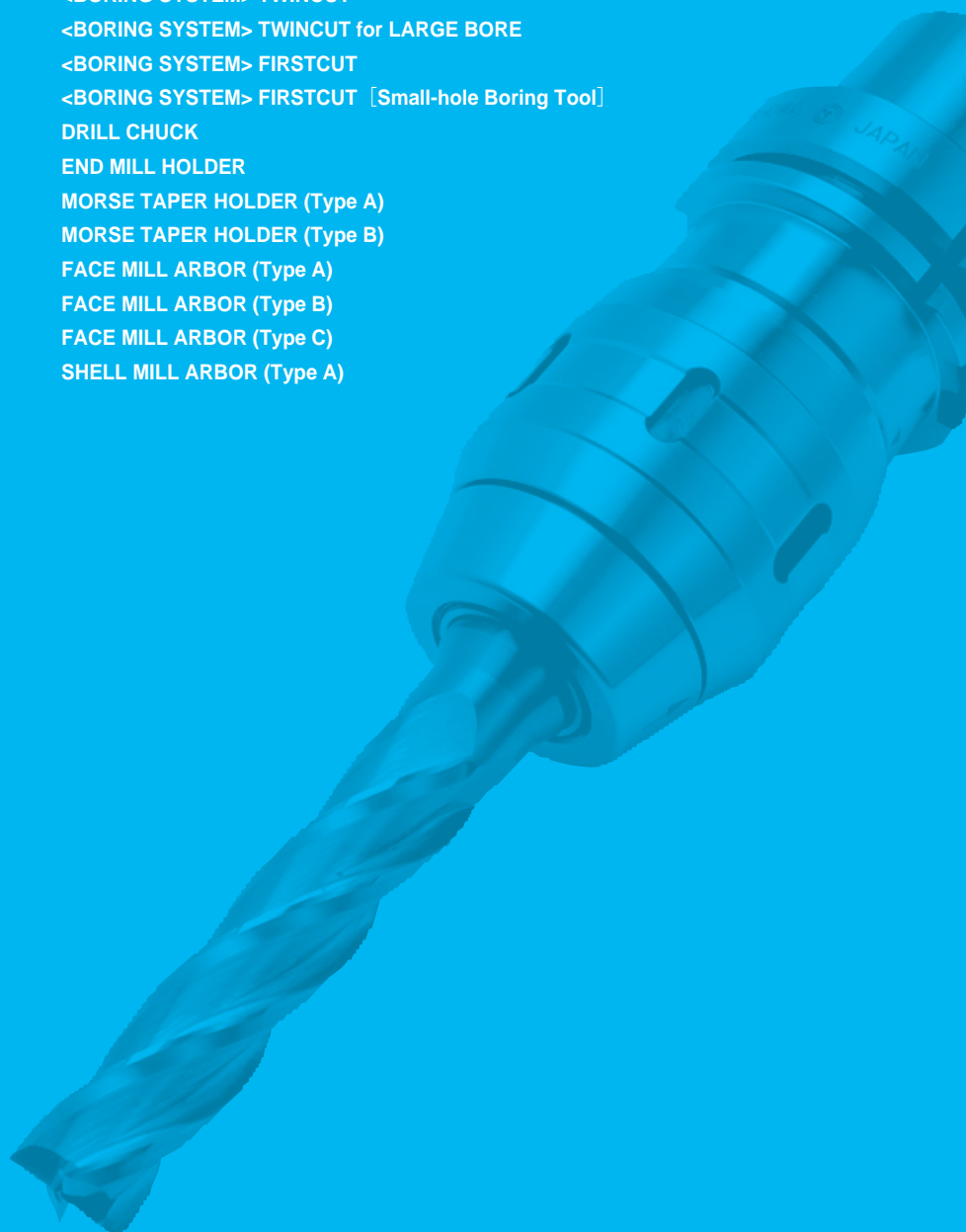


HSK series

109	MICRON CHUCK (Milling Chuck)
110	MICRON CHUCK N series
113,114	MICRON CHUCK H series
115,116	MICRON CHUCK M series
117	HARD CHUCK
120	COLLET CHUCK
121	COLLET CHUCK G Type
127	COLLET CHUCK (SLIM TYPE)
129	Hy-Dual CHUCK
130	SYNCHRO TAP HOLDER type SYFN
130	SYNCHRO TAP HOLDER type SYFS
132	<BORING SYSTEM> TWINCUT
133	<BORING SYSTEM> TWINCUT for LARGE BORE
134	<BORING SYSTEM> FIRSTCUT
135	<BORING SYSTEM> FIRSTCUT [Small-hole Boring Tool]
138	DRILL CHUCK
139	END MILL HOLDER
140	MORSE TAPER HOLDER (Type A)
140	MORSE TAPER HOLDER (Type B)
141	FACE MILL ARBOR (Type A)
142	FACE MILL ARBOR (Type B)
143	FACE MILL ARBOR (Type C)
144	SHELL MILL ARBOR (Type A)



▶▶▶ Thru-the-tool Coolant Available

▶▶▶ Thru-the-groove Coolant Available



HSK series

FIG.1

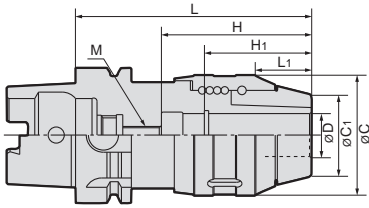


FIG.2

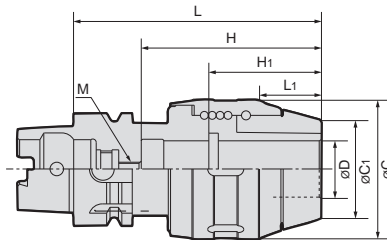
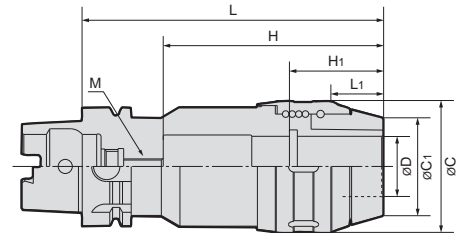


FIG.3



Cutter shank diameter should be h7 or better.

CODE	A	AA	FIG	øD	L	L1	øC	øC1	H	H1	min tool insert length		Adjust min/max	M	N/W (kg)												
											ST	CT															
Max. 10,000 min ⁻¹																											
HSKA50	HPC16 -110	○	○	2	16	110	26	56	34	75	50	40	51	57~67	M6	1.4											
	HPC20 -110	○	○		20				38			45															
	HPC25 -115	○	○		25				44			50															
	HPC32 -120	△	△		32				52			55															
Max. 10,000 min ⁻¹																											
HSKA63	HPC16 -110	○	○	1	16	110	26	56	34	75	50	40	51	59~67	M8	1.9											
	HPC20 -110	○	○		20				38			45															
	HPC25 -115	○	○		25				44			50															
	HPC32 -120	○	○	2	32	120	27.5	70	52	85	53	55	55	64~72	2.1												
	HPC32 -160	○	○													3	42	160	30.5	82	62	117	57	60	60	96~104	2.9
	HPC42 -160	△	△																								
Max. 8,000 min ⁻¹																											
HSKA100	HPC16 -110	○	○	1	16	110	26	56	34	70	50	40	51	59~65	M12	3.0											
	HPC20 -110	○	○		20				38			45															
	HPC25 -115	○	○		25				44			50															
	HPC25 -135	○	○		25				44			50															
	HPC32 -120	○	○	3	32	120	27.5	70	52	80	53	55	55	63~70	3.4												
	HPC32 -165	○	○													165	117	100~107	4.6								
	HPC42 -135	○	○													1	42	135	30.5	82	62	95	57	60	60	78~85	3.8
	HPC42 -165	○	○													3	42	165	30.5	82	62	122	57	60	60	105~112	4.8

△ : Mark tools are manufactured to order.

NOTE: 1. Coolant pipe is included.

2. Chuck wrench and adjust screw are sold separately.

3. Insert the O-ring included in the box to the groove of the ID for thru-the-tool use.

4. The above-mentioned maximum speed will vary depending rigidity of the machine and balance of cutter. An adequate cutting condition should be selected for each case.

ORDERING EXAMPLE

①	②	③	④	⑤
HSKA50	-	HPC	16	- 110 A
① Shank Size		② Holder's Name		③ Cutter's Shank Dia.
		④ G.L. Length		⑤ Grade



ACCESSORIES

▶ P.111 STRAIGHT COLLETS



ACCESSORIES

▶ P.112 ADJUST SCREW, CHUCK WRENCH

MICRON CHUCK N series

FEATURES p.1-6

HSKA^(No.)-HPC^(D)N-L

FIG.1

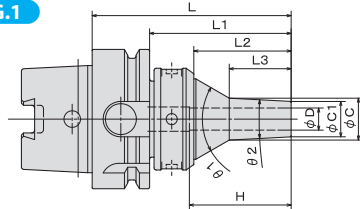
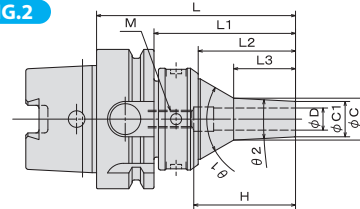


FIG.2



MODEL ø	CODE			FIG	øD	øC1	ø1	L	L1	L2	L3	H	Min insert length	Adjust		M	θ 1	θ 2	
	A	AA	G Type											MIN	MAX				
HSKA50	HPC03N-105	301000	301006	301012	1	3	9	10.4	105	79	44	27	20	-	-	-	80	3	
	HPC04N-105	301001	301007	301013		4	10	11.5											28
	HPC06N-105	301002	301008	301014		6	12	13.5											
	HPC08N-105	301003	301009	301015	2	8	14	15.5				29	50	35	35	50	M6		74
	HPC10N-105	301004	301010	301016		10	16	17.5											
	HPC12N-105	301005	301011	301017		12	18	21											
HSKA63	HPC03N-090	320920	320940	320960	1	3	9	10.4	90	64	44	27	20	-	-	-	80	3	
	HPC04N-090	320921	320941	320961		4	10	11.5											28
	HPC06N-090	320922	320942	320962		6	12	13.5											
	HPC08N-090	320923	320943	320963	2	8	14	15.5				29	50	35	35	45	M8		68
	HPC10N-090	320924	320944	320964		10	16	17.5											
	HPC12N-090	320925	320945	320965		12	18	21											

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

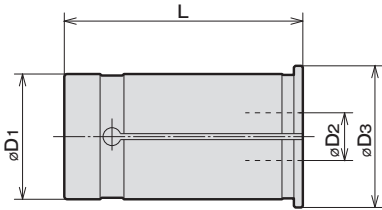
Accessories

ACCESSORIES for MICRON CHUCK (Milling Chuck)



STRAIGHT COLLET

SC^①-^②D₂



CODE		φD ₃	L
SC ^① - ^② D ₂			
SC16	-6·8·10·12	20	47
SC20	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16	23.5	50
SC25	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16·17·18·19·20·21	30	60
SC32	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16·17·18·19·20·21·22·23·24·25	37.5	70
SC42	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16·17·18·19·20·21·22·23·24·25·32	47.5	80

ORDERING EXAMPLE

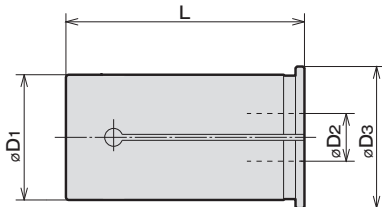
① SC ② 16 - ③ 6

- ① Name
- ② D₁
- ③ D₂



STRAIGHT COLLET (Oil-Hole Type)

SCOH^①-^②D₂



CODE	φD ₃	L	最小挿入量	
SCOH ^① - ^② D ₂				
SCOH20	23.5	54.5	-6	27
			-8	30
			-10	34
			-12	35
			-16	38
SCOH25	30	60	-6	27
			-8	30
			-10	32
			-12	35
			-16	38
			-20	41
SCOH32	37.5	70	-6	27
			-8	30
			-10	32
			-12	35
			-16	38
			-20	40
			-25	44

CODE	φD ₃	L	最小挿入量	
SCOH ^① - ^② D ₂				
SCOH42	47.5	80	-6	27
			-8	30
			-10	32
			-12	35
			-16	42
			-20	45
			-25	
			-32	50

ORDERING EXAMPLE

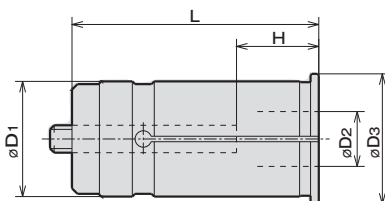
① SCOH ② 32 - ③ 20

- ① Name
- ② D₁
- ③ D₂



STRAIGHT COLLET WITH ADJUST SCREW

NC^①-^②D₂



CODE	φD ₃	L	H		
NC ^① - ^② D ₂			MIN.	MAX.	
NC20	-6·8·10·12·16	23.5	60	25	35
NC32	-6·8·10	37.5	80	20	45
	-12·16·20·25			25	55
NC42	-6·8·10·12	47.5	90	20	45
	-16·20·25·32			30	65

NOTE: Applicable to Micron chucks and Hard chucks.

ORDERING EXAMPLE

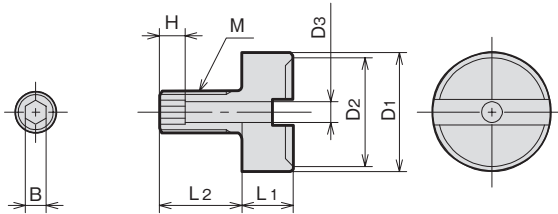
① NC ② 32 - ③ 6

- ① Name
- ② D₁
- ③ D₂

ACCESSORIES for MICRON CHUCK (Milling Chuck)



ADJUST SCREW (For MICRON CHUCK standard)



MODEL	CODE	øD1	øD2	øD3	M	L1	L2	H	B	MICRON CHUCK			
HAS1620-05-	M06	17652	15	13	3	5	18	2.5	3	HSKA50			
	M08	17654			4					M8	16	4	HSKA63
	M12	17656			5					M12	11	5	HSKA100
HAS2532-10-	M06	17658	23	21	3	10	18	4	3	HSKA50			
	M08	17660			4					M8	16	4	HSKA63
	M12	17662			5					M12	11.5	5	HSKA100
HAS4250-10-	M08	17664	33	31	4	11.5	28	4	4	HSKA63			
	M12	17666			5					M12	11.5	5	HSKA100

NOTE : 1. The above Adjust Screws are sold separately.
 2. Above Adjust Screws can not be used for "H" and "M" series Micron Chucks. Adjust Screws for "H" and "M" series Micron Chucks are manufactured to order.

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

Accessories

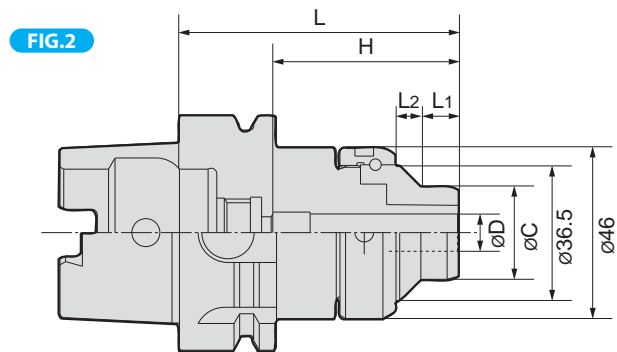
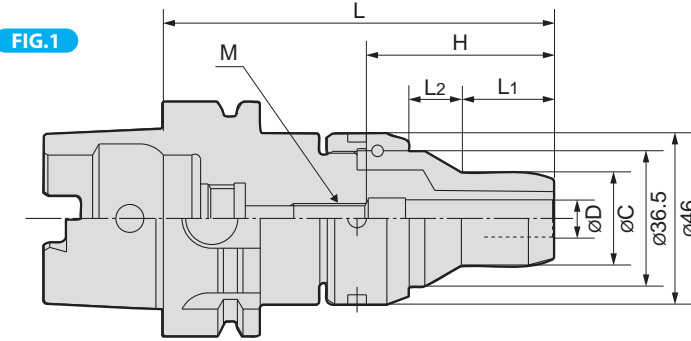


CHUCK WRENCH (For MICRON CHUCK standard)

HOOK SPANNER		
CHUCK CODE	WRENCH CODE	
MICRON CHUCK		
HPC16,HPC20	FS52-55G	35852
HPC25,HPC16S,HPC20S	FS58-62G	35853
HPC32,HPC25S	FS68-75G	35854
HPC42,HPC32S	FS80-90G	35855

▶▶▶ Thru-the-tool Coolant Available (Option)

▶▶▶ Thru-the-groove Coolant Available (Option)



Note : When HPC03H, HPC04H and HPC05H is used through the groove coolant or through the tool coolant usage, please keep the coolant pressure within 1MPa and under. In case those 3 kinds of tools are used in through the tool coolant at over 1MPa pressure, it requires special adjustment according to its pressure, need additional cost, please contact Showa distributor.

