MAKINO F3·F5

BT40 HSK-A63 F63
刀柄 TOOLING SYSTEM

创新实现最优化

HSK-A63 20,000 min^{-1}
BT40 12,000 min^{-1}
HSK-F63 30,000 min^{-1}

热装式刀柄 SLIMLINE
SHRINK-FIT HOLDER SLIMLINE

2体型 2 PIECE type P. 3
一体型 MONO series P. 6

RED SCREW arbor
可换式刀具用延长杆
The arbor for Indexable End Mill

P.14

DETa-1 超弹性筒夹刀柄
DETa-1 COLLET HOLDER

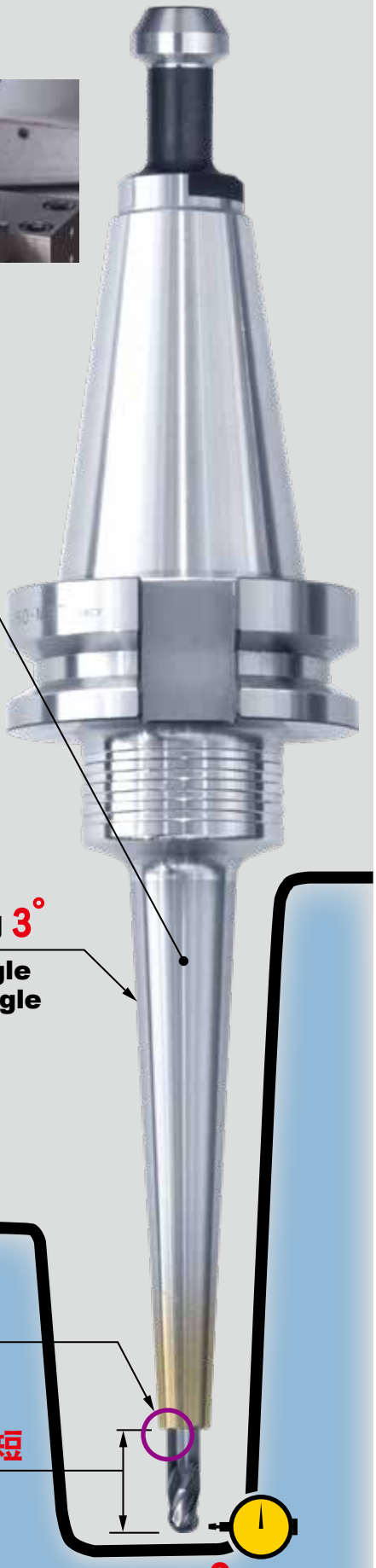
P.16

MST

日本恩司迪公司
MST corporation

2302

热装专用特殊不锈钢
SPECIAL MATERIAL



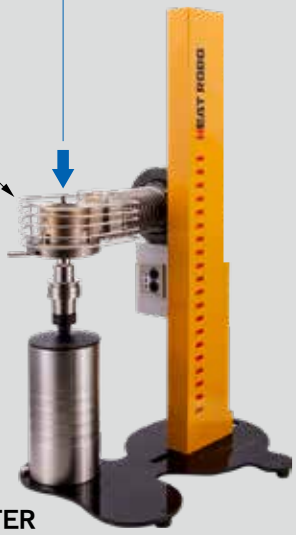
- **热膨胀系数是通常普通钢的1.6倍**
  Its thermal expansion coefficient is 1.6 times higher than that of regular steel.
- **用温风式加热器即可进行热装卸操作**
  Shrink fitting and removing is achieved using a hot-air heater.
- **可以放入水中进行冷却**
  Can be immersed in water to cool it off.
- **使用温风式加热器加热，不会出现加热过度**
  Will not overheat even if heated for a long time.
- **前端壁厚仅为1.5mm的超薄设计和丰富的刀柄种类**
  Ultra-thin 1.5 mm(.06") edge walls and sufficient variations of holder shapes.
- **不用更换加热喷嘴就可以进行 φ3～φ32的热装**
  Available from dia 3mm to dia 32mm(.12"~1.26") with just one nozzle.

NEW
MILL BORE
螺旋切削

半角 3°
Single Angle

硬质合金刀具
Required Carbide Cutter
φ3～5 (1/8"～1/4") →h6 | φ6～32 (5/16"～1") →h6

可以使用市售φ3 (.12″) 以上的刀具
Commercially cutting tools are available for dia. 3mm (.12") .



温风式加热器
HOT AIR HEATER

壁厚 1.5 毫米
Thickness 1.5mm (.06")

突出长度最短
Minimum Overhang

3 μm (.0001")
高精度
High accuracy

12 type

本体 Master Holder

A63-SLK12-75F

Fig. 1

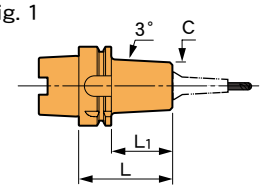


Fig. 2

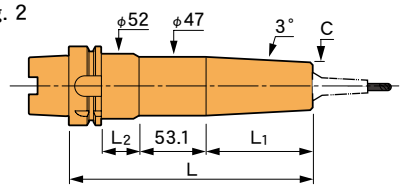
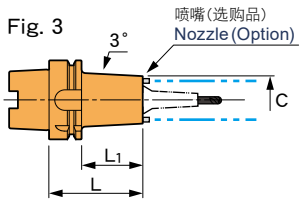


Fig. 3



BT40-SLK12-75

Fig. 4

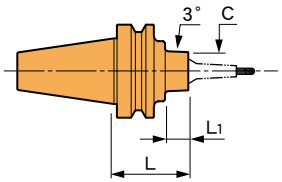
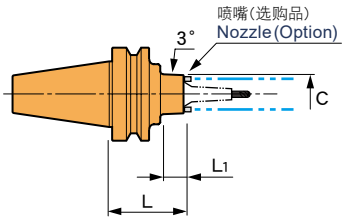


Fig. 5



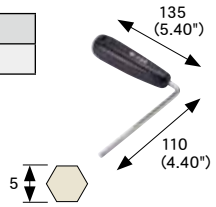
CODE	Fig.	L	ϕC	L_1	L_2	Kg
A 63-SLK12- 75	1	75	38	49	49	1.0
- 75F	3		41			1.1
-135	1	135	38	109	109	1.8
-135F	3		41			1.9
-165	2	165	38	86	—	2.2
-195		195			30	2.7
-225		225			60	3.2
BT40-SLK12- 45	4	45	38	18	18	1.1
- 45F	5		41			
- 75	4	75	38	48	48	1.4
- 75F	5		41			
-135F		135		108	108	2.2
F63M-SLK12- 75	1	75	38	49	49	1.0

■选购品 ●SLIMLINE筒夹 ●六角扳手 ●喷嘴 ●拉钉(BT)
■标准附属品 ●冷却液导管(HSK-A)
■Options ●SLIMLINE collet ●Wrench ●Nozzle ●Retention knob(BT)
■Std. Access. ●Coolant duct(HSK-A)

六角扳手 Wrench

用于拧紧本体和 SLIMLINE筒夹。
Required for clamping the main body and SLIMLINE collet.

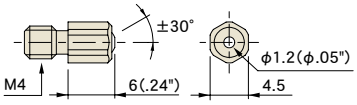
CODE
W-135



喷嘴 Nozzle

CODE	数量 Q'ty
NOZ-M4-12	12
-60	60

■补充说明 ●每个本体需要4 个
■Note ●Four nozzles are required for each master holder.



刀柄台 Holder stand

SLIMLINE筒夹、直柄刀杆、HSK-E25、E32用刀柄筒夹台。
有4种颜色可供选择,可按颜色分类整理,使用方便。
This is a stand for SLIMLINE collets, STRAIGHT arbor and compact holders (HSK-E25, E32). Selectable from four colors. Convenient to make arrangements by color-coding, etc.

正面 Front face

反面 Back face

CODE	色 Colors	正面 Front face	反面 Back face	放置个数 Storage capacity
SDKT-RE	红 Red	SLIMLINE 筒夹 SLIMLINE collet 直柄刀杆 Straight arbor	小径刀柄 Small shank holder (HSK-E25/E32)	各 25 支 25 pieces each
-BL	蓝 Blue			
-GR	绿 Green			
-GD	金 Gold			

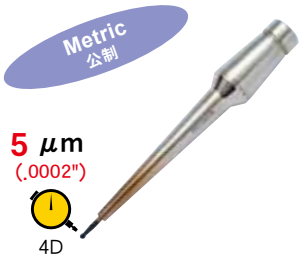
开孔拉钉

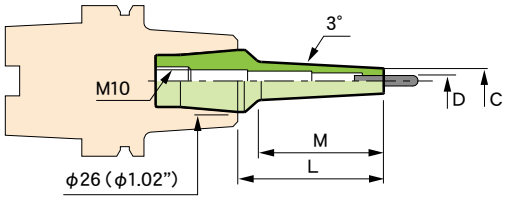
如果拉钉孔在ϕ6以上,可以在装载拉钉的情况下进行拧紧

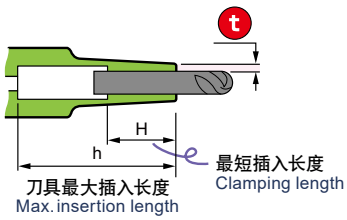
Retention knob with hole

There is no need to remove a retention knob with .24"(6ϕ) diameter coolant-thru hole when tightening or loosening SLIMLINE taper adapters.

