

# ACCESSORIES

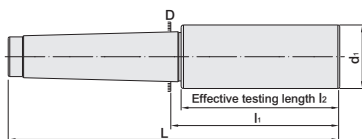
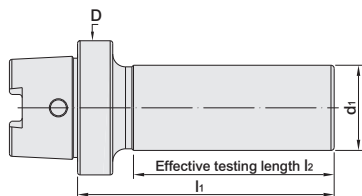
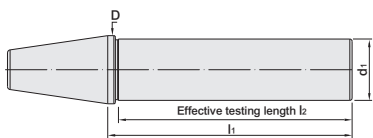
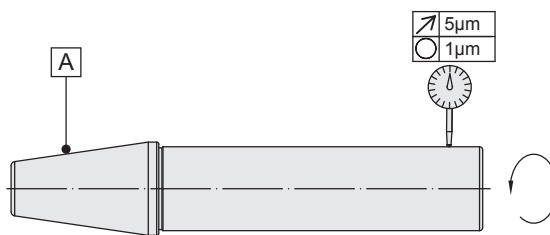
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# SPINDLE TEST BAR

## 主軸檢測棒

TAPER SHANK PRECISION	AT2
ROUNDNESS	1 $\mu$ m
SURFACE ROUGHNESS	Ra < 0.4 $\mu$ m
RUNOUT	5 $\mu$ m



### BT SERIES

MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
86403	BT30 x 25 - 250	250	242	31.75	25	0.78
86402 - 32 - 235	BT30 x 32 - 235	235	200	31.75	32	1.46
86402 - 32	BT30 x 32 - 250	250	240	31.75	32	1.55
86402 - 32 - 300	BT30 x 32 - 300	300	295	31.75	32	1.83
86404	BT40 x 40 - 300	300	293	44.45	40	2.17
86404 - 335	BT40 x 40 - 335	335	300	44.45	40	2.38
86406	BT50 x 40 - 300	300	292	69.85	40	3.65
86407	BT50 x 63 - 335	335	300	69.85	63	8.52

### CAT SERIES

86408	CAT40 x 40 - 300	300	293	44.45	40	2.19
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### DAT SERIES

86414	DAT40 x 40 - 302	302	293	44.45	40	2.17
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### HSK-A SERIES

MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
71.09.32.185	HSK40A x 32 - 185	185	150	40	32	1.13
72.09.40.235	HSK50A x 40 - 235	235	200	50	40	1.85
73.09.40.335	HSK63A x 40 - 335	335	300	63	40	2.78
75.09.63.335	HSK100A x 63 - 335	335	300	100	63	8.03

### MTB SERIES

MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
86453	MTB4 x 25 - 306.5	306.5	300	31.267	25	1.6
86454	MTB5 x 40 - 306.5	306.5	300	44.399	40	4.1

Features: ▶ MTB taper shank precision: AT3.



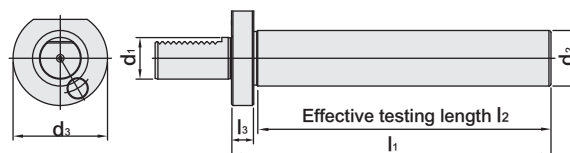
#### Reminder:

- ▶ Spindle Test Bar is supplied with a wooden box for vertical storage.
- ▶ It's recommended to store in stock vertically to prevent deformation.



# SPINDLE TEST BAR

## VDI 主軸檢測棒



### VDI SERIES

MODEL NO.	TYPE	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>
150.30.40.230	30 x 40 x 230	30	40	68	230	215	15
150.40.40.200	40 x 40 x 200	40	40	83	200	185	15
150.50.40.200	50 x 40 x 200	50	40	98	200	185	15

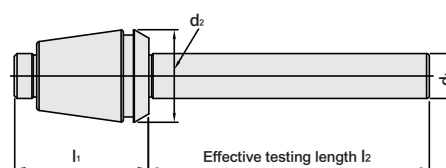


#### Reminder:

- ▶ Spindle Test Bar is supplied with a wooden box for vertical storage.
- ▶ It's recommended to store in stock vertically to prevent deformation.

# ER COLLET CHUCK TEST BAR

## ER 筒夾式刀桿檢測棒



MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	WEIGHT (KGS)
09.ER08.05.080	ER8 - φ 5 - 80	19.5	80	5	8.5	0.02
09.ER11.05.100	ER11 - φ 5 - 100	26	100	5	11.5	0.03
09.ER16.07.100	ER16 - φ 7 - 100	35.5	100	7	17	0.07
09.ER20.10.100	ER20 - φ 10 - 100	39.5	100	10	21	0.14
09.ER25.13.100	ER25 - φ 13 - 100	42	100	13	26	0.23
09.ER32.16.100	ER32 - φ 16 - 100	48	100	16	33	0.38
09.ER40.20.100	ER40 - φ 20 - 100	54	100	20	41	0.66
09.ER50.25.100	ER50 - φ 25 - 100	68	100	25	51.85	1.22

**Features:** ▶ For the use to measure the runout accuracy of ER collet chuck and nut.



#### Reminder:

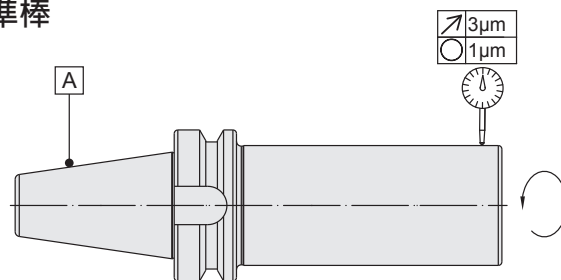
- ▶ Spindle Test Bar is supplied with a wooden box for vertical storage.
- ▶ It's recommended to store in stock vertically to prevent deformation.



# SPINDLE MASTER BAR

## 主軸精密標準棒

TAPER SHANK PRECISION	AT2
ROUNDNESS	1 $\mu$ m
SURFACE ROUGHNESS	Ra < 0.15 $\mu$ m
RUNOUT	3 $\mu$ m
CYLINDRICAL	5 $\mu$ m



### SBT SERIES

MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
25.09.25.250 - P	SBT30 x 25 - 250	250	225	46	25	0.91
25.09.32.150 - P	SBT30 x 32 - 150	150	125	46	32	1.09
25.09.32.235 - P	SBT30 x 32 - 235	235	210	46	32	1.57
26.09.50.200 - P	SBT40 x 50 - 200	200	170	63	50	2.94
26.09.50.350 - P	SBT40 x 50 - 350	350	320	63	50	4.64
27.09.50.200 - P	SBT50 x 50 - 200	200	159	100	50	5.28
27.09.50.360 - P	SBT50 x 50 - 360	360	319	100	50	7.1

### SCAT SERIES

43.09.50.300 - P	SCAT40 x 50 - 300	300	277.95	44.45	50	4.03
44.09.50.300 - P	SCAT50 x 50 - 300	300	280	98.425	50	6.88

### PSC SERIES

MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
140.09.20.180 - P	PSC32 x 20 - 180	180	165	32	20	0.41
141.09.32.180 - P	PSC40 x 32 - 180	180	160	40	32	1.08
142.09.32.180 - P	PSC50 x 32 - 180	180	150	63	32	1.38
142.09.32.245 - P	PSC50 x 32 - 245	245	215	63	32	1.7
142.09.40.280 - P	PSC50 x 40 - 280	280	250	63	40	2.12
143.09.40.182 - P	PSC63 x 40 - 182	182	150	75	40	1.93
143.09.40.232 - P	PSC63 x 40 - 232	232	200	75	40	4.02
143.09.40.352 - P	PSC63 x 40 - 352	352	320	75	40	2.93

### HSK-A SERIES

MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	WEIGHT (KGS)
86418 - 200 - P	HSK40A x 32 - 200	200	170	32	2.86
86418 - 300 - P	HSK40A x 32 - 300	300	270	32	1.77
86422 - P	HSK50A x 32 - 240	240	211	32	1.44
86422 - 300 - P	HSK50A x 32 - 300	300	274	32	2.83
86424 - P	HSK63A x 40 - 346	346	300	40	3.66
74.09.50.200 - P	HSK80A x 50 - 200	200	168	50	3.13
74.09.50.350 - P	HSK80A x 50 - 350	350	318	50	4.83
86428 - P	HSK100A x 40 - 349	349	300	40	7.61
86429 - P	HSK100A x 50 - 349	349	300	50	5.64

### HSK-E SERIES

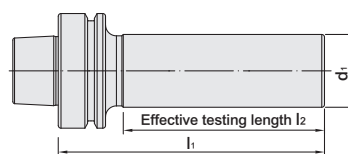
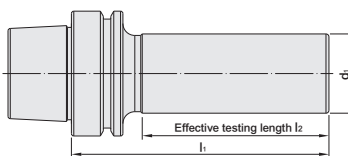
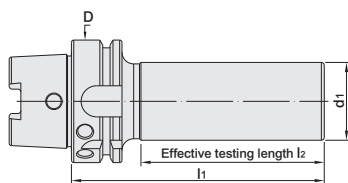
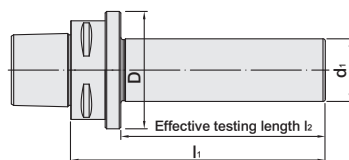
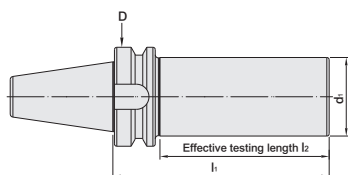
MODEL NO.	TYPE	l <sub>1</sub>	l <sub>2</sub>	d <sub>1</sub>	WEIGHT (KGS)
86430 - P	HSK25E x 25 - 175	175	163	25	0.58
98.09.20.180 - P	HSK32E x 20 - 180	180	158	20	0.41
86432 - P	HSK40E x 32 - 180	180	157	32	2.98
86433 - P	HSK50E x 32 - 180	180	151	32	3.7

### HSK-F SERIES

86442 - P	HSK63F x 40 - 346	346	300	40	4.48
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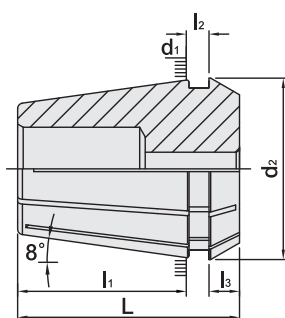
#### Reminder:

- ▶ Spindle Master Bar is supplied with an aluminum box for vertical storage. ▶ It's recommended to store in stock vertically to prevent deformation.
- ▶ The runout precision 5 $\mu$ m is available upon request. Please inform the sales personnel when ordering. For the precision info., please refer to page W-2.



# PN COLLET

## PN 筒夾



TYPE	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
PN8	8	8.48	13.5	10.2	1.8	1.5	0.01
PN11	11	11.5	18	13	2.5	2.5	0.01
PN16	16	16.8	27.5	20.8	3.4	4	0.03
PN20	20	20.8	31.5	23.9	3.4	4.8	0.04
PN25	25	25.8	34	25.9	3.6	5	0.06
PN32	32	32.7	40	30.9	4.1	5.5	0.10
PN40	40	40.85	46	34.5	4.5	7	0.25

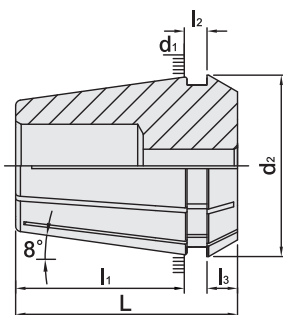
PN8		PN20		PN25		PN32		PN40	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04208 - PN - 03	3	04220 - PN - 03	3	04225 - PN - 03	3	04232 - PN - 03	3	04240 - PN - 06	6
- 04	4	- 04	4	- 04	4	- 04	4	- 07	7
- 05	5	- 05	5	- 05	5	- 05	5	- 08	8
<b>INCHES</b>		- 06	6	- 06	6	- 06	6	- 09	9
04208 - PN - 1/8	1/8	- 07	7	- 07	7	- 07	7	- 10	10
- 5/32	5/32	- 08	8	- 08	8	- 08	8	- 11	11
- 3/16	3/16	- 09	9	- 09	9	- 09	9	- 12	12
		- 10	10	- 10	10	- 10	10	- 13	13
		- 11	11	- 11	11	- 11	11	- 14	14
		- 12	12	- 12	12	- 12	12	- 15	15
		- 13	13	- 13	13	- 13	13	- 16	16
		<b>INCHES</b>		- 14	14	- 14	14	- 17	17
		04220 - PN - 1/8	1/8	- 15	15	- 15	15	- 18	18
		- 5/32	5/32	- 16	16	- 16	16	- 19	19
		- 3/16	3/16	<b>INCHES</b>		- 17	17	- 20	20
		- 7/32	7/32	04225 - PN - 1/8	1/8	- 18	18	- 21	21
		- 1/4	1/4	- 5/32	5/32	- 19	19	- 22	22
		- 9/32	9/32	- 3/16	3/16	- 20	20	- 23	23
		- 5/16	5/16	- 7/32	7/32	<b>INCHES</b>		- 24	24
		- 11/32	11/32	- 1/4	1/4	04232 - PN - 1/8	1/8	- 25	25
		- 3/8	3/8	- 9/32	9/32	- 5/32	5/32	- 26	26
		- 13/32	13/32	- 5/16	5/16	- 3/16	3/16	<b>INCHES</b>	
		- 7/16	7/16	- 11/32	11/32	- 7/32	7/32	04240 - PN - 1/4	1/4
		- 15/32	15/32	- 3/8	3/8	- 1/4	1/4	- 9/32	9/32
		- 1/2	1/2	- 13/32	13/32	- 9/32	9/32	- 5/16	5/16
				- 7/16	7/16	- 5/16	5/16	- 11/32	11/32
				- 15/32	15/32	- 11/32	11/32	- 3/8	3/8
				- 1/2	1/2	- 3/8	3/8	- 13/32	13/32
				- 17/32	17/32	- 13/32	13/32	- 7/16	7/16
				- 9/16	9/16	- 7/16	7/16	- 15/32	15/32
				- 19/32	19/32	- 15/32	15/32	- 1/2	1/2
				- 5/8	5/8	- 1/2	1/2	- 17/32	17/32
						- 17/32	17/32	- 9/16	9/16
						- 9/16	9/16	- 19/32	19/32
						- 19/32	19/32	- 5/8	5/8
						- 5/8	5/8	- 21/32	21/32
						- 21/32	21/32	- 11/16	11/16
						- 11/16	11/16	- 23/32	23/32
						- 23/32	23/32	- 3/4	3/4
						- 3/4	3/4	- 7/8	7/8
								- 1	1

- Features:**
- ▶ Runout accuracy: 3µm and UP class 5µm.
  - ▶ Design: 6 slots in front and back, with better steel and production process, making the runout accuracy better than ER collets.
  - ▶ One size clamping is recommended.
  - ▶ Surface roughness: Ra < 0.1µm.
  - ▶ Recommended clamping range of tool shank: h6.



# PN-ES STEEL SEALED COLLET

PN-ES 斜溝止水筒夾



TYPE	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
PN16ES	16	16.8	27.5	20.8	3.4	4	0.03
PN20ES	20	20.8	31.5	23.9	3.4	4.8	0.04
PN25ES	25	25.8	34	25.9	3.6	5	0.06
PN32ES	32	32.7	40	30.9	4.1	5.5	0.10
PN40ES	40	40.85	46	34.5	4.5	7	0.25

PN16ES		PN20ES		PN25ES		PN32ES		PN40ES	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04674 - 03	3	04676 - 03	3	04678 - 03	3	04680 - 03	3	04682 - 06	6
- 04	4	- 04	4	- 04	4	- 04	4	- 07	7
- 05	5	- 05	5	- 05	5	- 05	5	- 08	8
- 06	6	- 06	6	- 06	6	- 06	6	- 09	9
- 07	7	- 07	7	- 07	7	- 07	7	- 10	10
- 08	8	- 08	8	- 08	8	- 08	8	- 11	11
- 09	9	- 09	9	- 09	9	- 09	9	- 12	12
- 10	10	- 10	10	- 10	10	- 10	10	- 13	13
<b>INCHES</b>		- 11	11	- 11	11	- 11	11	- 14	14
04674 - 1/8	1/8	- 12	12	- 12	12	- 12	12	- 15	15
- 5/32	5/32	- 13	13	- 13	13	- 13	13	- 16	16
- 3/16	3/16	<b>INCHES</b>		- 14	14	- 14	14	- 17	17
- 7/32	7/32	04676 - 1/8	1/8	- 15	15	- 15	15	- 18	18
- 1/4	1/4	- 5/32	5/32	- 16	16	- 16	16	- 19	19
- 9/32	9/32	- 3/16	3/16	<b>INCHES</b>		- 17	17	- 20	20
- 5/16	5/16	- 7/32	7/32	04678 - 1/8	1/8	- 18	18	- 21	21
- 11/32	11/32	- 1/4	1/4	- 5/32	5/32	- 19	19	- 22	22
- 3/8	3/8	- 9/32	9/32	- 3/16	3/16	- 20	20	- 23	23
- 13/32	13/32	- 5/16	5/16	- 7/32	7/32	<b>INCHES</b>		- 24	24
		- 11/32	11/32	- 1/4	1/4	04680 - 1/8	1/8	- 25	25
		- 3/8	3/8	- 9/32	9/32	- 5/32	5/32	- 26	26
		- 13/32	13/32	- 5/16	5/16	- 3/16	3/16	<b>INCHES</b>	
		- 7/16	7/16	- 11/32	11/32	- 7/32	7/32	04682 - 1/4	1/4
		- 15/32	15/32	- 3/8	3/8	- 1/4	1/4	- 9/32	9/32
		- 1/2	1/2	- 13/32	13/32	- 9/32	9/32	- 5/16	5/16
				- 7/16	7/16	- 5/16	5/16	- 11/32	11/32
				- 15/32	15/32	- 11/32	11/32	- 3/8	3/8
				- 1/2	1/2	- 3/8	3/8	- 13/32	13/32
				- 17/32	17/32	- 13/32	13/32	- 7/16	7/16
				- 9/16	9/16	- 7/16	7/16	- 15/32	15/32
				- 19/32	19/32	- 15/32	15/32	- 1/2	1/2
				- 5/8	5/8	- 1/2	1/2	- 17/32	17/32
						- 17/32	17/32	- 9/16	9/16
						- 9/16	9/16	- 19/32	19/32
						- 19/32	19/32	- 5/8	5/8
						- 5/8	5/8	- 21/32	21/32
						- 21/32	21/32	- 11/16	11/16
						- 11/16	11/16	- 23/32	23/32
						- 23/32	23/32	- 3/4	3/4
						- 3/4	3/4	- 7/8	7/8
								- 1	1

**Product information:**

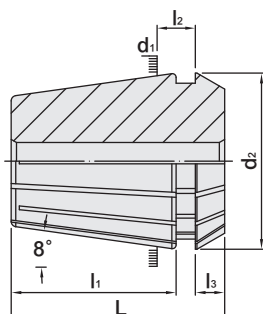
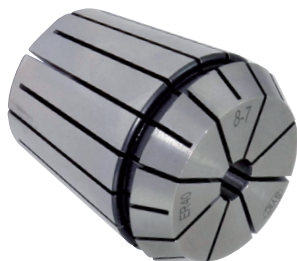
- ▶ Runout accuracy: 3µm.
- ▶ Use with PNER eccentric nut, [P.W-46].
- ▶ Used for coolant-through cutting tools.
- ▶ One size clamping is recommended.



## ER COLLET

ER 彈性筒夾

(DIN ISO 15488)



T W PAT NO. M261313  
T W PAT NO. M266126  
J P PAT NO. 3108255  
J P PAT NO. 3108254

TYPE	E-NO.	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
ER8	4260E	8	8.5	13.5	10.8	2.98	1.5	0.01
ER11	4009E	11	11.5	18	13.5	3.8	2.5	0.01
ER16	426E	16	17	27.5	20.8	6.26	4	0.03
ER20	428E	20	21	31.5	23.9	6.36	4.8	0.04
ER25	430E	25	26	34	25.9	6.66	5	0.06
ER32	470E	32	33	40	30.9	7.16	5.5	0.10
ER40	472E	40	41	46	34.9	7.66	7	0.25
ER50	477E	50	51.85	60	46	12.6	8.5	0.45

ER8		ER11		ER16		ER20	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04208 - 01	1 - 0.5	04211 - 01	1 - 0.5	04216 - 01	1 - 0.5	04220 - 01	1 - 0.5
- 01.5	1.5 - 1	- 01.5	1.5 - 1	- 01.5	1.5 - 1	- 01.5	1.5 - 1
- 02	2 - 1.5	- 02	2 - 1.5	- 02	2 - 1.5	- 02	2 - 1.5
- 02.5	2.5 - 2	- 02.5	2.5 - 2	- 02.5	2.5 - 2	- 02.5	2.5 - 2
- 03	3 - 2.5	- 03	3 - 2.5	- 03	3 - 2	- 03	3 - 2
- 03.5	3.5 - 3	- 03.5	3.5 - 3	- 03.5	3.5 - 2.5	- 03.5	3.5 - 2.5
- 04	4 - 3.5	- 04	4 - 3.5	- 04	4 - 3	- 04	4 - 3
- 04.5	4.5 - 4	- 04.5	4.5 - 4	- 04.5	4.5 - 3.5	- 04.5	4.5 - 3.5
- 05	5 - 4.5	- 05	5 - 4.5	- 05	5 - 4	- 05	5 - 4
<b>INCHES</b>		- 05.5	5.5 - 5	- 05.5	5.5 - 4.5	- 05.5	5.5 - 4.5
04208 - 1/16	0.043 - 0.062	- 06	6 - 5.5	- 06	6 - 5	- 06	6 - 5
- 1/8	0.086 - 0.125	- 06.5	6.5 - 6	- 06.5	6.5 - 5.5	- 06.5	6.5 - 5.5
- 3/16	0.148 - 0.187	- 07	7 - 6.5	- 07	7 - 6	- 07	7 - 6
<b>INCHES</b>		- 07.5	7.5 - 6.5	- 07.5	7.5 - 6.5	- 07.5	7.5 - 6.5
<b>INCHES</b>		04211 - 1/16	0.062	- 08	8 - 7	- 08	8 - 7
<b>INCHES</b>		- 3/32	0.093	- 08.5	8.5 - 7.5	- 08.5	8.5 - 7.5
<b>INCHES</b>		- 1/8	0.125	- 09	9 - 8	- 09	9 - 8
<b>INCHES</b>		- 5/32	0.156	- 09.5	9.5 - 8.5	- 09.5	9.5 - 8.5
<b>INCHES</b>		- 3/16	0.187	- 10	10 - 9	- 10	10 - 9
<b>INCHES</b>		- 7/32	0.218	- 10.5	10.5 - 9.5	- 10.5	10.5 - 9.5
<b>INCHES</b>		- 1/4	0.25	04216 - 1/16	0.043 - 0.062	- 11	11 - 10
<b>INCHES</b>				- 3/32	0.054 - 0.093	- 11.5	11.5 - 10.5
<b>INCHES</b>				- 1/8	0.086 - 0.125	- 12	12 - 11
<b>INCHES</b>				- 5/32	0.117 - 0.156	- 12.5	12.5 - 11.5
<b>INCHES</b>				- 3/16	0.148 - 0.187	- 13	13 - 12
<b>INCHES</b>				- 7/32	0.179 - 0.218	<b>INCHES</b>	
<b>INCHES</b>				- 1/4	0.211 - 0.25	04220 - 1/16	0.043 - 0.062
<b>INCHES</b>				- 9/32	0.242 - 0.281	- 3/32	0.054 - 0.093
<b>INCHES</b>				- 5/16	0.273 - 0.312	- 1/8	0.086 - 0.125
<b>INCHES</b>				- 11/32	0.304 - 0.343	- 5/32	0.117 - 0.156
<b>INCHES</b>				- 3/8	0.336 - 0.375	- 3/16	0.148 - 0.187
<b>INCHES</b>				- 13/32	0.367 - 0.406	- 7/32	0.179 - 0.218
<b>INCHES</b>						- 1/4	0.211 - 0.25
<b>INCHES</b>						- 9/32	0.242 - 0.281
<b>INCHES</b>						- 5/16	0.273 - 0.312
<b>INCHES</b>						- 11/32	0.304 - 0.343
<b>INCHES</b>						- 3/8	0.336 - 0.375
<b>INCHES</b>						- 13/32	0.367 - 0.406
<b>INCHES</b>						- 7/16	0.398 - 0.437
<b>INCHES</b>						- 15/32	0.429 - 0.468
<b>INCHES</b>						- 1/2	0.461 - 0.5

## Features:

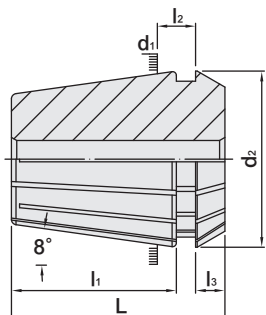
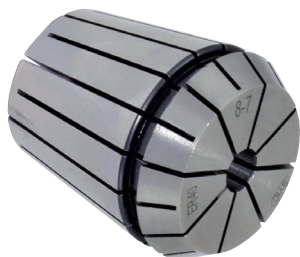
- ▶ Runout accuracy: 20μm, A class 10μm, UP class 5μm.
- ▶ Design: 8 slots in front and back, with good flexibility and convenient for clamping tools.
- ▶ Clamping range: ER8, ER11: 0.5mm; ER16,20,25,32,40: 1mm (ID ≥ 3mm), 0.5mm (ID < 3mm); ER50: 2mm (ID > 10mm), 1mm (ID ≤ 10mm).
- ▶ Surface roughness: Ra < 0.25μm, A class Ra < 0.15μm, UP class Ra < 0.1μm.
- ▶ Used for drills, taps, mills and reamers, etc.
- ▶ Please inform required precision when making an order.



## ER COLLET

ER 彈性筒夾

(DIN ISO 15488)



T W PAT NO. M261313  
T W PAT NO. M266126  
J P PAT NO. 3108255  
J P PAT NO. 3108254

TYPE	E-NO.	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
ER8	4260E	8	8.5	13.5	10.8	2.98	1.5	0.01
ER11	4009E	11	11.5	18	13.5	3.8	2.5	0.01
ER16	426E	16	17	27.5	20.8	6.26	4	0.03
ER20	428E	20	21	31.5	23.9	6.36	4.8	0.04
ER25	430E	25	26	34	25.9	6.66	5	0.06
ER32	470E	32	33	40	30.9	7.16	5.5	0.10
ER40	472E	40	41	46	34.9	7.66	7	0.25
ER50	477E	50	51.85	60	46	12.6	8.5	0.45

ER25			
MODEL NO.	SIZE	MODEL NO.	SIZE
04225 - 01	1 - 0.5	04225 - 09	9 - 8
- 01.5	1.5 - 1	- 09.5	9.5 - 8.5
- 02	2 - 1.5	- 10	10 - 9
- 02.5	2.5 - 2	- 10.5	10.5 - 9.5
- 03	3 - 2	- 11	11 - 10
- 03.5	3.5 - 2.5	- 11.5	11.5 - 10.5
- 04	4 - 3	- 12	12 - 11
- 04.5	4.5 - 3.5	- 12.5	12.5 - 11.5
- 05	5 - 4	- 13	13 - 12
- 05.5	5.5 - 4.5	- 13.5	13.5 - 12.5
- 06	6 - 5	- 14	14 - 13
- 06.5	6.5 - 5.5	- 14.5	14.5 - 13.5
- 07	7 - 6	- 15	15 - 14
- 07.5	7.5 - 6.5	- 15.5	15.5 - 14.5
- 08	8 - 7	- 16	16 - 15
- 08.5	8.5 - 7.5		

## INCHES

04225 - 3/32	0.054 - 0.093	04225 - 3/8	0.336 - 0.375
- 1/8	0.086 - 0.125	04225 - 13/32	0.367 - 0.406
- 5/32	0.117 - 0.156	04225 - 7/16	0.398 - 0.437
- 3/16	0.148 - 0.187	04225 - 15/32	0.429 - 0.468
- 7/32	0.179 - 0.218	04225 - 1/2	0.461 - 0.5
- 1/4	0.211 - 0.250	04225 - 17/32	0.492 - 0.531
- 9/32	0.242 - 0.281	04225 - 9/16	0.523 - 0.562
- 5/16	0.273 - 0.312	04225 - 19/32	0.554 - 0.593
- 11/32	0.304 - 0.343	04225 - 5/8	0.586 - 0.625

ER32			
MODEL NO.	SIZE	MODEL NO.	SIZE
04232 - 02	2 - 1.5	04232 - 11.5	11.5 - 10.5
- 02.5	2.5 - 2	- 12	12 - 11
- 03	3 - 2	- 12.5	12.5 - 11.5
- 03.5	3.5 - 2.5	- 13	13 - 12
- 04	4 - 3	- 13.5	13.5 - 12.5
- 04.5	4.5 - 3.5	- 14	14 - 13
- 05	5 - 4	- 14.5	14.5 - 13.5
- 05.5	5.5 - 4.5	- 15	15 - 14
- 06	6 - 5	- 15.5	15.5 - 14.5
- 06.5	6.5 - 5.5	- 16	16 - 15
- 07	7 - 6	- 16.5	16.5 - 15.5
- 07.5	7.5 - 6.5	- 17	17 - 16
- 08	8 - 7	- 17.5	17.5 - 16.5
- 08.5	8.5 - 7.5	- 18	18 - 17
- 09	9 - 8	- 18.5	18.5 - 17.5
- 09.5	9.5 - 8.5	- 19	19 - 18
- 10	10 - 9	- 19.5	19.5 - 18.5
- 10.5	10.5 - 9.5	- 20	20 - 19
- 11	11 - 10		

## INCHES

04232 - 1/16	0.043 - 0.062	04232 - 7/16	0.398 - 0.437
- 3/32	0.054 - 0.093	- 15/32	0.429 - 0.468
- 1/8	0.086 - 0.125	- 1/2	0.461 - 0.5
- 5/32	0.117 - 0.156	- 17/32	0.492 - 0.531
- 3/16	0.148 - 0.187	- 9/16	0.523 - 0.562
- 7/32	0.179 - 0.218	- 19/32	0.554 - 0.593
- 1/4	0.211 - 0.25	- 5/8	0.586 - 0.625
- 9/32	0.242 - 0.281	- 21/32	0.617 - 0.656
- 5/16	0.273 - 0.312	- 11/16	0.648 - 0.687
- 11/32	0.304 - 0.343	- 23/32	0.679 - 0.718
- 3/8	0.336 - 0.375	- 3/4	0.711 - 0.75
- 13/32	0.367 - 0.406		

## Features:

- ▶ Runout accuracy: 20μm, A class 10μm, UP class 5μm.
- ▶ Design: 8 slots in front and back, with good flexibility and convenient for clamping tools.
- ▶ Clamping range: ER8, ER11: 0.5mm; ER16,20,25,32,40: 1mm (ID ≥ 3mm), 0.5mm (ID < 3mm); ER50: 2mm (ID > 10mm), 1mm (ID ≤ 10mm).
- ▶ Surface roughness: Ra < 0.25μm, A class Ra < 0.15μm, UP class Ra < 0.1μm.
- ▶ Used for drills, taps, mills and reamers, etc.
- ▶ Please inform required precision when making an order.

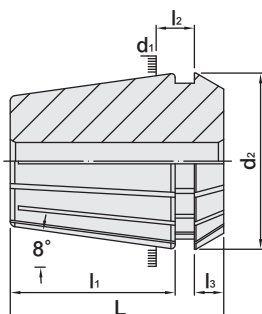
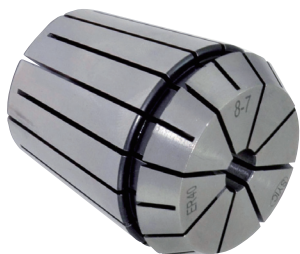




# ER COLLET

ER 彈性筒夾

(DIN ISO 15488)



TYPE	E-NO.	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
ER8	4260E	8	8.5	13.5	10.8	2.98	1.5	0.01
ER11	4009E	11	11.5	18	13.5	3.8	2.5	0.01
ER16	426E	16	17	27.5	20.8	6.26	4	0.03
ER20	428E	20	21	31.5	23.9	6.36	4.8	0.04
ER25	430E	25	26	34	25.9	6.66	5	0.06
ER32	470E	32	33	40	30.9	7.16	5.5	0.10
ER40	472E	40	41	46	34.9	7.66	7	0.25
ER50	477E	50	51.85	60	46	12.6	8.5	0.45

T W PAT NO. M261313  
 T W PAT NO. M266126  
 J P PAT NO. 3108255  
 J P PAT NO. 3108254

ER40				ER50			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04240 - 03	3 - 2	04240 - 15	15 - 14	04250 - 06	6 - 5	04250 - 21	21 - 19
- 03.5	3.5 - 2.5	- 15.5	15.5 - 14.5	- 07	7 - 6	- 22	22 - 20
- 04	4 - 3	- 16	16 - 15	- 08	8 - 7	- 23	23 - 21
- 04.5	4.5 - 3.5	- 16.5	16.5 - 15.5	- 09	9 - 8	- 24	24 - 22
- 05	5 - 4	- 17	17 - 16	- 10	10 - 9	- 25	25 - 23
- 05.5	5.5 - 4.5	- 17.5	17.5 - 16.5	- 11	11 - 9	- 26	26 - 24
- 06	6 - 5	- 18	18 - 17	- 12	12 - 10	- 27	27 - 25
- 06.5	6.5 - 5.5	- 18.5	18.5 - 17.5	- 13	13 - 11	- 28	28 - 26
- 07	7 - 6	- 19	19 - 18	- 14	14 - 12	- 29	29 - 27
- 07.5	7.5 - 6.5	- 19.5	19.5 - 18.5	- 15	15 - 13	- 30	30 - 28
- 08	8 - 7	- 20	20 - 19	- 16	16 - 14	- 31	31 - 29
- 08.5	8.5 - 7.5	- 20.5	20.5 - 19.5	- 17	17 - 15	- 32	32 - 30
- 09	9 - 8	- 21	21 - 20	- 18	18 - 16	- 33	33 - 31
- 09.5	9.5 - 8.5	- 21.5	21.5 - 20.5	- 19	19 - 17	- 34	34 - 32
- 10	10 - 9	- 22	22 - 21	- 20	20 - 18		
- 10.5	10.5 - 9.5	- 22.5	22.5 - 21.5				
- 11	11 - 10	- 23	23 - 22				
- 11.5	11.5 - 10.5	- 23.5	23.5 - 22.5				
- 12	12 - 11	- 24	24 - 23				
- 12.5	12.5 - 11.5	- 24.5	24.5 - 23.5				
- 13	13 - 12	- 25	25 - 24				
- 13.5	13.5 - 12.5	- 25.5	25.5 - 24.5				
- 14	14 - 13	- 26	26 - 25				
- 14.5	14.5 - 13.5						

**INCHES**

**INCHES**

04240 - 1/8	0.086 - 0.125	04240 - 1/2	0.461 - 0.5
- 5/32	0.117 - 0.156	04240 - 17/32	0.492 - 0.531
- 3/16	0.148 - 0.187	04240 - 9/16	0.523 - 0.562
- 7/32	0.179 - 0.218	04240 - 19/32	0.554 - 0.593
- 1/4	0.211 - 0.25	04240 - 5/8	0.586 - 0.625
- 9/32	0.242 - 0.281	04240 - 21/32	0.617 - 0.656
- 5/16	0.273 - 0.312	04240 - 11/16	0.648 - 0.687
- 11/32	0.304 - 0.343	04240 - 23/32	0.679 - 0.718
- 3/8	0.336 - 0.375	04240 - 3/4	0.711 - 0.750
- 13/32	0.367 - 0.406	04240 - 7/8	0.836 - 0.875
- 7/16	0.398 - 0.437	04240 - 1	0.961 - 1
- 15/32	0.429 - 0.468		

04250 - 7/32	0.179 - 0.219	04250 - 25/32	0.703 - 0.781
- 1/4	0.211 - 0.250	- 27/32	0.765 - 0.844
- 5/16	0.273 - 0.313	- 15/16	0.859 - 0.938
- 11/32	0.304 - 0.344	- 1	0.921 - 1
- 3/8	0.336 - 0.375	- 1-3/32	1.015 - 1.094
- 7/16	0.359 - 0.438	- 1-3/16	1.109 - 1.188
- 17/32	0.453 - 0.531	- 1-1/4	1.171 - 1.25
- 5/8	0.546 - 0.625	- 1-5/16	1.234 - 1.313
- 11/16	0.609 - 0.688		

**Features:**

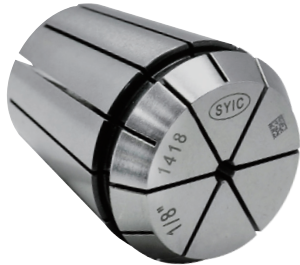
- ▶ Runout accuracy: 20µm, A class 10µm, UP class 5µm.
- ▶ Design: 8 slots in front and back, with good flexibility and convenient for clamping tools.
- ▶ Clamping range: ER8, ER11: 0.5mm; ER16,20,25,32,40: 1mm (ID ≥ 3mm), 0.5mm (ID < 3mm); ER50: 2mm (ID > 10mm), 1mm (ID ≤ 10mm).
- ▶ Surface roughness: Ra < 0.25µm, A class Ra < 0.15µm, UP class Ra < 0.1µm.
- ▶ Used for drills, taps, mills and reamers, etc.
- ▶ Please inform required precision when making an order.



