

**SPECIALIZED MACHINE SERIES  
TOOLING SYSTEM**

# Quick Change Stub Holder

## Application

- Stub drilling and reaming. Endmilling possible with KH-E.
- For special purpose machines, transfer lines etc.

## Feature

### Bushingless machining

Use of short stub drills increases rigidity.

### Simple machine design

Bushingless machining reduce cost for machine design and manufacturing.

### Reduction of tool cost

Stub drills offer high rigidity and long tool life.

### Easy disposal of chips

The simple stub holder design allows for easy chip removal.

### Secure gripping of drill

NT's high precision collets assures maximum gripping power and precise hole location.

### Reduction of preparation time

Insertion / removal of the stub holders is easily achieved by a single hand operation. The projection length of stub drill can be adjusted by the preset screw.

## No Rust

Special Surface Treatment

- Rust-free under normal use conditions. No loss of precision due to rust.
- Minimum maintenance required.

Stub Holder  
**KH-E**  
**KH-EC1**



Stub Holder  
**KH-A**  
**KH**



Stub Tapper  
**KD-NL**



Stub Holder  
**KD**  
**KD-T**



## Problems with Old Style Drilling

- Old holders tend to get rusty quickly, and require maintenance.
- Bushings are required due to low rigidity of drill and spindle.
- The use of bushings and bush plates limits chip disposal. Longer time is needed for machine design.
- Expensive MT shank drills are required to secure high gripping accuracy.
- It takes a longer time to replace the tools.
- Longer drill projections reduces accuracy.

# KH-E

## Quick Change Stub Holder

BT

CAT

AHO

HSK-A/E/F/C

HSK-T

UTS

Specialized Machine

Related Equipment

Bush & Chamfering Drill

Stub Holder

Tapping Chuck

Tap Adapter

Adjustable Adapter

Endmill Chuck

Straight Drill Chuck

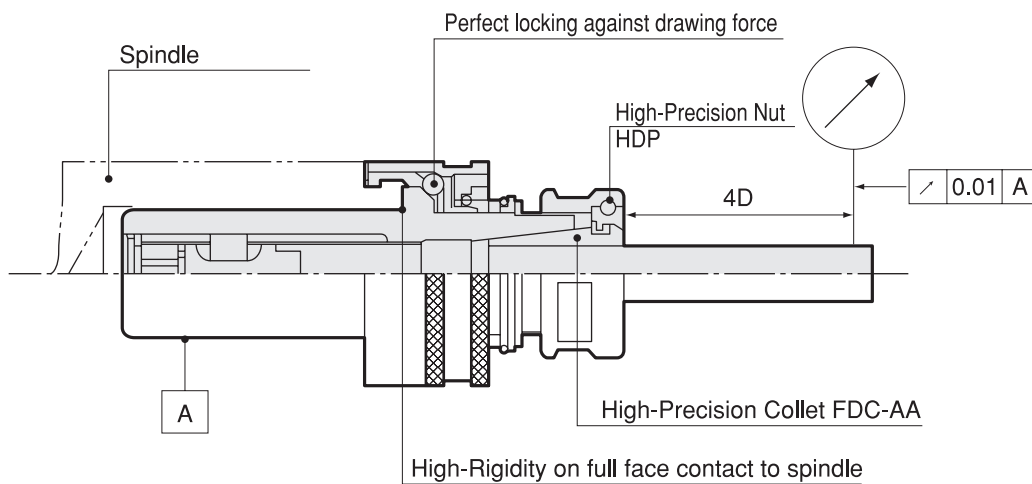
Floating Holder

### Feature

Endmilling, which was not available before, becomes possible.

**High Rigidity** Owing to the locking function incorporated, the holder doesn't come off spindle even though drawing force works.

**High Precision** As the high precision collet is employed, the runout is available within 10 microns at  $4 \times D$  ( $4 \times$  tool shank dia. distance from the holder nose).

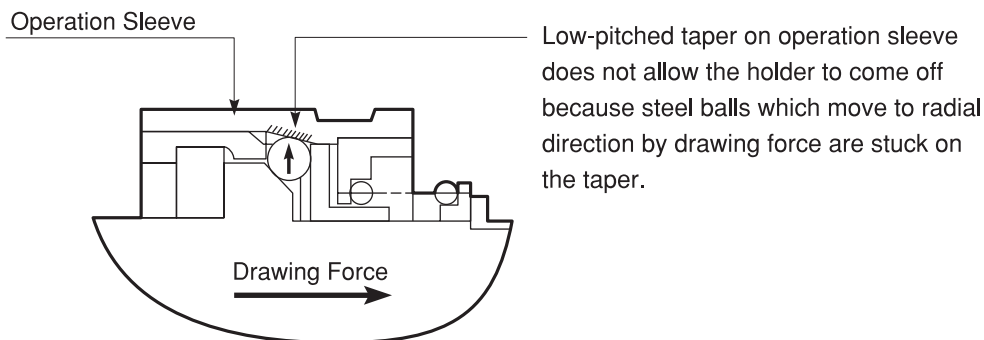


### Significant Difference between KH-E and other stub holders

Strong chucking prevents pull out of cutting tool

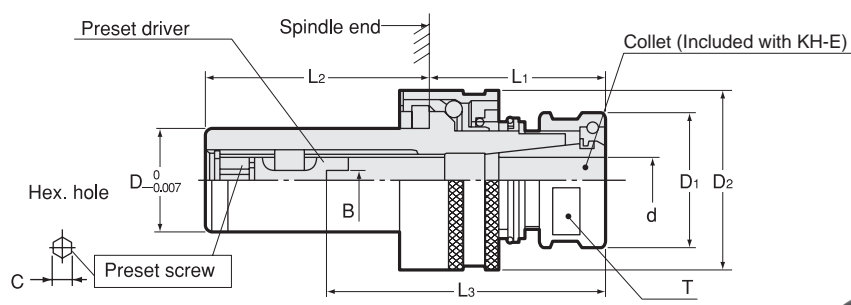


Locking mechanism stops pulling force caused by spiral cutting tools such as end mill.



Enlarged Locking Function

**Note** ● For center-thru coolant feed, select KH-EC1 or KH-EC2 models on page



# KH-E Collet set




Holder
+
Preset driver
+
Nut
+
Collet

Code	Model	D	B	Chucking range d	Preset driver	L3	D1	D2	L1	L2	C	kg	Collet	Nut	Spanner
3050 12 # # # ※ ※ ※	<b>KH-12E</b>	12	0	0.5 ~ 6.0	KHS -00006	20 ~ 45									S-0
			2.4	3.1 ~ 5.0	KHS -02406	24 ~ 48	23	24.3	34	35	3	0.1	FDC-d07AA	HDP-07A	
			3.0	5.1 ~ 6.0	KHS -03006	25 ~ 48									
3050 14 # # # ※ ※ ※	<b>KH-14E</b>	14	0	0.5 ~ 7.0	KHS -00007	20 ~ 45									S-0
			2.4	3.1 ~ 5.0	KHS -02407	24 ~ 48	23	26.3	34	35	4	0.1	FDC-d07AA	HDP-07A	
			3.0	5.1 ~ 6.0	KHS -03007	25 ~ 48									
3050 16 # # # ※ ※ ※	<b>KH-16E</b>	16	0	2.6 ~ 9.0	KHS -00009	29 ~ 46									S-1L
			2.4	3.1 ~ 5.0	KHS -02409	32 ~ 49	26	32	35	40	4	0.2	FDC-d09AA	HDP-09	
			3.0	5.1 ~ 6.0	KHS -03009	34 ~ 51									
3050 19 # # # ※ ※ ※	<b>KH-19E</b>	19	0	2.6 ~ 9.0	KHS -00009	29 ~ 51	26	35	35	45	4	0.2	FDC-d09AA	HDP-09	S-1L
			2.4	3.1 ~ 5.0	KHS -02409	32 ~ 54									
			3.0	5.1 ~ 6.0	KHS -03009	34 ~ 56	26	35	35	45	4	0.2	FDC-d09AA	HDP-09	
3050 20 # # # ※ ※ ※	<b>KH-20E</b>	20	0	2.6 ~ 9.0	KHS -00009	29 ~ 51									S-1L
			2.4	3.1 ~ 5.0	KHS -02409	32 ~ 54									
			3.0	5.1 ~ 6.0	KHS -03009	34 ~ 56	26	35	35	45	4	0.2	FDC-d09AA	HDP-09	
3050 22 # # # ※ ※ ※	<b>KH-22E</b>	22	0	2.6 ~ 12.0	KHS -00012	35 ~ 62									S-3L
			2.4	3.1 ~ 5.0	KHS -02412	33 ~ 60	32	38	35	55	5	0.3	FDC-d12AA	HDP-12	
			3.0	5.1 ~ 6.0	KHS -03012	33 ~ 60									
3050 24 # # # ※ ※ ※	<b>KH-24E</b>	24	0	2.6 ~ 12.0	KHS -00012	35 ~ 62									S-3L
			2.4	3.1 ~ 5.0	KHS -02412	33 ~ 60	32	40	35	55	5	0.3	FDC-d12AA	HDP-12	
			3.0	5.1 ~ 6.0	KHS -03012	33 ~ 60									
3050 25 # # # ※ ※ ※	<b>KH-25E</b>	25	0	3.6 ~ 16.0	KHS -00016	36 ~ 64 (69)	36	44	35	60	6	0.4	FDC-d16AA	HDP-16	S-4L
			2.4	3.6 ~ 5.0	KHS -02416	39 ~ 67 (72)									
			3.0	5.1 ~ 6.0	KHS -03016	39 ~ 67 (72)	36	44	35	60	6	0.4	FDC-d16AA	HDP-16	
3050 26 # # # ※ ※ ※	<b>KH-26E</b>	26	0	3.6 ~ 16.0	KHS -00016	36 ~ 64 (69)									S-4L
			2.4	3.6 ~ 5.0	KHS -02416	39 ~ 67 (72)									
			3.0	5.1 ~ 6.0	KHS -03016	39 ~ 67 (72)	36	44	35	60	6	0.4	FDC-d16AA	HDP-16	
3050 28 # # # ※ ※ ※	<b>KH-28E</b>	28	0	6.1 ~ 9.0	KHS -04016	40 ~ 68 (73)	36	47	35	65	6	0.5	FDC-d16AA	HDP-16	S-4L
			4.0	6.1 ~ 9.0	KHS -04016	40 ~ 68 (73)									
			5.0	9.1 ~ 12.0	KHS -05016	41 ~ 69 (74)	36	47	35	65	6	0.5	FDC-d16AA	HDP-16	
3050 30 # # # ※ ※ ※	<b>KH-30E</b>	30	0	12.1 ~ 16.0	KHS -06016	44 ~ 72 (77)	36	47	35	65	6	0.5	FDC-d16AA	HDP-16	S-4L
			4.0	6.1 ~ 9.0	KHS -04016	40 ~ 68 (73)									
			6.0	12.1 ~ 16.0	KHS -06016	44 ~ 72 (77)	36	47	35	65	6	0.5	FDC-d16AA	HDP-16	
3050 32 # # # ※ ※ ※	<b>KH-32E</b>	32	0	3.6 ~ 22.0	KHS -00022	41 ~ 74	46	51	40	80	6	0.7	FDC-d22AA	HDP-22	S-5L
			2.4	3.6 ~ 5.0	KHS -02422	39 ~ 75									
			3.0	5.1 ~ 6.0	KHS -03022	39 ~ 75									
3050 35 # # # ※ ※ ※	<b>KH-35E</b>	35	0	6.1 ~ 9.0	KHS -04022	42 ~ 78	46	55	40	80	6	0.8	FDC-d22AA	HDP-22	S-5L
			4.0	6.1 ~ 9.0	KHS -04022	42 ~ 78									
			5.0	9.1 ~ 12.0	KHS -05022	48 ~ 84									
3050 36 # # # ※ ※ ※	<b>KH-36E</b>	36	0	12.1 ~ 16.0	KHS -06022	54 ~ 90	46	55	40	80	6	0.8	FDC-d22AA	HDP-22	S-5L
			6.0	12.1 ~ 16.0	KHS -06022	54 ~ 90									
			8.0	16.1 ~ 22.0	KHS -08022	54 ~ 90									
3050 48 # # # ※ ※ ※	<b>KH-48E</b>	48	0	20.1 ~ 32.0	KHS -00032	66 ~ 87	65	75	50	100	6	2.0	FDC-d32A	HDP-32	S-6
			8.0	20.1 ~ 32.0	KHS -08032	70 ~ 93									
			12.0	22.1 ~ 32.0	KHS -12032	78 ~ 109									



Code	Model	B	L3	D <sub>0.07</sub>	D1	D2	L1	L2	T	kg
3054 12 □□□ 000	KHB -12E /00006	0	20 ~ 45	12	23	24.3	34	35	—	0.1
	/02406	2.4	24 ~ 48							
	/03006	3	25 ~ 48							
3054 14 □□□ 000	KHB -14E /00007	0	20 ~ 45	14	23	26.3	34	35	—	0.1
	/02407	2.4	24 ~ 48							
	/03007	3	25 ~ 48							
	/04007	4	27 ~ 48							
3054 16 □□□ 000	KHB -16E /00009	0	29 ~ 46	16	26	32	35	40	24	0.2
	/02409	2.4	32 ~ 49							
	/03009	3	34 ~ 51							
	/04009	4	34 ~ 51							
3054 19 □□□ 000	KHB -19E /00009	0	29 ~ 51	19	26	35	35	45	24	0.2
	/02409	2.4	32 ~ 54							
3054 20 □□□ 000	KHB -20E /03009	3	34 ~ 56	20	26	35	35	45	24	0.2
		/04009	4							
3054 22 □□□ 000	KHB -22E /00012	0	35 ~ 62	22	32	38	35	55	30	0.3
		/02412	2.4							
3054 24 □□□ 000	KHB -24E /03012	3	33 ~ 60	24	32	40	35	55	30	0.3
	/04012	4	37 ~ 64							
	/05012	5	37 ~ 64							
3054 25 □□□ 000	KHB -25E /00016	0	36 ~ 64 (69)	25	36	44	35	60	33	0.4
	/02416	2.4	39 ~ 67 (72)							
3054 26 □□□ 000	KHB -26E /03016	3	39 ~ 67 (72)	26	36	44	35	60	33	0.4
		/04016	4							
3054 28 □□□ 000	KHB -28E /05016	5	41 ~ 69 (74)	28	36	47	35	65	33	0.5
		/06016	6							
3054 30 □□□ 000	KHB -30E /00022	0	41 ~ 74	30	36	47	35	65	33	0.5
	/02422	2.4	39 ~ 75							
	/03022	3	39 ~ 75							
3054 32 □□□ 000	KHB -32E /04022	4	42 ~ 78	32	46	51	40	80	42	0.6
	/05022	5	48 ~ 84							
	/06022	6	54 ~ 90							
3054 35 □□□ 000	KHB -35E /08022	8	54 ~ 90	35	46	55	40	80	42	0.7
3054 36 □□□ 000	KHB -36E /00032	0	66 ~ 87	36	46	55	40	80	42	0.8
		/08032	8							
3054 48 □□□ 000	KHB -48E /12032	12	78 ~ 109	48	65	75	50	100	—	1.8

- 1.L3 dimension in bracket stands for max. dimension of KH-28E & KH-30E.
- 2.Please select preset driver according to tang size of cutting tool. (Refer to P.433)
- 3.Spanner is sold separately.
- 4.Refer to P.439 for spindle dimension.

<b>Collet</b> P. 086, 444 	<b>Spanner</b> P. 446 	<b>Preset driver</b> P. 433 
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**KH-E (Collet set)**  
Ordering Example

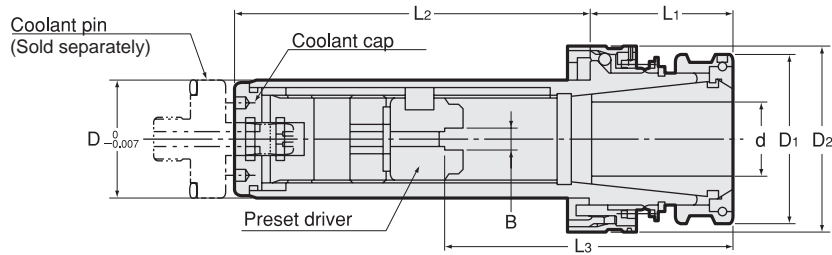
**KH-20E / 04009 / 7.0**  
Preset driver Collet I.D.

**KHB-E (Holder body)**  
Ordering Example

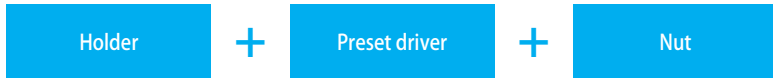
**KHB-20E / 04009**  
Preset driver

# KH-EC1

Quick Change Stub Holder ( For High Coolant Pressure )



## KHB-EC1 Holder body



Code	Model	B	Collet I.D. d	L3	D	D1	D2	L1	L2	kg	Max. Coolant	Coolant pin	Collet	
3055 14 ※※※ 000	<b>KHB -14EC1</b>	/00007	0	3.0 ~ 7.0	20 ~ 45									
		/02407	2.4	3.1 ~ 5.0	24 ~ 48	14	23	26.3	34	50	0.1	8MPa	KH-14EC-P	FDC-07-OH or C
		/03007	3.0	5.1 ~ 6.0	25 ~ 48									
		/04007	4.0	6.1 ~ 7.0	27 ~ 48									
3055 16 ※※※ 000	<b>KHB -16EC1</b>	/00009	0	3.0 ~ 9.0	29 ~ 47									
		/02409	2.4	3.1 ~ 5.0	32 ~ 50	16	26	32	35	55	0.2	8MPa	KH-16EC-P	FDC-09-OH or C
		/03009	3.0	5.1 ~ 6.0	34 ~ 52									
		/04009	4.0	6.1 ~ 9.0	34 ~ 52									
3055 19 ※※※ 000	<b>KHB -19EC1</b>	/00009	0	3.0 ~ 9.0	29 ~ 52	19	26	35	35	60	0.2	8MPa	KH-19EC-P	FDC-09-OH or C
		/02409	2.4	3.1 ~ 5.0	32 ~ 55									
3055 20 ※※※ 000	<b>KHB -20EC1</b>	/03009	3.0	5.1 ~ 6.0	34 ~ 57	20	26	35	35	60	0.2	8MPa	KH-20EC-P	FDC-09-OH or C
		/04009	4.0	6.1 ~ 9.0	34 ~ 57									
3055 22 ※※※ 000	<b>KHB -22EC1</b>	/00012	0	3.0 ~ 12	35 ~ 62	22	32	38	35	70	0.3	8MPa	KH-22EC-P	FDC-12-OH or C
		/02412	2.4	3.1 ~ 5.0	34 ~ 61									
3055 24 ※※※ 000	<b>KHB -24EC1</b>	/03012	3.0	5.1 ~ 6.0	35 ~ 61									
		/04012	4.0	6.1 ~ 9.0	37 ~ 64	24	32	40	35	70	0.4	8MPa	KH-24EC-P	FDC-12-OH or C
		/05012	5.0	9.1 ~ 12	37 ~ 64									
3055 25 ※※※ 000	<b>KHB -25EC1</b>	/00016	0	6.0 ~ 16	36 ~ 64 (69)	25	36	44	35	80	0.4	8MPa	KH-25EC-P	FDC-16-OH or C
3055 26 ※※※ 000	<b>KHB -26EC1</b>	/03016	3.0	6.0	40 ~ 67 (72)	26	36	44	35	80	0.4	8MPa	KH-26EC-P	FDC-16-OH or C
		/04016	4.0	6.1 ~ 9.0	42 ~ 68 (73)									
3055 28 ※※※ 000	<b>KHB -28EC1</b>	/05016	5.0	9.1 ~ 12	42 ~ 69 (74)	28	36	47	35	85	0.5	8MPa	KH-28EC-P	FDC-16-OH or C
		/06016	6.0	12.1 ~ 16	44 ~ 72 (77)	30	36	47	35	85	0.6	8MPa	KH-30EC-P	FDC-16-OH or C
3055 32 ※※※ 000	<b>KHB -32EC1</b>	/00022	0	6.0 ~ 22	43 ~ 79	32	46	51	40	100	0.7	8MPa	KH-32EC-P	FDC-22-OH or C
		/03022	3.0	6.0	47 ~ 82									
3055 35 ※※※ 000	<b>KHB -35EC1</b>	/04022	4.0	6.1 ~ 9.0	49 ~ 83	35	46	55	40	100	0.8	8MPa	KH-35EC-P	FDC-22-OH or C
		/05022	5.0	9.1 ~ 12	49 ~ 84									
3055 36 ※※※ 000	<b>KHB -36EC1</b>	/06022	6.0	12.1 ~ 16	54 ~ 90	36	46	55	40	100	0.9	6MPa	KH-36EC-P	FDC-22-OH or C
		/08022	8.0	16.1 ~ 22	54 ~ 90									

<b>Collet</b> P. 087-088 	<b>Spanner</b> P. 446 	<b>Coolant Pin</b> P. 426 
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- L3 in bracket stands for KHB-28EC1 KHB-30EC1.
- Coolant pin, collet and spanner are sold separately.
- After removing coolant cap by adjustable pin wrench(sold separately), L3 dimension can be adjusted.
- Please select preset driver according to tang size of cutting tool. (Refer to P.433)
- Refer to P.439 for spindle dimension.

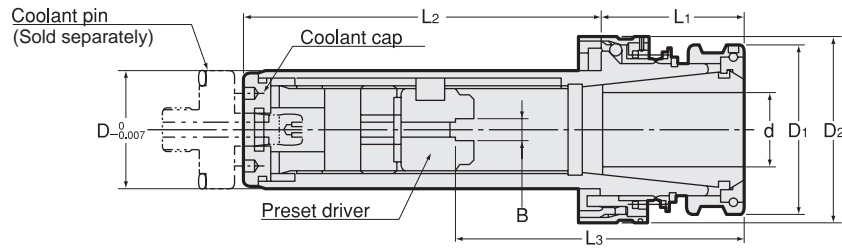
adjustable pin wrench (sold separately)

Code	Model	Holder Size
0150 09300000	<b>GWA1</b>	KHB14 ~ KHB30
0150 09300040	<b>GWA40</b>	KHB32 ~ KHB36

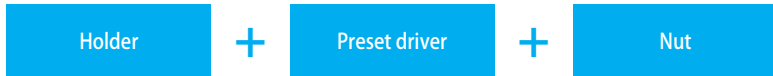
**Ordering Example**  
**KHB-20EC 1 / 03009**  
 High coolant pressure type Preset driver

# KH-EC2

Quick Change Stub Holder ( For Low Coolant Pressure )



## KHB-EC2 Holder body



Code	Model	B	Collet I.D. d	L3	D	D1	D2	L1	L2	kg	Max. Coolant	Coolant pin	Collet
305614 *** 000	KHB -14EC2 /00007	0	3.0 ~ 7.0	20 ~ 45	14	23	26.3	34	50	0.1	5MPa	KH-14EC-P	FDC-07-OH or C
	/02407	2.4	3.1 ~ 5.0	24 ~ 48									
	/03007	3.0	5.1 ~ 6.0	25 ~ 48									
	/04007	4.0	6.1 ~ 7.0	27 ~ 48									
305616 *** 000	KHB -16EC2 /00009	0	3.0 ~ 9.0	29 ~ 47	16	26	32	35	55	0.2	5MPa	KH-16EC-P	FDC-09-OH or C
	/02409	2.4	3.1 ~ 5.0	32 ~ 50									
	/03009	3.0	5.1 ~ 6.0	34 ~ 52									
	/04009	4.0	6.1 ~ 9.0	34 ~ 52									
305619 *** 000	KHB -19EC2 /00009	0	3.0 ~ 9.0	29 ~ 52	19	26	35	35	60	0.2	5MPa	KH-19EC-P	FDC-09-OH or C
/02409	2.4	3.1 ~ 5.0	32 ~ 55										
305620 *** 000	KHB -20EC2 /03009	3.0	5.1 ~ 6.0	34 ~ 57	20	26	35	35	60	0.2	5MPa	KH-20EC-P	FDC-09-OH or C
	/04009	4.0	6.1 ~ 9.0	34 ~ 57									
305622 *** 000	KHB -22EC2 /00012	0	3.0 ~ 12	35 ~ 62	22	32	38	35	70	0.3	4MPa	KH-22EC-P	FDC-12-OH or C
	/02412	2.4	3.1 ~ 5.0	34 ~ 61									
	/03012	3.0	5.1 ~ 6.0	35 ~ 61									
305624 *** 000	KHB -24EC2 /04012	4.0	6.1 ~ 9.0	37 ~ 64	24	32	40	35	70	0.4	4MPa	KH-24EC-P	FDC-12-OH or C
	/05012	5.0	9.1 ~ 12	37 ~ 64									
305625 *** 000	KHB -25EC2 /00016	0	6.0 ~ 16	36 ~ 64 (69)	25	36	44	35	80	0.4	3MPa	KH-25EC-P	FDC-16-OH or C
305626 *** 000	KHB -26EC2 /03016	3.0	6.0	40 ~ 67 (72)									
305628 *** 000	KHB -28EC2 /04016	4.0	6.1 ~ 9.0	42 ~ 68 (73)	28	36	47	35	85	0.5	3MPa	KH-28EC-P	FDC-16-OH or C
305630 *** 000	KHB -30EC2 /05016	5.0	9.1 ~ 12	42 ~ 69 (74)									
305632 *** 000	KHB -32EC2 /06016	6.0	12.1 ~ 16	44 ~ 72 (77)	30	36	47	35	85	0.6	3MPa	KH-30EC-P	FDC-16-OH or C
305632 *** 000	KHB -32EC2 /00022	0	6.0 ~ 22	43 ~ 79	32	46	51	40	100	0.7	3MPa	KH-32EC-P	FDC-22-OH or C
	/03022	3.0	6.0	47 ~ 82									
	/04022	4.0	6.1 ~ 9.0	49 ~ 83									
305635 *** 000	KHB -35EC2 /05022	5.0	9.1 ~ 12	49 ~ 84	35	46	55	40	100	0.8	3MPa	KH-35EC-P	FDC-22-OH or C
	/06022	6.0	12.1 ~ 16	54 ~ 90									
305636 *** 000	KHB -36EC2 /08022	8.0	16.1 ~ 22	54 ~ 90	36	46	55	40	100	0.9	3MPa	KH-36EC-P	FDC-22-OH or C

<b>Collet</b> P. 087-088	<b>Spanner</b> P. 446	<b>Coolant Pin</b> P. 426

- L3 in bracket stands for KHB-28EC2 KHB-30EC2.
- Coolant pin, collet and spanner are sold separately.
- Please select preset driver according to tang size of cuttingtool. (Refer to P.433)  
Refer to P.439 for spindle dimension.

adjustable pin wrench (sold separately)

Code	Model	Holder Size
0150 09300000	GWA1	KHB14 ~ KHB30
0150 09300040	GWA40	KHB32 ~ KHB36

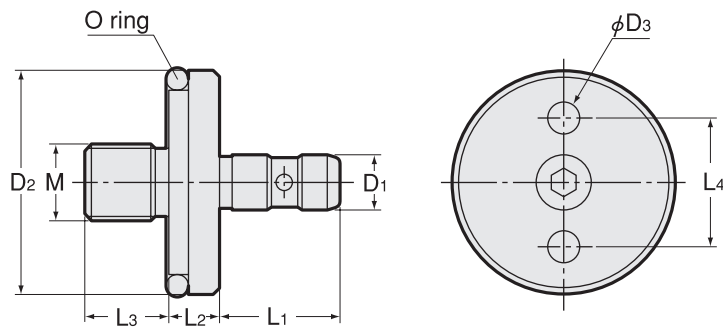
### Ordering Example

**KHB-20EC 2 / 03009**  
Low coolant pressure type Preset driver

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine  
Related Equipment  
Bush & Chamfering Drill

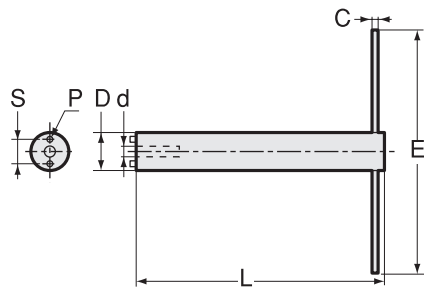
Stub Holder  
Tapping Chuck  
Tap Adapter  
Adjustable Adapter  
Endmill Chuck  
Straight Drill Chuck  
Floating Holder

## Coolant pin



Code	Model	D1	D2	D3	L1	L2	L3	L4	kg	M	O ring
3055 00001402	<b>KH14EC-P</b>	5.7	13.9	3.5	15	8	13	9.6	0.01	M8 P=1	P-10A 1-B
3055 00001602	<b>KH16EC-P</b>	5.7	15.9	3.5	15	8	13	11	0.02	M8 P=1	P-12 1-B
3055 00001902	<b>KH19EC-P</b>	5.7	18.9	3.5	15	8	13	11	0.03	M8 P=1	P-15 1-B
3055 00002002	<b>KH20EC-P</b>	5.7	19.9	3.5	15	8	13	11	0.03	M8 P=1	P-16 1-B
3055 00002202	<b>KH22EC-P</b>	7.6	21.9	5.5	16.5	8	13	15.4	0.03	M10 P=1	P-18 1-B
3055 00002402	<b>KH24EC-P</b>	7.6	23.9	5.5	16.5	8	13	15.4	0.04	M10 P=1	P-20 1-B
3055 00002502	<b>KH25EC-P</b>	8.6	24.9	5.5	19	8	13	17	0.04	M12 P=1	P-21 1-B
3055 00002602	<b>KH26EC-P</b>	8.6	25.9	5.5	19	8	13	17	0.04	M12 P=1	P-22 1-B
3055 00002802	<b>KH28EC-P</b>	8.6	27.9	5.5	19	8	13	17	0.05	M12 P=1	P-22A 1-B
3055 00003002	<b>KH30EC-P</b>	8.6	29.9	5.5	19	8	13	17	0.05	M12 P=1	P-24 1-B
3055 00003202	<b>KH32EC-P</b>	8.6	31.9	5.5	19	8	13	20	0.06	M12 P=1	P-26 1-B
3055 00003502	<b>KH35EC-P</b>	8.6	34.9	5.5	19	8	13	20	0.06	M12 P=1	P-29 1-B
3055 00003602	<b>KH36EC-P</b>	8.6	35.9	5.5	19	8	13	20	0.06	M12 P=1	P-30 1-B

## Coolant pin wrench

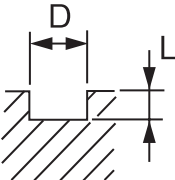
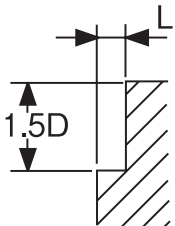


Model	Coolant pin	d	D	S	P	L	C	E	kg
<b>HDMC -14G</b>	KH14EC-P	6	13.5	9.6	3	120	6	120	
<b>-16G</b>	KH16EC-P KH19EC-P KH20EC-P	6	15.5	11	3	140	6	120	
<b>-22G</b>	KH22EC-P KH24EC-P	8	21.5	15.4	5	160	10	160	0.5
<b>-25G</b>	KH25EC-P KH26EC-P KH28EC-P KH30EC-P	9	24.5	17	5	180	10	160	0.7
<b>-32G</b>	KH32EC-P KH35EC-P KH36EC-P	9	31.5	20	5	200	12	200	1.4

Coolant pin wrench is necessary to replace coolant pin.



## Stub Holder KH-E Endmilling Guidelines

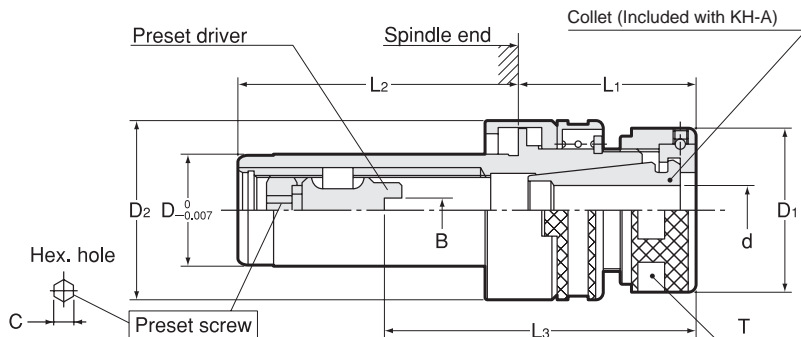
Shape	Material	Cutter's dia	Rotation (min-1)	Feed (mm/min)	Max. cutting length L			
					KH16E	KH22E	KH26E	KH35E
	Aluminum (AC4C)	φ 6	4,000	387	1D	1D	—	—
		φ 12	3,150	400	—	1D	1D	—
		φ 16	2,000	345	—	—	0.75D	0.75D
		φ 20	1,000	315	—	—	—	0.5D
	Cast Iron (FC25)	φ 6	2,240	150	0.75D	1D	—	—
		φ 12	1,000	190	—	0.75D	0.75D	—
		φ 16	800	170	—	—	1D	0.75D
		φ 20	630	160	—	—	—	0.5D
	Steel (S45C)	φ 6	1,000	48	1D	1D	—	—
		φ 12	450	60	—	0.75D	1D	—
		φ 16	355	60	—	—	0.5D	0.5D
		φ 20	280	56	—	—	—	0.5D
	Aluminum (AC4C)	φ 6	9,000	1,000	0.3D	0.3D	—	—
		φ 12	4,000	1,180	—	0.3D	0.3D	—
		φ 16	3,150	1,060	—	—	0.3D	0.2D
		φ 20	2,500	1,000	—	—	—	0.1D
	Cast Iron (FC25)	φ 6	2,650	355	0.1D	0.1D	—	—
		φ 12	1,180	450	—	0.2D	0.2D	—
		φ 16	950	400	—	—	0.2D	0.1D
		φ 20	750	375	—	—	—	0.1D
	Steel (S45C)	φ 6	1,320	125	0.2D	0.2D	—	—
		φ 12	600	160	—	0.2D	0.2D	—
		φ 16	470	160	—	—	0.2D	0.1D
		φ 20	375	150	—	—	—	0.1D

- BT
- CAT
- AHO
- HSK-A/EF/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Stub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

# KH-A

## Quick Change Stub Holder

- Stub drilling for special purpose machines and transfer machines.