开孔拉钉
Retention knob with hole







细长型 **Slim-type**

CODE	ϕD	ϕC	t	L	M	H	h
CS12- 3- 35	3	6	1.5	35	22	10	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12-3.175- 35	3.175	6.175	1.5	35	22	10	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12- 4- 35	4	7	1.5	35	22	12	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12- 5- 35	5	8	1.5	35	22	15	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12- 6- 35	6	9	1.5	35	22	18	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12- 7- 35	7	10	1.5	35	22	20	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12- 8- 35	8	11	1.5	35	22	25	60
- 55				55	42		80
- 80				80	67		105
-110				110	97		135
CS12- 9- 35	9	12	1.5	35	22	30	60
- 55				55	42		
- 80				80	67		
-110				110	97		
CS12-10- 35	10	13	1.5	35	22	30	60
- 55				55	42		
- 80				80	67		
-110				110	97		
CS12-11- 35	11	14	1.5	35	22	30	60
- 55				55	42		
- 80				80	67		
-110				110	97		
CS12-12- 35	12	15	1.5	35	22	30	60
- 55				55	42		
- 80				80	67		
-110				110	—		

标准型 **Regular-type**

CODE	ϕD	ϕC	t	L	M	H	h
CR12- 3-35	3	7.5	2.25	35	22	10	60
-55				55	42		80
-80				80	67		105
CR12- 4-35	4	10	3	35	22	12	60
-55				55	42		80
-80				80	67		105
CR12- 6-35	6	12	3	35	22	18	60
-55				55	42		80
-80				80	67		105
CR12- 8-35	8	14	3	35	22	25	60
-55				55	42		80
-80				80	67		105
CR12-10-35	10	16	3	35	22	30	60
-55				55	42		
-80				80	67		
CR12-12-35	12	20	4	35	22	30	60
-55				55	42		
-80				80	—		

油孔型 **Flush-type**

CODE	ϕD	ϕC	t	L	M	H	h
CF12- 3-35	3	9.5	3.25	35	22	10	60
-55				55	42		80
-80				80	67		105
CF12- 4-35	4	12	4	35	22	12	60
-55				55	42		80
-80				80	67		105
CF12- 6-35	6	14	4	35	22	18	60
-55				55	42		80
-80				80	67		105
CF12- 8-35	8	16	4	35	22	25	60
-55				55	42		80
-80				80	67		105
CF12-10-35	10	18	4	35	22	30	60
-55				55	42		
-80				80	—		
CF12-12-35	12	20	4	35	22	30	60
-55				55	42		
-80				80	—		

Inch
英制

细长型 **Slim-type**

CODE	ϕD	ϕC	t	L	M	H	h
CS12-1/8- 35	1/8	.24	.059	1.38	.87	.39	2.56
- 55				2.17	1.65		3.35
- 80				3.15	2.64		4.33
-110				4.33	3.82		5.51
-3/16- 35	3/16	.31	.059	1.38	.87	.59	2.56
- 55				2.17	1.65		3.35
- 80				3.15	2.64		4.33
-110				4.33	3.82		5.51
-1/4- 35	1/4	.37	.059	1.38	.87	.71	2.56
- 55				2.17	1.65		3.35
- 80				3.15	2.64		4.33
-110				4.33	3.82		5.51

CODE	ϕD	ϕC	t	L	M	H	h
CS12-5/16- 35	5/16	.43	.059	1.38	.87	.98	2.56
- 55				2.17	1.65		3.35
- 80				3.15	2.64		4.33
-110				4.33	3.82		5.51
-3/8- 35	3/8	.49	.059	1.38	.87	1.18	2.36
- 55				2.17	1.65		
- 80				3.15	2.64		
-110				4.33	3.82	.98	
-1/2- 35	1/2	.62	.059	1.38	.87	1.18	2.36
- 55				2.17	1.65		
- 80				3.15	2.64		
-110				4.33	3.68		

标准型 **Regular-type**

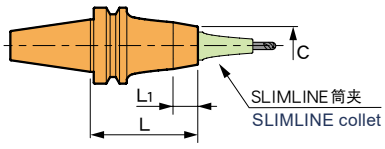
CODE	ϕD	ϕC	t	L	M	H	h
CR12-1/ 8-35	1/8	.36	.118	1.38	.87	.39	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-3/16-35	3/16	.42	.118	1.38	.87	.59	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-1/4-35	1/4	.49	.118	1.38	.87	.71	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-5/16-35	5/16	.55	.118	1.38	.87	.98	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-3/8-35	3/8	.61	.118	1.38	.87	1.18	2.36
-55				2.17	1.65		
-80				3.15	2.64		
-1/2-35	1/2	.81	.157	1.38	.87	1.18	2.36
-55				2.17	1.99		
-80				3.15	1.80		

油孔型 **Flush-type**

CODE	ϕD	ϕC	t	L	M	H	h
CF12-1/8-35	1/8	.38	.128	1.38	.87	.39	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-3/16-35	3/16	.50	.157	1.38	.87	.59	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-1/4-35	1/4	.56	.157	1.38	.87	.71	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-5/16-35	5/16	.63	.157	1.38	.87	.98	2.56
-55				2.17	1.65		3.35
-80				3.15	2.64		4.33
-3/8-35	3/8	.69	.157	1.38	.87	1.18	2.36
-55				2.17	1.65		
-80				3.15	2.64		
-1/2-35	1/2	.81	.157	1.38	.87	1.18	2.36
-55				2.17	1.99		
-80				3.15	1.80		

8 type

本体 Master Holder

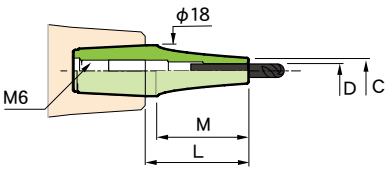


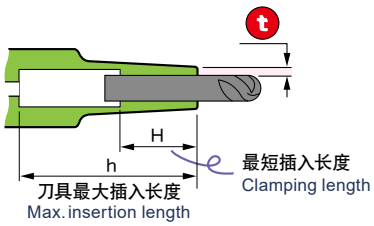
CODE	L	L1	ϕC	Kg
A 63-SLK8-55	55	7	29.5	0.8
-75	75	15	30.5	0.9
BT40-SLK8-40	40	13	—	1
-70	70	15	31.2	1.2
F63M-SLK8-55	55	7	29.5	0.8
-75	75	15	30.5	1

■选购品 ●SLIMLINE筒夹迷你 8型 ●六角扳手 ●喷嘴 ●拉钉（BT）
■标准附属品 ●冷却液导管 (HSK-A)
■备考 ●关於拉钉的交换请向弊司垂询。

■**Options** ●SLIMLINE collet mini8 type ●Wrench ●Nozzle ●Retention knob(BT)
■**Std. Access.** ●Coolant duct(HSK-A)
■**Note** ●To replace the extension knob, please contact us.

SLIMLINE 筒夹 SLIMLINE collet





细长型 **Slim-type**

CODE	ϕD	ϕC	t	L	M	H	h
CS8-3-25	3	6	1.5	25	22	9	37.5
-45				45	42		57.5
-65				65	62		77.5
CS8-4-25	4	7	1.5	25	22	12	37.5
-45				45	42		57.5
-65				65	62		77.5
CS8-6-25	6	9	1.5	25	22	15	35
-45				45	42		
-65				65	62		
CS8-8-25	8	11	1.5	25	22	20	37
-45				45	42		49

标准型 **Regular-type**

CODE	ϕD	ϕC	t	L	M	H	h
CR8-3-45	3	7.5	2.25	45	42	9	57.5
-65				65	62		77.5
CR8-4-45	4	10	3	45	42	12	57.5
-65				65	62		77.5
CR8-6-45	6	12	3	45	42	15	35
-65				65	62		
CR8-8-45	8	14	3	45	42	20	49

油孔型 **Flush-type**

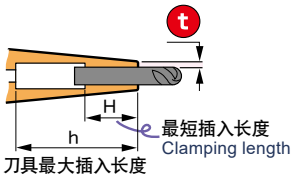
CODE	ϕD	ϕC	t	L	M	H	h
CF8-3-45	3	9.5	3.25	45	42	9	57.5
-65				65	62		77.5
CF8-4-45	4	12	4	45	42	12	57.5
-65				65	62		77.5
CF8-6-45	6	14	4	45	42	15	35
-65				65	62		
CF8-8-45	8	16	4	45	42	20	49

扳手 Wrench

用于拧紧本体和 SLIMLINE筒夹。
Required for clamping the master holder and SLIMLINE collet.

