

CUTTING TOOLS

ARBOR - DRILL CHUCK

ARBOR

BT Series [BT30, 40, 50]

Milling Chuck

HPC	P.858-859
HPC-H	P.859-860
HPC-M	P.861-862

Hard Chuck

CTH	P.863
CTH-L	P.864
CT-G	P.864

Collet Chuck

RSC	P.865-866
RSC-G	P.867
SSC	P.868

Drill Chuck

SDC	P.869
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Hy-Dualic Chuck

HDU	P.870
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Tap Chuck

SYFN, SYFS	P.871
TPC	P.872

Boring Chuck

TWC	P.874-875
FIC	P.875-879

Side Lock Chuck

SLA	P.880
SLD	P.880
CSL	P.881

Morse Taper Holder

MTA	P.882
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Face Mill Arbor

FMA	P.883
FMB	P.884
FMC	P.885
FM	P.886

Shell Mill Arbor

SMA, SMB	P.887-888
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Side Cutter Arbor

SCA	P.888
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Traction Drive Speed

Accelerator

TDU	P.889
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Oil-Hole Adapter

OH-SL	P.890
OH-MT	P.890
OH-CTH	P.891
OH-TPC	P.891

Angle Head Holder

AGCT-RSC	P.892
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HSK Series

Milling Chuck

HPC	P.893
HPC-H	P.894-895
HPC-M	P.896-897

Hard Chuck

CTH	P.898
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Collet Chuck

RSC	P.898-899
RSC-G	P.900
SSC	P.901

Hy-Dualic Chuck

HDU	P.902
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Tap Holder

SYFN, SYFS	P.903
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Boring Chuck

TWC	P.904-905
FIC	P.906-907

Drill Chuck

SDC	P.908
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Side LockChuck

SLA	P.909
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Morse Taper Holder

MTA	P.910
MTB	P.910

Face Mill Arbor

FMA	P.911
FMB	P.912
FMC	P.913

Shell Mill Arbor

SMA	P.914
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ST Series

Hard Chuck

CTH	P.915
-----	-------

Collet Chuck

SSC	P.915
-----	-------

Tap Holder

TPC	P.916
-----	-------

Boring Chuck

TWC	P.916
FIC	P.917-918

Side Lock Chuck

S	P.919
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Face Mill Arbor

FMA	P.919
-----	-------

Side Cutter Arbor

SCA	P.920
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Versatile Tools

Hard Chuck

CTH	P.921
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Face Mill Arbor

FMA	P.921
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S-Holder

CTH-A	P.922
CTH-B	P.922

Cutting Tool

New Super Drill

	P.923-925
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Accessories

Pull Stud	P.926-929
Straight Collet	P.930-931
Adjust Screw	P.932-933
Chuck Wrench	P.934-935
Spring Collet	P.936
Collet	P.937-940
Nose Piece	P.941
Nut	P.942
Locking Fixture	P.943
Point Finder	P.944
Tool Setter	P.945
Tool Presetter	P.946-948

Drill Chuck

Super Keyless

Dream Chuck

BT Shank	P.949
Jacobs Taper	P.949
MT Shank	P.949
ST Shank	P.950

CNC Keyless

Drill Chuck

BT Shank	P.950
MT Shank	P.951
ST Shank	P.951

Keyless Drill Chuck

	P.952
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Drill Chuck

	P.953
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Chuck Keys

	P.954
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Thru-the-tool Coolant Available

Thru-the-groove Coolant Available

BBT Available

(sold separately)

Collet → Page 930

Screw → Page 932

Wrench → Page 934

S 標準

FIG.1

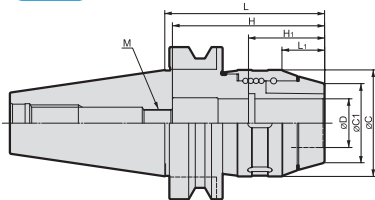


FIG.2

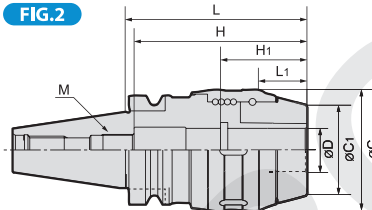
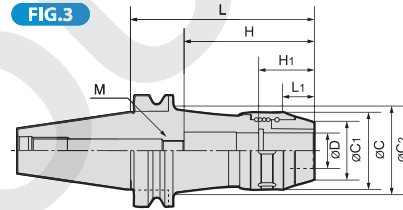


FIG.3



(sold separately)

Cutter shank diameter should be h7 or better

Order No.	Class A	Class AA	BBT	Fig	ØD	L	L1	ØC	ØC1	H	H1	最小刃具挿入量		調整量	M	N/W (kg)		
												スキマスルー	センタースルー					
Max. 10,000 min ⁻¹																		
BT30 (BBT30)	HPC16-	100	○	○	○	2	16	100	26	56	34	85	50	40	51	70 ~ 80	M10	1.4
	HPC20-	100	○	○	○		20		26	56	38			45				1.3
	HPC25-	100	△	△	△		25		27.5	62	44			50				1.6
	HPC32-	105	△	△	△		32		105	70	52			53				55
Max. 10,000 min ⁻¹																		
BT40 (BBT40)	HPC16-	090	○	○	○	1	16	90	26	56	34	85	50	40	51	70 ~ 80	M10	1.8
		120	△	△	△		120	56		34	40			2.2				
		090	○	○	○		90	56		38	45			1.7				
		120	△	△	△		120	56		38	45			2.1				
	HPC20-	105	○	○	○	2	25	105	27.5	62	44	100	50	50	51	77 ~ 90	M18	2
		135	△	△	△		135	62		44	50			2.5				
		105	○	○	○		105	62		44	50			2.2				
		135	△	△	△		135	62		44	50			2.5				
	HPC32-	135	△	△	△	2	32	135	27.5	70	52	117	53	55	55	94 ~ 107	M18	2.5
		135	△	△	△		32	135		70	52			55				2.5
		135	△	△	△		32	135		70	52			55				2.5
		135	△	△	△		32	135		70	52			55				2.5
HPC42-	135	△	△	△	2	42	135	30.5	82	62	100	57	60	60	77 ~ 90	M18	3.5	

Order No.		Class A	Class AA	BBT	Fig	ØD	L	L1	ØC	ØC1	ØC2	H	H1	最小刃具挿入量		調整量	M	N/W (kg)			
														スキマスルー	センタースルー						
Max. 8,000 min ⁻¹																					
BT50 (BBT50)	HPC16-	105	○	○	○	1	16	105	26	56	34	-	85	50	40	70 ~ 80	M10	4.4			
		135	△	△	△							3						135	57	4.7	
		165	△	△	△							165						62	5.5		
	HPC20-	105	○	○	○	1	20	105		-	45	51	4.3								
		135	△	△	△					3				135	57		4.7				
		165	○	○	△					165				62	5.5						
	HPC25-	105	○	○	○	1	25	105		-	50		77 ~ 90	M18	4.4						
		135	△	△	△					3					135	62	4.8				
		165	○	○	△					165					72	5.7					
		200	△	△	△	3				200		-			6.6						
		250	△注4	-	△					250		7.8									
	HPC32-	105	○	○	○	1	32	105		-	70	52	117	53	55	55	94 ~ 107	M18	4.4		
		135	△	△	△					3									135	70	5
		165	○	○	△					165									75	5.6	
		200	△	△	△	3				200									-	7.2	
		250	△注4	-	△					250									8.6		
		300	△注4	-	△					300									10.3		

Order No.			Class A	Class AA	BBT	Fig	ØD	L	L1	ØC	ØC1	ØC2	H	H1	最小刃具挿入量		調整量	M	N/W (kg)
															スキマスルー	センタースルー			
BT50 (BBT50)	HPC42-	110	○	○	○	1	42	110	30.5	82	62	80	122	57	60	60	99 ~ 112	M18	4.6
		135	△	△	△			135				5.3							
		165	○	○	△			165				6.2							
		200	△	△	-			200				8.3							

△: Mark tools are manufactured to order.

NOTE :

1. Chuck wrench and adjust screw are sold separately.
2. Insert the O-ring included in the box to the groove of the ID for thru-the-tool use.
3. 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
BT30	-	HPC	16	- 100 A
① Shank Size				
② Holder's Name				
③ Cutter's Shank Dia.				
④ G.L. Length				
⑤ Grade				

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed Accelerator

Oil-Hole Adapter

Angle Head Holder

หัวจับ

MICRON CHUCK H Series

H-ซีรีส์
H-series

FIG.1

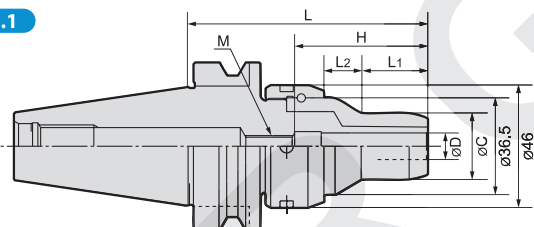
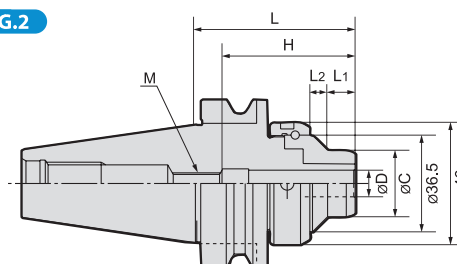


FIG.2



Cutter shank diameter should be h7 or better

Order No.		Class A	Class AA	G Type	Fig	ØD	L	L1	L2	ØC	H	最小刃具 挿入量	調整量		調整ネジ M	スキマ スルー	センター スルー	N/W (kg)						
													MIN	MAX										
Max. 20,000 min ⁻¹ (G Type : Max. 30,000 min ⁻¹)																								
BT30 (BBT30)	HPC03H	060	○	○	○	2	3	60	10.3	6.7	25	15	15	-	-	-	○	○追加加工	0.9					
		090	○	○	○	1		90	25	14							○	○追加加工	1					
	HPC04H	060	○	○	○	2	4	60	10.3	6.7							15	15	-	-	-	○	○追加加工	0.9
		090	○	○	○	1		90	25	14												○	○追加加工	1
	HPC05H	060	△	△	△	2	5	60	10.3	6.7							15	15	-	-	-	○	○追加加工	0.9
		090	△	△	△	1		90	25	14												○	○追加加工	1
	HPC06H	060	○	○	○	2	6	60	10.3	6.7		37.5	23	28	37	AS17-2-M5-CTW	×	○	0.9					
		090	○	○	○	1		90	25	14							○有償	○	1					
	HPC07H	060	△	△	△	2	7	60	10.3	6.7			23	28		AS17-2-M6-CTW	×	○	0.9					
		090	△	△	△	1		90	25	14							○有償	○	1					
	HPC08H	060	○	○	○	2	8	60	10.3	6.7			50	23	35	50	AS22-2-M6-CTW	×	○	0.9				
		090	○	○	○	1		90	25	14								○有償	○	1				
	HPC09H	060	△	△	△	2	9	60	10.3	6.7		23		35			AS22-2-M8-CTW	×	○	0.9				
		090	△	△	△	1		90	25	14								○有償	○	1				
	HPC10H	060	○	○	○	2	10	60	10.3	6.7		23				35		AS22-2-M8-CTW	×	○	0.9			
		090	○	○	○	1		90	25	14									○有償	○	1			
	HPC11H	060	△	△	△	2	11	60	12.2	4.8		32	25	32	50	AS25-2-M10-CTW	×	○	0.9					
		090	△	△	△	1		90	25	14							○有償	○	1					
	HPC12H	060	○	○	○	2	12	60	12.2	4.8			50	25	32		55	AS25-2-M10-CTW	×	○	0.9			
		090	○	○	○	1		90	25	14									○有償	○	1			
	HPC13H	060	△	△	△	2	13	60	12.2	4.8			55	40	40		55	AS25-2-M10-CTW	×	○	0.9			
		090	△	△	△	1		90	25	14									○有償	○	1			

Order No.		Class A	Class AA	G Type	Fig	ØD	L	L1	L2	ØC	H	最小刃具挿入量	調整量		調整ネジ M	スキマスルー	センタースルー	N/W (kg)
BT30 (BBT30)	HPC14H	090	△	△	△	1	14				60		42	60	AS25-2-M10-CTW	○有償	○	1
	HPC15H	090	△	△	△		15	90	25	14	32	40	47	65		○有償	○	
	HPC16H	090	△	△	△		16				65					○有償	○	

Max. 20,000 min⁻¹ (G Type : Max. 30,000 min⁻¹)

BT Series รุ่น BT	HKS Series รุ่น HSK	ST Series รุ่น ST	Versatile Tool	Cutting Tool	Accessories	Drill Chuck	Milling Chuck	Hard Chuck	Collet Chuck	Drill Chuck	Hy-Dualic Chuck	Tap Chuck	Boring Chuck	Side Lock Chuck	Morse Taper Holder	Face Mill Arbor	Shell Mill Arbor	Side Cutter Arbor	Traction Drive Speed Accelerator	Oil-Hole Adapter	Angle Head Holder
BT40 (BBT40)	HPC03H	060	○	○	○	2		60	10.3	6.7	25	375	15	15	-	-	-	-	-	-	-
		090	○	○	○	1	3	90	25	14											
BT40 (BBT40)	HPC04H	060	○	○	○	2		60	10.3	6.7	25	375	15	15	-	-	-	-	-	-	-
		090	○	○	○	1	4	90	25	14											
BT40 (BBT40)	HPC05H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	5	120													
BT40 (BBT40)	HPC06H	060	○	○	○	2		60	10.3	6.7	25	375	15	15	-	-	-	-	-	-	-
		090	○	○	○	1	6	90													
BT40 (BBT40)	HPC07H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	7	120													
BT40 (BBT40)	HPC08H	060	○	○	○	2		60	10.3	6.7	25	375	15	15	-	-	-	-	-	-	-
		090	○	○	○	1	8	90													
BT40 (BBT40)	HPC09H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	9	120													
BT40 (BBT40)	HPC10H	060	○	○	○	2		60	10.3	6.7	25	375	15	15	-	-	-	-	-	-	-
		090	○	○	○	1	10	90													
BT40 (BBT40)	HPC11H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	11	120													
BT40 (BBT40)	HPC12H	060	○	○	○	2		60	12.2	4.8	25	375	15	15	-	-	-	-	-	-	-
		090	○	○	○	1	12	90													
BT40 (BBT40)	HPC13H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	13	120													
BT40 (BBT40)	HPC14H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	14	120													
BT40 (BBT40)	HPC15H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	15	120													
BT40 (BBT40)	HPC16H	090	△	△	△	1		90			25	375	15	15	-	-	-	-	-	-	-
		120	△	△	△	1	16	120													

Max. 12,000 min⁻¹

BT50 (BBT50)	HPC03H	105	○	○	-	1	3	105	25	14	15	15	-	-	-	○	○追加加工	4.0													
		150	○	○	-		4	150											○	○追加加工	4.6										
	HPC04H	105	○	○	-		4	105								25	37.5	30	30	37	AS17-2-M5-CTW	○	○追加加工	4.0							
		150	○	○	-		4	150														○	○追加加工	4.6							
	HPC05H	105	△	△	-		5	105														○	○追加加工	4.0							
		105	○	○	-		6	150														○有償	○	4.6							
	HPC06H	150	○	○	-		7	105														50	35	35	50	AS17-2-M6-CTW	○有償	○	4.0		
		HPC07H	105	△	△		-	8																			150	○有償		○	AS22-2-M6-CTW
	HPC08H	150	○	○	-		9	105			AS22-2-M8-CTW	○有償	○	4.0																	
		HPC09H	105	△	△		-	10				150	○有償		○												4.6				
	HPC10H	150	○	○	-		11	105				32	55		40	55	AS25-2-M10-CTW	○有償	○	4.0											
		HPC11H	105	△	△		-	12										150	○有償		○					4.6					
	HPC12H	150	○	○	-		13	105			60			40				42	60		○有償							○	4.0		
		HPC13H	105	△	△		-														14						○有償	○		4.0	
	HPC14H	150	○	○	-		15													65	47	65	○有償	○	4.0						
		HPC15H	105	△	△		-																16	○有償		○	4.0				
HPC16H	150	○	○	-																											
	HPC16H	105	△	△	-																										

หัวจับ

MICRON CHUCK H Series



Thru-the-tool Coolant Available

BBT Available

(sold separately)

Screw ➔ Page 933

Wrench ➔ Page 934

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper
Holder

Face Mill Arbor

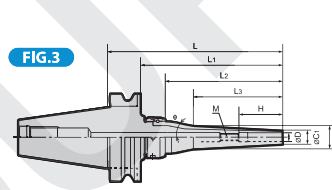
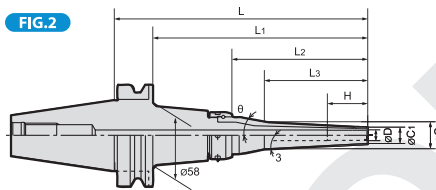
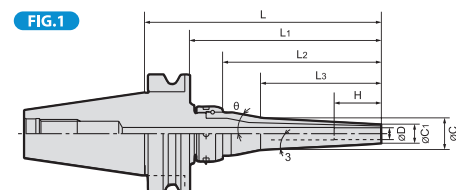
Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed
Accelerator

Oil-Hole Adapter

Angle Head Holder



Cutter shank diameter should be h6 or better

Order No.		STOCK	Fig	ØD	ØC1	ØC	L	L1	L2	L3	H	最小 刃具 挿入量	調整ネジ可動量		M	θ	N/W (kg)		
													MIN	MAX					
Max. 15,000 min ⁻¹																			
BT30 (BBT30)	HPC03M-	130	△	1	3	9	16	130	108	84	67	-	20	-	-	-	34	0.8	
		180	△				20	180	158	134	102						18	1.0	
	HPC04M-	130	△			4	10	17	130	108	84						67	33	0.8
		180	△					21	180	158	134						102	17	1.0
	HPC05M-	130	△			5	11	18	130	108	84						67	32	0.8
		180	△					22	180	158	134						102	16	1.0
	HPC06M-	130	△		6	12	19	130	108	84	67						30	0.8	
		180	△				23	180	158	134	102						15	1.0	
	HPC07M-	130	△		7	13	20	130	108	84	67						28	0.8	
		180	△				24	180	158	134	102						14	1.0	
	HPC08M-	130	△		8	14	21	130	108	84	67						27	0.8	
		180	△				25	180	158	134	102						13	1.0	
	HPC09M-	130	△		9	15	22	130	108	84	67		26	0.8					
		180	△				26	180	158	134	102		12	1.0					
	HPC10M-	130	△		3	10	16	23	130	108	84		67	50	35	50	M8	24	0.8
		180	△					27	180	158	134		102					11	1.0
	HPC11M-	130	△			11	17	24	130	108	84		67	55	40	55	M10	23	0.8
		180	△					28	180	158	134		102					10	1.0
	HPC12M-	130	△			12	18	25	130	108	84		67	40				21	0.8
		180	△					29	180	158	134		102					9	1.0

Max. 15,000 min ⁻¹																		
BT40 (BBT40)	HPC03M-	135	○	1	3	9	16	135	108	84	67	20					34	1.4
		185	○				20	185	158	134	102						18	1.6
	HPC04M-	135	○		4	10	17	135	108	84	67						33	1.4
		185	○				21	185	158	134	102						17	1.6
	HPC05M-	135	△		5	11	18	135	108	84	67						32	1.4
		185	△				22	185	158	134	102						16	1.6
	HPC06M-	135	○		6	12	19	135	108	84	67						30	1.5
		185	○				23	185	158	134	102						15	1.6
	HPC07M-	135	△		7	13	20	135	108	84	67						28	1.5
		185	△				24	185	158	134	102						14	1.6
	HPC08M-	135	○		8	14	21	135	108	84	67						27	1.5
		185	○				25	185	158	134	102						13	1.7
	HPC09M-	135	△		9	15	22	135	108	84	67						26	1.5
		185	△				26	185	158	134	102						12	1.7
	HPC10M-	135	○		10	16	23	135	108	84	67						24	1.5
		185	○				27	185	158	134	102						11	1.7
	HPC11M-	135	△		11	17	24	135	108	84	67						23	1.5
		185	△				28	185	158	134	102						10	1.7
	HPC12M-	135	○		12	18	25	135	108	84	67						21	1.5
		185	○				29	185	158	134	102						9	1.7

Order No.	STOCK	Fig	ØD	ØC1	ØC	L	L1	L2	L3	H	最小 刃具 挿入量	調整ネジ可動量		M	θ	N/W (kg)
												MIN	MAX			

Max. 10,000 min⁻¹

BT50 (BBT50)	HPC03M-	150	○	1	3	9	16	150	112	84	67	20				34	4.2
		200	○				20	200	162							18	4.4
		250	○	2				250	212	134	102						5.3
	HPC04M-	150	○	1	4	10	17	150	112	84	67					33	4.3
		200	○				21	200	162							17	4.3
		250	○	2				150	212	134	102						4.4
	HPC05M-	150	△	1	5	11	18	150	112	84	67	35				32	5.3
		200	△				22	200	162							16	4.4
		250	△	2				250	212	134	102						5.3
	HPC06M-	150	○	1	6	12	19	150	112	84	67					30	4.3
		200	○				23	200	162							15	4.5
		250	○	2				250	212	134	102						5.3
	HPC07M-	150	△	1	7	13	20	150	112	84	67					28	4.3
		200	△				24	200	162							14	4.5
		250	△	2				250	212	134	102						5.3
	HPC08M-	150	○	1	8	14	21	150	112	84	67	40				27	4.3
		200	○				25	200	162							13	4.5
		250	○	2				250	212	134	102						5.4
	HPC09M-	150	△	1	9	15	22	150	112	84	67					26	4.3
		200	△				26	200	162							12	4.5
		250	△	2				250	212	134	102						5.4
	HPC10M-	150	○	1	10	16	23	150	112	84	67					24	4.3
		200	○				27	200	162							11	4.5
		250	○	2				250	212	134	102						5.4
	HPC11M-	150	△	1	11	17	24	150	112	84	67					23	4.3
		200	△				28	200	162							10	4.5
		250	△	2				250	212	134	102						5.4
	HPC12M-	150	○	1	12	18	25	150	112	84	67					21	4.3
		200	○				29	200	162							9	4.5
		250	○	2				250	212	134	102						5.4

△: Mark tools are manufactured to order.

