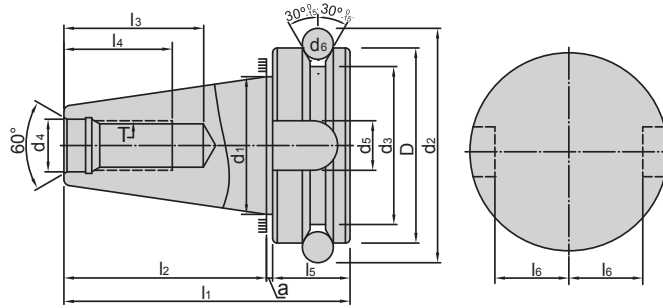
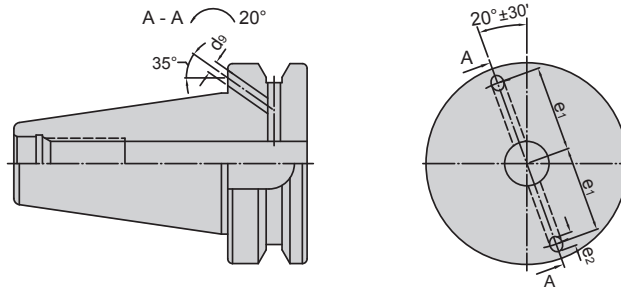


# 刀桿系列 Tooling System

MAS403/BT A



MAS403/BT AD+B



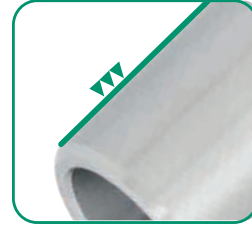
規格 Spec.	D h8	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub> H8	d <sub>5</sub> H12	d <sub>6</sub>	d <sub>7</sub> H12	a ±0.4
BT30	46	31.75	56.14	38	12.5	16.1	8	-	2
BT40	63	44.45	75.679	53	17	16.1	10	4	2
BT50	100	69.85	119.02	83	25	25.7	15	6	3

規格 Spec.	l <sub>1</sub>	l <sub>2</sub> ±0.2	l <sub>3</sub> min	l <sub>4</sub> min	l <sub>5</sub>	l <sub>6</sub> 0 -0.2	e <sub>1</sub> ±0.1	e <sub>2</sub> Max	T 6H
BT30	70.4	48.4	34	24	20	16.3	-	-	M12×1.75P
BT40	92.4	65.4	43	30	25	22.6	27	5	M16×2.0P
BT50	139.8	101.8	62	45	35	35.4	42	7	M24×3.0P

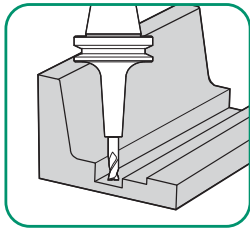
1. 錐度精度 : <AT3
2. 硬度 : >HRC 56°
3. 滲碳深度 : >0.8mm
4. 真圓度 : < 0.8μm
5. 表面粗糙度 : Ra < 0.25μm
6. 本體規範 : JIS MAS 403

1. Taper tolerance < AT3.
2. Hardness > HRC 56°
3. Carbon depth > 0.8mm.
4. Roundness < 0.8μm.
5. Surface roughness : Ra < 0.25μm.
6. Shank body standard : JIS MAS 403.

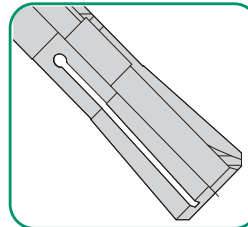
• 長度單位 Unit of Length (mm)



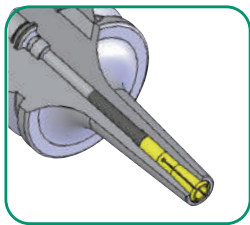
刀桿全研磨·標準動平衡G2.5 25000rpm  
Tool holder with polishing and fully balanced is up to G2.5 36000 rpm.



前端小徑設計·  
降低干涉的情形。  
The slim design reduces interference while machining.



內孔4°錐角設計·  
方便刀具鬆脫並加大夾持力·  
提高穩定性。  
Inner hole coning angle design for a strong clamping force that could increase the stability and quick tool change.



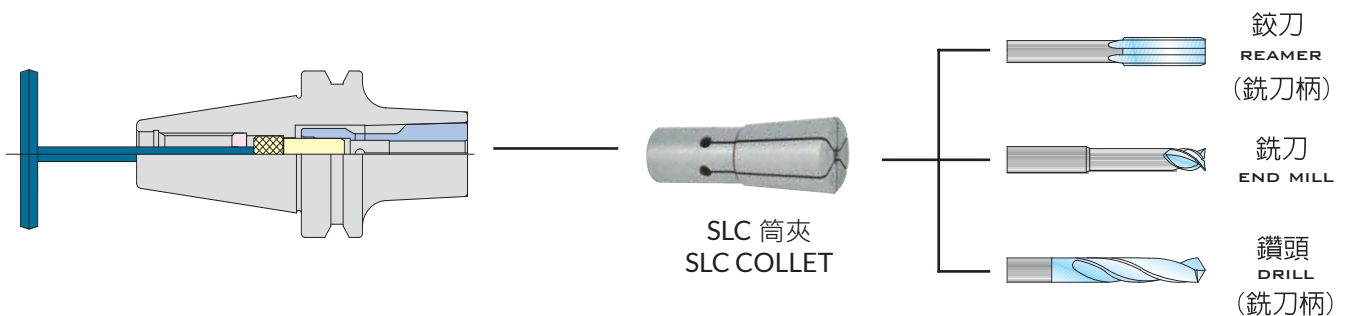
內藏式筒夾設計·無需使用螺帽·  
更適合高速加工。  
The built-in collet does not need a clamping nut and is perfect for high speed processing.



標準動平衡 G2.5 25000rpm。  
Standard balance of G2.5 at 25000 rpm.

### SBL 後拉式使用方式：

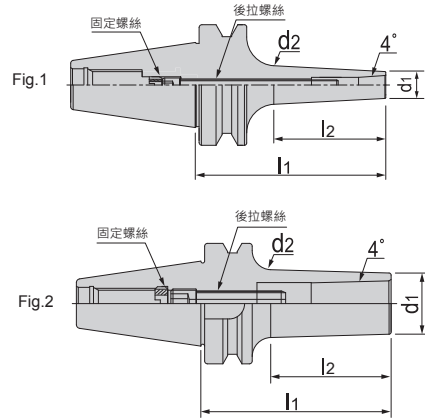
SBL Slim-fit Application Method:



- 本體規格 : BT、DAT、CAT、HSK、C  
- 筒夾規格 : SLC6、SLC12、SLC20

- Spindle Taper : BT、DAT、CAT、HSK、C.  
- Collet type : SLC6、SLC12、SLC20.

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 偏擺精度: 5 $\mu$ m(4D)
- 標準動平衡 G2.5 25000rpm

- Precision 5 $\mu$ m up to 4D length.
- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	夾持範圍 Clamping Range	筒夾 Collet	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	後拉螺絲 Slim-Fit Screw	固定螺絲 Fixed Screw	扳手 Wrench	扭力值 (N.m) Torque	Fig.	重量 (KGS) Weight
BT30 x SBL6-70	2~6	SLC6	70	38	14	18.1	SBL6-M6-40L	SBL6-M12	PT5	6.0	1	1.00
BT30 x SBL6-100	2~6	SLC6	100	68	14	21.2	SBL6-M6-70L	SBL6-M12	PT5	6.0	1	0.60
BT30 x SBL12-70	3~12	SLC12	70	47	26	33.4	SBL12-M10-25L	SBL12-M15	PT6	10.0	2	0.63
BT30 x SBL12-100	3~12	SLC12	100	77	26	38.1	SBL12-M10-25L	SBL12-M15	PT6	10.0	2	0.84
BT30 x SBL20-80	3~20	SLC20	80	55	34	37.7	SBL20-M12-30L	SBL20-M18	PT8	12.0	2	0.68
BT30 x SBL20-100	3~20	SLC20	100	77	34	39.2	SBL20-M12-30L	SBL20-M18	PT8	12.0	2	0.85
BT40 x SBL6-70	2~6	SLC6	70	28	14	17.1	SBL6-M6-50L	SBL6-M16	PT5	6.0	1	1.20
BT40 x SBL6-100	2~6	SLC6	100	58	14	20.1	SBL6-M6-75L	SBL6-M16	PT5	6.0	1	1.20
BT40 x SBL12-70	3~12	SLC12	70	33	26	31	SBL12-M10-25L	SBL12-M16	PT6	10.0	2	1.30
BT40 x SBL12-100	3~12	SLC12	100	63	26	31.6	SBL12-M10-55L	SBL12-M16	PT6	10.0	2	1.38
BT40 x SBL20-70	3~20	SLC20	70	33	35	38.1	SBL20-M12-30L	SBL20-M16	PT8	12.0	2	1.50
BT40 x SBL20-100	3~20	SLC20	100	68	35	41	SBL20-M12-52L	SBL20-M16	PT8	12.0	2	1.45
BT50 x SBL6-70	2~6	SLC6	70	17	14	15.9	SBL6-M6-50L	SBL6-M16	PT5-S	6.0	1	4.00
BT50 x SBL6-100	2~6	SLC6	100	47	14	19.1	SBL6-M6-40L	SBL6-M16	PT5-S	6.0	1	3.93
BT50 x SBL12-70	3~12	SLC12	70	22	26	28.1	SBL12-M10-25L	SBL12-M16	PT6-S	10.0	2	4.00
BT50 x SBL12-100	3~12	SLC12	100	52	26	30.6	SBL12-M10-55L	SBL12-M16	PT6-S	10.0	2	4.30
BT50 x SBL20-70	3~20	SLC20	70	22	35	36.9	SBL20-M12-30L	SBL20-M16	PT8-S	12.0	2	3.90
BT50 x SBL20-100	3~20	SLC20	100	52	35	39.6	SBL20-M12-52L	SBL20-M16	PT8-S	12.0	2	4.70

PT 型扳手 PT-Type Wrench

止動螺帽 Stop Nut

固定螺絲 Fixed Screw

後拉螺絲 Slim-Fit Screw



規格 Spec.	S	L	扭力值 (N.m) Torque
PT5	5	70	6.0
PT5-S		130	
PT6	6	70	10.0
PT6-S		130	
PT8	8	140	12.0

規格 Spec.	L
SBL6-SN	17

規格 Spec.	規格 Spec.
SBL6-M12	SBL12-M16
SBL6-M16	SBL20-M16
SBL12-M15	SBL20-M18

規格 Spec.	L	規格 Spec.	L
SBL6-M6-30L	30	SBL6-M6-80L	80
SBL6-M6-35L	35	SBL6-M6-95L	95
SBL6-M6-40L	40	SBL6-M6-127L	127
SBL6-M6-50L	50	SBL12-M10-25L	25
SBL6-M6-65L	65	SBL12-M10-55L	55
SBL6-M6-70L	70	SBL20-M12-30L	30
SBL6-M6-72L	72	SBL20-M12-52L	52
SBL6-M6-75L	75		

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet
B645-B647	B630



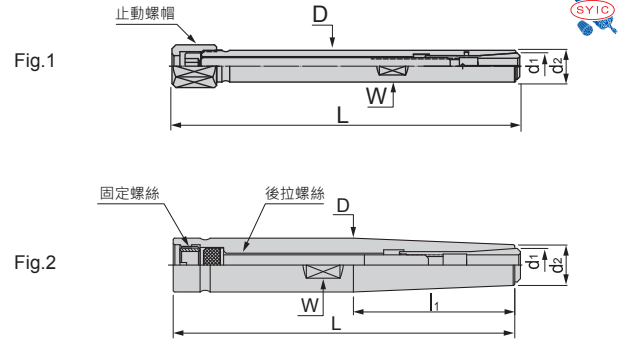
• 長度單位 Unit of Length (mm)





# 直柄 SBL 小徑延長桿 STRAIGHT SHANK SBL COLLET CHUCK

JIS  
MAS 403



規格 Spec.	L	l <sub>1</sub>	D	d <sub>1</sub>	d <sub>2</sub>	W	後拉螺絲 Slim-Fit Screw	固定螺絲 Fixed Screw	止動螺帽 Stop Nut	扳手 Wrench	扭力值 (N.m) Torque	Fig.	重量 (KGS) Weight
C12 x SBL6-120	120	-	12	9.93	12	10	SBL6-M6-95	-	SBL6-SN	PT5	6	1	0.12
C12 x SBL6-150	150	-	12	9.93	12	10	SBL6-M6-127	-	SBL6-SN	PT5	6	1	0.14
C16 x SBL6-120	120	48	16	9.93	12	14	SBL6-M6-70	M11X1.0P	-	PT5	6	2	0.16
C16 x SBL6-150	150	48	16	9.93	12	14	SBL6-M6-40	M11X1.0P	-	PT5-S	6	2	0.2
C16 x SBL6-200	200	48	16	9.93	12	14	SBL6-M6-80	M11X1.0P	-	PT5-S	6	2	0.24
C20 x SBL6-120	120	76.5	20	9.93	12	17	SBL6-M6-70	M11X1.0P	-	PT5	6	2	0.19
C20 x SBL6-150	150	86	20	9.93	12	17	SBL6-M6-40	M11X1.0P	-	PT5-S	6	2	0.25
C20 x SBL6-200	200	76.5	20	9.93	12	17	SBL6-M6-72	M11X1.0P	-	PT5-S	6	2	0.35
C25 x SBL6-120	120	60	25	9.93	14	22	SBL6-M6-30	M11X1.0P	-	PT5	6	2	0.38
C25 x SBL6-150	150	60	25	9.93	14	22	SBL6-M6-35	M11X1.0P	-	PT5-S	6	2	0.44
C25 x SBL6-200	200	60	25	9.93	14	22	SBL6-M6-75	M11X1.0P	-	PT5-S	6	2	0.6
C25 x SBL12-120	120	50	25	18	22	22	SBL12-M10-25	M16X2.0P	-	PT6	10	2	0.28
C25 x SBL12-150	150	50	25	18	22	22	SBL12-M10-55	M16X2.0P	-	PT6	10	2	0.39
C25 x SBL12-200	200	50	25	18	22	22	SBL12-M10-55	5/8"-11UNC	-	PT6-S	10	2	0.55

- 附扳手 Comes with a spanner.



# 直柄 SBL 小徑延長桿套裝組 STRAIGHT SHANK SBL COLLET CHUCK SET



規格 Spec.	內容物 Contents						重量 (KGS) Weight
	延長桿 Chuck	止動螺帽 Stop Nut	筒夾 Collet	扳手 Wrench	扭力值 (N.m) Torque	數量 Qty	
C12 x SBL6-120-3P	C12 x SBL6-120	SBL6-SN	SLC6-3	PT5	6.0	1	0.60
			SLC6-4				
			SLC6-6				
C16 x SBL6-150-3P	C16 x SBL6-150	-	SLC6-3	PT5-S	6.0	1	0.66
			SLC6-4				
			SLC6-6				



• 長度單位 Unit of Length (mm)

# 燒結系統化示意圖

## Modular Shrink-Fit System Illustration

### 不鏽鋼熱膨脹刀桿專用 For Stainless Shrink-Fit Chuck

#### 加熱設備 Heater



LM-HM-12400  
熱風式加熱器  
Hot-Air Heater



LM-HM-12400-TC  
熱風式加熱器-自動計時型  
Hot Air Heater - Auto Timer Type

#### 刀桿 Chuck



HSK-SFW不鏽鋼熱膨脹刀桿  
HSK-SFW Shrink-Fit Chuck



C-SFW不鏽鋼熱膨脹延長桿  
C-SFW Straight Shank of  
Shrink-Fit Chuck



MFS熱膨脹延長桿  
MFS Shrink-Fit Extension

結合SFS後拉式刀桿使用  
With SFS Slim-Fit Collet Chuck

#### 刀具 Cutting Tool



EM碳化鎢鋼立銑刀  
Tungsten Carbide End Mills



BE碳化鎢鋼球型立銑刀  
Tungsten Carbide Ball End Mills



RE碳化鎢鋼圓鼻立銑刀  
Tungsten Carbide Ball End Mills

### 工具鋼熱膨脹刀桿專用 For Hot Work Steel Shrink-Fit Chuck



SFC-300電磁誘導加熱器  
Shrink-Fit Machine



SFC-1000電磁誘導加熱器  
Shrink-Fit Machine



BT/SFCT熱膨脹刀桿  
BT/SFCT Shrink-Fit Chuck



SBT/SFCT 法蘭加厚型熱膨脹刀桿  
DualDRIVE+ SBT/SFCT  
Shrink Fit Chuck



HSK/SFCT熱膨脹刀桿  
HSK/SFCT Shrink-Fit Chuck  
(FOR TYPE E)



C-SFC不鏽鋼熱膨脹延長桿  
C-SFC Straight Shank of  
Shrink-Fit Chuck



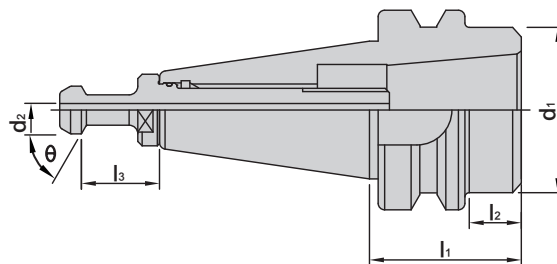
PSC/SFC熱膨脹刀桿  
PSC/SFC Shrink Fit Chuck



SFC熱膨脹刀桿(出水孔型)  
SFC Shrink Fit Chuck  
(With CP Coolant Hole)



SFC熱膨脹刀桿(威力曲線型)  
SFC Shrink Fit Chuck  
(CUL Type)



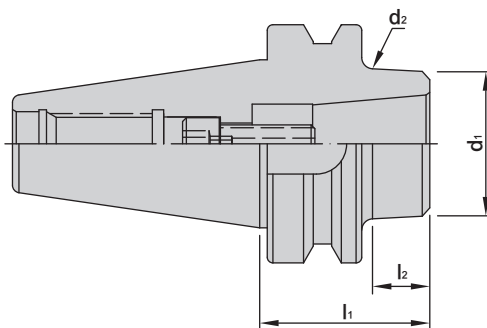
### 特點 Feature

- 需搭配 MFS 熱膨脹刀桿做使用

-Need to be used with MFS shrink-fit extension.

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$\theta$	重量 (KGS) Weight
BT30 x SFS12-35-A	35	12	18	38.1	3	45°	0.4
BT30 x SFS12-35-B	35	12	18	38.1	3	60°	0.4

※ 含拉頭 With pull studs



規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	重量 (KGS) Weight
BT40 x SFS12 - 45	45	15.1	38.1	39.6	1.1
BT40 x SFS12 - 75	75	60.1	38.1	42.8	1.4
BT40 x SFS12 - 90	90	45.1	38.1	44.4	1.6
BT40 x SFS12 - 135	135	105.1	38.1	49.1	2.2
BT50 x SFS12 - 75	75	34.1	38.1	41.6	4.0
BT50 x SFS12 - 105	105	64.1	38.1	44.8	4.4
BT50 x SFS12 - 135	135	94.1	38.1	47.9	4.7
BT50 x SFS12 - 225	225	184.1	38.1	57.4	6.4
BT50 x SFS12 - 315	315	274.1	38.1	66.8	11

※ 不含拉頭 Not included pull studs

### 選配表 Option

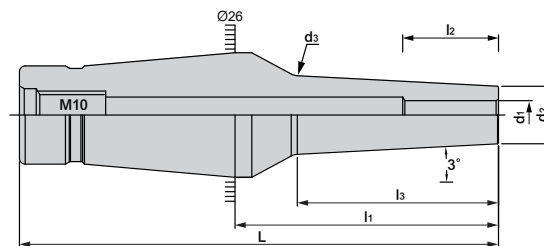
拉頭 Pull Stud	
B645	B645-B647

• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit

壁薄型 Thin

BT



### 特點 Feature

- 材質: 不鏽鋼
- 需搭配 SFS 後拉式立銼刀夾頭做使用

- Material: Heat-resistant stainless steel.
- Need to be used with SFS slim-fit collet chuck.

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	重量 (KGS) Weight
MFS12S x 3mm - 35	80	35	10	22	3	6	8.3	0.16
MFS12S x 3mm - 55	100	55	10	42	3	6	10.4	0.17
MFS12S x 3mm - 80	125	80	10	67	3	6	13.0	0.20
MFS12S x 3mm - 110	155	110	10	97	3	6	16.2	0.23
MFS12S x 3.175mm - 35	80	35	10	22	3.175	6.175	8.5	0.16
MFS12S x 3.175mm - 55	100	55	10	42	3.175	6.175	10.6	0.17
MFS12S x 3.175mm - 80	125	80	10	67	3.175	6.175	13.2	0.19
MFS12S x 3.175mm - 110	155	110	10	97	3.175	6.175	16.3	0.23
MFS12S x 4mm - 35	80	35	10	22	4	7	9.3	0.16
MFS12S x 4mm - 55	100	55	10	42	4	7	11.4	0.18
MFS12S x 4mm - 80	125	80	10	67	4	7	14.0	0.20
MFS12S x 4mm - 110	155	110	10	97	4	7	17.2	0.24
MFS12S x 6mm - 35	80	35	20	22	6	9	11.3	0.17
MFS12S x 6mm - 55	100	55	20	42	6	9	13.4	0.18
MFS12S x 6mm - 80	125	80	20	67	6	9	16.2	0.21
MFS12S x 6mm - 110	155	110	20	97	6	9	19.2	0.26
MFS12S x 8mm - 35	80	35	26	22	8	11	13.3	0.17
MFS12S x 8mm - 55	100	55	26	42	8	11	15.4	0.19
MFS12S x 8mm - 80	125	80	26	67	8	11	18.0	0.23
MFS12S x 8mm - 110	155	110	26	97	8	11	21.2	0.29
MFS12S x 10mm - 35	80	35	32	22	10	13	15.3	0.17
MFS12S x 10mm - 55	100	55	32	42	10	13	17.4	0.20
MFS12S x 10mm - 80	125	80	32	67	10	13	20.0	0.24
MFS12S x 10mm - 110	155	110	32	97	10	13	23.2	0.32
MFS12S x 12mm - 35	80	35	37	22	12	15	17.3	0.17
MFS12S x 12mm - 55	100	55	37	42	12	15	19.4	0.20
MFS12S x 12mm - 80	125	80	37	67	12	15	22.0	0.26
MFS12S x 12mm - 110	155	110	37	97	12	15	25.2	0.35

### 選配表 Option



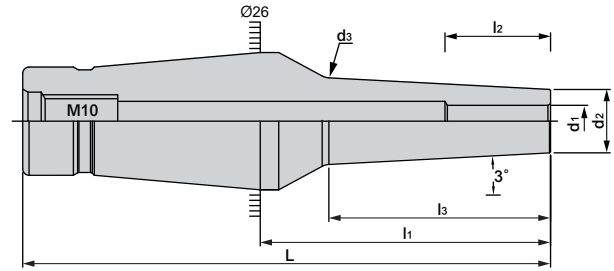
• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit

標準型 Standard



BT



### 特點 Feature

- 材質：不鏽鋼
- 需搭配 SFS 後拉式立銼刀夾頭做使用

- Material: Heat-resistant stainless steel.
- Need to be used with SFS slim-fit collet chuck.

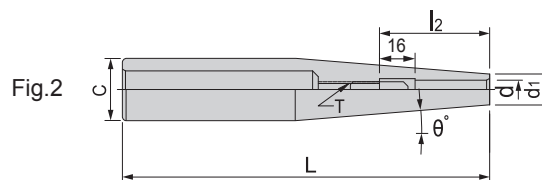
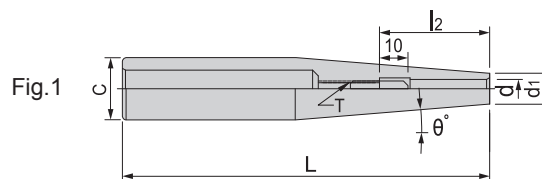
規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	重量 (KGS) Weight
MFS12R x 3mm - 35	80	35	10	22	3	7.5	9.8	0.2
MFS12R x 3mm - 55	100	55	10	42	3	7.5	11.9	0.2
MFS12R x 3mm - 80	125	80	10	67	3	7.5	14.5	0.2
MFS12R x 4mm - 35	80	35	10	22	4	10	12.3	0.2
MFS12R x 4mm - 55	100	55	10	42	4	10	14.4	0.2
MFS12R x 4mm - 80	125	80	10	67	4	10	17	0.2
MFS12R x 6mm - 35	80	35	20	22	6	12	14.3	0.2
MFS12R x 6mm - 55	100	55	20	42	6	12	16.4	0.2
MFS12R x 6mm - 80	125	80	20	67	6	12	19	0.2
MFS12R x 8mm - 35	80	35	26	22	8	14	16.3	0.2
MFS12R x 8mm - 55	100	55	26	42	8	14	18.4	0.2
MFS12R x 8mm - 80	125	80	26	67	8	14	21	0.3
MFS12R x 10mm - 35	80	35	32	22	10	16	18.3	0.2
MFS12R x 10mm - 55	100	55	32	42	10	16	20.4	0.2
MFS12R x 10mm - 80	125	80	32	67	10	16	23	0.3
MFS12R x 12mm - 35	80	35	37	22	12	20	22.3	0.2
MFS12R x 12mm - 55	100	55	37	42	12	20	24.4	0.2
MFS12R x 12mm - 80	125	80	37	51.5	12	20	25.4	0.3

### 選配表 Option



• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



### 特點 Feature

- 搭配任何筒夾式刀桿使用，應用廣泛且便利
- 精度 5μ

- Compatible with all collet type tool holder. Wide application and economical
- Precision 5μ.

規格 Spec.	C	L	l <sub>2</sub>	d	d <sub>1</sub>	θ	T	Fig.	重量 (KGS) Weight
C10-SFW4-120	10	120	20	3	7	3°	-	1	0.06
C12-SFW6-120	10	120	20	4	10	3°	-	1	0.12
C20-SFW10-150	12	150	36	6	14	3°	M5x0.8P	2	0.12
C20-SFW8-150	16	150	10	4	12	3°	M6x1.0P	1	0.18
C20-SFW6-150	16	150	36	6	10	3°	M5x0.8P	2	0.20
C16-SFW4-150	20	150	26	6	7	3°	-	2	0.25
C16-SFW6-150	20	150	20	8	9	3°	-	1	0.28
C20-SFW4-200	20	200	42	10	7	3°	-	1	0.24
C20-SFW6-200	25	200	26	6	10	3°	-	2	0.64
C20-SFW8-200	25	200	26	8	12	3°	-	1	0.66

### 選配表 Option



• 長度單位 Unit of Length (mm)

不鏽鋼刀桿專用  
For Stainless Steels Tool Holder



- 適用刀桿 : MFS      - Applicable chuck: MFS

規格 Spec.	LM-HM-12400
尺寸 (長 x 寬 x 高) Size(DxWxH)	527.7x329x656(mm)
輸出電源 Power output	200V AC, 50/60 Hz 15A
瞬間輸出最大功率 Maximum output	3000 瓦 (W)
建議使用範圍 Tool size range	適用於 $\phi 3(1/8") \sim \phi 12(1/2")$
使用氣壓壓力範圍 Pneumatic requirements	0.4~0.6(Mpa)
加熱時間 Heating time	以 3mm(1/8") 約 90(Sec)
加熱刀桿材質 Shrink-fit chuck material	不鏽鋼材質 stainless steel
重量 (kg)Weight	17.26(kg)

### 標準配備 Standard Equipment

圖示 Pic.	規格 Spec.	名稱 Description	用途 Use
	LM-HM-12400-031	電子式倒數計時器 Digital Countdown Timer	計時加熱及冷卻時間 Countdown the heating and cooling time
	LM-HM-12400-030	鑷子 Tweezer	夾取待安裝或拆卸下之刀具 Used for grabbing tool
	LM-HM-12400-BT50/HSK100	刀桿放置座 Tool Holder Plate	適合放置 BT50 和 HSK100 之刀桿 · 以及轉換其他規格之變徑刀桿座 Applicable for placing BT50 and HSK100 holders, as well as for changing different base holders
	LM-HM-12400-003-2	加熱罩蓋 Heating Mantle	加熱過程中包覆刀桿，使刀桿有效受熱 · 適用刀具柄徑 $\phi 3 \sim \phi 6$ $\phi 6$ · To heat the holders evenly. Applicable for tools from $\phi 3\text{mm} \sim \phi 6\text{mm}$
	LM-HM-12400-003-3		加熱過程中包覆刀桿，使刀桿有效受熱 · 適用刀具柄徑 $\phi 8 \sim \phi 12$ $\phi 12$ · To heat the holders evenly. Applicable for tools from $\phi 8\text{mm} \sim \phi 8\text{mm}$
	LM-HM-12400-032	AC 轉換插頭 Universal Adaptor	轉換插頭型式 Power converter

### 選配配件 Option Accesories

圖示 Pic.	規格 Spec.	名稱 Description	用途 Use
	LM-HM-12400-035	耐熱手套 Heat resistant glove	有效阻絕熱源，保護操作者誤觸到高溫 Protection from high temperatures
	LM-HM-12400-034	銑刀放置盤 Tool cooling tray	放置從熱伸長導桿上拆卸下來的刀具用置放台 For placing the tools that have been removed from the shrink-fit chuck
	BT30、BT40、HSK25、HSK32、 HSK40、HSK63	變徑刀桿座 Base holder	用於固定刀桿之變徑刀桿座 Used for fixing different types of base holders

• 長度單位 Unit of Length (mm)



不鏽鋼刀桿專用  
For Stainless Steels Tool Holder

自動時間控制  
Auto Timer (Stop Automatically  
Through A Cycle-Heating/Cool Down)



- 適用刀桿 : MFS      - Applicable chuck: MFS

規格 Spec.	LM-HM-12400-TC
尺寸 (長 x 寬 x 高) Size(DxWxH)	527.7x329x656(mm)
輸出電源 Power output	200V AC, 50/60 Hz 15A
瞬間輸出最大功率 Maximum output	3000 瓦 (W)
建議使用範圍 Tool size range	適用於 $\phi 3(1/8") \sim \phi 12(1/2")$
使用氣壓壓力範圍 Pneumatic requirements	0.4~0.6(Mpa)
加熱時間 Heating time	以 3mm(1/8") 約 90(Sec)
加熱刀桿材質 Shrink-fit chuck material	不鏽鋼材質 stainless steel
重量 (kg)Weight	17.26(kg)

### 標準配備 Standard Equipment

圖示 Pic.	規格 Spec.	名稱 Description	用途 Use
	LM-HM-12400-031	電子式倒數計時器 Digital Countdown Timer	計時加熱及冷卻時間 Countdown the heating and cooling time
	LM-HM-12400-030	鑷子 Tweezer	夾取待安裝或拆卸下之刀具 Used for grabbing tool
	LM-HM-12400-BT50/HSK100	刀桿放置座 Tool Holder Plate	適合放置 BT50 和 HSK100 之刀桿， 以及轉換其他規格之變徑刀桿座 Applicable for placing BT50 and HSK100 holders, as well as for changing different base holders
	LM-HM-12400-003-2	加熱罩蓋 Heating Mantle	加熱過程中包覆刀桿，使刀桿有效受熱。 適用刀具柄徑 $\phi 3 \sim \phi 6$ $\phi 6$ · To heat the holders evenly. Applicable for tools from $\phi 3\text{mm} \sim \phi 6\text{mm}$
	LM-HM-12400-003-3		加熱過程中包覆刀桿，使刀桿有效受熱。 適用刀具柄徑 $\phi 8 \sim \phi 12$ $\phi 12$ · To heat the holders evenly. Applicable for tools from $\phi 8\text{mm} \sim \phi 12\text{mm}$
	LM-HM-12400-032	AC 轉換插頭 Universal Adaptor	轉換插頭型式 Power converter

### 選配配件 Option Accessories

圖示 Pic.	規格 Spec.	名稱 Description	用途 Use
	LM-HM-12400-035	耐熱手套 Heat resistant glove	有效阻絕熱源，保護操作者誤觸到高溫 Protection from high temperatures
	LM-HM-12400-034	銑刀放置盤 Tool cooling tray	放置從熱伸長導桿上拆卸下來的刀具用置放台 For placing the tools that have been removed from the shrink-fit chuck
	BT30、BT40、HSK25、HSK32、 HSK40、HSK63	變徑刀桿座 Base holder	用於固定刀桿之變徑刀桿座 Used for fixing different types of base holders

• 長度單位 Unit of Length (mm)

### | 快速加熱原理 Rapid Heating Principle:

由加熱器內之感應線圈，產生高頻電磁波使刀桿感應渦電流而生熱，加熱迅速，提升換刀效率

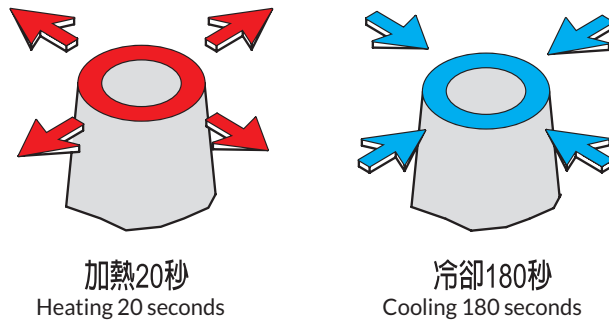
With the induction coil of the Shrink-fit machine, high frequency electro-magnetic waves rapidly to heat the arbor. It leads to quick clamping and unclamping of the tools.

### | 冷卻原理 Cooling Principle:

利用空壓機之風力強制降溫冷卻，使刀桿能迅速到達常溫狀態。(冷卻時間與空壓機馬力大小成反比)

Using the wind of air compressor to make the tool holder cool down quickly. (Cooling time and air compressor power are in inverse proportion.)

例 Example: BT40xSFC12-90



<p style="text-align: center;"><b>加熱</b></p> <p>將刀桿置加熱器加熱，時間約 20 秒 Heating: Heat the arbor for about 20 seconds.</p>	<p style="text-align: center;"><b>置入刀具</b></p> <p>將刀具置入加熱膨脹後之刀桿 Placing the cutting tool into the expanded arbor on your required height.</p>	<p style="text-align: center;"><b>固定夾持</b></p> <p>溫度冷卻收縮後之刀桿，刀具即強力的挾持住 Fixed clamping: The tool is clamped firmly after the arbor contracts after it has cooled down.</p>	<p style="text-align: center;"><b>取出</b></p> <p>在加熱刀桿膨脹後，即可輕易取出刀具 Removing: Expand the arbor by heating it to easily remove the tool.</p>

### | 操作便利安全 Convenient safety instruction:

刀桿被加熱至換刀溫度後，約五秒後自動開啟送風裝置冷卻刀桿，不必移動加熱器，提高操作之安全性

After heating the arbor to the desired temp for changing the tool, the air compressor will automatically turn on after 5 seconds and blow the cool air to cool down for clamping the tool.



規格 Spec.	SFC-300	SFC-1000
尺寸 (寬 x 深 x 高) Size(WxDxH)	300X300x685(mm)	650X410X820(mm)
輸出電源 Power output	單相 SINGLE-PHASE 220V、50/60HZ 15 安培 AMP	三相 3-PHASE 220V 50/60HZ 25 安培 AMP
瞬間輸出最大功率 Maximum output	2000~3000 瓦 (watts)	6000~9000 瓦 (watts)
建議使用範圍 Tool size range	Ø3~Ø20mm、大型加熱罩 Ø25~Ø32mm (另購) Ø3~Ø20mm、large heating mantle、Ø25~Ø32mm (optional)	適用於 Ø3~Ø32mm 刀具 Suitable for Ø3~Ø32mm Tool
加熱時間 Heating time	-	3~18 秒 (視刀桿尺寸、形狀而定) 3-18 seconds. (It depends on the arbor size and shape)
使用刀具 Cutting tools	限用鎢鋼刀具 Only tungsten steel tools	可使用在 HSS 刀具或一般捨棄式刀具 (Ø10 以上) HSS tools and garden-variety abandon cutting tools
加熱刀桿 Shrink-fit tool holder	合金鋼材質 (不建議加熱不鏽鋼材質) Alloy steel(stainless steel is not recommended for heating)	
重量 (KGS) Weight	18.75(KGS)	63.2(KGS)

### 選配配件 Optional Accessories

圖示 Pic.	規格 Spec.	名稱 Description	用途 Usage
	HSK25、HSK32、HSK40、 HSK50、HSK63、HSK80	HSK 變徑刀桿座 HSK Arbor Base	用於固定不同規格刀桿尺寸上 For different types of arbor specifications.
	BT30、BT40、 PSC-63A、BT50	BT 變徑刀桿座 BT Arbor Base	
	Ø3~Ø5、Ø6~Ø12、 Ø14~Ø20、Ø25~Ø32	導熱環 Thermal Conductive Ring Housing	有效阻絕熱源、冷空氣與外界接觸 Thermal housing prevents and ensures during heating and cooling the exact place of the arbor.
	Ø84x101	HSK 變徑刀桿座 HSK - Arbor Base	用於固定不同規格刀桿尺寸上 For different types of arbor specifications.
	Ø3、Ø4、Ø6、Ø8、Ø10、Ø12	刀具夾持器 (需另購) Cutting tool holder(Optional)	用於置入、取出刀具使用，並可設定刀具長度 To hold the cutting tool at any height during clamp and easily remove during unclamp.

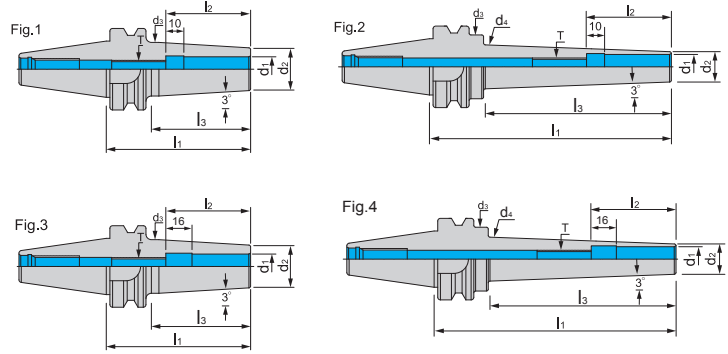


• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



BT



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
BT30 x SFCT4-80	80	20	48	4	10	15	-	M6x1.0P	1	0.40
BT30 x SFCT4-135	135	20	102	4	10	26	20.6	-	2	0.60
BT30 x SFCT5-80	80	20	53	5	16	19	-	M6x1.0P	1	0.42
BT30 x SFCT5-135	135	20	102	5	11	26	21.6	-	2	0.62
BT30 x SFCT6-80	80	36	53	6	21	26	-	M5x0.8P	3	0.44
BT30 x SFCT6-135	135	36	101	6	12	26	22.6	M5x0.8P	4	0.64
BT30 x SFCT8-80	80	36	53	8	21	26	-	M6x1.0P	1	0.45
BT30 x SFCT8-135	135	36	103	8	14	26	24.7	M6x1.0P	2	0.65
BT30 x SFCT10-80	80	42	53	10	24	29	-	M8x1.25P	2	0.65
BT30 x SFCT10-135	135	42	108	10	16	26	-	M8x1.25P	2	0.70
BT30 x SFCT12-80	80	52	53	12	24	29	-	M10x1.5P	1	0.50
BT30 x SFCT12-135	135	52	108	12	18	26	-	M10x1.5P	2	0.70
BT30 x SFCT14-80	80	52	46	14	24	32	-	M10x1.5P	2	0.52
BT30 x SFCT14-135	135	52	102	14	20	36	30.6	M10x1.5P	2	0.72
BT30 x SFCT16-80	80	52	55	16	27	32	-	M12x1.75P	1	0.54
BT30 x SFCT16-135	135	52	101	16	22	36	32.6	M12x1.75P	2	0.74
BT30 x SFCT18-90	90	52	66	18	33	38	-	M12x1.75P	2	0.56
BT30 x SFCT18-135	135	52	102	18	24	36	34.7	M12x1.75P	2	0.75
BT30 x SFCT20-90	90	52	66	20	33	38	-	M16x2.0P	1	0.80
BT30 x SFCT20-135	135	52	111	20	26	36	-	M16x2.0P	2	0.78
BT30 x SFCT25-100	100	58	78	25	44	49	-	M20x2.0P	2	0.60
BT30 x SFCT25-160	160	58	136	25	31	36	-	M20x2.0P	2	0.80

### 選配表 Option

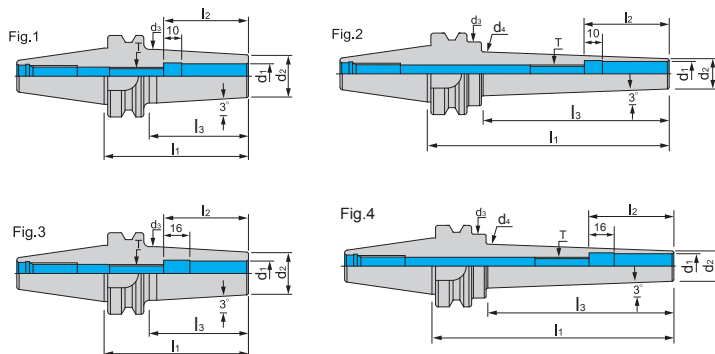
拉頭 Pull Stud	加熱器 Heater
B645-B647	B400



• 長度單位 Unit of Length (mm)

### 燒結式 Shrink-Fit

BT



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
BT40 x SFCT4-90	90	20	53	4	10	15.6	-	M6x1.0P	1	1.10
BT40 x SFCT4-135	135	20	97	4	10	26	20	-	2	1.20
BT40 x SFCT5-90	90	20	58	5	16	21	-	M6x1.0P	1	1.00
BT40 x SFCT5-135	135	20	97	5	11	26	21	-	2	1.20
BT40 x SFCT5-165	165	20	127	5	11	26	24	-	2	1.40
BT40 x SFCT5-200	200	20	168	5	11	26	-	-	2	1.80
BT40 x SFCT6-90	90	36	58	6	21	26	-	M5x0.8P	3	1.22
BT40 x SFCT6-135	135	36	96	6	12	26	22	M5x0.8P	4	1.30
BT40 x SFCT6-165	165	36	127	6	12	26	22	M5x0.8P	4	1.50
BT40 x SFCT6-200	200	36	168	6	12	26	-	M5x0.8P	4	2.00
BT40 x SFCT8-90	90	36	58	8	21	26	-	M6x1.0P	1	1.21
BT40 x SFCT8-135	135	36	97	8	14	36	24	M6x1.0P	2	1.30
BT40 x SFCT8-165	165	36	127	8	14	36	27	M6x1.0P	2	1.50
BT40 x SFCT8-200	200	36	162	8	14	36	30	M6x1.0P	2	1.59
BT40 x SFCT10-90	90	42	58	10	24	29	-	M8x1.25P	1	1.28
BT40 x SFCT10-135	135	42	97	10	16	36	26	M8x1.25P	2	1.30
BT40 x SFCT10-165	165	42	127	10	16	36	-	M8x1.25P	2	1.50
BT40 x SFCT10-200	200	42	161	10	16	36	32	M8x1.25P	2	2.00
BT40 x SFCT12-90	90	52	58	12	24	29	-	M10x1.5P	1	3.94
BT40 x SFCT12-135	135	52	97	12	18	36	28	M10x1.5P	2	1.30
BT40 x SFCT12-165	165	52	125	12	18	36	31	M10x1.5P	2	1.50
BT40 x SFCT12-200	200	52	162	12	18	36	35	M10x1.5P	2	1.69

### 選配表 Option

拉頭 Pull Stud	加熱器 Heater
B645-B647	B400

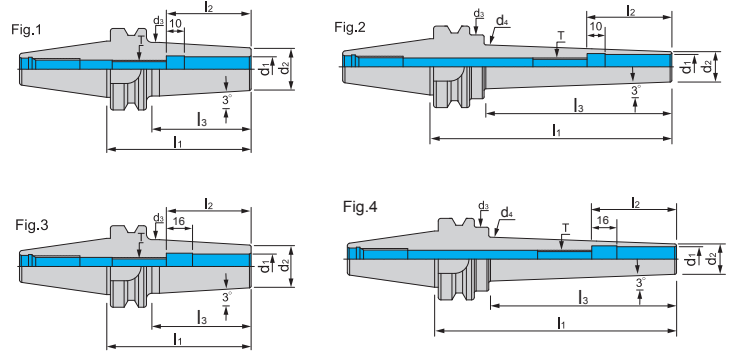


• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



BT



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
BT40 x SFCT14-90	90	52	58	14	27	32	-	M10x1.5P	1	1.20
BT40 x SFCT14-135	135	52	97	14	20	36	30	M10x1.5P	2	1.40
BT40 x SFCT14-165	165	52	126	14	20	36	33	M10x1.5P	2	1.50
BT40 x SFCT14-200	200	52	168	14	20	36	-	M10x1.5P	2	2.00
BT40 x SFCT16-90	90	52	58	16	27	32	-	M12x1.75P	1	1.28
BT40 x SFCT16-135	135	52	96	16	22	36	32	M12x1.75P	2	1.40
BT40 x SFCT16-165	165	52	127	16	22	36	35	M12x1.75P	2	1.50
BT40 x SFCT16-200	200	52	168	16	22	36	-	M12x1.75P	2	2.00
BT40 x SFCT18-100	100	52	68	18	33	38	-	M12x1.75P	1	1.30
BT40 x SFCT18-135	135	52	97	18	24	36	34	M12x1.75P	2	1.50
BT40 x SFCT18-165	165	52	133	18	24	36	-	M12x1.75P	2	2.00
BT40 x SFCT18-200	200	52	133	2	24	36	-	M12x1.75P	2	2.10
BT40 x SFCT19-90	90	52	168	2	24	36	-	M12x1.75P	2	1.80
BT40 x SFCT20-100	100	60	58	19	33	38	-	M16x2.0P	1	1.42
BT40 x SFCT20-135	135	52	68	20	33	38	-	M16x2.0P	1	1.50
BT40 x SFCT20-165	165	52	103	20	26	36	-	M16x2.0P	2	1.64
BT40 x SFCT20-200	200	52	133	20	26	36	-	M16x2.0P	2	2.10
BT40 x SFCT24-90	90	52	168	20	26	36	-	M16x2.0P	2	1.86
BT40 x SFCT25-100	100	72	61	24	44	49	-	M20x2.0P	1	1.78
BT40 x SFCT25-135	135	58	71	25	44	49	-	M20x2.0P	1	1.90
BT40 x SFCT25-165	165	58	97	25	31	49	41	M20x2.0P	2	2.10
BT40 x SFCT25-200	200	58	127	25	31	49	44	M20x2.0P	2	2.20
BT40 x SFCT32-100	100	58	162	25	31	49	48	M20x2.0P	2	1.55
BT40 x SFCT32-135	135	58	71	32	44	49	-	M20x2.0P	1	1.90
BT40 x SFCT32-165	165	58	97	32	38	49	48	M20x2.0P	2	2.22
BT40 x SFCT32-200	200	58	136	32	38	49	-	M20x2.0P	2	2.20

### 選配表 Option

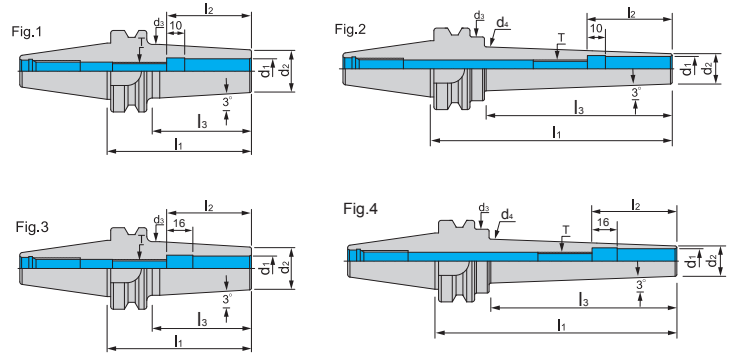
拉頭 Pull Stud	加熱器 Heater
B645-B647	B400



• 長度單位 Unit of Length (mm)



燒結式 Shrink-Fit



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
BT50 x SFCT4-100	100	20	52	4	10	15.5	-	M6x1.0P	1	3.86
BT50 x SFCT4-135	135	20	86	4	10	26	19	-	2	3.56
BT50 x SFCT5-100	100	20	57	5	16	21	-	M6x1.0P	1	3.86
BT50 x SFCT5-135	135	20	86	5	11	26	20	-	2	3.56
BT50 x SFCT5-165	165	20	115	5	11	26	23	-	2	3.73
BT50 x SFCT5-200	200	20	157	5	11	26	-	-	2	3.86
BT50 x SFCT6-100	100	36	57	6	21	26	-	M5x0.8P	3	3.92
BT50 x SFCT6-135	135	36	86	6	12	26	21	M5x0.8P	4	3.62
BT50 x SFCT6-165	165	36	116	6	12	26	24	M5x0.8P	4	3.76
BT50 x SFCT6-200	200	36	157	6	12	26	-	M5x0.8P	4	3.89
BT50 x SFCT8-100	100	36	57	8	21	26	-	M6x1.0P	1	3.92
BT50 x SFCT8-135	135	36	86	8	14	36	23	M6x1.0P	2	3.74
BT50 x SFCT8-165	165	36	116	8	14	36	26	M6x1.0P	2	3.85
BT50 x SFCT8-200	200	36	151	8	14	36	29	M6x1.0P	2	4.02
BT50 x SFCT10-100	100	42	58	10	24	29	-	M8x1.25P	1	3.90
BT50 x SFCT10-135	135	42	86	10	16	36	25	M8x1.25P	2	3.68
BT50 x SFCT10-165	165	42	116	10	16	36	28	M8x1.25P	2	3.86
BT50 x SFCT10-200	200	42	151	10	16	36	31	M8x1.25P	2	4.02
BT50 x SFCT12-100	100	52	52	12	24	29	-	M10x1.5P	1	3.94
BT50 x SFCT12-135	135	52	86	12	18	36	27	M10x1.5P	2	3.77
BT50 x SFCT12-165	165	52	116	12	18	36	30	M10x1.5P	2	3.89
BT50 x SFCT12-200	200	52	150	12	18	36	33	M10x1.5P	2	4.07

### 選配表 Option

拉頭 Pull Stud	加熱器 Heater
B645-B647	B400



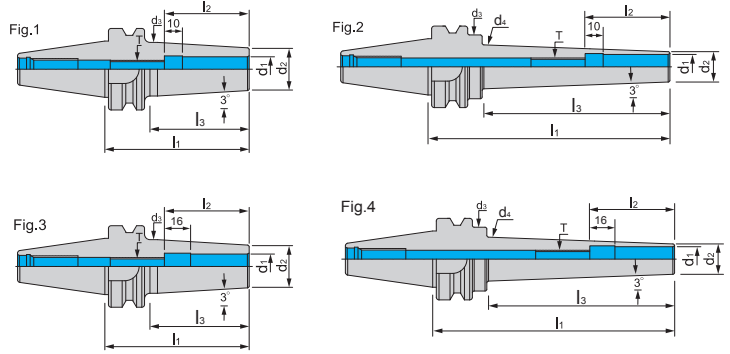
• 長度單位 Unit of Length (mm)



燒結式 Shrink-Fit



BT



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 2500rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 2500rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
BT50 x SFCT14-100	100	52	57	14	27	32	-	M10x1.5P	1	3.86
BT50 x SFCT14-135	135	52	86	14	20	36	29	M10x1.5P	2	3.81
BT50 x SFCT14-165	165	52	116	14	20	36	32	M10x1.5P	2	3.86
BT50 x SFCT14-200	200	52	157	14	20	36	-	M10x1.5P	2	4.16
BT50 x SFCT16-100	100	52	52	16	27	32	-	M12x1.75P	1	3.96
BT50 x SFCT16-135	135	52	86	16	22	36	31	M12x1.75P	2	3.82
BT50 x SFCT16-165	165	52	116	16	22	36	34	M12x1.75P	2	3.97
BT50 x SFCT16-200	200	52	157	16	22	36	-	M12x1.75P	2	4.19
BT50 x SFCT18-110	110	52	62	18	33	38	-	M12x1.75P	1	4.18
BT50 x SFCT18-135	135	52	85	18	24	36	32	M12x1.75P	2	3.88
BT50 x SFCT18-165	165	52	122	18	24	36	-	M12x1.75P	2	4.06
BT50 x SFCT18-200	200	52	157	18	24	36	-	M12x1.75P	2	4.30
BT50 x SFCT20-110	110	52	67	20	33	38	-	M16x2.0P	1	4.14
BT50 x SFCT20-135	135	52	86	20	26	36	35	M16x2.0P	2	3.86
BT50 x SFCT20-165	165	52	117	20	26	36	-	M16x2.0P	2	4.03
BT50 x SFCT20-200	200	52	152	20	26	36	-	M16x2.0P	2	4.22
BT50 x SFCT25-110	110	58	67	25	44	49	-	M20x2.0P	1	4.46
BT50 x SFCT25-135	135	58	86	25	31	49	40	M20x2.0P	2	4.03
BT50 x SFCT25-165	165	58	116	25	31	49	43	M20x2.0P	2	4.30
BT50 x SFCT25-200	200	58	150	25	31	49	46	M20x2.0P	2	4.67
BT50 x SFCT32-110	110	58	67	32	44	49	-	M20x2.0P	1	4.30
BT50 x SFCT32-135	135	58	86	32	38	49	47	M20x2.0P	2	4.18
BT50 x SFCT32-165	165	58	122	32	38	49	-	M20x2.0P	2	4.56
BT50 x SFCT32-200	200	58	157	32	38	49	-	M20x2.0P	2	5.01

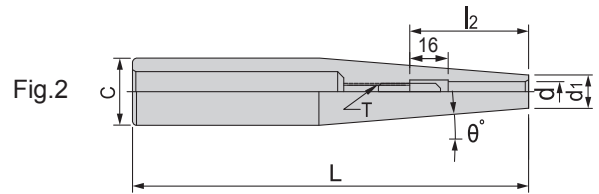
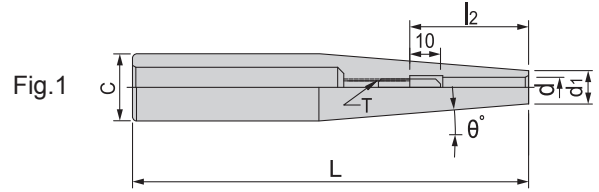
### 選配表 Option

拉頭 Pull Stud	加熱器 Heater
B645-B647	B400



• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



### 特點 Feature

- 搭配任何筒夾式刀桿使用，應用廣泛且便利
- 精度 5 $\mu$

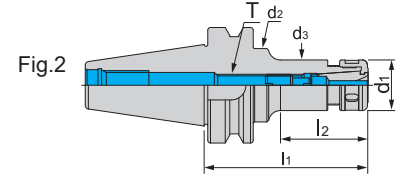
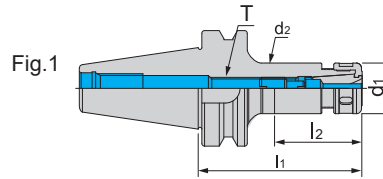
- Compatible with all collet type tool holder. Wide application and economical
- Precision 5 $\mu$ .