# ER-E COLLET

ER-E 彈性筒夾

(DIN ISO 15488)



T W PAT NO. M261313  
T W PAT NO. M266126  
J P PAT NO. 3108255  
J P PAT NO. 3108254

ER11E		ER20E		ER25E		ER32E		ER40E			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04311 - 02	2	04320 - 02	2	04325 - 02	2	04332 - 03	3	04340 - 03	3	04340 - 15	15
- 03	3	- 03	3	- 03	3	- 04	4	- 04	4	- 16	16
- 04	4	- 04	4	- 04	4	- 05	5	- 05	5	- 17	17
- 05	5	- 05	5	- 05	5	- 06	6	- 06	6	- 18	18
- 06	6	- 06	6	- 06	6	- 07	7	- 07	7	- 19	19
- 07	7	- 07	7	- 07	7	- 08	8	- 08	8	- 20	20
<b>INCHES</b>		- 08	8	- 08	8	- 09	9	- 09	9	- 21	21
04311 - 1/16	1/16	- 09	9	- 09	9	- 10	10	- 10	10	- 22	22
- 3/32	3/32	- 10	10	- 10	10	- 11	11	- 11	11	- 23	23
- 1/8	1/8	- 11	11	- 11	11	- 12	12	- 12	12	- 24	24
- 5/32	5/32	- 12	12	- 12	12	- 13	13	- 13	13	- 25	25
- 3/16	3/16	- 13	13	- 13	13	- 14	14	- 14	14	- 26	26
- 7/32	7/32	<b>INCHES</b>		- 14	14	- 15	15	<b>INCHES</b>		- 26	26
- 1/4	1/4	04320 - 1/16	1/16	- 15	15	- 16	16	04340 - 1/8	1/8	04340 - 1/2	1/2
- 9/32	9/32	- 3/32	3/32	- 16	16	- 17	17	- 5/32	5/32	- 17/32	17/32
<b>WEIGHT(KGS)</b>		- 1/8	1/8	<b>INCHES</b>		- 18	18	- 3/16	3/16	- 9/16	9/16
0.01		- 5/32	5/32	04325 - 3/32	3/32	- 19	19	- 7/32	7/32	- 19/32	19/32
<b>ER16E</b>		- 3/16	3/16	- 1/8	1/8	- 20	20	- 1/4	1/4	- 5/8	5/8
<b>MODEL NO.</b>	<b>SIZE</b>	- 7/32	7/32	- 5/32	5/32	<b>INCHES</b>		- 9/32	9/32	- 21/32	21/32
04316 - 02	2	- 1/4	1/4	- 3/16	3/16	04332 - 1/8	1/8	- 5/16	5/16	- 11/16	11/16
- 03	3	- 9/32	9/32	- 7/32	7/32	- 5/32	5/32	- 11/32	11/32	- 23/32	23/32
- 04	4	- 5/16	5/16	- 1/4	1/4	- 3/16	3/16	- 3/8	3/8	- 3/4	3/4
- 05	5	- 11/32	11/32	- 9/32	9/32	- 7/32	7/32	- 13/32	13/32	- 7/8	7/8
- 06	6	- 3/8	3/8	- 5/16	5/16	- 1/4	1/4	- 7/16	7/16	- 1	1
- 07	7	- 13/32	13/32	- 11/32	11/32	- 9/32	9/32	- 15/32	15/32		
- 08	8	- 7/16	7/16	- 3/8	3/8	- 5/16	5/16	<b>WEIGHT(KGS)</b>			
- 09	9	- 15/32	15/32	- 13/32	13/32	- 11/32	11/32	0.25			
- 10	10	- 1/2	1/2	- 7/16	7/16	- 3/8	3/8				
<b>INCHES</b>		<b>WEIGHT(KGS)</b>		- 15/32	15/32	- 13/32	13/32				
04316 - 1/16	1/16	0.04		- 1/2	1/2	- 7/16	7/16				
- 3/32	3/32			- 17/32	17/32	- 15/32	15/32				
- 1/8	1/8			- 9/16	9/16	- 1/2	1/2				
- 5/32	5/32			- 19/32	19/32	- 17/32	17/32				
- 3/16	3/16			- 5/8	5/8	- 9/16	9/16				
- 7/32	7/32			<b>WEIGHT(KGS)</b>		- 19/32	19/32				
- 1/4	1/4			0.06		- 5/8	5/8				
- 9/32	9/32					- 21/32	21/32				
- 5/16	5/16					- 11/16	11/16				
- 11/32	11/32					- 23/32	23/32				
- 3/8	3/8					- 3/4	3/4				
- 13/32	13/32					<b>WEIGHT(KGS)</b>					
<b>WEIGHT(KGS)</b>						0.1					
0.03											

**Features:**

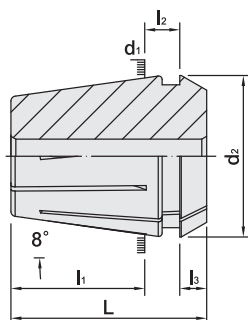
- ▶ Runout accuracy: 5µm.
- ▶ Design: 6 slots in front and back, increasing precision stability.
- ▶ Clamping one size tool is recommended.
- ▶ Surface roughness: Ra<0.1µm



# ER-ES STEEL SEALED COLLET

ER-ES 斜槽止水筒夾

(DIN ISO 15488)



T W PAT NO. M285418  
T W PAT NO. M311516  
J P PAT NO. 3124650  
C H PAT NO. 696264

TYPE	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
ER11ES	11	11.2	18	11.7	3.8	2.5	0.01
ER16ES	16	16.6	27.5	20.8	6.25	4	0.03
ER20ES	20	20.6	31.5	23.9	6.36	4.8	0.04
ER25ES	25	25.6	34	25.9	6.66	5	0.06
ER32ES	32	32.6	40	30.9	7.16	5.5	0.10
ER40ES	40	40.6	46	34.9	7.66	7	0.25

ER11ES		ER16ES		ER20ES		ER25ES			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04542 - 03	3	04543 - 03	3	04544 - 03	3	04545 - 03	3	04545 - 10	10
- 03.5	3.5	- 03.5	3.5	- 03.5	3.5	- 03.5	3.5	- 10.5	10.5
- 04	4	- 04	4	- 04	4	- 04	4	- 11	11
- 04.5	4.5	- 04.5	4.5	- 04.5	4.5	- 04.5	4.5	- 11.5	11.5
- 05	5	- 05	5	- 05	5	- 05	5	- 12	12
- 05.5	5.5	- 05.5	5.5	- 05.5	5.5	- 05.5	5.5	- 12.5	12.5
- 06	6	- 06	6	- 06	6	- 06	6	- 13	13
- 06.5	6.5	- 06.5	6.5	- 06.5	6.5	- 06.5	6.5	- 13.5	13.5
- 07	7	- 07	7	- 07	7	- 07	7	- 14	14
<b>INCHES</b>		- 07.5	7.5	- 07.5	7.5	- 07.5	7.5	- 14.5	14.5
04542 - 3/32	3/32	- 08	8	- 08	8	- 08	8	- 15	15
- 1/8	1/8	- 08.5	8.5	- 08.5	8.5	- 08.5	8.5	- 15.5	15.5
- 5/32	5/32	- 09	9	- 09	9	- 09	9	- 16	16
- 3/16	3/16	- 09.5	9.5	- 09.5	9.5	- 09.5	9.5		
- 7/32	7/32	- 10	10	- 10	10	<b>INCHES</b>			
- 1/4	1/4	<b>INCHES</b>		- 10.5	10.5	04545 - 7/32	7/32	04545 - 7/16	7/16
		04543 - 3/32	3/32	- 11	11	- 1/4	1/4	- 15/32	15/32
		- 1/8	1/8	- 11.5	11.5	- 9/32	9/32	- 1/2	1/2
		- 5/32	5/32	- 12	12	- 5/16	5/16	- 17/32	17/32
		- 3/16	3/16	- 12.5	12.5	- 11/32	11/32	- 9/16	9/16
		- 7/32	7/32	- 13	13	- 3/8	3/8	- 19/32	19/32
		- 1/4	1/4	<b>INCHES</b>		- 13/32	13/32	- 5/8	5/8
		- 9/32	9/32	04544 - 1/8	1/8				
		- 5/16	5/16	- 5/32	5/32				
		- 11/32	11/32	- 3/16	3/16				
		- 3/8	3/8	- 7/32	7/32				
		- 13/32	13/32	- 1/4	1/4				
				- 9/32	9/32				
				- 5/16	5/16				
				- 11/32	11/32				
				- 3/8	3/8				
				- 13/32	13/32				
				- 7/16	7/16				
				- 15/32	15/32				
				- 1/2	1/2				

**Features:**

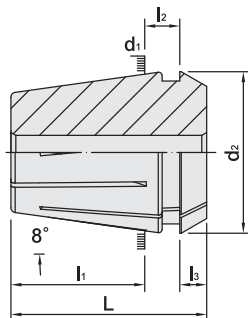
- ▶ Surface roughness: Ra<0.25µm.
- ▶ Used for coolant-through cutting tools.
- ▶ Water pressure up to 100 kgf/cm<sup>2</sup>(1400PSI).
- ▶ Only for tool shank with h6 tolerance and no flexible chucking range.



# ER-ES STEEL SEALED COLLET

ER-ES 斜槽止水筒夾

(DIN ISO 15488)



TYPE	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
ER11ES	11	11.2	18	11.7	3.8	2.5	0.01
ER16ES	16	16.6	27.5	20.8	6.25	4	0.03
ER20ES	20	20.6	31.5	23.9	6.36	4.8	0.04
ER25ES	25	25.6	34	25.9	6.66	5	0.06
ER32ES	32	32.6	40	30.9	7.16	5.5	0.10
ER40ES	40	40.6	46	34.9	7.66	7	0.25

TW PAT NO. M285418  
 TW PAT NO. M311516  
 J P PAT NO. 3124650  
 C H PAT NO. 696264

ER32ES			
MODEL NO.	SIZE	MODEL NO.	SIZE
04546 - 03	3	04546 - 12	12
- 03.5	3.5	- 12.5	12.5
- 04	4	- 13	13
- 04.5	4.5	- 13.5	13.5
- 05	5	- 14	14
- 05.5	5.5	- 14.5	14.5
- 06	6	- 15	15
- 06.5	6.5	- 15.5	15.5
- 07	7	- 16	16
- 07.5	7.5	- 16.5	16.5
- 08	8	- 17	17
- 08.5	8.5	- 17.5	17.5
- 09	9	- 18	18
- 09.5	9.5	- 18.5	18.5
- 10	10	- 19	19
- 10.5	10.5	- 19.5	19.5
- 11	11	- 20	20
- 11.5	11.5		

**INCHES**

04546 - 7/32	7/32	04546 - 1/2	1/2
- 1/4	1/4	- 17/32	17/32
- 9/32	9/32	- 9/16	9/16
- 5/16	5/16	- 19/32	19/32
- 11/32	11/32	- 5/8	5/8
- 3/8	3/8	- 21/32	21/32
- 13/32	13/32	- 11/16	11/16
- 7/16	7/16	- 23/32	23/32
- 15/32	15/32	- 3/4	3/4

ER40ES			
MODEL NO.	SIZE	MODEL NO.	SIZE
04547 - 03	3	04547 - 15	15
- 03.5	3.5	- 15.5	15.5
- 04	4	- 16	16
- 04.5	4.5	- 16.5	16.5
- 05	5	- 17	17
- 05.5	5.5	- 17.5	17.5
- 06	6	- 18	18
- 06.5	6.5	- 18.5	18.5
- 07	7	- 19	19
- 07.5	7.5	- 19.5	19.5
- 08	8	- 20	20
- 08.5	8.5	- 20.5	20.5
- 09	9	- 21	21
- 09.5	9.5	- 21.5	21.5
- 10	10	- 22	22
- 10.5	10.5	- 22.5	22.5
- 11	11	- 23	23
- 11.5	11.5	- 23.5	23.5
- 12	12	- 24	24
- 12.5	12.5	- 24.5	24.5
- 13	13	- 25	25
- 13.5	13.5	- 25.5	25.5
- 14	14	- 26	26
- 14.5	14.5		

**INCHES**

04547 - 7/32	7/32	04547 - 17/32	17/32
- 1/4	1/4	- 9/16	9/16
- 9/32	9/32	- 19/32	19/32
- 5/16	5/16	- 5/8	5/8
- 11/32	11/32	- 21/32	21/32
- 3/8	3/8	- 11/16	11/16
- 13/32	13/32	- 23/32	23/32
- 7/16	7/16	- 3/4	3/4
- 15/32	15/32	- 7/8	7/8
- 1/2	1/2	- 1	1

**Features:**

- ▶ Surface roughness: Ra<0.25µm.
- ▶ Used for coolant-through cutting tools.
- ▶ Water pressure up to 100 kgf/cm<sup>2</sup>(1400PSI).
- ▶ Only for tool shank with h6 tolerance and no flexible chucking range.



# ERS METALLIC SEALED COLLET

ERS 直溝止水筒夾

(DIN ISO 15488)



ERS11		ERS16		ERS20		ERS25			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04411 - 03	3	04416 - 03	3	04420 - 03	3	04425 - 03	3	04425 - 10	10
- 03.5	3.5	- 03.5	3.5	- 03.5	3.5	- 03.5	3.5	- 10.5	10.5
- 04	4	- 04	4	- 04	4	- 04	4	- 11	11
- 04.5	4.5	- 04.5	4.5	- 04.5	4.5	- 04.5	4.5	- 11.5	11.5
- 05	5	- 05	5	- 05	5	- 05	5	- 12	12
- 05.5	5.5	- 05.5	5.5	- 05.5	5.5	- 05.5	5.5	- 12.5	12.5
- 06	6	- 06	6	- 06	6	- 06	6	- 13	13
- 06.5	6.5	- 06.5	6.5	- 06.5	6.5	- 06.5	6.5	- 13.5	13.5
- 07	7	- 07	7	- 07	7	- 07	7	- 14	14
<b>INCHES</b>		- 07.5	7.5	- 07.5	7.5	- 07.5	7.5	- 14.5	14.5
04411 - 3/32	3/32	- 08	8	- 08	8	- 08	8	- 15	15
- 1/8	1/8	- 08.5	8.5	- 08.5	8.5	- 08.5	8.5	- 15.5	15.5
- 5/32	5/32	- 09	9	- 09	9	- 09	9	- 16	16
- 3/16	3/16	- 09.5	9.5	- 09.5	9.5	- 09.5	9.5		
- 7/32	7/32	- 10	10	- 10	10	<b>INCHES</b>			
- 1/4	1/4	<b>INCHES</b>		- 10.5	10.5	04425 - 7/32	7/32	04425 - 7/16	7/16
		04416 - 3/32	3/32	- 11	11	- 1/4	1/4	- 15/32	15/32
		- 1/8	1/8	- 11.5	11.5	- 9/32	9/32	- 1/2	1/2
		- 5/32	5/32	- 12	12	- 5/16	5/16	- 17/32	17/32
		- 3/16	3/16	- 12.5	12.5	- 11/32	11/32	- 9/16	9/16
		- 7/32	7/32	- 13	13	- 3/8	3/8	- 19/32	19/32
		- 1/4	1/4	<b>INCHES</b>		- 13/32	13/32	- 5/8	5/8
		- 9/32	9/32	04420 - 1/8	1/8				
		- 5/16	5/16	- 5/32	5/32				
		- 11/32	11/32	- 3/16	3/16				
		- 3/8	3/8	- 7/32	7/32				
		- 13/32	13/32	- 1/4	1/4				
				- 9/32	9/32				
				- 5/16	5/16				
				- 11/32	11/32				
				- 3/8	3/8				
				- 13/32	13/32				
				- 7/16	7/16				
				- 15/32	15/32				
				- 1/2	1/2				

**Features:**

- ▶ Runout accuracy: 10um & UP class 5um.
- ▶ Surface roughness: Ra<0.25µm.
- ▶ Used for coolant-through cutting tools.
- ▶ Water pressure up to 100 kgf/cm<sup>2</sup>(1400PSI).
- ▶ Only for tool shank with h6 tolerance and no flexible chucking range.



## ERS METALLIC SEALED COLLET

ERS 直溝止水筒夾

(DIN ISO 15488)



ERS32			
MODEL NO.	SIZE	MODEL NO.	SIZE
04432 - 03	3	04432 - 12	12
- 03.5	3.5	- 12.5	12.5
- 04	4	- 13	13
- 04.5	4.5	- 13.5	13.5
- 05	5	- 14	14
- 05.5	5.5	- 14.5	14.5
- 06	6	- 15	15
- 06.5	6.5	- 15.5	15.5
- 07	7	- 16	16
- 07.5	7.5	- 16.5	16.5
- 08	8	- 17	17
- 08.5	8.5	- 17.5	17.5
- 09	9	- 18	18
- 09.5	9.5	- 18.5	18.5
- 10	10	- 19	19
- 10.5	10.5	- 19.5	19.5
- 11	11	- 20	20
- 11.5	11.5		

## INCHES

04432 - 7/32	7/32	04432 - 1/2	1/2
- 1/4	1/4	- 17/32	17/32
- 9/32	9/32	- 9/16	9/16
- 5/16	5/16	- 19/32	19/32
- 11/32	11/32	- 5/8	5/8
- 3/8	3/8	- 21/32	21/32
- 13/32	13/32	- 11/16	11/16
- 7/16	7/16	- 23/32	23/32
- 15/32	15/32	- 3/4	3/4

ERS40			
MODEL NO.	SIZE	MODEL NO.	SIZE
04440 - 03	3	04440 - 15	15
- 03.5	3.5	- 15.5	15.5
- 04	4	- 16	16
- 04.5	4.5	- 16.5	16.5
- 05	5	- 17	17
- 05.5	5.5	- 17.5	17.5
- 06	6	- 18	18
- 06.5	6.5	- 18.5	18.5
- 07	7	- 19	19
- 07.5	7.5	- 19.5	19.5
- 08	8	- 20	20
- 08.5	8.5	- 20.5	20.5
- 09	9	- 21	21
- 09.5	9.5	- 21.5	21.5
- 10	10	- 22	22
- 10.5	10.5	- 22.5	22.5
- 11	11	- 23	23
- 11.5	11.5	- 23.5	23.5
- 12	12	- 24	24
- 12.5	12.5	- 24.5	24.5
- 13	13	- 25	25
- 13.5	13.5	- 25.5	25.5
- 14	14	- 26	26
- 14.5	14.5		

## INCHES

04440 - 7/32	7/32	04440 - 17/32	17/32
- 1/4	1/4	- 9/16	9/16
- 9/32	9/32	- 19/32	19/32
- 5/16	5/16	- 5/8	5/8
- 11/32	11/32	- 21/32	21/32
- 3/8	3/8	- 11/16	11/16
- 13/32	13/32	- 23/32	23/32
- 7/16	7/16	- 3/4	3/4
- 15/32	15/32	- 7/8	7/8
- 1/2	1/2	- 1	1

## Features:

- ▶ Runout accuracy: 10um & UP class 5um.
- ▶ Surface roughness: Ra<0.25um.
- ▶ Used for coolant-through cutting tools.
- ▶ Water pressure up to 100 kgf/cm<sup>2</sup>(1400PSI).
- ▶ Only for tool shank with h6 tolerance and no flexible chucking range.



# ERS COOLANT COLLET FOD TYPE

ERS 直溝出水筒夾 [FOD型]

(DIN ISO 15488)



ERS11-FOD		ERS16-FOD		ERS20-FOD		ERS25-FOD			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
04412 - 03	3	04417 - 03	3	04421 - 03	3	04426 - 03	3	04426 - 09	9
- 03.5	3.5	- 03.5	3.5	- 03.5	3.5	- 03.5	3.5	- 09.5	9.5
- 04	4	- 04	4	- 04	4	- 04	4	- 10	10
- 04.5	4.5	- 04.5	4.5	- 04.5	4.5	- 04.5	4.5	- 10.5	10.5
- 05	5	- 05	5	- 05	5	- 05	5	- 11	11
<b>INCHES</b>		- 05.5	5.5	- 05.5	5.5	- 05.5	5.5	- 11.5	11.5
04412 - 3/32	3/32	- 06	6	- 06	6	- 06	6	- 12	12
- 1/8	1/8	- 06.5	6.5	- 06.5	6.5	- 06.5	6.5	- 12.5	12.5
- 5/32	5/32	- 07	7	- 07	7	- 07	7	- 13	13
- 3/16	3/16	<b>INCHES</b>		- 07.5	7.5	- 07.5	7.5	- 13.5	13.5
- 7/32	7/32	04417 - 3/32	3/32	- 08	8	- 08	8	- 14	14
- 1/4	1/4	- 1/8	1/8	- 08.5	8.5	- 08.5	8.5		
		- 5/32	5/32	- 09	9	<b>INCHES</b>			
		- 3/16	3/16	<b>INCHES</b>		04426 - 7/32	7/32	04426 - 13/32	13/32
		- 7/32	7/32	04421 - 1/8	1/8	- 1/4	1/4	- 7/16	7/16
		- 1/4	1/4	- 5/32	5/32	- 9/32	9/32	- 15/32	15/32
		- 9/32	9/32	- 3/16	3/16	- 5/16	5/16	- 1/2	1/2
		- 5/16	5/16	- 7/32	7/32	- 11/32	11/32	- 17/32	17/32
				- 1/4	1/4	- 3/8	3/8	- 9/16	9/16
				- 9/32	9/32				
				- 5/16	5/16				
				- 11/32	11/32				
				- 3/8	3/8				

**Features:**

- ▶ Runout accuracy: 10um & UP class 5um.
- ▶ Surface roughness: Ra<0.25um.
- ▶ Used for cutting tools without coolant holes.
- ▶ Water pressure up to 100 kgf/cm<sup>2</sup>(1400PSI).
- ▶ Only for tool shank with h6 tolerance and no flexible chucking range.



# ERS COOLANT COLLET FOD TYPE

ERS 直溝出水筒夾 [FOD型]

(DIN ISO 15488)



ERS32-FOD			
MODEL NO.	SIZE	MODEL NO.	SIZE
04433 - 03	3	04433 - 12	12
- 03.5	3.5	- 12.5	12.5
- 04	4	- 13	13
- 04.5	4.5	- 13.5	13.5
- 05	5	- 14	14
- 05.5	5.5	- 14.5	14.5
- 06	6	- 15	15
- 06.5	6.5	- 15.5	15.5
- 07	7	- 16	16
- 07.5	7.5	- 16.5	16.5
- 08	8	- 17	17
- 08.5	8.5	- 17.5	17.5
- 09	9	- 18	18
- 09.5	9.5	- 18.5	18.5
- 10	10	- 19	19
- 10.5	10.5	- 19.5	19.5
- 11	11	- 20	20
- 11.5	11.5		

**INCHES**

04433 - 7/32	7/32	04433 - 1/2	1/2
- 1/4	1/4	- 17/32	17/32
- 9/32	9/32	- 9/16	9/16
- 5/16	5/16	- 19/32	19/32
- 11/32	11/32	- 5/8	5/8
- 3/8	3/8	- 21/32	21/32
- 13/32	13/32	- 11/16	11/16
- 7/16	7/16	- 23/32	23/32
- 15/32	15/32	- 3/4	3/4

ERS40-FOD			
MODEL NO.	SIZE	MODEL NO.	SIZE
04441 - 03	3	04441 - 15	15
- 03.5	3.5	- 15.5	15.5
- 04	4	- 16	16
- 04.5	4.5	- 16.5	16.5
- 05	5	- 17	17
- 05.5	5.5	- 17.5	17.5
- 06	6	- 18	18
- 06.5	6.5	- 18.5	18.5
- 07	7	- 19	19
- 07.5	7.5	- 19.5	19.5
- 08	8	- 20	20
- 08.5	8.5	- 20.5	20.5
- 09	9	- 21	21
- 09.5	9.5	- 21.5	21.5
- 10	10	- 22	22
- 10.5	10.5	- 22.5	22.5
- 11	11	- 23	23
- 11.5	11.5	- 23.5	23.5
- 12	12	- 24	24
- 12.5	12.5	- 24.5	24.5
- 13	13	- 25	25
- 13.5	13.5	- 25.5	25.5
- 14	14	- 26	26
- 14.5	14.5		

**INCHES**

04441 - 7/32	7/32	04441 - 17/32	17/32
- 1/4	1/4	- 9/16	9/16
- 9/32	9/32	- 19/32	19/32
- 5/16	5/16	- 5/8	5/8
- 11/32	11/32	- 21/32	21/32
- 3/8	3/8	- 11/16	11/16
- 13/32	13/32	- 23/32	23/32
- 7/16	7/16	- 3/4	3/4
- 15/32	15/32	- 7/8	7/8
- 1/2	1/2	- 1	1

**Features:**

- ▶ Runout accuracy: 10um & UP class 5um.
- ▶ Surface roughness: Ra<0.25um.
- ▶ Used for cutting tools without coolant holes.
- ▶ Water pressure up to 100 kgf/cm<sup>2</sup>(1400PSI).
- ▶ Only for tool shank with h6 tolerance and no flexible chucking range.



# ER-EO SEALED COLLET

ER-EO 止水筒夾

(DIN ISO 15488)



T W PAT NO. M285418

ER11EO		ER20EO		ER25EO		ER32EO		ER40EO			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
08311 - 03	3	08320 - 03	3	08325 - 03	3	08332 - 03	3	08340 - 03	3	08340 - 15	15
- 04	4	- 04	4	- 04	4	- 04	4	- 04	4	- 16	16
- 05	5	- 05	5	- 05	5	- 05	5	- 05	5	- 17	17
- 06	6	- 06	6	- 06	6	- 06	6	- 06	6	- 18	18
- 07	7	- 07	7	- 07	7	- 07	7	- 07	7	- 19	19
<b>INCHES</b>		- 08	8	- 08	8	- 08	8	- 08	8	- 20	20
08311 - 1/8	1/8	- 09	9	- 09	9	- 09	9	- 09	9	- 21	21
- 5/32	5/32	- 10	10	- 10	10	- 10	10	- 10	10	- 22	22
- 3/16	3/16	- 11	11	- 11	11	- 11	11	- 11	11	- 23	23
- 7/32	7/32	- 12	12	- 12	12	- 12	12	- 12	12	- 24	24
- 1/4	1/4	- 13	13	- 13	13	- 13	13	- 13	13	- 25	25
- 9/32	9/32	<b>INCHES</b>		- 14	14	- 14	14	- 14	14	- 26	26
<b>WEIGHT(KGS)</b>		08320 - 1/8	1/8	- 15	15	- 15	15	<b>INCHES</b>			
0.01		- 5/32	5/32	- 16	16	- 16	16	08340 - 1/8	1/8	08340 - 1/2	1/2
<b>ER16EO</b>		- 3/16	3/16	<b>INCHES</b>				- 5/32	5/32	- 17/32	17/32
<b>MODEL NO.</b>	<b>SIZE</b>	- 7/32	7/32	08325 - 1/8	1/8	- 17	17	- 3/16	3/16	- 9/16	9/16
08316 - 03	3	- 1/4	1/4	- 5/32	5/32	- 18	18	- 7/32	7/32	- 19/32	19/32
- 04	4	- 9/32	9/32	- 3/16	3/16	- 19	19	- 1/4	1/4	- 5/8	5/8
- 05	5	- 5/16	5/16	- 7/32	7/32	<b>INCHES</b>		- 9/32	9/32	- 21/32	21/32
- 06	6	- 11/32	11/32	- 1/4	1/4	08332 - 1/8	1/8	- 5/16	5/16	- 11/16	11/16
- 07	7	- 3/8	3/8	- 9/32	9/32	- 5/32	5/32	- 11/32	11/32	- 23/32	23/32
- 08	8	- 13/32	13/32	- 5/16	5/16	- 3/16	3/16	- 3/8	3/8	- 3/4	3/4
- 09	9	- 7/16	7/16	- 11/32	11/32	- 7/32	7/32	- 13/32	13/32	- 7/8	7/8
- 10	10	- 15/32	15/32	- 3/8	3/8	- 1/4	1/4	- 7/16	7/16	- 1	1
<b>INCHES</b>		- 1/2	1/2	- 13/32	13/32	- 9/32	9/32	- 15/32	15/32	<b>WEIGHT(KGS)</b>	
08316 - 1/8	1/8	<b>WEIGHT(KGS)</b>		- 7/16	7/16	- 5/16	5/16	0.25			
- 5/32	5/32	0.04		- 15/32	15/32	- 11/32	11/32				
- 3/16	3/16			- 1/2	1/2	- 3/8	3/8				
- 7/32	7/32			- 17/32	17/32	- 13/32	13/32				
- 1/4	1/4			- 9/16	9/16	- 7/16	7/16				
- 9/32	9/32			- 19/32	19/32	- 15/32	15/32				
- 5/16	5/16			- 5/8	5/8	- 1/2	1/2				
- 11/32	11/32			<b>WEIGHT(KGS)</b>		- 17/32	17/32				
- 3/8	3/8			0.06		- 9/16	9/16				
- 13/32	13/32					- 19/32	19/32				
<b>WEIGHT(KGS)</b>						- 5/8	5/8				
0.03						- 21/32	21/32				
						- 11/16	11/16				
						- 23/32	23/32				
						- 3/4	3/4				
						<b>WEIGHT(KGS)</b>					
						0.1					

**Features:**

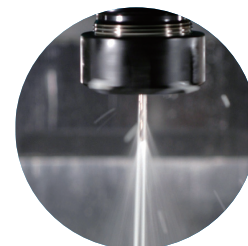
- ▶ Used for coolant-through cutting tools.
- ▶ The design is to use O-rings to seal and achieve coolant through tools.
- ▶ Water pressure up to 50 kgf/cm<sup>2</sup>.
- ▶ Patent-owned.



# ER COOLANT COLLET FID TYPE

ER - FID 出水筒夾

(DIN ISO 15488)



T W PAT NO. M362073

ER16 - FID		ER25 - FID		ER32 - FID		ER40 - FID			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
202.126.16.03	3	202.126.25.03	3	202.126.32.03	3	202.126.40.04	4	202.126.40.16	16
.04	4	.04	4	.04	4	.05	5	.17	17
.05	5	.05	5	.05	5	.06	6	.18	18
.06	6	.06	6	.06	6	.07	7	.19	19
.07	7	.07	7	.07	7	.08	8	.20	20
<b>INCHES</b>		.08	8	.08	8	.09	9	.21	21
202.126.16.1/8	1/8	.09	9	.09	9	.10	10	.22	22
.5/32	5/32	.10	10	.10	10	.11	11	.23	23
.3/16	3/16	.11	11	.11	11	.12	12	.24	24
.7/32	7/32	.12	12	.12	12	.13	13	.25	25
.1/4	1/4	.13	13	.13	13	.14	14	.26	26
.9/32	9/32	.14	14	.14	14	.15	15		
.5/16	5/16	<b>INCHES</b>		.15	15	<b>INCHES</b>			
<b>WEIGHT(KGS)</b>		202.126.25.1/8	1/8	.16	16	202.126.40.5/32	5/32	202.126.40.1/2	1/2
0.03		.5/32	5/32	.17	17	.3/16	3/16	.17/32	17/32
<b>ER20 - FID</b>		.3/16	3/16	.18	18	.7/32	7/32	.9/16	9/16
MODEL NO.	SIZE	.7/32	7/32	.19	19	.1/4	1/4	.19/32	19/32
202.126.20.03	3	.1/4	1/4	.20	20	.9/32	9/32	.5/8	5/8
.04	4	.9/32	9/32	<b>INCHES</b>		.5/16	5/16	.21/32	21/32
.05	5	.5/16	5/16	202.126.32.1/8	1/8	.11/32	11/32	.11/16	11/16
.06	6	.11/32	11/32	.5/32	5/32	.3/8	3/8	.23/32	23/32
.07	7	.3/8	3/8	.3/16	3/16	.13/32	13/32	.3/4	3/4
.08	8	.13/32	13/32	.7/32	7/32	.7/16	7/16	.7/8	7/8
.09	9	.7/16	7/16	.1/4	1/4	.15/32	15/32	.1	1
<b>INCHES</b>		.15/32	15/32	.9/32	9/32	<b>WEIGHT(KGS)</b>			
202.126.20.1/8	1/8	.1/2	1/2	.5/16	5/16	0.25			
.5/32	5/32	.17/32	17/32	.11/32	11/32				
.3/16	3/16	.9/16	9/16	.3/8	3/8				
.7/32	7/32	<b>WEIGHT(KGS)</b>		.13/32	13/32				
.1/4	1/4	0.06		.7/16	7/16				
.9/32	9/32			.15/32	15/32				
.5/16	5/16			.1/2	1/2				
.11/32	11/32			.17/32	17/32				
.3/8	3/8			.9/16	9/16				
<b>WEIGHT(KGS)</b>				.19/32	19/32				
0.04				.5/8	5/8				
				.21/32	21/32				
				.11/16	11/16				
				.23/32	23/32				
				.3/4	3/4				
				<b>WEIGHT(KGS)</b>					
				0.1					

**Features:** ▶ The design of coolant grooves is good for cooling and metal chips removal, extending tool life.  
▶ Water pressure up to 50kgf/cm<sup>2</sup>. ▶ Used for cutting tools without coolant holes.



# ER COOLANT COLLET FOD TYPE

ER - FOD 出水筒夾

(DIN ISO 15488)



T W PAT NO. M337439  
C N PAT NO. ZL200720007536.1  
C N PAT NO. ZL200820102788.7

ER16 - FOD	
MODEL NO.	SIZE
202.127.16.03	3
.04	4
.05	5
.06	6
.07	7

INCHES

202.127.16.1/8	1/8
.5/32	5/32
.3/16	3/16
.7/32	7/32
.1/4	1/4
.9/32	9/32
.5/16	5/16

WEIGHT(KGS)

0.03

ER20 - FOD	
MODEL NO.	SIZE
202.127.20.03	3
.04	4
.05	5
.06	6
.07	7
.08	8
.09	9

INCHES

202.127.20.1/8	1/8
.5/32	5/32
.3/16	3/16
.7/32	7/32
.1/4	1/4
.9/32	9/32
.5/16	5/16
.11/32	11/32
.3/8	3/8

WEIGHT(KGS)

0.04

ER25 - FOD	
MODEL NO.	SIZE
202.127.25.03	3
.04	4
.05	5
.06	6
.07	7
.08	8
.09	9
.10	10
.11	11
.12	12
.13	13
.14	14

INCHES

202.127.25.1/8	1/8
.5/32	5/32
.3/16	3/16
.7/32	7/32
.1/4	1/4
.9/32	9/32
.5/16	5/16
.11/32	11/32
.3/8	3/8
.13/32	13/32
.7/16	7/16
.15/32	15/32
.1/2	1/2
.17/32	17/32
.9/16	9/16

WEIGHT(KGS)

0.06

ER32 - FOD	
MODEL NO.	SIZE
202.127.32.03	3
.04	4
.05	5
.06	6
.07	7
.08	8
.09	9
.10	10
.11	11
.12	12
.13	13
.14	14
.15	15
.16	16
.17	17
.18	18
.19	19
.20	20

INCHES

202.127.32.1/8	1/8
.5/32	5/32
.3/16	3/16
.7/32	7/32
.1/4	1/4
.9/32	9/32
.5/16	5/16
.11/32	11/32
.3/8	3/8
.13/32	13/32
.7/16	7/16
.15/32	15/32
.1/2	1/2
.17/32	17/32
.9/16	9/16
.5/8	5/8
.21/32	21/32
.11/16	11/16
.23/32	23/32
.3/4	3/4

WEIGHT(KGS)

0.1

ER40 - FOD			
MODEL NO.	SIZE	MODEL NO.	SIZE
202.127.40.04	4	202.127.40.16	16
.05	5	.17	17
.06	6	.18	18
.07	7	.19	19
.08	8	.20	20
.09	9	.21	21
.10	10	.22	22
.11	11	.23	23
.12	12	.24	24
.13	13	.25	25
.14	14	.26	26
.15	15		

INCHES

202.127.40.5/32	5/32	202.127.40.1/2	1/2
.3/16	3/16	.17/32	17/32
.7/32	7/32	.9/16	9/16
.1/4	1/4	.19/32	19/32
.9/32	9/32	.5/8	5/8
.5/16	5/16	.21/32	21/32
.11/32	11/32	.11/16	11/16
.3/8	3/8	.23/32	23/32
.13/32	13/32	.3/4	3/4
.7/16	7/16	.7/8	7/8
.15/32	15/32	.1	1

WEIGHT(KGS)

0.25

ER50 - FOD			
MODEL NO.	SIZE	MODEL NO.	SIZE
202.127.50.06	6	202.127.50.21	21
.07	7	.22	22
.08	8	.23	23
.09	9	.24	24
.10	10	.25	25
.11	11	.26	26
.12	12	.27	27
.13	13	.28	28
.14	14	.29	29
.15	15	.30	30
.16	16	.31	31
.17	17	.32	32
.18	18	.33	33
.19	19	.34	34
.20	20		

INCHES

202.127.50.1/4	1/4	202.127.50.5/8	5/8
.9/32	9/32	.21/32	21/32
.5/16	5/16	.11/16	11/16
.11/32	11/32	.23/32	23/32
.3/8	3/8	.3/4	3/4
.13/32	13/32	.7/8	7/8
.7/16	7/16	.1	1
.15/32	15/32	.1-1/16	1-1/16
.1/2	1/2	.1-1/8	1-1/8
.17/32	17/32	.1-3/16	1-3/16
.9/16	9/16	.1-1/4	1-1/4
.19/32	19/32	.1-5/16	1-5/16

WEIGHT(KGS)

0.45

**Features:**

- ▶ The design of coolant holes is good for cooling and metal chips removal, extending tool life.
- ▶ Water pressure up to 50kgf/cm<sup>2</sup>.
- ▶ Used for cutting tools without coolant holes.