MODEL	A	AA	GType	FIG	φD	L	L1	L2	φC	H	Min insert length	Adjust		Adjust screw M	ST	CT	N/W (Kg)					
												MIN	MAX									
Max. 20,000 min ⁻¹ (G Type:Max. 30,000 min ⁻¹)																						
HSKA50	HPC03H	075	○	○	○	2	3	75	10.3	6.7	25	55						○	○ additional work	0.9		
		105	○	○	○	1		105	25	14								85	○	○ additional work	1.2	
	HPC04H	075	○	○	○	2	4	75	10.3	6.7		15	55							○	○ additional work	0.9
		105	○	○	○	1		105	25	14										85	○	○ additional work
	HPC05H	075	△	△	△	2	5	75	10.3	6.7		55								○	○ additional work	0.9
		105	△	△	△	1		105	25	14										85	○	○ additional work
	HPC06H	075	○	○	○	2	6	75	10.3	6.7		37.5	23	28	37					○ at cost	○	0.9
		105	○	○	○	1		105	25	14										30	30	AS17-2-M5-CTW
	HPC07H	075	△	△	△	2	7	75	10.3	6.7		23	28							○ at cost	○	0.9
		105	△	△	△	1		105	25	14										30	30	AS17-2-M6-CTW
	HPC08H	075	○	○	○	2	8	75	10.3	6.7		23								○ at cost	○	0.9
		105	○	○	○	1		105	25	14										35	35	50
	HPC09H	075	△	△	△	2	9	75	10.3	6.7		23								○ at cost	○	0.9
		105	△	△	△	1		105	25	14										35	35	50
	HPC10H	075	○	○	○	2	10	75	10.3	6.7		23								○ at cost	○	0.9
		105	○	○	○	1		105	25	14										35	35	50
HPC11H	075	△	△	△	2	11	75	12.2	4.8	25								○ at cost	○	0.9		
	105	△	△	△	1		105	25	14									55	40	40	55	AS22-2-M6-CTW
HPC12H	075	○	○	○	2	12	75	12.2	4.8	50	25							○ at cost	○	0.9		
	105	○	○	○	1													55	40	40	55	AS22-2-M6-CTW
HPC13H	105	△	△	△	1	13	105	25	14	32	55	40	40	55				○ at cost	○	1.0		
	105	△	△	△														14				
HPC14H	105	△	△	△	1	14	105	25	14	32	55	40	40	55				○ at cost	○	1.0		
	105	△	△	△														15				
HPC15H	105	△	△	△	1	15	105	25	14	32	55	40	40	55				○ at cost	○	1.0		
	105	△	△	△														16				

Max. 20,000 min ⁻¹ (G Type:Max. 30,000 min ⁻¹)																											
HSKA63	HPC03H	075	○	○	○	2	3	75	10.3	6.7	25	53							○	○ additional work	1.2						
		105	○	○	○	1		105	25	14									83	○	○ additional work	1.4					
		135	○	○	○	1		135											113	○	○ additional work	1.9					
	HPC04H	075	○	○	○	2	4	75	10.3	6.7		15	53								○	○ additional work	1.2				
		105	○	○	○	1		105	25	14											83	○	○ additional work	1.4			
		135	○	○	○	1		135													113	○	○ additional work	1.9			
	HPC05H	075	△	△	△	2	5	75	10.3	6.7		53									○	○ additional work	1.2				
		105	△	△	△	1		105	25	14											83	○	○ additional work	1.4			
		135	△	△	△	1		135													113	○	○ additional work	1.9			
	HPC06H	075	○	○	○	2	6	75	10.3	6.7		37.5	23	25	35						○ at cost	○	1.2				
		105	○	○	○	1		105	25	14											30	30	37	AS17-2-M5-CTW	○ at cost	○	1.4
		135	○	○	○	1		135													30	30	37	AS17-2-M6-CTW	○ at cost	○	1.9
HPC07H	075	△	△	△	2	7	75	10.3	6.7	23	25	35							○ at cost	○	1.2						
	105	△	△	△	1		105	25	14										30	30	37	AS17-2-M6-CTW	○ at cost	○	1.4		
	135	△	△	△	1		135												30	30	37	AS17-2-M6-CTW	○ at cost	○	1.9		

MODEL		A	AA	GType	FIG	φD	L	L1	L2	φC	H	Min insert length	Adjust MIN	Adjust MAX	Adjust screw M	ST	CT	N/W (Kg)														
Max. 20,000 min⁻¹(G Type:Max. 30,000 min⁻¹)																																
HSKA63	HPC08H	075	○	○	○	2	75	10.3	6.7	25	53	23	-	-	-	○ at cost	○	1.2														
		105	○	○	○	1	105	25	14										AS22-2-M6-CTW	○ at cost	○	1.4										
	135	○	○	○	1	135			○ at cost										○	1.9												
	HPC09H	075	△	△	△	2	75	10.3	6.7										23	-	-	-	○ at cost	○	1.2							
		105	△	△	△	1	105	25	14										AS22-2-M8-CTW	○ at cost	○	1.4										
	HPC10H	135	△	△	△	1	135												○ at cost	○	1.9											
		075	○	○	○	2	75	10.3	6.7										23	-	-	-	○ at cost	○	1.2							
	HPC11H	105	○	○	○	1	105	25	14										AS22-2-M8-CTW	○ at cost	○	1.4										
		135	○	○	○	1	135												○ at cost	○	1.9											
	HPC12H	075	△	△	△	2	75	12.2	4.8										55	40	40	55	AS22-2-M8-CTW	○ at cost	○	1.2						
		105	△	△	△	1	105	25	14										○ at cost	○	1.4											
	HPC13H	135	△	△	△	1	135												○ at cost	○	1.9											
		075	○	○	○	2	75	12.2	4.8										50	25	-	-	-	○ at cost	○	1.2						
	HPC14H	105	○	○	○	1	105	25	14										AS22-2-M8-CTW	○ at cost	○	1.4										
		135	○	○	○	1	135												○ at cost	○	1.9											
	HPC15H	075	△	△	△	1	75	10.3	6.7										55	40	40	55	AS22-2-M8-CTW	○ at cost	○	1.5						
105		△	△	△	1	105	25	14	○ at cost	○	1.7																					
HPC16H	135	△	△	△	1	135			○ at cost	○	1.7																					
	105	△	△	△	1	105			○ at cost	○	1.5																					
Max. 12,000 min⁻¹																																
HSKA100	HPC03H	110	○	○	-	3	110	25	14	25	81	15	-	-	-	○	○ additional work	2.7														
	HPC04H	110	○	○	-	4													37.5	30	30	37	AS17-2-M5-CTW	○ at cost	○							
	HPC05H	110	△	△	-	5													AS17-2-M6-CTW	○ at cost	○											
	HPC06H	110	○	○	-	6													AS22-2-M6-CTW	○ at cost	○											
	HPC07H	110	△	△	-	7													AS22-2-M8-CTW	○ at cost	○											
	HPC08H	110	○	○	-	8													AS22-2-M8-CTW	○ at cost	○											
	HPC09H	110	△	△	-	9													AS25-2-M10-CTW	40	40	56	○ at cost	○								
	HPC10H	110	○	○	-	10																	○ at cost	○								
	HPC11H	110	△	△	-	11																	○ at cost	○								
	HPC12H	110	△	△	-	12																	○ at cost	○								
	HPC13H	110	△	△	-	13																	○ at cost	○								
	HPC14H	110	△	△	-	14																	○ at cost	○								
	HPC15H	110	△	△	-	15																	○ at cost	○								
	HPC16H	110	△	△	-	16																	○ at cost	○								
	△ : Mark tools are manufactured to order.																															

- NOTE : 1. Each holder supplied with built-in coolant pipe. (Stationary type)
 2.Chuck wrench and adjust screw are sold separately.
 3. When the thru-the-coolant application is needed for HPC03H, HPC04, or HPC05, please instruct when ordering. "CT" will be marked for this application.
 4. The the thru-the-groove-coolant application for HPC06 or larger will be charged. Please instruct when ordering. "ST" will be marked for this application.
 5. The above-mentioned maximum speed will vary depending rigidity of the machine and balance of cutter. An adequate cutting condition should be selected for each case.

ORDERING EXAMPLE

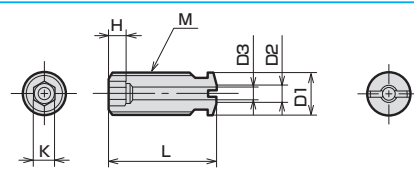
① HSKA50 - ② HPC - ③ 03 - ④ H - ⑤ 075 - ⑥ A

- ① Shank Size
- ② Holder's Name
- ③ Cutter's Shank Dia.
- ④ H series
- ⑤ G.L. Length
- ⑥ Grade



ACCESSORIES for MICRON CHUCK H series M series

ADJUST SCREW (For MICRON CHUCK H series, M series)



MODEL	CODE	M	L	D1	D2	D3	K	H	MICRON CHUCK
AS17-2-M5-CTW	17672	M5×0.8	17	5	3	2	2.5	3	HPC06H
AS17-2-M6-CTW	17676	M6×1.0	17	6					HPC07H
AS22-2-M6-CTW	17678		22	8	5	4	5	HPC08H, HPC08M	
AS22-2-M8-CTW	17680	M8×1.25	25	8	5	4	4	5	HPC09H, HPC10H HPC09M, HPC10M
AS25-2-M8-CTW	17682	M8×1.25		10	6	5	5	6	HPC11H~16H, HPC11M~12M
AS25-2-M10-CTW	17684	M10×1.5		10	6	5	5	6	

BT series
 HSK series
 ST series
 Versatile Tool
 Cutting Tool
 Accessories

FIG.1

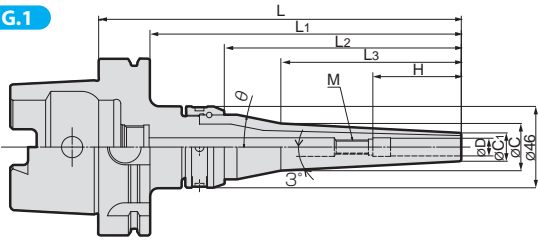


FIG.2

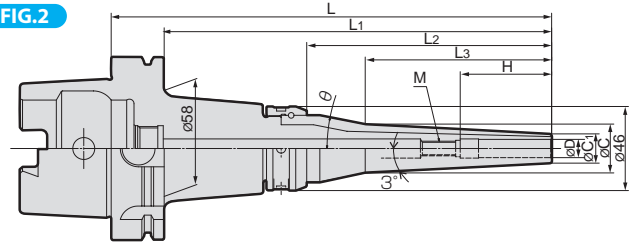


FIG.3

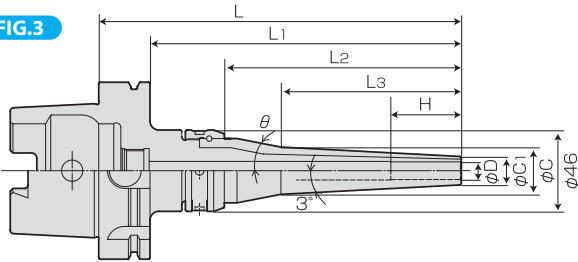
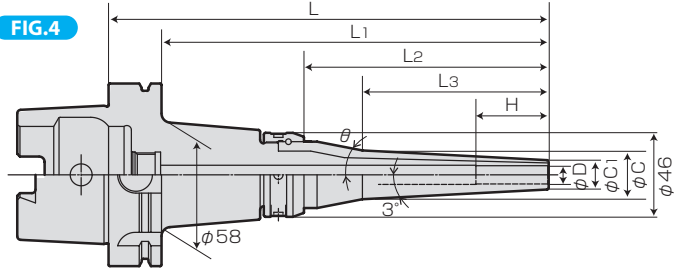


FIG.4



MODEL		STOCK	Fig	øD	øC1	øC	L	L1	L2	L3	H	Min insert length	Adjust length MIN	MAX	M	θ	N/W (kg)											
Max. 15,000 min⁻¹																												
HSKA50	HPC03M-	150	△	3	9	16	150	124	84	67	-	20	-	-	-	34	1.1											
	HPC04M-	150	△															4	10	17	33	1.1						
	HPC05M-	150	△															5	11	18	32	1.1						
	HPC06M-	150	△	1	12	19					50	35	35	50	M6	27	1.1											
	HPC07M-	150	△															6	12	19	30	1.1						
	HPC08M-	150	△															7	13	20	28	1.1						
	HPC09M-	150	△	1	15	22					55	40	37	55	M8	26	1.1											
	HPC10M-	150	△															8	14	21	24	1.1						
	HPC11M-	150	△															9	15	22	23	1.1						
HPC12M-	150	△	10	16	23	40	40	55	M8	21	1.1																	
Max. 15,000 min⁻¹																												
HSKA63	HPC03M-	150	△	3	9	16	150	124	84	67	-	20	-	-	-	34	1.3											
	HPC03M-	200	△															20	200	174	134	102	18	1.5				
	HPC04M-	150	○															4	10	17	150	124	84	67	20	-	-	-
	HPC04M-	200	○	21	200	174					134	102	17	1.5														
	HPC05M-	150	△	5	11	18					150	124	84	67	-	-	-											
	HPC05M-	200	△															22	200	174	134	102	16	1.5				
	HPC06M-	150	○															6	12	19	150	124	84	67	-	-	-	30
	HPC06M-	200	○	23	200	174					134	102	15	1.5														
	HPC07M-	150	△	7	13	20					150	124	84	67	-	-	-											
	HPC07M-	200	△															24	200	174	134	102	14	1.5				
	HPC08M-	150	○															8	14	21	150	124	84	67	-	-	-	27
	HPC08M-	200	○	25	200	174					134	102	13	1.5														
	HPC09M-	150	△	9	15	22					150	124	84	67	50	35	-											
	HPC09M-	200	△															26	200	174	134	102	12	1.5				
	HPC10M-	150	○															10	16	23	150	124	84	67	50	35	35	50
	HPC10M-	200	○	27	200	174					134	102	11	1.5														
	HPC11M-	150	△	11	17	24					150	124	84	67	55	37	-											
	HPC11M-	200	△															28	200	174	134	102	10	1.6				
HPC12M-	150	○	12				18	25	150	124								84	67	55	40	55	M8	21	1.4			
HPC12M-	200	○		29	200	174					134	102	9	1.6														

MODEL	STOCK	Fig	øD	øC1	øC	L	L1	L2	L3	H	Min insert length	Adjust length		M	θ	N/W (kg)																																												
												MIN	MAX																																															
Max. 10,000 min⁻¹																																																												
Hska100	HPC03M-	155	△	3	3	9	16	155	126	84	67	20					34	3.1																																										
		205	△				20	205	176	134	102						18	3.2																																										
		255	△				4	255	226								18	4.1																																										
	HPC04M-	155	○	3	4	10	17	155	126	84	67						35						33	3.1																																				
		205	○				21	205	176	134	102												17	3.3																																				
		255	△				4	255	226														17	4.1																																				
	HPC05M-	155	△	3	5	11	18	155	126	84	67																		32	3.1																														
		205	△				22	205	176	134	102																		16	3.3																														
		255	△				4	255	226																				16	4.1																														
	HPC06M-	155	○	3	6	12	19	155	126	84	67																								30	3.1																								
		205	○				23	205	176	134	102																								15	3.3																								
		255	△				4	255	226																										15	4.2																								
	HPC07M-	155	△	3	7	13	20	155	126	84	67																														28	3.1																		
		205	△				24	205	176	134	102																														14	3.3																		
		255	△				4	255	226																																14	4.2																		
	HPC08M-	155	○	3	8	14	21	155	126	84	67																																				27	3.1												
		205	○				25	205	176	134	102																																				13	3.3												
		255	△				4	255	226																																						13	4.2												
	HPC09M-	155	△	3	9	15	22	155	126	84	67																																										26	3.1						
		205	△				26	205	176	134	102																																										12	3.3						
		255	△				4	255	226																																												12	4.2						
	HPC10M-	155	○	3	10	16	23	155	126	84	67																																																24	3.2
		205	○				27	205	176	134	102																																																11	3.3
		255	△				4	255	226																																																		11	4.2
HPC11M-	155	△	3	11	17	24	155	126	84	67																																																	23	3.2
	205	△				28	205	176	134	102																																																	10	3.3
	255	△				4	255	226																																																			10	4.2
HPC12M-	155	○	1	12	18	25	155	126	84	67							55	40	40	40	M10																																						21	3.2
	205	○				29	205	176	134	102																																																	9	3.3
	255	△				2	255	226																																																			9	4.2

△ : Mark tools are manufactured to order.