NOTE:

- Chuck wrench and adjust screw are sold separately.
- Adjust screw is manufactured to order. Please instruct when ordering.
- 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.
- Please feel to ask us when need BBT shanks.

ORDERING EXAMPLE

① **BT50** - ② **HPC** ③ **06** ④ **M** - ⑤ **100**

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ M Series

⑤ G.L. Length

หัวจับ

HARD CHUCK



FEATURE

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

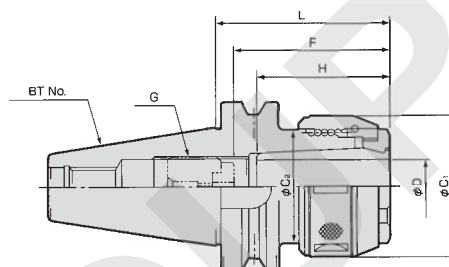
Thru-the-tool Coolant Available

(sold separately)

Collet → Page 930, 936

Screw → Page 933

Wrench → Page 934



	Order No.	ØD	L	ØC1	ØC2	H	G	F		SPRING COLLET	ADJUSTSCREW	N/W (kg)
								MIN	MAX			
BT40	-CTH16 -105 11192	16	105	52	50	50	M18x1.5	50	80	C16-(16)	OR-M18	1.9
	-135 11194		135									2.3
	-165 11196		165									2.7
	-CTH20 -090 11198	20	90	60	54	50	M18x1.5	50	75	C20-(20)	OR-M18	1.9
	-120 11200		120									2.4
	-CTH25 -105 11202	25	105	68	62	68	M28x1.5	68	85	C25-(25)	OR-M28	2.2
	-135 11204		135									2.9
	-165 11206		165									3.5
BT50	-CTH32 -105 11208	32	105	80	62	70	M18x1.5	80	95	CS32-(32)	OR-M18	2.6
	-135 11210		135				M28x1.5				OR-M28	3.3
	-CTH16 -105 13402	16	105	52	50	50	M18x1.5	50	100	C16-(16)	OR-M18	4.2
	-135 13404		135									4.7
	-165 13406		165									5.2
	-CTH20 -105 13428	20	105	60	54	50	M18x1.5	50	100	C20-(20)	OR-M18	4.6
	-135 13430		135									5.1
	-165 13432		165									5.6
	-CTH25 -105 13408	25	105	68	62	68	M28x1.5	68	100	C25-(25)	OR-M28	4.6
	-135 13410		135									5.2
	-165 13412		165									6.0
	-CTH32 -105 13414	32	105	80	67.5	80	M36x1.5	80	100	C32-(32)	OR-M36	4.8
	-135 13416		135		75							5.9
	-165 13418		165									6.9
	-CTH42 -105 13420	42	105	95	79.5	90	M36x1.5	90	110	C42-(42)	OR-M36	5.2
	-135 13422		135		87							6.5
	-165 13424		165									7.7
	-CTH50 -120 13434	50 (50.8)	120	105	99	95	M36x1.5	95	115	C50-(50)-(50.8)	OR-M36	6.4
	-135 13436		135									7.2
	-165 13438		165									8.7

NOTE:

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

ORDERING EXAMPLE

① BT40 - ② CTH ③ 20 - ④ 135

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper

Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed

Accelerator

Oil-Hole Adapter

Angle Head Holder



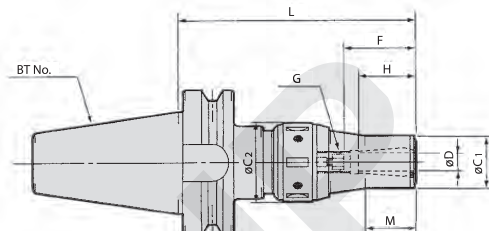
Thru-the-tool Coolant Available

(sold separately)

Collet → Page 930-931, 936

Screw → Page 933

Wrench → Page 934



FEATURE

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

Order No.				ØD	L	M	ØC1	ØC2	H	G	F		SPRING COLLET	ADJUST SCREW	N/W (kg)
											MIN	MAX			
BT40	-CTH12L	-105	11216								40	70			
BT50	-CTH12L	-165	13427	6 ~ 12	135	35	35	52	40	M14x1.5			C12-(D)	OR-M14	1.9
					165										4.7

NOTE:

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

ORDERING EXAMPLE

① **BT40** - ② **CTH** ③ **12** ④ **L** - ⑤ **135**

① Shank Size

② Holder's Name

③ Max. ØD

④ Long Type

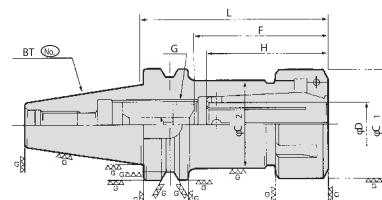
⑤ G.L. Length

หัวจับ G TYPE

NEW MILLING CHUCK G TYPE



Thru-the-tool Coolant Available



Order No.				ØD	L	ØC1	ØC2	H	G	F		SPRING COLLET	ADJUSTSCREW	N/W (kg)		
Max. 25,000min ⁻¹																
BT40	-CT25	-075G	11934	25	75	62	50	68	M18x1.5	68	78	C25-(25)	OR-M18			
		-090G	11935		90				M28x1.5	68	85		OR-M28			
		-105G	11930		105											
		-135G	11931		135											
	-CT32	-090G	11936	32	90	74	61	70	M18x1.5	80	90	CS32-(32)	OR-M18			
		-105G	11932		105											
※	-135G	11933	135													
Max. 25,000min ⁻¹																
BT50	-CT25	-075G	14504	25	75	62	-	68	M28x1.5	68	90	C25-(25)	OR-M28			
		-105G	14500		105		55				100			CS32-(32)	OR-M36	
		-135G	14501		135											
	-CT32	-075G	14505		32		75				74			-	80	M36x1.5
		-105G	14502	105		65	100	CS32-(32)	OR-M36							
	※	-135G	14503	135												

※Marks : Max.15,000min⁻¹

NOTE :

- 1.A spring collet is supplied with Unless ohterwise required, maximum ID springcollet is
- 2.Chuck wrench and adjust screw are sold separately.
- 3.OR-Adjust screw is used for thru-the-tool application.
- 4.The above-mentioned maximum speed will vary depending of cutter.
An adequated cutting condition should be selected for each case.

ORDERING EXAMPLE

① **BT40** - ② **CT** ③ **25** - ④ **075** ⑤ **G**

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ G.L. Length

⑤ G Type

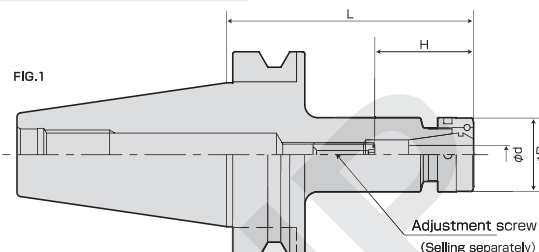
หัวจับ

COLLET CHUCK



(sold separately)

Collet	➔	Page 937-940	Thru-the-tool Coolant Available
Screw	➔	Page 932	Thru-the-groove Coolant Available
Wrench	➔	Page 934	BBT Available



Order No.			Ød (GRIPPING RANGE)	ØD	L	H	COLLET	NUT	ADJUST SCREW	
Max. 12,000min ⁻¹										
BT30 BBT30	RSC07N	-060	200660	0.5 ~ 7	24	60	24 ~ 40	CR07-(D)	RSN07NB	(M6x20L-CTW)
		-075	200661			75				
		-090	200662			90				
		-120	200664			120				
	RSC10N	-060	200666	0.5 ~ 10	30	60	31 ~ 48	CR10-(D)	RSN10NB	RAS10-25-2.5
		-075	200667			75				
		-090	200668			90				
		-120	200670			120				
	RSC13N	-060	200672	0.5 ~ 13	36	60	35 ~ 52	CR13-(D)	RSN13NB	RAS13-25-2.5
		-075	200673			75				
		-090	200674			90				
		-120	200676			120				
	RSC16N	-060	200678	1 ~ 16	42	60	38 ~ 50	CR16-(D)	RSN16NB	RAS16-25-5
		-075	200679			75				
		-090	200680			90				
		-120	200682			120				
	RSC20N	-075	200684	1.5 ~ 20	50	75	44 ~ 56.5	CR20-(D)	RSN20NB	
		-090	200686			90				
		-120	200688			120				
						150				
BT40 BBT40	RSC07N	-060	221100	0.5 ~ 7	24	60	24 ~ 40	CR07-(D)	RSN07NB	(M6x20L-CTW)
		-075	221101			75				
		-090	221102			90				
		-120	221104			120				
		-150	221106			150				
	RSC10N	-060	221108	0.5 ~ 10	30	60	31 ~ 48	CR10-(D)	RSN10NB	RAS10-25-2.5
		-075	221109			75				
		-090	221110			90				
		-120	221112			120				
		-150	221114			150				
	RSC13N	-060	221116	0.5 ~ 13	36	60	35 ~ 52	CR13-(D)	RSN13NB	RAS13-25-2.5
		-075	221117			75				
		-090	221118			90				
		-120	221120			120				
		-150	221122			150				
	RSC16N	-060	221124	1 ~ 16	42	60	38 ~ 70	CR16-(D)	RSN16NB	RAS16-25-5
		-075	221125			75				
		-090	221126			90				
		-120	221128			120				
		-150	221130			150				
	RSC20N	-060	221132	1.5 ~ 20	50	60	44 ~ 70	CR20-(D)	RSN20NB	RAS20-25-5
		-075	221133			75				
		-090	221134			90				
		-120	221136			120				
		-150	221138			150				

NOTE :

- 1.Collet and chuck wrench are sold separately.
- 2.CROH collet is used for thru-the-tool coolant application.
- 3.The above-mentioned maximum speed will vary depending on rigidity of machine and balance of cutter.
4. Only BT shank tools are coated. BBT shank tools are not coated.

ORDERING EXAMPLE

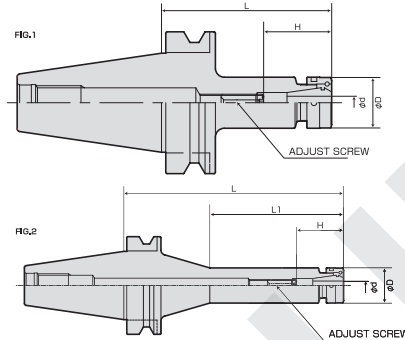
① **BT30** - ② **RSC** ③ **07** - ④ **090**

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length



Thru-the-tool Coolant Available

Thru-the-groove Coolant Available

BBT Available

(sold separately)

Collet ➔ Page 937-940

Screw ➔ Page 932

Wrench ➔ Page 934

Nut ➔ Page 942

Order No.			Fig	Ød (GRIPPING RANGE)	ØD	L	L1	H	COLLET	NUT	ADJUST SCREW
Max. 8,000 min ⁻¹											
BT50 BBT50	RSC07N -090	251230	1	0.5 ~ 7	24	90	-	24 ~ 40	CR07-(D)	RSN07NB	(M6x20L-CTW)
	-135	251232				135					
	-165	251234				165					
	-195	251235				195					
	RSC10N -075	251238	1	0.5 ~ 10	30	75	-	31 ~ 48	CR10-(D)	RSN10NB	RAS10-25-2.5
	-105	251240				105					
	-135	251242				135					
	-165	251244				165					
	-195	251246	195	150	180	190					
	-225	251248	225								
	-255	251250	255								
	-285	251252	285								
	RSC13N -075	251254	1	0.5 ~ 13	36	75	-	35 ~ 52	CR13-(D)	RSN13NB	RAS13-25-2.5
	-105	251256				105					
	-135	251258				135					
	-165	251260				165					
	-195	251262	195	150	180	190					
	-225	251264	225								
	-255	251266	255								
	-285	251268	285								
	RSC16N -075	251270	1	1 ~ 16	42	75	-	38 ~ 95	CR16-(D)	RSN16NB	RAS16-25-5
	-105	251272				105					
	-135	251274				135					
	-165	251276				165					
	-195	251278	195	150	180	190					
	-225	251280	225								
	-255	251282	255								
	-285	251284	285								
	RSC20N -075	251286	1	1.5 ~ 20	50	75	-	44 ~ 82	CR20-(D)	RSN20NB	RAS20-25-6
	-105	251288				105					
	-135	251290				135					
	-165	251292				165					
	-195	251294	195	150	180	190					
	-225	251296	225								
	-255	251298	255								
	-285	251300	285								

NOTE :

1. Collet and chuck wrench are sold separately.
2. CROH collet is used for thru-the-tool coolant application.
3. The above-mentioned maximum speed will vary depending on rigidity of machine and balance of cutter.
An adequate cutting condition should be selected for each case.
4. Only BT shank tools are coated. BBT shank tools are not coated.

ORDERING EXAMPLE

① **BT50** - ② **RSC** ③ **10** - ④ **225**

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length

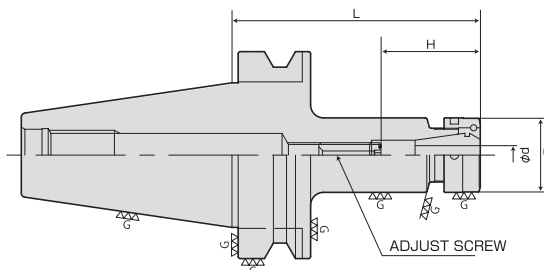
หัวจับ รุ่น G

COLLET CHUCK G TYPE (PLATE COATING) BT ONLY



Thru-the-tool Coolant Available

Thru-the-groove Coolant Available



(sold separately)

Collet ➡ Page 937-940

Screw ➡ Page 932

Wrench ➡ Page 934

Nut ➡ Page 942

Order No.	Ød (GRIPPING RANGE)	ØD	L	H	COLLET	NUT	ADJUST SCREW
Max. 25,000 min ⁻¹							
BT30 BBT30	RSC07N -060G 200700 -075G 200701 -090G 200702 -120G 200704	0.5 ~ 7	24	60 75 90 120	24 ~ 40	CR07-(D)	RSN07NB (M6x20L-CTW)
	RSC10N -060G 200706 -075G 200707 -090G 200708 -120G 200710	0.5 ~ 10	30	60 75 90 120	31 ~ 48	CR10-(D)	RSN10NB RAS10-25-2.5
	RSC13N -060G 200712 -075G 200713 -090G 200714 -120G 200716	0.5 ~ 13	36	60 75 90 120	35 ~ 52	CR13-(D)	RSN13NB RAS13-25-2.5
	RSC16N -060G 200718 -075G 200719 -090G 200720 -120G 200722	1 ~ 16	42	60 75 90 120	38 ~ 50 38 ~ 72	CR16-(D)	RSN16NB RAS16-25-5
	RSC20N -075G 200724 -090G 200726 -120G 200728	1.5 ~ 20	50	75 90 120	44 ~ 56.5	CR20-(D)	RSN20NB
BT40 BBT40	RSC07N -060G 221150 -075G 221151 -090G 221152 -120G 221154 -150G 221156	0.5 ~ 7	24	60 75 90 120 150	24 ~ 40	CR07-(D)	RSN07NB (M6x20L-CTW)
	RSC10N -060G 221158 -075G 221159 -090G 221160 -120G 221162 -150G 221164	0.5 ~ 10	30	60 75 90 120 150	31 ~ 48	CR10-(D)	RSN10NB RAS10-22-2.5
	RSC13N -060G 221166 -075G 221167 -090G 221168 -120G 221170 -150G 221172	0.5 ~ 13	36	60 75 90 120 150	35 ~ 52	CR13-(D)	RSN13NB RAS13-25-2.5
	RSC16N -060G 221174 -075G 221175 -090G 221176 -120G 221178 -150G 221180	1 ~ 16	42	60 75 90 120 150	38 ~ 70 38 ~ 77	CR16-(D)	RSN16NB RAS16-25-5
	RSC20N -060G 221182 -075G 221183 -090G 221184 -120G 221186 -150G 221188	1.5 ~ 20	50	60 75 90 120 150	44 ~ 70 44 ~ 72 44 ~ 82	CR20-(D)	RSN20NB RAS20-25-5

NOTE :

1. Collet and chuck wrench are sold separately.
2. CROH collet is used for thru-the-tool coolant application.
3. The above-mentioned maximum speed will vary depending on rigidity of machine and balance of cutter.
An adequate cutting condition should be selected for each case.
4. Only BT shank tools are coated. BBT shank tools are not coated.

ORDERING EXAMPLE

① BT30 - ② RSC ③ 07 - ④ 090 ⑤ G

① Shank Size

② Holder's Name

③ MAX. ØD

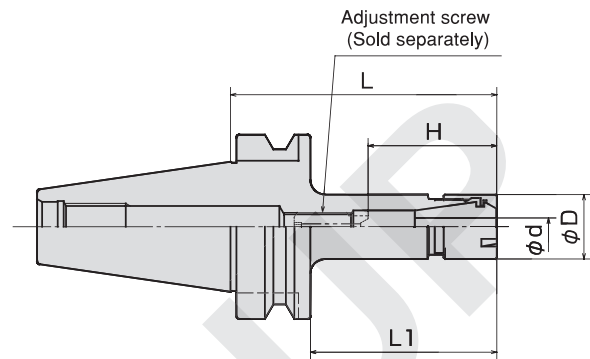
④ G.L. Length

⑤ G Type



Thru-the-tool Coolant Available

Thru-the-groove Coolant Available (Option)



(sold separately)

Collet → Page 937-939

Screw → Page 932

Wrench → Page 934

Nut → Page 942

	Order No.		Ø d	ØD	L	L1	H	Collet	Nut	Adjust Screw
BT30	SSC07-090	10101	0.5 ~ 7	16	90	68	25 ~ 40	CR07-d	ER11MN	M6 x 20L -CTW
	SSC07-135	10102			135	113				
	SSC10-090	10103	0.5 ~ 10	22	90	68	31 ~ 48	CR10-d	ER16MN	RAS10-25-2.5
	SSC10-135	10104			135	113				
	SSC13-090	10105	0.5 ~ 13	28	90	68	35 ~ 52	CR13-d	ER20MN	RAS13-25-2.5
	SSC13-135	10106			135	113				
BT40	SSC07-090	11273	0.5 ~ 7	16	90	63	25 ~ 40	CR07-d	ER11MN	M6 x 20L -CTW
	SSC07-135	11274			135	108				
	SSC10-090	11275	0.5 ~ 10	22	90	63	31 ~ 48	CR10-d	ER16MN	RAS10-25-2.5
	SSC10-135	11276			135	108				
	SSC13-105	11277	0.5 ~ 13	28	105	78	35 ~ 52	CR13-d	ER20MN	RAS13-25-2.5
	SSC13-090	11278			150	123				
BT50	SSC07-090	13565	0.5 ~ 7	16	90	52	25 ~ 40	CR07-d	ER11MN	M6 x 20L -CTW
	SSC07-135	13566			135	97				
	SSC10-105	13567	0.5 ~ 10	22	105	67	31 ~ 48	CR10-d	ER16MN	RAS10-25-2.5
	SSC10-150	13568			150	112				
	SSC13-120	13569	0.5 ~ 13	28	120	82	35 ~ 52	CR13-d	ER20MN	RAS13-25-2.5
	SSC13-165	13570			165	127				
	SSC13-195	13571			195	157				

NOTE :

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

ORDERING EXAMPLE

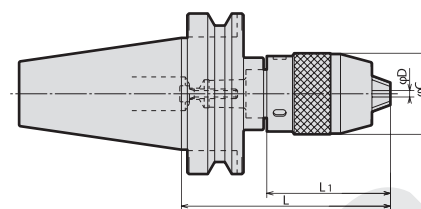
① **BT50** - ② **SSC** ③ **10** - ④ **105**

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length

หัวจับดอกสว่าน
DRILL CHUCK

FEATURES

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

Order No.			ØD (GRIPPING RANGE)	L		L1		ØC	N/W (kg)
				OPEN	CLOSE	OPEN	CLOSE		
BT30	-SDC08-080	10036	0.5 ~ 8	83	90.5	50	57.5	37.5	0.7
(BBT30)	-SDC13-100	10038	1 ~ 13	99	111.5	66	78.5	50	1.3
BT40	-SDC08-080	11148	0.5 ~ 8	83	90.5	50	57.5	37.5	1.3
(BBT40)	-SDC13-100	11150	1 ~ 13	99	111.5	66	78.5	50	1.8
BT50 (BBT50)	-SDC08-100	13291	0.5 ~ 8	103	110.5	50	57.5	37.5	4.1
	-SDC13-120	13293	1 ~ 13	119	131.5	66	78.5	50	4.5
	-SDC13-160	13294		159	171.5				5.1

NOTE :

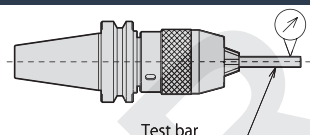
1. Each SDC chuck is supplied with a wrench.

ORDERING EXAMPLE

① **BT30** - ② **SDC** ③ **08** - ④ **080**

- ① Shank Size
② Holder's Name
③ MAX. ØD
④ G.L. Length

RUNOUT



SDC NO.	DIA. of TEST BAR	RUNOUT
SDC08	4 & 8 mm	LESS THAN 0.05mm
SDC13	6.5 & 13 mm	

- 測定位置等の試験方法は、JIS B6001に準拠しております。
- 規格テストバー以外での振れ精度も上記をクリアしております。
- 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.

