

OUNI

Clamping

優 薩 國 際



專注您的需求
FOCUS ON YOUR NEED



About

關於優薩



台中公司

OUNI 創立於2014年10月，並於2016年底因應客戶需求擴大經營增設彰化廠區。專業於研發機床相關零組件，我們擁有完善的機台設備與量測儀器，以精密的設備、專業的技術、嚴格的品管及迅速的效率，堅持為客戶做到最好。

自創立以來，一直堅持以品質第一服務至上為準則，為解決客戶的需求，

OUNI 致力於產品品質提升與技術研發不遺餘力，不斷創新研發，增進各種加工技術，陸續開發多樣產品，努力達到客戶要求的品質

產品範圍

迴轉油壓缸、中空動力夾頭、夾頭法蘭、軸(徑)向鎖定螺帽、工具機主軸專用拉爪、噴水頭、精密鑽夾頭、刀桿(BT、HSK系列).....等等



彰化廠區



Lathe車床



Grinding研磨



Test檢驗



Detection檢測



Accuracy量測



Detection檢測



Research研發



Process planning製程規劃

INDEX



A
夾頭系統
Chuck Tool



B
刀桿系統
Tooling System



C
主軸配件
Spindle Clamping Systems



D
車床配件
Lathes Component



Z
技術資料
Technical Data



A

夾頭系統
Chuck Tool

夾頭系統

Chuck Tool



Multi Keyless Drill Chucks

Keyless Drill Chucks for portable drills

- ◆適用在手工具，電動工具，氣動工具上。
- ◆使用時不需扳手 就可以鎖緊。
- ◆沿用歐洲設計款式。
- ◆好用，耐用，方便。
- ◆可部分客戶設計製造。
- ◆It can be used on hand tools, power tools and pneumatic tools.
- ◆It can be locked without wrench.
- ◆European design style.
- ◆Easy to use, durable and convenient.
- ◆It could be customize.

NO.	Model 型號	Size 尺寸	Capacity 夾持力	Thread Mount 相接型式
A000007420	10001	10M	0.5-10	3/8-24UNF
A000007421	10004	13M	0.5-13	3/8-24UNF
A000007422	10007	10SM	0.5-10	1/2-20UNF
A000007423	10010	13SM	0.5-13	1/2-20UNF

Stainless Steel Drill Chuck

不鏽鋼系列

Key Type Taper & Thread Mount
錐孔 & 螺紋



- ◆所有零件採用不鏽鋼材質。
- ◆特殊設計，轉動順暢。
- ◆所有料件都經過化學表面處理。
- ◆在高酸性、高鹼性或高濕度的環境下使用不易腐蝕(生鏽)。
- ◆外殼弧角設計不勾破手套，降低操作人員安全風險。
- ◆Stainless material is applied to each component.
- ◆Special design: working smoothly.
- ◆Chemical surface treatment is made for each component.
- ◆Anti-corrosion(anti-rust)even if used in the environment of high acidity, high alkalinity or high humidity.
- ◆Radius design on sleeve: it would not rip the glove; therefore, minimize the risk of operator safety.
- ◆Smooth appearance: being convenient for users.

NO.	Model 型號	Size 尺寸	Capacity 夾持力		Taper & Thread Mount No. DIN or Jacobs 相接型式	length(mm)長度		Outer Dia. (mm) 外徑	Weight (g) 重量	Key Size 適用扳手	
			mm 公制	inch 英制		open 三爪(開)	Closed (閉)			SUS303	SUS420J 2
A000007357	10101	4MTP	0.3-4	1/64-5/32	JT0	28	35	22	50	T0-03	-
A000007358	10104	6MTP	0.3-6.5	1/64-1/4	JT1	40.5	49	28.5	125	T1-03	T1-20
A000007359	10107	6MTH	0.3-6.5	1/64-1/4	3/8-24UNF	40.5	49	28.5	130	T1-03	T1-20
A000007360	10110	10MTP	0.3-10	1/64-3/8	JT2S	51	63	39	250	T2-03	T2-20
A000007361	10113	10MTP	0.3-10	1/64-3/8	D13	57	69	37	250	-	-
A000007362	10116	10MTP	0.3-10	1/64-3/8	D15	57	69	37	250	-	-
A000007363	10119	10MTH	0.3-10	1/64-3/8	3/8-24UNF	51	63	39	250	T2-03	T2-20
A000007364	10122	13MTP	0.3-13	1/64-1/2	JT6	63	77	45	420	T2-103	T2-120
A000007365	10125	13MTH	0.3-13	1/64-1/2	1/2-20UNF	63	77	45	420	T2-103	T2-120
A000007366	10128	16MTP	0.3-16	1/64-5/8	JT6	78	93	55	725	T3-03	T3-20
A000007367	10131	16MTH	0.3-16	1/64-5/8	1/2-20UNF	78	93	55	725	T3-03	T3-20

NO.	Model 型號	Size 尺寸	Pilot Size 板手大小	Weight(g) 重量	Used on 適用夾頭
A000007368	10201	T0-03	Ø3.2	16	4MTP
A000007369	10204	T1-03	Ø4.0	40	6MTP, 6MTH
A000007370	10207	T1-20	Ø3.2	40	4MTP
A000007371	10210	T2-03	Ø5.5	45	10MTP, 10MTH, 6HTP
A000007372	10213	T2-20	Ø5.5	45	10MTP, 10MTH, 6HTP
A000007373	10216	T2-103	Ø6.5		13MTP, 13MTH, 10HTP
A000007374	10219	T2-120	Ø6.5		13MTP, 13MTH, 10HTP
A000007375	10222	T3-03	Ø8		16MTP, 13MTH, 16HTP, 16MTH
A000007376	10225	T3-20	Ø8		16MTP, 13MTH, 16HTP, 16MTH



Keyless Taper Mount(錐孔) Special Heavy duty model 特重型系列

Titanium jaws
鍍鈦



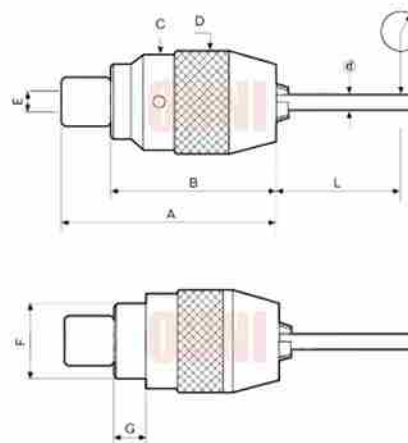
- ◆ 十分高精密之設計，適用於CNC及綜合切削機。所有構成部分皆經過電鍍及表面熱處理且在嚴格品質管制之下。
- ◆ 夾爪採用鈦合金鍍膜，可使夾爪更耐磨耐用及確保精度。
- ◆ Extremely high accuracy and precision design, suitable for CNC machines and machine center. All parts are ground, heat treated, surface treated and under specific QC condition. The clamping three jaws adopt high tech Titanium.
- ◆ The benefit of adopting Titanium is to increase the intensity and wear-resistance.

NO.	Model 型號	Size 尺寸	Capacity 夾持力		Thread Mount No. DIN or Jacobs 錐孔組型型式	Length(mm)長度		Outer Dia (mm) 外徑	Weight (g) 重量
			mm 公制	inch 英制		open 三爪(開)	Closed (關)		
A000007257	10401	3S	0.3-3	1/64-1/8	JT0	44	48.5	24	110
A000007258	10404	3S	0.3-3	1/64-1/8	JT1	44	48.5	24	110
A000007259	10407	6S	0.3-6.5	1/64-1/4	JT1	62	68	33	300
A000007260	10410	6S	0.3-6.5	1/64-1/4	B10	62	68	33	300
A000007261	10413	8S	0.3-8	1/64-5/16	JS1	68	76	38	425
A000007262	10416	8S	0.3-8	1/64-5/16	JT2S	68	76	38	425
A000007263	10419	8S	0.3-8	1/64-5/16	B10	68	76	38	425
A000007264	10422	8S	0.3-8	1/64-5/16	B12	68	76	38	425
A000007265	10425	10S	0.3-10	1/64-3/8	JT2S	80	92	43	625
A000007266	10428	10S	0.3-10	1/64-3/8	JT33	80	92	43	625
A000007267	10431	10S	0.3-10	1/64-3/8	B10	80	92	43	625
A000007268	10434	10S	0.3-10	1/64-3/8	B12	80	92	43	625
A000007269	10437	10S	0.3-10	1/64-3/8	JT2	80	92	43	625
A000007270	10440	10S	0.3-10	1/64-3/8	B16	80	92	43	625
A000007271	10443	13S	0.3-13	1/64-1/2	JT2	90	102	50	1000
A000007272	10446	13S	0.3-13	1/64-1/2	JT33	90	102	50	1000
A000007273	10449	13S	0.3-13	1/64-1/2	JT6	90	102	50	1000
A000007274	10452	13S	0.3-13	1/64-1/2	B12	90	102	50	1000
A000007275	10455	13S	0.3-13	1/64-1/2	B16	90	102	50	1000
A000007276	10458	16S	3-16	1/8-5/8	JT6	97	110	57	1320
A000007277	10461	16S	3-16	1/8-5/8	JT3	97	110	57	1320
A000007278	10464	16S	3-16	1/8-5/8	B16	97	110	57	1320
A000007279	10467	16S	3-16	1/8-5/8	B18	97	110	57	1320
A000007280	10470	16S	3-16	1/8-5/8	JT33	97	110	57	1320

Tool Shank Type(帶刀柄式) Heavy duty & Special Heavy duty model 重型及特重型系列

Titanium jaws
鍍鈦

- ◆ 擁有可搭配不同刀柄座規格之多重選擇；當您使用於綜合切削機時，它能讓您迅速地更換。
- ◆ Multi-choices of mounting specification offers quick changeover on machine center.



Type	直徑 mm	長度 mm	S Type X
6S	3	35	0.05
	4	50	
	6		
8S	4	35	0.05
	6	50	
	8		
10S	5	35	0.05
	6	58	
	10		
13S	6	55	0.05
	10	75	
	13		
16S	6	55	0.05
	10	80	
	16		

Keyless Drill Chuck Run Out Table
Keyless 鑽夾頭同心度檢驗表

NO.	Model 型號	Type 規格	Capacity 夾持力		Male Taper 錐柄型式	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Weight (g) 重量	Spanner NO. 適用勾板手
			mm 公制	inch 英制										
A000007347	10901	6S	0.3-6.5	1/64-1/4	MT2	78	54	32	33	M6 P1.0	26.5	7.5	300	11001
A000007348	10904	8S	0.3-8	1/64-5/16	MT2	85	60.5	36	37.5	M6 P1.0	30	10	400	11004
A000007349	10907	10S	0.3-10	1/64-3/8	MT2	95	70	41	43	M6 P1.0	34	13	650	11007
A000007350	10910	13S	0.3-13	1/64-1/2	MT3	107.5	80.5	48	50	M8 P1.25	38	15	960	11010
A000007351	10913	16S	3-16	1/8-5/8	MT3	112	85	54	57	M8 P1.25	43	16	1250	11013

Hook wrench(勾板手系列) Hook wrench model

NO.	Model 型號	Type 規格	Weight (g) 重量
A000007352	11001	6S	70
A000007353	11004	8S	82
A000007354	11007	10S	105
A000007355	11010	13S	120
A000007356	11013	16S	110



組接示意圖



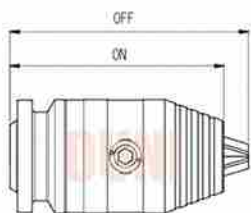
Stainless Steel Drill Chuck 不鏽鋼系列
Keyless Taper & Thread Mount
錐孔 & 螺紋

NO.	Model 型號	Size 尺寸	Capacity 夾持力		Taper & Thread Mount No. DIN or Jacobs 錐孔組接型式	length(mm)長度		Outer Dia (mm) 外徑	Weight (g) 重量
			mm 公制	inch 英制		open 三爪(開)	Closed (關)		
A000007377	11101	3S	0.3-3	1/64-1/8	JT0	44	50	30	110
A000007378	11104	3S	0.3-3	1/64-1/8	JT1	44	48.5	24	110
A000007379	11107	6S	0.3-6.5	1/64-1/4	JT1	62	68	33	300
A000007380	11110	8S	0.3-8	1/64-5/16	JT1	68	76	38	425
A000007381	11113	10S	0.3-10	1/64-3/8	JT2S	80	92	43	625
A000007382	11116	13S	0.3-13	1/64-1/2	JT6	90	102	50	1000
A000007383	11119	16S	3.0-16	1/8-5/8	JT6	97	110	57	1320



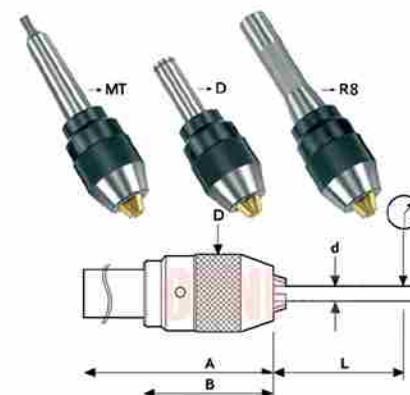
Hex Key Drill Chuck 齒輪式夾頭
Titanium jaws
鍍鈦

- 適合中高低轉速使用。
- 輕鬆夾緊鉗頭、絲攻、銼刀、銼刀。
- 夾緊力可達1200-cm。
- 鍍鈦爪設計，增加耐磨功能。
- Arbor structure makes its performance perfect for drilling press and machine center.
- Fine components ensure the tolerance and accuracy well.
- The benefit of titanium jaws is to increase the intensity and wear-resistance.