- NOTE: 1.Coolant pipe is included.
 2.Chuck wrench and adjust screw are sold separately.
 3.Adjust screw is manufactured to order. Please instruct when ordering.
 4.The above-mentioned maximum speed will vary depending rigidity of the machine and balance of cutter. An adequate cutting condition should be selected for each case.

ORDERING EXAMPLE

① HSKA63 - ② HPC ③ 06 ④ M - ⑤ 150

- ① Shank Size
- ② Holder's Name
- ③ Cutter's Shank Dia.
- ④ M series
- ⑤ G.L. Length

ACCESSORIES **P.114** ADJUST SCREW

ACCESSORIES **P.116** CHUCK WRENCH

ACCESSORIES for MICRON CHUCK H series M series



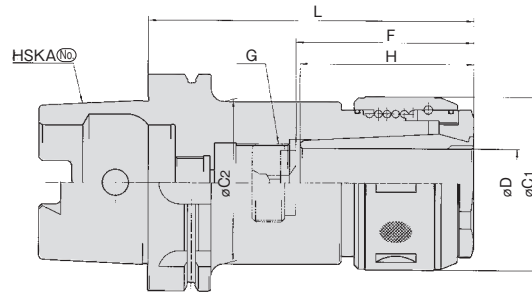
CHUCK WRENCH (For MICRON CHUCK H series, M series and N series)

HOOK PIN SPANNER		
CHUCK CODE	WRENCH CODE	
MICRON CHUCK		
HPC03H~HPC16H HPC03M~HPC12M HPC03N~HPC12N	FP45-48G	35851

HSK series
 BT series
 ST series
 Versatile Tool
 Cutting Tool
 Accessories

FEATURES

- The ball screw structure provides high clamping power.
- Easy handling.
- High accuracy and rigidity are kept lo



	MODEL	CODE	øD	L	øC1	øC2	H	G	F		SPRING COLLET	ADJUST SCREW	N/W (kg)
									MIN.	MAX.			
HSKA63	-CTH16-120	26890	16	120	52	50	50	M18×1.5	50	70	C16-(16)	OR-M18-25	
	-CTH20-120	26892	20		60	54							
	-CTH25-120	26894	25		68	68		M28×1.5	60	80	C20-(20)		
	-CTH32-135	26896	32		80						62		
HSKA100	-CTH16-135	27250	16	135	52	50	70	M18×1.5	50	69	C16-(16)	OR-M18	
	-CTH20-135	27252	20		60	54					C20-(20)		
	-CTH25-135	27254	25		68	62	M28×1.5	68	79	C25-(25)	OR-M28-25		
	-CTH32-150	27256	32		150	80	75	80	100	C32-(32)	OR-M36-20		
	-CTH42-165	27258	42		165	95	85	90	114	C42-(42)			

- NOTE:1. A Coolant pipe is supplied with chuck.
 2. A spring collet is supplied with Hard chuck.
 Unless otherwise required, maximum ID spring collet is supplied.
 3. Chuck wrench and adjust screw are sold separately.
 4. For thru-the-tool coolant application, OR-adjust screw is used.
 OR-adjust screw is sold separately.

ORDERING EXAMPLE

① HSKA63 - ② CTH ③ 16 - ④ 120

- ① Shank Size
- ② Holder's Name
- ③ Cutter's Shank Dia.
- ④ G.L. Length



ACCESSORIES

▶ P.48 ADJUST SCREW



ACCESSORIES

▶ P.118 SPLING COLLET, STRAIGHT COLLETS



ACCESSORIES

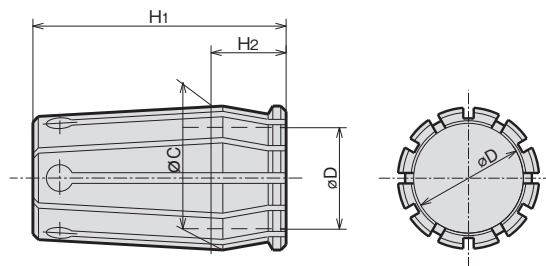
▶ P.119 CHUCK WRENCH

ACCESSORIES for HARD CHUCK



SPRING COLLET (For HARD CHUCK)

C^(No.)-^(D)



CODE	øD										øC	H1	H2	holder		
	6	8	10	12	16	20	25	32	42	50				CTH12L	CTH	CT
C12L-D	6	8	10	12							18.00	40	13	CTH12L	—	—
C16-D	6	8	10	12	16						24.00	50	17	—	CTH16	—
C20-D	6	8	10	12	16	20					28.75	50	15	—	CTH20	—
C25-D			10	12	16	20	25				35.75	68	19	—	CTH25	CT25
C32-D					16	20	25	32			45.25	80	21	—	CTH32	CT32
※CS32-D(SHORT)					16	20	25	32			45.25	70	21	—	CTH32	—
C42-D						20	25	32	42		55.00	90	21	—	CTH42	—
C50-D								32	42	50	65.00	95	25	—	CTH50	—

NOTE※ CS32-D(SHORT) spring collet is for BT40·NT40 Hard Chuck.

ORDERING EXAMPLE

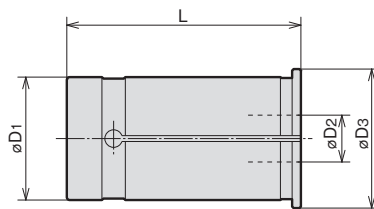
① C12 - ② 6

① Chack Type
② øD



STRAIGHT COLLET

SC^(D1)-^(D2)



CODE	SC ^(D1) - ^(D2)	øD3	L
SC16	-6·8·10·12	20	47
SC20	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16	23.5	50
SC25	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16·17·18·19·20·21	30	60
SC32	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16·17·18·19·20·21·22·23·24·25	37.5	70
SC42	-6·6.8·7·8·8.5·9·10·11·12·13·14·15·16·17·18·19·20·21·22·23·24·25·32	47.5	80

ORDERING EXAMPLE

① SC ② 16 - ③ 6

① Name
② D1
③ D2

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

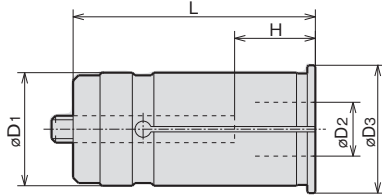
Accessories

ACCESSORIES for HARD CHUCK



STRAIGHT COLLET WITH ADJUST SCREW

NC D_1 - D_2



CODE	NC D_1 - D_2	$\phi D3$	L	H	
				MIN.	MAX.
NC20	-6·8·10·12·16	23.5	60	25	35
NC32	-6·8·10	37.5	80	20	45
	-12·16·20·25			25	55
NC42	-6·8·10·12	47.5	90	20	45
	-16·20·25·32			30	65

Note:
* For all SHOWA chuck

ORDERING EXAMPLE

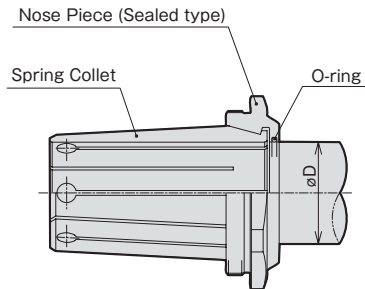
① **NC** ② **32** - ③ **6**

- ① Name
- ② D1
- ③ D2



NOSE PIECE (For HARD CHUCK)

NG No - D



ORDERING EXAMPLE

① **NG** ② **16** - ③ **6**

- ① Name
- ② Chuck Size
- ③ ϕD

CODE	ϕD										HARD CHUCK CODE	
NG16- ϕD	6	8	10	12	16							CTH16
NG20- ϕD	6	8	10	12	16	20						CTH20
NG25- ϕD				12	16	20	25					CTH25
NG32- ϕD					16	20	25	32				CTH32
NG42- ϕD						20	25	32	42			CTH42
NG50- ϕD								32	42	50	50.8	CTH50



CHUCK WRENCH (For HARD CHUCK)

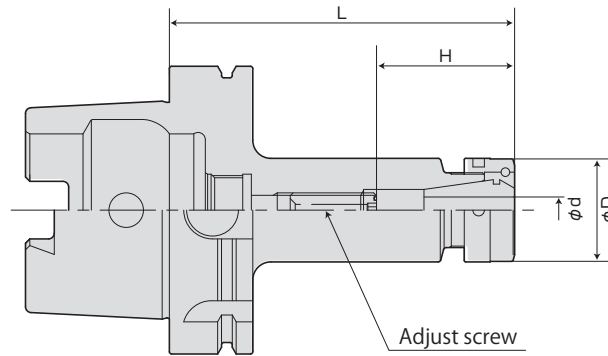
HOOK SPANNER		
CHUCK CODE	WRENCH CODE	
HARD CHUCK		
CTH12L.CTH16	FS52-55G	35852
CTH20.CT25G	FS58-62G	35853
CTH25.CT32G	FS68-75G	35854
CTH32	FS80-90G	35855
CTH42	FS92-100	
CTH50	FS105-115	35829

COLLET CHUCK

FEATURES P.9-10

HSKA^(No)-RSC^(D)MAX-L

- ▶▶ Thru-the-tool Coolant Available
- ▶▶ Thru-the-groove Coolant Available



MODEL	CODE	STOCK	ød	øD	L	H (Adjust)	COLLET	NUT	ADJUST SCREW	
Max. 20,000min⁻¹										
HSKA50	RSC07-090	300074	○	0.5~7	24	90	24~40	CR07-(D)	RSN07NB	M6×20L-CTW
	RSC10-090	300065	○	0.5~10	30	90	31~43	CR10-(D)	RSN10NB	RAS10-25-2.5
	-120	300066	○			120	31~48			
	RSC13-090	300067	○	0.5~13	36	90	35~43	CR13-(D)	RSN13NB	RAS13-25-2.5
	-120	300068	○			120	35~52			
	RSC16-090	300070	○	1~16	42	90	38~43	CR16-(D)	RSN16NB	RAS16-25-5
-120	300071	○	120			38~66				
RSC20-090	300072	○	1.5~20	50	90	68	CR20-(D)	RSN20NB	(M24×25L-CTW) RAS20-25-5	
-120	300073	○			120	44~67				
HSKA63	RSC07-090	320170	○	0.5~7	24	90	24~40	CR07-d	RSC07NB	M6×20L-CTW
	RSC10-090	320172	○	0.5~10	30	90	31~40	CR10-d	RSC10NB	RAS10-25-2.5
	RSC10-120	320174	○			120	31~48			
	RSC10-150	320175	△		150					
	RSC13-090	320176	○	0.5~13	36	90	35~40	CR13-d	RSC13NB	RAS13-25-2.5
	RSC13-120	320178	○			120	35~52			
	RSC13-150	320179	△		150					
	RSC16-090	320180	○	1~16	42	90	38~40	CR16-d	RSC16NB	RAS16-25-5
	RSC16-120	320181	○			120	38~66			
	RSC16-150	320161	△		150					
	RSC20-090	320182	○	1.5~20	50	90	66	CR20-d	RSC20NB	(M24×25L-CTW) RAS20-25-5
	RSC20-120	320184	○			120	44~61			
RSC20-150	320185	△		150						
Max. 8,000min⁻¹										
HSKA100	RSC07-105		○	0.5~7	24	105	24~40	CR07-d	RSC07NB	M6×20L-CTW
	RSC10-105	350330	○			105	31~43			
	RSC10-135	350332	○	0.5~10	30	135	31~48	CR10-d	RSC10NB	RAS10-25-2.5
	RSC10-165	350333	△			165				
	RSC10-195	350311	△			195				
	RSC10-225	350312	△			225				
	RSC10-255	350313	△			255				
	RSC10-285	350314	△			285				
	RSC13-105	350334	○	0.5~13	36	105	35~48	CR13-d	RSC13NB	RAS13-25-2.5
	RSC13-135	350336	○			135				
	RSC13-165	350337	△			165				
	RSC13-195	350315	△			195				
	RSC13-225	350316	△			225				
	RSC13-255	350317	△			255				
	RSC13-285	350318	△	285						
	RSC16-105	350338	○	1~16	42	105	38~48	CR16-d	RSC16NB	RAS16-25-5
	RSC16-135	350340	○			135				
	RSC16-165	350341	△			165				
	RSC16-195	350319	△			195				
	RSC16-225	350320	△			225				
	RSC16-255	350321	△			255				
	RSC16-285	350322	△	285						
	RSC20-105	350342	○	1.5~20	50	105	44~48	CR20-d	RSC20NB	RAS20-25-5
	RSC20-135	350344	○			135				
	RSC20-165	350345	△			165				
	RSC20-195	350346	△			195				
	RSC20-225	350347	△			225				
	RSC20-255	350348	△			255				
	RSC20-285	350349	△	285						

- NOTE: 1. Coolant pipe is included.
 2. Collet and chuck wrench are sold separately.
 3. CROH collet is used for thru-the-tool coolant application.
 4. The above-mentioned maximum speed will vary depending rigidity of the machine and balance of cutter.
 An adequate cutting condition should be selected for each case.

ORDERING EXAMPLE

① HSKA50 - ② RSC - ③ 07 - ④ 090

- ① Shank Size
- ② Holder's Name
- ③ Max. øD
- ④ G.L. Length

ACCESSORIES
 P.122-125 COLLETS

ACCESSORIES
 P.126 NUT, ADJUST SCREW, CHUCK WRENCH

BT series

HSK series

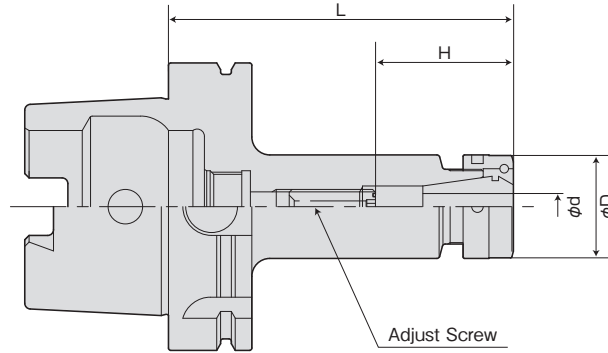
ST series

Versatile Tool

Cutting Tool

Accessories

- ▶▶▶ Thru-the-tool Coolant Available
- ▶▶▶ Thru-the-groove Coolant Available



Max 27,000min⁻¹

MODEL	CODE	φd (GRIPPING RANGE)	φD	L	H	COLLET	NUT	ADJUST SCREW	
HSKA50	RSC07-090G	300040	0.5~7	24	90	24~40	CR07-(D)	RSN07NB	M6×20L-CTW
	RSC10-090G	300042	0.5~10	30	90	31~43	CR10-(D)	RSN10NB	RAS10-25-2.5
	-120G	300043		120	31~48				
	RSC13-090G	300044	0.5~13	36	90	35~43	CR13-(D)	RSN13NB	RAS13-25-2.5
	-120G	300045		120	35~52				
	RSC16-090G	300046	1~16	42	90	38~43	CR16-(D)	RSN16NB	RAS16-25-5
	-120G	300047		120	38~66				
RSC20-090G	300048	1.5~20	50	90	68	CR20-(D)	RSN20NB	(M24×25L-CTW)	
-120G	300049		120	44~67	RAS20-25-5				
HSKA63	RSC07-090G	320150	0.5~7	24	90	24~40	CR07-(D)	RSN07NB	M6×20L-CTW
	RSC10-090G	320152	0.5~10	30	90	31~40	CR10-(D)	RSN10NB	RAS10-25-2.5
	-120G	320153		120	31~48				
	RSC13-090G	320154	0.5~13	36	90	35~40	CR13-(D)	RSN13NB	RAS13-25-2.5
	-120G	320155		120	35~52				
	RSC16-090G	320156	1~16	42	90	38~40	CR16-(D)	RSN16NB	RAS16-25-5
	-120G	320157		120	38~66				
RSC20-090G	320158	1.5~20	50	90	66	CR20-(D)	RSN20NB	(M24×25L-CTW)	
-120G	320159		120	44~61	RAS20-25-5				

- NOTE : 1. Coolant pipe is included.
 2. Collet and chuck wrench are sold separately.
 3. CROH collet is used for thru-the-tool coolant application.
 4. The above-mentioned maximum speed will vary depending rigidity of the machine and balance of cutter.
 An adequate cutting condition should be selected for each case.