## KH-A Collet set






Code	Model	D	B	Chucking range d	Preset driver	L3	D1	D2	L1	L2	C	kg	Collet	Nut	Spanner
2340 121 □□※※※	KH-12AR	12	0	0.5 ~ 6.0	KHS -00006	23 ~ 45	19	20	34	35	3	0.1	FDC-d07A	KDP-1414	Flat 17mm width
			2.4	3.1 ~ 5.0	KHS -02406	26 ~ 48									
			3.0	5.1 ~ 6.0	KHS -03006	26 ~ 48									
2340 141 □□※※※	KH-14AR	14	0	0.5 ~ 7.0	KHS -00007	23 ~ 45	19	24.3	34	35	4	0.1	FDC-d07A	KDP-1414	Flat 17mm width
			2.4	3.1 ~ 5.0	KHS -02407	26 ~ 48									
			3.0	5.1 ~ 6.0	KHS -03007	26 ~ 48									
			4.0	6.1 ~ 7.0	KHS -04007	27 ~ 48									
2340 160 □□※※※	KH-16A	16	0	2.8 ~ 9.0	KHS -00009	28 ~ 45	26	29	35	40	4	0.2	EDC-d19	KDP-1916	S-1L
			2.4	3.1 ~ 5.0	KHS -02409	31 ~ 48									
			3.0	5.1 ~ 6.0	KHS -03009	33 ~ 50									
2340 190 □□※※※	KH-19A	19	0	2.8 ~ 9.0	KHS -00009	28 ~ 50	26	32	35	45	4	0.2	EDC-d19	KDP-1916	S-1L
			2.4	3.1 ~ 5.0	KHS -02409	31 ~ 53									
			3.0	5.1 ~ 6.0	KHS -03009	33 ~ 55									
2340 200 □□※※※	KH-20A	20	0	2.8 ~ 9.0	KHS -00009	28 ~ 55	26	32	35	45	4	0.2	EDC-d19	KDP-1916	S-1L
			2.4	3.1 ~ 5.0	KHS -02409	31 ~ 55									
			3.0	5.1 ~ 6.0	KHS -03009	33 ~ 55									
2340 220 □□※※※	KH-22A	22	0	2.8 ~ 12	KHS -00012	34 ~ 61	32	35	35	55	5	0.3	EDC-d24	KDP-2422	S-3L
			2.4	3.1 ~ 5.0	KHS -02412	32 ~ 59									
			3.0	5.1 ~ 6.0	KHS -03012	32 ~ 59									
2340 240 □□※※※	KH-24A	24	4.0	6.1 ~ 9.0	KHS -04012	36 ~ 63	32	37	35	55	5	0.3	EDC-d24	KDP-2422	S-3L
			5.0	9.1 ~ 12	KHS -05012	39 ~ 63									
			0	4.0 ~ 16	KHS -00016	41 ~ 60 (65)									
2340 250 □□※※※	KH-25A	25	2.4	4.0 ~ 5.0	KHS -02416	36 ~ 58 (63)	36	41	35	60	6	0.4	EDC-d28	KDP-2825	S-4L
			3.0	5.1 ~ 6.0	KHS -03016	39 ~ 61 (66)									
			4.0	6.1 ~ 9.0	KHS -04016	42 ~ 64 (69)									
2340 260 □□※※※	KH-26A	26	5.0	9.1 ~ 12	KHS -05016	47 ~ 69 (74)	36	41	35	60	6	0.4	EDC-d28	KDP-2825	S-4L
			0	4.0 ~ 16	KHS -00016	41 ~ 60 (65)									
			2.4	3.1 ~ 5.0	KHS -02416	39 ~ 61 (66)									
2340 280 □□※※※	KH-28A	28	4.0	6.1 ~ 9.0	KHS -04016	42 ~ 64 (69)	36	44	35	65	6	0.5	EDC-d28	KDP-2825	S-4L
			5.0	9.1 ~ 12	KHS -05016	47 ~ 69 (74)									
			6.0	12.1 ~ 16	KHS -06016	51 ~ 72 (77)									
2340 300 □□※※※	KH-30A	30	0	4.0 ~ 22	KHS -00022	46 ~ 75	36	44	35	65	6	0.5	EDC-d28	KDP-2825	S-4L
			2.4	4.0 ~ 5.0	KHS -02422	39 ~ 76									
			3.0	5.1 ~ 6.0	KHS -03022	39 ~ 76									
2340 320 □□※※※	KH-32A	32	4.0	6.1 ~ 9.0	KHS -04022	42 ~ 79	46	52	40	80	6	0.8	EDC-d36	KDP-3632	S-5L
			5.0	9.1 ~ 12	KHS -05022	48 ~ 85									
			6.0	12.1 ~ 16	KHS -06022	54 ~ 91									
2340 350 □□※※※	KH-35A	35	8.0	16.1 ~ 22	KHS -08022	58 ~ 91	46	52	40	80	6	0.8	EDC-d36	KDP-3632	S-5L
			0	20.1 ~ 32	KHS -00032	66 ~ 83									
			2.4	4.0 ~ 5.0	KHS -02432	39 ~ 76									
2340 360 □□※※※	KH-36A	36	3.0	5.1 ~ 6.0	KHS -03032	39 ~ 76	46	52	40	80	6	0.8	EDC-d36	KDP-3632	S-5L
			4.0	6.1 ~ 9.0	KHS -04032	42 ~ 79									
			5.0	9.1 ~ 12	KHS -05032	48 ~ 85									
2340 481 □□※※※	KH-48A	48	0	20.1 ~ 22	KHS -08032	70 ~ 89	65	70	45	100	6	1.8	FDC-d32B	HDP-32	S-6
			12.0	22.1 ~ 32	KHS -12032	78 ~ 105									
			0	20.1 ~ 32	KHS -00032	66 ~ 83									

# KHB-A Holder body



Code	Model	B	L3	D	D1	D2	L1	L2	T	kg	
2340 121 □□□ 06	KHB -12AR	/00006	0	23 ~ 45	12	19	20	34	35	17	0.1
		/02406	2.4	26 ~ 48							
		/03006	3	26 ~ 48							
2340 141 □□□ 07	KHB -14AR	/00007	0	23 ~ 45	14	19	24.3	34	35	17	0.1
		/02407	2.4	26 ~ 48							
		/03007	3	26 ~ 48							
		/04007	4	27 ~ 48							
2340 160 □□□ 09	KHB -16A	/00009	0	28 ~ 45	16	26	29	35	40	24	0.15
		/02409	2.4	31 ~ 48							
		/03009	3	33 ~ 50							
		/04009	4	34 ~ 50							
2340 190 □□□ 09	KHB -19A	/00009	0	28 ~ 50	19	26	32	35	45	24	0.2
		/02409	2.4	31 ~ 53							
2340 200 □□□ 09	KHB -20A	/03009	3	33 ~ 55	20	26	32	35	45	24	0.2
		/04009	4	34 ~ 55							
2340 220 □□□ 12	KHB -22A	/00012	0	34 ~ 61	22	32	35	35	55	30	0.25
		/02412	2.4	32 ~ 59							
		/03012	3	32 ~ 59							
2340 240 □□□ 12	KHB -24A	/04012	4	36 ~ 63	24	32	37	35	55	30	0.3
		/05012	5	39 ~ 63							
2340 250 □□□ 16	KHB -25A	/00016	0	41 ~ 60(65)	25	36	41	35	60	33	0.35
2340 260 □□□ 16	KHB -26A	/02416	2.4	36 ~ 58(63)	26	36	41	35	60	33	0.35
		/03016	3	39 ~ 61(66)							
2340 280 □□□ 16	KHB -28A	/04016	4	42 ~ 64(69)	28	36	44	35	65	33	0.4
		/05016	5	47 ~ 69(74)							
2340 300 □□□ 16	KHB -30A	/06016	6	51 ~ 72(77)	30	36	44	35	65	33	0.45
2340 320 □□□ 22	KHB -32A	/00022	0	46 ~ 75	32	46	48	40	80	42	0.6
		/02422	2.4	39 ~ 76							
		/03022	3	39 ~ 76							
2340 350 □□□ 22	KHB -35A	/04022	4	42 ~ 79	35	46	52	40	80	42	0.7
		/05022	5	48 ~ 85							
2340 360 □□□ 22	KHB -36A	/06022	6	54 ~ 91	36	46	52	40	80	42	0.8
		/08022	8	58 ~ 91							
2340 480 □□□ 32	KHB -48A	/00032	0	66 ~ 83	48	65	70	45	100	-	1.6
		/08032	8	70 ~ 89							
		/12032	12	78 ~ 105							

- L3 dimension in bracket stands for max. dimension of KH-28E & KH-30E.
- Please select preset driver according to tang size of cutting tool. (Refer to P.433)
- Spanner is sold separately.
- Refer to P.440 for spindle dimension.

<b>Collet</b> P. 444 	<b>Spanner</b> P. 446 	<b>Preset driver</b> P. 433 
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**KH-A (Collet set)**  
Ordering Example

**KH-20A / 04009 / 7.0**  
Preset driver Collet I.D.

**KHB-A (Holder body)**  
Ordering Example

**KHB-20A / 04009**  
Preset driver

# KH-A-NL

## Quick Change Stub Tapper

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine

Related Equipment  
Bush & Chamfering Drill

Stub Holder

Tapping Chuck

Tap Adapter

Adjustable Adapter

Endmill Chuck

Straight Drill Chuck

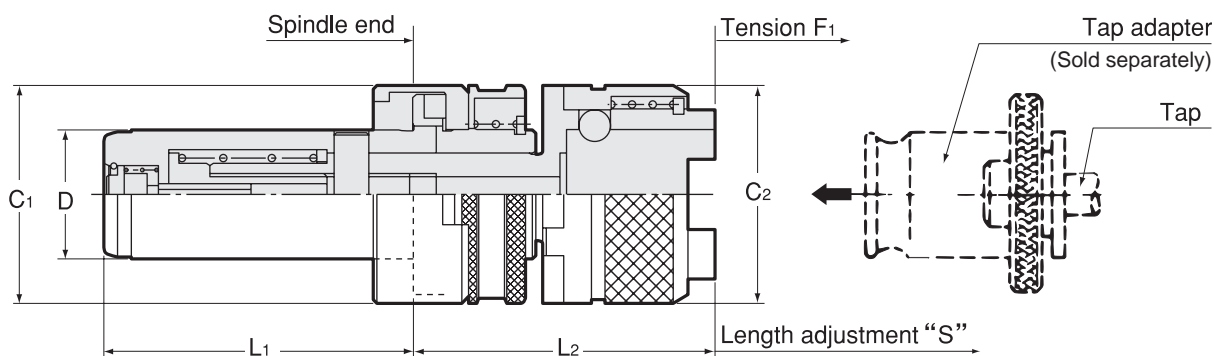
Floating Holder

### Applications

- Designed for use on KH-A spindle.
- Spindle Feed: All kinds of feed styles. For spindle feed other than pitch feed, use KH-A-NL in a condition where the tension feature always works a little. In this case, the length adjustment should be retained less than half.

### Feature

- Small projection length. Stable tapping.
- Projection length is adjustable
- Length compensation.
- Quick change



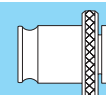
**!** For capable tap sizes, please refer to P. 462-464 chart.

Code	Model	Tap Size	Adapter size	D	C1	C2	L1	L2	S Max	F1	kg
2940 00014006	<b>KH 14A-NL006</b>	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	14	24.3	23	35	50+S	6	6 - S	0.13
2940 00016008	<b>KH 16A-NL008</b>		0	16	29	23	40	47+S	8	8 - S	0.2
2940 00019110	<b>KH 19A-NL110</b>		1	19	32	32	45	45+S	10	10 - S	0.25
2940 00020110	<b>KH 20A-NL110</b>		1	20	32	32	45	45+S	10	10 - S	0.25
2940 00022110	<b>KH 22A-NL110</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16)	1	22	35	32	55	45+S	10	10 - S	0.33
2940 00024110	<b>KH 24A-NL110</b>		1	24	37	32	55	45+S	10	10 - S	0.37
2940 00025115	<b>KH 25A-NL115</b>	Pipe(PT,PS,PF)1/8 ~ 1/4	1	25	41	32	60	45+S	15	15 - S	0.45
2940 00026115	<b>KH 26A-NL115</b>		1	26	41	32	60	45+S	15	15 - S	0.45
2940 00028215	<b>KH 28A-NL215</b>		2	28	44	50	65	60+S	15	15 - S	0.75
2940 00030215	<b>KH 30A-NL215</b>		2	30	44	50	65	60+S	15	15 - S	0.8
2940 00032220	<b>KH 32A-NL220</b>	M8 ~ M22 U3/8 ~ U7/8	2	32	48	50	80	60+S	20	20 - S	
2940 00035220	<b>KH 35A-NL220</b>	Pipe(PT,PS,PF)1/8 ~ 1/2	2	35	52	50	80	60+S	20	20 - S	
2940 00036220	<b>KH 36A-NL220</b>		2	36	52	50	80	60+S	20	20 - S	
2940 00048320	<b>KH 48A-NL320</b>	M16 ~ M38	3	48	70	72	100	90+S	20	20 - S	

1. Tap sizes in brackets are for light tapping only.
2. Tap adapter is sold separately.
3. We recommend you to have 1mm leeway in your tool layout, as L2 dimension is dispersed.
4. Refer to P.440 for spindle dimension.

### Tap Adapter

P. 458



### Ordering Example

**KH-14A - NL 006**

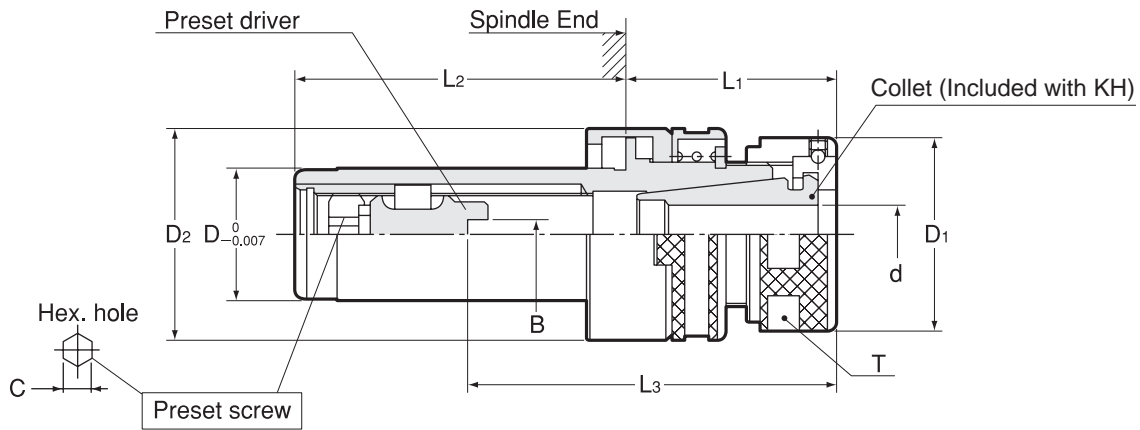
Length compensation (S Max)  
Adapter size

### Applications

- For aluminum alloy and cast iron. (For cast iron, drilling only.) In case of using  $\phi 12$  and above drill size or spot-facing cast iron, please contact NT Tool.
- Special purpose machine For transfer machine, etc.

### Feature

- For narrow spindle pitch processing.



※ Incompatible with KH-E and KH-A.

## KH Collet set

Holder

+

Preset driver

+

Nut



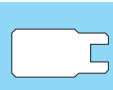
+

Collet

Code	Model	D	B	Chucking range d	Preset driver	L3	D1	D2	L1	L2	T	C	kg	Collet	Nut	Spanner
2300141 □□※※※	<b>KH-14R</b>	14	0	0.5 ~ 7.0	KHS -00007	23 ~ 45	19	22	34	35	17	4	0.1	FDC-d07A	KDP-1414	Flat 17mm width
			2.4	3.1 ~ 5.0	KHS -02407	26 ~ 48										
			3.0	5.1 ~ 6.0	KHS -03007	26 ~ 48										
			4.0	6.1 ~ 7.0	KHS -04007	27 ~ 48										
2300160 □□※※※	<b>KH-16</b>	16	0	2.8 ~ 9.0	KHS -00009	28 ~ 45	26	26	35	40	24	4	0.15	EDC-d19	KDP-1916	S-1L
			2.4	3.1 ~ 5.0	KHS -02409	31 ~ 48										
			3.0	5.1 ~ 6.0	KHS -03009	33 ~ 50										
			4.0	6.1 ~ 9.0	KHS -04009	34 ~ 50										
2300190 □□※※※	<b>KH-19</b>	19	0	2.8 ~ 9.0	KHS -00009	28 ~ 50	26	30	35	45	24	4		EDC-d19	KDP-1916	S-1L
			2.4	3.1 ~ 5.0	KHS -02409	31 ~ 53										
2300200 □□※※※	<b>KH-20</b>	20	3.0	5.1 ~ 6.0	KHS -03009	33 ~ 55	26	30	35	45	24	4		EDC-d19	KDP-1916	S-1L
			4.0	6.1 ~ 9.0	KHS -04009	34 ~ 55										
2300220 □□※※※	<b>KH-22</b>	22	0	2.8 ~ 12	KHS -00012	34 ~ 61	32	33	35	55	30	5	0.27	EDC-d24	KDP-2422	S-3L
			2.4	3.1 ~ 5.0	KHS -02412	32 ~ 59										
			3.0	5.1 ~ 6.0	KHS -03012	32 ~ 59										
			4.0	6.1 ~ 9.0	KHS -04012	36 ~ 63										
2300240 □□※※※	<b>KH-24</b>	24	4.0	6.1 ~ 9.0	KHS -04012	36 ~ 63	32	35	35	55	30	5		EDC-d24	KDP-2422	S-3L
			5.0	9.1 ~ 12	KHS -05012	39 ~ 63										



Code	Model	B	L3	D	D1	D2	L1	L2	T	C	
2340 141 □□□ 07	<b>KHB -14R</b>	/00007	0	23 ~ 45	14	19	22	34	35	17	4
		/02407	2.4	26 ~ 48							
		/03007	3.0	26 ~ 48							
		/04007	4.0	27 ~ 48							
2340 160 □□□ 09	<b>KHB -16</b>	/00009	0	28 ~ 45	16	26	26	35	40	24	4
		/02409	2.4	31 ~ 48							
		/03009	3.0	33 ~ 50							
		/04009	4.0	34 ~ 50							
2340 190 □□□ 09	<b>KHB -19</b>	/00009	0	28 ~ 50	19	26	30	35	45	24	4
		/02409	2.4	31 ~ 53							
2340 200 □□□ 09	<b>KHB -20</b>	/03009	3.0	33 ~ 55	20	26	30	35	45	24	4
		/04009	4.0	34 ~ 55							
2340 220 □□□ 12	<b>KHB -22</b>	/00012	0	34 ~ 61	22	32	33	35	55	30	5
		/02412	2.4	32 ~ 59							
		/03012	3.0	32 ~ 59							
2340 240 □□□ 12	<b>KHB -24</b>	/04012	4.0	36 ~ 63	24	32	35	35	55	30	5
		/05012	5.0	39 ~ 63							

<b>Collet</b> P. 444 	<b>Spanner</b> P. 446 	<b>Preset driver</b> P. 433 
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### KH (Collet set)

#### Ordering Example

**KH-20 / 04009 / 7.0**  
 Preset driver      Collet I.D.

### KHB (Holder body)

#### Ordering Example

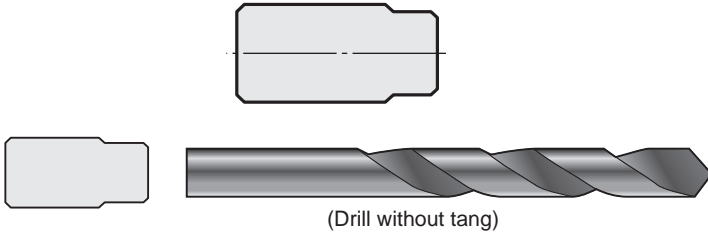
**KHB-20 / 04009**  
 Preset driver

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

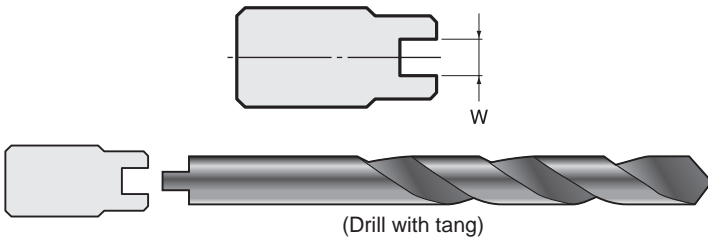
Accessories

Preset driver (For KH-E, KH-A, KH)

Type1 without tang



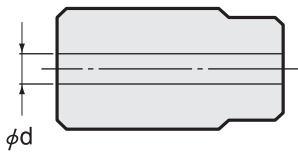
Type2 with tang



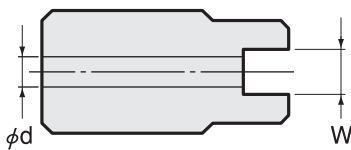
Model	Holder model	Type	W <sup>+0.4</sup> / <sub>+0.3</sub>
KHS	KH-12E KH-12AR	1	—
		2	2.4
		2	3
KHS	KH-14E KH-14AR KH-14R	1	—
		2	2.4
		2	3
		2	4
KHS	KH-16E, 16A, 16 KH-19E, 19A, 19 KH-20E, 20A, 20	1	—
		2	2.4
		2	3
		2	4
KHS	KH-22E, 22A, 22 KH-24E, 24A, 24	1	—
		2	2.4
		2	3
		2	4
		2	5
KHS	KH-25E, 25A KH-26E, 26A KH-28E, 28A KH-30E, 30A	1	—
		2	2.4
		2	3
		2	4
		2	5
		2	6
KHS	KH-32E, 32A KH-35E, 35A KH-36E, 36A	1	—
		2	2.4
		2	3
		2	4
		2	5
		2	6
KHS	KH-48E KH-48A	1	—
		2	8
		2	8
		2	12

Preset driver (For KH-EC)

Type1 without tang



Type2 with tang

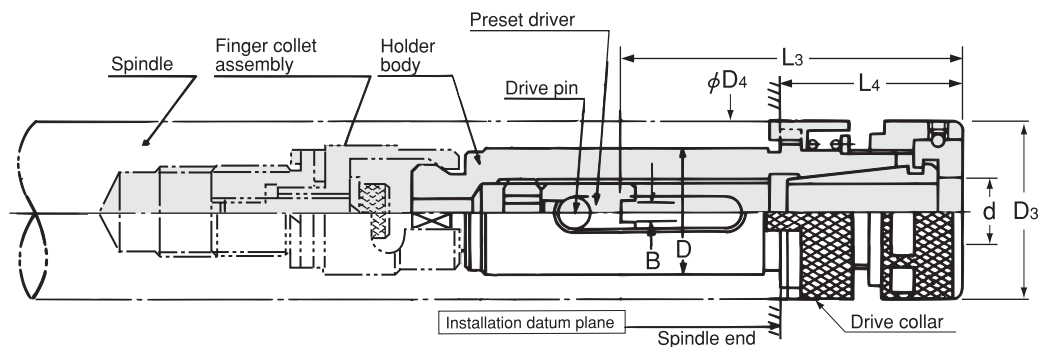


Model	Holder Model	Type	W <sup>+0.4</sup> / <sub>+0.3</sub>	d	
KHS	KHB-14EC1,2	00007-OH	2	2.4	2.5
		02407-OH	2	2.4	2.5
		03007-OH	2	3	2.5
		04007-OH	2	4	2.5
KHS	KHB-16EC1,2 KHB-19EC1,2 KHB-20EC1,2	00009-OH	2	2.4	2.5
		02409-OH	2	2.4	2.5
		03009-OH	2	3	3
		04009-OH	2	4	3
KHS	KHB-22EC1,2 KHB-24EC1,2	00012-OH	1	—	2.5
		02412-OH	2	2.4	2.5
		03012-OH	2	3	3
		04012-OH	2	4	4
		05012-OH	2	5	5
KHS	KHB-25EC1,2 KHB-26EC1,2 KHB-28EC1,2 KHB-30EC1,2	00016-OH	1	—	2.5
		03016-OH	2	3	3
		04016-OH	2	4	4
		05016-OH	2	5	5
		06016-OH	2	6	6
		08022-OH	2	8	8
KHS	KHB-32EC1,2 KHB-35EC1,2 KHB-36EC1,2	00022-OH	1	—	2.5
		03022-OH	2	3	3
		04022-OH	2	4	4
		05022-OH	2	5	5
		06022-OH	2	6	6
08022-OH	2	8	8		

# KD

## Quick Change Stub Holder

- It covers a wide range of  $\phi 0.5$ -32mm cutter shanks.



BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine  
Related Equipment  
Bush & Chamfering Drill  
Stub Holder

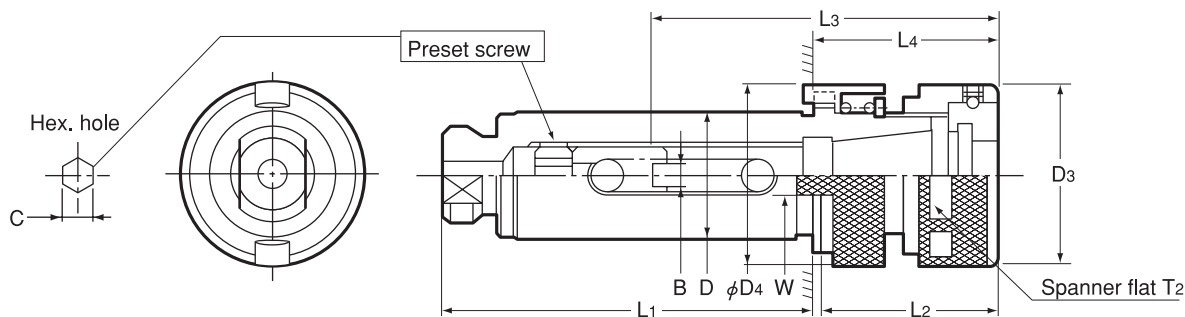
Tapping Chuck  
Tap Adapter  
Adjustable Adapter  
Endmill Chuck  
Straight Drill Chuck  
Floating Holder

## KD Collet set



Code	Model	D	B	Chucking range $\phi$	Presetdriver	L3	D3	D4	L4 MAX	kg	Collet	Nut	Spanner	Finger collet assembly
0800 1420 □※※※	KD-14R2	14	0	0.5 ~ 7.0	KDS -007F	31 ~ 49	19	19.5	30	0.08	FDC-d07A	KDP-1414	Flat 17mm width	KDA-14
			2.4	3.1 ~ 5.0	KDS -2.407F	31 ~ 49								
			3	5.1 ~ 6.0	KDS -307F	31 ~ 49								
			4	6.1 ~ 7.0	KDS -407F	31 ~ 49								
0800 1600 □※※※	KD-16	16	0	2.8 ~ 9.0	KDS -009F	31 ~ 50	26	26	30	0.13	EDC-d19	KDP-1916	S-1L	KDA-16
			2.4	3.1 ~ 5.0	KDS -2.409F	31 ~ 50								
			3	5.1 ~ 6.0	KDS -309F	33 ~ 52								
			4	6.1 ~ 9.0	KDS -409F	34 ~ 52								
0800 1900 □※※※	KD-19	19	0	2.8 ~ 9.0	KDS -009F	31 ~ 54	26	28	30	0.2	EDC-d19	KDP-1916	S-1L	KDA-19
			2.4	3.1 ~ 5.0	KDS -2.409F	31 ~ 54								
0800 2000 □※※※	KD-20	20	3	5.1 ~ 6.0	KDS -309F	33 ~ 56	26	28	30	0.2	EDC-d19	KDP-1916	S-1L	KDA-20
			4	6.1 ~ 9.0	KDS -409F	34 ~ 56								
			0	2.8 ~ 12.0	KDS -012F	32 ~ 57								
0800 2200 □※※※	KD-22	22	2.4	3.1 ~ 5.0	KDS -2.412F	32 ~ 57	32	32	30	0.25	EDC-d24	KDP-2422	S-3L	KDA-22
			3	5.1 ~ 6.0	KDS -312F	32 ~ 57								
			4	6.1 ~ 9.0	KDS -412F	35 ~ 60								
0800 2400 □※※※	KD-24	24	5	9.1 ~ 12.0	KDS -512F	39 ~ 60	32	32	30	0.3	EDC-d24	KDP-2422	S-3L	KDA-24
			0	4.0 ~ 16.0	KDS -016F	41 ~ 60								
0800 2500 □※※※	KD-25	25	2.4	4.0 ~ 5.0	KDS -2.416F	37 ~ 60	36	36	30	0.35	EDC-d28	KDP-2825	S-4L	KDA-25
0800 2600 □※※※	KD-26	26	3	5.1 ~ 6.0	KDS -316F	37 ~ 60								
0800 2800 □※※※	KD-28	28	4	6.1 ~ 9.0	KDS -416F	39 ~ 62	36	36	30	0.45	EDC-d28	KDP-2825	S-4L	KDA-28
			5	9.1 ~ 12.0	KDS -516F	46 ~ 69								
0800 3000 □※※※	KD-30	30	6	12.1 ~ 16.0	KDS -616F	51 ~ 74	36	38	30	0.5	EDC-d28	KDP-2825	S-4L	KDA-30
			0	4.0 ~ 22.0	KDS -022F	46 ~ 84								
0800 3200 □※※※	KD-32	32	2.4	4.0 ~ 5.0	KDS -2.422F	42 ~ 84	46	46	35	0.65	EDC-d36	KDP-3632	S-5L	KDA-32
			3	5.1 ~ 6.0	KDS -322F	42 ~ 84								
			4	6.1 ~ 9.0	KDS -422F	42 ~ 84								
0800 3500 □※※※	KD-35	35	5	9.1 ~ 12.0	KDS -522F	45 ~ 87	46	46	35	0.75	EDC-d36	KDP-3632	S-5L	KDA-35
			6	12.1 ~ 16.0	KDS -622F	51 ~ 91								
			8	16.1 ~ 22.0	KDS -822F	58 ~ 91								
0800 3600 □※※※	KD-36	36	8	16.1 ~ 22.0	KDS -822F	58 ~ 91	46	46	35	0.8	EDC-d36	KDP-3632	S-5L	KDA-36
			0	20.1 ~ 32.0	KDS -032F	60 ~ 106								
			8	20.1 ~ 22.0	KDS -832F	70 ~ 106								
0800 4810 □※※※	KD-48	48	12	22.1 ~ 32.0	KDS -1232F	78 ~ 106	65	66	40	1.7	FDC-d32B	HDP-32	S-6	KDA-48





# KDB Holder body



Code	Model	B	L3	D <sup>0</sup> <sub>-0.01</sub>	D3	D4	L1	L2	L4 MAX	W	T2	C	kg	
0801 142 □□□ 07	KDB -14R2	/007F	0	31 ~ 49	14	19	19.5	48	17	30	8	17	4	0.07
		/2407F	2.4	31 ~ 49										
		/307F	3	31 ~ 49										
		/407F	4	31 ~ 49										
0801 160 □□□ 09	KDB -16	/009F	0	31 ~ 50	16	26	26	55.5	27.5	30	8	24	4	0.12
		/2409F	2.4	31 ~ 50										
		/309F	3	33 ~ 52										
		/409F	4	34 ~ 52										
0801 190 □□□ 09	KDB -19	/009F	0	31 ~ 54	19	26	28	60.5	27.5	30	9	24	4	0.18
/2409F	2.4	31 ~ 54												
0801 200 □□□ 09	KDB -20	/309F	3	33 ~ 56	20	26	28	60.5	27.5	30	9	24	4	0.18
		/409F	4	34 ~ 56										
		/012F	0	32 ~ 57										
/2412F	2.4	32 ~ 57												
0801 240 □□□ 12	KDB -24	/312F	3	32 ~ 57	24	32	32	70	33	30	10	30	5	0.27
		/412F	4	35 ~ 60										
		/512F	5	39 ~ 60										
0801 250 □□□ 16	KDB -25	/016F	0	41 ~ 60	25	36	36	83	43	30	10	33	6	0.3
0801 260 □□□ 16	KDB -26	/2416F	2.4	37 ~ 60										
0801 280 □□□ 16	KDB -28	/316F	3	37 ~ 60	28	36	36	83	43	30	10	33	6	0.4
		/416F	4	39 ~ 62										
		/516F	5	46 ~ 69										
/616F	6	51 ~ 74												
0801 320 □□□ 22	KDB -32	/022F	0	46 ~ 84	32	46	46	100	49	35	10	42	6	0.55
		/2422F	2.4	42 ~ 84										
		/322F	3	42 ~ 84										
0801 350 □□□ 22	KDB -35	/422F	4	42 ~ 84	35	46	46	100	49	35	10	42	6	0.65
		/522F	5	45 ~ 87										
		/622F	6	51 ~ 91										
/822F	8	58 ~ 91												
0801 481 □□□ 32	KDB -48	/032F	0	60 ~ 106	48	65	66	117	64	40	11	—	6	1.4
		/832F	8	70 ~ 106										
		/1232F	12	78 ~ 106										

- Please select preset driver according to tang size of cutting tool. (Refer to P.438)
- Spanner and finger collet assembly is sold separately.
- Refer to P.441 for spindle dimension.