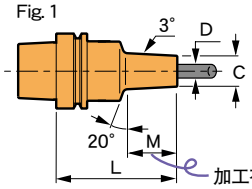
CODE
TW-4

一体型系列



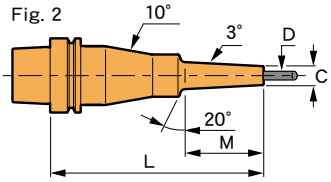
■标准附属品 ●冷却液导管
■Std. Access. ●Coolant duct

Fig. 1



加工有效长度
Effective length

Fig. 2



HEAT ROBO 电磁式加热器对应表
○：可加热　×：不可加热
▲：请将刀柄直接放在定位板上 → P.11

Available holder list for HEAT ROBO
○ : Available　× : Not available
▲ : Set up the holder on the positioning plate directly. → P.11

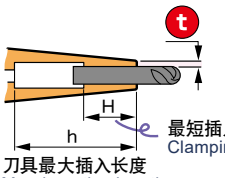
CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
A63-SLSA3- 95-M 42	1	3	6	95	42	9	70	0.7	○
-120-M 67				120	67		95	0.8	
-125-M 42				125	42		100	0.9	
t=1.5 -150-M 67				150	67		125	0.8	
t=1.5 -M 97					97				
-155-M 42	2			155	42		130	1.2	
-180-M 67				180	67		155	1.1	
-M 97	1				97			0.9	
-210-M 97	2			210			185	1.2	
-SLRA3- 75-M 22	1	3	7.5	75	22	9	50	0.7	
- 95-M 42				95	42		70		
-105-M 22				105	22		80	0.8	
-120-M 67				120	67		95		
-125-M 42				125	42		100		
-135-M 22	2			135	22		110	1.1	
-150-M 67	1			150	67		125	0.9	
t=2.25 -M 97					97			0.8	
-155-M 42	2			155	42		130		
-180-M 67				180	67		155	1.2	
-M 97	1				97			0.9	
-M127					127				
-210-M 97	2			210	97		185	1.0	
-M127	1				127		184	1.1	
-240-M127	2			240			214	1.5	
-SLFB3- 75-M 22	1	3	9.5	75	22	9	50	0.7	
- 95-M 42				95	42		70	0.8	
-105-M 22				105	22		80	0.9	
-120-M 67				120	67		95	0.8	
t=3.25 -125-M 42				125	42		100	0.9	
-135-M 22	2			135	22		110	1.2	
-150-M 67	1			150	67		125	0.9	
-155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		155	1.2	
A63-SLSA4- 95-M 42	1	4	7	95	42	12	70	0.7	○
-120-M 67				120	67		95	0.8	
-125-M 42				125	42		100		
-150-M 67				150	67		125	0.9	
-M 97					97			0.8	
t=1.5 -155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		155		
-M 97	1				97			0.9	
-210-M 97	2			210			185	1.2	

CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
A63-SLRA4- 75-M 22	1	4	10	75	22	12	50	0.7	○
- 95-M 42				95	42		70	0.8	
-105-M 22				105	22		80		
-120-M 67				120	67		95		
-125-M 42				125	42		100		
-135-M 22	2			135	22		110	1.1	
-150-M 67	1			150	67		125	0.9	
-M 97					97		124	0.8	
t=3 -155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		155	1.2	
-M 97	1				97		154	0.9	
-M127					127			1.0	
-210-M 97	2			210	97		185	1.3	
-M127	1				127			1.2	
-240-M127	2			240			214	1.5	
-SLFB4- 75-M 22	1	4	12	75	22	12	50	0.7	
- 95-M 42				95	42		70	0.8	
-105-M 22				105	22		80		
-120-M 67				120	67		95		
t=4 -125-M 42				125	42		100	0.9	
-135-M 22	2			135	22		110	1.1	
-150-M 67	1			150	67		125	0.9	
-155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		155	1.2	
A63-SLSA6- 95-M 42	1	6	9	95	42	18	70	0.7	○
-120-M 67				120	67		95	0.8	
-125-M 42				125	42		100		
-150-M 67				150	67		125	0.9	
-M 97					97		124		
t=1.5 -155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		155		
-M 97	1				97		154	1.0	
-210-M 97	2			210			184	1.4	
-SLSB6- 95-M 42	1	6	10	95	42	18	70	0.7	
-120-M 67				120	67		95	0.8	
-125-M 42				125	42		100		
-150-M 67				150	67		125	0.9	
-M 97					97		124		
-155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		155		
-M 97	1				97		154	1.0	
t=2 -M127					127			0.9	
-210-M 97	2			210	97		184	1.4	
-M127	1				127			1.1	
-M157					157				
-240-M127	2			240	127		214	1.5	
-M157	1				157			1.2	
-270-M157	2			270			244	1.6	▲
-SLRB6- 75-M 22	1	6	14	75	22	18	49	0.8	○
- 95-M 42				95	42		69		
-105-M 22				105	22		79	0.9	
-120-M 67				120	67		94		
-125-M 42				125	42		99	1.0	
t=4 -135-M 22	2			135	22		109	1.3	
-150-M 67	1			150	67		124	1.0	
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154		
-SLFB6- 75-M 22	1	6	14	75	22	18	49	0.8	
- 95-M 42				95	42		69		
-105-M 22				105	22		79	0.9	
-120-M 67				120	67		94		
-125-M 42				125	42		99	1.0	
t=4 -135-M 22	2			135	22		109	1.3	
-150-M 67	1			150	67		124	1.0	
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154		

CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
A63-SLSA 8- 95-M 42	1	8	11	95	42	24	70	0.7	○
-120-M 67				120	67		94	0.8	
-125-M 42				125	42		100		
-150-M 67				150	67		124	1.0	
t=1.5 -M 97					97			0.9	
-155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		154	1.4	
-M 97	1				97			1.0	
-210-M 97	2			210			184	1.4	
-SLSB 8- 95-M 42	1	8	13	95	42	24	69	0.8	
-120-M 67				120	67		94	0.9	
-125-M 42				125	42		99	1.0	
-150-M 67				150	67		124		
-M 97					97			0.9	
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154		
t=2.5 -M 97	1				97			1.1	
-M127					127			1.0	
-210-M 97	2			210	97		184	1.5	
-M127	1				127			1.2	
-M157					157		185		
-240-M127	2			240	127		214	1.6	▲
-M157	1				157			1.5	
-270-M157	2			270			242	2.0	
-SLRB 8- 75-M 22	1	8	18	75	22	24	49	0.8	×
- 95-M 42				95	42		69	0.9	○
-105-M 22				105	22		79	1.0	×
-120-M 67				120	67		94	0.9	○
t=5 -125-M 42				125	42		99	1.0	
-135-M 22	2			135	22		109	1.4	×
-150-M 67	1			150	67		124	1.1	○
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154	1.5	
-SLFB 8- 75-M 22	1	8	18	75	22	24	49	0.8	×
- 95-M 42				95	42		69	0.9	○
-105-M 22				105	22		79	1.0	×
-120-M 67				120	67		94	0.9	○
t=5 -125-M 42				125	42		99	1.0	
-135-M 22	2			135	22		109	1.4	×
-150-M 67	1			150	67		124	1.1	○
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154	1.5	
A63-SLSA10- 95-M 42	1	10	13	95	42	30	70	0.8	
-120-M 67				120	67		94		
-125-M 42				125	42		100		
-150-M 67				150	67		124	1.0	
-M 97					97			0.9	
t=1.5 -155-M 42	2			155	42		130	1.1	
-180-M 67				180	67		154	1.4	
-M 97	1				97			1.2	
-210-M 97	2			210			184	1.5	
-SLSB10- 95-M 42	1	10	16	95	42	30	69	0.8	
-120-M 67				120	67		94	0.9	
-125-M 42				125	42		99	1.0	
-150-M 67				150	67		124		
-M 97					97				
-155-M 42	2			155	42		128	1.6	
-180-M 67				180	67		154	1.4	
-M 97	1				97			1.1	
t=3 -M127					127		155	1.2	
-210-M 97	2			210	97		180	1.7	
-M127	1				127		182	1.4	
-M157					157		185	1.3	
-240-M127				240	127		215	2.0	▲
-M157					157		212	1.6	
-270-M157	2			270			242	2.1	

CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
A63-SLRB10- 75-M 22	1	10	22	75	22	30	49	0.8	×
- 95-M 42				95	42		68	0.9	○
-105-M 22				105	22		79	1.0	×
-120-M 67				120	67		94	1.1	○
t=6 -125-M 42				125	42		99		
-135-M 22	2			135	22		109	1.4	×
-150-M 67	1			150	67		124	1.3	○
-155-M 42	2			155	42		129	1.5	
-180-M 67				180	67		154	1.8	
-SLFB10- 75-M 22	1	10	22	75	22	30	49	0.8	×
- 95-M 42				95	42		69	0.9	○
-105-M 22				105	22		78	1.1	×
t=6 -120-M 67				120	67		94		○
-125-M 42				125	42		99		
-135-M 22	2			135	22		109	1.4	×
-150-M 67	1			150	67		124	1.3	○
-155-M 42	2			155	42		129	1.5	
-180-M 67				180	67		154	1.8	
A63-SLSA12- 95-M 42	1	12	15	95	42	30	69	0.8	○
-120-M 67				120	67		94		
t=1.5 -125-M 42				125	42		99	1.0	
-150-M 67				150	67		124		
-M 97					97			0.9	
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154		
-M 97	1				97			1.1	
-210-M 97	2			210			184	1.5	▲
-SLSB12- 95-M 42	1	12	19	95	42	30	69	0.8	○
-120-M 67				120	67		94	0.9	
-125-M 42				125	42		99	1.0	
t=3.5 -150-M 67				150	67		124	1.1	
-M 97					97		125		
-155-M 42	2			155	42		129	1.4	
-180-M 67				180	67		154	1.5	
-M 97	1				97		152	1.4	
-M127					127		155	1.3	
-210-M 97				210	97		180	1.9	▲
-M127					127			1.7	
-M157					157		185	1.4	
-240-M127				240	127		215	2.1	
-M157					157			1.9	
-270-M157	2			270			242	2.2	
-SLRB12- 75-M 22	1	12	26	75	22	30	50	0.9	×
- 95-M 42				95	42		70	1.0	
-105-M 22				105	22		77	1.2	
-120-M 67				120	67		95		
-125-M 42				125	42		97	1.3	
t=7 -135-M 22	2			135	22		107	1.7	
-150-M 67	1			150	67		122	1.4	
-155-M 42				155	42		127	1.8	
-180-M 67	2			180	67		152	1.9	
-SLFB12- 75-M 22	1	12	26	75	22	30	48	0.9	
- 95-M 42				95	42		68	1.0	
-105-M 22				105	22		75	1.2	
-120-M 67				120	67		93		
-125-M 42				125	42		95	1.3	
t=7 -135-M 22	2			135	22		105	1.7	
-150-M 67	1			150	67		120	1.4	
-155-M 42				155	42		125	1.8	
-180-M 67	2			180	67		150	1.9	

CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg
A63-SLSB16- 95-M 42	1	16	24	95	42	32	70	1.0
-120-M 67				120	67		95	1.1
-125-M 42				125	42		97	1.2
-150-M 67				150	67		122	1.3
-M 97					97		125	1.2
-155-M 42				155	42		130	1.7
t=4 -180-M 67	2			180	67		152	1.8
t=4 -M 97	1				97			1.4
-M127					127		155	1.5
-210-M 97				210	97		185	2.0
-M127					127		181	1.9
-M157					157		185	1.7
-240-M127				240	127		211	2.3
-M157					157		215	2.1
-270-M157				270			245	2.4
-SLRB16- 75-M 22	1	16	32	75	22	32	50	1.0
- 95-M 42				95	42		70	1.1
-105-M 22				105	22		77	1.2
-120-M 67				120	67		95	1.3
t=8 -125-M 42				125	42		97	
-135-M 22	2			135	22		107	1.7
-150-M 67	1			150	67		122	1.5
-155-M 42	2			155	42		127	1.9
-180-M 67				180	67		152	2.0
-SLFB16- 75-M 22	1	16	32	75	22	32	50	1.0
- 95-M 42				95	42		70	1.1
-105-M 22				105	22		77	1.2
-120-M 67				120	67		95	1.3
t=8 -125-M 42				125	42		97	
-135-M 22	2			135	22		107	1.7
-150-M 67	1			150	67		120	
-155-M 42	2			155	42		125	1.9
-180-M 67				180	67		152	2.0
A63-SLSB20- 95-M 42	1	20	29	95	42	40	70	1.0
-120-M 67				120	67		95	1.1
-125-M 42				125	42		97	1.2
-150-M 67				150	67		122	1.4
-M 97					97		125	
-155-M 42				155	42		130	1.8
-180-M 67	2			180	67		152	1.9
t=4.5 -M 97	1				97		151	1.8
-M127					127		155	1.6
-210-M 97				210	97		181	2.2
-M127					127			2.0
-M157					157		185	1.9
-240-M127				240	127		215	2.3
-M157					157		211	
-270-M157				270			245	2.6
-SLRB20- 95-M 42	1	20	38	95	42	40	70	1.3
-120-M 67				120	67		95	1.5
-125-M 42				125	42		96	1.7
t=9 -150-M 67				150	67		121	1.9
-155-M 42				155	42		126	2.1
-180-M 67				180	67		151	2.3
-SLFB20- 95-M 42	1	20	38	95	42	40	70	1.3
-120-M 67				120	67		95	1.5
-125-M 42				125	42		96	1.7
t=9 -150-M 67				150	67		120	1.9
-155-M 42				155	42		125	2.0
-180-M 67				180	67		150	2.2
A63-SLRB25- 95-M 42	1	25	45	95	42	45	70	1.4
t=10 -125-M 42				125			96	1.8
-155-M 42				155			126	2.2
-SLFB25- 95-M 42	1	25	45	95	42	45	70	1.4
t=10 -125-M 42				125			96	1.8
-155-M 42				155			126	2.2
A63-SLRB32-110-M 42	1	32	54	110	42	50	84	1.8



■选购品 ●拉钉
■Options ●Retention knob

Fig. 1

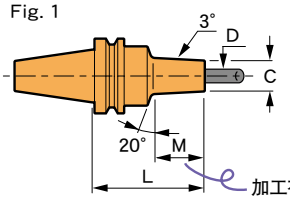
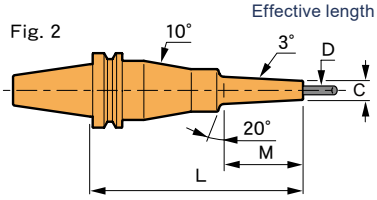


Fig. 2



HEAT ROBO 电磁式加热器对应表
○：可加热　×：不可加热
▲：请将刀柄直接放在定位板上 → P.11

Available holder list for HEAT ROBO
○ : Available　× : Not available
▲ : Remove the positioning plate and raise the base of heater using a rest or something. →P. 11

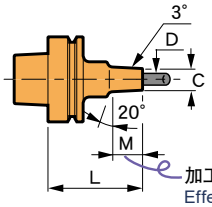
CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
BT40-SLSA3- 95-M 42	1	3	6	95	42	9	130	1.0	○
-120-M 67				120	67		155		
-125-M 42				125	42		160	1.1	
-150-M 67				150	67		185		
-M 97					97				
t=1.5 -155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
-M 97	1				97			1.2	
-210-M 97	2			210			245	1.4	
-SLRA3- 75-M 22	1	3	7.5	75	22	9	110	1.0	
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.1	
-120-M 67				120	67		155		
-125-M 42				125	42		160		
-135-M 22	2			135	22		170	1.4	
-150-M 67	1			150	67		185	1.2	
-M 97					97			1.1	
t=2.25 -155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
-M 97	1				97			1.2	
-M127					127			1.1	
-210-M 97	2			210	97		245	1.5	
-M127	1				127			1.4	
-240-M127	2			240			275	1.8	
-SLFB3- 75-M 22	1	3	9.5	75	22	9	110	1.0	
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.1	
-120-M 67				120	67		155		
-125-M 42				125	42		160		
t=3.25 -135-M 22	2			135	22		170	1.4	
-150-M 67	1			150	67		185	1.2	
-155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
BT40-SLSA4- 95-M 42	1	4	7	95	42	12	130	1.0	○
-120-M 67				120	67		155		
-125-M 42				125	42		160	1.1	
-150-M 67				150	67		185		
-M 97					97				
t=1.5 -155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
-M 97	1				97			1.2	
-210-M 97	2			210			245	1.5	