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed
Accelerator

Oil-Hole Adapter

Angle Head Holder



(sold separately)

Wrench → Page 934

FIG.1

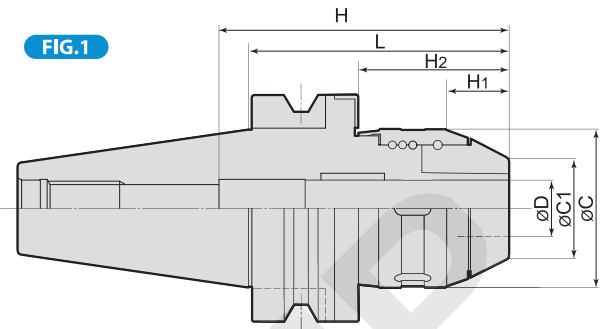
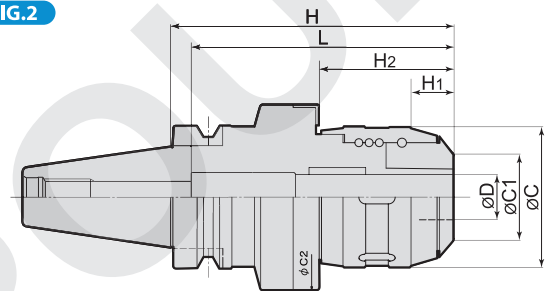


FIG.2



Order No.			A	Fig	ØD	L	H	ØC	ØC1	ØC2	H1	H2	最小 刃具 挿入量	N/W (kg)
BBT40	-HDU16-	120	○	2	16	120	112	62	38	82	14	54.5	57	
	-HDU20-	125	○		20	125	117				19	59.5	70	
BBT50	-HDU16-	105	○	1	16	105	112	62	38	-	14	54.5	57	
		135	△			135								
		165	△			165								
	-HDU20-	110	○		20	110	117	62	38		19	59.5	70	
		140	△			140								
		170	△			170								
	-HDU25-	115	○		25	115	128	70	44		27.5	66.5	85	
		145	△			145								
		175	△			175								
	-HDU32-	120	○		32	120	133	82	52		68.5	90		
		150	△			150								
		180	△			180								

NOTE :

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

ORDERING EXAMPLE

① BBT50 - ② HDU ③ 32 - ④ 120

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length

หัวจับตลับ

SYNCHRO TAP HOLDER

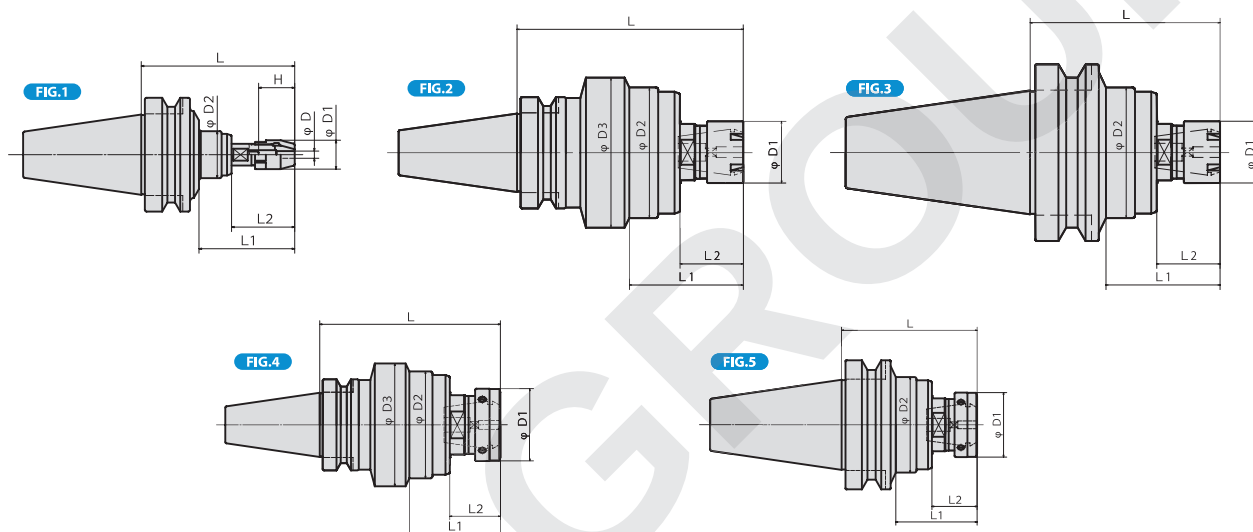


(sold separately)

Collet → Page 937-940

Wrench → Page 935

Nut → Page 942



	Order No.		CODE	Fig	ØD	ØD1	ØD2	ØD3	L	L1	L2	H	TAP SIZE	COLLET	
BT30	-SYFS02	-095	200602	1	3	16	26	-	95	53	35	22	M1, M1.6, M2, No.3, No.4, M3, No.5, No.6	-	
	-SYFS03	-095	200604		4										
		-SYFN12	-105	200616	4	-	36	51	62.5	105	54	30	-	M4 ~ M12, No.8 ~ U1/2 P1/8	CR13GBorGH
		-135	200617	135		84				60					
BT40	-SYFS02	-085	221042	1	3	16	26	-	85	53	35	22	M1, M1.6, M2, No.3, No.4, M3, No.5, No.6	-	
	-SYFS03	-085	221044		4										
		-SYFN12	-090	2	-	36	51	-	90	54	30	-	M4 ~ M12, No.8 ~ U1/2 P1/8	CR13GBorGH	
			-120						221053	120	84				60
			-125	221039	2	-	35	74	85	125	63	35	-	M4 ~ M16, No.8 ~ U5/8, P1/4	CR16GBorGH
	-SYFN16S	-155	221040	155						93	65				
		-185	221041	185						123	95				
			-125	221055	4	-	50	74	85	125	63	35	-	M4 ~ M20, U5/16 ~ U5/8, P1/8 ~ P3/8	CR20GBorGH
	-SYFN20	-155	221056	155						93	65				
		-185	221057	185						123	95				
BT50	-SYFS02	-095	251091	1	3	16	26	-	95	53	35	22	M1, M1.6, M2, No.3, No.4 M3, No.5, No.6	-	
	-SYFS03	-095	251093		4										
			-105	3	-	35	74	-	105	63	35	-	M4 ~ M16, No.8 ~ U5/8, P1/4	CR16GBorGH	
		-135	251107						135	93	65				
	-SYFN16S	-165	251109						165	123	95				
		-195	251110						195	153	125				
			-225	251100	225	183	155	-	M4 ~ M20, U5/16 ~ U5/8, P1/8 ~ P3/8	CR20GBorGH					
		-105	251104	105	63	35									
	-SYFN20	-135	251105	5	-	50	74				-	135	93	65	
	-165	251106	165					123	95						

NOTE :

- Collet and chuck wrench are sold separately.
- Applicable to synchronized machines only.
- Thru-the-groove coolant type is manufactured to orders.

ORDERING EXAMPLE

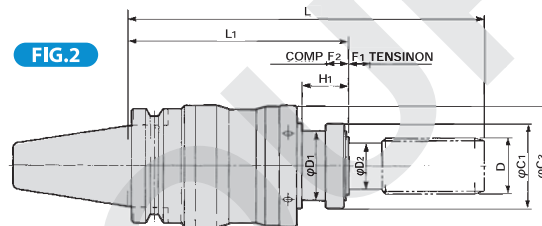
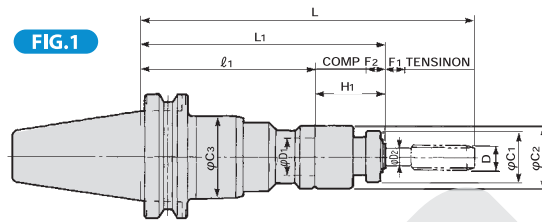
① BT30 - ② SYFN ③ 12 - ④ 105

① Shank Size

② Name

③ Type No.

④ G.L. Length



FEATURES

- Torque limiter collets are available.
- Tapping torque can be adjusted to prevent tap breakage.
- Accurate threads are made with the tension-compression mechanism, compensating pitch error of the machining center.

Order No.	FIG	ØD1	L1	l1	ØC1	ØC2	ØC3	H1	F1	F2	ØD2	D	Tap Collet code	N/W (kg)
BT40 - TPC20-150 11282 2220002	1	20	150	105	32	40	47	45	15	15	5 ~ 12.5	M4 ~ M14	TCC20-(D)	1.9
SBT40 - TPC29-195 11284 2220004	1	29	195	140	45	55	63	55	15	15	8.5 ~ 20	M12 ~ M27	TCC29-(D)	2.6
BT50 - TPC20-165 13582 2221002	1	20	165	120	32	40	47	45	15	15	5 ~ 12.5	M4 ~ M14	TCC20-(D)	4.3
SBT50 - TPC29-195 13584 2221004	1	29	195	140	45	55	63	55	15	15	8.5 ~ 20	M12 ~ M27	TCC29-(D)	5.0
BT50 - TPC40-225 13586 2221006	1	40	225	150	60	80	85	75	20	20	14 ~ 30	M18 ~ M39	TCC40-(D)	6.2
BT50 - TPC60-195 13588 2221008	2	60	195	-	75	-	106	39	20	20	30 ~ 42	M39 ~ M52	TCC60-(D)	8.1

NOTE :

1. TPC20, TPC29 & TPC40 of Fig.1 → Torque is adjusted by tap collet.
2. TPC60 of Fig.2 → Torque is adjusted by holder

ORDERING EXAMPLE

① **BT40** - ② **TPC** ③ **20** - ④ **150**

① Shank Size

② Holder's Name

③ ØD1

④ L1

หัวจับต๊าป (Type TCC)

TAP COLLETS (TYPE TCC)



FIG.1 With torque control

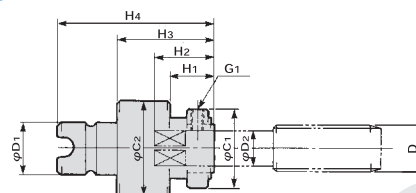
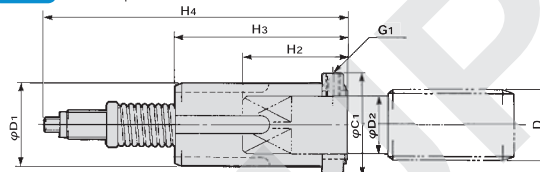


FIG.2 Without torque control



Order No.	FIG	ØD1	D	ØC1	ØD2	H1	H3	H4	G1
TCC20-(D)	1	20	M4 ~ M14	32	40	20	45	73	M6
TCC29-(D)	1	29	M12 ~ M27	45	55	25	55	90	M8
TCC40-(D)	1	40	M18 ~ M39	60	80	40	75	123	M10
TCC60-(D)	2	60	M39 ~ M52	75	-	-	124	219	M10

ORDERING EXAMPLE

① TCC ② 20 ③ M5

① Holder's Name

② ØD1

③ Tap Size

Order No.		M (JIS B 4430-1972)					UNC (JIS4432-1972)					PF PT (JIS B 4445, 4446-1967)										
		D	D2	H2		L	D	D2	H2		L	D	D2	H2		L						
TCC20-(D)		M4	5	22		195		NO.8U	5	22		195		-	-							
		M4.5	5			198		-	-	-		-		-	-							
		M5	5.5			203		10U NO.12U	5.5	22		203		-	-							
		M6	6			205		1/4U	6			205		-	-							
		-	-		-	-		5/16U	6.1	23		212		-	-							
		M7	6.2	23		207		-	-	-		-		-	-							
		M8	6.2			212		-	-	-		-		-	-							
		M9	7			214		3/8U	7	23		217		-	-							
		M10	7			217		-	-	-		-		-	-							
		M11	8			222		7/16U	8	24		221		PF PT	1/8			8	24			
	TCC29-(D)		M12	8.5	24	29		223	248	-	-	-	-		-	-		196				
		-	-	-	-		-	-	1/2U	9	25	30		225	250	-	-					
		M14	10.5	25	31		228	252	9/16U	10.5		31		230	254	-	-					
		-	-	-	-		-	-	-	-	-	-		-	-	PF PT	1/4	11	25	31		
		-	-	-	-		-	-	5/8U	12	25	32		235	258	-	-	-	-			
		M16	12.5	25	33		235	257	-	-	-	-		-	-	-	-	-	-			
		M18	14	34	34		261	291	3/4U	14		34	34		266	296	PF PT	3/8	14		34	34
		M20	15			35		266	295	-	-		-	-		-	-	-	-		-	
		M22	17			36		276	304	7/8U	17		34	36		276	304	-	-		-	
		-	-		-	-		-	-	-	-		-	-		-	-	PF PT	1/2	18		34
TCC40-(D)			M24	19	34	43		281	302	-	-		-	-		-	-	PF PT	5/8	19		43
		M27	20			291	312	1U	20		34	43		286	307	-	-	-	-		-	-
		-	-	-		-		-	-	1 1/8U	22		45		315	-	-	-	-		-	-
		M30	23			315		-	-	-	-		-		-	-	PF PT	3/4	23		45	45
		-	-	-	-		-	-	1 1/4U	24		47		323	-	-	PF	7/8	24		47	47
		M33	25		323		-	-	-	-		-		-	-	-	-	-		-	-	
		-	-	-	-		-	-	1 3/8U	26		47		333	-	-	PF PT	1	26		47	47
		M36	28		331		-	-	-	-		-		-	-	PF	1 1/8	28		50	50	
		M39	30	50	61	340	299	1 1/2U	30		50	61		335	294	-	-	-	-		-	-
	TCC60-(D)		M42	32		65		305	-	-		-		-	-	PF PT	1 1/4	32			57	57
			M45	35		70		305	1 3/4U	35		70		300	-	-	-	-			-	-
		M48	38		72		308	-	-		-		-	-	PF PT	1 1/2	38			62	62	
		-	-	-	-		-	-	2U	40		75		315	-	-	-	-		-	-	
		M52	42		75		315	-	-		-		-	-	PF	1 3/4	42			67	67	

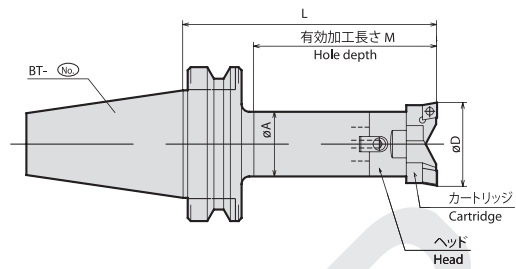
ARBOR

หัวจับ



หัวจับ สำหรับคว้านรูหยาบ

TWINCUT <Boring System>



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.

Order No.			Range	Shank	Head	Cartridge	Insert	L	M	ØA	N/W (kg)	
BT40	-TWC 25 - 120 - S	11710	Ø25 ~33	BT40	-SBS1 - 120	HE25	CT25	WT25-079	120	85	24	1.3
	-TWC 32 - 135 - S	11720	Ø32 ~45		-SBS2 - 130	HE32	CT32	WT32-095	135	100	31	1.6
	-TWC 44 - 135 - S	11730	Ø44 ~63		-SBS3 - 135	HE44	CT44			100	42	2.0
	-TWC 62 - 135 - S	11740	Ø62 ~89		-SBS4 - 135	HE62	CT62	WT62-127	165	100	54	2.7
	-TWC 88 - 165 - S	11750	Ø88 ~126		-SBS5 - 165	HE88	CT88			130	64	4.4
BT50	-TWC 25 - 150 - S	14010	Ø25 ~33	BT50	-SBS1 - 150	HE25	CT25	WT25-079	150	104	24	4.0
	-TWC 32 - 165 - S	14020	Ø32 ~45		-SBS2 - 165	HE32	CT32	WT32-095	165	119	31	4.2
	-TWC 44 - 165 - S	14030	Ø44 ~63		-SBS3 - 165	HE44	CT44			119	42	4.7
	-TWC 44 - 225 - S	14031			-SBS3 - 225					179		5.2
	-TWC 62 - 165 - S	14040	Ø62 ~89		-SBS4 - 165	HE62	CT62	WT62-127	165	119	54	5.5
	-TWC 62 - 240 - S	14041			240				194	6.7		
	-TWC 62 - 285 - S	14042			285				239	7.4		
	-TWC 88 - 165 - S	14050	Ø88 ~126		-SBS5 - 165	HE88	CT88		165	119	64	6.7
	-TWC 88 - 240 - S	14051			240				194	8.4		
	-TWC 88 - 330 - S	14052			330				284	10.4		
	-TWC125 - 165 - S	14060	Ø125 ~175		-SBS6 - 165	HE125	CT125		165	119	82	7.7
	-TWC125 - 240 - S	14061			240				194	10.6		
	-TWC125 - 330 - S	14062			330				284	14.2		

NOTE : 1. Inserts are sold separately.
2. Inserts are in phase with the drive key.
3. Thru-the-tool coolant type is manufactured to order.

ORDERING EXAMPLE

①	②	③	④	⑤
BT40	-	TWC	25 - 120	S
① Shank Size				
② Holder's Name				
③ MAX. ØD				
④ G.L. Length				
⑤ Set				

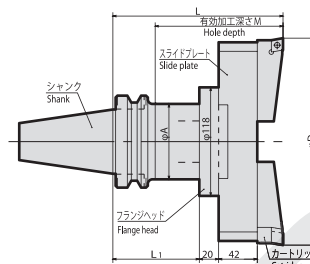
หัวจับ สำหรับคว้านรูขยาย

BORING SYSTEM TWINCUT for LARGE BORE



FEATURES

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



Order No.			Range	Shank	Flange Head	Slid Plate	Cartridge	Insert	L	M	ØA	N/W (kg)
BT50	-TWC175 - 185 - S	14070	Ø175 ~ 225	-SBS6 - 165	TWC - FH - 0 (TWC - FH - 90)	SP175-42	CT125	WT62-127	185	139	82	12.8
	-TWC175 - 260 - S	14071		-SBS6 - 240					260	214		15.8
	-TWC175 - 350 - S	14072		-SBS6 - 330					350	304		19.3
	-TWC225 - 185 - S	14073	Ø225 ~ 275	-SBS6 - 165		SP225-42			185	139		14.3
	-TWC225 - 260 - S	14074		-SBS6 - 240					260	214		17.2
	-TWC225 - 350 - S	14075		-SBS6 - 330					350	304		20.7
	-TWC275 - 185 - S	14076	Ø275 ~ 325	-SBS6 - 165		SP275-42			185	139		16.7
	-TWC275 - 260 - S	14077		-SBS6 - 240					260	214		19.7
	-TWC275 - 350 - S	14078		-SBS6 - 330					350	304		23.2
	-TWC325 - 185 - S	14079	Ø325 ~ 375	-SBS6 - 165		SP325-42			185	139		17.9
	-TWC325 - 260 - S	14080		-SBS6 - 240					260	214		20.9
	-TWC325 - 350 - S	14081		-SBS6 - 330					350	304		24.4

NOTE : 1. Inserts are sold separately.

2. Inserts are in phase with the drive key.

3. TWC-FH-90 Flange Head is used to change the phase to 90°

ORDERING EXAMPLE

① **BT50** ② **- TWC** ③ **175** ④ **- 185** ⑤ **S**

① Shank Size

② Name

③ MAX. ØD

④ G.L. Length

⑤ Set

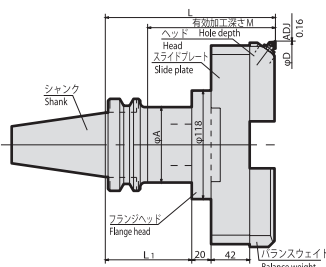
หัวจับ สำหรับคว้านรูขยาย

BORING SYSTEM FINECUT for LARGE BORE



FEATURES

- Easy adjustment in $\varnothing 0.002$ mm increment !



Order No.			Range	Shank	Flange Head	Slid Plate	Cartridge	Unit	Insert	L	M	ØA	N/W (kg)
BT50	-FIC175N - 190 - S	250170	Ø175 ~ 225	BT50	TWC - FH - 0 (TWC - FH - 90)	SP175-42	FCH175N FBW175N	FIC1AN	FT12-047	190	144	82	13.7
	-FIC175N - 265 - S	250171								265	219		16.7
	-FIC175N - 355 - S	250172								355	309		20.2
	-FIC225N - 190 - S	250173	Ø225 ~ 275			SP225-42				190	144		15.2
	-FIC225N - 265 - S	250174								265	219		18.1
	-FIC225N - 355 - S	250175								355	309		21.6
	-FIC275N - 190 - S	250176	Ø275 ~ 325			SP275-42				190	144		17.6
	-FIC275N - 265 - S	250177								265	219		20.6
	-FIC275N - 355 - S	250178								355	309		24.1
	-FIC325N - 190 - S	250179	Ø325 ~ 375			SP325-42				190	144		18.8
	-FIC325N - 265 - S	250180								265	219		21.8
	-FIC325N - 355 - S	250181								355	309		25.3

NOTE : 1. Inserts are sold separately.