<b>Collet</b> P. 444	<b>Spanner</b> P. 446	<b>Preset driver</b> P. 438	<b>Finger collet assembly</b> P. 438

**KD (Collet set)**  
Ordering Example

**KD-16 / 009F / 7.0**  
Preset driver Collet I.D.

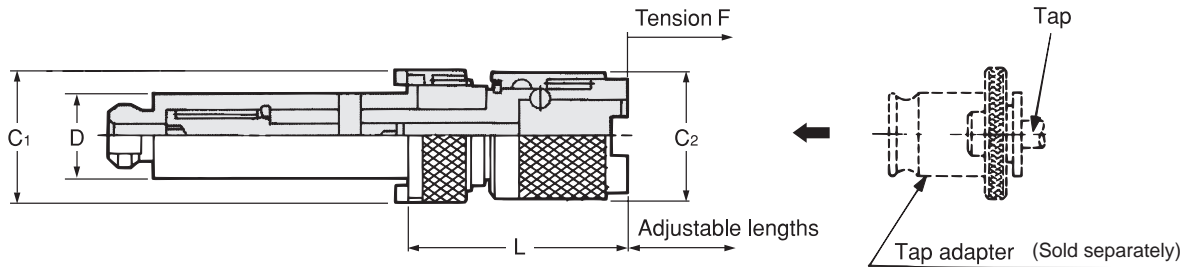
**KDB (Holder body)**  
Ordering Example

**KDB-16 / 309F**  
Preset driver

# KD-NL

## Quick Change Stub Tapper

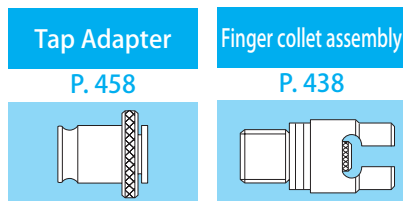
- Designed for use on KD spindle.
- Spindle Feed: All kinds of feed styles. For spindle feed other than pitch feed, use KD-NL in a condition where the tension feature always works a little. In this case, the length adjustment should be retained less than half.



For capable tap sizes, please refer to P.462-464 chart.

Code	Model	Tap Size	Adapter size	D	C2	C1	L	S MAX	F	kg
0830 00014008	<b>KD 14 -NL008</b>	M3 ~ M8 (M10)	0	14	23	19.5	45 + S	8	8-S	0.12
0830 00016010	<b>KD 16 -NL010</b>	U1/4 ~ U5/16 (U3/8)	0	16	23	26	43 + S	10	10-S	0.16
0830 00019110	<b>KD 19 -NL110</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1	19	32	28	41 + S	10	10-S	0.25
0830 00020110	<b>KD 20 -NL110</b>		1	20	32	28	41 + S	10	10-S	0.25
0830 00022110	<b>KD 22 -NL110</b>		1	22	32	32	41 + S	10	10-S	0.32
0830 00024110	<b>KD 24 -NL110</b>		1	24	32	32	41 + S	10	10-S	0.36
0830 00025115	<b>KD 25 -NL115</b>		1	25	32	36.2	41 + S	15	15-S	0.42
0830 00026115	<b>KD 26 -NL115</b>	1	26	32	36.2	41 + S	15	15-S	0.45	
0830 00028215	<b>KD 28 -NL215</b>	M8 ~ M22 U3/8 ~ U7/8 Pipe(PT,PS,PF)1/8 ~ 1/2	2	28	50	36.2	56 + S	15	15-S	0.75
0830 00030215	<b>KD 30 -NL215</b>		2	30	50	38	56 + S	15	15-S	
0830 00032220	<b>KD 32 -NL220</b>		2	32	50	46	59 + S	20	20-S	
0830 00035220	<b>KD 35 -NL220</b>		2	35	50	46	59 + S	20	20-S	
0830 00036220	<b>KD 36 -NL220</b>		2	36	50	46	59 + S	20	20-S	1.15

1. Tap adapter is sold separately.
2. Finger collet assembly is sold separately.



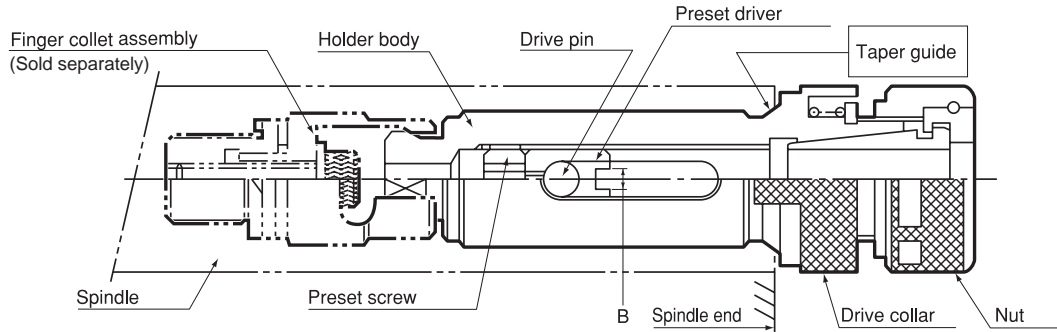
### Ordering Example

**KD28 - NL 006**  
 | Length compensation (S Max)  
 Adapter size

# KD-T

## Quick Change Stub Holder

- Back-lash in radial direction is little since taper guide portion on the end face of spindle bore and taper portion of holder body securely attached.
- Except the taper guide feature, all other features and condition of use are the same as KD.



## KD-T Collet set



Code	Model	B	Chucking range d	Preset driver	Collet	Nut	Spanner	Finger collet assembly				
0850 1420 □※※※	<b>KD-14R2T/□□07F/ ※※</b>	0	0.5 ~ 7.0	KDS -007F	FDC-d07A	KDP-1414	Flat 17mm width	KDA-14				
		2.4	3.1 ~ 5.0	KDS -2.407F								
		3	5.1 ~ 6.0	KDS -307F								
		4	6.1 ~ 7.0	KDS -407F								
0850 1600 □※※※	<b>KD-16T/□□09F/ ※※</b>	0	2.8 ~ 9.0	KDS -009F	EDC-d19	KDP-1916	S-1L	KDA-16				
		2.4	3.1 ~ 5.0	KDS -2.409F								
0850 1900 □※※※	<b>KD-19T/□□09F/ ※※</b>	3	5.1 ~ 6.0	KDS -309F	EDC-d19	KDP-1916	S-1L	KDA-19				
		4	6.1 ~ 9.0	KDS -409F								
0850 2000 □※※※	<b>KD-20T/□□09F/ ※※</b>	3	5.1 ~ 6.0	KDS -309F	EDC-d19	KDP-1916	S-1L	KDA-20				
		4	6.1 ~ 9.0	KDS -409F								
0850 2200 □※※※	<b>KD-22T/□□12F/ ※※</b>	0	2.8 ~ 12.0	KDS -012F	EDC-d24	KDP-2422	S-3L	KDA-22				
		2.4	3.1 ~ 5.0	KDS -2.412F								
		3	5.1 ~ 6.0	KDS -312F								
0850 2400 □※※※	<b>KD-24T/□□12F/ ※※</b>	3	5.1 ~ 6.0	KDS -312F	EDC-d24	KDP-2422	S-3L	KDA-24				
		4	6.1 ~ 9.0	KDS -412F								
		5	9.1 ~ 12.0	KDS -512F								
0850 2500 □※※※	<b>KD-25T/□□16F/ ※※</b>	0	4.0 ~ 16.0	KDS -016F	EDC-d28	KDP-2825	S-4L	KDA-25				
		2.4	4.0 ~ 5.0	KDS -2.416F								
0850 2600 □※※※	<b>KD-26T/□□16F/ ※※</b>	3	5.1 ~ 6.0	KDS -316F	EDC-d28	KDP-2825	S-4L	KDA-26				
		4	6.1 ~ 9.0	KDS -416F								
0850 2800 □※※※	<b>KD-28T/□□16F/ ※※</b>	5	9.1 ~ 12.0	KDS -516F	EDC-d28	KDP-2825	S-4L	KDA-28				
		6	12.1 ~ 16.0	KDS -616F								
0850 3000 □※※※	<b>KD-30T/□□16F/ ※※</b>	6	12.1 ~ 16.0	KDS -616F	EDC-d28	KDP-2825	S-4L	KDA-30				
		0	4.0 ~ 22.0	KDS -022F					EDC-d36	KDP-3632	S-5L	KDA-32
0850 3200 □※※※	<b>KD-32T/□□22F/ ※※</b>	2.4	4.0 ~ 5.0	KDS -2.422F								
		3	5.1 ~ 6.0	KDS -322F								
		4	6.1 ~ 9.0	KDS -422F								
0850 3500 □※※※	<b>KD-35T/□□22F/ ※※</b>	5	9.1 ~ 12.0	KDS -522F	EDC-d36	KDP-3632	S-5L	KDA-35				
		6	12.1 ~ 16.0	KDS -622F								
		8	16.1 ~ 22.0	KDS -822F								
0850 3600 □※※※	<b>KD-36T/□□22F/ ※※</b>	6	12.1 ~ 16.0	KDS -622F	EDC-d36	KDP-3632	S-5L	KDA-36				
		8	16.1 ~ 22.0	KDS -822F								
		0	20.1 ~ 32.0	KDS -032F					FDC-d32B	HDP-32	S-6	KDA-48
		8	20.1 ~ 22.0	KDS -832F								
12	22.1 ~ 32.0	KDS -1232F										

1. Please select preset driver according to tang size of cutting tool. (Refer to P.438)
2. Spanner and finger collet assembly is sold separately
3. Refer to P.441 for spindle dimension.

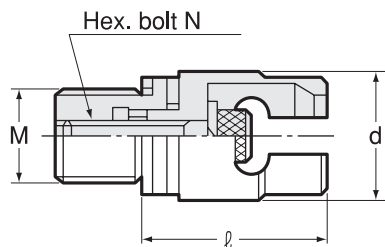
Spanner P. 446	Preset driver P. 438	Finger collet assembly P. 438

### Ordering Example

**KD-19T / 3 09F / 6.0**

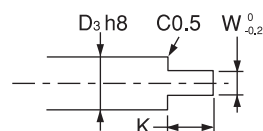
Tang width | Collet I.D.  
Max. cutter dia.

### Finger collet assembly (Spindle parts)



Model	Holder	d	l	M (P=1)	N
KDA -14	KD-14R2	14	27.3	M10	M5
KDA -16	KD-16	16	24.3	M12	M5
KDA -19	KD-19	19	29.3	M12	M5
KDA -20	KD-20	20	29.3	M12	M5
KDA -22	KD-22	22	27	M16	M6
KDA -24	KD-24	24	27	M16	M6
KDA -25	KD-25	25	29.5	M18	M8
KDA -26	KD-26	26	29.5	M18	M8
KDA -28	KD-28	28	29.5	M18	M8
KDA -30	KD-30	30	29.5	M18	M8
KDA -32	KD-32	32	30.5	M22	M8
KDA -35	KD-35	35	30.5	M22	M8
KDA -36	KD-36	36	30.5	M22	M8
KDA -48	KD-48	48	35.5	M22	M10

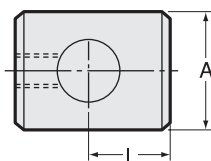
### Tang



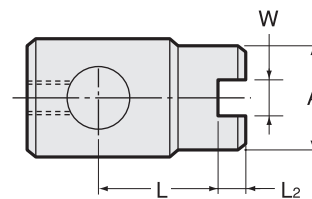
D3		W	K
Exceeding	Below		
3.1	5	2.4	5
5.1	6	3	6
6.1	9	4	8
9.1	12	5	8
12.1	16	6	10
16.1	22	8	12
22.1	32	12	12

### Preset driver (For KD, KD-T)

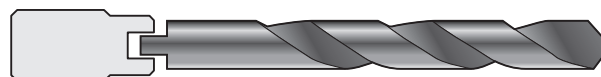
Type1 without tang



Type2 with tang



(Drill without tang)

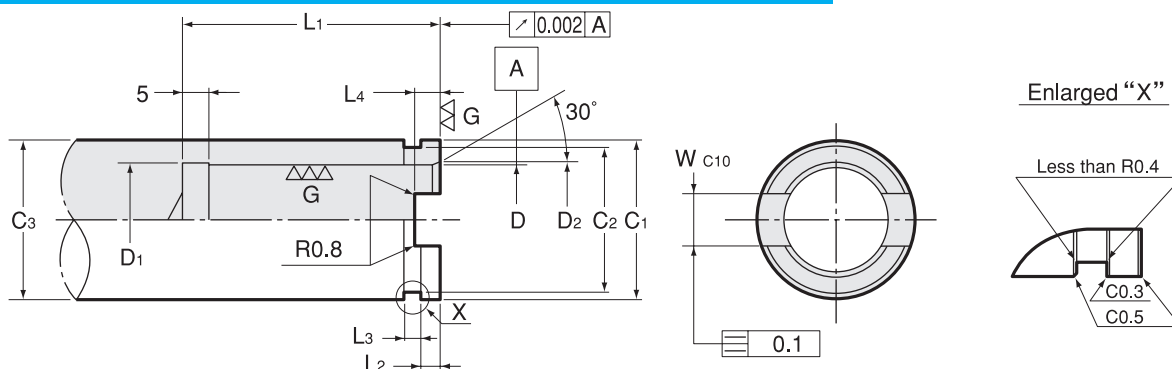


(Drill with tang)

Code	Model	Holder body	Type	W <sup>+0.4</sup> / <sub>+0.3</sub>	A	L	L2
0802 02000071	KDS -007F	KDB-14R2	1	—	7	5	—
0802 02024071	-2.407F		2	2.4	7	5	4
0802 02003071	-307F		2	3	7	5	4
0802 02004071	-407F		2	4	7	5	4
0802 02000091	KDS -009F	KDB-16,19,20	1	—	9	7.5	—
0802 02024091	-2.409F		2	2.4	7	7.5	3
0802 02003091	-309F		2	3	9	5.5	3
0802 02004091	-409F		2	4	9	5.5	3
0802 02000121	KDS -012F	KDB-22,24	1	—	10	12.5	—
0802 02024121	-2.412F		2	2.4	10.8	12.5	4
0802 02003121	-312F		2	3	10.8	12.5	4
0802 02004121	-412F		2	4	10.8	9.5	4
0802 02005121	-512F		2	5	10.8	9.5	4
0802 02000161	KDS -016F	KDB-25,26,28,30	1	—	7	21	—
0802 02024161	-2.416F		2	2.4	12.5	21	3
0802 02003161	-316F		2	3	12.5	21	3
0802 02004161	-416F		2	4	12.5	19	3
0802 02005161	-516F		2	5	12.5	12	4
0802 02006161	-616F		2	6	16	7	5
0802 02000221	KDS -022F	KDB-32,35,36	1	—	19	14	—
0802 02024221	-2.422F		2	2.4	19	14	3
0802 02003221	-322F		2	3	19	14	3
0802 02004221	-422F		2	4	19	14	3
0802 02005221	-522F		2	5	19	11	3
0802 02006221	-622F		2	6	19	7	3
0802 02008221	-822F		2	8	19	7	3
0802 02000321	KDS -032F	KDB-48	1	—	29	12	—
0802 02008321	-832F		2	8	29	12	8
0802 02012321	-1232F		2	12	29	12	8

## Spindle Dimensions For Quick Change Stub Holder

### Dimension for KH-E spindle

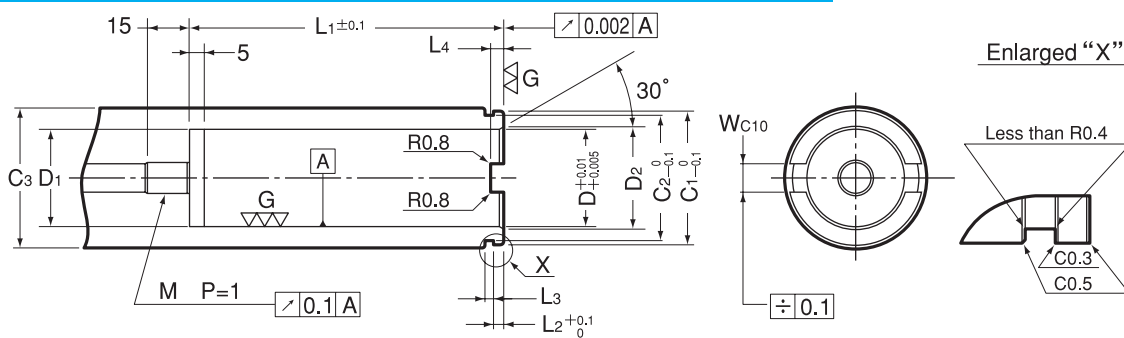


Size	D +0.010 +0.005	D1	D2	C1 0 -0.1	C2 0 -0.1	C3	L1	L2 +0.1 0	L3	L4	W C10
12E	12	12.4	13.5	18	16.5	18 or more	38	2.5	2.5	3.5	6
14E	14	14.4	15.5	22	20	20 or more	38	2.5	2.5	3.5	8
16E	16	16.4	17.5	26.4	24	25 or more	43	3.5	3.0	4.5	8
19E	19	19.4	20.5	29.4	27	28 or more	48	3.5	3.0	4.5	9
20E	20	20.4	21.5	29.4	27	28 or more	48	3.5	3.0	4.5	9
22E	22	22.4	23.5	32.4	30	32 or more	58	3.5	3.0	4.5	10
24E	24	24.4	25.5	34.4	32	32 or more	58	3.5	3.0	4.5	10
25E	25	25.4	26.5	37.4	35	35 or more	63	3.5	3.0	4.5	10
26E	26	26.4	27.5	37.4	35	35 or more	63	3.5	3.0	4.5	10
28E	28	28.4	29.5	40.4	38	40 or more	68	3.5	3.0	4.5	10
30E	30	30.4	31.5	40.4	38	40 or more	68	3.5	3.0	4.5	10
32E	32	32.4	33.5	43.8	41	45 or more	83	3.5	3.0	4.5	10
35E	35	35.4	36.5	47.8	45	45 or more	83	3.5	3.0	4.5	10
36E	36	36.4	37.5	47.8	45	45 or more	83	3.5	3.0	4.5	10
48E	48	48.4	49.5	65.4	62	65 or more	103	4.5	4.0	5.5	11

All corners not specified should be chamfered to C0.5.

- Material of spindle end : SCM415
- Heat treatment : HV613 ~ 697
- Carburized depth : 0.4 ~ 0.6

### Dimension for KH-EC spindle

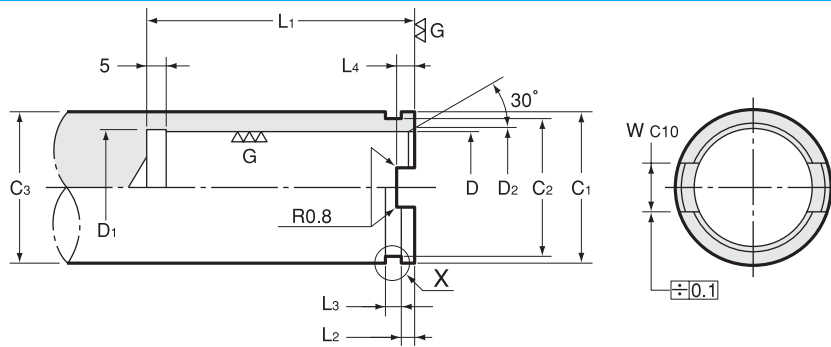


Size	D +0.010 +0.005	D1	D2	C1 0 -0.1	C2 0 -0.1	C3	L1	L2 +0.1 0	L3	W C10	L4	M
14EC	14	14.4	15.5	22	20	20 or more	60	2.5	2.5	8	3.5	M8 P=1
16EC	16	16.4	17.5	26.4	24	25 or more	65	3.5	3.0	8	4.5	M8 P=1
19EC	19	19.4	20.5	29.4	27	28 or more	70	3.5	3.0	9	4.5	M8 P=1
20EC	20	20.4	21.5	29.4	27	28 or more	70	3.5	3.0	9	4.5	M8 P=1
22EC	22	22.4	23.5	32.4	30	32 or more	80	3.5	3.0	10	4.5	M10 P=1
24EC	24	24.4	25.5	34.4	32	32 or more	80	3.5	3.0	10	4.5	M10 P=1
25EC	25	25.4	26.5	37.4	35	35 or more	91	3.5	3.0	10	4.5	M12 P=1
26EC	26	26.4	27.5	37.4	35	35 or more	91	3.5	3.0	10	4.5	M12 P=1
28EC	28	28.4	29.5	40.4	38	40 or more	96	3.5	3.0	10	4.5	M12 P=1
30EC	30	30.4	31.5	40.4	38	40 or more	96	3.5	3.0	10	4.5	M12 P=1
32EC	32	32.4	33.5	43.8	41	45 or more	111	3.5	3.0	10	4.5	M12 P=1
35EC	35	35.4	36.5	47.8	45	45 or more	111	3.5	3.0	10	4.5	M12 P=1
36EC	36	36.4	37.5	47.8	45	45 or more	111	3.5	3.0	10	4.5	M12 P=1

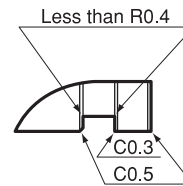
All corners not specified should be chamfered to C0.5.

- Material of spindle end : SCM415
- Heat treatment : HV613 ~ 697
- Carburized depth : 0.4 ~ 0.6

### Dimension for KH-A spindle



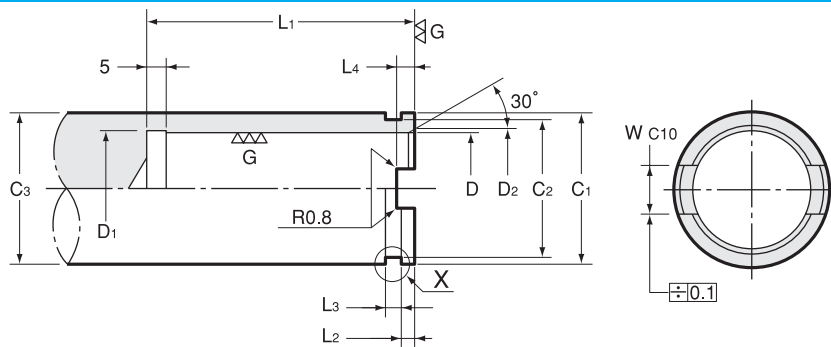
Enlarged "X"



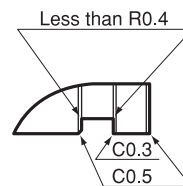
Size	D +0.015 +0.005	D1	D2	C1 0 -0.1	C2 0 -0.1	C3	L1	L2 +0.1 0	L3	W C10	L4
12AR	12	12.4	13.5	18	16.5	18 or more	38	2.5	2.5	6	3.5
14AR	14	14.4	15.5	22	20	20 or more	38	2.5	2.5	8	3.5
16A	16	16.4	17.5	26.4	24	25 or more	43	3.5	3.0	8	4.5
19A	19	19.4	20.5	29.4	27	28 or more	48	3.5	3.0	9	4.5
20A	20	20.4	21.5	29.4	27	28 or more	48	3.5	3.0	9	4.5
22A	22	22.4	23.5	32.4	30	32 or more	58	3.5	3.0	10	4.5
24A	24	24.4	25.5	34.4	32	32 or more	58	3.5	3.0	10	4.5
25A	25	25.4	26.5	37.4	35	35 or more	63	3.5	3.0	10	4.5
26A	26	26.4	27.5	37.4	35	35 or more	63	3.5	3.0	10	4.5
28A	28	28.4	29.5	40.4	38	40 or more	68	3.5	3.0	10	4.5
30A	30	30.4	31.5	40.4	38	40 or more	68	3.5	3.0	10	4.5
32A	32	32.4	33.5	43.8	41	45 or more	83	3.5	3.0	10	4.5
35A	35	35.4	36.5	47.8	45	45 or more	83	3.5	3.0	10	4.5
36A	36	36.4	37.5	47.8	45	45 or more	83	3.5	3.0	10	4.5
48A	48	48.4	49.5	65.4	62	65 or more	10	4.5	4.0	11	5.5

- Spindle dimension for KH-A only, not for KH.
- All corners not specified should be chamfered to C0.5.
  - Material of spindle end : SCM415
  - Heat treatment : HV613 ~ 697
  - Carburized depth : 0.4 ~ 0.6

### Dimension for KH-spindle



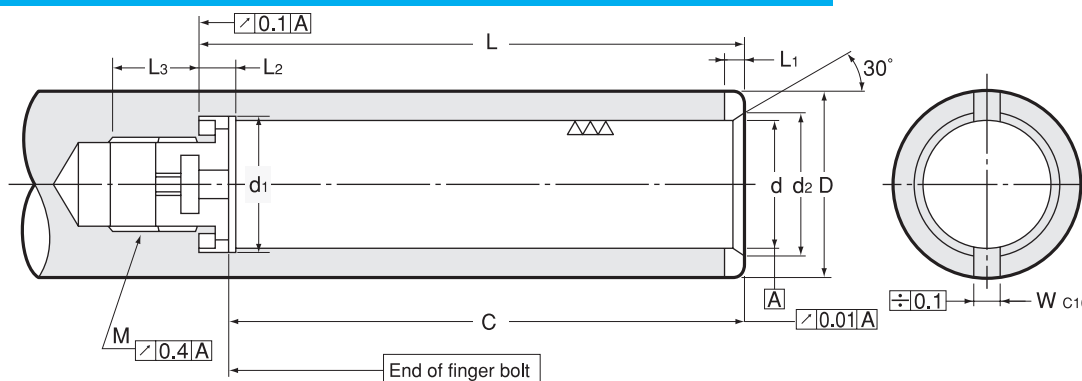
Enlarged "X"



Size	D +0.015 +0.005	D1	D2	C1 0 -0.1	C2 0 -0.1	C3	L1	L2 +0.1 0	L3	W C10	L4
14	14	14.4	15.5	19.8	18	20 or more	38	2.5	2.5	8	3.5
16	16	16.4	17.5	23.8	21.4	25 or more	43	3.5	3.0	8	4.5
19	19	19.4	20.5	27.8	25.4	28 or more	48	3.5	3.0	9	4.5
20	20	20.4	21.5	27.8	25.4	28 or more	48	3.5	3.0	9	4.5
22	22	22.4	23.5	30.3	27.9	32 or more	58	3.5	3.0	10	4.5
24	24	24.4	25.5	32.3	29.9	35 or more	58	3.5	3.0	10	4.5

- Spindle dimension for KH only, not for KH-A.
- All corners not specified should be chamfered to C0.5.
  - Material of spindle end : SCM415
  - Heat treatment : HV613 - 697
  - Carburized depth : 0.4 - 0.6

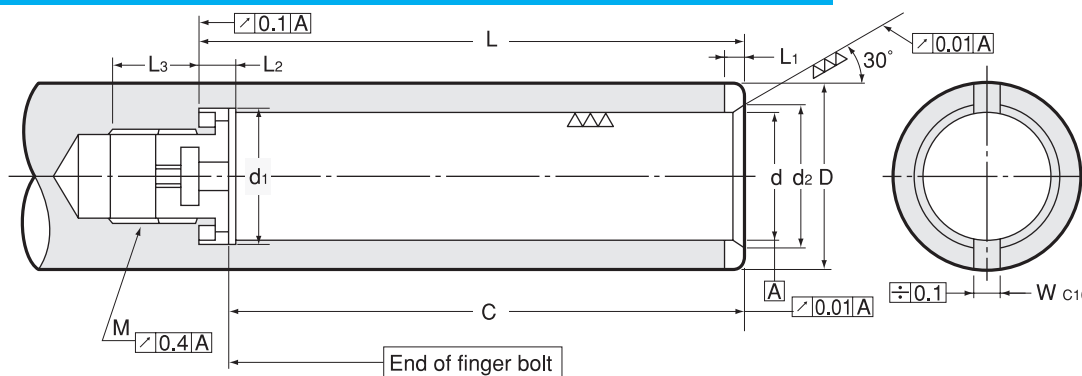
Dimension for KD spindle



Size	d <sub>G6</sub>	d <sub>2</sub>	D <sub>Min</sub>	d <sub>1</sub>	L ± 0.1	L <sub>1</sub> +0.2 / +0.1	L <sub>2</sub>	L <sub>3</sub>	W <sub>C10</sub>	M <sub>P=1</sub>
14	14	15.5	20	14.4	68	3	5	15	8	10
16	16	17.5	25	16.4	72.5	3	5	15	8	12
19	19	20.5	28	19.4	82.5	3	5	15	9	12
20	20	21.5	28	20.4	82.5	3	5	15	9	12
22	22	23.5	32	22.4	89.5	3	5	15	10	16
24	24	25.5	32	24.4	89.5	3	5	15	10	16
25	25	26.5	35	25.4	105	3	8	20	10	18
26	26	27.5	35	26.4	105	3	8	20	10	18
28	28	29.5	38	28.4	105	3	8	20	10	18
30	30	31.5	40	30.4	105	3	8	20	10	18
32	32	33.5	42	32.4	123	3	8	20	10	22
35	35	36.5	45	35.4	123	3	8	20	10	22
36	36	37.5	45	36.4	123	3	8	20	10	22
48	48	49.5	65	48.4	145	4.5	8	20	11	22

1. C dimension shows length from end of finger bolt to end of spindle. (refer to P. 443)
2. Don't carburize thread (M) portion.

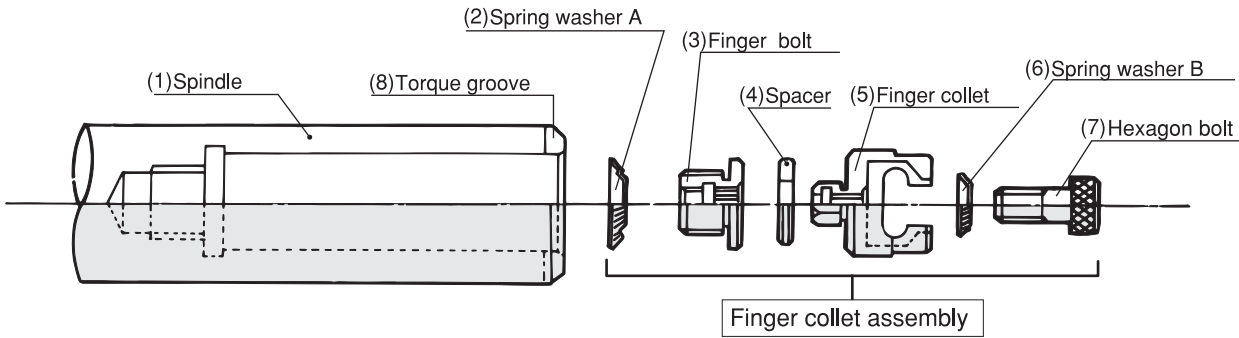
Dimension for KD-T spindle



Size	d <sub>G6</sub>	d <sub>2</sub> +0.02 / -0.08	D <sub>Min</sub>	d <sub>1</sub>	L ± 0.1	L <sub>1</sub> +0.2 / +0.1	L <sub>2</sub>	L <sub>3</sub>	W <sub>C10</sub>	M <sub>P=1</sub>
14T	14	15.5	20	14.4	68	3	5	15	8	10
16T	16	17.5	25	16.4	72.5	3	5	15	8	12
19T	19	20.5	28	19.4	82.5	3	5	15	9	12
20T	20	21.5	28	20.4	82.5	3	5	15	9	12
22T	22	23.5	32	22.4	89.5	3	5	15	10	16
24T	24	25.5	32	24.4	89.5	3	5	15	10	16
25T	25	26.5	35	25.4	105	3	8	20	10	18
26T	26	27.5	35	26.4	105	3	8	20	10	18
28T	28	29.5	38	28.4	105	3	8	20	10	18
30T	30	31.5	40	30.4	105	3	8	20	10	18
32T	32	33.5	42	32.4	123	3	8	20	10	22
35T	35	36.5	45	35.4	123	3	8	20	10	22
36T	36	37.5	45	36.4	123	3	8	20	10	22
48T	48	49.5	65	48.4	145	4.5	8	20	11	22

1. KD model can be used for KD-T spindle.
2. C dimension shows length from end of finger bolt to end of spindle. (refer to P. 443)
3. In case of heat treatment on the spindle, don't carburize thread (M) portion.
4. For 30° taper gauge information, please contact NT.