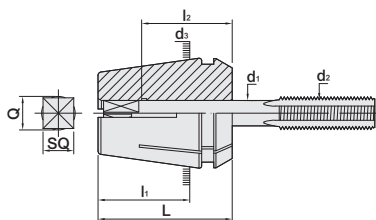
# ER - TC RIGID TAP COLLET

ER 鋼性攻牙筒夾

(DIN ISO 15488)



台灣精品 2007  
TAIWAN EXCELLENCE



T W PAT NO. M148435  
T W PAT NO. M333253  
C H PAT NO. 693702  
C N PAT NO. ZL200820102787.2

TYPE	d <sub>3</sub>	L	l <sub>1</sub>	CAPACITY	WEIGHT (KGS)
ER 16	16	27.5	17.5	M3 ~ M12	0.02
ER 20	20	31.5	20.7	M3 ~ M17	0.04
ER 25	25	34	23	M3 ~ M22	0.06
ER 32	32	40	27.34	M3 ~ M27	0.14
ER 40	40	46	31.34	M3 ~ M27	0.24
ER 50	50	60	38.9	M10 ~ M33	0.44

## ER - TC16

MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
05322	2.24	2	M3	1.8	18	ISO-529	05342	6	5.09	M5	4.9	18	DIN-352
05324	2.5	2.2	M3.5	2.1	18	DIN-376	05342	6	5.09	M5	4.9	18	DIN-371
05324	2.5	2.2	M3.5	2	18	ISO-529	05342	6	5.09	M6	4.5	18	JIS
05326	2.8	2.6	M4	2.1	18	DIN-376	05342	6	5.09	M6	4.9	18	DIN-352
05328	3.15	2.9	M3	2.5	18	ISO-529	05342	6	5.09	M6	4.9	18	DIN-371
05328	3.15	2.9	M4	2.5	18	ISO-529	05342	6	5.09	M8	4.9	18	DIN-352
05330	3.5	3.3	M3	2.7	18	DIN-352	05342	6	5.09	M8	4.9	18	DIN-376
05330	3.5	3.3	M3	2.7	18	DIN-371	05344	6.2	5.21	M7	5	18	JIS
05332	3.55	3.3	M3.5	2.8	18	ISO-529	05344	6.2	5.21	M8	5	18	JIS
05332	3.55	3.3	M4.5	2.8	18	ISO-529	05346	6.3	5.21	M6	5	18	ISO-529
05334	4	3.8	M3	3.2	18	JIS	05346	6.3	5.21	M8	5	18	ISO-529
05334	4	3.8	M3.5	3	18	DIN-352	05348	7	5.84	M9	5.5	18	JIS
05334	4	3.8	M3.5	3	18	DIN-371	05348	7	5.84	M10	5.5	18	JIS
05334	4	3.8	M4	3.15	18	ISO-529	05348	7	5.84	M10	5.5	18	DIN-352
05334	4	3.8	M5	3.15	18	ISO-529	05348	7	5.84	M10	5.5	18	DIN-376
05336	4.5	4.0	M4	3.4	18	DIN-352	05350	8	6.88	M8	6.2	22	DIN-371
05336	4.5	4	M4	3.4	18	DIN-371	05350	8	6.88	M8	6.3	22	ISO-529
05336	4.5	4	M6	3.4	18	DIN-376	05350	8	6.88	M10	6.3	22	ISO-529
05336	4.5	4	M6	3.55	18	ISO-529	05350	8	6.88	M11	6	22	JIS
05338	5	4.7	M4	4	18	JIS	05352	8.5	7.14	M12	6.5	22	JIS
05338	5	4.7	M4.5	4	18	JIS	05354	9	7.95	M12	7	22	DIN-352
05338	5	4.7	M5	4	18	ISO-529	05354	9	7.95	M12	7	22	DIN-376
05340	5.5	4.73	M5	4.5	18	JIS	05354	9	7.95	M12	7.1	22	ISO-529
05340	5.5	4.73	M5.5	4.5	18	JIS	05356	10	9.16	M10	8	22	DIN-371
							05356	10	9.16	M10	8	22	ISO-529

## INCHES

05320 - 168	0.168	0.151	5/32	0.131	0.709	-	05320 - 220	0.220	0.198	7/32	0.165	0.709	-
05320 - 194	0.194	0.180	3/16	0.152	0.709	-	05320 - 255	0.255	0.198	1/4	0.191	0.709	-

## ER - TC20

MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
05412	2.24	2	M3	1.8	18	ISO-529	05434	6	5.09	M8	4.9	18	DIN-352
05416	2.5	2.2	M3.5	2.1	18	DIN-376	05434	6	5.09	M8	4.9	18	DIN-376
05416	2.5	2.2	M3.5	2	18	ISO-529	05436	6.2	5.21	M7	5	18	JIS
05418	2.8	2.6	M4	2.1	18	DIN-376	05436	6.2	5.21	M8	5	18	JIS
05420	3.15	2.9	M3	2.5	18	ISO-529	05438	6.3	5.21	M6	5	18	ISO-529
05420	3.15	2.9	M4	2.5	18	ISO-529	05438	6.3	5.21	M8	5	18	ISO-529
05422	3.5	3.3	M3	2.7	18	DIN-352	05440	7	5.84	M9	5.5	18	JIS
05422	3.5	3.3	M3	2.7	18	DIN-371	05440	7	5.84	M10	5.5	18	JIS
05422	3.5	3.3	M5	2.7	18	DIN-376	05440	7	5.84	M10	5.5	18	DIN-352
05424	3.55	3.3	M3.5	2.8	18	ISO-529	05440	7	5.84	M10	5.5	18	DIN-376
05424	3.55	3.3	M4.5	2.8	18	ISO-529	05442	8	6.88	M8	6.2	22	DIN-371
05426	4	3.8	M3	3.2	18	JIS	05442	8	6.88	M8	6.3	22	ISO-529
05426	4	3.8	M3.5	3	18	DIN-352	05442	8	6.88	M10	6.3	22	ISO-529
05426	4	3.8	M3.5	3	18	DIN-371	05442	8	6.88	M11	6	22	JIS
05426	4	3.8	M4	3.15	18	ISO-529	05444	8.5	7.14	M12	6.5	22	JIS
05426	4	3.8	M5	3.15	18	ISO-529	05446	9	7.95	M12	7	22	DIN-352
05428	4.5	4.0	M4	3.4	18	DIN-352	05446	9	7.95	M12	7	22	DIN-376
05428	4.5	4.0	M4	3.4	18	DIN-371	05446	9	7.95	M12	7.1	22	ISO-529
05428	4.5	4.0	M6	3.4	18	DIN-376	05448	10	9.16	M10	8	22	DIN-371
05428	4.5	4.0	M6	3.55	18	ISO-529	05448	10	9.16	M10	8	22	ISO-529
05430	5	4.7	M4	4	18	JIS	05450	10.5	9.16	M14	8	25	JIS
05430	5	4.7	M4.5	4	18	JIS	05450	10.5	9.16	M15	8	25	JIS
05430	5	4.7	M5	4	18	ISO-529	05452	11	10.53	M14	9	25	DIN-352
05432	5.5	4.73	M5	4.5	18	JIS	05452	11	10.53	M14	9	25	DIN-376
05432	5.5	4.73	M5.5	4.5	18	JIS	05454	11.2	10.53	M14	9	25	ISO-529
05434	6	5.09	M5	4.9	18	DIN-352	05456	12	10.53	M16	9	25	DIN-352
05434	6	5.09	M5	4.9	18	DIN-371	05456	12	10.53	M16	9	25	DIN-376
05434	6	5.09	M6	4.5	18	JIS	05458	12.5	11.91	M16	10	25	JIS
05434	6	5.09	M6	4.9	18	DIN-352	05458	12.5	11.91	M16	10	25	ISO-529
05434	6	5.09	M6	4.9	18	DIN-371	05460	13	11.91	M17	10	25	JIS

## INCHES

05410 - 168	0.168	0.151	5/32	0.131	0.709	-	05410 - 323	0.323	0.263	7/16	0.242	0.866	-
05410 - 194	0.194	0.180	3/16	0.152	0.709	-	05410 - 367	0.367	0.307	1/2	0.275	0.866	-
05410 - 220	0.220	0.198	7/32	0.165	0.709	-	05410 - 381	0.381	0.321	3/8	0.286	0.866	-
05410 - 255	0.255	0.198	1/4	0.191	0.709	-	05410 - 429	0.429	0.37	9/16	0.322	0.984	-
05410 - 318	0.318	0.258	5/16	0.238	0.866	-							



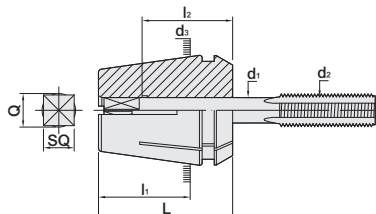
# ER - TC RIGID TAP COLLET

ER 鋼性攻牙筒夾

(DIN ISO 15488)



台灣精品 2007  
TAIWAN EXCELLENCE



TYPE	d <sub>3</sub>	L	l <sub>1</sub>	CAPACITY	WEIGHT (KGS)
ER 16	16	27.5	17.5	M3 ~ M12	0.02
ER 20	20	31.5	20.7	M3 ~ M17	0.04
ER 25	25	34	23	M3 ~ M22	0.06
ER 32	32	40	27.34	M3 ~ M27	0.14
ER 40	40	46	31.34	M3 ~ M27	0.24
ER 50	50	60	38.9	M10 ~ M33	0.44

T W PAT NO. M148435  
T W PAT NO. M333253  
C H PAT NO. 693702  
C N PAT NO. ZL200820102787.2

## ER - TC25

MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
05512	2.24	2	M3	1.8	18	ISO-529	05538	6.3	5.21	M8	5	18	ISO-529
05514	2.5	2.2	M3.5	2.1	18	DIN-376	05540	7	5.84	M9	5.5	18	JIS
05514	2.5	2.2	M3.5	2	18	ISO-529	05540	7	5.84	M10	5.5	18	JIS
05516	2.8	2.6	M4	2.1	18	DIN-376	05540	7	5.84	M10	5.5	18	DIN-352
05518	3.15	2.9	M3	2.5	18	ISO-529	05540	7	5.84	M10	5.5	18	DIN-376
05518	3.15	2.9	M4	2.5	18	ISO-529	05542	8	6.88	M8	6.2	22	DIN-371
05520	3.5	3.3	M3	2.7	18	DIN-352	05542	8	6.88	M8	6.3	22	ISO-529
05520	3.5	3.3	M3	2.7	18	DIN-371	05542	8	6.88	M10	6.3	22	ISO-529
05520	3.5	3.3	M5	2.7	18	DIN-376	05542	8	6.88	M11	6	22	JIS
05522	3.55	3.3	M3.5	2.8	18	ISO-529	05546	8.5	7.14	M12	6.5	22	JIS
05522	3.55	3.3	M4.5	2.8	18	ISO-529	05548	9	7.95	M12	7	22	DIN-352
05524	4	3.8	M3	3.2	18	JIS	05548	9	7.95	M12	7	22	DIN-376
05524	4	3.8	M3.5	3	18	DIN-352	05548	9	7.95	M12	7.1	22	ISO-529
05524	4	3.8	M3.5	3	18	DIN-371	05550	10	9.16	M10	8	22	DIN-371
05524	4	3.8	M4	3.15	18	ISO-529	05550	10	9.16	M10	8	22	ISO-529
05524	4	3.8	M5	3.15	18	ISO-529	05552	10.5	9.16	M14	8	25	JIS
05526	4.5	4.0	M4	3.4	18	DIN-352	05552	10.5	9.16	M15	8	25	JIS
05526	4.5	4.0	M4	3.4	18	DIN-371	05554	11	10.53	M14	9	25	DIN-352
05526	4.5	4.0	M6	3.4	18	DIN-376	05554	11	10.53	M14	9	25	DIN-376
05526	4.5	4.0	M6	3.55	18	ISO-529	05556	11.2	10.53	M14	9	25	ISO-529
05530	5	4.7	M4	4	18	JIS	05558	12	10.53	M16	9	25	DIN-352
05530	5	4.7	M4.5	4	18	JIS	05558	12	10.53	M16	9	25	DIN-376
05530	5	4.7	M5	4	18	ISO-529	05560	12.5	11.91	M16	10	25	JIS
05532	5.5	4.73	M5	4.5	18	JIS	05560	12.5	11.91	M16	10	25	ISO-529
05532	5.5	4.73	M5.5	4.5	18	JIS	05562	13	11.91	M17	10	25	JIS
05534	6	5.09	M5	4.9	18	DIN-352	05564	14	12.97	M18	11	25	JIS
05534	6	5.09	M5	4.9	18	DIN-371	05564	14	12.97	M18	11	25	DIN-352
05534	6	5.09	M6	4.5	18	JIS	05564	14	12.97	M18	11	25	DIN-376
05534	6	5.09	M6	4.9	18	DIN-352	05564	14	12.97	M18	11.2	25	ISO-529
05534	6	5.09	M6	4.9	18	DIN-371	05564	14	12.97	M20	11.2	25	ISO-529
05534	6	5.09	M8	4.9	18	DIN-352	05566	15	14.06	M20	12	25	JIS
05534	6	5.09	M8	4.9	18	DIN-376	05568	16	14.8	M20	12	25	DIN-352
05536	6.2	5.21	M7	5	18	JIS	05568	16	14.8	M20	12	25	DIN-376
05536	6.2	5.21	M8	5	18	JIS	05568	16	14.8	M22	12.5	25	ISO-529
05538	6.3	5.21	M6	5	18	ISO-529							

## INCHES

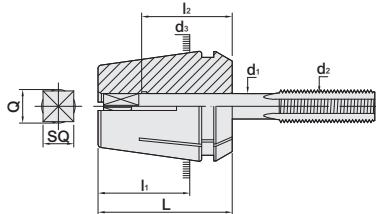
05510 - 168	0.168	0.151	5/32	0.131	0.709	-	05510 - 367	0.367	0.307	1/2	0.275	0.866	-
05510 - 194	0.194	0.180	3/16	0.152	0.709	-	05510 - 381	0.381	0.321	3/8	0.286	0.866	-
05510 - 220	0.220	0.198	7/32	0.165	0.709	-	05510 - 429	0.429	0.370	9/16	0.322	0.984	-
05510 - 255	0.255	0.198	1/4	0.191	0.709	-	05510 - 437	0.437	0.378	1/8 PT	0.328	0.984	-
05510 - 318	0.318	0.258	5/16	0.238	0.866	-	05510 - 480	0.480	0.422	5/8	0.360	0.984	-
05510 - 323	0.323	0.263	7/16	0.242	0.866	-							



## ER - TC RIGID TAP COLLET



台灣精品2007  
TAIWAN EXCELLENCE



ER 鋼性攻牙筒夾

(DIN ISO 15488)

TW PAT NO. M148435  
TW PAT NO. M333253  
CH PAT NO. 693702  
CN PAT NO. ZL200820102787.2

ER - TC32  
METRIC

TYPE	d <sub>3</sub>	L	l <sub>1</sub>	CAPACITY	WEIGHT (KGS)
ER 16	16	27.5	17.5	M3 ~ M12	0.02
ER 20	20	31.5	20.7	M3 ~ M17	0.04
ER 25	25	34	23	M3 ~ M22	0.06
ER 32	32	40	27.34	M3 ~ M27	0.14
ER 40	40	46	31.34	M3 ~ M27	0.24
ER 50	50	60	38.9	M10 ~ M33	0.44

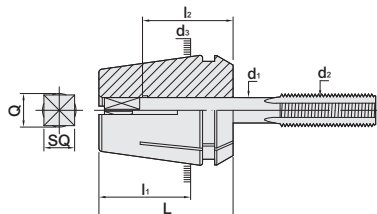
MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
05572	2.24	2	M3	1.8	18	ISO-529	05598	7	5.84	M10	5.5	18	DIN-376
05574	2.5	2.2	M3.5	2.1	18	DIN-376	05600	8	6.88	M8	6.2	22	DIN-371
05574	2.5	2.2	M3.5	2	18	ISO-529	05600	8	6.88	M8	6.3	22	ISO-529
05576	2.8	2.6	M4	2.1	18	DIN-376	05600	8	6.88	M10	6.3	22	ISO-529
05578	3.15	2.9	M3	2.5	18	ISO-529	05600	8	6.88	M11	6	22	JIS
05578	3.15	2.9	M4	2.5	18	ISO-529	05602	8.5	7.14	M12	6.5	22	JIS
05580	3.5	3.3	M3	2.7	18	DIN-352	05604	9	7.95	M12	7	22	DIN-352
05580	3.5	3.3	M3	2.7	18	DIN-371	05604	9	7.95	M12	7	22	DIN-376
05580	3.5	3.3	M5	2.7	18	DIN-376	05604	9	7.95	M12	7.1	22	ISO-529
05582	3.55	3.3	M3.5	2.8	18	ISO-529	05606	10	9.16	M10	8	22	DIN-371
05582	3.55	3.3	M4.5	2.8	18	ISO-529	05606	10	9.16	M10	8	22	ISO-529
05584	4	3.8	M3	3.2	18	JIS	05608	10.5	9.16	M14	8	25	JIS
05584	4	3.8	M3.5	3	18	DIN-352	05608	10.5	9.16	M15	8	25	JIS
05584	4	3.8	M3.5	3	18	DIN-371	05610	11	10.53	M14	9	25	DIN-352
05584	4	3.8	M4	3.15	18	ISO-529	05610	11	10.53	M14	9	25	DIN-376
05584	4	3.8	M5	3.15	18	ISO-529	05612	11.2	10.53	M14	9	25	ISO-529
05586	4.5	4.0	M4	3.4	18	DIN-352	05614	12	10.53	M16	9	25	DIN-352
05586	4.5	4.0	M4	3.4	18	DIN-371	05614	12	10.53	M16	9	25	DIN-376
05586	4.5	4.0	M6	3.4	18	DIN-376	05616	12.5	11.91	M16	10	25	JIS
05586	4.5	4.0	M6	3.55	18	ISO-529	05616	12.5	11.91	M16	10	25	ISO-529
05588	5	4.7	M4	4	18	JIS	05618	13	11.91	M17	10	25	JIS
05588	5	4.7	M4.5	4	18	JIS	05620	14	12.97	M18	11	25	JIS
05588	5	4.7	M5	4	18	ISO-529	05620	14	12.97	M18	11	25	DIN-352
05590	5.5	4.73	M5	4.5	18	JIS	05620	14	12.97	M18	11	25	DIN-376
05590	5.5	4.73	M5.5	4.5	18	JIS	05620	14	12.97	M18	11.2	25	ISO-529
05592	6	5.09	M5	4.9	18	DIN-352	05620	14	12.97	M20	11.2	25	ISO-529
05592	6	5.09	M5	4.9	18	DIN-371	05622	15	14.06	M20	12	25	JIS
05592	6	5.09	M6	4.5	18	JIS	05624	16	14.8	M20	12	25	DIN-352
05592	6	5.09	M6	4.9	18	DIN-352	05624	16	14.8	M20	12	25	DIN-376
05592	6	5.09	M6	4.9	18	DIN-371	05624	16	14.8	M22	12.5	25	ISO-529
05592	6	5.09	M8	4.9	18	DIN-352	05626	17	15.44	M22	13	28	JIS
05592	6	5.09	M8	4.9	18	DIN-376	05628	18	17.52	M22	14.5	28	DIN-352
05594	6.2	5.21	M7	5	18	JIS	05628	18	17.52	M22	14.5	28	DIN-376
05594	6.2	5.21	M8	5	18	JIS	05628	18	17.52	M24	14.5	28	DIN-352
05596	6.3	5.21	M6	5	18	ISO-529	05628	18	17.52	M24	14.5	28	DIN-376
05596	6.3	5.21	M8	5	18	ISO-529	05628	18	17.52	M24	14	28	ISO-529
05598	7	5.84	M9	5.5	18	JIS	05630	19	18.22	M24	15	28	JIS
05598	7	5.84	M10	5.5	18	JIS	05630	19	18.22	M25	15	28	JIS
05598	7	5.84	M10	5.5	18	DIN-352	05632	20	19.61	M26	15	28	JIS
05598	7	5.84	M10	5.5	18	DIN-352	05632	20	19.61	M27	15	28	JIS



# ER - TC RIGID TAP COLLET

ER 鋼性攻牙筒夾

(DIN ISO 15488)



TW PAT NO. M148435  
 TW PAT NO. M333253  
 CH PAT NO. 693702  
 CN PAT NO. ZL200820102787.2

TYPE	d <sub>3</sub>	L	l <sub>1</sub>	CAPACITY	WEIGHT (KGS)
ER 16	16	27.5	17.5	M3 ~ M12	0.02
ER 20	20	31.5	20.7	M3 ~ M17	0.04
ER 25	25	34	23	M3 ~ M22	0.06
ER 32	32	40	27.34	M3 ~ M27	0.14
ER 40	40	46	31.34	M3 ~ M27	0.24
ER 50	50	60	38.9	M10 ~ M33	0.44

## ER - TC32 INCHES

MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>
05570 - 168	0.168	0.151	5/32	0.131	0.709	05570 - 429	0.429"	0.370"	9/16	0.322"	0.984
- 194	0.194	0.180	3/16	0.152	0.709	- 437	0.437"	0.378"	1/8 PT	0.328"	1.102
- 220	0.220	0.198	7/32	0.165	0.709	- 480	0.480"	0.422"	5/8	0.360"	1.102
- 255	0.255	0.198	1/4	0.191	0.709	- 542	0.542"	0.486"	11/16	0.406"	1.102
- 318	0.318	0.258	5/16	0.238	0.866	- 562	0.562"	0.483"	1/4 PT	0.421"	1.102
- 323	0.323	0.263	7/16	0.242	0.866	- 590	0.590"	0.512"	3/4	0.442"	1.102
- 367	0.367	0.307	1/2	0.275	0.866	- 652	0.652"	0.576"	13/16	0.489"	1.102
- 381	0.381	0.321	3/8	0.286	0.866						

### Features:

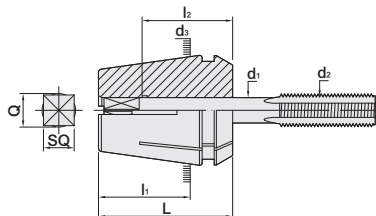
- ▶ To clamp a tap by the slots size differential.
- ▶ This product is workable as long as d<sub>1</sub> size (shank dia. of tap) matches collet ID (patented design).
- ▶ When making an order, please inform collet type and the size of d<sub>1</sub> (shank dia. of tap).



## ER - TC RIGID TAP COLLET

ER 鋼性攻牙筒夾

(DIN ISO 15488)



T W PAT NO. M148435  
T W PAT NO. M333253  
C H PAT NO. 693702  
C N PAT NO. ZL200820102787.2

TYPE	d <sub>3</sub>	L	l <sub>1</sub>	CAPACITY	WEIGHT (KGS)
ER 16	16	27.5	17.5	M3 ~ M12	0.03
ER 20	20	31.5	20.7	M3 ~ M17	0.04
ER 25	25	34	23	M3 ~ M22	0.06
ER 32	32	40	27.34	M3 ~ M27	0.10
ER 40	40	46	31.34	M3 ~ M27	0.25
ER 50	50	60	38.9	M10 ~ M33	0.45

## ER - TC40

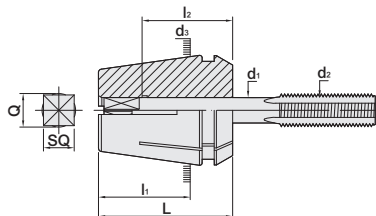
MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
05712	2.24	2	M3	1.8	18	ISO-529	05738	7	5.84	M10	5.5	18	DIN-376
05714	2.5	2.2	M3.5	2.1	18	DIN-376	05740	8	6.88	M8	6.2	22	DIN-371
05714	2.5	2.2	M3.5	2	18	ISO-529	05740	8	6.88	M8	6.3	22	ISO-529
05716	2.8	2.6	M4	2.1	18	DIN-376	05740	8	6.88	M10	6.3	22	ISO-529
05718	3.15	2.9	M3	2.5	18	ISO-529	05740	8	6.88	M11	6	22	JIS
05718	3.15	2.9	M4	2.5	18	ISO-529	05742	8.5	7.14	M12	6.5	22	JIS
05720	3.5	3.3	M3	2.7	18	DIN-352	05744	9	7.95	M12	7	22	DIN-352
05720	3.5	3.3	M3	2.7	18	DIN-371	05744	9	7.95	M12	7	22	DIN-376
05720	3.5	3.3	M5	2.7	18	DIN-376	05744	9	7.95	M12	7.1	22	ISO-529
05722	3.55	3.3	M3.5	2.8	18	ISO-529	05746	10	9.16	M10	8	22	DIN-371
05722	3.55	3.3	M4.5	2.8	18	ISO-529	05746	10	9.16	M10	8	22	ISO-529
05724	4	3.8	M3	3.2	18	JIS	05748	10.5	9.16	M14	8	25	JIS
05724	4	3.8	M3.5	3	18	DIN-352	05748	10.5	9.16	M15	8	25	JIS
05724	4	3.8	M3.5	3	18	DIN-371	05750	11	10.53	M14	9	25	DIN-352
05724	4	3.8	M4	3.15	18	ISO-529	05750	11	10.53	M14	9	25	DIN-376
05724	4	3.8	M5	3.15	18	ISO-529	05752	11.2	10.53	M14	9	25	ISO-529
05726	4.5	4	M4	3.4	18	DIN-352	05754	12	10.53	M16	9	25	DIN-352
05726	4.5	4	M4	3.4	18	DIN-371	05754	12	10.53	M16	9	25	DIN-376
05726	4.5	4	M6	3.4	18	DIN-376	05756	12.5	11.91	M16	10	25	JIS
05726	4.5	4	M6	3.55	18	ISO-529	05756	12.5	11.91	M16	10	25	ISO-529
05728	5	4.7	M4	4	18	JIS	05758	13	11.91	M17	10	25	JIS
05728	5	4.7	M4.5	4	18	JIS	05760	14	12.97	M18	11	25	JIS
05728	5	4.7	M5	4	18	ISO-529	05760	14	12.97	M18	11	25	DIN-352
05730	5.5	4.73	M5	4.5	18	JIS	05760	14	12.97	M18	11	25	DIN-376
05730	5.5	4.73	M5.5	4.5	18	JIS	05760	14	12.97	M18	11.2	25	ISO-529
05732	6	5.09	M5	4.9	18	DIN-352	05760	14	12.97	M20	11.2	25	ISO-529
05732	6	5.09	M5	4.9	18	DIN-371	05762	15	14.06	M20	12	25	JIS
05732	6	5.09	M6	4.5	18	JIS	05764	16	14.8	M20	12	25	DIN-352
05732	6	5.09	M6	4.9	18	DIN-352	05764	16	14.8	M20	12	25	DIN-376
05732	6	5.09	M6	4.9	18	DIN-371	05764	16	14.8	M22	12.5	25	ISO-529
05732	6	5.09	M8	4.9	18	DIN-352	05766	17	15.44	M22	13	28	JIS
05732	6	5.09	M8	4.9	18	DIN-376	05768	18	17.52	M22	14.5	28	DIN-352
05734	6.2	5.21	M7	5	18	JIS	05768	18	17.52	M22	14.5	28	DIN-376
05734	6.2	5.21	M8	5	18	JIS	05768	18	17.52	M24	14.5	28	DIN-352
05736	6.3	5.21	M6	5	18	ISO-529	05768	18	17.52	M24	14.5	28	DIN-376
05736	6.3	5.21	M8	5	18	ISO-529	05768	18	17.52	M24	14	28	ISO-529
05738	7	5.84	M9	5.5	18	JIS	05770	19	18.22	M24	15	28	JIS
05738	7	5.84	M10	5.5	18	JIS	05770	19	18.22	M25	15	28	JIS
05738	7	5.84	M10	5.5	18	DIN-352	05772	20	19.61	M26	15	28	JIS
05738	7	5.84	M10	5.5	18	DIN-352	05772	20	19.61	M27	15	28	JIS



# ER - TC RIGID TAP COLLET

ER 鋼性攻牙筒夾

(DIN ISO 15488)



T W PAT NO. M148435  
 T W PAT NO. M333253  
 C H PAT NO. 693702  
 C N PAT NO. ZL200820102787.2

TYPE	d <sub>3</sub>	L	l <sub>1</sub>	CAPACITY	WEIGHT (KGS)
ER 16	16	27.5	17.5	M3 ~ M12	0.03
ER 20	20	31.5	20.7	M3 ~ M17	0.04
ER 25	25	34	23	M3 ~ M22	0.06
ER 32	32	40	27.34	M3 ~ M27	0.10
ER 40	40	46	31.34	M3 ~ M27	0.25
ER 50	50	60	38.9	M10 ~ M33	0.45

## ER - TC40 INCHES

MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>
05710 - 255	0.255"	0.198"	1/4	0.191"	0.709	05710 - 562	0.562"	0.483"	1/4 PT	0.421"	0.984
- 318	0.318"	0.258"	5/16	0.238"	0.866	- 590	0.590"	0.512"	3/4	0.442"	0.984
- 323	0.323"	0.263"	7/16	0.242"	0.866	- 652	0.652"	0.576"	13/16	0.489"	0.984
- 367	0.367"	0.307"	1/2	0.275"	0.866	- 687	0.687"	0.612"	1/2 PT	0.515"	0.984
- 381	0.381"	0.321"	3/8	0.286"	0.866	- 697	0.697"	0.623"	7/8	0.523"	0.984
- 429	0.429"	0.370"	9/16	0.322"	0.984	- 700	0.700"	0.634"	3/8 PT	0.531"	0.984
- 437	0.437"	0.378"	1/8 PT	0.328"	0.984	- 760	0.760"	0.689"	15/16	0.570"	1.102
- 480	0.480"	0.422"	5/8	0.360"	0.984	- 800	0.800"	0.730"	1	0.600"	1.102
- 542	0.542"	0.486"	11/16	0.406"	0.984						

## ER - TC50

MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	MODEL NO.	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
05780 - 7	7	5.84	M10	5.5	18	JIS	05780 - 14	14	12.97	M18	11	25	DIN-352
- 7	7	5.84	M10	5.5	18	DIN-352	- 14	14	12.97	M18	11	25	DIN-376
- 7	7	5.84	M10	5.5	18	DIN-376	- 14	14	12.97	M18	11.2	25	ISO-529
- 8	8	6.88	M8	6.2	22	DIN-371	- 14	14	12.97	M20	11.2	25	ISO-529
- 8	8	6.88	M8	6.3	22	ISO-529	- 15	15	14.06	M20	12	25	JIS
- 8	8	6.88	M10	6.3	22	ISO-529	- 16	16	14.8	M20	12	25	DIN-352
- 8	8	6.88	M11	6	22	JIS	- 16	16	14.8	M20	12	25	DIN-376
- 8.5	8.5	7.14	M12	6.5	22	JIS	- 16	16	14.8	M22	12.5	25	ISO-529
- 9	9	7.95	M12	7	22	DIN-352	- 17	17	15.44	M22	13	28	JIS
- 9	9	7.95	M12	7	22	DIN-376	- 18	18	17.52	M22	14.5	28	DIN-352
- 9	9	7.95	M12	7.1	22	ISO-529	- 18	18	17.52	M22	14.5	28	DIN-376
- 10	10	9.16	M10	8	22	DIN-371	- 18	18	17.52	M24	14.5	28	DIN-352
- 10	10	9.16	M10	8	22	ISO-529	- 18	18	17.52	M24	14.5	28	DIN-376
- 10.5	10.5	9.16	M14	8	25	JIS	- 18	18	17.52	M24	14	28	ISO-529
- 10.5	10.5	9.16	M15	8	25	JIS	- 19	19	18.22	M24	15	28	JIS
- 11	11	10.53	M14	9	25	DIN-352	- 19	19	18.22	M25	15	28	JIS
- 11	11	10.53	M14	9	25	DIN-376	- 20	20	19.61	M26	15	28	JIS
- 11.2	11.2	10.53	M14	9	25	ISO-529	- 20	20	19.61	M27	15	28	JIS
- 12	12	10.53	M16	9	25	DIN-352	- 21	21	20.5	M28	17	35	JIS
- 12	12	10.53	M16	9	25	DIN-376	- 23	23	20.5	M30	17	35	JIS
- 12.5	12.5	11.91	M16	10	25	JIS	- 24	24	23.4	M32	19	35	JIS
- 12.5	12.5	11.91	M16	10	25	ISO-529	- 25	25	23.4	M33	19	35	JIS
- 13	13	11.91	M17	10	25	JIS	- 25	25	23.4	M33	20	35	DIN-352
- 14	14	12.97	M18	11	25	JIS	- 25	25	23.4	M33	20	35	DIN-376

### Features:

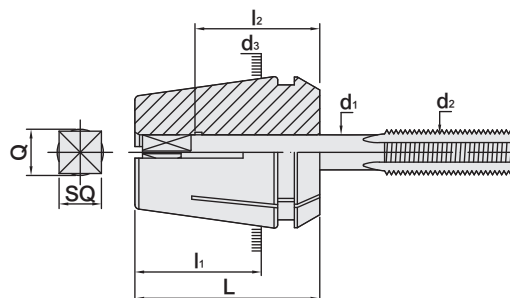
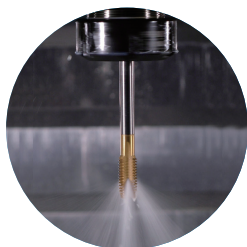
- ▶ To clamp a tap by the slots size differential.
- ▶ This product is workable as long as d<sub>1</sub> size (shank dia. of tap) matches collet ID (patented design).
- ▶ When making an order, please inform collet type and the size of d<sub>1</sub> (shank dia. of tap).



## ER-TC RIGID TAP SEALED COLLET

ER 鋼性攻牙止水筒夾

(DIN ISO 15488)



T W PAT NO. M148435  
T W PAT NO. M333253  
C H PAT NO. 693702  
C N PAT NO. ZL200820102787.2

MODEL NO.		TYPE		d <sub>3</sub>	L	l <sub>1</sub>	l <sub>2</sub>	CAPACITY			
254.16		ER - TCO16		16	27.5	17.5	18 ~ 22	M5 ~ M10			
254.20		ER - TCO20		20	31.5	20.7	18 ~ 25	M5 ~ M17			
254.25		ER - TCO25		25	34	23	18 ~ 25	M5 ~ M22			
254.32		ER - TCO32		32	40	27.34	18 ~ 28	M5 ~ M27			
254.40		ER - TCO40		40	46	31.34	18 ~ 28	M5 ~ M27			
d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
6	5.09	M5	4.9	18	DIN-352	11	10.53	M14	9	25	DIN-376
6	5.09	M5	4.9	18	DIN-371	11.2	10.53	M14	9	25	ISO-529
6	5.09	M6	4.5	18	JIS	12	10.53	M16	9	25	DIN-352
6	5.09	M6	4.9	18	DIN-352	12	10.53	M16	9	25	DIN-376
6	5.09	M6	4.9	18	DIN-371	12.5	11.91	M16	10	25	JIS
6	5.09	M8	4.9	18	DIN-352	12.5	11.91	M16	10	25	ISO-529
6	5.09	M8	4.9	18	DIN-376	13	11.91	M17	10	25	JIS
6.2	5.21	M7	5	18	JIS	14	12.97	M18	11	25	JIS
6.2	5.21	M8	5	18	JIS	14	12.97	M18	11	25	DIN-352
6.3	5.21	M6	5	18	ISO-529	14	12.97	M18	11	25	DIN-376
6.3	5.21	M8	5	18	ISO-529	14	12.97	M18	11.2	25	ISO-529
7	5.84	M9	5.5	18	JIS	14	12.97	M20	11.2	25	ISO-529
7	5.84	M10	5.5	18	JIS	15	14.06	M20	12	25	JIS
7	5.84	M10	5.5	18	DIN-352	16	14.8	M20	12	25	DIN-352
7	5.84	M10	5.5	18	DIN-376	16	14.8	M20	12	25	DIN-376
8	6.88	M8	6.2	22	DIN-371	16	14.8	M22	12.5	25	ISO-529
8	6.88	M8	6.3	22	ISO-529	17	15.44	M22	13	28	JIS
8	6.88	M10	6.3	22	ISO-529	18	17.52	M22	14.5	28	DIN-352
8	6.88	M11	6	22	JIS	18	17.52	M22	14.5	28	DIN-376
8.5	7.14	M12	6.5	22	JIS	18	17.52	M24	14.5	28	DIN-352
9	7.95	M12	7	22	DIN-352	18	17.52	M24	14.5	28	DIN-376
9	7.95	M12	7	22	DIN-376	18	17.52	M24	14	28	ISO-529
9	7.95	M12	7.1	22	ISO-529	19	18.22	M24	15	28	JIS
10	9.16	M10	8	22	DIN-371	19	18.22	M25	15	28	JIS
10	9.16	M10	8	22	ISO-529	20	19.61	M26	15	28	JIS
10.5	9.16	M14	8	25	JIS	20	19.61	M27	15	28	JIS
10.5	9.16	M15	8	25	JIS	20	19.61	M27	16	28	DIN-376
11	10.53	M14	9	25	DIN-352	20	19.61	M27	16	28	DIN-529

## INCHES

0.168	0.151	5/32	0.131	0.709	-	0.381	0.321	3/8	0.286	0.866	-
0.194	0.180	3/16	0.152	0.709	-	0.429	0.370	9/16	0.322	0.984	-
0.220	0.198	7/32	0.165	0.709	-	0.437	0.378	1/8 PT	0.328	0.984	-
0.255	0.198	1/4	0.191	0.709	-	0.480	0.422	5/8	0.360	0.984	-
0.318	0.258	5/16	0.238	0.866	-	0.562	0.483	1/4 PT	0.421	0.984	-
0.323	0.263	7/16	0.242	0.866	-	0.590	0.512	3/4	0.442	0.984	-
0.367	0.307	1/2	0.275	0.866	-	0.652	0.576	13/16	0.489	0.984	-

**Features:** ▶ Used for coolant-through taps. ▶ Water pressure up to 100kgf/cm<sup>2</sup>(1400PSI).

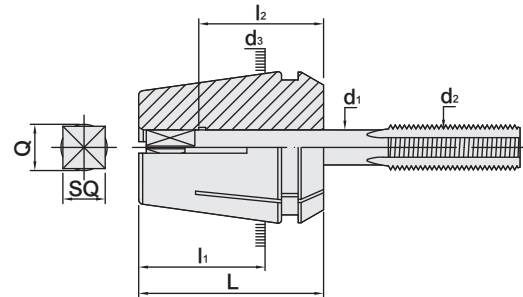
▶ When making an order, please inform collet type and d<sub>1</sub> size (shank dia. of tap).



# ER-TC RIGID TAP COOLANT COLLET FOD TYPE

ER 鋼性攻牙出水筒夾 [FOD型]

(DIN ISO 15488)



T W PAT NO. M148435  
T W PAT NO. M333253  
C H PAT NO. 693702  
C N PAT NO. ZL200820102787.2

MODEL NO.	TYPE	d <sub>3</sub>	L	l <sub>1</sub>	l <sub>2</sub>	CAPACITY
254.16B	ER - TC16	16	27.5	17.5	18 ~ 22	M5 ~ M10
254.20B	ER - TC20	20	31.5	20.7	18 ~ 25	M5 ~ M12
254.25B	ER - TC25	25	34	23	18 ~ 25	M5 ~ M20
254.32B	ER - TC32	32	40	27.34	18 ~ 28	M5 ~ M27
254.40B	ER - TC40	40	46	31.34	18 ~ 28	M5 ~ M27

d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD	d <sub>1</sub>	Q	d <sub>2</sub>	SQ	l <sub>2</sub>	STANDARD
6	5.09	M5	4.9	18	DIN-352	11	10.53	M14	9	25	DIN-376
6	5.09	M5	4.9	18	DIN-371	11.2	10.53	M14	9	25	ISO-529
6	5.09	M6	4.5	18	JIS	12	10.53	M16	9	25	DIN-352
6	5.09	M6	4.9	18	DIN-352	12	10.53	M16	9	25	DIN-376
6	5.09	M6	4.9	18	DIN-371	12.5	11.91	M16	10	25	JIS
6	5.09	M8	4.9	18	DIN-352	12.5	11.91	M16	10	25	ISO-529
6	5.09	M8	4.9	18	DIN-376	13	11.91	M17	10	25	JIS
6.2	5.21	M7	5	18	JIS	14	12.97	M18	11	25	JIS
6.2	5.21	M8	5	18	JIS	14	12.97	M18	11	25	DIN-352
6.3	5.21	M6	5	18	ISO-529	14	12.97	M18	11	25	DIN-376
6.3	5.21	M8	5	18	ISO-529	14	12.97	M18	11.2	25	ISO-529
7	5.84	M9	5.5	18	JIS	14	12.97	M20	11.2	25	ISO-529
7	5.84	M10	5.5	18	JIS	15	14.06	M20	12	25	JIS
7	5.84	M10	5.5	18	DIN-352	16	14.8	M20	12	25	DIN-352
7	5.84	M10	5.5	18	DIN-376	16	14.8	M20	12	25	DIN-376
8	6.88	M8	6.2	22	DIN-371	16	14.8	M22	12.5	25	ISO-529
8	6.88	M8	6.3	22	ISO-529	17	15.44	M22	13	28	JIS
8	6.88	M10	6.3	22	ISO-529	18	17.52	M22	14.5	28	DIN-352
8	6.88	M11	6	22	JIS	18	17.52	M22	14.5	28	DIN-376
8.5	7.14	M12	6.5	22	JIS	18	17.52	M24	14.5	28	DIN-352
9	7.95	M12	7	22	DIN-352	18	17.52	M24	14.5	28	DIN-376
9	7.95	M12	7	22	DIN-376	18	17.52	M24	14	28	ISO-529
9	7.95	M12	7.1	22	ISO-529	19	18.22	M24	15	28	JIS
10	9.16	M10	8	22	DIN-371	19	18.22	M25	15	28	JIS
10	9.16	M10	8	22	ISO-529	20	19.61	M26	15	28	JIS
10.5	9.16	M14	8	25	JIS	20	19.61	M27	15	28	JIS
10.5	9.16	M15	8	25	JIS	20	19.61	M27	16	28	DIN-376
11	10.53	M14	9	25	DIN-352	20	19.61	M27	16	28	DIN-529

**INCHES**

0.168	0.151	5/32	0.131	0.709	-	0.381	0.321	3/8	0.286	0.866	-
0.194	0.180	3/16	0.152	0.709	-	0.429	0.370	9/16	0.322	0.984	-
0.220	0.198	7/32	0.165	0.709	-	0.437	0.378	1/8 PT	0.328	0.984	-
0.255	0.198	1/4	0.191	0.709	-	0.480	0.422	5/8	0.360	0.984	-
0.318	0.258	5/16	0.238	0.866	-	0.562	0.483	1/4 PT	0.421	0.984	-
0.323	0.263	7/16	0.242	0.866	-	0.590	0.512	3/4	0.442	0.984	-
0.367	0.307	1/2	0.275	0.866	-	0.652	0.576	13/16	0.489	0.984	-

**Features:** ▶ Used for taps without coolant hole. ▶ Water pressure up to 100kgf/cm<sup>2</sup>(1400PSI).

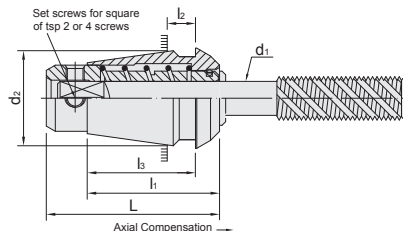
▶ When making an order, please inform collet type and d<sub>1</sub> size (shank dia. of tap).