規格 Spec.	C	L	l <sub>2</sub>	d	d <sub>1</sub>	$\theta$	T	Fig.	重量 (KGS) Weight
C10 x SFC3-120	10	120	20	3	7	4.5°	-	1	0.06
C10 x SFC4-120	10	120	20	4	7	4.5°	-	1	0.12
C12 x SFC6-120	12	120	36	6	10	4.5°	M5x0.8P	2	0.12
C16 x SFC4-150	16	150	10	4	7	3°	M6x1.0P	1	0.18
C16 x SFC6-150	16	150	36	6	9	3°	M5x0.8P	2	0.20
C20 x SFC6-150	20	150	26	6	10	3°	-	2	0.25
C20 x SFC8-150	20	150	20	8	14	3°	-	1	0.28
C20 x SFC10-150	20	150	42	10	14	3°	-	1	0.24
C25 x SFC6-250	25	250	26	6	10	3°	-	2	0.64
C25 x SFC8-250	25	250	26	8	12	3°	-	1	0.66
C25 x SFC10-250	25	250	32	10	14	3°	-	1	0.68
C25 x SFC12-250	25	250	37	12	16	3°	-	1	0.62

### 選配表 Option



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 ( 延伸 4D 長度處 )
- SKS 筒夾錐度 :4° · 增加夾持力、提高穩定性
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5 $\mu$ .
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic balancing G2.5 at 25000rpm.

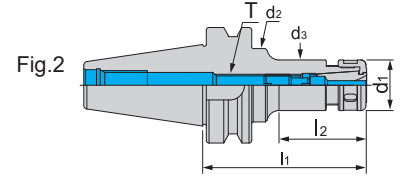
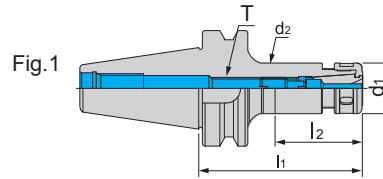
規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
BT30 x SKS6-45	45	22	18	20	-	M8x1.25P	1	0.80
BT30 x SKS6-60	60	33	18	20	-	M8x1.25P	1	0.90
BT30 x SKS6-90	90	55	18	20	-	M8x1.25P	1	0.52
BT30 x SKS10-45	45	22	30	27.6	-	M12x1.75P	1	0.80
BT30 x SKS10-60	60	33	30	27.6	-	M12x1.75P	1	0.90
BT30 x SKS10-90	90	63	30	27.6	-	M12x1.75P	1	1.00
BT30 x SKS13-60	60	35	35	33	-	M12x1.75P	1	0.84
BT30 x SKS13-90	90	65	35	33	-	M12x1.75P	1	0.74
BT30 x SKS13-120	120	95	35	33	-	M12x1.75P	1	1.60
BT30 x SKS16-60	60	37	40	40	-	M18x1.5P	1	0.59
BT30 x SKS16-90	90	67	40	40	-	M18x1.5P	1	0.82
BT30 x SKS20-60	60	33	48.5	48.5	-	M22x1.5P	1	0.64
BT30 x SKS20-90	90	60	48.5	48.5	-	M22x1.5P	1	0.98
BT40 x SKS6-90	90	44	18	32	18	M8x1.25P	2	1.20
BT40 x SKS6-120	120	74	18	32	18	M8x1.25P	2	1.21
BT40 x SKS10-60	60	30	30	40	27.6	M12x1.75P	2	1.14
BT40 x SKS10-90	90	45	30	40	27.6	M12x1.75P	2	1.20
BT40 x SKS10-120	120	74	30	40	27	M12x1.75P	2	1.40
BT40 x SKS13-60	60	30	35	33	-	M12x1.75P	1	1.12
BT40 x SKS13-90	90	60	35	33	-	M12x1.75P	1	1.28
BT40 x SKS13-120	120	90	35	33	-	M12x1.75P	1	1.44
BT40 x SKS13-150	150	120	35	33	-	M12x1.75P	1	1.70
BT40 x SKS13-200	200	170	35	33	-	M12x1.75P	1	2.00
BT40 x SKS16-60	60	23.2	40	40	-	M18x1.5P	1	1.10
BT40 x SKS16-90	90	58	40	40	-	M18x1.5P	1	1.30
BT40 x SKS16-120	120	88	40	40	-	M18x1.5P	1	1.70
BT40 x SKS16-150	150	118	40	40	-	M18x1.5P	1	1.90
BT40 x SKS16-200	200	168	40	40	-	M18x1.5P	1	2.10
BT40 x SKS20-60	60	32	48.5	48.5	-	M22x1.5P	1	1.14
BT40 x SKS20-90	90	60	48.5	48.5	-	M22x1.5P	1	0.46
BT40 x SKS20-120	120	88	48.5	48.5	-	M22x1.5P	1	1.90
BT40 x SKS20-150	150	118	48.5	48.5	-	M22x1.5P	1	2.10
BT40 x SKS20-200	200	168	48.5	48.5	-	M22x1.5P	1	2.20
BT40 x SKS25-90	90	61	55.1	55	-	M28x2.0P	1	1.70
BT40 x SKS25-120	120	91	55.1	55	-	M28x2.0P	1	1.80

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 (延伸 4D 長度處)
- SKS 筒夾錐度 :4° · 增加夾持力、提高穩定性
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5 $\mu$ .
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic Balancing G2.5 at 25000rpm.

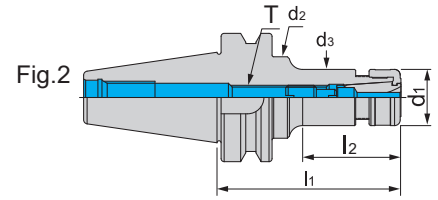
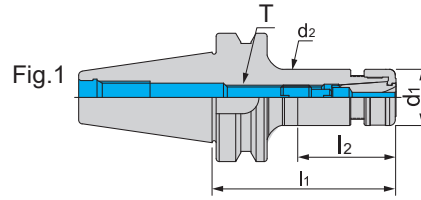
規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
BT50 x SKS6-90	90	42	18	18	-	M8x1.25P	1	4.00
BT50 x SKS6-120	120	60	18	32	18	M8x1.25P	2	4.20
BT50 x SKS10-105	105	57	30	27.6	-	M12x1.75P	1	4.50
BT50 x SKS10-150	150	94	30	40	27	M12x1.75P	2	4.17
BT50 x SKS10-165	165	108	30	40	27	M12x1.75P	2	4.30
BT50 x SKS10-200	200	145	30	36	27	M12x1.75P	2	5.20
BT50 x SKS10-250	250	193	30	40	27	M12x1.75P	2	5.60
BT50 x SKS13-105	105	62	35	33	-	M12x1.75P	1	4.11
BT50 x SKS13-135	135	92	35	33	-	M12x1.75P	1	4.18
BT50 x SKS13-150	150	77	35	33	45	M12x1.75P	2	4.80
BT50 x SKS13-165	165	92	35	45	33	M12x1.75P	2	4.55
BT50 x SKS13-200	200	157	35	45	33	M12x1.75P	2	4.74
BT50 x SKS13-250	250	207	35	45	33	M12x1.75P	2	5.16
BT50 x SKS16-105	105	57	40	40	-	M18x1.5P	1	4.18
BT50 x SKS16-150	150	93	40	52	40	M18x1.5P	2	4.70
BT50 x SKS16-165	165	108	40	52	40	M18x1.5P	2	4.50
BT50 x SKS16-200	200	157	40	52	40	M18x1.5P	2	5.12
BT50 x SKS16-250	250	207	40	52	40	M18x1.5P	2	5.66
BT50 x SKS20-105	105	62	48.5	48.5	-	M22x1.5P	1	4.32
BT50 x SKS20-135	135	92	48.5	48.5	-	M22x1.5P	1	4.66
BT50 x SKS20-165	165	122	48.5	48.5	-	M22x1.5P	1	5.00
BT50 x SKS20-200	200	157	48.5	48.5	-	M22x1.5P	1	5.45
BT50 x SKS20-250	250	207	48.5	48.5	-	M22x1.5P	1	6.05
BT50 x SKS25-105	105	62	55.1	55	-	M28x2.0P	1	4.50
BT50 x SKS25-150	150	107	55.1	55	-	M22x1.5P	1	4.80
BT50 x SKS25-200	200	157	55.1	55	-	M22x1.5P	1	6.00
BT50 x SKS25-250	250	207	55.1	55	-	M22x1.5P	1	6.68

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 (延伸 4D 長度處)
- SKS 筒夾錐度 :4° · 增加夾持力 · 提高穩定性
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5 $\mu$ .
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic Balance of G2.5 at 25000rpm.

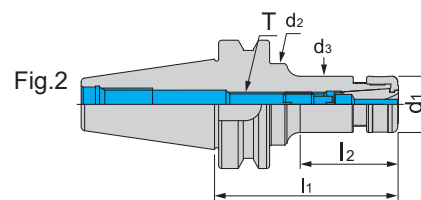
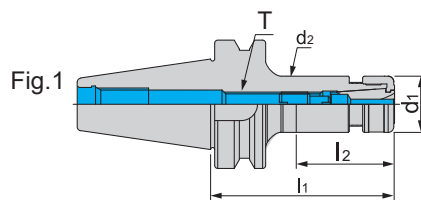
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	Fig.	重量 (KGS) Weight
BT30 x SKS6-45-HS	45	22	18	20	-	M8x1.25P	1	0.80
BT30 x SKS6-60-HS	60	33	18	20	-	M8x1.25P	1	0.90
BT30 x SKS6-90-HS	90	55	18	20	-	M8x1.25P	1	0.52
BT30 x SKS10-45-HS	45	22	30	27.6	-	M12x1.75P	1	0.80
BT30 x SKS10-60-HS	60	33	30	27.6	-	M12x1.75P	1	0.90
BT30 x SKS10-90-HS	90	63	30	27.6	-	M12x1.75P	1	1.00
BT30 x SKS13-60-HS	60	35	35	33	-	M12x1.75P	1	0.84
BT30 x SKS13-90-HS	90	65	35	33	-	M12x1.75P	1	0.74
BT30 x SKS13-120-HS	120	95	35	33	-	M12x1.75P	1	1.60
BT30 x SKS16-60-HS	60	37	40	40	-	M18x1.5P	1	0.59
BT30 x SKS16-90-HS	90	67	40	40	-	M18x1.5P	1	0.82
BT30 x SKS20-60-HS	60	33	48.5	48.5	-	M22x1.5P	1	0.64
BT30 x SKS20-90-HS	90	60	48.5	48.5	-	M22x1.5P	1	0.98
BT40 x SKS6-90-HS	90	44	18	32	18	M8x1.25P	2	1.20
BT40 x SKS6-120-HS	120	74	18	32	18	M8x1.25P	2	1.21
BT40 x SKS10-60-HS	60	30	30	40	27.6	M12x1.75P	2	1.14
BT40 x SKS10-90-HS	90	45	30	40	27.6	M12x1.75P	2	1.20
BT40 x SKS10-120-HS	120	74	30	40	27	M12x1.75P	2	1.40
BT40 x SKS13-60-HS	60	30	35	33	-	M12x1.75P	1	1.12
BT40 x SKS13-90-HS	90	60	35	33	-	M12x1.75P	1	1.28
BT40 x SKS13-120-HS	120	90	35	33	-	M12x1.75P	1	1.44
BT40 x SKS13-150-HS	150	120	35	33	-	M12x1.75P	1	1.70
BT40 x SKS13-200-HS	200	170	35	33	-	M12x1.75P	1	2.00
BT40 x SKS16-60-HS	60	23.2	40	40	-	M18x1.5P	1	1.10
BT40 x SKS16-90-HS	90	58	40	40	-	M18x1.5P	1	1.30
BT40 x SKS16-120-HS	120	88	40	40	-	M18x1.5P	1	1.70
BT40 x SKS16-150-HS	150	118	40	40	-	M18x1.5P	1	1.90
BT40 x SKS16-200-HS	200	168	40	40	-	M18x1.5P	1	2.10
BT40 x SKS20-60-HS	60	32	48.5	48.5	-	M22x1.5P	1	1.14
BT40 x SKS20-90-HS	90	60	48.5	48.5	-	M22x1.5P	1	0.46
BT40 x SKS20-120-HS	120	88	48.5	48.5	-	M22x1.5P	1	1.90
BT40 x SKS20-150-HS	150	118	48.5	48.5	-	M22x1.5P	1	2.10
BT40 x SKS20-200-HS	200	168	48.5	48.5	-	M22x1.5P	1	2.20
BT40 x SKS25-90-HS	90	61	55.1	55	-	M28x2.0P	1	1.70
BT40 x SKS25-120-HS	120	91	55.1	55	-	M28x2.0P	1	1.80

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 (延伸 4D 長度處)
- SKS 筒夾錐度 :4° · 增加夾持力、提高穩定性
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5 $\mu$ .
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic Balancing G2.5 at 25000rpm.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
BT50 x SKS6-90-HS	90	42	18	18	-	M8x1.25P	1	4.00
BT50 x SKS6-120-HS	120	60	18	32	18	M8x1.25P	2	4.20
BT50 x SKS10-105-HS	105	57	30	27.6	-	M12x1.75P	1	4.50
BT50 x SKS10-150-HS	150	94	30	40	27	M12x1.75P	2	4.17
BT50 x SKS10-165-HS	165	108	30	40	27	M12x1.75P	2	4.30
BT50 x SKS10-200-HS	200	145	30	36	27	M12x1.75P	2	5.20
BT50 x SKS10-250-HS	250	193	30	40	27	M12x1.75P	2	5.60
BT50 x SKS13-105-HS	105	62	35	33	-	M12x1.75P	1	4.11
BT50 x SKS13-135-HS	135	92	35	33	-	M12x1.75P	1	4.18
BT50 x SKS13-150-HS	150	77	35	33	45	M12x1.75P	2	4.80
BT50 x SKS13-165-HS	165	92	35	45	33	M12x1.75P	2	4.55
BT50 x SKS13-200-HS	200	157	35	45	33	M12x1.75P	2	4.74
BT50 x SKS13-250-HS	250	207	35	45	33	M12x1.75P	2	5.16
BT50 x SKS16-105-HS	105	57	40	40	-	M18x1.5P	1	4.18
BT50 x SKS16-150-HS	150	93	40	52	40	M18x1.5P	2	4.70
BT50 x SKS16-165-HS	165	108	40	52	40	M18x1.5P	2	4.50
BT50 x SKS16-200-HS	200	157	40	52	40	M18x1.5P	2	5.12
BT50 x SKS16-250-HS	250	207	40	52	40	M18x1.5P	2	5.66
BT50 x SKS20-105-HS	105	62	48.5	48.5	-	M22x1.5P	1	4.32
BT50 x SKS20-135-HS	135	92	48.5	48.5	-	M22x1.5P	1	4.66
BT50 x SKS20-165-HS	165	122	48.5	48.5	-	M22x1.5P	1	5.00
BT50 x SKS20-200-HS	200	157	48.5	48.5	-	M22x1.5P	1	5.45
BT50 x SKS20-250-HS	250	207	48.5	48.5	-	M22x1.5P	1	6.05
BT50 x SKS25-105-HS	105	62	55.1	55	-	M28x2.0P	1	4.50
BT50 x SKS25-150-HS	150	107	55.1	55	-	M22x1.5P	1	4.80
BT50 x SKS25-200-HS	200	157	55.1	55	-	M22x1.5P	1	6.00
BT50 x SKS25-250-HS	250	207	55.1	55	-	M22x1.5P	1	6.68

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651



• 長度單位 Unit of Length (mm)



# LHC

## 液壓刀桿系列

# Hydraulic

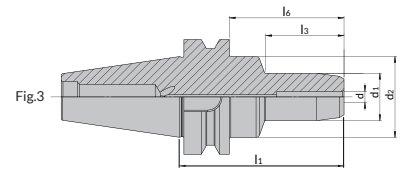
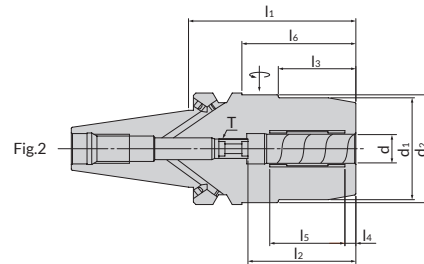
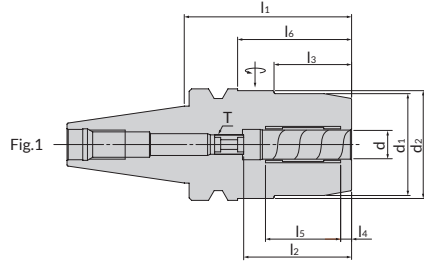
- 提高刀具100%的壽命
- 加工表面無振紋
- 適合高精度加工
- 一般六角扳手快速換刀
- Increase up to 100% tool life
- Excellent vibration damping that effectively reduces the chatter mark of the workpiece surface
- Ideal for machining high accuracy operations
- Using hex key wrench for quick tool change



# GERMANY



同心度和重覆精度在 0.003mm 以內 (2.5D)



### 特點 Feature

- 小徑液壓刀桿：外徑降低干涉，無需使用減壓徑套筒
- 直徑為 20mm 時，最大夾持扭矩高達 900Nm 最小扭矩 520Nm 以上。
- 直徑為 32mm 時，最大夾持扭矩高達 2000Nm 最小扭矩 900Nm 以上。
- Small-diameter hydraulic shank: Prevent interference from shank, no need to use collet reducer.
- Diameter 20mm, maximum clamping torque up to 900Nm, minimum torque above 520Nm.
- Diameter 32mm, maximum clamping torque up to 2000Nm, minimum torque above 900Nm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	d	d <sub>1</sub>	d <sub>2</sub>	T	扳手 Wrench	扭力值 (N.m) Torque	Fig.	重量 (KGS) Weight
BT30-LHC12-69	69	46	32	4.5	47	23	12	42	44.5	M8X1.0P	PT5	110	1	0.60
BT30-LHC20-90	90	51	50	5	68	39	20	42	44.5	M8X1.0P	PT5	400	1	0.90
<b>NEW</b> BT40-LHC6-90	90.5	37	43	3.6	20.5	63	6	26	44.5	M5X1.0P	PT5	-	3	1.40
<b>NEW</b> BT40-LHC8-90	90.5	37	44.5	3.6	20.5	63	8	28	44.5	M6X1.0P	PT5	-	3	1.40
<b>NEW</b> BT40-LHC10-90	90.5	41	44.5	3.6	20.5	63	10	30	44.5	M8X1.0P	PT5	-	3	1.40
BT40-LHC12-58	58	46	-	4.5	31	31	12	42	-	M8X1.0P	PT5	110	2	1.20
BT40-LHC16-72	72.5	51	-	5	37	45.5	16	49.25	-	M8X1.0P	PT5	350	2	1.30
BT40-LHC20-72	72.5	51	-	5	37	45.5	20	49.25	-	M8X1.0P	PT5	520	2	1.40
BT40-LHC32-120	120	61	-	6	44	80	32	62.5	-	M8X1.0P	PT6	900	2	2.38
BT50-LHC20-83	83.5	51	-	5	37	45.5	20	49.25	-	M8X1.0P	PT5	520	2	4.10
BT50-LHC32-90	90	61	-	6	44	52	32	72	-	M8X1.0P	PT6	900	2	4.60

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet
B645-B647	B632

• 長度單位 Unit of Length (mm)



# BT/OHER 油路刀把

## BT/OHER OIL HOLE COLLET CHUCK

PAT.NO: M298033  
 PAT.NO: M311791  
 PAT.NO: 3128766  
 PAT.NO: 3200356

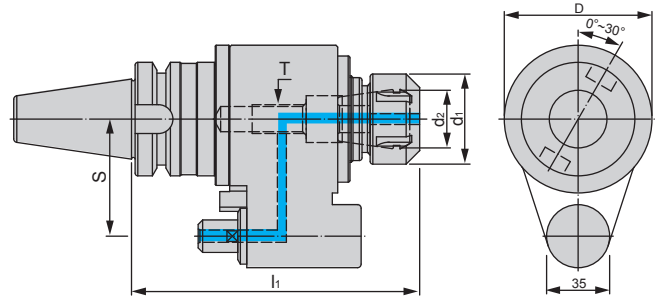
PAT.NO: 20-0433603  
 PAT.NO: ZL200620132661.0  
 PAT.NO: 696550  
 PAT.NO: TR 2007 02942 Y  
 PAT.NO: N.0000266731

JIS  
 MAS 403

水壓 Water pressure : 7bar



BT



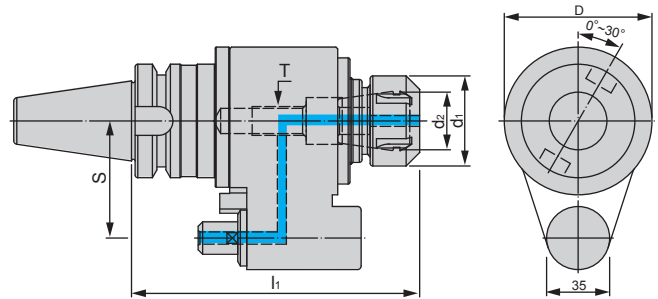
規格 Spec.	l <sub>1</sub>	D	d <sub>1</sub>	d <sub>2</sub> ER	S	T	重量 (KGS) Weight
BT40xOHER16-160	160	82	28	16	65	M10	3.80
BT40xOHER20-160	160	82	34	20	65	M12	4.10
BT40xOHER25-160	160	82	42	25	65	M16	4.30
BT40xOHER32-160	160	82	50	32	65	M16	4.50
BT50xOHER16-160	160	98	28	16	80	M10	7.00
BT50xOHER20-160	160	98	34	20	80	M12	7.10
BT50xOHER25-160	160	98	42	25	80	M16	7.20
BT50xOHER32-160	160	98	50	32	80	M16	7.30
BT50xOHER40-160	160	98	63	40	80	M20	7.50



# BT/OHER 油路刀把

## BT/OHER OIL HOLE COLLET CHUCK

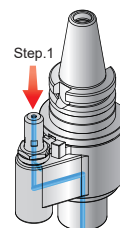
水壓 Water pressure : 20bar



規格 Spec.	l <sub>1</sub>	D	d <sub>1</sub>	d <sub>2</sub> ER	S	T	重量 (KGS) Weight
BT40xOHER32-160-20BAR	160	82	50	32	65	M16	4.50
BT50xOHER32-160-20BAR	160	98	50	32	80	M16	7.30

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner	定位塊 Fix block
B645-B647	B612-B624	B636	B650	B417

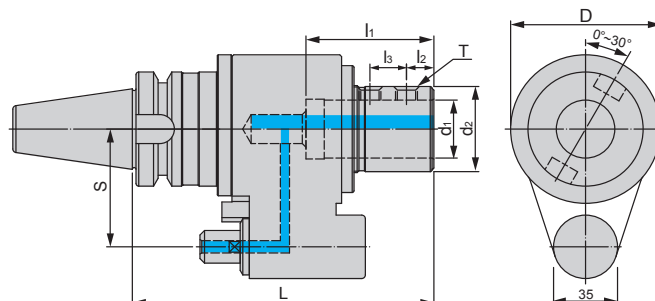


### ⚠ 使用注意事項 Notice

使用前應先進行給水動作，再進行運轉，以提升產品壽命。

Water supply before running for a better product life extended.

• 長度單位 Unit of Length (mm)



### 特點 Feature

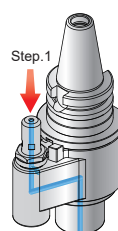
- 訂購前請先確認 "S" 尺寸 (中心距離)
- 使用前請先確認中心切削機的高壓裝置
- 承受 7kgf/cm<sup>2</sup> 水壓
- 最高轉速限制 :3000rpm

- Please confirm the "S" size before ordering.
- Please confirm the machining center with installation high pressure pump before use.
- Powerful 7 kgf/cm<sup>2</sup> water pressure.
- Max. spindle : 3000rpm.

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	D	d <sub>1</sub>	d <sub>2</sub>	S	T	重量 (KGS) Weight
BT40xOSL16-165	165	48	25	-	82	16	46.5	65	M12x1.75P	3.10
BT40xOSL20-165	165	50	25	-	82	20	46.5	65	M12x1.75P	3.50
BT40xOSL25-165	165	56	15	20	82	25	46.5	65	M12x1.75P	3.50
BT40xOSL32-165	165	60	15	20	82	32	47	65	M12x1.75P	5.20
BT50xOSL16-165	165	48	25	-	98	16	56	80	M14x2.0P	7.00
BT50xOSL20-165	165	50	25	-	98	20	56	80	M12x1.75P	7.50
BT50xOSL25-165	165	56	15	20	98	25	56	80	M16x2.0P	7.50
BT50xOSL32-165	165	60	15	20	98	32	56	80	M16x2.0P	7.80
BT50xOSL40-170	170	62	15	25	105	40	56	80	M14x2.0P	8.50

### 選配表 Option

拉頭 Pull Stud	套筒 Sleeve	定位塊 Fix block
B645-B647	B665	B417

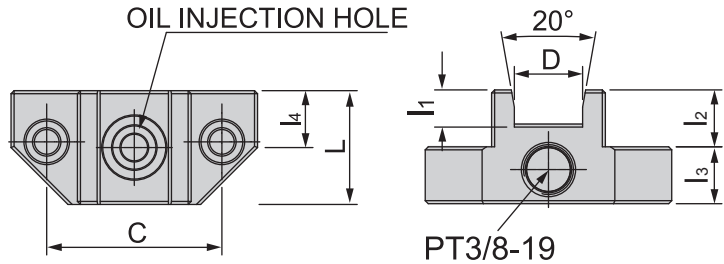
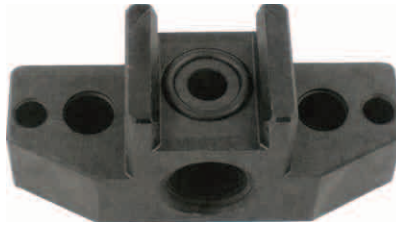


### ⚠ 使用注意事項 Notice

使用前應先進行給水動作，再進行運轉，以提升產品壽命。

Water supply before running for a better product life extended.

• 長度單位 Unit of Length (mm)



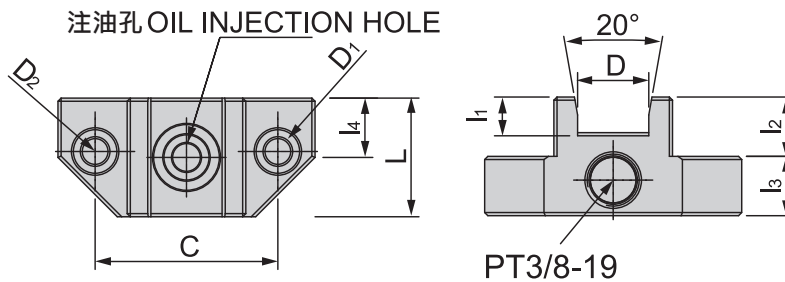
規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	C	D	重量 (KGS) Weight
ST-18	27	9	18.1	17.2	18	46.2	18	0.29

### 訂製產品圖面

- 接受特殊規格，請在下單之前告知詳細尺寸。
- 如果想要訂製，請注意主軸中心和定位塊中心的距離，並且請小心主軸法蘭上固定螺絲的尺寸和位置

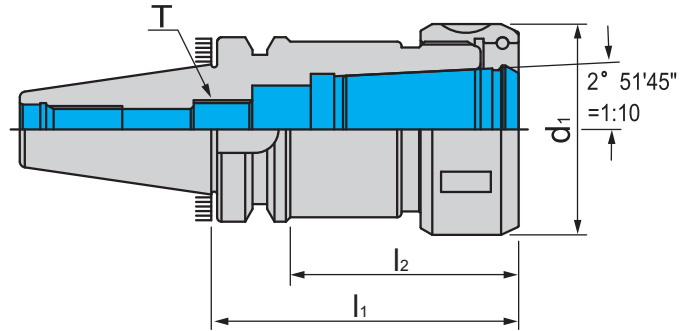
### Drawing of custom-made products

- Special type is accepted. Please inform detailed dimensions before making a purchase order.
- If you'd like custom-made, please beware of the distance between spindle center and Fixed Block center. Also, please indicate the dimension and position of the Fixed Screw on the flange of spindle.



UNIT:mm

L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	C	D	D <sub>1</sub>	D <sub>2</sub>



### 特點 Feature

- 筒夾樣式有 OZ 型以及 B 型
  - 整支通孔，利於出水及抗震
  - 如需擋刀螺絲可另外指定
  - 裝置時筒夾必須先置入螺帽，再裝入刀具，接著鎖固入本體
  - 刀具置入筒夾內孔，必須超出筒夾內孔有效夾持長度，避免不當鎖固，造成損壞
  - 務必使用正確扳手來裝置不可任意改變，避免不當鎖固，造成損壞
- Compatible with OZ and B type collets.
  - Through coolant design increase the tool life and vibration resistance.
  - A special stop screw is available for purchase to prevent the tool from being inserted too deep.
  - Place the collet first into the clamping nut, then install both on to the chuck.
  - Install the cutting tool to its proper length before tightening the clamping nut to avoid damaging the tool.
  - Do not use other spanners, it might cause damage the nut during tightening

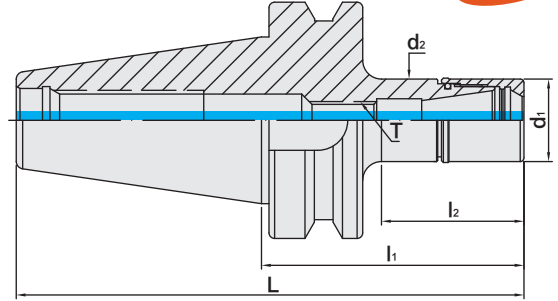
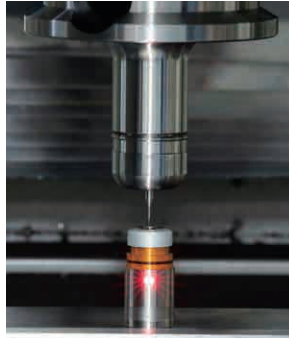
規格 Spec.	$l_1$	$l_2$	$d_1$	T	夾持範圍 Clamping Range	重量 (KGS) Weight
BT30 x EOC25-70	70	48	60	M12x1.75P	Ø3~Ø25	0.88
BT40 x EOC25-70	70	40.5	60	M16x2.0P	Ø3~Ø25	1.78
BT40 x EOC25-100	100	70.5	60	M16x2.0P	Ø3~Ø25	2.25
BT40 x EOC25-120	120	88	60	M16x2.0P	Ø3~Ø25	1.83
BT40 x EOC32-90	90	63	72	M20x2.0P	Ø4~Ø32	2.00
BT40 x EOC32-105	105	78	72	M20x2.0P	Ø4~Ø32	2.20
BT40 x EOC32-120	120	93	72	M20x2.0P	Ø4~Ø32	2.60
BT50 x EOC25-85	85	44.5	60	M16x2.0P	Ø3~Ø25	4.40
BT50 x EOC25-100	100	59.5	60	M16x2.0P	Ø3~Ø25	4.76
BT50 x EOC25-120	120	77	60	M16x2.0P	Ø3~Ø25	5.20
BT50 x EOC32-90	90	44	72	M24x2.0P	Ø4~Ø32	4.63
BT50 x EOC32-105	105	59	72	M24x2.0P	Ø4~Ø32	4.85
BT50 x EOC32-120	120	74	72	M24x2.0P	Ø4~Ø32	5.35

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B633	B640	B653

• 長度單位 Unit of Length (mm)

### 範例 Example



### 特點 Feature

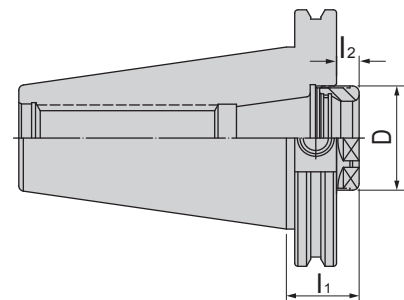
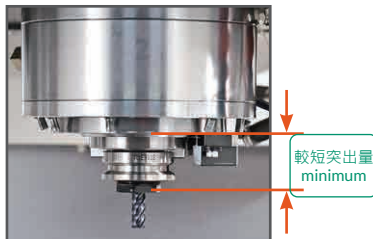
- 主軸符合日本小型工具機協會 JBS 標準
- 夾持刀具精度 5 $\mu$ m · 附動平衡 G2.5 RPM40000
- 應用產業 - 珠寶 / 醫療 / 鐘錶 / 電子 / 模具加工等

- The spindle meets JBS standard of Japanese small model machine tool.
- Clamping accuracy is within 5  $\mu$ m and balancing G2.5 RPM40000.
- Application to Jewelry / Medical / Electron/Watches / mold machining industries etc.

規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>
BT15-PTER11-34 G2.5 RPM40000	61	34	16	16
BT15-PTER16-37 G2.5 RPM40000	64	37	22	22
BT20-PTER11-40 G2.5 RPM40000	73	40	16	16
BT20-PTER16-45 G2.5 RPM40000	78	45	22	22



### 範例 Example



### 特點 Feature

- 用於加工件太高 · 無空間時使用
- Z 軸長度不足時 · 可以使用
- 突出量少 · 剛性較佳

- Short length ER collet chuck.
- Shorten length leads less vibration and runout.

規格 Spec	l <sub>1</sub>	l <sub>2</sub>	D	T	重量 (KGS) Weight
BT40 x ER16S	31.1	4.1	19	M24x1.0P	1.01
BT40 x ER20S	31.1	4.1	22	M28x1.5P	0.98
BT40 x ER25S	32.6	5.6	25	M32x1.5P	0.91
BT40 x ER32S	32.4	5.4	36	M40x1.5P	0.83
BT50 x ER16S	42.1	4.1	19	M24x1.0P	3.95
BT50 x ER20S	42.1	4.1	22	M28x1.5P	3.91
BT50 x ER25S	43.6	5.6	25	M32x1.5P	3.84
BT50 x ER32S	43.6	5.4	36	M40x1.5P	3.80

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B637	B651

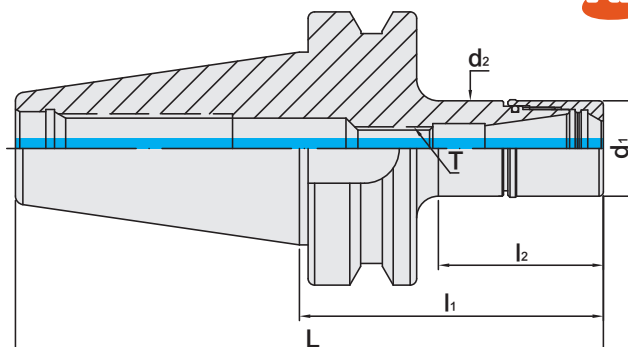
• 長度單位 Unit of Length (mm)

精度 Accuracy : <5 $\mu$ m



**NEW**

BT



### 特點 Feature

- 螺帽外徑較小，減少加工物件干涉。
- PTER 刀桿前端螺紋上下直部設計，使公差更為精準，加上搭配的 PN 筒夾，置入刀桿後包覆性佳，提升整體偏擺精度及加工穩定性。
- 搭配使用 PN 筒夾，偏擺精度：有 3 $\mu$ m 和 5 $\mu$ m 兩種供選擇。
- 刀桿前端 O 型環設計，達到良好的防塵及防水效果。
- Mini type of clamping nut, decreasing interference.
- PN collet well covered in PTER collet chuck and the two straight parts above and below the thread of tool holder improve the runout accuracy and machining stability.
- Used with PN collets. Runout accuracy: 3 $\mu$ m and 5 $\mu$ m two options to choose from.
- The front part of the tool holder has an O-ring to achieve anti-dust and waterproof.

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamping Range	重量 (KGS) Weight
BT30 x PTER11 - 70	118.4	70	43	16	16	M6 x 1.0P	3 ~ 7	0.43
BT30 x PTER11 - 100	148.4	100	73	16	16	M6 x 1.0P	3 ~ 7	0.47
BT30 x PTER11 - 120	168.4	120	93	16	16	M6 x 1.0P	3 ~ 7	0.49
BT30 x PTER16 - 70	118.4	70	43	22	22	M10 x 1.5P	3 ~ 10	0.46
BT30 x PTER16 - 100	148.4	100	73	22	22	M10 x 1.5P	3 ~ 10	0.53
BT30 x PTER16 - 120	168.4	120	93	22	22	M10 x 1.5P	3 ~ 10	0.58
BT40 x PTER11 - 70	135.4	70	38	16	16	M6 x 1.0P	3 ~ 7	0.98
BT40 x PTER11 - 100	165.4	100	63	16	16	M6 x 1.0P	3 ~ 7	1.03
BT40 x PTER11 - 125	190.4	125	83	16	16	M6 x 1.0P	3 ~ 7	1.08
BT40 x PTER11 - 150	215.4	150	108	16	16	M6 x 1.0P	3 ~ 7	1.11
BT40 x PTER16 - 70	135.4	70	38	22	22	M10 x 1.5P	3 ~ 10	1.02
BT40 x PTER16 - 100	165.4	100	63	22	22	M10 x 1.5P	3 ~ 10	1.1
BT40 x PTER16 - 125	190.4	125	88	22	22	M10 x 1.5P	3 ~ 10	1.16
BT40 x PTER16 - 150	215.4	150	113	22	22	M10 x 1.5P	3 ~ 10	1.22
HSK63A x PTER11 - 70	102	70	39	16	16	M6 x 1.0P	3 ~ 7	0.68
HSK63A x PTER11 - 100	132	100	64	16	16	M6 x 1.0P	3 ~ 7	0.73
HSK63A x PTER11 - 125	157	125	84	16	16	M6 x 1.0P	3 ~ 7	0.77
HSK63A x PTER11 - 150	182	150	109	16	16	M6 x 1.0P	3 ~ 7	0.81
HSK63A x PTER16 - 70	102	70	39	22	22	-	3 ~ 10	0.71
HSK63A x PTER16 - 100	132	100	69	22	22	M10 x 1.5P	3 ~ 10	0.79
HSK63A x PTER16 - 125	157	125	89	22	22	M10 x 1.5P	3 ~ 10	0.86
HSK63A x PTER16 - 150	182	150	114	22	22	M10 x 1.5P	3 ~ 10	0.92

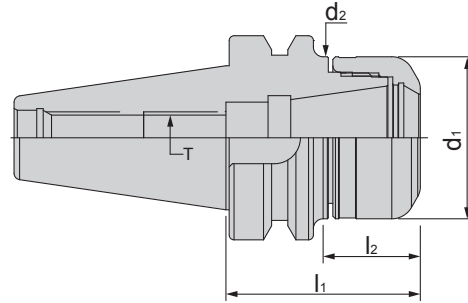
### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B637	B651

• 長度單位 Unit of Length (mm)



精度 Accuracy : <3 $\mu$ m



BT

### 特點 Feature

- 標準動平衡 :G2.5 25000rpm

- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	T	夾持範圍 Clamp Range	重量 (KGS) Weight
BT30xPNER20-60	60	37	32	32	M12x1.75P	3.0~13	0.80
BT30xPNER20-100	100	77	32	32	M12x1.75P	3.0~13	0.80
BT30xPNER25-60	60	37	40	40	M16x2.0P	3.0~16	0.90
BT30xPNER25-100	100	77	40	40	M16x2.0P	3.0~16	0.90
BT30xPNER32-60	60	33	50	50	-	3.0~20	1.00
BT30xPNER32-100	100	73	50	50	M16x2.0P	3.0~20	1.00
BT40xPNER16-70	70	40	30	30	M10x1.5P	3.0~10	1.12
BT40xPNER16-100	100	70	30	30	M10x1.5P	3.0~10	1.12
BT40xPNER16-130	130	100	30	30	M10x1.5P	3.0~10	1.14
BT40xPNER16-160	160	130	30	30	M10x1.5P	3.0~10	1.14
BT40xPNER20-70	70	40	32	32	M12x1.75P	3.0~13	1.14
BT40xPNER20-100	100	70	32	32	M12x1.75P	3.0~13	1.14
BT40xPNER20-130	130	100	32	32	M12x1.75P	3.0~13	1.16
BT40xPNER20-160	160	130	32	32	M12x1.75P	3.0~13	1.16
BT40xPNER25-70	70	40	40	40	M16x2.0P	3.0~16	1.19
BT40xPNER25-100	100	70	40	40	M16x2.0P	3.0~16	1.54
BT40xPNER25-130	130	100	40	40	M16x2.0P	3.0~16	2.00
BT40xPNER25-160	160	130	40	40	M16x2.0P	3.0~16	2.00
BT40xPNER32-70	70	40	50	50	M16x2.0P	3.0~20	1.20
BT40xPNER32-100	100	70	50	50	M16x2.0P	3.0~20	1.80
BT40xPNER32-130	130	100	50	50	M16x2.0P	3.0~20	1.40
BT40xPNER32-160	160	130	50	50	M16x2.0P	3.0~20	1.40
BT50xPNER16-100	100	59	30	30	M10x1.5P	3.0~10	4.28
BT50xPNER16-130	130	82	30	30	M10x1.5P	3.0~10	4.40
BT50xPNER16-160	160	112	30	30	M10x1.5P	3.0~10	4.52
BT50xPNER20-100	100	59	32	32	M12x1.75P	3.0~13	4.42
BT50xPNER20-130	130	82	32	32	M12x1.75P	3.0~13	4.60
BT50xPNER20-160	160	112	32	32	M12x1.75P	3.0~13	4.14
BT50xPNER25-100	100	59	40	40	M16x2.0P	3.0~16	4.36
BT50xPNER25-130	130	82	40	40	M16x2.0P	3.0~16	4.64
BT50xPNER25-160	160	112	40	40	M16x2.0P	3.0~16	4.84
BT50xPNER32-100	100	61	50	50	M16x2.0P	3.0~20	5.00
BT50xPNER32-130	130	82	50	50	M16x2.0P	3.0~20	5.02
BT50xPNER32-160	160	112	50	50	M16x2.0P	3.0~20	5.40
BT50xPNER40-100	100	59	63	63	M20x2.0P	6.0~26	4.88
BT50xPNER40-130	130	82	63	63	M20x2.0P	6.0~26	5.56
BT50xPNER40-160	160	112	63	63	M20x2.0P	6.0~26	6.22

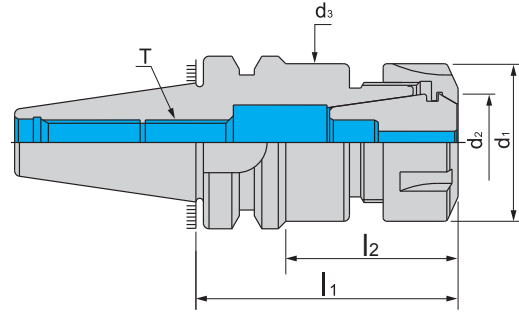
※DAT-PNER 可接單生產 DAT-PNER made to order.

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B637-B638	B651



• 長度單位 Unit of Length (mm)

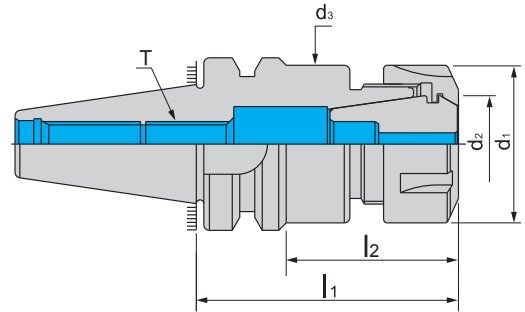


規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	夾持範圍 Clamping Range	重量 (KGS) Weight
BT30 x ER16A-70	70	40	28	16	28	M10x1.5P	Ø1-Ø10	0.57
BT30 x ER16A-100	100	70	28	16	28	M10x1.5P	Ø1-Ø10	0.70
BT30 x ER16A-120	120	93	28	16	28	M10x1.5P	Ø1-Ø10	0.95
BT30 x ER20A-70	70	45	34	20	34	M12x1.75P	Ø1-Ø13	0.61
BT30 x ER20A-100	100	63	34	20	34	M12x1.75P	Ø1-Ø13	0.80
BT30 x ER20A-135	135	110	34	20	34	M12x1.75P	Ø1-Ø13	1.15
BT30 x ER25-70	70	46	42	25	42	M16x2.0P	Ø1-Ø16	0.68
BT30 x ER25-100	100	70	42	25	42	M16x2.0P	Ø1-Ø16	-
BT30 x ER25-135	135	111	42	25	42	M16x2.0P	Ø1-Ø16	1.47
BT30 x ER32-70	70	48	50	32	45	M16x2.0P	Ø2-Ø20	0.69
BT30 x ER32-100	100	78	50	32	45	M16x2.0P	Ø2-Ø20	1.04
BT30 x ER40-80	80	58	63	40	53	M16x2.0P	Ø3-Ø26	0.94
BT40 x ER16A-70	70	40	28	16	28	M10x1.5P	Ø1-Ø10	1.16
BT40 x ER16A-100	100	63	28	16	28	M10x1.5P	Ø1-Ø10	1.29
BT40 x ER16A-125	125	88	28	16	28	M10x1.5P	Ø1-Ø10	1.36
BT40 x ER16A-150	150	113	28	16	28	M10x1.5P	Ø1-Ø10	1.57
BT40 x ER16A-180	180	143	28	16	28	M10x1.5P	Ø1-Ø10	1.54
BT40 x ER20A-70	70	40	34	20	34	M12x1.75P	Ø1-Ø13	1.19
BT40 x ER20A-100	100	63	34	20	34	M12x1.75P	Ø1-Ø13	1.40
BT40 x ER20A-135	135	98	34	20	34	M12x1.75P	Ø1-Ø13	1.69
BT40 x ER20A-150	150	113	34	20	34	M12x1.75P	Ø1-Ø13	1.78
BT40 x ER25-70	70	40	42	25	42	M16x2.0P	Ø1-Ø16	1.24
BT40 x ER25-100	90	70	42	25	42	M16x2.0P	Ø1-Ø16	1.52
BT40 x ER25-125	125	95	42	25	42	M16x2.0P	Ø1-Ø16	1.86
BT40 x ER25-150	150	115	42	25	42	M16x2.0P	Ø1-Ø16	2.11
BT40 x ER32-70	70	40	50	32	50	M16x2.0P	Ø2-Ø20	1.28
BT40 x ER32-100	100	70	50	32	50	M16x2.0P	Ø2-Ø20	1.70
BT40 x ER32-150	150	118	50	32	50	M16x2.0P	Ø2-Ø20	2.49
BT40 x ER40-80	80	53	63	40	60	-	Ø3-Ø26	1.49
BT40 x ER40-100	100	73	63	40	60	M20x2.0P	Ø3-Ø26	1.90
BT40 x ER40-120	120	93	63	40	60	M20x2.0P	Ø3-Ø26	2.45
BT40 x ER40-150	150	123	63	40	60	M20x2.0P	Ø3-Ø26	3.05
BT40 x ER50-85	85	58	78	50	60	M24x2.0P	Ø5-Ø34	1.70
BT40 x ER50-100	100	73	78	50	60	M24x2.0P	Ø5-Ø34	2.01

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B612	B634	B650

• 長度單位 Unit of Length (mm)



規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	夾持範圍 Clamping Range	重量 (KGS) Weight
BT50 x ER16A-70	70	29	28	16	28	M10x1.5P	Ø1~Ø10	4.10
BT50 x ER16A-90	90	47	28	16	28	M10x1.5P	Ø1~Ø10	4.16
BT50 x ER16A-105	105	57	28	16	28	M10x1.5P	Ø1~Ø10	4.19
BT50 x ER16A-135	135	87	28	16	28	M10x1.5P	Ø1~Ø10	4.19
BT50 x ER16A-150	150	102	28	16	28	M10x1.5P	Ø1~Ø10	4.46
BT50 x ER16A-165	165	117	28	16	28	M10x1.5P	Ø1~Ø10	4.36
BT50 x ER20A-70	70	29	34	20	34	M12x1.75P	Ø1~Ø13	4.09
BT50 x ER20A-90	90	47	34	20	34	M12x1.75P	Ø1~Ø13	4.18
BT50 x ER20A-105	105	57	34	20	34	M12x1.75P	Ø1~Ø13	4.28
BT50 x ER20A-135	135	87	34	20	34	M12x1.75P	Ø1~Ø13	4.37
BT50 x ER20A-150	150	102	34	20	34	M12x1.75P	Ø1~Ø13	4.47
BT50 x ER20A-165	165	117	34	20	34	M12x1.75P	Ø1~Ø13	4.55
BT50 x ER20A-200	200	152	34	20	34	M12x1.75P	Ø1~Ø13	4.74
BT50 x ER25-70	70	29	42	25	42	M16x2.0P	Ø1~Ø16	4.16
BT50 x ER25-105	105	57	42	25	42	M16x2.0P	Ø1~Ø16	4.45
BT50 x ER25-135	135	87	42	25	42	M16x2.0P	Ø1~Ø16	4.57
BT50 x ER25-165	165	117	42	25	42	M16x2.0P	Ø1~Ø16	4.89
BT50 x ER25-200	200	-	42	25	42	M16x2.0P	Ø1~Ø16	5.22
BT50 x ER32-80	80	39	50	32	50	M16x2.0P	Ø2~Ø20	4.21
BT50 x ER32-100	100	57	50	32	50	M16x2.0P	Ø2~Ø20	4.47
BT50 x ER32-120	120	72	50	32	50	M16x2.0P	Ø2~Ø20	4.90
BT50 x ER32-150	150	102	50	32	50	M16x2.0P	Ø2~Ø20	5.01
BT50 x ER32-200	200	152	50	32	50	M16x2.0P	Ø2~Ø20	5.71
BT50 x ER32-250	250	-	50	32	50	M16x2.0P	Ø2~Ø20	5.80
BT50 x ER40-80	80	39	63	40	63	M20x2.0P	Ø3~Ø26	4.26
BT50 x ER40-100	100	57	63	40	63	M20x2.0P	Ø3~Ø26	4.71
BT50 x ER40-120	120	72	63	40	63	M20x2.0P	Ø3~Ø26	5.05
BT50 x ER40-135	135	87	63	40	63	M20x2.0P	Ø3~Ø26	5.36
BT50 x ER40-150	150	-	63	40	63	M20x2.0P	Ø3~Ø26	5.68
BT50 x ER40-200	200	-	63	40	63	M20x2.0P	Ø3~Ø26	7.00
BT50 x ER50-90	90	49	78	50	78	M24x2.0P	Ø5~Ø34	4.45
BT50 x ER50-120	120	79	78	50	78	M24x2.0P	Ø5~Ø34	5.40
BT50 x ER50-165	165	124	78	50	78	M24x2.0P	Ø5~Ø34	7.10

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B612	B634	B650

• 長度單位 Unit of Length (mm)



# M 型 BT/ER 立銑刀夾頭

## BT/ER COLLET CHUCK(M TYPE)

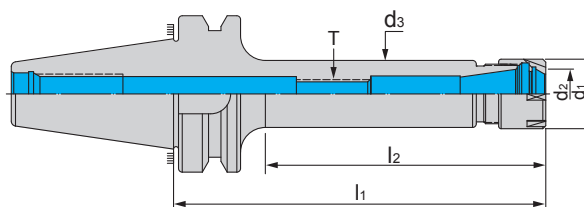
DIN-ISO-15488  
 PATNO: M298033  
 PATNO: M311791  
 PATNO: 3128766  
 PATNO: 20-0433603

PATNO: ZL200620132261.0  
 PATNO: 696550  
 PATNO: TR 2007 02945 Y  
 PATNO: N.0000266731

JIS  
 MAS 403



BT



### 特點 Feature

- 前端採用小徑螺帽·避免干涉
- 本體與螺帽皆已預設定動平衡 G6.3 10000rpm

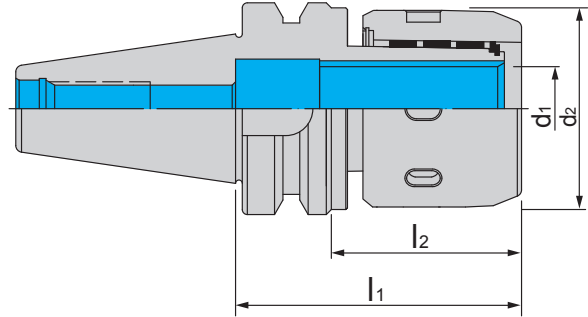
- M type with small diameter can avoid to interfere during machining.
- Dynamic balancing G6.3 at 10000rpm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	夾持範圍 Clamping Range	重量 (KGS) Weight
BT30 x ER11M-70	70	40	16	11	15	M6 x 1.0P	Ø1~Ø7	0.50
BT30 x ER11M-100	100	70	16	11	15	M6 x 1.0P	Ø1~Ø7	0.51
BT30 x ER11M-120	120	88	16	11	15	M6 x 1.0P	Ø1~Ø7	0.56
BT30 x ER16M-70	70	43	22	16	21	M10 x 1.5P	Ø1~Ø10	0.50
BT30 x ER16M-100	100	68	22	16	21	M10 x 1.5P	Ø1~Ø10	0.57
BT30 x ER16M-120	120	88	22	16	21	M10 x 1.5P	Ø1~Ø10	0.61
BT30 x ER20M-70	70	45	28	20	27	M12 x 1.75P	Ø1~Ø13	0.53
BT30 x ER20M-100	100	71	28	20	27	M12 x 1.75P	Ø1~Ø13	0.65
BT30 x ER20M-120	120	91	28	20	27	M12 x 1.75P	Ø1~Ø13	0.74
BT30 x ER20M-150	150	121	28	20	27	M12 x 1.75P	Ø1~Ø13	0.96
BT40 x ER11M-70	70	33	16	11	15	M6 x 1.0P	Ø1~Ø7	1.07
BT40 x ER11M-100	100	63	16	11	15	M6 x 1.0P	Ø1~Ø7	1.09
BT40 x ER11M-125	125	88	16	11	15	M6 x 1.0P	Ø1~Ø7	1.40
BT40 x ER11M-150	150	113	16	11	15	M6 x 1.0P	Ø1~Ø7	1.34
BT40 x ER16M-70	70	38	22	16	21	M10 x 1.5P	Ø1~Ø10	1.10
BT40 x ER16M-100	100	63	22	16	21	M10 x 1.5P	Ø1~Ø10	1.17
BT40 x ER16M-125	125	88	22	16	21	M10 x 1.5P	Ø1~Ø10	1.50
BT40 x ER16M-150	150	113	22	16	21	M10 x 1.5P	Ø1~Ø10	1.43
BT40 x ER20M-70	70	38	28	20	27	M12 x 1.75P	Ø1~Ø13	1.16
BT40 x ER20M-100	100	63	28	20	27	M12 x 1.75P	Ø1~Ø13	1.24
BT40 x ER20M-125	125	88	28	20	27	M12 x 1.75P	Ø1~Ø13	1.38
BT40 x ER20M-150	150	113	28	20	27	M12 x 1.75P	Ø1~Ø13	1.80
BT50 x ER11M-70	70	22	16	11	15	M6 x 1.0P	Ø1~Ø7	3.80
BT50 x ER11M-90	90	42	16	11	15	M6 x 1.0P	Ø1~Ø7	3.90
BT50 x ER11M-105	105	57	16	11	15	M6 x 1.0P	Ø1~Ø7	4.00
BT50 x ER11M-135	135	87	16	11	15	M6 x 1.0P	Ø1~Ø7	4.10
BT50 x ER11M-165	165	92	16	11	15	M6 x 1.0P	Ø1~Ø7	4.15
BT50 x ER16M-70	70	29	22	16	21	M10 x 1.5P	Ø1~Ø10	3.90
BT50 x ER16M-90	90	42	22	16	21	M10 x 1.5P	Ø1~Ø10	4.00
BT50 x ER16M-105	105	57	22	16	21	M10 x 1.5P	Ø1~Ø10	4.10
BT50 x ER16M-135	135	87	22	16	21	M10 x 1.5P	Ø1~Ø10	4.20
BT50 x ER16M-165	165	117	22	16	21	M10 x 1.5P	Ø1~Ø10	4.30
BT50 x ER20M-90	90	42	28	20	27	M12x 1.75P	Ø1~Ø13	4.10
BT50 x ER20M-105	105	57	28	20	27	M12x 1.75P	Ø1~Ø13	4.20
BT50 x ER20M-135	135	87	28	20	27	M12x 1.75P	Ø1~Ø13	4.40
BT50 x ER20M-165	165	117	28	20	27	M12x 1.75P	Ø1~Ø13	4.60

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B612	B634	B650

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 開槽：此款刀桿內孔分割 6 槽以防止滑動並加大夾持力
- 另有套裝可選購

- Slotting-the inner hole of the tool holder has 6 slots to prevent slipping and to increase the clamping power.
- Available in a set.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	夾持範圍 Clamping Range	重量 (KGS) Weight
BT30 x MLC20-75	75	70	20	55	Ø6~Ø20	1.18
BT30 x MLC20-90	90	70	20	55	Ø6~Ø20	1.37
BT40 x MLC20-80	80	70	20	55	Ø6~Ø20	1.78
BT40 x MLC20-100	100	70	20	55	Ø6~Ø20	2.00
BT40 x MLC20-135	135	70	20	55	Ø6~Ø20	2.41
BT40 x MLC32-90	90	75	32	73	Ø6~Ø32	2.18
BT40 x MLC32-105	105	75	32	73	Ø6~Ø32	2.60
BT40 x MLC32-135	135	75	32	73	Ø6~Ø32	3.21
BT50 x MLC20-105	105	70	20	55	Ø6~Ø20	4.50
BT50 x MLC20-150	150	70	20	55	Ø6~Ø20	4.90
BT50 x MLC32-110	110	75	32	73	Ø6~Ø32	5.17
BT50 x MLC32-135	135	75	32	73	Ø6~Ø32	5.64
BT50 x MLC32-165	165	75	32	73	Ø6~Ø32	6.26
BT50 x MLC32-200	200	75	32	73	Ø6~Ø32	6.98
BT50 x MLC42-110	110	90	42	95	Ø6~Ø42	5.74
BT50 x MLC42-130	130	90	42	95	Ø6~Ø42	6.30
BT50 x MLC42-165	165	90	42	95	Ø6~Ø42	7.31

- 附扳手 Attaches the spanner.