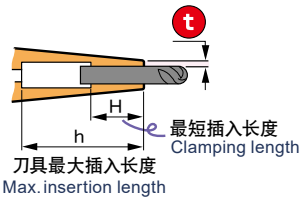
CODE	Fig.	φD	φC	L	M	H	h	Kg	
BT40-SLRA4- 75-M 22	1	4	10	75	22	12	110	1.0	○
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.1	
-120-M 67				120	67		155		
-125-M 42				125	42		160		
-135-M 22	2			135	22		170	1.4	
-150-M 67	1			150	67		185	1.2	
t=3 -M 97					97			1.1	
-155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
-M 97	1				97			1.2	
-M127					127			1.3	
-210-M 97	2			210	97		245	1.5	
-M127	1				127			1.4	
-240-M127	2			240			275	1.8	
-SLFB4- 75-M 22	1	4	12	75	22	12	110	1.0	
- 95-M 42				95	42		130	1.1	
-105-M 22				105	22		140		
-120-M 67				120	67		155		
t=4 -125-M 42				125	42		160	1.2	
-135-M 22	2			135	22		170	1.4	
-150-M 67	1			150	67		185	1.2	
-155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215	1.5	
BT40-SLSA6- 95-M 42	1	6	9	95	42	18	130	1.0	○
-120-M 67				120	67		155	1.1	
-125-M 42				125	42		160		
-150-M 67				150	67		185	1.2	
-M 97					97			1.1	
t=1.5 -155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
-M 97	1				97			1.3	
-210-M 97	2			210			245	1.7	
-SLSB6- 95-M 42	1	6	10	95	42	18	130	1.0	
-120-M 67				120	67		155	1.1	
-125-M 42				125	42		160		
-150-M 67				150	67		185	1.2	
-M 97					97				
-155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215		
t=2 -M 97	1				97			1.3	
-M127					127			1.2	
-210-M 97	2			210	97		245	1.7	
-M127	1				127			1.4	
-M157					157			1.3	
-240-M127	2			240	127		275	1.8	
-M157	1				157			1.7	
-270-M157	2			270			305	1.9	▲
-SLRB6- 75-M 22	1	6	14	75	22	18	110	1.1	○
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.2	
-120-M 67				120	67		155		
t=4 -125-M 42				125	42		160	1.3	
-135-M 22	2			135	22		170	1.6	
-150-M 67	1			150	67		185	1.3	
-155-M 42	2			155	42		190	1.6	
-180-M 67				180	67		215	1.7	
-SLFB6- 75-M 22	1	6	14	75	22	18	110	1.1	
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.2	
-120-M 67				120	67		155		
t=4 -125-M 42				125	42		160	1.3	
-135-M 22	2			135	22		170	1.6	
-150-M 67	1			150	67		185	1.3	
-155-M 42	2			155	42		190	1.6	
-180-M 67				180	67		215	1.7	

CODE	Fig.	φD	φC	L	M	H	h	Kg	
BT40-SLSA 8- 95-M 42	1	8	11	95	42	24	130	1.0	○
-120-M 67				120	67		155	1.1	
-125-M 42				125	42		160	1.3	
-150-M 67				150	67		185		
t=1.5 -M 97					97			1.2	
-155-M 42	2			155	42		190	1.4	
-180-M 67				180	67		215	1.6	
-M 97	1				97			1.3	
-210-M 97	2			210			245	1.9	
-SLSB 8- 95-M 42	1	8	13	95	42	24	130	1.1	
-120-M 67				120	67		155		
-125-M 42				125	42		160	1.3	
-150-M 67				150	67		185		
-M 97					97			1.2	
-155-M 42	2			155	42		190	1.6	
-180-M 67				180	67		215	1.7	
t=2.5 -M 97	1				97			1.4	
-M127					127			1.3	
-210-M 97	2			210	97		245	1.7	
-M127	1				127			1.5	
-M157					157			1.4	
-240-M127	2			240	127		275	1.8	▲
-M157	1				157			1.7	
-270-M157	2			270			305	2.2	
-SLRB 8- 75-M 22	1	8	18	75	22	24	110	1.1	×
- 95-M 42				95	42		130		○
-105-M 22				105	22		140	1.2	×
-120-M 67				120	67		155		○
t=5 -125-M 42				125	42		160	1.3	
-135-M 22	2			135	22		170	1.6	×
-150-M 67	1			150	67		185	1.4	○
-155-M 42	2			155	42		190	1.7	
-180-M 67				180	67		215	1.8	
-SLFB 8- 75-M 22	1	8	18	75	22	24	110	1.1	×
- 95-M 42				95	42		130		○
-105-M 22				105	22		140	1.2	×
-120-M 67				120	67		155		○
-125-M 42				125	42		160	1.3	
t=5 -135-M 22	2			135	22		170	1.6	×
-150-M 67	1			150	67		185	1.4	○
-155-M 42	2			155	42		190	1.7	
-180-M 67				180	67		215	1.9	
BT40-SLSA10- 95-M 42	1	10	13	95	42	30	130	1.0	○
-120-M 67				120	67		155	1.1	
-125-M 42				125	42		160	1.3	
-150-M 67				150	67		185		
-M 97					97			1.2	
t=1.5 -155-M 42	2			155	42		190	1.8	
-180-M 67				180	67		215		
-M 97	1				97			1.3	
-210-M 97	2			210			245	1.7	
-SLSB10- 95-M 42	1	10	16	95	42	30	130	1.1	
-120-M 67				120	67		155	1.2	
-125-M 42				125	42		160	1.3	
-150-M 67				150	67		185		
-M 97					97				
-155-M 42	2			155	42		190	1.6	
-180-M 67				180	67		215	1.7	
t=3 -M 97	1				97			1.4	
-M127					127				
-210-M 97	2			210	97		245	1.8	
-M127	1				127				
-M157					157			1.5	
-240-M127				240	127		275	2.1	▲
-M157					157			1.8	
-270-M157	2			270			305	2.3	

CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
BT40-SLRB10- 75-M 22	1	10	22	75	22	30	110	1.1	×
- 95-M 42				95	42		130	1.2	○
-105-M 22				105	22		140	1.3	×
-120-M 67				120	67		155		○
t=6 -125-M 42				125	42		160		
-135-M 22	2			135	22		170	1.7	×
-150-M 67	1			150	67		185	1.5	○
-155-M 42	2			155	42		190	1.7	
-180-M 67				180	67		215	2.1	
-SLFB10- 75-M 22	1	10	22	75	22	30	110	1.1	×
- 95-M 42				95	42		130	1.2	○
-105-M 22				105	22		140	1.3	×
-120-M 67				120	67		155		○
t=6 -125-M 42				125	42		160		
-135-M 22	2			135	22		170	1.7	×
-150-M 67	1			150	67		185	1.5	○
-155-M 42	2			155	42		190	1.9	
-180-M 67				180	67		215	2.0	
BT40-SLSA12- 95-M 42	1	12	15	95	42	30	130	1.1	○
-120-M 67				120	67		155		
-125-M 42				125	42		160	1.2	
-150-M 67				150	67		185	1.4	
t=1.5 -M 97					97			1.2	
-155-M 42	2			155	42		190	1.8	
-180-M 67				180	67		215	1.7	
-M 97	1				97			1.4	
-210-M 97	2			210			245	1.7	
-SLSB12- 95-M 42	1	12	19	95	42	30	130	1.1	
-120-M 67				120	67		155	1.2	
-125-M 42				125	42		160	1.3	
-150-M 67				150	67		185		
-M 97					97				
-155-M 42	2			155	42		190	1.7	
-180-M 67				180	67		215	1.9	
t=3.5 -M 97	1				97			1.7	
-M127					127			1.5	
-210-M 97				210	97		245	2.1	
-M127					127			1.9	
-M157					157			1.7	
-240-M127				240	127		275	2.2	▲
-M157					157			2.0	
-270-M157				270			300	2.4	
-SLRB12- 75-M 22	1	12	26	75	22	30	110	1.2	×
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.4	
-120-M 67				120	67		155		
-125-M 42				125	42		160	1.6	
t=7 -135-M 22				135	22		170	1.8	
-150-M 67				150	67		185	1.6	
-155-M 42	2			155	42		190	2.0	
-180-M 67				180	67		215	2.1	
-SLFB12- 75-M 22	1	12	26	75	22	30	110	1.2	
- 95-M 42				95	42		130		
-105-M 22				105	22		140	1.4	
-120-M 67				120	67		155		
-125-M 42				125	42		160	1.5	
t=7 -135-M 22	2			135	22		170	1.9	
-150-M 67	1			150	67		185	1.6	
-155-M 42				155	42		190	2.0	
-180-M 67				180	67		215	2.1	

CODE	Fig.	ϕD	ϕC	L	M	H	h	Kg	
BT40-SLSB16- 95-M 42	1	16	24	95	42	32	105	1.2	×
-120-M 67				120	67		130	1.3	
-125-M 42				125	42		135	1.4	
-150-M 67				150	67		160	1.5	
-M 97					97			1.4	
-155-M 42	2			155	42		165	1.9	
-180-M 67				180	67		190	2.0	
t=4 -M 97	1				97			1.8	
-M127					127			1.7	
-210-M 97				210	97		220	2.1	
-M127					127			2.0	
-M157					157			1.9	
-240-M127				240	127		250	2.5	
-M157					157			2.2	
-270-M157				270			280	2.5	
-SLRB16- 75-M 22	1	16	32	75	22	32	85	1.2	
- 95-M 42				95	42		105	1.3	
-105-M 22				105	22		115	1.4	
-120-M 67				120	67		130	1.5	
t=8 -125-M 42				125	42		135	1.6	
-135-M 22				135	22		145	1.9	
-150-M 67				150	67		160	1.7	
-155-M 42	2			155	42		165	2.1	
-180-M 67				180	67		190	2.3	
-SLFB16- 75-M 22	1	16	32	75	22	32	85	1.2	
- 95-M 42				95	42		105	1.3	
-105-M 22				105	22		115	1.4	
-120-M 67				120	67		130	1.5	
t=8 -125-M 42				125	42		135	1.6	
-135-M 22				135	22		145	1.9	
-150-M 67				150	67		160	1.7	
-155-M 42				155	42		165	2.0	
-180-M 67				180	67		190	2.2	
BT40-SLSB20- 95-M 42	1	20	29	95	42	40	105	1.2	
-120-M 67				120	67		130	1.3	
-125-M 42				125	42		135	1.5	
-150-M 67				150	67		160	1.6	
-M 97					97				
-155-M 42	2			155	42		165	2.0	
-180-M 67	1			180	67		190		
t=4.5 -M 97					97			1.9	
-M127					127			1.8	
-210-M 97				210	97		220	2.2	
-M127					127			2.1	
-M157					157			2.0	
-240-M127				240	127		250	2.4	
-M157					157				
-270-M157				270			280	2.7	
-SLRB20- 95-M 42	1	20	38	95	42	40	105	1.5	
-120-M 67				120	67		130	1.7	
-125-M 42				125	42		135	1.9	
t=9 -150-M 67				150	67		160	2.0	
-155-M 42				155	42		165	2.1	
-180-M 67				180	67		190	2.3	
-SLFB20- 95-M 42	1	20	38	95	42	40	105	1.5	
-120-M 67				120	67		130	1.7	
-125-M 42				125	42		135	1.9	
t=9 -150-M 67				150	67		160	2.0	
-155-M 42				155	42		165	2.1	
-180-M 67				180	67		190	2.3	
BT40-SLRB25- 95-M 42	1	25	45	95	42	45	105	1.5	
-125-M 42				125			135	1.9	
t=10 -155-M 42				155			165	2.3	
-SLFB25- 95-M 42	1	25	45	95	42	45	105	1.5	
-125-M 42				125			135	1.9	
t=10 -155-M 42				155			165	2.3	
BT40-SLRB32- 95-M 42	1	32	54	95	42	50	87	1.8	