## ER FLOATING TAP COLLET

ER 伸縮攻牙筒夾

(DIN ISO 15488)



TYPE	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	d <sub>2</sub>	WEIGHT (KGS)
FT 16	28.6	22	3	18	16	0.03
FT 20	31	24	5.85	18.85	20	0.05
FT 25	34	24.5	3	18.1	25	0.06
FT 32	43.3	31	7	25.5	32	0.10
FT 40	54	42	3	42	40	0.25

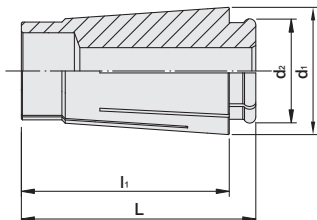
FT 16		FT 20		FT 25		FT 32		FT 40	
MODEL NO.	d <sub>1</sub>	MODEL NO.	d <sub>1</sub>	MODEL NO.	d <sub>1</sub>	MODEL NO.	d <sub>1</sub>	MODEL NO.	d <sub>1</sub>
05916 - 1.4	1.4	05920 - 2.24	2.24	05925 - 2.5	2.5	05932 - 4.5	4.5	05940 - 6	6
- 1.6	1.6	- 2.5	2.5	- 2.8	2.8	- 5	5	- 6.2	6.2
- 1.8	1.8	- 2.8	2.8	- 3	3	- 5.5	5.5	- 6.3	6.3
- 2	2	- 3	3	- 3.15	3.15	- 5.6	5.6	- 7	7
- 2.24	2.24	- 3.15	3.15	- 3.5	3.5	- 6	6	- 7.1	7.1
- 2.5	2.5	- 3.5	3.5	- 3.55	3.55	- 6.2	6.2	- 8	8
- 2.8	2.8	- 3.55	3.55	- 4	4	- 6.3	6.3	- 8.5	8.5
- 3	3	- 4	4	- 4.5	4.5	- 7	7	- 9	9
- 3.15	3.15	- 4.5	4.5	- 5	5	- 7.1	7.1	- 10	10
- 3.5	3.5	- 5	5	- 5.5	5.5	- 8	8	- 10.5	10.5
- 3.55	3.55	- 5.5	5.5	- 5.6	5.6	- 8.5	8.5	- 11	11
- 4	4	- 5.6	5.6	- 6	6	- 9	9	- 11.2	11.2
- 4.5	4.5	- 6	6	- 6.2	6.2	- 10	10	- 12	12
- 5	5	- 6.2	6.2	- 7.1	7.1	- 10.5	10.5	- 12.5	12.5
- 5.5	5.5	- 6.3	6.3	- 8	8	- 11	11	- 14	14
- 5.6	5.6	- 7	7	- 8.5	8.5	- 11.2	11.2		
- 6	6			- 9	9	- 12	12		
		<b>INCHES</b>		- 10	10	- 12.5	12.5		
<b>INCHES</b>		05920 - 141	0.141					05940 - 255	0.255
05916 - 141	0.141	- 168	0.168	<b>INCHES</b>		<b>INCHES</b>		- 318	0.318
- 168	0.168	- 194	0.194	05925 - 141	0.141	05932 - 168	0.168	- 323	0.323
- 220	0.220	- 220	0.22	- 168	0.168	- 194	0.194	- 367	0.367
		- 255	0.255	- 194	0.194	- 220	0.220	- 381	0.381
				- 220	0.220	- 255	0.255	- 429	0.429
				- 255	0.255	- 318	0.318	- 437	0.437
				- 318	0.318	- 323	0.323	- 480	0.480
				- 323	0.323	- 367	0.367	- 542	0.542
				- 367	0.367	- 381	0.381	- 562	0.562
						- 429	0.429	- 590	0.590
						- 437	0.437	- 652	0.652
						- 480	0.480	- 697	0.697

## Features:

- ▶ This product can avoid taps breaking when spindle reverses direction during tapping process.
- ▶ There are side lock screws at the bottom of collet, used for clamping a tap.
- ▶ Suitable for taps conforming to ISO-519, JIS, DIN-371, DIN-376 or DIN-352 standards.

# SKX COLLET

## SKX 高速機專用筒夾



TYPE	L	l <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	WEIGHT (KGS)
SKX - 6	25	21.4	10.2	8.8	0.03
SKX - 10	30.5	26.3	15.5	13.2	0.04
SKX - 13	39.05	34	20	17	0.04
SKX - 16	45.1	40	24.5	20.05	0.06
SKX - 20	54.2	48.95	29	24.85	0.14
SKX - 25	57.1	51.5	35.5	30	1.00

SKX - 6		SKX - 10		SKX - 13		SKX - 16		SKX - 20	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
251.790.06 - 01	1	251.790.10 - 02	2	251.790.13 - 02	2	251.790.16 - 02	2	251.790.20 - 03	3
- 02	2	- 03	3	- 03	3	- 03	3	- 04	4
- 03	3	- 04	4	- 04	4	- 04	4	- 05	5
- 04	4	- 05	5	- 05	5	- 05	5	- 06	6
- 05	5	- 06	6	- 06	6	- 06	6	- 07	7
- 06	6	- 07	7	- 07	7	- 07	7	- 08	8
<b>INCHES</b>		- 08	8	- 08	8	- 08	8	- 09	9
251.790.06 - 1/8	1/8	- 09	9	- 09	9	- 09	9	- 10	10
- 5/32	5/32	- 10	10	- 10	10	- 10	10	- 11	11
- 3/16	3/16	<b>INCHES</b>		- 11	11	- 11	11	- 12	12
- 7/32	7/32	251.790.10 - 1/8	1/8	- 12	12	- 12	12	- 13	13
- 1/4	1/4	- 5/32	5/32	- 13	13	- 13	13	- 14	14
		- 3/16	3/16			- 14	14	- 15	15
		- 7/32	7/32			- 15	15	- 16	16
		- 1/4	1/4			- 16	16	- 17	17
		- 9/32	9/32			<b>INCHES</b>		- 18	18
		- 5/16	5/16			251.790.16 - 1/8	1/8	- 19	19
		- 11/32	11/32			- 5/32	5/32	- 20	20
		- 3/8	3/8			- 3/16	3/16	<b>INCHES</b>	
						- 7/32	7/32	251.790.20 - 1/8	1/8
						- 1/4	1/4	- 5/32	5/32
						- 9/32	9/32	- 3/16	3/16
						- 5/16	5/16	- 7/32	7/32
						- 11/32	11/32	- 1/4	1/4
						- 3/8	3/8	- 9/32	9/32
						- 13/32	13/32	- 5/16	5/16
						- 7/16	7/16	- 11/32	11/32
						- 15/32	15/32	- 3/8	3/8
						- 1/2	1/2	- 13/32	13/32
						- 17/32	17/32	- 7/16	7/16
						- 9/16	9/16	- 15/32	15/32
						- 19/32	19/32	- 1/2	1/2
						- 5/8	5/8	- 17/32	17/32
								- 9/16	9/16
								- 19/32	19/32
								- 5/8	5/8
								- 21/32	21/32
								- 11/16	11/16
								- 23/32	23/32
								- 3/4	3/4
								- 7/8	7/8
								- 1	1

### Features:

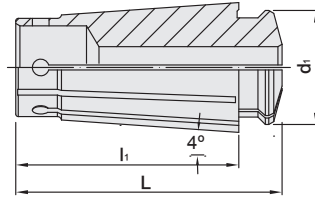
- ▶ Runout accuracy: 5μm, R class 7μm, A class 10μm.
- ▶ One size clamping is recommended.
- ▶ Surface roughness: Ra < 0.1μm, R & A class < 0.15μm.



# SKS COLLET

## UP TYPE

### SKS 高速機專用筒夾



TYPE	L	l <sub>1</sub>	d <sub>1</sub>	WEIGHT (KGS)
SKS - 6	25.7	21.4	9.26	0.03
SKS - 10	32	26.8	13.6	0.04
SKS - 13	39.1	33.6	17	0.04
SKS - 16	46	40	21	0.06
SKS - 20	54.3	49	24.9	0.14
SKS - 25	58.2	51.5	31	1.00

SKS - 6 - UP		SKS - 13 - UP		SKS - 16 - UP		SKS - 20 - UP			
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
18302 - 01	1.0 ~ 0.75	18305 - 02	2.0 ~ 1.75	18306 - 02	2.0 ~ 1.75	18308 - 03	3.0 ~ 2.75	18308 - 12	12 ~ 11.5
- 02	2.0 ~ 1.75	- 02.5	2.5 ~ 2.25	- 02.5	2.5 ~ 2.25	- 03.5	3.5 ~ 3.0	- 12.5	12.5 ~ 12
- 03	3.0 ~ 2.75	- 03	3.0 ~ 2.75	- 03	3.0 ~ 2.75	- 04	4.0 ~ 3.5	- 13	13 ~ 12.5
- 03.5	3.5 ~ 3.0	- 03.5	3.5 ~ 3.0	- 03.5	3.5 ~ 3.0	- 04.5	4.5 ~ 4.0	- 13.5	13.5 ~ 13
- 04	4.0 ~ 3.5	- 04	4.0 ~ 3.5	- 04	4.0 ~ 3.5	- 05	5.0 ~ 4.5	- 14	14 ~ 13.5
- 04.5	4.5 ~ 4.0	- 04.5	4.5 ~ 4.0	- 04.5	4.5 ~ 4.0	- 05.5	5.5 ~ 5.0	- 14.5	14.5 ~ 14
- 05	5.0 ~ 4.5	- 05	5.0 ~ 4.5	- 05	5.0 ~ 4.5	- 06	6.0 ~ 5.5	- 15	15 ~ 14.5
- 05.5	5.5 ~ 5.0	- 05.5	5.5 ~ 5.0	- 05.5	5.5 ~ 5.0	- 06.5	6.5 ~ 6.0	- 15.5	15.5 ~ 15
- 06	6.0 ~ 5.5	- 03	3.0 ~ 2.75	- 06	6.0 ~ 5.5	- 07	7.0 ~ 6.5	- 16	16 ~ 15.5
		- 03.5	3.5 ~ 3.0	- 06.5	6.5 ~ 6.0	- 07.5	7.5 ~ 7.0	- 16.5	16.5 ~ 16
		- 04	4.0 ~ 3.5	- 07	7.0 ~ 6.5	- 08	8.0 ~ 7.5	- 17	17 ~ 16.5
		- 04.5	4.5 ~ 4.0	- 07.5	7.5 ~ 7.0	- 08.5	8.5 ~ 8.0	- 17.5	17.5 ~ 17
		- 05	5.0 ~ 4.5	- 08	8.0 ~ 7.5	- 09	9.0 ~ 8.5	- 18	18 ~ 17.5
		- 05.5	5.5 ~ 5.0	- 08.5	8.5 ~ 8.0	- 09.5	9.5 ~ 9.0	- 18.5	18.5 ~ 18
		- 06	6.0 ~ 5.5	- 09	9.0 ~ 8.5	- 10	10 ~ 9.5	- 19	19 ~ 18.5
		- 06.5	6.5 ~ 6.0	- 09.5	9.5 ~ 9.0	- 10.5	10.5 ~ 10	- 19.5	19.5 ~ 19
		- 07	7.0 ~ 6.5	- 10	10 ~ 9.5	- 11	11 ~ 10.5	- 20	20 ~ 19.5
		- 07.5	7.5 ~ 7.0	- 10.5	10.5 ~ 10	- 11.5	11.5 ~ 11		
		- 08	8.0 ~ 7.5	- 11	11 ~ 10.5				
		- 08.5	8.5 ~ 8.0	- 11.5	11.5 ~ 11	<b>SKS - 25 - UP</b>			
		- 09	9.0 ~ 8.5	- 12	12 ~ 11.5	<b>MODEL NO.</b>	<b>SIZE</b>	<b>MODEL NO.</b>	<b>SIZE</b>
		- 09.5	9.5 ~ 9.0	- 12.5	12.5 ~ 12	18310 - 03	3.0 ~ 2.75	18310 - 14.5	14.5 ~ 14
		- 10	10 ~ 9.5	- 13	13 ~ 12.5	- 03.5	3.5 ~ 3.0	- 15	15 ~ 14.5
		- 10.5	10.5 ~ 10	- 13.5	13.5 ~ 13	- 04	4.0 ~ 3.5	- 15.5	15.5 ~ 15
		- 11	11 ~ 10.5	- 14	14 ~ 13.5	- 04.5	4.5 ~ 4.0	- 16	16 ~ 15.5
		- 11.5	11.5 ~ 11	- 14.5	14.5 ~ 14	- 05	5.0 ~ 4.5	- 16.5	16.5 ~ 16
		- 12	12 ~ 11.5	- 15	15 ~ 14.5	- 05.5	5.5 ~ 5.0	- 17	17 ~ 16.5
		- 12.5	12.5 ~ 12	- 15.5	15.5 ~ 15	- 06	6.0 ~ 5.5	- 17.5	17.5 ~ 17
		- 13	13 ~ 12.5	- 16	16 ~ 15.5	- 06.5	6.5 ~ 6.0	- 18	18 ~ 17.5
						- 07	7.0 ~ 6.5	- 18.5	18.5 ~ 18
						- 07.5	7.5 ~ 7.0	- 19	19 ~ 18.5
						- 08	8.0 ~ 7.5	- 19.5	19.5 ~ 19
						- 08.5	8.5 ~ 8.0	- 20	20 ~ 19.5
						- 09	9.0 ~ 8.5	- 20.5	20.5 ~ 20
						- 09.5	9.5 ~ 9.0	- 21	21 ~ 20.5
						- 10	10 ~ 9.5	- 21.5	21.5 ~ 21
						- 10.5	10.5 ~ 10	- 22	22 ~ 21.5
						- 11	11 ~ 10.5	- 22.5	22.5 ~ 22
						- 11.5	11.5 ~ 11	- 23	23 ~ 22.5
						- 12	12 ~ 11.5	- 23.5	23.5 ~ 23
						- 12.5	12.5 ~ 12	- 24	24 ~ 23.5
						- 13	13 ~ 12.5	- 24.5	24.5 ~ 24
						- 13.5	13.5 ~ 13	- 25	25 ~ 24.5
						- 14	14 ~ 13.5	- 25.4	25.4 ~ 25
						- 14.5	14.5 ~ 14		

#### Features:

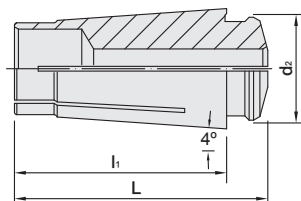
- ▶ Runout accuracy: 5µm.
- ▶ More slots and better flexibility compared to E type SKS collets.
- ▶ Less clamping power compared to E type SKS collets, while having flexibility:
  - ID > 3mm: clamping range 0.5mm.
  - ID < 3mm: clamping range 0.25mm.
- ▶ Surface roughness: Ra < 0.1µm.



# SKS COLLET

## E TYPE

SKS 高速機專用筒夾



TYPE	L	l <sub>1</sub>	d <sub>2</sub>	WEIGHT (KGS)
SKS - 6E	25.7	21.4	8.76	0.03
SKS - 10E	32	26.8	13	0.04
SKS - 13E	39.1	33.6	17	0.04
SKS - 16E	46	40	20.5	0.06
SKS - 20E	54.3	49	24.9	0.14

SKS - 6E		SKS - 10E		SKS - 13E		SKS - 16E		SKS - 20E	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
18302E - 01	1	18304E - 02	2	18305E - 02	2	18306E - 02	2	18308E - 03	3
- 02	2	- 03	3	- 03	3	- 03	3	- 04	4
- 03	3	- 04	4	- 04	4	- 04	4	- 05	5
- 04	4	- 05	5	- 05	5	- 05	5	- 06	6
- 05	5	- 06	6	- 06	6	- 06	6	- 07	7
- 06	6	- 07	7	- 07	7	- 07	7	- 08	8
		- 08	8	- 08	8	- 08	8	- 09	9
		- 09	9	- 09	9	- 09	9	- 10	10
		- 10	10	- 10	10	- 10	10	- 11	11
				- 11	11	- 11	11	- 12	12
				- 12	12	- 12	12	- 13	13
				- 13	13	- 13	13	- 14	14
						- 14	14	- 15	15
						- 15	15	- 16	16
						- 16	16	- 17	17
								- 18	18
								- 19	19
								- 20	20

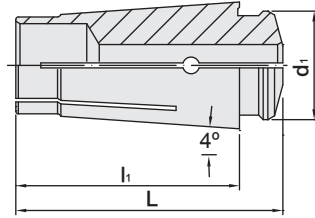
### Features:

- ▶ Runout accuracy: 5µm.
- ▶ Less slots and less flexibility compared to UP type SKS collets.
- ▶ Clamping power is better than UP type SKS collets, while one size clamping is recommended.
- ▶ Surface roughness: Ra < 0.1µm.



# SKS SEALED COLLET

## SKS 止水筒夾



TYPE	L	l <sub>1</sub>	d <sub>1</sub>	WEIGHT (KGS)
SKS - 10C	32	26.8	12.8	0.04
SKS - 13C	39.1	33.6	16.5	0.05
SKS - 16C	46	40	20.2	0.06
SKS - 20C	54.3	49	24.4	0.07
SKS - 25C	58.2	51.5	30	0.08

SKS - 10C		SKS - 13C		SKS - 16C		SKS - 20C		SKS - 25C	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
18304C - 03	3	18305C - 03	3	18306C - 03	3	18308C - 03	3	18310C - 06	6
- 04	4	- 04	4	- 04	4	- 04	4	- 07	7
- 05	5	- 05	5	- 05	5	- 05	5	- 08	8
- 06	6	- 06	6	- 06	6	- 06	6	- 09	9
- 07	7	- 07	7	- 07	7	- 07	7	- 10	10
- 08	8	- 08	8	- 08	8	- 08	8	- 11	11
- 09	9	- 09	9	- 09	9	- 09	9	- 12	12
- 10	10	- 10	10	- 10	10	- 10	10	- 13	13
		- 11	11	- 11	11	- 11	11	- 14	14
		- 12	12	- 12	12	- 12	12	- 15	15
		- 13	13	- 13	13	- 13	13	- 16	16
				- 14	14	- 14	14	- 17	17
				- 15	15	- 15	15	- 18	18
				- 16	16	- 16	16	- 19	19
						- 17	17	- 20	20
						- 18	18	- 21	21
						- 19	19	- 22	22
						- 20	20	- 23	23
								- 24	24
								- 25	25
								- 25.4	25.4

### Features:

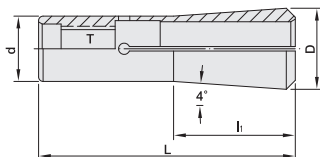
- ▶ Runout accuracy: 5µm.
- ▶ One size clamping is recommended.
- ▶ Water pressure: 21 kgf/cm<sup>2</sup>.
- ▶ Used for coolant-through cutting tools.





# SLC COLLET

## SLC 專用筒夾



TYPE	D	d	L	l <sub>1</sub>	T	WEIGHT (KGS)
SLC - 6	10	8	36	24	M6	0.02
SLC - 8	15	12	51.5	22.2	M8	0.03
SLC - 12	18	14.5	57	25.45	M10	0.04
SLC - 20	27	21	70	35	M12	0.12
SLC - 25	32.4	25	80	43.5	M16	0.16

SLC - 6		SLC - 8		SLC - 12		SLC - 20		SLC - 25	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
18851 - 03	3	18850 - 03	3	18852 - 03	3	18853 - 03	3	18854 - 06	6
- 04	4	- 04	4	- 04	4	- 04	4	- 08	8
- 05	5	- 05	5	- 05	5	- 05	5	- 10	10
- 06	6	- 06	6	- 06	6	- 06	6	- 12	12
<b>INCHES</b>		- 08	8	- 08	8	- 08	8	- 16	16
18851 - 1/8	1/8	<b>INCHES</b>		- 10	10	- 10	10	- 18	18
- 3/16	3/16	18850 - 1/8	1/8	- 12	12	- 12	12	- 20	20
- 1/4	1/4	- 3/16	3/16	<b>INCHES</b>		- 16	16	- 25	25
		- 1/4	1/4	18852 - 1/8	1/8	- 18	18	<b>INCHES</b>	
		- 5/16	5/16	- 3/16	3/16	- 20	20	18854 - 1/4	1/4
				- 1/4	1/4	<b>INCHES</b>		- 5/16	5/16
				- 5/16	5/16	18853 - 1/8	1/8	- 3/8	3/8
				- 3/8	3/8	- 3/16	3/16	- 7/16	7/16
				- 7/16	7/16	- 1/4	1/4	- 1/2	1/2
				- 1/2	1/2	- 5/16	5/16	- 5/8	5/8
						- 3/8	3/8	- 3/4	3/4
						- 7/16	7/16	- 7/8	7/8
						- 1/2	1/2	- 1	1
						- 5/8	5/8		
						- 3/4	3/4		

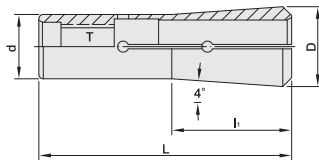
### Features:

- ▶ Runout accuracy: 5µm.
- ▶ Surface roughness: Ra < 0.1µm.
- ▶ Used for SBL collet chuck.



# SLC SEALED COLLET

## SLC 止水筒夾



TYPE	D	d	L	l <sub>1</sub>	T	WEIGHT (KGS)
SLC - 6 - CO	10	8	36	24	M6	0.02
SLC - 8 - CO	15	12	51.5	22.2	M8	0.03
SLC - 12 - CO	18	14.5	57	25.45	M10	0.04
SLC - 20 - CO	27	21	70	35	M12	0.12
SLC - 25 - CO	32.4	25	80	43.5	M16	0.16

SLC - 6 - CO		SLC - 8 - CO		SLC - 12 - CO		SLC - 20 - CO		SLC - 25 - CO	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
18851C - 03	3	18850C - 03	3	18852C - 03	3	18853C - 03	3	18854C - 06	6
- 04	4	- 04	4	- 04	4	- 04	4	- 08	8
- 05	5	- 05	5	- 05	5	- 05	5	- 10	10
- 06	6	- 06	6	- 06	6	- 06	6	- 12	12
<i>INCHES</i>		- 08	8	- 08	8	- 08	8	- 16	16
18851C - 1/8	1/8	<i>INCHES</i>		- 10	10	- 10	10	- 18	18
- 3/16	3/16	18850C - 1/8	1/8	- 12	12	- 12	12	- 20	20
- 1/4	1/4	- 3/16	3/16	<i>INCHES</i>		- 16	16	- 25	25
		- 1/4	1/4	18852C - 1/8	1/8	- 18	18	<i>INCHES</i>	
		- 5/16	5/16	- 3/16	3/16	- 20	20	18854C - 1/4	1/4
				- 1/4	1/4	<i>INCHES</i>		- 5/16	5/16
				- 5/16	5/16	18853C - 1/8	1/8	- 3/8	3/8
				- 3/8	3/8	- 3/16	3/16	- 7/16	7/16
				- 7/16	7/16	- 1/4	1/4	- 1/2	1/2
				- 1/2	1/2	- 5/16	5/16	- 5/8	5/8
						- 3/8	3/8	- 3/4	3/4
						- 7/16	7/16	- 7/8	7/8
						- 1/2	1/2	- 1	1
						- 5/8	5/8		
						- 3/4	3/4		

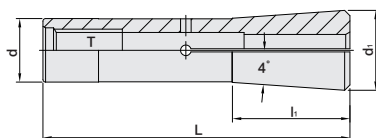
### Features:

- ▶ Runout accuracy: 5µm.
- ▶ Surface roughness: Ra < 0.1µm.
- ▶ Used for SBLC collet chuck.
- ▶ Water pressure: 21 bar.
- ▶ Used for coolant-through cutting tools.



# EBL COLLET

## EBL 筒夾



TYPE	L	l <sub>1</sub>	d	d <sub>1</sub>	T
EBL - 6	53	15	8.5	10.5	M6
EBL - 8	58	22.2	12	15.09	M8

EBL - 6		EBL - 8	
MODEL NO.	SIZE	MODEL NO.	SIZE
16902 - 03	3	16904 - 03	3
- 04	4	- 04	4
- 05	5	- 05	5
- 06	6	- 06	6
<i>INCHES</i>		- 08	8
16902 - 1/8	1/8	<i>INCHES</i>	
- 3/16	3/16	16904 - 1/8	1/8
- 1/4	1/4	- 3/16	3/16
		- 1/4	1/4
		- 5/16	5/16

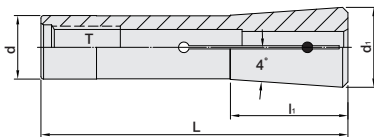
### Features:

- ▶ Runout accuracy: 5 $\mu$ m.
- ▶ The extended length of EBL collet and special longer inner hole design of holder allow deeper tool insertion and shorter tool overhanging length, improving the machining stability.
- ▶ Used for tools without coolant holes.



# EBL SEALED COLLET

EBL 止水筒夾



TYPE	L	l <sub>1</sub>	d	d <sub>1</sub>	T
EBL - 6 - CO	53	15	8.5	10.5	M6
EBL - 8 - CO	58	22.2	12	15.09	M8

EBL - 6 - CO		EBL - 8 - CO	
MODEL NO.	SIZE	MODEL NO.	SIZE
16902C - 03	3	16904C - 03	3
- 04	4	- 04	4
- 05	5	- 05	5
- 06	6	- 06	6
<b>INCHES</b>		<b>INCHES</b>	
16902C - 1/8	1/8	16904C - 1/8	1/8
- 3/16	3/16	- 3/16	3/16
- 1/4	1/4	- 1/4	1/4
		- 5/16	5/16

#### Features:

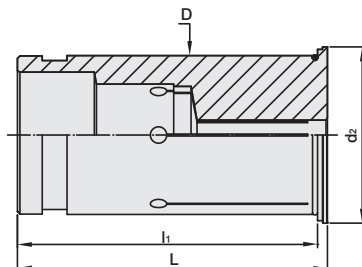
- ▶ Runout accuracy: 5 $\mu$ m.
- ▶ The extended length of EBL collet and special longer inner hole design of holder allow deeper tool insertion and shorter tool overhanging length, improving the machining stability.
- ▶ Used for coolant through tools.
- ▶ Capable of coolant pressure up to 25 bar.



# HYC REDUCTION SLEEVE

For hydraulic chuck

HYC 液壓套筒 [用於液壓刀桿]



TYPE	D	d <sub>2</sub>	L	l <sub>1</sub>
HYC12	12	16.5	47	45
HYC20	20	24	52.5	50.5
HYC25	25	29	56.5	54.5
HYC32	32	35.5	62.5	60.5

HYC12		HYC20		HYC25		HYC32	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
268.12 - 03	3	268.20 - 03	3	268.25 - 06	6	268.32 - 06	6
- 04	4	- 04	4	- 08	8	- 08	8
- 05	5	- 05	5	- 10	10	- 10	10
- 06	6	- 06	6	- 12	12	- 12	12
- 08	8	- 07	7	- 14	14	- 14	14
		- 08	8	- 16	16	- 16	16
		- 09	9	- 18	18	- 18	18
		- 10	10	- 20	20	- 20	20
		- 11	11			- 25	25
		- 12	12				
		- 13	13				
		- 14	14				
		- 15	15				
		- 16	16				

#### Features:

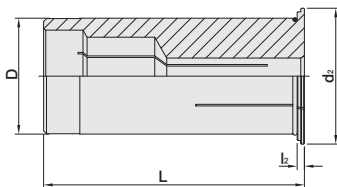
- ▶ Runout accuracy: 5μm.
- ▶ The slots of HYC collet are cut using high-precision sawing technology, ensuring precise ID and strong clamping power.
- ▶ Please assemble the cutting tool into HYC reduction sleeve first, and then insert the sleeve with tool into a hydraulic chuck in order to avoid damage.



# HSC STRAIGHT COLLET

## For MLD Milling Chuck

HSC 高精度直式筒夾 [用於MLD直式筒夾銑床夾頭]



TYPE	D	d <sub>2</sub>	L	l <sub>2</sub>	WEIGHT (KGS)
HSC12	12	18.5	47	2	0.1
HSC20	20	26	54	2	0.1
HSC25	25	29	60	2	0.3
HSC32	32	37.5	72	2	0.3
HSC1/2"	12.7	18.5	47	2	0.1
HSC3/4"	19.5	26	54	2	0.2
HSC1"	25.4	29	60	2	0.3
HSC1-1/4"	31.75	37.5	72	2	0.6

HSC12	
MODEL NO.	SIZE
267.12 - 03	3
- 04	4
- 05	5
- 06	6
- 08	8

**INCHES**

HSC1/2"	
MODEL NO.	SIZE
267.1/2 - 1/8	1/8
- 3/16	3/16
- 1/4	1/4
- 5/16	5/16

HSC20	
MODEL NO.	SIZE
267.20 - 04	4
- 05	5
- 06	6
- 08	8
- 10	10
- 12	12
- 16	16

**INCHES**

HSC3/4"	
MODEL NO.	SIZE
267.3/4 - 1/4	1/4
- 5/16	5/16
- 3/8	3/8
- 7/16	7/16
- 1/2	1/2
- 9/16	9/16
- 5/8	5/8

HSC25	
MODEL NO.	SIZE
267.25 - 04	4
- 05	5
- 06	6
- 08	8
- 10	10
- 12	12
- 14	14
- 16	16
- 20	20

**INCHES**

HSC1"	
MODEL NO.	SIZE
267.1 - 1/8	1/8
- 3/16	3/16
- 1/4	1/4
- 5/16	5/16
- 3/8	3/8
- 7/16	7/16
- 1/2	1/2
- 9/16	9/16
- 5/8	5/8
- 3/4	3/4

HSC32	
MODEL NO.	SIZE
267.32 - 06	6
- 08	8
- 10	10
- 12	12
- 14	14
- 16	16
- 18	18
- 20	20
- 25	25

**INCHES**

HSC1-1/4"	
MODEL NO.	SIZE
267.1-1/4 - 3/8	3/8
- 7/16	7/16
- 1/2	1/2
- 9/16	9/16
- 5/8	5/8
- 3/4	3/4
- 7/8	7/8
- 1	1

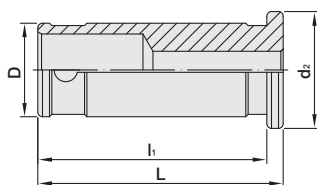
### Features:

- ▶ Runout accuracy: 5μm.

# STRAIGHT COLLET

## For MLD Milling Chuck

直式彈性筒夾 [用於MLD直式筒夾銑床夾頭]



TYPE	D	d <sub>2</sub>	L	l <sub>i</sub>	WEIGHT (KGS)
SSC12	12	19	44.5	42.5	0.1
SSC16	16	19	50	46	0.1
SSC20	20	25	52.5	49	0.1
SSC25	25	31	60	55	0.3
SSC32	32	37.5	64.6	59.6	0.3
SSC42	42	48	75	69	0.6
SSC3/4"	3/4"	25	52.5	49	0.1
SSC1"	1"	31	60	55	0.4
SSC1-1/4"	1-1/4"	37.5	64.6	59.6	0.3

SSC12		SSC20		SSC25		SSC32		SSC42	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84116 - 03	3	84120 - 03	3	84121 - 03	3	84122 - 03	3	84124 - 03	3
- 04	4	- 04	4	- 04	4	- 04	4	- 04	4
- 05	5	- 05	5	- 05	5	- 05	5	- 05	5
- 06	6	- 06	6	- 06	6	- 06	6	- 06	6
- 08	8	- 08	8	- 08	8	- 08	8	- 08	8
		- 10	10	- 10	10	- 10	10	- 10	10
		- 12	12	- 12	12	- 12	12	- 12	12
		- 16	16	- 16	16	- 16	16	- 16	16
				- 20	20	- 20	20	- 20	20
						- 25	25	- 25	25
								- 32	32

SSC16	
MODEL NO.	SIZE
84123 - 03	3
- 04	4
- 05	5
- 06	6
- 08	8
- 10	10
- 12	12

### INCHES

SSC3/4"		SSC1"		SSC1-1/4"	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84126 - 1/8	1/8	84128 - 1/8	1/8	84127 - 1/8	1/8
- 3/16	3/16	- 3/16	3/16	- 3/16	3/16
- 1/4	1/4	- 1/4	1/4	- 1/4	1/4
- 5/16	5/16	- 5/16	5/16	- 5/16	5/16
- 3/8	3/8	- 3/8	3/8	- 3/8	3/8
- 7/16	7/16	- 7/16	7/16	- 7/16	7/16
- 1/2	1/2	- 1/2	1/2	- 1/2	1/2
- 9/16	9/16	- 9/16	9/16	- 9/16	9/16
- 5/8	5/8	- 5/8	5/8	- 5/8	5/8
		- 3/4	3/4	- 3/4	3/4
				- 7/8	7/8
				- 1	1

### Features:

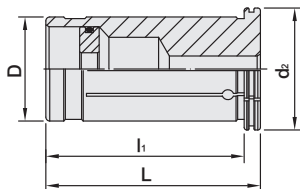
- ▶ Runout accuracy: 20µm, A class 10µm, UP class 5µm.



# STRAIGHT SEALED COLLET

## For hydraulic chuck

直式止水筒夾 [用於液壓刀桿]



TYPE	D	d <sub>2</sub>	L	l <sub>i</sub>	WEIGHT (KGS)
SSC12 - C	12	16	40	38	0.1
SSC20 - C	20	25	52.9	49.4	0.1
SSC25 - C	25	30.5	52.5	50.5	0.2
SSC32 - C	32	37.5	66	61	0.3
SSC42 - C	42	48	75	69	0.6
SSC1/2 - C	1/2	16	46.5	44.5	0.1
SSC3/4 - C	3/4	25	52.9	49.4	0.2
SSC1 - C	1	30.5	52.5	50.5	0.3
SSC1-1/4 - C	1-1/4"	37.5	66	61	0.6

SSC12 - C		SSC20 - C		SSC25 - C		SSC32 - C		SSC42 - C	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
19461 - 03	3	19462 - 03	3	19464 - 03	3	19466 - 03	3	19468 - 03	3
- 04	4	- 04	4	- 04	4	- 04	4	- 04	4
- 05	5	- 05	5	- 05	5	- 05	5	- 05	5
- 06	6	- 06	6	- 06	6	- 06	6	- 06	6
- 08	8	- 08	8	- 08	8	- 08	8	- 08	8
		- 10	10	- 10	10	- 10	10	- 10	10
		- 12	12	- 12	12	- 12	12	- 12	12
		- 16	16	- 16	16	- 16	16	- 16	16
				- 20	20	- 20	20	- 20	20
						- 25	25	- 25	25
								- 32	32

### INCHES

SSC1/2" - C		SSC3/4" - C		SSC1" - C		SSC1-1/4" - C	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
19472 - 1/8	1/8	19474 - 1/8	1/8	19476 - 1/8	1/8	19478 - 1/8	1/8
- 3/16	3/16	- 3/16	3/16	- 3/16	3/16	- 3/16	3/16
- 1/4	1/4	- 1/4	1/4	- 1/4	1/4	- 1/4	1/4
- 5/16	5/16	- 5/16	5/16	- 5/16	5/16	- 5/16	5/16
- 3/8	3/8	- 3/8	3/8	- 3/8	3/8	- 3/8	3/8
		- 7/16	7/16	- 7/16	7/16	- 7/16	7/16
		- 1/2	1/2	- 1/2	1/2	- 1/2	1/2
		- 9/16	9/16	- 9/16	9/16	- 9/16	9/16
		- 5/8	5/8	- 5/8	5/8	- 5/8	5/8
				- 3/4	3/4	- 3/4	3/4
						- 7/8	7/8
						- 1	1

### Features:

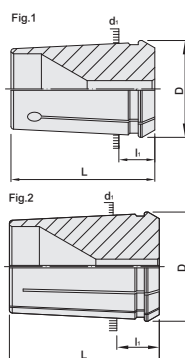
- ▶ Runout accuracy: 15um & UP class 5um.
- ▶ Used for coolant-through cutting tools.
- ▶ Coolant pressure: 7 bar.



# EOC COLLET

## FORM B

### EOC B型 彈性筒夾



TYPE	E-NO	L	l <sub>1</sub>	D	d <sub>1</sub>	Fig.	WEIGHT (KGS)
SYOZ - 25	462E	52	13	35	32.9	1	0.24
EOC32 - B	467E	60	17	43.7	41.3	2	0.5

SYOZ - 25			
MODEL NO.	SIZE	MODEL NO.	SIZE
83868 - 03	3	83868 - 15	15
- 04	4	- 16	16
- 05	5	- 17	17
- 06	6	- 18	18
- 07	7	- 19	19
- 08	8	- 20	20
- 09	9	- 21	21
- 10	10	- 22	22
- 11	11	- 23	23
- 12	12	- 24	24
- 13	13	- 25	25
- 14	14		

#### INCHES

83868 - 1/8	1/8	83868 - 9/16	9/16
- 3/16	3/16	- 5/8	5/8
- 1/4	1/4	- 11/16	11/16
- 5/16	5/16	- 3/4	3/4
- 3/8	3/8	- 7/8	7/8
- 7/16	7/16	- 15/16	15/16
- 1/2	1/2	- 1	1

EOC 32 - B			
MODEL NO.	SIZE	MODEL NO.	SIZE
83533 - 04	4	83533 - 19	19
- 05	5	- 20	20
- 06	6	- 21	21
- 07	7	- 22	22
- 08	8	- 23	23
- 09	9	- 24	24
- 10	10	- 25	25
- 11	11	- 26	26
- 12	12	- 27	27
- 13	13	- 28	28
- 14	14	- 29	29
- 15	15	- 30	30
- 16	16	- 31	31
- 17	17	- 32	32
- 18	18		

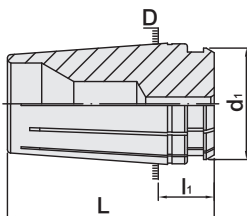
#### INCHES

83533 - 1/8	1/8	83533 - 1/2	1/2
- 3/16	3/16	- 5/8	5/8
- 1/4	1/4	- 3/4	3/4
- 5/16	5/16	- 7/8	7/8
- 3/8	3/8	- 1	1
- 7/16	7/16	- 1-1/4	1-1/4



# TG COLLET

## TG 彈性筒夾



TYPE	L	l <sub>1</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
TG 75	46.84	13.6	26.97	26.84	0.15
TG 100	60.32	16.32	35.02	32.5	0.3
TG 150	76.2	18	50.83	47.7	0.5

TG 75									
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84008 - 03	3	84008 - 06	6	84008 - 09	9	84008 - 12	12	84008 - 15	15
- 04	4	- 07	7	- 10	10	- 13	13	- 16	16
- 05	5	- 08	8	- 11	11	- 14	14		

### INCHES

84008 - 3/32	3/32	84008 - 15/64	15/64	84008 - 3/8	3/8	84008 - 33/64	33/64	84008 - 21/32	21/32
- 7/64	7/64	- 1/4	1/4	- 25/64	25/64	- 17/32	17/32	- 43/64	43/64
- 1/8	1/8	- 17/64	17/64	- 13/32	13/32	- 35/64	35/64	- 11/16	11/16
- 9/64	9/64	- 9/32	9/32	- 27/64	27/64	- 9/16	9/16	- 45/64	45/64
- 5/32	5/32	- 19/64	19/64	- 7/16	7/16	- 37/64	37/64	- 23/32	23/32
- 11/64	11/64	- 5/16	5/16	- 29/64	29/64	- 19/32	19/32	- 47/64	47/64
- 3/16	3/16	- 21/64	21/64	- 15/32	15/32	- 39/64	39/64	- 3/4	3/4
- 13/64	13/64	- 11/32	11/32	- 31/64	31/64	- 5/8	5/8		
- 7/32	7/32	- 23/64	23/64	- 1/2	1/2	- 41/64	41/64		

TG 100									
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84010 - 03	3	84010 - 08	8	84010 - 13	13	84010 - 18	18	84010 - 23	23
- 04	4	- 09	9	- 14	14	- 19	19	- 24	24
- 05	5	- 10	10	- 15	15	- 20	20	- 25	25
- 06	6	- 11	11	- 16	16	- 21	21		
- 07	7	- 12	12	- 17	17	- 22	22		

### INCHES

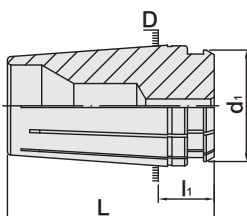
84010 - 3/32	3/32	84010 - 9/32	9/32	84010 - 15/32	15/32	84010 - 21/32	21/32	84010 - 27/32	27/32
- 7/64	7/64	- 19/64	19/64	- 31/64	31/64	- 43/64	43/64	- 55/64	55/64
- 1/8	1/8	- 5/16	5/16	- 1/2	1/2	- 11/16	11/16	- 7/8	7/8
- 9/64	9/64	- 21/64	21/64	- 33/64	33/64	- 45/64	45/64	- 57/64	57/64
- 5/32	5/32	- 11/32	11/32	- 17/32	17/32	- 23/32	23/32	- 29/32	29/32
- 11/64	11/64	- 23/64	23/64	- 35/64	35/64	- 47/64	47/64	- 59/64	59/64
- 3/16	3/16	- 3/8	3/8	- 9/16	9/16	- 3/4	3/4	- 15/16	15/16
- 13/64	13/64	- 25/64	25/64	- 37/64	37/64	- 49/64	49/64	- 61/64	61/64
- 7/32	7/32	- 13/32	13/32	- 19/32	19/32	- 25/32	25/32	- 31/32	31/32
- 15/64	15/64	- 27/64	27/64	- 39/64	39/64	- 51/64	51/64	- 63/64	63/64
- 1/4	1/4	- 7/16	7/16	- 5/8	5/8	- 13/16	13/16	- 1	1
- 17/64	17/64	- 29/64	29/64	- 41/64	41/64	- 53/64	53/64		

### Features:

- ▶ Increment by 1mm or 1/64".
- ▶ With 6 slots in front and back.