ORDERING EXAMPLE				
①	②	③	④	⑤
HSKA50	RSC	07	090	G
① Shank Size	② Holder's Name	③ Max. φD	④ G.L. Length	⑤ G Type



ACCESSORIES

➔ P.110-113 COLLETS



ACCESSORIES

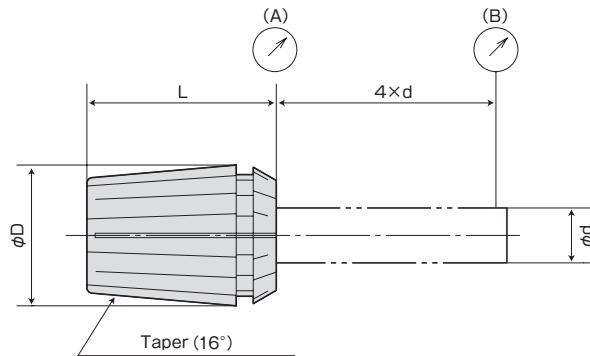
➔ P.114 NUT, ADJUST SCREW, CHUCK WRENCH

ACCESSORIES for COLLET CHUCK



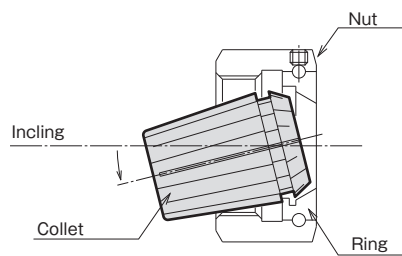
CR COLLET

CR^(No.)-D



Easy collet setting

- A half of ID of the ring is enlarged. Collet can be mounted easily by inclining it.



GRADE	RUNOUT (MAX. μm)	
	NOSE (A)	POINT (B)
(AA)	1	3
(A)	2	5
(STD)	5	15

Grade	application
AA grade · A grade	Reamer · Center drill Carbide small diameter drill, Endmill Whetstone for internal cylindrical grinding, Tool for high frequency motors Carbide drill Rotating tool for lathes (the tool rotation)
Standard	General drill, tap Rotating tool for lathes (Work rotating)

CHUCK COLLET CODE	RSC07 CR07-d GRADE		RSC10 CR10-d GRADE		RSC13 CR13-d GRADE		RSC16 CR16-d GRADE		RSC20 CR20-d GRADE		
φd	RANGE	φd	RANGE	φd	RANGE	φd	RANGE	φd	RANGE	φd	RANGE
1.0	0.5~1.0	1.0	0.5~1.0	1.0	0.5~1.0	1.5	1.0~1.5	2.0	1.5~2.0	2.0	1.5~2.0
1.5	1.0~1.5	1.5	1.0~1.5	1.5	1.0~1.5	1.5	1.0~1.5	2.0	1.5~2.0	2.5	2.0~2.5
2.0	1.5~2.0	2.0	1.5~2.0	2.0	1.5~2.0	2.0	1.5~2.0	2.5	2.0~2.5	3.0	2.5~3.0
2.5	2.0~2.5	2.5	2.0~2.5	2.5	2.0~2.5	2.5	2.0~2.5	3.0	2.5~3.0	4.0	3.0~4.0
3.0	2.5~3.0	3.0	2.5~3.0	3.0	2.5~3.0	3.0	2.5~3.0	4.0	3.0~4.0	5.0	4.0~5.0
3.5	3.0~3.5	4.0	3.0~4.0	4.0	3.0~4.0	4.0	3.0~4.0	5.0	4.0~5.0	6.0	5.0~6.0
4.0	3.5~4.0	5.0	4.0~5.0	5.0	4.0~5.0	5.0	4.0~5.0	6.0	5.0~6.0	7.0	6.0~7.0
4.5	4.0~4.5	6.0	5.0~6.0	6.0	5.0~6.0	6.0	5.0~6.0	7.0	6.0~7.0	8.0	7.0~8.0
5.0	4.5~5.0	7.0	6.0~7.0	7.0	6.0~7.0	7.0	6.0~7.0	8.0	7.0~8.0	9.0	8.0~9.0
5.5	5.0~5.5	8.0	7.0~8.0	8.0	7.0~8.0	8.0	7.0~8.0	9.0	8.0~9.0	10.0	9.0~10.0
6.0	5.5~6.0	9.0	8.0~9.0	9.0	8.0~9.0	9.0	8.0~9.0	10.0	9.0~10.0	11.0	10.0~11.0
6.5	6.0~6.5	10.0	9.0~10.0	10.0	9.0~10.0	10.0	9.0~10.0	11.0	10.0~11.0	12.0	11.0~12.0
7.0	6.5~7.0					11.0	10.0~11.0	12.0	11.0~12.0	13.0	12.0~13.0
						12.0	11.0~12.0	13.0	12.0~13.0	14.0	13.0~14.0
						13.0	12.0~13.0	14.0	13.0~14.0	15.0	14.0~15.0
								15.0	14.0~15.0	16.0	15.0~16.0
								16.0	15.0~16.0	17.0	16.0~17.0
										18.0	17.0~18.0
										19.0	18.0~19.0
										20.0	19.0~20.0
φD	11		16		20		25		32		
L	18		27		31		35		40		

Collet for through the groove (produce by order) are also available.

ORDERING EXAMPLE

① CR07 - ② 1.5 ③ AA

① Chuck Type
② φd
③ Grade

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

Accessories

ACCESSORIES for COLLET CHUCK

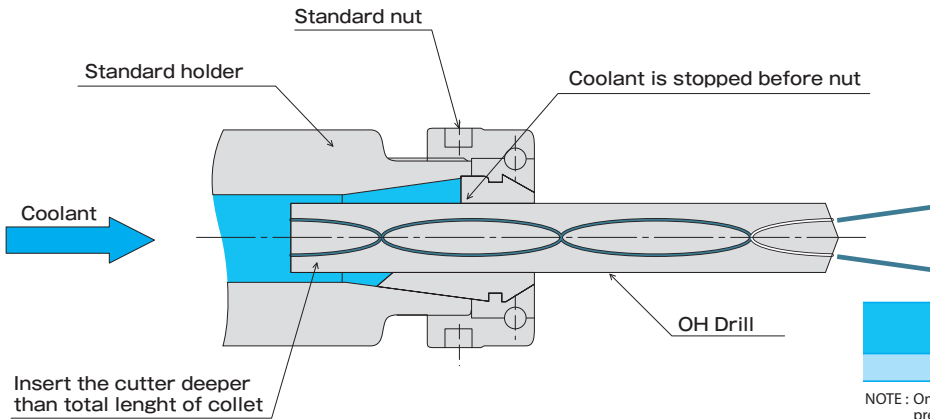


OIL HOLE CR COLLET

CROH[®]-D

FEATURES

- For thru-the-tool coolant application.
- High pressure up to 7 Mpa is acceptable.
- Standard holders and nuts can be used.
- Bearing of nut is not affected by coolant.



GRADE	RUNOUT (MAX. μm) 4 \times d
(AA)	5 μm

NOTE : Only super precious grade (AA) is available for sale only ultra precision grade (AA) type.

COLLET CODE/CHUCK	RSC07 CROH07-d GRADE		RSC10 CROH10-d GRADE		RSC13 CROH13-d GRADE		RSC16 CROH16-d GRADE		RSC20 CROH20-d GRADE		
	ϕd	RANGE	ϕd	RANGE	ϕd	RANGE	ϕd	RANGE	ϕd	RANGE	
ϕd	2.0	1.9~2.0	2.0	1.9~2.0	3.0	2.9~3.0	3.0	2.9~3.0	3.0	2.9~3.0	
	2.5	2.4~2.5	2.5	2.4~2.5	3.5	3.4~3.5	3.5	3.4~3.5	3.5	3.4~3.5	
	3.0	2.9~3.0	3.0	2.9~3.0	4.0	3.9~4.0	4.0	3.9~4.0	4.0	3.9~4.0	
	4.0	3.9~4.0	4.0	3.9~4.0	4.5	4.4~4.5	4.5	4.4~4.5	4.5	4.4~4.5	
	4.5	4.4~4.5	4.5	4.4~4.5	5.0	4.9~5.0	5.0	4.9~5.0	5.0	4.9~5.0	
	5.0	4.9~5.0	5.0	4.9~5.0	5.5	5.0~5.5	5.5	5.4~5.5	5.5	5.4~5.5	
	5.5	5.4~5.5	5.5	5.0~5.5	6.0	5.5~6.0	6.0	5.5~6.0	6.0	5.9~6.0	
	6.0	5.9~6.0	6.0	5.5~6.0	6.5	6.0~6.5	6.5	6.0~6.5	6.5	6.4~6.5	
	6.5	6.4~6.5	6.5	6.0~6.5	7.0	6.5~7.0	7.0	6.5~7.0	7.0	6.9~7.0	
	7.0	6.9~7.0	7.0	6.5~7.0	7.5	7.0~7.5	7.5	7.0~7.5	7.5	7.4~7.5	
				7.5	7.0~7.5	8.0	7.5~8.0	8.0	7.5~8.0	8.0	7.5~8.0
				8.0	7.5~8.0	8.5	8.0~8.5	8.5	8.0~8.5	8.5	8.0~8.5
				8.5	8.0~8.5	9.0	8.5~9.0	9.0	8.5~9.0	9.0	8.5~9.0
				9.0	8.5~9.0	9.5	9.0~9.5	9.5	9.0~9.5	9.5	9.0~9.5
				9.5	9.0~9.5	10.0	9.5~10.0	10.0	9.5~10.0	10.0	9.5~10.0
				10.0	9.5~10.0	10.5	10.0~10.5	10.5	10.0~10.5	10.5	10.0~10.5
						11.0	10.5~11.0	11.0	10.5~11.0	11.0	10.5~11.0
						11.5	11.0~11.5	11.5	11.0~11.5	11.5	11.0~11.5
						12.0	11.5~12.0	12.0	11.5~12.0	12.0	11.5~12.0
						12.5	12.0~12.5	12.5	12.0~12.5	12.5	12.0~12.5
					13.0	12.5~13.0	13.0	12.5~13.0	13.0	12.5~13.0	
							13.5	13.0~13.5	13.5	13.0~13.5	
							14.0	13.5~14.0	14.0	13.5~14.0	
							14.5	14.0~14.5	14.5	14.0~14.5	
							15.0	14.5~15.0	15.0	14.5~15.0	
							15.5	15.0~15.5	15.5	15.0~15.5	
							16.0	15.5~16.0	16.0	15.5~16.0	
									16.5	16.0~16.5	
									17.0	16.5~17.0	
									17.5	17.0~17.5	
									18.0	17.5~18.0	
									18.5	18.0~18.5	
									19.0	18.5~19.0	
									19.5	19.0~19.5	
									20.0	19.5~20.0	
ϕD		11		16		20		25		32	
L		18		27		31		35		40	

- NOTE : 1. Applicable for drill with oil hole.
 2. When in use insert a drill to the end from the rear of the collet.
 3. Do not use smaller sized cutting tools than inner diameter of collet, or coolant may leak out of a collet.
 4. If flat-face shank cutting tool is used, sealing function of collet does not work.

ORDERING EXAMPLE

① CROH10 - ② 10 ③ AA

① Chuck Type
 ② ϕd
 ③ Grade

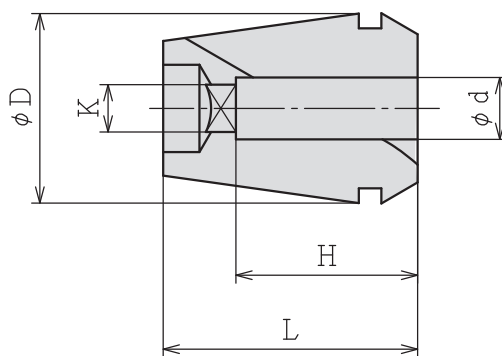
ACCESSORIES for COLLET CHUCK



CR TAP COLLET

CR^{No}GB-D

CR collet with square hole for shank end of tap (for synchro tap).



MODEL	CODE	TAP SIZE	ϕd	K	H	ϕD	L	TAP HOLDER	COLLET CHUCK	
CR10GB	-M4	84700	M4	5	4	16	27	-	RSC10	
	-M5	84702	M5	5.5	4.5					
	-M6	84704	M6	6	4.5					
	-M8	84706	M8	6.2	5					
	-M10	84708	M10	7	5.5					
-P1/8	84710	P1/8	8	6	20					
CR13GB	-M4	84712	M4	5	4	20	31	SYFN12	RSC13	
	-M5	84714	M5	5.5	4.5					
	-M6	84716	M6	6	4.5					
	-M8	84718	M8	6.2	5					
	-M10	84720	M10	7	5.5					
	-P1/8	84722	P1/8	8	6					20
-M12	84724	M12	8.5	6.5	20					
CR16GB	-M4	84726	M4	5	4	25	35	SYFN16S	RSC16	
	-M5	84728	M5	5.5	4.5					
	-M6	84730	M6	6	4.5					
	-M8	84732	M8	6.2	5					
	-M10	84734	M10	7	5.5					
	-P1/8	84736	P1/8	8	6					20
	-M12	84738	M12	8.5	6.5					20
	-M14	84740	M14	10.5	8					25
	-P1/4	84742	P1/4	11	9					17
	-M16	84744	M16	12.5	10					25
-P3/8	84746	P3/8	14	11	18					
CR20GB	-M4	84748	M4	5	4	32	40	SYFN20	RSC20	
	-M5	84750	M5	5.5	4.5					
	-M6	84752	M6	6	4.5					
	-M8	84754	M8	6.2	5					
	-M10	84756	M10	7	5.5					
	-P1/8	84758	P1/8	8	6					20
	-M12	84760	M12	8.5	6.5					20
	-M14	84762	M14	10.5	8					25
	-P1/4	84764	P1/4	11	9					17
	-M16	84766	M16	12.5	10					25
	-P3/8	84768	P3/8	14	11					18
	-M18	84770	M18	14	11					30
	-M20	84772	M20	15	12					30

NOTE : 1. Above table is for a tap of JIS standard shank.
2. Run-out accuracy is subject to ordinary (STD) class.

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

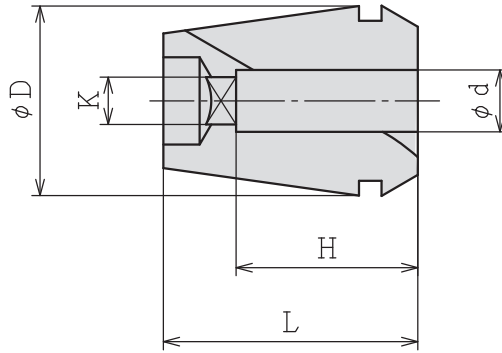
Accessories



OIL HOLE CR TAP COLLET

CR¹⁰GH-[⊕]

OH-type collet with square hole is for high-pressure centre-through coolant feeding (for synchro tapping) .



MODEL	CODE	TAP SIZE	φd	K	H	φD	L	TAP HOLDER	COLLET CHUCK
CR10GH	-M6	84800	M6	6	4.5	16	27	-	RSC10
	-M8	84802	M8	6.2	5				
	-M10	84804	M10	7	5.5				
	-P1/8	84806	P1/8	8	6				
CR13GH	-M6	84808	M6	6	4.5	20	31	SYFN12	RSC13
	-M8	84810	M8	6.2	5				
	-M10	84812	M10	7	5.5				
	-P1/8	84814	P1/8	8	6				
	-M12	84816	M12	8.5	6.5				
CR16GH	-M6	84818	M6	6	4.5	25	35	SYFN16S	RSC16
	-M8	84820	M8	6.2	5				
	-M10	84822	M10	7	5.5				
	-P1/8	84824	P1/8	8	6				
	-M12	84826	M12	8.5	6.5				
	-M14	84828	M14	10.5	8				
	-P1/4	84830	P1/4	11	9				
	-M16	84832	M16	12.5	10				
CR20GH	-M6	84836	M6	6	4.5	32	40	SYFN20	RSC20
	-M8	84838	M8	6.2	5				
	-M10	84840	M10	7	5.5				
	-P1/8	84842	P1/8	8	6				
	-M12	84844	M12	8.5	6.5				
	-M14	84846	M14	10.5	8				
	-P1/4	84848	P1/4	11	9				
	-M16	84850	M16	12.5	10				
	-P3/8	84852	P3/8	14	11				
	-M18	84854	M18	14	11				
-M20	84856	M20	15	12					

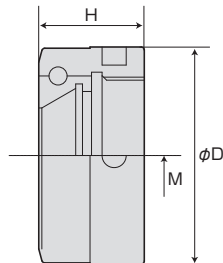
- NOTE : 1. Above table is for a tap of JIS standard shank.
 2. Run-out accuracy is subject to ordinary (STD) class.
 3. In the case of OSG Corporation synchro tap, shank diameter, square end dimensions are different from others so that there is the case that you can not use it even if tap size is the same.
 4. Gap-through collet is also available. Please order separately.