NO.	Model 型號	Type 規格	Capacity 夾持力		Taper Mount No. DIN or Jacobs 錐孔組接型式	length(mm)長度	
			mm 公制	inch 英制		open 三爪(開)	Closed (關)
A000007384	11301	8GHK	0.3-8	1/64-5/16	JT1	76	80.5
A000007385	11304	13GHK	0.3-13	1/64-1/2	JT6	94	105
A000007386	11307	13GHK	0.3-13	1/64-1/2	JT4	112	122.5
A000007387	11310	16GHK	1.5-16	1/16-5/8	JT6	104	115
A000007388	11313	16GHK	1.5-16	1/16-5/8	JT4	121.5	132.5

Arbor Type(連柄一體式) Titanium jaws 鍍鈦
Special Heavy duty model 特重型系列



- 附有夾頭柄結構之設計，使得它更適於銑床及綜合切削機且有更趨於完美之表現。精密的機械工學和堅固耐用的組成確保了耐力及精度。
- 夾爪採用高科技的鈦合金鍍膜，可使夾爪更耐磨耐用及確保精度。
- Designed together with arbor structure makes its performance perfect for drilling press and machine center. Precisely machined and ground components ensure the tolerance and accuracy.
- The clamping three jaws adopt high tech Titanium. The benefit of adopting Titanium is to increase the intensity and wear-resistance.

MT: 莫氏錐度柄

NO.	Model 型號	Type 規格	Capacity 夾持力		Male Taper No. DIN or Jacobs 錐柄組接型式	length(mm)長度			Weight (g) 重量	Spanner NO. 適用勾板手
			mm 公制	inch 英制		A	B	D(mm) 外徑		
A000007306	11501	8S	0.3-8	1/64-5/16	MT2	142	61	37	400	11004
A000007307	11504	10S	0.3-10	1/64-3/8	MT2	151	70	43	700	11007
A000007308	11507	13S	0.3-13	1/64-1/2	MT2	162	81	50	1010	11010
A000007309	11510	13S	0.3-13	1/64-1/2	MT3	180	81	50	1140	11010
A000007310	11513	13S	0.3-13	1/64-1/2	MT4	206	81	50	1490	11010
A000007311	11516	16S	3-16	1/8-5/8	MT3	186	85	57	1445	11013
A000007312	11519	16S	3-16	1/8-5/8	MT4	210	85	57	1770	11013

D: 直柄

NO.	Model 型號	Type 規格	Capacity 夾持力		Male Taper No. DIN or Jacobs 錐柄組接型式	length(mm)長度			Weight (g) 重量	Spanner NO. 適用勾板手
			mm 公制	inch 英制		A	B	D(mm) 外徑		
A000007313	11522	3S	0.3-3	1/64-1/8	D12	88.5	38.5	24	140	
A000007314	11525	6S	0.3-6.5	1/64-1/4	D16	104	54	33	334	11001
A000007315	11528	8S	0.3-8	1/64-5/16	D20	121	61	37	510	11004
A000007316	11531	13S	0.3-13	1/64-1/2	D20	141	81	50	1030	11010
A000007317	11534	13S	0.3-13	1/64-1/2	D25	160	81	50	1190	11010
A000007318	11537	13S	0.3-13	1/64-1/2	D32	162	81	50	1405	11010
A000007319	11540	16S	3-16	1/8-5/8	D20	145	85	57	1330	11013
A000007320	11543	16S	3-16	1/8-5/8	D25	165	85	57	1480	11013
A000007321	11546	16S	3-16	1/8-5/8	D32	167	85	57	1700	11013

R8: 不規則柄

NO.	Model 型號	Type 規格	Capacity 夾持力		Male Taper No. DIN or Jacobs 錐柄組接型式	length(mm)長度			Weight (g) 重量	Spanner NO. 適用勾板手
			mm 公制	inch 英制		A	B	D(mm) 外徑		
A000007322	11549	13S	0.3-13	1/64-1/2	R8	184	81	50	1260	11010
A000007323	11552	16S	3-16	1/8-5/8	R8	188	85	58	1530	11013

Chuck Tool

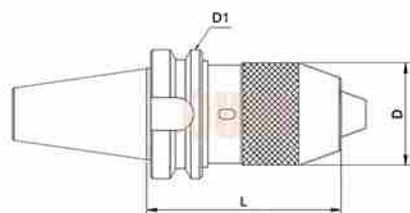
Hex Key Drill Chuck
齒輪式夾頭



NO.	Model 型號	Type 規格	A	B	C	ØD	E	ØF	ØG	ØH	I	ØJ
A000007389	11401	GHK8S	MT3	26.5	15	4x12L	69.5	38	48	37	M8	4
A000007390	11404	GHK13S	MT3	26.5	15	4x12L	89.8	38	48	50	M8	6
A000007391	11407	GHK16S	MT3	26.5	15	4x12L	95	38	48	50	M8	8



刀桿系統
Tooling System

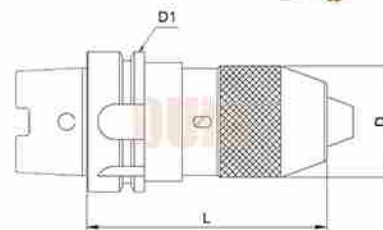


BT CHU CNC Drill Chuck

BT直結式鑽夾頭

- ◆ 適用於傳統銑床或其他提供BT主軸介面之工作母機作鑽孔加工。
- ◆ 比普通夾頭多三倍夾持力。
- ◆ 鑽頭不會鬆脫掉落。
- ◆ 比普通夾頭多出兩倍精準。
- ◆ 可替換式的夾頭。
- ◆ The product can be adapted for the general lathe or the drilling processing whose machines center can supply with BT spindle.
- ◆ 3 times better clamping capacity, comparing to keyed drill chucks.
- ◆ The drill bit won' t be loosen or falling off.
- ◆ Twice precision than the keyer drill chucks.
- ◆ The drill chuck is interchangeable.

NO.	Model 型號	TYPE 規格	L	D	D1	Spanner NO.
A000007180	20101	BT30xOPU8-75	75	37	46	11007
A000007181	20104	BT30xOPU13-90	90	50		11010
A000007182	20107	BT40xOPU8-85	85	37		11007
A000007183	20110	BT40xOPU13-95	95	50	63	11010
A000007184	20113	BT40xOPU13-130	130			
A000007185	20116	BT40xOPU13-150	150			
A000007186	20119	BT40xOPU16-120	120			
A000007187	20122	BT50xOPU13-110	110	50	100	11010
A000007188	20125	BT50xOPU13-150	150			
A000007189	20128	BT50xOPU16-110	110			
A000007190	20131	BT50xOPU16-130	130			
A000007191	20134	BT50xOPU16-145	145			



HSK CHU CNC Drill Chuck

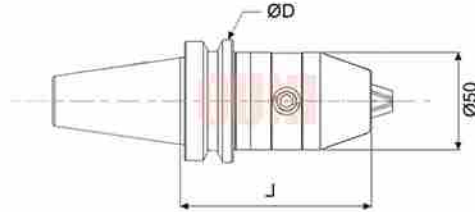
HSK直結式鑽夾頭

- ◆ 比普通夾頭多三倍夾持力。
- ◆ 鑽頭不會鬆脫掉落。
- ◆ 比普通夾頭多出兩倍精準。
- ◆ 可替換式的夾頭。
- ◆ 3 times better clamping capacity, comparing to keyed drill chucks.
- ◆ The drill bit won' t be loosen or falling off.
- ◆ Twice precision than the keyer drill chucks.
- ◆ The drill chuck is interchangeable.

NO.	Model 型號	TYPE 規格	L	D	D1	Spanner NO.
A000007206	20401	HSK50AxOPU13-110	110	50	50	11010
A000007207	20404	HSK63AxOPU13-145	145	50	63	11010
A000007208	20407	HSK100AxOPU13-120	120	50	100	11010



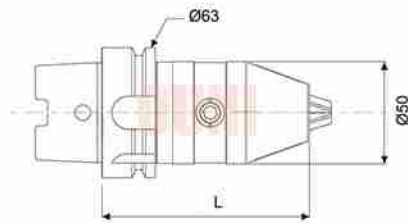
BT Hex Key Drill Chuck
BT齒輪式夾頭



NO.	Model 型號	TYPE 規格	夾持量 Capacity		L	ØD
			mm	inch		
A000007209	20501	BT40xGPU13-98	0.3-13	3/64-1/2	98	63
A000007210	20504	BT40xGPU16-103	1.5-16	1/16-5/8	103	63
A000007211	20507	BT50xGPU13-109	0.3-13	3/64-1/2	109	100
A000007212	20510	BT50xGPU16-114	1.5-16	1/16-5/8	114	100



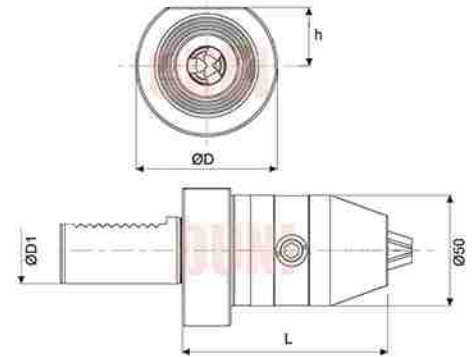
HSK Hex Key Drill Chuck
HSK齒輪式夾頭



NO.	Model 型號	TYPE 規格	夾持量 Capacity		L
			mm	Inch	
A000007217	20701	HSK63AxGPU13-105	0.3-13	3/64-1/2	105
A000007218	20704	HSK63AxGPU16-110	1.5-16	1/16-5/8	110