# TG COLLET

## TG 彈性筒夾



TYPE	L	l <sub>1</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
TG 75	46.84	13.6	26.97	26.84	0.15
TG 100	60.32	16.32	35.02	32.5	0.3
TG 150	76.2	18	50.83	47.7	0.5

TG 150							
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84011 - 04	4	84011 - 13	13	84011 - 22	22	84011 - 31	31
- 05	5	- 14	14	- 23	23	- 32	32
- 06	6	- 15	15	- 24	24	- 33	33
- 07	7	- 16	16	- 25	25	- 34	34
- 08	8	- 17	17	- 26	26	- 35	35
- 09	9	- 18	18	- 27	27	- 36	36
- 10	10	- 19	19	- 28	28	- 37	37
- 11	11	- 20	20	- 29	29	- 38	38
- 12	12	- 21	21	- 30	30		

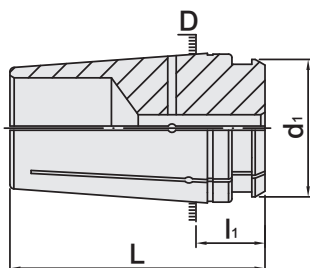
### INCHES

84011 - 5/32	5/32	84011 - 1/2	1/2	84011 - 27/32	27/32	84011 - 1-3/16	1-3/16
- 11/64	11/64	- 33/64	33/64	- 55/64	55/64	- 1-13/64	1-13/64
- 3/16	3/16	- 17/32	17/32	- 7/8	7/8	- 1-7/32	1-7/32
- 13/64	13/64	- 35/64	35/64	- 57/64	57/64	- 1-15/64	1-15/64
- 7/32	7/32	- 9/16	9/16	- 29/32	29/32	- 1-1/4	1-1/4
- 15/64	15/64	- 37/64	37/64	- 59/64	59/64	- 1-17/64	1-17/64
- 1/4	1/4	- 19/32	19/32	- 15/16	15/16	- 1-9/32	1-9/32
- 17/64	17/64	- 39/64	39/64	- 61/64	61/64	- 1-19/64	1-19/64
- 9/32	9/32	- 5/8	5/8	- 31/32	31/32	- 1-5/16	1-5/16
- 19/64	19/64	- 41/64	41/64	- 63/64	63/64	- 1-21/64	1-21/64
- 5/16	5/16	- 21/32	21/32	- 1"	1	- 1-11/32	1-11/32
- 21/64	21/64	- 43/64	43/64	- 1-1/64	1-1/64	- 1-23/64	1-23/64
- 11/32	11/32	- 41/64	41/64	- 1-1/32	1-1/32	- 1-3/8	1-3/8
- 23/64	23/64	- 45/64	45/64	- 1-3/64	1-3/64	- 1-25/64	1-25/64
- 3/8	3/8	- 23/32	23/32	- 1-1/16	1-1/16	- 1-13/32	1-13/32
- 25/64	25/64	- 47/64	47/64	- 1-5/64	1-5/64	- 1-27/64	1-27/64
- 13/32	13/32	- 3/4	3/4	- 1-3/32	1-3/32	- 1-7/16	1-7/16
- 27/64	27/64	- 49/64	49/64	- 1-7/64	1-7/64	- 1-29/64	1-29/64
- 7/16	7/16	- 25/32	25/32	- 1-1/8	1-1/8	- 1-15/32	1-15/32
- 29/64	29/64	- 51/64	51/64	- 1-9/64	1-9/64	- 1-31/64	1-31/64
- 15/32	15/32	- 13/16	13/16	- 1-5/32	1-5/32	- 1-1/2	1-1/2
- 31/64	31/64	- 53/64	53/64	- 1-11/64	1-11/64		



# TG SEALED COLLET

## TG 止水筒夾



TYPE	L	l <sub>1</sub>	D	d <sub>1</sub>	WEIGHT (KGS)
TG 100	60.32	16.32	35.02	32.5	0.3
TG 150	76.2	18	50.83	47.7	0.6

### TG 100

MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84063 - 03	3	84063 - 08	8	84063 - 13	13	84063 - 18	18	84063 - 22	22
- 04	4	- 09	9	- 14	14	- 19	19	- 23	23
- 05	5	- 10	10	- 15	15	- 20	20	- 24	24
- 06	6	- 11	11	- 16	16	- 21	21	- 25	25
- 07	7	- 12	12	- 17	17				

### INCHES

84063 - 3/32	3/32	84063 - 9/32	9/32	84063 - 15/32	15/32	84063 - 21/32	21/32	84063 - 27/32	27/32
- 7/64	7/64	- 19/64	19/64	- 31/64	31/64	- 43/64	43/64	- 55/64	55/64
- 1/8	1/8	- 5/16	5/16	- 1/2	1/2	- 11/16	11/16	- 7/8	7/8
- 9/64	9/64	- 21/64	21/64	- 33/64	33/64	- 45/64	45/64	- 57/64	57/64
- 5/32	5/32	- 11/32	11/32	- 17/32	17/32	- 23/32	23/32	- 29/32	29/32
- 11/64	11/64	- 23/64	23/64	- 35/64	35/64	- 47/64	47/64	- 59/64	59/64
- 3/16	3/16	- 3/8	3/8	- 9/16	9/16	- 3/4	3/4	- 15/16	15/16
- 13/64	13/64	- 25/64	25/64	- 37/64	37/64	- 49/64	49/64	- 61/64	61/64
- 7/32	7/32	- 13/32	13/32	- 19/32	19/32	- 25/32	25/32	- 31/32	31/32
- 15/64	15/64	- 27/64	27/64	- 39/64	39/64	- 51/64	51/64	- 63/64	63/64
- 1/4	1/4	- 7/16	7/16	- 5/8	5/8	- 13/16	13/16	- 1	1
- 17/64	17/64	- 29/64	29/64	- 41/64	41/64	- 53/64	53/64		

### TG 150

MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
84011 - C - 04	4	84011 - C - 11	11	84011 - C - 18	18	84011 - C - 25	25	84011 - C - 32	32
- 05	5	- 12	12	- 19	19	- 26	26	- 33	33
- 06	6	- 13	13	- 20	20	- 27	27	- 34	34
- 07	7	- 14	14	- 21	21	- 28	28	- 35	35
- 08	8	- 15	15	- 22	22	- 29	29	- 36	36
- 09	9	- 16	16	- 23	23	- 30	30	- 37	37
- 10	10	- 17	17	- 24	24	- 31	31	- 38	38

### INCHES

84011 - C - 5/32	5/32	84011 - C - 7/16	7/16	84011 - C - 23/32	23/32	84011 - C - 1	1	84011 - C - 1-9/32	1-9/32
- 11/64	11/64	- 29/64	29/64	- 47/64	47/64	- 1-1/64	1-1/64	- 1-19/64	1-19/64
- 3/16	3/16	- 15/32	15/32	- 3/4	3/4	- 1-1/32	1-1/32	- 1-5/16	1-5/16
- 13/64	13/64	- 31/64	31/64	- 49/64	49/64	- 1-3/64	1-3/64	- 1-21/64	1-21/64
- 7/32	7/32	- 1/2	1/2	- 25/32	25/32	- 1-1/16	1-1/16	- 1-11/32	1-11/32
- 15/64	15/64	- 33/64	33/64	- 51/64	51/64	- 1-5/64	1-5/64	- 1-23/64	1-23/64
- 1/4	1/4	- 17/32	17/32	- 13/16	13/16	- 1-3/32	1-3/32	- 1-3/8	1-3/8
- 17/64	17/64	- 35/64	35/64	- 53/64	53/64	- 1-7/64	1-7/64	- 1-25/64	1-25/64
- 9/32	9/32	- 9/16	9/16	- 27/32	27/32	- 1-1/8	1-1/8	- 1-13/32	1-13/32
- 19/64	19/64	- 37/64	37/64	- 55/64	55/64	- 1-9/64	1-9/64	- 1-27/64	1-27/64
- 5/16	5/16	- 19/32	19/32	- 7/8	7/8	- 1-5/32	1-5/32	- 1-7/16	1-7/16
- 21/64	21/64	- 39/64	39/64	- 57/64	57/64	- 1-11/64	1-11/64	- 1-29/64	1-29/64
- 11/32	11/32	- 5/8	5/8	- 29/32	29/32	- 1-3/16	1-3/16	- 1-15/32	1-15/32
- 23/64	23/64	- 41/64	41/64	- 59/64	59/64	- 1-13/64	1-13/64	- 1-31/64	1-31/64
- 3/8	3/8	- 21/32	21/32	- 15/16	15/16	- 1-7/32	1-7/32	- 1-1/2	1-1/2
- 25/64	25/64	- 43/64	43/64	- 61/64	61/64	- 1-15/64	1-15/64		
- 13/32	13/32	- 41/64	41/64	- 31/32	31/32	- 1-1/4	1-1/4		
- 27/64	27/64	- 45/64	45/64	- 63/64	63/64	- 1-17/64	1-17/64		

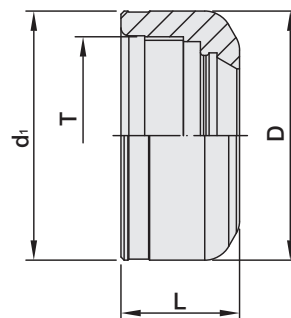
#### Features:

- Used for coolant-through cutting tools.

# PNER CLAMPING NUT



## PNER 螺帽



TW PAT NO. M298033  
 TW PAT NO. M311791  
 TW PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731

MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
04506 - PN	PNER16	22	30	30.5	M22 x 1.5P	40 N-m	30 ft/lbs	0.03
04507 - PN	PNER20	23.5	32	32.5	M25 x 1.5P	60 N-m	44 ft/lbs	0.04
04508 - PN	PNER25	24	40	40.5	M32 x 1.5P	80 N-m	59 ft/lbs	0.06
04509 - PN	PNER32	27	50	50.5	M40 x 1.5P	110 N-m	81 ft/lbs	0.10
04510 - PN	PNER40	30	63	63.5	M50 x 1.5P	130 N-m	95 ft/lbs	0.25

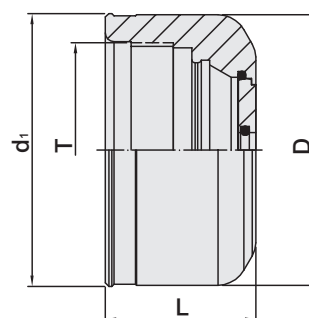
### Features:

- ▶ Its non-slot design decreases wind shear, and can be used for high speed application.

# PNER SEALED NUT



## PNER 止水螺帽



TW PAT NO. M298033  
 TW PAT NO. M311791  
 TW PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731

MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	SR SEALED RING	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
08402	PNER16 - CO	27	30	30.5	M22 x 1.5P	SR16	40 N-m	30 ft/lbs	0.08
08404	PNER20 - CO	29	32	32.5	M25 x 1.5P	SR20	60 N-m	44 ft/lbs	0.08
08406	PNER25 - CO	29	40	40.5	M32 x 1.5P	SR25	80 N-m	59 ft/lbs	0.14
08408	PNER32 - CO	32	50	50.5	M40 x 1.5P	SR32	110 N-m	81 ft/lbs	0.22
08410	PNER40 - CO	35	63	63.5	M50 x 1.5P	SR40	130 N-m	95 ft/lbs	0.40

### Features:

- ▶ Use SR sealed ring [PW-59] and PN collet to seal and achieve coolant through tools.
- ▶ Its non-slot design decreases wind shear, and can be used for high speed application.



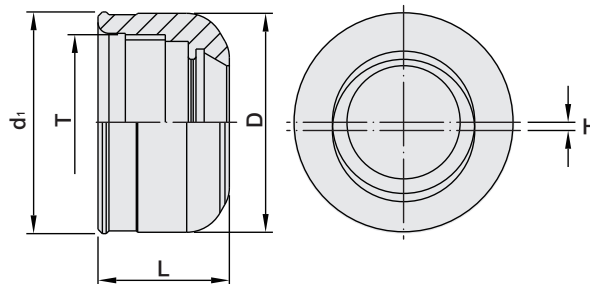
# PNER ECCENTRIC NUT



## PNER 偏心螺帽



T W PAT NO. M298033  
 T W PAT NO. M311791  
 T W PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731



MODEL NO.	TYPE	L	D	d <sub>1</sub>	H	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
04303	PNER16 - A	22	30	30.5	1.65	M22 x 1.5P	40 N-m	30 ft/lbs	0.03
04304	PNER20 - A	24	32	32.5	1.65	M25 x 1.5P	60 N-m	44 ft/lbs	0.04
04305	PNER25 - A	24	40	40.5	1.85	M32 x 1.5P	80 N-m	59 ft/lbs	0.06
04306	PNER32 - A	27	50	50.5	2	M40 x 1.5P	110 N-m	81 ft/lbs	0.10
04307	PNER40 - A	30	63	63.5	2.4	M50 x 1.5P	130 N-m	95 ft/lbs	0.25

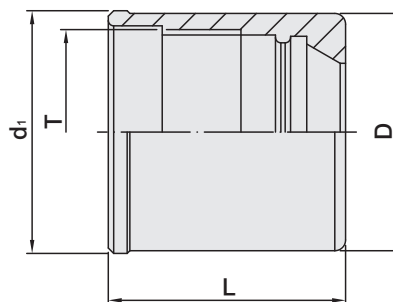
### Features:

- ▶ Used with PN-ES steel sealed collet [PW-6] and achieve coolant through tools.
- ▶ Its non-slot design decreases wind shear, and can be used for high speed application.

# PTER CLAMPING NUT



PTER 螺帽



MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
16791	PTER8	13.5	12	12.5	M10 x 0.75P	3.5 N-m	2.5 ft/lbs	0.004
16792	PTER11	19	16	16.5	M13 x 0.75P	20 N-m	14 ft/lbs	0.012
16793	PTER16	22	22	22.5	M19 x 1.0P	30 N-m	22 ft/lbs	0.022
16794	PTER20	24	28	28.5	M24 x 1.0P	50 N-m	36 ft/lbs	0.042

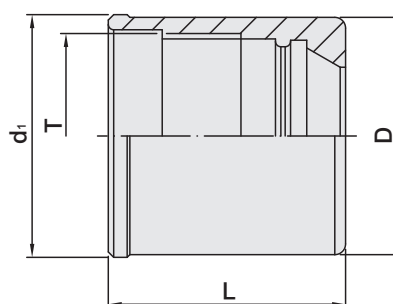
## Features:

- ▶ Its non-slot design decreases wind shear, and can be used for high speed application.

# UT CLAMPING NUT



UT 螺帽



MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
203.753.16	UT16	22	30	31	M22 x 1.5P	50 N-m	36 ft/lbs	0.064
203.753.20	UT20	27.5	35	36	M27 x 1.5P	60 N-m	44 ft/lbs	0.098
203.753.25	UT25	28.5	42	43	M32 x 1.5P	85 N-m	62 ft/lbs	0.150
203.753.32	UT32	31	48	49	M40 x 1.5P	120 N-m	88 ft/lbs	0.166

## Features:

- ▶ Its non-slot design decreases wind shear, and can be used for high speed application.



## ER CLAMPING NUT



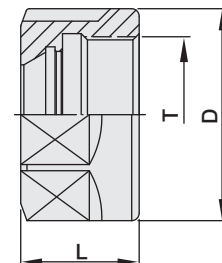
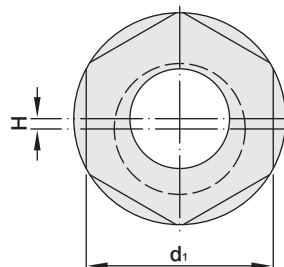
## ER 包固得螺帽



台灣精品 2008  
TAIWAN EXCELLENCE



T W PAT NO. M298033  
T W PAT NO. M311791  
J P PAT NO. 3128766  
K R PAT NO. 20-0433603  
C N PAT NO. ZL200620132661.0  
C H PAT NO. 696550  
T R PAT NO. TR 2007 02942 Y  
I T PAT NO. N.0000266731



MODEL NO.	TYPE	D	d <sub>1</sub>	H	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
04501P	ER11 - A	19	17	1	11.3	M14 x 0.75P	30 N-m	22 ft/lbs	0.02
04502P	ER16 - A	28	25	1.4	18.5	M22 x 1.5P	40 N-m	30 ft/lbs	0.05
04503P	ER20 - A	34	30	1.55	20	M25 x 1.5P	60 N-m	44 ft/lbs	0.10

## Features:

- ▶ Special surface treatment. Clamping power is increased twice.
- ▶ Pre-balance to G6.3 10,000rpm.

## ER CLAMPING NUT



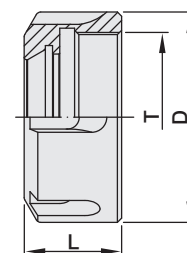
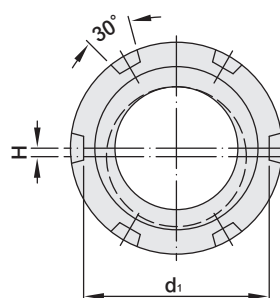
## ER 包固得螺帽



台灣精品 2008  
TAIWAN EXCELLENCE



T W PAT NO. M298033  
T W PAT NO. M311791  
J P PAT NO. 3128766  
K R PAT NO. 20-0433603  
C N PAT NO. ZL200620132661.0  
C H PAT NO. 696550  
T R PAT NO. TR 2007 02942 Y  
I T PAT NO. N.0000266731



MODEL NO.	TYPE	D	d <sub>1</sub>	H	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
04506P	ER16 - UM-RD	31.7	26	1.65	18	M22 x 1.5P	40 N-m	30 ft/lbs	0.05
04507P	ER20 - UM-RD	35	29	1.65	19.5	M25 x 1.5P	60 N-m	44 ft/lbs	0.10
04508P	ER25 - UM-RD	42	36	1.8	21	M32 x 1.5P	80 N-m	59 ft/lbs	0.14
04509P	ER32 - UM-RD	50	44	1.65	23.5	M40 x 1.5P	110 N-m	81 ft/lbs	0.20
04510P	ER40 - UM-RD	63	57	2.15	26.5	M50 x 1.5P	130 N-m	95 ft/lbs	0.30
04511P	ER50 - UM-RD	78	71	2.5	35.3	M64 x 2.0P	200 N-m	147 ft/lbs	0.50

## Features:

- ▶ Special surface treatment. Clamping power is increased twice.
- ▶ Pre-balance to G6.3 10,000rpm.





# ER CLAMPING NUT



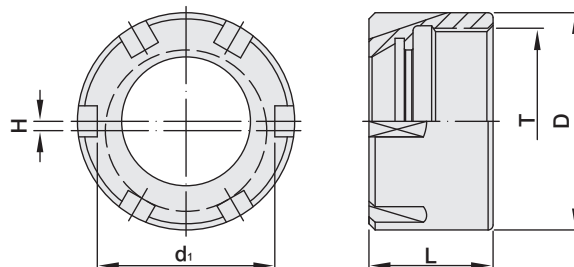
## ER 包固得螺帽



台灣精品 2008  
TAIWAN EXCELLENCE



T W PAT NO. M298033  
T W PAT NO. M311791  
J P PAT NO. 3128766  
K R PAT NO. 20-0433603  
C N PAT NO. ZL200620132661.0  
C H PAT NO. 696550  
T R PAT NO. TR 2007 02942 Y  
I T PAT NO. N.0000266731



MODEL NO.	TYPE	D	d <sub>1</sub>	H	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
04523P	ER8 - M	12	9.1	0.6	10.8	M10 x 0.75P	3.5 N-m	2.5 ft/lbs	0.01
04524P	ER11 - M	16	12	0.6	11.3	M13 x 0.75P	20 N-m	14 ft/lbs	0.01
04525P	ER16 - M	22	16.7	1.2	18	M19 x 1.0P	30 N-m	21 ft/lbs	0.05
04526P	ER20 - M	28	21.85	1.45	19	M24 x 1.0P	40 N-m	24 ft/lbs	0.05
04527P	ER25 - M	35	27.54	1.5	20	M30 x 1.0P	60 N-m	29 ft/lbs	0.08

### Features:

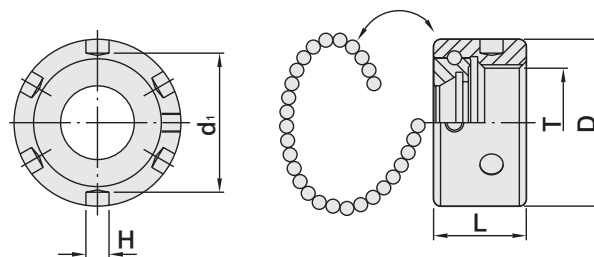
- ▶ Special surface treatment. Clamping power is increased twice.
- ▶ Pre-balance to G6.3 10,000rpm.

# ER HIGH SPEED PRECISION NUT BALL BEARING TYPE

## ER 強力精密高速型螺帽



T W PAT NO. M298033  
T W PAT NO. M311791  
T W PAT NO. M186381  
J P PAT NO. 3128766  
K R PAT NO. 20-0433603  
C N PAT NO. ZL200620132661.0  
C H PAT NO. 696550  
T R PAT NO. TR 2007 02942 Y  
I T PAT NO. N.0000266731



MODEL NO.	TYPE	D	d <sub>1</sub>	H	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
08680P	ER 16 - HSP	32	26	5	18	M22 x 1.5P	35 N-m	25 ft/lbs	0.01
08681P	ER 20 - HSP	36	30	5	20	M25 x 1.5P	55 N-m	40 ft/lbs	0.10
08682P	ER 25 - HSP	42	36	4.4	22.5	M32 x 1.5P	75 N-m	55 ft/lbs	0.10
08684P	ER 32 - HSP	50	44	4.4	25	M40 x 1.5P	100 N-m	73 ft/lbs	0.15
08686P	ER 40 - HSP	63	57	4.4	27.5	M50 x 1.5P	140 N-m	103 ft/lbs	0.27

### Features:

- ▶ Applied for ER-HSP spanner [W-71]. ▶ The external diameter is ground precisely, decreasing unbalance. ▶ Can be ordered separately.
- ▶ According to ISO1941-1 standard, examined by a balancing machine. ▶ Higher precision and stability if matching ER Collet-UP class.
- ▶ Balance: G2.5 15,000 rpm.



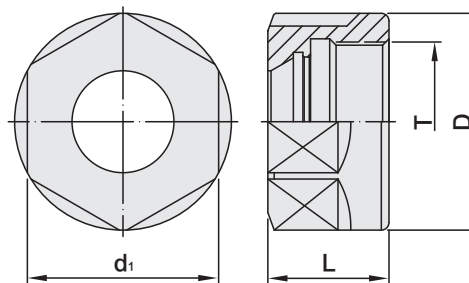
# HIGH SPEED POWER GOOD NUT



## ER 高速型包固得螺帽



台灣精品 2008  
TAIWAN EXCELLENCE



T W PAT NO. M298033  
T W PAT NO. M311791  
J P PAT NO. 3128766  
K R PAT NO. 20-0433603  
C N PAT NO. ZL200620132661.0  
C H PAT NO. 696550  
T R PAT NO. TR 2007 02942 Y  
I T PAT NO. N.0000266731

MODEL NO.	TYPE	D	d <sub>1</sub>	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
08652P	ER11A - HS	19	17	11.3	M14 x 0.75P	30 N-m	22 ft/lbs	0.02
08654P	ER16A - HS	28	25	17.5	M22 x 1.5P	40 N-m	30 ft/lbs	0.05
08656P	ER20A - HS	34	30	19	M25 x 1.5P	60 N-m	40 ft/lbs	0.10

### Features:

- ▶ Special surface treatment. Clamping power is improved twice.
- ▶ Balanced to G2.5 15,000 rpm.

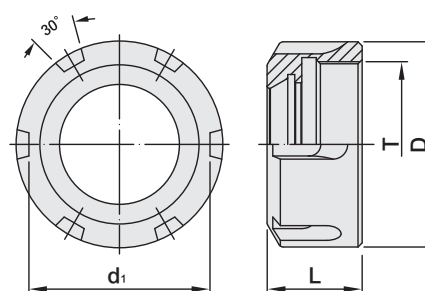
# HIGH SPEED POWER GOOD NUT



## ER 高速型包固得螺帽



台灣精品 2008  
TAIWAN EXCELLENCE



T W PAT NO. M298033  
T W PAT NO. M311791  
J P PAT NO. 3128766  
K R PAT NO. 20-0433603  
C N PAT NO. ZL200620132661.0  
C H PAT NO. 696550  
T R PAT NO. TR 2007 02942 Y  
I T PAT NO. N.0000266731

MODEL NO.	TYPE	D	d <sub>1</sub>	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
08655P	ER16 - HS	32	26	18	M22 x 1.5P	40 N-m	30 ft/lbs	0.06
08657P	ER20 - HS	35	29.5	19.5	M25 x 1.5P	60 N-m	44 ft/lbs	0.11
08658P	ER25 - HS	42	35.7	20.5	M32 x 1.5P	80 N-m	59 ft/lbs	0.14
08660P	ER32 - HS	50	43.8	23	M40 x 1.5P	110 N-m	81 ft/lbs	0.20
08662P	ER40 - HS	63	57	26	M50 x 1.5P	130 N-m	95 ft/lbs	0.30

### Features:

- ▶ Special surface treatment. Clamping power is improved twice.
- ▶ Balanced to G2.5 15,000 rpm.

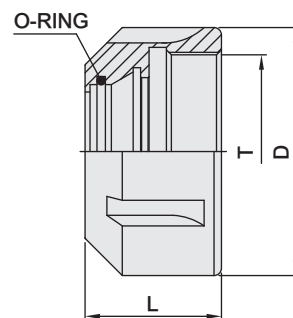
# ER SEALED NUT



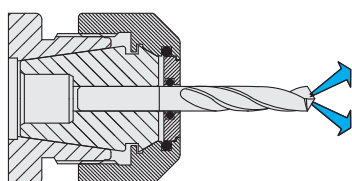
## ER 包固得止水螺帽



T W PAT NO. M455785  
 J P PAT NO. 3184153  
 C N PAT NO. ZL201320107547.2  
 D E PAT NO. Nr.202013101640.3  
 U S PAT NO. US9062770



MODEL NO.	TYPE	D	L	T	SR SEALED RING	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
08416P	ER16 - CO	28	22.5	M22 x 1.5P	SR16	40 N-m	30 ft/lbs	0.05
08420P	ER20 - CO	34	24	M25 x 1.5P	SR20	60 N-m	44 ft/lbs	0.07
08425P	ER25 - CO	42	25	M32 x 1.5P	SR25	80 N-m	59 ft/lbs	0.10
08432P	ER32 - CO	50	27.5	M40 x 1.5P	SR32	110 N-m	81 ft/lbs	0.15
08440P	ER40 - CO	63	30.5	M50 x 1.5P	SR40	130 N-m	95 ft/lbs	0.27



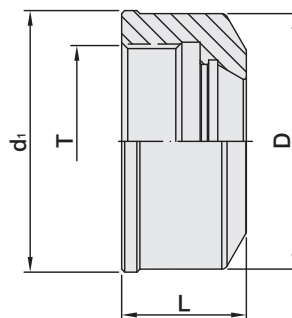
### Features:

- ▶ Use SR sealed ring [P.W-59] to seal and achieve coolant through tools.
- ▶ Can bear the water pressure up to 21kgf/cm<sup>2</sup>.
- ▶ Patent-owned.



# ER NON WIND RESISTANCE NUT

## ER 無風阻螺帽



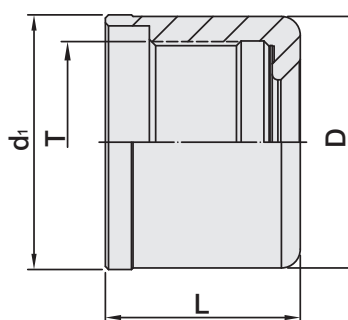
MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
206.130.16	ER16	17.5	30	31	M22 × 1.5P	40 N-m	30 ft/lbs	0.05
206.130.20	ER20	19	34	35	M25 × 1.5P	60 N-m	44 ft/lbs	0.10
206.130.25	ER25	20	42	43	M32 × 1.5P	80 N-m	59 ft/lbs	0.14
206.130.32	ER32	22.5	50	51	M40 × 1.5P	110 N-m	81 ft/lbs	0.23

### Features:

- Its non-slot design decreases wind shear, and can be used for high speed application.

# SK3 NON WIND RESISTANCE NUT

## SK3 無風阻螺帽



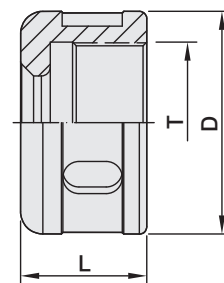
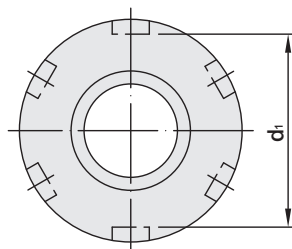
MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
206.763.06	SK306	23	19.5	20	M14 × 1.0P	25 N-m	18 ft/lbs	0.03
206.763.10	SK310	24	27.5	28	M21.5 × 1.0P	45 N-m	33 ft/lbs	0.04
206.763.13	SK313	29.6	33	34.4	M27 × 1.0P	50 N-m	36 ft/lbs	0.06
206.763.16	SK316	33	40	40.5	M32 × 1.5P	70 N-m	52 ft/lbs	0.10

### Features:

- Its non-slot design decreases wind shear, and can be used for high speed application.

# SKS CLAMPING NUT

SKS 高速機專用螺帽



T W PAT NO. M270871

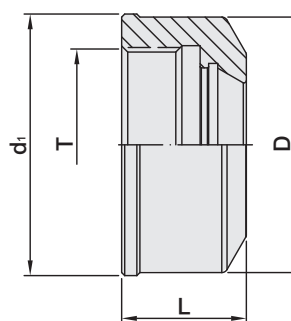
MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
18312	SKS6	15	18	-	M14 x 1.0P	25 N-m	18 ft/lbs	0.02
18314	SKS10	17	30	26	M21.5 x 1.0P	45 N-m	33 ft/lbs	0.04
18315 - 13	SKS13	21	33	31.8	M27 x 1.0P	50 N-m	36 ft/lbs	0.06
18316	SKS16	24.5	40	35.8	M32 x 1.5P	70 N-m	51 ft/lbs	0.06
18318	SKS20	24	48.5	44.4	M40 x 1.0P	90 N-m	66 ft/lbs	0.14
18320	SKS25	30.5	55	50	M45 x 1.5P	100 N-m	73 ft/lbs	1.00

#### Features:

- ▶ Fine pitch: H4 to ensure the good precision.

# SKS NON WIND RESISTANCE NUT

SKS 無風阻螺帽



MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
206.668.06	SKS - 6	15	18	19	M14 x 1.0P	25 N-m	18 ft/lbs	0.20
206.668.10	SKS - 10	17	30	31	M21.5 x 1.0P	45 N-m	33 ft/lbs	0.04
206.668.13	SKS - 13	21	34	35	M27 x 1.0P	50 N-m	36 ft/lbs	0.06
206.668.16	SKS - 16	24.5	40	41	M32 x 1.5P	70 N-m	51 ft/lbs	0.06
206.668.20	SKS - 20	24	48	48.5	M40 x 1.0P	90 N-m	66 ft/lbs	0.14
206.668.25	SKS - 25	30.5	55	56	M45 x 1.5P	100 N-m	73 ft/lbs	1.00

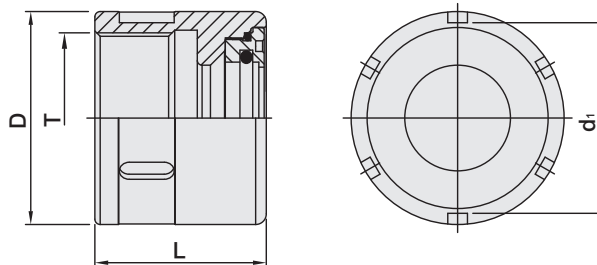
#### Features:

- ▶ Due to special surface treatment, clamping power is increased by 50%~100%.
- ▶ Its non-slot design decreases wind shear, and can be used for high speed application.



# SKS SEALED NUT

## SKS 止水螺帽



MODEL NO.	TYPE	L	D	d <sub>1</sub>	T	SR SEALED RING	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
203.658.10	SKS10 - CO	22.8	30	26	M21.5 x 1.0P	SR16	45 N-m	33 ft/lbs	0.04
203.658.13	SKS13 - CO	26.5	35	31.8	M27 x 1.0P	SR20	50 N-m	36 ft/lbs	0.06
203.658.16	SKS16 - CO	32.2	40	35.8	M32 x 1.5P	SR25	70 N-m	51 ft/lbs	0.03
203.658.20	SKS20 - CO	29.5	48.5	44.4	M40 x 1.0P	SR32	90 N-m	66 ft/lbs	0.14
203.658.25	SKS25 - CO	38	55	50	M45 x 1.5P	SR40	100 N-m	73 ft/lbs	1.00



- ▶ Need to use with SR sealed ring [P.W-59] and achieve coolant through tools.
- ▶ First, insert the SR sealed ring into the SKS sealed cap, then fasten them on the body of SKS clamping nut with SKS sealed cap spanner.

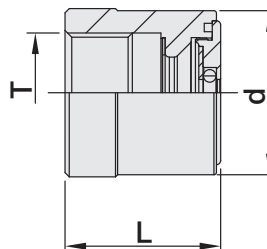
### Features:

- ▶ For information of SKS sealed cap spanner, please refer to page W-72(optional).

# SKX SEALED NUT



SKX 止水螺帽



MODLE NO.	TYPE	L	d	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
210.790.06	SKX6 - CO	18.5	19.5	M14 x 1.0P	25 N-m	18 ft/lbs	0.04
210.790.10	SKX10 - CO	21	30	M21.5 x 1.0P	45 N-m	33 ft/lbs	0.08
210.790.13	SKX13 - CO	26.5	35	M27 x 1.0P	50 N-m	36 ft/lbs	0.06
210.790.16	SKX16 - CO	28	40	M32 x 1.5P	70 N-m	51 ft/lbs	0.15
210.790.20	SKX20 - CO	28	48	M40 x 1.0P	70 N-m	51 ft/lbs	0.19
210.790.25	SKX25 - CO	30	55	M45 x 1.5P	100 N-m	73 ft/lbs	0.27



## Features:

- ▶ SKX sealed nut is not included with SKX sealed cap. Please order the cap additionally.
- ▶ SKX sealed cap is designed with an o-ring. No need to use with SR sealed ring.
- ▶ For information of SKX sealed cap spanner, please refer to page W-72 (optional).



## SKX SEALED CAP

## SKX 止水墊片



SKX6 - CO		SKX13 - CO		SKX16 - CO		SKX20 - CO		SKX25 - CO	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
210.790.06 - 01	1	210.790.13 - 03	3	210.790.16 - 02	2	210.790.20 - 03	3	210.790.25 - 03	3
- 02	2	- 04	4	- 03	3	- 04	4	- 04	4
- 03	3	- 05	5	- 04	4	- 05	5	- 05	5
- 04	4	- 06	6	- 05	5	- 06	6	- 06	6
- 05	5	- 07	7	- 06	6	- 07	7	- 07	7
- 06	6	- 08	8	- 07	7	- 08	8	- 08	8
<b>INCHES</b>		- 09	9	- 08	8	- 09	9	- 09	9
210.790.06 - 1/8	1/8	- 10	10	- 09	9	- 10	10	- 10	10
- 5/32	5/32	- 11	11	- 10	10	- 11	11	- 11	11
- 3/16	3/16	- 12	12	- 11	11	- 12	12	- 12	12
- 7/32	7/32	- 13	13	- 12	12	- 13	13	- 13	13
- 1/4	1/4	<b>INCHES</b>		- 13	13	- 14	14	- 14	14
		210.790.13 - 1/8	1/8	- 14	14	- 15	15	- 15	15
		- 5/32	5/32	- 15	15	- 16	16	- 16	16
		- 3/16	3/16	- 16	16	- 17	17	- 17	17
		- 7/32	7/32	<b>INCHES</b>		- 18	18	- 18	18
		- 1/4	1/4	210.790.16 - 1/8	1/8	- 19	19	- 19	19
		- 9/32	9/32	- 5/32	5/32	- 20	20	- 20	20
		- 5/16	5/16	- 3/16	3/16	<b>INCHES</b>		- 21	21
		- 11/32	11/32	- 7/32	7/32	210.790.20 - 1/8	1/8	- 22	22
		- 3/8	3/8	- 1/4	1/4	- 5/32	5/32	- 23	23
		- 13/32	13/32	- 9/32	9/32	- 3/16	3/16	- 24	24
		- 7/16	7/16	- 5/16	5/16	- 7/32	7/32	- 25	25
		- 15/32	15/32	- 11/32	11/32	- 1/4	1/4	<b>INCHES</b>	
<b>INCHES</b>		- 1/2	1/2	- 3/8	3/8	- 9/32	9/32	210.790.25 - 1/8	1/8
210.790.10 - 1/8	1/8			- 13/32	13/32	- 5/16	5/16	- 5/32	5/32
- 5/32	5/32			- 7/16	7/16	- 11/32	11/32	- 3/16	3/16
- 3/16	3/16			- 15/32	15/32	- 3/8	3/8	- 7/32	7/32
- 7/32	7/32			- 1/2	1/2	- 13/32	13/32	- 1/4	1/4
- 1/4	1/4			- 17/32	17/32	- 7/16	7/16	- 9/32	9/32
- 9/32	9/32			- 9/16	9/16	- 15/32	15/32	- 5/16	5/16
- 5/16	5/16			- 19/32	19/32	- 1/2	1/2	- 11/32	11/32
- 11/32	11/32			- 5/8	5/8	- 17/32	17/32	- 3/8	3/8
- 3/8	3/8					- 9/16	9/16	- 13/32	13/32
						- 19/32	19/32	- 7/16	7/16
						- 5/8	5/8	- 15/32	15/32
						- 21/32	21/32	- 1/2	1/2
						- 11/16	11/16	- 17/32	17/32
						- 23/32	23/32	- 9/16	9/16
						- 3/4	3/4	- 19/32	19/32
								- 5/8	5/8
								- 21/32	21/32
								- 11/16	11/16
								- 23/32	23/32
								- 3/4	3/4
								- 7/8	7/8
								- 1	1

**Features:**

- ▶ SKX Sealed Nut is not included with SKX Sealed Cap. Please order the cap additionally.
- ▶ For information of SKX sealed cap spanner, please refer to page W-72 (optional).





