAS22-100	SAS22-TBH25-50	22	50	CCMT060200		
SK50-TBH34-130	34 - 50	130	SK50-SAS31-70	SAS31-TBH34-60	31	60	CCMT060200		
SK50-TBH34-160	34 - 50	160	SK50-SAS31-100	SAS31-TBH34-60	31	60	CCMT060200		
SK50-TBH34-190	34 - 50	190	SK50-SAS31-130	SAS31-TBH34-60	31	60	CCMT060200		
SK50-TBH50-150	50 - 76	150	SK50-SAS42-70	SAS42-TBH50-80	42	80	CCMT09T300		
SK50-TBH50-190	50 - 76	190	SK50-SAS42-110	SAS42-TBH50-80	42	80	CCMT09T300		
SK50-TBH50-240	50 - 76	240	SK50-SAS42-150	SAS42-TBH50-80	42	80	CCMT09T300		
SK50-TBH76-200	76 - 116	200	SK50-SAS65-90	SAS65-TBH76-110	65	110	CCMT120400		
SK50-TBH76-240	76 - 116	240	SK50-SAS65-130	SAS65-TBH76-110	65	110	CCMT120400		
SK50-TBH76-280	76 - 116	280	SK50-SAS65-170	SAS65-TBH76-110	65	110	CCMT120400		
SK50-TBH116-225	116 - 156	225	SK50-SAS84-80	SAS84-TBH116-145	84	145	CCMT120400		
SK50-TBH116-275	116 - 156	275	SK50-SAS84-130	SAS84-TBH116-145	84	145	CCMT120400		
SK50-TBH116-325	116 - 156	325	SK50-SAS84-180	SAS84-TBH116-145	84	145	CCMT120400		

BASIC HOLDER (SMALL BORE) for TWIN EDGE BORING BAR

SAS

DOPPELSCHNEIDER - BOHRSTANGE
BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
PORTA TESTINE BILAMA
BARRAS DE MANDRINAR DE DOS PLACAS



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

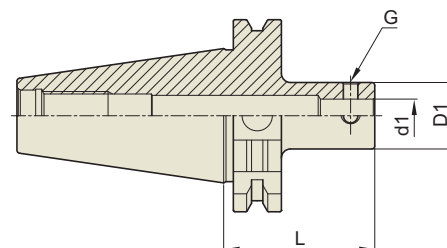
Unit : mm

TAPER No.	MODEL No.	d1	D1	L	G	Weight (Kg)
30	BT30-SAS22-40	11	22	40	M5	0.30
	BT30-SAS22-90	11	22	90	M5	0.40
	BT30-SAS31-50	18	31	50	M8	0.40
	BT30-SAS31-90	18	31	90	M8	0.50
40	BT40-SAS22-50	11	22	50	M5	1.70
	BT40-SAS22-90	11	22	90	M5	1.90
	BT40-SAS22-105	11	22	105	M5	1.90
	BT40-SAS31-60	18	31	60	M8	1.90
	BT40-SAS31-100	18	31	100	M8	2.30
	BT40-SAS31-120	18	31	120	M8	2.40
	BT40-SAS42-60	24	42	60	M10	2.70
	BT40-SAS42-105	24	42	105	M10	2.90
	BT40-SAS42-120	24	42	120	M10	3.10
	BT40-SAS65-70	34	65	70	M16	3.30
	BT40-SAS65-90	34	65	90	M16	3.60
	BT40-SAS65-110	34	65	110	M16	4.60
	BT40-SAS65-130	34	65	130	M16	4.70
50	BT50-SAS22-60	11	22	60	M5	4.30
	BT50-SAS22-80	11	22	80	M5	4.50
	BT50-SAS22-100	11	22	100	M5	4.70
	BT50-SAS31-70	18	31	70	M8	4.50
	BT50-SAS31-100	18	31	100	M8	5.10
	BT50-SAS31-130	18	31	130	M8	5.40
	BT50-SAS42-70	24	42	70	M10	5.00
	BT50-SAS42-110	24	42	110	M10	5.20
	BT50-SAS42-150	24	42	150	M10	5.50
	BT50-SAS65-90	34	65	90	M16	6.80
	BT50-SAS65-130	34	65	130	M16	7.50
	BT50-SAS65-170	34	65	170	M16	8.00
	BT50-SAS84-80	46	84	80	M16	9.00
	BT50-SAS84-130	46	84	130	M16	9.70
	BT50-SAS84-180	46	84	180	M16	9.90

BASIC HOLDER (SMALL BORE) for TWIN EDGE BORING BAR

SAS

DOPPELSCHNEIDER - BOHRSTANGE
BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
PORTA TESTINE BILAMA
BARRAS DE MANDRINAR DE DOS PLACAS



DIN 69871 -SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ DIN 69871-SK

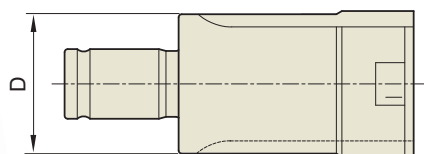
Unit : mm

TAPER No.	MODEL No.	d1	D1	L	G	Weight (Kg)
30	SK30-SAS22-40	11	22	40	M5	0,30
	SK30-SAS22-90	11	22	90	M5	0,40
	SK30-SAS31-50	18	31	50	M8	0,40
	SK30-SAS31-90	18	31	90	M8	0,50
40	SK40-SAS22-50	11	22	50	M5	1,70
	SK40-SAS22-90	11	22	90	M5	1,90
	SK40-SAS22-105	11	22	105	M5	1,90
	SK40-SAS31-60	18	31	60	M8	1,90
	SK40-SAS31-100	18	31	100	M8	2,30
	SK40-SAS31-120	18	31	120	M8	2,40
	SK40-SAS42-60	24	42	60	M10	2,70
	SK40-SAS42-105	24	42	105	M10	2,90
	SK40-SAS42-120	24	42	120	M10	3,10
	SK40-SAS65-70	34	65	70	M16	3,30
	SK40-SAS65-90	34	65	90	M16	3,60
	SK40-SAS65-110	34	65	110	M16	4,60
	SK40-SAS65-130	34	65	130	M16	4,70
50	SK50-SAS22-60	11	22	60	M5	4,30
	SK50-SAS22-80	11	22	80	M5	4,50
	SK50-SAS22-100	11	22	100	M5	4,70
	SK50-SAS31-70	18	31	70	M8	4,50
	SK50-SAS31-100	18	31	100	M8	5,10
	SK50-SAS31-130	18	31	130	M8	5,40
	SK50-SAS42-70	24	42	70	M10	5,00
	SK50-SAS42-110	24	42	110	M10	5,20
	SK50-SAS42-150	24	42	150	M10	5,50
	SK50-SAS65-90	34	65	90	M16	6,80
	SK50-SAS65-130	34	65	130	M16	7,50
	SK50-SAS65-170	34	65	170	M16	8,00
	SK50-SAS84-80	46	84	80	M16	9,00
	SK50-SAS84-130	46	84	130	M16	9,70
	SK50-SAS84-180	46	84	180	M16	9,90

TWIN HEAD

ACC

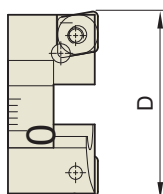
Unit : mm



TWIN HEAD	D	Weight (Kg)
SAS22-TBH25-50	22	
SAS31-TBH34-60	31	
SAS42-TBH50-80	42	
SAS65-TBH76-110	65	
SAS84-TBH116-145	84	

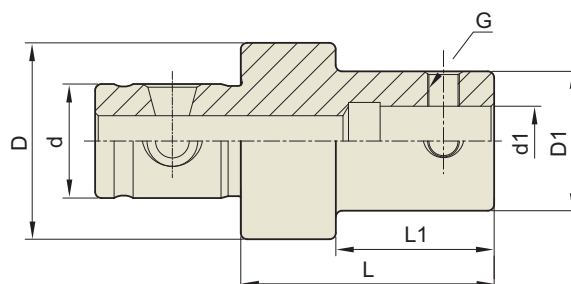
INSERT HOLDER (CARTRIDGE) for TWIN EDGE BORING BAR

Unit : mm



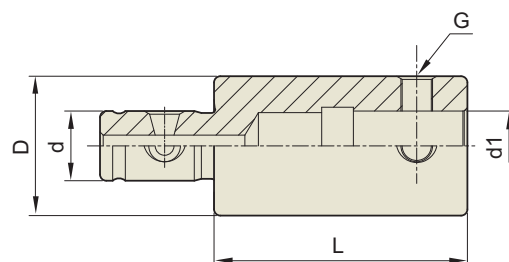
INSERT HOLDER	D Min – Max	Weight (Kg)
TBH25-CC06	25 – 34	
TBH34-CC06	34 – 50	
TBH50-CC09	50 – 76	
TBH76-CC12	76 – 116	
TBH116-CC12	116 – 156	

REDUCTION BAR for TWIN EDGE BORING BAR



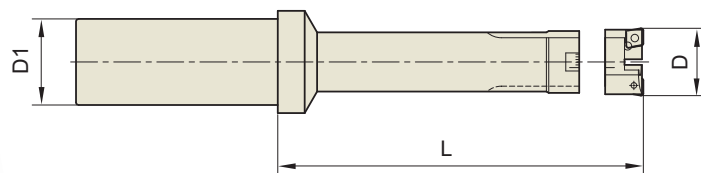
Unit : mm

TWIN HEAD	d	d1	D	D1	L	L1	G	Weight (Kg)
R-SAS31-22-40	18	11	31	22	40	25	M5	
R-SAS42-22-45	24	11	42	22	45	25	M5	
R-SAS42-31-50	24	18	42	31	50	30	M8	
R-SAS65-22-50	34	11	65	22	50	25	M5	
R-SAS65-31-55	34	18	65	31	55	30	M8	
R-SAS65-42-65	34	24	65	42	65	40	M10	
R-SAS84-22-55	46	11	84	22	55	25	M5	
R-SAS84-31-60	46	18	84	31	60	30	M8	
R-SAS84-42-65	46	24	84	42	65	40	M10	
R-SAS84-65-70	46	34	84	65	70	40	M16	