VDI Hex Key Drill Chuck
VDI齒輪式夾頭



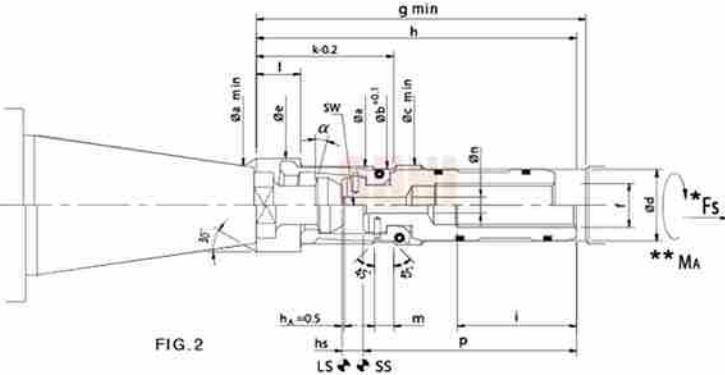
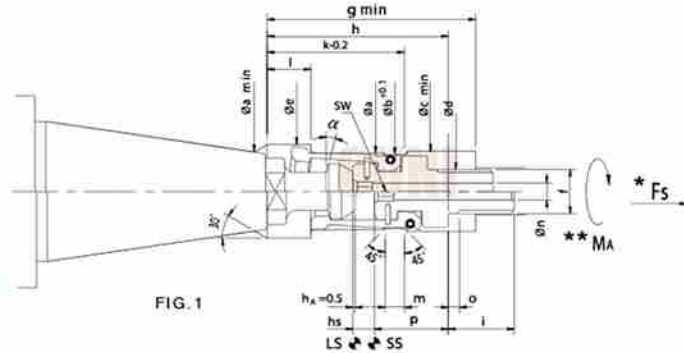
NO.	Model 型號	TYPE 規格	夾持量 Capacity		L	ØD	h	ØD1
			mm	inch				
A000007219	20801	VDI30xGPU16-93	0.3-13	3/64-1/2	93	68	28	30
A000007220	20804	VDI30xGPU16-98	1.5-16	1/16-5/8	98	68	28	30
A000007221	20807	VDI40xGPU13-93	0.3-13	3/64-1/2	93	83	32	40
A000007222	20810	VDI40xGPU16-98	1.5-16	1/16-5/8	98	83	32	40

ISO Pull stud type clamping units

ISO 主軸夾爪

- ◆ 適合在主軸上搭配使用。
- ◆ 嚴選適合鋼材，強度，耐用，尺寸要求。
- ◆ 耐用循環次數在200萬使用次數設計。
- ◆ 爪型及拉力可依客戶需求設計製造。

- ◆ Suitable for use on spindles.
- ◆ Strictly selected for steel, strength, durability, size requirements.
- ◆ Durable cycle times are designed for 2 million usage times.
- ◆ Claw type and tension can be designed and manufactured by customers.



FS:Max.Clamping Force 最大拉刀力

MA:Max Tightening Torque 最大鎖緊扭矩

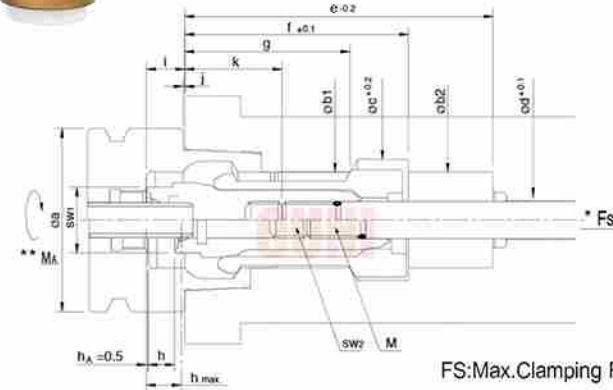
NO.	Model 型號	Type 規格	圖號 Fig	α $\pm 15^\circ$	A_{HT}	b	c	d	e	f	g_{min}	h
G000002581	J0073	ISO-25	1	15°	14	13.4	14.5	8	17.0	M8*1.0P	38	32.7
G000002582	J0074	ISO-25	2	15°	14	13.4	14.5	13	17.0	M8*1.25P	60	58

NO.	Model 型號	Type 規格	i	k	l	m	n	o	p	hs	Fs max. xN	MA Nm	SW mm
G000002581	J0073	ISO-25	12.0	25	8.0	3.5	3.0	2.0	13.5	3.5	4	12	3
G000002582	J0074	ISO-25	22.0	25	8.0	3.5	3.0	-	38.8	3.5	4	12	-

HSK Griper HSK 主軸夾爪



- ◆ 一體式結構，容易安裝。
- ◆ 嚴選適合鋼材，耐用。
- ◆ 特殊設計，作動可靠。
- ◆ 使用在HSK系列刀桿高速運轉時，平衡穩定。
- ◆ Integrated Structure:Easy to be installed.
- ◆ High rigidity. High durability.
- ◆ Special Design:High Reliability.
- ◆ Suitable for high-speed machine center. To make HSK Tool-Holders steady.



FS:Max.Clamping Force 最大拉刀力

MA:Max Tightening Torque 最大鎖緊扭矩

NO.	Model 型號	Type 規格	a	b1 _{HT0}	c	b2 _{H0}	d	e	f	g	M	h
G000002583	J0066	HSK32	32	17	22.5	17	6.6	62.5	43	30	M6x1.0P	5.1
G000002584	J0067	HSK40	40	21	26.5	21	8.6	78	58	44	M8x1.25P	5.6
G000002585	J0068	HSK50	50	26	33.0	26	10.6	84	61	45	M10x1.5P	6.4
G000002586	J0069	HSK63	63	34	41.6	34	14.6	94	68	52	M14x1.5P	7.4
G000002587	J0070	HSK80	80	42	50	42	16.6	98	72	56	M16x1.5P	8.3
G000002588	J0071	HSK100	100	53	63	53	18.4	124	93	70	M16x1.5P	9.15

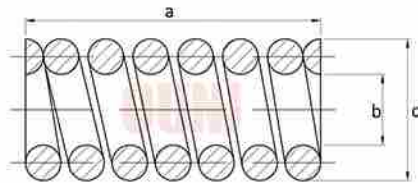
NO.	Model 型號	Type 規格	i	j	k	h max.	Fs max. xN	MA Nm	SW1 mm	SW2 mm	最高轉速 Max. RPM
G000002583	J0066	HSK32	8.5	0.5	19.5	7.5	5	10	12	3	57,000
G000002584	J0067	HSK40	8.5	0.5	27.0	8	6.8	15	15	4	45,000
G000002585	J0068	HSK50	10.5	0.5	26.5	9	11	20	18	4	37,000
G000002586	J0069	HSK63	10.5	0.5	31.5	10	18	30	24	5	29,000
G000002587	J0070	HSK80	13	0.5	29	11	28	30	27	6	20,000
G000002588	J0071	HSK100	13	0.5	34.5	12.5	45	50	36	6	15,000

Wire Springs

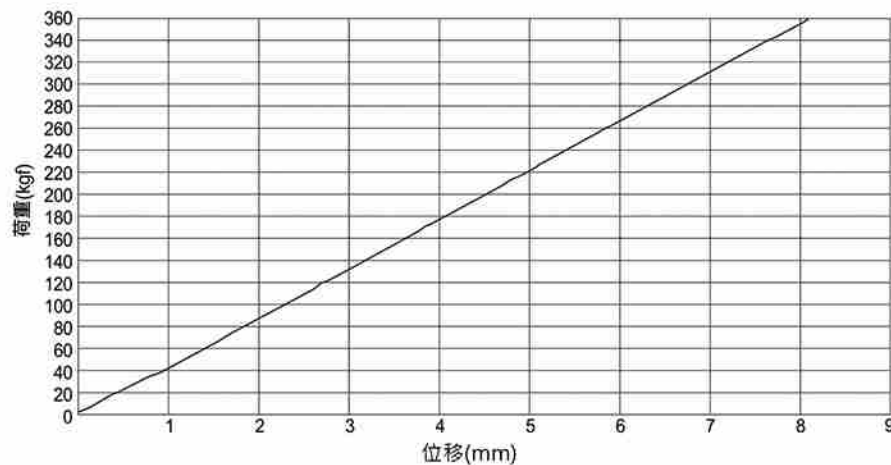
彈簧



- ◆ 一體成型式設計，組裝、維護簡單。
- ◆ 彈簧外徑小，可提供極大的彈簧載荷。
- ◆ 載荷穩定，高安全性操作。
- ◆ 尺寸可依客戶指定製造。
- ◆ One-piece design, easy to assemble and maintain.
- ◆ The small outer diameter of the spring provides great spring load.
- ◆ Stable load and high safety operation.
- ◆ Dimensions can be manufactured according to customer's specifications.



NO.	Model 型號	Free Length 自由長	內徑	外徑
G000003243	J1401	50±0.2	12.15±0.1	24±0.1



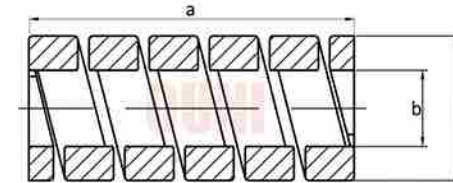
C-07

Coil Springs

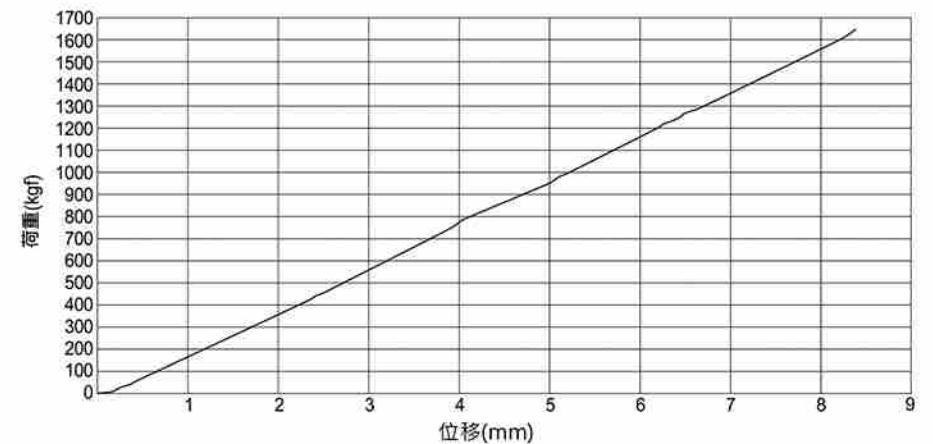
扁線彈簧



- ◆ 一體成型式設計，組裝、維護簡單。
- ◆ 彈簧外徑小，可提供極大的彈簧載荷。
- ◆ 載荷穩定，高安全性操作。
- ◆ 內孔徑可依客戶指定尺寸加工。
- ◆ One-piece design, easy to assemble and maintain.
- ◆ The small outer diameter of the spring provides great spring load.
- ◆ Stable load and high safety operation.
- ◆ Dimensions can be manufactured according to customer's specifications.



NO.	Model 型號	Free Length 自由長	內徑	外徑
G000003244	J1501	88.5±0.2	20.2±0.1	39.3±0.1



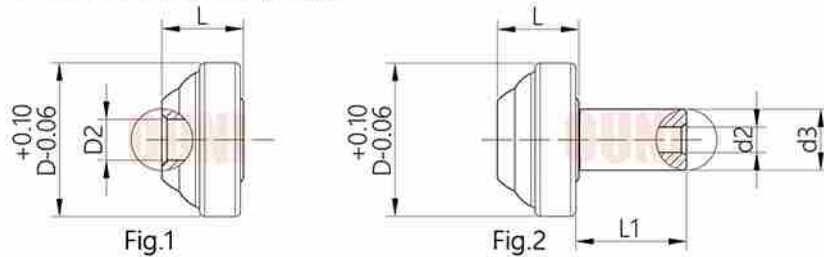
C-08

Spray Nozzle Series Press Fit Type 噴水頭 壓配型

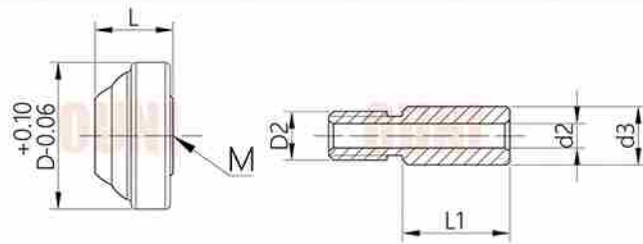


- ◆可任意調整噴水口角度，有效對應低、中、高冷卻液液壓，正確噴向瞄準點。
- ◆適用於綜合切削機、銑床、車床等各式工具機。
- ◆可提高加工效率及精度外，亦有助於延長工具使用壽命和減少成本消耗。

- ◆ The Coolant Spray Nozzle could easily adjust its direction and spray precisely. When the coolants correspond with three pressures-low, medium and high pressures, it can precisely aim at workpiece.
- ◆ They are suitable for CNC Machine Center, CNC Lathes, CNC Milling Machine, Grinding Machine and so on.
- ◆ The products can enhance the processing efficiency and accuracy. Also it is helpful for extending the lifetime of tools and decreasing the cost.