※ 注意：銑刀裝置入筒夾需超過筒夾有效夾持長度，以避免因非完全夾持，導致筒夾損壞、變形

Note: To avoid the improper clamping ( no clamp at all ) & damage and deformation for collect, it should exceed the effective length of collet when installing the cutter on to collet.

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	扳手 Spanner
B645-B647	B631	B653

• 長度單位 Unit of Length (mm)



# MLD

## 直式筒夾銑床夾頭



重切削加工  
HEAVY DUTY  
MACHINING

高穩定性  
HIGH  
STABILITY

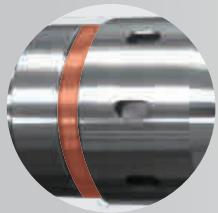
5 $\mu$ m

### 高剛性及最佳防塵效果 High Rigidity And Dust Proof

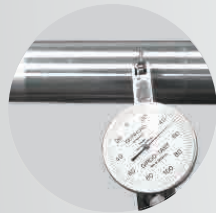
- 夾持刀具後 (柄徑公差尺寸需小於h6) · 螺帽及法蘭端面緊貼 · 可預防軸承網變形 · 提升剛性及達到防塵效果。
- 具高精度及易於操作的特性 · 高轉速或重切削加工情況下不易產生振動。
- After clamping tools (the requirement of shank tolerance is less than h6), the nut and the flange contact firmly to prevent the needle bearing cage from deforming, rigidity is increased and achieves the function of dust proof.
- Featured with high precision and easy-to-fasten, vibrations do not occur in high speed machining or heavy duty machining



### 偏擺精度 5 $\mu$ m內 Runout Accuracy Within 5 $\mu$ m



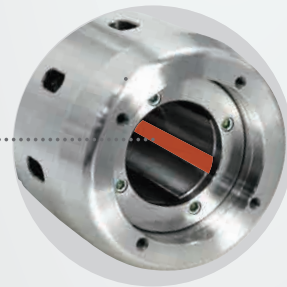
鎖固螺帽後 · 螺帽與刀桿端面貼合 · 增加切削剛性 · 達到良好的防塵效果。  
After fastening, the nuts and tool holders contact tight to enhance the cutting rigidity and achieve dustproof purposes.



MLD 本體：四倍長的偏擺精度於5 $\mu$ m內。  
Runout accuracy within 5 $\mu$ m at 4D length.

### 軸承網 Needle Bearing Cage

內孔特殊溝槽設計提升夾持力及降低震刀 · 適用於重切削加工。  
Special slotted design of internal hole increases the clamping force and decreases vibration. Suitable for heavy-duty machining.



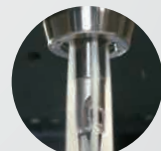
### MLD系列 MLD System



筒夾  
Collet



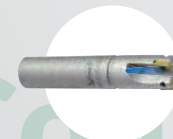
一般刀具  
General Tool



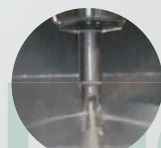
止水端蓋  
Sealed Cap



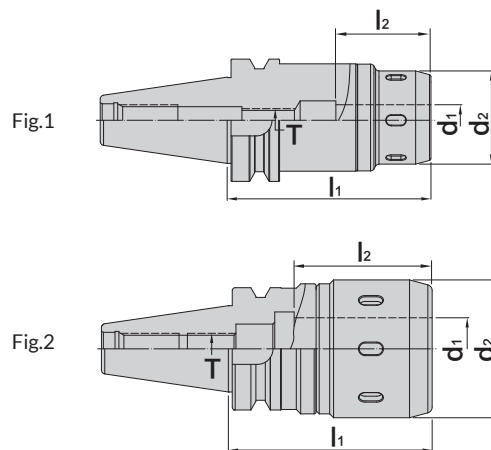
筒夾  
Collet



出水型刀具  
Coolant  
Through Tool



Multilock Collet Chuck



### 特點 Feature

- 開槽 - 此款刀桿內孔分割 6 槽以防止滑動並加大夾持力
- 另有套裝可選購
- MLD20、MLD-3/4、MLK20 扳手共用
- MLD25、EOC25、MLK25 扳手共用
- MLD32、MLD-1-1/4、MLK32 扳手共用

- Slotting-the inner hole of the tool holder has 6 slots to prevent slipping and to increase the clamping power.
- Available in a set.
- MLD20 and MLD-3/4、MLK20 spanner can be used in common.
- MLD25 and EOC25、MLK25 spanner can be used in common.
- MLD32 and MLD-1-1/4、MLK32 spanner can be used in common.

規格 Spec.	$l_1$	$d_1$	$d_2$	T	Fig.	重量 (KGS) Weight
BT30 x MLD12-80	80	12	42	M12x1.75P	2	1.00
BT30 x MLD16-75	75	16	48	M12x1.75P	1	1.20
BT30 x MLD20-80	80	20	56.5	M12x1.75P	2	1.90
BT30 x MLD20-90	90	20	56.5	M16x2.0P	2	2.10
BT30 x MLD25-90	90	25	60	M16x2.0P	2	1.34
BT40 x MLD12-75	75	12	42	M12x1.75P	1	2.10
BT40 x MLD12-105	105	12	42	M12x1.75P	1	2.10
BT40 x MLD12-135	135	12	42	M12x1.75P	1	2.20
BT40 x MLD16-75	75	16	48	M12x1.75P	1	2.20
BT40 x MLD16-105	105	16	48	M12x1.75P	1	2.30
BT40 x MLD16-135	135	16	48	M12x1.75P	1	2.30
BT40 x MLD20-80	80	20	56.5	M16x2.0P	1	2.30
BT40 x MLD20-100	100	20	56.5	M16x2.0P	1	2.50
BT40 x MLD20-135	135	20	56.5	M16x2.0P	1	2.40
BT40 x MLD25-85	85	25	60	M16x2.0P	1	2.40
BT40 x MLD25-100	100	25	60	M16x2.0P	1	2.40
BT40 x MLD32-95	95	32	71	M16x2.0P	2	2.70
BT40 x MLD32-105	105	32	71	M16x2.0P	2	2.70
BT40 x MLD32-135	135	32	71	M16x2.0P	2	3.00

- 附扳手 Attaches the spanner.

※ 注意：銑刀裝置入筒夾需超過筒夾有效夾持長度，以避免因非完全夾持，導致筒夾損壞、變形

Note: To avoid the improper clamping (no clamp at all) & damage and deformation for collect, it should exceed the effective length of collet when installing the cutter onto collet.

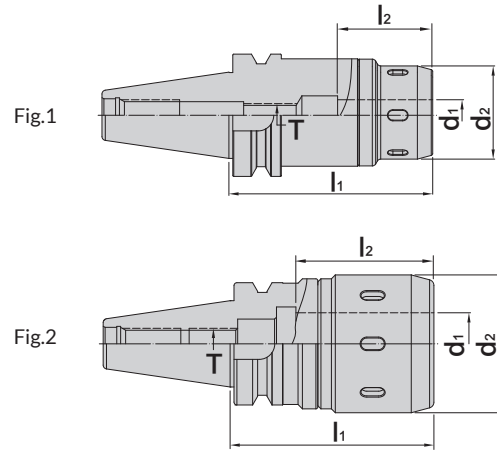
### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	筒夾 Collet	扳手 Spanner	止水端蓋 Sealed Cap
B645-B647	B631	B632	B653	B640



• 長度單位 Unit of Length (mm)





### 特點 Feature

- 開槽 - 此款刀桿內孔分割 6 槽以防止滑動並加大夾持力
- 另有套裝可選購
- MLD20、MLD-3/4、MLK20 扳手共用
- MLD25、EOC25、MLK25 扳手共用
- MLD32、MLD-1-1/4、MLK32 扳手共用

- Slotting-the inner hole of the tool holder has 6 slots to prevent slipping and to increase the clamping power.
- Available in a set.
- MLD20 and MLD-3/4、MLK20 spanner can be used in common.
- MLD25 and EOC25、MLK25 spanner can be used in common.
- MLD32 and MLD-1-1/4、MLK32 spanner can be used in common.

規格 Spec.	$l_1$	$d_1$	$d_2$	T	Fig.	重量 (KGS) Weight
BT50 x MLD12-105	105	12	42	M12x1.75P	1	4.60
BT50 x MLD12-135	135	12	42	M12x1.75P	1	5.10
BT50 x MLD12-165	165	12	42	M12x1.75P	1	5.80
BT50 x MLD16-105	105	16	48	M12x1.75P	1	4.90
BT50 x MLD16-135	135	16	48	M12x1.75P	1	5.60
BT50 x MLD16-165	165	16	48	M12x1.75P	1	6.50
BT50 x MLD20-105	105	20	56.5	M16x2.0P	1	4.50
BT50 x MLD20-150	150	20	56.5	M16x2.0P	1	4.90
BT50 x MLD25-100	100	25	60	M16x2.0P	1	4.80
BT50 x MLD25-130	130	25	60	M16x2.0P	1	5.70
BT50 x MLD32-105	105	32	71	M24x3.0P	1	5.00
BT50 x MLD32-135	135	32	71	M24x3.0P	1	5.20
BT50 x MLD32-165	165	32	71	M24x3.0P	1	6.70
BT50 x MLD42-115	115	42	90	M24x3.0P	1	5.50
BT50 x MLD42-130	130	42	90	M24x3.0P	1	6.50
BT50 x MLD42-165	165	42	90	M24x3.0P	1	7.70

- 附扳手 Attaches the spanner.

※ 注意：銑刀裝置入筒夾需超過筒夾有效夾持長度，以避免因非完全夾持，導致筒夾損壞、變形

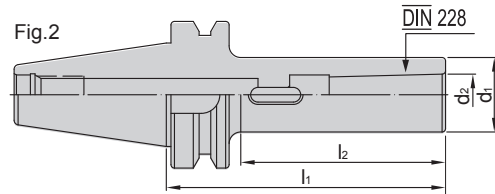
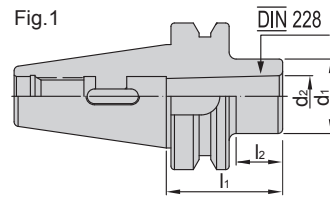
Note: To avoid the improper clamping ( no clamp at all ) & damage and deformation for collect, it should exceed the effective length of collet when installing the cutter onto collet.

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	扳手 Spanner	止水螺帽 Sealed Cap
B645-B647	B631	B653	B640



• 長度單位 Unit of Length (mm)

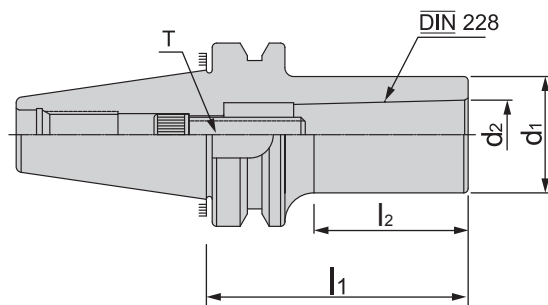


規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	Fig.	重量 (KGS) Weight
BT30 x MTA1-45	45	20	25	12.065	1	0.48
BT30 x MTA1-105	105	78	25	12.065	2	0.80
BT30 x MTA2-60	60	35	32	17.78	1	0.55
BT30 x MTA2-120	120	95	32	17.78	2	0.90
BT30 x MTA3-80	80	56	40	23.825	1	0.73
BT40 x MTA1-45	45	15	25	12.065	1	1.07
BT40 x MTA1-120	120	83	25	12.065	2	1.41
BT40 x MTA2-50	50	20	32	17.78	1	1.10
BT40 x MTA2-120	120	88	32	17.78	2	1.80
BT40 x MTA3-70	70	38	40	23.825	1	1.20
BT40 x MTA3-135	135	102	40	23.825	2	1.85
BT40 x MTA4-95	95	63	48	31.267	1	1.42
BT40 x MTA4-165	165	133	48	31.267	2	2.41
BT50 x MTA1-45	45	2	25	12.065	1	3.95
BT50 x MTA1-120	120	74	25	12.065	2	4.06
BT50 x MTA1-180	180	132	25	12.065	2	4.32
BT50 x MTA2-60	60	17	32	17.78	1	3.98
BT50 x MTA2-135	135	89	32	17.78	2	4.24
BT50 x MTA2-180	180	132	32	17.78	2	5.00
BT50 x MTA3-65	65	22	40	23.825	1	4.02
BT50 x MTA3-150	150	107	40	23.825	2	4.61
BT50 x MTA3-180	180	132	40	23.825	2	4.91
BT50 x MTA4-95	95	52	48	31.267	1	4.20
BT50 x MTA4-180	180	132	48	31.267	2	5.50
BT50 x MTA5-105	105	62	63	44.399	1	4.30

### 選配表 Option

拉頭 Pull Stud	退鑽器 Hand Drift
B645-B647	B683

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 用於夾持莫式錐度、尾端附內螺紋的切削刀具或是延長桿

- For screw-on the cutting tools or extension tools with morse taper.

規格 Spec.	莫式錐度 MT	$l_1$	$l_2$	$d_1$	$d_2$	T	適用鑽頭	重量 (KGS) Weight
BT30 x MTB1-45	1	45	20	25	12.065	M6x1.0P	Ø10~Ø14	0.50
BT30 x MTB2-60	2	60	36	32	17.78	M10x1.5P	Ø16~Ø22	0.58
BT40 x MTB1-45	1	45	13	25	12.065	M6x1.0P	Ø10~Ø14	1.10
BT40 x MTB2-45	2	45	13	32	17.78	M10x1.5P	Ø15~Ø22	1.10
BT40 x MTB2-185	2	185	148	32	17.78	M10x1.5P	Ø15~Ø22	1.90
BT40 x MTB3-75	3	75	45	40	23.825	M12x1.75P	Ø24~Ø32	1.30
BT40 x MTB3-90	3	90	53	40	23.825	M12x1.75P	Ø24~Ø32	1.40
BT40 x MTB3-120	3	120	83	40	23.825	M12x1.75P	Ø24~Ø32	1.80
BT40 x MTB3-180	3	180	143	40	23.825	M12x1.75P	Ø24~Ø32	2.40
BT40 x MTB4-100	4	100	67	48	31.267	M16x2.0P	Ø32~Ø50	1.59
BT40 x MTB4-120	4	120	87	48	31.267	M16x2.0P	Ø32~Ø50	1.80
BT40 x MTB4-180	4	180	147	48	31.267	M16x2.0P	Ø32~Ø50	2.60
BT50 x MTB1-45	1	45	6	25	12.065	M6x1.0P	Ø10~Ø14	4.05
BT50 x MTB2-45	2	45	5	32	17.78	M10x1.5P	Ø16~Ø22	4.02
BT50 x MTB3-60	3	60	12	40	23.825	M12x1.75P	Ø24~Ø32	4.11
BT50 x MTB3-250	3	250	-	34	23.825	M12x1.75P	Ø24~Ø32	6.70
BT50 x MTB3-300	3	300	-	34	23.825	M12x1.75P	Ø24~Ø32	7.60
BT50 x MTB3-350	3	350	-	34	23.825	M12x1.75P	Ø24~Ø32	8.38
BT50 x MTB3-400	3	400	-	34	23.825	M12x1.75P	Ø24~Ø32	9.30
BT50 x MTB4-75	4	75	32	48	31.267	M16x2.0P	Ø32~Ø50	4.20
BT50 x MTB5-120-M20	5	120	77	63	44.399	M20x2.5P	Ø40	4.57
BT50 x MTB5-120-M24	5	120	77	63	44.399	M24x3.0P	Ø40	4.60

• 長度單位 Unit of Length (mm)

# GPH

## 齒驅式鑽夾頭

內部傘型齒輪與傳動齒輪六角孔設計，夾持力達到40~75N·m，可輕鬆夾緊鑽頭、絲攻及絞刀。

The inside bevel gear and hexagonal hole for driving gear make the clamping power achieve 40~75N·m. Easy to tighten drills, taps and reamers.

可正反轉

Clockwise and anticlockwise rotations are workable.

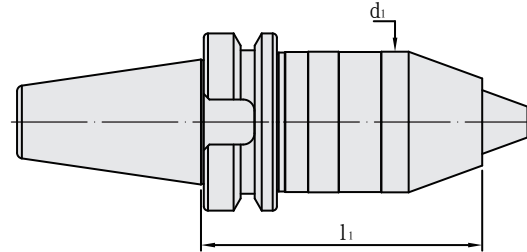
側邊的六角孔鎖固設計可快速換刀，無須再從機台上卸除刀桿。

The design of fastening from side hexagonal hole allows quick tool change, no need to dismount the chuck from the machine.

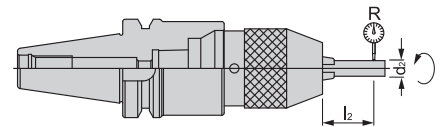
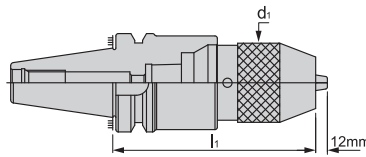
鍍鈦夾爪設計，提升耐磨性。  
Titanium-coating jaws improve abrasion resistance.



# Gear Driving Drill Chuck Holder



規格 Spec.	$l_1$	$d_1$	夾持範圍 Clamping Capacity	重量 (KGS) Weight
BT40-GPH13-98	98	50	1 ~ 13 mm	1.70
BT50-GPH13-109	109	50	1 ~ 13 mm	4.10



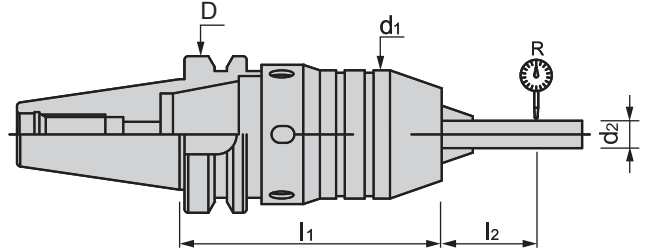
規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	夾持範圍 Clamping Capacity	R	重量 (KGS) Weight
BT30 x SPU8 -80	80	55	37	6	1~8mm	0.04	0.87
BT30 x SPU13-110	110	75	50	13	1~13mm	0.04	1.61
BT40 x SPU8-85	85	55	37	6	1~8mm	0.04	1.56
BT40 x SPU13-100	100	75	50	13	1~13mm	0.04	2.04
BT40 x SPU13-130	130	75	50	13	1~13mm	0.04	2.76
BT40 x SPU16-105	105	80	57	16	3~16mm	0.04	2.21
BT50 x SPU8-90	90	55	37	6	1~8mm	0.04	4.16
BT50 x SPU13-100	100	75	50	13	1~13mm	0.04	4.74
BT50 x SPU13-120	120	75	50	13	1~13mm	0.04	5.12
BT50 x SPU13-180	180	75	50	13	1~13mm	0.04	6.31
BT50 x SPU16-105	105	80	57	16	3~16mm	0.04	4.98
BT50 x SPU16-130	130	80	57	16	3~16mm	0.04	5.45
BT50 x SPU16-190	190	80	57	16	3~16mm	0.04	7.25

- 附扳手 Attaches the spanner.

### 選配表 Option



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 能增加鑽夾頭的堅固性及精準性，於使用綜合加工中心機的換刀系統
- 刀柄和鑽夾頭結合為一體。即使是作重切削的加工，鑽夾頭也不會脫落
- 即使機器主軸立即停止，刀具也不會因此脫落
- 超過長時間的使用，此夾頭仍保持高精度

- Designed to maximize drill chuck rigidity and precision on machine centers with automatic tool changer.
- The Shank and Universal Drill Chuck are combined as one body, so that the Drill Chuck will not be fallen out when heavy cutting is being performed.
- The drill will not be dropped out when the main spindle of machine instantly stops.
- High precision can be maintained over a long period of time.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	夾持範圍 Clamping Range		R	重量 (KGS) Weight
						mm	inch		
BT30 x SPH08-80	83	55	46	38	6	1~8	1/24~5/16	0.04	2.20
BT30 x SPH13-100	102	80	46	50	8	1~13	1/24~1/2	0.04	2.50
BT40 x SPH08-85	87	55	63	38	6	1~8	1/24~5/16	0.04	2.40
BT40 x SPH13-105	102	80	63	50	8	1~13	1/24~1/2	0.04	2.18
BT40 x SPH16-110	119	80	63	57	10	3~16	1/8~5/8	0.04	3.00
BT50 x SPH13-115	115	80	100	50	8	1~13	1/24~1/2	0.04	4.88
BT50 x SPH16-120	120	80	100	57	10	3~16	1/8~5/8	0.04	6.00

- 附扳手 Attaches the spanner.

### 注意事項 Notice

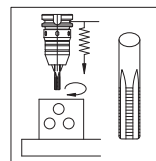
本產品之最大優點為簡單容易操作、快速方便、安全性極高。當使用本產品時，為了減少意外事故發生，延長產品壽命，必須遵守以下列舉的基本事項：夾持長度 (l<sub>1</sub>) 應將鑽頭柄插入到底或至少爪長 (L) 的 2/3。

The most advantage for this product is easy to operate, item saving and high safety. Please abide by following to avoid the accidents & extend the product life when in use. The shank of drill (clamping length L<sub>1</sub>) should be inserted into the bottom fully. Or at least 2/3 length of L

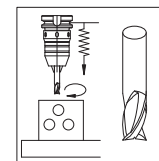
以下為各種規格爪長度及夾持量

Following table is the specification for clamping length & volume

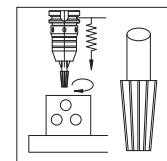
規格 Spec.	夾爪長度 L(mm)	夾持量 L <sub>1</sub> (mm) 至少
3mm (1/8")	14	9
6.5mm (1/4")	20	13
8mm (5/16")	26	17
10mm (3/8")	26	17
13mm (1/2")	28	19
16mm (5/8")	30	20



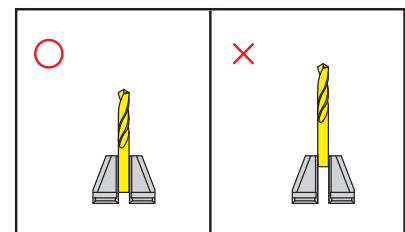
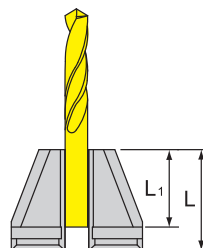
◎可攻牙  
◎ Able to tap



◎可銼  
◎ Able to mill



◎可絞孔  
◎ Able to ream

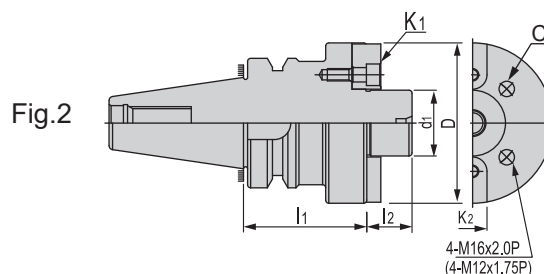
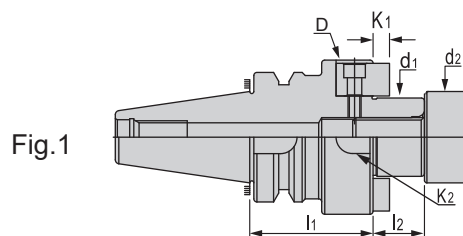


### 選配表 Option

拉頭 Pull Stud
B645-B647

• 長度單位 Unit of Length (mm)





### 特點 Feature

- 平面銑刀配合部位 (d1) · 軸系公差 h6
- 整支通孔 · 利於出水及抗震

- d1 tolerance is h6.
- The tool holder with through coolant design is better for water to get through vibration resistance.

FMA 為英制規格 FMA is INCH Size

規格 Spec.	$l_1$	$l_2$	D	$d_1$	$d_2$	$K_1$	$K_2$	C	Fig.	重量 (KGS) Weight
BT30 x FMA25.4-45	45	20	50	25.4	31.5	4.52	9.52	-	1	1.10
BT30 x FMA25.4-60	60	20	50	25.4	31.5	4.52	9.52	-	1	1.10
BT30 x FMA31.75-45	45	22	60	31.75	41	6.7	12.7	-	1	1.16
BT40 x FMA25.4-45	45	20	50	25.4	31.5	4.52	9.52	-	1	1.44
BT40 x FMA25.4-60	60	20	50	25.4	31.5	4.52	9.52	-	1	1.66
BT40 x FMA25.4-90	90	20	50	25.4	31.5	4.52	9.52	-	1	2.18
BT40 x FMA25.4-105	105	20	50	25.4	31.5	4.52	9.52	-	1	2.39
BT40 x FMA31.75-45	45	22	60	31.75	41	6.7	12.7	-	1	1.68
BT40 x FMA31.75-75	75	22	60	31.75	41	6.7	12.7	-	1	2.33
BT40 x FMA31.75-90	90	22	60	31.75	41	6.7	12.7	-	1	2.72
BT40 x FMA38.1-60	60	25	75	38.1	44.5	8.87	15.87	-	1	2.60
BT40 x FMA50.8-60	60	36	98	50.8	65	9.75	19.05	-	1	3.82
BT40 x FMA47.625-65	65	32	128.75	47.625	-	12.5	25.4	PCD Ø101.6	2	6.50
BT50 x FMA25.4-45	45	20	50	25.4	31.5	4.52	9.52	-	1	4.21
BT50 x FMA25.4-90	90	20	50	25.4	31.5	4.52	9.52	-	1	4.71
BT50 x FMA25.4-150	150	20	50	25.4	31.5	4.52	9.52	-	1	5.54
BT50 x FMA31.75-45	45	22	60	31.75	41	6.2	12.7	-	1	4.39
BT50 x FMA31.75-75	75	22	60	31.75	41	6.7	12.7	-	1	4.89
BT50 x FMA31.75-105	105	22	60	31.75	41	6.7	12.7	-	1	5.70
BT50 x FMA38.1-45	45	25	80	38.1	44.5	8.87	15.87	-	1	4.68
BT50 x FMA38.1-75	75	25	80	38.1	44.5	8.87	15.87	-	1	5.80
BT50 x FMA50.8-45	45	36	98	50.8	65	9.75	19.05	-	1	5.70
BT50 x FMA50.8-75	75	36	98	50.8	65	9.75	19.05	-	1	6.82
BT50 x FMA47.62-75	75	32	128.75	47.62	-	12.5	25.4	PCD Ø101.6	2	8.82

### 選配表 Option

拉頭 Pull Stud



B645-B647

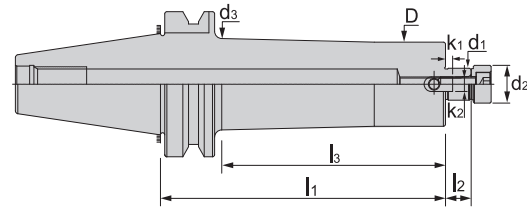
• 長度單位 Unit of Length (mm)



# BT/FMA 平面銑刀柄 ( 加長斜度柄 )

## BT/FMA FACE MILL ARBOR(EXTENSION TYPE)

JIS  
MAS 403



BT

### 特點 Feature

- 平面銑刀配合部位 (d1) · 軸系公差 h6
- 整支通孔 · 利於出水及抗震

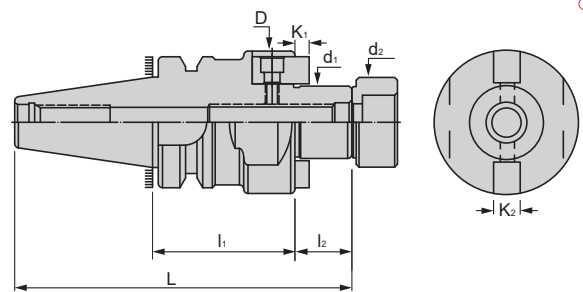
- d1 tolerance is h6.
- The tool holder with through coolant design is better for water to get through vibration resistance

FMA 為英制規格 FMA is INCH Size

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	K <sub>1</sub>	K <sub>2</sub>	重量 (KGS) Weight
BT50 x FMA25.4-125BG	125	20	79	48	25.4	31.5	60	4.25	9.52	5.36
BT50 x FMA25.4-150BG	150	20	102	48	25.4	31.5	60	4.25	9.52	6.40
BT50 x FMA25.4-200BG	200	20	152	58	25.4	31.5	63	4.25	9.52	7.40
BT50 x FMA25.4-250BG	250	20	202	58	25.4	31.5	63	4.25	9.52	8.60
BT50 x FMA25.4-300BG	300	20	252	58	25.4	31.5	63	4.25	9.52	9.70
BT50 x FMA25.4-350BG	350	20	302	58	25.4	31.5	66	4.25	9.52	10.8
BT50 x FMA25.4-400BG	400	20	352	58	25.4	31.5	66	4.25	9.52	11.9
BT50 x FMA31.75-125BG	125	22	82	70	31.75	41	75	6.7	12.7	5.60
BT50 x FMA31.75-150BG	150	22	107	70	31.75	41	75	6.7	12.7	7.34
BT50 x FMA31.75-175BG	175	22	132	70	31.75	41	75	6.7	12.7	8.30
BT50 x FMA31.75-200BG	200	22	157	70	31.75	41	75	6.7	12.7	9.10
BT50 x FMA31.75-250BG	250	22	207	70	31.75	41	75	6.7	12.7	10.6
BT50 x FMA31.75-300BG	300	22	252	70	31.75	41	75	6.7	12.7	12.1
BT50 x FMA31.75-350BG	350	22	302	70	31.75	41	75	6.7	12.7	13.7

# BT 平面銑刀柄 ( 削平兩端輕量型 )

## BT FACE MILL ARBOR(LIGHTWEIGHT TYPE WITH TWO FLAT SIDES)

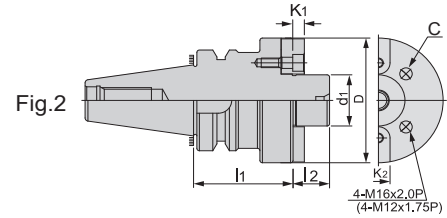
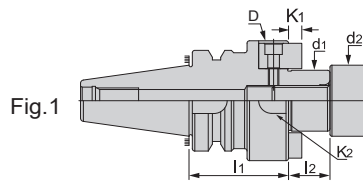


規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	k <sub>1</sub>	k <sub>2</sub>	重量 (KGS) Weight
BT30 x FMA25.4-50-BROTHER	118.4	50	20	50	25.4	31.5	4.52	9.52	0.94
BT30 x FMA31.75-50-BROTHER	120.4	50	22	60	31.75	41	6.7	12.7	1.22
BT30 x FMB22-50-BROTHER	117.7	50	19	48	22	26	4.8	10	0.90
BT30 x FMB27-50-BROTHER	118.4	50	20	60	27	31.5	5.8	12	1.00

### 選配表 Option



• 長度單位 Unit of Length (mm)



FMB 為公制規格 FMB is METRIC size

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	k <sub>1</sub>	k <sub>2</sub>	C	Fig.	重量 (KGS) Weight
BT30 x FMB16-50	50	16	46	16	-	5	8	-	1	0.68
BT30 x FMB22-45	45	19	48	22	26	4.8	10	-	1	0.82
BT30 x FMB22-60	60	19	48	22	26	4.8	10	-	1	1.00
BT30 x FMB27-45	45	20	60	27	31.5	5.8	12	-	1	1.05
BT30 x FMB27-60	60	20	60	27	31.5	5.8	12	-	1	1.30
BT30 x FMB32-60	60	22	78	32	41	6.8	14	-	1	1.58
BT40 x FMB16-50	50	16	63	16	-	5	8	-	1	1.22
BT40 x FMB16-90	90	16	63	16	-	5	8	-	1	1.48
BT40 x FMB22-45	45	19	48	22	26	4.8	10	-	1	1.38
BT40 x FMB22-60	60	19	48	22	26	4.8	10	-	1	1.57
BT40 x FMB22-100	100	19	48	22	26	4.8	10	-	1	2.17
BT40 x FMB22-150	150	19	48	22	26	4.8	10	-	1	2.86
BT40 x FMB22-200	200	19	48	22	26	4.8	10	-	1	3.58
BT40 x FMB27-45	45	20	60	27	31.5	5.8	12	-	1	1.58
BT40 x FMB27-60	60	20	60	27	31.5	5.8	12	-	1	1.89
BT40 x FMB27-90	90	20	60	27	31.5	5.8	12	-	1	2.61
BT40 x FMB27-105	105	20	60	27	31.5	5.8	12	-	1	2.93
BT40 x FMB32-60	60	22	78	32	41	6.8	14	-	1	2.10
BT40 x FMB40-60	60	25	80	40	48	8.3	16	-	1	2.80
BT50 x FMB16-50	50	16	100	16	-	5	8	-	1	4.02
BT50 x FMB16-90	90	16	100	16	-	5	8	-	1	4.14
BT50 x FMB22-45	45	19	48	22	26	4.8	10	-	1	4.15
BT50 x FMB22-90	90	19	48	22	26	4.8	10	-	1	4.68
BT50 x FMB22-150	150	19	48	22	26	4.8	10	-	1	5.35
BT50 x FMB22-200	200	19	48	22	26	4.8	10	-	1	6.02
BT50 x FMB22-250	250	19	48	22	26	4.8	10	-	1	6.64
BT50 x FMB22-300	300	19	48	22	26	4.8	10	-	1	9.40
BT50 x FMB22-350	350	19	48	22	26	4.8	10	-	1	10.5
BT50 x FMB22-400	400	19	48	22	26	4.8	10	-	1	10.88
BT50 x FMB27-50	50	20	60	27	31.5	5.8	12	-	1	4.41
BT50 x FMB27-90	90	20	60	27	31.5	5.8	12	-	1	5.09
BT50 x FMB27-150	150	20	60	27	31.5	5.8	12	-	1	6.30
BT50 x FMB27-200	200	20	60	27	31.5	5.8	12	-	1	7.42
BT50 x FMB27-250	250	20	60	27	31.5	5.8	12	-	1	8.43
BT50 x FMB32-50	50	22	78	32	41	6.8	14	-	1	4.69
BT50 x FMB32-90	90	22	78	32	41	6.8	14	-	1	5.96
BT50 x FMB40-50	50	25	89	40	48	8.3	16	-	1	5.20
BT50 x FMB40-90	90	25	89	40	48	8.3	16	-	1	6.00
BT50 x FMB40-105	105	25	89	40	48	8.3	16	-	1	7.20
BT50 x FS40F-75	75	26	110	40	-	8.3	16	PCD Ø66.7	2	6.00
BT50 x FS60F-75	75	25	138	60	-	12.5	25.4	PCD Ø101.6	2	8.49

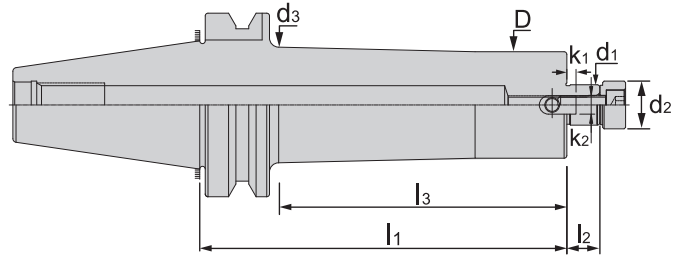
### 選配表 Option

拉頭 Pull Stud



B645-B647

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 平面銑刀配合部位 (d1) · 軸系公差 h6
- 整支通孔 · 利於出水及抗震

- d1 tolerance is h6.
- The tool holder with through coolant design is better for water to get through vibration resistance

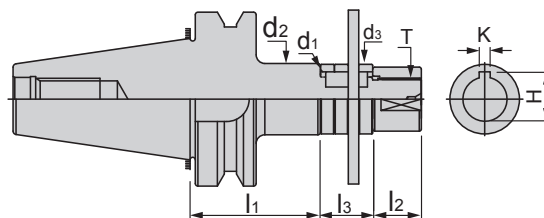
FMB 為公制規格 FMB is METRIC size

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	k <sub>1</sub>	k <sub>2</sub>	重量 (KGS) Weight
BT40 x FMB22-150BG	150	19	118	48	22	31.75	51	4.25	10	2.95
BT40 x FMB22-200BG	200	19	168	48	22	31.75	51	4.25	10	3.68
BT40 x FMB22-250BG	250	19	218	48	22	31.75	51	4.25	10	4.38
BT40 x FMB22-300BG	300	19	-	48	22	31.75	51	4.25	10	5.40
BT50 x FMB22-100BG	100	19	-	58	22	31.75	62.5	4.25	10	6.00
BT50 x FMB22-150BG	150	19	107	58	22	31.75	62.5	4.25	10	6.17
BT50 x FMB22-200BG	200	19	157	58	22	31.75	62.5	4.25	10	7.30
BT50 x FMB22-250BG	250	19	207	58	22	31.75	62.5	4.25	10	9.40
BT50 x FMB22-300BG	300	19	257	58	22	31.75	62.5	4.25	10	10.24
BT50 x FMB22-350BG	350	19	307	58	22	31.75	62.5	4.25	10	10.3
BT50 x FMB22-400BG	400	19	352	58	22	31.75	62.5	4.25	10	11.4
BT50 x FMB22-450BG	450	19	402	58	22	31.75	62.5	4.25	10	12.3
BT50 x FMB22-500BG	500	19	452	58	22	31.75	62.5	4.25	10	13.7
BT50 x FMB22-600BG	600	19	-	58	22	31.75	62.5	4.25	10	17.2
BT50 x FMB27-150BG	150	20	107	60	27	31.5	78	5.8	12	6.82
BT50 x FMB27-200BG	200	20	157	60	27	31.5	78	5.8	12	8.50
BT50 x FMB27-250BG	250	20	207	60	27	31.5	78	5.8	12	9.50
BT50 x FMB27-300BG	300	20	257	60	27	31.5	78	5.8	12	10.4
BT50 x FMB27-350BG	350	20	307	60	27	31.5	78	5.8	12	11.4
BT50 x FMB27-400BG	400	20	352	60	27	31.5	78	5.8	12	12.4
BT50 x FMB27-450BG	450	20	402	60	27	31.5	78	5.8	12	13.4
BT50 x FMB27-500BG	500	20	452	60	27	31.5	78	5.8	12	14.4
BT50 x FMB32-150BG	150	22	107	78	32	41	85	6.8	14	7.00
BT50 x FMB32-200BG	200	22	157	78	32	41	85	6.8	14	8.50
BT50 x FMB32-250BG	250	22	207	78	32	41	85	6.8	14	9.50
BT50 x FMB32-300BG	300	22	257	78	32	41	85	6.8	14	10.5
BT50 x FMB32-350BG	350	22	307	78	32	41	85	6.8	14	11.5
BT50 x FMB32-400BG	400	22	352	78	32	41	85	6.8	14	12.5
BT50 x FMB32-450BG	450	22	402	78	32	41	85	6.8	14	13.5
BT50 x FMB32-500BG	500	22	460	80	32	41	96	6.8	14	14.5

### 選配表 Option



• 長度單位 Unit of Length (mm)



規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	K	H	T	重量 (KGS) Weight
BT30 x SCA10-60	60	12	35	10	18	18	-	-	M8 x 1.25P	0.80
BT30 x SCA16-60	60	16	30	16	26	26	4	17.7	M14 x 1.5P	0.78
BT30 x SCA22-60	60	22	30	22	34	34	6	24.3	M20 x 1.5P	1.20
BT30 x SCA22-75	75	22	30	22	34	34	6	24.3	M20 x 1.5P	1.18
BT40 x SCA16-60	60	16	30	16	26	26	4	17.7	M14 x 1.5P	1.42
BT40 x SCA22-60	60	22	30	22	34	34	6	24.3	M20 x 1.5P	1.60
BT40 x SCA22-75	75	22	30	22	34	34	6	24.3	M20 x 1.5P	1.83
BT40 x SCA22-120	120	22	30	22	34	34	6	24.3	M20 x 1.5P	2.19
BT40 x SCA27-75	75	28	30	27	41	40	7	30	M24 x 1.5P	2.10
BT40 x SCA27-120	120	28	30	27	41	40	7	30	M24 x 1.5P	2.50
BT40 x SCA32-90	90	32	30	32	47	46	8	35.5	M30 x 1.5P	2.72
BT40 x SCA22.22-75	75	22	30	22.22	34	34	3.18	24.6	M20 x 1.5P	1.70
BT40 x SCA22.22-120	120	22	30	22.22	34	34	3.18	24.6	M20 x 1.5P	2.00
BT40 x SCA25.4-75	75	28	30	25.4	41	40	6.35	28.4	M24 x 1.5P	2.17
BT40 x SCA25.4-120	120	28	30	25.4	41	40	6.35	28.4	M24 x 1.5P	2.67
BT40 x SCA31.75-90	90	32	30	31.75	47	47	7.93	34.8	M30 x 1.5P	2.60
BT50 x SCA22-90	90	22	30	22	34	34	6	24.3	M20 x 1.5P	4.40
BT50 x SCA22-135	135	22	30	22	34	34	6	24.3	M20 x 1.5P	4.70
BT50 x SCA27-90	90	28	30	27	41	40	7	30	M24 x 1.5P	4.60
BT50 x SCA27-135	135	28	30	27	41	40	7	30	M24 x 1.5P	5.00
BT50 x SCA32-90	90	32	30	32	47	46	8	35.5	M30 x 1.5P	5.44
BT50 x SCA32-135	135	32	30	32	47	46	8	35.5	M30 x 1.5P	6.16
BT50 x SCA40-90	90	40	30	40	55	55	10	43.7	M36 x 2.0P	5.00
BT50 x SCA40-135	135	40	30	40	55	55	10	43.7	M36 x 2.0P	6.00
BT50 x SCA22.22-90	90	22	30	22.22	34	34	3.18	24.6	M20 x 1.5P	4.40
BT50 x SCA22.22-135	135	22	30	22.22	34	34	3.18	24.6	M20 x 1.5P	4.70
BT50 x SCA25.4-90	90	28	30	25.4	41	40	6.35	28.4	M24 x 1.5P	5.05
BT50 x SCA25.4-135	135	28	30	25.4	41	40	6.35	28.4	M24 x 1.5P	5.58
BT50 x SCA31.75-90	90	32	30	31.75	47	46	7.93	34.8	M30 x 1.5P	4.70
BT50 x SCA31.75-135	135	32	30	31.75	47	46	7.93	34.8	M30 x 1.5P	5.20
BT50 x SCA38.1-90	90	40	30	38.1	55	55	9.525	42.4	M36 x 2.0P	4.90
BT50 x SCA38.1-135	135	40	30	38.1	55	55	9.525	42.4	M36 x 2.0P	5.90

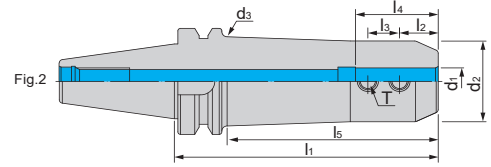
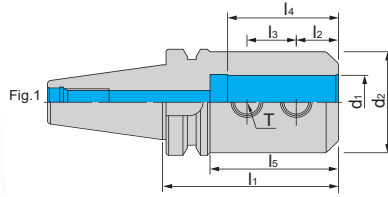
### 選配表 Option

拉頭 Pull Stud



B645-B647

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 預設定動平衡 G6.3 8000rpm( 削平處理 )
- 不分孔徑皆為兩只鎖固螺絲

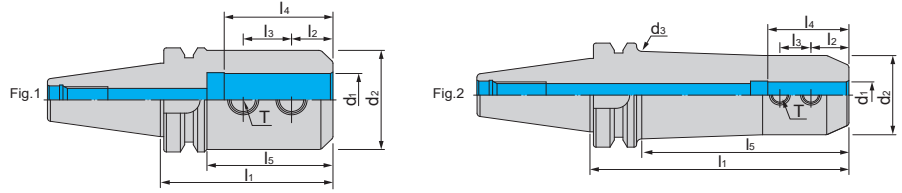
- The pre-balance can reach G6.3 8000rpm.
- With two side-lock screw.

規格 Spec.	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
BT30xSLN6-60JIS	60	12	10	35		6	25	-	M6 x 1.0P	1	-
BT30xSLN8-60JIS	60	14	12	35		8	28	-	M8 x 1.25P	1	-
BT30xSLN10-60JIS	60	15	14	39		10	35	-	M10 x 1.5P	1	-
BT30xSLN12-60JIS	60	20	16	44		12	40	-	M10 x 1.5P	1	-
BT30xSLN16-75JIS	75	22	18	47		16	45	-	M10 x 1.5P	1	-
BT30xSLN20-75JIS	75	25	20	55		20	50	-	M12 x 1.75P	1	-
BT30xSLN25-90JIS	90	24	25	58	68	25	50	-	M12 x 1.75P	1	1.70
BT30xSLN32-90JIS	90	24	28	63		32	60	-	M16 x 2.0P	1	-
BT30 x SLN25-90JIS	90	24	25	58	68	25	50	-	M12 x 1.75P	1	1.70
BT40 x SLN 6-75JIS	75	12	10	35	45	6	25	-	M6 x 1.0P	1	1.17
BT40 x SLN 6-150JIS	150	12	10	35	113	6	25	30	M6 x 1.0P	2	1.50
BT40 x SLN 8-75JIS	75	14	12	35	45	8	28	-	M8 x 1.25P	1	1.21
BT40 x SLN 8-150JIS	150	14	12	35	113	8	28	33	M8 x 1.25P	2	1.50
BT40 x SLN10-75JIS	75	15	14	39	45	10	35	-	M10 x 1.5P	1	1.35
BT40 x SLN10-150JIS	150	15	14	39	118	10	35	40	M10 x 1.5P	2	1.50
BT40 x SLN12-75JIS	75	20	16	44	45	12	42	-	M10 x 1.5P	1	1.50
BT40 x SLN12-150JIS	150	20	16	44	118	12	42	47	M10 x 1.5P	2	1.70
BT40 x SLN16-75JIS	75	22	18	47	45	16	48	-	M10 x 1.5P	1	1.58
BT40 x SLN16-150JIS	150	22	18	47	120	16	48	53	M10 x 1.5P	2	2.75
BT40 x SLN20-90JIS	90	25	20	55	60	20	50	-	M12 x 1.75P	1	1.77
BT40 x SLN20-150JIS	150	25	20	55	120	20	52	57	M12 x 1.75P	2	1.80
BT40 x SLN25-90JIS	90	24	25	58	60	25	50	-	M12 x 1.75P	1	1.72
BT40 x SLN32-100JIS	100	24	28	63	73	32	60	-	M16 x 2.0P	1	2.08
BT40 x SLN40-105JIS	105	28	28	68	78	40	72	62.6	M16 x 2.0P	2	-

### 選配表 Option



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 預設定動平衡 G6.3 8000rpm( 削平處理 )
- 不分孔徑皆為兩只鎖固螺絲

- The pre-balance can reach G6.3 8000rpm.
- With two side-lock screw.

規格 Spec.	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
BT50 x SLN 6-75JIS	75	12	10	35	27	6	25	-	M6 x 1.0P	1	4.04
BT50 x SLN 8-75JIS	75	14	12	35	27	8	28	-	M8 x 1.25P	1	4.06
BT50 x SLN10-75JIS	75	15	14	39	32	10	35	-	M10 x 1.5P	-	3.90
BT50 x SLN12-90JIS	90	20	16	44	42	12	42	-	M10 x 1.5P	-	4.35
BT50 x SLN12-165JIS	165	20	16	44	124	12	42	47	M10 x 1.5P	2	5.05
BT50 x SLN16-90JIS	90	22	18	47	42	16	48	-	M10 x 1.5P	1	4.53
BT50 x SLN16-150JIS	150	22	18	47	102	16	48	53	M10 x 1.5P	2	4.98
BT50 x SLN16-165JIS	165	22	18	47	117	16	48	53	M10 x 1.5P	2	5.50
BT50 x SLN20-90JIS	90	25	20	55	49	20	50	-	M12 x 1.75P	1	4.53
BT50 x SLN20-150JIS	150	25	20	55	102	20	50	57	M12 x 1.75P	2	5.98
BT50 x SLN20-165JIS	165	25	20	55	117	20	50	57	M12 x 1.75P	2	5.67
BT50 x SLN20-210JIS	210	25	20	55	162	20	50	57	M12 x 1.75P	2	6.40
BT50 x SLN25-100JIS	100	24	25	58	59	25	50	-	M12 x 1.75P	1	4.58
BT50 x SLN25-150JIS	150	24	25	58	102	25	50	57	M12 x 1.75P	2	5.48
BT50 x SLN25-165JIS	165	24	25	58	117	25	50	57	M12 x 1.75P	2	5.55
BT50 x SLN25-210JIS	210	24	25	58	169	25	50	57	M12 x 1.75P	2	6.25
BT50 x SLN25-250JIS	250	24	25	58	202	25	50	60	M12 x 1.75P	2	7.10
BT50 x SLN32-105JIS	105	24	28	63	64	32	60	-	M16 x 2.0P	1	4.89
BT50 x SLN32-150JIS	150	24	28	63	102	32	50	60	M16 x 2.0P	2	7.48
BT50 x SLN32-165JIS	165	24	28	63	117	32	60	65	M16 x 2.0P	1	6.22
BT50 x SLN32-210JIS	210	24	28	63	162	32	50	60	M16 x 2.0P	2	6.34
BT50 x SLN32-250JIS	250	24	28	63	207	32	50	60	M16 x 2.0P	2	7.50
BT50 x SLN32-300JIS	300	24	28	63	257	32	60	65	M16 x 2.0P	2	9.30
BT50 x SLN40-115JIS	115	30	32	85	74	40	90	-	M20 x 2.0P	1	6.60
BT50 x SLN42-120JIS	120	30	32	85	79	42	90	-	M20 x 2.0P	1	6.73
BT50 x SLN42-210JIS	210	30	32	85	-	42	70	75	M20 x 2.0P	2	7.80
BT50 x SLN50-120JIS	120	35	35	90	82	50	90	-	M20 x 2.0P	1	5.28
● BT50 x SLN50.8-120JIS	120	33.9	35.78	90	82	50.8	90	-	M20 x 2.0P	1	6.61

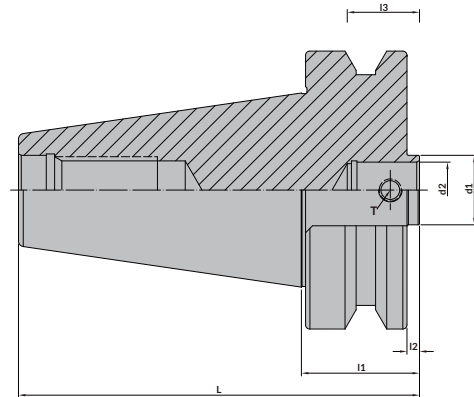
●有插梢 With pin

### 選配表 Option



● 長度單位 Unit of Length (mm)





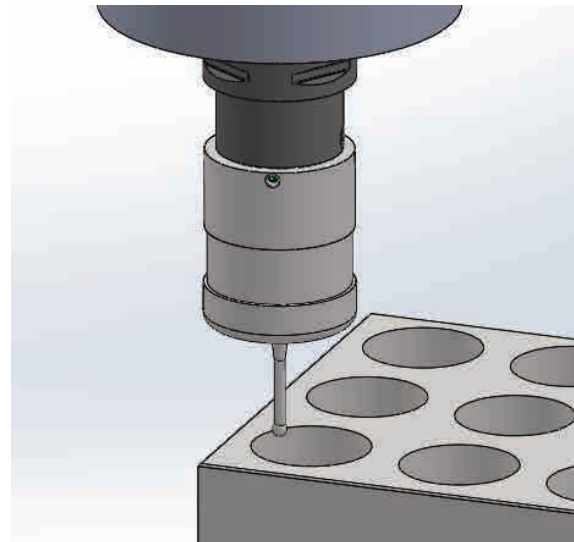
### 特點 Feature

- 依據探針設計，探針刀把可做中心出水，以利清潔工件後進行量測
- 依客戶需求，客製探針刀桿

- Coolant through holders can be made according to touch probe designs, capable of cleaning workpiece directly before measuring.
- Attached to customer's needs, we provide custom optional.