Unit : mm

MODEL No.	d	d1	D	L	G	Weight (Kg)
E-SAS22-40	11	11	22	40	M5	
E-SAS22-60	11	11	22	60	M5	
E-SAS31-50	18	18	31	50	M8	
E-SAS31-80	18	18	31	80	M8	
E-SAS42-60	24	24	42	60	M10	
E-SAS42-90	24	24	42	90	M10	
E-SAS65-70	34	34	65	70	M16	
E-SAS65-100	34	34	65	100	M16	
E-SAS84-90	46	46	84	90	M16	
E-SAS84-100	46	46	84	100	M16	



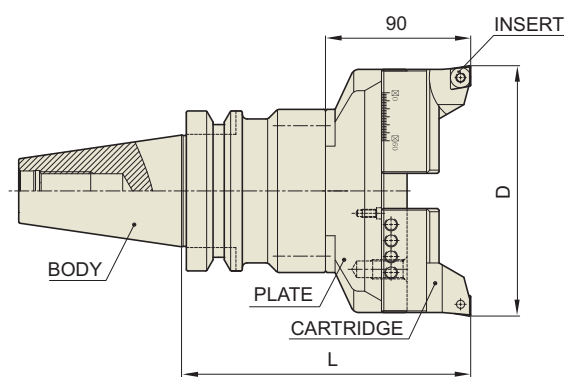
■ ST

Unit : mm

MODEL No.	D	L	D1	INSERT	Weight (Kg)	Stock
	Min – Max					
ST32-TBH25-125	25 – 34	125	32	CCMT060200		
ST32-TBH34-130	34 – 50	130	32	CCMT060200		
ST32-TBH50-155	50 – 76	155	32	CCMT09T300		
ST40-TBH76-185	76 – 116	185	40	CCMT120400		
ST42-TBH76-185	76 – 116	185	42	CCMT120400		

TWIN EDGE BORING BAR (BIG BORE-for ROUGH BORING) TBH

DOPPELSCHNEIDER - BOHRSTANGE
BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
PORTA TESTINE BILAMA
BARRAS DE MANDRINAR DE DOS PLACAS



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

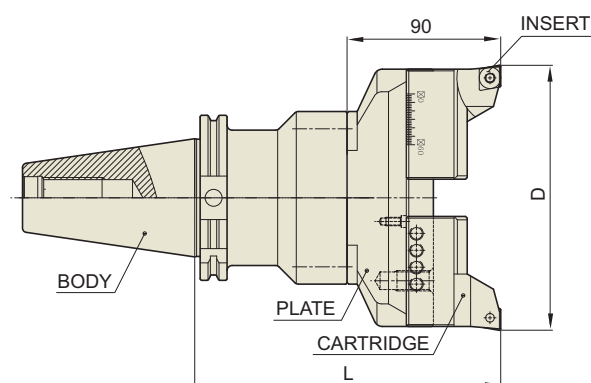
Unit : mm

MODEL No.	D	L	BODY	PLATE	INSERT	Weight (Kg)	Stock
	Min - Max						
BT50-TBH156-180	156 - 216	180	BT50-SAS102-90	PLA156	CCMT120400		
BT50-TBH156-230	156 - 216	230	BT50-SAS102-140	PLA156	CCMT120400		
BT50-TBH156-280	156 - 216	280	BT50-SAS102-190	PLA156	CCMT120400		
BT50-TBH216-180	216 - 276	180	BT50-SAS102-90	PLA216	CCMT120400		
BT50-TBH216-230	216 - 276	230	BT50-SAS102-140	PLA216	CCMT120400		
BT50-TBH216-280	216 - 276	280	BT50-SAS102-190	PLA216	CCMT120400		
BT50-TBH276-180	276 - 336	180	BT50-SAS102-90	PLA276	CCMT120400		
BT50-TBH276-230	276 - 336	230	BT50-SAS102-140	PLA276	CCMT120400		
BT50-TBH276-280	276 - 336	280	BT50-SAS102-190	PLA276	CCMT120400		
BT50-TBH336-180	336 - 396	180	BT50-SAS102-90	PLA336	CCMT120400		
BT50-TBH336-230	336 - 396	230	BT50-SAS102-140	PLA336	CCMT120400		
BT50-TBH336-280	336 - 396	280	BT50-SAS102-190	PLA336	CCMT120400		
BT50-TBH396-180	396 - 456	180	BT50-SAS102-90	PLA396	CCMT120400		
BT50-TBH396-230	396 - 456	230	BT50-SAS102-140	PLA396	CCMT120400		
BT50-TBH396-280	396 - 456	280	BT50-SAS102-190	PLA396	CCMT120400		
BT50-TBH456-180	456 - 516	180	BT50-SAS102-90	PLA456	CCMT120400		
BT50-TBH456-230	456 - 516	230	BT50-SAS102-140	PLA456	CCMT120400		
BT50-TBH456-280	456 - 516	280	BT50-SAS102-190	PLA456	CCMT120400		
BT50-TBH516-180	516 - 576	180	BT50-SAS102-90	PLA516	CCMT120400		
BT50-TBH516-230	516 - 576	230	BT50-SAS102-140	PLA516	CCMT120400		
BT50-TBH516-280	516 - 576	280	BT50-SAS102-190	PLA516	CCMT120400		

► Upon request , special twin edge boring bars with a boring range up to 800mm could be manufactured and supplied.

TWIN EDGE BORING BAR (BIG BORE-for ROUGH BORING) TBH

DOPPELSCHNEIDER - BOHRSTANGE
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
 PORTA TESTINE BILAMA
 BARRAS DE MANDRINAR DE DOS PLACAS



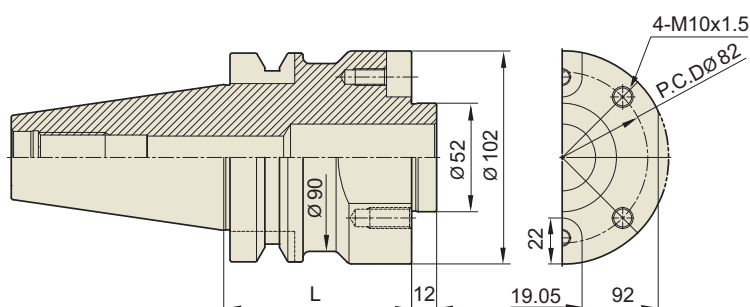
DIN 69871 -SK	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ DIN 69871-SK

Unit : mm

MODEL No.	D	L	BODY	PLATE	INSERT	Weight (Kg)	Stock
	Min - Max						
SK50-TBH156-180	156 - 216	180	SK50-SAS102-90	PLA156	CCMT120400		
SK50-TBH156-230	156 - 216	230	SK50-SAS102-140	PLA156	CCMT120400		
SK50-TBH156-280	156 - 216	280	SK50-SAS102-190	PLA156	CCMT120400		
SK50-TBH216-180	216 - 276	180	SK50-SAS102-90	PLA216	CCMT120400		
SK50-TBH216-230	216 - 276	230	SK50-SAS102-140	PLA216	CCMT120400		
SK50-TBH216-280	216 - 276	280	SK50-SAS102-190	PLA216	CCMT120400		
SK50-TBH276-180	276 - 336	180	SK50-SAS102-90	PLA276	CCMT120400		
SK50-TBH276-230	276 - 336	230	SK50-SAS102-140	PLA276	CCMT120400		
SK50-TBH276-280	276 - 336	280	SK50-SAS102-190	PLA276	CCMT120400		
SK50-TBH336-180	336 - 396	180	SK50-SAS102-90	PLA336	CCMT120400		
SK50-TBH336-230	336 - 396	230	SK50-SAS102-140	PLA336	CCMT120400		
SK50-TBH336-280	336 - 396	280	SK50-SAS102-190	PLA336	CCMT120400		
SK50-TBH396-180	396 - 456	180	SK50-SAS102-90	PLA396	CCMT120400		
SK50-TBH396-230	396 - 456	230	SK50-SAS102-140	PLA396	CCMT120400		
SK50-TBH396-280	396 - 456	280	SK50-SAS102-190	PLA396	CCMT120400		
SK50-TBH456-180	456 - 516	180	SK50-SAS102-90	PLA456	CCMT120400		
SK50-TBH456-230	456 - 516	230	SK50-SAS102-140	PLA456	CCMT120400		
SK50-TBH456-280	456 - 516	280	SK50-SAS102-190	PLA456	CCMT120400		
SK50-TBH516-180	516 - 576	180	SK50-SAS102-90	PLA516	CCMT120400		
SK50-TBH516-230	516 - 576	230	SK50-SAS102-140	PLA516	CCMT120400		
SK50-TBH516-280	516 - 576	280	SK50-SAS102-190	PLA516	CCMT120400		

► Upon request , special twin edge boring bars with a boring range up to 800mm could be manufactured and supplied.