HEAT ROBO电磁式加热器对应表
○：可加热　×：不可加热

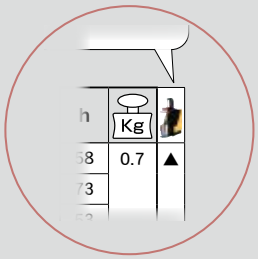
Available holder list for HEAT ROBO
○ : Available　× : Not available

CODE	φD	φC	t	L	M	H	h	Kg	
F63-SLSA 3- 95-M42	3	6	1.5	95	42	9	78	0.7	○
-SLRA 3- 75-M22		7.5	2.25	75	22		54		
- 95-M42				95	42		78		
-SLFB 3- 75-M22		9.5	3.25	75	22		58		
- 95-M42				95	42		78	0.8	
-120-M67				120	67		103		
F63-SLSA 4- 95-M42	4	7	1.5	95	42	12	78	0.7	○
-SLRA 4- 70-M22		10	3	70	22		53		
- 75-M22				75			58		
- 95-M42				95	42		78	0.8	
-SLFB 4- 75-M22		12	4	75	22		58	0.7	
- 95-M42				95	42		78	0.8	
-120-M67				120	67		103		
F63-SLSA 6- 95-M42	6	9	1.5	95	42	18	78	0.7	○
-SLSB 6- 95-M42		10	2						
-SLRA 6- 75-M22		12	3	75	22		58		
- 95-M42				95	42		78	0.8	
-SLFB 6- 75-M22		14	4	75	22		58		
F63-SLSA 8- 95-M42	8	11	1.5	95	42	24	78	0.7	○
-SLSB 8- 95-M42		13	2.5					0.8	
-SLRA 8- 75-M22		14	3	75	22		58	0.7	
- 95-M42				95	42		78	0.8	
-SLFB 8- 75-M22		18	5	75	22		58		×
F63-SLSA10- 95-M42	10	13	1.5	95	42	30	74	0.8	○
-SLSB10- 95-M42		16	3						
-SLRA10- 75-M22				75	22		54		
-SLFB10- 75-M22		22	6						×
F63-SLSA12- 95-M42	12	15	1.5	95	42	30	74	0.8	○
-SLSB12- 95-M42		19	3.5						
-SLRA12- 75-M22		20		75	22		54	0.9	
-SLFB12- 75-M22		26	7						×
F63-SLFB16- 75-M22	16	32	8	75	22	32	54	1.0	
F63-SLFB20- 75-M22	20	38	9	75	22	40	53	1.1	
F63-SLFB25- 75-M22	25	45	10	75	22	45	53	1.1	

关于刀柄的安装固定 (HEAT ROBO电磁式加热器1200S)
How to set up the holder (HEAT ROBO DENJI 1200S)

一些型号的热装式刀柄无法使用HEAT ROBO电磁式加热器进行加热，请确认所使用刀柄是否能在该加热器上使用。
另外，表格中有「▲」处，请采用下列方法进行对应。

Some SLIMLINE holders cannot be heated due to its longer length than HRD-01. Confirm whether the holder is available or not.
Please follow the operation below for the items marked "▲" in the list.

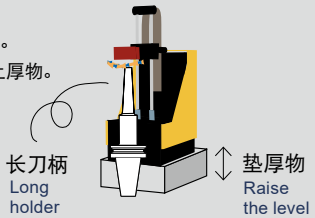


编码表
Code table

BT锥柄
BT shank

由于刀柄较长,不能直接进行加热。
请拆卸下底板,在加热器底部垫上厚物。

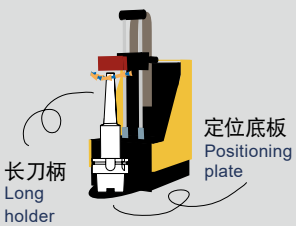
Heating operation is impossible due to holder's longer length.
Remove the positioning plate and raise the base of heater using a rest or something.



HSK锥柄
HSK shank

由于刀柄较长,不能直接进行加热。
请将刀柄直接放置在定位底板上。

Heating operation is impossible due to holder's longer length.
Set up the holder directly on the positioning plate without using base or adapter.



电磁感应式加热器 INDUCTION HEATER

HEAT ROBO DENJI 电磁 5000S

CODE	尺寸Size (W×D×H)
HRD-02SH	340×470×750 (13.40" × 18.50" × 29.50")

■ 选购品 ・加热线圈 ・适配器 ・底座 ・刀具防脱片(HSB・HSC)
■ 标准附属品 ・耐热手套 ・装卸用镊子 ・加热圈保护套
■ 注意事项 ・需要自备变压器
■ Option • Heating Coil • Adapter • Base • Cutter Stopper(HSB·HSC)
■ Std. Access. • Heat-resistant gloves • Tweezers • Protection sheet for heating coil
■ Caution • Transformer is required.

加热线圈(选购品) Heating coil (Option)

	CODE	刀具直径 Cutter dia.	加热时间 Heating time
线圈 Coil 1	HRD2-CL1	φ 3~ 6 (1/ 8"~1/4")	18 秒 sec.
线圈 Coil 2	-CL2	φ 7~12 (5/16"~1/2")	28 秒 sec.
线圈 Coil 3	-CL3	φ16 , 20 (5/ 8", 3/4")	
线圈 Coil 4	-CL4	φ25 (1")	40 秒 sec.
线圈 Coil 5	-CL5	※	35 秒 sec.
线圈 Coil 6	-CL6	强力型热装刀柄 HYPER version	40 秒 sec.
线圈 Coil 7	-CL7	φ32	60 秒 sec.

■ 标准附属品 ・加热圈保护套
■ 备考※ ・对应刀柄为φ8, 10, 12, 16的有效长为M22的SLRB / SLFB型
■ Std. Access. • Protection sheet for heating coil
■ Note※ • Coil 5(※) is for dia. 8 ,10 ,12 ,16 (5/16", 3/8", 1/2", 5/8") internal bore with M22 effective length holders,and for all of SLRB and SLFB type.

HEAT ROBO DENJI 电磁 1200S

CODE	尺寸Size (W×D×H)
HRD-01S-120NA -230AS	230×550×550 (9.10" × 21.70" × 21.70")

■ 选购品 ・适配器 ・底座 ・刀具防脱片(HSB・HSC)
■ 标准附属品 ・加热线圈 ・加热圈保护套 ・耐热手套 ・装卸用镊子
■ 备考 ・NA=北美州用, AS=亚洲专用, 部分刀柄无法使用, 请参照编码表.
■ Option • Adapter • Base • Cutter Stopper(HSB·HSC)
■ Std. Access. •Heating Coil •Protection sheet for heating coil •Heat-resistant gloves •Tweezers
■ Note •NA=For North America, AS=For Asia.

加热线圈(标准附属品) Heating coil (Standard accessories)

	CODE	刀具直径 Cutter dia.	加热时间 Heating time
线圈 Coil 1	HRD-CL1	φ3 ~ 6 (φ1/ 8"~1/4")	18 秒 sec.
线圈 Coil 2	-CL2	φ7 ~12 (φ5/16"~1/2")	33 秒 sec.