規格 Spec.	探頭型號 Probe
BT30-PSD11.2-27.6	OMP40 OMP400 MP20
BT40-PSD11.2-27.6	
BT50-PSD11.2-37.6	
HSK63A-PSD11.2-43.6	
BT40-PSD20.1-31.5	OMP60 RMP60 MP11 MP12 MP700
BT50-PSD20.1-42.5	
HSK63A-PSD20.1-46.5	
PSC63-PSD20.1-50	
HSK100A-PSD20.1-79	

### 範例 Example



探針刀把內建校正偏擺微調機構，簡易、快速調整探針的偏擺精度。  
Built-in mechanism for accuracy compensation makes adjusting probe accuracy easy.

• 長度單位 Unit of Length (mm)





Fig.1

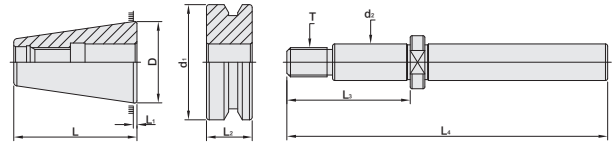


Fig.2

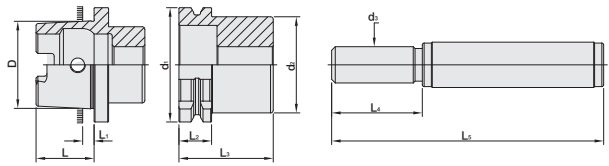
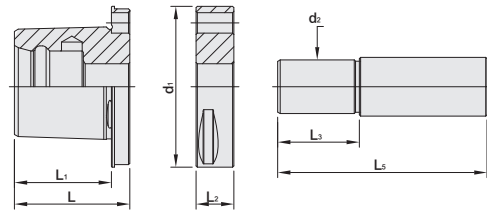


Fig.3



範例 Example



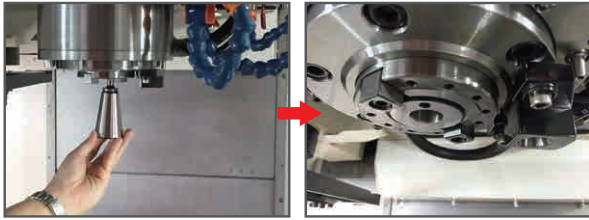
規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	Fig.
BT30 - A.T.C	50.4	2	20	50.4	158.4	-	31.75	46	16	-	M12 x 1.75P	1
BT40 - A.T.C	67.4	2	25	67.5	175.5	-	44.45	63	20	-	M16 x 2.0P	1
BT50 - A.T.C	104.8	3	35	120	320	-	69.85	100	25	-	M24 x 3.0P	1
HSK32A - A.T.C	16	3.2	14	30	50	100	24.007	32	26	8	-	2
HSK40A - A.T.C	20	4	14	37	61	141	30.007	40	34	12	-	2
HSK50A - A.T.C	25	5	18	43	74	174	38.009	50	42	15	-	2
HSK63A - A.T.C	32	6.3	18	52	90	190	48.010	63	53	20	-	2
HSK80A - A.T.C	40	8	18	54.5	100.5	200.5	60.012	80	68	20	-	2
HSK100A - A.T.C	50	10	19	67	125	275	75.013	100	88	24	-	2
HSK125A - A.T.C	63	12.5	19	74	145	295	95.016	125	111	30	-	2
PSC32-A.T.C	22	19	12	20	-	60	-	32	-	24	-	3
PSC40-A.T.C	28	24	16	28	-	78	-	40	-	12	-	3
PSC50-A.T.C	35	30	15	29	-	79	-	50	-	16	-	3
PSC63-A.T.C	45.2	38	14.8	32	-	82	-	63	-	21	-	3

• 長度單位 Unit of Length (mm)

### 操作說明 Instructions

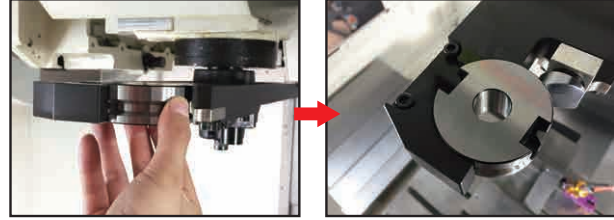
#### 1. 錐度套筒端鎖上拉頭，置入主軸內

The taper adapter with pull stud inserts into spindle.



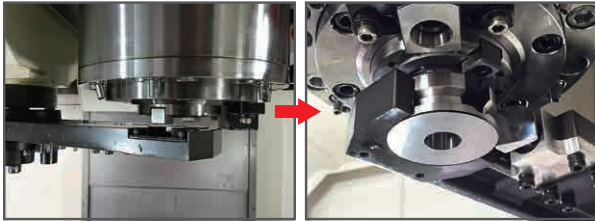
#### 2. 換刀槽零件置入換刀臂內

Install the flange adapter into gripper of ATC arm.



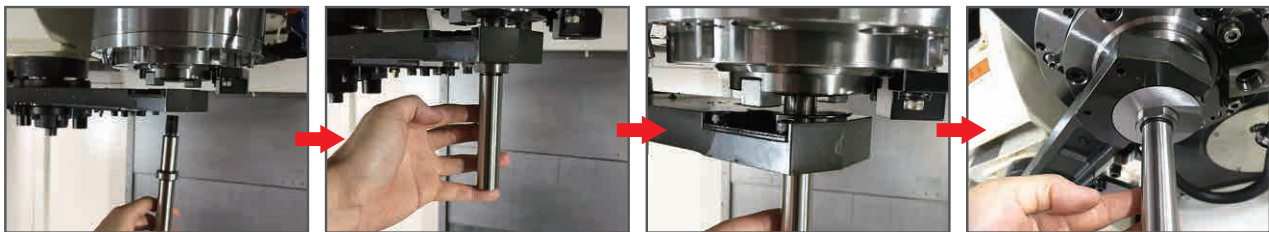
#### 3. 將換刀槽旋轉到主軸中心

Press machine controller button to move ATC arm to align with machine spindle.

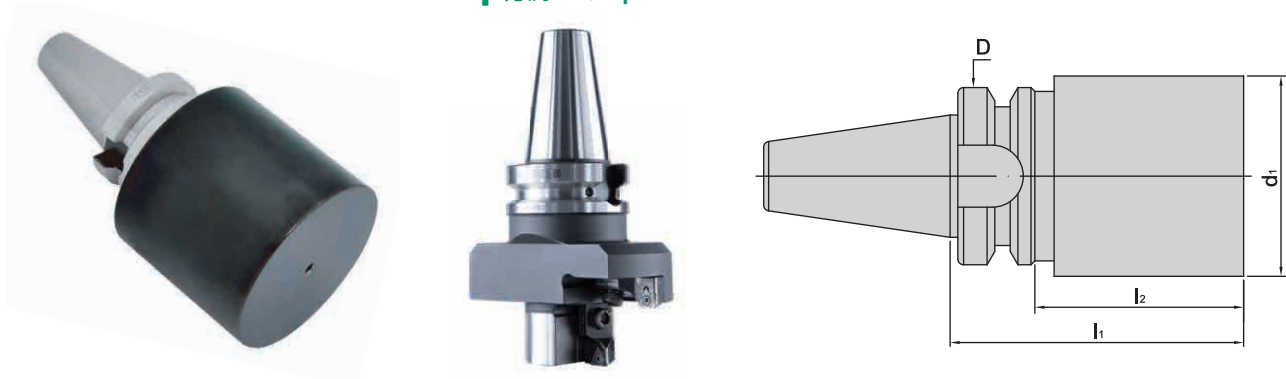


#### 4. 將測試圓棒插入錐度套筒及換刀槽的中心孔，如能同時穿過，代表換刀臂與主軸有同心

Insert alignment plug into the holes of flange adapter and taper adapter for alignment. If alignment plug can be inserted with ease and the movement is smooth, the alignment is done.

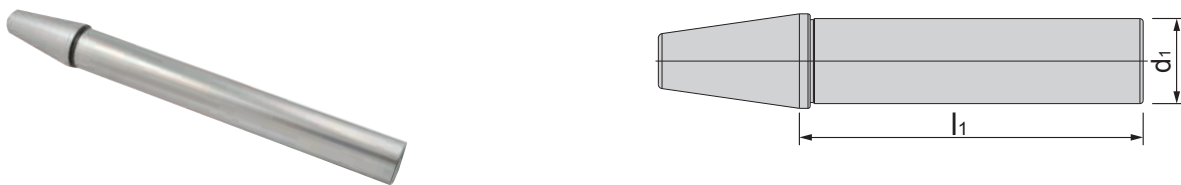


### 範例 Example



規格 Spec.	$l_1$	$l_2$	D	$d_1$	重量 (KGS) Weight
BT30 x Ø50-200	200	173	46	50	3.3
BT40 x Ø40.5-160	160	133	63	40.5	2.30
BT40 x Ø63.5-160	160	133	63	63.5	4.21
BT40 x Ø63.5-250	250	223	63	63.5	6.41
BT50 x Ø50-300	300	262	100	50	7.53
BT50 x Ø80-160	160	122	100	80	8.29
BT50 x Ø80-200	200	162	100	80	9.84
BT50 x Ø80-300	300	262	100	80	13.71

### 標準型 Standard



### 特點 Feature

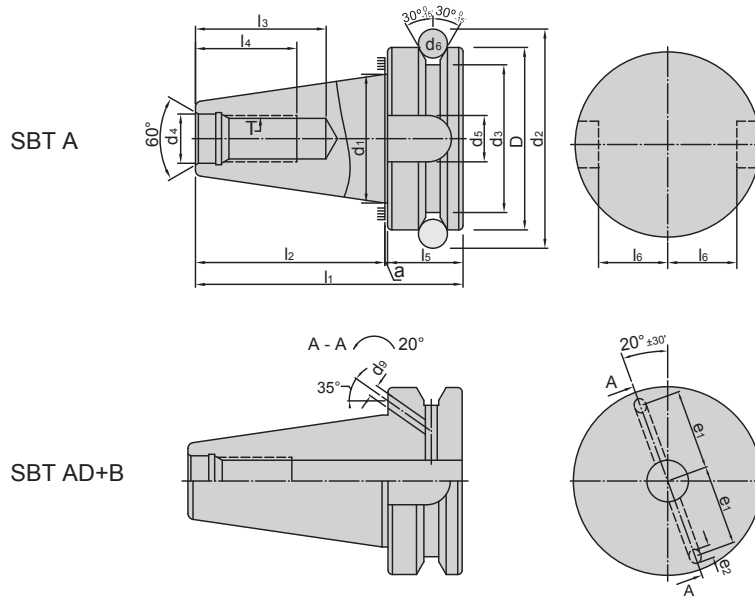
- 皆通過真圓度測試機，精確檢驗通過
- 附精度檢驗表

- Have passed by the roundness testing machine.
- With precision test table.

	錐度精度 Taper Precision	AT2
	真圓度 Roundness	0.001mm
	表面粗造度 Surface Roughness	Ra<0.4
	同心度 Concentricity	0.005mm

規格 Spec.	$l_1$	$d_1$	同心度 Concentricity	真圓度 Roundness	重量 (KGS) Weight
BT30 - TS250L	250	32	0.005	0.001	3.59
BT40 - TS300L	300	40	0.005	0.001	3.64
BT50 - TS300L	300	40	0.005	0.001	5.44

• 長度單位 Unit of Length (mm)



規格 Spec.	D h8	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub> H8	d <sub>5</sub> H12	d <sub>6</sub>	d <sub>7</sub> H12
SBT30	46	31.75	56.14	38	12.5	16.1	8	-
SBT40	63	44.45	75.679	53	17	16.1	10	4
SBT50	100	69.85	119.02	83	25	25.7	15	6

規格 Spec.	a 0 -0.005	l <sub>1</sub>	l <sub>2</sub> ±0.2	l <sub>3</sub> min	l <sub>4</sub> min	l <sub>5</sub>	l <sub>6</sub> 0 -0.2	e <sub>1</sub> ±0.1	e <sub>2</sub> MAX	T 6H
SBT30	1	70.4	48.4	34	24	21	16	-	-	M12×1.75P
SBT40	1	92.4	65.4	43	30	26	22.6	27	5	M16×2.0P
SBT50	1.5	139.8	101.8	62	45	36.5	35.4	42	7	M24×3.0P

1. 錐度精度 : <AT3
2. 硬度 : >HRC 56°
3. 滲碳深度 : >0.8mm
4. 真圓度 : < 0.8μm
5. 表面粗糙度 : Ra < 0.25μm

- 1.Taper tolerance < AT3.
- 2.Hardness > HRC 56°
- 3.Carbon depth > 0.8mm.
- 4.Roundness < 0.8μm.
- 5.Surface roughness : Ra < 0.25μm

# SBT

## 法蘭加厚型(雙面拘束)系列

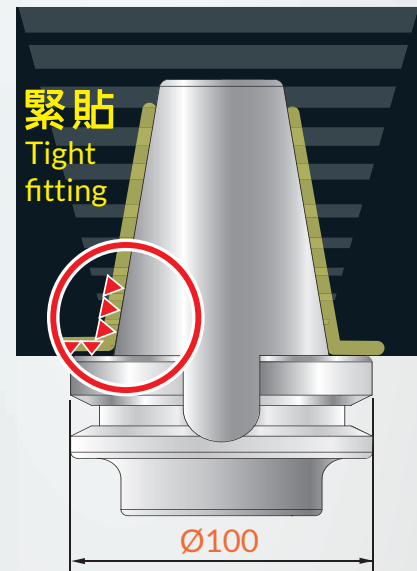
### SBT DUAL DRIVE Tool Holder System

可在高速加工時，增加刀桿的穩定性。降低刀桿在高速切削時，所造成主軸的擴孔及精度不佳的現象；接觸直徑加大，有助於延伸倍數增加。刀具穩定性提升，可增加刀具使用壽命，確保在換刀後，重覆定位精度，並且提高搪孔切削時的真圓度。

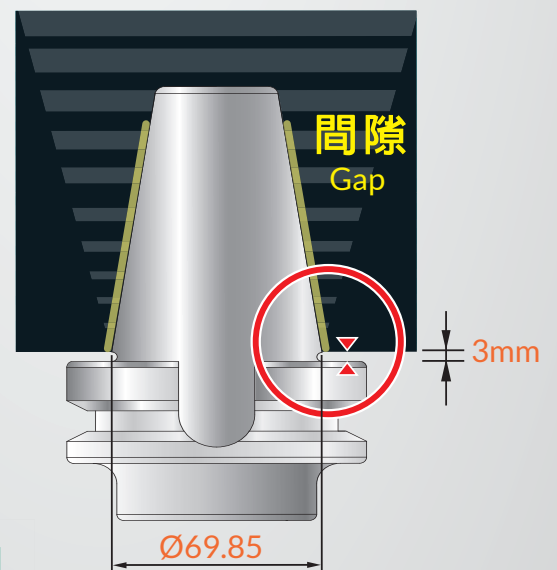
Dual DRIVE + SBT Tool Holders features a dual contact with 3mm gap between the machine tool spindle face and the tool holder flange, which improves rigidity and reduce vibration during the high-speed machining. After replacing the cutting tool, the SBT Tool Holder remain the same repeatability and roundness that improves the surface finish, stability, and accuracy, as well as extend the overall tool life.



SBT50 DualDRIVE+

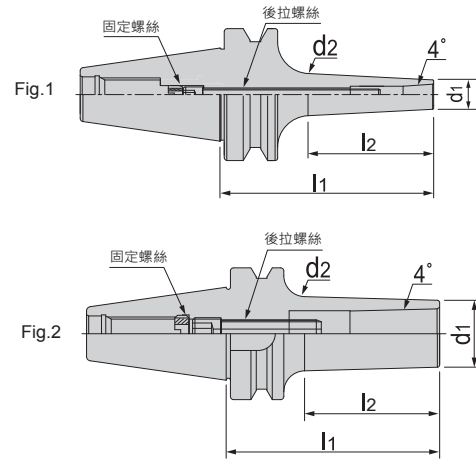


BT50 Tool Holder



# DualDRIVE+

雙面拘束 Dual Contact



SBT

### 特點 Feature

- 標準動平衡 G2.5 25000rpm

- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	$l_1$	夾持範圍 Clamping Range	筒夾 Collet	$l_2$	$d_1$	$d_2$	後拉螺絲 Slim-Fit Screw	固定螺絲 Fixed Screw	扳手 Wrench	扭力值 (N.m) Torque	Fig.	重量 (KGS) Weight
SBT30 x SBL6-70	70	2~6	SLC6	38	14	18	SBL6-M6-40L	SBL6-M12	PT5	6	1	0.60
SBT30 x SBL6-100	100	2~6	SLC6	68	14	21	SBL6-M6-70L	SBL6-M12	PT5	6	1	1.25
SBT30 x SBL12-70	70	3~12	SLC12	47	26	33	SBL12-M10-25L	SBL12-M15	PT6	10	2	1.20
SBT30 x SBL12-100	100	3~12	SLC12	77	26	38	SBL12-M10-25L	SBL12-M15	PT6	10	2	1.45
SBT30 x SBL20-80	80	3~20	SLC20	54	34	37	SBL20-M12-30L	SBL20-M18	PT8-S	12	2	1.20
SBT30 x SBL20-100	100	3~20	SLC20	76	34	39	SBL20-M12-30L	SBL20-M18	PT8-S	12	2	1.45
SBT40 x SBL6-70	70	2~6	SLC6	28	14	17	SBL6-M6-50L	SBL6-M16	PT5	6	1	1.20
SBT40 x SBL6-100	100	2~6	SLC6	58	14	20	SBL6-M6-75L	SBL6-M16	PT5	6	1	1.26
SBT40 x SBL12-70	70	3~12	SLC12	33	26	31	SBL12-M10-25L	SBL12-M16	PT6	10	2	1.30
SBT40 x SBL12-100	100	3~12	SLC12	63	26	31	SBL12-M10-55L	SBL12-M16	PT6	10	2	1.70
SBT40 x SBL20-70	70	3~20	SLC20	33	35	38	SBL20-M12-30L	SBL20-M16	PT8-S	12	2	1.50
SBT40 x SBL20-100	100	3~20	SLC20	68	35	40	SBL20-M12-52L	SBL20-M16	PT8-S	12	2	1.62
SBT40 x SBL20-130	130	3~20	SLC20	106	35	41	SBL20-M12-52L	SBL20-M16	PT8-S	12	2	2.10
SBT50 x SBL6-70	70	2~6	SLC6	17	14	15	SBL6-M6-50L	SBL6-M16	PT5-S	6	1	4.00
SBT50 x SBL6-100	100	2~6	SLC6	47	14	19	SBL6-M6-40L	SBL6-M16	PT5-S	6	1	4.10
SBT50 x SBL12-70	70	3~12	SLC12	22	26	28	SBL12-M10-25L	SBL12-M16	PT6-S	10	2	4.00
SBT50 x SBL12-100	100	3~12	SLC12	52	26	30	SBL12-M10-55L	SBL12-M16	PT6-S	10	2	4.30
SBT50 x SBL12-125	125	3~12	SLC12	77	26	32	SBL12-M10-55L	SBL12-M16	PT6-S	10	2	4.50
SBT50 x SBL20-70	70	3~20	SLC20	22	35	36	SBL20-M12-30L	SBL20-M16	PT8-S	12	2	4.60
SBT50 x SBL20-100	100	3~20	SLC20	52	35	39	SBL20-M12-52L	SBL20-M16	PT8-S	12	2	4.70
SBT50 x SBL20-125	125	3~20	SLC20	77	35	41	SBL20-M12-52L	SBL20-M16	PT8-S	12	2	4.90

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet
B645-B647	B630

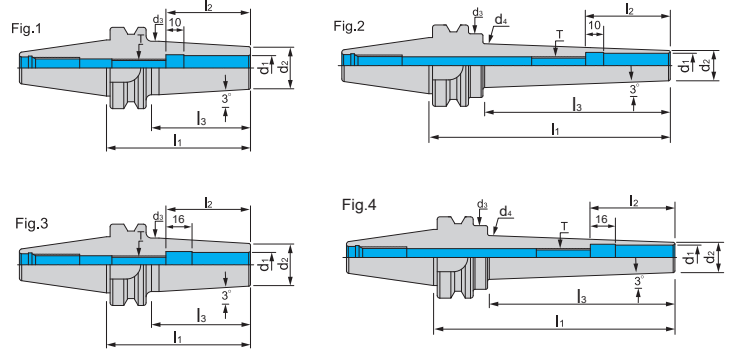
• 長度單位 Unit of Length (mm)



雙面拘束 Dual Contact 燒結式 Shrink-Fit



SBT



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
SBT30 x SFCT4-80	80	20	48	4	10	15	-	M6x1.0P	1	0.40
SBT30 x SFCT5-80	80	20	53	5	16	19	-	M6x1.0P	1	0.42
SBT30 x SFCT6-80	80	36	53	6	21	26	-	M5x0.8P	3	0.44
SBT30 x SFCT8-80	80	36	53	8	21	26	-	M6x1.0P	1	0.45
SBT30 x SFCT10-80	80	42	53	10	24	29	-	M8x1.25P	2	0.50
SBT30 x SFCT12-80	80	47	53	12	24	29	-	M10x1.5P	1	0.50
SBT30 x SFCT14-80	80	47	46	14	24	32	-	M10x1.5P	2	0.52
SBT30 x SFCT16-80	80	50	55	16	27	32	-	M12x1.75P	1	0.54
SBT30 x SFCT18-90	90	50	66	18	33	38	-	M12x1.75P	2	0.56
SBT30 x SFCT20-90	90	52	66	20	33	38	-	M16x2.0P	1	0.58
SBT30 x SFCT25-100	100	58	78	25	44	49	-	M20x2.0P	2	0.60
SBT40 x SFCT3-90	90	18	53	3	9	14.6	-	M6x1.0P	1	0.99
SBT40 x SFCT4-90	90	20	53	4	10	15.6	-	M6x1.0P	1	1.10
SBT40 x SFCT5-90	90	20	58	5	16	21	-	M6x1.0P	1	1.00
SBT40 x SFCT6-90	90	36	58	6	21	26	-	M5x0.8P	3	1.24
SBT40 x SFCT8-90	90	36	58	8	21	26	-	M6x1.0P	1	1.23
SBT40 x SFCT10-90	90	42	58	10	24	29	-	M8x1.25P	1	1.28
SBT40 x SFCT12-90	90	47	58	12	24	29	-	M10x1.5P	1	1.28
SBT40 x SFCT14-90	90	47	58	14	27	32	-	M10x1.5P	1	1.20
SBT40 x SFCT16-90	90	50	58	16	27	32	-	M12x1.75P	1	1.30
SBT40 x SFCT18-100	100	50	68	18	33	38	-	M12x1.75P	1	1.30
SBT40 x SFCT20-100	100	52	68	20	33	38	-	M16x2.0P	1	1.40
SBT40 x SFCT25-100	100	58	71	25	44	49	-	M20x2.0P	1	1.78
SBT40 x SFCT32-100	100	58	71	32	44	49	-	M20x2.0P	1	1.70

### 選配表 Option

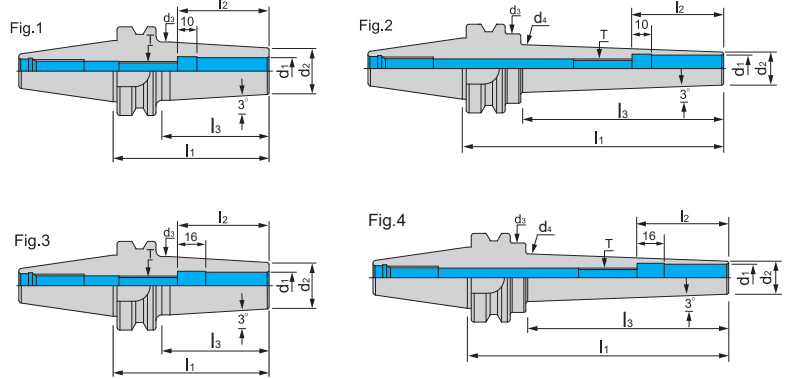
拉頭 Pull Stud	加熱器 Hot-Air
B645-B647	B400

• 長度單位 Unit of Length (mm)



雙面拘束 Dual Contact

燒結式 Shrink-Fit



SBT

### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
SBT50 x SFCT4-100	100	20	52	4	10	15.5	-	M6x1.0P	1	3.86
SBT50 x SFCT5-100	100	20	57	5	16	21	-	M6x1.0P	1	3.86
SBT50 x SFCT6-100	100	36	57	6	21	26	-	M5x0.8P	3	3.92
SBT50 x SFCT8-100	100	36	57	8	21	26	-	M6x1.0P	1	3.92
SBT50 x SFCT10-100	100	42	58	10	24	29	-	M8x1.25P	1	3.90
SBT50 x SFCT12-100	100	47	52	12	24	29	-	M10x1.5P	1	3.94
SBT50 x SFCT14-100	100	47	57	14	27	32	-	M10x1.5P	1	4.20
SBT50 x SFCT16-100	100	50	52	16	27	32	-	M12x1.75P	1	3.96
SBT50 x SFCT18-110	110	50	62	18	33	38	-	M12x1.75P	1	4.18
SBT50 x SFCT20-110	110	52	67	20	33	38	-	M16x2.0P	1	4.14
SBT50 x SFCT25-110	110	58	67	25	44	49	-	M20x2.0P	1	4.46
SBT50 x SFCT32-110	110	58	67	32	44	49	-	M20x2.0P	1	4.30

### 選配表 Option

拉頭 Pull Stud	加熱器 Hot-Air
B645-B647	B400

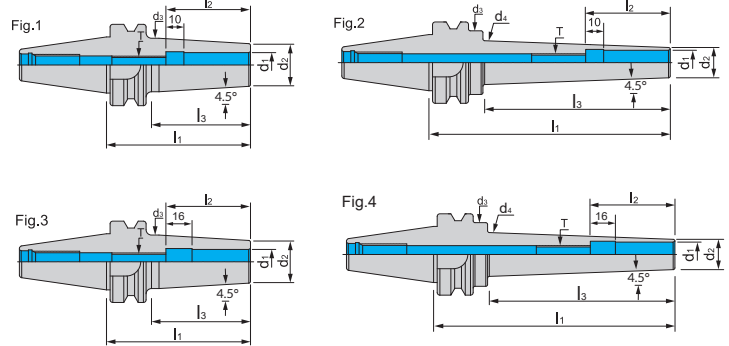
• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact

燒結式 Shrink-Fit



SBT




### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

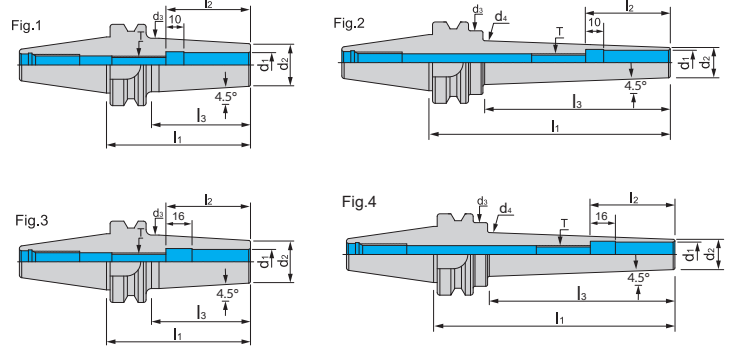
規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
SBT40 x SFC6-130	130	36	93	6	21	27	-	M5x0.8P	4	1.41
SBT40 x SFC6-160	160	36	93	6	21	27	-	M5x0.8P	4	1.54
SBT40 x SFC6-200	200	36	133	6	21	27	-	M5x0.8P	4	1.72
SBT40 x SFC8-130	130	36	93	8	21	27	-	M6x1.0P	2	1.41
SBT40 x SFC8-160	160	36	93	8	21	27	-	M6x1.0P	2	1.54
SBT40 x SFC8-200	200	36	133	8	21	27	-	M6x1.0P	2	1.72
SBT40 x SFC10-130	130	42	93	10	24	32	-	M8x1.25P	2	1.66
SBT40 x SFC10-160	160	42	93	10	24	32	-	M8x1.25P	2	1.79
SBT40 x SFC10-200	200	42	133	10	24	32	-	M8x1.25P	2	1.97
SBT40 x SFC12-130	130	47	93	12	27	32	-	M10x1.5P	2	1.86
SBT40 x SFC12-160	160	47	93	12	27	32	-	M10x1.5P	2	1.99
SBT40 x SFC12-200	200	47	133	12	27	32	-	M10x1.5P	2	2.17
SBT40 x SFC14-130	130	47	93	14	27	34	-	M10x1.5P	2	1.94
SBT40 x SFC14-160	160	47	93	14	27	34	-	M10x1.5P	2	2.07
SBT40 x SFC14-200	200	47	133	14	27	34	-	M10x1.5P	2	2.25
SBT40 x SFC16-130	130	50	93	16	27	34	-	M12x1.75P	2	1.75
SBT40 x SFC16-160	160	50	93	16	27	34	-	M12x1.75P	2	1.91
SBT40 x SFC16-200	200	50	133	16	27	34	-	M12x1.75P	2	2.06
SBT40 x SFC18-130	130	50	98	18	33	42	-	M12x1.75P	2	2.31
SBT40 x SFC18-160	160	50	98	18	33	42	-	M12x1.75P	2	2.46
SBT40 x SFC18-200	200	50	138	18	33	42	-	M12x1.75P	2	2.61
SBT40 x SFC20-130	130	52	98	20	33	42	-	M16x2.0P	2	2.28
SBT40 x SFC20-160	160	52	98	20	33	42	-	M16x2.0P	2	2.43
SBT40 x SFC20-200	200	52	138	20	33	42	-	M16x2.0P	2	2.57

### 選配表 Option

拉頭 Pull Stud	加熱器 Hot-Air
	
B645-B647	B400

• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact 燒結式 Shrink-Fit



SBT

### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
SBT40 x SFC25-130	130	58	101	25	44	53	-	M20x2.0P	2	2.34
SBT40 x SFC25-160	160	58	131	25	44	53	-	M20x2.0P	2	2.85
SBT40 x SFC25-200	200	58	171	25	44	53	-	M20x2.0P	2	3.53
SBT40 x SFC32-130	130	58	101	32	44	53	--	M20x2.0P	2	2.21
SBT40 x SFC32-160	160	58	131	32	44	53	-	M20x2.0P	2	2.71
SBT40 x SFC32-200	200	58	171	32	44	53	-	M20x2.0P	2	3.39
SBT50 x SFC6-130	130	36	82	6	21	27	-	M5x0.8P	4	3.94
SBT50 x SFC6-160	160	36	82	6	21	27	-	M5x0.8P	4	4.07
SBT50 x SFC6-200	200	36	122	6	21	27	-	M5x0.8P	4	4.24
SBT50 x SFC8-130	130	36	82	8	21	27	-	M6x1.0P	2	3.93
SBT50 x SFC8-160	160	36	82	8	21	27	-	M6x1.0P	2	4.06
SBT50 x SFC8-200	200	36	122	8	21	27	-	M6x1.0P	2	4.23
SBT50 x SFC10-130	130	42	82	10	24	32	-	M8x1.25P	2	4.05
SBT50 x SFC10-160	160	42	82	10	24	32	-	M8x1.25P	2	4.18
SBT50 x SFC10-200	200	42	122	10	24	32	-	M8x1.25P	2	4.35
SBT50 x SFC12-130	130	47	82	12	24	32	-	M10x1.5P	2	4.04
SBT50 x SFC12-160	160	47	82	12	24	32	-	M10x1.5P	2	4.17
SBT50 x SFC12-200	200	47	122	12	24	32	-	M10x1.5P	2	4.34
SBT50 x SFC14-130	130	47	82	14	27	34	-	M10x1.5P	2	4.11
SBT50 x SFC14-160	160	47	82	14	27	34	-	M10x1.5P	2	4.24
SBT50 x SFC14-200	200	47	122	14	27	34	-	M10x1.5P	2	4.41
SBT50 x SFC16-130	130	50	82	16	27	34	-	M12x1.75P	2	4.09
SBT50 x SFC16-160	160	50	82	16	27	34	-	M12x1.75P	2	4.26
SBT50 x SFC16-200	200	50	122	16	27	34	-	M12x1.75P	2	4.43

### 選配表 Option

拉頭 Pull Stud	加熱器 Hot-Air
B645-B647	B400

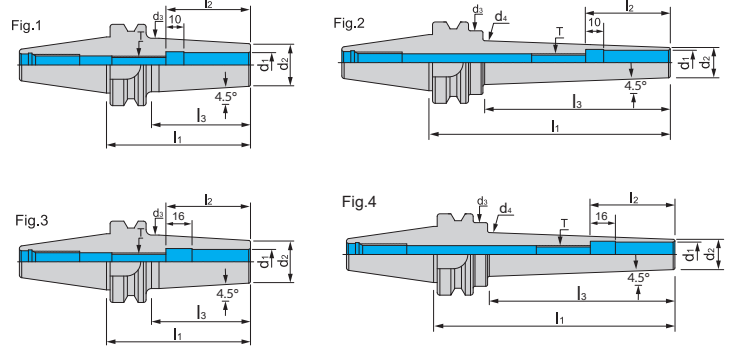
• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact

燒結式 Shrink-Fit



SBT



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$d_4$	T	Fig.	重量 (KGS) Weight
SBT50 x SFC18-130	130	50	82	18	33	42	-	M12x1.75P	2	4.34
SBT50 x SFC18-160	160	50	82	18	33	42	-	M12x1.75P	2	4.51
SBT50 x SFC18-200	200	50	122	18	33	42	-	M12x1.75P	2	4.30
SBT50 x SFC20-130	130	52	82	20	33	42	-	M16x2.0P	2	4.32
SBT50 x SFC20-160	160	52	82	20	33	42	-	M16x2.0P	2	4.53
SBT50 x SFC20-200	200	52	122	20	33	42	-	M16x2.0P	2	4.70
SBT50 x SFC25-130	130	58	82	25	44	53	-	M20x2.0P	2	4.78
SBT50 x SFC25-160	160	58	82	25	44	53	-	M20x2.0P	2	4.99
SBT50 x SFC25-200	200	58	122	25	44	53	-	M20x2.0P	2	5.16
SBT50 x SFC32-130	130	58	82	32	44	53	-	M20x2.0P	2	4.63
SBT50 x SFC32-160	160	58	82	32	44	53	-	M20x2.0P	2	4.84
SBT50 x SFC32-200	200	58	122	32	44	53	-	M20x2.0P	2	5.01

### 選配表 Option

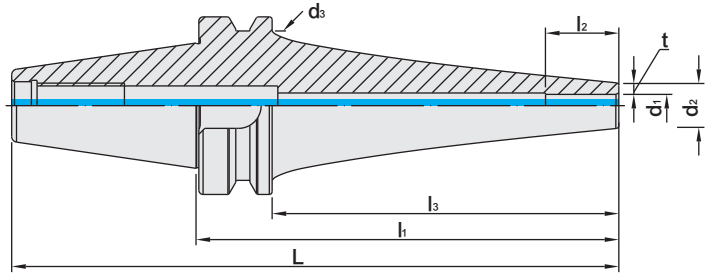
拉頭 Pull Stud	加熱器 Hot-Air
B645-B647	B400

• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit 雙面拘束 Dual Contact



**NEW**



SBT

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	t	重量 (KGS) Weight
SBT40-SFC4 - 150CUL	215.4	150	10	123	4	10	53	3	1.4
SBT40-SFC4 - 200CUL	265.4	200	10	173	4	10	53	3	1.7
SBT40-SFC4 - 250CUL	315.4	250	10	223	4	10	53	3	2.2
SBT40-SFC6 - 150CUL	215.4	150	26	123	6	13	53	3.5	1.5
SBT40-SFC6 - 200CUL	265.4	200	26	173	6	13	53	3.5	1.7
SBT40-SFC8 - 150CUL	215.4	250	26	123	8	16	53	4	1.6
SBT40-SFC8 - 200CUL	265.4	200	26	173	8	16	53	4	1.8
SBT40-SFC8 - 250CUL	315.4	250	26	223	8	16	53	4	2.0
SBT40-SFC10 - 150CUL	215.4	150	32	123	10	19	53	4.5	1.6
SBT40-SFC10 - 200CUL	265.4	200	32	173	10	19	53	4.5	1.8
SBT40-SFC10 - 250CUL	315.4	250	32	223	10	19	53	4.5	2.0
SBT40-SFC12 - 150CUL	215.4	150	37	123	12	22	53	5	1.7
SBT40-SFC12 - 200CUL	265.4	200	37	173	12	22	53	5	1.8
SBT40-SFC12 - 250CUL	315.4	250	37	223	12	22	53	5	2.0
SBT50-SFC4 - 150CUL	215.8	150	10	112	4	10	85	3	5.3
SBT50-SFC4 - 200CUL	301.8	200	10	162	4	10	85	3	5.8
SBT50-SFC4 - 250CUL	351.8	250	10	212	4	10	85	3	6.3
SBT50-SFC4 - 300CUL	401.8	300	10	262	4	10	85	3	6.7
SBT50-SFC6 - 150CUL	215.8	150	26	112	6	13	85	3.5	5.3
SBT50-SFC6 - 200CUL	301.8	200	26	162	6	13	85	3.5	5.9
SBT50-SFC6 - 250CUL	351.8	250	26	212	6	13	85	3.5	6.4
SBT50-SFC6 - 300CUL	401.8	300	26	262	6	13	85	3.5	6.8
SBT50-SFC8 - 150CUL	215.8	150	26	112	8	16	85	4	4.9
SBT50-SFC8 - 200CUL	301.8	200	26	162	8	16	85	4	5.5
SBT50-SFC8 - 250CUL	351.8	250	26	212	8	16	85	4	5.8
SBT50-SFC8 - 300CUL	401.8	300	26	262	8	16	85	4	6.1
SBT50-SFC10 - 150CUL	215.8	150	32	112	10	19	85	4.5	5.1
SBT50-SFC10 - 200CUL	301.8	200	32	162	10	19	85	4.5	5.4
SBT50-SFC10 - 250CUL	351.8	250	32	212	10	19	85	4.5	6.1
SBT50-SFC10 - 300CUL	401.8	300	32	262	10	19	85	4.5	6.4
SBT50-SFC12 - 150CUL	215.8	150	37	112	12	22	85	5	5.1
SBT50-SFC12 - 200CUL	301.8	200	37	162	12	22	85	5	5.6
SBT50-SFC12 - 250CUL	351.8	250	37	212	12	22	85	5	5.8
SBT50-SFC12 - 300CUL	401.8	300	37	262	12	22	85	5	6.3

• 搭配熱風式加熱器 B399-B400

• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



SBT



Fig.1

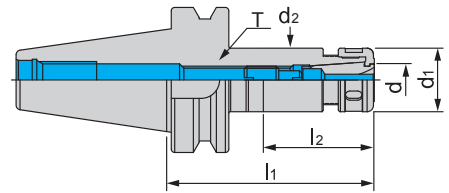
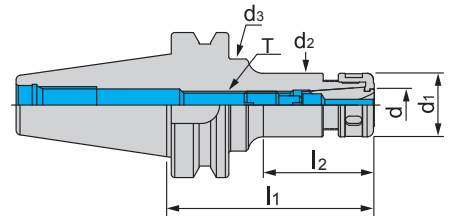


Fig.2



### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 (延伸 4D 長度處)
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5 $\mu$ .
- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	$l_1$	$l_2$	$d$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
SBT30 x SKS6-45	45	22	$\varnothing 3 \sim \varnothing 6$	18	18	-	M8x1.25P	1	0.80
SBT30 x SKS6-60	60	33	$\varnothing 3 \sim \varnothing 6$	18	18	-	M8x1.25P	1	0.90
SBT30 x SKS10-45	45	22	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	0.80
SBT30 x SKS10-60	60	33	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	0.90
SBT30 x SKS10-90	90	63	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	1.00
SBT30 x SKS13-60	60	35	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.10
SBT30 x SKS13-90	90	65	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	0.78
SBT30 x SKS13-120	120	95	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.20
SBT30 x SKS16-60	60	36	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	0.76
SBT30 x SKS16-90	90	66	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.02
SBT30 x SKS20-60	60	37	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	45	M12x1.75P	2	0.68
SBT30 x SKS20-90	90	67	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	45	M12x1.75P	2	1.02
SBT40 x SKS6-90	90	44	$\varnothing 3 \sim \varnothing 6$	18	18	32	M8x1.25P	2	1.20
SBT40 x SKS6-120	120	74	$\varnothing 3 \sim \varnothing 6$	18	18	32	M8x1.25P	2	1.21
SBT40 x SKS10-60	60	22	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	1.36
SBT40 x SKS10-90	90	45	$\varnothing 3 \sim \varnothing 10$	30	27.6	40	M12x1.75P	2	1.20
SBT40 x SKS10-120	120	74	$\varnothing 3 \sim \varnothing 10$	30	27.6	40	M12x1.75P	2	1.40
SBT40 x SKS13-60	60	30	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.16
SBT40 x SKS13-90	90	60	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.32
SBT40 x SKS13-120	120	90	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.56
SBT40 x SKS16-60	60	23.2	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.14
SBT40 x SKS16-90	90	58	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.60
SBT40 x SKS16-120	120	90	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.70
SBT40 x SKS20-60	60	32	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	1.18
SBT40 x SKS20-90	90	60	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	1.56
SBT40 x SKS20-120	120	88	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	1.96
SBT40 x SKS25-90	90	61	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	1.70
SBT40 x SKS25-120	120	91	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	1.80

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651

• 長度單位 Unit of Length (mm)



雙面拘束 Dual Contact



Fig.1

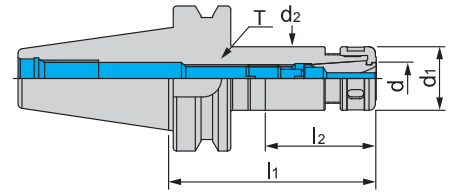
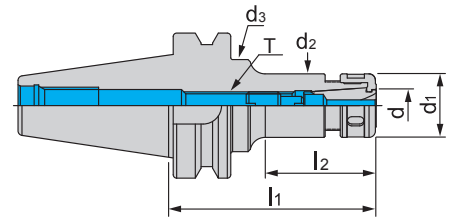


Fig.2



SBT

### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 ( 延伸 4D 長度處 )
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5 $\mu$ .
- Balance of G2.5 at 25000rpm.

規格 Spec.	$l_1$	$l_2$	$d$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
SBT50 x SKS6-90	90	42	$\varnothing 3 \sim \varnothing 6$	18	18	-	M8x1.25P	1	4.00
SBT50 x SKS6-120	120	59	$\varnothing 3 \sim \varnothing 6$	18	18	32	M8x1.25P	2	4.20
SBT50 x SKS10-105	105	57	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	4.50
SBT50 x SKS10-150	150	94	$\varnothing 3 \sim \varnothing 10$	30	27	40	M12x1.75P	2	4.60
SBT50 x SKS10-165	165	108	$\varnothing 3 \sim \varnothing 10$	30	27	40	M12x1.75P	2	4.30
SBT50 x SKS10-200	200	143	$\varnothing 3 \sim \varnothing 10$	30	27	36	M12x1.75P	2	5.20
SBT50 x SKS10-250	250	193	$\varnothing 3 \sim \varnothing 10$	30	27	40	M12x1.75P	2	5.60
SBT50 x SKS13-105	105	62	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	4.12
SBT50 x SKS13-135	135	92	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	4.70
SBT50 x SKS13-165	165	92	$\varnothing 3 \sim \varnothing 13$	35	33	45	M12x1.75P	2	4.46
SBT50 x SKS13-200	200	92	$\varnothing 3 \sim \varnothing 13$	35	33	45	M12x1.75P	2	5.20
SBT50 x SKS13-250	250	92	$\varnothing 3 \sim \varnothing 13$	35	33	45	M12x1.75P	2	5.70
SBT50 x SKS16-105	105	57	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	4.15
SBT50 x SKS16-150	150	98	$\varnothing 3 \sim \varnothing 16$	40	40	52	M18x1.5P	2	4.70
SBT50 x SKS16-165	165	108	$\varnothing 3 \sim \varnothing 16$	40	40	52	M18x1.5P	2	4.50
SBT50 x SKS16-200	200	92	$\varnothing 3 \sim \varnothing 16$	40	40	52	M18x1.5P	2	5.22
SBT50 x SKS16-250	250	92	$\varnothing 3 \sim \varnothing 16$	40	40	52	M18x1.5P	2	6.00
SBT50 x SKS20-105	105	62	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	4.40
SBT50 x SKS20-135	135	92	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	4.60
SBT50 x SKS20-165	165	122	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	5.16
SBT50 x SKS20-200	200	157	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	5.40
SBT50 x SKS20-250	250	207	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	6.10
SBT50 x SKS25-105	105	62	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	4.50
SBT50 x SKS25-150	150	107	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	4.80
SBT50 x SKS25-200	200	157	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	6.00
SBT50 x SKS25-250	250	207	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	6.70

### 選配表 Option

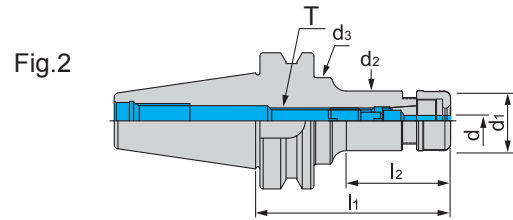
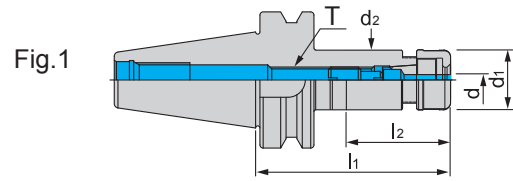
拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651

• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



SBT



### 特點 Feature

- 偏擺精度 :5 $\mu$  以下 (延伸 4D 長度處)
- 標準動平衡 :G2.5 25000rpm

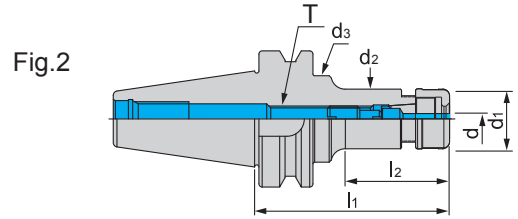
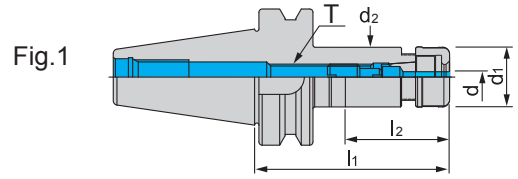
- Run-out accuracy: within 5 $\mu$ .
- Balance of G2.5 at 25000rpm.

規格 Spec.	$l_1$	$l_2$	d	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
SBT30 x SKS6-45-HS	45	14.5	$\varnothing 3 \sim \varnothing 6$	18	18	-	M8x1.25P	1	0.80
SBT30 x SKS6-60-HS	60	25	$\varnothing 3 \sim \varnothing 6$	18	18	-	M8x1.25P	1	0.90
SBT30 x SKS10-45-HS	45	14.5	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	0.80
SBT30 x SKS10-60-HS	60	25	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	0.90
SBT30 x SKS10-90-HS	90	55	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	0.84
SBT30 x SKS13-60-HS	60	35	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.10
SBT30 x SKS13-90-HS	90	65	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	0.70
SBT30 x SKS13-120-HS	120	95	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.20
SBT30 x SKS16-60-HS	60	27.7	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.75P	1	1.00
SBT30 x SKS16-90-HS	90	57.7	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.75P	1	1.20
SBT30 x SKS20-60-HS	60	37	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M12x1.75P	1	0.70
SBT30 x SKS20-90-HS	90	67	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M12x1.75P	1	1.20
SBT30 x SKS25-90-HS	90	57.2	$\varnothing 3 \sim \varnothing 25.4$	55.1	45	-	M28x2.0P	1	1.40
SBT40 x SKS6-90-HS	90	36.352	$\varnothing 3 \sim \varnothing 6$	18	18	32	M8x1.25P	2	1.20
SBT40 x SKS6-120-HS	120	68.476	$\varnothing 3 \sim \varnothing 6$	18	18	32	M8x1.25P	2	1.42
SBT40 x SKS10-60-HS	60	22	$\varnothing 3 \sim \varnothing 10$	30	27.6	-	M12x1.75P	1	1.40
SBT40 x SKS10-90-HS	90	37.721	$\varnothing 3 \sim \varnothing 10$	30	27.6	40	M12x1.75P	2	1.50
SBT40 x SKS10-120-HS	120	68.499	$\varnothing 3 \sim \varnothing 10$	30	27.6	40	M12x1.75P	2	1.60
SBT40 x SKS13-60-HS	60	28	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.20
SBT40 x SKS13-90-HS	90	58	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.32
SBT40 x SKS13-120-HS	120	88	$\varnothing 3 \sim \varnothing 13$	35	33	-	M12x1.75P	1	1.60
SBT40 x SKS16-60-HS	60	23.2	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.40
SBT40 x SKS16-90-HS	90	48.7	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.64
SBT40 x SKS16-120-HS	120	78.876	$\varnothing 3 \sim \varnothing 16$	40	40	-	M18x1.5P	1	1.70
SBT40 x SKS20-60-HS	60	32	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	1.30
SBT40 x SKS20-90-HS	90	60	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	1.60
SBT40 x SKS20-120-HS	120	90	$\varnothing 3 \sim \varnothing 20$	48.5	48.5	-	M22x1.5P	1	2.00
SBT40 x SKS25-90-HS	90	50.7	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	1.70
SBT40 x SKS25-120-HS	120	80.7	$\varnothing 3 \sim \varnothing 25.4$	55.1	55	-	M28x2.0P	1	2.26

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651

• 長度單位 Unit of Length (mm)



SBT

### 特點 Feature

- 偏擺精度 :5μ 以下 (延伸 4D 長度處)
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5μ.
- Balance of G2.5 at 25000rpm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	Fig.	重量 (KGS) Weight
SBT50 x SKS6-90-HS	90	42	Ø3~Ø6	18	18	-	M8x1.25P	1	4.00
SBT50 x SKS6-120-HS	120	59	Ø3~Ø6	18	18	32	M8x1.25P	2	4.20
SBT50 x SKS10-105-HS	105	57	Ø3~Ø10	30	27.6	-	M12x1.75P	1	4.50
SBT50 x SKS10-150-HS	150	94	Ø3~Ø10	30	27	40	M12x1.75P	2	4.60
SBT50 x SKS10-165-HS	165	108	Ø3~Ø10	30	27	40	M12x1.75P	2	5.00
SBT50 x SKS10-200-HS	200	143	Ø3~Ø10	30	27	36	M12x1.75P	2	5.20
SBT50 x SKS10-250-HS	250	193	Ø3~Ø10	30	27	40	M12x1.75P	2	5.60
SBT50 x SKS13-105-HS	105	62	Ø3~Ø13	35	33	-	M12x1.75P	1	4.50
SBT50 x SKS13-135-HS	135	92	Ø3~Ø13	35	33	-	M12x1.75P	1	4.70
SBT50 x SKS13-165-HS	165	92	Ø3~Ø13	35	33	45	M12x1.75P	2	4.90
SBT50 x SKS13-200-HS	200	92	Ø3~Ø13	35	33	45	M12x1.75P	2	5.20
SBT50 x SKS13-250-HS	250	92	Ø3~Ø13	35	33	45	M12x1.75P	2	5.70
SBT50 x SKS16-105-HS	105	57	Ø3~Ø16	40	40	-	M18x1.5P	1	4.50
SBT50 x SKS16-150-HS	150	98	Ø3~Ø16	40	40	52	M18x1.5P	2	4.70
SBT50 x SKS16-165-HS	165	108	Ø3~Ø16	40	40	52	M18x1.5P	2	5.00
SBT50 x SKS16-200-HS	200	92	Ø3~Ø16	40	40	52	M18x1.5P	2	5.50
SBT50 x SKS16-250-HS	250	92	Ø3~Ø16	40	40	52	M18x1.5P	2	6.00
SBT50 x SKS20-105-HS	105	62	Ø3~Ø20	48.5	48.5	-	M22x1.5P	1	4.30
SBT50 x SKS20-135-HS	135	92	Ø3~Ø20	48.5	48.5	-	M22x1.5P	1	4.60
SBT50 x SKS20-165-HS	165	122	Ø3~Ø20	48.5	48.5	-	M22x1.5P	1	5.00
SBT50 x SKS20-200-HS	200	157	Ø3~Ø20	48.5	48.5	-	M22x1.5P	1	5.40
SBT50 x SKS20-250-HS	250	207	Ø3~Ø20	48.5	48.5	-	M22x1.5P	1	6.10
SBT50 x SKS25-105-HS	105	62	Ø3~Ø25.4	55.1	55	-	M28x2.0P	1	4.50
SBT50 x SKS25-150-HS	150	107	Ø3~Ø25.4	55.1	55	-	M28x2.0P	1	5.28
SBT50 x SKS25-200-HS	200	157	Ø3~Ø25.4	55.1	55	-	M28x2.0P	1	6.00
SBT50 x SKS25-250-HS	250	207	Ø3~Ø25.4	55.1	55	-	M28x2.0P	1	6.70

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B627	B639	B651

• 長度單位 Unit of Length (mm)



# SBT/MLK 法蘭加厚型強力銑削夾頭

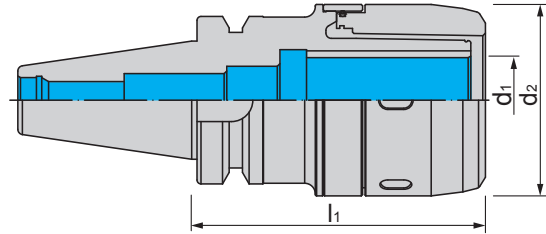
## SBT/MLK DUAL DRIVE FORCE COLLET CHUCK

雙面拘束 Dual Contact

防塵設計 Dust-proof design

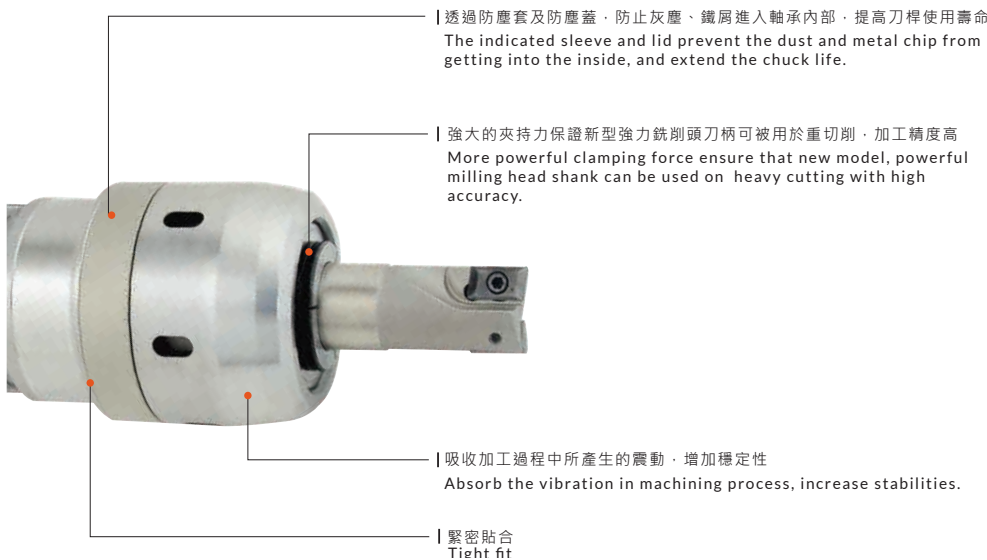


SBT



規格 Spec.	$l_1$	$d_1$	$d_2$	重量 (KGS) Weight
SBT30-MLK12-70	70	12	42	1.03
SBT30-MLK16-85	85	16	48	1.31
SBT30-MLK20-90	90	20	56.5	1.58
SBT30-MLK25-90	90	25	60	-
SBT40-MLK12-80	80	12	42	1.72
SBT40-MLK16-80	80	16	48	1.86
SBT40-MLK20-90	90	20	56.5	2.00
SBT40-MLK25-95	95	25	60	2.28
SBT40-MLK32-105	105	32	72	3.00
SBT40-MLK32-135	135	32	72	2.70
SBT50-MLK12-100	100	12	42	4.56
SBT50-MLK16-100	100	16	48	4.72
SBT50-MLK20-100	100	20	56.5	4.87
SBT50-MLK25-100	100	25	60	4.88
SBT50-MLK32-110	110	32	72	5.64
SBT50-MLK32-165	165	32	72	7.10
SBT50-MLK42-115	115	42	90	6.19

-MLK32 扳手與 EOC32 扳手、MLD32 扳手共用  
-MLK32 and MLK32、MLD32 spanner can be used in common.