2. TP**080204 Insert is used.

3. Inserts are in phase with the drive key.

4. TWC-FH-90 Flange Head is used to change the phase to 90°

5. Unit : FIC1AN

ORDERING EXAMPLE

① **BT40** ② **- FIC** ③ **175** ④ **- N** ⑤ **- 190** ⑥ **S**

① Shank Size

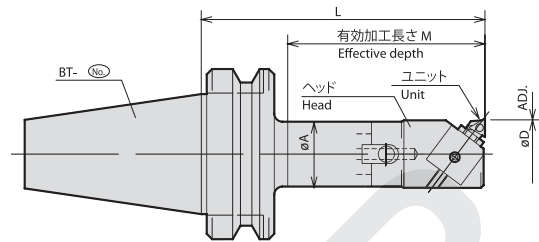
② Name

③ MAX. ØD

④ Angular type

⑤ G.L. Length

⑥ Set



Order No.			Range	Shank		Head	Unit	Insert	L	M	ØA	N/W (kg)							
BT40	-FIC 27AN - 120 - S	220065	Ø 27 ~ 31	BT40	-SBS1 - 120	FCH27AN	FIC0AN	FT0-039	120	85	24	1.1							
	-FIC 30AN - 120 - S	220066	Ø 30 ~ 34			FCH30AN						1.2							
	-FIC 33AN - 135 - S	220067	Ø 33 ~ 37			FCH33AN						1.4							
	-FIC 36AN - 135 - S	220068	Ø 36 ~ 47		-SBS2 - 135	FCH36AN	FIC1AN	FT12-047	135	100	1.4								
	-FIC 44AN - 135 - S	220069	Ø 44 ~ 59		-SBS3 - 135	FCH44AN	FIC2AN				2.0								
	-FIC 56AN - 135 - S	220070	Ø 56 ~ 72		-SBS4 - 135	FCH56AN					2.7								
	-FIC 69AN - 165 - S	220071	Ø 69 ~ 85		-SBS5 - 165	FCH69AN	FIC3AN	FT3-063	165	130	64	4.3							
	-FIC 82AN - 165 - S	220072	Ø 82 ~ 98			FCH82AN						4.8							
	-FIC 95AN - 165 - S	220073	Ø 95 ~ 111			FCH95AN						7.3							
	-FIC108AN - 165 - S	220074	Ø 108 ~ 124			FCH108AN					8.5								
-FIC121AN - 165 - S	220075	Ø 121 ~ 137	FCH121AN	10.0															
BT50	-FIC 27AN - 150 - S	250080	Ø 27 ~ 31	BT50	-SBS1 - 150	FCH27AN	FIC0AN	FT0-039	150	104	24	4.3							
	-FIC 30AN - 150 - S	250081	Ø 30 ~ 34			FCH30AN						4.4							
	-FIC 33AN - 165 - S	250082	Ø 33 ~ 37			FCH33AN						4.8							
	-FIC 36AN - 165 - S	250083	Ø 36 ~ 47		-SBS2 - 165	FCH36AN	FIC1AN	FT12-047	165	119	31	4.8							
	-FIC 44AN - 165 - S	250084	Ø 44 ~ 59		-SBS3 - 165	FCH44AN	FIC2AN					5.4							
	-FIC 44AN - 225 - S	250085			-SBS3 - 225							6.0							
	-FIC 56AN - 165 - S	250086			-SBS4 - 165			FCH56AN				165	119	54	6.3				
	-FIC 56AN - 240 - S	250087	-SBS4 - 240		7.6														
	-FIC 56AN - 285 - S	250088	-SBS4 - 285		8.4														
	-FIC 69AN - 165 - S	250089	-SBS5 - 165		FCH69AN											165	119	64	7.2
	-FIC 69AN - 240 - S	250090	-SBS5 - 240																9.1
	-FIC 69AN - 330 - S	250091	-SBS5 - 330					11.4											
	-FIC 82AN - 165 - S	250092	-SBS5 - 165					FCH82AN				165	119	82					7.7
	-FIC 82AN - 240 - S	250093	-SBS5 - 240																9.6
	-FIC 82AN - 330 - S	250094	-SBS5 - 330		11.9														
	-FIC 95AN - 170 - S	250095	-SBS6 - 165		FCH95AN											170	124		10.0
	-FIC 95AN - 245 - S	250096	-SBS6 - 240																13.1
	-FIC 95AN - 335 - S	250097	-SBS6 - 330					16.8											
	-FIC108AN - 175 - S	250098	-SBS6 - 165					FCH108AN				175	129						11.1
	-FIC108AN - 250 - S	250099	-SBS6 - 240																14.2
	-FIC108AN - 340 - S	250100	-SBS6 - 330		17.9														
	-FIC121AN - 180 - S	250101	-SBS6 - 165		FCH121AN											180	134		12.6
	-FIC121AN - 255 - S	250102	-SBS6 - 240																15.8
	-FIC121AN - 345 - S	250103	-SBS6 - 330					19.4											
	-FIC134AN - 185 - S	250104	-SBS6 - 165					FCH134AN				185	139						14.4
	-FIC134AN - 260 - S	250105	-SBS6 - 240																17.6
	-FIC134AN - 350 - S	250106	-SBS6 - 330		21.2														
	-FIC147AN - 190 - S	250107	-SBS6 - 165		FCH147AN											190	144		16.6
	-FIC147AN - 265 - S	250108	-SBS6 - 240																19.8
	-FIC147AN - 355 - S	250109	-SBS6 - 330					23.4											
	-FIC160AN - 195 - S	250110	-SBS6 - 165					FCH160AN				195	149						19.1
	-FIC160AN - 270 - S	250111	-SBS6 - 240																22.3
	-FIC160AN - 360 - S	250112	-SBS6 - 330		25.9														

NOTE : 1. Inserts are sold separately.
2. Inserts are in phase with the drive key.
3. Thru-the-tool coolant type is manufactured to orders.

ORDERING EXAMPLE

①	②	③	④	⑤	⑥
BT40	-	FIC	27	AN	- 120 S
① Shank Size					
② Name					
③ MAX. OD					
④ Angular type					
⑤ G.L. Length					
⑥ Set					

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<BORING SYSTEM> FIRSTCUT

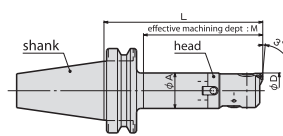


Fig. 1

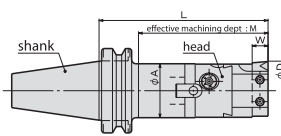


Fig. 2

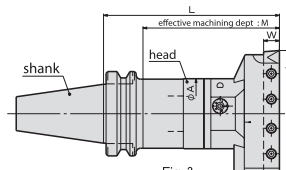


Fig. 3

Order No.		Fig	CODE	D Range	SHANK	HEAD	Boring Tool	Insert	L	M	ØA	W	N/W (kg)	
BT40	-FIC25N-130-S	1	221400	Ø25 ~ 32	BT40	-SBS1-120	FCH25N	-	TP □□0802 □□	130	95	24	-	1.2
	-FIC32N-155-S		221402	Ø32 ~ 44注6		-SBS2-135	FCH32N			155	120	31		1.5
	-FIC44N-155-S		221404	Ø44 ~ 57		-SBS3-135	FCH44N					42		2.2
	-FIC55N-150-S		221406	Ø55 ~ 73		-SBS4-135	FCH55N			150	115	54		3.0
	-FIC70N-200-S	2	221408	Ø70 ~ 140	-SBS5-165	FCH70N	TBS119C12 SBS919 TBS919 TSBS919	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	200	165	64	□19	5.2	
-FIC90N-215-S	221410	Ø90 ~ 160	-SBS6-165	FCH90N			215	180	83	8.2				
BT50	-FIC25N-160-S	1	251500	Ø25 ~ 32	BT50	-SBS1-150	FCH25N	-	TP □□0802 □□	160	114	24	-	4.0
	-FIC32N-185-S		251502	Ø32 ~ 44注6		-SBS2-165	FCH32N			185	139	31		4.5
	-FIC44N-185-S		251504	Ø44 ~ 57		-SBS3-165	FCH44N			245	199	42		5.2
	-FIC44N-245-S		251506			-SBS3-225				180	134			5.8
	-FIC55N-180-S		251508			-SBS4-165				255	209	54		6.1
	-FIC55N-255-S		251510	Ø55 ~ 73		-SBS4-240	FCH55N			300	254			7.3
	-FIC55N-300-S		251512		-SBS4-285				8.1					
	-FIC70N-200-S	2	251514		-SBS5-165				200	154		64	7.7	
	-FIC70N-275-S		251516	Ø70 ~ 140	-SBS5-240	FCH70N	275	229		9.6				
	-FIC70N-365-S		251518		-SBS5-330		365	319		11.8				
	-FIC90N-215-S		251520		-SBS6-165		215	169		10.5				
	-FIC90N-290-S		251522	Ø90 ~ 160	-SBS6-240	FCH90N	290	244		13.5				
	-FIC90N-380-S		251524		-SBS6-330		380	334		17.2				
	-FIC150N-205-S	3	251526		-SBS6-165		TBS119C12 SBS919 TBS919 TSBS919	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	205	159		83	□19	11.3
	-FIC150N-280-S		251528	Ø150 ~ 220	-SBS6-240	FCH150N	280	234		14.3				
	-FIC150N-370-S		251530		-SBS6-330		370	324		18.0				
	-FIC220N-205-S		251532		-SBS6-165		205	159		12.6				
	-FIC220N-280-S		251534	Ø220 ~ 290	-SBS6-240	FCH220N	280	234		15.6				
	-FIC220N-370-S		251536		-SBS6-330		370	324		19.3				
	-FIC290N-205-S		251538		-SBS6-165		205	159		13.9				
	-FIC290N-280-S		251540	Ø290 ~ 360	-SBS6-240	FCH290N	280	234		16.9				
	-FIC290N-370-S		251542		-SBS6-330		370	324		20.6				

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed

Accelerator

Oil-Hole Adapter

Angle Head Holder

FIRSTCUT HEAD

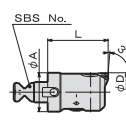


Fig. 1

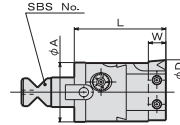


Fig. 2

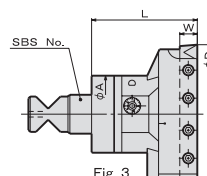


Fig. 3

Order No.	Fig	CODE	D Range	SLIDE DISTANCE	Boring Tool	Insert	SBS No.	L	ØA	W	N/W (kg)	
FCH25N	1	700130	Ø25 ~ 32	3.5	-	TP □□0802 □□	SBS1	47	24	-	0.2	
FCH32N		700131	Ø32 ~ 44注6	5.0			SBS2	57	31		0.4	
FCH44N		700132	Ø44 ~ 57	6.5			SBS3	64	42		0.7	
FCH55N		700133	Ø55 ~ 73	9.0			SBS4	68	54		1.2	
FCH70N	2	700134	Ø70 ~ 140	20	TBS119C12 SBS919 TBS919 TSBS919	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	SBS5	100	64	□19	2.6	
FCH90N		700135	Ø90 ~ 160					122			4.7	
FCH150N	3	700136	Ø150 ~ 220				SBS6	112	83		5.5	
FCH220N		700137	Ø220 ~ 290								6.8	
FCH290N		700138	Ø290 ~ 360								8.1	

NOTE :

- Adjustable in 0.01mm per scale.
- Insert is in face with drive key.
- Through the tool coolant is standard.
- Inserts over than FIC70N are square shank tools.
- Inserts or bites are sold separately.
- Max. machining diameter means when installed packed spacer.
Without spacer, the max machining diameter is Ø42mm.

ORDERING EXAMPLE

① BT50 ② - FIC ③ 70 ④ N ⑤ - 200 ⑥ S

① Shank Size

② Holder's Name

③ Head No.

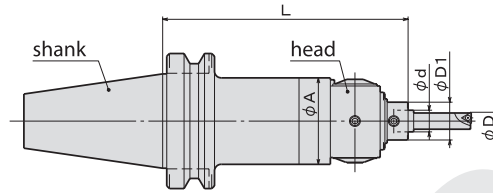
④ New Jig Borer Type

⑤ G.L. Length

⑥ Set

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<BORING SYSTEM> FIRSTCUT [SMALL-HOLE BORING TOOL]



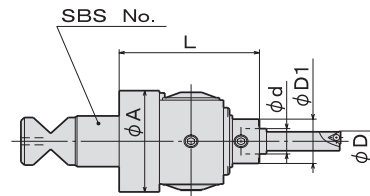
Order No.			D Range	SHANK		HEAD	L	ØA	Ød	ØD1	DIAL CALIBRATION	COLLET	N/W (kg)
BT40	-FIC1NJ-151-S	221420	Ø3 ~ 23	BT40	-SBS3-135	FCH1NJ	151	46	10	18	Ø0.005	SSCP10-□	2.1
	-FIC2NJ-180-S	221422	Ø3 ~ 28		-SBS5-165	FCH2NJ	180	64	16	28	Ø0.010	SSCP16-□	4.4
BT50	-FIC1NJ-181-S	251550	Ø3 ~ 23	BT50	-SBS3-165	FCH1NJ	181	46	10	18	Ø0.005	SSCP10-□	5.1
	-FIC2NJ-180-S	251552	Ø3 ~ 28		-SBS5-165	FCH2NJ	180	64	16	28	Ø0.010	SSCP16-□	6.9

NOTE :
 1. Insert is in face with drive key.
 2. Through the tool coolant is standard.
 3. Inserts and bites and collets are sold separately.

ORDERING EXAMPLE

①	②	③	④	⑤	⑥
BT50	- FIC	1	NJ	- 181	- S
① Shank Size					
② Holder's Name					
③ Head No.					
④ New Jig Borer Type					
⑤ G.L. Length					
⑥ Set					

FIRSTCUT HEAD [SMALL-HOLE BORING TOOL]

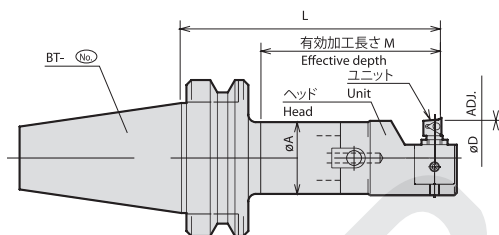


Order No.		D Range	SBS No.	L	ØA	Ød	ØD1	DIAL CALIBRATION	SLIDE DISTANCE	COLLET	N/W (kg)
FCH1NJ	700139	Ø3 ~ 23	SBS3	60	46	10	18	Ø0.005	2.5	SSCP10-□	0.6
FCH2NJ	700140	Ø3 ~ 28	SBS5	80	64	16	28	Ø0.010	3.5	SSCP16-□	1.8

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

หัวจับ สำหรับคว้านรูละเอียดแบบแนวตั้ง

BORING SYSTEM FINECUT [Vertical Type]



Order No.			Range	Shank		Head	Unit	Insert	L	M	ØA	N/W (kg)
BT40	-FIC 32VN - 135 - S	220085	Ø32 ~ 37	BT40	-SBS2-135	FCH32VN	FIC0VN	FT0-039	135	100	31	1.4
	-FIC 36VN - 135 - S	220086	Ø36 ~ 41			FCH36VN	FIC1VN	FT12-047				1.4
	-FIC 40VN - 135 - S	220087	Ø40 ~ 50			FCH40VN						1.4
	-FIC 50VN - 135 - S	220088	Ø50 ~ 69			FCH50VN						FIC2VN
	-FIC 66VN - 135 - S	220089	Ø66 ~ 87		-SBS4-135	FCH66VN			FIC3VN	FT3-063	165	130
	-FIC 84VN - 165 - S	220090	Ø84 ~ 105		-SBS5-165	FCH84VN	5.1					
	-FIC102VN- 165 - S	220091	Ø102 ~ 123		-SBS6-165	FCH102VN	7.9					
	-FIC120VN- 165 - S	220092	Ø120 ~ 141		FCH120VN	8.1						
BT50	-FIC 32VN - 165 - S	250120	Ø32 ~ 37	BT50	-SBS2-165	FCH32VN	FIC0VN	FT0-039	165	119	31	4.8
	-FIC 36VN - 165 - S	250121	Ø36 ~ 41			FCH36VN	FIC1VN	FT12-047				4.8
	-FIC 40VN - 165 - S	250122	Ø40 ~ 50			FCH40VN						4.8
	-FIC 50VN - 165 - S	250123	Ø50 ~ 69			-SBS3-165						FCH50VN
	-FIC 50VN - 225 - S	250124			-SBS3-225	FIC66VN						6.2
	-FIC 66VN - 165 - S	250125			-SBS4-165		6.5					
	-FIC 66VN - 240 - S	250126			-SBS4-240		7.8					
	-FIC 66VN - 285 - S	250127	-SBS4-285		8.6							
	-FIC 84VN - 165 - S	250128	Ø84 ~ 105		-SBS5-165	FCH84VN					8.0	
	-FIC 84VN - 240 - S	250129			-SBS5-240						9.9	
	-FIC 84VN - 330 - S	250130			-SBS5-330						12.2	
	-FIC102VN -165 - S	250131			-SBS6-165						FCH102VN	
	-FIC102VN -240 - S	250132	-SBS6-240		13.7							
	-FIC102VN -330 - S	250133	-SBS6-330		17.4							
	-FIC120VN -165 - S	250134	-SBS6-165		FCH120VN				10.8			
	-FIC120VN -240 - S	250135	-SBS6-240						13.9			
	-FIC120VN -330 - S	250136	-SBS6-330						17.6			
	-FIC138VN -165 - S	250137	-SBS6-165						FCH138VN			
	-FIC138VN -240 - S	250138	-SBS6-240		14.7							
	-FIC138VN -330 - S	250139	-SBS6-330		18.4							
	-FIC156VN -165 - S	250140	-SBS6-165		FCH156VN							
	-FIC156VN -240 - S	250141	-SBS6-240						15.3			
	-FIC156VN -330 - S	250142	-SBS6-330						19.0			

NOTE : 1. Inserts are sold separately.
 2. Inserts are in phase with the drive key.
 3. Thru-the-tool coolant type is manufactured to orders.

ORDERING EXAMPLE

①	BT40	-	②	FIC	③	32	④	VN	-	⑤	135	⑥	S
①	Shank Size												
②	Name												
③	MAX. ØD												
④	Vertical type												
⑤	G.L. Length												
⑥	Set												

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed

Accelerator

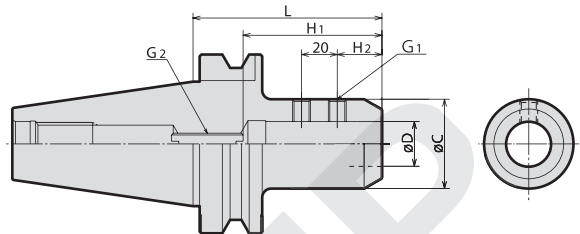
Oil-Hole Adapter

Angle Head Holder



Thru-the-tool Coolant Available

BBT Available



FEATURES

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

Order No.	ØD (H6)	L	ØC	H1		H2	G1	G2	N/W (kg)
				MIN.	MAX.				
BT30 (BBT30)	-SLA20- 075 10020	20	75	45	55	70	25	M10	0.80
	-SLA25- 085 10022	25	85	45	55	70	25	M10	0.85
BT40 (BBT40)	-SLA16- 090 11112	16	90	48	35	50	24	M10	1.8
	-SLA20- 090 11114	20	90	50	55	70	25	M10	1.8
	-SLA25- 090 11116	25	90	50	55	70	25	M10	1.7
	-SLA32- 105 11118	32	105	60	65	80	30	M10	2.1
BT50 (BBT50)	-SLA20- 105 13252	20	105	50	55	70	25	M12	4.4
	-SLA25- 105 13254	25	105	50	55	70	25	M12	4.3
	-SLA32- 105 13256	32	105	60	65	80	30	M12	4.5
	-SLA40- 105 13257	40	105	70	70	85	25	M12	4.7
	-SLA42- 105 13258	42	105	75	70	85	25	M12	5.0

NOTE :

- For endmill of straight shank with flat.
- Thru-the-tool application is acceptable. Please inform it when ordering.

ORDERING EXAMPLE

① **BT30** - ② **SLA** ③ **20** - ④ **075**

① Shank Size

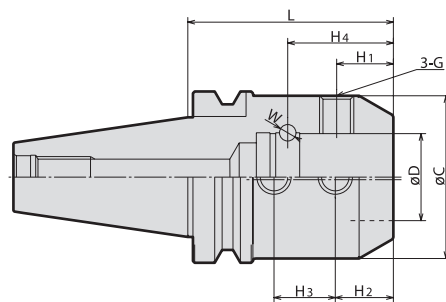
② Holder's Name

③ Cutter's Shank Dia.

④ G.L. Length

หัวจับเอ็นมิล

END MILL HOLDER (For ANSI type combination shank)



Order No.	ØD (H6)	L	ØC	H1	H2	H3	H4	G2	ØW	N/W (kg)
BT50 -SLD50.8-120 13260	50.8	120	95	33.1	33.9	35.78	61.68	M20x1.5	11.18	6.6

NOTE :

- For ANSI combination shank endmills.

ORDERING EXAMPLE

① **BT50** - ② **SLD** ③ **50.8** - ④ **120**

① Shank Size

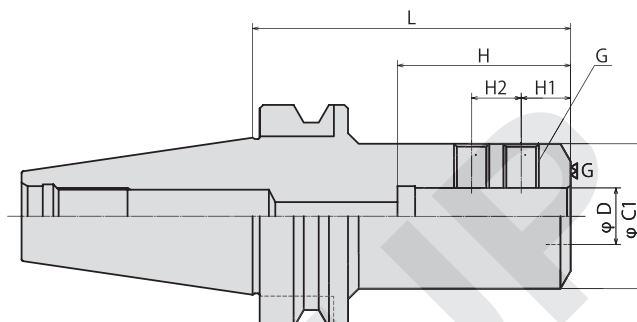
② Holder's Name

③ Cutter's Shank Dia.