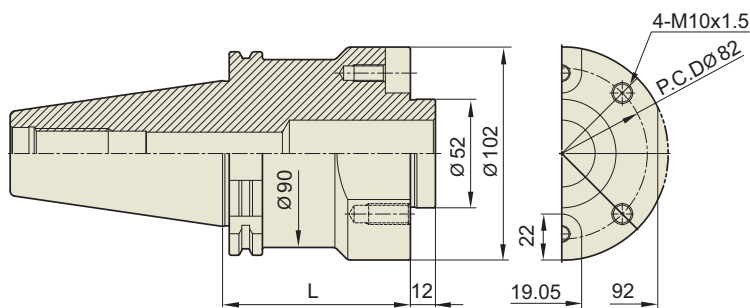


■ JIS B6339/MAS 403-BT

JIS B6339 -BT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	-	-	-

Unit : mm

MODEL No.	L	Weight (Kg)
BT50-SAS102-90	90	
BT50-SAS102-140	140	
BT50-SAS102-190	190	

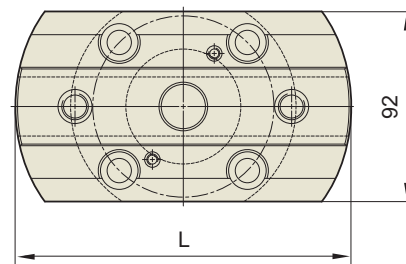


■ DIN 69871-SK

DIN 69871 -SK	Taper Accuracy	G Value	RPM	Coolant System
	AT3	-	-	-

Unit : mm

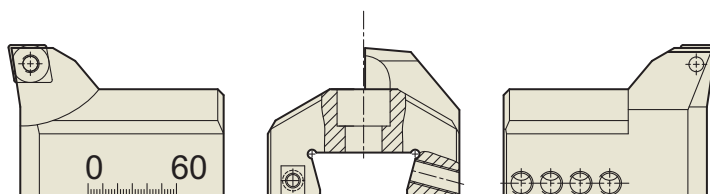
MODEL No.	L	Weight (Kg)
SK50-SAS102-90	90	
SK50-SAS102-140	140	
SK50-SAS102-190	190	



Unit : mm

PLATE	D	Weight (Kg)
PLA156	152	
PLA216	212	
PLA276	272	
PLA336	332	
PLA396	392	
PLA456	452	
PLA516	512	

INSERT HOLDER (CARTRIDGE) for TWIN EDGE BORING BAR



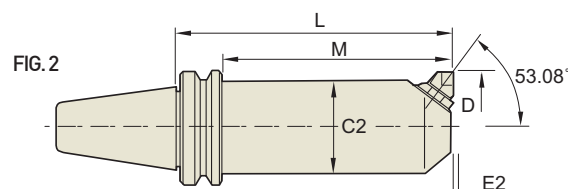
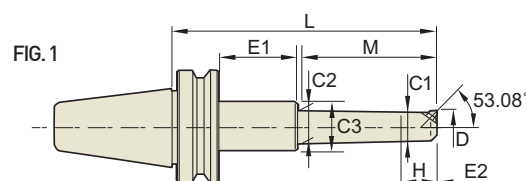
Unit : mm

CARTRIDGE (For Rough Cutting)	Weight (Kg)
CN120	

MICRO BORING BAR

BCA

MIKRO - BOHRSTANGE
BARRE D'ALÉSAGE MICRO
PORTA TESTINE MICROREGISTRABILI
BARRAS DE MANDRINAR MICRO



JIS B6339 -BT	Taper Accuracy	G Value	RPM	Coolant System
	AT3	-	-	-

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	D Min-Max	L	M	C1	C2	C3	H	E1	E2	UNIT	INSERT	Weight (Kg)	Fig.	Stock
30	BT30-BCA13.5-105	13.5 - 16	105	68	12	13.0	44	15	5	0.2	M1B2 E/F	BRAZED TYPE		1	
	BT30-BCA14.5-105	14.5 - 17	105	68	13	14.0	44	15	5	0.2	M1B2 E/F	BRAZED TYPE		1	
	BT30-BCA16-105	16 - 22.5	105	73	14	15	-	18	-	0.2	M1A2 E/F	BRAZED TYPE		3	
	BT30-BCA19-120	19 - 23	120	85	16	18	44	23	3	0.2	M2B 2CC	CCGT0401	0.70	1	
	BT30-BCA23-135	23 - 29	135	105	19	22	-	24	-	0.2	M3B 2TC	TBGT0601	0.70	3	
	BT30-BCA29-150	29 - 41	150	115	25	28	44	30	8	0.2	M3A 2TC	TBGT0601	0.90	1	
	BT30-BCA29-195	29 - 41	195	115	25	28	44	30	53	0.2	M3A 2TC	TBGT0601		1	
	BT30-BCA38-150	38 - 49	150	115	33	35	55	41	8	0.2	M5B 2TC	TCGT1102	1.40	1	
	BT30-BCA38-210	38 - 49	210	175	33	37	55	41	8	0.2	M5B 2TC	TCGT1102		1	
	BT30-BCA46-150	46 - 66	150	115	38	41	55	45	8	0.2	M5A 2TC	TCGT1102	2.10	1	
	BT30-BCA46-210	46 - 66	210	175	38	45	55	45	8	0.2	M5A 2TC	TCGT1102		1	
40	BT30-BCA62-165	62 - 87	165	135	51	-	-	-	-	0.2	M7A 2TC	TCGT16T3		2	
	BT40-BCA13.5-105	13.5 - 16	105	68	12	13.0	44	15	5	0.2	M1B2 E/F	BRAZED TYPE		1	
	BT40-BCA14.5-105	14.5 - 17	105	68	13	14.0	44	15	5	0.2	M1B2 E/F	BRAZED TYPE		1	
	BT40-BCA16-105	16 - 22.5	105	73	14	15	-	18	-	0.2	M1A2 E/F	BRAZED TYPE		3	
	BT40-BCA19-120	19 - 23	120	85	16	18	44	23	3	0.2	M2B2CC	CCGT0401	1.50	1	
	BT40-BCA23-135	23 - 29	135	105	19	22	-	24	-	0.2	M3B2TC	TBGT0601	1.50	3	
	BT40-BCA29-150	29 - 41	150	115	25	28	44	30	8	0.2	M3A2TC	TBGT0601	1.50	1	
	BT40-BCA29-195	29 - 41	195	115	25	28	44	30	53	0.2	M3A2TC	TBGT0601	2.00	1	
	BT40-BCA38-150	38 - 49	150	115	33	35	55	41	8	0.2	M5B2TC	TCGT1102	1.80	1	
	BT40-BCA38-210	38 - 49	210	175	33	37	55	41	8	0.2	M5B2TC	TCGT1102	2.20	1	
	BT40-BCA46-150	46 - 66	150	115	38	41	55	45	8	0.2	M5A2TC	TCGT1102	2.10	1	
	BT40-BCA46-210	46 - 66	210	175	38	45	55	45	8	0.2	M5A2TC	TCGT1102	2.30	1	
	BT40-BCA62-165	62 - 87	165	135	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	2.90	2	
	BT40-BCA62-210	62 - 87	210	180	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	3.60	2	
	BT40-BCA83-150	83 - 108	150	120	63	-	-	-	-	0.2	M7A2TC	TCGT16T3		2	
	BT40-BCA83-210	83 - 108	210	180	63	-	-	-	-	0.2	M7A2TC	TCGT16T3		2	
	BT40-BCA98-150	98 - 142	150	120	83	-	-	85	-	0.2	M10A2TC	TCGT16T3		4	

MIKRO - BOHRSTANGE
BARRE D'ALÉSAGE MICRO
PORTA TESTINE MICROREGISTRABILI
BARRAS DE MANDRINAR MICRO

FIG. 3

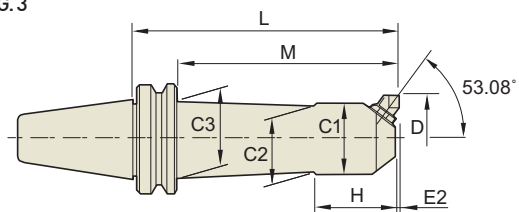
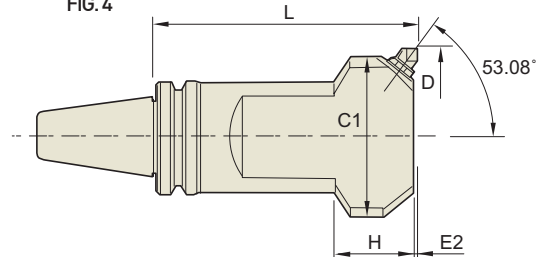