### 選配表 Option

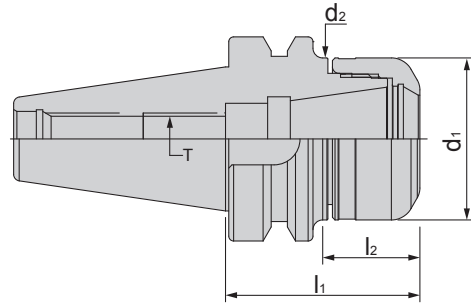
拉頭 Pull Stud	筒夾 Collet	扳手 Spanner
B645-B647	B631	B651



• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact

精度 Accuracy : <3μm



SBT

### 特點 Feature

- 標準動平衡 :G2.5 25000rpm

- Dynamical balancing G2.5 at 25000rpm.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	T	夾持範圍 Clamp Range	重量 (KGS) Weight
SBT30xPNER16-50	50	25	30	30	M10x1.5P	3.0~10	0.70
SBT30xPNER16-100	100	75	30	30	M10x1.5P	3.0~10	0.87
SBT30xPNER20-60	60	37	32	32	M12x1.75P	3.0~13	0.74
SBT30xPNER20-100	100	77	32	32	M12x1.75P	3.0~13	0.95
SBT30xPNER25-60	60	37	40	40	M16x2.0P	3.0~16	0.90
SBT30xPNER25-100	100	77	40	40	M16x2.0P	3.0~16	1.17
SBT30xPNER32-60	60	33	50	50	M16x2.0P	3.0~20	1.00
SBT30xPNER32-100	100	73	50	50	M16x2.0P	3.0~20	1.40
SBT40xPNER16-70	70	40	30	30	M10x1.5P	3.0~10	1.40
SBT40xPNER16-100	100	70	30	30	M10x1.5P	3.0~10	1.59
SBT40xPNER16-130	130	100	30	30	M10x1.5P	3.0~10	1.76
SBT40xPNER16-160	160	130	30	30	M10x1.5P	3.0~10	1.88
SBT40xPNER20-70	70	40	32	32	M12x1.75P	3.0~13	1.42
SBT40xPNER20-100	100	70	32	32	M12x1.75P	3.0~13	1.58
SBT40xPNER20-130	130	100	32	32	M12x1.75P	3.0~13	1.78
SBT40xPNER20-160	160	130	32	32	M12x1.75P	3.0~13	1.92
SBT40xPNER25-70	70	40	40	40	M16x2.0P	3.0~16	1.52
SBT40xPNER25-100	100	70	40	40	M16x2.0P	3.0~16	1.78
SBT40xPNER25-130	130	100	40	40	M16x2.0P	3.0~16	2.04
SBT40xPNER25-160	160	130	40	40	M16x2.0P	3.0~16	2.30
SBT40xPNER32-70	70	40	50	50	M16x2.0P	3.0~20	1.62
SBT40xPNER32-100	100	70	50	50	M16x2.0P	3.0~20	2.04
SBT40xPNER32-130	130	100	50	50	M16x2.0P	3.0~20	2.46
SBT40xPNER32-160	160	130	50	50	M16x2.0P	3.0~20	2.90

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B637-B638	B651



• 長度單位 Unit of Length (mm)



# SBT/PNER 法蘭加厚型立銑刀夾頭

## SBT/PNER DUAL DRIVE COLLET CHUCK

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PAT.NO:M311791  
PAT.NO:M501316  
PAT.NO:3128766  
PAT.NO:20-0433603

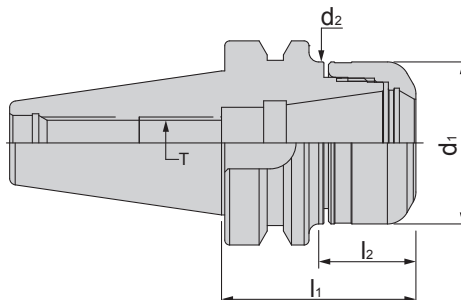
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雙面拘束 Dual Contact

精度 Accuracy : <3μm



SBT



### 特點 Feature

- 標準動平衡 :G2.5 25000rpm

- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
SBT40xPNER40-70	70	40	63	63	M20x2.0P	6.0~26	1.80
SBT40xPNER40-100	100	70	63	63	M20x2.0P	6.0~26	2.40
SBT50xPNER16-70	70	29	30	30	M10x1.5P	3.0~10	3.00
SBT50xPNER16-100	100	59	30	30	M10x1.5P	3.0~10	4.28
SBT50xPNER16-130	130	82	30	30	M10x1.5P	3.0~10	4.40
SBT50xPNER16-160	160	112	30	30	M10x1.5P	3.0~10	4.52
SBT50xPNER20-70	70	29	32	32	M12x1.75P	3.0~13	4.13
SBT50xPNER20-100	100	59	32	32	M12x1.75P	3.0~13	4.21
SBT50xPNER20-130	130	82	32	32	M12x1.75P	3.0~13	4.42
SBT50xPNER20-160	160	112	32	32	M12x1.75P	3.0~13	4.60
SBT50xPNER25-70	70	29	40	40	M16x2.0P	3.0~16	4.14
SBT50xPNER25-100	100	59	40	40	M16x2.0P	3.0~16	4.36
SBT50xPNER25-130	130	82	40	40	M16x2.0P	3.0~16	4.64
SBT50xPNER25-160	160	112	40	40	M16x2.0P	3.0~16	4.84
SBT50xPNER32-70	70	31	50	50	M16x2.0P	3.0~20	4.20
SBT50xPNER32-100	100	61	50	50	M16x2.0P	3.0~20	4.56
SBT50xPNER32-130	130	82	50	50	M16x2.0P	3.0~20	5.02
SBT50xPNER32-160	160	112	50	50	M16x2.0P	3.0~20	5.40
SBT50xPNER40-80	80	39	63	63	M20x2.0P	6.0~26	4.42
SBT50xPNER40-100	100	52	63	63	M20x2.0P	6.0~26	4.88
SBT50xPNER40-130	130	82	63	63	M20x2.0P	6.0~26	5.56
SBT50xPNER40-160	160	112	63	63	M20x2.0P	6.0~26	6.22

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B637-B638	B651



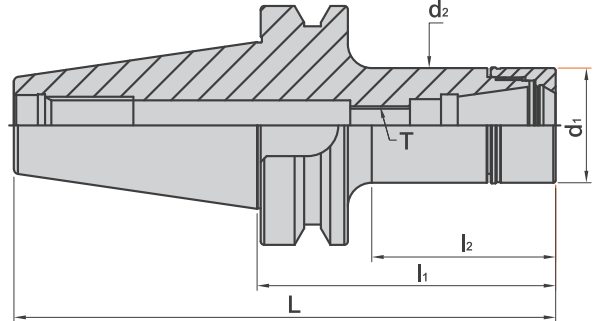
• 長度單位 Unit of Length (mm)



雙面拘束 Dual Contact



**NEW**



SBT

### 特點 Feature

- 標準動平衡 :G2.5 25000rpm

- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
SBT30xPro.E16-70	118.4	70	43	30	30	M10x1.5P	1~10	0.58
SBT30xPro.E16-100	148.4	100	73	30	30	M10x1.5P	1~10	0.73
SBT30xPro.E16-125	173.4	125	98	30	30	M10x1.5P	1~10	0.85
SBT30xPro.E16-150	198.4	150	123	30	30	M10x1.5P	1~10	0.97
SBT30xPro.E20-70	118.4	70	44	35	35	M12x1.75P	1~13	0.65
SBT30xPro.E20-100	148.4	100	74	35	35	M12x1.75P	1~13	0.85
SBT30xPro.E20-125	173.4	125	99	35	35	M12x1.75P	1~13	1.02
SBT30xPro.E20-150	198.4	150	124	35	35	M12x1.75P	1~13	1.19
SBT30xPro.E25-70	118.4	70	47.5	42	42	M16x2.0P	1~16	0.73
SBT30xPro.E25-100	148.4	100	77.5	42	42	M16x2.0P	1~16	1.03
SBT30xPro.E25-125	173.4	125	102.5	42	42	M16x2.0P	1~16	1.28
SBT30xPro.E25-150	198.4	150	127.5	42	42	M16x2.0P	1~16	1.53
SBT30xPro.E32-70	118.4	70	47.5	50	50	M16x2.0P	2~20	0.75
SBT30xPro.E32-100	148.4	100	77.5	50	50	M16x2.0P	2~20	1.14
SBT30xPro.E32-125	173.4	125	102.5	50	50	M16x2.0P	2~20	1.47
SBT30xPro.E32-150	198.4	150	127.5	50	50	M16x2.0P	2~20	1.80
SBT40xPro.E16-70	135.4	70	38	30	30	M10x1.5P	1~10	1.14
SBT40xPro.E16-100	165.4	100	63	30	30	M10x1.5P	1~10	1.28
SBT40xPro.E16-125	190.4	125	88	30	30	M10x1.5P	1~10	1.38
SBT40xPro.E16-150	215.4	150	113	30	30	M10x1.5P	1~10	1.49
SBT40xPro.E16-200	265.4	200	163	30	30	M10x1.5P	1~10	1.70
SBT40xPro.E20-70	135.4	70	35	35	35	M12x1.75P	1~13	1.19
SBT40xPro.E20-100	165.4	100	65	35	35	M12x1.75P	1~13	1.38
SBT40xPro.E20-125	190.4	125	90	35	35	M12x1.75P	1~13	1.54
SBT40xPro.E20-150	215.4	150	115	35	35	M12x1.75P	1~13	1.69
SBT40xPro.E20-200	265.4	200	165	35	35	M12x1.75P	1~13	2.00
SBT40xPro.E25-70	135.4	70	40	42	42	M16x2.0P	1~16	1.26
SBT40xPro.E25-100	165.4	100	70	42	42	M16x2.0P	1~16	1.54
SBT40xPro.E25-125	190.4	125	95	42	42	M16x2.0P	1~16	1.78
SBT40xPro.E25-150	215.4	150	120	42	42	M16x2.0P	1~16	2.02

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B638	B651

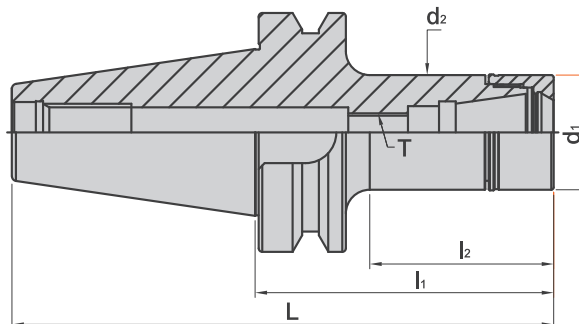
• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



**NEW**

SBT



### 特點 Feature

- 標準動平衡 :G2.5 25000rpm

- Dynamic balancing G2.5 at 25000rpm.

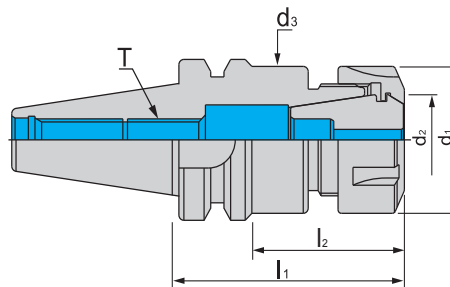
規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
SBT40xPro.E25-200	265.4	200	170	42	42	M16x2.0P	1~16	2.49
SBT40xPro.E32-70	135.4	70	40	50	50	M16x2.0P	2~20	1.27
SBT40xPro.E32-100	165.4	100	70	50	50	M16x2.0P	2~20	1.65
SBT40xPro.E32-125	190.4	125	95	50	50	M16x2.0P	2~20	1.97
SBT40xPro.E32-150	215.4	150	120	50	50	M16x2.0P	2~20	2.29
SBT50xPro.E16-70	171.8	70	29	30	30	M10x1.5P	1~10	3.68
SBT50xPro.E16-100	201.8	100	52	30	30	M10x1.5P	1~10	3.78
SBT50xPro.E16-125	226.8	125	77	30	30	M10x1.5P	1~10	3.92
SBT50xPro.E16-150	251.8	150	102	30	30	M10x1.5P	1~10	4.03
SBT50xPro.E16-200	301.8	200	147	30	30	M10x1.5P	1~10	4.27
SBT50xPro.E16-250	351.8	250	197	30	30	M10x1.5P	1~10	4.48
SBT50xPro.E20-70	171.8	70	29	35	35	M12x1.75P	1~13	3.70
SBT50xPro.E20-100	201.8	100	52	35	35	M12x1.75P	1~13	3.86
SBT50xPro.E20-125	226.8	125	77	35	35	M12x1.75P	1~13	4.06
SBT50xPro.E20-150	251.8	150	102	35	35	M12x1.75P	1~13	4.22
SBT50xPro.E20-200	301.8	200	147	35	35	M12x1.75P	1~13	4.56
SBT50xPro.E20-250	351.8	250	197	35	35	M12x1.75P	1~13	4.87
SBT50xPro.E25-70	171.8	70	31	42	42	M16x2.0P	1~16	3.74
SBT50xPro.E25-100	201.8	100	52	42	42	M16x2.0P	1~16	4.00
SBT50xPro.E25-125	226.8	125	77	42	42	M16x2.0P	1~16	4.20
SBT50xPro.E25-150	251.8	150	102	42	42	M16x2.0P	1~16	4.40
SBT50xPro.E25-200	301.8	200	152	42	42	M16x2.0P	1~16	4.80
SBT50xPro.E25-250	351.8	250	197	42	42	M16x2.0P	1~16	5.24
SBT50xPro.E32-70	171.8	70	31	50	50	M16x2.0P	2~20	3.74
SBT50xPro.E32-100	201.8	100	52	50	50	M16x2.0P	2~20	4.10
SBT50xPro.E32-125	226.8	125	77	50	50	M16x2.0P	2~20	4.38
SBT50xPro.E32-150	251.8	150	102	50	50	M16x2.0P	2~20	4.66
SBT50xPro.E32-200	301.8	200	152	50	50	M16x2.0P	2~20	5.23
SBT50xPro.E32-250	351.8	250	197	50	50	M10x1.5P	2~20	5.83

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B625-B626	B638	B651

• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



SBT

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	夾持範圍 Clamp Range	重量 (KGS) Weight
SBT30 x ER16A-50	50	27	28	16	28	M10x1.5P	Ø1~Ø10	0.45
SBT30 x ER16A-60	60	35	28	16	28	M10x1.5P	Ø1~Ø10	0.50
SBT30 x ER16A-70	70	40	28	16	28	M10x1.5P	Ø1~Ø10	0.55
SBT30 x ER16A-100	100	70	28	16	28	M10x1.5P	Ø1~Ø10	0.57
SBT30 x ER16A-120	120	93	28	16	28	M10x1.5P	Ø1~Ø10	0.70
SBT30 x ER20A-50	50	28	34	20	34	M12x1.75P	Ø1~Ø13	0.95
SBT30 x ER20A-70	70	45	34	20	34	M12x1.75P	Ø1~Ø13	0.61
SBT30 x ER20A-100	100	75	34	20	34	M12x1.75P	Ø1~Ø13	0.80
SBT30 x ER20A-135	135	110	34	20	34	M12x1.75P	Ø1~Ø13	1.15
SBT30 x ER25-70	70	46	42	25	42	M16x2.0P	Ø1~Ø16	0.68
SBT30 x ER25-135	135	111	42	25	42	M16x2.0P	Ø1~Ø16	1.47
SBT30 x ER32-70	70	48	50	32	45	M16x2.0P	Ø2~Ø20	0.69
SBT30 x ER32-100	100	78	50	32	45	M16x2.0P	Ø2~Ø20	1.04
SBT30 x ER40-80	80	58	63	40	53	M16x2.0P	Ø3~Ø26	0.94
SBT40 x ER16A-70	70	40	28	16	28	M10x1.5P	Ø1~Ø10	1.16
SBT40 x ER16A-100	100	63	28	16	28	M10x1.5P	Ø1~Ø10	1.29
SBT40 x ER16A-125	125	88	28	16	28	M10x1.5P	Ø1~Ø10	1.36
SBT40 x ER16A-150	150	103	28	16	28	M10x1.5P	Ø1~Ø10	1.50
SBT40 x ER16A-180	180	143	28	16	28	M10x1.5P	Ø1~Ø10	2.00
SBT40 x ER20A-70	70	40	34	20	34	M12x1.75P	Ø1~Ø13	1.19
SBT40 x ER20A-100	100	63	34	20	34	M12x1.75P	Ø1~Ø13	1.40
SBT40 x ER20A-135	135	98	34	20	34	M12x1.75P	Ø1~Ø13	1.69
SBT40 x ER20A-150	150	113	34	20	34	M12x1.75P	Ø1~Ø13	1.78
SBT40 x ER25-70	70	40	42	25	42	M16x2.0P	Ø1~Ø16	1.24
SBT40 x ER25-100	100	70	42	25	42	M16x2.0P	Ø1~Ø16	1.52
SBT40 x ER25-125	125	95	42	25	42	M16x2.0P	Ø1~Ø16	1.76
SBT40 x ER25-150	150	115	42	25	42	M16x2.0P	Ø1~Ø16	2.11
SBT40 x ER32-70	70	40	50	32	45	M16x2.0P	Ø2~Ø20	1.92
SBT40 x ER32-100	100	70	50	32	45	M16x2.0P	Ø2~Ø20	1.70
SBT40 x ER32-150	150	118	50	32	45	M16x2.0P	Ø2~Ø20	2.49
SBT40 x ER40-80	80	53	63	40	53	-	Ø3~Ø26	1.49
SBT40 x ER40-100	100	73	63	40	53	M20x2.0P	Ø3~Ø26	1.90
SBT40 x ER40-120	120	93	63	40	53	M20x2.0P	Ø3~Ø26	2.45
SBT40 x ER40-150	150	123	63	40	53	M20x2.0P	Ø3~Ø26	3.05
SBT40 x ER50-85	85	58	78	50	60	M24x2.0P	Ø5~Ø34	1.70
SBT40 x ER50-100	100	73	78	50	60	M24x2.0P	Ø5~Ø34	2.01

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B612	B634	B650

• 長度單位 Unit of Length (mm)

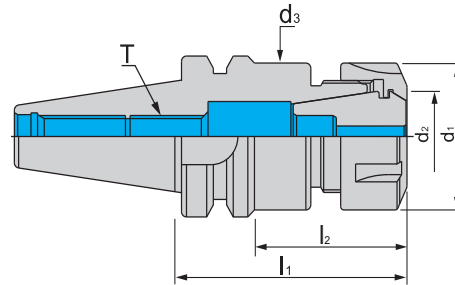


# SBT/ER 法蘭加厚型立銑刀夾頭

## SBT/ER DUAL DRIVE COLLET CHUCK

PAT.NO: M298033 PAT.NO: ZL200620132261.0  
 PAT.NO: M311791 PAT.NO: 696550  
 DIN-6388 PAT.NO: 3128766 PAT.NO: TR 2007 02945 Y  
 DIN-ISO-10897 PAT.NO: 20-0433603 PAT.NO: N.0000266731

雙面拘束 Dual Contact



SBT

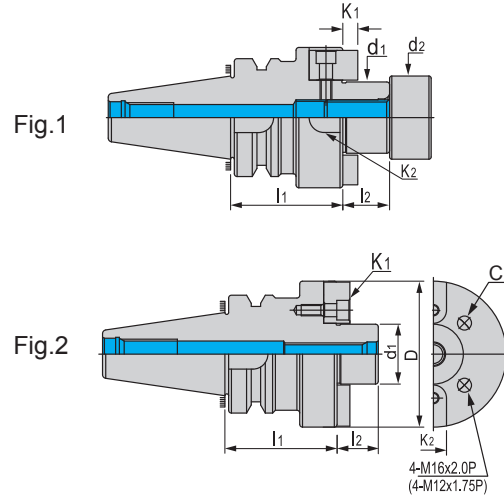
規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	$d_3$	T	夾持範圍 Clamp Range	重量 (KGS) Weight
SBT50 x ER16A-70	70	28	28	16	28	M10x1.5P	Ø1~Ø10	4.10
SBT50 x ER16A-90	90	47	28	16	28	M10x1.5P	Ø1~Ø10	4.16
SBT50 x ER16A-105	105	57	28	16	28	M10x1.5P	Ø1~Ø10	4.19
SBT50 x ER16A-135	135	87	28	16	28	M10x1.5P	Ø1~Ø10	4.40
SBT50 x ER16A-150	150	102	28	16	28	M10x1.5P	Ø1~Ø10	4.50
SBT50 x ER16A-165	165	117	28	16	28	M10x1.5P	Ø1~Ø10	4.36
SBT50 x ER20A-70	70	29	34	20	34	M12x1.75P	Ø1~Ø13	4.09
SBT50 x ER20A-90	90	47	34	20	34	M12x1.75P	Ø1~Ø13	4.18
SBT50 x ER20A-105	105	57	34	20	34	M12x1.75P	Ø1~Ø13	4.22
SBT50 x ER20A-135	135	87	34	20	34	M12x1.75P	Ø1~Ø13	4.52
SBT50 x ER20A-150	150	102	34	20	34	M12x1.75P	Ø1~Ø13	4.47
SBT50 x ER20A-165	165	117	34	20	34	M12x1.75P	Ø1~Ø13	4.55
SBT50 x ER20A-200	200	152	34	20	34	M12x1.75P	Ø1~Ø13	4.90
SBT50 x ER25-70	70	29	42	25	42	M16x2.0P	Ø1~Ø16	4.16
SBT50 x ER25-105	105	57	42	25	42	M16x2.0P	Ø1~Ø16	4.45
SBT50 x ER25-135	135	87	42	25	42	M16x2.0P	Ø1~Ø16	4.57
SBT50 x ER25-165	165	117	42	25	42	M16x2.0P	Ø1~Ø16	4.89
SBT50 x ER32-80	80	39	50	32	50	M16x2.0P	Ø2~Ø20	4.21
SBT50 x ER32-100	100	57	50	32	50	M16x2.0P	Ø2~Ø20	4.46
SBT50 x ER32-120	120	72	50	32	50	M16x2.0P	Ø2~Ø20	4.66
SBT50 x ER32-150	150	102	50	32	50	M16x2.0P	Ø2~Ø20	5.01
SBT50 x ER32-200	200	152	50	32	50	M16x2.0P	Ø2~Ø20	5.71
SBT50 x ER40-80	80	39	63	40	63	M20x2.0P	Ø3~Ø26	4.26
SBT50 x ER40-100	100	57	63	40	63	M20x2.0P	Ø3~Ø26	4.71
SBT50 x ER40-120	120	72	63	40	63	M20x2.0P	Ø3~Ø26	5.05
SBT50 x ER40-135	135	87	63	40	63	M20x2.0P	Ø3~Ø26	5.36
SBT50 x ER40-150	150	102	63	40	63	M20x2.0P	Ø3~Ø26	5.76
SBT50 x ER50-90	90	49	78	50	78	M24x2.0P	Ø5~Ø34	4.45
SBT50 x ER50-120	120	79	78	50	78	M24x2.0P	Ø5~Ø34	5.40
SBT50 x ER50-165	165	124	78	50	78	M24x2.0P	Ø5~Ø34	7.10

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B645-B647	B612	B634	B650

• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



SBT

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	K <sub>1</sub>	K <sub>2</sub>	C	Fig.	重量 (KGS) Weight
SBT30 x FMA25.4-45	45	20	50	25.4	31.5	4.52	9.52	-	1	1.10
SBT30 x FMA25.4-60	60	20	50	25.4	31.5	4.52	9.52	-	1	1.30
SBT30 x FMA31.75-45	45	22	60	31.75	41	6.7	12.7	-	1	1.16
SBT40 x FMA25.4-45	45	20	50	25.4	31.5	4.52	9.52	-	1	1.44
SBT40 x FMA25.4-60	60	20	50	25.4	31.5	4.52	9.52	-	1	1.66
SBT40 x FMA25.4-90	90	20	50	25.4	31.5	4.52	9.52	-	1	2.18
SBT40 x FMA25.4-105	105	20	50	25.4	31.5	4.52	9.52	-	1	2.39
SBT40 x FMA31.75-45	45	22	60	31.75	41	6.7	12.7	-	1	1.52
SBT40 x FMA31.75-75	75	22	60	31.75	41	6.7	12.7	-	1	2.45
SBT40 x FMA31.75-90	90	22	60	31.75	41	6.7	12.7	-	1	2.72
SBT40 x FMA38.10-60	60	25	75	38.1	44.5	8.87	15.87	-	1	2.50
SBT40 x FMA50.80-60	60	36	98	50.8	65	9.75	19.05	-	1	2.25
SBT40 x FMA47.625-65	65	32	128.75	47.62	-	12.5	25.4	PCD Ø101.6	2	6.50
SBT50 x FMA25.4-45	45	20	50	25.4	31.5	4.52	9.52	-	1	4.21
SBT50 x FMA25.4-90	90	20	50	25.4	31.5	4.52	9.52	-	1	4.71
SBT50 x FMA25.4-150	150	20	50	25.4	31.5	4.52	9.52	-	1	5.54
SBT50 x FMA31.75-45	45	22	60	31.75	41	6.2	12.7	-	1	4.39
SBT50 x FMA31.75-75	75	22	60	31.75	41	6.7	12.7	-	1	4.89
SBT50 x FMA31.75-105	105	22	60	31.75	41	6.7	12.7	-	1	5.70
SBT50 x FMA38.10-45	45	25	80	38.1	44.5	8.87	15.87	-	1	5.20
SBT50 x FMA38.10-75	75	25	80	38.1	44.5	8.87	15.87	-	1	5.78
SBT50 x FMA50.80-45	45	36	98	50.8	65	9.75	19.05	-	1	5.70
SBT50 x FMA50.80-75	75	36	98	50.8	65	9.75	19.05	-	1	6.80
SBT50 x FMA47.62-75	75	32	128.75	47.62	-	12.5	25.4	PCD Ø101.6	2	8.82

### 選配表 Option



• 長度單位 Unit of Length (mm)



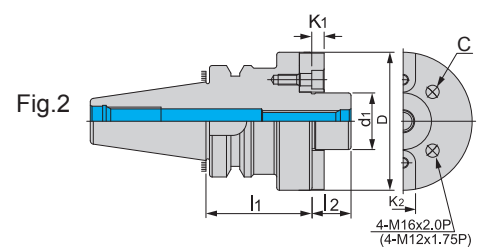
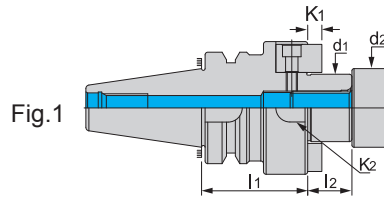
# SBT/FMB 法蘭加厚型平面銑刀柄

## SBT/FMB DUAL DRIVE FACE MILL ARBOR

雙面拘束 Dual Contact



SBT



規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	k <sub>1</sub>	k <sub>2</sub>	C	Fig.	重量 (KGS) Weight
SBT30 x FMB22-45	45	19	48	22	26	4.8	10	-	1	0.82
SBT30 x FMB22-60	60	19	48	22	26	4.8	10	-	1	1.00
SBT30 x FMB27-60	60	20	60	27	31.5	5.8	12	-	1	1.30
SBT30 x FMB32-60	60	22	78	32	41	6.8	14	-	1	1.62
SBT40 x FMB22-45	45	19	48	22	26	4.8	10	-	1	1.37
SBT40 x FMB22-60	60	19	48	22	26	4.8	10	-	1	1.57
SBT40 x FMB22-100	100	19	48	22	26	4.8	10	-	1	2.19
SBT40 x FMB22-150	150	19	48	22	26	4.8	10	-	1	2.87
SBT40 x FMB22-200	200	19	48	22	26	4.8	10	-	1	3.58
SBT40 x FMB27-60	60	20	60	27	31.5	5.8	12	-	1	1.87
SBT40 x FMB27-90	90	20	60	27	31.5	5.8	12	-	1	2.61
SBT40 x FMB27-105	105	20	60	27	31.5	5.8	12	-	1	2.93
SBT40 x FMB32-60	60	22	78	32	41	6.8	14	-	1	2.10
SBT40 x FMB40-60	60	25	80	40	48	8.3	16	-	1	2.80
SBT50 x FMB22-45	45	19	48	22	26	4.8	10	-	1	4.15
SBT50 x FMB22-90	90	19	48	22	26	4.8	10	-	1	4.68
SBT50 x FMB22-150	150	19	48	22	26	4.8	10	-	1	5.31
SBT50 x FMB22-200	200	19	48	22	26	4.8	10	-	1	6.06
SBT50 x FMB22-250	250	19	48	22	26	4.8	10	-	1	8.00
SBT50 x FMB22-300	300	19	48	22	26	4.8	10	-	1	10.0
SBT50 x FMB22-350	350	19	48	22	26	4.8	10	-	1	10.5
SBT50 x FMB22-400	400	19	48	22	26	4.8	10	-	1	12.5
SBT50 x FMB27-50	50	20	60	27	31.5	5.8	12	-	1	4.41
SBT50 x FMB27-90	90	20	60	27	31.5	5.8	12	-	1	5.40
SBT50 x FMB27-150	150	20	60	27	31.5	5.8	12	-	1	6.30
SBT50 x FMB27-200	200	20	60	27	31.5	5.8	12	-	1	7.42
SBT50 x FMB27-250	250	20	60	27	31.5	5.8	12	-	1	8.43
SBT50 x FMB32-50	50	22	78	32	41	6.8	14	-	1	4.69
SBT50 x FMB32-90	90	22	78	32	41	6.8	14	-	1	5.96
SBT50 x FMB40-50	50	25	89	40	48	8.3	16	-	1	5.04
SBT50 x FMB40-90	90	25	89	40	48	8.3	16	-	1	6.00
SBT50 x FMB40-105	105	25	89	40	48	8.3	16	-	1	7.20
SBT50 x FS40F-75	75	26	110	40	-	8.3	16	PCD Ø66.7	2	6.00
SBT50 x FS60F-75	75	25	138	60	-	12.5	25.4	PCD Ø101.6	2	8.49

### 選配表 Option

拉頭 Pull Stud



B645-B647

• 長度單位 Unit of Length (mm)

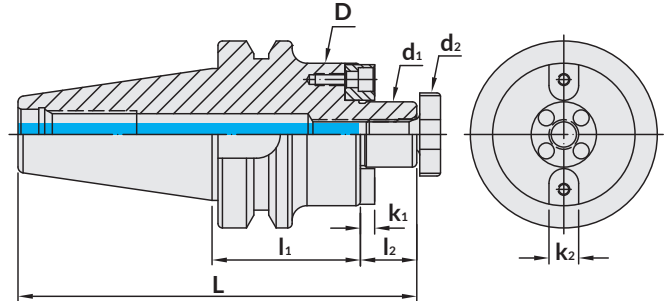


雙面拘束 Dual Contact



**NEW**

SBT



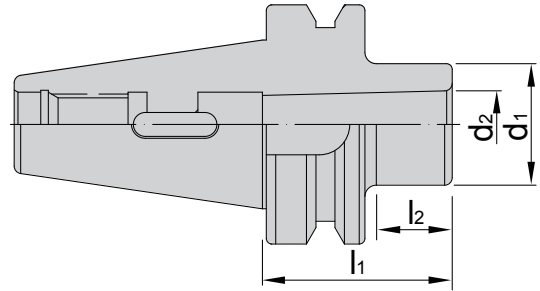
規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	k <sub>1</sub>	k <sub>2</sub>	重量 (KGS) Weight
SBT30 x FMC16-35	100.4	35	17	40	16	20	5	8	0.72
SBT30 x FMC22-40	107.4	40	19	45	22	28	4.8	10	0.80
SBT30 x FMC27 - 40	109.4	40	21	60	27	35	5.8	12	1.06
SBT40 x FMC16 - 45	127.4	45	17	38	16	20	5	8	1.20
SBT40 x FMC22 - 45	129.4	45	19	50	22	28	4.8	10	1.34
SBT40 x FMC27 - 45	131.4	45	21	60	27	35	5.8	12	1.56
SBT40 x FMC32 - 50	139.4	50	24	78	32	42	6.8	14	1.96
SBT50 x FMC16 - 50	168.8	50	17	40	16	20	5	8	4.00
SBT50 x FMC22 - 60	180.8	60	19	50	22	28	4.8	10	4.10
SBT50 x FMC27 - 60	182.8	60	21	60	27	35	5.8	12	4.30
SBT50 x FMC32 - 60	185.8	60	24	78	32	42	6.8	14	4.60
SBT50 x FMC40 - 70	198.8	70	27	89	40	52	8.3	16	5.20
SBT40 x FMC22.225 - 45	127.4	45	17	47	22.225	28	3.5	8	1.50
SBT40 x FMC22.225 - 60	142.4	60	17	47	22.225	28	3.5	8	1.80
SBT40 x FMC22.225 - 90	172.4	90	17	47	22.225	28	3.5	8	2.50
SBT40 x FMC25.4 - 60	147.4	60	22	70	25.4	35	5	9.525	2.00
SBT40 x FMC25.4 - 90	177.4	90	22	70	25.4	35	5	9.525	2.70
SBT40 x FMC25.4 - 105	192.4	105	22	70	25.4	35	5	9.525	3.40
SBT40 x FMC31.75 - 60	155.4	60	30	76	31.75	42	7	12.7	2.50
SBT40 x FMC31.75 - 90	185.4	90	30	76	31.75	42	7	12.7	3.20
SBT50 x FMC22.225 - 90	208.8	90	17	47	22.225	28	3.5	8	4.40
SBT50 x FMC22.225 - 105	223.8	105	17	47	22.225	28	3.5	8	4.70
SBT50 x FMC22.225 - 150	268.8	150	17	47	22.225	28	3.5	8	5.30
SBT50 x FMC22.225 - 200	318.8	200	17	47	22.225	28	3.5	8	6.00
SBT50 x FMC22.225 - 250	368.8	250	17	47	22.225	28	3.5	8	6.60
SBT50 x FMC22.225 - 300	418.8	300	17	47	22.225	28	3.5	8	7.70
SBT50 x FMC22.225 - 350	468.8	350	17	47	22.225	28	3.5	8	8.90
SBT50 x FMC25.4 - 45	168.8	45	22	70	25.4	35	5	9.525	4.00
SBT50 x FMC25.4 - 60	183.8	60	22	70	25.4	35	5	9.525	4.50
SBT50 x FMC25.4 - 90	213.8	90	22	70	25.4	35	5	9.525	5.40
SBT50 x FMC25.4 - 150	273.8	150	22	70	25.4	35	5	9.525	7.20
SBT50 x FMC25.4 - 200	232.8	200	22	70	25.4	35	5	9.525	8.70
SBT50 x FMC25.4 - 250	373.8	250	22	70	25.4	35	5	9.525	10.3
SBT50 x FMC25.4 - 300	423.8	300	22	70	25.4	35	5	9.525	11.8

• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



SBT

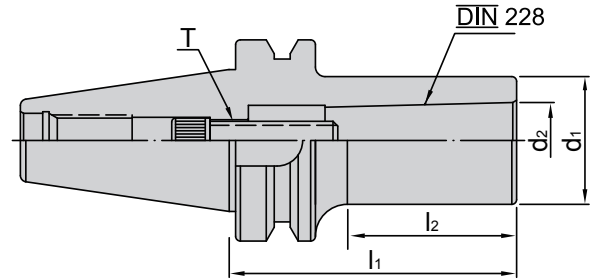


規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	重量 (KGS) Weight
SBT30 x MTA1-45	45	20	25	12.065	0.55
SBT30 x MTA1-105	105	78	25	12.065	0.80
SBT30 x MTA2-60	60	35	32	17.78	0.60
SBT30 x MTA2-120	120	95	25	12.065	0.90
SBT30 x MTA3-80	80	56	40	23.825	0.80
SBT40 x MTA1-45	45	15	25	12.065	1.05
SBT40 x MTA1-120	120	83	25	12.065	1.32
SBT40 x MTA2-50	50	20	32	17.78	1.10
SBT40 x MTA2-120	120	88	32	17.78	1.42
SBT40 x MTA3-70	70	38	40	23.825	1.70
SBT40 x MTA3-135	135	102	40	23.825	1.40
SBT40 x MTA4-95	95	63	48	31.267	2.00
SBT40 x MTA4-165	165	133	48	31.267	2.50
SBT50 x MTA1-45	45	2	25	12.065	3.80
SBT50 x MTA1-120	120	74	25	12.065	4.30
SBT50 x MTA1-180	180	132	25	12.065	5.00
SBT50 x MTA2-60	60	17	32	17.78	4.00
SBT50 x MTA2-135	135	89	32	17.78	4.70
SBT50 x MTA2-180	180	132	32	17.78	5.00
SBT50 x MTA3-65	65	22	40	23.825	3.90
SBT50 x MTA3-150	150	107	40	23.825	5.00
SBT50 x MTA3-180	180	132	40	23.825	5.50
SBT50 x MTA4-95	95	52	48	31.267	4.20
SBT50 x MTA4-180	180	132	48	31.267	5.50
SBT50 x MTA5-105	105	62	63	44.399	4.30

### 選配表 Option

拉頭 Pull Stud	退鑽器 Hand Drift
B645-B647	B683

• 長度單位 Unit of Length (mm)



SBT

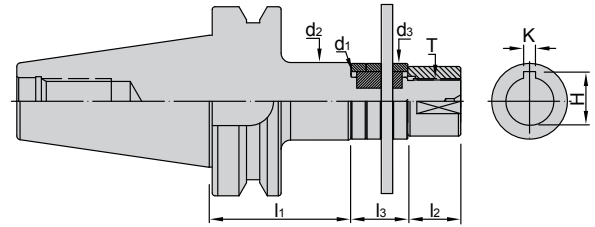
規格 Spec.	T	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	重量 (KGS) Weight
SBT30 x MTB1-45	M6x1.0P	45	20	25	12.065	0.55
	1/4"-20	45	20	25	12.065	0.55
SBT30 x MTB2-60	M10x1.5P	60	36.5	32	17.78	0.60
	3/8"-16	60	36.5	32	17.78	0.60
SBT40 x MTB1-45	M6x1.0P	45	13	25	12.065	1.10
	1/4"-20	45	13	25	12.065	1.10
SBT40 x MTB2-45	M10x1.5P	45	13	32	17.78	1.10
	3/8"-16	45	13	32	17.78	1.10
SBT40 x MTB2-185	M10x1.5P	185	148	32	17.78	1.90
	3/8"-16	185	148	32	17.78	1.90
SBT40 x MTB3-75	M12x1.75P or 1/2"-12	75	45	40	23.825	1.30
SBT40 x MTB3-90		90	53	40	23.825	1.40
SBT40 x MTB3-120		120	83	40	23.825	1.80
SBT40 x MTB3-180		180	143	40	23.825	2.40
SBT40 x MTB4-100	M16x2.0P or 5/8"-10	100	67	48	31.267	1.60
SBT40 x MTB4-120		120	87	48	31.267	1.80
SBT40 x MTB4-180		180	147	48	31.267	2.60
SBT50 x MTB1-45	M6x1.0P	45	6	25	12.065	3.80
	1/4"-20	45	6	25	12.065	3.80
SBT50 x MTB2-45	M10x1.5P	45	5	32	17.78	3.90
	3/8"-16	45	5	32	17.78	3.90
SBT50 x MTB3-60	M12x1.75P	60	12	40	23.825	3.90
	1/2"-12	60	12	40	23.825	3.90
SBT50 x MTB4-75	M16x2.0P	75	32	48	31.267	4.20
	5/8"-11	75	32	48	31.267	4.20
SBT50 x MTB5-120	M24x3.0P	120	77	63	44.399	4.30
	1"-8	120	77	63	44.399	4.30

### 選配表 Option



• 長度單位 Unit of Length (mm)

雙面拘束 Dual Contact



SBT

### 特點 Feature

- 螺帽標準：DIN-2082-1
- 間隔環標準：DIN-2084-B

- Nut standard: DIN-2082-1
- Bush standard: DIN-2084-B

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	K	H	T	重量 (KGS) Weight
SBT30 x SCA10-60	60	12	35	10	18	18	-	-	M8x1.25P	0.80
SBT30 x SCA16-60	60	16	30	16	26	26	4	17.7	M14x1.5P	1.00
SBT30 x SCA22-60	60	22	30	22	34	34	6	24.3	M20x1.5P	1.20
SBT30 x SCA22-75	75	22	30	22	34	34	6	24.3	M20x1.5P	1.40
SBT40 x SCA16-60	60	16	30	16	26	26	4	17.7	M14x1.5P	1.50
SBT40 x SCA22-60	60	22	30	22	34	34	6	24.3	M20x1.5P	1.60
SBT40 x SCA22-75	75	22	30	22	34	34	6	24.3	M20x1.5P	1.70
SBT40 x SCA22-120	120	22	30	22	34	34	6	24.3	M20x1.5P	2.00
SBT40 x SCA27-75	75	28	30	27	41	40	7	30	M24x1.5P	2.10
SBT40 x SCA27-120	120	28	30	27	41	40	7	30	M24x1.5P	2.50
SBT40 x SCA32-90	90	32	30	32	47	47	8	35	M30x1.5P	2.60
SBT40 x SCA22.22-75	75	22	30	22.22	34	34	3.18	24.6	M20x1.5P	2.70
SBT40 x SCA22.22-120	120	22	30	22.22	34	34	3.18	24.6	M20x1.5P	2.00
SBT40 x SCA25.4-75	75	28	30	25.4	41	40	6.35	28.4	M24x1.5P	2.00
SBT40 x SCA25.4-120	120	28	30	25.4	41	40	6.35	28.4	M24x1.5P	2.40
SBT40 x SCA31.75-90	90	32	30	31.75	47	47	7.93	34.8	M30x1.5P	2.60
SBT50 x SCA22-90	90	22	30	22	34	34	6	24.3	M20x1.5P	4.40
SBT50 x SCA22-135	135	22	30	22	34	34	6	24.3	M20x1.5P	4.70
SBT50 x SCA27-90	90	28	30	27	41	40	7	30	M24x1.5P	4.60
SBT50 x SCA27-135	135	28	30	27	41	40	7	30	M24x1.5P	5.00
SBT50 x SCA32-90	90	32	30	32	47	47	8	35	M30x1.5P	4.70
SBT50 x SCA32-135	135	32	30	32	47	47	8	35	M30x1.5P	5.20
SBT50 x SCA40-90	90	40	30	40	55	55	10	43.7	M36x2.0P	5.00
SBT50 x SCA40-135	135	40	30	40	55	55	10	43.7	M36x2.0P	6.00
SBT50 x SCA22.22-90	90	22	30	22.22	34	34	3.18	24.6	M20x1.5P	4.40
SBT50 x SCA22.22-135	135	22	30	22.22	34	34	3.18	24.6	M20x1.5P	4.70
SBT50 x SCA25.4-90	90	28	30	25.4	41	40	6.35	28.4	M24x1.5P	4.50
SBT50 x SCA25.4-135	135	28	30	25.4	41	40	6.35	28.4	M24x1.5P	4.90
SBT50 x SCA31.75-90	90	32	30	31.75	47	47	7.93	34.8	M30x1.5P	4.70
SBT50 x SCA31.75-135	135	32	30	31.75	47	47	7.93	34.8	M30x1.5P	5.20
SBT50 x SCA38.1-90	90	40	30	38.1	55	55	9.525	42.4	M36x2.0P	4.90
SBT50 x SCA38.1-135	135	40	30	38.1	55	55	9.525	42.4	M36x2.0P	5.90

### 選配表 Option



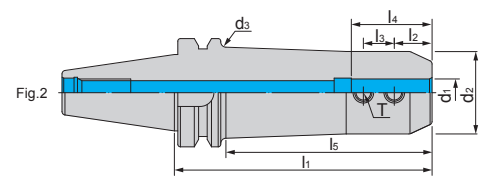
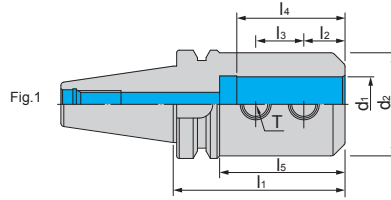
• 長度單位 Unit of Length (mm)



# SBT/SLN 法蘭加厚型側固式銑刀柄 (JIS 型)

## SBT/SLN DUAL DRIVE SIDE LOCK END MILL HOLDERS(JIS TYPE)

雙面拘束 Dual Contact



SBT

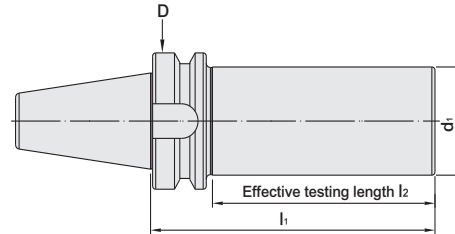
規格 Spec.	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
SBT40 x SLN 6-75JIS	75	12	10	35	45	6	25	-	M6 x 1.0P	1	1.17
SBT40 x SLN 6-150JIS	150	12	10	35	113	6	25	30	M6 x 1.0P	2	1.50
SBT40 x SLN 8-75JIS	75	14	12	35	45	8	28	-	M8 x 1.25P	1	1.21
SBT40 x SLN 8-150JIS	150	14	12	35	113	8	28	33	M8 x 1.25P	2	1.50
SBT40 x SLN10-75JIS	75	15	14	39	45	10	35	-	M10 x 1.5P	1	1.35
SBT40 x SLN10-150JIS	150	15	14	39	118	10	35	40	M10 x 1.5P	2	1.50
SBT40 x SLN12-75JIS	75	20	16	44	45	12	42	-	M10 x 1.5P	1	1.50
SBT40 x SLN12-150JIS	150	20	16	44	118	12	42	47	M10 x 1.5P	2	1.70
SBT40 x SLN16-75JIS	75	22	18	47	45	16	48	-	M10 x 1.5P	1	1.58
SBT40 x SLN16-150JIS	150	22	18	47	120	16	48	53	M10 x 1.5P	2	2.75
SBT40 x SLN20-90JIS	90	25	20	55	60	20	50	-	M12 x 1.75P	1	1.77
SBT40 x SLN20-150JIS	150	25	20	55	120	20	52	57	M12 x 1.75P	2	1.80
SBT40 x SLN25-90JIS	90	24	25	58	60	25	50	-	M12 x 1.75P	1	1.92
SBT40 x SLN32-100JIS	100	24	28	63	73	32	60	-	M16 x 2.0P	1	2.30
SBT50 x SLN 6-75JIS	75	12	10	35	31	6	25	-	M6 x 1.0P	1	4.04
SBT50 x SLN 8-75JIS	75	14	12	35	27	8	28	-	M8 x 1.25P	1	4.06
SBT50 x SLN10-75JIS	75	15	14	39	32	10	35	-	M10 x 1.5P	-	3.90
SBT50 x SLN12-90JIS	90	20	16	44	42	12	42	-	M10 x 1.5P	-	4.35
SBT50 x SLN12-165JIS	165	20	16	44	124	12	42	47	M10 x 1.5P	2	5.05
SBT50 x SLN16-90JIS	90	22	18	47	42	16	48	-	M10 x 1.5P	1	4.53
SBT50 x SLN16-165JIS	165	22	18	47	117	16	48	53	M10 x 1.5P	2	5.50
SBT50 x SLN20-90JIS	90	25	20	55	49	20	50	-	M12 x 1.75P	1	4.53
SBT50 x SLN20-165JIS	165	25	20	55	117	20	50	57	M12 x 1.75P	2	5.67
SBT50 x SLN20-210JIS	210	25	20	55	162	20	50	57	M12 x 1.75P	2	6.40
SBT50 x SLN25-100JIS	100	24	25	68	59	25	50	57	M12 x 1.75P	1	4.58
SBT50 x SLN25-165JIS	165	24	25	68	117	25	50	57	M12 x 1.75P	2	5.55
SBT50 x SLN25-210JIS	210	24	25	68	169	25	50	57	M12 x 1.75P	2	6.25
SBT50 x SLN25-250JIS	250	24	25	68	202	25	50	60	M12 x 1.75P	2	7.10
SBT50 x SLN32-105JIS	105	24	28	73	64	32	60	-	M16 x 2.0P	1	4.89
SBT50 x SLN32-165JIS	165	24	28	73	117	32	60	65	M16 x 2.0P	1	6.33
SBT50 x SLN32-210JIS	210	24	28	73	162	32	60	60	M16 x 2.0P	2	6.34
SBT50 x SLN32-250JIS	250	24	28	73	207	32	50	60	M16 x 2.0P	2	7.50
SBT50 x SLN32-300JIS	300	24	28	73	257	32	60	65	M16 x 2.0P	2	8.00
SBT50 x SLN40-115JIS	115	30	32	85	74	40	90	-	M20 x 2.0P	1	6.60
SBT50 x SLN42-120JIS	120	30	32	85	79	42	90	-	M20 x 2.0P	1	6.73
SBT50 x SLN42-210JIS	210	30	32	85	-	42	70	75	M20 x 2.0P	2	7.80
SBT50 x SLN50-120JIS	120	35	35	90	82	50	90	-	M20 x 2.0P	1	5.28
● SBT50 x SLN50.8-120JIS	120	33.9	35.78	90	82	50.8	90	-	M20 x 2.0P	1	6.61

● 有插梢 With pin

### 選配表 Option



● 長度單位 Unit of Length (mm)



	錐度精度 Taper Precision	AT2
	真圓度 Roundness	0.8um
	表面粗糙度 Surface Roughness	Ra<0.15um
	偏擺精度 Runout	3um
	圓柱度 Cylindrical	5um