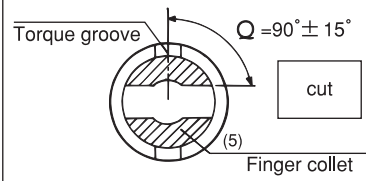
## How to assemble KDA



1. Make inside portion of spindle KD dimensions.
2. Assemble each of component parts in the order of A, B, C.....F.

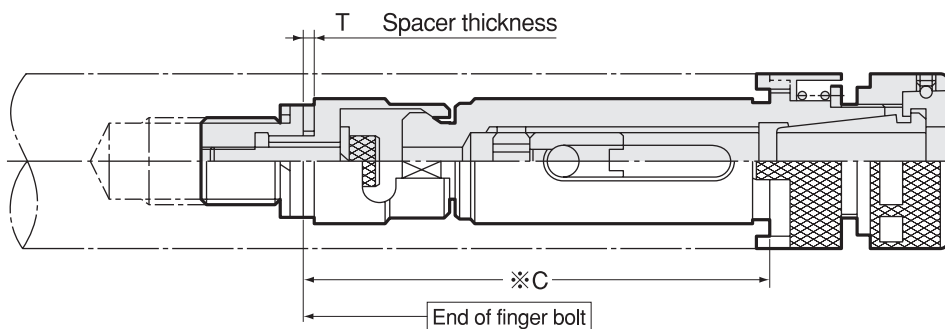
### Assembling process

<b>A</b>		<ul style="list-style-type: none"> <li>● Fit (2) into (3). Then, fit them into (1) by using a torque wrench. Clamping value shall be 30-35Nm.</li> </ul>
<b>B</b>		<p style="text-align: center;">Depth slide calipers</p> <p style="text-align: center;">*C</p> <ul style="list-style-type: none"> <li>Modify spacer thickness to match measured C dimension.</li> </ul>
<b>C</b>		<ul style="list-style-type: none"> <li>● Modification of spacer thickness</li> </ul>
<b>D</b>		<ul style="list-style-type: none"> <li>● Fit (5) into (4). Then, fit them into (3) by using hex. wrench. Keep turning the hex. wrench until it does not turn any more.</li> </ul>
<b>E</b>		<ul style="list-style-type: none"> <li>● Fit (6) into (7). Then turn them by using hex. wrench.</li> </ul>
<b>F</b>		<ul style="list-style-type: none"> <li>● After modifying (4), follow the procedures D, E and F.</li> <li>● Install the holder into spindle and twist it right and left. (When holder is firmly fixed into spindle, drive collar is locked to the torque groove of spindle with a 'click' sound.)</li> </ul>





## Spacer Dimension



Model	※ C: Measured figure	T ± 0.01
KD-14R2	58.26 ~ 58.41	0.83
	58.42 ~ 58.57	0.98
	58.58 ~ 58.73	1.13
KD-16	68.26 ~ 68.41	2.24
	68.42 ~ 68.57	2.39
	68.58 ~ 68.73	2.54
KD-19	78.26 ~ 78.41	2.24
	78.42 ~ 78.57	2.39
KD-20	78.58 ~ 78.73	2.54
KD-22	83.96 ~ 84.11	1.94
	84.12 ~ 84.27	2.09
KD-24	84.28 ~ 84.43	2.24
KD-25	99.26 ~ 99.41	3.24
KD-26	99.42 ~ 99.57	3.39
KD-28	99.58 ~ 99.73	3.54
KD-30		
KD-32	117.26 ~ 117.41	2.74
KD-35	117.42 ~ 117.57	2.89
KD-36	117.58 ~ 117.73	3.04
KD-48R	139.26 ~ 139.41	2.74
	139.42 ~ 139.57	2.89
	139.58 ~ 139.73	3.04

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine**
- Related Equipment
- Bush & Chamfering Drill

- Sub Holder**
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

# EDC、FDC-07A、FDC-32B

Collet

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

Cutter's shank dia.	Model			
	EDC-19	EDC-24	EDC-28	EDC-36
φ 2.8 ~ 3.0	EDC-0319	EDC-0324	—	—
φ 3.0 ~ 3.3	EDC-03319	EDC-03324	—	—
φ 3.3 ~ 3.6	EDC-03619	EDC-03624	—	—
φ 3.6 ~ 3.9	EDC-03919	EDC-03924	—	—
φ 3.9 ~ 4.2	EDC-04219	EDC-04224	EDC-04228	EDC-04236
φ 4.2 ~ 4.5	EDC-04519	EDC-04524	EDC-04528	EDC-04536
φ 4.5 ~ 5.0	EDC-0519	EDC-0524	EDC-0528	EDC-0536
φ 5.0 ~ 5.5	EDC-05519	EDC-05524	EDC-05528	EDC-05536
φ 5.5 ~ 6.0	EDC-0619	EDC-0624	EDC-0628	EDC-0636
φ 6.0 ~ 6.5	EDC-06519	EDC-06524	EDC-06528	EDC-06536
φ 6.5 ~ 7.0	EDC-0719	EDC-0724	EDC-0728	EDC-0736
φ 7.0 ~ 7.5	EDC-07519	EDC-07524	EDC-07528	EDC-07536
φ 7.5 ~ 8.0	EDC-0819	EDC-0824	EDC-0828	EDC-0836
φ 8.0 ~ 8.5	EDC-08519	EDC-08524	EDC-08528	EDC-08536
φ 8.5 ~ 9.0	EDC-0919	EDC-0924	EDC-0928	EDC-0936
φ 9.0 ~ 9.5	—	EDC-09524	EDC-09528	EDC-09536
φ 9.5 ~ 10.0	—	EDC-1024	EDC-1028	EDC-1036
φ 10.0 ~ 10.5	—	EDC-10524	EDC-10528	EDC-10536
φ 10.5 ~ 11.0	—	EDC-1124	EDC-1128	EDC-1136
φ 11.0 ~ 11.5	—	EDC-11524	EDC-11528	EDC-11536
φ 11.5 ~ 12.0	—	EDC-1224	EDC-1228	EDC-1236
φ 12.0 ~ 12.5	—	—	EDC-12528	EDC-12536
φ 12.5 ~ 13.0	—	—	EDC-1328	EDC-1336
φ 13.0 ~ 13.5	—	—	EDC-13528	EDC-13536
φ 13.5 ~ 14.0	—	—	EDC-1428	EDC-1436
φ 14.0 ~ 14.5	—	—	EDC-14528	EDC-14536
φ 14.5 ~ 15.0	—	—	EDC-1528	EDC-1536
φ 15.0 ~ 15.5	—	—	EDC-15528	EDC-15536
φ 15.5 ~ 16.0	—	—	EDC-1628	EDC-1636
φ 16.0 ~ 16.5	—	—	—	EDC-16536
φ 16.5 ~ 17.0	—	—	—	EDC-1736
φ 17.0 ~ 17.5	—	—	—	EDC-17536
φ 17.5 ~ 18.0	—	—	—	EDC-1836
φ 18.0 ~ 18.5	—	—	—	EDC-18536
φ 18.5 ~ 19.0	—	—	—	EDC-1936
φ 19.0 ~ 19.5	—	—	—	EDC-19536
φ 19.5 ~ 20.0	—	—	—	EDC-2036
φ 20.0 ~ 20.5	—	—	—	EDC-20536
φ 20.5 ~ 21.0	—	—	—	EDC-2136
φ 21.0 ~ 21.5	—	—	—	EDC-21536
φ 21.5 ~ 22.0	—	—	—	EDC-2236

Cutter's shank dia.	Model
	FDC-07A
φ 0.5 ~ 1.0	FDC-01007A
φ 1.0 ~ 1.5	FDC-01507A
φ 1.5 ~ 2.0	FDC-02007A
φ 2.0 ~ 2.5	FDC-02507A
φ 2.5 ~ 3.0	FDC-03007A
φ 3.0 ~ 3.5	FDC-03507A
φ 3.5 ~ 4.0	FDC-04007A
φ 4.0 ~ 4.5	FDC-04507A
φ 4.5 ~ 5.0	FDC-05007A
φ 5.0 ~ 5.5	FDC-05507A
φ 5.5 ~ 6.0	FDC-06007A
φ 6.0 ~ 6.5	FDC-06507A
φ 6.5 ~ 7.0	FDC-07007A

Cutter's shank dia.	Model
	FDC-32B
φ 20.0 ~ 20.5	FDC-20532B
φ 20.5 ~ 21.0	FDC-21032B
φ 21.0 ~ 21.5	FDC-21532B
φ 21.5 ~ 22.0	FDC-22032B
φ 22.0 ~ 22.5	FDC-22532B
φ 22.5 ~ 23.0	FDC-23032B
φ 23.0 ~ 23.5	FDC-23532B
φ 23.5 ~ 24.0	FDC-24032B
φ 24.0 ~ 24.5	FDC-24532B
φ 24.5 ~ 25.0	FDC-25032B
φ 25.0 ~ 25.5	FDC-25532B
φ 25.5 ~ 26.0	FDC-26032B
φ 26.0 ~ 26.5	FDC-26532B
φ 26.5 ~ 27.0	FDC-27032B
φ 27.0 ~ 27.5	FDC-27532B
φ 27.5 ~ 28.0	FDC-28032B
φ 28.0 ~ 28.5	FDC-28532B
φ 28.5 ~ 29.0	FDC-29032B
φ 29.0 ~ 29.5	FDC-29532B
φ 29.5 ~ 30.0	FDC-30032B
φ 30.0 ~ 30.5	FDC-30532B
φ 30.5 ~ 31.0	FDC-31032B
φ 31.0 ~ 31.5	FDC-31532B
φ 31.5 ~ 32.0	FDC-32032B

**EDC**

Ordering Example

**EDC - 065 19**  
 MAX. chucking dia. 19 Series

**FDC-07A**

Ordering Example

**FDC - 060 07 A**  
 MAX. chucking dia. | Accuracy  
 07 Series

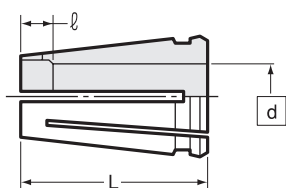
**FDC-32B**

Ordering Example

**FDC - 310 32 B**  
 MAX. chucking dia. | Accuracy  
 32 Series



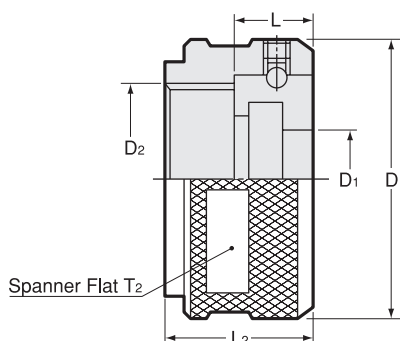
### EDC Collet Dimension



Collet	EDC- $\square$ 19				EDC- $\square$ 24				EDC- $\square$ 28						EDC- $\square$ 36											
Nut	KDP-1916				KDP-2422				KDP-2825						KDP-3632											
L	25		20		25		30		25		40		30		25		45		40							
$\square$ l	$\square$	l	$\square$	l	$\square$	l	$\square$	l	$\square$	l	$\square$	l	$\square$	l	$\square$	l	$\square$	l	$\square$	l						
	3.0	7.0	5.0	4.5	8.5	0	3.0	7.0	4.5	11.5	4.2	7.0	4.5	18.5	12.5	4.5	14.5	0	4.2	4.0	4.5	23.5	12.5	7.0	20.5	0
	3.3	7.0	5.5	4.0	9.0	0	3.3	7.0	5.0	9.5			5.0	16.5	13.0	4.0	15.0	0			5.0	21.5	13.0	6.5	21.0	0
	3.6	7.0	6.0	4.0			3.6	7.0	5.5	9.0			5.5	16.0	13.5	0	15.5	0			5.5	21.0	13.5	6.0	21.5	0
	3.9	7.0	6.5	4.0			3.9	7.0	6.0	8.5			6.0	13.0	14.0	0	16.0	0			6.0	17.0	14.0	6.0	22.0	0
	4.2	7.0	7.0	4.0			4.2	7.0	6.5	8.0			6.5	13.0							6.5	17.0	14.5	5.5		
	4.5	6.5	7.5	4.0					7.0	5.0			7.0	13.0							7.0	15.0	15.0	5.0		
			8.0	0					7.5	5.0			7.5	13.0							7.5	15.0	15.5	5.0		
									8.0	5.0			8.0	11.5							8.0	15.0	16.0	5.0		
									8.5	5.0			8.5	10.5							8.5	15.0	16.5	5.0		
									9.0	5.0			9.0	10.5							9.0	15.0	17.0	5.0		
									9.5	4.5			9.5	10.0							9.5	14.5	17.5	5.0		
									10.0	4.5			10.0	10.0							10.0	11.5	18.0	4.0		
									10.5	4.0			10.5	5.0							10.5	11.0	18.5	4.0		
									11.0	4.0			11.0	5.0							11.0	10.5	19.0	4.0		
									11.5	4.0			11.5	5.0							11.5	10.0	19.5	4.0		
									12.0	0			12.0	4.5							12.0	10.0	20.0	0		

Shrinkage Allowance : 0.3mm for d 4.5 or smaller  
0.5mm for d 5.0 or bigger

### KDP Nut Dimension

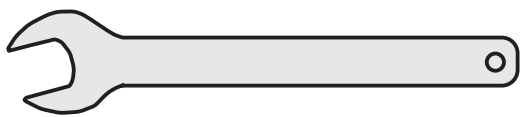


Code	Model	Collet	D	D1	D2	L	L2	T2
0070 00001916	<b>KDP -1916</b>	EDC- $\square$ 19	26	10	M19 P=1	6.7	14	24
0070 00002422	<b>KDP -2422</b>	EDC- $\square$ 24	32	12.5	M24 P=1	7.2	15	30
0070 00002825	<b>KDP -2825</b>	EDC- $\square$ 28	36	16.5	M28 P=1	7.5	15	33
0070 00003632	<b>KDP -3632</b>	EDC- $\square$ 36	46	23	M36 P=1	10.0	18.5	42

## Combination of accessories

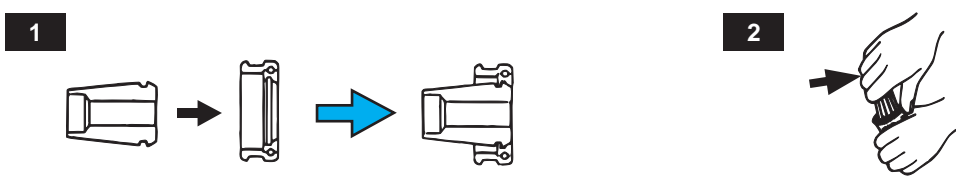
Collet		Nut		Spanner	
Code	Model	Code	Model	Code	Model
2480 0120 ※※ 07	<b>FDC-07A</b>	0070 01001407	<b>KDP-1414</b>	—	<b>Flat17mm width</b>
0070 000190 ※※	<b>EDC-19</b>	0070 00001916	<b>KDP-1916</b>	0803 00000011	<b>S-1L</b>
0070 00024 ※※※	<b>EDC-24</b>	0070 00002422	<b>KDP-2422</b>	0803 00000013	<b>S-3L</b>
0070 00028 ※※※	<b>EDC-28</b>	0070 00002825	<b>KDP-2825</b>	0803 00000014	<b>S-4L</b>
0070 00036 ※※※	<b>EDC-36</b>	0070 00003632	<b>KDP-3632</b>	0803 00000015	<b>S-5L</b>
2480 003 ※※※ 32	<b>FDC-32B</b>	2544 00000032	<b>HDP-32</b>	0803 00000006	<b>S-6</b>

### Spanner



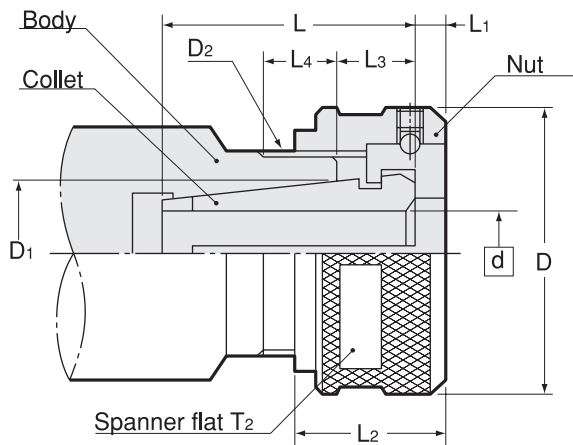
Use of NT spanners on NT products prevent over-tightening and breakage. As NT spanner flats are made to NT specifications, conventional spanner may not fit properly on NT products.

### Collet insertion and removal



1. To insert  
Place EDC collet into threaded end of KDP nut. Press down on rear of the collet to "clip" the collet into the nut.
2. To remove  
While holding KDP nut firmly in one hand grasp EDC collet in the other while pushing sideways.

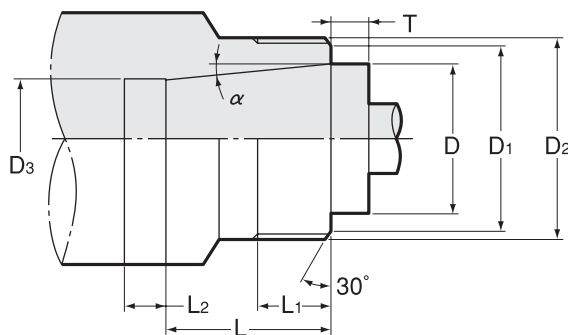
### Dimension for Collet and Nut



Collet	Nut	Spanner	d	D	D1	D2	L	L1	L2	L3	L4 MIN	T2
EDC -d19	KDP-1916	S-1L	2.8 ~ 9	26	13.73	M19 P=1	(25)	2.5	14	3.5 ~ 7.0	8	24
EDC -d24	KDP-2422	S-3L	2.8 ~ 12	32	18.59	M24 P=1	(30)	3.0	15	3.5 ~ 7.0	8	30
EDC -d28	KDP-2825	S-4L	3.9 ~ 16	36	22.3	M28 P=1	(40)	3.0	15	4.0 ~ 7.5	8	33
EDC -d36	KDP-3632	S-5L	3.9 ~ 22	46	30.6	M36 P=1	(45)	4.3	18.5	5.5 ~ 9.0	10	42

L dimension varies from size to size.

### Dimension for body



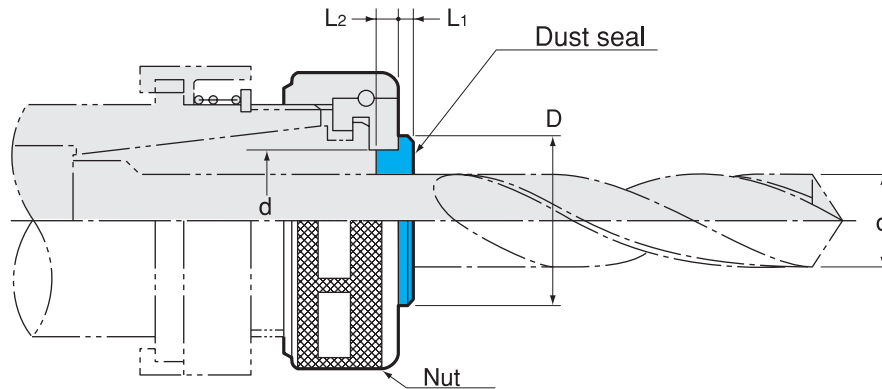
Collet	Nut	D	T ± 0.1	D1	D2	D3	L	L1 MIN	(L2)	α
EDC -d19	KDP-1916	13.73	4.24	18	M19 P=1	(10.8)	21	8	(6.0)	5° 59'
EDC -d24	KDP-2422	18.59	4.19	23	M24 P=1	(14.8)	26	8	(6.6)	5° 59'
EDC -d28	KDP-2825	22.3	4.52	27	M28 P=1	(18.5)	35.5	8	(10)	5° 59'
EDC -d36	KDP-3632	30.6	5	35	M36 P=1	(24.8)	39	10	(10)	5° 59'

D3 and L2 are for reference only and can be changed to your designing.  
Contact us for taper gauge.

# DS

## Dust Seal

- By installing a dust seal into nut, chips are prevented from entering. To insert dust seal, apply some adhesive to nut and press down on the dust seal to snap it into place.



Applicable only for KDP series and HDP32 nut.

Code	Collet	Nut	Collet	d	D	d	L1	L2
0071 00009 ※※※	<b>DS9-d</b>	KDP-1916	EDC-19	2.8 ~ 9	15	10	1.5	2.3
0071 00012 ※※※	<b>DS12-d</b>	KDP-2422	EDC-24	2.8 ~ 11.5	18	12.5	1.5	2.7
0071 00016 ※※※	<b>DS16-d</b>	KDP-2825	EDC-28	4.0 ~ 15.5	22	16.5	2	2.7
0071 00022 ※※※	<b>DS22-d</b>	KDP-3632	EDC-36	4.0 ~ 22	30	23	2	4
0071 00032 ※※※	<b>DS32-d</b>	HDP-32	FDC-32B	20.0 ~ 32	40	33	2	4

1. Shank diameter of a cutting tool will be inserted in " ※※※ ". Product code for DS16-12.0 will be 0071 00016120 .
2. When ordering, please specify tool shank diameter.

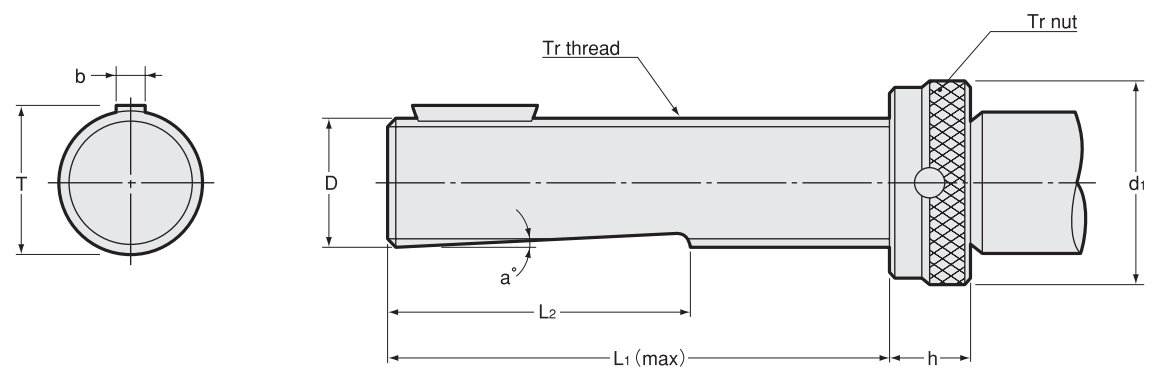
### Ordering Example

## DS 16 - 12.0

dust seal | Tool shank dia. in use  
Max. collet size

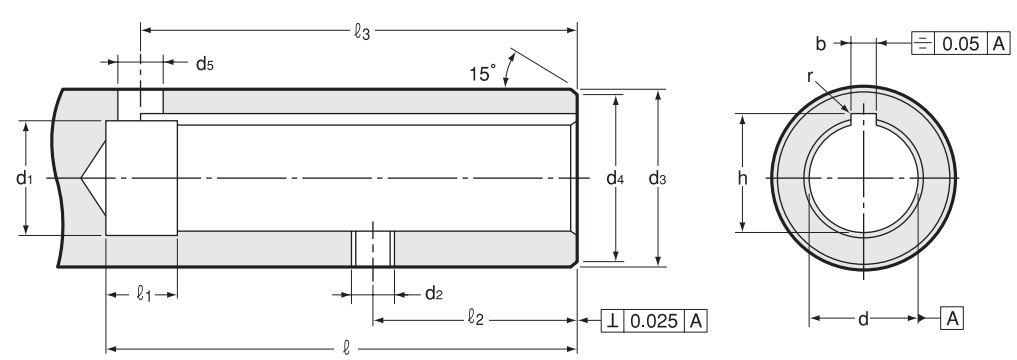
# MEMO

### Dimension for Adjustable Shank (DIN Standard)



Tr thread size	D <sub>h6</sub>	d1	T	b <sub>h9</sub>	L1	L2	h	a°
<b>Tr.16×1.5</b>	16	25	17.1 <sup>0</sup> <sub>-0.25</sub>	5	73	43	12	2
<b>Tr.20×2</b>	20	32	21.1 <sup>0</sup> <sub>-0.25</sub>	5	76	46	12	2
<b>Tr.28×2</b>	28	40	29.5 <sup>0</sup> <sub>-0.25</sub>	6	83	51	12	2
<b>Tr.36×2</b>	36	50	37.5 <sup>0</sup> <sub>-0.35</sub>	8	104	65	14	2
<b>Tr.48×2</b>	48	67	49.9 <sup>0</sup> <sub>-0.35</sub>	10	126	76	18	2

### DIN Spindle Dimension



Size	d <sub>H6</sub>	l <sub>(min)</sub>	d1	d2	d3 <sub>g6</sub>	d4	d5	l1	l2 <sub>±0.1</sub>	l3	b	h <sub>+0.1</sub> <sub>0</sub>	r
<b>16</b>	16	74	16.6	M6	25	24	6	8	34	70	5 <sup>+0.145</sup> <sub>+0.070</sub>	17.3	0.2
<b>20</b>	20	77	20.6	M6	32	31	6	8	34	73	5 <sup>+0.145</sup> <sub>+0.070</sub>	21.3	0.2
<b>28</b>	28	85	28.6	M8	40	39	8	10	38	80	6 <sup>+0.145</sup> <sub>+0.070</sub>	29.7	0.4
<b>36</b>	36	106	36.8	M8	50	49	10	10	45	101	8 <sup>+0.170</sup> <sub>+0.080</sub>	37.7	0.4
<b>48</b>	48	129	48.8	M10	67	66	12	12	57	123	10 <sup>+0.170</sup> <sub>+0.080</sub>	50.1	0.4



# KTP

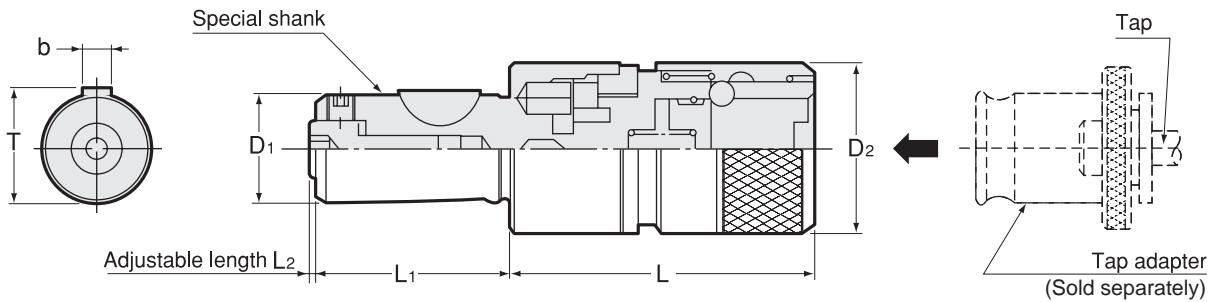
## Quick Change Stub Tapper

### Applications

- Spindle Feed : Pitch Feed
- Designed for use on special-purpose machine, transfer machine etc.

### Feature

- Small shank and projection length makes your tapping job very stable.
- Simple spindle designing/machining makes your machine compact.
- Radial float corrects alignment discrepancies between pre-drilled hole and tap.
- Quick change



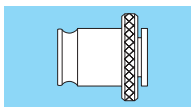
For capable tap sizes, please refer to P. 462-464 chart.

Code	Model	Tap Size	Adapter size	Radial float	D1 <sub>h6</sub>	D2	L	L1 <sub>±0.1</sub>	T	b	L2	kg
0831 00000000	<b>KTP0</b>	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	0.25	16	23	54	31	17.1	5	0 ~ 2	0.2
0831 00000001	<b>KTP1</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1	0.5	20	32	58	37	21.1	5	0 ~ 2	0.4
0831 00000040	<b>KTP40</b>	M6 ~ M18 U1/4 ~ U3/4	40	0.75	28	40	78	49	29.5	6	0 ~ 2	0.8
0831 00000002	<b>KTP2</b>	M8 ~ M22 U3/8 ~ U7/8 Pipe(PT,PS,PF)1/8 ~ 1/2	2	1	28	50	85	49	29.5	6	0 ~ 2	1.2

1. Tap size in brackets are for light tapping only.
2. Tap adapter is sold separately.

### Tap Adapter

P. 458



### Ordering Example

**KTP1**  
Adapter size

# KTL

## Quick Change Stub Tapper

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine

Related Equipment  
Bush & Chamfering Drill

Stub Holder

Tapping Chuck

Tap Adapter

Adjustable Adapter

Endmill Chuck

Straight Drill Chuck

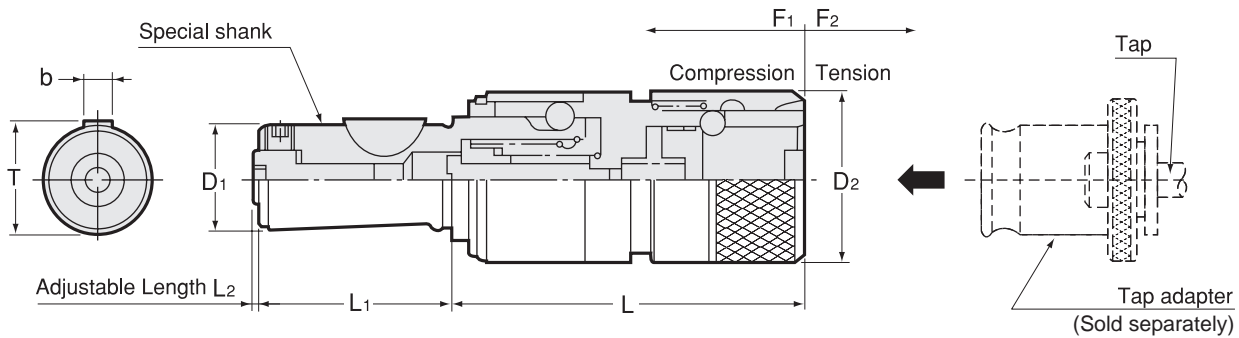
Floating Holder

### Applications

- Spindle Feed : All kinds of feed styles. For spindle feeds other than pitch feed, compression should not be activated while tapping.
- Designed for use on special-purpose machine, transfer machine, tapping machine etc.

### Feature

- Small shank and projection length makes your tapping job very stable.
- Simple spindle designing/machining makes your machine compact.
- Length compensation allows for feed discrepancies between spindle and tap.
- Quick change



For capable tap sizes, please refer to P.462-464 chart.

Code	Model	Tap Size	Adapter size	Axial compensation		D1 h6	D2	L	L1 ±0.1	T	b	L2	kg
				F1 Compression	F2 Tension								
0832 0000013	<b>KTL 013-3</b>	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	3	10	16	23	65	31	17.1	5	0 ~ 2	0.2
0832 00010010	<b>010-0</b>			0	10	16	23	65	31	17.1	5	0 ~ 2	0.2
0832 00000113	<b>KTL 113-3</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1	3	10	20	32	70	37	21.1	5	0 ~ 2	0.4
0832 00010110	<b>110-0</b>			0	10	20	32	70	37	21.1	5	0 ~ 2	0.4
0832 00004015	<b>KTL 4015-3</b>	M6 ~ M18 U1/4 ~ U3/4	40	3	12	28	40	85	49	29.5	6	0 ~ 2	0.8
0832 00014012	<b>4012-0</b>			0	12	28	40	85	49	29.5	6	0 ~ 2	0.8
0832 00000215	<b>KTL 215-3</b>	M8 ~ M22 U3/8 ~ U7/8 Pipe(PT,PS,PF)1/8 ~ 1/2	2	3	12	28	50	95	49	29.5	6	0 ~ 2	1.2
0832 00010212	<b>212-0</b>			0	12	28	50	95	49	29.5	6	0 ~ 2	1.2

1. Tap size in brackets are for light tapping only.
2. In case of alignment discrepancy between predrilled hole and tap, use KTL P.
3. Tap adapter is sold separately.

**Tap Adapter**  
P. 458

**Ordering Example**  
**KTL1 13 - 3**  
Adapter size | Compression(F1)  
F1 + F2=13

# KTLP

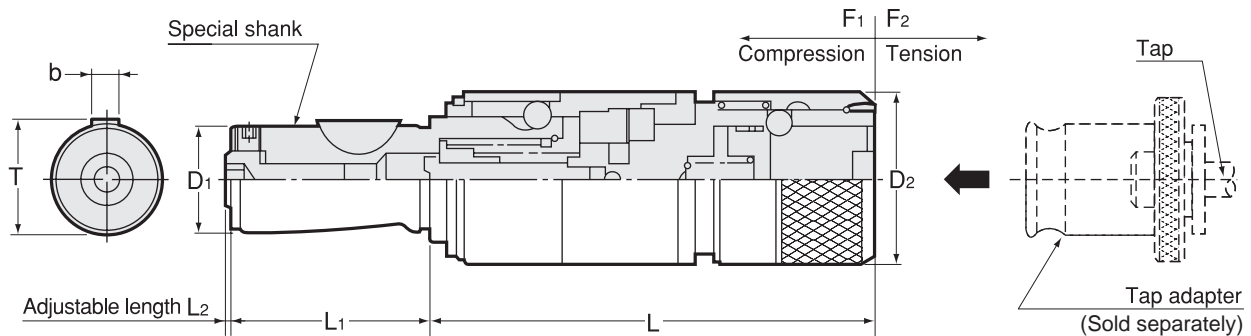
## Quick Change Stub Tapper

### Applications

- Designed for use on special-purpose machine, transfer machine etc.
- Spindle Feed : All kinds of feed styles. For spindle feeds other than pitch feed, use a tapping chuck with tension so that compression does not work.

### Feature

- Small shank and projection length makes your tapping job very stable.
- Simple spindle designing/machining makes your machine compact.
- Length compensation allows for feed discrepancies between spindle and tap.
- Radial float corrects alignment discrepancies between pre-drilled hole and tap.
- Quick change



For capable tap sizes, please refer to P.462-464 chart.