FIG. 4



JIS B6339
-BT

Taper
Accuracy
AT3

G Value
-

RPM
-

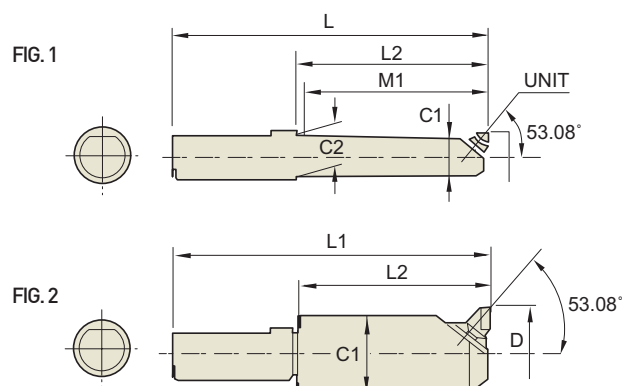
Coolant
System
-

■ JIS B6339/MAS 403-BT

Unit : mm

TAPER No.	MODEL No.	D	L	M	C1	C2	C3	H	E1	E2	UNIT	INSERT	Weight (Kg)	Fig.	Stock
		Min-Max													
50	BT50-BCA13.5-120	13.5 - 16	120	67	12	13	44	15	10	0.2	M1B2 E/F	-		1	
	BT50-BCA13.5-195	13.5 - 16	195	67	12	13	44	15	85	0.2	M1B2 E/F	-		1	
	BT50-BCA14.5-120	14.5 - 17	120	67	13	14	44	15	10	0.2	M1B2 E/F	-		1	
	BT50-BCA14.5-195	14.5 - 17	195	67	13	14	44	15	85	0.2	M1B2 E/F	-		1	
	BT50-BCA16-120	16 - 22.5	120	73	14	15	44	18	4	0.2	M1A2 E/F	-		1	
	BT50-BCA16-195	16 - 22.5	195	73	14	15	44	18	79	0.2	M1A2 E/F	-		1	
	BT50-BCA19-135	19 - 23	135	86	16	18	44	23	6	0.2	M2B2CC	CCGT0401	3.80	1	
	BT50-BCA19-210	19 - 23	210	86	16	18	44	23	81	0.2	M2B2CC	CCGT0401		1	
	BT50-BCA23-150	23 - 29	150	105	19	22	44	24	2	0.2	M3B2TC	TBGT0601	3.90	1	
	BT50-BCA23-225	23 - 29	225	105	19	22	44	24	77	0.2	M3B2TC	TBGT0601		1	
	BT50-BCA29-165	29 - 41	165	115	25	28	44	30	7	0.2	M3A2TC	TBGT0601	4.50	1	
	BT50-BCA29-225	29 - 41	225	115	25	28	44	30	67	0.2	M3A2TC	TBGT0601		1	
	BT50-BCA38-165	38 - 49	165	115	33	35	55	41	7	0.2	M5B2TC	TCGT1102		1	
	BT50-BCA38-225	38 - 49	225	172	33	37	55	41	10	0.2	M5B2TC	TCGT1102	5.00	1	
	BT50-BCA46-165	46 - 66	165	115	38	41	55	45	7	0.2	M5A2TC	TCGT1102	5.20	1	
	BT50-BCA46-225	46 - 66	225	182	38	-	-	45	-	0.2	M5A2TC	TCGT1102		3	
	BT50-BCA46-255	46 - 66	255	206	38	-	55	45	6	0.2	M5A2TC	TCGT1102	5.70	1	
	BT50-BCA62-180	62 - 87	180	137	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	7.00	2	
	BT50-BCA62-240	62 - 87	240	184	51	57	70	60	13	0.2	M7A2TC	TCGT16T3	7.60	1	
	BT50-BCA62-330	62 - 87	330	280	51	60	70	60	7	0.2	M7A2TC	TCGT16T3	9.50	1	
	BT50-BCA83-165	83 - 108	165	122	63	-	-	-	-	0.2	M7A2TC	TCGT16T3		2	
	BT50-BCA83-240	83 - 108	240	190	63	62	90	95	7	0.2	M7A2TC	TCGT16T3		1	
	BT50-BCA83-345	83 - 108	345	295	63	62	90	95	7	0.2	M7A2TC	TCGT16T3		1	
	BT50-BCA98-165	98 - 142	165	122	83	-	-	-	-	0.2	M10A2TC	TCGT16T3		2	
	BT50-BCA98-240	98 - 142	240	197	83	-	-	-	-	0.2	M10A2TC	TCGT16T3		2	
	BT50-BCA98-345	98 - 142	345	302	83	92	-	85	-	0.2	M10A2TC	TCGT16T3		3	
	BT50-BCA132-210	132 - 176	210	-	108	-	-	65	-	0.2	M10A2TC	TCGT16T3		4	
	BT50-BCA132-315	132 - 176	315	-	108	-	-	65	-	0.2	M10A2TC	TCGT16T3		4	
	BT50-BCA166-225	166 - 210	225	-	142	-	-	70	-	0.2	M10A2TC	TCGT16T3		4	
	BT50-BCA166-315	166 - 210	315	-	142	-	-	70	-	0.2	M10A2TC	TCGT16T3		4	
	BT50-BCA200-210	200 - 244	210	-	176	-	-	75	-	0.2	M10A2TC	TCGT16T3		4	

MIKRO - BOHRSTANGE
BARRE D'ALÉSAGE MICRO
PORTA TESTINE MICROREGISTRABILI
BARRAS DE MANDRINAR MICRO

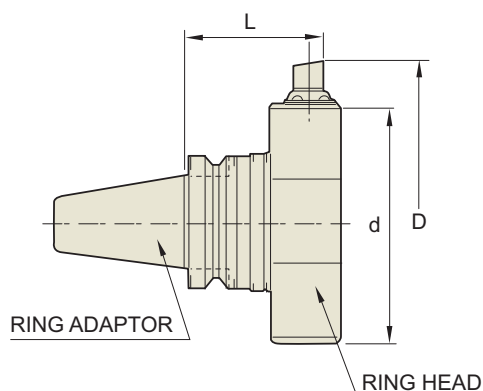


■ ST

Unit : mm

STYLE	MODEL No.	D	L1	L2	M1	C1	C2	MICRO UNIT	Weight (Kg)	Fig.	Stock
		Min-Max									
32	ST32-BCA13,5-75	13,5 - 16	135	75	67	12	13	M1B2E/F	0,5	1	
	ST32-BCA14,5-75	14,5 - 17	145	75	67	12	14	M1B2E/F	0,5	1	
	ST32-BCA16-90	16 - 22,5	160	90	82	14	15	M1A2E/F	0,5	1	
	ST32-BCA19-90	19 - 23,0	160	90	82	16	18	M2B-2CC	0,5	1	
	ST32-BCA23-120	23 - 29,0	190	120	110	19	22	M3B-2TC	1	1	
	ST32-BCA29-120	29 - 41,0	190	120	110	25	28	M3A-2TC	1	1	
	ST32-BCA38-120	38 - 49,0	190	120	115	33	35	M5B-2TC	1,5	2	
	ST32-BCA46-120	46 - 66	190	120	115	38	-	M5A-2TC	1,5	2	
	ST32-BCA62-120	62 - 87,0	190	120	115	51	-	M7A-2TC	2,5	2	
42	ST42-BCA13,5-85	13,5 - 16	165	85	67	12	13	M1B2E or F	1,0	1	
	ST42-BCA14,5-85	14,5 - 17	165	85	67	12	14	M1B2E or F	1,0	1	
	ST42-BCA16-100	16 - 22,5	180	100	82	14	15	M1A2E or F	1,0	1	
	ST42-BCA19-100	19 - 23,0	180	100	82	16	18	M2B2E or F	1,0	1	
	ST42-BCA23-120	23 - 29,0	200	120	110	19	22	M3B-2TC	1,5	1	
	ST42-BCA29-120	29 - 41,0	200	120	110	25	28	M3A-2TC	1,5	1	
	ST42-BCA38-130	38 - 49,0	210	130	125	33	35	M5B-2TC	1,5	1	
	ST42-BCA46-135	46 - 66,0	215	135	130	38	44	M5A-2TC	1,5	1	
	ST42-BCA62-135	62 - 87,0	215	135	130	51	-	M7A-2TC	2,5	2	
	ST42-BCA83-150	83 - 108	230	150	145	63	-	M7A-2TC	3,0	2	

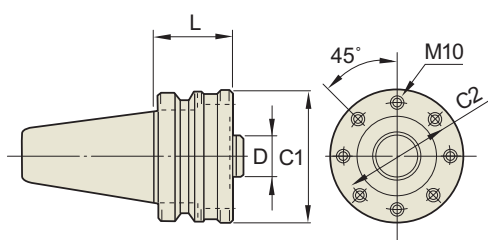
■ JIS B6339/MAS 403-BT



■ BORING RING HOLDER

Unit : mm

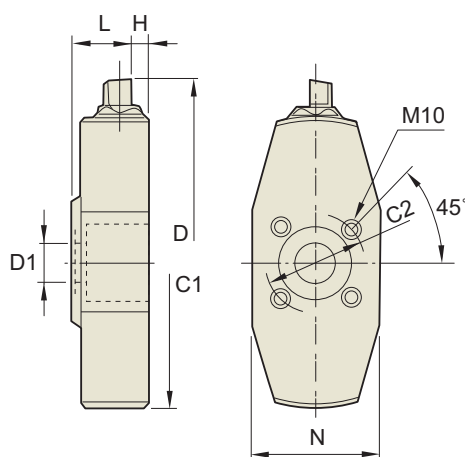
MODEL No.	d	D	L
BT50-BRA140-105	140	197	105
BT50-BRA140-165	140	197	165
BT50-BRA191-105	191	248	105
BT50-BRA191-165	191	248	165
BT50-BRA242-105	242	299	105
BT50-BRA242-165	242	299	165
BT50-BRA293-105	293	350	105
BT50-BRA293-165	293	350	165
BT50-BRA344-105	344	401	105
BT50-BRA344-165	344	401	165
BT50-BRA395-105	395	452	105
BT50-BRA395-165	395	452	165



■ RING ADAPTER

Unit : mm

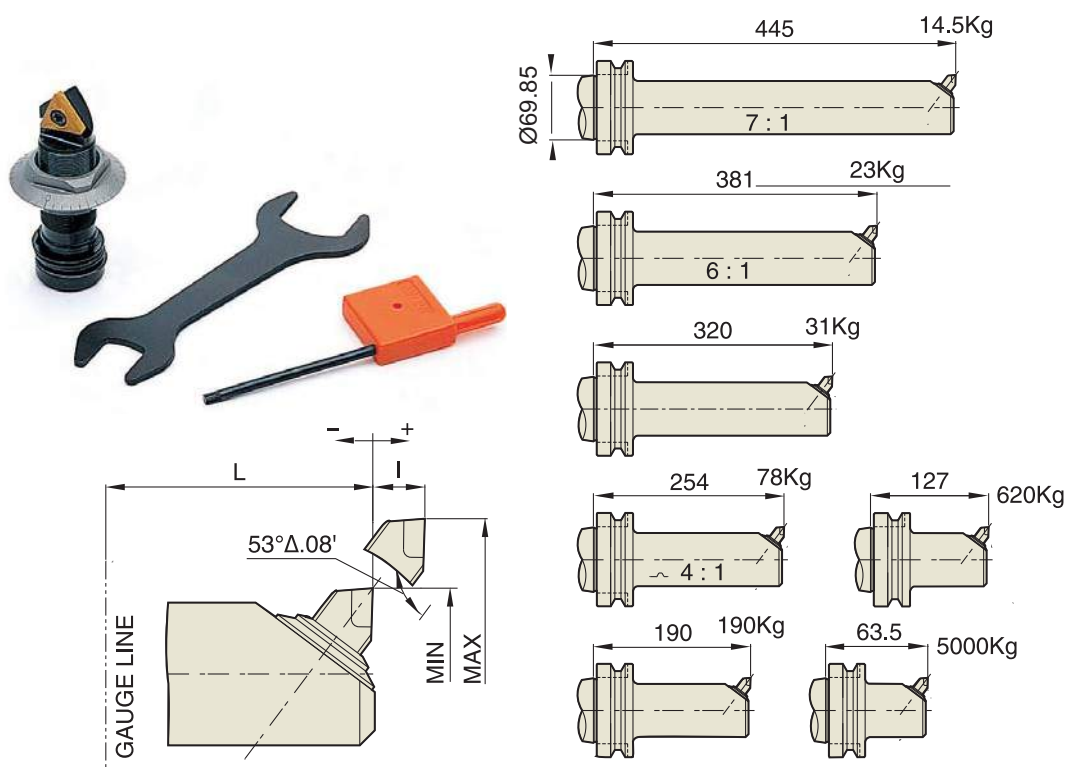
MODEL No.	D(h6)	L	C1	C2
BT50-RAA32- 60	32	60	102	82
BT50-RAA32-120	32	120	102	82