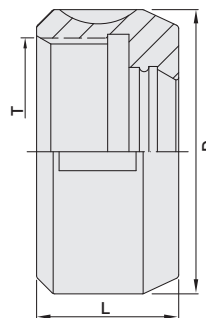
# EOC CLAMPING NUT



EOC 包固得栓緊螺帽



TW PAT NO. M298033  
 TW PAT NO. M311791  
 TW PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731



MODEL NO.	TYPE	D	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
83638P	EOC25	60	30	M48 x 2.0P	130 N-m	95 ft/lbs	0.30
83639P	EOC32	72	33.5	M60 x 2.5P	220 N-m	162 ft/lbs	0.48

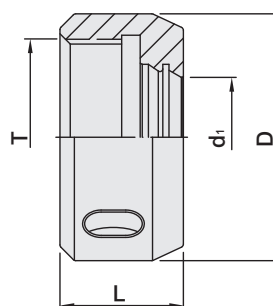
# TG CLAMPING NUT



TG 包固得栓緊螺帽



TW PAT NO. M298033  
 TW PAT NO. M311791  
 TW PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731



MODEL NO.	TYPE	D	d <sub>1</sub>	L	T	RECOMMENDED TIGHTENING TORQUE		WEIGHT (KGS)
84012P	TG75	50	22.7	25	TW 1-1/2" - 12	122 N-m	90 ft/lbs	0.52
84014P	TG100	60	29.1	30	TW 1-7/8" - 12	130 N-m	95 ft/lbs	0.46
84016P	TG150	82	42.4	35	TW 2-5/8" - 12	200 N-m	147 ft/lbs	0.50



# MLD SEALED CAP

## MLD 止水端蓋

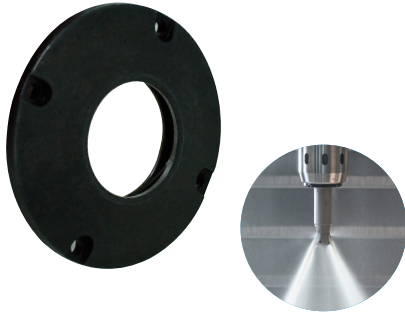


Fig.1

SR SEALED RING

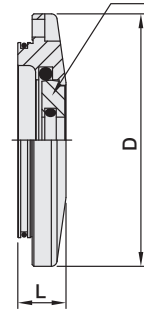
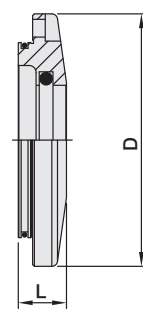


Fig.2



MODEL NO.	TYPE	L	D	RANGE	SR SEALED RING	Fig	WEIGHT (KGS)
19490G	MLD12	8.9	38.2	3 ~ 8	SR16	1	0.03
19490G - 2	MLD12	8.9	38.2	12	-	2	0.03
19491G	MLD16	8.9	42.2	3 ~ 12	SR20	1	0.04
19491G - 2	MLD16	8.9	42.2	16	-	2	0.04
19496G	MLD20	8.9	44	3 ~ 16	SR25	1	0.04
19492G - 2	MLD20	8.9	44	20	-	2	0.04
19497G	MLD25	10.4	51	3 ~ 20	SR32	1	0.06
19493G - 2	MLD25	10.4	51	25	-	2	0.06
19498G	MLD32	11.05	60	3 ~ 25	SR40	1	0.06
19494G - 2	MLD32	11.05	60	32	-	2	0.06
19495G	MLD42	12.02	70	3 ~ 25	SR40	1	0.07
19495G - 2	MLD42	12.02	70	42	-	2	0.07
19490G	MLD1/2"	8.9	38.2	1/8" ~ 3/8"	SR16	1	0.03
19490G - 2 - 0.5	MLD1/2"	8.9	38.2	1/2"	-	2	0.03
19491G	MLD5/8"	8.9	42.2	1/8" ~ 1/2"	SR20	1	0.04
19491G - 2 - 0.625	MLD5/8"	8.9	42.2	5/8"	-	2	0.04
19496G	MLD3/4"	8.9	44	1/8" ~ 5/8"	SR25	1	0.04
19496G - 2	MLD3/4"	8.9	44	3/4"	-	2	0.04
19497G	MLD1"	10.4	51	1/8" ~ 3/4"	SR32	1	0.06
19497G - 2	MLD1"	10.4	51	1"	-	2	0.06
19498G	MLD1-1/4"	11.05	60	1/8" ~ 1"	SR40	1	0.06
19498G - 2	MLD1-1/4"	11.05	60	1-1/4"	-	2	0.06

Fig.1

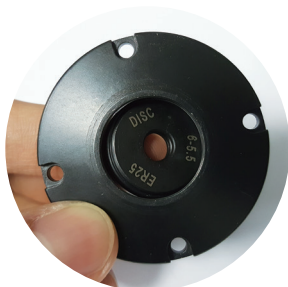


Fig.2



▶ Need to use with a sealed ring.

▶ The inner hole of MLD sealed cap same as tool shank. Do not need a sealed ring for use.

### Features:

▶ Used for coolant-through cutting tools.

# SR SEALED RING

## SR 止水環



T W PAT NO. M455785  
 J P PAT NO. 3184153  
 C N PAT NO. ZL20320107547.2  
 D E PAT NO. Nr.202013101640.3  
 U S PAT NO. US 9062770

SR16		SR20		SR25		SR32		SR40	
MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE	MODEL NO.	SIZE
08516 - 3.5	3.5 ~ 3.0	08520 - 3.5	3.5 ~ 3.0	08525 - 3.5	3.5 ~ 3.0	08532 - 3.5	3.5 ~ 3.0	08540 - 3.5	3.5 ~ 3.0
- 4.0	4.0 ~ 3.5	- 4.0	4.0 ~ 3.5	- 4.0	4.0 ~ 3.5	- 4.0	4.0 ~ 3.5	- 4.0	4.0 ~ 3.5
- 4.5	4.5 ~ 4.0	- 4.5	4.5 ~ 4.0	- 4.5	4.5 ~ 4.0	- 4.5	4.5 ~ 4.0	- 4.5	4.5 ~ 4.0
- 5.0	5.0 ~ 4.5	- 5.0	5.0 ~ 4.5	- 5.0	5.0 ~ 4.5	- 5.0	5.0 ~ 4.5	- 5.0	5.0 ~ 4.5
- 5.5	5.5 ~ 5.0	- 5.5	5.5 ~ 5.0	- 5.5	5.5 ~ 5.0	- 5.5	5.5 ~ 5.0	- 5.5	5.5 ~ 5.0
- 6.0	6.0 ~ 5.5	- 6.0	6.0 ~ 5.5	- 6.0	6.0 ~ 5.5	- 6.0	6.0 ~ 5.5	- 6.0	6.0 ~ 5.5
- 6.5	6.5 ~ 6.0	- 6.5	6.5 ~ 6.0	- 7.5	7.5 ~ 7.0	- 6.5	6.5 ~ 6.0	- 6.5	6.5 ~ 6.0
- 7.0	8.5 ~ 8.0	- 7.0	7.0 ~ 6.5	- 8.0	8.0 ~ 7.5	- 7.0	7.0 ~ 6.5	- 7.0	7.0 ~ 6.5
- 7.5	9.0 ~ 8.5	- 7.5	7.5 ~ 7.0	- 8.5	8.5 ~ 8.0	- 7.5	7.5 ~ 7.0	- 7.5	7.5 ~ 7.0
- 8.0	9.5 ~ 9.0	- 8.0	8.0 ~ 7.5	- 9.0	9.0 ~ 8.5	- 8.0	8.0 ~ 7.5	- 8.0	8.0 ~ 7.5
- 8.5	10 ~ 9.5	- 8.5	8.5 ~ 8.0	- 9.5	9.5 ~ 9.0	- 8.5	8.5 ~ 8.0	- 8.5	8.5 ~ 8.0
- 9.0	10.5 ~ 10	- 9.0	9.0 ~ 8.5	- 10	10 ~ 9.5	- 9.0	9.0 ~ 8.5	- 9.0	9.0 ~ 8.5
- 9.5	11 ~ 10.5	- 9.5	9.5 ~ 9.0	- 10.5	10.5 ~ 10	- 9.5	9.5 ~ 9.0	- 9.5	9.5 ~ 9.0
- 10	11.5 ~ 11	- 10	10 ~ 9.5	- 11	11 ~ 10.5	- 10	10.0 ~ 9.5	- 10	10 ~ 9.5
<b>WEIGHT (KGS)</b>		- 10.5	10.5 ~ 10	- 11.5	11.5 ~ 11	- 10.5	10.5 ~ 10	- 11	11 ~ 10.5
0.01		- 11	11 ~ 10.5	- 12	12 ~ 11.5	- 11	11 ~ 10.5	- 11.5	11.5 ~ 11
		- 11.5	11.5 ~ 11	- 12.5	12.5 ~ 12	- 11.5	11.5 ~ 11	- 12	12.0 ~ 11.5
		- 12	12 ~ 11.5	- 13	13 ~ 12.5	- 12	12 ~ 11.5	- 12.5	12.5 ~ 12
		- 12.5	12.5 ~ 12	- 13.5	13.5 ~ 13	- 12.5	12.5 ~ 12	- 13	13.0 ~ 12.5
		- 13	13 ~ 12.5	- 14	14 ~ 13.5	- 13	13 ~ 12.5	- 13.5	13.5 ~ 13
		<b>WEIGHT (KGS)</b>		- 14.5	14.5 ~ 14	- 13.5	13.5 ~ 13	- 14	14.0 ~ 13.5
		0.01		- 15	15 ~ 14.5	- 14	14 ~ 13.5	- 14.5	14.5 ~ 14
				- 15.5	15.5 ~ 15	- 14.5	14.5 ~ 14	- 15	15.0 ~ 14.5
				- 16	16 ~ 15.5	- 15	15 ~ 14.5	- 15.5	15.5 ~ 15
				<b>WEIGHT (KGS)</b>		- 15.5	15.5 ~ 15.0	- 16	16.0 ~ 15.5
				0.01		- 16	16 ~ 15.5	- 16.5	16.5 ~ 16
						- 16.5	16.5 ~ 16	- 17	17.0 ~ 16.5
						- 17	17 ~ 16.5	- 17.5	17.5 ~ 17
						- 17.5	17.5 ~ 17	- 18	18.0 ~ 17.5
						- 18	18 ~ 17.5	- 18.5	18.5 ~ 18
						- 18.5	18.5 ~ 18.0	- 19	19.0 ~ 18.5
						- 19	19 ~ 18.5	- 19.5	19.5 ~ 19
						- 19.5	19.5 ~ 19	- 20	20 ~ 19.5
						- 20	20 ~ 19.5	- 20.5	20.5 ~ 20
						<b>WEIGHT (KGS)</b>		- 21	21 ~ 20.5
						0.01		- 21.5	21.5 ~ 21
								- 22	22 ~ 21.5
								- 22.5	22.5 ~ 22
								- 23	23 ~ 22.5
								- 23.5	23.5 ~ 23
								- 24	24 ~ 23.5
								- 24.5	24.5 ~ 24
								- 25	25 ~ 24.5
								- 25.5	25.5 ~ 25
								- 26	26 ~ 25.5
								<b>WEIGHT (KGS)</b>	
								0.02	

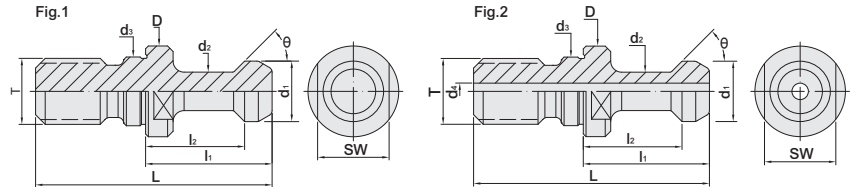
### Features:

- ▶ One size clamping is recommended.
- ▶ Used for ER, MLD, SKS and PNER sealed nuts to seal and achieve coolant through tools.
- ▶ Can bear the water pressure up to 21 kgf/cm<sup>2</sup>.



# BT PULL STUD

## BT 螺栓拉頭



### W/O Coolant

MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	θ	T	SW	Fig.	WEIGHT (KGS)
17801	BT30 - 45°	43	23	18	16.5	11	7	12.5	-	45°	M12	13	1	0.04
17803	BT40 - 45°	60	35	28	23	15	10	17	-	45°	M16	19	1	0.10
17805	BT50 - 45°	85	45	35	38	23	17	25	-	45°	M24	30	1	0.30
17806	BT30 - 60°	43	23	18	16.5	11	7	12.5	-	60°	M12	13	1	0.04
17808	BT40 - 60°	60	35	28	23	15	10	17	-	60°	M16	19	1	0.10
17810	BT50 - 60°	85	45	35	38	23	17	25	-	60°	M24	30	1	0.30
17812	BT30 - 90°	43	23	18	16.5	11	7	12.5	-	90°	M12	13	1	0.04
17814	BT40 - 90°	60	35	28	23	15	10	17	-	90°	M16	19	1	0.10
17816	BT50 - 90°	85	45	35	38	23	17	25	-	90°	M24	30	1	0.30

### Coolant Thru

17817	BT30 - 45°	43	23	18	16.5	11	7	12.5	3	45°	M12	13	2	0.10
17818	BT40 - 45°	60	35	28	23	15	10	17	4	45°	M16	19	2	0.10
17818 - MAZAK	BT40 - 45°	44.1	19.1	14.02	22	18.79	12.44	17	7	45°	M16	19	2	0.10
17824	BT50 - 45°	85	45	35	38	23	17	25	5	45°	M24	30	2	0.30
17824 - MAZAK	BT50 - 45°	65.4	25.4	17.78	35.5	28.95	20.8	25	10	45°	M24	30	2	0.30
17820	BT40 - 60°	60	35	28	23	15	10	17	4	60°	M16	19	2	0.10
17826	BT50 - 60°	85	45	35	38	23	17	25	5	60°	M24	30	2	0.30
17822	BT40 - 90°	60	35	28	23	15	10	17	4	90°	M16	19	2	0.10
17828	BT50 - 90°	85	45	35	38	23	17	25	5	90°	M24	30	2	0.30

### Features:

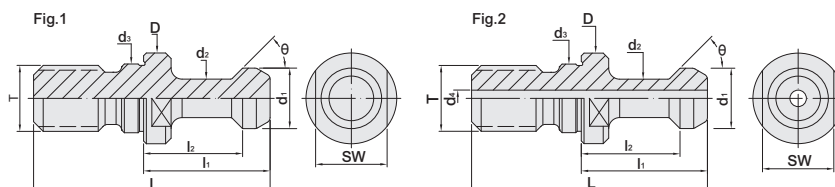
- ▶ Please make sure the pull stud conforms to the machine type.



# BT PULL STUD

## with ground thread

### BT 研磨螺栓拉頭



#### W/O Coolant

MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	θ	T	SW	Fig.	WEIGHT (KGS)
17801 - G	BT30 - 45°G	43	23	18	16.5	11	7	12.5	-	45°	M12	13	1	0.04
17803 - G	BT40 - 45°G	60	35	28	23	15	10	17	-	45°	M16	19	1	0.10
17805 - G	BT50 - 45°G	85	45	35	38	23	17	25	-	45°	M24	30	1	0.30
17806 - G	BT30 - 60°G	43	23	18	16.5	11	7	12.5	-	60°	M12	13	1	0.04
17808 - G	BT40 - 60°G	60	35	28	23	15	10	17	-	60°	M16	19	1	0.10
17810 - G	BT50 - 60°G	85	45	35	38	23	17	25	-	60°	M24	30	1	0.30
17812 - G	BT30 - 90°G	43	23	18	16.5	11	7	12.5	-	90°	M12	13	1	0.04
17814 - G	BT40 - 90°G	60	35	28	23	15	10	17	-	90°	M16	19	1	0.10
17816 - G	BT50 - 90°G	85	45	35	38	23	17	25	-	90°	M24	30	1	0.30

#### Coolant Thru

17817 - G	BT30 - 45°G	43	23	18	16.5	11	7	12.5	3x2	45°	M12	13	2	0.10
17818 - G	BT40 - 45°G	60	35	28	23	15	10	17	4	45°	M16	19	2	0.10
17824 - G	BT50 - 45°G	85	45	35	38	23	17	25	7	45°	M24	30	2	0.30
17820 - G	BT40 - 60°G	60	35	28	23	15	10	17	4	60°	M16	19	2	0.10
17826 - G	BT50 - 60°G	85	45	35	38	23	17	25	7	60°	M24	30	2	0.30
17822 - G	BT40 - 90°G	60	35	28	23	15	10	17	4	90°	M16	19	2	0.10
17828 - G	BT50 - 90°G	85	45	35	38	23	17	25	7	90°	M24	30	2	0.30

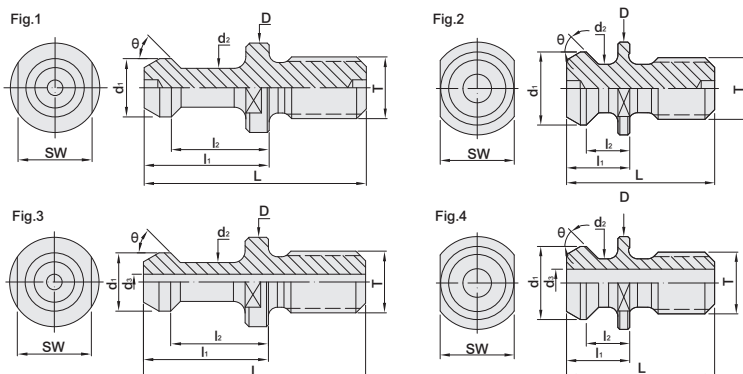
#### Features:

- ▶ Please make sure the pull stud conforms to the machine type.



# CAT PULL STUD

## CAT 螺栓拉頭



### W/O Coolant

MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	θ	SW	T-UNC	Fig.	WEIGHT (KGS)
21003	CAT40 - ANSI	1.5	0.64	0.44	0.94	0.74	0.49	-	45°	0.75	5/8" - 11	2	0.09
21005	CAT50 - ANSI	2.3	1	0.7	1.44	1.14	0.82	-	45°	1.25	1" - 8	2	0.25
21003 - 45	CAT40 - MAS - I	2.25	1.266	0.99	0.905	0.59	0.394	-	45°	0.748	5/8" - 11	1	0.09
21003 - 60	CAT40 - MAS - II	2.25	1.266	0.99	0.905	0.59	0.394	-	60°	0.748	5/8" - 11	1	0.09
21003 - 90	CAT40 - MAS - III	2.25	1.266	0.99	0.905	0.59	0.394	-	90°	0.748	5/8" - 11	1	0.09
21005 - 45	CAT50 - MAS - I	3.346	1.772	1.378	1.496	0.906	0.669	-	45°	1.181	1" - 8	1	0.25
21005 - 60	CAT50 - MAS - II	3.346	1.772	1.378	1.496	0.906	0.669	-	60°	1.181	1" - 8	1	0.25
21005 - 90	CAT50 - MAS - III	3.346	1.772	1.378	1.496	0.906	0.669	-	90°	1.181	1" - 8	1	0.25

### Coolant Thru

21003 - C	CAT40 - ANSI - C	1.5	0.64	0.44	0.94	0.74	0.49	0.281	45°	0.75	5/8" - 11	4	0.09
21005 - C	CAT50 - ANSI - C	2.3	1	0.7	1.44	1.14	0.82	0.468	45°	1.25	1" - 8	4	0.25
21003 - 45C	CAT40 - Coolant - I	2.25	1.266	0.99	0.905	0.59	0.394	0.157	45°	0.748	5/8" - 11	3	0.09
21003 - 60C	CAT40 - Coolant - II	2.25	1.266	0.99	0.905	0.59	0.394	0.157	60°	0.748	5/8" - 11	3	0.09
21003 - 90C	CAT40 - Coolant - III	2.25	1.266	0.99	0.905	0.59	0.394	0.157	90°	0.748	5/8" - 11	3	0.09
21005 - 45C	CAT50 - Coolant - I	3.346	1.772	1.378	1.496	0.906	0.669	0.256	45°	1.181	1" - 8	3	0.25
21005 - 60C	CAT50 - Coolant - II	3.346	1.772	1.378	1.496	0.906	0.669	0.256	60°	1.181	1" - 8	3	0.25
21005 - 90C	CAT50 - Coolant - III	3.346	1.772	1.378	1.496	0.906	0.669	0.256	90°	1.181	1" - 8	3	0.25

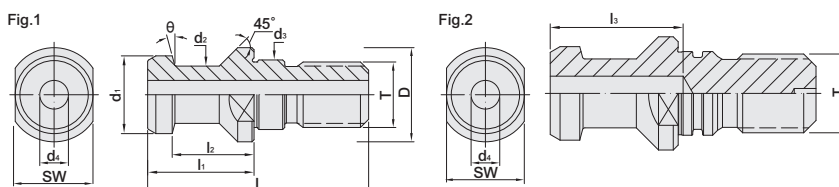
### Features:

- ▶ Please make sure the pull stud conforms to the machine type.

# DAT PULL STUD

DAT 螺栓拉頭

(DIN 7388 - 3)

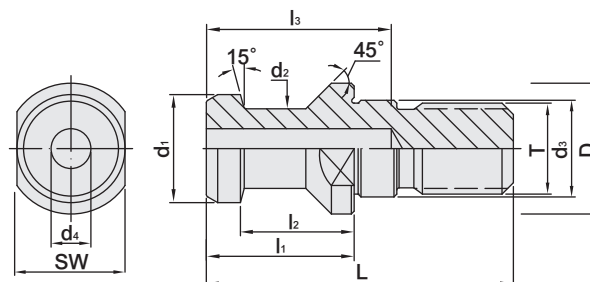


**W/O Coolant**

MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	θ	SW	T	Fig.	WEIGHT (KGS)
49011	DAT30 - B	44	24	19	-	17	13	9	13	-	15°	14	M12	2	0.03
49013	DAT40 - B	54	26	20	27	23	19	14	17	7	15°	19	M16	2	0.09
49015	DAT50 - B	74	34	25	37	36	28	21	25	11.5	15°	30	M24	2	0.25

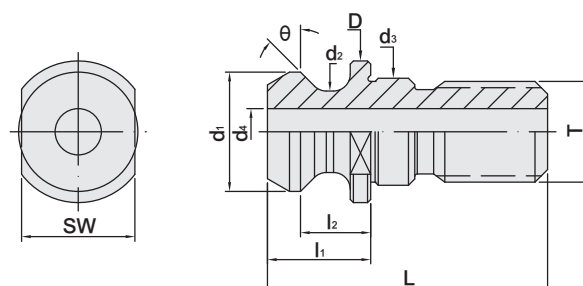
**Coolant Thru**

49001	DAT30 - A	44	24	19	-	17	13	9	13	-	15°	14	M12	1	0.03
49003	DAT40 - A	54	26	20	-	23	19	14	17	7	15°	19	M16	1	0.09
49005	DAT50 - A	74	34	25	-	36	28	21	25	11.5	15°	30	M24	1	0.25



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	T	WEIGHT (KGS)
49017	DAT40	54	26	20	27	23	19	14	17	7	M16	0.09

(DIN ISO 7388 - UD)



**Coolant Thru**

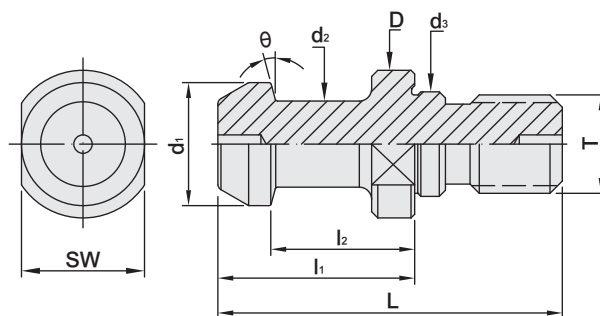
MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	θ	SW	T	WEIGHT (KGS)
49032	DAT40 - A	54	26	20	23	19	14	17	7	15°	19	M16	0.09
49034	DAT50 - A	74	34	25	36	28	21	25	11.5	15°	30	M24	0.25
49036	DAT40 - B	44.5	16.4	11.15	22.5	18.95	12.95	17	7.35	45°	18	M16	0.03
49038	DAT50 - B	65.5	25.55	17.95	37	29.1	19.6	25	11.55	45°	30	M24	0.10

**Features:** ▶ Please make sure the pull stud conforms to the machine type.



# ISO PULL STUD

ISO 螺栓拉頭



MODEL NO.	TYPE	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	l <sub>1</sub>	l <sub>2</sub>	θ	SW	T	WEIGHT (KGS)
49000 - ISO20	ISO20 - 15°	12	9	6	8.5	26	12	9	15°	10	M8	0.01
42194 - ISO25 - 02	ISO25 - 45°	12	10	7	9	31	18	13.5	45°	10	M8	0.02
49000 - ISO25	ISO25 - 15°	12	10	7	8.5	28	16	11.7	15°	10	M8	0.02
49001 - 45	ISO30	17	12.8	9	13	45	24	19	45°	14	M12	0.03

### Features:

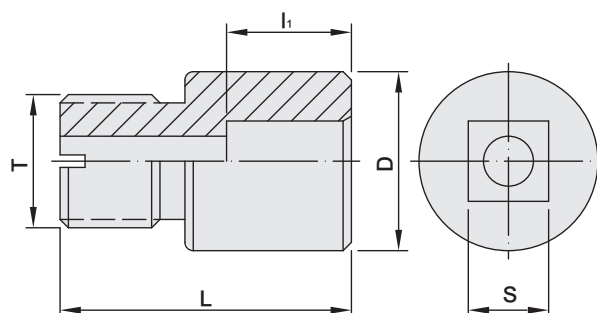
- ▶ Please make sure the pull stud conforms to the machine type.



# SQUARE SHANK ADAPTER

COOLANT THRU

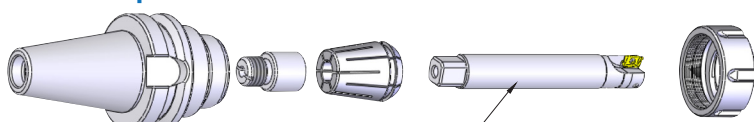
四角榫舌



T W PAT NO. M408428  
 J P PAT NO. 3168351  
 D E PAT NO. Nr.202011004740.7

MODEL NO.	TYPE	L	li	D	S	T	WEIGHT (KGS)
9398765	PLSS1/2" x M16	35	15	21.5	9.652	M16 x 2.0P	0.03
9397764	PLSS3/4" x M16	35	15	21.5	14.288	M16 x 2.0P	0.04
9396764	PLSS1/2" x M20	40	15	29	9.652	M20 x 2.0P	0.12
9396763	PLSS3/4" x M20	40	15	29	14.288	M20 x 2.0P	0.12
9396762	PLSS1" x M20	40	15	29	19.05	M20 x 2.0P	0.12
9396766	PLSS1-1/4" x M24	40	15	34	19.38	M24 x 2.0P	0.18

**We're Making a Better Connection Between the Cutting Tool and Spindle.**



**For the info. of PLIM, please refer to catalog NO.78.**

**Features:**

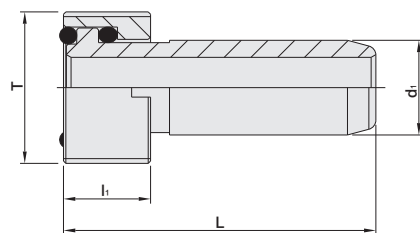
- ▶ Adapts ER Chucks into PowerLOC Milling Holders: PowerLOC Square Shank Adapters turn our standard collet chucks into milling holders capable of performing heavier milling jobs than you ever thought possible.



# COOLANT SUPPLY UNIT & KEY

(DIN 69895)

## HSK 給水管 HSK COOLANT SUPPLY UNIT

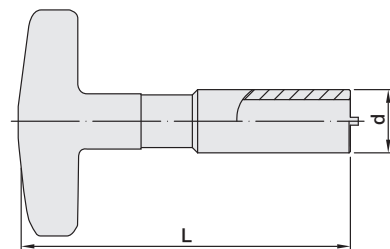


MODEL NO.	TYPE	L	l <sub>1</sub>	d <sub>1</sub>	T	WEIGHT (KGS)
30031	HSK32A - CP	26	5.5	6	M10 x 1.0P	0.01
30033	HSK40A - CP	29.3	7.5	8	M12 x 1.0P	0.01
30035	HSK50A - CP	33	9.5	10	M16 x 1.0P	0.02
30037	HSK63A - CP	36.6	11.5	12	M18 x 1.0P	0.02
30039	HSK80A - CP	40	13.5	14	M20 x 1.5P	0.04
30041	HSK100A - CP	44	15.5	16	M24 x 1.5P	0.06

**Features:**

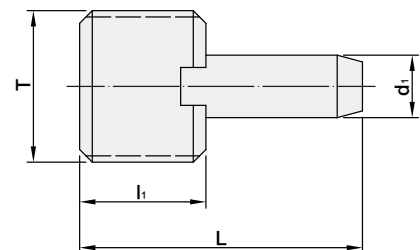
- ▶ Installation and Dismounting of HSK Coolant Supply Unit.

## HSK 給水管扳手 KEY FOR COOLANT SUPPLY UNIT



MODEL NO.	TYPE	L	d	WEIGHT (KGS)
30051	HSK32A - CPW	90	φ 10mm	0.10
30053	HSK40A - CPW	90	φ 13.5mm	0.12
30055	HSK50A - CPW	95	φ 15.5mm	0.14
30057	HSK63A - CPW	100	φ 17.5mm	0.16
30059	HSK80A - CPW	110	φ 19.5mm	
30061	HSK100A - CPW	125	φ 23.5mm	0.32

## PSC 給水管 PSC COOLANT SUPPLY UNIT

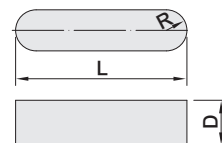


MODEL NO.	TYPE	L	l <sub>1</sub>	d <sub>1</sub>	T	WEIGHT (KGS)
140.950	PSC32	22.4	10	4.95	M12 x 1.5P	0.07
141.950	PSC40	25.8	12	5.95	M14 x 1.5P	0.01
142.950	PSC50	28.35	14	7	M16 x 1.5P	0.015
143.950	PSC63	31	15	8	M20 x 2.0P	0.027
144.950	PSC80	31.3	15	10	M20 x 2.0P	0.026

# PARTS

## FOR CSR COMBI SHELL END MILL ARBOR

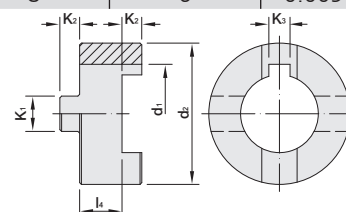
### CSR 連結式銑刀柄零件



#### KEY



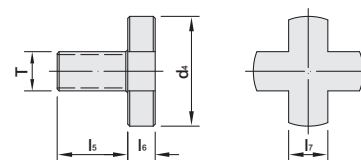
MODEL NO.	TYPE	L	D	R	WEIGHT (KGS)
42831	KEY - 16	22	4	2	0.002
42832	KEY - 22	24	6	3	0.003
42833	KEY - 27	24	7	3.5	0.004
42834	KEY - 32	27	8	4	0.006
42835	KEY - 40	31	10	5	0.008
42836	KEY - 50	35	8	6	0.009



#### REMOVABLE RING



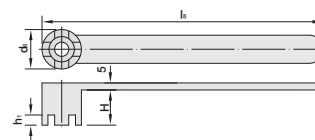
MODEL NO.	TYPE	d <sub>1</sub>	d <sub>2</sub>	k <sub>1</sub>	k <sub>2</sub>	k <sub>3</sub>	l <sub>4</sub>	WEIGHT (KGS)
42841	CORE - 16	16	32	8	5	4	10	0.009
42843	CORE - 22	22	40	10	5.6	6	12	0.01
42845	CORE - 27	27	48	12	6.3	7	12	0.02
42847	CORE - 32	32	58	14	7	8	14	0.03
42849	CORE - 40	40	70	16	8	10	14	0.04
42851	CORE - 50	50	90	18	9	12	16	0.05



#### NUT



MODEL NO.	TYPE	d <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	T	WEIGHT (KGS)
42861	CONU - 16	20	16	6	8	M8	0.07
42863	CONU - 22	28	18	7	10	M10	0.08
42865	CONU - 27	35	22	8	12	M12	0.10
42867	CONU - 32	42	26	9	16	M16	0.20
42869	CONU - 40	52	30	10	20	M20	0.25
42871	CONU - 50	63	36	12	24	M24	0.30



#### SPANNER



MODEL NO.	TYPE	d <sub>6</sub>	l <sub>8</sub>	H	h <sub>1</sub>	WEIGHT (KGS)
42881	COSP - 16	22	180	20	6.2	0.30
42883	COSP - 22	28	200	25	7.2	0.40
42885	COSP - 27	35	225	32	8.5	0.50
42887	COSP - 32	42	250	36	9.5	0.65
42889	COSP - 40	52	280	40	11	0.85
42891	COSP - 50	63	315	45	12	0.95

#### Features:

- Can purchase removable ring, nut and spanner separately.



# SPIGOT INTERCHANGEABLE DIGITAL TORQUE WRENCH

## 數顯 LCD 扭力扳手



### Two-color handle

MODEL NO.	TYPE	LENGTH	RANGE		WEIGHT (KGS)
04575 - 135	DG - 135	365	10 - 135 N·m	7.4 - 99.6 ft/lbs	0.80
04575 - 200	DG - 200	540	20 - 200 N·m	14.8 - 147 ft/lbs	1.10
04575 - 340	DG - 340	769	34 - 340 N·m	25 - 250.9 ft/lbs	1.40



### Steel handle

MODEL NO.	TYPE	LENGTH	RANGE		WEIGHT (KGS)
283.DG252	DG - 252	373	10 - 135 N·m	7.4 - 99.6 ft/lbs	0.80
283.DG253	DG - 253	548	20 - 200 N·m	14.8 - 147 ft/lbs	1.05
283.DG254	DG - 254	748	34 - 340 N·m	25 - 250.9 ft/lbs	1.35



### Two-color handle

MODEL NO.	TYPE	LENGTH	RANGE		WEIGHT (KGS)
283.DG264	DG - 264	373	10 - 135 N·m	7.4 - 99.6 ft/lbs	0.85
283.DG265	DG - 265	548	20 - 200 N·m	14.8 - 147 ft/lbs	1.10
283.DG266	DG - 266	748	34 - 340 N·m	25 - 250.9 ft/lbs	1.40

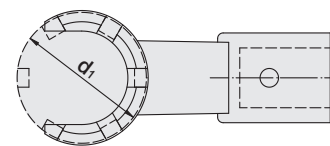


### Steel handle

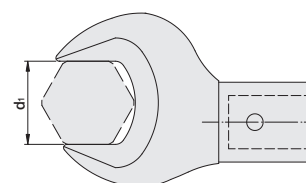
MODEL NO.	TYPE	LENGTH	RANGE		WEIGHT (KGS)
283.DG271	DG - 271	373	10 - 135 N·m	7.4 - 99.6 ft/lbs	0.65
283.DG272	DG - 272	548	20 - 200 N·m	14.8 - 147 ft/lbs	0.90
283.DG273	DG - 273	748	34 - 340 N·m	25 - 250.9 ft/lbs	1.20

# NUT ADAPTERS FOR EXCHANGEABLE TORQUE WRENCH

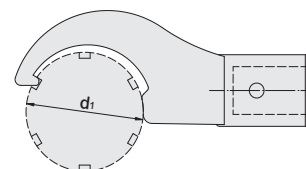
螺帽轉接頭 [扭力扳手用]



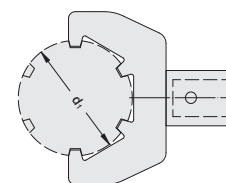
MODEL NO.	TYPE	d <sub>1</sub>	WEIGHT (KGS)
04576	ER11 - M	16	0.09
04577	ER16 - M	22	0.10
04578	ER20 - M	28	0.10
04587	ER25 - M	35	0.10



MODEL NO.	TYPE	d <sub>1</sub>	WEIGHT (KGS)
04582	ER16 - A, ER16A - HS, ER16 - CO	25	0.14
04584	ER20 - A, ER20A - HS, ER20 - CO	30	0.20
04597 - 6	SKS6	18	0.08



MODEL NO.	TYPE	d <sub>1</sub>	WEIGHT (KGS)
04592	EOC25	60	0.30
04597 - 10	SKS10	30	0.16
04597 - 13	SKS13	35	0.17
04597 - 16	SKS16	40	0.18
04597 - 20	SKS20	48.5	0.19
04597 - 25	SKS25	55	0.20



MODEL NO.	TYPE	d <sub>1</sub>	WEIGHT (KGS)
04583	ER16 UM/RD, ER16 - HS	31.7	0.18
04585	ER20 UM/RD, ER20 - HS	35	0.20
04586	ER25 UM/RD, ER25 - HS, ER25 - CO	42	0.25
04588	ER32 UM/RD, ER32 - HS, ER32 - CO	50	0.30
04590	ER40 UM/RD, ER40 - HS, ER40 - CO	63	0.40

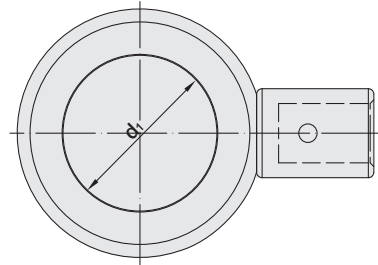
## Features:

- ▶ Used with spigot interchangeable digital torque wrench [P.W-68].
- ▶ Set the torque according to recommended torque value to maintain the best cutting performance.