■ 标准附属品 ・加热圈保护套
■ Std. Access. • Protection sheet for heating coil

选购品

适配器 Adapter

CODE	Fig.	刀柄类型 Holder type
ADH-40	1	一体型系列 MONO series
-SLK	2	2体型 2PIECE modular SLIMLINE 简夹 SLIMLINE collet

Fig. 1

Fig. 2

底座 Base

CODE
BAA-01

Size: φ 88 × 165 (3.46" × 6.49")

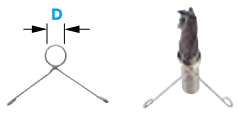
刀具防脱套 Cutter stopper

HSA (弹簧圈型) HSA (Coil spring type)

CODE	φD	数量 Q'ty
HSA-D	3, 3.175, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, 32 (1/8", 3/16", 1/4", 5/16", 3/8", 1/2")	同尺寸 10 个 Contains 10 pcs. in each size
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12 (1/8" 3/16", 1/4", 5/16", 3/8", 1/2")	各 1 个 计 10 个 10pcs. in total with each one
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20, 25 (1/8" 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1")	立铣刀尺寸各 1 个 计 10 个 10pcs. in total with each one (in end-mill size increments)

例如 Ex. φD HSA - 3

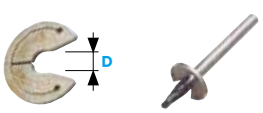
备注 : HEAT ROBO Baby 热风式加热器用
Note: For HEAT ROBO Baby



HSB (弹簧片型) HSB (Plate spring type)

CODE	φD
HSB-D	3, 3.175, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25 , 32 (1/8", 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1")

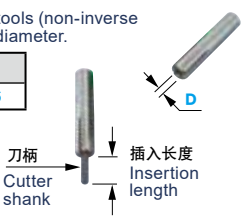
例如 Ex. φD HSB - 6



HSC (槽孔筒夹型) HSC (Slit collet type)
便于小径阶梯型刀具。
Convenient for roumer type tools (non-inverse diameter tools) with a small diameter.

CODE	φD
HSC-D	3 , 3.175 , 4 , 6

例如 Ex. φD HSC - 4



MST

热风式加热器 HOT AIR HEATER

HEAT ROBO Baby 3000S

搭载自动计时停止装置加热器
即使忘记冷却操作也可自动冷却并停止

Shrink Fit Heater with the safety timer
Stops automatically even if you forget to stop heating.

CODE	尺寸Size (W×D×H)
HRB-03ST-230NA	430×330×600 (16.90" × 13.00" × 23.60")
-230EU	
-230AS	

NA=For North America, EU=For Europe, AS=For Asia NA=北美州用, EU=欧洲用, AS=亚洲专用

标准样式 **Standard model**

CODE	尺寸Size (W×D×H)
HRB-03S-230NA	430 × 330 × 660 (16.90" × 13.00" × 26.00")
-230EU	
-230AS	

NA=For North America, EU=For Europe, AS=For Asia NA=北美州用, EU=欧洲用, AS=亚洲专用

■ 选购品 ·适配器 ·底座 ·刀具防脱片
■ 标准附属品 ·耐热手套 ·装卸用镊子 ·定时器
■ **Option** • Adapter • Base • Cutter Stopper
■ **Std. Access.** • Heat-resistant gloves • Tweezers • Timer

HEAT ROBO Baby 1200S

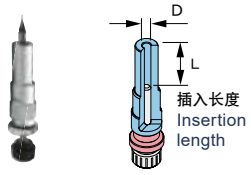
CODE	尺寸Size (W×D×H)
HRB-02S-120NA	370×260×590 (14.60" × 10.20" × 23.20")

■ 选购品 ·适配器 ·底座 ·刀具防脱片
■ 标准附属品 ·耐热手套 ·装卸用镊子 ·定时器
■ 备考※ ·NA=北美州用
■ **Option** • Adapter • Base • Cutter Stopper
■ **Std. Access.** • Heat-resistant gloves • Tweezers • Timer
■ **Note** • NA=For North America

OPTIONS

刀具调整器 Cutter adjuster

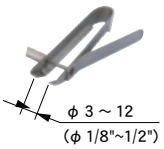
能设置刀具的突出长度。
Allows you to set the overhang of a cutting tool or align the lengths of several cutting tools.



CODE	φD	L
HAJ- 3	3	10 ~ 30
- 3.175	3.175	
- 4	4	13 ~ 30
- 6	6	19 ~ 45
- 8	8	21 ~ 55
-10	10	22 ~ 70
-12	12	23 ~ 85
-16	16	26 ~ 90
-20	20	37 ~ 100
-25	25	40 ~ 100

刀具钳子 Cutter pliers

CODE
HPY-01



防脱套夹钳 Stopper pliers

CODE	NOTE
SPY-01	HSB

刀具托盘 Cutter tray

CODE
SDH-01

Size:170 × 170
(6.70" × 6.70")

RED SCREW arbor

最大限度发挥可换式刀具的切削性能

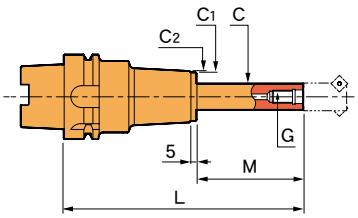
- 充分利用硬质合金的特性(高杨氏率)进行高刚性设计
- 硬质合金一体化无滑落
- 可稳定进行深腔直壁加工
- 对应中心通冷

Displaying the highest cutting performance of any indexable end mill!

- Highly rigid design makes the best use of Carbide alloy properties (high Young's modulus).
- Carbide, integral type eliminates slipping.
- Steady processing for deep standing-wall machining.
- Compatible with center-through coolant

对应各厂商刀具!

Compatible with other manufacturers' tools



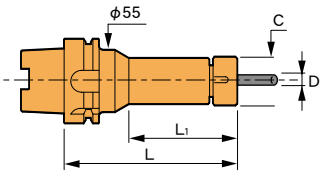
CODE	G	ϕC	L	M	ϕC1	ϕC2	Kg
A63-RSG 8-105-M 25	M8	15	105	25	30	32	1.3
-135-M 25			135				1.4
-130-M 50			130	50			1.3
-160-M 50			160				1.4
-155-M 75			155	75			
-185-M 75			185				1.5
-RSG10-125-M 25	M10	19	125	25	36	38	1.6
-155-M 25			155				1.9
-150-M 50			150	50			1.7
-180-M 50			180				2.0
-175-M 75			175	75			1.8
-205-M 75			205				2.1
-200-M100			200	100			1.8
-230-M100			230				2.1
-RSG12-125-M 25	M12	24	125	25	43	45	1.9
-155-M 25			155				2.3
-150-M 50			150	50			2.0
-180-M 50			180				2.4
-175-M 75			175	75			2.2
-205-M 75			205				2.6
-200-M100			200	100			2.3
-230-M100			230				2.7

CODE	G	ϕC	L	M	ϕC1	ϕC2	Kg
BT40-RSG 8-105-M 25	M8	15	105	25	30	32	1.4
-135-M 25			135				1.8
-130-M 50			130	50			1.4
-160-M 50			160				1.8
-155-M 75			155	75			1.5
-185-M 75			185				1.9
-RSG10-125-M 25	M10	19	125	25	36	38	1.8
-155-M 25			155				2.2
-150-M 50			150	50			1.9
-180-M 50			180				2.3
-175-M 75			175	75			2.0
-205-M 75			205				2.4
-200-M100			200	100			2.0
-230-M100			230				2.4
-RSG12-125-M 25	M12	24	125	25	43	45	2.0
-155-M 25			155				2.4
-150-M 50			150	50			2.1
-180-M 50			180				2.5
-175-M 75			175	75			2.3
-205-M 75			205				2.7
-200-M100			200	100			2.4
-230-M100			230				2.8

■ 选购品 ●拉钉 (BT)
■ 标准附属品 ●冷却液导管(HSK-A)
■ 注意事项 ●可交换式刀具为另购品。请向各刀具厂商垂询购买。
●请参照【可交换式刀具安装部尺寸】，确认所使用刀具是否可以安装。

■ Option ●Retention knob(BT)
■ Std. Access. ●Coolant duct(HSK-A)
■ Caution ●The indexable end mill is not a standard accessory. Please purchase it on the market.
●Please check your indexable end mills for conformance to the dimensions.