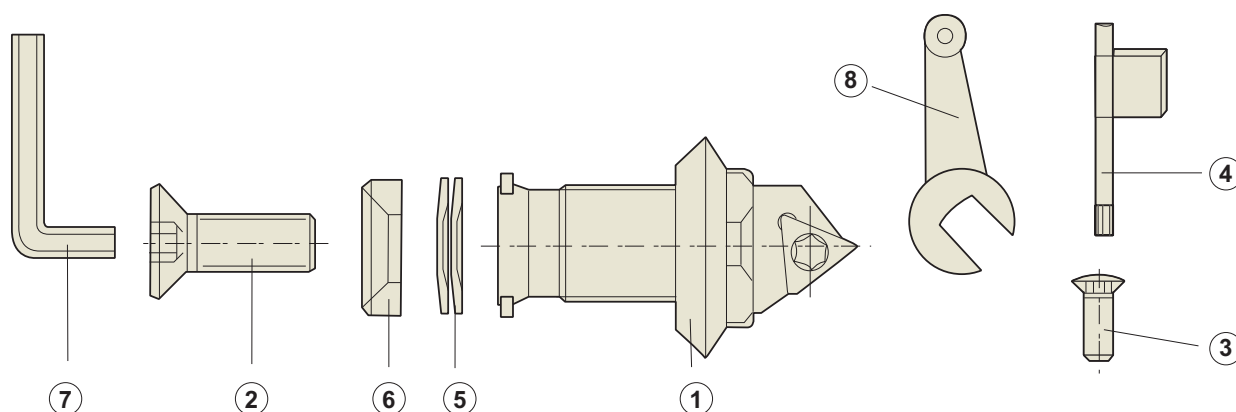
■ RING HEAD

Unit : mm

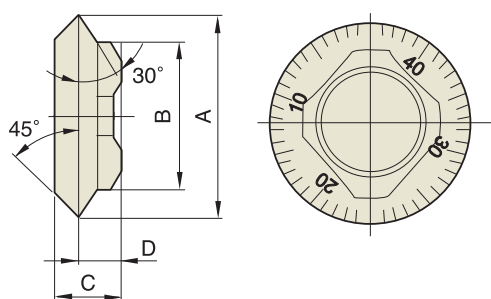
MODEL No.	D1 (H7)	D	L	C1	C2	H	N	MICRO UNIT
		Min-Max						
RH32-BCA140	32	140 - 197	45	102	82	14	-	M10A2TC
RH32-BCA191	32	191 - 248	45	136	82	14	-	M10A2TC
RH32-BCA242	32	242 - 299	45	184	82	14	103	M10A2TC
RH32-BCA293	32	293 - 350	45	234	82	14	103	M10A2TC
RH32-BCA344	32	344 - 401	45	284	82	14	103	M10A2TC
RH32-BCA395	32	395 - 452	45	36	82	14	103	M10A2TC



BORING BAR MODEL No.	BRAZED TYPE B EF		SCREW ON TYPE			Insert Spec
	MIN	MAX	MIN	MAX	ΔL	
BCA 19	M2B2	M2B2				CCGT0401
	19	23			-1.9	CCGT0401
BCA 23	M3B2	M3B2	M3B2TC	M3B2TC	M3B2TC	TBGT 060102
	23	29	24.9	30.9	-1.9	TBGT 060102
BCA 29	M3A2	M3A2	M3A2TC	M3A2TC	M3A2TC	TBGT 060102
	29	41.8	30.9	43.8	-1.9	TBGT 060102
BCA 38	M5B2	M5B2	M5B2TC	M5B2TC	M5B2TC	TCGT 110204
	38	49.2	40.9	52.1	-1.9	TCGT 110204
BCA 46	M5A2	M5A2	M5A2TC	M5A2TC	M5A2TC	TCGT 110204
	46	66.6	48.9	69.5	-1.9	TCGT 110204
BCA 62	M7A2	M7A2	M7A2TC	M7A2TC	M7A2TC	TCGT 16T304
	62	87.4	62	87.4	0	TCGT 16T304
BCA 83	M7A2	M7A2	M7A2TC	M7A2TC	M7A2TC	TCGT 16T304
	83	108.4	83	108.4	0	TCGT 16T304
BCA 98	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT 16T304
	98	142.4	98	142.4	0	TCGT 16T304
BCA 132	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT 16T304
	132	176.4	132	176.4	0	TCGT 16T304
BCA 166	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT 16T304
	166	210.4	166	210.4	0	TCGT 16T304
BCA 200	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT 16T304
	200	244.4	200	244.4	0	TCGT 16T304



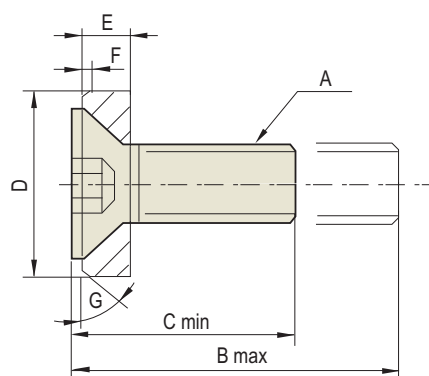
ORDER NO.			M1A-B	M2A-B	M3A-B	M5A-B	M5A-B	M7A-B	M10A-B
PART NAME									
1	DIAL NUT	Slant Angle	1-40	2-40	3-40	5-40	5-40	7-80	10-80
	DIAL NUT	Right Angle	1-50	2-50	3-50	5-50	5-50	7-100	10-100
2	CARTRIDGE BOLT	M-A	F-M3-0.5-8	F-M3-0.5-12	F-M4-0.7-15	F-M6-1.0-25	F-M6-1.0-25	F-M10-1.5-30	M12-1.75-50
	CARTRIDGE BOLT	M-B	M-M3-0.5-6	M-M3-0.5-10	M-M4-0.7-12	M-M6-1.0-20	M-M6-1.0-20	M-M10-1.5-25	M12-1.75-35
3	INSERT SCREW		S1845L5	S1845L5	S2045L6	S2555L6	S2555L6	S4095L6	S4095L6
4	T-WRENCH		T6	T6	T6	T8	T8	T15	T15
5	SPRING WASHER			CB-2	CB-3	CB-5	CB-5	CB-7	CB-10
6	MOUNTING WASHER			2306	3306	5306	5306	7306	10306
7	L-WRENCH		WR-2	WR-2	WR-2.5	WR-4	WR-4	WR-6	WR-8
8	SPANNER		GS12	GS12	GS35	GS35	GS35	GS710	GS710



■ GRADUATED DIAL UNIT

Unit : mm

SIZE	A	B	C	D
M1	9.53	6.99	4.45	2.54
M2	12.7	9.53	5.08	3.30
M3	15.88	11.3	5.59	3.56
M5	25.4	19.05	8.76	4.83
M7	34.93	25.40	11.68	7.11
M10	44.45	34.93	13.84	7.49



■ LOCK SCREW AND WASHER

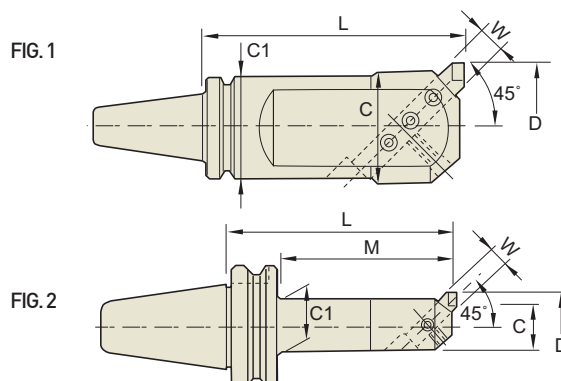
Unit : mm

SIZE	A	B	C	D	E	F	G
M1	M3	8	6	—	—	—	—
M2	M3	12	10	7.82	1.83	0.5	45°
M3	M4	15	12	10.9	2.46	1.0	45°
M5	M6	25	20	15.7	4.32	0.8	37°
M7	M10	30	25	23.7	6.35	1.30	37°
M10	M12	50	35	31.6	7.92	2.5	37°

SQUARE BORING BAR (45°)

BSA

VIERKANT - BOHRSTANGE
BARRE D'ALÉSAGE CARRÉ
BARRA PORTA TESTINE
BARRAS DE MANDRINAR CUADRADAS



JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

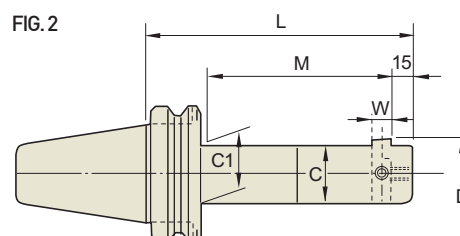
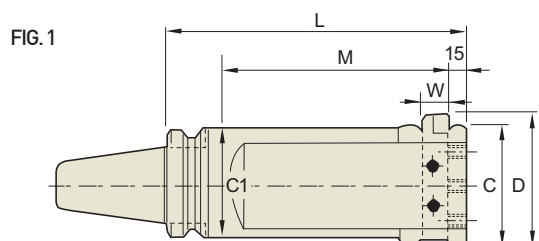
Unit : mm

TAPER No.	MODEL No.	D Min-Max	L	C	C1	W	M	Weight (Kg)	Fig.	Stock
30	BT30-BSA25-120	25 - 38	120	20	22	8	90	1.0		
	BT30-BSA30-135	30 - 42	135	24	26	8	105	1.1		
	BT30-BSA38-150	38 - 52	150	30	33	10	120	1.4		
	BT30-BSA42-150	42 - 56	150	34	37	10	125	1.6		
	BT30-BSA50-150	50 - 65	150	40	44	13	125	1.8		
40	BT40-BSA25-135	25 - 38	135	20	22	8	108	1.3		
	BT40-BSA30-165	30 - 42	165	24	26	8	138	1.5		
	BT40-BSA38-180	38 - 52	180	30	33	10	153	1.8		
	BT40-BSA42-210	42 - 56	210	34	37	10	183	2.3		
	BT40-BSA50-180	50 - 65	180	40	44	13	153	2.4		
	BT40-BSA50-225	50 - 65	225	40	44	13	198	2.9		
	BT40-BSA62-180	62 - 90	180	50	54	16	153	3.2		
	BT40-BSA62-240	62 - 90	240	50	54	16	213	4.2		
	BT40-BSA72-180	72 - 110	180	60	63	19	153	4.4		
	BT40-BSA72-240	72 - 110	240	60	63	19	213	5.7		
50	BT40-BSA90-180	90 - 125	180	75	63	19	153	5.4		
	BT50-BSA25-135	25 - 38	135	20	22	8	95	4.4		
	BT50-BSA30-165	30 - 42	165	24	26	8	125	4.6		
	BT50-BSA38-180	38 - 52	180	30	33	10	140	4.8		
	BT50-BSA42-210	42 - 56	210	34	37	10	170	5.0		
	BT50-BSA50-180	50 - 65	180	40	44	13	140	5.4		
	BT50-BSA50-240	50 - 65	240	40	44	13	200	5.7		
	BT50-BSA62-195	62 - 90	195	50	54	16	155	6.1		
	BT50-BSA62-270	62 - 90	270	50	54	16	230	7.5		
	BT50-BSA72-195	72 - 110	195	60	66	19	155	6.9		
	BT50-BSA72-285	72 - 110	285	60	66	19	245	9.3		
	BT50-BSA90-210	90 - 125	210	75	80	19	170	9.2		
	BT50-BSA90-300	90 - 125	300	75	80	19	260	12.3		
	BT50-BSA105-195	105 - 160	195	90	90	25	157	10.5		
	BT50-BSA105-285	105 - 160	285	90	90	25	247	14.8		