# NUT ADAPTERS FOR EXCHANGEABLE TORQUE WRENCH

螺帽轉接頭 [扭力扳手用]



MODEL NO.	TYPE	d <sub>1</sub>	WEIGHT (KGS)
287.128.11	ER11 W - TDQ / SKS6 W - TDQ	18	0.24
287.128.16	ER16 W - TDQ / SKS10 W - TDQ	30	0.28
287.128.20	ER20 W - TDQ / SKS13W - TDQ	34	0.32
287.128.25	ER25 W - TDQ	42	0.35
287.128.32	ER32 W - TDQ	50	0.40
287.666.16	SKS16 W - TDQ	40	0.33
287.666.25	SKS25 W - TDQ	55	0.40
284.16	PTER11	16	0.42
284.18	SKS6	18	0.22
284.19.5	SK306, UT11	19.5	0.24
284.22	PTER16	22	0.24
284.27.5	SK310	27.5	0.25
284.28	PTER20	28	0.25
284.30	ER16, SKS10, PNER16, UT16, SKX10-CO	30	0.25
284.32	PNER20	32	0.25
284.33	SK313	33	0.25
284.34	ER20, SK313	34	0.33
284.35	UT20, PTER25	35	0.40
284.40	SKS16, PNER25, SK316, SKX16-CO	40	0.40
284.42	ER25 W-RDQ, UT25	42	0.40
284.48	SKS20, UT32, SKX20-CO	48	0.40
284.50	ER32, PNER32	50	0.42
284.55	SKS25 W-RDQ, SKX25-CO	55	0.42
284.63	PNER40	63	0.58



No using adjustable spanner!



No using ER spanner with steel tube!



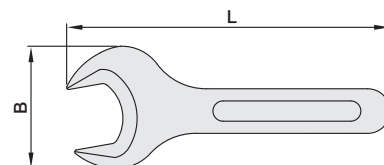
No using adjustable spanner with steel tube!

## Features:

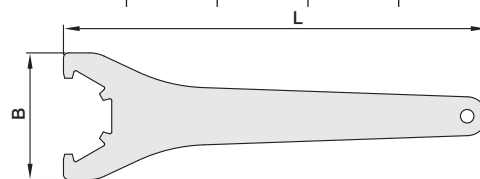
- ▶ Used with spigot interchangeable digital torque wrench [P.W-68].
- ▶ Set the torque according to recommended torque value to maintain the best cutting performance.

# ER SPANNER

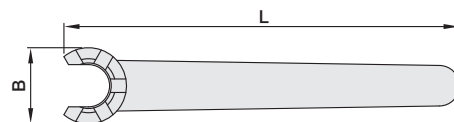
## ER 扳手



MODEL NO.	TYPE	NUT DIA	L	B	WEIGHT (KGS)
04608	ER11 - A, ER11A - HS	19	120	40	0.10
04609	ER16 - A, ER16A - HS, ER16 - CO	28	140	53	0.15
04610	ER20 - A, ER20A - HS, ER20 - CO	34	160	60	0.20



MODEL NO.	TYPE	NUT DIA	L	B	WEIGHT (KGS)
04613	ER16 UM/RD, ER16 - HS	31.7	162	54	0.18
04614	ER20 UM/RD, ER20 - HS	35	182	60	0.20
04615	ER25 UM/RD, ER25 - HS, ER25 - CO	42	206	65	0.22
04616	ER32 UM/RD, ER32 - HS, ER32 - CO	50	253	75	0.30
04617	ER40 UM/RD, ER40 - HSP, ER40 - HS, ER40 - CO	63	289	90	0.50
04618	ER50 UM/RD	78	351	110	0.90



MODEL NO.	TYPE	NUT DIA	L	B	WEIGHT (KGS)
04620	ER8 - M	12	75	13	0.05
04621	ER11 - M	16	95	17	0.04
04622	ER16 - M	22	117	23	0.06
04623	ER20 - M	28	129	29	0.07
04624	ER25 - M	19	143	36	0.09



MODEL NO.	TYPE	NUT DIA	L	B	WEIGHT (KGS)
04642	ER16 - HSP	32	150	29	0.15
04644	ER20 - HSP	36	150	29	0.20
04645	ER25 - HSP, MLD12, MLD1/2"	42	200	38	0.22
04646	ER32 - HSP	50	200	38	0.30

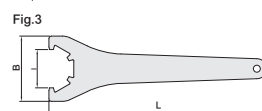
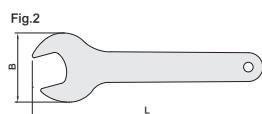
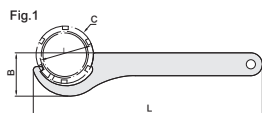
### Features:

- ▶ The spanner can be purchased separately.
- ▶ ER collet chuck doesn't include a spanner.



# SPANNER

## 扳手



MODEL NO.	TYPE	L	B	C	I	Fig	WEIGHT (KGS)
82170	SPU8	155	26	36	31	1	0.06
82171	SPU10	155	27.5	43	35	1	0.06
82172	SPU13	170	37.5	48	46	1	0.08
82173	SPU16	170	40	54	49.5	1	0.08
83691	EOC25, MLD25, MLD1", TG100	260	46	60	52	1	0.30
84191	MLD42	285	65	90	90	1	0.37
84193	EOC32	272	64	72	67	1	0.45
84192G	MLD20, MLD3/4"	260	46	56.5	47.5	1	0.30
84193G	MLD32, MLD1-1/4"	272	64	71	63	1	0.45
18323	SKS10	200	30	30	27	1	0.25
18323 - 13	SKS13	220	30	34	29.8	1	0.25
18324	SKS16	220	38	40	37	1	0.30
18324 - 20	SKS20, MLD16, MLD5/8"	220	40	48	35.8	1	0.32
18325	SKS25	235	41	55.1	51	1	0.40
84020	TG150	272	64	82	67	1	0.50
18322	SKS6	120	36	-	-	2	3.00
84018	TG75	253	75	-	-	3	4.00

## T型梅花[星型]扳手



Fig.1 Allen wrench

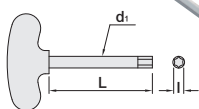
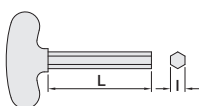
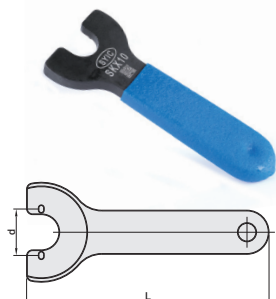


Fig.2 Torx wrench



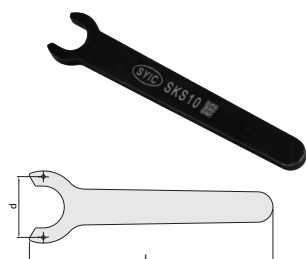
MODEL NO.	TYPE	d <sub>1</sub>	L	I	Fig	WEIGHT (KGS)
B11 - A - 11T20X100 - B - G	T20 - 100	3.9	100	T20	1	0.04
B11 - A - 11T20X200 - B - G	T20 - 200	3.9	200	T20	1	0.04
B11 - A - 11T20X200 - B - 1	T20 - 200	6	200	T20	1	0.04
B11 - A - 10T5X150 - B	T5 - 150	-	150	5	2	0.06
B11 - A - 10T5X200 - B	T5 - 200	-	200	5	2	0.06
B11 - A - 10T6X150 - B	T6 - 150	-	150	6	2	0.08
B11 - A - 10T6X200 - B	T6 - 200	-	200	6	2	0.10
B11 - A - 10T8X200 - B	T8 - 200	-	200	8	2	0.14
B11 - A - 10T10X200 - B	T10 - 200	-	200	10	2	0.16

## SKX止水垫片扳手 SKX Sealed Cap Spanner



MODEL NO.	TYPE	L	d	WEIGHT (KGS)
288.790.06	SKX06	82.5	10.5	0.06
288.790.10	SKX10	82.5	15.8	0.05
288.790.16	SKX16	92.5	24.8	0.07
288.790.20	SKX20	92.5	28.8	0.07
288.790.25	SKX25	95.0	34.8	0.09

## SKS止水垫片扳手 SKS Sealed Cap Spanner

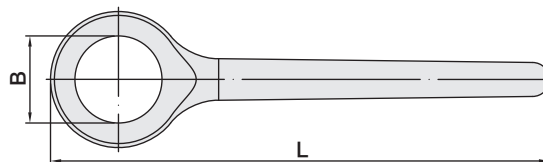


MODEL NO.	TYPE	L	d	WEIGHT (KGS)
203.658.10 - 2	SKS10	117	17	0.06
203.658.13 - 2	SKS13	130	22	0.07
203.658.16 - 2	SKS16	130	27	0.08
203.658.20 - 2	SKS20	130	32	0.09
203.658.25 - 2	SKS25	130	37	0.09



# BEARING SPANNER

## 軸承扳手



MODEL NO.	TYPE	NUT DIA	L	B	WEIGHT (KGS)
286.129.11	ER11 W-RDQ / SKS6 W-RDQ	18	120	18	0.33
286.129.16	ER16 W-RDQ / SKS10 W-RDQ	30	170	30	0.43
286.129.20	ER20 W-RDQ / SKS13 W-RDQ	34	172	34	0.43
286.129.25	ER25 W-RDQ	42	175	42	0.47
286.129.32	ER32 W-RDQ	50	180	50	0.50
286.667.16	SKS16 W-RDQ	40	175	40	0.50
286.667.20	SKS20 W-RDQ	48	198	48	0.55
286.667.25	SKS25 W-RDQ	55	183	55	0.55
04630	PTER8, SP-ER8M	12	100	12	0.09
285.16	PTER11	16	195	16	0.38
285.18	SKS6, ER11	18	195	18	0.38
285.19.5	SK306, SKX6-CO	19.5	195	19.5	0.39
285.22	PTER16	22	195	22	0.40
285.27.5	SK310	27.5	195	27.5	0.40
285.28	PTER20	28	195	28	0.40
285.30	ER16, SKS10, PNER16, UT16, SKX10-CO	30	195	30	0.40
285.32	PNER20	32	195	32	0.40
285.33	SK313	33	195	33	0.40
285.34	ER20, SKS13	34	235	34	0.45
285.35	UT20, PTER25	35	235	35	0.64
285.40	SKS16, PNER25, SK316, SKX16-CO	40	235	40	0.64
285.42	ER25, UT25	42	235	42	0.67
285.48	SKS20, UT32, SKX20-CO	48	235	48	0.69
285.50	ER32, PNER32	50	235	50	0.69
285.55	SKS25 W-RDQ, SKX25-CO	55	235	55	0.91
285.63	PNER40, PRO32	63	250	63	0.70
285.71	MLD32	71	270	71	1.24

### Features:

- Used for all non wind resistance nuts.



No using adjustable spanner!



No using ER spanner with steel tube!

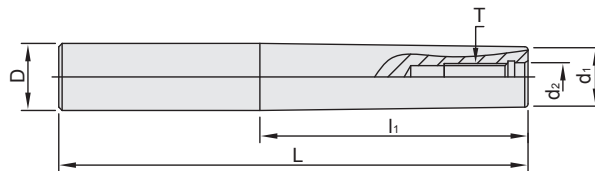


No using adjustable spanner with steel tube!



# STRAIGHT SHANK SOM EXTENSION HOLDER

直柄 SOM 螺紋鎖固式延長桿



TW PAT NO. M319837  
CN PAT NO. ZL200720007532.3

MODEL NO.	TYPE	D	T	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	WEIGHT (KGS)
83782	C12 - SOM6 - 130	12	M6 x 1.0P	10	6.5	130	60	0.07
83784	C16 - SOM8 - 140	16	M8 x 1.25P	13	8.5	140	80	0.15
83786	C16 - SOM8 - 180	16	M8 x 1.25P	13	8.5	180	120	0.21
83788	C20 - SOM10 - 140	20	M10 x 1.5P	18	10.5	140	80	0.24
83790	C20 - SOM10 - 180	20	M10 x 1.5P	18	10.5	180	120	0.35
83792	C25 - SOM12 - 170	25	M12 x 1.75P	21	12.5	170	100	0.56
83794	C25 - SOM12 - 210	25	M12 x 1.75P	21	12.5	210	140	0.69

## Screwed cutting tool



P.W-75



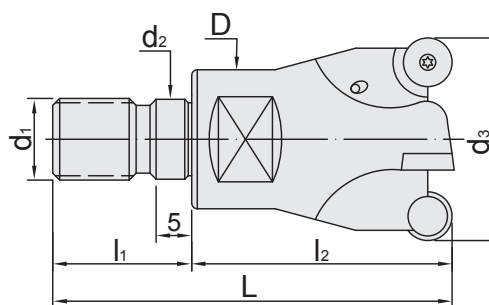
P.W-76



P.W-77

# STR SCREWED CUTTING TOOL

## STR 螺紋鎖固切削刀具



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	Inserts	WEIGHT (KGS)
83702	STR - 2.5R12M6 - 2T	39	17	22	6.5	M6	10	12	RD..0501	0.03
83704	STR - 3.5R16M8 - 2T	41	18	23	8.5	M8	13.5	16	RD..0702	0.05
83706	STR - 3.5R20M10 - 3T	49	19	30	10.5	M10	18	20	RD..0702	0.08
83708	STR - 3.5R25M12 - 3T	58	23	35	12.5	M12	21	25	RD..0702	0.12
83710	STR - 5R25M12 - 2T	58	23	35	12.5	M12	21	25	RD..1003	0.11
83712	STR - 5R30M16 - 3T	67	25	42	17	M16	26	30	RD..1003	0.19
83714	STR - 5R35M16 - 4T	67	25	42	17	M16	29	35	RD..1003	0.23

### Accessory:

Inserts	Screw	Wrench	Torque	Clamp Screw	Clamp Wrench	Torque
RD..0501	M2-3.8-2.68-43	T6	0.6	M2-3.8-2.68-43	T6	0.6
RD..0702	M2.5-6.45-3.7	T8	1.2	M3.5-8.0-5.0-43	T15	3.0
RD..1003	M3.5-8.0-5.0-43	T15	3.0	M4-8.0-5.7-60	T15	3.0

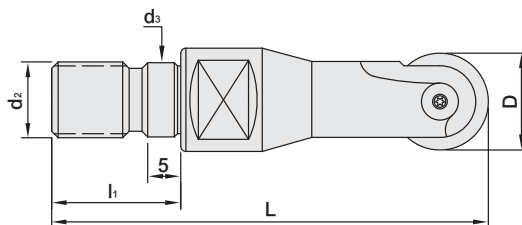
### Product information:

- ▶ Inserts are optional accessories. Needs to be purchased additionally.



# RG SCREWED CUTTING TOOL

## RG 螺紋鎖固切削刀具



MODEL NO.	TYPE	L	l <sub>1</sub>	D	d <sub>2</sub>	d <sub>3</sub>	Inserts	WEIGHT (KGS)
83722	RG - 4R08M6	50	17	8	M6	10	RG08S	0.03
83724	RG - 5R10M6	50	17	10	M6	10	RG10S	0.03
83726	RG - 6R12M8	55	18	12	M8	13.5	RG12S	0.44
83728	RG - 8R16M8	60	18	16	M8	13.5	RG16S	0.05
83730	RG - 10R20M10	65	19	12	M10	18	RG20S	0.09
83732	RG - 12.5R25M12	70	23	25	M12	21	RG25S	0.14

### Accessory:

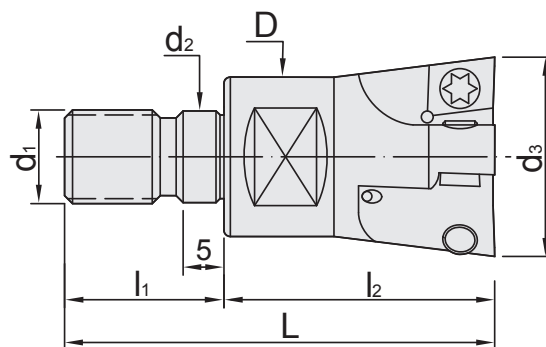
Inserts	Screw	Wrench	Torque
RG08S	RG - M8	T6	0.6
RG10S	RG - M10	T7	0.9
RG12S	RG - M12	T10	2.0
RG16S	RG - M16	T15	3.0
RG20S	RG - M20	T20	5.0
RG25S	RG - M25	T20	5.0

### Product information:

- ▶ Inserts are optional accessories. Needs to be purchased additionally.

# DM SCREWED CUTTING TOOL

## DM 螺紋鎖固切削刀具



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	Inserts	WEIGHT (KGS)
83742	DM - 0412M6 - 2T	39	17	22	6.5	M6	10	12	EP..0402	0.03
83744	DM - 0416M8 - 3T	41	18	23	8.5	M8	13.5	16	EP..0402	0.04
83746	DM - 0620M10 - 3T	49	19	30	10.5	M10	18	20	EP..0602	0.06
83748	DM - 0825M12 - 2T	58	23	35	12.5	M12	21	25	EP..08M3	0.11
83750	DM - 0825M12 - 3T	58	23	35	12.5	M12	21	25	EP..08M3	0.10
83752	DM - 0830M16 - 4T	67	25	42	17	M16	26	30	EP..08M3	0.19
83754	DM - 0835M16 - 4T	67	25	42	17	M16	29	35	EP..08M3	0.21

### Accessory:

Inserts	Screw	Wrench	Torque
EP..0402	M2-3.8-2.68-43	T6	0.6
EP..0402	M2-5.0-2.7-60	T6	0.6
EP..0602	M2.5-6.45-3.7	T8	1.2
EP..08M3	M4-8.0-5.0-43	T15	3.0

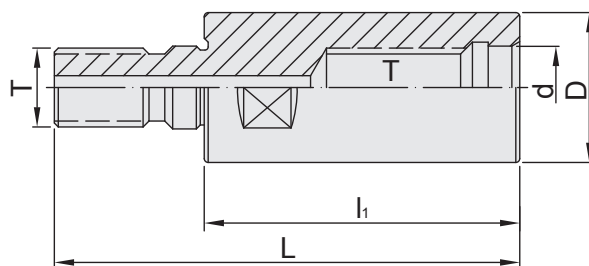
### Product information:

- Inserts are optional accessories. Needs to be purchased additionally.



# SOM EXTENSION SPACER

SOM 延長桿



MODEL NO.	TYPE	L	l <sub>1</sub>	D	d	T	WEIGHT (KGS)
83762	SOM6 - 25	42	25	13	6.5	M6 x 1.0P	0.05
83764	SOM8 - 32	50	32	15	8.5	M8 x 1.25P	0.06
83766	SOM10 - 40	59	40	19	10.5	M10 x 1.5P	0.08
83768	SOM12 - 50	73	50	21	12.5	M12 x 1.75P	0.10
83770	SOM16 - 60	85	60	25	17	M16 x 2.0P	0.12

#### Features:

- ▶ The extension has a hole, good for water to get through and anti-vibration.
- ▶ The material adopts anti-vibration steel.
- ▶ The thread precision belongs to the 1st grade thread 4H.

# MTB / ER COLLET HOLDER

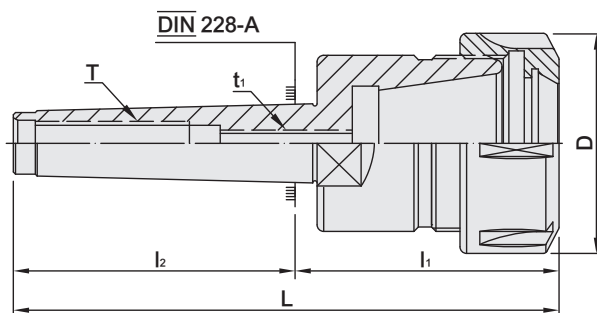


MTB / ER 銑夾頭柄

[ DIN ISO 15488 ]



T W PAT NO. M298033  
 T W PAT NO. M311791  
 T W PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	t <sub>1</sub>	T DRAW BAR	WEIGHT (KGS)
04700	MTB2 x ER20A - 52	116	52	64	35	M10 x 1.5P	M10 x 1.5P, 3/8" W16	0.45
04701	MTB2 x ER25 - 55	119	55	64	42	M10 x 1.5P	M10 x 1.5P, 3/8" W16	0.50
04702	MTB3 x ER25 - 55	136	55	81	42	M12 x 1.75P	M12 x 1.75P, 1/2" W12	0.60
04703	MTB3 x ER32 - 60	141	60	81	50	M12 x 1.75P	M12 x 1.75P, 1/2" W12	0.80
04704	MTB3 x ER40 - 70	151	70	81	63	M12 x 1.75P	M12 x 1.75P, 1/2" W12	1.30
04705	MTB4 x ER32 - 60	162.5	60	102.5	50	M16 x 2.0P	M16 x 2.0P, 5/8" W11	0.95
04706	MTB4 x ER40 - 70	172.5	70	102.5	63	M16 x 2.0P	M16 x 2.0P, 5/8" W11	1.50

# R8 / ER COLLET HOLDER

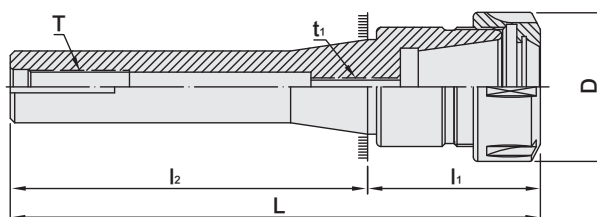


R8 / ER 銑床夾頭柄

[ DIN ISO 15488 ]



T W PAT NO. M298033  
 T W PAT NO. M311791  
 T W PAT NO. M186381  
 J P PAT NO. 3128766  
 K R PAT NO. 20-0433603  
 C N PAT NO. ZL200620132661.0  
 C H PAT NO. 696550  
 T R PAT NO. TR 2007 02942 Y  
 I T PAT NO. N.0000266731



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	t <sub>1</sub>	T DRAW BAR	WEIGHT (KGS)
04717	R8 x ER16A - 38	136	38	101	28	M10 x 1.5P	7/16" NF20	0.65
04718	R8 x ER32 - 60	161	60	101	50	M12 x 1.75P	7/16" NF20	0.90
04719	R8 x ER40 - 65	168	65	101	63	M16 x 2.0P	7/16" NF20	1.15

**Features:**

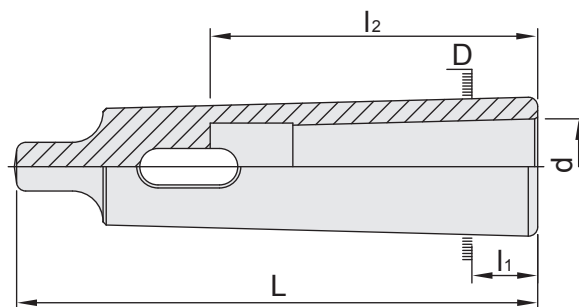
- ▶ Body's thread is ground precisely.
- ▶ Each holder has been locked with a nut, but not including the spanner.

Collet	Nut	Spanner
P.W-7~28	P.W-48	P.W-71



# DRILL SLEEVE

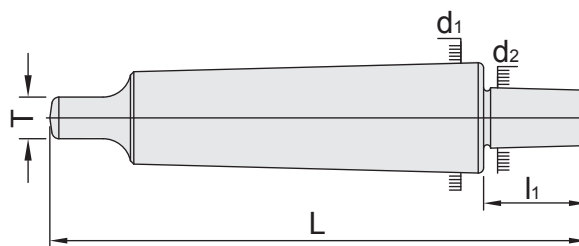
鑽頭套筒



MODEL NO.	TYPE	D	d	L	l <sub>1</sub>	l <sub>2</sub>	WEIGHT (KGS)
81002	DS - MT1 x MT2	17.78	12.065	92	17	56	0.10
81007	DS - MT2 x MT3	23.825	17.78	112	18	67	0.19
81008	DS - MT2 x MT4	31.267	17.78	124	6.5	67	0.45
81011	DS - MT3 x MT4	31.267	23.825	140	22.5	84	0.40
81014	DS - MT4 x MT5	44.399	31.267	171	21.5	107	0.96
81016	DS - MT5 x MT6	63.348	44.399	218	8	135	2.80

# DRILL CHUCK ARBOR

夾頭心軸



MODEL NO.	TYPE	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	T	WEIGHT (KGS)
81411	MTA2 x JT6	17.78	17.17	109.4	29.4	6.3	0.19
81412	MTA2 x JT3	17.78	20.599	116	35	6.3	0.20
81418	MTA3 x JT6	23.825	17.17	128.4	29.4	7.9	0.30
81424	MTA4 x JT6	31.267	17.17	153.4	29.4	11.9	0.70
81441	MK2 x B16	17.78	15.733	112	29	6.3	0.18
81448	MK3 x B16	23.825	15.733	134	29	7.9	0.34
81454	MK4 x B16	31.267	15.733	159.5	29	11.9	0.65

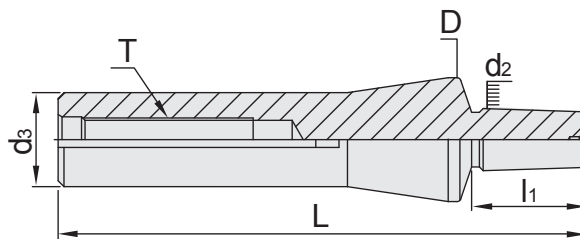
**Features:**

- ▶ MTA=TANG TYPE ▶ Runout: 0.005mm ▶ Roundness: 0.005mm.



# R8 DRILL CHUCK ARBOR

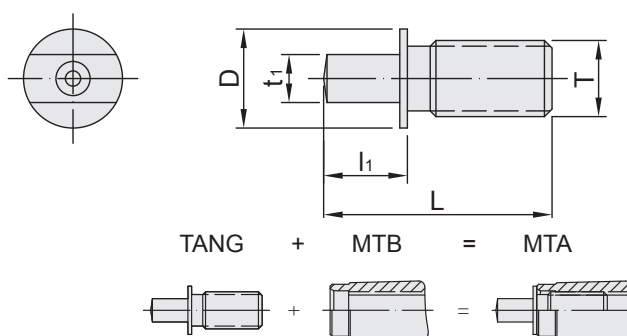
R-8 夾頭心軸



MODEL NO.	TYPE	D	d <sub>2</sub>	d <sub>3</sub>	L	l <sub>1</sub>	T	WEIGHT (KGS)
81501	R8 x JT33	31.75	15.85	24.1	136.4	29.4	7/16" NF 20	0.41
81502	R8 x JT6	31.75	17.17	24.1	136.4	29.4	7/16" NF 20	0.45
81503	R8 x JT3	31.75	20.599	24.1	142	35	7/16" NF 20	0.49
81511	R8 x B16	31.75	15.733	24.1	138	29	7/16" NF 20	0.45

# TANG

樺舌



MODEL NO.	TYPE	D	L	l <sub>1</sub>	t <sub>1</sub>	T	WEIGHT (KGS)
83640	MT2	13	30	7	6.3	3/8" - 16	0.002
83641	MT2	13	30	7	6.3	M10 x 1.5P	0.002
83644	MT3	18	40	12	7.8	1/2" - 12	0.05
83645	MT3	18	40	12	7.8	M12 x 1.75P	0.04
83646	MT4	25	46	13	11.9	5/8" - 11	0.07
83647	MT4	25	46	13	11.9	M16 x 2.0P	0.07
83648	MT5	35	47	14	15.9	1" - 8	0.17
83649	MT5	35	47	14	15.9	M24 x 3.0P	0.17

## Features:

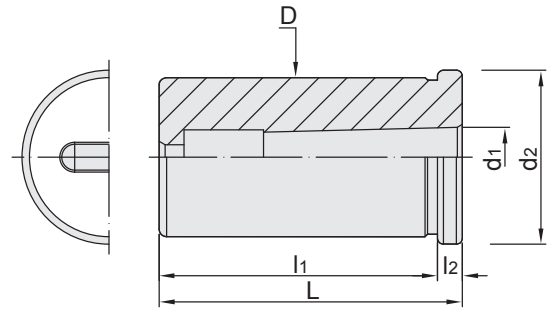
- Tang is designed for MTB, used for MTA machine, such as drilling machine or Lathe.



## STRAIGHT SHANK

## MORSE TAPER ADAPTER

直式鑽頭套筒



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	D	d <sub>1</sub>	d <sub>2</sub>	WEIGHT (KGS)
84131	SSC32 x MTA1	61	56	5	32	12.065	35	0.35
84132	SSC32 x MTA2	73	65	8	32	17.78	37	0.35
84133	SSC32 x MTA3	92	72	20	32	23.825	37	0.35
84134	SSC42 x MTA1	61	56	5	42	12.065	47	0.62
84135	SSC42 x MTA2	74	66	8	42	17.78	47	0.62
84136	SSC42 x MTA3	92	75	17	42	23.825	47	0.62
84137	SSC42 x MTA4	115	90	25	42	31.267	47	0.82

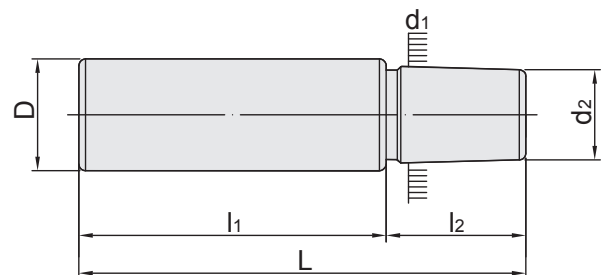
**Features:**

► MTA=TANG TYPE=DIN 228-B. ► SSC=Straight shank.

## STRAIGHT SHANK

## DRILL SLEEVE

直式夾頭心軸



MODEL NO.	TYPE	D	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	WEIGHT (KGS)
84141	SSC20 x JT6	20	17.17	15.851	84.4	55	29.4	0.20
84142	SSC32 x JT6	32	17.17	15.851	99.4	70	29.4	0.50
84143	SSC32 x JT3	32	20.599	18.951	105.95	70	35.95	0.60
84144	SSC42 x JT6	42	17.17	15.825	99.4	70	29.4	1.15
84145	SSC42 x JT3	42	20.599	18.951	135.95	100	35.95	1.20

**Features:**

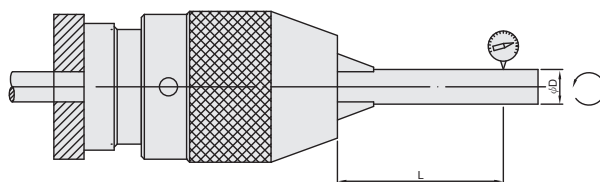
► Suitable for any Milling Chuck or spring collet.



# KEYLESS DRILL CHUCK

## SPECIAL HEAVY DUTY

超重力型 自動鑽夾頭



MODEL NO.	TYPE	LENGTH (CLOSED)	OUTER DIA.	CLAMPING CAPACITY	WEIGHT (KGS)
82150	08S x JT1	76	38	1 ~ 8mm 5/16"	0.17
82151	10S x JT2	92	43	1 ~ 10mm 3/8"	0.25
82153	13S x JT6	102	49	1 ~ 13mm 1/2"	0.95
82154	16S x JT6	110	55	3 ~ 16mm 5/8"	1.20
82155	08S x B10	76	38	1 ~ 8mm 5/16"	0.17
82157	10S x B12	92	43	1 ~ 10mm 3/8"	0.25
82159	13S x B16	102	49	1 ~ 13mm 1/2"	1.00
82160	16S x B16	110	55	3 ~ 16mm 5/8"	1.20
82162	16S x B18	110	55	3 ~ 16mm 5/8"	1.20

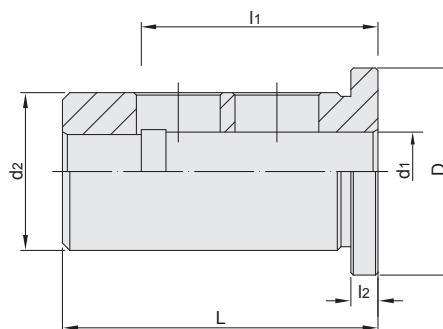
### Features:

- ▶ Extremely high accuracy and precision design, suitable for CNC machines and machine centers.
- ▶ All parts are ground, heat treated, surface treated and under secure QC.

# STRALGHT SLEEVE

## FOR SIDE LOCK OIL HOLE HOLDER

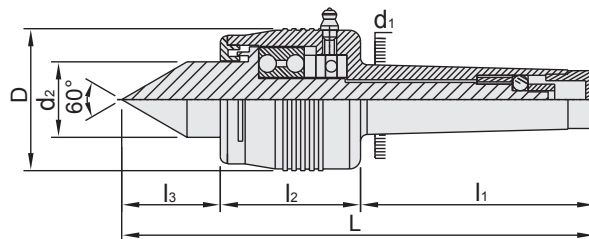
OSL 側固式油路刀把套筒



MODEL NO.	TYPE d <sub>2</sub> - d <sub>1</sub>	D	L	l <sub>1</sub>	l <sub>2</sub>	WEIGHT (KGS)
18051	OSL - 20 - 16	30	54	48	5.5	0.07
18053	OSL - 25 - 16	35	60	48	5.5	0.19
18055	OSL - 25 - 20	35	60	56	5.5	0.15
18057	OSL - 32 - 16	42	64	48	5.5	0.35
18059	OSL - 32 - 20	42	64	56	5.5	0.32
18061	OSL - 32 - 25	42	64	56	5.5	0.22
18063	OSL - 40 - 16	50	74	48	5.5	0.57
18065	OSL - 40 - 20	50	74	60	5.5	0.54
18067	OSL - 40 - 25	50	74	60	5.5	0.45
18069	OSL - 40 - 32	50	74	60	5.5	0.30

# OIL INJECTION ROTARY CENTER

注油式迴轉頂心



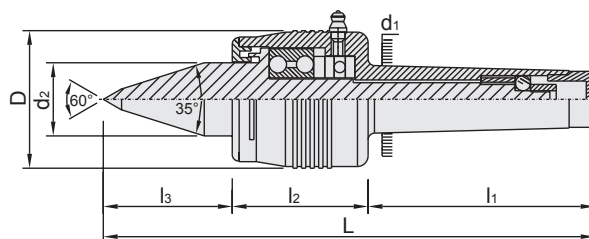
MODEL NO.	TYPE	D	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
82012	SC - 69M - MT4	64	31.267	31.5	210	96	58	42	1.86
82013	SC - 69M - MT5	64	44.399	31.5	237	120	58	42	2.46

## Features:

- ▶ Use large-scale point, increasing strength.
- ▶ With waterproof function, good for heat dissipation.
- ▶ It could be oil injected regularly, extending use life.
- ▶ Tip angle 60°, concentricity 0.005mm.
- ▶ Suitable for CNC lathe and high speed lathe.

# OIL INJECTION ROTARY CENTER FOR SLIM WORKPIECE

細物用注油式迴轉頂心



MODEL NO.	TYPE	D	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	WEIGHT (KGS)
82017	SC - 70L - MT4	64	31.267	31.5	224	108	58	58	2.24
82018	SC - 70L - MT5	64	44.399	31.5	251	135	58	58	2.90

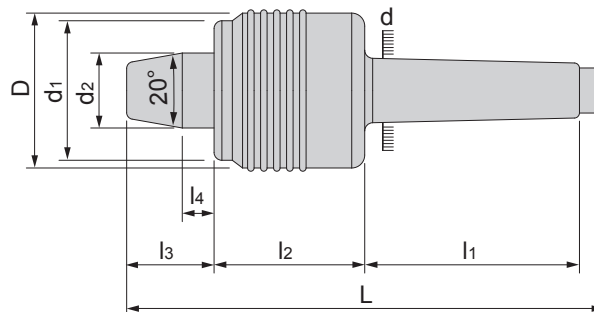
## Features:

- ▶ The point is shrunk 35°, which is used to fix slim workpiece.
- ▶ With waterproof function, good for heat dissipation.
- ▶ It could be oil injected regularly, extending use life.
- ▶ Tip angle 60°, concentricity 0.005mm.
- ▶ Suitable for CNC lathe and high speed lathe.

# INTERCHANGEABLE LIVE CENTER

## OIL INJECTION SYSTEM

注油式替換頂心

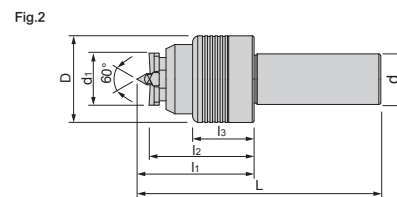
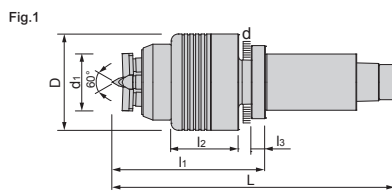


MODEL NO.	TYPE	L	D	d	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	WEIGHT (KGS)
82044	SC- 68H - MT4	199	64	31.267	58	31.6	96	58	33	13	2.24
82045	SC - 68H - MT5	226	64	44.399	58	31.6	120	58	33	13	3.10

68H-6A	68H-8A	68H-10A	68H-15A	68H-35A	68H-A

# AUTOMATIC ADJUSTABLE INSERTED CENTER

自動可調式插式頂心



MODEL NO.	TYPE	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	D	d	d <sub>1</sub>	Fig.	WEIGHT (KGS)
82062	SC - 66A - MT4	203	109	48	10	68.5	31.267	40.5	1	2.52
82064	SC - 66B - C40	203	92	82.7	48	68.5	40	40.5	2	2.12

PART NO	RANGE	TYPE A	PART NO	RANGE	TYPE B
TYPE A	10 ~ 60		TYPE B	15 ~ 35	

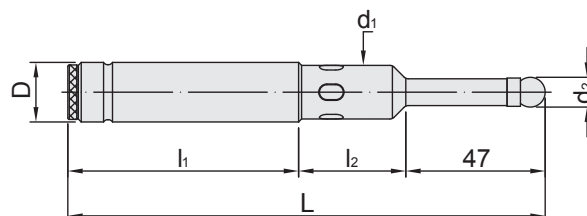
- ▶ The center cylinder can be adjusted automatically when the workpiece is uneven.
- ▶ Center pointer and Center cylinder can be used interchangeably.



# OPTICAL EDGE FINDER

## TOUCH POINT SENSOR

光電式尋邊器



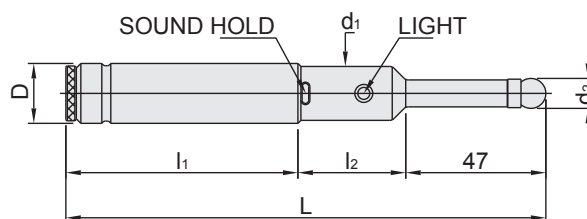
MODEL NO.	TYPE	D	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	BATTERY TYPE	WEIGHT (KGS)
83301	OP - 20	20	18	10	160	79	34	UM - 5(SP) 2P/R1/1.5V	0.3
83302	OP - 32	32	18	10	160	79	34	UM - 5(SP) 2P/R1/1.5V	0.6

**Features:**

- ▶ Quickly locate working edges.
  - ▶ Save time to find positions, for Milling Machine, Jig borers, and other machine tools.
- HIGH SENSIBLE POSITION MEASURING
- ▶ Uses dry batteries to light the red bulb.
  - ▶ The scope of application includes edge surface, inside and outside diameters and high efficiency.
  - ▶ There is a safety spring puller, which will put a ball precisely back to the position when ball breaks away from ball seat.