NO.	Model 型號	D	D2	L	L1	d2	d3	Fig.
G00000107	J0101	Ø15	Ø4	8	-	-	-	1
G000002777	J0105	Ø12	Ø2.5	7	-	-	-	1
G000000108	J0102	Ø15	-	8	6	Ø3	Ø6	2
G000000110	J0104	Ø12	-	7	7	Ø2.5	Ø6	2

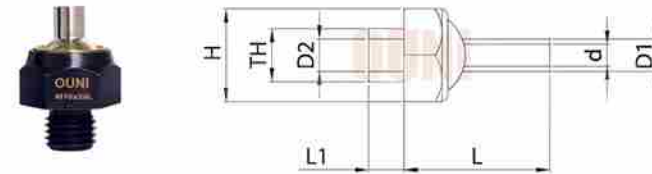


NO.	Model 型號	D	D2	M	L	d2	d3	L1 (可訂製)
G000000111	J0108	Ø15	M5x0.8	M5x0.8	8	Ø2.5	Ø6	11
G000002773	J0109	Ø14	M5x0.8	M5x0.8	8	Ø2.5	Ø6	11

Spray Nozzle Series Thread Mount Type 噴水頭 螺紋型

- ◆可任意調整噴水口角度，有效對應低、中、高冷卻液液壓，提升刀具冷卻效率。
- ◆適用於綜合切削機、銑床、車床等各式工具機。
- ◆可提高加工效率及精度外，亦有助於延長工具使用壽命和減少成本消耗。

- ◆ The Coolant Spray Nozzle could easily adjust its direction and spray precisely. When the coolants correspond with three pressures-low, medium and high pressures, it can improve cooling efficiency of tools.
- ◆ They are suitable for CNC Machine Center, CNC Lathes, CNC Milling Machine, Grinding Machine and so on.
- ◆ The products can enhance the processing efficiency and accuracy. Also it is helpful for extending the lifetime of tools and decreasing the cost.



NO.	Model 型號	Thread mount 螺紋組接	L	L1	D1	D2	d	H
G000002649	J011100	PT 1/8	20	-	-	-	-	-
G000002650	J011200	PT 1/8	40	10	6	5	4	17
G000002651	J011000	PT 1/8	60	-	-	-	-	-
G000002652	J011300	PT 1/4	20	-	-	-	-	-
G000002653	J011400	PT 1/4	40	10	6	5	4	17
G000002654	J011500	PT 1/4	60	-	-	-	-	-
G000002655	J011600	PT 3/8	30	-	-	-	-	-
G000002656	J011700	PT 3/8	50	13	8	10	6	24
G000002657	J011800	PT 3/8	70	-	-	-	-	-
G000002658	J011900	PT 1/2	40	-	-	-	-	-
G000002659	J012000	PT 1/2	60	18	10	12	8	32
G000002660	J012100	PT 1/2	80	-	-	-	-	-
G000003049	J013700	M10*1.25P	18.2	8.5	6	4.5	4.5	17
G000002661	J012200	M10*1.25P	20	-	-	-	-	-
G000002662	J012300	M10*1.25P	40	8	6	5	4	17
G000002663	J012400	M10*1.25P	60	-	-	-	-	-
G000002664	J012500	M20*1.5P	30	-	-	-	-	-
G000002665	J012600	M20*1.5P	50	13	8	10	6	24
G000002666	J012700	M20*1.5P	70	-	-	-	-	-
G000002667	J012800	M24*2.0P	40	-	-	-	-	-
G000002668	J012900	M24*2.0P	60	18	10	12	8	31
G000002669	J013000	M24*2.0P	80	-	-	-	-	-
G000002670	J013100	NPT 1/4	20	-	-	-	-	-
G000002671	J013200	NPT 1/4	40	10	6	5	4	17
G000002672	J013300	NPT 1/4	60	-	-	-	-	-
G000002673	J013400	NPT 3/8	30	-	-	-	-	-
G000002674	J013500	NPT 3/8	50	13	8	10	6	24
G000002675	J013600	NPT 3/8	70	-	-	-	-	-

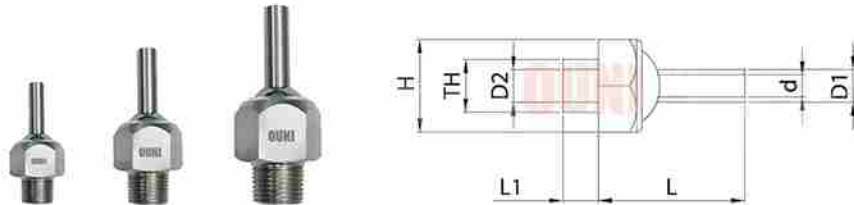
Spray Nozzle Series Thread Mount Type

噴水頭 螺紋型

Stainless Type 不鏽鋼

- ◆可任意調整噴水口角度，有效對應低、中、高冷卻液液壓，提升刀具冷卻效率。
- ◆適用於綜合切削機、銑床、車床等各式工具機。
- ◆可提高加工效率及精度外，亦有助於延長工具使用壽命和減少成本消耗。

- ◆The Coolant Spray Nozzle could easily adjust its direction and spray precisely. When the coolants correspond with three pressures-low, medium and high pressures, it can improve cooling efficiency of tools.
- ◆They are suitable for CNC Machine Center, CNC Lathes, CNC Milling Machine, Grinding Machine and so on.
- ◆The products can enhance the processing efficiency and accuracy. Also it is helpful for extending the lifetime of tools and decreasing the cost.



NO.	Model 型號	Thread mount 螺紋組接	L	L1	D1	D2	d	H
G000002676	J011110	PT 1/8	20					
G000002677	J011210	PT 1/8	40	10	6	5	4	17
G000002678	J011010	PT 1/8	60					
G000002679	J011310	PT 1/4	20					
G000002680	J011410	PT 1/4	40	10	6	5	4	17
G000002681	J011510	PT 1/4	60					
G000002682	J011610	PT 3/8	30					
G000002683	J011710	PT 3/8	50	13	8	10	6	24
G000002684	J011810	PT 3/8	70					
G000002685	J011910	PT 1/2	40					
G000002686	J012010	PT 1/2	60	18	10	12	8	32
G000002687	J012110	PT 1/2	80					
G000002688	J012210	M10*1.25P	20					
G000002689	J012310	M10*1.25P	40	8	6	5	4	17
G000002690	J012410	M10*1.25P	60					
G000002691	J012510	M20*1.5P	30					
G000002692	J012610	M20*1.5P	50	13	8	10	6	24
G000002693	J012710	M20*1.5P	70					
G000002694	J012810	M24*2.0P	40					
G000002695	J012910	M24*2.0P	60	18	10	12	8	31
G000002696	J013010	M24*2.0P	80					
G000002697	J013110	NPT 1/4	20					
G000002698	J013210	NPT 1/4	40	10	6	5	4	17
G000002699	J013310	NPT 1/4	60					
G000002700	J013410	NPT 3/8	30					
G000002701	J013510	NPT 3/8	50	13	8	10	6	24
G000002702	J013610	NPT 3/8	70					

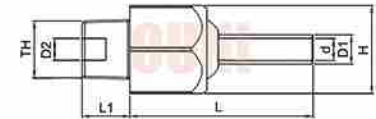
Spray Nozzle Series Leak Lock Type

噴水頭 止漏型

Alloy Steel Type 合金鋼

Stainless Type 不鏽鋼

- ◆特殊設計可立即停止供給切削液。
- ◆出水不延遲，可延長刀具使用壽命。
- ◆Special design for avoiding oil leaking.
- ◆Not delaying spraying fluid which prolongs the longevity of the tool holders.



Alloy Steel Type 合金鋼

NO.	Model 型號	Thread mount 螺紋組接	L	L1	D1	D2	d	H
G000002703	J017500	PT 1/8	40					
G000002704	J017600	PT 1/8	60	10	6	6	4	17
G000002705	J017700	PT 1/4	40					
G000002706	J017800	PT 1/4	60					
G000002707	J017900	PT 3/8	30					
G000002708	J018000	PT 3/8	50	13	8	10	6	24
G000002709	J018100	PT 3/8	70					
G000002710	J018500	NPT 1/4	40	10	6	6	4	17
G000002711	J018600	NPT 1/4	60					
G000002712	J018700	NPT 3/8	30					
G000002713	J018800	NPT 3/8	50	13	8	10	6	24
G000002714	J018900	NPT 3/8	70					
G000002715	J019000	M10*1.25P	40	10	6	6	4	17
G000002716	J019100	M10*1.25P	60					
G000002717	J019200	M20*1.5P	30					
G000002718	J019300	M20*1.5P	50	13	8	10	6	24
G000002719	J019400	M20*1.5P	70					

Stainless Type 不鏽鋼

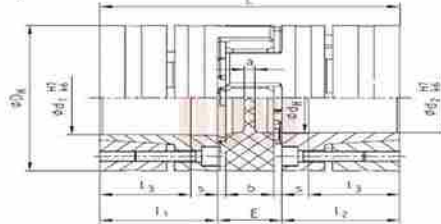
NO.	型號	Thread mount 螺紋組接	L	L1	D1	D2	d	H
G000002720	J017510	PT 1/8	40					
G000002721	J017610	PT 1/8	60	10	6	6	4	17
G000002722	J017710	PT 1/4	40					
G000002723	J017810	PT 1/4	60					
G000002724	J017910	PT 3/8	30					
G000002725	J018010	PT 3/8	50	13	8	10	6	24
G000002726	J018110	PT 3/8	70					
G000002727	J018510	NPT 1/4	40	10	6	6	4	17
G000002728	J018610	NPT 1/4	60					
G000002729	J018710	NPT 3/8	30					
G000002730	J018810	NPT 3/8	50	13	8	10	6	24
G000002731	J018910	NPT 3/8	70					
G000002732	J019010	M10*1.25P	40	10	6	6	4	17
G000002733	J019110	M10*1.25P	60					
G000002734	J019210	M20*1.5P	30					
G000002735	J019310	M20*1.5P	50	13	8	10	6	24
G000002736	J019410	M20*1.5P	70					

Shaft Coupling

脹緊式聯軸器



- ◆ 脹緊套膜式，有較高夾緊力。
- ◆ 同心度準，運轉平穩。
- ◆ 安裝拆卸容易。
- ◆ The expansion sleeve has a high clamping force.
- ◆ Smooth operation.
- ◆ Easy to install and disassemble.