SQUARE BORING BAR (90°)

BSB

VIERKANT - BOHRSTANGE
BARRE D'ALÉSAGE CARRÉ
BARRA PORTA TESTINE
BARRAS DE MANDRINAR CUADRADAS

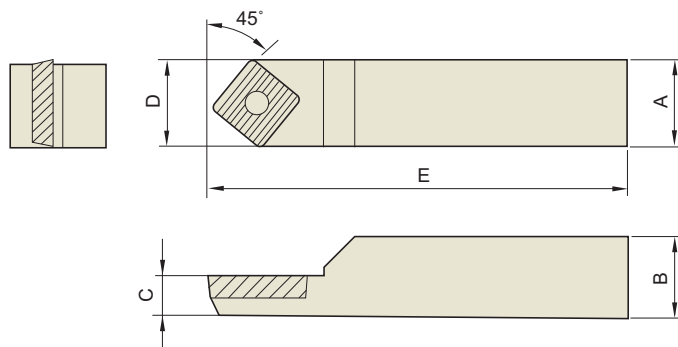


JIS B6339 -BT	Taper Accuracy AT3	G Value -	RPM -	Coolant System -
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■ JIS B6339/MAS 403-BT

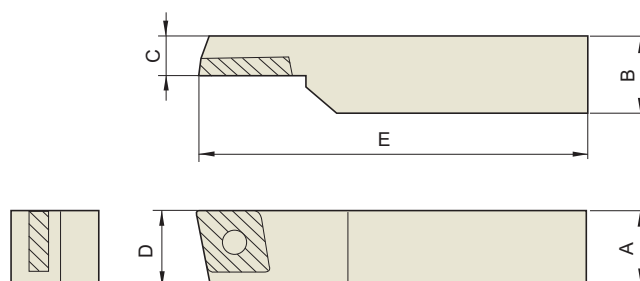
Unit : mm

TAPER No.	MODEL No.	D Min-Max	L	C	C1	W	M	Weight (Kg)	Fig.	Stock
30	BT30-BSB25-120	25 - 50	120	20	22	8	90	1.1		
	BT30-BSB38-150	38 - 70	150	30	33	10	120	1.5		
	BT30-BSB50-150	50 - 90	150	40	44	13	125	2.2		
40	BT40-BSB25-135	25 - 50	135	20	22	8	108	1.3		
	BT40-BSB38-180	38 - 70	180	30	33	10	153	1.9		
	BT40-BSB50-180	50 - 90	180	40	44	13	153	2.6		
	BT40-BSB50-225	50 - 90	225	40	44	13	198	3.1		
	BT40-BSB62-180	62 - 115	180	50	56	16	153	3.4		
	BT40-BSB62-225	62 - 115	225	50	56	16	198	4.1		
	BT40-BSB72-180	72 - 135	180	60	66	19	153	4.7		
	BT40-BSB72-225	72 - 135	225	60	66	19	198	5.6		
	BT40-BSB90-180	90 - 150	180	75	80	19	153	5.7		
	BT40-BSB90-225	90 - 150	225	75	80	19	198	6.6		
50	BT50-BSB25-135	25 - 50	135	20	22	8	95	4.1		
	BT50-BSB38-180	38 - 70	180	30	33	10	140	4.8		
	BT50-BSB50-180	50 - 90	180	40	44	13	140	5.5		
	BT50-BSB50-240	50 - 90	240	40	44	13	200	5.7		
	BT50-BSB62-195	62 - 115	195	50	56	16	155	6.4		
	BT50-BSB62-270	62 - 115	270	50	56	16	230	7.9		
	BT50-BSB72-195	72 - 135	195	60	66	19	155	7.3		
	BT50-BSB72-285	72 - 135	285	60	66	19	245	9.6		
	BT50-BSB90-210	90 - 150	210	75	80	19	170	9.6		
	BT50-BSB90-300	90 - 150	300	75	80	19	260	12.6		
	BT50-BSB105-195	105 - 190	195	90	-	25	155	11.1		
	BT50-BSB105-285	105 - 190	285	90	94	25	245	15.4		



Unit : mm

Size	classification	A	B	C	D	E	SCREW	WRENCH	INSERT
SBC08-45		08	08	6,3	8,39	70	SSB-2506	T7	CCMT0602
SBC10-45		10	10	7	10,39	70	SSB-2506	T7	CCMT0602
SBC13-45		13	13	10	13,6	80	SSB-4009	T15	CCMT09T3
SBC16-45		16	16	11	16,68	100	SSB-5012	T15	CCMT1204
SBC19-45		19	19	11	19,68	100	SSB-5012	T15	CCMT1204
SBC25-45		25	25	12,5	25,68	120	SSB-5012	T15	CCMT1204



Unit : mm

Size	classification	A	B	C	D	E	SCREW	WRENCH	INSERT
SBC08-90		08	08	6,3	8,4	70	SSB-2506	T7	CCMT0602
SBC10-90		10	10	7	10,4	70	SSB-2506	T7	CCMT0602
SBC13-90		13	13	10	13,6	80	SSB-4009	T15	CCMT09T3
SBC16-90		16	16	11	16,7	100	SSB-5012	T15	CCMT1204
SBC19-90		19	19	11	19,7	100	SSB-5012	T15	CCMT1204
SBC25-90		25	25	12,5	25,7	120	SSB-5012	T15	CCMT1204

TOOLING SYSTEM

ACCESSORY & OTHERS



PULL STUD BOLT

■ PULL STUD BOLT ■ PULL STUD BOLT SPANNER

TOOL CLAMP

HEIGHT PRESETTER

TECHNICAL DATA : SHANK

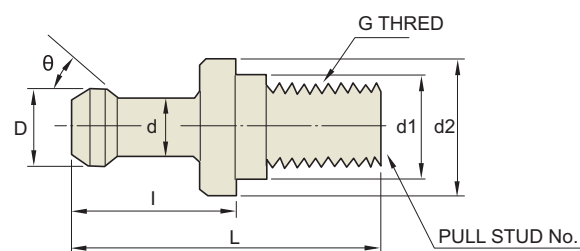
■ DIN 69871 - SK ■ JIS B6339/MAS 403 - BT ■ DIN 69893/ISO 12164-1-HSK
■ ANSI/ASME B5.50 - CAT
■ DIN 228 (MORSE TAPER) : TANG / SCREW TYPE

DONRAY PREMIUM

PULL STUD BOLT & PULL STUD BOLT SPANNER



ANZUGBOLZEN
BOULONS DE SERRAGE
TIRANTI PER MANDRINI UNIVERSALI
TIRANTES PARA PORTAHERRAMIENTAS



■ PULL STUD BOLT

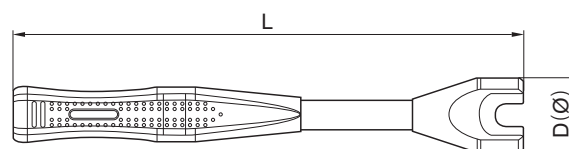
Unit : mm

MODEL No.	D	d2	d1	d	L	l	G	O	TYPE
PS-1	15	23	17	10	60	35	M16	45°	BT40-I standard type
PS-2	15	23	17	10	60	35	M16	60°	BT40-II standard type
PS-5	23	38	25	17	85	45	M24	45°	BT50-I standard type
PS-6	23	38	25	17	85	45	M24	60°	BT50-II standard type
PS-16	11	16,5	12,5	7	43	23	M12	45°	BT30-I standard type
PS-17	11	16,5	12,5	7	43	23	M12	60°	BT30-II standard type
PS-0	23	38	25	17	85	45	M24	90°	For BT50 OKK
PS-08	15	23	17	10	60	35	M16	90°	For BT40 OKK
PS-P	24	36	25	18	71	31	M24	90°	For BT50 MITSUI SEIKI
PS-P5	15	23	17	10	50	25	M16	90°	For BT40 MITSUI SEIKI
PS-G41	29	37	25	21	65,2	25,2	M24	45°	For BT50 MAZAK
PS-G51	18,8	22	17	12,45	44,1	19,1	M16	45°	For BT40 MAZAK
PS-S2	25	39	25	18	95	55	M24	60°	For SHIN NIPPON KOKI
PS-F1	23	39	25	18	104	64	M24	45°	For MITSUBISHI
PS-B1	22	38	25	16	112	72	M24	60°	For OKUMA
PSS-1	19	23	17	14	54	26	M16	75°	For SK40
PSS-5	28	36	25	21	74	34	M24	75°	For SK50

► Stock Control Item

► Upon requests, other pull stud bolts with special dimensions could be produced and supplied.

► Through hole type ("H" type) is available upon request.