④ G.L. Length

หัวจับ

SIDE LOCK DRILL HOLDER



Order No.			ØD	L	ØC	H	H1	H2	G
BT30	CSL16-060	10027	16	60	41	49	14	14	M10
	CSL20-060	10028	20		45	51			
	CSL25-065	10029	25		47	57			
BT40	CSL16-060	11780	16	60	41	49	14	14	M10
	CSL16-090	11782	16	90	41	49			
	CSL20-060	11784	20	60	45	51			
	CSL20-090	11786	20	90	45	51	15	20	M12
	CSL25-060	11788	25	60	48	57			
	CSL25-090	11790	25	90	48	57			
	CSL32-075	11792	32	75	61	61	15	25	M14
	CSL32-105	11794	32	105	61	61			
	CSL40-105	11796	40	105	68	71			
BT50	CSL16-040	13101	16	40	-	49	18	-	M12
	CSL16-105	13102		105	-	49	14	14	M10
	CSL16-135	13103		135	41	49	14	14	M10
	CSL16-165	13104		165	41	49	14	14	M10
	CSL20-040	13105	20	40	-	51	18	-	M12
	CSL20-105	13106		105	-	51	14	14	M10
	CSL20-135	13107		135	45	51	14	14	M10
	CSL20-165	13108		165	45	51	14	14	M10
	CSL25-040	13109	25	40	-	57	20	-	M16
	CSL25-105	13110		105	-	57	15	20	M12
	CSL25-135	13111		135	48	57	15	20	M12
	CSL25-165	13112		165	48	57	15	20	M12
	CSL32-040	13113	32	40	-	61	20	-	M16
	CSL32-105	13114		105	-	61	15	20	M12
	CSL32-135	13115		135	61	61	15	20	M12
	CSL32-165	13116		165	61	61	15	20	M12
	CSL40-050	13117	40	50	-	71	14	-	M14
	CSL40-105	13118		105	-	71	15	25	M14
	CSL40-135	13119		135	68	71	15	25	M14
	CSL40-165	13120		165	68	71	15	25	M14
	CSL50-105	13121	50	105	83	81	15	25	M16

NOTE :

1. For endmill of straight shank with flat.

ORDERING EXAMPLE

① BT30 - ② CSL ③ 16 - ④ 060

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper

Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed

Accelerator

Oil-Hole Adapter

Angle Head Holder



BBT Available

FIG.1

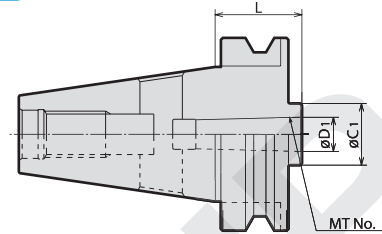
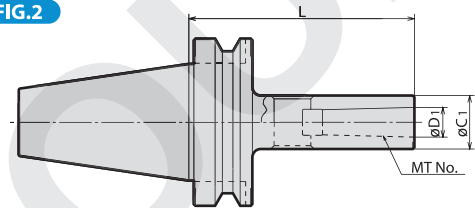


FIG.2



DRILL DIA. AND SHANK

SHANK		MT1	MT2	MT3	MT4	MT5
DRILL DIA.	MIN.	2.0	14.1	23.1	32.1	50.1
	MAX.	14.0	23.0	32.0	50.0	75.0

	Order No.	FIG.	MT No.	L	ØD1	ØC1	N/W (kg)
BT30 (BBT30)	-MTA1 -045 10030	1	1	45	12.065	25	0.43
	-MTA2 -060 10032	1	2	60	17.780	32	0.50
	-MTA3 -080 10034	1	3	80	23.825	40	0.69
BT40 (BBT40)	-MTA1 -045 11152	1	1	45	12.065	25	1.0
	-120 11154	2		120			1.3
	-MTA2 -045 11156	1	2	45	17.780	32	1.0
	-120 11158	2		120			1.5
	-MTA3 -075 11160	1	3	75	23.825	40	1.2
	-135 11162	2		135			1.8
	-MTA4 -090 11164	1	4	90	31.267	50	1.4
	-165 11166	2		165			2.5
	-MTA1 -045 13302	1	1	45	12.065	25	3.6
	-120 13304	2		120			3.9
BT50 (BBT50)	-180 13306	2		180			4.2
	-MTA2 -045 13308	1	2	45	17.780	32	3.6
	-135 13310	2		135			4.2
	-180 13312	2		180			4.5
	-MTA3 -045 13314	1	3	45	23.825	40	3.5
	-150 13316	2		150			4.5
	-180 13318	2		180			4.8
	-MTA4 -075 13320	1	4	75	31.267	50	3.6
	-180 13322	2		180			5.2
	-MTA5 -105 13324	1	5	105	44.399	65	3.9
	-210 13326	2		210			6.5

NOTE :

1. For tongue type Morse taper shank cutting tools.

ORDERING EXAMPLE

① BT30 - ② MTA ③ 1 - ④ 045

① Shank Size

② Holder's Name

③ MT No.

④ G.L. Length

หัวจับ

FACE MILL ARBOR (Type A)

Thru-the-tool Coolant Available (Option)

BBT Available



FIG.1

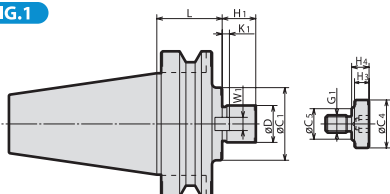


FIG.2

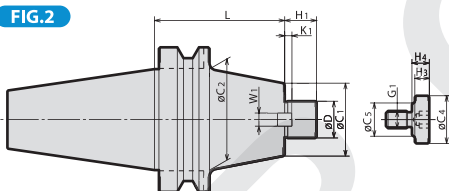


FIG.3

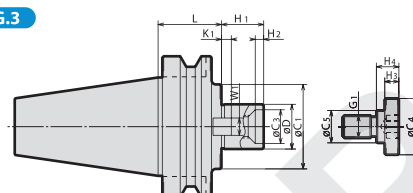


FIG.4

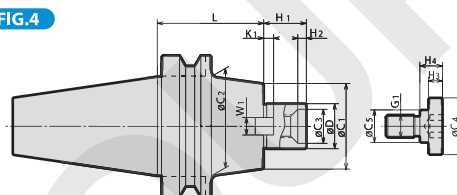


FIG.5

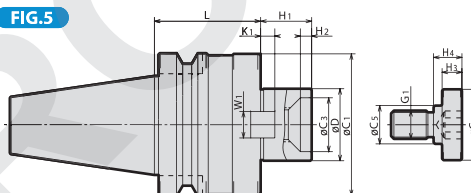
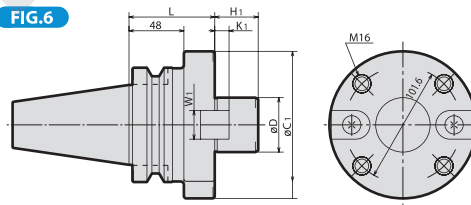


FIG.6



Order No.		FIG.	ØD (h6)	L	ØC1	ØC2	ØC3	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
										W1	K1		ØC4	ØC5	H3	H4	
BT30 (BBT30)	-FMA22.225 -035 10010	1	22.225	35	40	-	-	18	-	8.0	4	M8	20	15	7	9	0.57
	-FMA25.4 -035 10012		25.4	35	50	-	-	22	-	9.5	5	M12	33	23	10	12	0.72
	-FMA25.4 -045 11002	1	25.4	45	-	-	-	22	-	9.5	5	M12	33	23	10	12	1.4
BT40 (BBT40)	-FMA25.4 -105 11006	2	25.4	105	50	60	-	22	-	9.5	5	M12	33	23	10	12	2.6
	-FMA31.75 -045 11008	3	31.75	45	60	-	24	30	6	12.7	7	M16	40	23	10	15	1.6
	-090 11010		31.75	90	60	-	24	30	6	12.7	7	M16	40	23	10	16	2.6
BT50 (BBT50)	-FMA38.1 -060 11014	3	38.1	60	80	-	28	34	6	15.9	9	M20	50	27	14	20	2.6
	-FMA25.4 -045 13002		25.4	45	50	-	-	22	-	9.5	5	M12	33	23	10	12	3.9
	-090 13004	2	25.4	90	50	70	-	22	-	9.5	5	M12	33	23	10	12	5.0
	-150 13006	2	25.4	150	50	70	-	22	-	9.5	5	M12	33	23	10	12	6.4
	-FMA31.75 -045 13008	3	31.75	45	60	-	-	30	6	12.7	7	M16	40	23	10	16	4.1
	-075 13010	4	31.75	75	60	70	24	30	6	12.7	7	M16	40	23	10	16	4.9
	-105 13012		31.75	105	60	70	24	30	6	12.7	7	M16	40	23	10	16	5.7
	-FMA38.1 -045 13014	3	38.1	45	80	-	28	34	6	15.9	9	M20	50	27	14	20	4.4
	-075 13016		38.1	75	80	-	28	34	6	15.9	9	M20	50	27	14	20	5.6
	-FMA50.8 -045 13020	3	50.8	45	98	-	38	36	10	19.05	10	M24	65	37	14	24	5.0
	-075 13022	5	50.8	75	100	-	38	36	10	19.05	10	M24	65	37	14	24	6.7
	-FMA47.625 -075 13024	6	47.625	75	128.57	-	-	38	-	25.4	12.5	-	-	-	-	-	8.0

NOTE :

1. Please instruct when ordering for thru-the-tool application.

ORDERING EXAMPLE

① BT30 - ② FMA ③ 25.4 - ④ 035

① Shank Size

② Name

③ ØD

④ G.L. Length

ARBOR

หัวจับ



หัวจับ

FACE MILL ARBOR (Type B)



Thru-the-tool Coolant Available (Option)

BBT Available

FIG.1

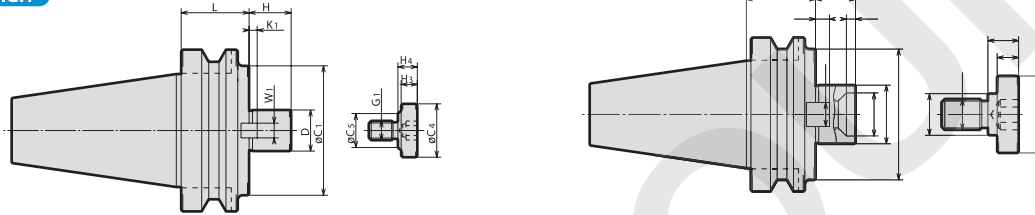
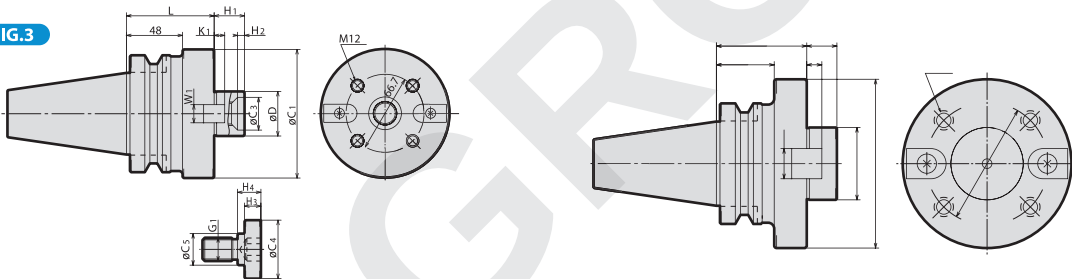


FIG.3



Order No.	FIG.	ØD (h6)	L	ØC1	ØC3	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
								W1	K1		ØC4	ØC5	H3	H4	
BT40 (BBT40)	-FMB25.4 -060 11022	1	25.4	60	80	-	26	-	9.5	5	M12	33	23	10	1.3
	-105 11024			105											3.3
	-FMB38.1 -060 11026	2	38.1	60	85	28	26	6	15.9	9	M20	50	27	14	2.6
	-FMB27 -060 11028	1	27	60	80	-	26	-	12	6	M12	33	23	10	2.3
BT50 (BBT50)	-105 11030			105											3.3
	-FMB40 -060 11032	2	40	60	85	28	26	6	16	8.5	M20	50	27	14	2.6
	-FMB25.4 -045 13032	1	25.4	45	80	-	26	-	9.5	5	M12	33	23	10	4.1
	-090 13034			90											6.1
BT40 (BBT40)	-150 13036			150											8.3
	-FMB38.1 -045 13038	2	38.1	45	85	28	26	6	15.9	9	M20	50	27	14	4.4
	-075 13040			5											5.7
	-105 13042			105											7.0
BT50 (BBT50)	-FMB38.1F -075 13044	3	38.1	75	110	28	26	6	15.9	9	M20	50	27	14	6.6
	-FMB27 -045 13046	1	27	45	80	-	26	-	12	6	M12	33	23	10	4.1
	-090 13048			90											5.9
	-150 13050			150											8.3
BT40 (BBT40)	-FMB40 -045 13052	2	40	45	85	28	26	6	16	8.5	M20	50	27	14	4.4
	-075 13054			75											5.7
	-105 13056			105											7.1
	-FMB40F -075 13058	3	40	75	110	28	26	6	16	8.5	M20	50	27	14	6.7
BT50 (BBT50)	-FMB60 -075 13060	4	60	75	140	-	25	-	25.4	12.5	-	-	-	-	8.5

NOTE :

1. For Sandvik cutters.

ORDERING EXAMPLE

① **BT40** - ② **FMB** ③ **25.4** - ④ **060**

① Shank Size

② Name

③ ØD

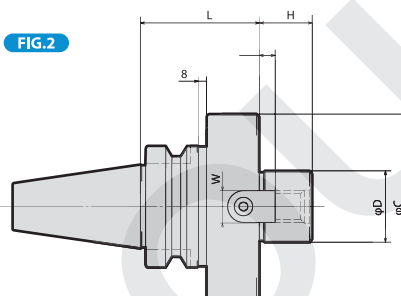
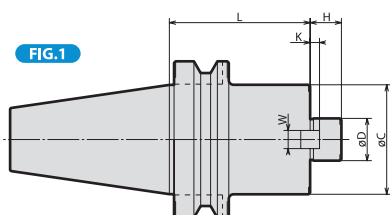
④ G.L. Length

หัวจับ

FACE MILL ARBOR (Type C)

Thru-the-tool Coolant Available (Option)

BBT Available



Order No.				FIG.	ØD (h6)	L	ØC	H	K	W	CLAMP BOLT	N/W (kg)
BT30 (BBT30)	-FMC16	-045	200621	1	16	45	34	17	5	8	M8x25L	0.6
	-FMC22	-045	200622		22		45	18		10	M10x30L	0.7
	-FMC27	-045	200623	2	27		70	20	6	12	M12x35L	1.1
BT40 (BBT40)	-FMC25.4	-060	11042	1	25.4	60	70	20	5	9.5	M12x35L	2.0
	-105	11044				105						3.1
	-FMC38.1	-060	11046		38.1	60	85	22	7	15.9	M16x40L	2.5
	-FMC22	-060	11048		22	60	45	18	5	10	M10x30L	1.5
	-105	11050				105						2.1
	-FMC27	-060	11052		27	60	70	20	6	12	M12x35L	2.0
	-105	11054				105						3.1
	-FMC32	-060	11056		32	60	85	22	7	14	M16x40L	2.4
	-FMC25.4	-045	13072	1	25.4	45	70	20	5	9.5	M12x35L	4.0
BT50 (BBT50)	-090	13074				90						5.4
	-150	13076				150						7.2
	-FMC38.1	-045	13078		38.1	45	85	22	7	15.9	M16x40L	4.2
	-075	13080				75						5.6
	-105	13082				105						6.9
	-FMC22	-060	13084		22	60	45	18	5	10	M10x30L	4.1
	-105	13086				105						4.6
	-150	13088				150						5.2
	-FMC27	-045	13090		27	45	70	20	6	12	M12x35L	4.0
	-090	13092				90						5.4
	-150	13094				150						7.2
	-FMC32	-045	13096		32	45	85	22	7	14	M16x40L	4.2
	-075	13098				75						5.0
	-105	13100				105						6.8

NOTE :

1. For Sandvik cutters.

ORDERING EXAMPLE

① BT40 - ② FMC ③ 25.4 - ④ 060

① Shank Size

② Name

③ ØD

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

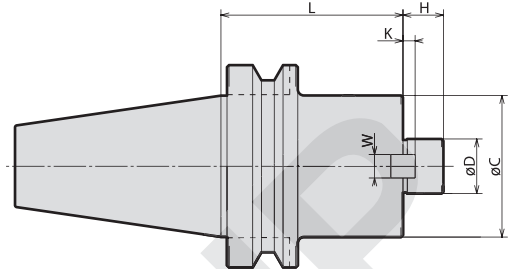
Side Cutter Arbor

Traction Drive Speed

Accelerator

Oil-Hole Adapter

Angle Head Holder



Order No.			ØD(h6)	L	ØC	H	K	W	Clamp Bolt	N/W (kg)					
BT50 (BBT50)	-FM22-200-050	251111	22	200	48	15	5	10	M10x30L	5.9					
	-FM22-200-063	251112			60					7.2					
	-FM22-250-050	251113		250	48					6.7					
	-FM22-250-063	251114			60					8.4					
	-FM22-300-050	251115		300	48					7.4					
	-FM22-300-063	251116			60					9.5					
	-FM22-350-050	251117		350	48					8.1					
	-FM22-350-063	251118			60					10.6					
	-FM22.225-150-050	251141	22.23	150	47	18	4	7.6	M10x30L	5.2					
	-FM22.225-150-063	251142			60					6.1					
	-FM22.225-200-050	251143		200	47					5.9					
	-FM22.225-200-063	251144			60					7.2					
	-FM22.225250-050	251145		250	47					6.5					
	-FM22.225-250-063	251146			60					8.4					
	-FM22.225-300-050	251147		300	47					7.2					
	-FM22.225-300-063	251148			60					9.5					
	-FM22.225-350-050	251149		350	47					7.9					
	-FM22.225-350-063	251150			60					9.5					
	-FM25.4-200	251121		25.4	200					60	22	5	9.1	M12x35L	7.3
	-FM25.4-250	251122													250
	-FM25.4-300	251123	300			9.5									
	-FM25.4-350	251124	350			10.6									
	-FM27-200	251161	27	200	73	20	6	12	M12x35L	9					
	-FM27-250	251162								250	10.6				
	-FM27-300	251163								300	12.3				
	-FM31.75-150-080	251131	31.75	150	76	30	7	12.3	M16x35L	7.7					
	-FM31.75-150-100	251132			96					10.1					
	-FM31.75-200-080	251133		200	76					9.5					
	-FM31.75-200-100	251134			96					12.9					
	-FM31.75-250-080	251135		250	76					11.3					
	-FM31.75-250-100	251136			96					15.8					
	-FM31.75-300-080	251137		300	76					13.1					
-FM31.75-300-100	251138	96			18.6										

ORDERING EXAMPLE

① **BT50** - ② **FM** ③ **22** - ④ **200**

① Shank Size

② Name

③ ØD

④ G.L. Length

หัวจับ

SHELL MILL ARBOR (Type A)



FIG.1

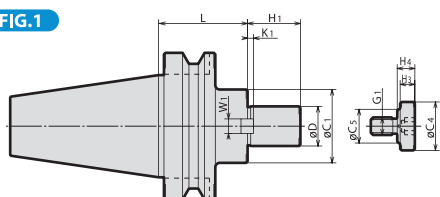


FIG.2

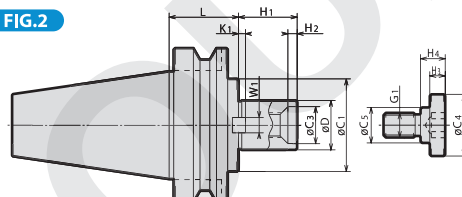


FIG.3

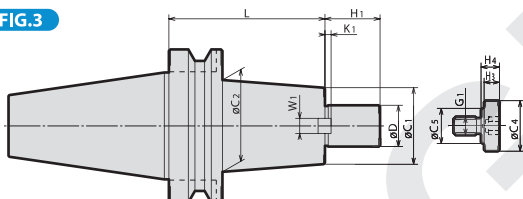
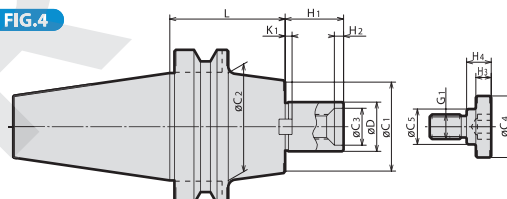


FIG.4



Order No.		FIG.	ØD (h6)	L	ØC1	ØC2	ØC3	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
										W1	K1		ØC4	ØC5	H3	H4	
BT40	-SMA16-060 11066 (11062)	1	16	60	34	-	-	17	-	8	3	M8	20	15	7	9	1.3
	-120 11068 (11064)		(15.875)	120													1.7
	-SMA22-060 11070 (11057)	1	22	60	42	-	-	27	-	8	3.5	M10	28	18	9	11	1.5
	-120 11072		(22.225)	120													2.1
	-SMA27-045 11074 (11060)	1	27	45	50	-	-	36	-	10	4	M12	33	23	10	12	1.5
	-105 11076		(25.4)	105													2.4
BT50	-SMA32-045 11078 (11061)	3	32	45	60	-	24	38	6	10	4.5	M16	40	23	10	16	1.7
	-090 11080		(31.75)	90													2.7
	-SMA16-075 13122 (13148)	1	16	75	34	-	-	17	-	8	3	M8	20	15	7	9	4.0
	-120 13124 (13150)		(15.875)	120													4.3
	-SMA22-075 13126 (13152)	1	22	75	42	-	-	27	-	8	3.5	M10	28	18	9	11	4.2
	-120 13128 (13154)		(22.225)	120													4.7
	-180 13130 (13156)		180	180													5.4
	-SMA27-060 13132 (13158)	1	27	60	50	-	-	36	-	10	4	M12	33	23	10	12	4.2
	-105 13134 (13160)	2	(25.4)	105													5.2
	-150 13136 (13162)		150	150													6.0
	-SMA32-045 13138 (13164)	3	32	45	60	-	24	38	6	10	4.5	M16	40	23	10	16	4.1
	-075 13140 (13166)	4	(31.75)	75													4.9
	-105 13142 (13168)		105	105													5.7
	-SMA40-045 13144 (13170)	3	40	45	80	-	28	38	8	12	5	M20	50	27	14	20	4.5
	-075 13146 (13172)		(38.1)	75													5.7

NOTE :

1. Arbor in () for cutters in inches are in stock

ORDERING EXAMPLE

① BT40 - ② SMA ③ 16 - ④ 060

① Shank Size

② Name

③ ØD

④ G.L. Length

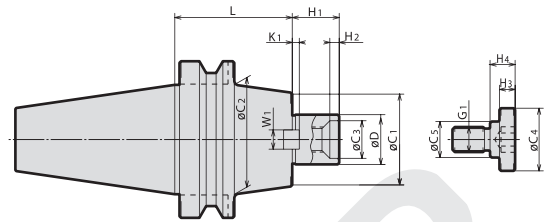
ARBOR

หัวจับ



หัวจับ

SHELL MILL ARBOR (Type B)

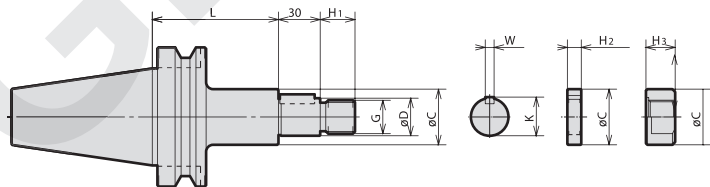


	Order No.			ØD (h6)	L	ØC1	ØC2	ØC3	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
											W1	K1						
Cutting Tool	BT40	-SMB22.225-060	11082	22.225	60	45	-	-	17	-	8	3.5	M10	28	18	9	11	1.5
		-SMB31.75 -045	11084	31.75	45	60	-	24	30	6	12.7	4.5	M16	45	23	10	16	1.6
		-SMB38.1 -060	11086	38.1	60	80	-	28	36	6	15.9	5	M20	50	27	14	20	2.6
Accessories	BT50	-SMB22.225-060	13182	22.225	60	45	-	-	17	-	8	3.5	M10	28	18	9	11	4.1
		-120	13184		120													4.8
		-180	13186		180													5.6
Drill Chuck	BT50	-SMB31.75 -045	13188	31.75	45	60	-	24	30	6	12.7	4.5	M16	40	23	10	16	4.1
		-075	13190		75													4.8
		-105	13192		105													5.6
Milling Chuck	BT50	-SMB38.1 -045	13194	38.1	45	80	-	28	36	6	15.9	5	M20	50	27	14	20	4.4
		-075	13196		75													5.6

NOTE : 1. For shell endmill with brazed T/C tips.