Code	Model	Tap Size	Adapter size	Radial float	Axial compensation		D1 h6	D2	L	L1 ±0.1	T	b	L2	kg
					F1 Compression	F2 Tension								
0833 00000013	<b>KTLP 013-3</b>	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	0.25	3	10	16	23	83	31	17.1	5	0 ~ 2	0.3
0833 00010010	<b>010-0</b>		0	0.25	0	10	16	23	83	31	17.1	5	0 ~ 2	0.3
0833 00000113	<b>KTLP 113-3</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1	0.5	3	10	20	32	85	37	21.1	5	0 ~ 2	0.5
0833 00010110	<b>110-0</b>		1	0.5	0	10	20	32	85	37	21.1	5	0 ~ 2	0.5
0833 00004015	<b>KTLP 4015-3</b>	M6 ~ M18 U1/4 ~ U3/4	40	0.75	3	12	28	40	109	49	29.5	6	0 ~ 2	1.0
0833 00014012	<b>4012-0</b>		40	0.75	0	12	28	40	109	49	29.5	6	0 ~ 2	1.0
0833 00000215	<b>KTLP 215-3</b>	M8 ~ M22 U3/8 ~ U7/8 Pipe(PT,PS,PF)1/8 ~ 1/2	2	1	3	12	28	50	119	49	29.5	6	0 ~ 2	1.6
0833 00010212	<b>212-0</b>		2	1	0	12	28	50	119	49	29.5	6	0 ~ 2	1.6

1. Tap size in brackets are for light tapping only.
2. Tap adapter is sold separately.

### Tap Adapter

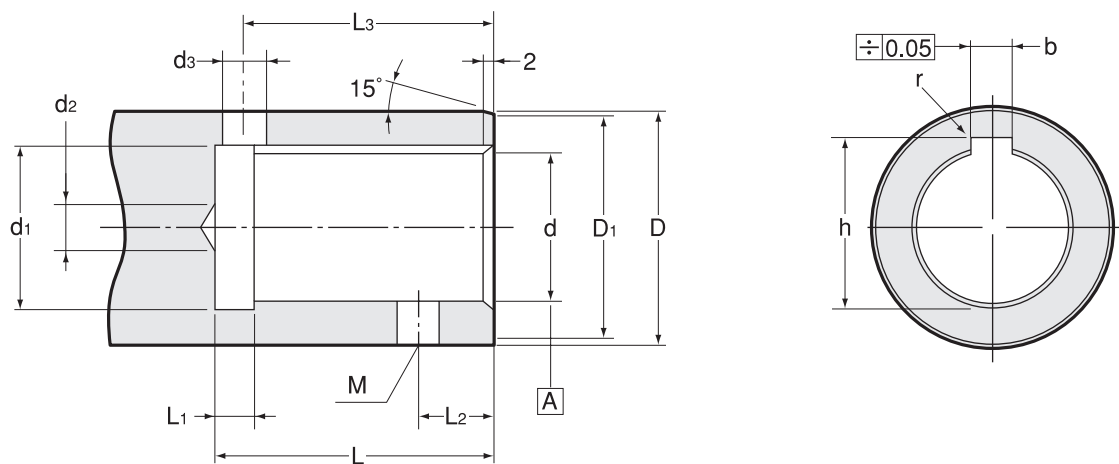
P. 458



### Ordering Example

**KTLP1 13 - 3**  
 Adapter size | Compression(F1)  
 F1 + F2=13

## Special Spindle Dimension



For KTP, KTL, KTLP

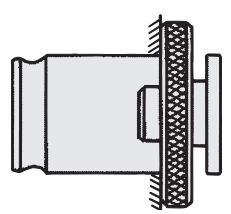
Size	d H6	L +0.5 0	d1	d2 (MAX)	D g6	D1	d3	L1	L2	M	L3	b +0.145 +0.07	h +0.1 +0	r
<b>16</b>	16	31	16.6	4	25	24	6	5	10	M6	27	5	17.3	0.2
<b>20</b>	20	37	20.6	6	32	31	6	5	10	M6	33	5	21.3	0.2
<b>28</b>	28	49	28.6	10	40	39	8	5	12	M8	44	6	29.7	0.4

# MEMO

# QUICK CHANGE TAP ADAPTER

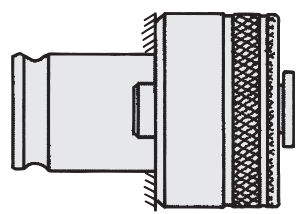
## Basic 4 Models

**WE**



**WE** Quick Change

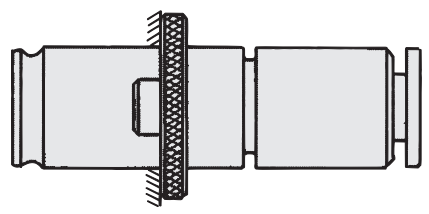
**WES · B**



**WE** Quick Change

**S** Safety Torque

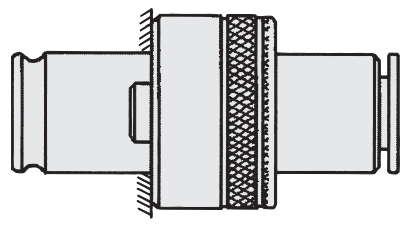
**WEN**



**WE** Quick Change

**N** Length Adjustment

**WESN · B**



**WE** Quick Change

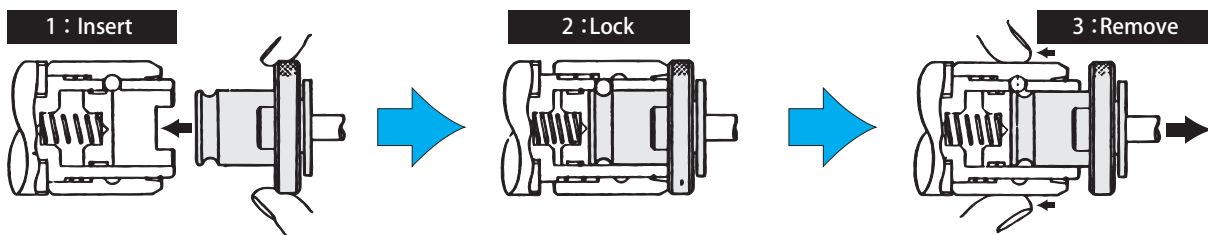
**S** Safety Torque

**N** Length Adjustment

In addition to the basic 4 models, wide variety of models (extended size, enlarged size, R type for short shank tap etc.) are available.

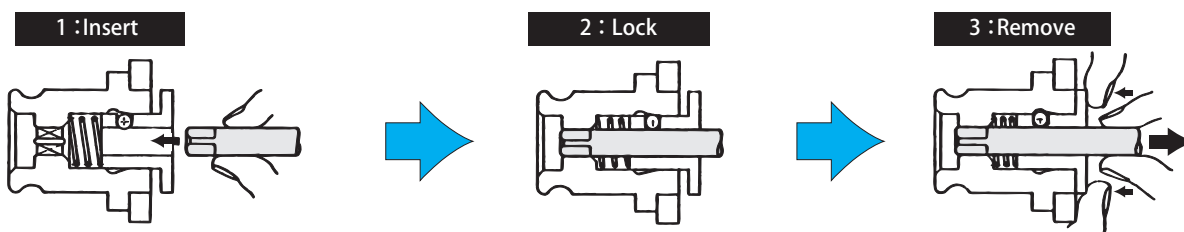
WE : Quick Change

Tapping chuck and tapping adapter



- 1 : Simply insert tap adapter into tapping chuck.
- 2 : Tapping chuck and tap adapter are connected firmly.
- 3 : Push down on operation sleeve of tapping chuck while removing tap adapter.

Tapping adapter and Tap

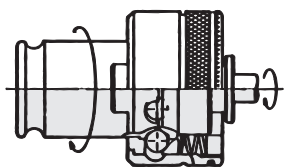


- 1 : Insert tap into bottom of tap adapter, and rotate tap manually to connect them firmly.
- 2 : Tap and adapter are connected firmly.
- 3 : Push down on ball bush while removing tap.

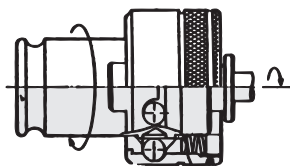
S : Safety torque

Safe torque device activates to prevent breakage tap when torque more than fixed amount is applied to tap. (Use with a tapper equipped with axial compensation mechanism.)

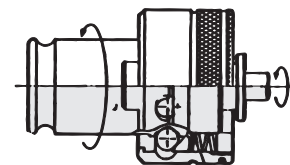
Normal operation (Normal machining)



Empty operation (Abnormal machining torque)

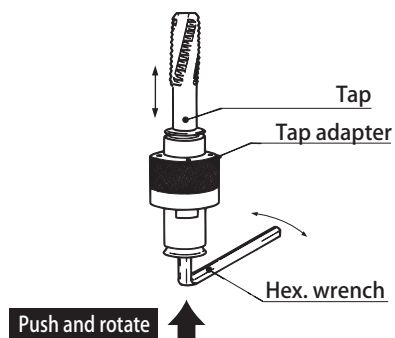


Reverse operation (Torque device doesn't move in the reverse direction)



When using left handed tap adapter, please specify.

N : Length adjustment



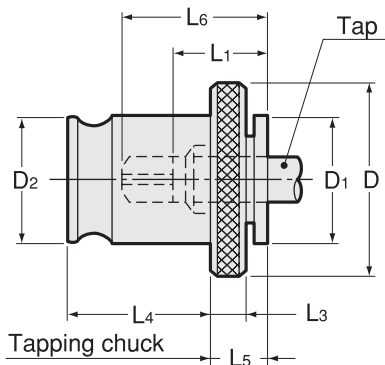
Insert hex. wrench into bottom of tap adapter and turn to adjust tool length.

Tap adapter with tool adjustment mechanism can be recommended for following conditions.

- 1.Tool adjustment with prestting gauge.
- 2.When tap length changes due to re-grinding.
- 3.When you do not want to use N/C machine tool compensation function.

# WE

## Quick Change Tap Adapter



### Applications

- For through hole, blind hole, right-hand thread and left-hand thread.

### Feature

- Quick Change
- ※ In case you are afraid of tap breakage, choose a WES ·B and a tapping chuck with safety torque clutch.

For capable tap sizes, please refer to P.462-464 chart.

Code	Model	Tap Size	Chuck size	D	D1	D2	L1	L3	L4	L5	kg
0210 0000 ※※※	<b>WE0</b>	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	22	12.5	13	15	4	19.5	7	0.03
0210 0001 ※※※	<b>WE1</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1 32	30	19	19	17	4	21.5	7	0.06
0210 0004 ※※※	<b>WE40</b>	M6 ~ M18 U1/4 ~ U3/4	40	40	25	26	30	5	32	13	0.12
0210 0002 ※※※	<b>WE2</b>	M8 ~ M22 U3/8 ~ U7/8	2	48	30	31	30	5	35	11	0.25
0210 0003 ※※※	<b>WE3</b>	M26 ~ M38 U1 ~ U1 3/8	3	70	47	48	44	6	55.5	14	0.8
—	<b>WE4</b>	7/8 ~ 1-3/4 M22 ~ M48	4	90	60	60	71	13	63	42	

1. Tap sizes in brackets are for light tapping only.
2. Calculate tap projection length from L1 dimension.
3. L1 and L6 dimensions fluctuate with tap sizes. Always take into account ± 1.5mm allowance.
4. Refer to P.462 for tap shank dia. and square dimension.

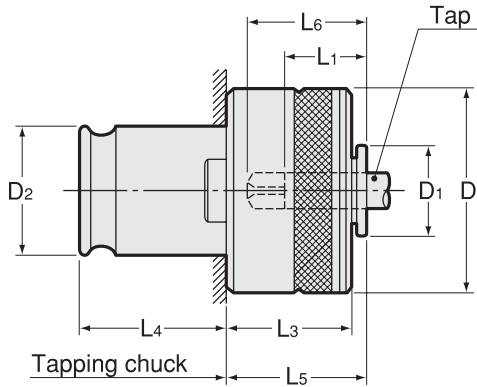
### Ordering Example

**WE1 M8J**  
Adapter size Tap size



# WES·B

## Quick Change Tap Adapter



### Applications

- For right-hand thread only. Through hole and blind hole.

### Feature

- Quick Change
- Safety torque clutch actuates to prevent tap breakage when an excessive torque is applied to tap. In this case, a tapping chuck with compression device should be used together.

For capable tap sizes, please refer to P.462-464 chart.

Code	Model	Tap Size	Chuck size	D	D1	D2	L1	L3	L4	L5	kg
0210 06000 ※※※	<b>WES0B</b>	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	23	12.5	13	15	20	19.5	21	0.06
0210 06001 ※※※	<b>WES1B</b>	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1 32	32	19	19	17	25	21.5	25	0.15
0210 06040 ※※※	<b>WES40B</b>	M6 ~ M18 U1/4 ~ U3/4	40	40	25	26	30	27	32	30	0.3
0210 06002 ※※※	<b>WES2B</b>	M8 ~ M22 U3/8 ~ U7/8	2	50	30	31	30	31	35	33	0.6
0210 06003 ※※※	<b>WES3B</b>	M26 ~ M38 U1 ~ U1 3/8	3	72	47	48	44	41	55.5	45	1.5
—	<b>WES4B</b>	7/8 ~ 1-3/4 M22 ~ M48	4	95	60	60	71	61	63	68	

1. Tap sizes in brackets are for light tapping only.
2. Calculate tap projection length from L1 dimension.
3. Tapping chuck with compression device should be used together.
4. Specify PT, PS or PF when using a pipe tap, as each of them has various safety torque value.
5. L1 and L6 dimensions fluctuate with tap sizes. Always take into account ± 1.5mm allowance.
6. Refer to P.462 for tap shank dia. and square dimension.

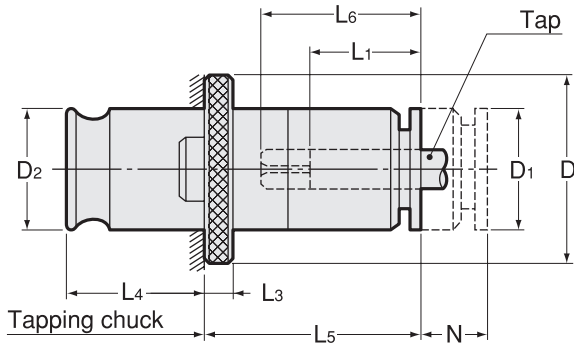
### Ordering Example

**WES1B M8J**

Adapter size Tap size

# WEN

## Quick Change Tap Adapter



### Applications

- For through hole, blind hole, right-hand thread and left-hand thread.

### Feature

- Quick Change
- Length adjustment facilitates your depth control of re-ground tap.

**!** For capable tap sizes, please refer to P.462-464 chart.

Code	Type	Tap Size	Chuck Size	N	D	D1	D2	L1	L3	L4	L5
—	WEN0	M3 ~ M8(M10) U1/4 ~ U5/16 (U3/8)	0	8	22	13	13	15	4	19.5	29
—	WEN1	#0-12, 1/4 - 1/2 M3-M12	1	10	30	19	19	17	4	21.5	34
—	WEN2	5/16 - 7/8 M8-M20	2	15	48	30	31	30	5	35	60
—	WEN3	13/16 - 1-3/8 M14-M33	3	25	70	48	48	44	6	55.5	83

1. Tap sizes in brackets are for light tapping only.
2. Calculate tap projection length from L1 dimension.
3. L1 and L6 dimensions fluctuate with tap sizes. Always take into account ± 1.5mm allowance.
4. Refer to P.462 for tap shank dia. and square dimension.

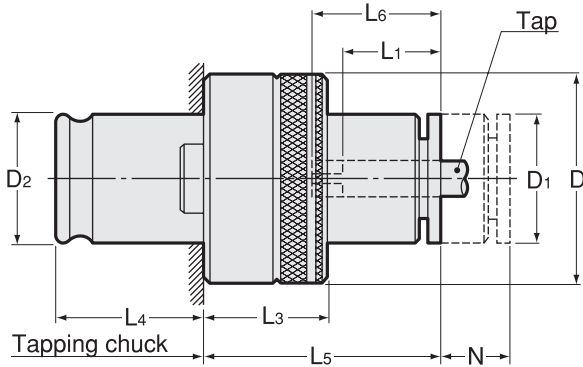
### Ordering Example

**WEN1 M11**  
Adapter size Tap size

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine  
Related Equipment  
Bush & Chamfering Drill  
Sub Holder  
Tapping Chuck  
Tap Adapter  
Adjustable Adapter  
Endmill Chuck  
Straight Drill Chuck  
Floating Holder

# WESN · B

## Quick Change Tap Adapter




### Applications

- For right-hand thread only. Through hole and blind hole.

### Feature

- Quick Change
- Safety torque clutch actuates to prevent tap breakage when an excessive torque is applied to tap. In this case, a tapping chuck with compression device should be used together.
- Length Adjustment facilitates your depth control of re-ground tap.

 For capable tap sizes, please refer to P.462-464 chart.

Code	Model	Tap Size	Chuck size	N Adjustable length	D	D1	D2	L1	L3	L4	L5	kg
0210 06100 ※※※	WESN0B	M3 ~ M8 (M10) U1/4 ~ U5/16 (U3/8)	0	8	23	13	13	15	20	19.5	28	0.1
0210 06101 ※※※	WESN1B	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe(PT,PS,PF)1/8 ~ 1/4	1 32	10	32	19	19	17	25	21.5	33	0.2
0210 06140 ※※※	WESN40B	M6 ~ M18 U1/4 ~ U3/4	40	15	40	25	26	30	27	32	53	0.4
0210 06102 ※※※	WESN2B	M8 ~ M22 U3/8 ~ U7/8	2	15	50	30	31	30	31	35	59	0.7
0210 06103 ※※※	WESN3B	M26 ~ M38 U1 ~ U1 3/8	3	25	72	48	48	44	41	55.5	82.5	2.1

1. Tap sizes in brackets are for light tapping only.
2. Calculate tap projection length from L1 dimension.
3. Tapping chuck with compression device should be used together.
4. Specify PT, PS or PF when using a pipe tap, as each of them has various safety torque value.
5. L1 and L6 dimensions fluctuate with tap sizes. Always take into account  $\pm 1.5\text{mm}$  allowance.
6. Refer to P.462 for tap shank dia. and square dimension.

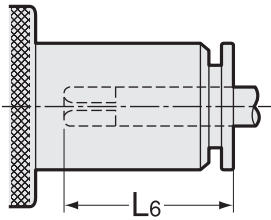
### Ordering Example

**WESN2B M12J**

Adapter size Tap size

## Tapping Capacity

Dimension L6



Symbol

⊙ : For JIS (old) Tap

● : For Coarse Thread Tap

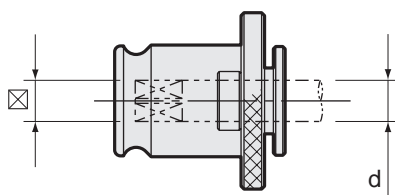
※ : For light machining on aluminum alloy and the like

**!** For capable tap sizes, please refer to P.462-464 chart.

### WESN · B、WES · B、WE

Tap Dimension					WESN · B WES · B WE 0		WESN · B WES · B WE 1		WESN · B WES · B WE 40		WESN · B WES · B WE 2		WESN · B WES · B WE 3	
Metric Thread	Unified Thread	Whit-worth Thread	Shank Dia. $\phi$	Square $\square$		L6		L6		L6		L6		L6
M3	NO5,NO6		4	3.2	⊙	22	⊙	23						
M4 M4.5	NO8		5	4	⊙	22.5	⊙	24.5						
M5 M5.5	NO10,NO12		5.5	4.5	⊙	22.5	⊙	24.5						
M6	U1/4	W1/4	6	4.5	⊙	22	⊙	24.5	⊙	36.5				
	U5/16	W5/16	6.1	5	⊙	23	⊙	25	⊙	37.5				
M8 M7			6.2	5	⊙	23	⊙	25.5	⊙	37	⊙	37		
M10 M9	U3/8	W3/8	7	5.5	※	23.5	⊙	25.5	⊙	37	⊙	37		
	M11 U7/16	W7/16	8	6			⊙	26.5	●	38.5	●	38.5		
M12			8.5	6.5			⊙	26.5	●	38	●	38		
	U1/2	W1/2	9	7			⊙	27	⊙	38.5	⊙	38.5		
M14 M15	U9/16	W9/16	10.5	8			※	28	●	40	●	40		
	U5/8	W5/8	12	9					⊙	41.5	⊙	41.5		
M16			12.5	10					●	42	●	42		
	M17		13	10					⊙	42	⊙	42		
M18	U3/4	W3/4	14	11					⊙	43.5	⊙	43.5		
M20			15	12							⊙	44		
M22	U7/8	W7/8	17	13							⊙	45		
M27 M26	U1	W1	20	15									●	62
	M28		21	17									●	63.5
	U1 1/8	W1 1/8	22	17									●	62.5
M30			23	17									●	62
	M32	U1 1/4	24	19									●	66
M33			25	19									●	66
M35 M34	U1 3/8	W1 3/8	26	21									●	68
M36 M38			28	21									●	67
Pipe Tap Dimension														
PT	PS	PF	$\phi$	$\square$										
1/8	1/8	1/8	8	6			⊙	26.5						
1/4	1/4	1/4	11	9			⊙	29						

## Tapping Capacity



### ANSI

Unit : Inch

Type	Chuck size	Tap size	φ d Tap Shank	☒ Drive Square
WE0 WES0B WEN0 WESN0B	0	#0-6	0.141	0.110
		#8	0.168	0.131
		#10	0.194	0.152
		#12	0.220	0.165
		1/4	0.255	0.191
WE1 WES1B WEN1 WESN1B	1	5/16	0.318	0.238
		#0-6	0.141	0.110
		#8	0.168	0.131
		#10	0.194	0.152
		#12	0.220	0.165
		1/4	0.255	0.191
		5/16	0.318	0.238
		3/8	0.381	0.286
		7/16	0.323	0.242
		1/2	0.367	0.275
WE2 WES2B WEN2 WESN2B	2	1/8SPT	0.313	0.234
		1/8LPT	0.437	0.328
		5/16	0.318	0.238
		3/8	0.381	0.286
		7/16	0.323	0.242
		1/2	0.367	0.275
		9/16	0.429	0.322
		5/8	0.480	0.360
		11/16	0.542	0.406
		3/4	0.590	0.442
WE3 WES3B WEN3 WESN3B	3	13/16	0.652	0.489
		7/8	0.697	0.523
		15/16	0.760	0.570
		1	0.800	0.600
		1-1/8	0.896	0.672
		1-1/4	1.021	0.766
		1-3/8	1.108	0.831
		1/2PT	0.687	0.515
WE4 WES4B	4	3/4PT	0.906	0.679
		1PT	1.125	0.843
		7/8	0.697	0.523
		15/16	0.760	0.570
		1	0.800	0.600
		1-1/8	0.896	0.672
		1-1/4	1.021	0.766
		1-3/8	1.108	0.831
WE1 WES1B WEN1 WESN1B	1	1-1/2	1.233	0.925
		1-3/4	1.430	1.072

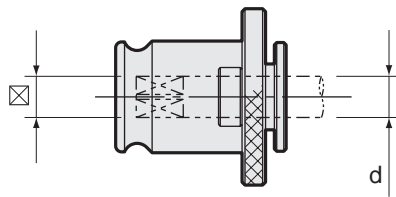
### ISO

Unit : Metric

Type	Chuck size	Tap size	φ d Tap Shank	☒ Drive Square
WE0 WES0B WEN0 WESN0B	0	Please contact NT USA for details.		
WE1 WES1B WEN1 WESN1B	1	M3-1	2.24	1.8
		M3.5, M2	2.5	2.0
		M2.5, M2.2	2.8	2.24
		M4-1, M3-2	3.15	2.5
		M4.5, M3.5	3.55	2.8
		M5-1, M4-2	4.0	3.15
		M6-1	4.5	3.55
		M5-2	5.0	4.0
		M5-3	5.6	4.5
		M8-1, M6-2	6.3	5.0
		M7	7.1	5.6
		M11, M10-1, M8-2	8.0	6.3
		M12, M9	9.0	7.1
		M10-2	10.0	8.0
WE2 WES2B WEN2 WESN2B	2	M14	11.2	9.0
		M5-1, M4-2	4.0	3.15
		M6-1	4.5	3.55
		M5-2	5.0	4.0
		M5-3	5.6	4.5
		M8-1, M6-2	6.3	5.0
		M7	7.1	5.6
		M11, M10-1, M8-2	8.0	6.3
		M12, M9	9.0	7.1
		M10-2	10.0	8.0
		M14	11.2	9.0
		M16	12.5	10.0
		M20, M18	14.0	11.2
		M22	16.0	12.5
WE3 WES3B WEN3 WESN3B	3	M12, M9	9.0	7.1
		M10-2	10.0	8.0
		M14	11.2	9.0
		M16	12.5	10.0
		M20, M18	14.0	11.2
		M22	16.0	12.5
		M24	18.0	14.0
		M30, M27	20.0	16.0
WE4 WES4B	4	M33-1	22.4	18.0
		M36, M33-2	25.0	20.0
		M42, M39	28.0	22.4
		M22	16.0	12.5
		M24	18.0	14.0
		M30, M27	20.0	16.0

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

## Tapping Capacity



**DIN** *Unit : Metric*

Type	Chuck size	Tap size	φ d Tap Shank	Drive Square
<b>WE0 WES0B WENO WESN0B</b>	<b>0</b>	<b>M3, M5</b>	3.5	2.7
		<b>M4, M6</b>	4.5	3.4
		<b>M5, M6, M8</b>	6.0	4.9
		<b>M10</b>	7.0	5.5
		<b>M8, M10</b>	8.0	6.2
<b>WE1 WES1B WEN1 WESN1B</b>	<b>1</b>	<b>M3, M5</b>	3.5	2.7
		<b>M3.5</b>	4.0	3.0
		<b>M4, M6</b>	4.5	3.4
		<b>M5, M6, M8</b>	6.0	4.9
		<b>M10</b>	7.0	5.5
		<b>M8, M10</b>	8.0	6.2
		<b>M12</b>	9.0	7.0
<b>WE2 WES2B WEN2 WESN2B</b>	<b>2</b>	<b>M10</b>	10.0	8.0
		<b>M14</b>	11.0	9.0
		<b>M16</b>	12.0	9.0
		<b>M18</b>	14.0	11.0
		<b>M20</b>	16.0	12.0
		<b>M22, M24</b>	18.0	14.5
		<b>M12</b>	9.0	7.0
		<b>M10</b>	10.0	8.0
		<b>M14</b>	11.0	9.0
		<b>M16</b>	12.0	9.0
		<b>M18</b>	14.0	11.0
<b>WE3 WES3B WEN3 WESN3B</b>	<b>3</b>	<b>M20</b>	16.0	12.0
		<b>M22, M24</b>	18.0	14.5
		<b>M27, M30</b>	20.0	16.0
		<b>M33, M36</b>	22.0	18.0
		<b>M36</b>	25.0	20.0
		<b>M22, M24</b>	18.0	14.5
<b>WE4 WES4B</b>	<b>4</b>	<b>M27, M30</b>	20.0	16.0
		<b>M30</b>	22.0	18.0
		<b>M33, M36</b>	25.0	20.0
		<b>M36</b>	28.0	22.0
		<b>M39, M42</b>	32.0	24.0
		<b>M45, M48</b>	36.0	29.0

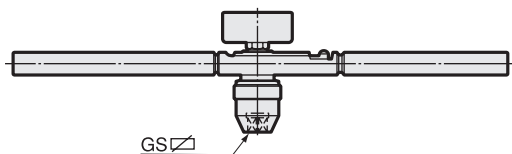
**JIS** *Unit : Metric*

Type	Chuck size	Tap size	φ d Tap Shank	Drive Square
<b>WE0 WES0B WENO WESN0B</b>	<b>0</b>	<b>M3</b>	4.0	3.2
		<b>M4, M4.5</b>	5.0	4.0
		<b>M5, M5.5</b>	5.5	4.5
		<b>M6</b>	6.0	4.5
		<b>M7, M8</b>	6.2	5.0
		<b>M9, M10</b>	7.0	5.5
<b>WE1 WES1B WEN1 WESN1B</b>	<b>1</b>	<b>M11</b>	8.0	6.0
		<b>M3</b>	4.0	3.2
		<b>M4, M4.5</b>	5.0	4.0
		<b>M5, M5.5</b>	5.5	4.5
		<b>M6</b>	6.0	4.5
		<b>M7, M8</b>	6.2	5.0
		<b>M9, M10</b>	7.0	5.5
		<b>M11</b>	8.0	6.0
		<b>M12</b>	8.5	6.5
		<b>M13</b>	9.5	7.0
<b>WE2 WES2B WEN2 WESN2B</b>	<b>2</b>	<b>M14, M15</b>	10.5	8.0
		<b>M6</b>	6.0	4.5
		<b>M7, M8</b>	6.2	5.0
		<b>M9, M10</b>	7.0	5.5
		<b>M11</b>	8.0	6.0
		<b>M12</b>	8.5	6.5
		<b>M13</b>	9.5	7.0
		<b>M14, M15</b>	10.5	8.0
		<b>M16</b>	12.5	10.0
		<b>M17</b>	13.0	10.0
		<b>M18</b>	14.0	11.0
		<b>M20</b>	15.0	12.0
		<b>M22</b>	17.0	13.0
		<b>WE3 WES3B WEN3 WESN3B</b>	<b>3</b>	<b>M14, M15</b>
<b>M16</b>	12.5			10.0
<b>M17</b>	13.0			10.0
<b>M18</b>	14.0			11.0
<b>M20</b>	15.0			12.0
<b>M22</b>	17.0			13.0
<b>M24, M25</b>	19.0			15.0
<b>M26, M27</b>	20.0			15.0
<b>M28</b>	21.0			17.0
<b>M30</b>	23.0			17.0
<b>M32</b>	24.0			19.0
<b>WE4 WES4B</b>	<b>4</b>	<b>M33</b>	25.0	19.0
		<b>M34, M35</b>	26.0	21.0
		<b>M36, M38</b>	28.0	21.0
		<b>M22</b>	17.0	13.0
		<b>M24, M25</b>	19.0	15.0
		<b>M26, M27</b>	20.0	15.0
		<b>M28</b>	21.0	17.0
		<b>M30</b>	23.0	17.0
		<b>M32</b>	24.0	19.0
		<b>M33</b>	25.0	19.0
		<b>M34, M35</b>	26.0	21.0
		<b>M36, M38</b>	28.0	21.0
		<b>M39, M40</b>	30.0	23.0
		<b>M42</b>	32.0	26.0
<b>M45</b>	35.0	26.0		
<b>M48</b>	38.0	29.0		

## Torque Setting

Torque Wrench (for right thread)

## G type

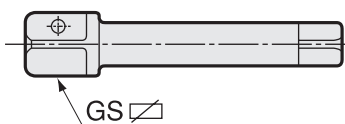


Oil pressure torque wrench with N-m, divisions.

Code	Model	Adapter size	(N-m)	GS
0150 09000000	<b>G0</b>	0	15	13
0150 09000001	<b>G1</b>	0.1	30	13
0150 09000002	<b>G2</b>	2.40	120	13
0150 09000003	<b>G3</b>	3	300	13
0150 09000004	<b>GE4-RD4</b>	4	1,000	25

Setting Shank

## GS type



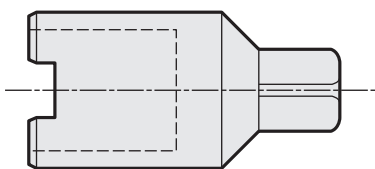
Code	Model	GS	Tapsize
0210 091100 ※※	<b>GS13-M</b> ※※	13	M3 ~ M38
0210 091110 ※※	<b>GS25-M</b> ※※	25	M22 ~ M48

1. Tap size will be inserted in " ※※ ".

2. Square head of setting shank fit into square part of torque wrench.

Setting Socket

## GW type

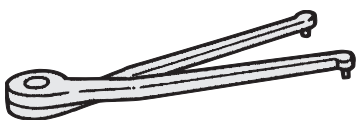


Code	Model	Adapter size
0210 09200000	<b>GW0</b>	0
0210 09200001	<b>GW1</b>	1
0210 09200040	<b>GW40</b>	40
0210 09200002	<b>GW2</b>	2
0210 09200003	<b>GW3</b>	3
0210 09200004	<b>GW4</b>	4

Fix square part of setting socket on vise, and then insert tap adapter into it for torque setting.

Adjustable Pin Wrench

## GWA type

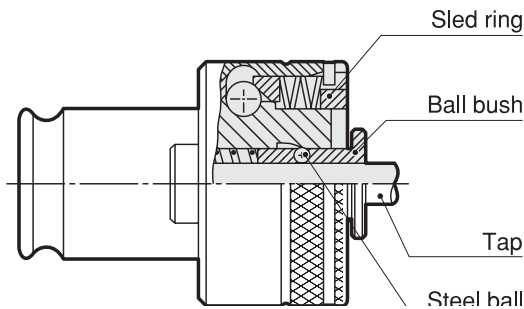


Code	Model	Pin diameter	Adapter size
0150 09300000	<b>GWA0</b>	2	0
0150 09300001	<b>GWA1</b>	2.5	1
0150 09300040	<b>GWA40</b>	3	2、3、40
0150 09300004	<b>GWA4</b>	6	4

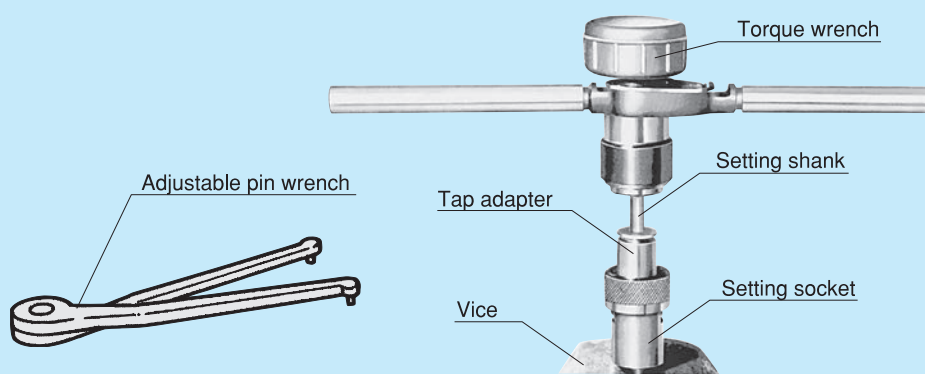
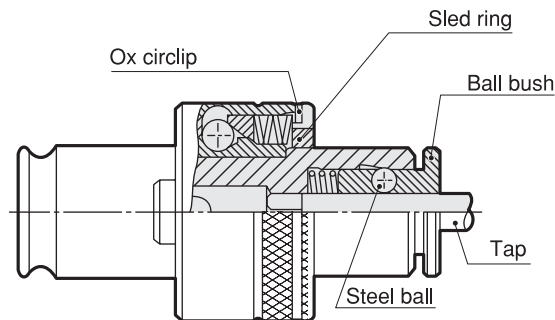
Rotate sled ring of tap adapter by pin wrench for torque adjustment.

## Torque setting

Tap adapter type WES · B



Tap adapter type WESN · B



## Torque setting by special tool

- 1) Fix square part of setting socket by using vise.
- 2) Insert tap adapter into the setting socket.
- 3) Insert the setting shank into the tap adapter.
- 4) Insert square part of torque wrench into head part of setting shank.
- 5) Check current torque.
- 6) When changing torque, remove horn part of ox circlip.
- 7) Insert adjustable pin wrench into pin hole of sled ring.
- 8) Rotate sled ring clockwise when increase torque or counterclockwise when decrease torque.
- 9) Check torque again after setting torque.
- 10) After setting the torque, return horn part of ox circlip to original position to fix sled ring.

## Torque setting without special tool

- 1) Remove horn part of ox circlip.
- 2) Insert adjustable pin wrench into pin hole of sled ring.
- 3) Rotate sled ring clockwise when increase torque or counterclockwise when decrease torque. Sled ring rotation must be 45 ~ 90°
- 4) After setting the torque, return horn part of ox circlip to original position to fix sled ring.