NO.	Model 型號	Type 型式	Size 尺寸	材質	Dimensions(mm)規格													夾緊螺絲	
					D _H	d _{H1}	L	l ₁ :l ₂	l ₃	E	b	s	a	M	Z	T _A (Nm)	M _i		
G000002639	J1101	HW6	19	鋼	40	18	66	25	25	15	12	1.5	3.0	M5	6	4.1	M4		
G000002640	J1104			鋁	3														
G000002641	J1107		24	鋼	55	27	78	30	25.5	17	14	1.5	3.0	M5	4	8.5	M5		
G000002642	J1110			鋁	6														
G000002643	J1113		28	鋼	65	30	90	35	32.5	19	15	2	4.0	M5	8	8.5	M5		
G000002644	J1116			鋁	6														
G000002645	J1119		38	鋼	80	37	114	45	40	23	18	2.5	4.0	M6	8	14	M6		
G000002646	J1122			鋁	10														
G000002647	J1125		42	鋼	95	46	126	50	45.5	25	20	2.5	5.0	M8	8	35	M8		
G000002648	J1128			鋁	25														
G000003249	J1131	48	鋼	105	51	140	56	51	27	21	3	5.0	M10	4	69	M10			
G000003250	J1134		鋁	49	0														

Size 尺寸	Type 型式	Material 材質	軸套孔徑和相應的可傳遞力矩 T _A (Nm)															
			10	14	15	16	18	19	20	22	24	25	28	32	35	36	38	
19	HW6	鋼	33	55	68	70	78	84	90									
		鋁	22	41	50	56	65	72	78									
24	HW6	鋼	62	74	76	88	97	110	114	116	125	140						
		鋁	42	55	62	70	80	88	92	98	105	112						
28	HW6	鋼							184	203	220	280	310	353	360	389		
		鋁							177	195	216	248	253	307	311	329		

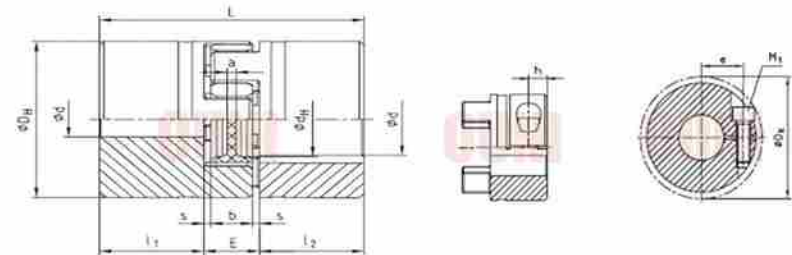
Size 尺寸	Type 型式	Material 材質	軸套孔徑和相應的可傳遞力矩 T _A (Nm)															
			22	24	25	28	32	35	36	38	40	42	45	48	50	55	60	
38	HW6	鋼	228	337	356	398	442	501	515	533	572	615	644	653				
		鋁	228	304	331	350	405	460	470	513	547	577	617	622				
42	HW6	鋼				445	470	566	580	620	680	730	790	850	880	905		
		鋁				360	400	500	515	600	640	660	720	800	850	875		
48	HW6	鋼				685	809	822	841	926	916	1042	1181	1125	1311	1420		
		鋁				638	762	780	842	929	943	1075	1208	1136	1336	1366		

Shaft Coupling

側固式聯軸器



- ◆ 同心度準，運轉平穩。
- ◆ 安裝拆卸容易。
- ◆ 鋁材質，抗電磁干擾。
- ◆ Smooth operation.
- ◆ Easy to install and disassemble.
- ◆ Aluminum material, anti-electromagnetic interference.



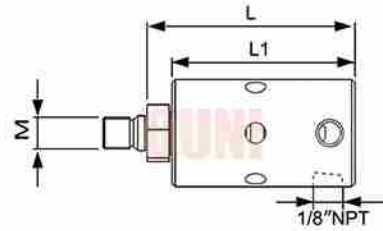
NO.	Model 型號	Type 型式	Size 尺寸	成品孔徑			Dimensions(mn)規格													夾緊螺絲	
				d _{min}	2.5d _{max}	D _H	d _{H1}	L	l ₁ :l ₂	E	b	s	a	M _i	t _i	e	ØD _k				
G000003251	J1137	HW2	19	6	24	40	18	66	25	16	12	1.5	3	M5	11	14.5	46				
G000003252	J1140		24	8	28	55	27	78	30	18	14	1.5	3	M6	10.5	20	57.5				
G000003253	J1143		28	10	38	65	30	90	35	20	15	2	4	M8	11.5	25	73				
G000003254	J1146		38	12	45	80	38	114	45	24	18	2.5	4	M8	15.5	30	83.5				

NO.	Model 型號	Type 型式	Size 尺寸	成品孔徑			Dimensions(mn)規格													夾緊螺絲	
				d _{min}	2.5d _{max}	D _H	d _{H1}	L	l ₁ :l ₂	E	b	s	a	M _i	t _i	e	ØD _k				
G000003255	J1149	HW2.5	19	6	24	40	18	66	25	16	12	1.5	3	M5	11	14.5	46				
G000003256	J1152		24	8	28	55	27	78	30	18	14	1.5	3	M6	10.5	20	57.5				
G000003257	J1155		28	10	38	65	30	90	35	20	15	2	4	M8	11.5	25	73				
G000003258	J1158		38	12	45	80	38	114	45	24	18	2.5	4	M8	15.5	30	83.5				

Size 尺寸	Type 型式	標準孔徑和容許傳遞扭矩																							
		8	10	12	14	15	16	18	19	20	22	24	25	28	32	35	38	40	42	45					
19	HW2	24	26	27	28	29	30	31	32	32	29	25													
24	HW2					32	34	38	40	42	42	51	53	59	68										
28	HW2											58	62	70	74	78	85	93	97	109	124	136			
38	HW2																	154	173	197	216	234	247	259	278
19	HW2.5	25	27	28	29	30	31	32	32	34	30	32													
24	HW2.5					34	36	40	43	45	48	50	54	57	63										
28	HW2.5								81	81	84	85	87	89	91	92	97	102	105						
38	HW2.5															105	109	113	118	122	123	126	130		

Spindle Clamping Systems

Rotary Joint 冷卻水迴轉接頭

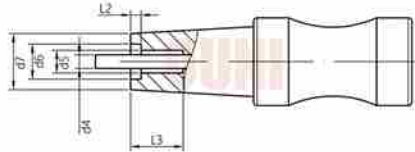


NO.	Model 型號	L	L1	M
G000002742	J1201	66	58	M10xp1

Spray Nozzle Punch 噴水頭沖子



- ◆輔助噴水頭正確安裝
- ◆Auxiliary Spray Nozzle is installed correctly



NO.	Model 型號	d4	d5	d6	d7	L2	L3	Used on 適用噴水頭
G000002774	J1301	Ø3.9	Ø6.5	Ø10	Ø16	3	15	J0101, J0102, J0108
G000002775	J1302	Ø2.4	Ø6.5	Ø8	Ø13	3	10	J0104, J0105
G000002776	J1303	0	Ø6.5	Ø10	Ø15	3	15	J0109



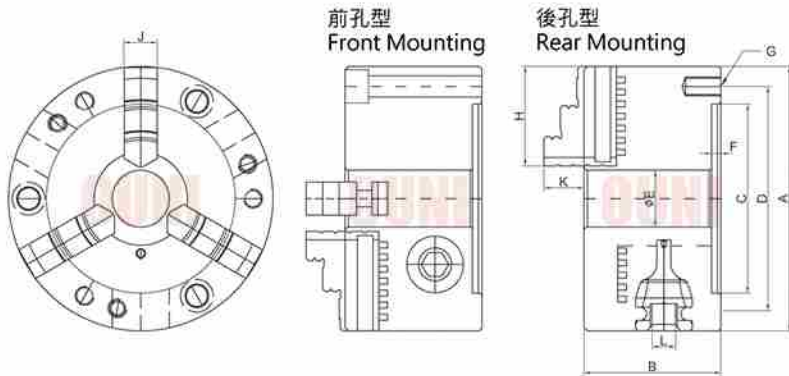
車床配件
Lathes Component



Stainless Steel 3-Jaw scroll chucks 不鏽鋼三爪夾頭

- ◆採用不鏽鋼材質。
- ◆特殊設計，轉動順暢。
- ◆所有料件都經過化學表面處理。
- ◆在高酸性、高鹼性 or 高濕度的環境下使用不易腐蝕(生鏽)。

- ◆ Made of stainless steel.
- ◆ Special design, smooth rotation.
- ◆ All parts are chemically surface treated.
- ◆ Use in high acidity, high alkali or high humidity environment not easy to corrode (rust).



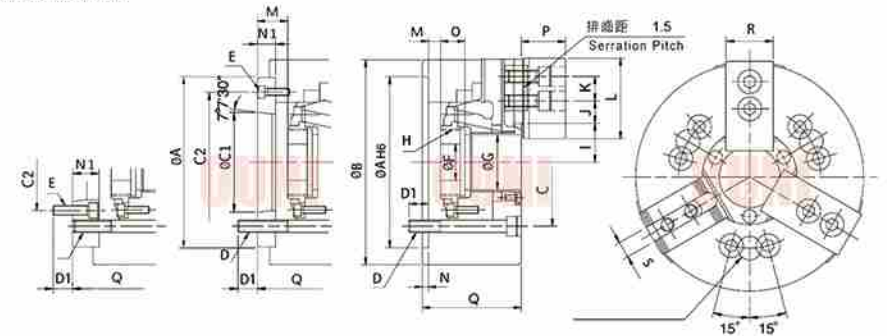
Model 型號	A	B	C	D	E	F	G	H	J	K	L	Max. Speed 最高轉速 r.p.m. (min ⁻¹)	Max. Gripping Diameter 把握範圍		Weight 淨重 (kg)
													外徑把握 O.D. Clamping	內徑把握 I.D. Clamping	
3SC-03	85	45	60	73	16	3.5	3-M6x1P	35	11	15	7	2500	Ø2-Ø70	Ø24-Ø64	1.5
3SC-04	112	58	80	95	24	4.5	3-M8x1.25P	42	14	17	10	2500	Ø3-Ø90	Ø32-Ø84	3.3
3SC-05	132	60	100	115	32	4.5	3-M8x1.25P	50	16	20	10	2500	Ø3-Ø110	Ø35-Ø100	4.6
3SC-06	167	66	130	147	45	5	3-M10x1.5P	65	19	23	10	2000	Ø4-Ø160	Ø48-Ø150	7.9



Thru-hole power chuck 中空動力夾頭

- ◆楔形三爪大貫通孔徑。
- ◆摺動面均經硬化及精密研磨，並直接潤滑。
- ◆高剛性結構及高夾持精度。
- ◆F值為連結螺帽未車製螺牙時之孔徑。
- ◆Hmax值為連結螺帽可車製螺牙之最大規格，但可依實際需求訂製。

- ◆ It's a WEDGE-HOOK type 3-jaw with the large through-hole.
- ◆ Matching surfaces of all parts hardened, ground and lubricated directly.
- ◆ Construction of high rigidity and high clamping accuracy.
- ◆ F value is the hole diameter of blank draw nut, H is the maximum thread specification, and it could be customize.



Model 型號	Flange outer 喉口外徑 (mm)	Jaw width (D1) 爪口寬度 (mm)	Chucking Dia 夾持範圍 (mm)		Max. D.B. 最大夾持直徑 (mm)	Max. clamping force 最大夾持力 (kN/kg)	Max. speed 最高轉速 min (r.p.m.)	Fig. m ³	Weight 淨重 (kg)	Weight 淨重 (kg)	Matching nut 適用螺帽	Max. pressure 最大夾持力 Mpa (kg/cm ²)	
			Max.	Min.									
3HC-04	10	5.4	110	7	33.7(1400)	28.4(2900)	8000	0.01	4	-	TR-428	2.6(26)	
3HC-05	A4	10	5.4	135	12	17.1(1750)	35.8(3650)	7000	0.02	6.7	7.5	TR-536	2.5(25)
3HC-06	A5	12	5.5	168	15	21.5(2200)	56.8(5800)	6000	0.06	11.9	13.7	TR-646	2.3(23)
3HC-08	A5	16	7.4	210	33	34.3(3500)	85.8(8750)	5000	0.18	22.5	25.4	TR-852	2.7(27)
	A6	16	7.4	210	15	34.3(3500)	85.8(8750)	5000	0.18	22.5	23.6	TR-852	2.7(27)
3HC-10	A6	19	8.8	254	31	42.6(4380)	110.7(11300)	4200	0.33	34.5	41.5	TR-1075	2.9(29)
	A8	19	8.8	254	31	42.6(4380)	110.7(11300)	4200	0.33	34.5	40	TR-1075	2.9(29)

Model 型號	A	B	C	C1	C2	D	D1	E	F	G	H max.	H min.	I max.	I min.	J max.	J min.	
3HC-04	85	110	20.6	-	-	3-M10	16	-	12	26	M32x1.5	23	20.3	11.3	6.8		
3HC-05	A4	110	135	82.6	63.51	96	3-M10	15	15	3-M6	12	33	M40x1.5	26.5	23.8	19.8	7.8
3HC-06	A5	140	168	104.8	82.56	116	3-M10	16	16	3-M6	20	45	M55x2	32	29.3	22.8	9.3
3HC-08	A5	170	210	133.4	82.56	104.8	3-M12	20	17	6-M10	30	52	M60x2	38.7	35	29.8	14.8
	A6	170	210	133.4	106.38	150	3-M12	20	18	3-M6	30	52	M60x2	38.7	35	29.8	14.8
3HC-10	A6	220	254	171.4	106.38	133.4	6-M16	22	18	6-M12	45	75	M85x2	51	46.6	33.8	14.6
	A8	220	254	171.4	139.72	190	6-M16	22	24	3-M8	45	75	M85x2	51	46.6	33.8	14.6