ACCESSORIES for COLLET CHUCK



NUT FOR COLLET CHUCK

RSN (No.) - TYPE



for BT, ST

Through-Coolant use

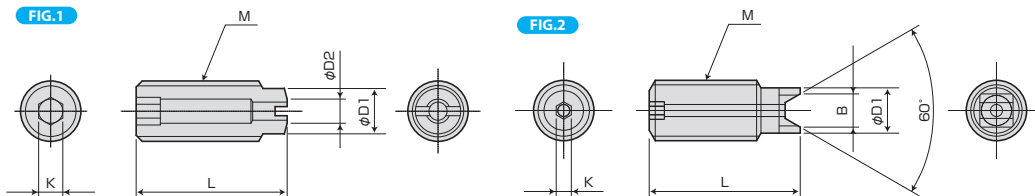
CODE	M	φD	H	CHUCK
RSN07NB(Ni) 30891	M16×1.0	24	11.5	RSC07
RSN10NB(Ni) 30892	M21×1.0	30	15.5	RSC10
RSN13NB(Ni) 30893	M26×1.0	36	17.5	RSC13
RSN16NB(Ni) 30894	M32×1.0	42	17.5	RSC16
RSN20NB(Ni) 30895	M40×1.0	50	17.5	RSC20

CODE	M	φD	H	CHUCK
RSN10NB-OH 30870	M21×1.0	30	15.5	RSC10
RSN13NB-OH 30871	M26×1.0	36	17.5	RSC13
RSN16NB-OH 30872	M32×1.0	42		RSC16
RSN20NB-OH 30873	M40×1.0	50		RSC20

Note: Single use of OH nut can not cope with the thru-the-tool coolant.



ADJUST SCREW (For COLLET CHUCK)



MODEL	FIG	M	L	D1	D2	K	B	HOLDER
M6×20L-CTW 1)	1	M6×1.0	20	4.5	3	3	—	RSC07
RAS10-25-2.5 2)	2	M10×1.5	25	7.5	—	2.5	5.5	RSC10
RAS13-25-2.5 2)		M12×1.5		9.5			7.2	RSC13
RAS16-25-5 2)		M18×1.5		13.5			—	RSC16
RAS20-25-5 2)		M24×1.5		17.5		5	9.5	RSC20

Note 1: Drill less than φ3 cannot be used for adjustment protrusion in order to enter the coolant hole.

CTW is not in the two pieces shape

Note 2: Drill less than φ2 cannot be used for adjustment protrusion in order to enter the coolant hole.



CHUCK WRENCH (For COLLET CHUCK)

CODE	CHUCK
FP25 35844	RSC07
FP30 35845	RSC10
FP35 35846	RSC13
FP42 35847	RSC16
FP50 35848	RSC20

BT series

HSK series

ST series

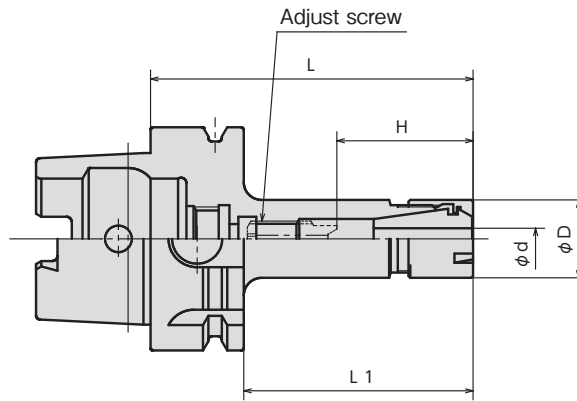
Versatile Tool

Cutting Tool

Accessories

▶▶ Thru-the-tool Coolant Available

▶▶ Thru-the-groove Coolant Available



MODEL	CODE	ød	øD	L	L1	H	COLLET	NUT	ADJUST SCREW	
HSKA50	SSC07-090	310011	0.5~7	16	90	64	25~40	CR07-d	ER11MN	M6×20L-CTW
	SSC07-135	310012			135	109				
	SSC10-090	310013	0.5~10	22	90	64	31~48	CR10-d	ER16MN	RAS10-25-2.5
	SSC10-135	310014			135	109				
	SSC13-090	310015	0.5~13	28	90	64	35~52	CR13-d	ER20MN	RAS13-25-2.5
	SSC13-135	310016			135	109				
HSKA63	SSC07-090	321351	0.5~7	16	90	64	25~40	CR07-d	ER11MN	M6×20L-CTW
	SSC07-135	321352			135	109				
	SSC10-090	321353	0.5~10	22	90	64	31~48	CR10-d	ER16MN	RAS10-25-2.5
	SSC10-135	321354			135	109				
	SSC13-105	321355	0.5~13	28	105	79	35~52	CR13-d	ER20MN	RAS13-25-2.5
	SSC13-150	321356			150	124				

- NOTE: 1. A Coolant pipe is supplied with chuck.
 2. Collet and chuck wrench are sold separately.
 3. CROH collet is used for thru-the-tool coolant application.

ORDERING EXAMPLE			
①	②	③	④
HSKA63	- SSC	10	- 135
① Shank Size	② Holder's Name	③ Max. øD	④ G.L. Length



ACCESSORIES

▶ P.122,123 COLLETS



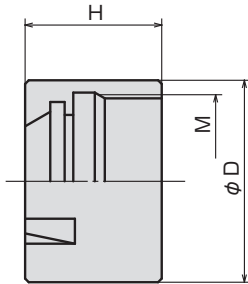
ACCESSORIES

▶ P.128 NUT, ADJUST SCREW, CHUCK WRENCH

ACCESSORIES for SLIM CHUCK



NUT FOR SLIM CHUCK

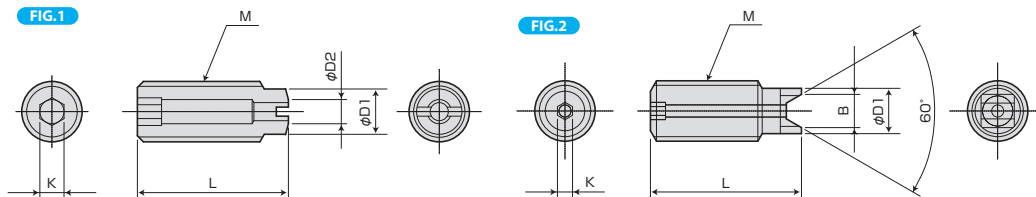


	CODE	M	øD	H	CHUCK
ER11MN	30924	M13×0.75	16	11.3	SSC07
ER16MN	30926	M19×1.0	22	18	SSC10
ER20MN	30928	M24×1.0	28	19	SSC13
ER25MN	30929	M30×1.0	35	20	SYFN16S

ER25MN is a nut for Synchro Tap Holder SYFN16S type, on page 57 and page 111.



ADJUST SCREW (For SLIM CHUCK)



MODEL	FIG	M	L	D1	D2	K	B	HOLDER
M6×20L-CTW 1)	1	M6×1.0	20	4.5	3	3	—	SSC07
RAS10-25-2.5 2)	2	M10×1.5	25	7.5	—	2.5	5.5	SSC10
RAS13-25-2.5 2)		M12×1.5		9.5			7.2	SSC13

Note 1: Drill less than $\phi 3$ cannot be used for adjustment protrusion in order to enter the coolant hole. CTW is not in the two pieces shape

Note 2: Drill less than $\phi 2$ cannot be used for adjustment protrusion in order to enter the coolant hole.



CHUCK WRENCH (For SLIM CHUCK)

	CODE	CHUCK
ER11MS	35861	SSC07
ER16MS	35863	SSC10
ER20MS	35865	SSC13
ER25MS	35867	SYFN16S

NOTE: ER25MS is a wrench for Synchro Tap Holder SYFN16S, type, on page 57 and page 111.

FIG.1

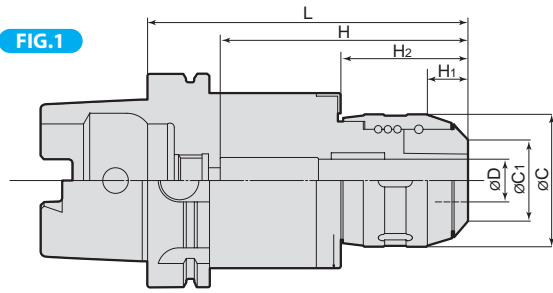
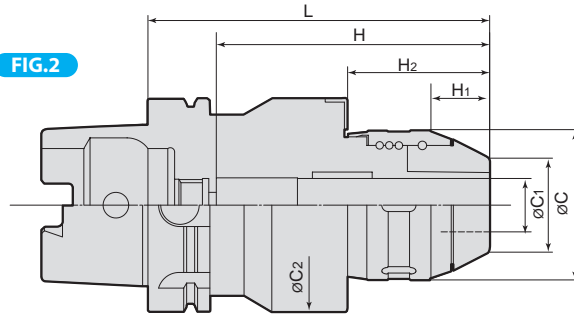


FIG.2



Cutter shank diameter should be h6 or better.

MODEL	STOCK	Fig	øD	L	H	øC	øC1	øC2	H1	H2	Min insert length	N/W (kg)
HSKA63	-HDU16- 140	△	16	140	112	62	38	82	14	54.5	57	
	-HDU20- 145	△										
HSKA100	-HDU16- 145	△	20	145	117	62	38	82	14	54.5	57	
	-HDU20- 150	△										
HSKA100	-HDU25- 160	△	25	160	128	70	44	100	27.5	66.5	85	
	-HDU32- 165	△										

- NOTE : 1. Coolant pipe is included.
 2. Please don't use with collets because it may destroy the inside of the holder.
 3. After 100 clamping cycles, or every 3month interval, please confirm clamping power of hydraulic portion.
 4. When you check clamping power of hydraulic portion, please use exclusive test bar (separately sold).

ORDERING EXAMPLE

① HSKA63 - ② HDU ③ 32 - ④ 120

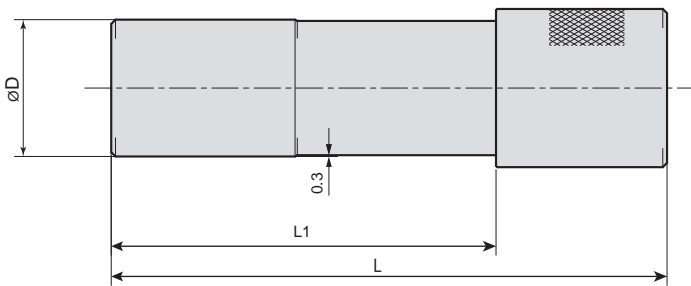
① Shank Size
 ② Holder's Name
 ③ Max. øD
 ④ G.L. Length

ACCESSORIES
 P.118 CHUCK WRENCH

ACCESSORIES for Hy-Dual CHUCK



Tester for clamping power



MODEL	øD	L	L1	
TB	HDU16	16	110	57
	HDU20	20	110	70
	HDU25	25	125	85
	HDU32	32	130	90

ORDERING EXAMPLE

① TB - ② HDU16

① Holder's Name
 ② Chack Size



CHUCK WRENCH (For Hy-Dual CHUCK)

HOOK SPANNER		
CHUCK CODE	WRENCH CODE	
Hy-DUAL CHUCK		
HDU16,HDU20	FS58-62G	35853
HDU25	FS68-75G	35854
HDU32	FS80-90G	35855

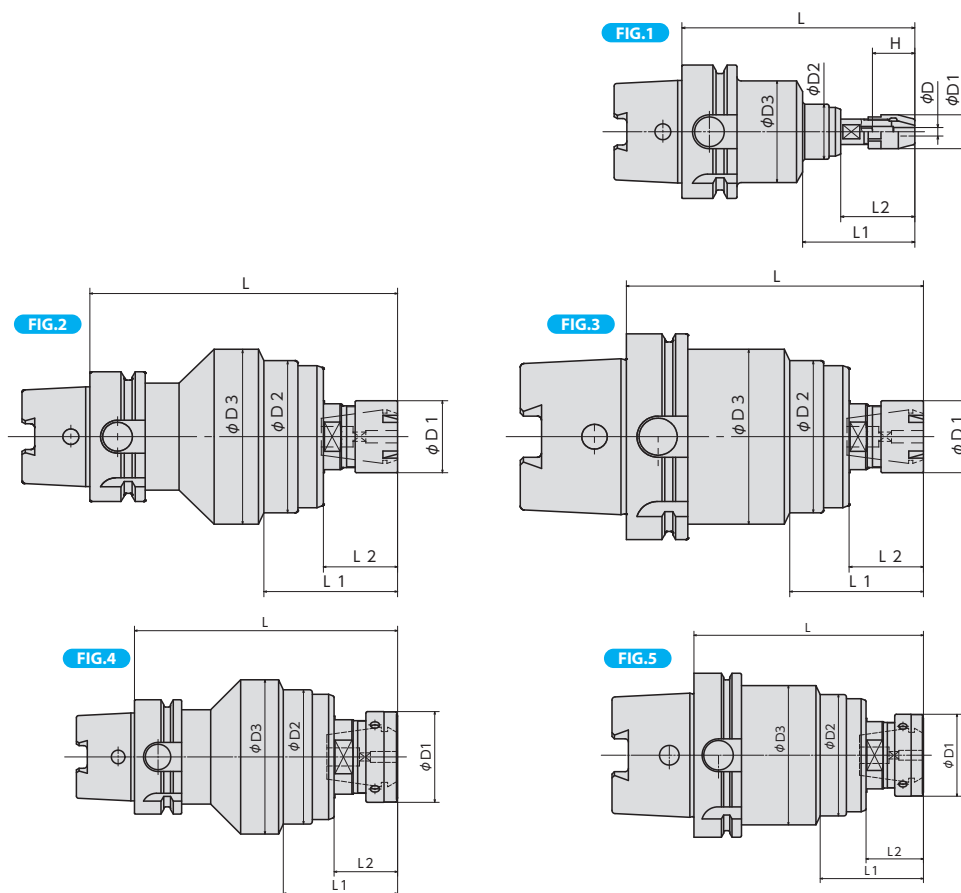
SYNCHRO TAP HOLDER SYFN/SYFS

FEATURES p. 11-12

HSKA^(No.)-SYFN/SYFS^(No.)-L

▶▶▶ Thru-the-tool Coolant Available

▶▶▶ Thru-the-groove Coolant Available(Optional)



Please use the tool having shank tolerance within h7 for SYFS type.

MODEL	CODE	FIG	φD	φD1	φD2	φD3	L	L1	L2	H	TAP SIZE	COLLET	
HSKA50	-SYFN12	-125 310001	4	-	36	51	62.5	125	54	30	-	M4~M12, No.8~U1/2 P1/8	CR13GBorGH
	-155 310002	155						84	60				
HSKA63	-SYFS02	-110 321282	1	3	16	26	48	110	53	35	22	M1, M1.6, M2, No.3, No.4 M3, No.5, No.6	-
	-SYFS03	-110 321284											
	-SYFN12	-115 321291	5	-	36	51	62.5	115	54	30	-	M4~M12, No.8~U1/2 P1/8	CR13GBorGH
		-145 321292						145	84	60			
	-SYFN16S	-145 321297	2	-	35	74	85	145	63	35	-	M4~M16, No.8~U5/8, P1/4	CR16GBorGH
		-175 321298						175	93	65			
		-205 321299						205	123	95			
		-145 321294						145	63	35			
	-SYFN20	-175 321295	4	-	50	74	85	175	93	65	-	M4~M20, U5/16~U5/8, P1/8~P3/8	CR20GBorGH
		-205 321296						205	123	95			
-140 351107		3						-	35	74			
-170 351108	170		93	65									
-200 351109	200		123	95									
-230 351110	230		153	125									
-260 351111	260	183	155										
	-SYFN20	-140 351104	5	-	50	74	85	140	63	35	-	M4~M20, U5/16~U5/8, P1/8~P3/8	CR20GBorGH
		-170 351105						170	93	65			
	-200 351106	200						123	95				
-200 351106	200	123						95					

- NOTE: 1. Each holder supplied with built-in coolant pipe. (Stationary type)
 2. Collet and chuck wrench are sold separately.
 3. Applicable to synchronized machines only.
 4. Thru-the-groove coolant type is manufactured to orders.