หัวจับ

SIDE CUTTER ARBOR



Order No.				ØD (h6)	L	ØC	G	H1	H2	H3	K	W	N/W (kg)
BT40	-SCA12.7	-060	11092	12.7	60	20	M12x1.25	15	5 10 20	12	◇	◇	1.2
	-SCA15.875	-075	11094	15.875	75	26	M14x1.5	16		13	17.42	3.18	1.4
	-SCA22.225	-075	11098	22.225	75	34	M20x1.5	21		18	23.82		1.7
	-SCA25.4	-075	11100	25.4	75	40	M24x2	25		21	27.78	6.35	2.0
	-120	11102	120		2.5								
	-SCA31.75	-090	11104	31.75	90	46	M30x2	30		26	34.92	7.9	2.6
BT50	-SCA12.7	-075	13212	12.7	75	20	M12x1.25	15	5 10 20	12	◇	◇	3.9
	-105	13214	105		4.0								
	-SCA15.875	-090	13216	15.875	90	26	M14x1.5	16		13	17.42	3.18	4.0
	-120	13218	120		4.2								
	-SCA22.225	-090	13220	22.225	90	34	M20x1.5	21		18	23.82		4.5
	-135	13222	135		4.7								
	-SCA25.4	-090	13224	25.4	90	40	M24x2	25		21	27.78	6.35	4.7
	-135	13226	135		5.1								
	-SCA31.75	-090	13228	31.75	90	46	M30x2	30		26	34.92	7.92	5.1
	-135	13230	135		5.7								
	-SCA38.1	-090	13232	38.1	90	55	M36x3	36		31	42.06	9.52	5.8
	-135	13234	135		6.7								

ORDERING EXAMPLE

①	BT40	-	②	SCA	③	12.7	-	④	060
---	------	---	---	-----	---	------	---	---	-----

① Shank Size

② Name

③ ØD

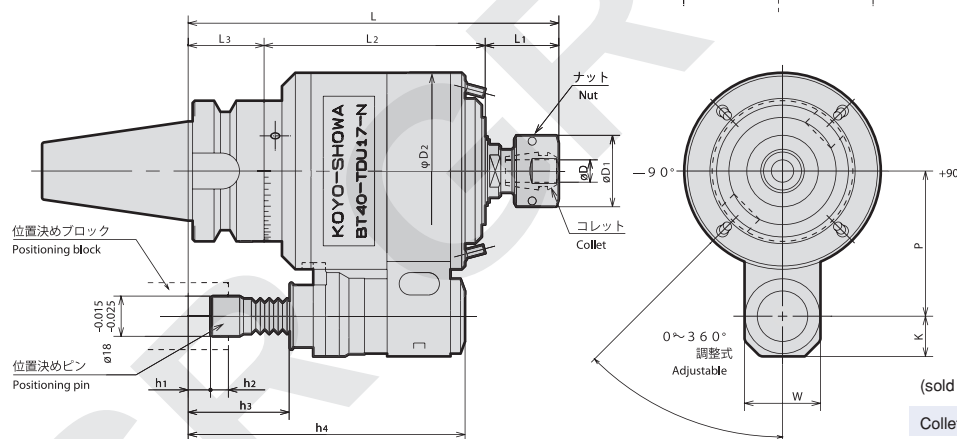
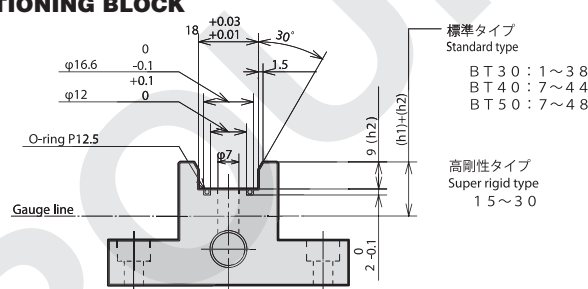
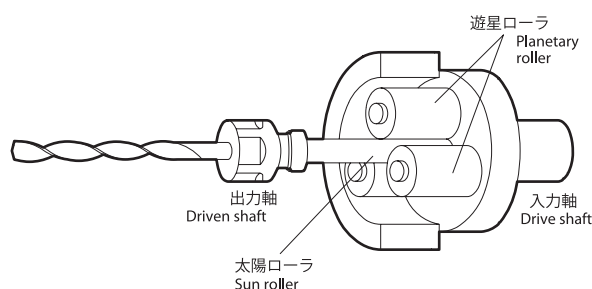
④ G.L. Length

หัวจับ

TRACTION DRIVE SPEED ACCELERATOR



POSITIONING BLOCK



(sold separately)

Collet ➡ Page 942

Traction drive (TD) speeder is an A.T.C. type speed accelerator, which employs planetary rollers and is co-developed and introduced to the market by Koyo Seiko and SHOWA for the first time in the world.

FEATURES

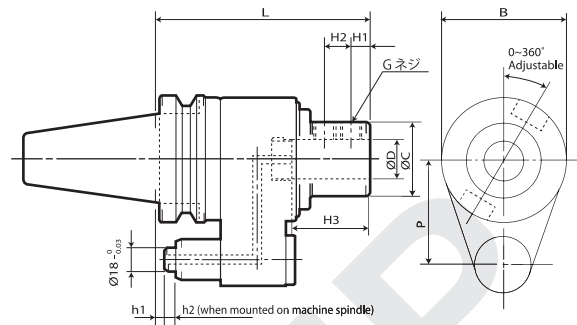
- 30,000 min⁻¹ is obtainable on normal M/C.
- High and stable torque transmission enables small diameter drilling and endmilling, as well as deep grooving.
- Capable even for grinding on M/C, with minimum vibration and noise.
- Compact and light weight A.T.C. type.
- Broadly adjustment Positioning Pin "One-touch" adjustment, and a height range of 40 mm.

Standard Type

Order No.			Speed Ratio	Max (min ⁻¹)	L	L1	L2	L3	ØD	ØD1	ØD2	h1	h2	h3	h4	P	K	W	N/W (kg)	Max. power (kg)	Static Rigidity (N/µm)	Collet (AA Grade)	Nut Code
BT30	-TDU17-N	10180	1:6	30,000	159	31	100	28	0.5 ~10	30	88	-6 ~29	7 ~9	39.5 ~ 42.5	118	65	18	34	4.3	3.1	8.8	CR10-(D)	RSN10NB
BT40	-TDU17-N	11496	1:6	30,000	165	31	100	34	0.5 ~10	30	88	40 ~35	7 ~9	45.5 ~ 48.5	124	65	18	34	5.4	3.1	9.8	CR10-(D)	RSN10NB
BT50	-TDU17-N	13896	1:6	30,000	169	31	100	38	0.5 ~10	30	88	0 ~39	7 ~9	49.5 ~ 52.5	128	80	18	34	7.9	3.1	12.7	CR10-(D)	RSN10NB

Super Rigid Type

Order No.			Speed Ratio	Max (min ⁻¹)	L	L1	L2	L3	ØD	ØD1	ØD2	h1	h2	h3	h4	P	K	W	N/W (kg)	Max. power (kg)	Static Rigidity (N/µm)	Collet (AA Grade)	Nut Code
BT50	-TDU40	13894	1:3.4	12,000	200	42	120	38	1.5 ~20	50	120	6 ~21	9	15 ~30	112	80	22	37	11.5	8.8	30.4	CR20-(D)	RSN20NB



ORDERING EXAMPLE

① **BT40** - ② **OH-SL** ③ **16** - ④ **150**

① Shank Size

② Name

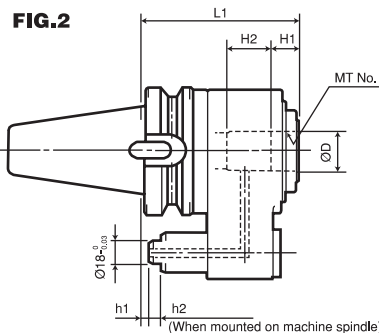
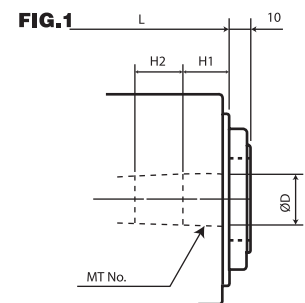
③ Cutter's Shank Dia.

④ G.L. Length

CUTTING CONDITION		
	STD	H
MAX.RPM	1500min ⁻¹	3000min ⁻¹
MAX.COOLANT PRESSURE	0.5MPa	2.0MPa

Order No.			ØD	L	ØC	H1	H2	H3	G	B	P
BT40	-OH-SL16-150	11426	16	150	38	25	-	45	M12x1.5	80	65
	-SL20-150	11428	20			-					
	-SL25-150	11430	25	43	15	20	55				
	-SL32-165	11432	32	165	53	13	18	60	92		
BT50	-OH-SL16-165	13842	16	165	40	25	-	45	M12x1.5	98	80 82 85
	-SL20-165	13844	20			-					
	-SL25-165	13846	25		48	15	20	55			
	-SL32-165	13848	32		58			60	M16x1.5		
	-SL40-165	13850	40		63					105	

Note : 1. when ordering, please inform h1 and h2 dimensions, which differ depending on machine maker and model.



ORDERING EXAMPLE

① **BT40** - ② **OH-MT** ③ **3** - ④ **105**

① Shank Size

② Name

③ MT No.

④ G.L. Length

Order No.		ØD	L	ØC	H1	H2	G	B	P
BT40	-OH-MT3-105 11422	2	MT3	23.825	105	21	22	80	65
	-MT4-120 11424	2	MT4	31.267	120	21	34		
BT50	-OH-MT3-110 13832	1	MT3	23.825	110	21	22	98	80
	-MT4-120 13834	2	MT4	31.267	120	21	34		82
	-MT5-135 13836	2	MT5	44.399	135	40	45		85

หัวจับ

OIL-HOLE HARD CHUCK



(sold separately)

Collet → Page 936

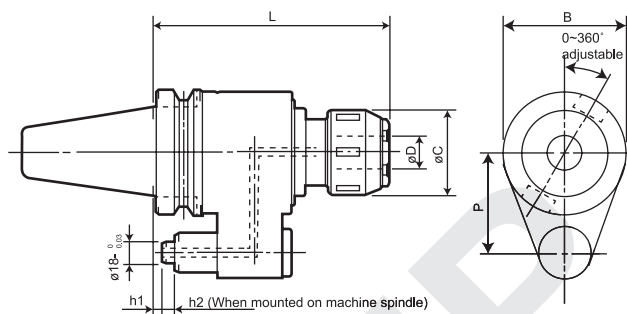
Wrench → Page 934

CUTTING CONDITION

MAX.RPM	3000min ⁻¹
MAX.COOLANT PRESSURE	2.0MPa

Order No.			ØD	ØC	L	B	P
BT50	-OH-CTH16-170	13851	16	52	170	98	80
	-CTH25-185	13852	25	68	185	98	
	-CTH32-195	13854	32	83	195	120	

NOTE : When ordering, please inform h1 and h2 dimensions, which differ depending on machine maker and model.



ORDERING EXAMPLE

①	BT50	-	②	OH-CTH	③	16	-	④	170
---	------	---	---	--------	---	----	---	---	-----

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

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Drill Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

Side Cutter Arbor

Traction Drive Speed Accelerator

Oil-Hole Adapter

Angle Head Holder

หัวจับตลับ

OIL-HOLE TAP CHUCK

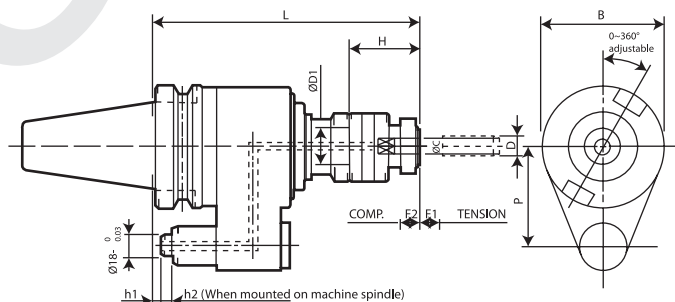


CUTTING CONDITION

MAX.COOLANT PRESSURE	2.0MPa
----------------------	--------

Order No.			ØD	L	H	B	P	F1	F2	D	TAP COLLET CODE
BT40	-OH-TPC20-207	11288	20	207	45	92	65	15	15	M4 ~ M14	OH-TCC20-①
	-TPC29-217	11289	29	217	55					M12 ~ M27	OH-TCC29-①
BT50	-OH-TPC20-200	13592	20	200	45	98	80 82 85	15	15	M4 ~ M14	OH-TCC20-①
	-TPC29-210	13594	29	210	55					M12 ~ M27	OH-TCC29-①
	-TPC40-260	13596	40	260	75			20	20	M18 ~ M39	OH-TCC40-①

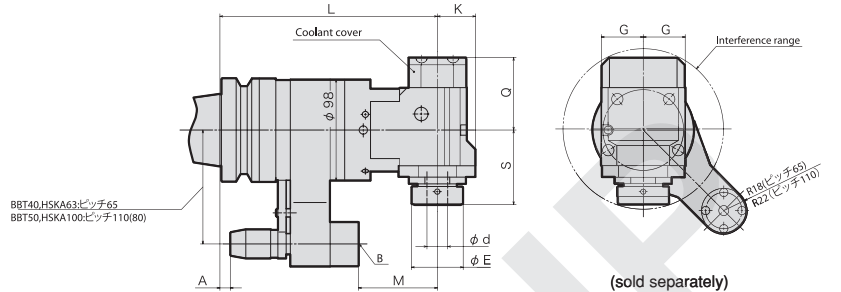
NOTE : When ordering, please inform h1 and h2 dimensions, which differ depending on machine maker and model.



ORDERING EXAMPLE

①	BT50	-	②	OH-TPC	③	20	-	④	207
---	------	---	---	--------	---	----	---	---	-----

- ① Shank Size
- ② Name
- ③ ØD1
- ④ G.L. Length



(sold separately)

Collet	➡	Page 938
Wrench	➡	Page 934
Nut	➡	Page 942

Order No.			Ød	ØE	L	K	M	S	G	Q	Q'	F	F'	Collet	N/W (kg)
BBT40	-AGCT-RSC10-190AJ	240622	2.9~10	30	190	26	80	58	40.5	67	47.5	137	123	CROH10	6.0
	-AGCT-RSC16-190AJ	240624	5.5~16	42		28.5		60		70	50.5	142	128	CROH16	6.2
BBT50	-AGCT-RSC10-210AJ	270662	5.5~10	30	210	26	76	58		67	47.5	137	123	CROH10	10.4
	-AGCT-RSC20-210AJ	270664	7.5~20	50		37		72		70	50.5	155	140	CROH20	11.0

- NOTE :
1. Rotation direction of cutting tool is reversed; speed ratio is 1:1
 2. Angle of position pin, drive key groove and addendum direction can be set freely.
 3. Angle-Jet can be used by thru-the tool coolant only. No Dry cutting!
 4. Non-thru-the tool coolant type (AG model) is also available. Q' and F' shown in above dimension chart corresponds to AG model.
 5. Wrench to clamp nut is included, but collet is not included.
 6. Set length of A is 8mm (for BBT40 & HSKA63), and 6mm (for BBT50 & HSKA100) is standard of SHOWA but other length.
 7. Installation of Angle-Jet requires a positioning block.
 8. Depending on Machine type, ATC (Automatic Tool Changer) may not be used.
 9. Supply of coolant through positioning pin requires connecting coolant hose with B position (65mm:PT1/16, 110mm:PT1/8) (this only is AG model).

หัวจับ

MICRON CHUCK (Milling Chuck)

標準
Standard

Thru-the-tool Coolant Available

Thru-the-groove Coolant Available

(sold separately)

Collet → Page 930-931

Screw → Page 932

Wrench → Page 934

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Drill Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

FIG.1

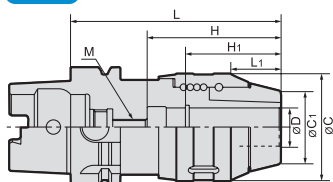


FIG.2

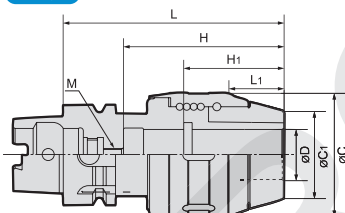
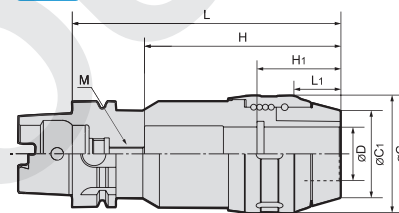


FIG.3



Order No.	Class A	Class AA	Fig	ØD	L	L1	ØC	ØC1	H	H1	最小刃具挿入量		調整量	M	N/W (kg)				
											スキマスルー	センタースルー							
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	1.7										
	HPC25- 115	○	○		25	115	27.5	62	44	80	50	2.1							
	HPC32- 120	△	△		32	120	26	70	52	70	53	55	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	1.8										
	HPC25- 115	○	○		25	115		62	44			80				50	2.0		
	HPC32- 120	○	○	2	32	120	27.5	70	52	85	53	55	64 ~ 72	2.1					
	HPC32- 160	○	○		3	32		160		117			96 ~ 104	2.9					
	HPC42- 160	△	△	42			30.5	82	62	100	57	60	60	67 ~ 87		3.8			
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	2.9										
	HPC25 115	○	○		25	115	27.5	62	44			80				50	55	63 ~ 65	3.2
	HPC25 135	○	○			135			90								73 ~ 80	3.3	
	HPC32 120	○	○	3	32	120	70	52	80	53	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	○	○					165				122				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	HSKA50	-	②	HPC	③	16	-	④	100	⑤	A
---	--------	---	---	-----	---	----	---	---	-----	---	---

① Shank Size

② Holder's Name

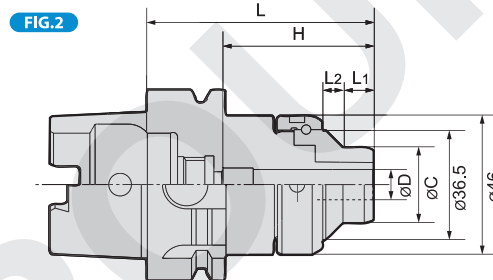
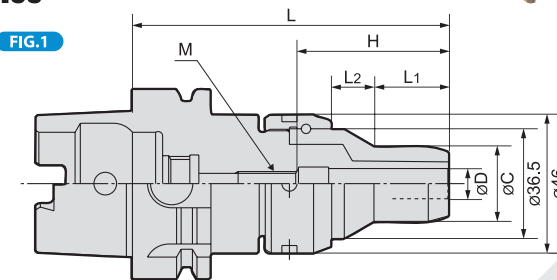
③ Cutter's Shank Dia.