規格 Spec.	l1	l2	D	d1	重量 (KGS) Weight
SBT30-TS250L-P	250	225	46	25	0.91
SBT30-TS150L-P	150	125	46	32	1.09
SBT30-TS235L-P	235	210	46	32	1.57
SBT40-TS200L-P	200	170	63	50	2.94
SBT40-TS350L-P	350	320	63	50	4.64
SBT50-TS200L-P	200	159	100	50	5.28
SBT50-TS360L-P	360	319	100	50	7.1
SCAT40-TS300L-P	300	277.95	44.45	50	4.03
SCAT50-TS300L-P	300	280	98.425	50	6.88





# SOM 模組化示意圖

## Modular combination



SBT/SOM  
螺紋鎖固式刀桿  
Screwed End  
Mill Holder



直柄C/M螺紋鎖固式  
鎢鋼延長桿  
C/M Straight Shank  
Tungsten Carbide  
Extension Shank



CAT/SOM  
鎖牙式刀桿  
Screwed-on End  
Mill Holder



SOM鎖牙式延長桿  
SOM Screwed-on End  
Mill Extension Shank



MAS 鎖牙式迷你銑刀  
MAS Screwed-on  
End Mill Cutter



STR鎖牙式切削刀具  
STR Screwed-on  
End Mill Cutter



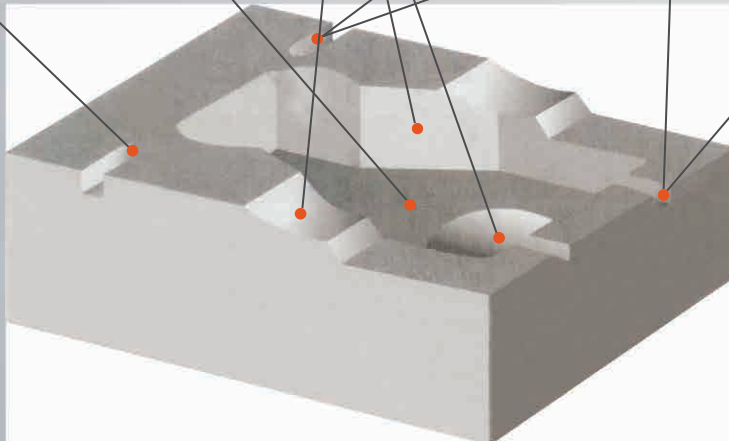
BR鎖牙式球型銑刀  
Screwed-on Rounded Corner  
End Mill Cutter



NHF 高進給鎖牙銑刀  
High Feed Screwed-on  
End mill Cutter

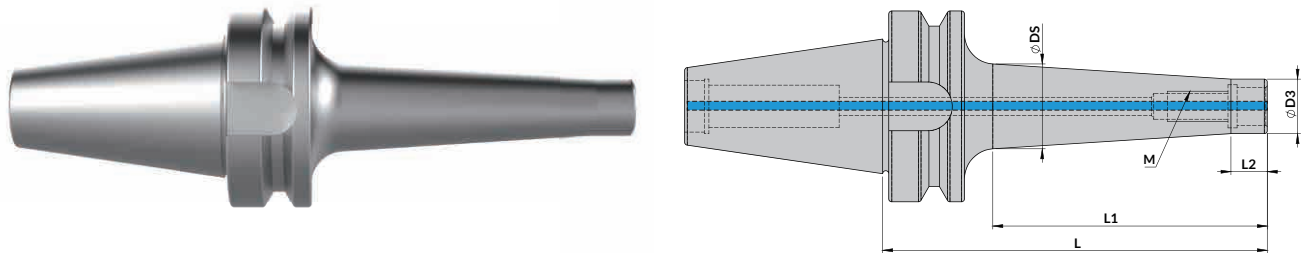


HAS鎖牙式大進給切削刀具  
Screwed-on High  
Speed Mill Cutter



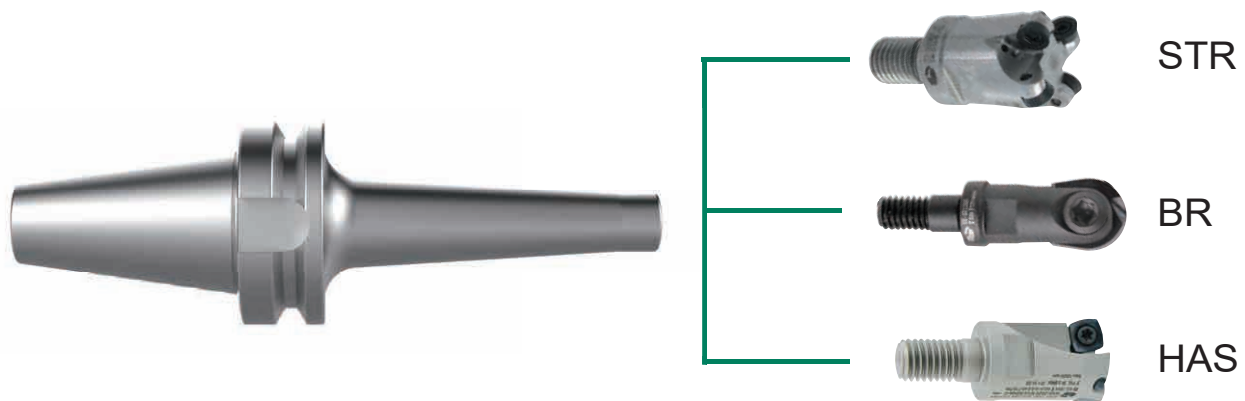
※ 刀桿通孔，利於出水及抗震。

Through-hole design for better water coolant and anti-vibration



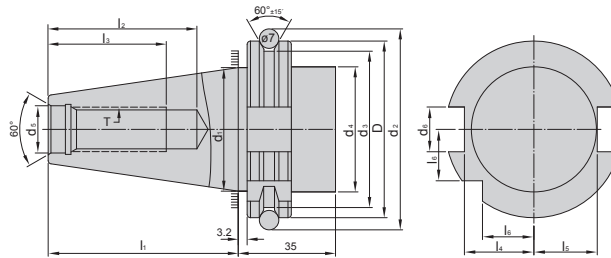
規格 Spec.	M	Ds	D3	L	L1	L2
SBT40-SOM6-110	M6	25	9.7	110	80	10
SBT40-SOM8-105	M8	30	15	105	75	10
SBT40-SOM10-100	M10	35	18	100	70	10
SBT40-SOM10-130	M10	35	18	130	100	10
SBT40-SOM12-95	M12	40	21	95	65	10
SBT40-SOM12-130	M12	40	21	130	100	10
SBT40-SOM16-90	M16	48	28	90	60	10
SBT40-SOM16-140	M16	48	28	140	110	10
SBT50-SOM12-150	M12	41	21	150	105	30
SBT50-SOM12-200	M12	42.5	21	200	155	30
SBT50-SOM16-150	M16	49	28	150	105	30
SBT50-SOM16-200	M16	50	28	200	155	35

### 範例 Example

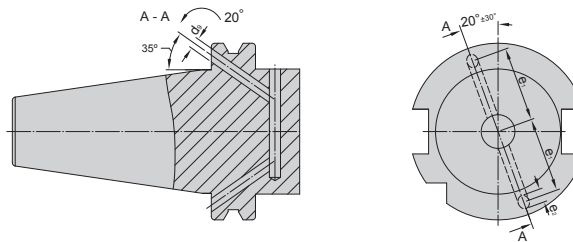


• 長度單位 Unit of Length (mm)

DIN69871/DAT A



DIN 69871/DAT AD+B

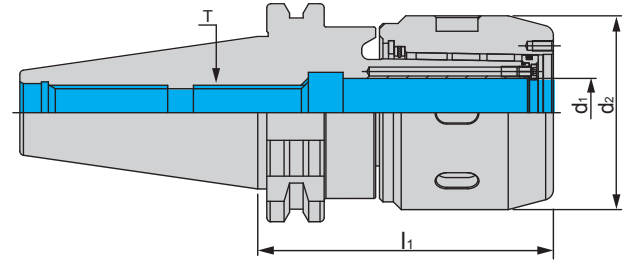


DAT

規格 Spec.	D 0 -0.1	d <sub>1</sub>	d <sub>2</sub> ±0.05	d <sub>3</sub> 0 -0.5	d <sub>4</sub> Max.	d <sub>5</sub> H7	d <sub>6</sub> H12	d <sub>9</sub>	l <sub>1</sub> 0 -0.3	l <sub>2</sub> min.	l <sub>3</sub> min.	l <sub>4</sub> 0 -0.4	l <sub>5</sub> 0 -0.5	l <sub>6</sub> 0 -0.3	e <sub>1</sub> ±0.1	e <sub>2</sub> max.	T
DAT30	50	31.75	59.30	44.30	45	13	16.1	4	47.8	33.5	24	19	16.4	15	21	5	M12
DAT40	63.55	44.45	72.30	56.25	50	17	16.1	4	68.4	42.5	32	25	22.8	18.5	27	5	M16
DAT50	97.50	69.85	107.25	91.25	80	25	25.7	6	101.75	61.5	47	37.7	35.5	30	42	7	M24

1. 錐度精度 : <AT3
2. 硬度 : >HRC 56°
3. 滲碳深度 : >0.8mm
4. 真圓度 : < 0.8μm
5. 表面粗糙度 : Ra < 0.25μm

1. Taper tolerance < AT3.
2. Hardness > HRC 56°
3. Carbon depth > 0.8mm.
4. Roundness < 0.8μm.
5. Surface roughness : Ra < 0.25μm



### 特點 Feature

- 內孔特殊溝槽設計，防止所夾持刀具脫刀滑落，可以割斷附著油膜，不會有脫刀現象產生，提高了使用的安全性
- 刀桿本體厚，可產生充分的夾持力。採用滾針軸承原理設計，滾動摩擦及脫落減到最小，裝置操作省力便捷
- 螺帽與刀桿端面鎖固後，緊貼牢靠，提高剛性並徹底的防塵
- 偏擺精度 :0.001~0.005 以內，真圓度 :0.02mm
- MLD20、MLD-3/4、MLK20 扳手共用
- MLD25、EOC25、MLK25 扳手共用
- MLD32、MLD-1-1/4、MLK32 扳手共用

- There is a special design for the slots of internal hole. It prevents the cutting tools from slipping and increases the clamping power.
- The body of the tool holder is thick, so it has good clamping power. It adopts the needle bearing design to prevent the slipping. The operation is convenient and easy.
- After locking the cutting tool (The tolerance of the cutting tool must be less than h6), it is more contacted with the flange while locking the clamping nut and tool holder. It can prevent the bearing cage from deformation easily. Also, rigidity and dust-proof function is improved.
- Run-out: Within 0.001~0.005mm. Concentricity: 0.02mm.
- MLD20 and MLD-3/4、MLK20 spanner can be used in common.
- MLD25 and EOC25、MLK25 spanner can be used in common.
- MLD32 and MLD-1-1/4、MLK32 spanner can be used in common.



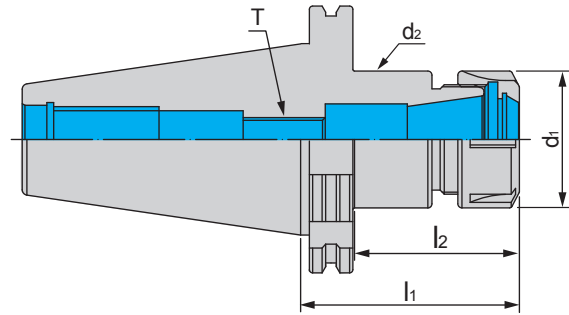
使用 MLD 止水環可使冷卻液從刀具排出，利於散熱及有效排屑  
When using MLD sealed cap, the coolant fluid discharges from the cutting tool. It's good for heat dissipation and metal chips removal.

規格 Spec.	$l_1$	$d_1$	$d_2$	T	重量 (KGS) Weight
DAT30 x MLD20 - 85	85	20	56.5	M12x1.75P	1.90
DAT30 x MLD20 - 100	100	20	56.5	M12x1.75P	2.10
DAT40 x MLD20 - 85	85	20	56.5	M16x2.0P	2.40
DAT40 x MLD20 - 135	135	20	56.5	M16x2.0P	2.50
DAT40 x MLD32 - 105	105	32	71	M16x2.0P	2.70
DAT40 x MLD32 - 135	135	32	71	M16x2.0P	3.00
DAT50 x MLD20 - 105	105	20	56.5	M24x3.0P	4.50
DAT50 x MLD20 - 150	150	20	56.5	M16x2.0P	4.90
DAT50 x MLD32 - 105	105	32	71	M24x3.0P	5.10
DAT50 x MLD32 - 135	135	32	71	M16x2.0P	5.90

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	扳手 Spanner	止水端蓋 Sealed Cap
B648	B631	B651	B640

• 長度單位 Unit of Length (mm)



DAT

### 特點 Feature

- 筒夾樣式有彈性、止水、剛性攻牙、伸縮攻牙、極小內孔、燒結式熱膨脹可供選擇
- 彈性筒夾偏擺精度有標準級 (0.02mm 以內) · A 級 (0.01mm 以內) · UP (0.005mm 以內)
- 螺帽預設動平衡設計 · 可在 RPM10,000 下使用
- 整支通孔 · 利於出水及抗震
- 如需擋刀螺絲可另外指定
- 裝置時筒夾必須先置入螺帽 · 再裝入刀具 · 接著鎖固入本體
- 刀具置入筒夾內孔 · 必須超出筒夾內孔有效夾持長度 · 避免不當鎖固 · 造成損壞
- 務必使用正確扳手來裝置不可任意改變 · 避免不當鎖固 · 造成損壞

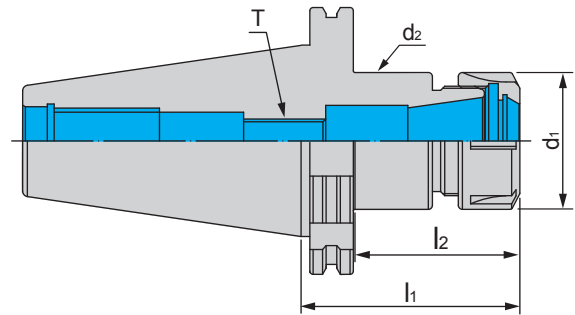
- There are various features for collet, like flexibility, water sealed, rigid tapping, extend tapping, minimized inner hole, shrink-fitting for your selection.
- The ER collet has three kinds of classes for precision : general class 0.02mm, A class 0.01mm, and UP class 0.05mm.
- The pre-balance can reach 10000rpm.
- The tool holder with through coolant design is better for water to get through vibration resistance
- Additional selection if stop screw is needed.
- When using, please put the nut into the collet and then put them into the body together.
- It must exceed the effective clamping length of collet when inserting the cutter into collet to avoid the improper lock & damage.
- Please use the right wrench on installation to avoid the improper lock & damage.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	T	使用筒夾 Collet	夾持範圍 Clamp Range	重量 (KGS) Weight
DAT40 x ER11A - 80	80	50	19	19	M6x1.0P	ER11	1~7	1.05
DAT40 x ER11A - 125	125	95	19	19	M6x1.0P	ER11	1~7	1.15
DAT40 x ER16A - 70	70	40	28	28	M10x1.5P	ER16	1~10	1.30
DAT40 x ER16A - 100	100	70	28	28	M10x1.5P	ER16	1~10	1.40
DAT40 x ER16A - 125	125	95	28	28	M10x1.5P	ER16	1~10	1.60
DAT40 x ER16A - 150	150	120	28	28	M10x1.5P	ER16	1~10	1.65
DAT40 x ER16A - 180	180	150	28	28	M10x1.5P	ER16	1~10	1.85
DAT40 x ER20A - 70	70	47	34	34	M12x1.75P	ER20	1~13	1.40
DAT40 x ER20A - 100	100	70	34	34	M12x1.75P	ER20	1~13	1.50
DAT40 x ER20A - 135	135	105	34	34	M12x1.75P	ER20	1~13	1.95
DAT40 x ER20A - 160	160	130	34	34	M12x1.75P	ER20	1~13	2.20
DAT40 x ER25 - 70	70	50	42	42	M16x2.0P	ER25	1~16	1.60
DAT40 x ER25 - 100	100	80	42	42	M16x2.0P	ER25	1~16	1.85
DAT40 x ER25 - 150	150	130	42	42	M16x2.0P	ER25	1~16	2.25
DAT40 x ER25 - 180	180	160	42	42	M16x2.0P	ER25	1~16	2.45
DAT40 x ER25 - 200	200	180	42	42	M16x2.0P	ER25	1~16	2.55
DAT40 x ER32 - 70	70	50	50	49.7	M16x2.0P	ER32	2~20	1.22
DAT40 x ER32 - 100	100	80	50	49.5	M16x2.0P	ER32	2~20	1.64
DAT40 x ER32 - 135	135	115	50	49.7	M16x2.0P	ER32	2~20	2.15
DAT40 x ER32 - 150	150	130	50	49.7	M16x2.0P	ER32	2~20	2.65
DAT40 x ER40 - 70	70	50	63	50	M20x2.0P	ER40	3~26	1.50
DAT40 x ER40 - 100	100	80	63	50	M20x2.0P	ER40	3~26	2.00
DAT40 x ER40 - 135	135	115	63	50	M20x2.0P	ER40	3~26	3.30
DAT40 x ER50 - 100	100	80	78	64	M24x2.0P	ER50	5~34	1.70

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B648	B612	B637	B650

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 筒夾樣式有彈性、止水、剛性攻牙、伸縮攻牙、極小內孔、燒結式熱膨脹可供選擇
- 彈性筒夾偏擺精度有標準級 (0.02mm 以內) · A 級 (0.01mm 以內) · UP(0.005mm 以內)
- 螺帽預設動平衡設計 · 可在 RPM10,000 下使用
- 整支通孔 · 利於出水及抗震
- 如需擋刀螺絲可另外指定
- 裝置時筒夾必須先置入螺帽 · 再裝入刀具 · 接著鎖固入本體
- 刀具置入筒夾內孔 · 必須超出筒夾內孔有效夾持長度 · 避免不當鎖固 · 造成損壞
- 務必使用正確扳手來裝置不可任意改變 · 避免不當鎖固 · 造成損壞

- There are various features for collet, like flexibility, water sealed, rigid tapping, extend tapping, minimized inner hole, shrink-fitting for your selection.
- The ER collet has three kinds of classes for precision : general class 0.02mm, A class 0.01mm, and UP class 0.05mm.
- The pre-balance can reach 10000rpm.
- The tool holder with through coolant design is better for water to get through vibration resistance
- Additional selection if stop screw is needed.
- When using, please put the nut into collet and then put them into the body together.
- It must exceed the effective clamping length of collet when inserting the cutter into collet to avoid the improper lock & damage.
- Please use the right wrench on installation to avoid the improper lock & damage.

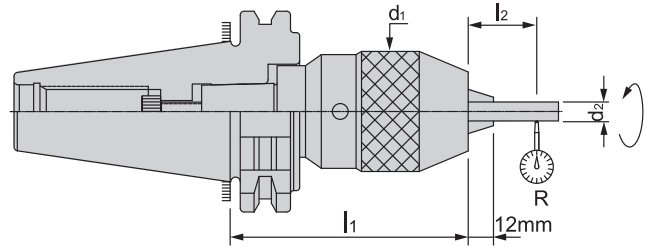
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	使用筒夾 Collet	夾持範圍 Clamp Range	重量 (KGS) Weight
DAT50 x ER16A - 100	100	70	28	28	M10x1.5P	ER16	1~10	3.20
DAT50 x ER16A - 135	135	105	28	28	M10x1.5P	ER16	1~10	4.30
DAT50 x ER16A - 160	160	130	28	28	M10x1.5P	ER16	1~10	4.50
DAT50 x ER16A - 180	180	150	28	28	M10x1.5P	ER16	1~10	4.80
DAT50 x ER20A - 100	100	70	34	34	M12x1.75P	ER20	1~13	3.40
DAT50 x ER20A - 135	135	105	34	34	M12x1.75P	ER20	1~13	3.60
DAT50 x ER20A - 160	160	130	34	34	M12x1.75P	ER20	1~13	3.80
DAT50 x ER25 - 70	70	40	42	42	M16x2.0P	ER25	1~16	3.40
DAT50 x ER25 - 100	100	70	42	42	M16x2.0P	ER25	1~16	4.15
DAT50 x ER25 - 150	150	120	42	42	M16x2.0P	ER25	1~16	4.50
DAT50 x ER25 - 200	200	170	42	42	M16x2.0P	ER25	1~16	4.70
DAT50 x ER32 - 80	80	50	50	50	M20x2.0P	ER32	2~20	3.60
DAT50 x ER32 - 120	120	90	50	50	M20x2.0P	ER32	2~20	3.93
DAT50 x ER32 - 160	160	130	50	50	M20x2.0P	ER32	2~20	4.75
DAT50 x ER32 - 200	200	170	50	50	M20x2.0P	ER32	2~20	4.90
DAT50 x ER40 - 80	80	50	63	60	M20x2.0P	ER40	3~26	3.65
DAT50 x ER40 - 120	120	90	63	60	M20x2.0P	ER40	3~26	4.80
DAT50 x ER40 - 160	160	130	63	60	M20x2.0P	ER40	3~26	5.20
DAT50 x ER40 - 200	200	170	63	60	M20x2.0P	ER40	3~26	5.40
DAT50 x ER50 - 80	80	57	78	-	M24x2.0P	ER50	5~34	4.85
DAT50 x ER50 - 120	120	99	78	78	M24x2.0P	ER50	5~34	5.45
DAT50 x ER50 - 160	160	139	78	78	M24x2.0P	ER50	5~34	5.55
DAT50 x ER50 - 200	200	179	78	78	M24x2.0P	ER50	5~34	5.70

### 選配表 Option

拉頭 Pull Stud	筒夾 Collet	螺帽 Nut	扳手 Spanner
B648	B612	B634	B650

• 長度單位 Unit of Length (mm)





DAT

### 特點 Feature

- 直結式設計 · 提高使用後工件的效果
- SPU 偏精度為 0.04mm · 如需更高精度要求 · 請使用 ER 或 SKS 系列

- The series type design, enhances the use effect.
- The SPU leaning precision is 0.04mm. To request higher degree of accuracy, please use ER or SKS series

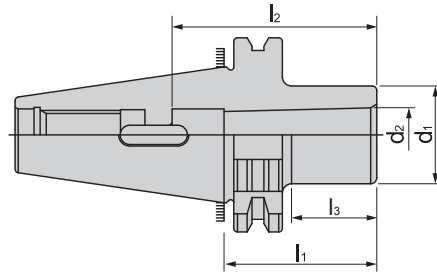
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	夾持範圍 Clamp Range		R	重量 (KGS) Weight
					mm	inch		
DAT40 x SPU8-75	75	55	37	6	1~8	1/24~5/16	0.04	1.35
DAT40 x SPU13-100	100	75	50	13	1~13	1/24~1/2	0.04	1.94
DAT40 x SPU16-115	115	80	57	16	3~16	1/8~5/8	0.04	2.33
DAT50 x SPU8-75	75	55	37	6	1~8	1/24~5/16	0.04	3.43
DAT50 x SPU13-100	100	75	50	13	1~13	1/24~1/2	0.04	4.40
DAT50 x SPU16-105	105	80	57	16	3~16	1/8~5/8	0.04	4.73

- 附扳手 Attaches the spanner.

### 選配表 Option

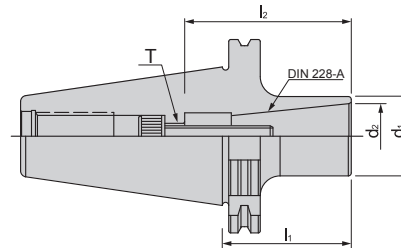


• 長度單位 Unit of Length (mm)



DAT

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	重量 (KGS) Weight
DAT40 x MTA1 - 50	50	56	22	25	12.065	1.20
DAT40 x MTA2 - 50	50	67	27	32	17.78	1.00
DAT40 x MTA3 - 70	70	84	47	40	23.825	1.10
DAT40 x MTA4 - 95	95	107	74	48	31.267	1.35
DAT50 x MTA1 - 45	45	56	22	25	12.065	3.00
DAT50 x MTA2 - 60	60	67	35	32	17.78	3.10
DAT50 x MTA2-135	135	67	-	32	17.78	4.70
DAT50 x MTA3 - 65	65	84	40	40	23.825	3.20
DAT50 x MTA3-150	150	84	-	40	23.825	5.00
DAT50 x MTA4 - 95	95	107	70	48	31.267	3.40
DAT50 x MTA5 - 105	105	133	80	63	44.399	3.60



### 特點 Feature

- 高精密的運作過程，即使長時間鑽孔，同心圓仍然在 0.015mm 之內

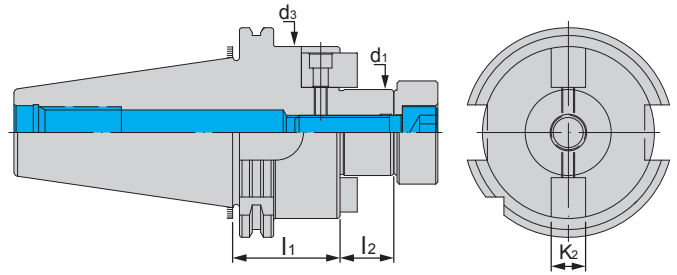
-High accurate working process. Even though using prolonged drill, the concentricity is still within 0.015mm.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	T	重量 (KGS) Weight
DAT40 x MTB2 - 45	45	67	32	17.78	M10X1.5P	0.96
DAT40 x MTB3 - 75	75	84	40	23.825	M12X1.75P	1.30
DAT40 x MTB4 - 100	100	107	48	31.267	M16X2.0P	1.50
DAT50 x MTB2 - 45	45	67	32	17.78	M10X1.5P	3.90
DAT50 x MTB3 - 65	65	84	40	23.825	M12X1.75P	4.02
DAT50 x MTB4 - 75	75	107	48	31.267	M16X2.0P	4.20
DAT50 x MTB4 - 95	95	107	48	31.267	M16X2.0P	4.40
DAT50 x MTB5 - 105	105	135	63	44.399	M24X3.0P	4.25

### 選配表 Option

拉頭 Pull Stud	退鑽器 Hand Drift
B648	B683

• 長度單位 Unit of Length (mm)

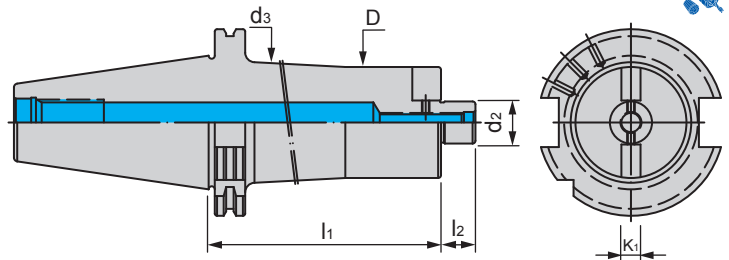


### 特點 Feature

- 平面銑刀配合部位 (d1) · 軸系公差 h6
- 預設動平衡達 G6.3 8000rpm · 不含檢測報告
- 若需更好的動平衡 · 須另外加價

- d1 tolerance is h6.
- Dynamic pre-balancing G6.3 at 8000rpm, without an inspection report.
- The balancing grade and revolution can be done according to customer request but the additional charge is needed.

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_3$	$k_2$	重量 (KGS) Weight
DAT50 x FMA31.75-50	50	22	31.75	60	12.7	4.80
DAT50 x FMA38.1-100	100	25	38.1	80	15.875	6.70



### 特點 Feature

- 平面銑刀配合部位 (d1) · 軸系公差 h6
- 預設動平衡達 G6.3 8000rpm · 不含檢測報告
- 若需更好的動平衡 · 須另外加價

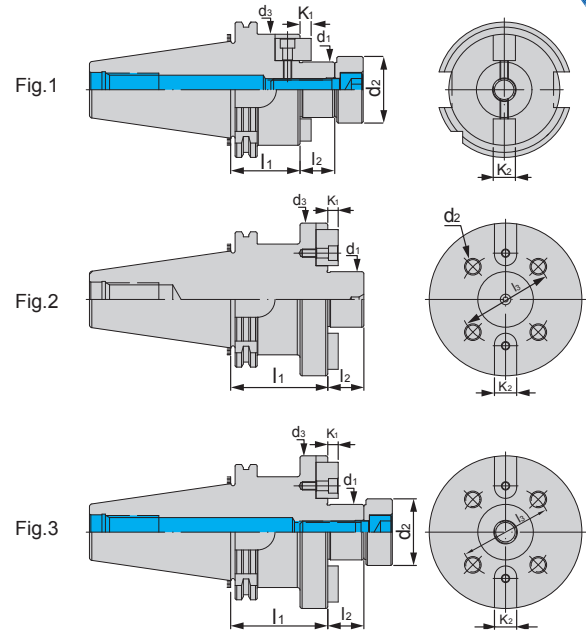
- d1 tolerance is h6.
- Dynamic pre-balancing G6.3 at 8000rpm, without an inspection report.
- The balancing grade and revolution can be done according to customer request but the additional charge is needed.

規格 Spec.	$l_1$	$l_2$	D	$d_1$	$d_2$	$d_3$	$k_1$	重量 (KGS) Weight
DAT50 x FMB22-100BG	100	19	58	22	23	62.5	10	2.50
DAT50 x FMB22-150BG	150	19	58	22	23	62.5	10	2.90
DAT50 x FMB22-200BG	200	19	58	22	23	62.5	10	6.74
DAT50 x FMB22-250BG	250	19	58	22	23	62.5	10	7.30
DAT50 x FMB22-300BG	300	19	58	22	23	62.5	10	5.40

### 選配表 Option



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 平面銑刀配合部位 (d1) · 軸系公差 h6
- 預設動平衡達 G6.3 8000rpm · 不含檢測報告
- 若需更好的動平衡 · 須另外加價

- d1 tolerance is h6.
- The Dynamic pre-balance can reach G6.3 8,000 rpm, without an inspection report.
- The balancing grade and revolution can be done according to customer request but the additional charge is needed.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	k <sub>1</sub>	k <sub>2</sub>	Fig.	重量 (KGS) Weight
DAT40 x FMB22-35	35	19	22	26	48	4.8	10	1	1.20
DAT40 x FMB22-60	60	19	22	26	48	4.8	10	1	1.50
DAT40 x FMB22-100	100	19	22	26	48	4.8	10	1	2.12
DAT40 x FMB22-150	150	19	22	26	48	4.8	10	1	1.80
DAT40 x FMB27-60	60	20	27	31.5	58	5.8	12	1	1.80
DAT40 x FMB32-60	60	22	32	41	66	6.8	14	1	2.30
DAT40 x FMB40-60	60	25	40	48	80	8.3	16	1	2.80
DAT50 x FMB22-35	35	19	22	26	48	4.8	10	1	3.40
DAT50 x FMB22-75	75	19	22	26	48	4.8	10	1	3.72
DAT50 x FMB22-90	90	19	22	26	48	4.8	10	1	3.86
DAT50 x FMB22-150	150	19	22	26	48	4.8	10	1	4.90
DAT50 x FMB22-200	200	19	22	26	48	4.8	10	1	5.30
DAT50 x FMB27-35	35	20	27	31.5	60	5.8	12	1	3.50
DAT50 x FMB32-35	35	22	32	41	66	6.8	14	1	3.70
DAT50 x FMB40-50	50	25	40	48	80	8.3	16	1	4.63
DAT50 x FMB50-60	60	30	50	68	95	9.7	19	1	5.80
DAT40 x FMB40F-60	60	30	40	M12	89	8.3	16	2	2.90
DAT50 x FMB40F-70	70	30	40	M12	89	8.3	16	2	5.50
DAT50 x FMB60F-70	70	40	60	M16	129	12.5	25.4	2	5.70
DAT40 x FS40 -60	60	26	40	50	110	8.3	16	3	3.20
DAT50 x FS40 -70	70	26	40	50	110	8.3	16	3	5.70
DAT50 x FS60 -70	70	25	60	M16	140	12.5	25.4	3	5.50

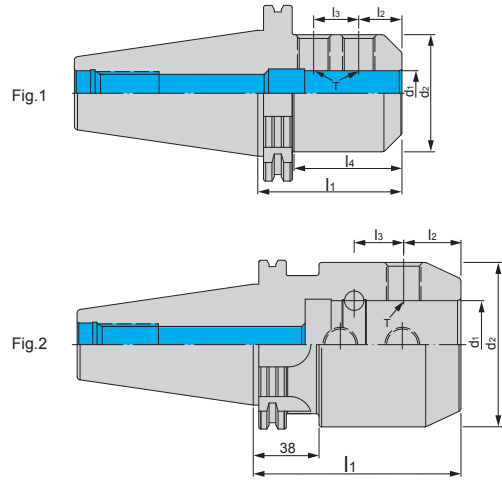
### 選配表 Option

拉頭 Pull Stud



B648

• 長度單位 Unit of Length (mm)



DAT

### 特點 Feature

- 孔徑公差 H5
- 預設動平衡達 G6.3 8000rpm · 不含檢測報告
- 若需更好的動平衡 · 須另外加價

- Internal hole tolerance is H5.
- Dynamic pre-balancing G6.3 at 8000rpm, without an inspection report.
- The balancing grade and revolution can be done according to customer request but the additional charge is needed.

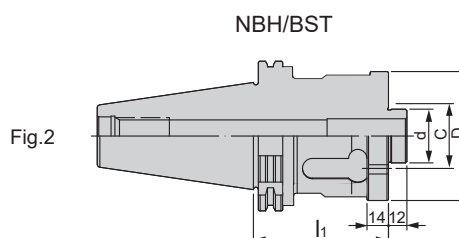
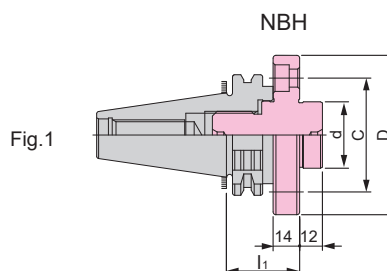
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	d <sub>1</sub>	d <sub>2</sub>	T	Fig.	重量 (KGS) Weight
DAT40 x SLN6-50	50	18	-	27	6	25	M6x1.0P	1	0.97
DAT40 x SLN8-50	50	18	-	27	8	28	M8x1.25P	1	1.00
DAT40 x SLN10-50	50	20	-	27	10	35	M10x1.5P	1	1.04
DAT40 x SLN12-50	50	22.5	-	30	12	42	M12x1.75P	1	1.15
DAT40 x SLN16-63	63	24	-	43	16	48	M14x2.0P	1	1.40
DAT40 x SLN20-63	63	25	-	43	20	52	M16x2.0P	1	1.30
DAT40 x SLN25-100	100	24	25	80	25	65	M18x2.0P	1	2.40
DAT40 x SLN32-100	100	24	28	80	32	72	M20x2.0P	1	2.70
DAT50 x SLN6-63	63	18	-	33	6	25	M6x1.0P	1	3.10
DAT50 x SLN8-63	63	18	-	33	8	28	M8x1.25P	1	3.10
DAT50 x SLN10-63	63	20	-	33	10	35	M10x1.5P	1	3.30
DAT50 x SLN12-63	63	22.5	-	40	12	42	M12x1.75P	1	3.35
DAT50 x SLN16-63	63	24	-	40	16	48	M14x2.0P	1	3.45
DAT50 x SLN20-63	63	25	-	40	20	52	M16x2.0P	1	3.47
DAT50 x SLN25-80	80	24	25	59	25	65	M18x2.0P	1	4.20
DAT50 x SLN32-100	100	24	28	78	32	72	M20x2.0P	1	4.88
DAT50 x SLN40-100	100	30	32	80	40	90	M20x2.0P	1	5.60
DAT50 x SLN42-100	100	30	32	80	42	90	M20x2.0P	1	5.70
DAT50 x SLN50-125	125	35	35	105	50	100	M24x2.0P	1	5.90
DAT50 x SLN63-150	150	40	40	130	63	125	M20x2.0P	1	6.20
DAT50 x SLN63-150	150	40	24	130	63	125	M16x2.0P	2	6.20

### 選配表 Option



• 長度單位 Unit of Length (mm)

DAT



### 特點 Feature

- 孔徑公差 H5
- 預設動平衡達 G6.3 8000rpm · 不含檢測報告
- 若需更好的動平衡 · 須另外加價

- Internal hole tolerance is H5.
- Dynamic pre-balancing G6.3 at 8000rpm, without an inspection report.
- The balancing grade and revolution can be done according to customer request but the additional charge is needed.

規格 Spec.	$l_1$	D	d	C	Fig.	重量 (KGS) Weight
DAT40xNBH2084A	35	84	35	PCD,Ø60 4-M8 x 1.25P	1	1.70
DAT50xNBH2084A	35	84	35		1	3.50
FR60xNBH2084	14	84	35	PCD,Ø60	-	-
DAT40xNBH2084B-100	100	84	35	PCD,Ø60 4-M8 x 1.25P	2	2.00
DAT50xNBH2084B-100	100	84	35		2	4.00
DAT50xNBH2084B-200	200	84	35		2	11.00
DAT50xBST-100	100	95	50	PCD,Ø72 4-Ø13	2	5.60
DAT50xBST-150	150	95	50		2	4.00
DAT50xBST-200	200	95	50		2	8.75
DAT50xBST-250	250	95	50		2	9.76
DAT50xBST-350	350	95	50		2	12.8
DAT50xBST-400	400	95	50		2	14.0

### 選配表 Option

拉頭 Pull Stud	搪頭 Boring Head		
B648	B728	B731	B753

• 長度單位 Unit of Length (mm)

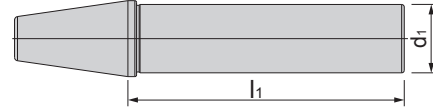




# 主軸檢測棒 SPINDLE MASTER BAR

DIN  
69871

標準型 Standard



## 特點 Feature

- 皆通過真圓度測試機，精確檢驗通過
- 附精度檢驗表

- Have passed the roundness testing machine, exact test passed.
- With precision test table.

	錐度精度 Taper Precision	AT2
	真圓度 Roundness	0.001mm
	表面粗造度 Surface Roughness	Ra<0.4
	同心度 Concentricity	0.005mm

規格 Spec.	l <sub>1</sub>	d <sub>1</sub>	同心度 Concentricity	真圓度 Roundness	重量 (KGS) Weight
DAT40 - TS300L	300	40	0.005	0.001	3.00

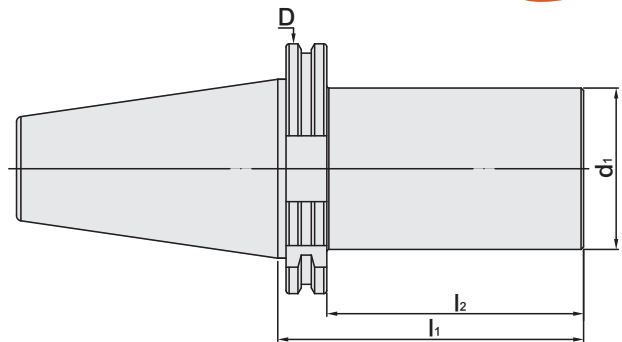
※ DAT30 與 BT30 共用；DAT50 與 BT50 共用 DAT30 and BT30 can be used in common. DAT50 and BT50 can be used in common.



# DAT 素材 DAT BLANK



**NEW**



規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>2</sub>	重量 (KGS) Weight
DAT50 x ψ2.75" - 4.734"	4.734	3.982	3.84	2.75	5.56
DAT50 x ψ4.5" - 3.324"	3.324	2.572	3.84	4.5	7.09

## 選配表 Option

拉頭 Pull Stud
B648

• 長度單位 Unit of Length (mm)

<p>CAT/EOC</p> 	<p>CAT/ER</p> 	<p>M 型 CAT/ER</p> 	<p>CAT/SPU</p> 
<p>CAT/SPH</p> 	<p>CAT/JTA</p> 	<p>CAT/MTA</p> 	<p>CAT/FMA</p> 
<p>CAT/SLN</p> 	<p>CAT/TG</p> 	<p>CAT/ETP</p> 	<p>CAT/MLD</p> 
<p>CAT/SBL</p> 	<p>CAT/SKS</p> 	<p>CAT/OSL</p> 	<p>CAT/OHER</p> 
<p>CAT/SOM</p> 	<p>CAT 套筒</p> 		

※ 詳細規格歡迎來電洽詢

Please feel free to contact us for more detailed spec.

• 長度單位 Unit of Length (mm)

### NT/MLC 直式筒夾銑床夾具組

#### STRAIGHT COLLET MULTI-LOCK COLLET CHUCK SET



NT30-MLC20-5 PCS  
NT40-MLC32-7 PCS  
NT50-MLC32-7 PCS  
NT50-MLC42-8 PCS

### EOC/OZ 銑床夾頭組

#### MILLING CHUCK SET



NT30-EOC25-7M-SYOZ  
NT40-EOC25-7M-SYOZ  
NT50-EOC25-7M-SYOZ

### EOC 立銑刀夾頭

#### COLLET CHUCK



NT30-EOC25  
NT40-EOC25  
NT40-EOC32  
NT50-EOC25  
NT50-EOC32

### ER 銑床夾頭組

#### MILLING CHUCK SET



NT30-ER32-SET  
NT30-ER40-SET  
NT40-ER32-SET  
NT40-ER40-SET  
NT50-ER40-SET  
NT50-ER50-SET

### NT/ER 銑床夾頭柄

#### COLLET HOLDER



NT30-ER16A  
NT30-ER20A  
NT30-ER25  
NT30-ER32  
NT30-ER40  
NT40-ER16A  
NT40-ER20A  
NT40-ER25  
NT40-ER32  
NT40-ER40  
NT40-ER50  
NT50-ER16A  
NT50-ER20A  
NT50-ER25  
NT50-ER32  
NT50-ER40  
NT50-ER50

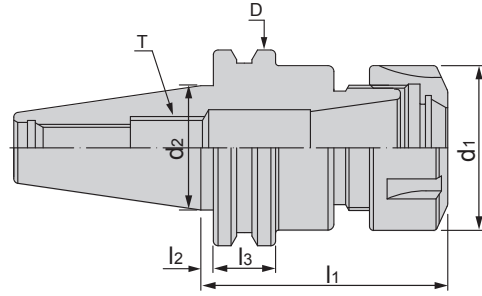
### 直結式鑽夾頭

#### DRILL CHUCK TYPE



NT30-SPU13-100  
NT40-SPU13-90  
NT50-SPU13-120

## ISO/ER 立銑刀夾頭 ISO/ER COLLET CHUCK(FOR W/OUT SLOTS)



### 特點 Feature

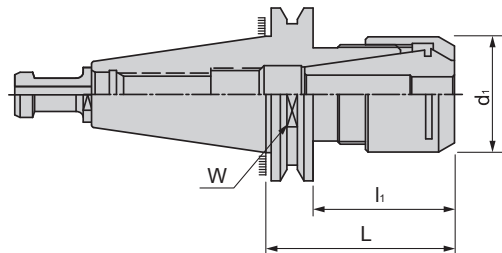
- 無鍵槽適用於高轉速下使用
- 動平衡校正 G2.5 36000rpm

- Is suitable without the key slot under the high speed uses.
- Dynamic balancing G2.5 at 36000rpm.

規格 (無鍵槽) Spec.	$l_1$	$l_2$	$l_3$	D	$d_1$	$d_2$	夾持範圍 Clamp Range	T	重量 (KGS) Weight
ISO20 x ER11A - 52	52	2	8	33	19	21.642	1~7	M6x 1.0P	0.55
ISO20 x ER16AD - 52	52	2	15.9	30	28	21.642	1~10	M10 x 1.5P	0.22
ISO20 x ER20AD - 52	52	2	15.9	30	34	21.642	1~13	M12 x 1.75P	0.25
ISO25 x ER11A - 52	52	2.95	8	37	19	24.91	1~7	M6x 1.0P	0.60
ISO25 x ER16A - 52	52	2.95	8	37	28	24.91	1~10	M10 x 1.5P	0.65
ISO25 x ER20A - 52	52	2.95	8	37	34	24.91	1~13	M12 x 1.75P	0.70
ISO30 x ER11A - 80	80	3.2	15.9	50	19	31.75	1~7	M6x 1.0P	0.70
ISO30 x ER16A - 63	63	3.2	15.9	50	28	31.75	1~10	M10 x 1.5P	0.57
ISO30 x ER20A - 63	63	3.2	15.9	50	34	31.75	1~13	M12 x 1.75P	0.62
ISO30 x ER25 - 63	63	3.2	15.9	50	42	31.75	1~16	M16 x 2.0P	0.67
ISO30 x ER32 - 63	63	3.2	15.9	50	50	31.75	2~20	M16 x 2.0P	0.68
ISO30 x ER40 - 57	57	3.2	15.9	50	63	31.75	3~26	M16 x 2.0P	1.00

ISO

## ISO/ER 高速刀把 ISO/ER HIGH SPEED COLLET CHUCK



### 特點 Feature

- 標準動平衡 G2.5 40000rpm

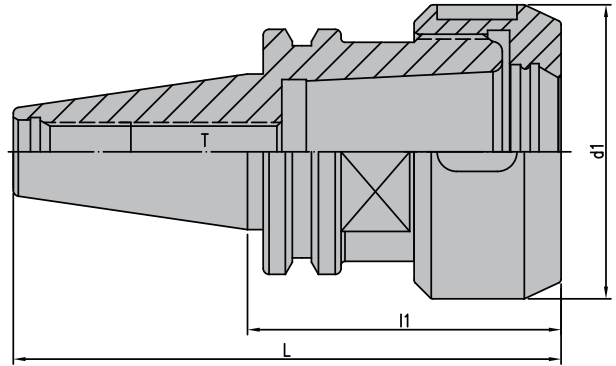
- Dynamic balancing G2.5 at 40000rpm.

規格 Spec.	L	$l_i$	$d_i$	W	扳手 Spanner	螺帽 Nut	重量 (KGS) Weight
ISO20xER16M-35HG	35	27.2	22	ISO20-W	ER16-MHG-W	ER16-MHG	0.14
ISO25xER16M-36HG	36	27.2	22	ISO25-W	ER16-MHG-W	ER16-MHG	0.18
ISO25xER20M-36HG	36	27.2	28	ISO25-W	ER20-MHG-W	ER20-MHG	0.20
ISO30xER16M-60HG	60	40.9	22	ISO30-W	ER16-MHG-W	ER16-MHG	0.58
ISO30xER20M-60HG	60	40.9	28	ISO30-W	ER20-MHG-W	ER20-MHG	0.6
ISO30xER25M-60HG	60	40.9	35	ISO30-W	ER25-MHG-W	ER25-MHG	0.58

### 選配表 Option

拉頭 Pull Stud	螺帽 Nut	扳手 Spanner	鎖刀座 Locking Device
B646/B649	B637	B652	B657

• 長度單位 Unit of Length (mm)



ISO

### 特點 Feature

- 標準動平衡 G2.5 18000rpm

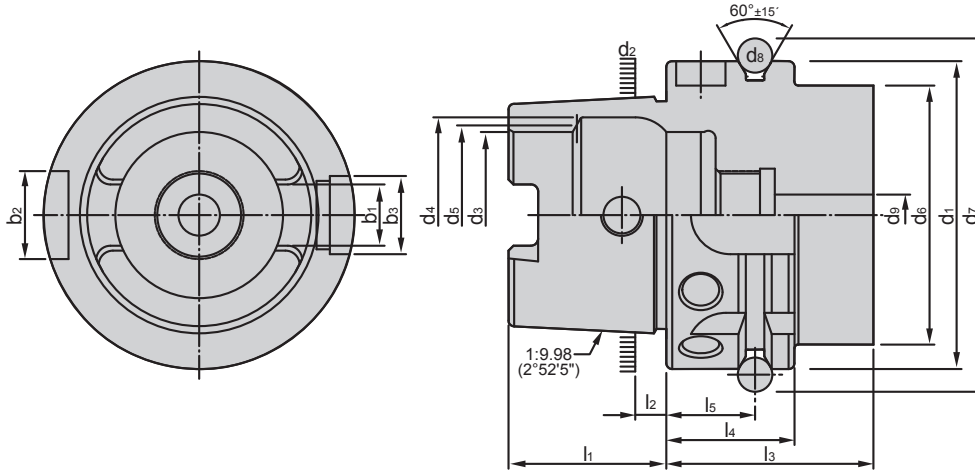
-Dynamic balancing G2.5 at 18000rpm.

規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	T
SK30-EOC25-70	117.8	70	60	M12x1.75P



• 長度單位 Unit of Length (mm)

DIN 69893 A



HSK

規格 Spec.	d <sub>1</sub> h <sub>10</sub>	d <sub>2</sub>	d <sub>3</sub> H <sub>10</sub>	d <sub>4</sub> H <sub>11</sub>	d <sub>5</sub>	d <sub>6</sub> Max.	d <sub>7</sub> -0.1	d <sub>8</sub>	d <sub>9</sub> Max.	l <sub>1</sub> -0.2	l <sub>2</sub>	l <sub>3</sub> Min.	l <sub>4</sub> -0.1	l <sub>5</sub> ±0.1	b <sub>1</sub> ±0.04	b <sub>2</sub> H <sub>10</sub>	b <sub>3</sub> H <sub>10</sub>
HSK25	25	19.006	14	16.4	15	20	28.5	3	3	13	2.5	20	10	4.5	6.05	6	7
HSK32	32	24.007	17	20.5	19	26	37	4	4.2	16	3.2	35	20	16	7.05	7	9
HSK40	40	30.007	21	25.5	23	34	45	4	5	20	4	35	20	16	8.05	9	11
HSK50	50	38.009	26	32	29	42	59.3	7	6.8	25	5	42	26	18	10.54	12	14
HSK63	63	48.010	34	40	37	53	72.3	7	8.4	32	6.3	42	26	18	12.54	16	18
HSK80	80	60.012	42	50	46	68	88.8	7	10.2	40	8	42	26	18	16.04	18	20
HSK100	100	75.013	53	63	58	88	109.75	7	12	50	10	45	29	20	20.02	20	22
HSK125	125	95.016	67	80	73	111	134.75	7	14	63	12.5	45	29	20	25.02	25	28

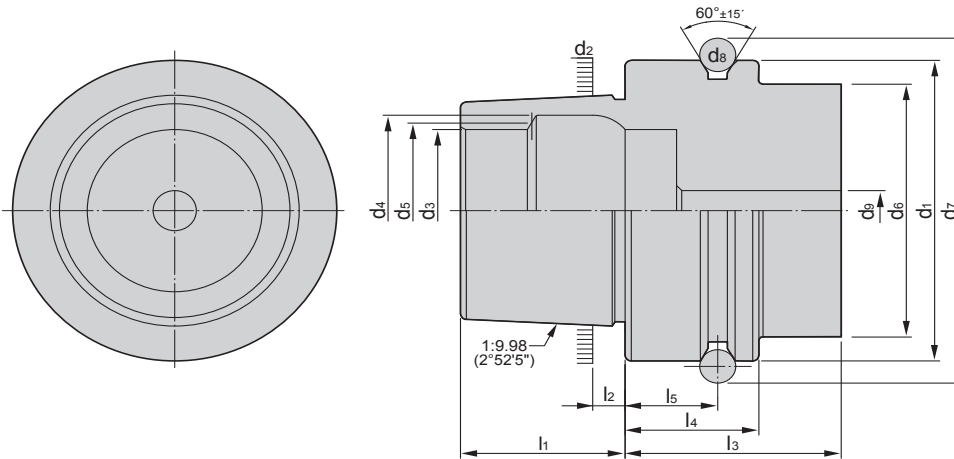
1. 錐度精度 : <AT3
2. 硬度 : > HRC 56°
3. 滲碳深度 : >0.8mm
4. 真圓度 : < 0.6μm
5. 表面粗糙度 : Ra < 0.25μm
6. 刀桿有預設標準動平衡 G6.3 · 可另外指定精密動平衡 G2.5
7. 本體規範 : DIN 69893-1

- 1.Taper tolerance < AT3.
- 2.Hardness > HRC 56°
3. Carbon depth > 0.8mm.
- 4.Roundness < 0.6μm.
- 5.Surface roughness : Ra < 0.25μm.
- 6.The shank has pre-balance at G6.3,and can provide precision balance at G2.5, made by request.
- 7.Shank body standard : DIN69893-1

• 長度單位 Unit of Length (mm)



## DIN 69893 E



規格 Spec.	d <sub>1</sub> h <sub>10</sub>	d <sub>2</sub>	d <sub>3</sub> H <sub>10</sub>	d <sub>4</sub> H <sub>11</sub>	d <sub>5</sub>	d <sub>6</sub> Max.	d <sub>7</sub> 0 -0.1	d <sub>8</sub>	d <sub>9</sub> Max.	l <sub>1</sub> 0 -0.2	l <sub>2</sub>	l <sub>3</sub> Min.	l <sub>4</sub> 0 -0.1	l <sub>5</sub> ±0.1
HSK25	25	19.006	14	16.4	15	20	28.5	3	3	13	2.5	20	10	4.5
HSK32	32	24.007	17	20.5	19	26	37	4	4.2	16	3.2	35	20	16
HSK40	40	30.007	21	25.5	23	34	45	4	5	20	4	35	20	16
HSK50	50	38.009	26	32	29	42	59.3	7	6.8	25	5	42	26	18
HSK63	63	48.010	34	40	37	53	72.3	7	8.4	32	6.3	42	26	18
HSK80	80	60.012	42	50	46	68	88.8	7	10.2	40	8	42	26	18
HSK100	100	75.013	53	63	58	88	109.75	7	12	50	10	45	29	20
HSK125	125	95.016	67	80	73	111	134.75	7	14	63	12.5	45	29	20

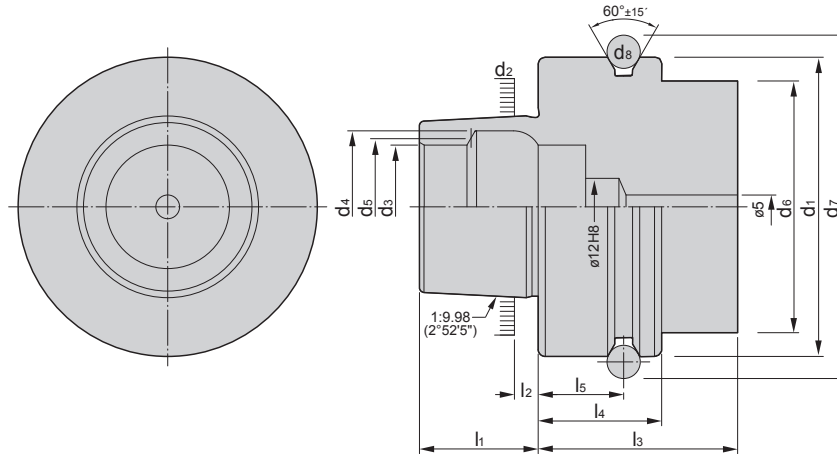
HSK

1. 錐度精度 : < AT3
2. 硬度 : > HRC 56°
3. 滲碳深度 : > 0.8mm
4. 真圓度 : < 0.6μm
5. 表面粗糙度 : Ra < 0.25μm
6. 刀桿有預設標準動平衡 G6.3 · 可另外指定精密動平衡 G2.5
7. 本體規範 : DIN 69893-E

1. Taper tolerance < AT3.
2. Hardness > HRC 56°
3. Carbon depth > 0.8mm.
4. Roundness < 0.6μm.
5. Surface roughness : Ra < 0.25μm.
6. The shank has pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
7. Shank body standard : DIN69893-E

• 長度單位 Unit of Length (mm)

DIN 69893 F



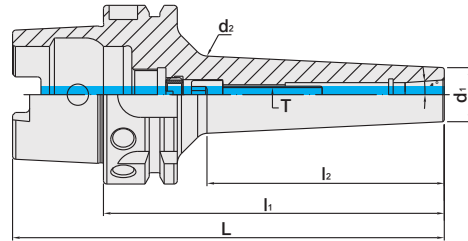
HSK

規格 Spec.	d <sub>1</sub> h <sub>10</sub>	d <sub>2</sub>	d <sub>3</sub> H <sub>10</sub>	d <sub>4</sub> H <sub>11</sub>	d <sub>5</sub>	d <sub>6</sub> Max.	d <sub>7</sub> 0 -0.1	d <sub>8</sub>	l <sub>1</sub> 0 -0.2	l <sub>2</sub>	l <sub>3</sub> Min.	l <sub>4</sub> 0 -0.1	l <sub>5</sub> ±0.1
HSK50	50	30.007	21	25.5	23	42	59.3	7	20	4	42	26	18
HSK63	63	38.009	26	32	29	53	72.3	7	25	5	42	26	18

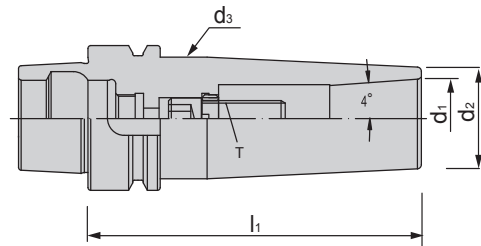
1. 錐度精度 : < AT3
2. 硬度 : > HRC 56°
3. 滲碳深度 : > 0.8mm
4. 真圓度 : < 0.6µm
5. 表面粗糙度 : Ra < 0.25µm
6. 刀桿有預設標準動平衡 G6.3 · 可另外指定精密動平衡 G2.5
7. 本體規範 : DIN 69893-F

1. Taper tolerance < AT3.
2. Hardness > HRC 56°
3. Carbon depth > 0.8mm.
4. Roundness < 0.6µm.
5. Surface roughness : Ra < 0.25µm.
6. The shank has pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
7. Shank body standard : DIN69893-F

• 長度單位 Unit of Length (mm)



規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	扭力值 Torque		夾持範圍 clamp Range	重量 (KGS) Weight
							N.m	lbf-ft		
HSK63A x EBL6 - 125	157	125	88.8	19.05	27.7	M6 x 1.0P	12	9	3~6	1.06
HSK63A x EBL6 - 150	182	150	115	19.05	30.3	M6 x 1.0P	12	9	3~6	1.19
HSK63A x EBL8 - 125	157	125	90.4	22.225	31	M8 x 1.25P	29	21	3~8	1.12
HSK63A x EBL8 - 150	182	150	116.7	22.225	33.2	M8 x 1.25P	29	21	3~8	1.26
HSK100A x EBL6 - 125	175	125	85.6	19.05	27.4	M6 x 1.0P	12	9	3~6	2.34
HSK100A x EBL6 - 150	200	150	111.9	19.05	30	M6 x 1.0P	12	9	3~6	2.49
HSK100A x EBL8 - 125	175	125	87.3	22.225	30.7	M8 x 1.25P	29	21	3~8	2.41
HSK100A x EBL8 - 150	200	150	113.6	22.225	33.3	M8 x 1.25P	29	21	3~8	2.55



### 特點 Feature

- 標準動平衡 G2.5 25000rpm

- The balancing garde reaches the revoluting of G2.5 25000rpm.