ORDERING EXAMPLE

①	②	③	④
HSKA63	-SYFN	20	-145
① Shank Size	② Name	③ Type No	④ G.L. Length

ACCESSORIES
 ▶ P.124,125 COLLETS

ACCESSORIES
 ▶ P.126,128 NUT, CHUCK WRENCH

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

Accessories



COLLET CHUCK (SLIM TYPE)

FEATURES P. 14

ST[⊙]-SSC[⊙]MAX-L[⊙]

▶▶▶ Thru-the-tool Coolant Available

▶▶▶ Thru-the-groove Coolant Available

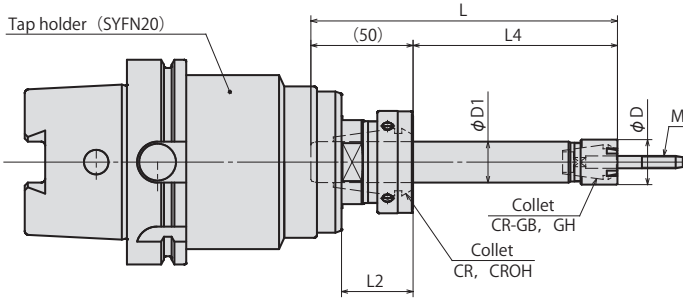


FIG.1

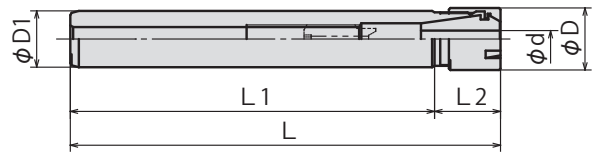
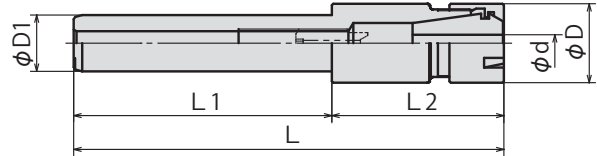


FIG.2



MODEL	CODE	FIG	φD	φD1	L	L1	L2	L3	L4	Suitable holder	Suitable collet	TAP SIZE	Collet for suitable collet	NUT
ST16	SSC07-100	30377	16	16	100	83	17	50 (min40)	50	SYFN20	CR20-16 CROH20-16	M2~M6, No.3~ U1/4	CR07-d CROH07-d	ER11MN
	SSC07-150	30378			150	133			100					
	SSC07-200	30379			200	183			150					
ST20	SSC10-100	30831	22	20	100	77	23	50 (min45)	50	SYFN20	CR20-20 CROH20-20	M4~M10, No.8~ U7/16	CR10GB CR10GH	ER16MN
	SSC10-150	30832			150	127			100					
	SSC10-200	30833			200	177			150					
	SSC10-250	30834			250	227			200					
	SSC13-150	30835	2	28	20	150	90	60	100			M4~M12, No.8~ U1/2,P1/8	CR13GB CR13GH	ER20MN
	SSC13-200	30836				200	140		150					

NOTE: 1. Collet and chuck wrench are sold separately.
2. CROH collet is used for thru-the-tool coolant application.

ORDERING EXAMPLE

① **HSKA63** - ② **SYFN** ③ **20** - ④ **145**

- ① Shank Size
- ② Name
- ③ Type No
- ④ G.L. Length



ACCESSORIES

▶ **P.122-125 COLLETS**

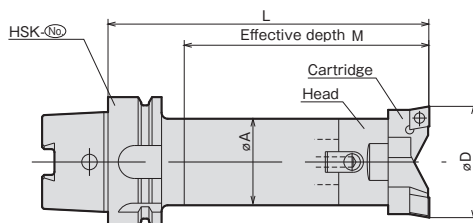


ACCESSORIES

▶ **P.128 NUT, ADJUST SCREW, CHUCK WRENCH**

FEATURES

- Versatile modular type boring system.
- Rigidity is increased by the new coupling method and the serrated head.
- Twin blades allow heavy cutting.
- Extensions are used for deep holes.



RANGE (D)	MODEL	CODE	SHANK	HEAD	CARTRIDGE	L	M	L ₁	øA	N/W (kg)	
ø25~33	HSKA63	- TWC 25 - 120 - S	HSKA63	- SBS1 - 120	HE25	CT25	120	85	83	24	1.2
ø32~45		- TWC 32 - 135 - S		- SBS2 - 135	HE32	CT32	135	100	98	31	1.5
ø44~63		- TWC 44 - 135 - S		- SBS3 - 135	HE44	CT44	135	100	91	42	2.0
ø62~89		- TWC 62 - 135 - S		- SBS4 - 135	HE62	CT62	135	100	82	54	3.0
ø88~126	HSKA100	- TWC 88 - 165 - S	HSKA100	- SBS5 - 165	HE88	CT88	165	130	100	64	5.7
ø25~33		- TWC 25 - 150 - S		- SBS1 - 150	HE25	CT25	150	104	113	24	2.6
ø32~45		- TWC 32 - 165 - S		- SBS2 - 165	HE32	CT32	165	119	128	31	3.0
ø44~63		- TWC 44 - 165 - S		- SBS3 - 165	HE44	CT44	165	119	121	42	3.6
		- TWC 44 - 225 - S		- SBS3 - 225			225	179	181		4.2
ø62~89		- TWC 62 - 165 - S		- SBS4 - 165	HE62	CT62	165	119	112	54	4.7
		- TWC 62 - 240 - S		- SBS4 - 240			240	194	187		5.9
		- TWC 62 - 285 - S		- SBS4 - 285			285	239	232		6.7
ø88~126		- TWC 88 - 165 - S		- SBS5 - 165	HE88	CT88	165	119	100	64	6.0
		- TWC 88 - 240 - S		- SBS5 - 240			240	194	175		7.8
		- TWC 88 - 330 - S		- SBS5 - 330			330	284	265		10.0
ø125~175		- TWC125 - 185 - S		- SBS6 - 185	HE125	CT125	185	139	113	82	8.8
	- TWC125 - 240 - S	- SBS6 - 240	240	194			168	9.6			
	- TWC125 - 330 - S	- SBS6 - 330	330	284			258	14.8			

- NOTE : 1. Coolant pipe is included.
 2. Inserts are sold separately.
 3. Inserts are in phase with the drive key.
 4. Thru-the tool coolant type if manufactured by order.

ORDERING EXAMPLE

①	②	③	④	⑤
HSKA63	TWC	25	120	S
① Shank Size				
② Name				
③ Min. øD				
④ G.L. Length				
⑤ Set				



ACCESSORIES

➔ P.133 INSERTS

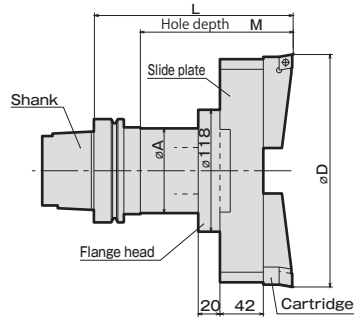


ACCESSORIES

➔ P.137 EXTENSION · REDUCTION

FEATURES

For high stock removal with balanced blade, for $\phi 175 \sim \phi 375$ mm bores.



HSK series

RANGE(D)	MODEL	CODE	SHANK	FLANGE HEAD	SLIDE PLATE	CARTRIDGE	INSERT	L	M	φA	N/W (kg)
φ175~225	- TWC175 - 205 - S	350185	HSKA100	- SBS6 - 185	TWC - FH - 0 (TWC - FH - 90)	CT125	WT62-127	205	159	82	12.2
	- TWC175 - 260 - S	350186		- SBS6 - 240				260	214		14.5
	- TWC175 - 350 - S	350187		- SBS6 - 330				350	304		17.9
φ225~275	- TWC225 - 205 - S	350188	HSKA100	- SBS6 - 185	TWC - FH - 0 (TWC - FH - 90)	CT125	WT62-127	205	159	82	13.6
	- TWC225 - 260 - S	350189		- SBS6 - 240				260	214		15.9
	- TWC225 - 350 - S	350190		- SBS6 - 330				350	304		19.4
φ275~325	- TWC275 - 205 - S	350191	HSKA100	- SBS6 - 185	TWC - FH - 0 (TWC - FH - 90)	CT125	WT62-127	205	159	82	16.1
	- TWC275 - 260 - S	350192		- SBS6 - 240				260	214		18.3
	- TWC275 - 350 - S	350193		- SBS6 - 330				350	304		21.8
φ325~375	- TWC325 - 205 - S	350194	HSKA100	- SBS6 - 185	TWC - FH - 0 (TWC - FH - 90)	CT125	WT62-127	205	159	82	17.3
	- TWC325 - 260 - S	350195		- SBS6 - 240				260	214		19.6
	- TWC325 - 350 - S	350196		- SBS6 - 330				350	304		23.1

- NOTE : 1. Coolant pipe is included.
 2. Inserts are sold separately.
 3. Inserts are in phase with the drive key.
 4. TWC-FH-90 Flange Head is used to change the phase to 90°.

ORDERING EXAMPLE

①	②	③	④	⑤
HSKA100	-	TWC 175	-	185 - S
① Shank Size	② Name	③ Min. φD	④ G.L. Length	⑤ Set

ACCESSORIES for <BORING SYSTEM> TWINCUT Double-Face-Contact Shank

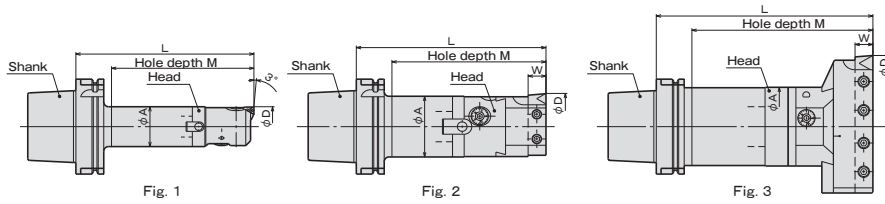


INSERT for TWINCUT

TWINCUT	CODE				ISO CODE	I. C.	T	R	CARTRIDGE	SCREW	DRIVER
	STEEL	CAST IRON									
	WT25 - 079P	32901	WT25 - 079K	32911	CC**080304	7.94	3.18	0.4	CT25	BFTX0307	TRX10
	WT32 - 095P	32902	WT32 - 095K	32912	CC**090308	9.525			CT32~44	BFTX0409N	TX215
	WT62 - 127P	32903	WT62 - 127K	32913	CC**120408	12.7	4.76	0.8	CT62~125	BFTX0511N	TRX220

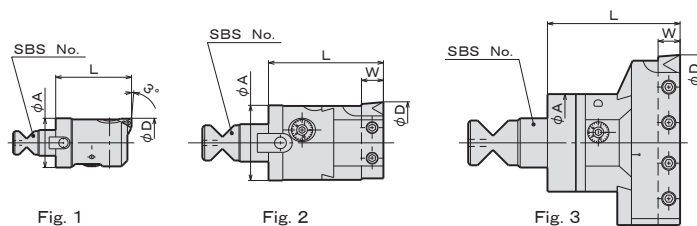
NOTE : 1. Inserts are available in 10 pcs boxes.

▶▶▶ Thru-the-tool Coolant Available



RANGE (D)	MODEL	Fig	CODE	SHANK	HEAD	BORING TOOL	INSERT	L	M	φA	W	N/W (kg)	
φ25~32	-FIC25N-130-S	1	321500	HSKA63	-SBS1-120	FCH25N	—	TP□□0802□□	130	95	24	—	1.3
φ32~44 注7)	-FIC32N-155-S		321502		-SBS2-135	FCH32N			155	120	31		1.6
φ44~57	-FIC44N-155-S		321504		-SBS3-135	FCH44N			150	115	42		2.3
φ55~73	-FIC55N-150-S		321506		-SBS4-135	FCH55N			150	115	54		3.1
φ70~140	-FIC70N-200-S	2	321508	-SBS5-165	FCH70N	TBS119C12 SBS919 TBS919	CP□□1204□□ TP□□1603□□ CC□□1204□□ TC□□16T3□□	200	165	64	□19	5.3	
φ90~160	-FIC90N-250-S		321510	-SBS6-200	FCH90N	250	215	83	9.7				
φ25~32	-FIC25N-160-S	1	351300	HSKA100	-SBS1-150	FCH25N	—	TP□□0802□□	160	114	24	—	3.0
φ32~44 注7)	-FIC32N-185-S		351302		-SBS2-165	FCH32N			185	139	31		3.5
φ44~57	-FIC44N-185-S		351304		-SBS3-165	FCH44N			245	199	42		4.2
φ55~73	-FIC44N-245-S		351306		-SBS3-225	FCH44N			180	134	54		4.8
φ55~73	-FIC55N-180-S	1	351308	-SBS4-165	FCH55N	—	TP□□0802□□	255	209	54	—	5.1	
φ55~73	-FIC55N-255-S		351310	-SBS4-240	FCH55N			300	254	64		6.3	
φ55~73	-FIC55N-300-S	1	351312	-SBS4-285	FCH55N	—	TP□□0802□□	200	154	64	—	6.7	
φ55~73	-FIC55N-380-S		351314	-SBS5-165	FCH70N			275	229	83		8.6	
φ70~140	-FIC70N-200-S	2	351316	-SBS5-240	FCH70N	TBS119C12 SBS919 TBS919 TSBS919	CP□□1204□□ TP□□1603□□ CC□□1204□□ TC□□16T3□□	200	154	64	□19	6.7	
φ70~140	-FIC70N-275-S		351316	-SBS5-240	FCH70N			275	229	83		8.6	
φ70~140	-FIC70N-365-S		351318	-SBS5-330	FCH70N			365	319	83		10.8	
φ70~140	-FIC70N-425-S		351320	-SBS6-185	FCH90N			235	189	83		9.5	
φ90~160	-FIC90N-235-S	2	351320	-SBS6-240	FCH90N	—	TP□□0802□□	290	244	83	—	12.5	
φ90~160	-FIC90N-290-S		351322	-SBS6-330	FCH90N			380	334	83		16.2	
φ90~160	-FIC90N-380-S	2	351324	-SBS6-330	FCH90N	—	TP□□0802□□	225	179	83	—	10.3	
φ90~160	-FIC150N-225-S		351326	-SBS6-185	FCH150N			280	234	83		13.3	
φ150~220	-FIC150N-280-S	3	351328	-SBS6-240	FCH150N	TBS119C12 SBS919 TBS919 TSBS919	CP□□1204□□ TP□□1603□□ CC□□1204□□ TC□□16T3□□	280	234	83	□19	17.0	
φ150~220	-FIC150N-370-S		351330	-SBS6-330	FCH220N			370	324	83		11.6	
φ150~220	-FIC220N-225-S		351332	-SBS6-185	FCH220N			225	179	83		14.6	
φ150~220	-FIC220N-280-S		351334	-SBS6-240	FCH220N			280	234	83		18.3	
φ220~290	-FIC220N-370-S	3	351336	-SBS6-330	FCH220N	—	TP□□0802□□	370	324	83	—	12.9	
φ220~290	-FIC290N-225-S		351338	-SBS6-185	FCH290N			225	179	83		15.9	
φ290~360	-FIC290N-280-S	3	351340	-SBS6-240	FCH290N	—	TP□□0802□□	280	234	83	—	15.9	
φ290~360	-FIC290N-370-S		351342	-SBS6-330	FCH290N			370	324	83		19.6	

FIRSTCUT HEAD



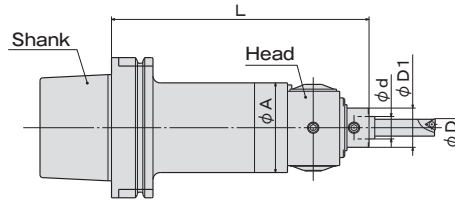
RANGE (D)	MODEL	Fig	CODE	SLIDE DISTANCE	BORING TOOL	INSERT	SBS No.	L	φA	W	N/W (kg)
φ25~32	FCH25N	1	700130	3.5	—	TP□□0802□□	SBS1	47	24	—	0.2
φ32~44 注7)	FCH32N		700131	5.0			SBS2	57	31		0.4
φ44~57	FCH44N		700132	6.5			SBS3	64	42		0.7
φ55~73	FCH55N		700133	9.0			SBS4	68	54		1.2
φ70~140	FCH70N	2	700134	20	TBS119C12 SBS919 TBS919 TSBS919	CP□□1204□□ TP□□1603□□ CC□□1204□□ TC□□16T3□□	SBS5	100	64	□19	2.6
φ90~160	FCH90N		700135				122	4.7			
φ150~220	FCH150N	3	700136	20	TBS119C12 SBS919 TBS919 TSBS919	CP□□1204□□ TP□□1603□□ CC□□1204□□ TC□□16T3□□	SBS6	112	83	□19	5.5
φ220~290	FCH220N		700137				6.8				
φ290~360	FCH290N		700138				8.1				

- NOTE: 1. A coolant pipe is installed(fixed type).
 2. Adjustable in φ0.01mm per scale
 3. Insert is in face with drive key.
 4. Through the tool coolant is standard.
 5. Inserts over than FIC70 are square shank tool.
 6. Inserts and bites are sold separately.
 7. The max. machining range means when installed spacer(included).
 Without spacer, max range is φ42mm.