④ G.L. Length

⑤ Grade



H-ซีรีส์
H-series



Thru-the-tool Coolant Available (option)

Thru-the-groove Coolant Available (option)

(sold separately)

Screw → Page 933

Wrench → Page 934

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 JSR GROUP

Order No.		Class A	Class AA	G Type	Fig	ØD	L	L1	L2	ØC	H	最小刃具 挿入量	調整量		調整ネジ M	スキマ スルー	センター スルー	N/W (kg)									
Max. 20,000 min ⁻¹ (G Type : Max. 30,000 min ⁻¹)																											
HSCA50	HPC03H	075	○	○	○	2	3	75	10.3	6.7	25	55	15	-	-	-	○	○追加加工	0.9								
		105	○	○	○	1		105	25	14		85					○	○追加加工	1.2								
	HPC04H	075	○	○	○	2	4	75	10.3	6.7		55					37.5	-	-	-	○	○追加加工	0.9				
		105	○	○	○	1		105	25	14		85									○	○追加加工	1.2				
	HPC05H	075	△	△	△	2	5	75	10.3	6.7		55									37.5	-	-	-	○	○追加加工	0.9
		105	△	△	△	1		105	25	14		85													○	○追加加工	1.2
	HPC06H	075	○	○	○	2	6	75	10.3	6.7		37.5	23	28	37	AS17-2-M5-CTW									○有償	○	0.9
		105	○	○	○	1		105	25	14			30	30											○有償	○	1.2
	HPC07H	075	△	△	△	2	7	75	10.3	6.7			23	28	37	AS17-2-M6-CTW	○有償	○	0.9								
		105	△	△	△	1		105	25	14			30	30			○有償	○	1.2								
	HPC08H	075	○	○	○	2	8	75	10.3	6.7			50	23	-	-	-	○有償	○	0.9							
		105	○	○	○	1		105	25	14				35	35	50	AS22-2-M6-CTW	○有償	○	1.2							
	HPC09H	075	△	△	△	2	9	75	10.3	6.7		23		-	-	-	○有償	○	0.9								
		105	△	△	△	1		105	25	14		35		35	50	AS22-2-M6-CTW	○有償	○	1.2								
	HPC10H	075	○	○	○	2	10	75	10.3	6.7		23		-	-	-	○有償	○	0.9								
		105	○	○	○	1		105	25	14		35		35	50	AS22-2-M6-CTW	○有償	○	1.2								
	HPC11H	075	△	△	△	2	11	75	12.2	4.8		32	25	-	-	-	○有償	○	0.9								
		105	△	△	△	1		105	25	14			55	40	40	55	AS22-2-M6-CTW	○有償	○	1.2							
	HPC12H	075	○	○	○	2	12	75	12.2	4.8			50	25	-	-	-	○有償	○	0.9							
		105	○	○	○												○有償	○	1.2								
	HPC13H	105	△	△	△	1		105	25	14			55	40	40	55	AS22-2-M6-CTW	○有償	○	1.0							
		105	△	△	△													○有償	○	1.0							
	HPC14H	105	△	△	△													○有償	○	1.0							
		105	△	△	△													○有償	○	1.0							
	HPC15H	105	△	△	△		○有償											○	1.0								
		105	△	△	△		○有償											○	1.0								

Max. 20,000 min⁻¹ (G Type : Max. 30,000 min⁻¹)

HSCA63	HPC03H	075	○	○	○	2	3	75	10.3	6.7	53	15	-	-	○	○追加加工	1.2
		105	○	○	○	1	3	105	25	14	83				○	○追加加工	1.4
		135	○	○	○			135			113				○	○追加加工	1.9
	HPC04H	075	○	○	○	2	4	75	10.3	6.7	53				○	○追加加工	1.2
		105	○	○	○	1	4	105	25	14	83				○	○追加加工	1.4
		135	○	○	○			135			113				○	○追加加工	1.9
	HPC05H	075	△	△	△	2	5	75	10.3	6.7	53				○	○追加加工	1.2
		105	△	△	△	1	5	105	25	14	83				○	○追加加工	1.4
		135	△	△	△			135			113				○	○追加加工	1.9

Order No.			Class A	Class AA	G Type	Fig	ØD	L	L1	L2	ØC	H	最小刃具 挿入量	調整量		調整ネジ M	スキマ スルー	センター スルー	N/W (kg)						
													MIN	MAX											
HSKA63	HPC06H	075	○	○	○	2	6	75	10.3	6.7	25	37.5	23	25	35	AS17-2-M5-CTW	○有償	○	1.2						
		105	○	○	○	1		105	25	14			30	30	37		○有償	○	1.4						
		135	○	○	○			135	○有償	○			1.9												
	HPC07H	075	△	△	△	2	7	75	10.3	6.7			23	25	35	AS17-2-M6-CTW	○有償	○	1.2						
		105	△	△	△	1		105	25	14			30	30	37		○有償	○	1.4						
		135	△	△	△			135	○有償	○			1.9												
	HPC08H	075	○	○	○	2	8	75	10.3	6.7			53	23	-	-	-	○有償	○	1.2					
		105	○	○	○	1		105	25	14			35	35	50	AS22-2-M6-CTW	○有償	○	1.4						
		135	○	○	○			135	○有償	○			1.9												
	HPC09H	075	△	△	△	2	9	75	10.3	6.7			50	23	-	-	-	○有償	○	1.2					
		105	△	△	△	1		105	25	14				35	35	50	AS22-2-M8-CTW	○有償	○	1.4					
		135	△	△	△			135	○有償	○				1.9											
	HPC10H	075	○	○	○	2	10	75	10.3	6.7		23		-	-	-	○有償	○	1.2						
		105	○	○	○	1		105	25	14		35		35	50	AS22-2-M8-CTW	○有償	○	1.4						
		135	○	○	○			135	○有償	○		1.9													
	HPC11H	075	△	△	△	2	11	75	12.2	4.8		50		25	-	-	-	○有償	○	1.2					
		105	△	△	△	1		105	25	14		55		40	40	55	AS22-2-M8-CTW	○有償	○	1.4					
		135	△	△	△			135	○有償	○		1.9													
	HPC12H	075	○	○	○	2	12	75	12.2	4.8		50		25	-	-	-	○有償	○	1.2					
		105	○	○	○	1		105	25	14		55		40	40	55	AS22-2-M8-CTW	○有償	○	1.4					
		135	○	○	○			135										○有償	○	1.9					
	HPC13H	105	△	△	△	1		105					13					135	55	40	40	55	AS22-2-M8-CTW	○有償	○
		135	△	△	△			135									○有償							○	1.7
		105	△	△	△			105									○有償							○	1.5
HPC14H	135	△	△	△	1	135		14			135		50				58	60	AS25-2-M8-CTW	○有償	○	1.7			
	105	△	△	△		105														○有償	○	1.5			
	135	△	△	△		135														○有償	○	1.7			
HPC15H	105	△	△	△	1	105		15			135		50				58	60	AS25-2-M8-CTW	○有償	○	1.5			
	135	△	△	△		135														○有償	○	1.7			
	105	△	△	△		105														○有償	○	1.5			
HPC16H	105	△	△	△		16	105															○有償	○	1.5	

HSKA100	HPC03H	110	○	○	-	1	3	110	25	14	25	81	15	-	-	-	○	○追加加工	2.7				
	HPC04H	110	○	○	-		4										○	○追加加工					
	HPC05H	110	△	△	-		5										○	○追加加工					
	HPC06H	110	○	○	-		6									37.5	30	30		37	AS17-2-M5-CTW	○有償	○
	HPC07H	110	△	△	-		7														AS17-2-M6-CTW	○有償	○
	HPC08H	110	○	○	-		8														AS22-2-M6-CTW	○有償	○
	HPC09H	110	△	△	-		9									50	35	35		50	AS22-2-M8-CTW	○有償	○
	HPC10H	110	○	○	-		10															○有償	○
	HPC11H	110	△	△	-		11															○有償	○
	HPC12H	110	△	△	-		12									32	40	40		55	AS25-2-M10-CTW	○有償	○
	HPC13H	110	△	△	-		13															○有償	○
	HPC14H	110	△	△	-		14															○有償	○
	HPC15H	110	△	△	-		15				○有償	○											
	HPC16H	110	△	△	-		16				60	56	○有償	○	2.8								

NOTE :

- Each holder supplied with built-in coolant pipe. (Stationary type)
- Chuck wrench and adjust screw are sold separately.
- When the thru-the-coolant application is needed for HPC03H, HPC04, or HPC05, please instruct when ordering. "CT" will be marked for this application.
- The thru-the-groove-coolant application for HPC06 or larger will be charged. Please instruct when ordering. "ST" will be marked for this application.
- 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 - ⑤ 100 ⑥ A

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ H Series

⑤ G.L. Length

⑥ Grade



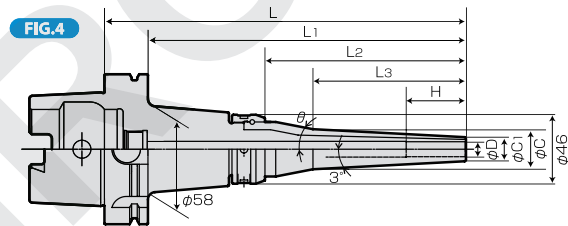
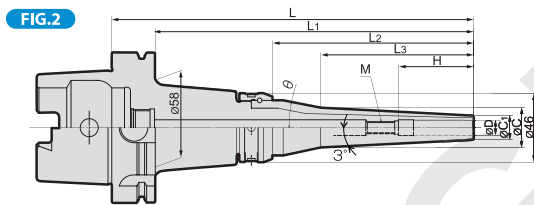
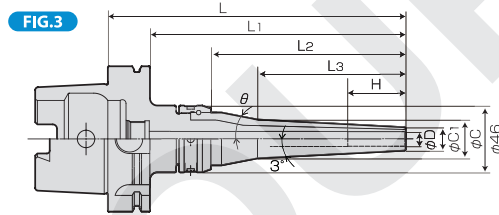
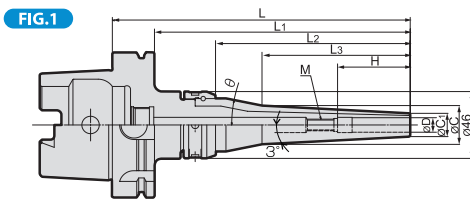
Thru-the-tool Coolant Available

(sold separately)

Screw → Page 933

Wrench → Page 934

M Mシリーズ



Order No.		STOCK	Fig	ØD	ØC1	ØC	L	L1	L2	L3	H	最小 刃具 挿入量	調整ネジ可動量		M	θ	N/W (kg)							
Max. 15,000 min ⁻¹																								
HSCA50	HPC03M- 150	△	3	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	△		6	12	19										30	1.1							
	HPC07M- 150	△		7	13	20										28	1.1							
	HPC08M- 150	△	1	8	14	21					50	35	35	50	M6	27	1.1							
	HPC09M- 150	△		9	15	22									M8	26	1.1							
	HPC10M- 150	△		10	16	23									24	1.1								
	HPC11M- 150	△		11	17	24									23	1.1								
HPC12M- 150	△	12		18	25	55	40	40	55	M8					21	1.1								
Max. 15,000 min ⁻¹																								
HSCA63	HPC03M- 150	△	3	3	9	16	150	124	84	67	-	20	-	-	-	34	1.3							
		200				△	20	200	174	134						102	18	1.5						
	HPC04M- 150	○		4	10	17	150	124	84	67						33	1.3							
		200				○	21	200	174	134						102	17	1.5						
	HPC05M- 150	△		5	11	18	150	124	84	67						32	1.3							
		200				△	22	200	174	134						102	16	1.5						
	HPC06M- 150	○		6	12	19	150	124	84	67						30	1.3							
		200				○	23	200	174	134						102	15	1.5						
	HPC07M- 150	△		7	13	20	150	124	84	67						28	1.3							
		200				△	24	200	174	134						102	14	1.5						
	HPC08M- 150	○		8	14	21	150	124	84	67						27	1.4							
		200				○	25	200	174	134						102	13	1.5						
	HPC09M- 150	△		1	9	15	22	150	124	84						67	50	35	35	50	M8	26	1.4	
		200					△	26	200	174						134						102	12	1.5
	HPC10M- 150	○			10	16	23	150	124	84						67						24	1.4	
		200					○	27	200	174						134						102	11	1.5
	HPC11M- 150	△			11	17	24	150	124	84						67	55	37	55	23		1.4		
		200					△	28	200	174						134				102		10	1.6	
	HPC12M- 150	○			12	18	25	150	124	84						67				40		40	21	1.4
		200					○	29	200	174						134							102	9

Order No.		STOCK	Fig	ØD	ØC1	ØC	L	L1	L2	L3	H	最小 刃具 挿入量	調整ネジ可動量		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	△					255	226									4.1					
	HPC04M-	155	○	3	4	10	17	155	126	84	67						33	3.1					
		205	○				21	205	176	134	102						17	3.3					
		255	△					255	226									4.1					
	HPC05M-	155	△	3	5	11	18	155	126	84	67	35					32	3.1					
		205	△				22	205	176	134	102						16	3.3					
		255	△					255	226									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	△					255	226									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	△					255	226									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	△					255	226														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	△					255	226														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	△					255	226														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	△					255	226														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	△					255	226									4.2					

NOTE :

- Coolant pipe is included.
- Chuck wrench and adjust screw are sold separately.
- Adjust screw is manufactured to order.
- 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 - ⑤ 100

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ M Series

⑤ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

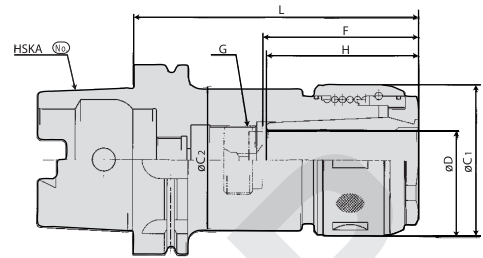
Drill Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor



(sold separately)

Collet → Page 930-931, 936

Screw → Page 933

Wrench → Page 934

Nose piece → Page 941

FEATURE

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

	Order No.			ØD	L	ØC1	ØC2	H	G	F		SPRING COLLET	ADJUSTSCREW	N/W (kg)
										MIN	MAX			
HSKA63	-CTH16 -120	26890	16	120	52	50	50	M16x1.5	50	70	70	C16-(16)	OR-M18-25	
	-CTH20 -120	26892	20									C20-(20)		
	-CTH25 -120	26894	25	135	68	62	68	M28x1.5	60	80	80	C25-(25)	OR-M28-25	
	-CTH32 -135	26896	32									C32-(32)		
HSKA100	-CTH16 -135	27250	16	135	52	50	50	M18x1.5	50	69	69	C16-(16)	OR-M18	
	-CTH20 -135	27252	20									C20-(20)		
	-CTH25 -135	27254	25	150	68	62	68	M28x1.5	68	79	79	C25-(25)	OR-M28-25	
	-CTH32 -150	27256	32									C32-(32)		
	-CTH42 -165	27258	42	165	95	85	90	M36x1.5	90	114	114	C42-(42)	OR-M36-20	

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



(sold separately)

Collet → Page 937-940

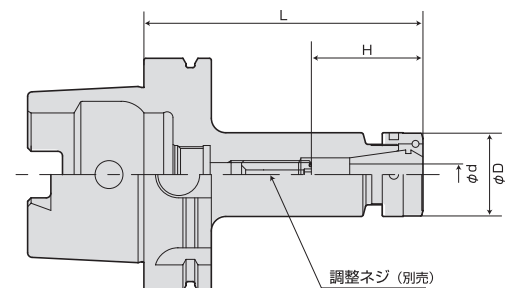
Screw → Page 932

Wrench → Page 934

Nut → Page 942

Thru-the-tool Coolant Available

Thru-the-groove Coolant Available



Order No.			STOCK	Ød	ØD	L	H	COLLET	NUT	ADJUST SCREW
HSKA50	RSC07 -090	300074	○	0.5 ~ 7	24	90	24 ~ 40	CR07-(D)	RSN07NB	M6 x 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			

Max. 20,000min⁻¹

Order No.			STOCK	Ød	ØD	L	H	COLLET	NUT	ADJUST SCREW
HSKA50	RSC20 -090	300072	○	1.5 ~ 20	50	90	68	CR20-(D)	RSN20NB	(M24 x 25L-CTW)
	-120	300073	○			120	44 ~ 67			RAS20-25-5
HSKA63	RSC07 -090	320170	○	0.5 ~ 7	24	90	24 ~ 40	CR07-d	RSN07NB	M6 x 20L-CTW
	RSC10 -090	320172	○	0.5 ~ 10	30	90	31 ~ 40	CR10-d	RSN10NB	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	RSN13NB	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	RSN16NB	RAS16-25-5
	RSC16 -120	320181	○			120	38 ~ 66			
	RSC16 -150	320161	△			150				
	RSC20 -090	320182	○	1.5 ~ 20	50	90	66	CR20-d	RSN20NB	(M24 x 25L-CTW)
	RSC20 -120	320184	○			120	44 ~ 61			RAS20-25-5
RSC20 -150	320185	△	150							

Max. 8,000min⁻¹

HSKA100	RSC07 105		○	0.5 ~ 7	24	105	24 ~ 40	CR07-d	RSN07NB	M6 x 20L-CTW
	RSC10 105 350330		○	0.5 ~ 10	30	105	31 ~ 43	CR10-d	RSN10NB	RAS10-25-2.5
	RSC10 135 350332		○			135				
	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	RSN13NB	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	RSN16NB	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	RSN20NB	RAS20-25-5
	RSC20 135 350344		○			136				
	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. OD

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

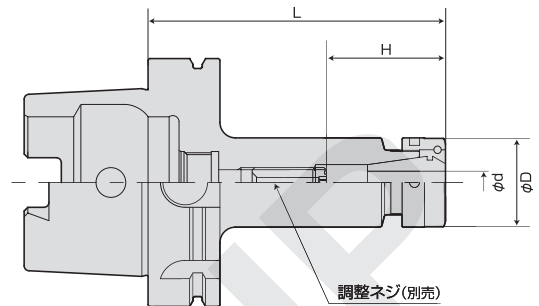
Drill Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor



Thru-the-tool Coolant Available

Thru-the-groove Coolant Available

Order No.	Order No.	Order No.	Ød (GRIPPING RANGE)	ØD	L	H	COLLET	NUT	ADJUST SCREW
Max. 27,000 min ⁻¹									
HSKA50	RSC07 -090G	300040	0.5 ~ 7	24	90	24 ~ 40	CR07-(D)	RSN07NB	M6 x 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 ~ 3	CR16-(D)	RSN16NB	RAS16-25-5
	-120G	300047			120	38 ~ 66			
	RSC20 -090G	300048	1.5 ~ 20	50	90	68	CR20-(D)	RSN20NB	(M24 x 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 x 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 -190G	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	CR-20-(D)	RSN20NB	(M24 x 25L-CTW)
	-120G	320159			120	44 ~ 61			RAS20-25-5

NOTE :

- Coolant pipe is included.
- Collet and chuck wrench are sold separately.
- CROH collet is used for thru-the-tool coolant application.
- 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.

(sold separately)

Collet ➡ Page 937-940

Screw ➡ Page 932

Wrench ➡ Page 934

Nut ➡ Page 942

ORDERING EXAMPLE

① HSKA50 - ② RSC ③ 07 - ④ 090 ⑤ G

① Shank Size

② Holder's Name

③ MAX. OD

④ G.L. Length

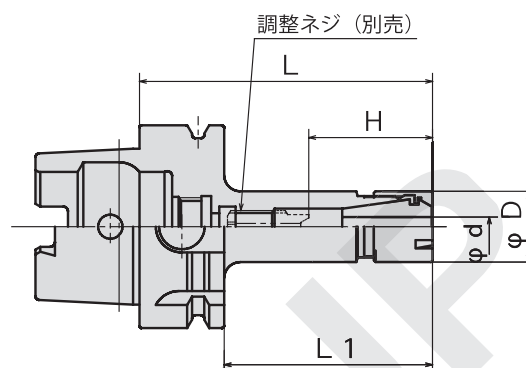
⑤ G Type

หัวจับแบบสลิม

COLLET CHUCK (SLIM TYPE)

Thru-the-tool Coolant Available

Thru-the-groove Coolant Available (Option)



Order No.			Ø d	ØD	L	L1	H	Collet	Nut	Adjust Screw
HSKA50	SSC07-090	310011	0.5 ~ 7	16	90	64	25 ~ 40	CR07-d	ER11MN	M6 x 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	M6x 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.