弹簧筒夹刀柄 COLLET HOLDER



CODE	ϕD	L	ϕC	L1	Kg	
A 63-CTH10- 75	2.4 ~ 10	75	36	49	0.9	10
-CTH20- 90	5.8 ~ 20	90	50	64	1.2	20
-CTH25-105	5.8 ~ 25	105	62	79	1.6	25
BT40-CTH10- 60	2.4 ~ 10	60	36	33	1.1	10
-CTH20- 60	5.8 ~ 20		50		1.2	20
-CTH25- 75	5.8 ~ 25	75	62	48	1.5	25
F 63-CTH10- 60	2.4 ~ 10	60	36	34	0.9	10
-CTH20- 75	5.8 ~ 20	75	50	49	1.1	20

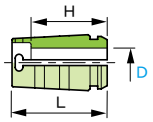
■选购品 ●弹簧筒夹 ●扳手 ●拉钉(BT40) ●可调整扭矩扳手 ●冷却液贯穿系统 ●间隙螺母

■标准附属品 ●圆形螺母(NUA—CTH) ●冷却液导管(HSK-A)

■Options ●Spring collet ●Spanner ●Retention knob(BT40) ●Adjustable torque wrench ●Coolant screw ●Sukima nut

■Std. Access. ●Nut (NUA—CTH) ● Coolant duct(HSK-A)

弹簧筒夹 超精密级(P级) Spring collet Precision Collet

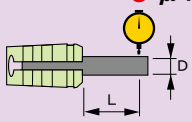


例如 Ex. ϕD C10 - 6 - P

CODE	ϕD	伸缩范围 Collapsibility	L	H
C10-D-P	2.6 2.8. 3 3.2 3.4 3.6 ···0.2mm间隔 In 0.2mm steps··· 9 9.2 9.4 9.6 9.8 10	0.2	26	18(ϕD=2.6 ~5.8)
				20(ϕD=6 ~10)
C20-D-P	6 6.2 6.4 6.6 6.8 ···0.2mm间隔 In 0.2mm steps··· 19.4 19.6 19.8 20		50	32(ϕD=6 ~ 9.8)
				35(ϕD=10 ~ 15.8)
				40(ϕD=16 ~ 20)
C25-D-P	6 8 10 10.5 11 11.5 12 ···0.5mm间隔 In 0.5mm steps··· 23 23.5 24 24.5 25		68	38(ϕD= 6 ~ 8)
				48(ϕD= 10 ~ 15)
				54(ϕD= 15.5 ~ 20)
				57(ϕD= 20.5 ~ 25)

弹簧筒夹的摆动精度 Run-out accuracy of Spring collet

5 μm



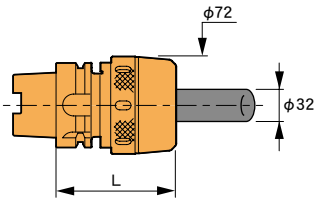
D	L
~10	4 ×D
10 ~20	40
20.5 ~25	60

※ 筒夹单体的精度 Accuracy of collet alone

扳手 Spanner

CODE	刀柄类型 Holder type
FC-36	CTH10
-50	CTH20
-62	CTH25

Hi-ART 强力铣刀柄 Hi-ART MILLING CHUCK



CODE	L	刀具的夹持长度 Cutter insetion length	Kg	容许最大转数 min-1 MAX. min-1
A 63-ART32-100	100	66 ~ 71	2.0	6,000
BT40-ART32- 85	85	66 ~ 88	1.9	
- 95	95		2.1	
-105	105		2.3	
-135	135		3.0	

■选购品 ●直筒夹 ●带推顶勾的扳手 ●喷嘴 ●调整螺丝 ●拉钉(BT40)

■标准附属品 ●冷却液导管(HSK-A)

■备考 ●利用冷却液贯穿【喷嘴贯穿】时需要开孔拉钉和喷嘴

■Options ●Straight collet ●Spanner with ejection hook ●Nozzle ●Adjust screw ●Retention knob(BT40)

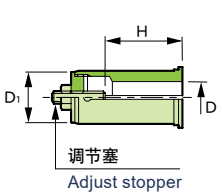
■Std. Access. ●Coolant duct(HSK-A)

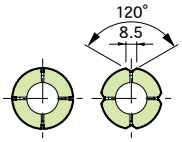
■Note ●To utilize the coolant-through nozzle capability, the retention knob with hole and nozzle are required.

直筒夹 Straight collet

标准型 Standard type

F type 喷嘴用切槽 Notch for nozzle





CODE 标准类型 Standard type	CODE F 类型 F type	ϕD	ϕD1	H
S32- 6	S32- 6F	6	32	30~68
- 8	- 8F	8		
-10	-10F	10		40~68
-12	-12F	12		
-16	-16F	16		50~68
-20	-20F	20		
-25	-25F	25		

带推顶勾的扳手 Spanner with ejection hook

不仅可以安装刀具，也可以取出直筒夹。

This spanner can be used to both tighten a nut and remove a straight collet.

CODE
FM-72

喷嘴 Nozzle

CODE	数量 Q'ty
NOZ-M4-12	12
-60	60

调整螺丝 Adjust screw

可以自由调整刀具的突出长度。

The overhang of the cutting tool can be adjusted.

CODE
AJN-M18L

DETa-1 超弹性筒夹刀柄

DETa-1 COLLET HOLDER

Fig. 1

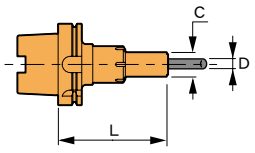
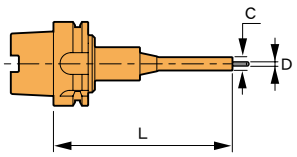


Fig. 2



CODE	Fig.	φD	L	φC	Kg	
A 63-DTA 3- 90	1	0.5～ 3.175	90	10	0.8	D 3
-DTA 7-105		1 ～ 7	105	21	1.1	D 7
-DTA12-120		2.5～13	120	30	1.2	D12
-DTB 3- 75	2	0.5～ 3.175	75	10	0.8	D 3
BT40-DTA 3- 95	1	0.5～ 3.175	95	10	1.1	D 3
-DTA 7-105		1 ～ 7	105	21	1.3	D 7
-DTA12-120		2.5～13	120	30	1.5	D12
-DTB 3- 80	2	0.5～ 3.175	80	10	1.3	D 3
-DTB 7- 60		1 ～ 7	60	21	1.0	D 7
-DTB12- 90		2.5～13	90	30	1.2	D12
F 63-DTA 3- 90	1	0.5～ 3.175	90	10	0.8	D 3
-DTB 3- 75	2		75			
F63M-DTB 7-100		1 ～ 7	100	21	0.9	D 7
-DTB12-120		2.5～13	120	30	1.1	D12

■选购品 ●DETa-1筒夹 ●扳手·六角扳手 ●拉钉(BT) ●刷子组套

■标准附属品 ●销 (DTA3) ●冷却液导管(HSK-A)

■ Options ●DETa-1 Collet ●Spanner·Wrench ●Retention knob(BT) ●Cleaning tool

■ Std. Access. ●Rod (DTA3) ●Coolant duct (HSK-A)

扳手和扳子 Spanner Wrench

CODE	Fig.	刀柄类型 Holder type
F -22	1	DTA 3
-38	2	DTA 7
-45		DTA12
DW- 2.5-110	3	DTB 3

Fig.1

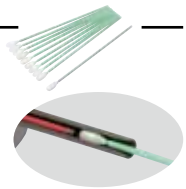
Fig.2

Fig.3

刷子组套 Cleaning tool

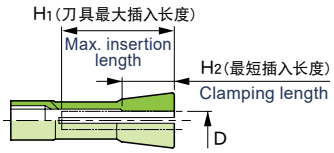
CODE	数量 Q'ty
PCT01-10	10
-25	25

请用于筒夹刀柄内部清扫。
Used to clean the inside of holder.



DETa-1 超弹性弹簧筒夹 超精密级(P级)

DETa-1 collet Precision collet

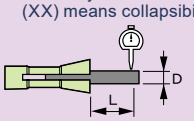


CODE	φD	H1	H2
D 3- 0.6-P	0.5 ～ 0.6	30	6.9
- 0.8-P	0.6 ～ 0.8		
- 1 -P	0.8 ～ 1		7.0
- 1.5-P	1 ～ 1.5		7.2
- 2 -P	1.5 ～ 2		7.3
- 2.5-P	2 ～ 2.5		7.4
- 3 -P	2.5 ～ 3		7.5
- 3.175-P	2.7 ～ 3.175		7.6
D 7- 1.5-P	1 ～ 1.5	36	7
- 2 -P	1.5 ～ 2		10
- 2.5-P	2 ～ 2.5		12
- 3 -P	2.5 ～ 3		
- 4 -P	3 ～ 4		14
- 5 -P	4 ～ 5		16
- 6 -P	5 ～ 6		
- 7 -P	6 ～ 7		
D12- 4 -P	2.5 ～ 4	50	16
- 6 -P	4 ～ 6		20
- 8 -P	6 ～ 8		22
-10 -P	8 ～ 10		
-12 -P	10 ～ 12		
-13 -P	11 ～ 13		

超弹性弹簧筒夹的偏摆精度
Run-out accuracy of DETa-1 collet

筒夹	D3	D7/D12
超精密级(P级)	3(8)μm	5(10)μm

※括号（ ）表示利用伸缩范围时筒夹单体的精度
Accuracy of collet alone,
(XX) means collapsibility usable.



φD	L
～10	4×D
10 ～13	40

周边设备 PERIPHERAL

Goo CHECKER

CODE	L	Kg
A63 -ZPM-150	150	1.2
-210	210	1.5
BT40-ZPM-150	150	1.3
-210	210	1.5
F63 -ZPM-150	150	1.1
-210	210	1.3

简单设定加工中心的工件原点(Z点)
It set up the original point of work-piece in M/C.

刀具紧固台 TOOL SET UP STAND

利用虎钳夹持使用。
It is used for attaching on vise.

CODE
HF-A63
-BT40
-F63

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