■ PULL STUD BOLT SPANNER

Unit : mm

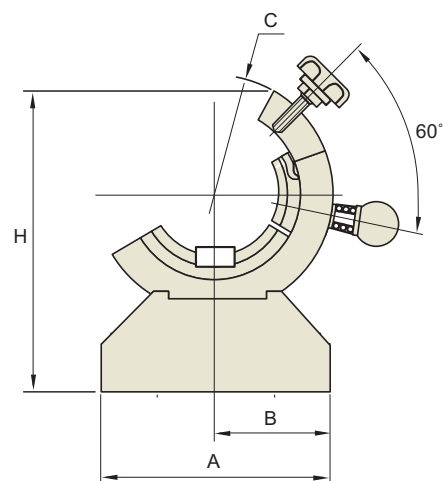
MODEL No.	D	L	Weight (Kg)	For
PSWB-30	27	210	0.3	BT30
PSWB-40	37	230	0.4	BT40
PSWB-50	49	280	0.78	BT50

ANZUGBOLZEN
BOULONS DE SERRAGE
TIRANTI PER MANDRINI UNIVERSALI
TIRANTES PARA PORTAHERRAMIENTAS

■ APPLICATION TABLE OF PULL STUD BOLT

MACHINE MANUFACTURER	MACHINE MODEL No.	TAPER No.	PS BOLT	MACHINE MANUFACTURER	MACHINE MODEL No.	TAPER No.	PS BOLT
DOOSAN	T 4000	BT30	PS-16	SEMC	Any Mill LCV30A/B	BT30	PS-17
	DT 360D	BT30	PS-16		Any Mill LCV55S	BT50	PS-6
	DNM 400II, 500II, 650II	BT40	PSS-1		Any Mill LCV650S	BT50	PS-5
	DNM 750II/40	BT40	PSS-1		Any Mill ICV66	BT50	PS-5
	DNM 750II/50	BT50	PS-5		Any Mill ICV80	BT50	PS-5
	Mynx 6500	BT50	PS-5		DMC-3000	BT50	PS-0
	Mynx 7500	BT50	PS-5		PCH40	BT40	PS-1
	VM 5400 / 6500	BT40	PSS-1		PCH50	BT50	PS-5
	VM 750	BT50	PS-5	HWACHEON	SIRIUS-1	BT30	PS-16
	VM 960	BT50	PS-5		SIRIUS-550	BT40	PS-1
	VM 1260	BT50	PS-5		SIRIUS-UL/ULG	BT40	PS-1
	VC 430	BT40	PSS-1		SIRIUS-7040	BT50	PS-0
	VC 510	BT40	PSS-1		SIRIUS-650/650N	BT50	PS-0
	DVM 500II	BT40	PSS-1		SIRIUS-850/850N	BT50	PS-0
	DVM 5650II	BT40	PSS-1		SIRIUS-700	BT50	PS-0
	NX 4500II	BT40	PSS-1		SIRIUS-12580	BT50	PS-0
	NX 5500II	BT40	PSS-1	S&T	TCH-45	BT40	PS-1
	NX 6500II	BT40	PSS-1		TCH-50	BT50	PS-6
	NHM 5000	BT50	PS-5		TCH-80	BT50	PS-6
	NHM 6300	BT50	PS-5		TCH-80TS	BT50	PS-6
	NHM 8000	BT50	PS-5		FX-500H	BT40	PS-2
	NHM 1000	BT50	PS-5		TNV-40A	BT40	PS-1
	NHM 1250	BT50	PS-5		TNV-80A	BT40	PS-1
	NHP 5000	BT50	PS-5		TNV-650V	BT50	PS-6
	NHP 6300	BT50	PS-5	HASS	TM-1/2	BT40	PS-1
	HC 400II	BT40	PSS-1		VF-4SS/3SS/2SS	BT40	PS-1
	HC 500II	BT40	PSS-1		VF-2TR	BT40	PS-1
	i-CUT 380T / 420T	BT30	PS-16		VF-5/50TR	BT50	PS-5
	i-CUT 400T/M	BT30	PS-16		VF-9/50	BT50	PS-5
WIA	F 400 / 500/ 650	BT40	PS-1	MAZAK		BT40	PS-G51
	F 500/ 650	BT50	PS-5			BT50	PS-G41
	F 510M / 550M / 660M	BT40	PS-1	MORI SEKI		BT40	PS-08
	F 510B	BT40	PS-1			BT50	PS-51
	F 600B / 750B / 960B	BT50	PS-5				
	KH 50G / 63G	BT50	PS-5				
	KH 80G / 1000	BT40	PS-1				
	HS 5000	BT40	PS-1				
	HS 5000 / 6300 / 8000	BT50	PS-5				

MONTAGEVORRICHTUNGEN
DISPOSITIF DE MONTAGE
ATTREZZO PER IL MONTAGGIO DI MANDRINI
SOPORTE PARA MONTAJE



• Flange Clamping Design

Unit : mm

TAPER No.	MODEL No.	A	B	C	H	Weight (Kg)
BT30	TCP30	125	65	108	135	3.0
BT40	TCP40	160	80	138	180	7.6
BT50	TCP50	180	90	165	205	8.6
SK30	TSK30	125	65	108	135	3.0
SK40	TSK40	160	80	138	180	7.6
SK50	TSK50	180	90	165	205	8.6
HSK32/40/50	THSK32/40/50	125	65	108	135	
HSK63	THSK63	160	80	138	180	
HSK100	THSK100	180	90	165	205	

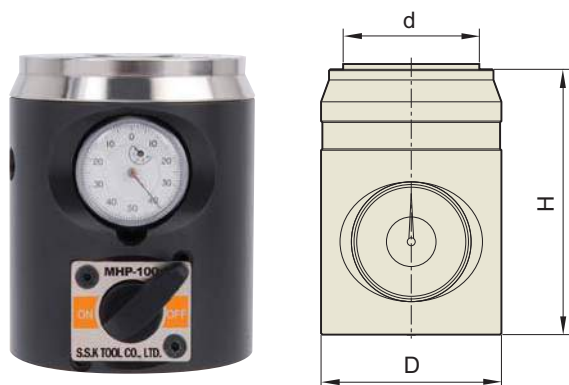
►Tool clamp for CAT taper could be supplied.

►Stock Control Item

►Features

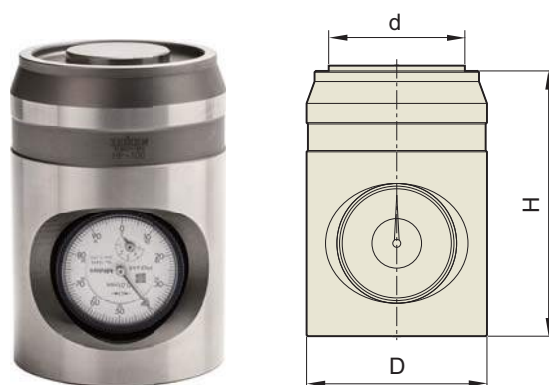
1. No surface damage such as abrasion and scratch around taper shank closely associated with tool runout
2. Easy to assemble and disassemble pull stud bolt
3. Convenient and safe when using spanner wrench with milling chuck or ER collet chuck

· MAGNETIC HEIGHT PRESETTER



- Both vertical and horizontal type usable
- Slim design

· HEIGHT PRESETTER



- Exclusively for vertical

Unit : mm

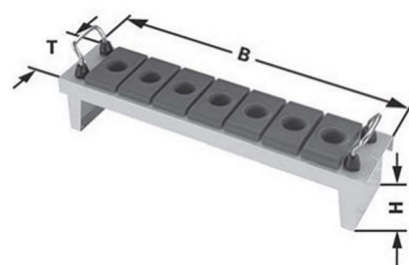
MODEL No.	D	H	d	DIAL
MHP-100(magnetic)	76	100	33	0.01
HP-100	68	100 / - 0.01	33	0.01



Unit : mm

MODEL No.	insert	dimension	order code
SK30	72	765 x 855 x 1750	1702 001
SK40	56	765 x 855 x 1750	1702 002
SK50	40	765 x 855 x 1750	1702 003
HSK63	48	765 x 855 x 1750	1702 004
HSK100	32	765 x 855 x 1750	1702 005

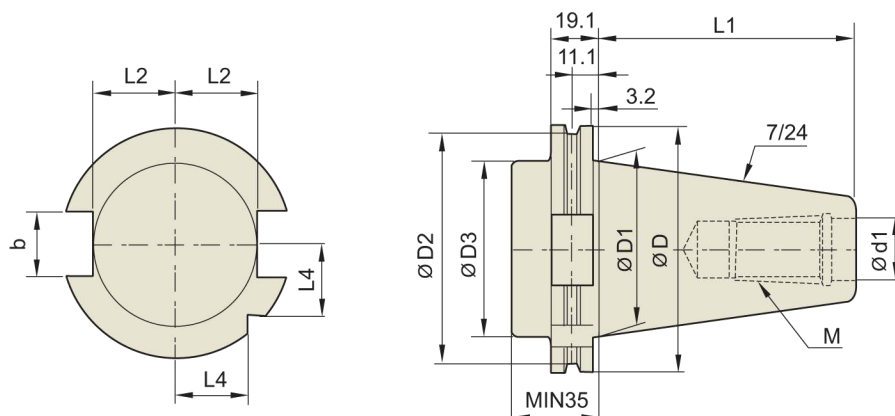
TOOL CARRIER FOR CNC TOOLHOLDERS



Unit : mm

MODEL No.	insert	dimension	order code
SK30	9	660 x 155 x 200	1702 0011
SK40	7	660 x 155 x 200	1702 0012
SK50	5	660 x 155 x 200	1702 0013
HSK63	6	660 x 155 x 200	1702 0014
HSK100	4	660 x 155 x 200	1702 0015

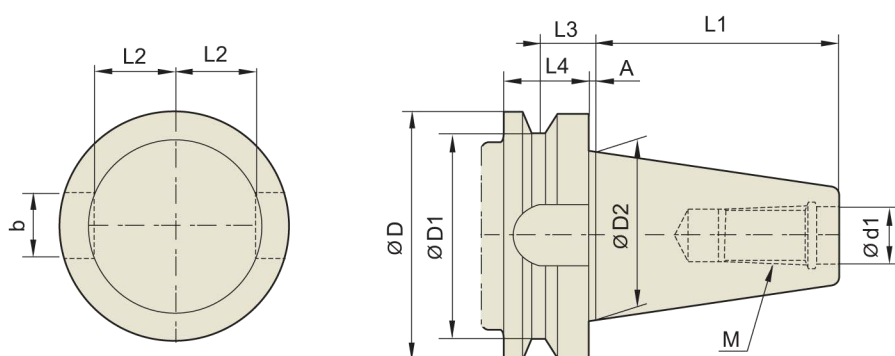
DIN 69871 - SK SHANK



Unit : mm

TAPER No.	ØD	ØD1	ØD2	ØD3	Ød1	L1	L2	L3	L4	b	M
SK30	50	31.75	44.3	45	13	47.8	16.4	19	15	16.1	M12×1.75
SK40	63.55	44.45	56.25	50	17	68.4	22.8	25	18.5	16.1	M16×2.0
SK50	97.5	69.85	91.25	80	25	101.75	35.5	37.7	30	25.7	M24×3.0