ORDERING EXAMPLE

① HSKA100-② FIC ③ 70 N-④ 200-⑤ S

- ① Shank Size
- ② Holder's Name
- ③ Min. φD
- ④ New Type
- ⑤ G.L. Length
- ⑥ Set



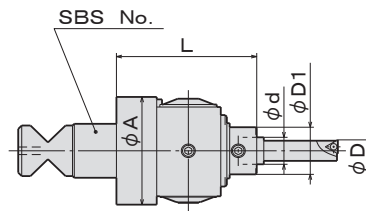
RANGE (D)	MODEL	CODE	SHANK	HEAD	L	φA	φd	φD1	DIAL CALIBRATION	COLLET	N/W (kg)	
φ3~23	HSKA63	-FIC1NJ-151-S	HSKA63	-SBS3-135	FCH1NJ	151	46	10	18	φ0.005	SSCP10-□	2.2
φ3~28		-FIC2NJ-180-S		-SBS5-165	FCH2NJ	180	64	16	28	φ0.010	SSCP16-□	4.5
φ3~23	HSKA100	-FIC1NJ-181-S	HSKA100	-SBS3-165	FCH1NJ	181	46	10	18	φ0.005	SSCP10-□	4.1
φ3~28		-FIC2NJ-180-S		-SBS5-165	FCH2NJ	180	64	16	28	φ0.010	SSCP16-□	5.9

NOTE: 1. A coolant pipe is installed (fixed type).
 2. Insert is in face with drive key.
 3. Through the tool coolant is standard.
 4. Inserts and bites and collets are sold separately.

ORDERING EXAMPLE

①	②	③	④	⑤	⑥
HSKA100	-FIC	70	N	200	-S
① Shank Size					
② Holder's Name					
③ Min. φD					
④ New Type					
⑤ G.L. Length					
⑥ Set					

FIRSTCUT HEAD [Small-hole Boring Tool]



RANGE (D)	MODEL	CODE	SBS No.	L	φA	φd	φD1	DIAL CALIBRATION	SLIDE DISTANCE	COLLET	N/W (kg)
φ3~23	FCH1NJ	700139	SBS3	60	46	10	18	φ0.005	2.5	SSCP10-□	0.6
φ3~28	FCH2NJ	700140	SBS5	80	64	16	28	φ0.010	3.5	SSCP16-□	1.8

NOTE: 1. Through the tool coolant is standard.
 2. Inserts and bites and collets are sold separately.



ACCESSORIES

▶ P.136 JIG BORER TOOLS, COLLET, INSERTS



ACCESSORIES

▶ P.137 EXTENSION, REDUCTION

ACCESSORIES for <BORING SYSTEM>FIRSTCUT



THROWAWAY SQUARE SHANK TOOLS • THROWAWAY JIG BORER TOOLS

THROWAWAY SQUARE SHANK TOOLS

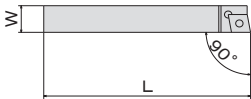


Fig. 1

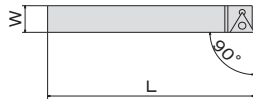
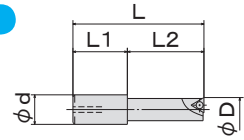


Fig. 2

MIN. RANGE D	MODEL	Fig	CODE	INSERT	W	L
70	TBS919	1	700150	CC□□1204□□	□19	140
72	TBS119C12		700152	CP□□1204□□		95
70	TSBS919	2	700154	TC□□16T3□□	□19	140
	SBS919		700156	TP□□1603□□		

NOTE : Inserts are sold separately.

THROWAWAY JIG BORER TOOLS



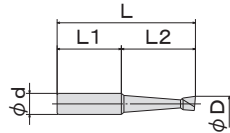
MIN. RANGE D	MODEL	CODE	L	L1	L2	φd	INSERT
8	JBM-1008	700160	50		30	10	CC□□03S1□□
10	-1010	700161	60	20	40		TP□□0802□□
12	-1012	700162	70		50		TP□□1102□□
15	-1015	700163	79	19	60		TP□□1102□□
18	-1018	700164					TP□□1102□□
8	JBM-1608	700165	65		35	16	CC□□0602□□
10	-1610	700166	75	30	45		TP□□0802□□
12	-1612	700167	85		55		TP□□0802□□
15	-1615	700168	95		65		TP□□0802□□
18	-1618	700169					TP□□1102□□
21	-1621	700170	96	26	70		TP□□1102□□

NOTE : Inserts are sold separately.

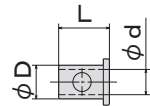


JIG BORER TOOLS • COLLET

JIG BORER TOOLS



COLLET



TYPE	MIN. RANGE D	φd	L1	For Through hole				For Blind hole			
				MODEL	CODE	L	L1	MODEL	CODE	L	L1
Carbide Tool	3	8	25	101A	700341	39	14	101B	700361	39	14
	6			102A	700342	51.5	26.5	102B	700362	51.5	26.5
	10			103A	700343	65.5	40.5	103B	700363	65.5	40.5
	15			104A	700344	69	44	104B	700364	69	44
	3			151A	700345	60	20	151B	700365	60	20
	6			152A	700346	70	30	152B	700366	70	30
	10	153A	700347	75	35	153B	700367	75	35		
	15	154A	700348	85	45	154B	700368	85	45		

MODEL	CODE	φd	φD	L
SCP10-6	35650	6	10	17.5
SCP10-8	35652	8		
SCP16-8	35654	8	16	25
SCP16-10	35656	10		
SCP16-12	35658	12		



THROWAWAY TIP for FIRSTCUT

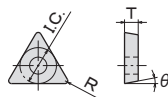


Fig. 1

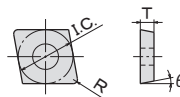


Fig. 2

STEEL		CAST IRON		SUS		ALUMINIUM		DA		CBN		Fig.	ISO CODE	I.C.	T	R	θ	BORING HEAD	SCREW	DRIVER
MODEL	CODE	MODEL	CODE	MODEL	CODE	MODEL	CODE	MODEL	CODE	MODEL	CODE									
NFT-TC16-ST	34500	NFT-TC16-CS	34508	NFT-TC16-SU	34516							1	TC**16T304	9.525	3.97	0.4	7°	FCH70N~FCN290N	MS4011A	TRX15
NFT-CC03-ST	34501	NFT-CC03-CS	34509	NFT-CC03-SU	34517	NFT-CC03-AL	34524			NFT-CC03-BN	34532	2	CC**03X102	3.5	1.39	0.2		FCH1NJ	TS16	TRX6
NFT-CC06-ST	34502	NFT-CC06-CS	34510	NFT-CC06-SU	34518	NFT-CC06-AL	34525	NFT-CC06-DA	34528	NFT-CC06-BN	34533		CC**060202	6.35	2.38		FCH2NJ			
NFT-CC12-ST	34503	NFT-CC12-CS	34511	NFT-CC12-SU	34519								CC**120404	12.7	4.76		FCH70N~FCN290N	MS5011A	TRX20	
NFT-TP08-ST	34504	NFT-TP08-CS	34512	NFT-TP08-SU	34520	NFT-TP08-AL	34526	NFT-TP08-DA	34529	NFT-TP08-BN	34534		TP**080204	4.76	2.38	0.4	11°	FCH25N~FCH55N, FCH1NJ, FCH2NJ	CHN-20043-R	TRX6
NFT-TP11-ST	34505	NFT-TP11-CS	34513	NFT-TP11-SU	34521	NFT-TP11-AL	34527	NFT-TP11-DA	34530	NFT-TP11-BN	34535	1	TP**110204	6.35				FCH1NJ, FCH2NJ	CHN-25056-R	TRX8
NFT-TP16-ST	34506	NFT-TP16-CS	34514	NFT-TP16-SU	34522			NFT-TP16-DA	34531	NFT-TP16-BN	34536		TP**160304	9.525	3.18			FCH70N~FCN290N	MS4011A	TRX15
NFT-CP12-ST	34507	NFT-CP12-CS	34515	NFT-CP12-SU	34523							2	CP**120404	12.7	4.76				M4×15L(全糸)	

NOTE : 1. Inserts are available in 10 pcs boxes.

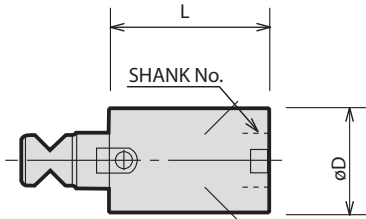
BT series
HSK series
ST series
Versatile Tool
Cutting Tool
Accessories



EXTENSION



For deeper holes.



MODEL	CODE	SHANK No.	øD	L
TEX1 - 40	32610	1	24	40
TEX2 - 45	32620	2	31	45
TEX3 - 50	32630	3	42	50
TEX3 - 65	32631			65
TEX4 - 65	32640	4	54	65
TEX4 - 90	32641			90
TEX5 - 75	32650	5	64	75
TEX5 - 105	32651			105
TEX6 - 75	32660	6	82	75
TEX6 - 105	32661			105

ORDERING EXAMPLE

① **TEX** ② **1** - ③ **40**

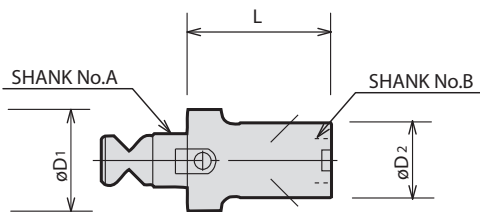
- ① Name
- ② Shank No.
- ③ L



REDUCTION



For using smaller heads.



MODEL	CODE	SHANK No.A	SHANK No.B	øD1	øD2	L
RE2X1 - 60	32720	2	1	31	24	60
RE2X1 - 90	32721					90
RE3X1 - 60	32730	3	2	42	31	60
RE3X1 - 90	32731					90
RE3X2 - 60	32735	4	1	54	24	60
RE3X2 - 90	32736					90
RE4X1 - 60	32740	5	3	64	31	60
RE4X1 - 90	32741					90
RE4X2 - 60	32743	6	4	82	42	60
RE4X2 - 90	32744					90
RE4X3 - 60	32746	3	2	54	31	60
RE4X3 - 90	32747					90
RE5X2 - 60	32750	4	3	64	42	60
RE5X2 - 105	32751					105
RE5X3 - 60	32753	5	4	82	54	60
RE5X3 - 105	32754					105
RE5X4 - 60	32756	6	5	82	64	60
RE5X4 - 105	32757					105
RE6X3 - 75	32760	3	2	54	31	75
RE6X3 - 90	32761					90
RE6X4 - 75	32763	4	3	64	42	75
RE6X4 - 90	32764					90
RE6X5 - 75	32766	5	4	82	54	75

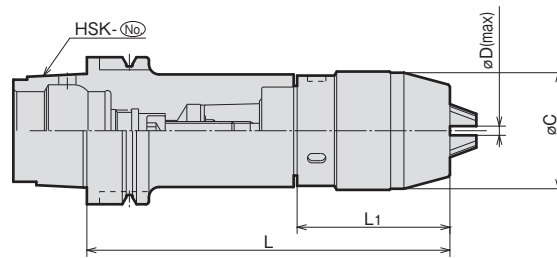
ORDERING EXAMPLE

① **RE** ② **2×1** - ③ **60**

- ① Name
- ② Shank No. A×B
- ③ L

FEATURES

- Drill chuck is positively coupled with the holder.
- Short (L length) and compact.
- Clamping force can be increased by the attached wrench.



MODEL	CODE	øD	L		L1		øC	N/W (kg)	
			OPEN	CLOSE	OPEN	CLOSE			
HSKA50	-SDC08-125	25380	0.5~ 8	128	135.5	50	57.5	37.5	1.1
	-SDC13-155	25390	1~13	154	166.5	66	78.5	50	1.7
HSKA63	-SDC08-125	26380	0.5~ 8	128	135.5	50	57.5	37.5	1.3
	-SDC13-155	26390	1~13	154	166.5	66	78.5	50	1.9
HSKA100	-SDC08-130	27380	0.5~ 8	133	140.5	50	57.5	37.5	2.5
	-SDC13-155	27390	1~13	154	166.5	66	78.5	50	3.1
	-SDC13-205	27391		204	216.5				3.9

NOTE:1. Coolant pipe is included. Each SDC chuck is supplied with a wrench.
2. Each SDC chuck is supplied with a wrench.

ORDERING EXAMPLE			
①	HSKA50	-	② SDC
③	08	-	④ 125
①	Shank Size		
②	Holder's Name		
③	Max. øD		
④	G.L. Length		

RUNOUT

SDC NO.	DIA. OF TEST BAR	RUNOUT
SDC08	4&8mm	0.05mm以下
SDC13	6.5&13mm	

• Runout was measured at three times the diameter from chuck nose.

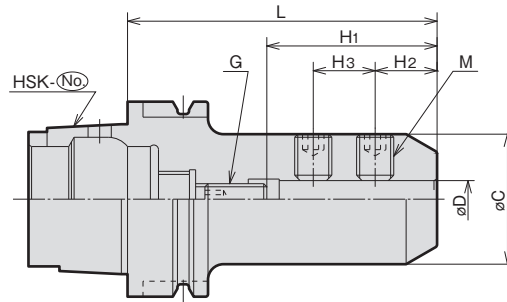
CLAMPING POWER

	CLAMPING	TWISTING MOMENT	Comparison %
TRADITIONAL KEYLESS CHUCK	Manual	6.9 N·m	100
SHOWA SDC CHUCK			
SHOWA SDC CHUCK	With wrench	21.6 N·m	314

NOTE : Twisting moment was measured with a ø9mm test bar.

FEATURES

- Run-out of the cutting tool is improved by the eccentric ID.



MODEL	CODE	øD(H6)	L	øC	H1		H2	H3	M	G	N/W (kg)	
					MIN.	MAX.						
HSKA50	-SLA06-075	25710	6	75	30	18	28	13	-	M 6	M 5	0.7
	-SLA08-080	25720	8	80	35	23	33	15		M 8	M 6	0.8
	-SLA10-090	25730	10	90		25	38	18		M10	M 8	0.9
	-SLA12-100	25740	12	100	42	30	43	20		M12	M10	1.1
	-SLA16-120	25750	16	120	48	35	50	24		M14	M12	1.7
	-SLA20-140	25760	20	140	50	55	70	25		M16		2.0
HSKA63	-SLA06-075	26710	6	75	30	18	28	13	-	M 6	M 5	0.9
	-SLA08-080	26720	8	80	35	23	33	15		M 8	M 6	1.0
	-SLA10-090	26730	10	90		25	38	18		M10	M 8	1.1
	-SLA12-100	26740	12	100	42	30	43	20		M12	M10	1.3
	-SLA16-100	26750	16	100	48	35	46	24		M14	M12	1.6
	-SLA20-120	26760	20	120	50	55	65	25		M16		2.5
	-SLA25-130	26770	25	130	61			24		M18		3.0
	-SLA32-140	26780	32	140	72	65	75	24		M20		4.2
HSKA100	-SLA06-085	27710	6	85	30	18	28	13	-	M 6	M 5	2.2
	-SLA08-090	27720	8	90	35	23	33	15		M 8	M 6	2.3
	-SLA10-100	27730	10	100		25	38	18		M10	M 8	2.4
	-SLA12-110	27740	12	110	42	30	43	20		M12	M10	2.6
	-SLA16-110	27750	16	110	48	35	50	24		M14	M12	2.9
	-SLA20-130	27760	20	130	50			25		M16		3.8
	-SLA25-140	27770	25	140	61	55	70	24		M18		4.5
	-SLA32-150	27780	32	150	72	65	80	24		M20		5.5

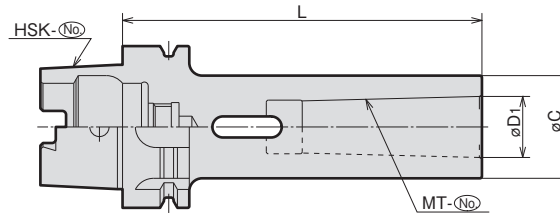
NOTE : 1. Coolant pipe is included.
2. For endmill of straight shank with flat.

ORDERING EXAMPLE

①	HSKA50	-	②	SLA	③	06	-	④	075
①	Shank Size								
②	Holder's Name								
③	Cutter's Shank Dia.								
④	G.L. Length								

MORSE TAPER HOLDER (Type A)

HSKA^(No.)-MTA^(No.)-L



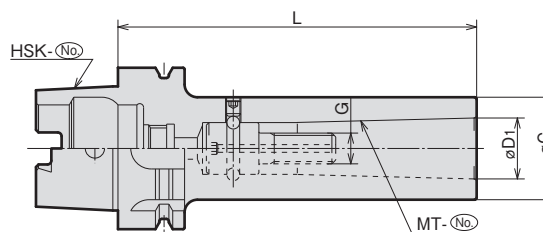
ORDERING EXAMPLE			
①	②	③	④
HSKA50	-MTA	1	-10
① Shank Size	② Holder's Name	③ MT No.	④ G.L. Length

	MODEL	CODE	MT No.	L	øD1	øC	N/W (kg)
HSKA50	-MTA1-100	25410	1	100	12.065	25	1.2
	-MTA2-120	25420	2	120	17.780	32	1.4
	-MTA3-140	25430	3	140	23.825	40	1.5
HSKA63	-MTA1-100	26410	1	100	12.065	25	1.6
	-MTA2-120	26420	2	120	17.780	32	1.8
	-MTA3-140	26430	3	140	23.825	40	2.2
	-MTA4-160	26440	4	160	31.267	50	2.5
HSKA100	-MTA2-120	27420	2	120	17.780	32	3.0
	-MTA3-140	27430	3	140	23.825	40	3.4
	-MTA4-160	27440	4	160	31.267	50	3.7
	-MTA5-200	27450	5	200	44.399	65	4.9

NOTE: 1. Coolant pipe is included.
2. For tongue type Morse taper shank cutting tools.