Model 型號	K	L	M max.	M min.	N	N1	O	P	Q	R	S				
3HC-04	14	52	1.5	-6.5	4	-	17.5	24	59	23	10				
3HC-05	A4	14	62	1	16	-9	6	4	15	20	31	60	71	25	10
3HC-06	A5	20	73	11	26	-1	14	15	19	37	81	91	31	12	
3HC-08	A5	25	95	14.5	37.5	-1.5	21.5	23	20.5	38	91	109	35	14	
	A6	25	95	14.5	31.5	-1.5	15.5	17	20.5	38	91	103	35	14	
3HC-10	A6	30	110	8.5	33.5	-10.5	14.5	25	25	43	110	120	40	16	
	A8	30	110	8.5	26.5	-10.5	7.5	6	18	25	43	0	113	40	16

Lathes Component

UNMI

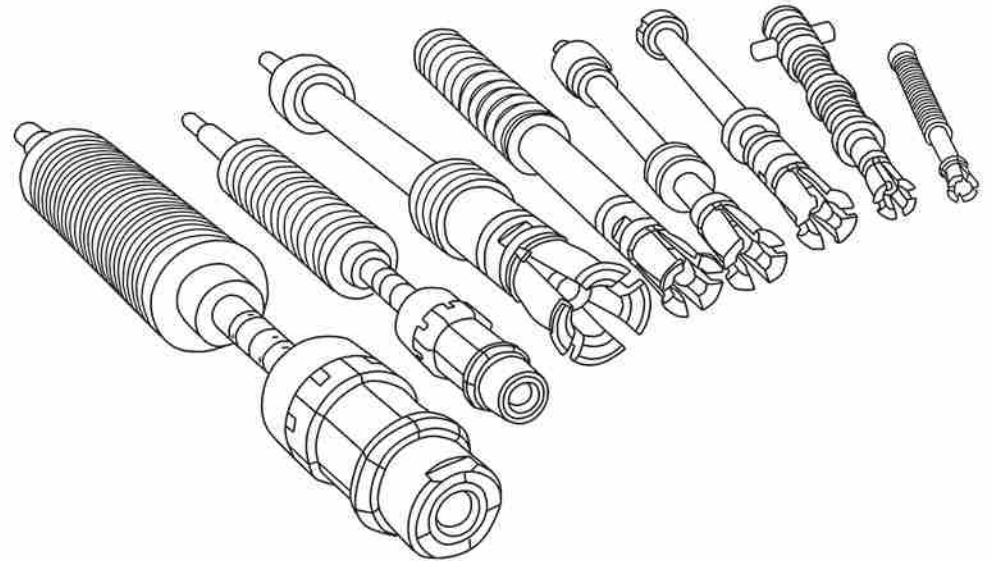
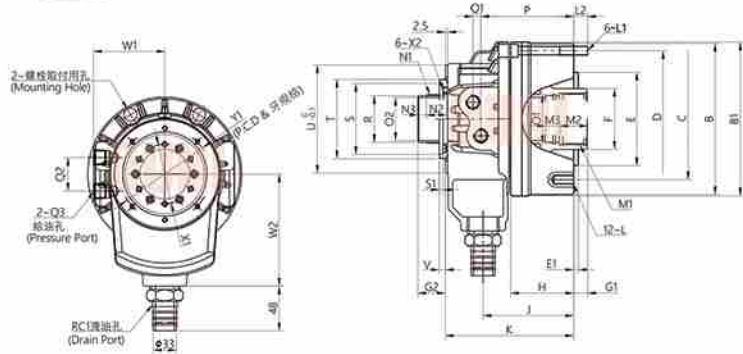
D-03

車床配件 Lathes Component



Through-hole rotary hydraulic cylinder 超薄型中空迴轉油壓缸

- ◆內建逆止閥自鎖機構及壓力洩壓閥。
- ◆安裝時可由後端鎖固之。
- ◆BUILT-IN safety check valves and pressure relief valves.
Can screw it from the rear end of the cylinder when mounting.



Model 型號	Eff. Piston(Dia) 有效直徑(mm)	Piston stroke 行程(mm)	Eff. Piston area cm ² 有效面積 (cm ²)	Max. Draw Bar Force 最大拉力(kN)	Max. pressure 最高使用壓力 Mpa(kg/cm ²)	Max speed 最高回轉數 r.p.m. (min-1)	Moment of inertia 慣性矩 (kg·m ²)	Weight 淨重 (kg)	Total oil leakage 總洩油量 (L/min)
		Extend 伸縮 Retract 收縮		Push Side 推側力 Pull Side 拉側力					
TR-428	90	10	46.8	50.7	1742(17.1)	1881(18.4)	8000	0.013	6
TR-536	105		70.8	66.5	2690(26.3)	2520(24.6)	8000	0.013	6.9
TR-646	128	15	105	93	3990(39.0)	3530(34.5)	7000	0.019	9.2
TR-646C	125		99.1	88	3765(36.9)	3344(32.7)	7000	0.019	9.2
TR-852	145	22	137	127	4922(48.2)	4558(44.6)	6300	0.057	12.5
TR-1881K	180	25	188.5	173.6	7166(70.2)	6599(64.6)	4800	0.09	21

Model 型號	A L.D.	B	B1	C	D	E H2	E1	F	G1 max.	G1 min.	G2 max.	G2 min.	H	J	K	L	L1	L3	M1	M2	M3	
TR-428	90	126	132	100	-	80		44	9	-1	34	24	60	91	131.5	12~M8X20	-	-	M33X1.5	25		
TR-536	105	138	143	115	125	100		48	15	0	40	25	63.5	99.5	134			M8X70	M42X1.5			
TR-646	128	162	165	130	147	100	5	65	15	0	29	67.5	97	137.5		12~M10X20		15	M55X2.0		15	
TR-646C	125	162	165	140	140	120		65	15	0	44	29	67.5	97	137.5				M8X75	M55X2.0		30
TR-852	145	185	184	170	165	130		70	21	-1	22	68.5	98	138					M60X2.0			30
TR-1881K	180	225	229	205	205	168		100	23	-2	55	30	86	130	184.5	12~M12X24	M10X90	16	M90X2.0			35

Model 型號	W1	N2	N3	O1 H8	O2 H8	P	Q1	Q2	Q3	R e7	S H7	T	U	V	W1	W2	X1	X2	Y1	RC1	
TR-428	M34X1.5	27		30	28	94	8	30	PT1/4	32	53	59	98	5.5	60	109	44	M5X6		88.5	
TR-536	M44X1.5	27		38	36	95.5		30	PT1/4	42	64	74	98	6	66	109	55	M5X5		M5X6	
TR-646	M52X1.5	29		50	46	99.5				52	76	85	116	6.5	76.5	120	64	M6X6		98	
TR-646C	M52X1.5	29		50	46	99.5	8.5			52	76	85	116	6.5	76.5	120	64	M6X6		M5X6	
TR-852	M58X1.5	30		55	52	100		36	PT3/8		85	96	128	7	80	130	73	M6X7		98	
TR-1881K	M89X2.0	38		85	81	144	11	40	PT1/2	85.8	115	126	175	11	105	174	103	M6X10		166	

技術資料

Technical Data

技術資料 Technical Data

Dynamic Balance Standard Formula List 動平衡標準公式列表

Balance Grade	G0.4	G1	G2.5	G6.3	G16	G40	G100	G250	G630	G1600	G4000	
Precision	exw(mm/s)	0.4	1	2.5	6.3	16	40	100	250	630	1600	4000
Required	exw(μm*rpm)	3820	9549	23875	60165	152800	382000	954900	2387500	6016500	15280000	38200000

SETTING OF THE BALANCE SERIES IS ACCORDING TO ISO 1940 STANDARD

THE FORMULA AS FOLLOWS:

$$U = M \times e$$

$$U = \frac{G \times M}{n} \times 9549$$

$$G = \frac{n \times U}{9549 \times M}$$

G=UNBALANCE SERIES

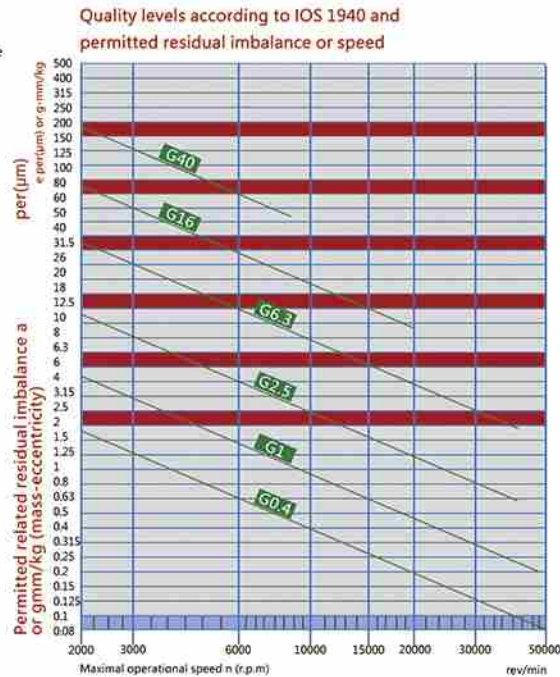
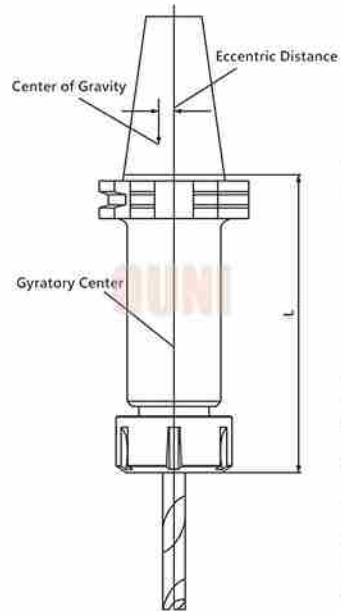
U=UNBALANCE (g-mm)

e=ECCENTRIC DISTANCE(mm)

M=ROTER WEIGHT(kg)

n=rpm

9549=CONSTANT

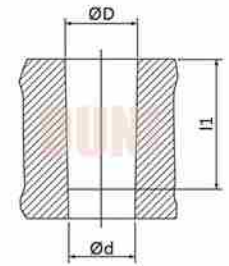


JACOBS TAPER

Type	D	d	l1
JT0	6.35	5.802	11.112
JT1	9.754	8.469	16.669
JT2S	13.94	12.386	19.05
JT2	14.199	12.386	22.225
JT33	15.85	14.237	25.4
JT6	17.17	15.852	25.4
JT3	20.599	18.951	30.956
JT4	28.55	26.346	42.069
JT5	35.89	33.422	47.625

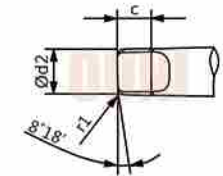
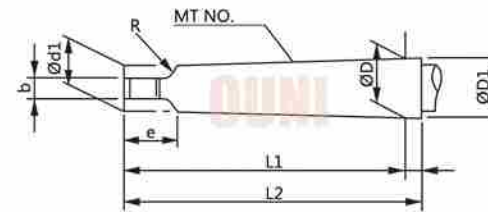
DIN238

Type	D	d	l1
B6	6.35	5.85	10
B10	10.094	9.4	14.5
B12	12.065	11.1	18.5
B16S	15.608	14.5	21.5
B16	15.733	14.5	24
B18S	17.431	16.2	25
B18	17.78	16.2	32
B22	21.793	19.8	40.5
B24	23.825	21.3	50.5