規格 Spec.	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
HSK50E x SBL6-80	80	9.93	14	19.188	M6x1.0P	2~6	1.40
HSK50E x SBL12-110	110	18	26	42	M10x1.5P	3~12	1.50
HSK50E x SBL20-110	110	27	35	42	M12x1.75P	3~20	1.80
HSK50E x SBL20-120	120	27	35	42	M12x1.75P	3~20	1.80

- 附扳手 Attaches the spanner.

### 選配表 Option

筒夾 Collet	扳手 Spanner	給水管 Coolant Supply Unti
B630	B630	B519

• 長度單位 Unit of Length (mm)

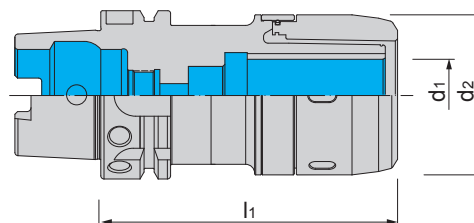


# HSK/MLK 強力銑削夾頭

## HSK/MLK FORCE COLLET CHUCK

DIN  
69893-A

防塵設計 Dust-proof design



規格 Spec.	$l_1$	$d_1$	$d_2$	重量 (KGS) Weight
HSK63A-MLK12-90	90	12	42	-
HSK63A-MLK16-100	100	16	48	-
HSK63A-MLK20-120	120	20	56.5	-
HSK63A-MLK25-105	105	25	60	-
HSK63A x MLK32-120	120	32	72	2.53
HSK63A x MLK32-150	150	32	72	-
HSK100A-MLK12-115	115	12	42	-
HSK100A-MLK16-120	120	16	48	-
HSK100A-MLK20-120	120	20	56.5	-
HSK100A-MLK25-115	115	25	60	-
HSK100A x MLK32-120	120	32	72	4.36

HSK

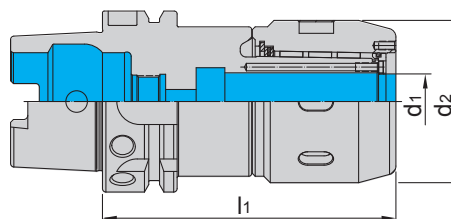


# HSK/MLD 直式筒夾銑床夾頭

## HSK/MLD MULTI-LOCK COLLET CHUCK

DIN 69893  
NO.M430337

DIN  
69893-A



### 特點 Feature

- 偏擺精度 :0.001~0.005 以內 · 真圓度 :0.02mm
- 預設動平衡至 G6.3 8000rpm · 可依照客戶指定動平衡等級及轉速 · 並附檢驗報告 · 但需另外付費
- MLD20、MLD-3/4、MLK20 扳手共用
- MLD25、EOC25、MLK25 扳手共用
- MLD32、MLD-1-1/4、MLK32 扳手共用

- Run-out: Within 0.001~0.005mm. Concentricity: 0.02mm.
- Dynamic pre-balancing G6.3 at 8000rpm., with an inspection report. The balancing grade and revolution can be done according to customer request but the additional charge is needed.
- MLD20 and MLD-3/4、MLK20 spanner can be used in common.
- MLD25 and EOC25、MLK25 spanner can be used in common.
- MLD32 and MLD-1-1/4、MLK32 spanner can be used in common.

規格 Spec.	$l_1$	$d_1$	$d_2$	重量 (KGS) Weight
HSK50A x MLD20 - 120	120	20	56.5	1.62
HSK50A x MLD32 - 130	130	32	71	1.80
HSK63A x MLD20 - 120	120	20	56.5	2.07
HSK63A x MLD32 - 120	120	32	71	2.54
HSK100A x MLD20 - 120	120	20	56.5	3.40
HSK100A x MLD32 - 120	120	31	71	4.00

※ 注意：銑刀裝置入筒夾需超過筒夾有效挾持長度，以避免因非完全挾持，導致筒夾損壞、變形

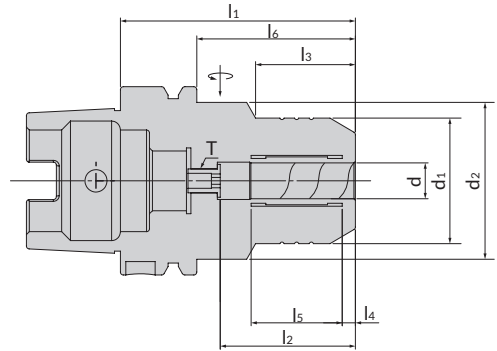
Note: To avoid the improper clamping (no clamp at all) & damage and deformation for collet, it should exceed the effective length of collet when installing the cutter onto collet.

### 選配表 Option

筒夾 Collet	扳手 Spanner	給水管 Coolant Supply Unti
B631	B651	B519

• 長度單位 Unit of Length (mm)

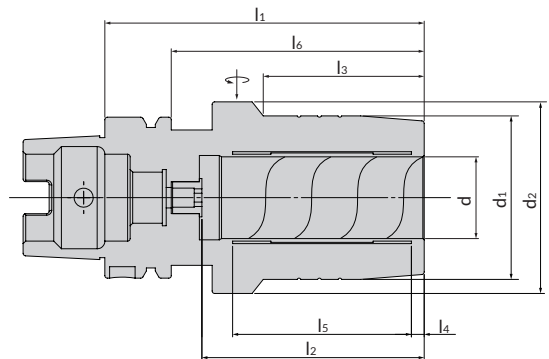
同心度和重覆精度在 0.003mm 以內 (2.5D)



### 特點 Feature

- 小徑液壓刀桿：外徑降低干涉，無需使用減壓徑套筒
  - 直徑為 20mm 時，最大夾持扭矩高達 900Nm 最小扭矩 520Nm 以上。
  - 直徑為 32mm 時，最大夾持扭矩高達 2000Nm 最小扭矩 900Nm 以上。
- Small-diameter hydraulic shank: Prevent interference from shank, no need to use collet reducer
  - diameter 20mm, .

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	d	d <sub>1</sub>	d <sub>2</sub>	T	扳手 Wrench	扭力值 (N.m) Torque	重量 (KGS) Weight
HSK63A-LHC6-70	70	37	25	-	21	43	6	26	50	M5	PT5	-	-
HSK63A-LHC8-70	70	37	25	-	21	43	8	28	50	M6	PT5	-	-
HSK63A-LHC10-80	80	41	35	-	31	53	10	30	50	M8X1.0P	PT5	-	-
HSK63A-LHC12-80	80	46	34	4.5	31	54	12	42	52.5	M8X1.0P	PT5	110	1.25
HSK63A-LHC16-80	80	51	-	5	37	54	16	52.5	-	M8X1.0P	PT5	350	1.30
HSK63A-LHC20-80	80	51	-	5	37	54	20	52.5	-	M8X1.0P	PT5	520	1.32
HSK63A-LHC32-120	120	61	-	6	44	94.05	32	62.5	-	M8X1.0P	PT6	900	2.66
HSK100A-LHC20-90	90	51	-	5	37	61	20	52.5	-	M8X1.0P	PT5	520	2.80
HSK100A-LHC32-100	100	61	-	6	44	71	32	72	-	M8X1.0P	PT6	900	3.80



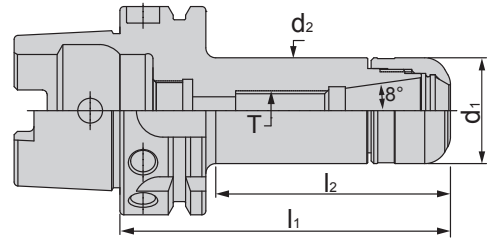
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	d	d <sub>1</sub>	d <sub>2</sub>	T	扳手 Wrench	扭力值 (N.m) Torque	重量 (KGS) Weight
HSK63A-LHC32-125-P	125	61	10	63	47.7	99	32	64	75	M16X1.0P	PT6	650	2.70

### 選配表 Option

筒夾 Collet	給水管 Coolant Supply Unit
B632	B519

• 長度單位 Unit of Length (mm)

精度 Accuracy : <3μm



### 特點 Feature

- 標準動平衡 G2.5 25000rpm

- The Dynamic balancing grade reaches the revolving of G2.5 25000rpm.

HSK

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
HSK32AxPNER16-50	50	29	30	26	-	3.0~10	0.14
HSK32AxPNER20-60	60	39	32	-	-	3.0~13	0.24
HSK40AxPNER16-60	60	37	30	26	-	3.0~10	0.36
HSK40AxPNER20-60	60	38	32	32	-	3.0~13	0.37
HSK40AxPNER25-60	60	38	40	-	-	3.0~16	0.47
HSK40AxPNER32-70	70	35	50	40.5	-	3.0~20	0.57
HSK50AxPNER16-60	60	31	30	26	-	3.0~10	0.54
HSK50AxPNER20-60	60	31	32	32	-	3.0~13	0.55
HSK50AxPNER25-60	60	32	40	32.5	-	3.0~16	0.65
HSK50AxPNER32-70	70	42	50	-	-	3.0~20	0.75
HSK50AxPNER40-80	80	38	63	-	-	6.0~26	0.85
HSK63AxPNER16-60	60	31	30	26	-	3.0~10	1.00
HSK63AxPNER16-100	100	64	30	26	M10x1.5P	3.0~10	1.10
HSK63AxPNER16-130	130	94	30	26	M10x1.5P	3.0~10	1.20
HSK63AxPNER16-160	160	124	30	26	M10x1.5P	3.0~10	1.30
HSK63AxPNER20-60	60	31	32	32	-	3.0~13	1.60
HSK63AxPNER20-100	100	71	32	32	M12x1.75P	3.0~13	1.70
HSK63AxPNER20-130	130	99	32	32	M12x1.75P	3.0~13	1.80
HSK63AxPNER20-160	160	129	32	32	M12x1.75P	3.0~13	1.90
HSK63AxPNER25-100	100	71	40	40	M16x2.0P	3.0~16	1.80
HSK63AxPNER25-130	130	101	40	40	M16x2.0P	3.0~16	1.90
HSK63AxPNER25-160	160	131	40	40	M16x2.0P	3.0~16	2.00
HSK63AxPNER32-100	100	71	50	50	-	3.0~20	2.55
HSK63AxPNER32-130	130	101	50	50	M16x2.0P	3.0~20	2.65
HSK63AxPNER32-160	160	131	50	50	M16x2.0P	3.0~20	2.75
HSK63AxPNER40-100	100	71	63	-	M20x2.0P	6.0~26	2.65
HSK63AxPNER40-130	130	101	63	-	M20x2.0P	6.0~26	2.75
HSK63AxPNER40-160	160	131	63	-	M20x2.0P	6.0~26	2.85

### 選配表 Option

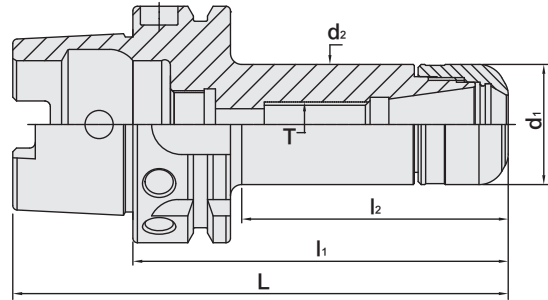
筒夾 Collet	螺帽 Nut	扳手 Spanner	給水管 Coolant Supply Unit
B625-B626	B637-B638	B651	B519



• 長度單位 Unit of Length (mm)



精度 Accuracy : <3μm



### 特點 Feature

- 標準動平衡 G2.5 25000rpm

- The Dynamic balancing grade reaches the revolving of G2.5 25000rpm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
HSK80AxPNER32-100	100	69	50	50	-	3.0~20	3.10
HSK80AxPNER40-120	120	91	63	63	M20x2.0P	6.0~26	3.20
HSK100AxPNER16-100	100	61	30	26	-	3.0~10	2.90
HSK100AxPNER16-130	130	91	30	26	M10x1.5P	3.0~10	
HSK100AxPNER16-160	160	121	30	26	M10x1.5P	3.0~10	
HSK100AxPNER16-200	200	161	30	26	M10x1.5P	3.0~10	
HSK100AxPNER20-100	100	61	32	32	M12x1.75P	3.0~13	3.00
HSK100AxPNER20-130	130	91	32	32	-	3.0~13	
HSK100AxPNER20-160	160	121	32	32	M12x1.75P	3.0~13	
HSK100AxPNER20-200	200	161	32	32	M12x1.75P	3.0~13	
HSK100AxPNER25-100	100	61	40	40	M16x2.0P	3.0~16	3.10
HSK100AxPNER25-130	130	91	40	40	-	3.0~16	
HSK100AxPNER25-160	160	121	40	40	M16x2.0P	3.0~16	
HSK100AxPNER25-200	200	161	40	40	M16x2.0P	3.0~16	
HSK100AxPNER32-100	100	61	50	50	-	3.0~20	3.20
HSK100AxPNER32-130	130	91	50	50	M16x2.0P	3.0~20	
HSK100AxPNER32-160	160	121	50	50	M16x2.0P	3.0~20	
HSK100AxPNER32-200	200	161	50	50	M16x2.0P	3.0~20	
HSK100AxPNER40-100	100	61	63	63	-	6.0~26	3.30
HSK100AxPNER40-130	130	91	63	63	M20x2.0P	6.0~26	
HSK100AxPNER40-160	160	121	63	63	M20x2.0P	6.0~26	
HSK100AxPNER40-200	200	161	63	63	M20x2.0P	6.0~26	

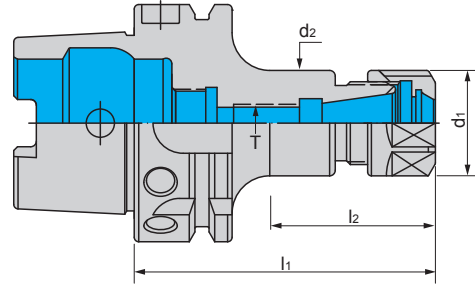
HSK

### 選配表 Option

筒夾 Collet	螺帽 Nut	扳手 Spanner	給水管 Coolant Supply Unti
B625-B626	B637-B638	B651	B519



• 長度單位 Unit of Length (mm)



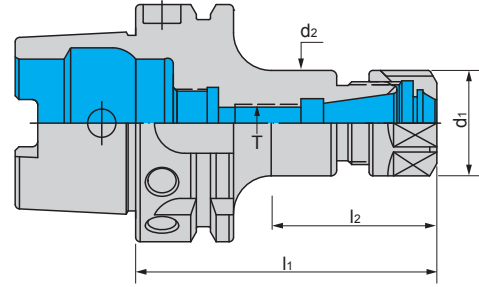
HSK

規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	T	重量 (KGS) Weight
HSK 40A x ER20A-80	80	59	34	32	M10 x 1.5P	0.35
HSK 40A x ER25-80	80	59	42	32	M10 x 1.5P	0.40
HSK 50A x ER16A-80	80	49	28	28	M10 x 1.5P	0.50
HSK 50A x ER16A-100	100	71	28	28	M10 x 1.5P	0.55
HSK 50A x ER16A-120	120	91	28	28	M10 x 1.5P	0.70
HSK 50A x ER20A-80	80	53	34	34	M12 x 1.75P	0.60
HSK 50A x ER20A-100	100	71	34	34	M12 x 1.75P	0.65
HSK 50A x ER20A-120	120	91	34	34	M12 x 1.75P	0.70
HSK 50A x ER25-80	80	53	42	40	M16 x 2.0P	0.70
HSK 50A x ER25-100	100	73	42	42	M16 x 2.0P	0.80
HSK 50A x ER25-135	135	108	42	42	M16 x 2.0P	0.90
HSK 50A x ER32-100	100	73	50	50	M16 x 2.0P	1.08
HSK 50A x ER32-135	135	108	50	50	M16 x 2.0P	1.50
HSK 50A x ER32-160	160	133	50	50	M16 x 2.0P	1.70
HSK 63A x ER16A-80	80	44	28	28	M10 x 1.5P	0.90
HSK 63A x ER16A-100	100	64	28	28	M10 x 1.5P	0.98
HSK 63A x ER16A-120	120	84	28	28	M10 x 1.5P	1.70
HSK 63A x ER16A-160	160	124	28	28	M10 x 1.5P	1.28
HSK 63A x ER20A-80	80	49	34	34	M12 x 1.75P	0.96
HSK 63A x ER20A-100	100	66	34	34	M12 x 1.75P	1.09
HSK 63A x ER20A-120	120	91	34	34	M12 x 1.75P	1.19
HSK 63A x ER20A-160	160	131	34	34	M12 x 1.75P	2.00
HSK 63A x ER25-80	80	49	42	42	M16 x 2.0P	1.07
HSK 63A x ER25-100	100	69	42	42	M16 x 2.0P	1.25
HSK 63A x ER25-120	120	89	42	42	M16 x 2.0P	1.44
HSK 63A x ER25-150	150	119	42	42	M16 x 2.0P	2.30
HSK 63A x ER32-80	80	53	50	50	-	1.16
HSK 63A x ER32-100	100	72	50	50	M16 x 2.0P	1.44
HSK 63A x ER32-145	145	118	50	50	M16 x 2.0P	2.70
HSK 63A x ER32-160	160	133	50	50	M16 x 2.0P	2.33
HSK 63A x ER40-80	80	53	63	52	-	1.28
HSK 63A x ER40-100	100	73	63	60	M20 x 2.0P	1.69
HSK 63A x ER40-120	120	93	63	60	M20 x 2.0P	2.03
HSK 63A x ER40-150	150	123	63	60	M20 x 2.0P	2.95
HSK 63A x ER40-170	170	143	63	60	M20 x 2.0P	3.10
HSK 63A x ER50-120	120	93	78	60	M24 x 2.0P	3.50

### 選配表 Option

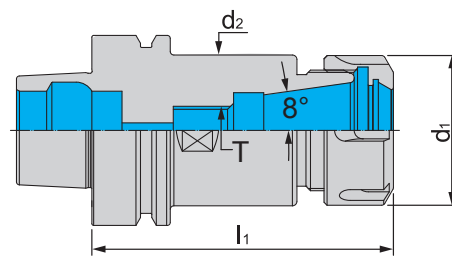
筒夾 Collet	螺帽 Nut	扳手 Spanner	給水管 Coolant Supply Uni
B612	B634	B650	B519

• 長度單位 Unit of Length (mm)



規格 Spec.	$l_1$	$l_2$	$d_1$	$d_2$	T	重量 (KGS) Weight
HSK 100A x ER16A-80	80	41	28	28	M10 x 1.5P	2.90
HSK 100A x ER16A-100	100	61	28	28	M10 x 1.5P	2.95
HSK 100A x ER16A-160	160	116	28	28	M10 x 1.5P	3.45
HSK 100A x ER20A-80	80	41	34	34	M12 x 1.75P	2.9
HSK 100A x ER20A-100	100	61	34	34	M12 x 1.75P	2.57
HSK 100A x ER20A-160	160	121	34	34	M12 x 1.75P	3.30
HSK 100A x ER25-100	100	61	42	42	M16 x 2.0P	3.00
HSK 100A x ER25-130	130	96	42	42	M16 x 2.0P	3.00
HSK 100A x ER32-100	100	61	50	50	M16 x 2.0P	2.92
HSK 100A x ER32-135	135	96	50	50	M16 x 2.0P	3.35
HSK 100A x ER32-150	150	116	50	50	M16 x 2.0P	3.50
HSK 100A x ER40-80	80	46	63	62	-	3.30
HSK 100A x ER40-120	120	86	63	63	M20 x 2.0P	3.71
HSK 100A x ER40-175	175	141	63	60	M20 x 2.0P	4.20
HSK 100A x ER50-100	100	68	78	78	-	4.50
HSK 100A x ER50-120	120	88	78	64	M24 x 2.0P	5.00

HSK

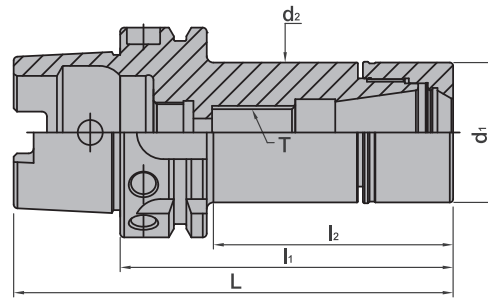


規格 Spec.	$l_1$	$d_1$	$d_2$	T	重量 (KGS) Weight
HSK 63F x ER32-70	70	50	53	-	0.97
HSK 63F x ER32-100	100	50	53	M16 x 2.0P	2.55
HSK 63F x ER40-75	75	63	53	-	2.65
HSK 63F x ER40-100	100	63	53	M20 x 2.0P	2.50
HSK 63F x ER40-120	120	63	53	M20 x 2.0P	2.77

### 選配表 Option

筒夾 Collet	螺帽 Nut	扳手 Spanner
B612	B634	B650

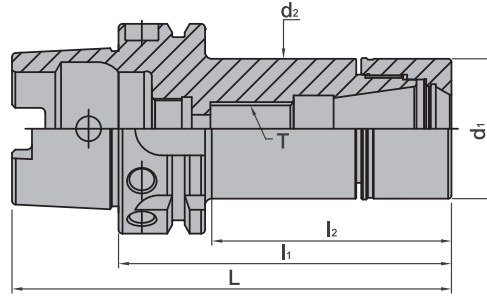
• 長度單位 Unit of Length (mm)



HSK

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Size Range	重量 (KGS) Weight
HSK40AxPro.E16-70	90	70	48	30	30	-	1~10	0.40
HSK40AxPro.E16-100	120	100	78	30	30	M10x1.5P	1~10	0.55
HSK40AxPro.E20-70	90	70	49	35	34	-	1~13	0.47
HSK40AxPro.E20-100	120	100	79	35	34	M12x1.75P	1~13	0.63
HSK40AxPro.E25-70	90	70	35	42	42	-	1~16	0.51
HSK40AxPro.E25-100	120	100	65	42	42	M16x2.0P	1~16	0.80
HSK40AxPro.E32-70	90	70	35	50	50	-	2~20	0.52
HSK40AxPro.E32-100	120	100	65	50	50	M16x2.0P	2~20	0.90
HSK50AxPro.E16-70	95	70	42	30	30	-	1~10	0.56
HSK50AxPro.E16-100	125	100	71	30	30	M10x1.5P	1~10	0.71
HSK50AxPro.E16-125	150	125	96	30	30	M10x1.5P	1~10	0.84
HSK50AxPro.E16-150	175	150	121	30	30	M10x1.5P	1~10	0.97
HSK50AxPro.E20-70	95	70	42	35	35	-	1~13	0.62
HSK50AxPro.E20-100	125	100	71	35	35	M12x1.75P	1~13	0.83
HSK50AxPro.E20-125	150	125	96	35	35	M12x1.75P	1~13	1.01
HSK50AxPro.E20-150	175	150	121	35	35	M12x1.75P	1~13	1.19
HSK50AxPro.E25-70	95	70	43.5	42	42	-	1~16	0.71
HSK50AxPro.E25-100	125	100	73.5	42	42	M16x2.0P	1~16	1.00
HSK50AxPro.E25-125	150	125	98.5	42	42	M16x2.0P	1~16	1.26
HSK50AxPro.E25-150	175	150	123.5	42	42	M16x2.0P	1~16	1.52
HSK50AxPro.E32-80	105	80	53	50	50	-	2~20	0.82
HSK50AxPro.E32-100	125	100	73	50	50	M16x2.0P	2~20	1.05
HSK50AxPro.E32-125	150	125	98	50	50	M16x2.0P	2~20	1.37
HSK50AxPro.E32-150	175	150	123	50	50	M16x2.0P	2~20	1.71
HSK63AxPro.E16-70	102	70	39	30	30	-	1~10	0.82
HSK63AxPro.E16-100	132	100	69	30	30	M10x1.5P	1~10	0.97
HSK63AxPro.E16-125	157	125	94	30	30	M10x1.5P	1~10	1.09
HSK63AxPro.E16-150	182	150	119	30	30	M10x1.5P	1~10	1.22
HSK63AxPro.E16-200	232	200	169	30	30	M10x1.5P	1~10	1.47
HSK63AxPro.E20-70	102	70	39	35	35	-	1~13	0.88
HSK63AxPro.E20-100	132	100	69	35	35	M12x1.75P	1~13	1.08
HSK63AxPro.E20-125	157	125	94	35	35	M12x1.75P	1~13	1.25
HSK63AxPro.E20-150	182	150	119	35	35	M12x1.75P	1~13	1.43
HSK63AxPro.E20-200	232	200	169	35	35	M12x1.75P	1~13	1.78
HSK63AxPro.E25-70	102	70	41	42	42	-	1~16	0.97
HSK63AxPro.E25-100	132	100	71	42	42	M16x2.0P	1~16	1.26
HSK63AxPro.E25-125	157	125	96	42	42	M16x2.0P	1~16	1.51
HSK63AxPro.E25-150	192	150	121	42	42	M16x2.0P	1~16	1.77
HSK63AxPro.E25-200	232	200	171	42	42	M16x2.0P	1~16	2.28
HSK63AxPro.E32-80	112	80	53	50	50	-	2~20	1.01
HSK63AxPro.E32-100	132	100	71	50	50	M16x2.0P	2~20	1.39
HSK63AxPro.E32-125	157	125	96	50	50	M16x2.0P	2~20	1.69
HSK63AxPro.E32-150	182	150	121	50	50	M16x2.0P	2~20	2.02
HSK63AxPro.E32-200	232	200	171	50	50	M16x2.0P	2~20	2.70

• 長度單位 Unit of Length (mm)



規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
HSK80AxPro.E16-70	110	70	39	30	30	-	1~10	1.25
HSK80AxPro.E16-100	140	100	69	30	30	M10x1.5P	1~10	1.40
HSK80AxPro.E16-125	165	125	94	30	30	M10x1.5P	1~10	1.52
HSK80AxPro.E16-150	190	150	119	30	30	M10x1.5P	1~10	1.64
HSK80AxPro.E16-200	240	200	169	30	30	M10x1.5P	1~10	1.88
HSK80AxPro.E20-70	110	70	39	35	35	-	1~13	1.31
HSK80AxPro.E20-100	140	100	69	35	35	M12x1.75P	1~13	1.52
HSK80AxPro.E20-125	165	125	94	35	35	M12x1.75P	1~13	1.69
HSK80AxPro.E20-150	190	150	119	35	35	M12x1.75P	1~13	1.86
HSK80AxPro.E20-200	240	200	169	35	35	M12x1.75P	1~13	2.20
HSK80AxPro.E25-70	110	70	39	42	42	-	1~16	1.41
HSK80AxPro.E25-100	140	100	69	42	42	M16x2.0P	1~16	1.69
HSK80AxPro.E25-125	165	125	94	42	42	M16x2.0P	1~16	1.94
HSK80AxPro.E25-160	200	160	129	42	42	M16x2.0P	1~16	2.29
HSK80AxPro.E25-200	240	200	169	42	42	M16x2.0P	1~16	2.69
HSK80AxPro.E32-100	140	100	69	50	50	-	2~20	1.81
HSK80AxPro.E32-125	165	125	94	50	50	M16x2.0P	2~20	2.12
HSK80AxPro.E32-150	190	150	119	50	50	M16x2.0P	2~20	2.46
HSK80AxPro.E32-200	240	200	169	50	50	M16x2.0P	2~20	3.12
HSK100AxPro.E16-100	150	100	61	30	30	M10x1.5P	1~10	2.29
HSK100AxPro.E16-125	175	125	86	30	30	M10x1.5P	1~10	2.41
HSK100AxPro.E16-150	200	150	111	30	30	M10x1.5P	1~10	2.52
HSK100AxPro.E16-200	250	200	161	30	30	M10x1.5P	1~10	2.75
HSK100AxPro.E20-100	150	100	61	35	35	-	1~13	2.40
HSK100AxPro.E20-125	175	125	86	35	35	M12x1.75P	1~13	2.57
HSK100AxPro.E20-150	200	150	111	35	35	M12x1.75P	1~13	2.73
HSK100AxPro.E20-200	250	200	161	35	35	M12x1.75P	1~13	3.06
HSK100AxPro.E25-100	150	100	61	42	42	-	1~16	2.58
HSK100AxPro.E25-125	175	125	86	42	42	M16x2.0P	1~16	2.81
HSK100AxPro.E25-150	200	150	111	42	42	M16x2.0P	1~16	3.06
HSK100AxPro.E25-200	250	200	161	42	42	M16x2.0P	1~16	3.55
HSK100AxPro.E32-100	150	100	61	50	50	-	2~20	2.68
HSK100AxPro.E32-125	175	125	86	50	50	M16x2.0P	2~20	2.98
HSK100AxPro.E32-150	200	150	111	50	50	M16x2.0P	2~20	3.32
HSK100AxPro.E32-200	250	200	161	50	50	M16x2.0P	2~20	3.98
HSK125AxPro.E16-100	163	100	41	30	30	M10x1.5P	1~10	3.91
HSK125AxPro.E16-125	188	125	66	30	30	M10x1.5P	1~10	4.03
HSK125AxPro.E16-150	213	150	91	30	30	M10x1.5P	1~10	4.13
HSK125AxPro.E16-200	263	200	141	30	30	M10x1.5P	1~10	4.34
HSK125AxPro.E20-100	163	100	44	35	35	M12x1.75P	1~13	3.97
HSK125AxPro.E20-125	188	125	69	35	35	M12x1.75P	1~13	4.13
HSK125AxPro.E20-150	213	150	94	35	35	M12x1.75P	1~13	4.29
HSK125AxPro.E20-200	263	200	144	35	35	M12x1.75P	1~13	4.60
HSK125AxPro.E25-100	163	100	47	42	42	M16x2.0P	1~16	4.07

HSK

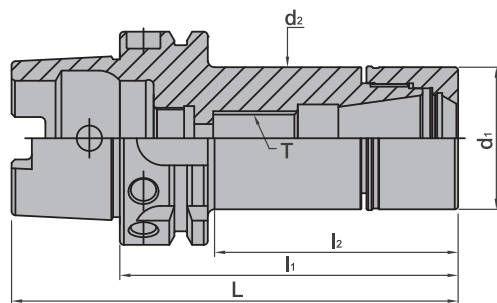


## HSK/Pro.E 筒夾式刀桿 HSK/Pro.E COLLET CHUCK(FOR TYPE A)

DIN  
69893-A



**NEW**

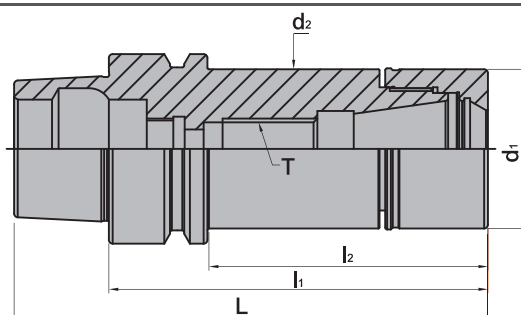


規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
HSK125A xPro.E25-125	188	125	72	42	42	M16x2.0P	1~16	4.31
HSK125A xPro.E25-150	213	150	97	42	42	M16x2.0P	1~16	4.55
HSK125A xPro.E25-200	263	200	147	42	42	M16x2.0P	1~16	5.02
HSK125A xPro.E32-100	163	100	61	50	50	M16x2.0P	2~20	3.94
HSK125A xPro.E32-125	188	125	86	50	50	M16x2.0P	2~20	4.30
HSK125A xPro.E32-150	213	150	111	50	50	M16x2.0P	2~20	4.59
HSK125A xPro.E32-200	263	200	161	50	50	M16x2.0P	2~20	5.23

HSK



## HSK/Pro.E 筒夾式刀桿 HSK/Pro.E COLLET CHUCK(FOR TYPE E)



**NEW**

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Clamp Range	重量 (KGS) Weight
HSK25ExPro.E16-60	73	60	49	30	30	-	1~10	0.22
HSK32ExPro.E16-65	81	65	44	30	30	-	1~10	0.29
HSK40ExPro.E16-60	80	60	39	30	30	-	1~10	0.37
HSK40ExPro.E20-100	120	100	79	35	34	M12x1.75P	1~13	0.68
HSK40ExPro.E20-125	145	125	104	35	34	M12x1.75P	1~13	0.85
HSK40ExPro.E25-70	90	70	49.5	42	42	-	1~16	0.53
HSK40ExPro.E25-100	120	100	79.5	42	42	M16x2.0P	1~16	0.82
HSK40ExPro.E25-125	145	125	104.5	42	42	M16x2.0P	1~16	1.08
HSK40ExPro.E25-150	170	150	129.5	42	42	M16x2.0P	1~16	1.34
HSK40ExPro.E32-70	90	70	49.5	50	50	M16x2.0P	2~20	0.53
HSK40ExPro.E32-100	120	100	79.5	50	50	M16x2.0P	2~20	0.92
HSK50ExPro.E16-70	95	70	41	30	30	-	1~10	0.60
HSK50ExPro.E16-100	125	100	71	30	30	M10x1.5P	1~10	0.75
HSK50ExPro.E20-70	95	70	41	35	35	-	1~13	0.66
HSK50ExPro.E20-100	125	100	71	35	35	M12x1.75P	1~13	0.86
HSK50ExPro.E20-125	150	125	96	35	35	M12x1.75P	1~13	1.04
HSK50ExPro.E20-150	175	150	121	35	35	M12x1.75P	1~13	1.22
HSK50ExPro.E25-70	95	70	43.5	42	42	-	1~16	0.70
HSK50ExPro.E25-100	125	100	73.5	42	42	M16x2.0P	1~16	0.99
HSK50ExPro.E32-70	95	70	43.5	50	50	-	2~20	0.73
HSK50ExPro.E32-100	125	100	73	50	50	M16x2.0P	2~20	1.06
HSK50ExPro.E32-125	150	125	98	50	50	M16x2.0P	2~20	1.41
HSK50ExPro.E32-150	175	150	123	50	50	M16x2.0P	2~20	1.75

• 長度單位 Unit of Length (mm)



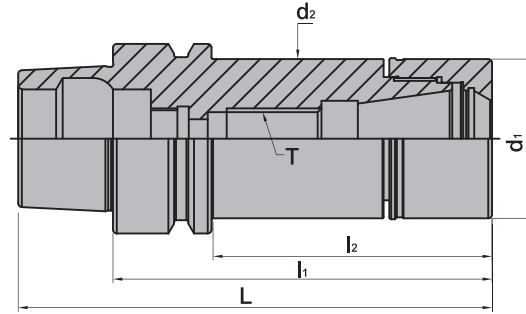


## HSK-F/Pro.E 筒夾式刀桿 HSK-F/Pro.E COLLET CHUCK(FOR TYPE F)

DIN  
69893-A



NEW

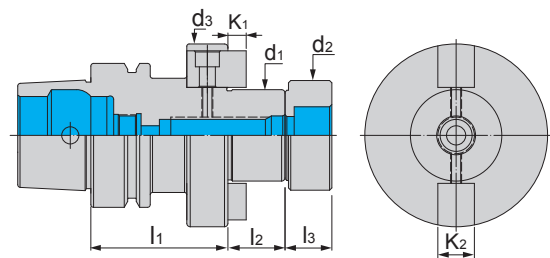


規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	T	夾持範圍 Size Range	重量 (KGS) Weight
HSK63FxPro.E16-70	95	70	39	30	30	-	1~10	0.82
HSK63FxPro.E16-100	125	100	69	30	30	M10x1.5P	1~10	0.97
HSK63FxPro.E16-125	150	125	94	30	30	M10x1.5P	1~10	1.10
HSK63FxPro.E20-70	95	70	39	35	35	-	1~13	0.88
HSK63FxPro.E20-100	125	100	69	35	35	M12x1.75P	1~13	1.09
HSK63FxPro.E20-125	150	125	94	35	35	-	1~13	1.27
HSK63FxPro.E20-150	175	150	119	35	35	M16x2.0P	1~13	1.45
HSK63FxPro.E25-70	95	70	41	42	42	M16x2.0P	1~16	0.97
HSK63FxPro.E25-100	125	100	71	42	42	M16x2.0P	1~16	1.26
HSK63FxPro.E25-125	150	125	96	42	42	M16x2.0P	1~16	1.52
HSK63FxPro.E32-70	95	70	41	50	50	M16x2.0P	2~20	1.00
HSK63FxPro.E32-100	125	100	71	50	50	-	2~20	1.38
HSK63FxPro.E32-125	150	125	96	50	50	M10x1.5P	2~20	1.70
HSK63FxPro.E32-150	175	150	121	50	50	-	2~20	2.04

HSK



## HSK/FMB 平面銑刀柄 HSK/FMB FACE MILL ARBOR(FOR TYPE E)



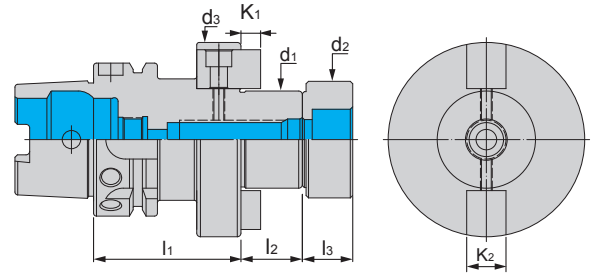
### 特點 Feature

- 平面銑刀配合部位 (d1) 軸系公差 h6.

- d1 tolerance: h6.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	k <sub>1</sub>	k <sub>2</sub>	重量 (KGS) Weight
HSK 40E x FMB22 - 60	60	19	14	22	26	48	4.8	10	0.86
HSK 50E x FMB22 - 60	60	19	14	22	26	48	4.8	10	1.20
HSK 50E x FMB27 - 60	60	21	16	27	31.5	60	5.8	12	1.30

• 長度單位 Unit of Length (mm)



### 特點 Feature

- 平面銑刀配合部位 (d1) 軸系公差 h6.

- d1 tolerance: h6.

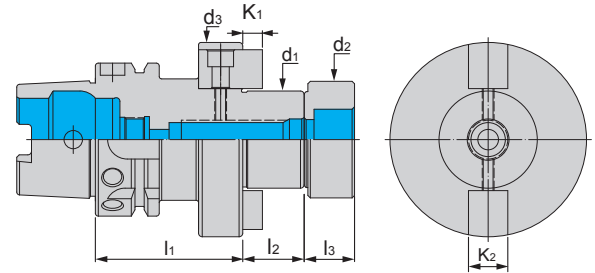
規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	$k_1$	$k_2$	重量 (KGS) Weight
HSK 40A x FMB16 - 50	50	17	-	16	-	40	5	8	0.70
HSK 40A x FMB22 - 60	60	19	14	22	26	52	4.8	10	0.86
HSK 40A x FMB27 - 60	60	21	16	27	31.5	60	5.8	12	1.00
HSK 40A x FMB32 - 60	60	24	16	32	41	78	6.8	14	1.10
HSK 50A x FMB16 - 50	50	17	-	16	-	40	5	8	1.10
HSK 50A x FMB22 - 60	60	19	14	22	26	48	4.8	10	0.95
HSK 50A x FMB27 - 60	60	21	16	27	31.5	60	5.8	12	1.30
HSK 50A x FMB32 - 60	60	24	-	32	41	78	6.8	14	1.50
HSK 63A x FMB16 - 50	50	17	-	16	-	40	5	8	1.20
HSK 63A x FMB16 - 100	100	17	-	16	-	40	5	8	
HSK 63A x FMB16 - 150BG	150	17	-	16	-	40	5	8	
HSK 63A x FMB22 - 50	50	17	14	22	26	48	4.8	10	1.30
HSK 63A x FMB22 - 100	100	19	14	22	26	48	4.8	10	
HSK 63A x FMB22 - 150BG	150	19	14	22	26	48	4.8	10	
HSK 63A x FMB27 - 60	60	19	16	27	31.5	53	5.8	12	1.50
HSK 63A x FMB27 - 100	100	21	16	27	31.5	53	5.8	12	
HSK 63A x FMB27 - 150BG	150	21	16	27	31.5	60	5.8	12	
HSK 63A x FMB32 - 60	60	21	16	32	41	78	6.8	14	1.60
HSK 63A x FMB32 - 100	100	24	16	32	41	78	6.8	14	
HSK 63A x FMB32 - 150BG	150	24	16	32	41	78	6.8	14	
HSK 63A x FMB40 - 60	60	24	20.5	40	48	80	8.3	16	2.10
HSK 63A x FMB40 - 100	100	25	20.5	40	48	80	8.3	16	

HSK

### 選配表 Option



• 長度單位 Unit of Length (mm)



### 特點 Feature

- 平面銑刀配合部位 (d1) 軸系公差 h6.

- d1 tolerance: h6.

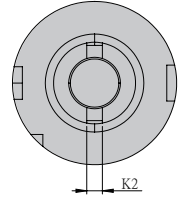
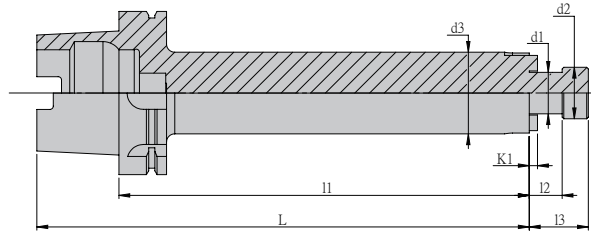
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	k <sub>1</sub>	k <sub>2</sub>	重量 (KGS) Weight
HSK 100A x FMB22 - 50	50	19	14	22	26	48	4.8	10	2.7
HSK100AxFMB22-100	100	19	14	22	26	48	4.8	10	
HSK100AxFMB22-150 BG	150	19	14	22	26	58	4.8	10	
HSK100AxFMB22-200 BG	200	19	14	22	26	58	4.8	10	
HSK 100A x FMB27 - 50	50	21	16	27	31.5	60	5.8	12	2.9
HSK 100A x FMB27 - 100	100	21	16	27	31.5	60	5.8	12	
HSK 100A x FMB27 - 150BG	150	21	16	27	31.5	60	5.8	12	
HSK 100A x FMB27 - 200BG	200	21	16	27	31.5	60	5.8	12	
HSK 100A x FMB32 - 50	50	24	16	32	41	78	6.8	14	3.0
HSK 100A x FMB32 - 100	100	24	16	32	41	78	6.8	14	
HSK100A x FMB32 - 150BG	150	25	20.5	40	48	80	8.3	16	
HSK100A x FMB32 - 200BG	200	25	20.5	40	48	80	8.3	16	
HSK 100A x FMB40 - 60	60	25	20.5	40	48	88	8.3	16	4.0
HSK 100A x FMB40 - 100	100	25	20.5	40	48	88	8.3	16	
HSK 100A x FMB40 - 150BG	150	30	24	50	65	120	9.7	19	
HSK 100A x FMB40 - 200BG	200	40	-	60	-	129	12.5	25.4	
HSK 100A x FMB50 - 70	70	30	25	50	68	120	9.7	19	5.1
HSK 100A x FMB60 - 70	70	40	-	60	-	129	12.5	25.4	5.5

HSK

### 選配表 Option

給水管 Coolant Supply Unti
B519

• 長度單位 Unit of Length (mm)



HSK

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	k <sub>1</sub>	k <sub>2</sub>	重量 (KGS) Weight
HSK63A x FMA25.4 - 75	75	20		25.4		50	4.52	9.52	
HSK63A-FMA25.4-100	100	20		25.4		50	4.52	9.52	
HSK63A-FMA25.4-150BG	150	20		25.4		48	4.52	9.52	
HSK63A x FMA31.75 - 75	75	22		31.75		60	6.7	12.7	
HSK63A-FMA31.75-100	100	22		31.75		60	6.7	12.7	
HSK63A-FMA31.75-150BG	150	22		31.75		60	6.7	12.7	
HSK63A x FMA38.1 - 75	75	25		38.1		75	8.87	15.87	
HSK63A x FMA38.1 - 100	100	25		38.1		75	8.87	15.87	
HSK100A x FMA25.4 - 75	75	20		25.4		50	4.52	9.52	
HSK100A x FMA25.4 - 150BG	150	20		25.4		48	4.52	9.52	
HSK100A x FMA25.4 - 200BG	200	20		25.4		58	4.52	9.52	
HSK100A x FMA31.75 - 75	75	22		25.4		60	6.7	12.7	
HSK100A x FMA31.75 - 150BG	150	22		31.75		70	6.7	12.7	
HSK100A x FMA31.75 - 200BG	200	22		31.75		70	6.7	12.7	
HSK100A x FMA38.1 - 75	75	25		31.75		80	8.87	15.87	
HSK100A x FMA38.1 - 150BG	150	25		38.1		80	8.87	15.87	
HSK100A x FMA38.1 - 200BG	200	25		38.1		80	8.87	15.87	
HSK100A x FMA50.8 - 75	75	36		50.8		98	9.75	19.05	
HSK100A x FMA50.8 - 150BG	150	36		50.8		98	9.75	19.05	

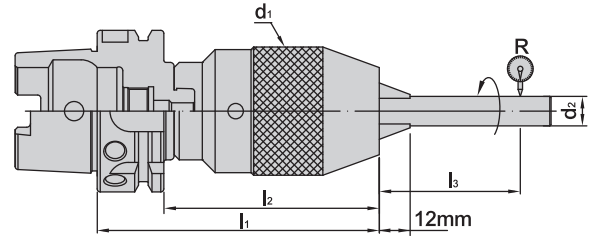
### 選配表 Option

給水管 Coolant Supply Unit



B519

• 長度單位 Unit of Length (mm)



### 特點 Feature

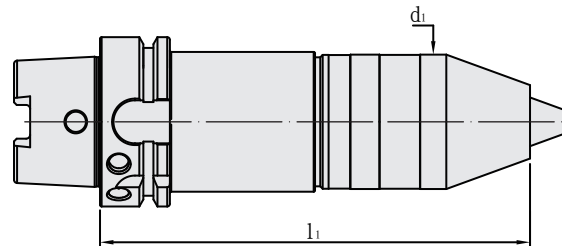
- 本產品因為增加了多層安全性設計，能提供給綜合切削中心機使用，在電腦操作的全自動作業中，以及無人化的管理整個流程，都能夠安全及順利地進行

- This product with multi-safety design can be used at Machine Center. It will be very safety to process under automatic computer operation and unmanned management.

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	R	重量 (KGS) Weight
HSK 50A x SPU13- 150	150	124	55	50	5	0.04	1.40
HSK 63A x SPU13- 150	150	124	55	50	10	0.04	2.69
HSK 100A x SPU13- 155	155	126	75	50	13	0.04	4.30

- 附扳手 Attaches the spanner.