MORSE TAPER HOLDER (Type B)

HSKA^(No.)-MTB^(No.)-L



ORDERING EXAMPLE			
①	②	③	④
HSKA50	-MTB	1	-100
① Shank Size	② Holder's Name	③ MT No.	④ G.L. Length

	MODEL	CODE	MT No.	L	øD1	øC	G	N/W (kg)
HSKA50	-MTB1-100	25510	1	100	12.065	25	M 6	1.2
	-MTB2-120	25520	2	120	17.780	32	M10	1.4
	-MTB3-140	25530	3	140	23.825	40	M12	1.8
HSKA63	-MTB1-100	26510	1	100	12.065	25	M 6	1.6
	-MTB2-120	26520	2	120	17.780	32	M10	1.8
	-MTB3-140	26530	3	140	23.825	40	M12	2.2
HSKA100	-MTB4-160	26540	4	160	31.267	50	M16	2.5
	-MTB2-120	27520	2	120	17.780	32	M10	3.0
	-MTB3-140	27530	3	140	23.825	40	M12	3.4
	-MTB4-160	27540	4	160	31.267	50	M16	3.7
	-MTB5-200	27550	5	200	44.399	65	M20	4.9

NOTE: 1. Coolant pipe is included.
2. For drawing thread type Morse taper shank cutting tools.

BT series

HSK series

ST series

Versatile Tool

Cutting Tool

Accessories

FIG.1

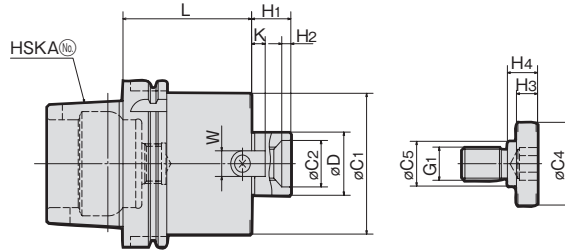


FIG.2

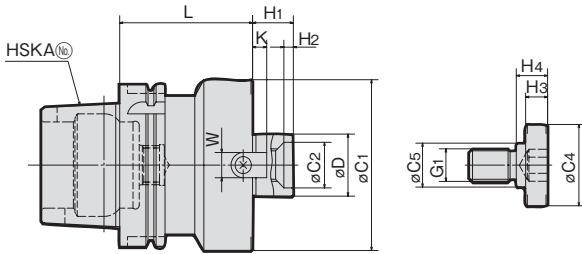
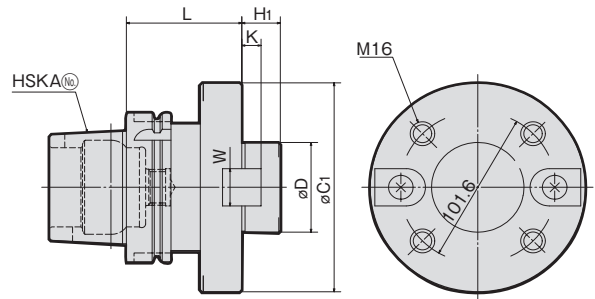


FIG.3



MODEL	CODE	FIG.	øD(h6)	L	øC1	øC2	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)	
									W	K		øC4	øC5	H3	H4		
HSKA50	-FMA22.225-045	1	22.225	45	40	—	18	—	8.0	4	M8	20	15	7	9	0.6	
	-FMA25.4 -060	300572	2	25.4	60	50	—	22	—	9.5	5	M12	33	23	10	12	0.8
HSKA63	-FMA25.4 -060	320660	1	25.4	60	50	—	22	—	9.5	5	M12	33	23	10	12	1.2
	-FMA31.75 -060	320662	2	31.75		60	24	30	6	12.7	7	M16	40	23		16	1.4
	-FMA38.1 -060	320664		38.1		80	28	34		15.9	9	M20	50	27		14	20
HSKA100	-FMA25.4 -060	350660	1	25.4	60	50	—	22	—	9.5	5	M12	33	23	10	12	2.5
	-FMA31.75 -060	350662		31.75		60	24	30	6	12.7	7	M16	40	23		16	2.8
	-FMA38.1 -060	350664		38.1		80	28	34		15.9	9	M20	50	27		14	20
	-FMA50.8 -075	350666	2	50.8	75	100	38	36	10	19.05	10	M24	65	37	14	24	4.9
	-FMA47.625-075	350668	3	47.625		128.6	—	38	—	25.4	12.5	—	—	—		—	—

NOTE : 1. Coolant pipe is included.

ORDERING EXAMPLE

① HSKA63 - ② FMA - ③ 25.4 - ④ 060

- ① Shank Size
- ② Name
- ③ øD
- ④ G.L. Length

FIG.1

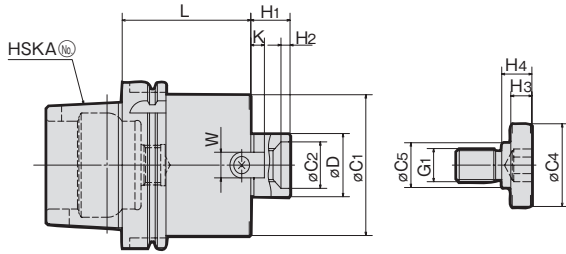


FIG.2

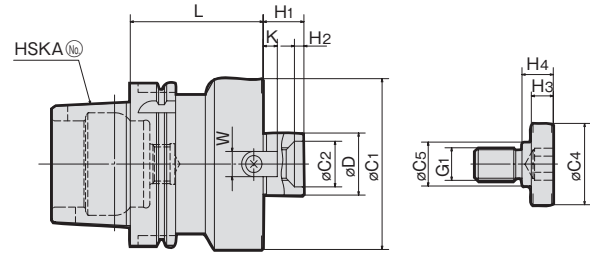


FIG.3

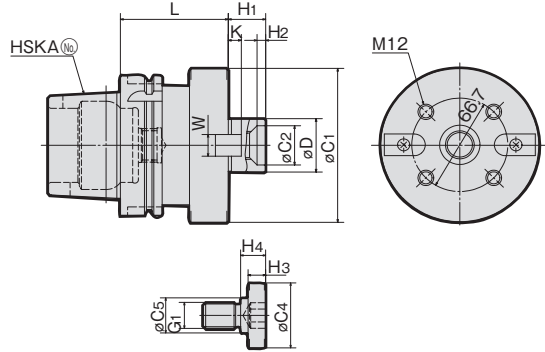
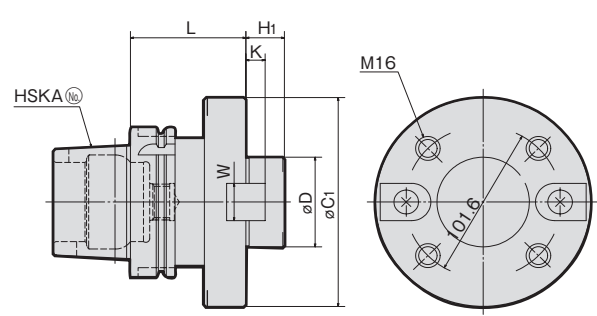


FIG.4



MODEL	CODE	FIG.	øD(h6)	L	øC1	øC2	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
									W	K		øC4	øC5	H3	H4	
HSKA63	-FMB25.4 -060	2	25.4	60	80	—	26	—	9.5	5	M12	33	23	10	12	1.7
	-FMB38.1 -060		85		28	6		15.9	9	M20	50	27	14	20	1.8	
	-FMB27 -060		27		80	—		—	12	6	M12	33	23	10	12	1.7
	-FMB40 -060		320676		40	85		28	6	16	8.5	M20	50	27	14	20
HSKA100	-FMB25.4 -060	1	25.4	60	80	—	26	—	9.5	5	M12	33	23	10	12	2.9
	-FMB38.1 -060	85	—	—	—	—		—	—	—	—	—	—	—	—	3.5
	-FMB38.1F-075	350684	38.1	75	110	28		6	15.9	9	M20	50	27	14	20	4.8
	-FMB27 -060	350686	27	60	80	—		—	12	6	M12	33	23	10	12	2.9
	-FMB40 -060	350262	40	85	—	—		—	—	—	—	—	—	—	—	3.5
	-FMB40F -075	350265	3	40	75	110		28	6	16	8.5	M20	50	27	14	20
	-FMB60 -075	4	60	140	—	25	—	25.4	12.5	—	—	—	—	—	6.8	

NOTE : 1. Coolant pipe is included.
2. For Sandvik and Seco cutters.

ORDERING EXAMPLE

①	②	③	④
HSKA63	-FMB	38.1	-060
① Shank Size	② Name	③ øD	④ G.L. Length

FIG.1

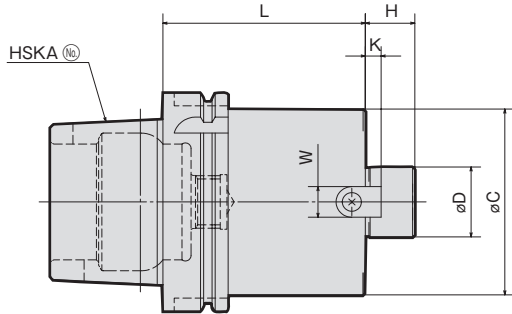
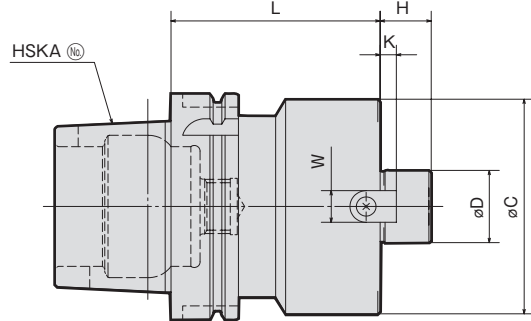


FIG.2



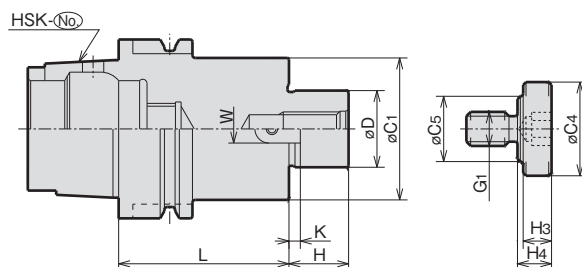
MODEL	CODE	FIG.	øD(h6)	L	øC	H	KEY		CLAMP BOLT	N/W (kg)	
							W	K			
HSKA63	-FMC25.4-060	320680	25.4	60	70	20	9.5	5	M12 × 35L	1.5	
	-FMC38.1-060	320682	38.1		85	22	15.9	7	M16 × 40L	0.8	
	-FMC22 -060	320684	1		22	45	18	10	5	M10 × 30L	1.1
	-FMC27 -060	320686	2		27	70	20	12	6	M12 × 35L	1.5
	-FMC32 -060		2		32	85	22	14	7	M16 × 40L	1.8
HSKA100	-FMC25.4-060		25.4	60	70	20	9.5	5	M12 × 35L	2.9	
	-FMC38.1-060		38.1		85	22	15.9	7	M16 × 40L	3.5	
	-FMC22 -060	350704	1		22	45	18	10	5	M10 × 30L	2.4
	-FMC27 -060		27		70	20	12	6	M12 × 35L	3.0	
	-FMC32 -060		32		85	22	14	7	M16 × 40L	3.4	

NOTE: 1. Coolant pipe is included.
2. For Sandvik and Seco cutters.

ORDERING EXAMPLE

① **HSKA63** - ② **FMC** ③ **22** - ④ **060**

- ① Shank Size
- ② Name
- ③ øD
- ④ G.L. Length



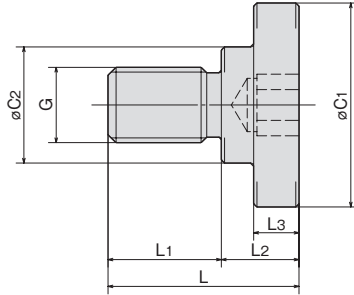
MODEL	CODE	øD(h6)	L	øC1	H	KEY		G1	CLAMP BOLT				N/W (kg)		
						W	K		øC4	øC5	H3	H4			
HSKA50	-SMA16-060	25610	60	34	17	7.95	3	M 8	20	15	7	9	0.6		
	-120	25611											120	34	17
	-SMA22-060	25620	60	42	27		9.95	3.5	M10	28	18	9	11	1.0	
	-120	25621												120	42
	-SMA27-060	25630	60	50	36			9.95	4	M12	33	23	10	12	1.3
	-120	25631													120
-SMA32-060	25640	60	60	38	9.95	4.5			M16	40	23	10	16	1.7	
-120	25641													120	60
HSKA63	-SMA16-060	26610	60	34		17	7.95		3	M 8	20	15	7	9	0.8
	-120	26611													120
	-SMA22-060	26620	60	42		27		9.95	3.5	M10	28	18	9	11	1.1
	-120	26621													120
	-SMA27-060	26630	60	50	36	9.95			4	M12	33	23	10	12	1.4
	-120	26631													120
-SMA32-060	26640	60	60	38	9.95		4.5		M16	40	23	10	16	1.8	
-120	26641													120	60
HSKA100	-SMA22-060	27620	60	42			27	7.95	3.5	M10	28	18	9	11	2.3
	-120	27621													120
	-SMA27-060	27630	60	50		36	9.95		4	M12	33	23	10	12	2.8
	-120	27631													120
	-SMA32-060	27640	60	60	38	9.95			4.5	M16	40	23	10	16	3.0
	-120	27641													120
-SMA40-060	27650	60	80	38	11.95			4.5	M20	50	27	14	20	3.0	
-120	27651													120	80

NOTE : 1. Coolant pipe is included.

ORDERING EXAMPLE			
①	②	③	④
HSKA50	- SMA	16	- 060
① Shank Size	② Name	③ øD	④ G.L. Length



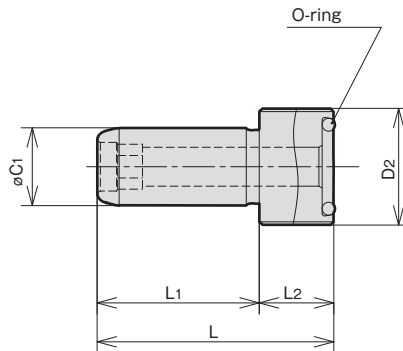
CLAMP BOLT FOR FACE MILL ARBOR



MODEL	CODE	$\phi C1$	$\phi C2$	L	L1	L2	L3	G	ARBOR CODE
MBA - M 8	49771	20	15	23	14	9	7	M 8×P1.25	FMA22.225 SMA16
MBA - M10	49772	28	18	27	16	11	9	M10×P1.5	SMA22 SMB22.225
MBA - M12	49773	33	23	30	18	12	10	M12×P1.75	FMA,B25.4 FMB27 SMA27
MBA - M16	49774	40	23	40	24	16	10	M16×P2.0	FMA31.75 SMA32 SMB31.75
MBA - M20	49775	50	27	50	30	20	14	M20×P2.5	FMA,B38.1 FMB40 SMA40 SMB38.1
MBA - M24	49776	65	37	59	35	24	14	M24×P3.0	FMA50.8



< HSK SHANK > COOLANT PIPE



MODEL	CODE	HSK No.	D1	D2	L	L1	L2	O-ring
CLP-032	25180	HSK32	6	M10×1.0	26	20.5	5.5	P4
CLP-040	25181	HSK40	8	M12×1.0	29.5	22	7.5	P6
CLP-050	25182	HSK50	10	M16×1.0	33	23.5	9.5	P9
CLP-063	25183	HSK63	12	M18×1.0	36.5	25	11.5	P11
CLP-080	25184	HSK80	14	M20×1.5	40	26.5	13.5	P12
CLP-100	25185	HSK100	16	M24×1.5	44	28.5	15.5	P15

ORDERING EXAMPLE

① **CLP** - ② **032**

- ① Name
- ② HSK No.