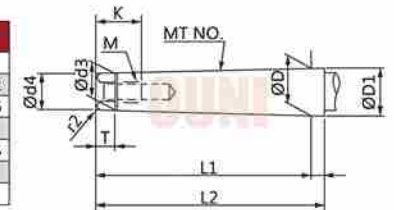
DIN228" A TANG TYPE"

Type	φD	a	φD1	φd1	φd2	L1	L2	b	c	e	R	r1
MT0	9.045	3	9.2	6.1	6	5.6	59.5	3.9	6.5	10.5	4	1
MT1	12.065	3.5	12.2	9	8.7	62	65.5	5.2	8.5	13.5	5	1.2
MT2	17.78	5	18	14	13.5	75	80	6.3	10	16	6	1.6
MT3	23.825	5	24.1	19.1	18.5	94	99	7.9	13	20	7	2
MT4	31.267	6.5	31.6	25.2	24.5	117.5	124	11.9	16	24	8	2.5
MT5	44.399	6.5	44.7	36.5	35.7	149.5	156	15.9	19	29	10	3
MT6	63.348	8	63.8	52.4	51	210	218	19	27	40	13	4



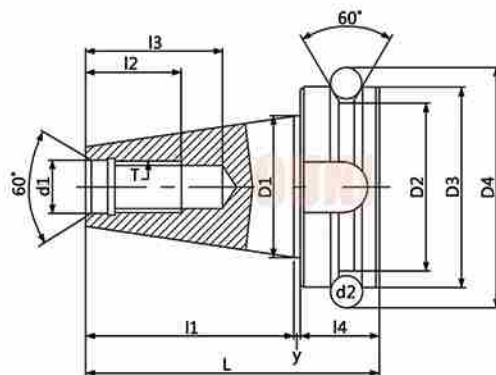
DIN228" B DRAW BAR TYPE"

Type	φD	a	φD1	φd3	φd4	L1	L2	T	r2	M	K	r
MT0	9.045	3	9.2	6.4	6	50	53	4	0.2	---	---	1
MT1	12.065	3.5	12.2	9.4	9	53.5	57	5	0.2	M6	16	1.2
MT2	17.78	5	18	14.6	14	64	69	5	0.2	M10	24	1.6
MT3	23.825	5	24.1	19.8	19	81	86	7	0.6	M12	28	2
MT4	31.267	6.5	31.6	25.9	25	102.5	109	9	1	M16	32	2.5
MT5	44.399	6.5	44.7	37.6	35.7	129.5	136	10	2.5	M20	40	3
MT6	63.348	8	63.8	53.9	51	182	190	16	4	M24	50	4



JIS B 6339

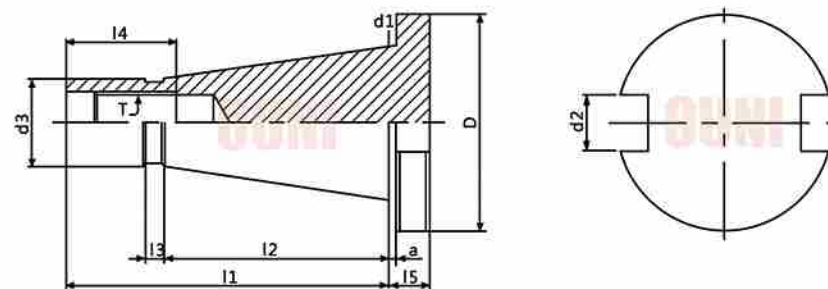
- ◆ 如適合於中心止水標準，可選配。
- ◆ 柄徑出廠前動平衡值為G6.3，依客戶需求亦可提供G2.5之柄徑。
- ◆ 柄徑標準：JIS MAS-403
- ◆ 椎度公差小於AT3
- ◆ 基本材質：JIS-SCM415
- ◆ 硬度大於HRC 56 滲碳深度大於0.8mm
- ◆ 真圓度小於0.8 μ m
- ◆ 標面粗糙度：Ra小於0.5 μ m
- ◆ If it is suitable for center coolant standard, it can be ordered.
- ◆ The shank has pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
- ◆ Shank body standard: JIS MAS 403.
- ◆ Taper tolerance AT3.
- ◆ Basic Material : JIS-SCM415.
- ◆ Hardness HRC56 Carbon depth 0.8mm.
- ◆ Roundness 0.8 μ m.
- ◆ Surface roughness: Ra 0.5 μ m.



Mount type	D3	D1	D4	D2	d1	d2	L	l1	l2	l3	l4	y	T
BT30	46	31.75	56.14	38	12.5	8	70.4	±0.2	34	24	20	2	M12x1.75P
BT40	63	44.45	75.679	53	17	10	92.4	±0.2	43	30	25	2	M16x2.0P
BT50	100	69.85	119.02	85	25	15	139.8	±0.2	62	45	35	3	M24x3.0P

DIN 2080

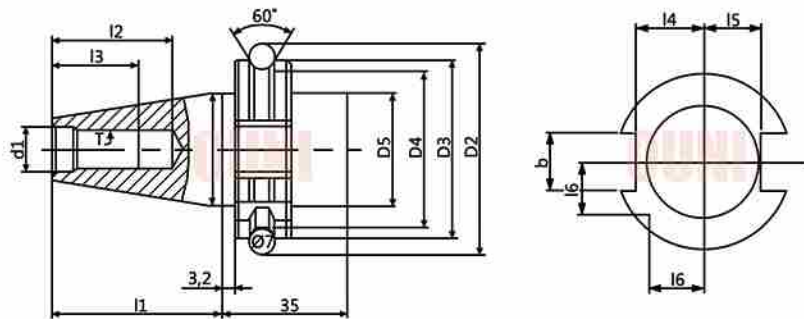
- ◆ 柄徑標準：DIN-2080
- ◆ 椎度公差小於AT3
- ◆ 基本材質：JIS-SCM415
- ◆ 硬度大於HRC 56 滲碳深度大於0.8mm
- ◆ 真圓度小於0.8 μ m
- ◆ 標面粗糙度：Ra小於0.5 μ m
- ◆ Shank body standard: DIN-2080.
- ◆ Taper tolerance AT3.
- ◆ Basic Materance: JIS-SCM415.
- ◆ Hardness HRC56 Carbon depth 0.8mm.
- ◆ Roundness 0.8 μ m.
- ◆ Surface roughness: Ra 0.5 μ m.



Mount type	D	d1	D2	d3	a	l1	l2	l3z	l4	l5	T
BT30	50	31.75	16.1	17.11	1.6	68.4	48.4	3	24	8	1/2"-12W, M12x1.75P, 1/2"-13UNC
BT40	63	44.45	16.1	25.00	1.6	93.4	65.4	5	32	10	5/8"-11W, M16x2.0P
BT50	97.5	69.85	25.7	39.29	3.2	126.8	101.8	8	47	12	1"-8W, M24x3.0P

DIN 69871

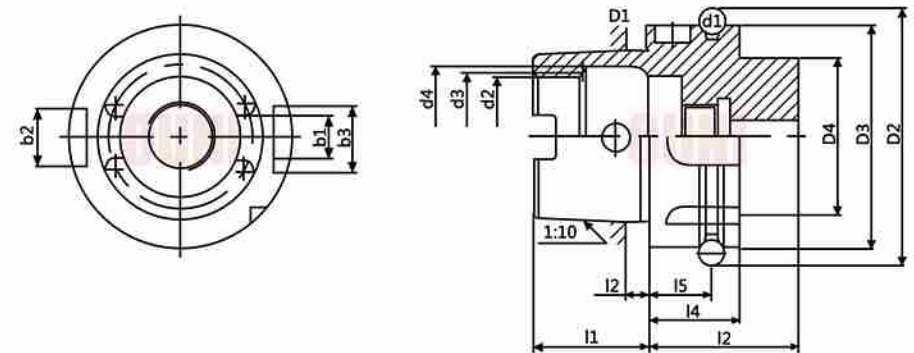
- ◆ 如適合於中心止水標準(DIN-69871-AD or B), 可選配。
- ◆ 柄徑出廠前動平衡值為G6.3, 依客戶需求亦可提供G2.5之柄徑。
- ◆ 柄徑標準: DIN-69871
- ◆ 椎度公差小於AT3
- ◆ 基本材質: JIS-SCM415
- ◆ 硬度大於HRC 56 滲碳深度大於0.8mm
- ◆ 真圓度小於0.8 μ m
- ◆ 標面粗糙度: Ra小於0.5 μ m
- ◆ If it is suitable for center coolant standard(DIN-69871-AD or B), it can be ordered.
- ◆ The shank has pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
- ◆ Shank body standard: DIN-69871.
- ◆ Taper tolerance AT3.
- ◆ Basic Material: JIS-SCM415.
- ◆ Hardness HRC56 Carbon depth 0.8mm.
- ◆ Roundness 0.8 μ m.
- ◆ Surface roughness:Ra 0.5 μ m.



Mount type	D3	D1	D2	D4	D5	d1	b	l1	l2	l3	l4	l5	l6	T
	0		±0.05	0	max.	H7	H12	0	min.	min.	0	0	0	
	-0.1			-0.5				-0.3			-0.4	-0.4	-0.3	
BT30	50	31.75	59.30	44.30	45	13	16.1	47.8	33.5	24	19	16.4	15	M12x1.75P
BT40	63.55	44.45	72.30	56.25	50	17	16.1	68.4	42.5	32	25	22.8	18.5	M16x2.0P
BT50	97.50	69.85	107.25	91.25	80	25	25.7	101.75	61.5	47	37.7	35.5	30	M24x3.0P

DIN 69893 A+C

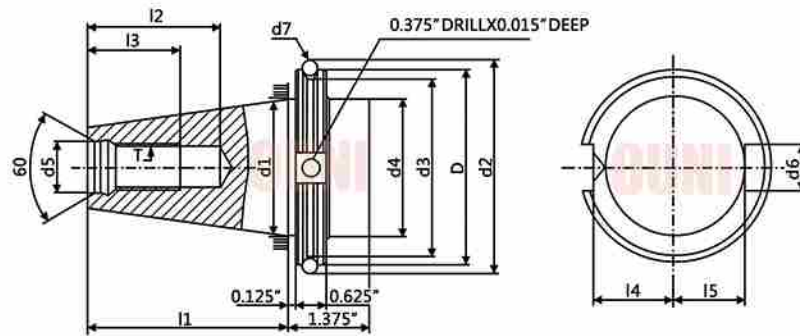
- ◆ 柄徑出廠前動平衡值為G6.3, 依客戶需求亦可提供G2.5之柄徑。
- ◆ 柄徑標準: DIN-69893
- ◆ 椎度公差小於AT3
- ◆ 基本材質: JIS-SCM415
- ◆ 硬度大於HRC 56 滲碳深度大於0.8mm
- ◆ 真圓度小於0.8 μ m
- ◆ 標面粗糙度: Ra小於0.5 μ m
- ◆ The shank is pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
- ◆ Shank body standard: DIN-69893.
- ◆ Taper tolerance AT3.
- ◆ Basic Material: JIS-SCM415.
- ◆ Hardness HRC56 Carbon depth 0.8mm.
- ◆ Roundness 0.8 μ m.
- ◆ Surface roughness:Ra 0.5 μ m.