# E.S. OPTICAL EDGE FINDER

警示鳴音 光電尋邊器



T W PAT NO. M319837  
T W PAT NO. 93911

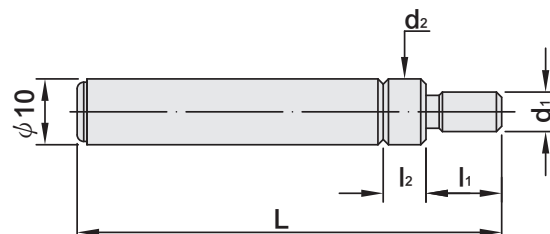
MODEL NO.	TYPE	D	d <sub>1</sub>	d <sub>2</sub>	L	l <sub>1</sub>	l <sub>2</sub>	BATTERY TYPE	WEIGHT (KGS)
83311	ES - 20	20	18	10	160	79	41	UM5 <sup>#</sup> x 2pcs	0.35
83312	ES - 32	32	18	10	160	79	41	UM5 <sup>#</sup> x 2pcs	0.60

**Features:**

- ▶ The red lamp can concentrate light and resist water.
- ▶ It will beep at the same time when the red lamp is on.
- ▶ When probe is in a deep hole you can't see the red light, but you can hear the sound.

# MECHANICAL EDGE FINDER

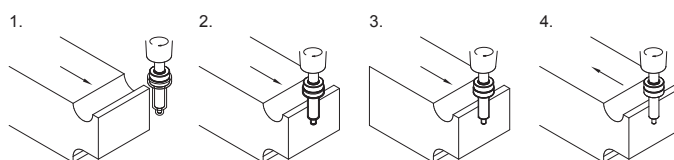
## 偏心式尋邊器



MODEL NO.	TYPE	L	$l_1$	$l_2$	$d_1$	$d_2$	WEIGHT (KGS)
83352	ME610	65	11.5	6.5	$\phi 6$	$\phi 10$	0.03
83342	HME610	65	11.5	6.5	$\phi 6$	$\phi 10$	0.03

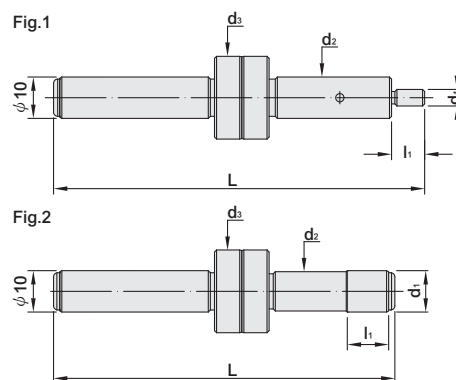
### Features:

- ▶ Accuracy of the point to point is within 0.002mm.
- ▶ Revolution within 400-600RPM.
- ▶ Max. flange is clear for our sight.
- ▶ 4mm is the min. hole that could be tested.
- ▶ Suitable for milling machine, drilling machine, and boring machine.



# MECHANICAL EDGE FINDER

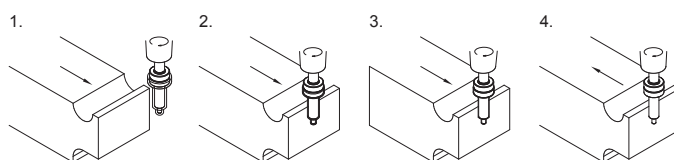
## 偏心式尋邊器



MODEL NO.	TYPE	L	$l_1$	$d_1$	$d_2$	$d_3$	Fig	WEIGHT (KGS)
83354	ME420	90	8	$\phi 4$	$\phi 10$	$\phi 20$	1	0.06
83344	HME420	90	8	$\phi 6$	$\phi 10$	$\phi 20$	1	0.06
83356	ME1020	82.8	10	$\phi 10$	$\phi 10$	$\phi 20$	2	0.06
83346	HME1020	82.8	10	$\phi 10$	$\phi 10$	$\phi 20$	2	0.06

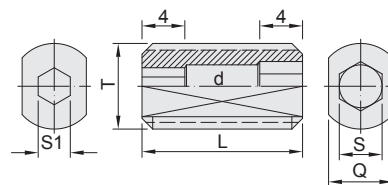
### Features:

- ▶ Accuracy of the point to point is within 0.002mm.
- ▶ Revolution within 400-600RPM.
- ▶ Max. flange is clear for our sight.
- ▶ 4mm is the min. hole that could be tested.
- ▶ Suitable for milling machine, drilling machine, and boring machine.



# SCREW

## 給水型擋刀螺絲



### COOLANT PRESET SCREW



MODEL NO.	T	L	d	S	S1	Q	WEIGHT (KGS)
19192	M5 x 0.8P	15	2	2	2	3	0.003
19193	M6 x 1.0P	15	3	2.5	2.5	4	0.003
19194	M8 x 1.25P	15	4	4	3	6	0.005
19195	M10 x 1.5P	15	5	5	4	8	0.005
19196	M12 x 1.75P	15	6	6	5	10	0.01
19197	M16 x 2.0P	25	6	8	6	14	0.01
19198	M20 x 2.0P	25	6	10	8	18	0.03

## 給水型擋刀螺絲

### COOLANT PRESET SCREW



MODEL NO.	TYPE	WEIGHT (KGS)	MODER NO.	TYPE	WEIGHT (KGS)
16080C - 20	M5 x 0.8P - 20	0.002	16090C - 25	M18 x 1.5P - 25	0.02
16081C	M6 x 1.0P - 15	0.003	16091C	M20 x 2.0P - 15	0.03
16082C	M8 x 1.25P - 15	0.005	16092C - 25	M22 x 1.5P - 25	0.03
16083C	M10 x 1.5P - 15	0.005	16093C	M24 x 2.0P - 15	0.05
16085C	M12 x 1.75P - 15	0.01	16095C - 30	M28 x 2.0P - 30	0.05
16089C	M16 x 2.0P - 15	0.01			

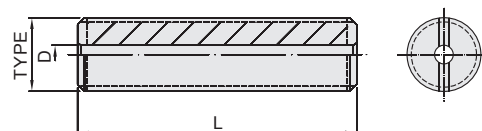
## 擋刀螺絲

### PRESET SCREW



MODEL NO.	TYPE	WEIGHT (KGS)	MODER NO.	TYPE	WEIGHT (KGS)
16081	M6 x 1.0P - 15	0.003	16089	M16 x 2.0P - 15	0.03
16082	M8 x 1.25P - 15	0.005	16091	M20 x 2.0P - 15	0.03
16083	M10 x 1.5P - 15	0.01	16093	M24 x 2.0P - 15	0.05
16085	M12 x 1.75P - 15	0.01			

## MLD 設定螺絲



### SET SCREW



MODEL NO.	TYPE	L	D	WEIGHT (KGS)
15946 - 1	M12 x 1.75P	40	φ4	0.03
15947 - 1	M16 x 2.0P	60	φ4	0.05
15947 - 4	M16 x 2.0P	35	φ4	0.05
15947 - 2	5/8" - 11UNC	60	φ4	0.07
15947 - 3	5/8" - 11UNC	35	φ4	0.07
15948 - 1	M24 x 3.0P	60	φ4	0.18
15948 - 2	1" - 8UNC	60	φ4	0.20

► FOR Multi-lock collet chucks.

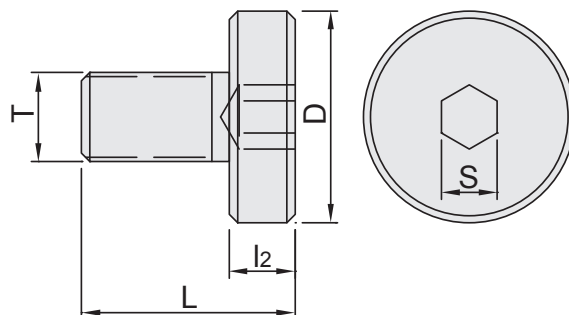




# SHELL MILL SCREW

SPECIALLY USED FOR CAT INCH FINE THREAD

華司螺絲 [專用於CAT英制細牙平面銑刀柄]



## STANDARD TYPE

MODEL NO.	TYPE	D	L	l <sub>2</sub>	T	S	WEIGHT (KGS)
WF - 0.5	FMA screw 1/2 "	15.875	21.336	8.636	1/4" - 28UNF	3/16"	0.01
WF - 0.5 - 1.5	FMA screw 1/2 "	15.875	46.736	8.636	1/4" - 28UNF	3/16"	0.04
WF - 0.75	FMA screw 3/4 "	22.225	34.798	9.398	3/8" - 24UNF	1/4"	0.04
WF - 0.75 - 1.5	FMA screw 3/4 "	22.225	47.498	9.398	3/8" - 24UNF	1/4"	0.06
WF - 1	FMA screw 1 "	30.163	34.798	9.398	1/2" - 20UNF	5/16"	0.06
WF - 1 - 1.75	FMA screw 1 "	30.163	53.848	9.398	1/2" - 20UNF	5/16"	0.08
WF - 1.25	FMA screw 1-1/4 "	38.1	44.45	12.7	5/8" - 18UNF	5/16"	0.16
WF - 1.25 - 1.75	FMA screw 1-1/4 "	38.1	57.15	12.7	5/8" - 18UNF	5/16"	0.20
WF - 1.5	FMA screw 1-1/2 "	47.625	44.45	12.7	3/4" - 16UNF	3/8"	0.24
WF - 1.5 - 1.75	FMA screw 1-1/2 "	47.625	57.15	12.7	3/4" - 16UNF	3/8"	0.27
WF - 2	FMA screw 2 "	63.5	50.8	12.7	1" - 14UNF	1/2"	0.42
WF - 2 - 2	FMA screw 2 "	63.5	63.5	12.7	1" - 14UNF	1/2"	0.60
WF - 2.5	FMA screw 2-1/2 "	79.375	57.15	12.7	1" - 14UNF	1/2"	0.60

## COOLANT TYPE

W.F.C1 - 0.5	FMA screw 1/2 "	15.875	21.336	8.636	1/4" - 28UNF	3/16"	0.01
W.F.C1 - 0.5 - 1.5	FMA screw 1/2 "	15.875	46.736	8.636	1/4" - 28UNF	3/16"	0.04
W.F.C1 - 0.75	FMA screw 3/4 "	22.225	34.798	9.398	3/8" - 24UNF	1/4"	0.04
W.F.C1 - 0.75 - 1.5	FMA screw 3/4 "	22.225	47.498	9.398	3/8" - 24UNF	1/4"	0.06
W.F.C1 - 1	FMA screw 1 "	30.163	34.798	9.398	1/2" - 20UNF	5/16"	0.06
W.F.C1 - 1 - 1.75	FMA screw 1 "	30.163	53.848	9.398	1/2" - 20UNF	5/16"	0.08
W.F.C1 - 1.25	FMA screw 1-1/4 "	38.1	44.45	12.7	5/8" - 18UNF	5/16"	0.16
W.F.C1 - 1.25 - 1.75	FMA screw 1-1/4 "	38.1	57.15	12.7	5/8" - 18UNF	5/16"	0.20
W.F.C1 - 1.5	FMA screw 1-1/2 "	47.625	44.45	12.7	3/4" - 16UNF	3/8"	0.24
W.F.C1 - 1.5 - 1.75	FMA screw 1-1/2 "	47.625	57.15	12.7	3/4" - 16UNF	3/8"	0.27
W.F.C1 - 2	FMA screw 2 "	63.5	50.8	12.7	1" - 14UNF	1/2"	0.42
W.F.C1 - 2 - 2	FMA screw 2 "	63.5	63.5	12.7	1" - 14UNF	1/2"	0.60
W.F.C1 - 2.5	FMA screw 2-1/2 "	79.375	57.15	12.7	1" - 14UNF	1/2"	0.60

### Features:

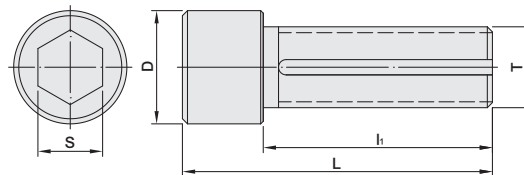
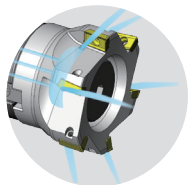
- For face mill arbors.



# SCREW WITH COOLANT FLUTE

SPECIALLY USED FOR ALL TAPERS OF FACE MILL ARBORS EXCEPT CAT

給水槽螺絲 [專用於CAT以外所有錐度之平面銑刀柄]



MODEL NO.	TYPE	L	l <sub>1</sub>	D	S	T	SUITABLE TOOL HOLDER	WEIGHT (KGS)
FMC - M10 - 35	M10 x 1.5P - 35	45	35	16	8	M10 x 1.5P	FMB 22	0.02
FMC - M12 - 30	M12 x 1.75P - 30	42	30	18	10	M12 x 1.75P	FMB 27 / 32	0.04
FMC - M12 - 35	M12 x 1.75P - 35	47	35	18	10	M12 x 1.75P	FMB 27 / 32	0.04
FMC - M16 - 50	M16 x 2.0P - 50	66	50	24	14	M16 x 2.0P	FMB 40	0.10
FMC - 12.7 - 38.1	1/2" - 12W - 38.1	50.8	38.1	19.05	9.525	1/2" - 12W	FMA 25.4 / 31.75	0.04
FMC - 15.875 - 38.1	5/8" - 11W - 38.1	53.975	38.1	22.225	14	5/8" - 11W	FMA 38.1	0.08
FMC - 15.875 - 45	5/8" - 11W - 45	60.875	45	22.225	14	5/8" - 11W	FMA 50.8	0.10

#### Features:

- For face mill arbors to achieve coolant through cutters.

# END MILL HOLDER REPLACEMENT LOCK SCREW

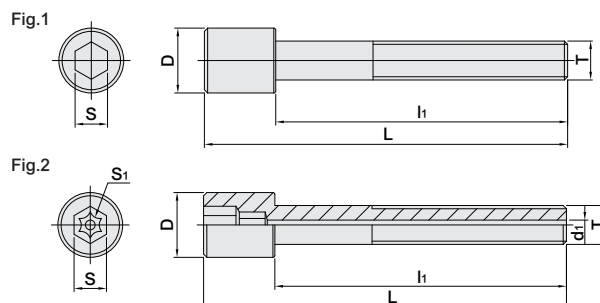
側固螺絲



MODEL NO.	TYPE	LENGTH	MODEL NO.	TYPE	LENGTH
17125 - SCREW	M12 x 1.75P	15	22911 - SCREW	1/4-28UNF	5/16"
17126 - SCREW	M14 x 2.0P	16	22913 - SCREW	5/16-24UNF	5/16"
17136 - SCREW	M16 x 2.0P	16	22915 - SCREW	3/8-24UNF	3/8"
17137 - SCREW	M18 x 2.0P	20	22917 - SCREW	7/16-20UNF	3/8"
17138 - SCREW	M20 x 2.0P	20	22919 - SCREW	1/2-20UNF	7/16"
17166 - SCREW	M24 x 2.0P	25	22921 - SCREW	5/8-18UNF	1/2"
22907 - SCREW	6# - 32UNC	5/16"	22927.1 - SCREW	3/4-16UNF	5/8"
22909 - SCREW	8# - 32UNC	1/4"	22951 - SCREW	1-14UNF	7/8"

# SCREW FOR SBL & SBLC COLLET CHUCK

## 後拉螺絲

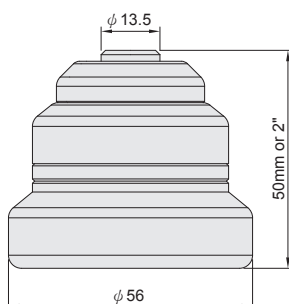


MODEL NO.	TYPE	L	l <sub>1</sub>	D	d <sub>1</sub>	S	S <sub>1</sub>	T	Fig
SBL - M6 - 15	M6 x 1.0P - 15	26	15	10	-	5	-	M6	1
SBL - M6 - 20	M6 x 1.0P - 20	31	20	10	-	5	-	M6	1
SBL - M6 - 25	M6 x 1.0P - 25	36	25	10	-	5	-	M6	1
SBL - M6 - 30	M6 x 1.0P - 30	41	30	10	-	5	-	M6	1
SBL - M6 - 35	M6 x 1.0P - 35	46	35	10	-	5	-	M6	1
SBL - M6 - 40	M6 x 1.0P - 40	51	40	10	-	5	-	M6	1
SBL - M6 - 45	M6 x 1.0P - 45	56	45	10	-	5	-	M6	1
SBL - M6 - 50	M6 x 1.0P - 50	61	50	10	-	5	-	M6	1
SBL - M6 - 55	M6 x 1.0P - 55	66	55	10	-	5	-	M6	1
SBL - M6 - 60	M6 x 1.0P - 60	71	60	10	-	5	-	M6	1
SBL - M6 - 65	M6 x 1.0P - 65	76	65	10	-	5	-	M6	1
SBL - M6 - 70	M6 x 1.0P - 70	81	70	10	-	5	-	M6	1
SBL - M6 - 75	M6 x 1.0P - 75	86	75	10	-	5	-	M6	1
SBL - M6 - 100	M6 x 1.0P - 100	111	100	10	-	5	-	M6	1
SBL - M6 - 130	M6 x 1.0P - 130	141	130	10	-	5	-	M6	1
SBL - M6CT - 15	M6 x 1.0P - 15	26	15	10	1.5	5	T20	M6	2
SBL - M6CT - 20	M6 x 1.0P - 20	31	20	10	1.5	5	T20	M6	2
SBL - M6CT - 25	M6 x 1.0P - 25	36	25	10	1.5	5	T20	M6	2
SBL - M6CT - 35	M6 x 1.0P - 35	46	35	10	1.5	5	T20	M6	2
SBL - M6CT - 40	M6 x 1.0P - 40	51	40	10	1.5	5	T20	M6	2
SBL - M6CT - 45	M6 x 1.0P - 45	56	45	10	1.5	5	T20	M6	2
SBL - M6CT - 50	M6 x 1.0P - 50	61	50	10	1.5	5	T20	M6	2
SBL - M6CT - 55	M6 x 1.0P - 55	66	55	10	1.5	5	T20	M6	2
SBL - M6CT - 60	M6 x 1.0P - 60	71	60	10	1.5	5	T20	M6	2
SBL - M6CT - 65	M6 x 1.0P - 65	76	65	10	1.5	5	T20	M6	2
SBL - M6CT - 70	M6 x 1.0P - 70	81	70	10	1.5	5	T20	M6	2
SBL - M6CT - 80	M6 x 1.0P - 80	91	80	10	1.5	5	T20	M6	2
SBL - M6CT - 85	M6 x 1.0P - 85	96	85	10	1.5	5	T20	M6	2
SBL - M6CT - 100	M6 x 1.0P - 100	111	100	10	1.5	5	T20	M6	2
SBL - M6CT - 130	M6 x 1.0P - 130	141	130	10	1.5	5	T20	M6	2
SBL - M10 - 20	M10 x 1.5P - 20	30	20	13.8	-	6	-	M10	1
SBL - M10 - 25	M10 x 1.5P - 25	35	25	13.8	-	6	-	M10	1
SBL - M10 - 35	M10 x 1.5P - 35	45	35	13.8	-	6	-	M10	1
SBL - M10 - 55	M10 x 1.5P - 55	65	55	13.8	-	6	-	M10	1
SBL - M10CT - 20	M10 x 1.5P - 20	30	20	13.8	3	6	T20	M10	2
SBL - M10CT - 25	M10 x 1.5P - 25	35	25	13.8	3	6	T20	M10	2
SBL - M10CT - 35	M10 x 1.5P - 35	45	35	13.8	3	6	T20	M10	2
SBL - M10CT - 55	M10 x 1.5P - 55	65	55	13.8	3	6	T20	M10	2
SBL - M12 - 30	M12 x 1.75P - 30	42	30	13.8	-	8	-	M12	1
SBL - M12 - 52	M12 x 1.75P - 52	64	52	13.8	-	8	-	M12	1
SBL - M12 - 102	M12 x 1.75P - 102	114	102	13.8	-	8	-	M12	1
SBL - M12 - 6 - 30	M12 x 1.75P - 30	42	30	13.8	-	6	-	M12	1
SBL - M12 - 6 - 52	M12 x 1.75P - 52	64	52	13.8	-	6	-	M12	1
SBL - M12 - 6 - 102	M12 x 1.75P - 102	114	102	13.8	-	6	-	M12	1
SBL - M12CT - 30	M12 x 1.75P - 30	42	30	13.8	2	8	T20	M12	2
SBL - M12CT - 52	M12 x 1.75P - 52	64	52	13.8	2	8	T20	M12	2
SBL - M12CT - 6 - 30	M12 x 1.75P - 30	42	30	13.8	2	6	T20	M12	2
SBL - M12CT - 6 - 52	M12 x 1.75P - 52	64	52	13.8	2	6	T20	M12	2



# Z AXIAL PRESET GAUGE

## ZOP - 50 光電式 Z軸設定器



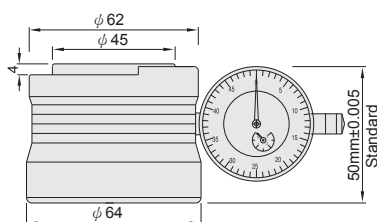
### OPTICAL TYPE

MODEL NO.	TYPE	WEIGHT (KGS)
17905	ZOP - 50	0.5

#### Features:

- ▶ With magnetic base.
- ▶ The red lamp will be on when being touched.
- ▶ Accuracy 0.005mm.
- ▶ Used for vertical and horizontal machining centers.

## ZSI - 50 Z軸設定器 無磁性 外插量錶式



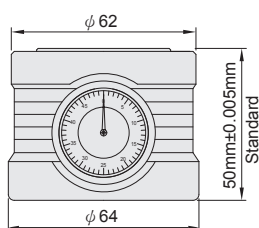
### SIMPLE TYPE

MODEL NO.	TYPE	WEIGHT (KGS)
17906	ZSI - 50	1.35

#### Features:

- ▶ Without magnetic base.
- ▶ Accuracy 0.005mm.

## ZDS - 50J Z軸設定器 有磁性 內藏量錶式



### MAGNETIC TYPE

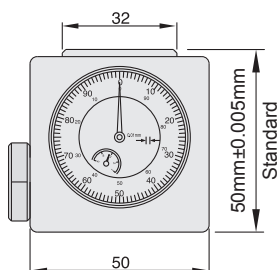
MODEL NO.	TYPE	WEIGHT (KGS)
17909 - J	ZDS - 50J	1.35

#### Features:

- ▶ With magnetic base.
- ▶ Accuracy 0.005mm.

T W PAT NO. M250749

## ZDI - 50 量錶式 Z軸設定器



### INDICATOR TYPE

MODEL NO.	TYPE	WEIGHT (KGS)
17908	ZDI - 50	1.01

#### Features:

- ▶ With magnetic base.
- ▶ Accuracy 0.005mm.

T W PAT NO. M262301  
C N PAT NO. ZLZL02201019X



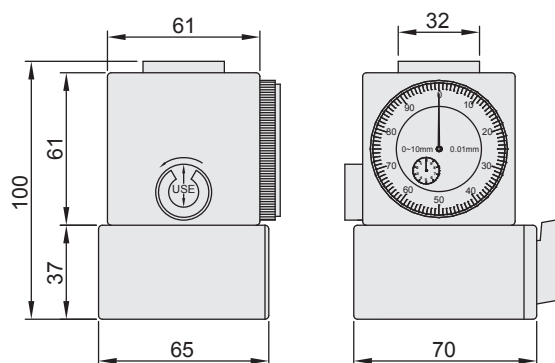
# ZDI-100 Z AXIAL PRESET GAUGE

## INDICATOR TYPE

### ZDI - 100 量錶式 Z軸設定器



T W PAT NO. M262301  
T W PAT NO. M289094

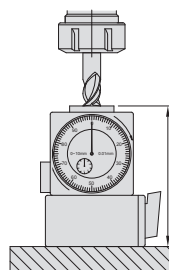


#### INDICATOR TYPE

MODEL NO.	TYPE	WEIGHT (KGS)
17910	ZDI - 100	2.24

#### Features:

- ▶ Height: 100mm.
- ▶ With magnetic design. The magnetism can be turned on or turned off by adjusting the switch.
- ▶ Adjust the dial indicator to "zero".
- ▶ Dial indicator for each increment: 0.01mm.
- ▶ Magnetic capacity: 80kg.

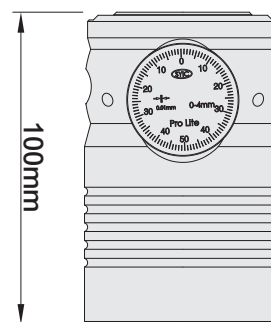


- ▶ When the tool touches the top of the gauge and both dial indicators read zero, the cutter distance is now 100mm above the workpiece.

# ZSW-100 Z AXIAL PRESET GAUGE

## MAGNETIC

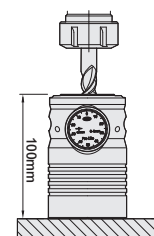
### ZSW - 100 Z軸設定器 有磁性內藏量錶式



#### INDICATOR TYPE

MODEL NO.	TYPE	WEIGHT (KGS)
17911	ZSW - 100	1.9

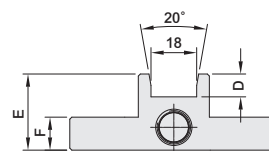
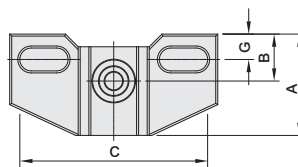
- ▶ Put the whole unit on the work piece. When cutter touched the probe face, please feed slowly until the needle shows "0." The cutter distance is now 50mm above the work piece.



# FIXED BLOCK

FOR OIL HOLE HOLDER

油路刀把用定位塊

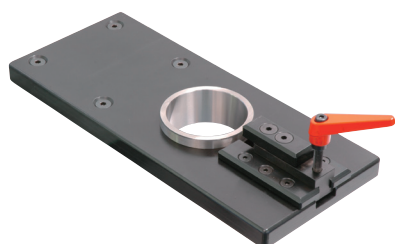


MODEL NO.	TYPE	A	B	C	D	E	F	G	WEIGHT (KGS)
18292	SFB - 3	40	18.5	45~65	9	30	13	10	0.30

# TOOL HOLDER LOCKING DEVICE

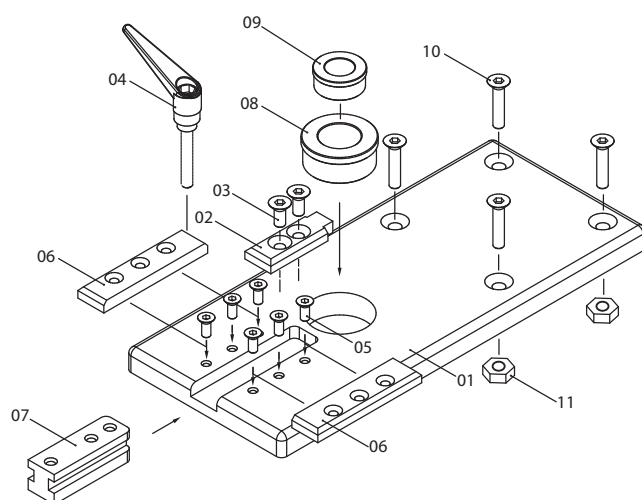
## FOR BT & HSK TOOL HOLDERS

鎖刀座



TW PAT NO. M262301  
TW PAT NO. M340137  
CN PAT NO. ZL200620102786.8

MODEL NO.	TYPE	02 FIXED BLOCK		08 ADAPTER		09 ADAPTER	
		MODEL NO.	TYPE	MODEL NO.	TYPE	MODEL NO.	TYPE
301.10	BT30	301.11.02	BT40	301.122.08	AD50	301.10.09	BT30
301.11	BT40	301.11.02	BT40	301.122.08	AD50	301.11.09	BT40
301.12	BT50	301.12.02	BT50	301.12.08	BT50	-	-
301.73	HSK63A	301.73.02	HSK63A	301.122.08	AD50	301.73.09	HSK63A
301.75	HSK100A	301.75.02	HSK100A	301.75.08	HSK100A	-	-



NO.	NAME OF EACH PART
01	FIXED PLATE
02	FIXED BLOCK
03	SCREW
04	FIXED HANDLE
05	SCREW
06	FIXED SPACER
07	SLIDING BLOCK
08	ADAPTER
09	ADAPTER
10	SCREW
11	NUT

### Features:

- ▶ AD50 commonly-used 08 ADAPTER can be changed into BT30, BT40 and HSK63A all together by matching 09 ADAPTERS.



# TOOL HOLDER LOCKING DEVICE



Don't use hammer

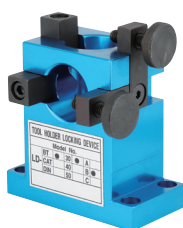
## 鎖刀座



### A TYPE

MODEL NO.	TYPE	MODEL NO.	TYPE
LD - BT30A	BT30	LD - DIN40A	DAT40
LD - BT40A	BT40	LD - DIN50A	DAT50
LD - BT50A	BT50	301.LD - SBT30A	SBT30
LD - CAT40A	CAT40	301.LD - SBT40A	SBT40
LD - CAT50A	CAT50	301.LD - SBT50A	SBT50

- ▶ Cast iron body.
- ▶ Horizontal tool rest: aluminum alloy, extending use life.
- ▶ Vertical tool rest: aluminum.



### B TYPE

MODEL NO.	TYPE
LD - 30B	#30
LD - 40B	#40
LD - 50B	#50

- ▶ Aluminum alloy body. ▶ Used for vertical and horizontal direction.
- ▶ To fix the tool holders with screw. ▶ Compatible with BT, CAT, DAT, SBT, SCAT, SDAT, NT tapers.



### LDC TYPE

MODEL NO.	TYPE	MODEL NO.	TYPE
LDC - BT15	BT15	LDC - CAT40	CAT40
LDC - BT20	BT20	LDC - CAT50	CAT50
LDC - BT30	BT30	LDC - DAT40	DAT40
LDC - BT40	BT40	LDC - DAT50	DAT50
LDC - BT50	BT50		



### LDC TYPE

MODEL NO.	TYPE
LDC - HSK63A	HSK63A
LDC - HSK100A	HSK100A

- ▶ Used for HSK-A type tool holders.
- ▶ To fix the drive keys of HSK-A type tool holders with screws.



### LDC TYPE

MODEL NO.	TYPE	MODEL NO.	TYPE
LDC - HSK32	HSK32A, HSK32E, PSC32	LDC - ISO20	ISO20
LDC - HSK40	HSK40A, HSK40E, HSK40F, PSC40	LDC - ISO25	ISO25
LDC - HSK50	HSK50A, HSK50E, HSK50F, PSC50	LDC - ISO30	ISO30(flange OD size: 46mm)
LDC - HSK63	HSK63A, HSK63E, HSK63F, PSC63	LDC - DIN30	DAT30, ISO30(flange OD size: 50mm)

- ▶ Compatible with tool holders with the same flange diameters.



### LDCB TYPE

MODEL NO.	TYPE
LDCB - HSK40	HSK40A, HSK40E, HSK40F, PSC40
LDCB - HSK50	HSK50A, HSK50E, HSK50F, PSC50
LDCB - HSK63	HSK63A, HSK63E, HSK63F, PSC63

- ▶ Needle roller bearing increases the clamping force.



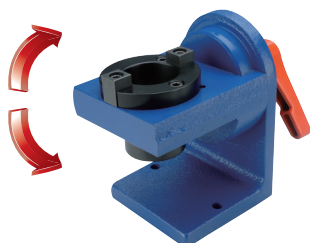


# ROTATION TYPE TOOL HOLDER LOCKING DEVICE



Don't use hammer

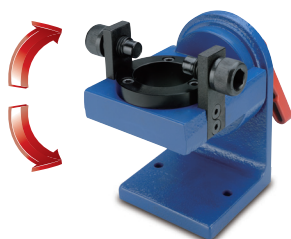
## 鎖刀座



### BT TYPE

MODEL NO.	TYPE
LDA - BT30	BT30
LDA - BT40	BT40

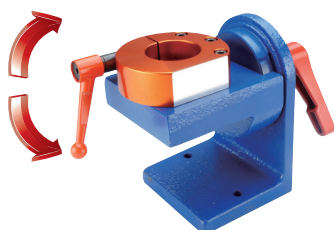
- ▶ Also used for drawbar clamping type tool holders (SBL, HBL, EBL).
- ▶ Rotation angles: 95°, 45°, 180°.



### HSK TYPE

MODEL NO.	TYPE
LDA - HSK63A	HSK63A

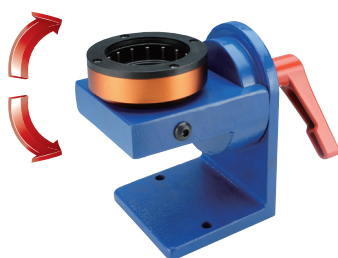
- ▶ Also used for drawbar clamping type tool holders (SBL, HBL, EBL).
- ▶ Rotation angles: 95°, 45°, 180°. ▶ To fix the drive keys of HSK-A type tool holders with screws.



### LDA TYPE

MODEL NO.	TYPE	MODEL NO.	TYPE
LDA - HSK32	HSK32A, HSK32E, PSC32	LDA - ISO20	ISO20
LDA - HSK40	HSK40A, HSK40E, HSK40F, PSC40	LDA - ISO25	ISO25
LDA - HSK50	HSK50A, HSK50E, HSK50F, PSC50	LDA - ISO30	ISO30(flange OD size: 46mm)
LDA - HSK63	HSK63A, HSK63E, HSK63F, PSC63	LDA - DIN30	DAT30, ISO30(flange OD size: 50mm)

- ▶ Also used for drawbar clamping type tool holders (SBL, HBL, EBL).
- ▶ Rotation angles: 95°, 45°, 180°. ▶ Compatible with tool holders with the same flange diameters.



### LDAB TYPE

MODEL NO.	TYPE
LDAB - HSK50	HSK50
LDAB - HSK63	HSK63

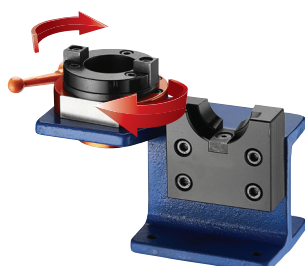
- ▶ Also used for drawbar clamping type tool holders (SBL, HBL, EBL).
- ▶ Rotation angles: 95°, 45°, 180°. ▶ Needle roller bearing increases the clamping force.



### LDC TYPE

MODEL NO.	TYPE
LDC - BT40R	BT40

- ▶ Rotation type can be rotated 360° horizontally.
- ▶ Used for indexable cutting tools with more convenience to change inserts.



### LD TYPE

MODEL NO.	TYPE
LD - BT40AR	BT40

- ▶ Rotation type can be rotated 360° horizontally.
- ▶ Used for indexable cutting tools with more convenience to change inserts.



# SPINDLE TAPER WIPER

## 主軸清潔棒



MODEL NO.	TYPE	WEIGHT (KGS)
17703	#30	0.03
17704	#40	0.04
17705	#50	0.07

### Features:

- ▶ For cleaning the oil or particles from machine spindle.
- ▶ Material: non-woven fabric.



MODEL NO.	TYPE	WEIGHT (KGS)
17706	#30B	0.03
17707	#40B	0.04
17708	#50B	0.07

### Features:

- ▶ For cleaning the oil or particles from machine spindle.
- ▶ Material: wool, which can prevent static electricity when cleaning the spindle taper and has better use life and cleaning effect.



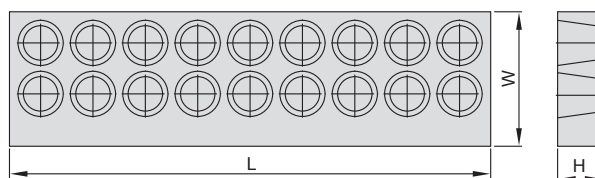
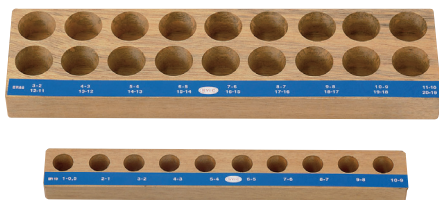
MODEL NO.	TYPE	WEIGHT (KGS)
38030	HSK40	0.08
38032	HSK50A - 63F - 50E	0.06
38036	HSK63A - 80F	0.08
38038	HSK100	0.50

### Features:

- ▶ For cleaning the oil or particles from machine spindle.
- ▶ Material: non-woven fabric.

# ER COLLET WOODEN TRAY

## ER 筒夾木盤



MODEL NO.	TYPE	L	W	H	Q'TY	WEIGHT (KGS)
04282	ER 8	210	20	13	9	0.01
04284	ER 11	210	20	13	13	0.01
04286	ER 16	275	35	22	10	0.14
04288	ER 20	275	35	22	12	0.12
04290	ER 25	275	77	26	16	0.18
04292	ER 32	340	90	30	18	0.48
04294	ER 40	265	210	38	24	0.76
04296	ER 50	235	210	37	12	0.64

## BOX

## 包裝盒



MODEL NO.	TYPE	FULL PCS/SET	MATERIAL	SIZE	WEIGHT (KGS)
04242	SLC6 / SLC12 / SLC20	6	Plastic	350 x 396 x 100	1.90
04244	SKS6 / SKS10	6	Plastic	350 x 396 x 100	1.90
04245	SKS13 / SKS16	6	Plastic	350 x 396 x 100	1.90
04246	SKS20 / SKS25	6	Plastic	350 x 396 x 100	1.90
04252	ER8 / ER 11	13	Wooden	223 x 75 x 95	0.20
04254	ER16	10	Wooden	240 x 130 x 80	0.50
04256	ER16 / ER20	10	Plastic	310 x 150 x 50	0.30
04258	ER20	12	Wooden	290 x 140 x 80	0.50
04262	ER25	15	Wooden	285 x 160 x 80	0.40
04264	ER25	15	Plastic	320 x 240 x 100	0.90
04266	ER32	18	Wooden	275 x 160 x 110	1.10
04268	ER32	18	Plastic	320 x 240 x 100	0.90
04270	ER40	23	Wooden	410 x 240 x 110	1.80
04272	ER40	7	Plastic	320 x 240 x 100	0.90
04274	ER50	17	Wooden	445 x 305 x 125	2.80
83693	EOC 25	7	Wooden	300 x 165 x 90	1.00
83694	EOC 25	15	Wooden	315 x 235 x 90	0.80
83695	EOC 25	7 or 15	Wooden	305 x 280 x 110	1.80
83696	EOC 25	7 or 15	Plastic	300 x 165 x 90	1.00
83697	EOC 32	8	Wooden	305 x 240 x 110	1.90
83698	EOC 32	16	Wooden	445 x 295 x 130	3.20
83699	EOC 32	8 or 16	Plastic	320 x 240 x 100	0.90

**Product information:**

- ▶ Plastic boxes will not get broken easily and is easy to deliver.
- ▶ ISO#50 should be used with wooden box.
- ▶ The same type of box is suitable for the complete set or the required sizes of collets from customers.
- ▶ There is EVA inserted lining inside ER8 & ER11's wooden box.
- ▶ There's EVA inserted lining inside ER32 & ER40's plastic box.
- ▶ When ordering EOC25 wooden box, please indicate 7 pcs or 15 pcs needed.
- ▶ The plastic box for EOC25 7pcs and 5pcs is the same.
- ▶ EOC32 plastic case, empty inside but with a 16 hole of EVA insert lining, 8pcs or 16pcs are the same one.
- ▶ EOC25 NT50 or EOC32 NT50 must use wooden box.