HSK

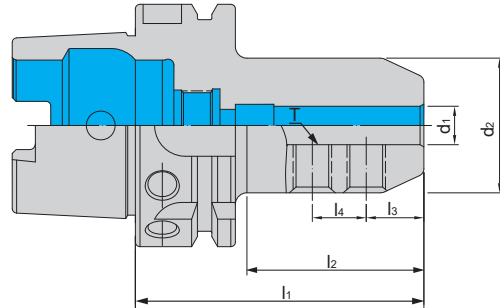


規格 Spec.	$l_1$	$d_1$	夾持範圍 Capacity Range	重量 (KGS) Weight
HSK63A-GPH13-105	105	50	1 ~ 13	2.53

### 選配表 Option

給水管 Coolant Supply Unti
B519

• 長度單位 Unit of Length (mm)



HSK

規格 Spec.	$l_1$	$l_2$	$l_3$	$l_4$	$d_1$	$d_2$	T	重量 (KGS) Weight
HSK 63A x SLN10 - 75JIS	75	46	15	14	10	35	M10X1.5P	-
HSK 63A x SLN12 - 80JIS	80	51	20	16	12	42	M10X1.5P	-
HSK 63A x SLN16 - 90JIS	90	62	22	18	16	48	M10X1.5P	-
HSK 63A x SLN16 - 150JIS	150	124	22	18	16	48	M10X1.5P	-
HSK 63A x SLN20 - 90JIS	90	62.5	25	20	20	50	M12X1.75P	-
HSK 63A x SLN20 - 150JIS	150	124	25	20	20	50	M12X1.75P	-
HSK 63A x SLN25 - 90JIS	90	62.5	24	25	25	50	M12X1.75P	-
HSK 63A x SLN25 - 150JIS	150	124	24	25	25	50	M12X1.75P	-
HSK 63A x SLN32 - 105JIS	105	79	24	28	32	60	M16X2.0P	-
HSK100A x SLN16 - 90JIS	90	40	22	18	16	48	M10X1.5P	-
HSK100A x SLN16 - 150JIS	150	100	22	18	16	48	M10X1.5P	-
HSK100A x SLN20 - 90JIS	90	40	25	20	20	50	M12X1.75P	-
HSK100A x SLN20 - 150JIS	150	100	25	20	20	50	M12X1.75P	-
HSK100A x SLN25 - 90JIS	90	40	24	25	25	50	M12X1.75P	-
HSK100A x SLN25 - 150JIS	150	100	24	25	25	50	M12X1.75P	-
HSK100A x SLN32 - 105JIS	105	55	24	32	32	50	M12X1.75P	-
HSK100A x SLN32 - 150JIS	150	100	24	32	32	60	M12X1.75P	-

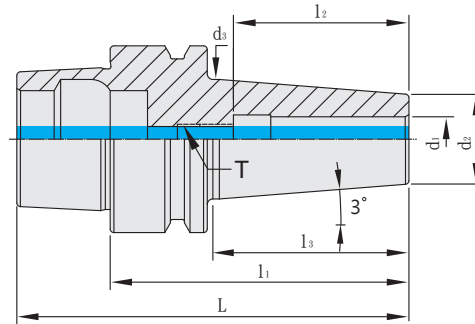
• 長度單位 Unit of Length (mm)



燒結式 Shrink-Fit



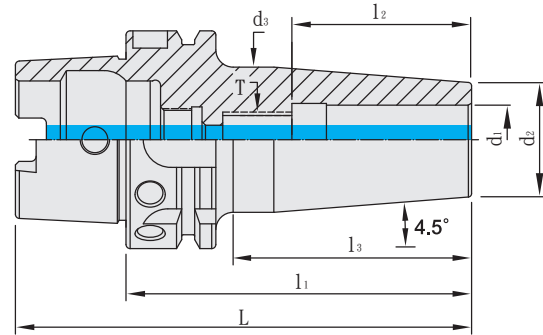
**NEW**



規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	重量 (KGS) Weight
HSK25E-SFW3-35L G2.5 RPM36000	35	20	17	3	6	18	
HSK25E-SFW3.175-35L G2.5 RPM36000	35	20	17	3.175	6.175	18	
HSK25E-SFW4-35L G2.5 RPM36000	35	20	17	4	7	18	
HSK25E-SFW6-35L G2.5 RPM36000	35		17	6	9	18	
HSK32E-SFW3-50L G2.5 RPM36000	50	20	22	3	6	20	
HSK32E-SFW3.175-50L G2.5 RPM36000	50	20	22	3.175	6.175	20	
HSK32E-SFW4-50L G2.5 RPM36000	50	20	22	4	7	20	
HSK32E-SFW4-50L-R G2.5 RPM36000	50	20	22	4	10	20	
HSK32E-SFW6-70L G2.5 RPM36000	50		22	6	9	20	
HSK32E-SFW6-50L-R G2.5 RPM36000	50		22	6	12	26	
HSK32E-SFW8-50L-R G2.5 RPM36000	50		22	8	14	26	
HSK32E-SFW10-55L-R G2.5 RPM36000	50		22	10	16	26	
HSK32E-SFW12-55L-R G2.5 RPM36000	50		22	12	20	26	
HSK40E-SFW3-50L G2.5 RPM36000	50	42	22	3	6	20	
HSK40E-SFW3.175-50 G2.5 RPM36000	50	42	22	3.175	6.175	20	
HSK40E-SFW4-50L G2.5 RPM36000	50	42	22	4	7	20	
HSK40E-SFW6-50L G2.5 RPM36000	50	39	22	6	9	20	
HSK40E-SFW8-60L G2.5 RPM36000	50	49	22	8	11	26	
HSK40E-SFW10-60L G2.5 RPM36000	50	49	22	10	13	26	
HSK40E-SFW12-55L-R G2.5 RPM36000	50	44	22	12	20	30	
HSK40E-SFW12-85L-R G2.5 RPM36000	50	74	22	12	20	32	

HSK

燒結式 Shrink-Fit



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

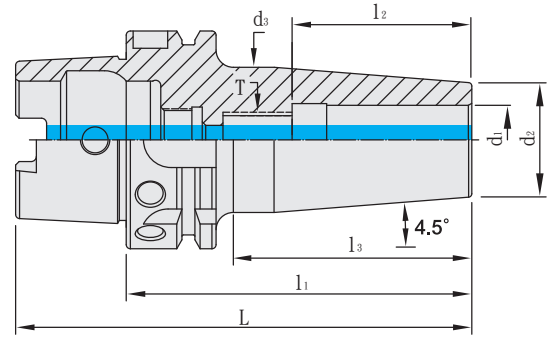
規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	重量 (KGS) Weight
HSK50A x SFC3-80	105	80	18	49	3	9	16.7	-	0.54
HSK50A x SFC4-80	105	80	20	49	4	10	17.7	-	0.55
HSK50A x SFC5-80	105	80	20	49	5	16	22	-	0.56
HSK50A x SFC6-80	105	80	36	49	6	21	27	M5 x 0.8P	0.57
HSK50A x SFC8-80	105	80	36	49	8	21	27	M6 x 1.0P	0.58
HSK50A x SFC10-85	110	85	42	54	10	24	32	M8 x 1.25P	0.67
HSK50A x SFC12-90	115	90	47	59	12	24	32	M10 x 1.5P	0.67
HSK50A x SFC14-90	115	90	47	59	14	24	32	M10 x 1.5P	0.72
HSK50A x SFC16-95	120	95	50	64	16	27	34	M12 x 1.75P	0.73
HSK50A x SFC18-95	120	95	52	67	18	33	42	M12 x 1.75P	0.90
HSK50A x SFC20-100	125	100	52	73	20	33	42	M16 x 2.0P	0.92
HSK50A x SFC25-115	140	115	47	88	25	44	53	M20 x 2.0P	0.95
HSK63A x SFC3-80	112	80	18	40	3	9	18	-	0.70
HSK63A x SFC4-80	112	80	20	44	4	10	17.049	-	0.70
HSK63A x SFC5-80	112	80	20	51	5	16	22	-	0.70
HSK63A x SFC6-80	112	80	36	51	6	21	27	M5 x 0.8P	0.89
HSK63A x SFC6-130	162	130	36	94	8	21	27	M6	1.06
HSK63A x SFC6-160	192	160	36	124	8	21	27	M6	1.19
HSK63A x SFC8-80	112	80	36	51	8	21	27	M6 x 1.0P	0.82
HSK63A x SFC8-130	162	130	36	94	8	21	27	M6	1.05
HSK63A x SFC8-160	192	160	36	124	8	21	27	M6	1.18
HSK63A x SFC10-85	117	85	42	54	10	24	32	M8 x 1.25P	0.91
HSK63A x SFC10-130	162	130	42	94	10	24	32	M8	1.81
HSK63A x SFC10-160	192	160	42	124	10	24	32	M8	1.36
HSK63A x SFC12-90	122	90	47	59	12	24	32	M10 x 1.5P	0.97
HSK63A x SFC12-130	162	130	47	94	12	24	32	M10	1.17
HSK63A x SFC12-160	192	160	47	124	12	24	32	M10	1.35
HSK63A x SFC14-90	122	90	47	59	14	27	34	M10 x 1.5P	0.97
HSK63A x SFC14-130	162	130	47	99	14	27	34	M10	1.23
HSK63A x SFC14-160	192	160	47	129	14	27	34	M10	1.44
HSK63A x SFC16-95	127	95	50	64	16	27	34	M12 x 1.75P	0.98
HSK63A x SFC16-130	162	130	50	99	16	27	34	M12	1.21

### 選配表 Option

給水管 Coolant Supply Unit	加熱器 Hot-Air
	
B519	B400

• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

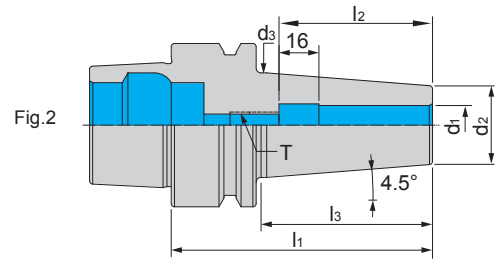
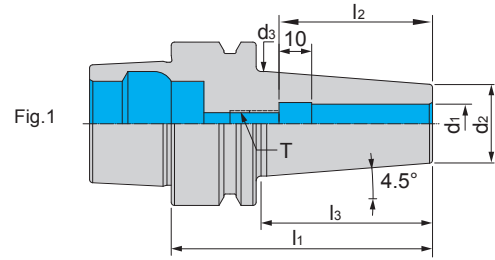
- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm

規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	重量 (KGS) Weight
HSK63A x SFC16-160	192	160	50	129	16	27	34	M12	1.42
HSK63A x SFC18-95	127	95	50	64	18	33	42	M12 x 1.75P	0.99
HSK63A x SFC18-130	162	130	50	89	18	33	42	M12	1.51
HSK63A x SFC18-160	192	160	50	89	18	33	42	M12	1.83
HSK63A x SFC20-100	132	100	52	69	20	33	42	M16 x 2.0P	1.00
HSK63A x SFC20-130	162	130	52	89	20	33	42	M16	1.48
HSK63A x SFC20-160	192	160	52	89	20	33	42	M16	1.80
HSK63A x SFC25-115	147	115	58	88	25	44	53	M20 x 2.0P	1.40
HSK63A x SFC25-130	162	130	58	104	25	44	53	M20	2.00
HSK63A x SFC25-160	192	160	58	134	25	44	53	M20	2.51
HSK63A x SFC32-120	152	120	58	93	32	44	53	M20 x 2.0P	1.39
HSK100A x SFC6-85	135	85	36	46	6	21	27	M5 x 0.8P	2.15
HSK100A x SFC6-130	180	130	36	91	6	21	27	M5	2.36
HSK100A x SFC6-160	210	160	36	91	6	21	27	M5	2.50
HSK100A x SFC8-85	135	85	36	46	8	21	27	M6 x 1.0P	2.15
HSK100A x SFC8-130	180	130	36	91	8	21	27	M6	2.35
HSK100A x SFC8-160	210	160	36	91	8	21	27	M6	2.49
HSK100A x SFC10-90	140	90	42	51	10	24	32	M8 x 1.25P	2.23
HSK100A x SFC10-130	180	130	42	91	10	24	32	M8	2.49
HSK100A x SFC10-160	210	160	42	91	10	24	32	M8	2.68
HSK100A x SFC12-95	145	95	47	56	12	24	32	M10 x 1.5P	2.25
HSK100A x SFC12-130	180	130	47	91	12	24	32	M10	2.47
HSK100A x SFC12-160	210	160	47	91	12	24	32	M10	2.66
HSK100A x SFC14-130	180	130	47	91	14	27	34	M10	2.55
HSK100A x SFC14-160	210	160	47	91	14	27	34	M10	2.76
HSK100A x SFC16-100	150	100	50	61	16	27	34	M12 x 1.75P	2.31
HSK100A x SFC16-130	180	130	50	91	16	27	34	M12	2.53
HSK100A x SFC16-160	210	160	50	91	16	27	34	M12	2.74
HSK100A x SFC20-105	155	105	52	71	20	33	42	M16 x 2.0P	2.51
HSK100A x SFC20 - 130	180	130	52	96	20	33	42	M16 x 2.0P	2.79
HSK100A x SFC20 - 160	210	160	52	91	20	33	42	M16 x 2.0P	3.11
HSK100A x SFC25-115	165	115	58	81	25	44	53	M20 x 2.0P	3.04
HSK100A x SFC25-160	210	160	58	91	25	44	53	M20 x 2.0P	3.82
HSK100A x SFC32-120	152	120	58	93	32	44	53	M20 x 2.0P	1.67
HSK100A x SFC32-160	192	160	58	134	32	44	53	M20	2.37

HSK

• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



### 特點 Feature

- 整支通孔 · 利於出水及抗震
- 標準動平衡 G2.5 25000rpm

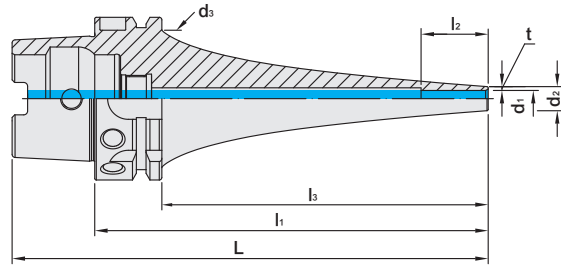
- A through coolant shank which allows water to pass through easily and vibration resistance.
- Dynamic balancing G2.5 at 25000rpm.

HSK

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	$d_3$	T	Fig.	重量 (KGS) Weight
HSK25E x SFC3-50	50	20	37	3	9	13	-	1	0.14
HSK25E x SFC4-50	50	20	38	4	10	16.079	-	1	0.15
HSK25E x SFC5-50	50	20	39	5	16	20	-	1	0.16
HSK32E x SFC3-50	50	18	27	3	9	13.287	-	1	0.54
HSK32E x SFC4-50	50	20	27	4	10	14.287	-	1	0.55
HSK32E x SFC5-50	50	20	29	5	16	20	-	1	0.56
HSK32E x SFC6-50	50	36	29	6	21	25	-	2	0.57
HSK32E x SFC8-60	60	36	39	8	21	26	M6 x 1.0P	1	0.58
HSK32E x SFC10-60	60	42	39	10	21	26	M8 x 1.25P	1	0.60
HSK32E x SFC12-70	70	47	49	12	21	26	M10 x 1.5P	1	0.70
HSK40E x SFC3-80	80	20	49	3	9	18	-	1	0.54
HSK40E x SFC4-80	80	20	49	4	10	22	-	1	0.55
HSK40E x SFC5-80	80	20	55	5	16	22	-	1	0.56
HSK40E x SFC6-80	80	36	59	6	21	27	M5 x 0.8P	2	0.57
HSK40E x SFC8-80	80	36	59	8	21	27	M6 x 1.0P	1	0.58
HSK40E x SFC10-85	85	42	64	10	24	32	M8 x 1.25P	1	0.65
HSK40E x SFC12-90	90	47	69	12	24	32	M10 x 1.5P	1	0.67
HSK50E x SFC3-80	80	20	42	3	9	18	M6X1.0P	1	0.54
HSK50E x SFC4-80	80	20	49	4	10	17.7	M6X1.0P	1	0.58
HSK50E x SFC5-80	80	20	49	5	16	22	M6X1.0P	1	0.56
HSK50E x SFC6-80	80	36	49	6	21	27	M5 x 0.8P	2	0.67
HSK50E x SFC8-80	80	36	49	8	21	27	M6 x 1.0P	1	0.68
HSK50E x SFC10-80	80	42	52	10	24	32	M8 x 1.25P	1	0.72
HSK50E x SFC12-80	80	47	52	12	24	32	M10 x 1.5P	1	0.70
HSK50E x SFC16-95	95	50	67	16	27	34	M12 x 1.75P	1	0.73
HSK50E x SFC20-100	100	52	73	20	33	42	M16 x 2.0P	1	0.92
HSK50E x SFC25-115	115	47	88	25	44	53	M20 x 2.0P	1	0.95

• 長度單位 Unit of Length (mm)

燒結式 Shrink-Fit



規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	t	重量 (KGS) Weight
HSK63A x SFC4 - 150CUL	182	150	10	124	4	10	53	3	0.9
HSK63A x SFC4 - 200CUL	232	200	10	174	4	10	53	3	1.1
HSK63A x SFC4 - 250CUL	282	250	10	224	4	10	53	3	1.6
HSK63A x SFC6 - 150CUL	182	150	20	124	6	13	53	3.5	1.3
HSK63A x SFC6 - 200CUL	232	200	20	174	6	13	53	3.5	1.4
HSK63A x SFC6 - 250CUL	282	250	20	224	6	13	53	3.5	1.8
HSK63A x SFC8 - 150CUL	182	150	26	124	8	16	53	4	1.4
HSK63A x SFC8 - 200CUL	232	200	26	174	8	16	53	4	1.6
HSK63A x SFC8 - 250CUL	282	250	26	224	8	16	53	4	1.9
HSK63A x SFC10 - 150CUL	182	150	32	124	10	19	53	4.5	1.3
HSK63A x SFC10 - 200CUL	232	200	32	174	10	19	53	4.5	1.6
HSK63A x SFC10 - 250CUL	282	250	32	224	10	19	53	4.5	2.1
HSK100A x SFC4 - 150CUL	200	150	10	121	4	10	85	3	3.6
HSK100A x SFC4 - 200CUL	250	200	10	171	4	10	85	3	4.1
HSK100A x SFC4 - 250CUL	300	250	10	221	4	10	85	3	4.5
HSK100A x SFC4 - 300CUL	350	300	10	271	4	10	85	3	4.8
HSK100A x SFC6 - 150CUL	200	150	20	121	6	13	85	3.5	6.6
HSK100A x SFC6 - 200CUL	250	200	20	171	6	13	85	3.5	4.7
HSK100A x SFC6 - 250CUL	300	250	20	221	6	13	85	3.5	5.4
HSK100A x SFC6 - 300CUL	350	300	20	271	6	13	85	3.5	6.1
HSK100A x SFC8 - 150CUL	200	150	26	121	8	16	85	4	6.5
HSK100A x SFC8 - 200CUL	250	200	26	171	8	16	85	4	6.9
HSK100A x SFC8 - 250CUL	300	250	26	221	8	16	85	4	4.6
HSK100A x SFC8 - 300CUL	350	300	26	271	8	16	85	4	4.9
HSK100A x SFC10 - 150CUL	200	150	32	121	10	19	85	4.5	3.5
HSK100A x SFC10 - 200CUL	250	200	32	171	10	19	85	4.5	4.1
HSK100A x SFC10 - 250CUL	300	250	32	221	10	19	85	4.5	4.9
HSK100A x SFC10 - 300CUL	350	300	32	271	10	19	85	4.5	5.2
HSK100A x SFC12 - 150CUL	200	150	37	121	12	22	85	5	3.6
HSK100A x SFC12 - 200CUL	250	200	37	171	12	22	85	5	4.4
HSK100A x SFC12 - 250CUL	300	250	37	221	12	22	85	5	4.6
HSK100A x SFC12 - 300CUL	350	300	37	271	12	22	85	5	4.8

• 搭配熱風式加熱器 A000

HSK

• 長度單位 Unit of Length (mm)



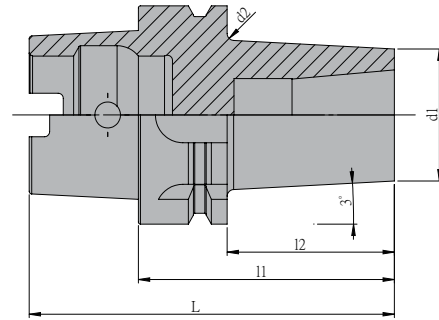
# HSK/SFS 後拉式立銑刀夾頭

## HSK/SFS SLIM-FIT COLLET CHUCK

DIN 69893-A



**NEW**



HSK

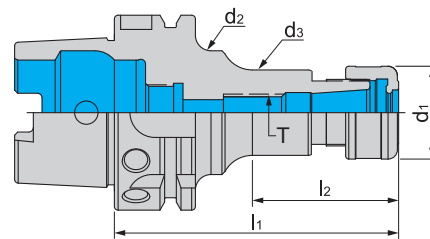
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HSK50A x SFS12-75	100	75	48.6	38.1	42	0.8
HSK63A x SFS12-75	107	75	47.105	38.1	43	1.0
HSK63A x SFS12-135	167	135	107.5	38.1	49.3	1.7
HSK63A x SFS12-165	197	165	138.6	38.1	52.6	2.1
HSK63A x SFS12-225	257	225	199	38.1	52	2.9
HSK63A x SFS12-240	272	240	132.6	38.1	52	3.1
HSK100A x SFS12-105	155	105	66.5	38.1	45	3.4
HSK100A x SFS12-135	185	135	101.26	38.1	48.7	3.8
HSK100A x SFS12-225	275	225	191.2	38.1	58.1	5.4
HSK100A x SFS12-315	365	315	281.2	38.1	67.5	6.4
HSK40E x SFS12-75	95	75	55	38.1	40	0.7
HSK50E x SFS12-75	110	75	48.6	38.1	42	0.8
HSK63F x SFS12-75	100	75	47.1	38.1	43	1.0
HSK63F x SFS12-100	125	75	72.1	38.1	45.6	1.3
HSK63F x SFS12-125	150	125	97.0	38.1	48.2	1.6



# HSK/SKS 高速機專用夾頭 (無風阻)

## HSK/SKS COLLET CHUCK(FOR TYPE A) (NON WIND RESISTANCE)

PAT.NO: M270871



### 特點 Feature

- 偏擺精度 :5μ 以下 (延伸 4D 長度處)
- SKS 筒夾錐度 :4° · 增加夾持力、提高穩定性
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5μ.
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic balancing G2.5 at 25000rpm.

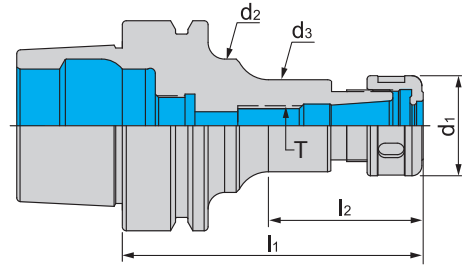
規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	重量 (KGS) Weight
HSK32A x SKS10-60-HS	60	-	30	40	-	M12 x 1.75P	0.26
HSK40A x SKS10-60-HS	60	-	30	40	-	M12 x 1.75P	0.60

### 選配表 Option

熱膨脹刀桿 Shrink-fit Extension	筒夾 Collet	螺帽 Nut		扳手 Spanner		給水管 Coolant Supply Unti
B394	B627	B639	B639	B651	B651	B519

• 長度單位 Unit of Length (mm)



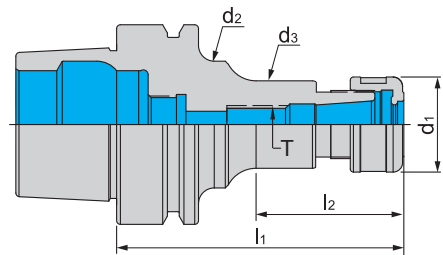


### 特點 Feature

- 偏擺精度 :5μ 以下 (延伸 4D 長度處)
- SKS 筒夾錐度 :4° · 增加夾持力、提高穩定性
- 標準動平衡 :G2.5 25000rpm

- Run-out accuracy: within 5μ.
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic balancing G2.5 at 25000 rpm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	重量 (KGS) Weight
HSK50E x SKS10-90	90	45	30	40	27.6	M12 x 1.75P	0.83
HSK50E x SKS10-120	120	75	30	40	27.6	M12 x 1.75P	0.93
HSK50E x SKS16-90	90	63	40	40	-	M18 x 1.5P	0.90
HSK50E x SKS16-120	120	93	40	40	-	M18 x 1.5P	1.13



### 特點 Feature

- 偏擺精度 :5μ 以下 (延伸 4D 長度處)
- SKS 筒夾錐度 :4° · 增加夾持力、提高穩定性
- 標準動平衡 :G2.5 25000rpm

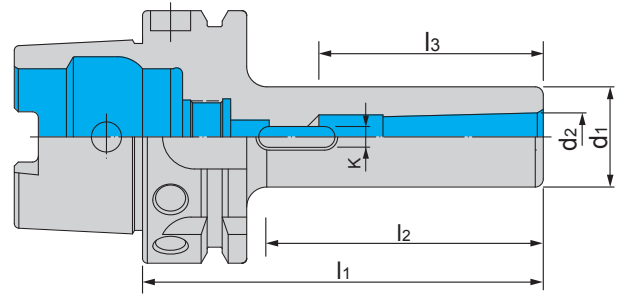
- Run-out accuracy: within 5μ.
- SKS tapered collet: 4° degrees, increases clamping power and stability.
- Dynamic balancing G2.5 at 25000rpm.

規格 Spec.	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	T	重量 (KGS) Weight
HSK40E x SKS6-60-HS	60	44	18	32	18	M8x1.25P	0.32
HSK40E x SKS10-60-HS	60	45	30	40	27.6	M12x1.75P	0.42
HSK40E x SKS16-90-HS	90	59	40	40	-	M18x1.5P	0.68
HSK50E x SKS10-90-HS	90	45	30	40	27.6	M12x1.75P	0.80
HSK50E x SKS10-120-HS	120	75	30	40	27.6	M12x1.75P	1.00
HSK50E x SKS16-90-HS	90	63	40	40	-	M18x1.5P	1.00
HSK50E x SKS16-120-HS	120	93	40	40	-	M18x1.5P	1.20

### 選配表 Option

筒夾 Collet	螺帽 Nut		扳手 Spanner	
B627	B639	B639	B651	B651

• 長度單位 Unit of Length (mm)



### 特點 Feature

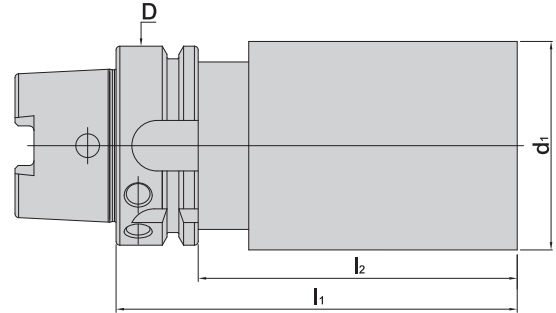
- MTA= 榫舌型式本 =DIN 228-B

- MTA=TANG TYPE=DIN 228-B

HSK

規格 Spec.	$l_1$	$l_2$	$l_3$	$d_1$	$d_2$	K	重量 (KGS) Weight
HSK 63A x MTA1- 100	100	69	56	25	12.065	5.2	1.90
HSK 63A x MTA2- 120	120	89	67	32	17.78	6.3	1.15
HSK 63A x MTA3- 140	140	109	84	40	23.825	7.9	2.20
HSK 63A x MTA4- 160	160	132	107	48	31.267	11.9	1.99
HSK 100A x MTA1- 110	110	71	56	25	12.065	5.2	3.40
HSK 100A x MTA2- 120	120	81	67	32	17.78	6.3	3.80
HSK 100A x MTA3- 150	150	111	84	40	23.825	7.9	4.00
HSK 100A x MTA4- 170	170	131	107	48	31.267	11.9	4.60
HSK 100A x MTA5- 200	200	166	135	63	44.399	15.9	5.20

• 長度單位 Unit of Length (mm)



規格 Spec.	$l_1$	$l_2$	D	$d_1$	重量 (KGS) Weight
HSK32A x Ø67-43.8	43.8	23.8	32	67	0.46
HSK63A x Ø64-240	240	224	63	64	-
HSK63A x Ø80-250	250	224	63	80	-
HSK63A x Ø100-150	150	124	63	100	-
HSK100A x Ø97-250	250	221	100	97	-



Fig.1

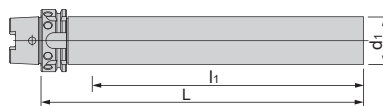


Fig.2

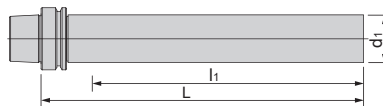


Fig.3

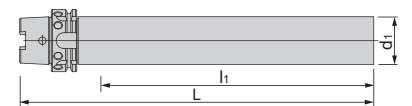
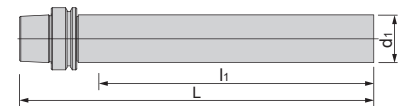


Fig.4



	錐度精度 Taper Precision	AT2
	真圓度 Roundness	0.001mm
	表面粗造度 Surface Roughness	Ra<0.4
	同心度 Concentricity	0.005mm

規格 Spec.	L	$l_1$	$d_1$	Fig.	重量 (KGS) Weight
HSK40A-TS180L	215	180	32	1	2.86
HSK50A-TS240L	282	240	32	1	-
HSK63A-TS300L	374	300	40	3	3.66
HSK100A-TS300L	395	300	50	3	7.61
HSK25E-TS175L	195	175	20	2	-
HSK32E-TS180L	215	180	20	2	2.38
HSK40E-TS180L	215	180	32	2	2.98
HSK50E-TS240L	282	240	32	2	3.70
HSK63F-TS300L	367	300	40	4	4.48

• 長度單位 Unit of Length (mm)



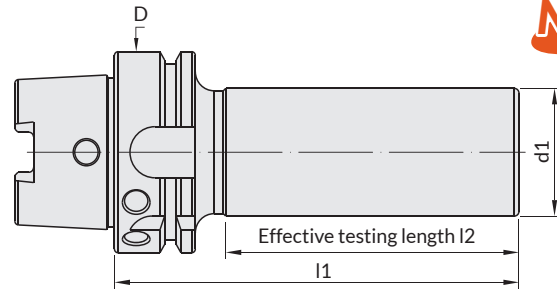
# HSK 主軸精密標準棒

## HSK SPINDLE MASTER BAR

DIN  
69893-A



**NEW**



	錐度精度 Taper Precision	AT2
	真圓度 Roundness	0.8um
	表面粗糙度 Surface Roughness	Ra<0.15um
	偏擺精度 Runout	3um
	圓柱度 Cylindrical	5um

規格 Spec.	l1	l2	d1	重量 (KGS) Weight
HSK40A-TS200L-P	200	170	32	2.86
HSK40A-TS300L-P	300	270	32	1.77
HSK50A-TS240L-P	240	211	32	1.44
HSK50A-TS300L-P	300	274	32	2.83
HSK63A-TS346L-P	346	300	40	3.66
HSK80A-TS200L-P	200	168	50	3.13
HSK80A-TS350L-P	350	318	50	4.83
HSK100A-TS349L-P	349	300	40	7.61
HSK100A-TS350L-P	350	318	50	5.73

HSK

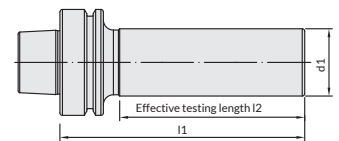
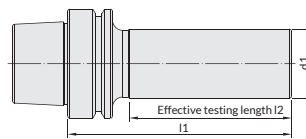


# HSK 主軸精密標準棒

## HSK SPINDLE MASTER BAR



**NEW**

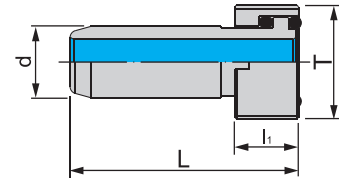
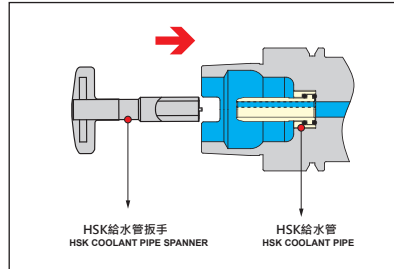


	錐度精度 Taper Precision	AT2
	真圓度 Roundness	0.8um
	表面粗糙度 Surface Roughness	Ra<0.15um
	偏擺精度 Runout	3um
	圓柱度 Cylindrical	5um

規格 Spec.	l1	l2	d1	重量 (KGS) Weight
HSK25E-TS175L-P	175	163	25	0.58
HSK32E-TS180L-P	180	158	20	0.41
HSK40E-TS180L-P	180	157	32	2.98
HSK50E-TS180L-P	180	151	32	3.7
HSK63F-TS346L-P	346	300	40	4.48

• 長度單位 Unit of Length (mm)

## 範例 Example



## 特點 Feature

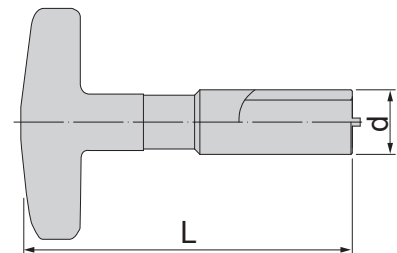
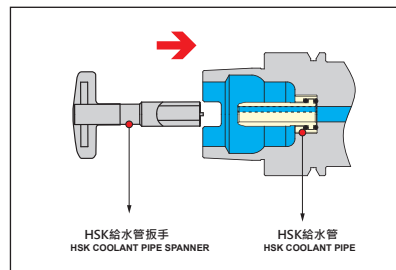
- HSK 刀桿中心出水使用導管

- HSK cutter bar center water leakage use drive pipe.

規格 Spec.	L	l <sub>1</sub>	d	T	重量 (KGS) Weight
HSK32-CP	26	5.5	6	M10 x 1.0P	0.01
HSK40-CP	29.3	7.5	8	M12 x 1.0P	0.01
HSK50-CP	33	9.5	10	M16 x 1.0P	0.02
HSK63-CP	36.3	11.5	12	M18 x 1.0P	0.02
HSK100-CP	44	15.5	16	M24 x 1.5P	0.06

HSK

## 範例 Example



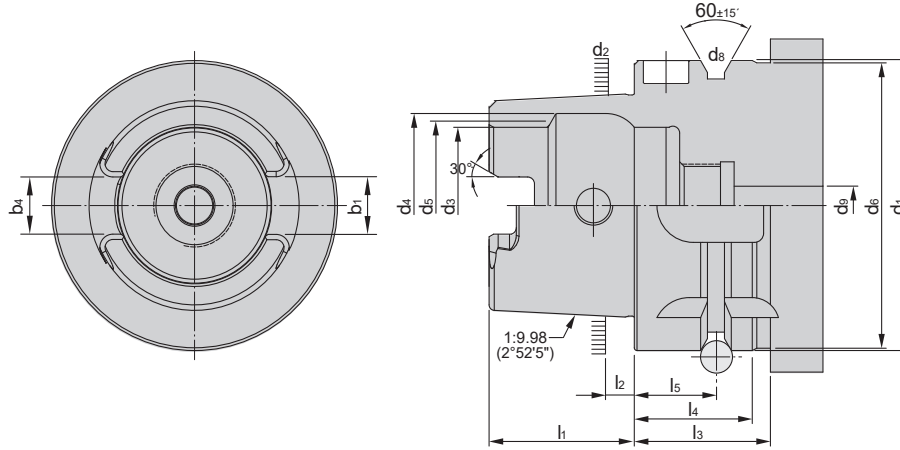
## 特點 Feature

- HSK 給水管鎖緊扳手

- In HSK cold tube locking spanner.

規格 Spec.	L	d	重量 (KGS) Weight
HSK32-CPW	90	10	0.10
HSK40-CPW	90	13.5	0.12
HSK50-CPW	95	15.5	0.14
HSK63-CPW	100	17.5	0.16
HSK100-CPW	125	23.5	0.32

• 長度單位 Unit of Length (mm)



HSK-T

規格 Spec.	d <sub>1</sub> h <sub>10</sub>	d <sub>2</sub>	d <sub>3</sub> H <sub>10</sub>	d <sub>4</sub> H <sub>11</sub>	d <sub>5</sub>	d <sub>6</sub> Max.	d <sub>8</sub>	d <sub>9</sub> Max.	l <sub>1</sub> 0 -0.2	l <sub>2</sub>	l <sub>3</sub> Min.	l <sub>4</sub> 0 -0.1	l <sub>5</sub> ±0.1	b <sub>1</sub> ±0.04	b <sub>4</sub>	
HSK-T32	32	24.007	17	20.5	19	31	4	4.2	16	3.2	23	20	16	7.05	6.932	+0.03 0
HSK-T40	40	30.007	21	25.5	23	39	4	5	20	4	23	20	16	8.05	7.932	+0.03 0
HSK-T50	50	38.009	26	32	29	49	7	6.8	25	5	30	26	18	10.54	10.425	+0.035 0
HSK-T63	63	48.010	34	40	37	62	7	8.4	32	6.3	30	26	18	12.54	12.425	+0.035 0
HSK-T80	80	60.012	42	50	46	79	7	10.2	40	8	30	26	18	16.04	15.93	+0.035 0
HSK-T100	100	75.013	53	63	58	99	7	12	50	10	34	26	20	20.02	19.91	+0.035 0

1. 錐度精度 : < AT3
2. 硬度 : > HRC 56°
3. 滲碳深度 : > 0.8mm
4. 真圓度 : < 0.8μm
5. 表面粗糙度 : Ra < 0.25μm
6. 刀桿有預設標準動平衡 G6.3 · 可另外指定精密動平衡 G2.5
7. 本體規範 : DIN ISO 12164-3:20008

1. Taper tolerance < AT3.
2. Hardness > HRC 56°
3. Carbon depth > 0.8mm.
4. Roundness < 0.8μm.
5. Surface roughness : Ra < 0.25μm.
6. The shank has pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
7. Shank body standard : DIN ISO 12164-3:20008

• 長度單位 Unit of Length (mm)



鎖固方式Clamp mechanism			
A	Back clamp system	M	Multi-clamp system
C	Clamp-on system	P	Pin lock system
D	Double clamp system	S	Screw-on system
E	Off-set pin system	T	Taper lock system
JS	Screw-on system	W	Wedge-on system
JT	Back clamp system		

離隙角 Insert clearance	
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°

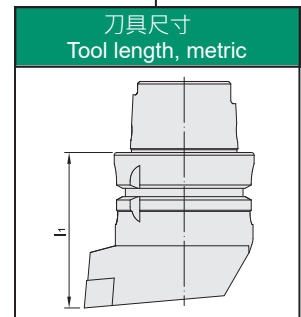
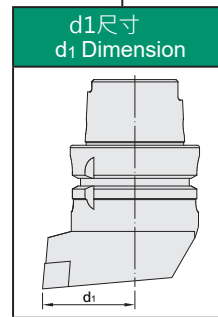
刀具長度 Insert edge length						
Insert inscribed circle		6.35	7.94	9.525	12.00	12.70
	80°	06	08	09	-	12
	55°	07	-	11	-	15
	35°	11	-	16	-	-
		-	-	-	12	-
		11	13	16	-	22
		-	-	09	-	12

**HSK - T63 - M C L N R - 45 065 - 12**

刀片形狀 Insert geometry	
C	
D	
K	
R	
S	
T	
V	
W	
L	
H	
A	
B	
E	
M	
O	
P	

進刀角度 Cutting edge geometry				
90°	75°	90°	45°	
60°	90°	90°	107.5°	
93°	75°	95°	95°	50°
63°	117.5°	75°	45°	
60°	93°	72.5°	60°	
85°				

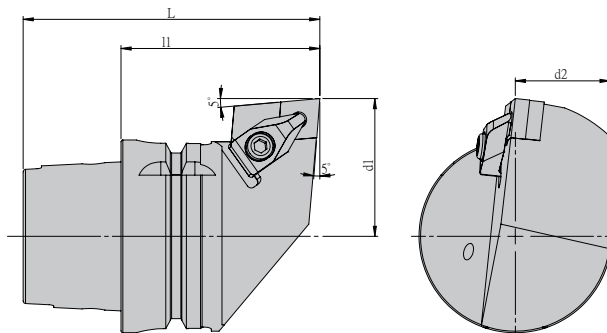
切削方向 Hand
R 
L 
N 



HSK-T

## DCLN 外徑車刀

### DCLN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	刀片 Insert	重量 (KGS) Weight
HSK-T63-DCLNR-45065-12	97	65	45	31	CN..1204	1.26
HSK-T63-DCLNL-45065-12	97	65	45	31	CN..1204	1.26

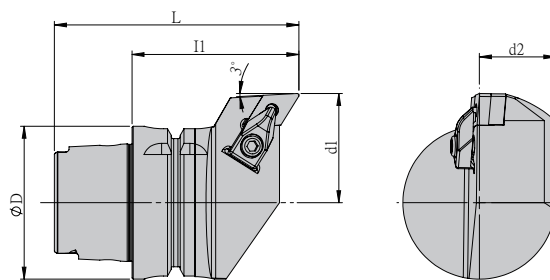
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
CN..1204	CNS1204	M4-10-5.7-60	T15	3.0	DCP-2	M5-20-4.9	PL4	5.0

HSK-T

## DDJN 外徑車刀

### DDJN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	刀片 Insert	重量 (KGS) Weight
HSK-T63-DDJNR-45075-15	107	75	45	31	DN..1504	1.38
HSK-T63-DDJNL-45075-15	107	75	45	31	DN..1504	1.38

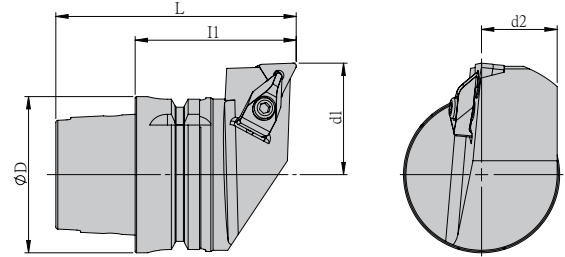
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
DN..1504	DNS1504	-	-	-	DCP-2	M5-20-4.9	PL4	5.0

• 長度單位 Unit of Length (mm)

## DTJN 外徑車刀

### DTJN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	刀片 Insert	重量 (KGS) Weight
HSK-T63-DTJNR-45065-16	97	65	45	31	TN..1604	1.27
HSK-T63-DTJNL-45065-16	97	65	45	31	TN..1604	1.27

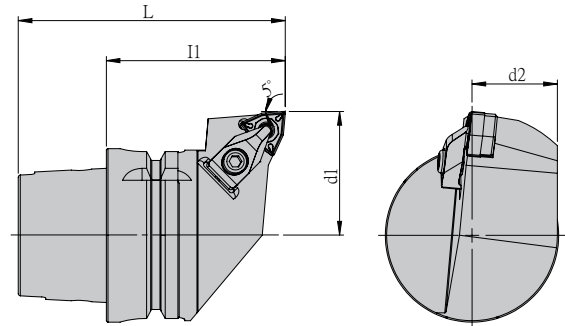
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
TN..1604	TNS1604	M4-9-5.15-47	T15	3.0	DCP-1	M5-20-4.9	PL4	5.0

HSK-T

## DWLN 外徑車刀

### DWLN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	刀片 Insert	重量 (KGS) Weight
HSK-T63-DWLN-45065-08	97	65	45	31	WN..0804	1.22
HSK-T63-DWLN-45065-08	97	65	45	31	WN..0804	1.22

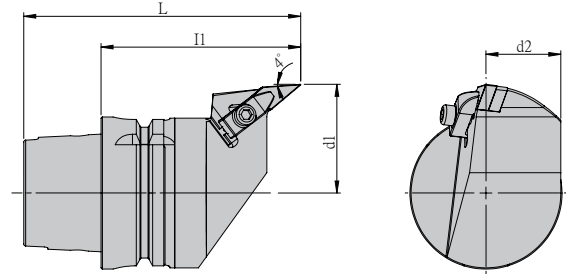
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
WN..0804	WNS0804	M5-12-7.1-70	T20	5.0	DCP-2	M5-20-4.9	PL4	5.0

• 長度單位 Unit of Length (mm)

## DVLN 外徑車刀

### DVLN EXTERNAL TURNING TOOL



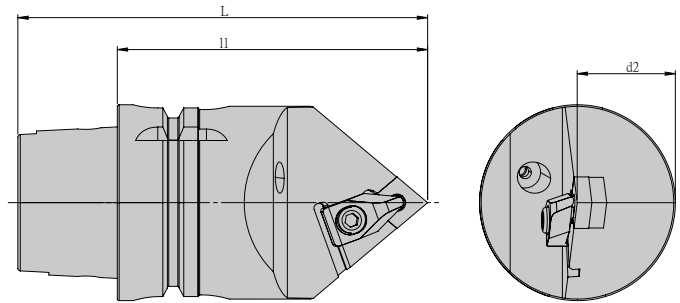
規格 Spec.	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	刀片 Insert	重量 (KGS) Weight
HSK-T63-DVLNR-45075-16	107	75	45	31	VN..1604	1.30
HSK-T63-DVLNL-45075-16	107	75	45	31	VN..1604	1.30

#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
VN..1604	VNS1604	-	-	-	DCP-4	M5-20-4.9	PL4	5.0

## DCMNN 外徑車刀

### DCMNN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	刀片 Insert	重量 (KGS) Weight
HSK-T63-DCMNN-00100-12	132	100	CN..1204	1.68
HSK-T63-DCMNN-00140-12	172	140	CN..1204	1.68

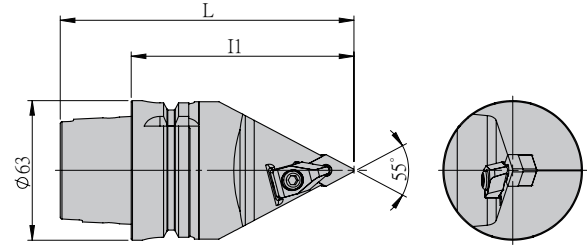
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
CN..1204	CNS1204	M4-10-5.7-60	T15	3.0	DCP-2	M5-20-4.9	PL4	5.0

• 長度單位 Unit of Length (mm)

## DDNN 外徑車刀

### DDNN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	D	刀片 Insert	重量 (KGS) Weight
HSK-T63-DDNNN-00100-15	132	100	63	DN..1504	1.55
HSK-T63-DDNNN-00140-15	172	140	63	DN..1504	1.55

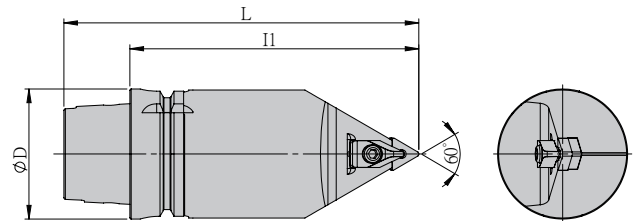
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
DN..1504	DNS1504	-	-	-	DCP-2	M5-20-4.9	PL4	5.0

HSK-T

## DTEN 外徑車刀

### DTEN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	D	刀片 Insert	重量 (KGS) Weight
HSK-T63-DTENN-00100-16	132	100	63	TN..1604	1.62
HSK-T63-DTENN-00140-16	172	140	63	TN..1604	1.62

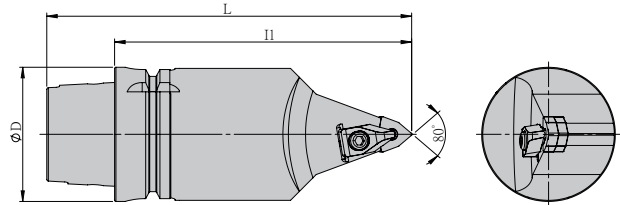
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
TN..1604	TNS1604	M4-9-5.15-47	T15	3.0	DCP-1	M5-20-4.9	PL4	5.0

• 長度單位 Unit of Length (mm)

## DWMN 外徑車刀

### DWMN EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	D	刀片 Insert	重量 (KGS) Weight
HSK-T63-DWMNN-00100-08	132	100	63	WN..0804	1.48
HSK-T63-DWMNN-00140-08	172	140	63	WN..0804	1.48

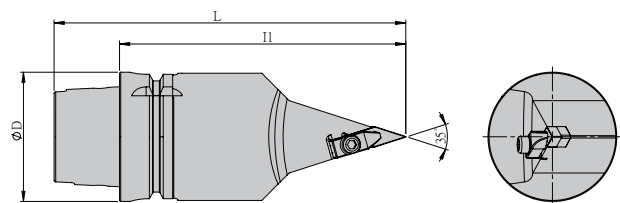
#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
WN..0804	WNS0804	M5-12-7.1-70	T20	5.0	DCP-2	M5-20-4.9	PL4	5.0

HSK-T

## DVNN 外徑車刀

### DVNN EXTERNAL TURNING TOOL

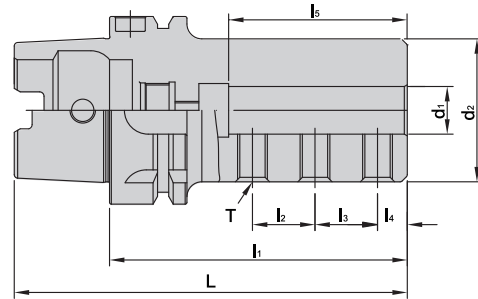


規格 Spec.	L	l <sub>1</sub>	D	刀片 Insert	重量 (KGS) Weight
HSK-T63-DVNNN-00100-16	132	100	63	VN..1604	1.40
HSK-T63-DVNNN-00140-16	172	140	63	VN..1604	1.40

#### 配件表 Accessories

刀片 Insert	墊片 Shim	墊片螺絲 Shim Screw	扳手 Wrench	扭力值 (N.m) Torque	壓板 Clamp	壓板螺絲 Clamp Screw	壓板扳手 Clamp Wrench	扭力值 (N.m) Torque
VN..1604	VNS1604	-	-	-	DCP-4	M5-20-4.9	PL4	5.0

• 長度單位 Unit of Length (mm)



規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	d <sub>1</sub>	d <sub>2</sub>	T	重量 (KGS) Weight
HSK-T63xSLT8-70	102	70	10	10	6	32	8	28	M6	0.93
HSK-T63xSLT10-80	112	80	12	12	8	40	10	35	M8	1.10
HSK-T63xSLT12-90	122	90	16	16	8	45	12	42	M8	1.36
HSK-T63xSLT16-100	132	100	21	21	10	60	16	48	M10	1.60
HSK-T63xSLT20-120	152	120	20	20	12	60	20	52	M10	2.03
HSK-T63xSLT25-140	172	140	23	23	14	67	25	56	M12	2.52
HSK-T63xSLT32-160	192	160	26	26	16	74	32	64	M12	3.34

HSK-T

Fig.1

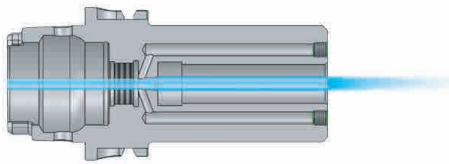
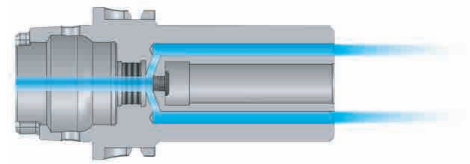


Fig.2



刀具中心出水螺絲 Screw For Coolant Outlet From Tool Holder

規格 Spec.	適用規格 Applicable Spec.	T	Fig.	重量 (KGS) Weight
B06-01M4x0.7P-503	SLT8	M4x0.7P	1	-
B06-01M5x0.5P-503	SLT10	M5x0.8P		-
B06-01M6x1.0P-603	SLT12	M6x1.0P		-
	SLT16			-
	SLT20			-
B06-01M8x1.25P-603	SLT25	M8x1.25P		-
	SLT32		-	

刀具中心出水螺絲 Screw For Coolant Outlet From Tool Holder

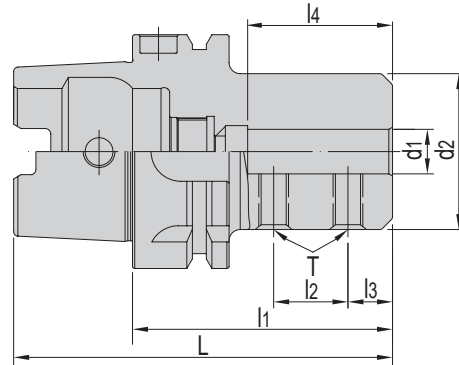
規格 Spec.	適用規格 Applicable Spec.	T	Fig.	重量 (KGS) Weight
C-EBSS6-8	SLT8	M6x1.0P	2	-
	SLT10			-
	SLT12			-
	SLT16			-
	SLT20			-
	SLT25			-
	SLT32			-

• 長度單位 Unit of Length (mm)





## SLD 側固式鑽頭用刀柄 SIDE LOCK HIGH SPEED DRILL

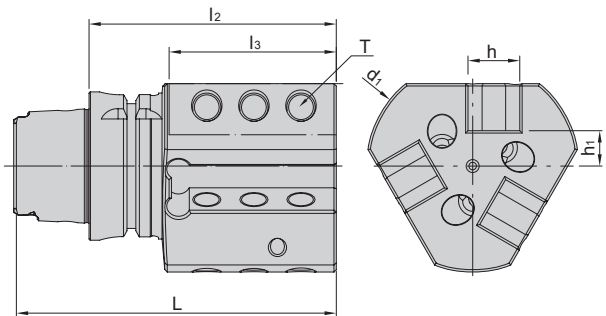


規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	d <sub>1</sub>	d <sub>2</sub>	T	重量 (KGS) Weight
HSK-T63xSLD8-65	97	65	18	10	34	8	28	M8	0.84
HSK-T63xSLD10-70	102	70	20	12	39	10	35	M8	0.97
HSK-T63xSLD12-70	102	70	20	12	39	12	42	M8	1.10
HSK-T63xSLD16-75	107	75	20	15	44	16	48	M10	1.26
HSK-T63xSLD20-75	104	75	20	15	44	20	52	M10	1.34
HSK-T63xSLD25-85	117	85	23	17	52	25	62	M12	1.79
HSK-T63xSLD32-90	122	90	27	17	56	32	62	M12	1.74
HSK-T63xSLD40-100	132	100	28	22	62	40	68	M16	2.00

HSK-T



## SV 外徑車刀架 EXTERNAL TURNING TOOL

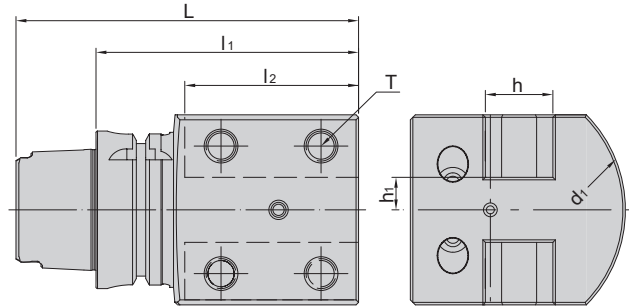


規格 Spec.	L	l <sub>2</sub>	l <sub>3</sub>	d <sub>1</sub>	h	h <sub>1</sub>	T	重量 (KGS) Weight
HSK-T63xSV20R-105	137	105	70	90	20	15	M12x1.75P	2.72
HSK-T63xSV20L-105	137	105	70	90	20	15	M12x1.75P	2.72

• 長度單位 Unit of Length (mm)



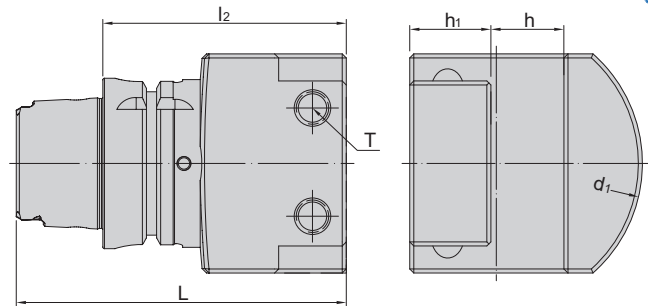
## SB 外徑車刀架 EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>1</sub>	l <sub>2</sub>	h	h <sub>1</sub>	d <sub>1</sub>	T	重量 (KGS) Weight
HSK-T63xSB25R-105	137	105	70	25	13	54	M12x1.75P	2.98



## SF 外徑車刀架 EXTERNAL TURNING TOOL

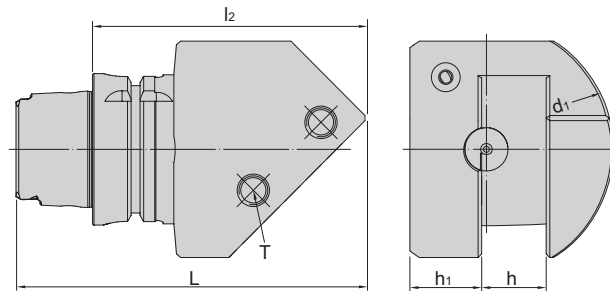


規格 Spec.	L	l <sub>2</sub>	h	h <sub>1</sub>	d <sub>1</sub>	T	重量 (KGS) Weight
HSK-T63xSF25-90	122	90	25	30	54	M12x1.75P	3.05
HSK-T63xSF25-120	152	120	25	30	54	M12x1.75P	3.99

HSK-T



## SN 外徑車刀架 EXTERNAL TURNING TOOL



規格 Spec.	L	l <sub>2</sub>	d <sub>1</sub>	h	h <sub>1</sub>	T	重量 (KGS) Weight
HSK-T63xSN25R-115	147	115	53	25	30	M12x1.75P	3.40
HSK-T63xSN25L-115	147	115	53	25	30	M12x1.75P	3.40

• 長度單位 Unit of Length (mm)