Mount type	D3	D1	d2	d4	d3	D4	D2	d1	l1	l2	l3	l4	l5	b1	b2	b3
	h10		H10	H11		max.	0	0			min.	0	±0.1	±0.04	H10	H10
							-0.1	-0.2				-0.1				
HSK32	32	24.007	17	21	19	26	37	4	16	3.2	35	20	16	7.05	7	9
HSK40	40	30.007	21	25.5	23	34	45	4	20	4	35	20	16	8.05	9	11
HSK50	50	38.009	26	32	29	42	59.3	7	25	5	42	26	18	10.54	12	14
HSK63	63	48.010	34	40	37	53	72.3	7	32	6.3	42	26	18	12.54	16	18
HSK100	100	75.013	53	63	58	85	109.75	7	50	10	45	29	20	20.02	20	22

ASME B5.50

- ◆如適合於中心止水標準(DIN-69871-AD or B), 可選配。
- ◆柄徑出廠前動平衡值為G6.3, 依客戶需求亦可提供G2.5之柄徑。
- ◆柄徑標準: ANSI-B5.50
- ◆推度公差小於AT3
- ◆基本材質: JIS-SCM415
- ◆硬度大於HRC 56 滲碳深度大於0.8mm
- ◆真圓度小於0.8 μ m
- ◆標面粗糙度: Ra小於0.5 μ m
- ◆If it is suitable for center coolant standard(DIN-69871-AD or B), it can be ordered.
- ◆The shank has pre-balance at G6.3, and can provide precision balance at G2.5, made by request.
- ◆Shank body standard: ANSI-B5.50
- ◆Taper tolerance AT3.
- ◆Basic Material: JIS-SCM415.
- ◆Hardness HRC56 Carbon depth 0.8mm.
- ◆Roundness 0.8 μ m.
- ◆Surface roughness:Ra 0.5 μ m.



Mount type	D	d1	D2	d3	d4	d5	d6	d7	I1	I2	I3	I4	I5	T
CAT30	1.812	1.250	2.176	1.531	1.250	0.516	0.645	0.2813	1.875	1.00	0.188	0.735	0.640	0.500-13
CAT40	2.500	1.750	2.863	2.219	1.750	0.641	0.645	0.2813	2.687	1.12	0.188	0.985	0.890	0.625-11
CAT45	3.250	2.250	3.613	2.969	2.250	0.766	0.770	0.2813	3.250	1.50	0.188	1.235	1.140	0.750-10
CAT50	3.875	2.750	4.238	3.594	2.750	1.031	1.020	0.2813	4.000	1.75	0.250	1.485	1.390	1.000-8

Hex Key Drill Chuck Manual

齒輪式夾頭操作須知

CAUTION

- ◆Clamping or releasing the cutting tool only at standstill of machine spindle or outside the machine.
- ◆Please spray oil on the surface to prevent corrosion before storing Hex Key Drill Chuck.

HOW TO MOUNT

- ◆Hex Key Drill Chuck is clamped by Hex Key on side of the drill chuck actuating a bevel gear. Turn hex key counter clockwise to open the drill chuck, clockwise to close it. Open the jaw of Hex Key Drill Chuck wide enough to insert the cutting tool.(FIG.1)
- ◆Turn Hex Key clockwise to clamp the cutting tool.(FIG.2)
- ◆Hex Key Drill Chuck is ready for work.(FIG.3)
- ◆Please turn Hex Key counter clockwise to release the cutting tool and move the cutting tool.

注意事項

- ◆只在主軸停止或是機器外時才鎖緊/鬆開刀具。
- ◆在貯放齒輪式夾頭之前, 請在表面噴上防鏽油來防止生鏽。

裝置固定步驟

- ◆齒輪式夾頭是以六角板手驅動夾頭旁的齒輪來夾持刀具; 逆轉六角板手可打開三爪; 正轉六角板手則可關閉三爪。先將夾頭之三爪開至足以放入刀具。(圖1)
- ◆正轉六角板手使夾頭能夾緊刀具。(圖2)
- ◆齒輪式夾頭可開始加工。(圖3)
- ◆請逆轉六角板手鬆開且移開刀具。

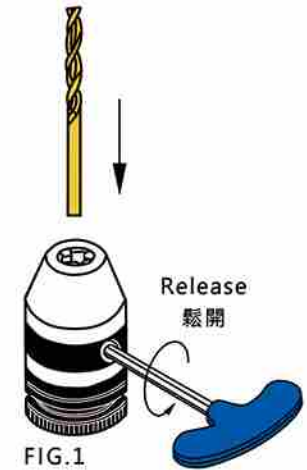


FIG.1



FIG.2

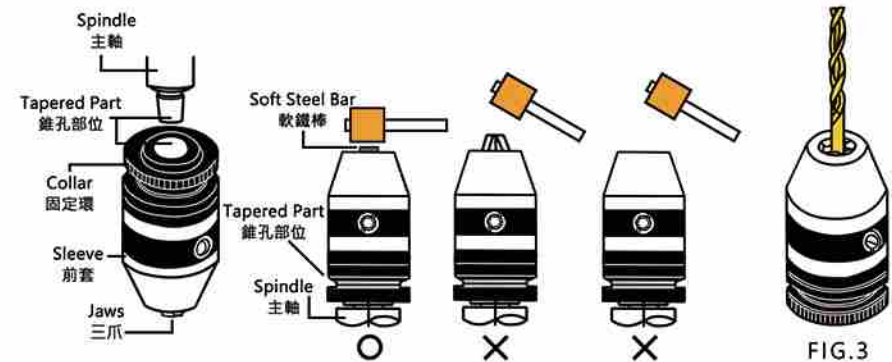


FIG.3

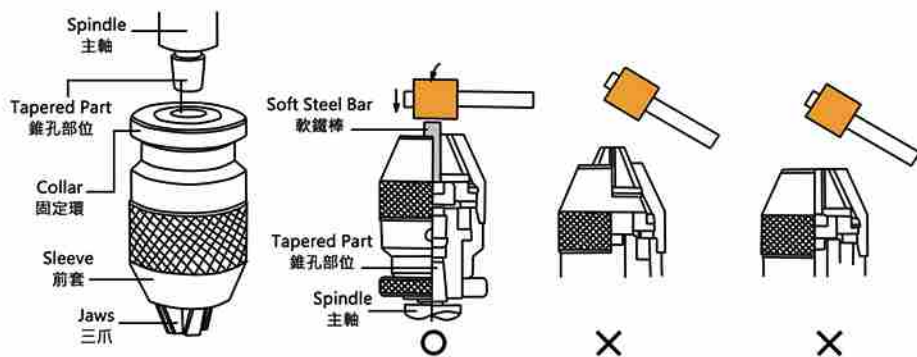
自動鑽夾頭操作須知

注意事項

- ◆ 依據此手冊中教導"如何裝置及固定"之步驟,即可正確地完成裝置此夾頭;否則,此夾頭將會鬆開,最後可能造成使用者嚴重地受傷及意外。
- ◆ 開始操作前,檢查並確認三爪是否緊緊的夾住您所使用的工具,錯誤的夾持將會產生夾頭精度有差異、破損或解體。這樣可能造成使用者嚴重地受傷及意外。
- ◆ 手用力地鎖緊夾頭,如果使用一個夾持量較大的夾頭來夾持一個較小尺寸的工具,則此夾頭具備之自動鎖緊的裝置可能會無法夾持,可能會導致工具滑落最後失敗。
- ◆ 此夾頭於加工時,只可正轉,不可逆轉;若逆轉操作將失去功能,夾持之工具將會鬆開,且旋出夾頭外,則可能造成使用者嚴重地受傷及意外。
- ◆ 此夾頭不能使用於有緊急停止裝置的機器,如果機器主軸因緊急狀況而停止轉動,則工具會鬆開且旋出夾頭外,則可能造成使用者嚴重地受傷及意外。
- ◆ 勿觸碰正在轉動中之夾頭或工具,否則將會有危險,會被正在運轉中的機器拖住,一定會造成嚴重地受傷及意外。
- ◆ 主軸還未完全停止前,勿操作夾頭;否則將會有危險,會被正在運轉中的機器拖住,造成嚴重地受傷及意外。
- ◆ 出現某些異常狀況下,如:立即察覺外殼破裂、夾頭損壞或變形,則勿再使用此夾頭,若再使用此種有缺陷夾頭,會造成嚴重地受傷及意外。
- ◆ 切勿作任何再修復、重組甚至重新製造此夾頭之動作,若使用這種重製的夾頭,會造成嚴重地受傷及意外。

"裝置固定"步驟

- ◆ 夾頭錐部(Tapered part)需用防鏽油清除乾淨,避免灰塵及外來的雜質。
- ◆ 三爪必須縮回至夾頭鼻端的水平線之下。
- ◆ 主軸錐部(Tapered part)或夾頭柄(Arbor)也一定要清乾淨。
- ◆ 將主軸或夾頭柄錐部嵌入夾頭之錐部,嵌入時,注意不要傷到錐部或造成任何裂痕。接著,用木槌擊軟鐵棒而將夾頭擊入,注意勿使夾頭從主軸或夾頭柄滑落。
- ◆ 勿直接捶打三爪或前套。



Z-09

Keyless Drill Chuck Manual

CAUTION

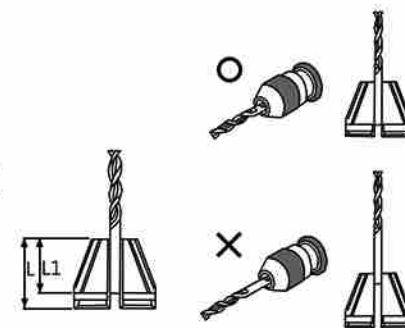
- ◆ Mount the chuck firmly according to "how to mount" in this manual. Otherwise, the chuck might be loosened, which may eventually result in serious bodily injuries or accidents.
- ◆ Check and confirm that the tool is clamped firmly by the three jaws before starting operation. Improper clamping of the tool will cause its abnormal runout, breakage and/or detaching, which may result in serious bodily injuries or accidents.
- ◆ Tighten the chuck strongly by hands. In case of chucking a tool of smaller diameter with a chuck of larger capacity, the automatic tightening mechanism may fail to function properly, which may cause slipping of the tool and eventually its falling down.
- ◆ The chuck cannot be used in CCW rotation. If the chuck is rotated in CCW direction, the tool will be loosened and spin off from the chuck which may cause serious bodily injuries or accidents.
- ◆ The chuck cannot be used to the machine having an emergency stop mechanism. If the machine spindle stops rotating by such emergency stopping, the tool will be loosened and spin off from the chuck, which may cause serious bodily injuries or accidents. (Use our CNC Keyless Chuck or Dream Chuck for the machines having such emergency stop mechanism.)
- ◆ Do not touch the chuck or the tool while being rotated. Otherwise, there will be dangers to be caught by the rotating parts of the machine, which can result in serious bodily injuries or accidents.
- ◆ Do not manipulate the chuck before complete stop of the spindle. Otherwise, there will be dangers to be caught by the rotating parts of the machine, which can result in serious bodily injuries or accidents. Do not use the chuck if some abnormal conditions, like cracks, breakage or transformation are detected thereon. Use of such defective chuck may cause serious bodily injuries or accidents. Do not make any repairing, re-assembling nor remodeling on the chuck. Use of such re-worked chuck may cause serious bodily injuries or accidents.

How to mount

- ◆ The tapered part of the chuck must well be cleaned off oily material, dust and foreign material.
- ◆ The three jaws must be retracted below the level of the chuck nose.
- ◆ The tapered part of the spindle or the arbor must also well be cleaned.
- ◆ Insert the tapered part of the spindle or the arbor into the tapered part of the chuck, taking care not to make any flaws or damages on any of the tapered parts. And drive the chuck by hammering the edge of the soft steel bar with a wooden hammer, taking care not to let the chuck slip off or fall down from the spindle or the arbor.
- ◆ Do not hammer the jaws nor sleeve.

When you operate, the length of holding capacity (L1) shall insert the drill bit to the bottom or at least insert to 2/3 of the length of three Jaws(L).

夾持長度(L1)應將鑽頭柄插入到底或至少爪長(L)的2/3。



Z-10

專注客戶需求
FOCUS ON YOUR NEED

OUNI 優蔭國際有限公司

臺中公司：40453 臺中市北區台灣大道二段 360 號 25 樓之3
25F.-3, No.360, Sec. 2, Taiwan Blvd., North Dist., Taichung City 404, Taiwan
彰化工廠：52344彰化縣埤頭鄉永豐村東西路 8 7 號
No. 87, Dongxi Rd., Pitou Township, Changhua County 523, Taiwan



www.ounimart.com
service@ounimart.com
TEL : +886(04)-23218229
FAX : +886(04)-23218239

型錄所載內容，本公司保留未經預告之變更權利，敬請見諒。

OUNICA001
201905