Guidelines for Torque Value

Metric Tap		Inch Tap		PT Tap		PS and PF Taps	
Tap Size	Torque (N-m)	Tap Size	Torque (N-m)	Tap Size	Torque (N-m)	Tap Size	Torque (N-m)
M3	1.0	1/8"	2.0	1/8"	26.0	1/8"	8.0
M4	2.3	1/4"	8.0	1/4"	35.0	1/4"	26.0
M5	3.7	5/16"	14.0	3/8"	47.0	3/8"	32.0
M6	6.0	3/8"	22.0	1/2"	100.0	1/2"	65.0
M7	7.5	7/16"	32.0	3/4"	120.0	3/4"	90.0
M8	12.0	1/2"	45.0	1"	240.0	1"	160.0
M9	14.0	9/16"	52.0	1 1/4"	270.0	1 1/4"	200.0
M10	22.0	5/8"	65.0	1 3/8"	300.0	1 3/8"	220.0
M11	26.0			1 1/2"	310.0	1 1/2"	240.0
M12	32.0	3/4"	90.0				
M14	47.0						
M16	52.0	7/8"	120.0				
M18	82.0						
M20	90.0	1"	160.0				
M22	100.0	1 1/8"	220.0				
M24	135.0	1 1/4"	250.0				
M27	160.0	1 3/8"	325.0				
M30	230.0	1 1/2"	360.0				
M33	250.0	1 5/8"	580.0				
M36	310.0	1 3/4"	630.0				
M39	325.0	1 7/8"	750.0				
M40 (細)	210.0	2"	800.0				
M42	420.0						
M45	480.0						
M48	630.0						
M50 (細)	260.0						

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

# D

## Adjustable Adapter Short Design Type D

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine

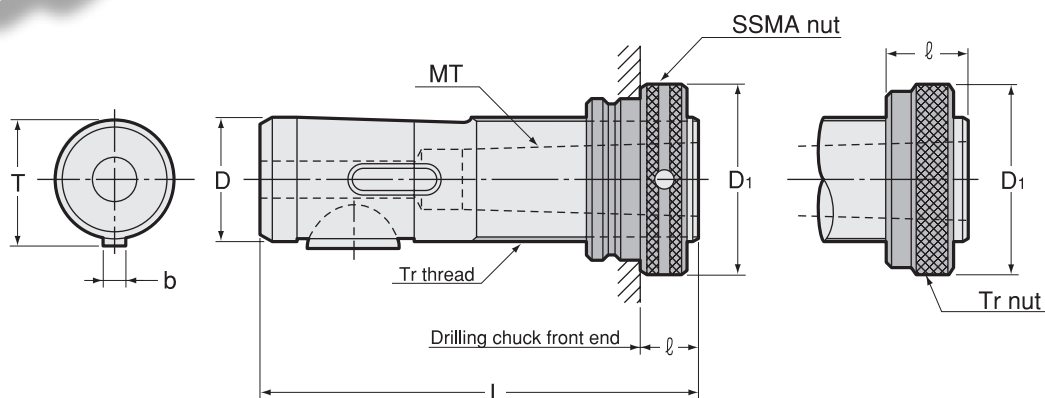
Related Equipment  
Bush & Chamfering Drill  
Sub Holder  
Tapping Chuck  
Tap Adapter

Adjustable Adapter  
Endmill Chuck  
Straight Drill Chuck  
Floating Holder



**Applications**  
Drilling and spot-facing.

**Feature**  
1. Both Tr and SSMA nut types are available in many sizes.  
2. SSMA nut type is suitable for use with drilling chuck.



Model	MT	D	D1 ± 0.2		L	b	T	kg		ℓ	
			SSMA	Tr				SSMA	Tr	SSMA	Tr
D16 -1 /SSMA16 /Tr16	1	16	26	25	85	5	17.1	0.10	0.09	9 ~ 37	12 ~ 38
D20 -1 /SSMA20 /Tr20	1	20	33	32	88	5	21.1	0.19	0.18	9 ~ 37	12 ~ 38
D25 -1 /SSMA25	1	25	40	37	95	6	26.5	0.36	0.33	10 ~ 40	12 ~ 42
	-2 /Tr25	2	25	40	37	95	6	26.5	0.29	0.25	10 ~ 40
D26 -1 /Tr26	1	26	—	40	95	5	27.5	—	0.37	—	12 ~ 42
	-2	2	26	—	40	95	5	27.5	—	0.29	—
D28 -1 /SSMA28	1	28	42	40	95	6	29.5	0.45	0.42	10 ~ 40	12 ~ 42
	-2 /Tr28	2	28	42	40	95	6	29.5	0.37	0.34	10 ~ 40
D32 -2 /SSMA32	2	32	47	45	118	8	33.5	0.65	0.63	10 ~ 46	14 ~ 48
	-3 /Tr32	3	32	47	45	118	8	33.5	0.50	0.48	10 ~ 46
D35 -1 /Tr35	1	35	—	50	118	6	36.5	—	0.88	—	14 ~ 48
	-2	2	35	—	50	6	36.5	—	0.79	—	14 ~ 48
	-3	3	35	—	50	6	36.5	—	0.64	—	14 ~ 48
D36 -2 /SSMA36	2	36	54	50	118	8	37.5	0.88	0.83	10 ~ 46	14 ~ 48
	-3 /Tr36	3	36	54	50	8	37.5	0.74	0.68	10 ~ 46	14 ~ 48
D48 -2 /SSMA48 /Tr48	2	48	72	67	144	10	49.9	2.13	2.01	14 ~ 61	18 ~ 63
	-3	3	48	72	67	10	49.9	1.97	1.85	14 ~ 61	18 ~ 63
	-4	4	48	72	67	10	49.9	1.64	1.51	14 ~ 61	18 ~ 63
	-3-8	3	48	72	67	8	49.9	1.97	1.85	14 ~ 61	18 ~ 63
	-4-8	4	48	72	67	8	49.9	1.63	1.51	14 ~ 61	18 ~ 63

### Ordering Example

**D 20 - 1 / SSMA20**  
D MT1 SSMA nut

Adjustable Adapter			SSMA	Tr
Model			Model	Model
D16	-1		SSMA16	Tr16
D20	-1		SSMA20	Tr20
D25	-1		SSMA25	Tr25
D25	-2		SSMA25	Tr25
D26	-1		—	Tr26
D26	-2		—	Tr26
D28	-1		SSMA28	Tr28
D28	-2		SSMA28	Tr28
D32	-2		SSMA32	Tr32
D32	-3		SSMA32	Tr32
D35	-1		—	Tr35
D35	-2		—	Tr35
D35	-3		—	Tr35
D36	-2		SSMA36	Tr36
D36	-3		SSMA36	Tr36
D48	-2		SSMA48	Tr48
D48	-3		SSMA48	Tr48
D48	-4		SSMA48	Tr48
D48	-3-8		SSMA48	Tr48
D48	-4-8		SSMA48	Tr48

- 1.To avoid troubles, please do not use our products with another manufacturer's products.
- 2.Refer to P.476 for DIN spindle dimension.

Ordering Example

**SSMA 20**      **Tr 20**  
 Size                      Size

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

# F

## Adjustable Adapter Long Design Type F

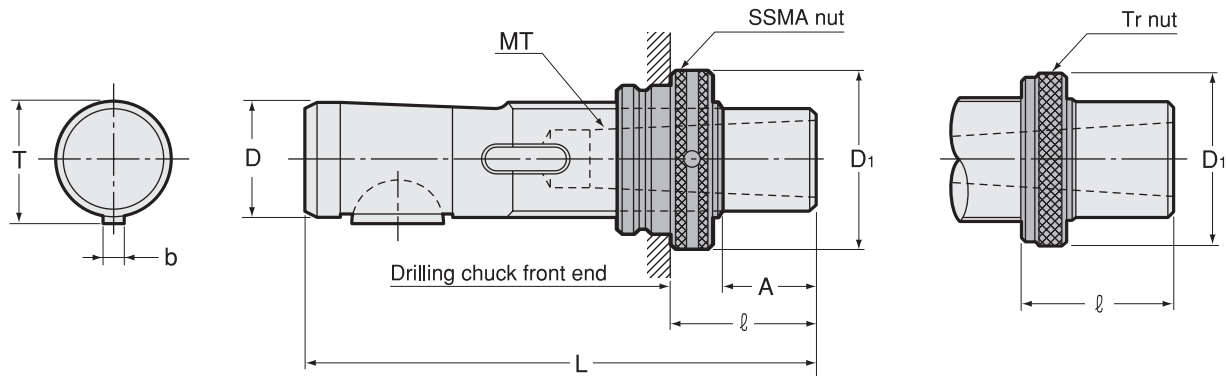
- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter

### Applications

Drilling and spot-facing.

### Feature

1. Both Tr and SSMA nut types are available in many sizes.
2. SSMA nut type is suitable for use with drilling chuck.



Model	MT	A	D	D1 ± 0.2		L	b	T	kg	ℓ		
				SSMA	Tr					SSMA	Tr	
F16-1	-25	1	25	16	26	25	110	5	17.1	0.13	34 ~ 62	37 ~ 63
	-50	1	50	16	26	25	135	5	17.1	0.16	59 ~ 87	62 ~ 88
	-75	1	75	16	26	25	160	5	17.1	0.19	84 ~ 112	87 ~ 113
	-100	1	100	16	26	25	185	5	17.1	0.22	109 ~ 137	112 ~ 138
F20-1	-25	1	25	20	33	32	113	5	21.1	0.24	34 ~ 62	37 ~ 63
	-50	1	50	20	33	32	138	5	21.1	0.28	59 ~ 87	62 ~ 88
	-75	1	75	20	33	32	163	5	21.1	0.33	84 ~ 112	87 ~ 113
	-100	1	100	20	33	32	188	5	21.1	0.38	109 ~ 137	112 ~ 138
F25-1	-25	1	25	25	40	37	120	6	26.5	0.44	35 ~ 65	37 ~ 67
	-50	1	50	25	40	37	145	6	26.5	0.52	60 ~ 90	62 ~ 92
	-75	1	75	25	40	37	170	6	26.5		85 ~ 115	87 ~ 117
	-100	1	100	25	40	37	195	6	26.5		110 ~ 140	112 ~ 142
F25-2	-25	2	25	25	40	37	120	6	26.5	0.37	35 ~ 65	37 ~ 67
	-50	2	50	25	40	37	145	6	26.5	0.41	60 ~ 90	62 ~ 92
	-75	2	75	25	40	37	170	6	26.5	0.52	85 ~ 115	87 ~ 117
	-100	2	100	25	40	37	195	6	26.5	0.6	110 ~ 140	112 ~ 142
F26-1	-25	1	25	26	—	40	120	5	27.5	0.45	—	37 ~ 67
	-50	1	50	26	—	40	145	5	27.5	0.54	—	62 ~ 92
	-75	1	75	26	—	40	170	5	27.5	0.62	—	87 ~ 117
	-100	1	100	26	—	40	195	5	27.5	0.7	—	112 ~ 142
F26-2	-25	2	25	26	—	40	120	5	27.5	0.38	—	37 ~ 67
	-50	2	50	26	—	40	145	5	27.5	0.46	—	62 ~ 92
	-75	2	75	26	—	40	170	5	27.5	0.54	—	87 ~ 117
	-100	2	100	26	—	40	195	5	27.5	0.62	—	112 ~ 142
F28-1	-25	1	25	28	42	40	120	6	29.5	0.55	35 ~ 65	37 ~ 67
	-50	1	50	28	42	40	145	6	29.5	0.65	60 ~ 90	62 ~ 92
	-75	1	75	28	42	40	170	6	29.5	0.74	85 ~ 115	87 ~ 117
	-100	1	100	28	42	40	195	6	29.5	0.84	110 ~ 140	112 ~ 142
F28-2	-25	2	25	28	42	40	120	6	29.5	0.47	35 ~ 65	37 ~ 67
	-50	2	50	28	42	40	145	6	29.5	0.57	60 ~ 90	62 ~ 92
	-75	2	75	28	42	40	170	6	29.5	0.66	85 ~ 115	87 ~ 117
	-100	2	100	28	42	40	195	6	29.5	0.73	110 ~ 140	112 ~ 142

Model	MT	A	D	D1 ± 0.2		L	b	T	kg	ℓ		
				SSMA	Tr					SSMA	Tr	
F32-2	-30	2	30	32	47	45	148	8	33.5	0.83	40 ~ 76	44 ~ 78
	-60	2	60	32	47	45	178	8	33.5	0.98	70 ~ 106	74 ~ 108
	-90	2	90	32	47	45	208	8	33.5		100 ~ 136	104 ~ 138
	-120	2	120	32	47	45	238	8	33.5		130 ~ 166	134 ~ 168
F32-3	-30	3	30	32	47	45	148	8	33.5	0.67	40 ~ 66	44 ~ 78
	-60	3	60	32	47	45	178	8	33.5	0.81	70 ~ 106	74 ~ 108
	-90	3	90	32	47	45	208	8	33.5	0.97	100 ~ 136	104 ~ 138
	-120	3	120	32	47	45	238	8	33.5		130 ~ 166	134 ~ 168
F35-2	-30	2	30	35	—	50	148	6	36.5		—	44 ~ 78
	-60	2	60	35	—	50	178	6	36.5	1.18	—	74 ~ 108
	-90	2	90	35	—	50	208	6	36.5		—	104 ~ 138
	-120	2	120	35	—	50	238	6	36.5	1.56	—	134 ~ 168
F35-3	-30	3	30	35	—	50	148	6	36.5	0.83	—	44 ~ 78
	-60	3	60	35	—	50	178	6	36.5	1.03	—	74 ~ 108
	-90	3	90	35	—	50	208	6	36.5		—	104 ~ 138
	-120	3	120	35	—	50	238	6	36.5		—	134 ~ 168
F36-2	-30	2	30	36	54	50	148	8	37.5	1.1	40 ~ 66	44 ~ 78
	-60	2	60	36	54	50	178	8	37.5	1.3	70 ~ 106	74 ~ 108
	-90	2	90	36	54	50	208	8	37.5		100 ~ 136	104 ~ 138
	-120	2	120	36	54	50	238	8	37.5		130 ~ 166	134 ~ 168
F36-3	-30	3	30	36	54	50	148	8	37.5	0.94	40 ~ 66	44 ~ 78
	-60	3	60	36	54	50	178	8	37.5	1.1	70 ~ 106	74 ~ 108
	-90	3	90	36	54	50	208	8	37.5	1.34	100 ~ 136	104 ~ 138
	-120	3	120	36	54	50	238	8	37.5		130 ~ 166	134 ~ 168
F48-3	-40	3	40	48	72	67	184	10	49.9		54 ~ 101	58 ~ 103
	-80	3	80	48	72	67	224	10	49.9		94 ~ 141	98 ~ 143
	-120	3	120	48	72	67	264	10	49.9		134 ~ 181	138 ~ 183
	-160	3	160	48	72	67	304	10	49.9		174 ~ 221	178 ~ 223
F48-4	-40	4	40	48	72	67	184	10	49.9		54 ~ 101	58 ~ 103
	-80	4	80	48	72	67	224	10	49.9	2.53	94 ~ 141	98 ~ 143
	-120	4	120	48	72	67	264	10	49.9	3.02	134 ~ 181	138 ~ 183
	-160	4	160	48	72	67	304	10	49.9		174 ~ 221	178 ~ 223
F48-3	-40-8	3	40	48	72	67	184	8	49.9	2.37	54 ~ 101	58 ~ 103
	-80-8	3	80	48	72	67	224	8	49.9		94 ~ 141	98 ~ 143
	-120-8	3	120	48	72	67	264	8	49.9		134 ~ 181	138 ~ 183
	-160-8	3	160	48	72	67	304	8	49.9		174 ~ 221	178 ~ 223
F48-4	-40-8	4	40	48	72	67	184	8	49.9	2.02	54 ~ 101	58 ~ 103
	-80-8	4	80	48	72	67	224	8	49.9	2.52	94 ~ 141	98 ~ 143
	-120-8	4	120	48	72	67	264	8	49.9		134 ~ 181	138 ~ 183
	-160-8	4	160	48	72	67	304	8	49.9		174 ~ 221	178 ~ 223

- 1.To avoid troubles, please do not use our products with another manufacturer's products.
- 2.Refer to P.476 for DIN spindle dimension.

### Ordering Example

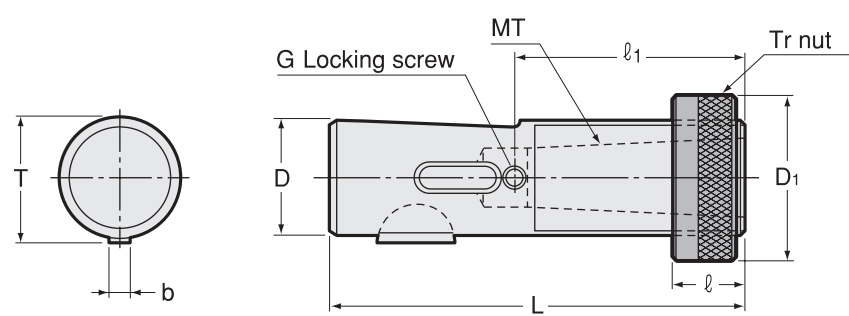
**F 20 - 1 - 50 / SSMA20**  
 D MT1 A SSMA nut

# H, M

## Adjustable Adapter "H" And "M" Series

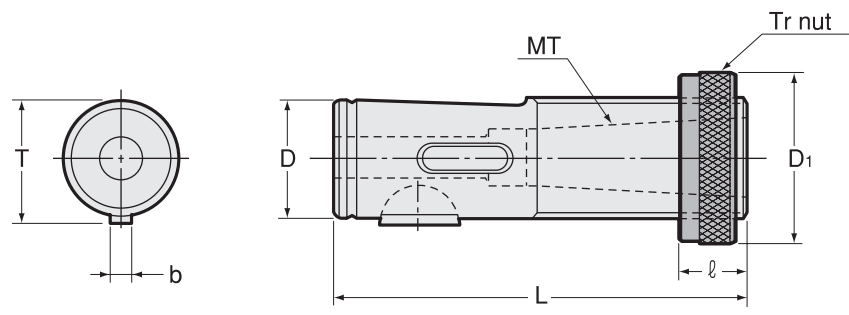
- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

### H Series



Code	Model	MT	D	D1 ±0.2	L	b	T	l	l1	G	kg
0610 04111810	H -11810 /Tr18H	1	18	32	102	4	19.5	12 ~ 52	48	M6 P=1	0.17
0610 04111811	-11811 /Tr18H	1	18	32	112	4	19.5	12 ~ 62	48	M6 P=1	0.19
0610 04111812	-11812 /Tr18H	1	18	32	122	4	19.5	12 ~ 72	48	M6 P=1	0.21
0610 04111813	-11813 /Tr18H	1	18	32	132	4	19.5	12 ~ 82	48	M6 P=1	
0610 04111814	-11814 /Tr18H	1	18	32	142	4	19.5	12 ~ 92	48	M6 P=1	
0610 04112610	H -12610 /Tr26H	1	26	40	102	5	27.5	12 ~ 52	48	M6 P=1	0.40
0610 04112611	-12611 /Tr26H	1	26	40	112	5	27.5	12 ~ 62	48	M6 P=1	
0610 04112612	-12612 /Tr26H	1	26	40	122	5	27.5	12 ~ 72	48	M6 P=1	
0610 04112613	-12613 /Tr26H	1	26	40	132	5	27.5	12 ~ 82	48	M6 P=1	0.51
0610 04112614	-12614 /Tr26H	1	26	40	142	5	27.5	12 ~ 92	48	M6 P=1	
0610 04122610	H -22610 /Tr26H	2	26	40	102	5	27.5	12 ~ 52	56.3	M6 P=1	
0610 04122611	-22611 /Tr26H	2	26	40	112	5	27.5	12 ~ 62	56.3	M6 P=1	0.35
0610 04122612	-22612 /Tr26H	2	26	40	122	5	27.5	12 ~ 72	56.3	M6 P=1	0.39
0610 04122613	-22613 /Tr26H	2	26	40	132	5	27.5	12 ~ 82	56.3	M6 P=1	0.43
0610 04122614	-22614 /Tr26H	2	26	40	142	5	27.5	12 ~ 92	56.3	M6 P=1	

### M Series



Code	Model	MT	D	D1 ±0.2	L	b	T	l	kg
0610 14300161	M1 -16x1 /Tr16	1	16	25	78	4	17.5	12 ~ 38	0.08
0610 14300201	M1 -20x1 /Tr20	1	20	32	78	5	22	12 ~ 38	0.17
0610 14300261	M1 -26x1 /Tr26	1	26	40	94	5	28	12 ~ 43	0.36
0610 14300262	-26x2 /Tr26	2	26	40	94	5	28	12 ~ 43	0.29
0610 14300281	M1 -28x1 /Tr28	1	28	40	94	5	30	12 ~ 43	0.41
0610 14300282	-28x2 /Tr28	2	28	40	94	5	30	12 ~ 43	0.34
0610 14300322	M1 -32x2 /Tr32	2	32	45	117	6	34.4	14 ~ 47	0.63
0610 14300323	-32x3 /Tr32	3	32	45	117	6	34.4	14 ~ 47	0.48

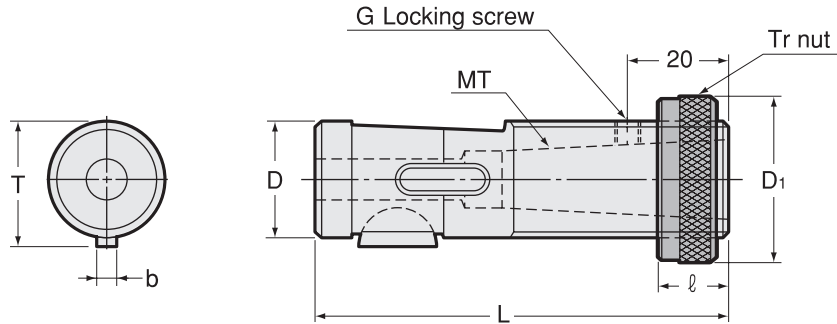
### Ordering Example

**M1 - 16 × 1 / Tr16**  
 D MT1 Tr nut

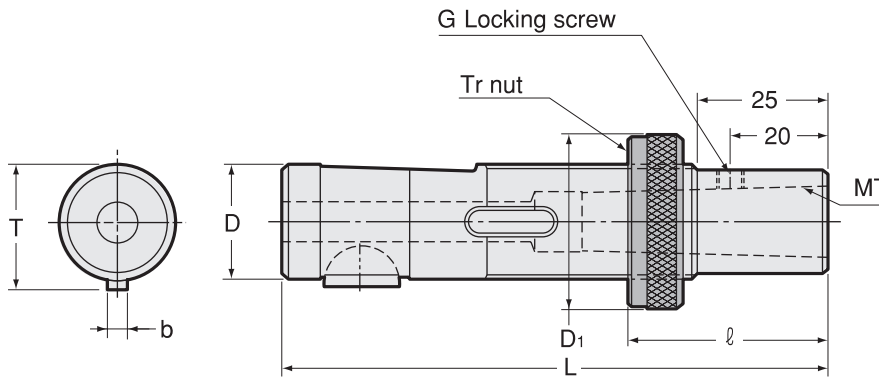
# N

## Adjustable Adapter "N" Series

**N Series**



Code	Model	MT	D	D1 ± 0.2	L	b	T 0 -0.2	l	G	kg
0610 02111611	N -1161 /Tr16N	1	16	25	85	4	17.5	12 ~ 37	M5 P=0.8	0.09
0610 02112011	N -1201 /Tr20N	1	20	32	85	5	22	12 ~ 37	M5 P=0.8	
0610 02112411	N -1241 /Tr24N	1	24	37	85	5	26	12 ~ 37	M5 P=0.8	0.27
0610 02112611	N -1261 /Tr26N	1	26	40	96	7	28.6	12 ~ 43	M6 P=1.0	
0610 02112621	-1262 /Tr26N	2	26	40	96	7	28.6	12 ~ 43	M6 P=1.0	0.30
0610 02113021	N -1302 /Tr30N	2	30	45	100	7	32.6	14 ~ 46	M6 P=1.0	0.47
0610 02113621	N -1362 /Tr36N	2	36	50	118	10	39.2	14 ~ 54	M6 P=1.0	0.84
0610 02113631	-1363 /Tr36N	3	36	50	118	10	39.2	14 ~ 54	M6 P=1.0	0.69
0610 02114831	N -1483 /Tr48N	3	48	67	142	12	51.2	18 ~ 64	M6 P=1.0	1.82
0610 02114841	-1484 /Tr48N	4	48	67	142	12	51.2	18 ~ 64	M6 P=1.0	



Code	Model	MT	D	D1 ± 0.2	L	b	T 0 -0.2	l	G	kg
0610 02121611	N -2161 /Tr16N	1	16	25	110	4	17.5	38 ~ 62	M5 P=0.8	0.12
0610 02122011	N -2201 /Tr20N	1	20	32	110	5	22	38 ~ 62	M5 P=0.8	
0610 02122411	N -2241 /Tr24N	1	24	37	110	5	26	38 ~ 62	M5 P=0.8	
0610 02122611	N -2261 /Tr26N	1	26	40	121	7	28.6	38 ~ 68	M6 P=1.0	
0610 02122621	-2262 /Tr26N	2	26	40	121	7	28.6	38 ~ 68	M6 P=1.0	
0610 02123021	N -2302 /Tr30N	2	30	45	125	7	32.6	40 ~ 71	M6 P=1.0	
0610 02123621	N -2362 /Tr36N	2	36	50	143	10	39.2	40 ~ 79	M6 P=1.0	1.00
0610 02123631	-2363 /Tr36N	3	36	50	143	10	39.2	40 ~ 79	M6 P=1.0	0.84
0610 02124831	N -2483 /Tr48N	3	48	67	167	12	51.2	44 ~ 89	M6 P=1.0	
0610 02124841	-2484 /Tr48N	4	48	67	167	12	51.2	44 ~ 89	M6 P=1.0	

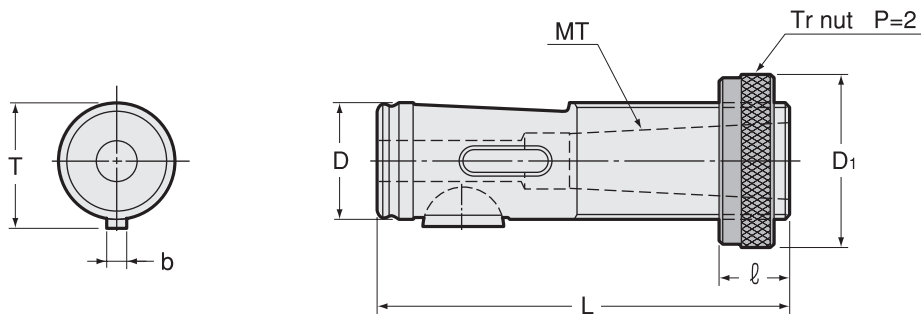
**Ordering Example**  
**N-2161 / Tr16N**  
 Tr nut

# T

## Adjustable Adapter "T" Series

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS  
Specialized Machine  
Related Equipment  
Bush & Chamfering Drill

### T Series



Code	Model	MT	D	D1 ±0.2	L	b	T 0 -0.2	l	kg
0610 03100116	T -1×16 /Tr16×2	1	16	25	80	3	17	12 ~ 35	0.08
0610 03100119	T -1×19 /Tr19	1	19	32	80	5	21	12 ~ 35	0.15
0610 03100122	T -1×22 /Tr22	1	22	32	92	5	24	12 ~ 40	0.23
0610 03100222	-2×22 /Tr22	2	22	32	92	5	24	12 ~ 40	0.15
0610 03100126	T -1×26 /Tr26	1	26	40	102	5	28	12 ~ 45	0.39
0610 03100226	-2×26 /Tr26	2	26	40	102	5	28	12 ~ 45	0.31
0610 03100335	T -3×35 /Tr35	3	35	50	122	7	38	14 ~ 52	0.66
0610 03100448	T -4×48 /Tr48	4	48	67	152	7	51	18 ~ 62	

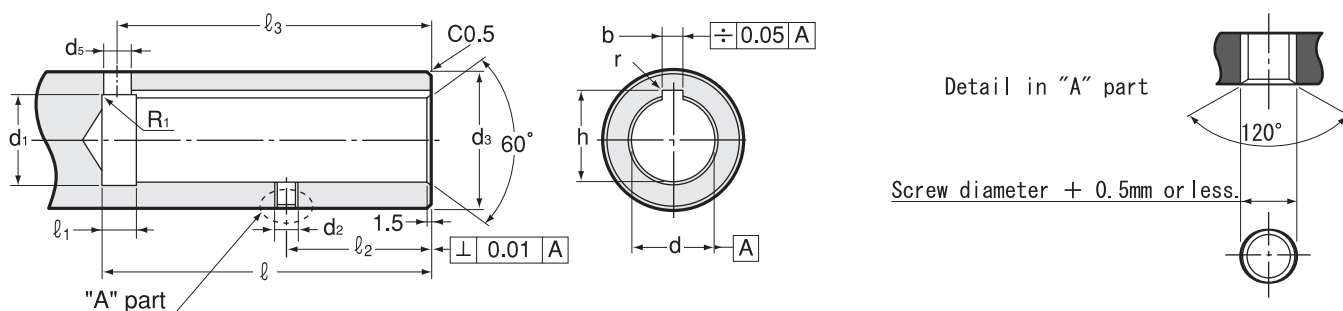
### Ordering Example

**T - 1 × 16 / Tr16×2**  
 MT1      D      Tr nut

Sub Holder  
Tapping Chuck  
Tap Adapter  
Adjustable Adapter  
Endmill Chuck  
Straight Drill Chuck  
Floating Holder



## Spindle Dimensions



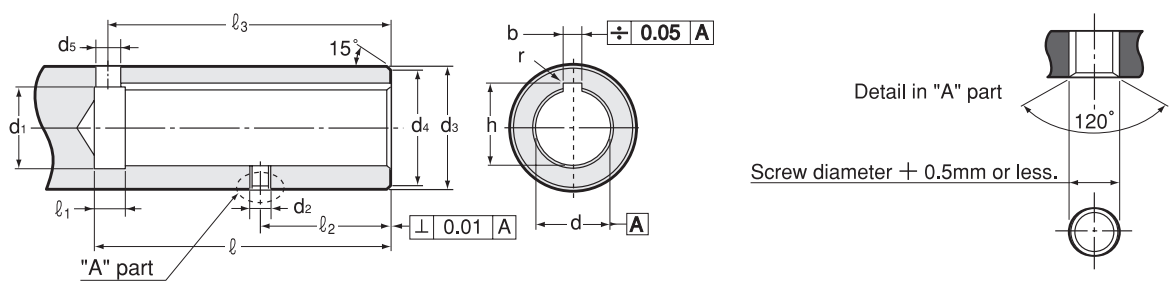
Chamfer 120° at "A" part. (Max. chamfering diameter = Screw diameter + 0.5 mm or less)

### N Series

Size	d <sub>H6</sub>	ℓ (min)	d1	d2	d3 <sub>g6</sub>	d5	ℓ1	ℓ2 ± 0.1	ℓ3	b	h <sub>+0.1/0</sub>	r
16	16	81	17	M8 P=1.25	28	8	12	32	75	4 <sup>+0.078</sup> <sub>+0.030</sub>	17.7	0.2
20	20	81	21	M8 P=1.25	32	8	12	32	75	5 <sup>+0.078</sup> <sub>+0.030</sub>	22.5	0.2
24	24	81	25	M8 P=1.25	36	8	12	32	75	5 <sup>+0.078</sup> <sub>+0.030</sub>	26.5	0.2
24	24	81	25	M8 P=1.25	38	8	12	32	75	5 <sup>+0.078</sup> <sub>+0.030</sub>	26.5	0.2
26	26	92	27	M10 P=1.5	42	10	12	38	83	7 <sup>+0.098</sup> <sub>+0.040</sub>	29.5	0.4
30	30	96	31	M10 P=1.5	50	10	12	42	87	7 <sup>+0.098</sup> <sub>+0.040</sub>	33.5	0.4
36	36	114	37	M10 P=1.5	60	12	12	50	108	10 <sup>+0.098</sup> <sub>+0.040</sub>	40	0.4
48	48	135	49	M10 P=1.5	75	14	12	57	126	12 <sup>+0.120</sup> <sub>+0.050</sub>	52	0.4

### H Series

Size	d <sub>H6</sub>	ℓ (min)	d1	d2	d3 <sub>g6</sub>	d4	d5	ℓ1	ℓ2 ± 0.1	ℓ3	b	h <sub>+0.1/0</sub>	r
18	18	92	18.6	M6 P=1.0	26	25	5	8	46	88	4 <sup>+0.145</sup> <sub>+0.070</sub>	19.7	0.2
26	26	92	26.6	M6 P=1.0	35	34.5	6	10	46	87	5 <sup>+0.145</sup> <sub>+0.070</sub>	27.7	0.2



Chamfer 120° at "A" part. (Max. chamfering diameter = Screw diameter + 0.5 mm or less)

**M Series**

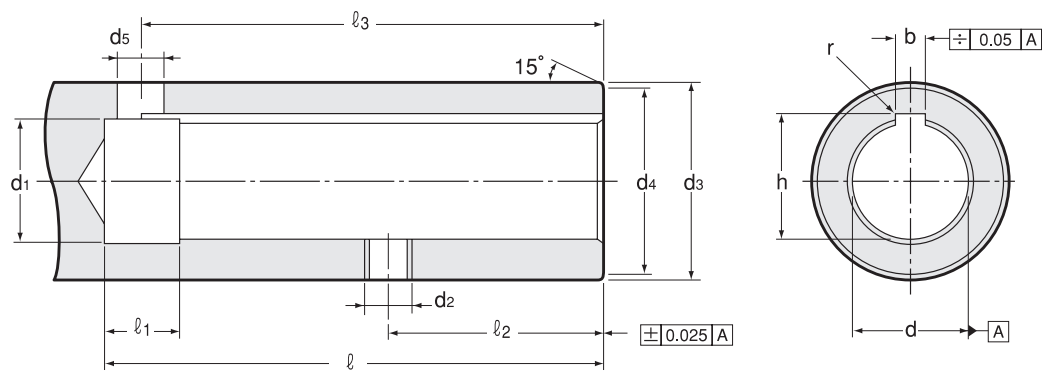
Size	d <sub>H6</sub>	ℓ (min)	d1	d2	d3 <sub>g6</sub>	d4	d5	ℓ 1	ℓ 2 ± 0.1	ℓ 3	b	h <sub>+0.1 0</sub>	r
16	16	68	16.6	M6 P=1.0	25	24	5	8	34	64	4 <sup>+0.145 +0.070</sup>	17.7	0.2
20	20	68	20.6	M8 P=1.25	32	31	6	8	34	64	5 <sup>+0.145 +0.070</sup>	22.2	0.2
26	26	84	26.6	M8 P=1.25	40	39	6	10	41	79	5 <sup>+0.145 +0.070</sup>	28.2	0.2
28	28	84	28.6	M8 P=1.25	40	39	6	10	41	79	5 <sup>+0.145 +0.070</sup>	30.2	0.2
32	32	105	32.8	M10 P=1.5	45	44	8	10	45	100	6 <sup>+0.145 +0.070</sup>	34.6	0.2