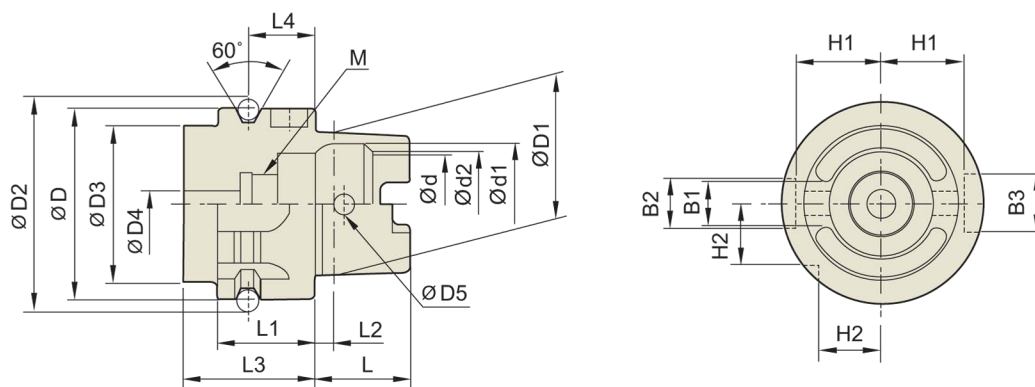
JIS B6339 / MAS 403 - BT SHANK



Unit : mm

TAPER No.	ØD	ØD1	ØD2	Ød1	L1	L2	L3	L4	A	b	M
BT30	46	31.75	38	12.5	48.4	16.3	13.6	20	2	16.1	M12×1.75
BT40	63	44.45	53	17	65.4	22.6	16.6	25	2	16.1	M16×2
BT50	100	69.85	85	25	101.8	35.4	23.2	35	3	25.7	M24×3
BT60	155	107.95	135	31	161.8	60.1	28.2	45	3	25.7	M30×3.5

DIN 69893 / ISO12164 - I - HSK SHANK



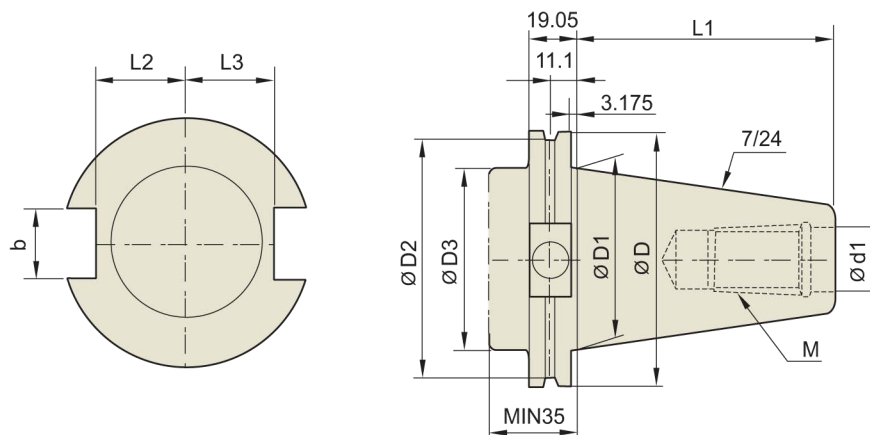
Unit : mm

TAPER No.	ØD	ØD1	ØD2	ØD3	ØD4	ØD5	L	L1	L2	L3	L4
HSK32A	32	24	37,00	26	4,2	4,0	16	20	3,2	35	16
HSK40A	40	30	45,00	34	5,0	4,6	20	20	4,0	35	16
HSK50A	50	38	59,30	42	6,8	6,0	25	26	5,0	42	18
HSK63A	63	48	72,30	53	8,4	7,5	32	26	6,3	42	18
HSK80A	80	60	88,8	68	10,2	8,5	40	26	8	42	18
HSK100A	100	75	109,75	85	12,0	12,0	50	29	10,0	45	20

Unit : mm

TAPER No.	Ød	Ød1	Ød2	B1	B2	B3	H1	H2	L4
HSK32A	17	20,5	19	7,05	7	9	13,0	9,5	M10×1,0
HSK40A	21	25,5	23	8,05	9	11	17,0	12,0	M12×1,0
HSK50A	26	32,0	29	10,54	12	14	21,0	15,5	M16×1,0
HSK63A	34	40,0	37	12,54	16	18	26,5	20,0	M18×1,0
HSK80A	42	50	46	16,04	18	20	34	25	M20×1,5
HSK100A	53	63,0	58	20,02	20	22	44,0	31,5	M24×1,5

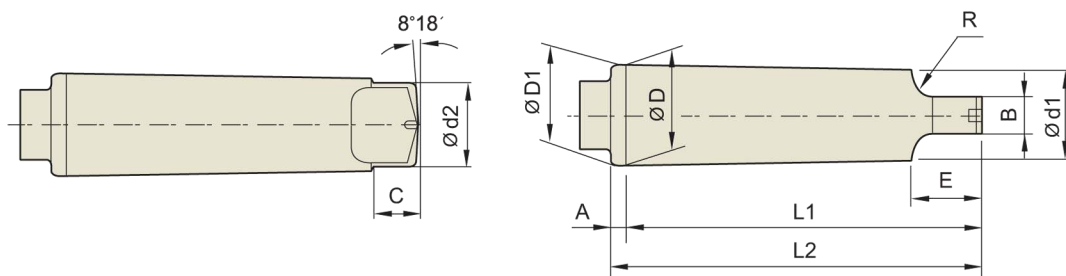
ANSI/ASME B5.50 - CAT SHANK



Unit : mm

TAPER No.	ØD	ØD1	ØD2	ØD3	Ød1	L1	L2	L3	b	M
CAT30	50	31.75	44.3	31.75	13	47.625	16.25	18.67	16.1	UNC1/2-13
CAT40	63.55	44.45	56.25	44.45	17	68.25	22.60	25	16.1	UNC5/8-11
CAT50	97.5	69.85	91.25	70.1	25	101.6	35.3	37.7	25.7	UNC1-18
CAT60	155	107.95	132.56	108	32	161.93	54	59.3	25.7	UNC1,1/4-7

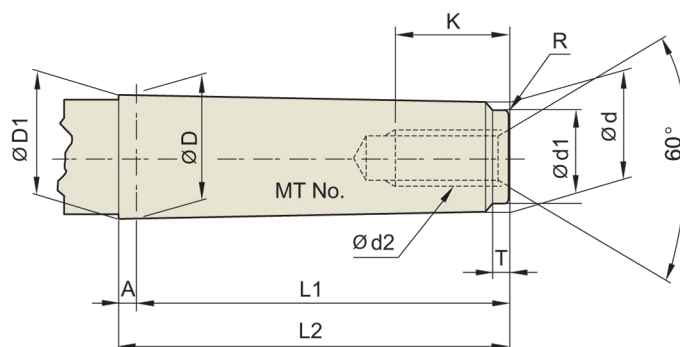
DIN 228 (MORSE TAPER) TANG TYPE (MTA)



Unit : mm

TAPER	Taper	Taper Angle(α)	ØD	A	ØD1	Ød1	L1	L2	Ød2	B	C	E	R
MT0	1/19,212	1° 29' 27"	9,045	3	9,045	6,104	56,5	59,5	6,0	3,9	6,5	10,5	4
MT1	1/20,047	1° 25' 43"	12,065	3,5	12,065	8,972	62,0	65,5	8,7	5,2	8,5	13,5	5
MT2	1/20,020	1° 25' 50"	17,780	5	17,780	14,034	75,0	80,0	13,5	6,3	10	16	6
MT3	1/19,922	1° 26' 16"	23,825	5	23,825	19,107	94,0	99,0	18,5	7,9	13	20	7
MT4	1/19,254	1° 29' 15"	31,267	6,5	31,267	25,164	117,5	124,0	24,5	11,9	16	24	8
MT5	1/19,002	1° 30' 26"	44,399	6,5	44,399	36,531	149,5	156,0	35,7	15,9	19	29	10
MT6	1/19,180	1° 29' 36"	63,348	8	63,348	52,399	210,0	218,0	51,0	19,0	27	40	13
MT7	1/19,231	1° 29' 22"	83,058	10	83,058	68,186	286,0	296,0	66,8	28,6	35	54	19

DIN 228 (MORSE TAPER) SCREW TYPE (MTB)



Unit : mm

TAPER	Taper	Taper Angle(α)	ØD	A	ØD1	d	L1	L2	Ød1	d2	K	T	R
MT0	1/19,212	1° 29' 27"	9,045	3	9,201	6,442	50	53	6,4	—	—	4	0,2
MT1	1/20,047	1° 25' 43"	12,065	3,5	12,230	9,396	53,5	57	9,4	M6	16	5	0,2
MT2	1/20,020	1° 25' 50"	17,780	5	18,030	14,583	64	69	14,6	M10	24	5	0,2
MT3	1/19,922	1° 26' 16"	23,825	5	24,076	19,759	81	86	19,8	M12	28	7	0,6
MT4	1/19,254	1° 29' 15"	31,267	6,5	31,605	25,943	102,5	109	25,9	M16	32	9	1
MT5	1/19,002	1° 30' 26"	44,399	6,5	44,741	37,584	129,5	136	37,6	M20	40	9	2,5
MT6	1/19,180	1° 29' 36"	63,348	8	63,765	53,859	182	190	53,9	M24	50	12	4
MT7	1/19,231	1° 29' 22"	83,058	10	83,578	70,058	250	260	70,0	M33	80	18,5	5

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