**T Series**

Size	d	ℓ (min)	d1	d2	d3 <sub>h7</sub>	d4	d5	ℓ 1	ℓ 2 ± 0.1	ℓ 3	b	h <sub>+0.3 +0.1</sub>
16	16 <sup>+0.027 +0.015</sup>	75	17	M6 P=0.75	25	24	4	10	31.3	66	3 <sup>+0.27 +0.19</sup>	17.5
19	19 <sup>+0.027 +0.015</sup>	75	20	M8 P=0.75	32	31	6	10	31.3	67	5 <sup>+0.28 +0.20</sup>	21.5
22	22 <sup>+0.032 +0.018</sup>	88	23	M8 P=0.75	36	35	6	10	36.3	80	5 <sup>+0.28 +0.20</sup>	24.5
26	26 <sup>+0.032 +0.018</sup>	98	28	M8 P=0.75	40	39	6	10	41.3	90	5 <sup>+0.28 +0.20</sup>	28.5
35	35 <sup>+0.038 +0.021</sup>	116	37	M8 P=0.75	52	51	8	10	46.3	106	7 <sup>+0.29 +0.21</sup>	38.5
48	48 <sup>+0.038 +0.021</sup>	147	50	M8 P=0.75	65	64	8	10	62.3	136	7 <sup>+0.29 +0.21</sup>	51.5

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter

**DIN Spindle Dimension**



Size	d <sub>H6</sub>	ℓ (min)	d1	d2	d3 <sub>g6</sub>	d4	d5	ℓ 1	ℓ 2 ± 0.1	ℓ 3	b <sub>+0.120 +0.060</sub>	h <sub>+0.1 0</sub>	r
8	8	42	8.6	M4	15	14.4	3.5	8	16	35	2	9	0.2
10	10	52	10.6	M5	18	17.4	5	8	22	48	3	11	0.2
12	12	52	12.6	M5	20	19.2	5	8	22	48	3	13	0.2
16	16	74	16.6	M6	25	24	6	8	34	70	5	17.3	0.2
20	20	77	20.6	M8	32	31	6	8	34	73	5	21.3	0.2
25	25	85	25.6	M8	37	36	8	10	38	80	6	26.7	0.4
26	26	85	26.6	M8	40	39	6	10	38	80	5	27.7	0.2
28	28	85	28.6	M8	40	39	8	10	38	80	6	29.7	0.4
32	32	106	32.8	M8	45	44	10	10	45	101	8	33.7	0.4
35	35	106	35.8	M8	50	49	8	10	45	101	6	36.7	0.4
36	36	106	36.8	M8	50	49	10	10	45	101	8	37.7	0.4
48	48	129	48.8	M10	67	66	12	12	57	123	10	50.1	0.4

# MEMO

# EM · A

End Mill Chuck

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS

Specialized Machine

Related Equipment

Bush & Chamfering Drill

Sub Holder

Tapping Chuck

Tap Adapter

Adjustable Adapter

Endmill Chuck

Straight Drill Chuck

Floating Holder

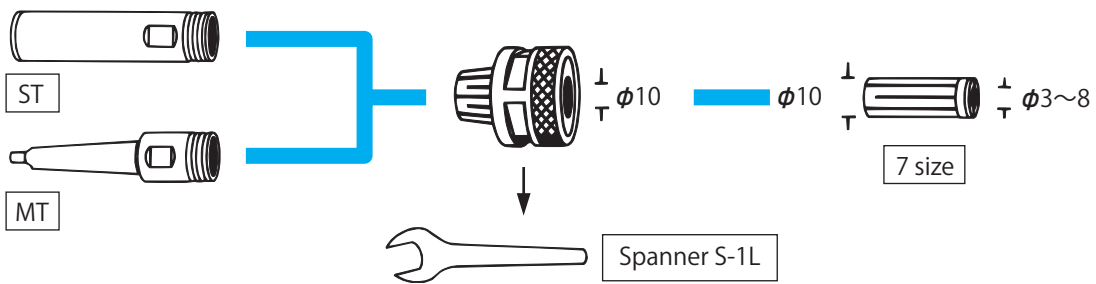
## System Chart

### 19 series

Shank (φ 3 ~ 10)

Nut with φ 10.0 collet (EMP-19A)

Straight collet



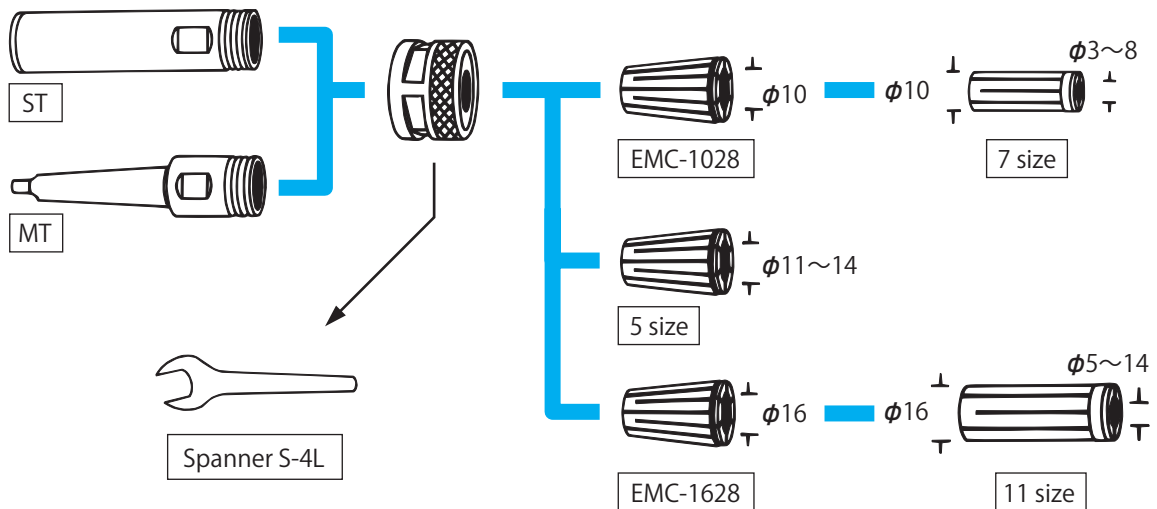
### 28 series

Shank (φ 3 ~ 16)

Nut (EMP-28A)

Taper collet

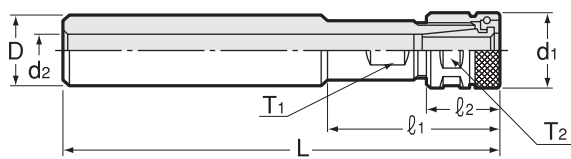
Straight collet



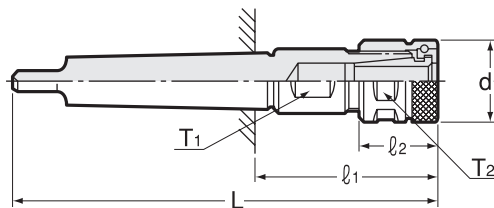
## Applications

1. Small diameter end milling
2. Extension for milling chuck

Straight shank



MT shank



Code	Model	Series	Chucking Range	D <sub>h7</sub>	MT	d1	d2	L	ℓ 1	ℓ 2	T1	T2	kg	Nut
0041 01101619	<b>EM -1619A</b>	19	3 ~ 10	16	—	26	7.5	100	50	20	17	24	0.17	EMP-19A (with φ10 collet)
0041 01102019	<b>-2019A</b>	19	3 ~ 10	20	—	26	11.5	125	50	20	17	24	0.23	EMP-19A (with φ10 collet)
0041 01102219	<b>-2219A</b>	19	3 ~ 10	22	—	26	11.5	125	50	20	17	24	0.27	EMP-19A (with φ10 collet)
0041 01102519	<b>-2519A</b>	19	3 ~ 10	25	—	26	11.5	150	50	20	17	24	0.41	EMP-19A (with φ10 collet)
0041 01103219	<b>-3219A</b>	19	3 ~ 10	32	—	26	11.5	150	65	20	22	24	0.65	EMP-19A (with φ10 collet)
0041 01104219	<b>-4219A</b>	19	3 ~ 10	42	—	26	11.5	175	80	20	22	24	1.20	EMP-19A (with φ10 collet)
0041 01100119	<b>-T119A</b>	19	3 ~ 10	—	1	26	—	120	58	20	17	24	0.16	EMP-19A (with φ10 collet)
0041 01100219	<b>-T219A</b>	19	3 ~ 10	—	2	26	—	150	75	20	17	24	0.27	EMP-19A (with φ10 collet)
0041 01100319	<b>-T319A</b>	19	3 ~ 10	—	3	26	—	180	86	20	17	24		EMP-19A (with φ10 collet)
0041 01102028	<b>EM -2028A</b>	28	3 ~ 16	20	—	36	11.5	125	60	25	27	33	0.34	EMP-28A
0041 01102228	<b>-2228A</b>	28	3 ~ 16	22	—	36	11.5	125	60	25	27	33		EMP-28A
0041 01102528	<b>-2528A</b>	28	3 ~ 16	25	—	36	17.5	150	60	25	27	33	0.4	EMP-28A
0041 01125428	<b>-25428A</b>	28	3 ~ 16	25.4	—	36	17.5	150	60	25	27	33		EMP-28A
0041 01103028	<b>-3028A</b>	28	3 ~ 16	30	—	36	17.5	150	60	25	27	33	0.55	EMP-28A
0041 01131728	<b>-317528A</b>	28	3 ~ 16	31.75	—	36	17.5	150	60	25	27	33		EMP-28A
0041 01103228	<b>-3228A</b>	28	3 ~ 16	32	—	36	17.5	150	60	25	27	33	0.62	EMP-28A
0041 01103528	<b>-3528A</b>	28	3 ~ 16	35	—	36	17.5	175	60	25	27	33		EMP-28A
0041 01104228	<b>-4228A</b>	28	3 ~ 16	42	—	36	17.5	175	60	25	27	33	1.24	EMP-28A
0041 01100228	<b>-T228A</b>	28	3 ~ 16	—	2	36	—	150	75	25	27	33		EMP-28A
0041 01100328	<b>-T328A</b>	28	3 ~ 16	—	3	36	—	180	86	25	27	33	0.58	EMP-28A
0041 01100428	<b>-T428A</b>	28	3 ~ 16	—	4	36	—	205	87.5	25	27	33		EMP-28A

1. Complete with nut.
2. Collet and spanner are sold separately. (Please refer to the subsequent page.)

Ordering Example

**EM - 20 28A**  
Size Min. boring dia. 28 series

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

## Accessories

### Straight collet for 19 series and 28 series EMS

Code	Model	I.D.
0070 01010030	<b>EMS -0310</b>	3.0
0070 01010035	<b>-03510</b>	3.5
0070 01010040	<b>-0410</b>	4.0
0070 01010050	<b>-0510</b>	5.0
0070 01010060	<b>-0610</b>	6.0
0070 01010077	<b>-07710</b>	7.7
0070 01010080	<b>-0810</b>	8.0

### Straight collet for 28 series EMS

Code	Model	I.D.
0070 01016050	<b>EMS -0516</b>	5.0
0070 01016060	<b>-0616</b>	6.0
0070 01016077	<b>-07716</b>	7.7
0070 01016080	<b>-0816</b>	8.0
0070 01016090	<b>-0916</b>	9.0
0070 01016100	<b>-1016</b>	10.0
0070 01016110	<b>-1116</b>	11.0
0070 01016120	<b>-1216</b>	12.0
0070 01016125	<b>-12516</b>	12.5
0070 01016130	<b>-1316</b>	13.0
0070 01016140	<b>-1416</b>	14.0



### Taper collet

Code	Model	I.D.
0070 01028100	<b>EMC -1028</b>	10.0
0070 01028110	<b>-1128</b>	11.0
0070 01028120	<b>-1228</b>	12.0
0070 01028125	<b>-12528</b>	12.5
0070 01028130	<b>-1328</b>	13.0
0070 01028140	<b>-1428</b>	14.0
0070 01028160	<b>-1628</b>	16.0

### Spanner



Code	Model	Nut
0803 00000011	<b>S-1L</b>	EMP-19A
0803 00000014	<b>S-4L</b>	EMP-28A

### Set for 19 series

19 Sries	Code	Shank	SET	Nut with collet	Straight collet				
				EMP-19A	EMS-0810	EMS-0610	EMS-0510	EMS-0410	EMS-0310
				φ 10	φ 8	φ 6	φ 5	φ 4	φ 3
 <p style="writing-mode: vertical-rl; transform: rotate(180deg);">S T R A I G H T</p>	0040 01016191	<b>EM -1619A</b>	B	Yes	Yes	Yes			
	0040 01016192	<b>-1619A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01020191	<b>-2019A</b>	B	Yes	Yes	Yes			
	0040 01020192	<b>-2019A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01022191	<b>-2219A</b>	B	Yes	Yes	Yes			
	0040 01022192	<b>-2219A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01025191	<b>-2519A</b>	B	Yes	Yes	Yes			
	0040 01025192	<b>-2519A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01032191	<b>-3219A</b>	B	Yes	Yes	Yes			
	0040 01032192	<b>-3219A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01042191	<b>-4219A</b>	B	Yes	Yes	Yes			
	0040 01042192	<b>-4219A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
 <p style="writing-mode: vertical-rl; transform: rotate(180deg);">M O R S E T A P E R</p>	0040 01001191	<b>EM -T119A</b>	B	Yes	Yes	Yes			
	0040 01001192	<b>-T119A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01002191	<b>-T219A</b>	B	Yes	Yes	Yes			
	0040 01002192	<b>-T219A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01003191	<b>-T319A</b>	B	Yes	Yes	Yes			
0040 01003192	<b>-T319A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	

Each set completes with a spanner and collets marked "Yes" .

Set for 28 series

28 Sries	Code	Shank	SET	Nut EMP-28A	Taper collet	Straight collet				
					EMC-1628	EMS-1216	EMS-1016	EMS-0816	EMS-0616	EMS-0516
					φ 16	φ 12	φ 10	φ 8	φ 6	φ 5
 S T R A I G H T	0040 01020281	<b>EM -2028A</b>	B	Yes	Yes	Yes	Yes			
	0040 01020282	<b>-2028A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01022281	<b>-2228A</b>	B	Yes	Yes	Yes	Yes			
	0040 01022282	<b>-2228A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01025281	<b>-2528A</b>	B	Yes	Yes	Yes	Yes			
	0040 01025282	<b>-2528A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01025421	<b>-25428A</b>	B	Yes	Yes	Yes	Yes			
	0040 01025422	<b>-25428A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01030281	<b>-3028A</b>	B	Yes	Yes	Yes	Yes			
	0040 01030282	<b>-3028A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01031751	<b>-317528A</b>	B	Yes	Yes	Yes	Yes			
	0040 01031752	<b>-317528A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01032281	<b>-3228A</b>	B	Yes	Yes	Yes	Yes			
	0040 01032282	<b>-3228A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01035281	<b>-3528A</b>	B	Yes	Yes	Yes	Yes			
	0040 01035282	<b>-3528A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
0040 01042281	<b>-4228A</b>	B	Yes	Yes	Yes	Yes				
0040 01042282	<b>-4228A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
 M O R S E T A P E R	0040 01002281	<b>EM -T228A</b>	B	Yes	Yes	Yes	Yes			
	0040 01002282	<b>-T228A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01003281	<b>-T328A</b>	B	Yes	Yes	Yes	Yes			
	0040 01003282	<b>-T328A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	0040 01004281	<b>-T428A</b>	B	Yes	Yes	Yes	Yes			
	0040 01004282	<b>-T428A</b>	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Each set completes with a spanner and collets marked "Yes" .

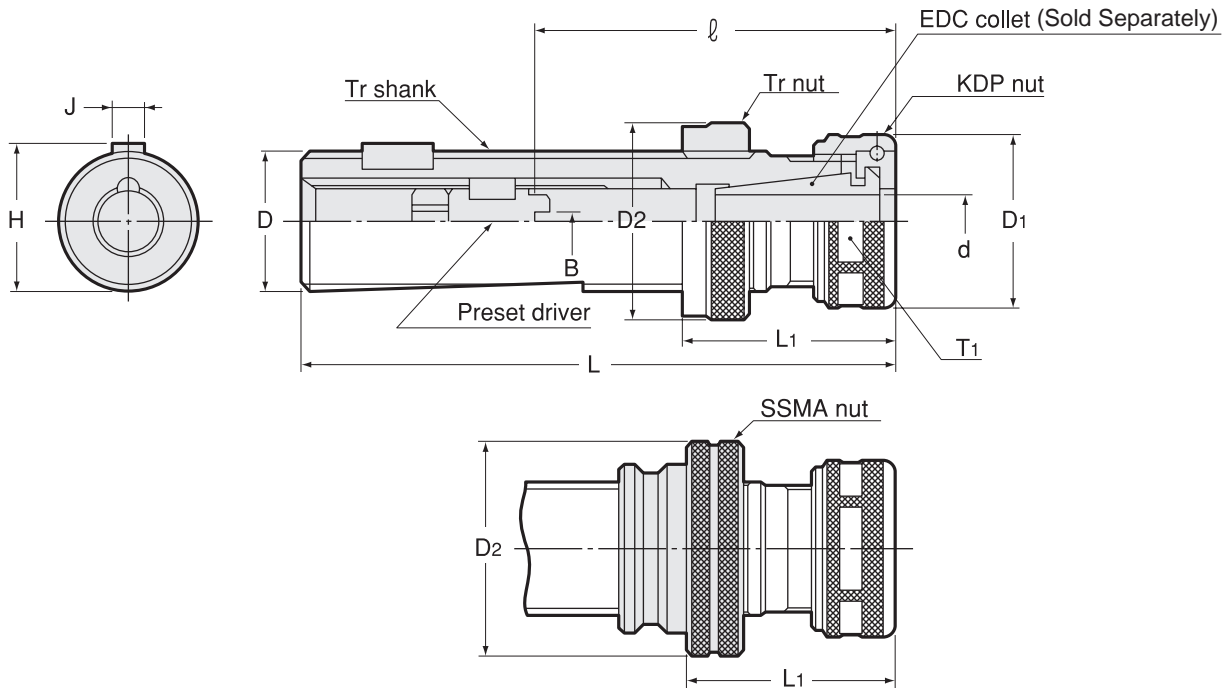
Ordering Example

**EM - 20 19A - C**  
 Shank size 19 series C set

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

# DC

## Straight Drill Chuck




Code	Model	D h6	d Chucking Range	B	$\varnothing$	Preset driver	L	D1	D2	L1	H	J	T1	Nut	kg
0060 3016 ※ 000	<b>DC-1619 /Tr16</b>	16	2.8 ~ 9	0	18 ~ 58	DCS -009	103	26	25	35 ~ 50	17.1	5	24	KDP-1916	0.1
0060 4016 ※ 000	<b>/SSMA16</b>	16	2.8 ~ 9	4	31 ~ 71	DCS -409	103	26	26	32 ~ 47	17.1	5	24	KDP-1916	0.1
0060 3020 ※ 000	<b>DC-2019 /Tr20</b>	20	2.8 ~ 9	0	18 ~ 58	DCS -009	108	26	32	35 ~ 50	21.1	5	24	KDP-1916	0.2
0060 4020 ※ 000	<b>/SSMA20</b>	20	2.8 ~ 9	4	31 ~ 71	DCS -409	108	26	33	32 ~ 47	21.1	5	24	KDP-1916	0.2
0060 3025 ※ 000	<b>DC-2524 /Tr25</b>	25	2.8 ~ 12	0	23 ~ 63	DCS -012	118	32	37	38 ~ 63	26.5	6	30	KDP-2422	0.3
0060 4025 ※ 000	<b>/SSMA25</b>	25	2.8 ~ 12	5	33 ~ 73	DCS -512	118	32	40	36 ~ 61	26.5	6	30	KDP-2422	0.4
0060 3028 ※ 000	<b>DC-2828 /Tr28</b>	28	4.0 ~ 16	0	28 ~ 78	DCS -016	122	36	40	40 ~ 68	29.5	6	33	KDP-2825	0.4
0060 4028 ※ 000	<b>/SSMA28</b>	28	4.0 ~ 16	5	43 ~ 93	DCS -516	122	36	42	38 ~ 66	29.5	6	33	KDP-2825	0.4
0060 3032 ※ 000	<b>DC-3228 /Tr32</b>	32	4.0 ~ 16	0	28 ~ 78	DCS -016	143	36	45	40 ~ 68	33.5	8	33	KDP-2825	0.6
0060 4032 ※ 000	<b>/SSMA32</b>	32	4.0 ~ 16	5	43 ~ 93	DCS -516	143	36	47	36 ~ 64	33.5	8	33	KDP-2825	0.7
0060 3036 ※ 000	<b>DC-3636 /Tr36</b>	36	4.0 ~ 22	0	29 ~ 89	DCS -022	143	46	50	45 ~ 80	37.5	8	42	KDP-3632	0.8
0060 4036 ※ 000	<b>/SSMA36</b>	36	4.0 ~ 22	5	48 ~ 108	DCS -522	143	46	54	41 ~ 76	37.5	8	42	KDP-3632	0.8
				6	48 ~ 108	DCS -622									
				8	48 ~ 108	DCS -822									

1. Complete with nut and preset driver. Collet and spanner are sold separately. (P. 444 - 446)  
 2. Dimension B will be inserted in " ※ "


**Collet**

P. 444



**Spanner**

P. 446



Accessories			
Holder Model	Nut	Collet	Spanner
<b>DC -1619</b>	KDP-1916	EDC-d19	S-1L
<b>DC -2019</b>	KDP-1916	EDC-d19	S-1L
<b>DC -2524</b>	KDP-2422	EDC-d24	S-3L
<b>DC -2828</b>	KDP-2825	EDC-d28	S-4L
<b>DC -3228</b>	KDP-2825	EDC-d28	S-4L
<b>DC -3636</b>	KDP-3632	EDC-d36	S-5L

### Ordering Example

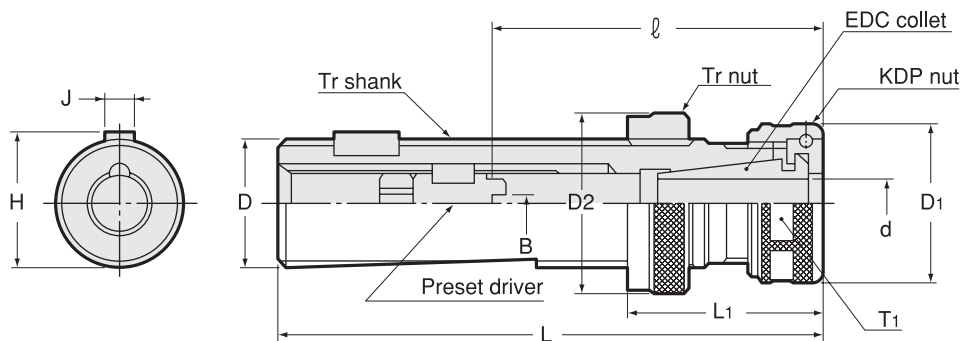
**DC-2828 / Tr28 / 016**  
 Nut                      Preset driver



# DC · T , DC · N

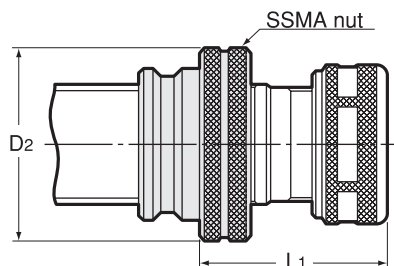
## Straight Drill Chuck

- Use with drilling chuck with SSMA nut enables quick change.



### Applications

- For special purpose machine, transfer lines, machining center, NC lathe, automatic lathe, multiple drilling machine etc.





Code	Model	D <sub>h6</sub>	d Chucking Range	B	ℓ	Preset driver	L	D1	D2	L1	H	J	T1	Nut	kg
0060 3216 ※ 000	<b>DC-1619N /Tr16N</b>	16	2.8 ~ 9	0	18 ~ 58	DCS -009	103	26	25	35 ~ 50	17.5	4	24	KDP-1916	
0060 4216 ※ 000	<b>/SSMA16N (x2)</b>	16	2.8 ~ 9	4	31 ~ 71	DCS -409	103	26	26	32 ~ 47	17.5	4	24	KDP-1916	
0060 3416 ※ 000	<b>DC-1619T /Tr16x2</b>	16	2.8 ~ 9	0	18 ~ 58	DCS -009	103	26	25	35 ~ 50	17.0	3	24	KDP-1916	
0060 4416 ※ 000	<b>/SSMA16 (x2)</b>	16	2.8 ~ 9	4	31 ~ 71	DCS -409	103	26	26	32 ~ 47	17.0	3	24	KDP-1916	
0060 3419 ※ 000	<b>DC-1919T /Tr19</b>	19	2.8 ~ 9	0	18 ~ 58	DCS -009	103	26	32	35 ~ 50	21.0	5	24	KDP-1916	0.2
0060 4419 ※ 000	<b>/SSMA19-20</b>	19	2.8 ~ 9	4	31 ~ 71	DCS -409	103	26	33	32 ~ 47	21.0	5	24	KDP-1916	0.2
0060 3220 ※ 000	<b>DC-2019N /Tr20N</b>	20	2.8 ~ 9	0	18 ~ 58	DCS -009	108	26	32	35 ~ 50	22.0	5	24	KDP-1916	0.2
0060 4220 ※ 000	<b>/SSMA20N</b>	20	2.8 ~ 9	4	31 ~ 71	DCS -409	108	26	33	32 ~ 47	22.0	5	24	KDP-1916	0.2
0060 3422 ※ 000	<b>DC-2224T /Tr22</b>	22	2.8 ~ 12	0	23 ~ 63	DCS -012	118	32	32	38 ~ 63	24.0	5	30	KDP-2422	0.3
0060 4422 ※ 000	<b>/SSMA22</b>	22	2.8 ~ 12	5	33 ~ 73	DCS -512	118	32	37	36 ~ 61	24.0	5	30	KDP-2422	0.3
0060 3224 ※ 000	<b>DC-2424N /Tr24N</b>	24	2.8 ~ 12	0	23 ~ 63	DCS -012	108	32	37	38 ~ 63	26.0	5	30	KDP-2422	0.3
0060 4224 ※ 000	<b>/SSMA24-25N</b>	24	2.8 ~ 12	5	33 ~ 73	DCS -512	108	32	40	36 ~ 61	26.0	5	30	KDP-2422	0.3
0060 3226 ※ 000	<b>DC-2624N /Tr26N</b>	26	2.8 ~ 12	0	23 ~ 63	DCS -012	122	32	40	38 ~ 63	28.6	7	30	KDP-2422	0.4
0060 4226 ※ 000	<b>/SSMA26-28N</b>	26	2.8 ~ 12	5	33 ~ 73	DCS -512	122	32	42	36 ~ 61	28.6	7	30	KDP-2422	0.4
0060 3426 ※ 000	<b>DC-2624T /Tr26</b>	26	2.8 ~ 12	0	23 ~ 63	DCS -012	122	32	40	38 ~ 63	28.0	5	30	KDP-2422	0.4
0060 4426 ※ 000	<b>/SSMA26-28</b>	26	2.8 ~ 12	5	33 ~ 73	DCS -512	122	32	42	36 ~ 61	28.0	5	30	KDP-2422	0.4
0060 3230 ※ 000	<b>DC-3028N /Tr30N</b>	30	4 ~ 16	0	28 ~ 78	DCS -016	122	36	45	40 ~ 68	32.6	7	33	KDP-2825	0.6
0060 4230 ※ 000	<b>/SSMA30-36N</b>	30	4 ~ 16	5	43 ~ 93	DCS -516	122	36	54	36 ~ 64	32.6	7	33	KDP-2825	0.6
0060 3435 ※ 000	<b>DC-3536T /Tr35</b>	35	4 ~ 22	0	29 ~ 89	DCS -022	143	46	50	45 ~ 80	38.0	7	42	KDP-3632	0.8
0060 4435 ※ 000	<b>/SSMA35-36</b>	35	4 ~ 22	5	48 ~ 108	DCS -522	143	46	54	41 ~ 76	38.0	7	42	KDP-3632	0.8
0060 3236 ※ 000	<b>DC-3636N /Tr36N</b>	36	4 ~ 22	0	29 ~ 89	DCS -022	143	46	50	45 ~ 80	39.2	10	42	KDP-3632	0.8
0060 4236 ※ 000	<b>/SSMA36N</b>	36	4 ~ 22	5	48 ~ 108	DCS -522	143	46	54	41 ~ 76	39.2	10	42	KDP-3632	0.8
				6	48 ~ 108	DCS -622	143	46	54	41 ~ 76	39.2	10	42	KDP-3632	0.8
				8	48 ~ 108	DCS -822	143	46	54	41 ~ 76	39.2	10	42	KDP-3632	0.8

1. Collet and spanner are sold separately. (P. 444 - 446)
2. Dimension B will be inserted in " ※ "

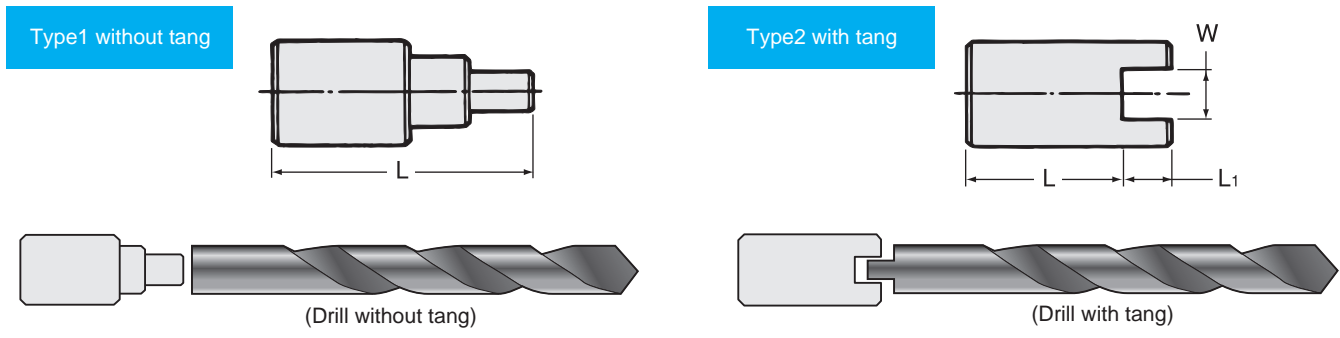
### Ordering Example

**DC-3536T** / **Tr35** / **622**  
Nut Preset driver

<b>Collet</b> P. 444	<b>Spanner</b> P. 446
	

Accessories				
Model	Nut (Included)	Collet	Spanner	
DC -1619N	KDP-1916	EDC-d19	S-1L	
DC -1619T	KDP-1916	EDC-d19	S-1L	
DC -1919T	KDP-1916	EDC-d19	S-1L	
DC -2019N	KDP-1916	EDC-d19	S-1L	
DC -2224T	KDP-2422	EDC-d24	S-3L	
DC -2424N	KDP-2422	EDC-d24	S-3L	
DC -2624N	KDP-2422	EDC-d24	S-3L	
DC -2624T	KDP-2422	EDC-d24	S-3L	
DC -3028N	KDP-2825	EDC-d28	S-4L	
DC -3536T	KDP-3632	EDC-d36	S-5L	
DC -3636N	KDP-3632	EDC-d36	S-5L	

### Preset driver

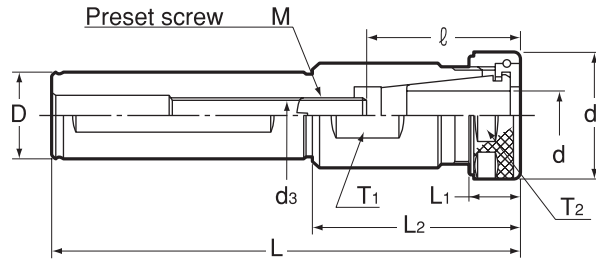


Code	Model	Holder model	Type	W +0.3 +0.2	L	L1
0061 02000009	<b>DCS -009</b>	DC-1619, 1619N, 1619T, 1919T, 2019, 2019N	1	—	28.3	—
0061 02000409	<b>DCS -409</b>	DC-1619, 1619N, 1619T, 1919T, 2019, 2019N	2	4	15.3	3.5
0061 02000012	<b>DCS -012</b>	DC-2224T, 2424N, 2524, 2624T, 2624N	1	—	29.0	—
0061 02000512	<b>DCS -512</b>	DC-2224T, 2424N, 2524, 2624T, 2624N	2	5	19.5	3.5
0061 02000016	<b>DCS -016</b>	DC-2828, 3028N, 3228	1	—	35.0	—
0061 02000516	<b>DCS -516</b>	DC-2828, 3028N, 3228	2	5	20.0	4.0
0061 02000616	<b>DCS -616</b>	DC-2828, 3028N, 3228	2	6	20.0	4.0
0061 02000022	<b>DCS -022</b>	DC-3536T, 3636, 3636N	1	—	46.5	—
0061 02000522	<b>DCS -522</b>	DC-3536T, 3636, 3636N	2	5	27.5	4.0
0061 02000622	<b>DCS -622</b>	DC-3536T, 3636, 3636N	2	6	27.5	4.0
0061 02000822	<b>DCS -822</b>	DC-3536T, 3636, 3636N	2	8	27.5	4.0

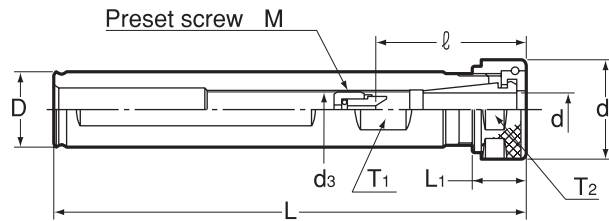
# ED • A

## Straight Drill Chuck

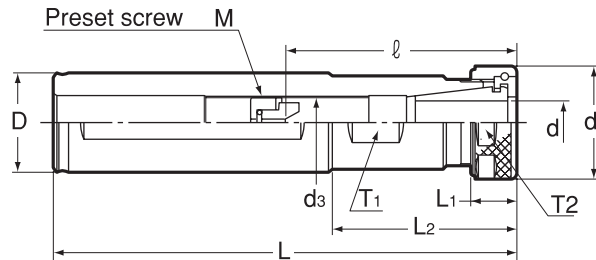
ST Type1



ST Type2

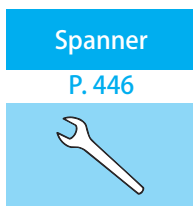
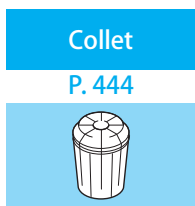


ST Type3



Code	Model	Chucking range (d)	Type	D <sub>h6</sub>	L	d1	L1	L2	M	d3	ℓ	T1	T2	Nut	kg
0060 52001619	ED -1619A	2.8 ~ 9	1	16	125	26	14	50	M8	6.8	30 ~ 40	17	24	KDP-1916	0.2
0060 52002019	-2019A	2.8 ~ 9	2	20	125	26	14	—	M10	9.3	30 ~ 60	17	24	KDP-1916	
0060 52002219	-2219A	2.8 ~ 9	3	22	125	26	14	50	M10	9.3	30 ~ 60	17	24	KDP-1916	
0060 52002519	-2519A	2.8 ~ 9	3	25	125	26	14	50	M10	9.3	30 ~ 60	17	24	KDP-1916	
0060 52025419	-25419A	2.8 ~ 9	3	25.4	125	26	14	50	M10	9.3	30 ~ 60	17	24	KDP-1916	
0060 52031719	-317519A	2.8 ~ 9	3	31.75	150	26	14	60	M10	9.3	30 ~ 60	17	24	KDP-1916	
0060 52003219	-3219A	2.8 ~ 9	3	32	150	26	14	60	M10	9.3	30 ~ 60	17	24	KDP-1916	
0060 52002028	ED -2028A	4 ~ 16	1	20	135	36	15	60	M10	8.6	43 ~ 55	27	33	KDP-2825	0.4
0060 52002228	-2228A	4 ~ 16	1	22	135	36	15	60	M10	8.6	43 ~ 55	27	33	KDP-2825	0.4
0060 52002528	-2528A	4 ~ 16	1	25	135	36	15	60	M10	8.6	43 ~ 55	27	33	KDP-2825	0.5
0060 52025428	-25428A	4 ~ 16	1	25.4	135	36	15	60	M10	8.6	43 ~ 55	27	33	KDP-2825	0.5
0060 52031728	-317528A	4 ~ 16	3	31.75	150	36	15	60	M17	16.3	43 ~ 75	27	33	KDP-2825	0.6
0060 52003228	-3228A	4 ~ 16	3	32	150	36	15	60	M17	16.3	43 ~ 75	27	33	KDP-2825	0.6
0060 52004028	-4028A	4 ~ 16	3	40	175	36	15	75	M17	16.3	43 ~ 75	27	33	KDP-2825	1.1
0060 52004228	-4228A	4 ~ 16	3	42	175	36	15	75	M17	16.3	43 ~ 75	27	33	KDP-2825	1.1

Collet and spanner are sold separately.

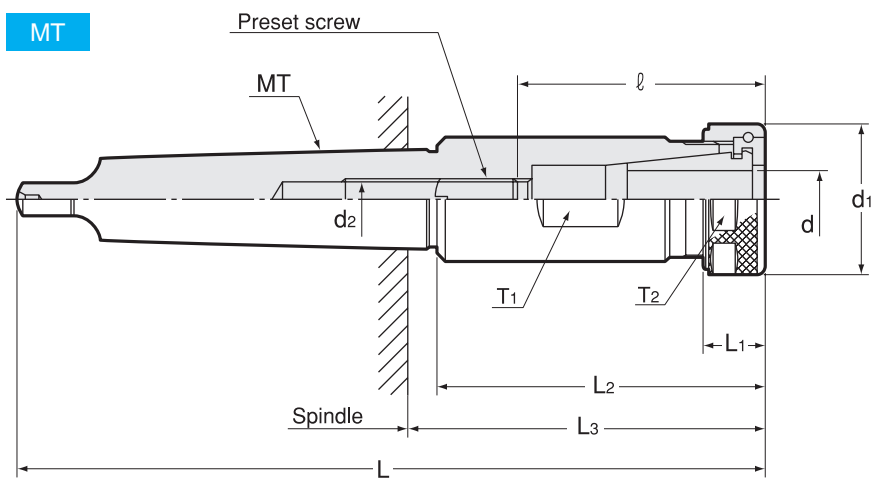


Accessories			
Model	Nut (Included)	Collet	Spanner
ED-○○19A	KDP-1916	EDC-d19	S-1L
ED-○○28A	KDP-2825	EDC-d28	S-4L

### Ordering Example

**ED - 16 19A**  
D 19Aseries


- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine**
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck**
- Floating Holder




Code	Model	d Chucking range	MT	L	d1	L1	L2	M	L3	d2	ℓ	T1	T2	Nut	kg
0060 52000119	<b>ED -T119A</b>	2.8 ~ 9	1	120	26	14	50	—	58	—	30	17	24	KDP-1916	0.1
0060 52000219	<b>-T219A</b>	2.8 ~ 9	2	150	26	14	65	M10	75	9.3	30 ~ 60	17	24	KDP-1916	0.2
0060 52000319	<b>-T319A</b>	2.8 ~ 9	3	180	26	14	80	M10	86	9.3	30 ~ 60	17	24	KDP-1916	0.3
0060 52000228	<b>-T228A</b>	4 ~ 16	2	150	36	15	65	M8	75	6.8	43 ~ 55	27	33	KDP-2825	0.4
0060 52000328	<b>-T328A</b>	4 ~ 16	3	180	36	15	80	M10	86	8.6	43 ~ 55	27	33	KDP-2825	0.6
0060 52000428	<b>-T428A</b>	4 ~ 16	4	205	36	15	80	M17	88	16.3	43 ~ 75	27	33	KDP-2825	0.8

Collet and spanner are sold separately. (P. 444 - 446)

**Collet**  
P. 444



**Spanner**  
P. 446



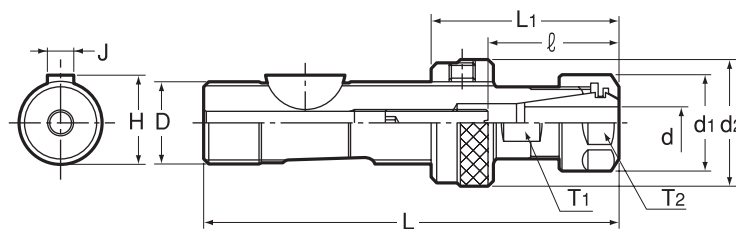
Accessories			
Model	Nut (Included)	Collet	Spanner
<b>ED-○○19A</b>	KDP-1916	EDC-d19	S-1L
<b>ED-○○28A</b>	KDP-2825	EDC-d28	S-4L

**Ordering Example**  
**ED - T1 19A**  
 Shank size 19Aseries

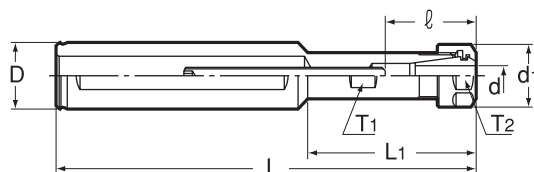
# ED For Small Diameters

Straight Drill Chuck For Small Diameters

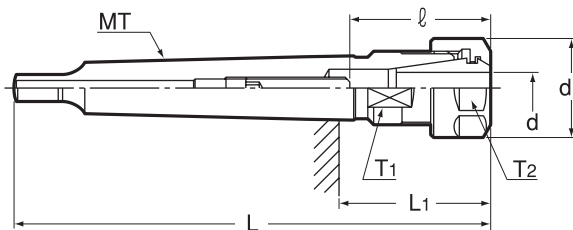
Tr Type1



ST Type2



MT Type3



Code	Model	d Chucking range	Type	D <sub>h6</sub>	MT	L	d1	d2	ℓ	L1	H <sub>0-0.2</sub>	J <sub>h9</sub>	T1	T2	Nut	kg	Collet
0060 50011007	ED -Tr1007/Tr10	0.5 ~ 7	1	10	-	72	19	18	18 ~ 31 (21)	32 ~ 42	10.9	3	12	17	KDP-1414	0.1	FDC-07
0060 50011207	-Tr1207/Tr12	0.5 ~ 7	1	12	-	72	19	20	18 ~ 31	32 ~ 42	12.9	3	12	17	KDP-1414	0.1	
0060 50011607	-Tr1607/Tr16	0.5 ~ 7	1	16	-	80	19	25	18 ~ 31	35 ~ 45	17.1	5	12	17	KDP-1414	0.1	
0060 50001607	ED -1607	0.5 ~ 7	2	16	-	125	19	-	18 ~ 31	50	-	-	12	17	KDP-1414	0.1	FDC-07
0060 50002007	-2007	0.5 ~ 7	2	20	-	125	19	-	18 ~ 31	50	-	-	12	17	KDP-1414	0.2	
0060 50000007	ED -T007	0.5 ~ 7	3	-	0	85.5	19	-	18 ~ 31 (21)	29	-	-	12	17	KDP-1414		FDC-07
0060 50000107	-T107	0.5 ~ 7	3	-	1	91.5	19	-	18 ~ 31	29	-	-	12	17	KDP-1414		

1. Collet are sold separately. (P. 444)

2. ℓ dimension in bracket is valid only when the tool shank is φ5.1mm or bigger.

Collet

P. 444



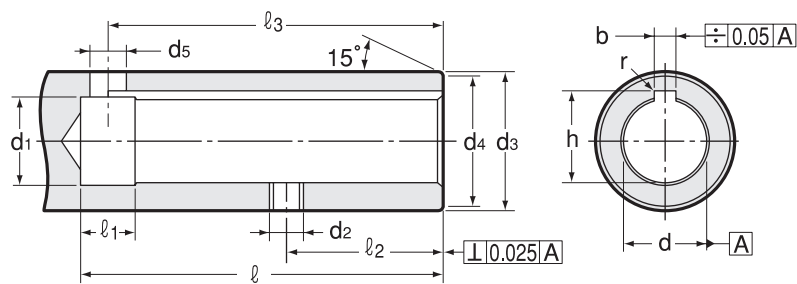
### Accessories

Holder Model	Nut (Included)	Collet	Spanner
All Model	KDP-1414	FDC-07	Width 17mm

### Ordering Example

**ED - 16 07**  
D 07series

Spindle Dimensions for ED-07 series



寸法 Size	d H6	ℓ (min)	d1	d2	d3 g6	d4	d5	ℓ 1	ℓ 2 ± 0.1	ℓ 3	b	h +0.1 0
10	10	41	10.6	M5	18	17.4	5	8	14	37	3 +0.012 +0.06	11
12	12	41	12.6	M5	20	19.2	5	8	14	37	3 +0.012 +0.06	13
16	16	46	16.6	M6	25	24	6	8	16	42	5 +0.145 +0.07	17.3

Special spindle dimension shown above is different from DIN standard.

- BT
- CAT
- AHO
- HSK-A/E/F/C
- HSK-T
- UTS
- Specialized Machine
- Related Equipment
- Bush & Chamfering Drill
- Sub Holder
- Tapping Chuck
- Tap Adapter
- Adjustable Adapter
- Endmill Chuck
- Straight Drill Chuck
- Floating Holder

# MEMO

# Floating Holder

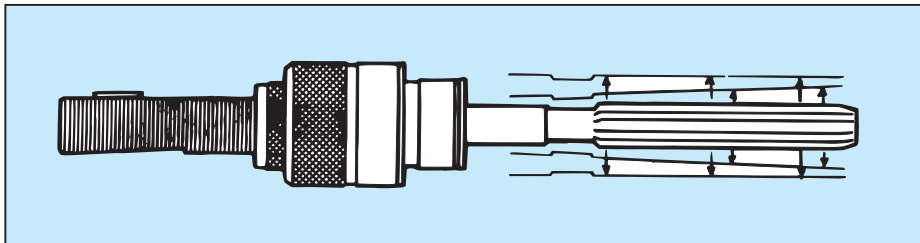
## Applications

High precision reaming with special purpose machines and transfer lines.

## Feature

### 1. Top quality floating mechanism

Radial float and angular float mechanisms compensate for misalignment between reamer and pre-drilled hole.



Radial & parallel float

+

Angular float

### 2. Use for both horizontal and vertical spindles

Built-in locking function prevents reamer from sagging on horizontal spindles.

### 3. No rust

No loss of precision due to rust by special surface treatment.

BT  
CAT  
AHO  
HSK-A/E/F/C  
HSK-T  
UTS

Specialized Machine

Related Equipment

Bush & Chamfering Drill

Sub Holder

Tapping Chuck

Tap Adapter

Adjustable Adapter

Endmill Chuck

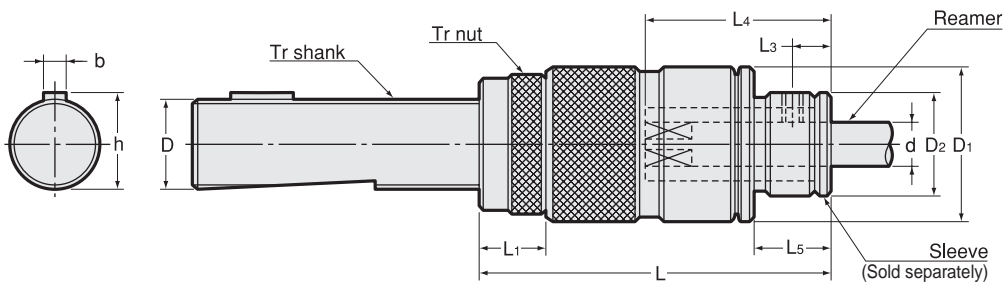
Straight Drill Chuck

Floating Holder



# FH-Tr

## Floating Holder



Code	Model	d Reamer shank	Sleeve size	Float		D	b	h	D1	L	L1	L3	L5	D2	kg
				Radial	Angular										
0180 00003000	<b>FH0 -Tr16</b>	3.00 ~ 8.00	FHS0	0.4	1°	16	5	17.2	28	62~80	12	7	15	19.5	0.3
0180 00003001	<b>-Tr16T</b>	3.00 ~ 8.00	FHS0	0.4	1°	16	3	17.3	28	62~80	12	7	15	19.5	
0180 00003002	<b>-Tr16N</b>	3.00 ~ 8.00	FHS0	0.4	1°	16	4	17.5	28	62~80	12	7	15	19.5	0.3
0180 00003003	<b>-Tr19</b>	3.00 ~ 8.00	FHS0	0.4	1°	19	5	21.1	28	62~80	12	7	15	19.5	0.4
0180 00003004	<b>-Tr20</b>	3.00 ~ 8.00	FHS0	0.4	1°	20	5	21.2	28	62~75	12	7	15	19.5	0.4
0180 00003100	<b>FH1 -Tr16</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	16	5	17.2	36	69~87	12	8	19	23	0.4
0180 00003101	<b>-Tr16T</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	16	3	17.3	36	69~87	12	8	19	23	
0180 00003102	<b>-Tr16N</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	16	4	17.5	36	69~87	12	8	19	23	0.4
0180 00003103	<b>-Tr19</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	19	5	21.1	36	66~84	12	8	19	23	0.5
0180 00003104	<b>-Tr20</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	20	5	21.2	36	66~79	12	8	19	23	0.5
0180 00003105	<b>-Tr22</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	22	5	24.1	36	66~84	12	8	19	23	0.5
0180 00003106	<b>-Tr24</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	24	5	26.1	36	66~94	12	8	19	23	0.6
0180 00003107	<b>-Tr25</b>	4.00 ~ 10.00	FHS1	0~0.4 Adjustable	0~1° Adjustable	25	6	26.5	36	66~84	12	8	19	23	0.6
0180 00003208	<b>FH2 -Tr26T</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	26	5	28.1	55	87~110	12	14	25	38	1.2
0180 00003209	<b>-Tr26N</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	26	7	28.6	55	87~110	12	14	25	38	1.2
0180 00003210	<b>-Tr28</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	28	6	29.5	55	87~118	12	14	25	38	1.2
0180 00003211	<b>-Tr30</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	30	7	33.1	55	89~118	14	14	25	38	1.3
0180 00003212	<b>-Tr32</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	32	8	33.5	55	89~115	14	14	25	38	1.5
0180 00003213	<b>-Tr35</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	35	7	38.1	55	89~125	14	14	25	38	1.6
0180 00003214	<b>-Tr36</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	36	8	37.5	55	89~127	14	14	25	38	1.7
0180 00003215	<b>-Tr36N</b>	8.10 ~ 20.00	FHS2	0~0.6 Adjustable	0~1° Adjustable	36	10	39.6	55	89~127	14	14	25	38	

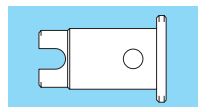
### L4 Dimension

Model	d Reamer shank	L4
<b>FH0 FH1</b>	3.00 ~ 3.79	23
	3.80 ~ 4.79	26
	4.80 ~ 5.49	30
	5.50 ~ 10.00	35
<b>FH2</b>	8.10 ~ 10.79	42
	10.80 ~ 12.09	50
	12.10 ~ 20.00	55

1. Sleeve is sold separately.
2. To adjust the floating amount, please use the adjustable pin wrench GWA.
3. Please refer to P. 465 for GWA.

### Sleeve

P. 494



Model	Wrench
FH1	GWA1
FH2	

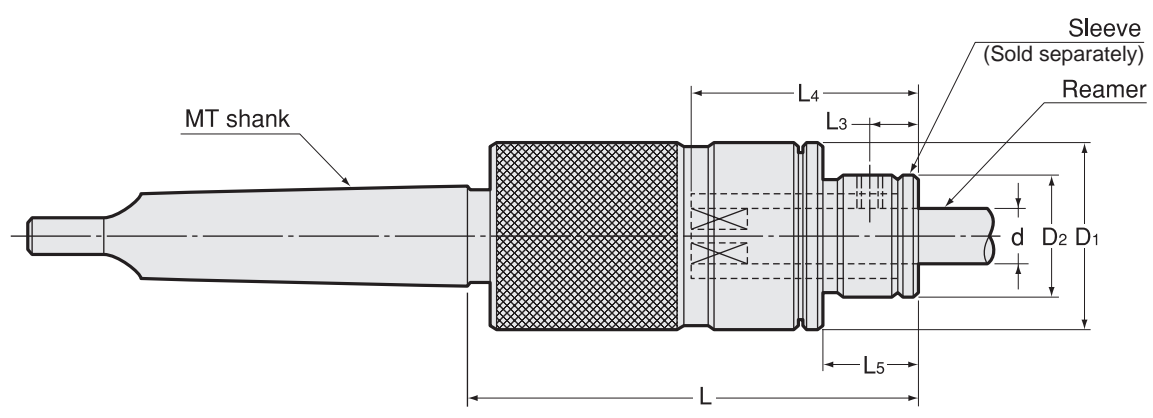
### Ordering Example

**FH0 - Tr20**

Shank size

# FH-MT

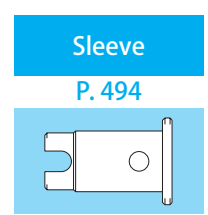
## Floating Holder



Code	Model	d Reamer shank	Sleeve size	Float		D1	L	L3	L5	D2	kg
				Radial	Angular						
0180 00002001	<b>FH0 -MT1</b>	3.00 ~ 8.00	FHS0	0.4	1°	28	65	7	15	19.5	0.3
0180 00002002	<b>-MT2</b>	3.00 ~ 8.00	FHS0	0.4	1°	28	65	7	15	19.5	0.4
0180 00002101	<b>FH1 -MT1</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 Adjustable	0 ~ 1° Adjustable	36	70	8	19	23	0.4
0180 00002102	<b>-MT2</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 Adjustable	0 ~ 1° Adjustable	36	70	8	19	23	0.5
0180 00002202	<b>FH2 -MT2</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 Adjustable	0 ~ 1° Adjustable	55	95	14	25	38	1.2
0180 00002203	<b>-MT3</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 Adjustable	0 ~ 1° Adjustable	55	95	14	25	38	1.3

L4 Dimension		
Model	d Reamer shank	L4
<b>FH0 FH1</b>	3.00 ~ 3.79	23
<b>FH0 FH1</b>	3.80 ~ 4.79	26
<b>FH0 FH1</b>	4.80 ~ 5.49	30
<b>FH0 FH1</b>	5.50 ~ 10.00	35
<b>FH2</b>	8.10 ~ 10.79	42
<b>FH2</b>	10.80 ~ 12.09	50
<b>FH2</b>	12.10 ~ 20.00	55

1. Sleeve is sold separately.
2. To adjust the floating amount, please use the adjustable pin wrench GWA. Please refer to P. 465 for GWA.

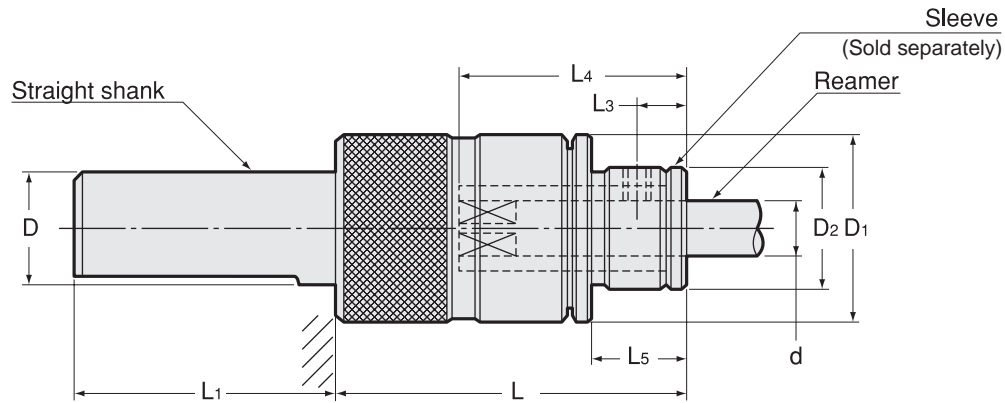


Model	Wrench
FH1	GWA1
FH2	

**Ordering Example**  
**FH0 - MT1**  
 Shank size

# FH-ST

## Floating Holder



Code	Model	d Reamer shank	Sleeve size	Float		D	D1	L	L1	L3	L5	D2	kg
				Radial	Angular								
0180 00001000	<b>FH0 -ST15.875</b>	3.00 ~ 8.00	FHS0	0.4	1°	15.875	28	50	50	7	15	19.5	0.2
0180 00001001	<b>-ST16</b>	3.00 ~ 8.00	FHS0	0.4	1°	16	28	50	50	7	15	19.5	0.2
0180 00001002	<b>-ST19.05</b>	3.00 ~ 8.00	FHS0	0.4	1°	19.05	28	50	50	7	15	19.5	0.2
0180 00001003	<b>-ST20</b>	3.00 ~ 8.00	FHS0	0.4	1°	20	28	50	50	7	15	19.5	0.3
0180 00001100	<b>FH1 -ST15.875</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 0 ~ 1° Adjustable		15.875	36	54	50	8	19	23	0.3
0180 00001101	<b>-ST16</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 0 ~ 1° Adjustable		16	36	54	50	8	19	23	0.3
0180 00001102	<b>-ST19.05</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 0 ~ 1° Adjustable		19.05	36	54	50	8	19	23	0.4
0180 00001103	<b>-ST20</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 0 ~ 1° Adjustable		20	36	54	50	8	19	23	0.4
0180 00001104	<b>-ST25</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 0 ~ 1° Adjustable		25	36	54	50	8	19	23	0.4
0180 00001105	<b>-ST25.4</b>	4.00 ~ 10.00	FHS1	0 ~ 0.4 0 ~ 1° Adjustable		25.4	36	54	50	8	19	23	0.4
0180 00001204	<b>FH2 -ST25</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 0 ~ 1° Adjustable		25	55	75	50	14	25	38	0.9
0180 00001205	<b>-ST25.4</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 0 ~ 1° Adjustable		25.4	55	75	50	14	25	38	0.9
0180 00001206	<b>-ST32</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 0 ~ 1° Adjustable		32	55	75	70	14	25	38	1.1
0180 00001207	<b>-ST35</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 0 ~ 1° Adjustable		35	55	75	70	14	25	38	1.2
0180 00001208	<b>-ST38.1</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 0 ~ 1° Adjustable		38.1	55	75	70	14	25	38	1.3
0180 00001209	<b>-ST40</b>	8.10 ~ 20.00	FHS2	0 ~ 0.6 0 ~ 1° Adjustable		40	55	75	70	14	25	38	1.4

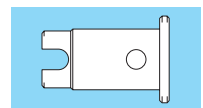
### L4 Dimension

Model	d Reamer shank	L4
<b>FH0 FH1</b>	3.00 ~ 3.79	23
<b>FH0 FH1</b>	3.80 ~ 4.79	26
<b>FH0 FH1</b>	4.80 ~ 5.49	30
<b>FH0 FH1</b>	5.50 ~ 10.00	35
<b>FH2</b>	8.10 ~ 10.79	42
<b>FH2</b>	10.80 ~ 12.09	50
<b>FH2</b>	12.10 ~ 20.00	55

1. Sleeve is sold separately.
2. To adjust the floating amount, please use the adjustable pin wrench GWA. Please refer to P. 465 for GWA.

### Sleeve

P. 494

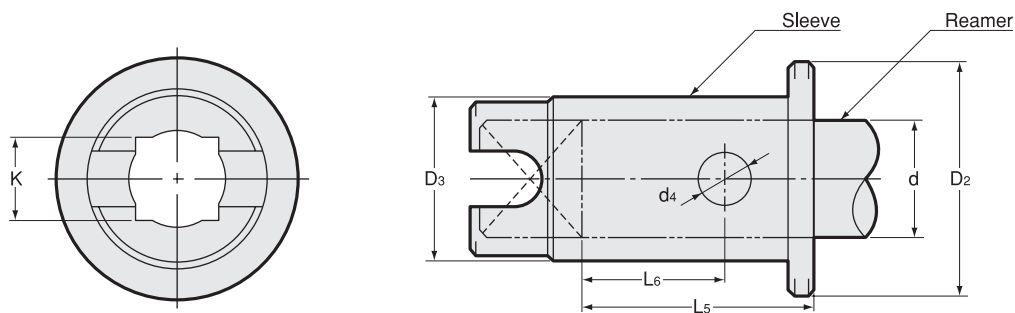


Model	Wrench
FH1	GWA1
FH2	

### Ordering Example

**FH0 - ST16**  
Shank size

# Floating Holder Sleeve



Code	Model	d Reamer shank		K C11	Holder	L5	L6	D2	D3	d4	kg
		More than	Less than								
0185 0000 ※※※※	FHS0- $\phi$ d	2.99	3.35	2.5	FH0- $\bigcirc\bigcirc$	18	11	19.5	11	5	0.03
		3.35	3.78	2.8	FH0- $\bigcirc\bigcirc$	17	10	19.5	11	5	0.03
		3.78	4.30	3.2	FH0- $\bigcirc\bigcirc$	20	13	19.5	11	5	0.03
		4.30	4.70	3.5	FH0- $\bigcirc\bigcirc$	20	13	19.5	11	5	0.02
		4.70	5.40	4.0	FH0- $\bigcirc\bigcirc$	23	16	19.5	11	5	0.02
		5.40	6.00	4.5	FH0- $\bigcirc\bigcirc$	28	21	19.5	11	5	0.02
		6.00	6.70	5.0	FH0- $\bigcirc\bigcirc$	27	20	19.5	11	5	0.02
		6.70	7.30	5.5	FH0- $\bigcirc\bigcirc$	27	20	19.5	11	5	0.02
0185 0001 ※※※※	FHS1- $\phi$ d	3.99	4.30	3.2	FH1- $\bigcirc\bigcirc$	20	12	23	13	6	0.04
		4.30	4.70	3.5	FH1- $\bigcirc\bigcirc$	20	12	23	13	6	0.04
		4.70	5.40	4.0	FH1- $\bigcirc\bigcirc$	23	15	23	13	6	0.03
		5.40	6.00	4.5	FH1- $\bigcirc\bigcirc$	28	20	23	13	6	0.03
		6.00	6.70	5.0	FH1- $\bigcirc\bigcirc$	27	19	23	13	6	0.03
		6.70	7.30	5.5	FH1- $\bigcirc\bigcirc$	27	19	23	13	6	0.03
		7.30	8.00	6.0	FH1- $\bigcirc\bigcirc$	26	18	23	13	6	0.03
		8.00	8.60	6.5	FH1- $\bigcirc\bigcirc$	26	18	23	13	6	0.03
0185 0002 ※※※※	FHS2- $\phi$ d	8.09	8.60	6.5	FH2- $\bigcirc\bigcirc$	33	19	38	26	7	0.20
		8.60	9.50	7.0	FH2- $\bigcirc\bigcirc$	32	18	38	26	7	0.20
		9.50	10.70	8.0	FH2- $\bigcirc\bigcirc$	31	17	38	26	7	0.19
		10.70	12.00	9.0	FH2- $\bigcirc\bigcirc$	38	24	38	26	7	0.19
		12.00	13.50	10.0	FH2- $\bigcirc\bigcirc$	42	28	38	26	7	0.17
		13.50	14.70	11.0	FH2- $\bigcirc\bigcirc$	41	27	38	26	7	0.16
		14.70	16.00	12.0	FH2- $\bigcirc\bigcirc$	40	26	38	26	7	0.15
		16.00	17.20	13.0	FH2- $\bigcirc\bigcirc$	39	25	38	26	7	0.14
		17.20	18.70	14.0	FH2- $\bigcirc\bigcirc$	38	24	38	26	7	0.12
		18.70	20.00	15.0	FH2- $\bigcirc\bigcirc$	37	23	38	26	7	0.11

Available in increments of 0.01 mm according to size of reamer shank.

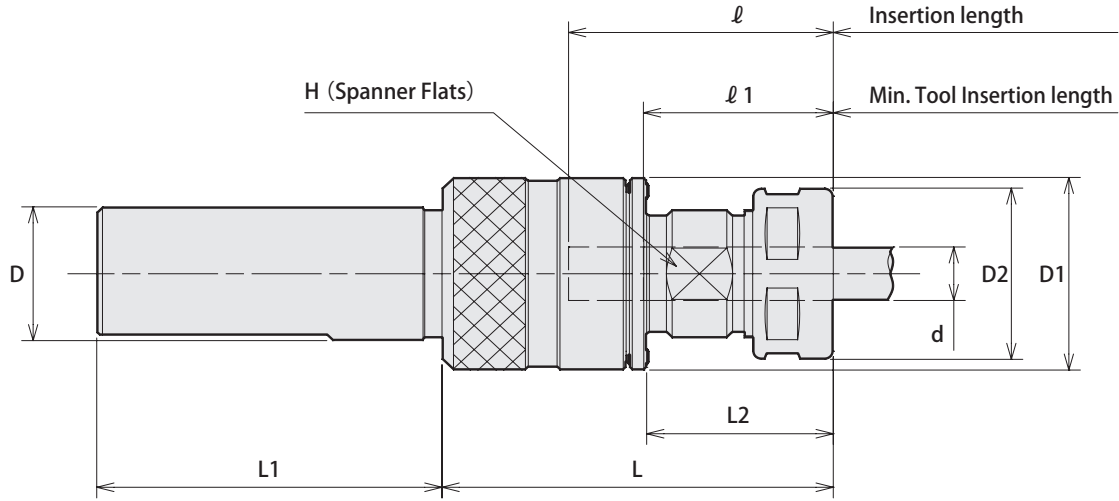
[Ordering Example](#)

**FHS1 - 6.0**

Reamer shank dia.

# FH-ST-HDC-A New

Collet Type Floating Holder



Code	Model	d	Float		D	D1	L	L1	l	l1	L2	D2	H	kg	Collet	Spanner	Adjustable pin wrench
			Radial	Angular													
0180 10001407	FH0 -ST25 -HDC07A	0.5 ~ 7.0	0.4	1°	25	28	62	60	35	22	27	23	17	0.1	FDC-07	S-0	—
0180 10011412	FH1 -ST25 -HDC12A	2.5 ~ 12.0	0 ~ 0.4	0 ~ 1° Adjustable	25	36	68	60	46	33	32	32	22	0.2	FDC-12	S-3L	GWA1
0180 10021422	FH2 -ST25 -HDC22A	3.5 ~ 22.0	0 ~ 0.6	0 ~ 1° Adjustable	25	55	95	60	68	47	44	46	35	0.5	FDC-22	S-5L	

1. For center through coolant feed, please contact NT TOOL beforehand for cutting conditions.
2. Collet and spanner are sold separately.
3. See P.499 for standard tightening torque.
4. For FH0, floating amount and angle are fixed.
5. To adjust floating amount, please use adjustable pin wrench (P.465)

<p>Adjustable pin wrench P. 465</p> 	<p>Collet P. 086 - 089</p> 	<p>Spanner P. 095</p> 
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## Ordering Example

**FH0 - ST25 - HDC 07 A**  
Shank size    Max. collet I.D.