(sold separately)

Collet ➔ Page 937-938

Screw ➔ Page 932

Wrench ➔ Page 935

Nut ➔ Page 942

ORDERING EXAMPLE

① HSKA63 - ② SSC ③ 10 - ④ 135

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dualic Chuck

Tap Chuck

Boring Chuck

Drill Chuck

Side Lock Chuck

Morse Taper Holder

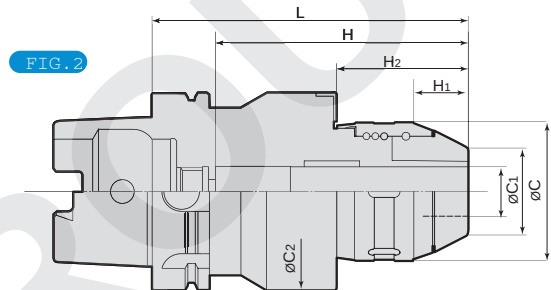
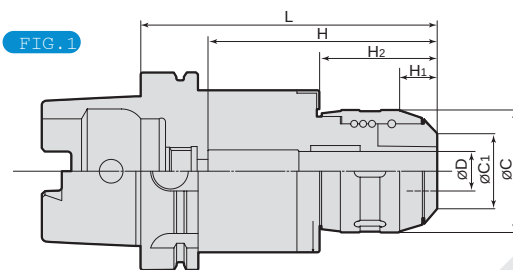
Face Mill Arbor

Shell Mill Arbor



(sold separately)

Wrench → Page 934



Order No.			Stock	Fig	ØD	L	H	ØC	ØC1	ØC2	H1	H2	最小 刃具 挿入量	N/W (kg)
HSKA63	-H DU16-	140	△	1	16	140	112	62	38	82	14	545	57	
	-H DU20-	145	△		20	145	117				19	59.5	70	
HSKA100	-H DU16-	145	△	2	16	145	112	62	38	82	14	54.5	57	
	-H DU20-	150	△		20	150	117				19	59.5	70	
	-H DU25-	160	△	1	25	160	128	70	44	100	27.5	54.5	85	
	-H DU32-	165	△		32	165	133				59.5	90		

NOTE :

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

ORDERING EXAMPLE

① **HSKA63** - ② **H DU** ③ **32** - ④ **120**

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length

หัวจับตลับ

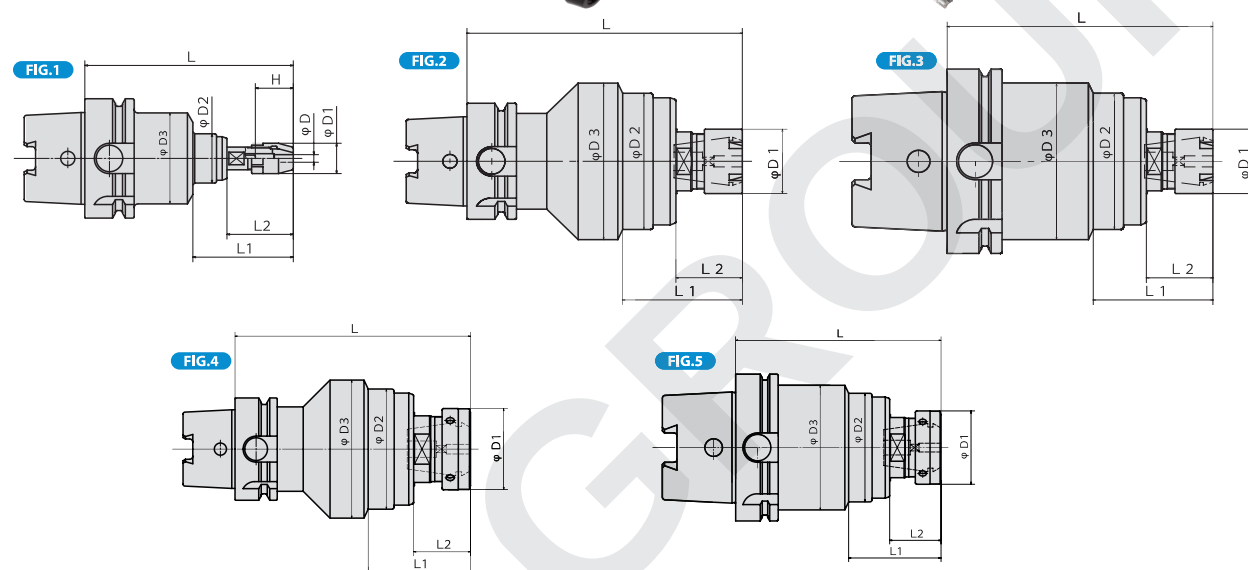
SYNCHRO TAP HOLDER

(sold separately)

Collet ➔ Page 939-940

Wrench ➔ Page 935

Nut ➔ Page 942



Order No.			CODE	Fig	ØD	ØD1	ØD2	ØD3	L	L1	L2	H	TAP SIZE	COLLET
HSKA50	-SYFN12	-125	3100001	4	-	36	51	62.5	125	54	30	-	M4 ~ M12, No.8 ~ U1/2	CR13GBorGH
		-155	3100002						155	84	60		P1/8	
HSKA63	-SYFS02	-110	321282	1	3	16	26	48	110	53	35	22	M1,M1.6,M2, No.3, No.4	-
	-SYFS03	-110	321284										M3,No.5,No.6	
	-SYFN12	-115	321291	5	-	36	51	62.5	115	54	30	-	M4 ~ M12, No.8 ~ U1/2	CR13GBorGH
		-145	321292						145	84	60		P1/8	
	-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			
	-SYFN20	-145	321294	4	-	50	74	85	145	63	35	-	M4 ~ M20, U5/16 ~ U5/8, P1/8 ~ P3/8	CR20GBorGH
		-175	321295						175	93	65			
	-205	321296	205						123	95				
HSKA100	-SYFS02	-115	351081	1	3	16	26	48	115	53	35	22	M1,M1.6,M2, No.3, No.4	-
	-SYFS03	-115	351082										M3, No.5, No.6	
	-SYFN16S	-140	351107	3	-	35	74	85	140	63	35	-	M4 ~ M16, No.8 ~ U5/8, P1/4	CR16GBorGH
		-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	CR20GorGH
		-170	351105						170	93	65			
		-200	351106						200	123	95			

NOTE :

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

ORDERING EXAMPLE

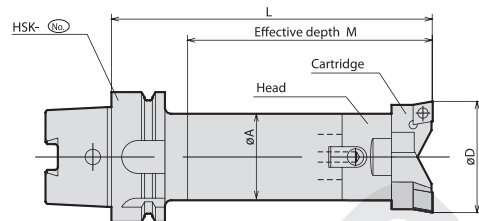
① HSKA63 - ② SYFN ③ 12 - ④ 105

① Shank Size

② Name

③ Type No.

④ G.L. Length



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.

Order No.			Range	Shank		Head	Cartridge	L	M	L1	ØA	N/W (kg)
HSKA63	-TWC 25 - 120 - S	320100	Ø25 ~33	HSKA63	-SBS1 - 120	HE25	CT25	120	85	83	24	1.2
	-TWC 32 - 135 - S	320101	Ø32 ~45		-SBS2 - 130	HE32	CT32	135	100	98	31	1.5
	-TWC 44 - 135 - S	320102	Ø44 ~63		-SBS3 - 135	HE44	CT44	135	100	91	42	2.0
	-TWC 62 - 135 - S	320103	Ø62 ~89		-SBS4 - 135	HE62	CT62	135	100	82	54	3.0
	-TWC 88 - 165 - S	320104	Ø88 ~126		-SBS5 - 165	HE88	CT88	165	130	100	64	5.7
HSKA100	-TWC 25 - 150 - S	350150	Ø25 ~33	HSKA100	-SBS1 - 150	HE25	CT25	150	104	113	24	2.6
	-TWC 32 - 165 - S	350151	Ø32 ~45		-SBS2 - 165	HE32	CT32	165	119	128	31	3.0
	-TWC 44 - 165 - S	350152	Ø44 ~63		-SBS3 - 165	HE44	CT44	165	119	121	42	3.6
	-TWC 44 - 225 - S	350153			-SBS3 - 225			225	179	181		4.2
	-TWC 62 - 165 - S	350154	Ø62 ~89		-SBS4 - 165	HE62	CT62	165	119	112	54	4.7
	-TWC 62 - 240 - S	350155			-SBS4 - 240			240	194	187		5.9
	-TWC 62 - 285 - S	350156			-SBS4 - 285			285	239	232		6.7
	-TWC 88 - 165 - S	350157	Ø88 ~126		-SBS5 - 165	HE88	CT88	165	119	100	64	6.0
	-TWC 88 - 240 - S	350158			-SBS5 - 240			240	194	175		7.8
	-TWC 88 - 330 - S	350159			-SBS5 - 330			330	284	265		10.0
	-TWC125 - 185 - S	350160	Ø125 ~175		-SBS6 - 185	HE125	CT125	185	139	113	82	8.8
	-TWC125 - 240 - S	350161			-SBS6 - 240			240	194	168		9.6
	-TWC125 - 330 - S	350162			-SBS6 - 330			330	284	258		14.8

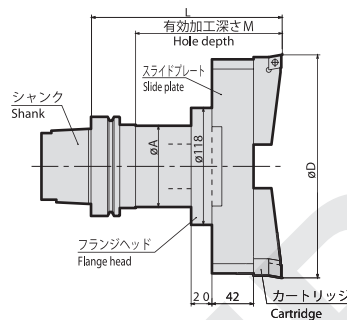
NOTE : 1. Coolant pipe is included.
 2. Inserts are sold separately.
 3. Inserts are in phase with the drive key.
 4. Thru-the-tool coolant type is manufactured to order.

ORDERING EXAMPLE

①	②	③	④	⑤
HSKA63	-	TWC	25	- 120 S
① Shank Size				
② Holder's Name				
③ MAX. ØD				
④ G.L. Length				
⑤ Set				

หัวจับ สำหรับคว้านรูขยาย

BORING SYSTEM TWINCUT for LARGE BORE

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

Order No.		Range	Shank		Flange Head	Slid Plate	Cartridge	Insert	L	M	ØA	N/W (kg)
HSKA100	-TWC175 - 205 - S 350185	Ø175 ~ 225	HSKA100	-SBS6 - 185	TWC - FH - 0 (TWC - FH - 90)	SP175-42	CT125	WT62-127	205	159	82	12.2
	-SBS6 - 240			260					214	14.5		
	-SBS6 - 330			350					304	17.9		
	-TWC225 - 205 - S 350188	Ø225 ~ 275		-SBS6 - 185		SP225-42			205	159		13.6
	-SBS6 - 240			260					214	15.9		
	-SBS6 - 330			350					304	19.4		
	-TWC275 - 205 - S 350191	Ø275 ~ 325		-SBS6 - 185		SP275-42			205	159		16.1
	-SBS6 - 240			260					214	18.3		
	-SBS6 - 330			350					304	21.8		
	-TWC325 - 205 - S 350194	Ø325 ~ 375		-SBS6 - 185		SP325-42			205	159		17.3
	-SBS6 - 240			260					214	19.6		
	-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 MAX. $\varnothing D$

④ G.L. Length

⑤ Set

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Drill Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

หัวจับ สำหรับคว้านรูละเอียด <BORING SYSTEM> FIRSTCUT

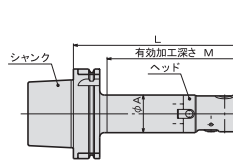


Fig. 1

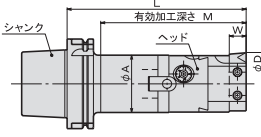


Fig. 2

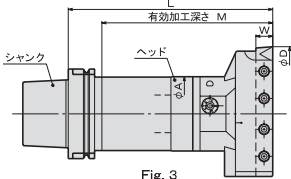


Fig. 3

Order No.	Fig	CODE	D Range	SHANK	HEAD	Boring Tool	Insert	L	M	ØA	W	N/W (kg)
HSKA63	1	-FIC25N-130-S	321500	Ø25 ~ 32	-SBS1-120	FCH25N	TP □□0802 □□	130	95	24	-	1.3
		-FIC32N-155-S	321502	Ø32 ~ 44注7	-SBS2-135	FCH32N		155	120	31	-	1.6
		-FIC44N-155-S	321504	Ø44 ~ 57	-SBS3-135	FCH44N				42	-	2.3
	2	-FIC55N-150-S	321506	Ø55 ~ 73	-SBS4-135	FCH55N	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	150	115	54	□19	3.1
		-FIC70N-200-S	321508	Ø70 ~ 140	-SBS5-165	FCH70N		200	165	64	□19	5.3
		-FIC90N-250-S	321510	Ø90 ~ 160	-SBS6-200	FCH90N		250	215	83	□19	9.7
HSKA100	1	-FIC25N-160-S	351300	Ø25 ~ 32	-SBS1-150	FCH25N	TP □□0802 □□	160	114	24	-	3.0
		-FIC32N-185-S	351302	Ø32 ~ 44注7	-SBS2-165	FCH32N		185	139	31	-	3.5
		-FIC44N-185-S	351304	Ø44 ~ 57	-SBS3-165	FCH44N				42	-	4.2
		-FIC44N-245-S	351306	Ø44 ~ 57	-SBS3-225	FCH44N		245	199		-	4.8
		-FIC55N-180-S	351308	Ø55 ~ 73	-SBS4-165	FCH55N		180	134		-	5.1
		-FIC55N-255-S	351310	Ø55 ~ 73	-SBS4-240	FCH55N		255	209	54	-	6.3
	2	-FIC55N-300-S	351312	Ø55 ~ 73	-SBS4-285	FCH55N	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	300	254		-	7.1
		-FIC70N-200-S	351314	Ø70 ~ 140	-SBS5-165	FCH70N		200	154		-	6.7
		-FIC70N-275-S	351316	Ø70 ~ 140	-SBS5-240	FCH70N		275	229	64	-	8.6
		-FIC70N-365-S	351318	Ø70 ~ 140	-SBS5-330	FCH70N		365	319		-	10.8
		-FIC90N-235-S	351320	Ø90 ~ 160	-SBS6-185	FCH90N		235	189		-	9.5
		-FIC90N-290-S	351322	Ø90 ~ 160	-SBS6-240	FCH90N		290	244		-	12.5
	3	-FIC90N-380-S	351324	Ø90 ~ 160	-SBS6-330	FCH90N		380	334		-	16.2
		-FIC150N-225-S	351326	Ø150 ~ 220	-SBS6-185	FCH150N	TBS119C12 SBS919 TBS919 TSBS919	225	179		□19	10.3
		-FIC150N-280-S	351328	Ø150 ~ 220	-SBS6-240	FCH150N		280	234		□19	13.3
		-FIC150N-370-S	351330	Ø150 ~ 220	-SBS6-330	FCH150N		370	324		□19	17.0
		-FIC220N-225-S	351332	Ø220 ~ 290	-SBS6-185	FCH220N		225	179		83	11.6
		-FIC220N-280-S	351334	Ø220 ~ 290	-SBS6-240	FCH220N		280	234		83	14.6
		-FIC220N-370-S	351336	Ø220 ~ 290	-SBS6-330	FCH220N		370	324		83	18.3
	3	-FIC290N-225-S	351338	Ø290 ~ 360	-SBS6-185	FCH290N	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	225	179		-	12.9
		-FIC290N-280-S	351340	Ø290 ~ 360	-SBS6-240	FCH290N		280	234		-	15.9
		-FIC290N-370-S	351342	Ø290 ~ 360	-SBS6-330	FCH290N		370	324		-	19.6

FIRSTCUT HEAD

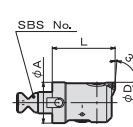


Fig. 1

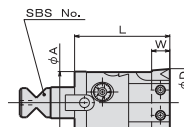


Fig. 2

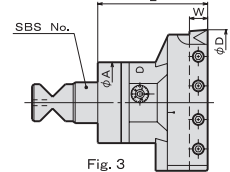


Fig. 3

Order No.	Fig	CODE	D Range	SLIDE DISTANCE	Boring Tool	Insert	SBS No.	L	ØA	W	N/W (kg)
FCH25N	1	700130	Ø25 ~ 32	3.5	-	TP □□0802 □□	SBS1	47	24	-	0.2
FCH32N		700131	Ø32 ~ 44注7	5.0			SBS2	57	31	-	0.4
FCH44N		700132	Ø44 ~ 57	6.5			SBS3	64	42	-	0.7
FCH55N		700133	Ø55 ~ 73	9.0			SBS4	68	54	-	1.2
FCH70N	2	700134	Ø70 ~ 140	20	TBS119C12 SBS919 TBS919 TSBS919	CP □□ 1204 □□ TP □□ 1603 □□ CC □□ 1204 □□ TC □□ 16T3 □□	SBS5	100	64	□19	2.6
FCH90N		700135	Ø90 ~ 160					122		□19	4.7
FCH150N	3	700136	Ø150 ~ 220				SBS6	112	83	□19	5.5
FCH220N		700137	Ø220 ~ 290							□19	6.8
FCH290N		700138	Ø290 ~ 360							□19	8.1

NOTE :
 1. A coolant pipe is installed(fixed type).
 2. Adjustable in 0.01mm 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 42mm.

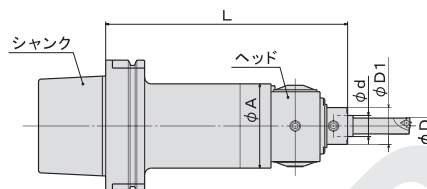
ORDERING EXAMPLE

① HSKA100 - ② FIC ③ 70 ④ N - ⑤ 200 - ⑥ S

- ① Shank Size
- ② Holder's Name
- ③ Head No.
- ④ New Jig Borer Type
- ⑤ G.L. Length
- ⑥ Set

หัวจับ สำหรับคว้านรูละเอียด

<BORING SYSTEM> FIRSTCUT [SMALL-HOLE BORING TOOL]



Order No.			D Range	SHANK	HEAD	L	ØA	Ød	ØD1	DIAL CALIBRATION	COLLET	N/W (kg)	
HSKA63	-FIC1NJ-151-S	321520	Ø3 ~ 23	HSKA63	-SBS3-135	FCH1NJ	151	46	10	18	Ø0.005	SSCP10-□	2.2
	-FIC2NJ-180-S	321522	Ø3 ~ 28		-SBS5-165	FCH2NJ	180	64	16	28	Ø0.010	SSCP16-□	4.5
HSKA100	-FIC1NJ-181-S	351350	Ø3 ~ 23	HSKA100	-SBS3-165	FCH1NJ	181	46	10	18	Ø0.005	SSCP10-□	4.1
	-FIC2NJ-180-S	351352	Ø3 ~ 28		-SBS5-165	FCH2NJ	180	64	16	28	Ø0.010	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	1	NJ	- 181	- S
① Shank Size					
② Holder's Name					
③ Head No.					
④ New Jig Borer Type					
⑤ G.L. Length					
⑥ Set					

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dualic Chuck

Tap Chuck

Boring Chuck

Drill Chuck

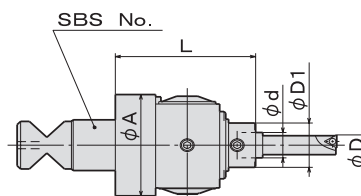
Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

FIRSTCUT HEAD [SMALL-HOLE BORING TOOL]



Order No.		D Range	SBS No.	L	ØA	Ød	ØD1	DIAL CALIBRATION	SLIDE DISTANCE	COLLET	N/W (kg)
FCH1NJ	700139	Ø3 ~ 23	SBS3	60	46	10	18	Ø0.005	2.5	SSCP10-□	0.6
FCH2NJ	700140	Ø3 ~ 28	SBS5	80	64	16	28	Ø0.010	3.5	SSCP16-□	1.8

NOTE :

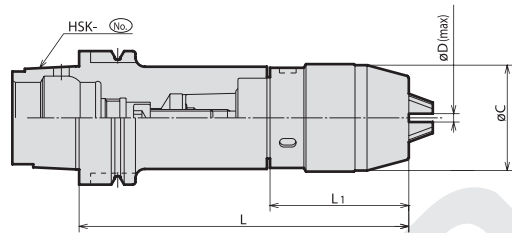
1. Through the tool coolant is standard.
2. Inserts and bites and collets are sold separately.

ARBOR

หัวจับ



หัวจับดอกสว่าน DRILL CHUCK



FEATURES

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

	Order No.			ØD	L		L1		ØC	N/W (kg)
					OPEN	CLOSE	OPEN	CLOSE		
Drill Chuck	HKA50	-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
Milling Chuck	HKA63	-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
Hard Chuck	HKA100	-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	HKA50	-	②	SDC	③	08	-	④	080
---	-------	---	---	-----	---	----	---	---	-----

① Shank Size

② Holder's Name

③ MAX. ØD

④ G.L. Length

RUNOUT		
SDC NO.	DIA. of TEST BAR	RUNOUT
SDC08	4 & 8 mm	LESS THAN 0.05mm
SDC13	6.5 & 13 mm	

- 測定位置等の試験方法は、JIS B6001に準拠しております。
- 規格テストバー以外での振れ精度も上記をクリアしております。
- 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		21.6 N·m	314

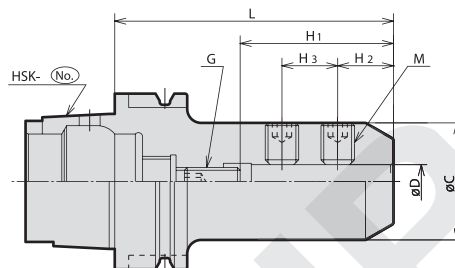
NOTE : Twisting moment was measured with a Ø9mm test bar.

หัวจับเอ็นมิล

END MILL HOLDER



Thru-the-tool Coolant Available



FEATURES

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

	Order No.		ØD (H6)	L	ØC	H1		H2	H3	M	G	N/W (kg)
						MIN.	MAX.					
HSKA50	-SLA06- 075	25710	6	75	30	18	28	13		M6	M5	0.7
	-SLA08- 085	25720	8	80	35	23	33	15		M8	M6	0.8
	-SLA10- 090	25730	10	90		25	38	18		M10	M8	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
HSKA63	-SLA20- 140	25760	20	140	50	55	70	25		M16	M12	2.0
	-SLA06- 075	26710	6	75	30	18	28	13		M6	M5	0.9
	-SLA08- 080	26720	8	80	35	23	33	15		M8	M6	1.0
	-SLA10- 090	26730	10	90		25	38	18		M10	M8	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	M12	2.5
HSKA100	-SLA25- 130	26770	25	130	61			24	25	M18	M12	3.0
	-SLA32- 140	26780	32	140	72	65	75		28	M20	M12	4.2
	-SLA06- 085	27710	6	85	30	18	28	13		M6	M5	2.2
	-SLA08- 090	27720	8	90	35	23	33	15		M8	M6	2.3
	-SLA10- 100	27730	10	100		25	38	18		M10	M8	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	M12	3.8
	-SLA25- 140	27770	25	140	61	55	70		25	M18	M12	4.5
	-SLA32- 150	27780	32	150	72	65	80		28	M20	M12	5.5

NOTE :

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

ORDERING EXAMPLE

① HSKA50 - ② SLA ③ 20 - ④ 075

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

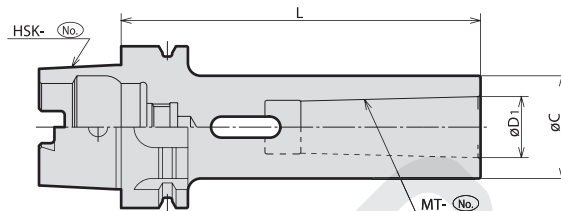
Drill Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor



ORDERING EXAMPLE

① **HSKA50** - ② **MTA** ③ **1** - ④ **045**

① Shank Size

② Holder's Name

③ MT No.

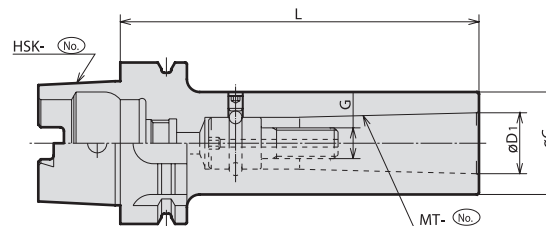
④ G.L. Length

Order No.			MT No.	L	ØD1	ØC1	N/W (kg)
HSA50	-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
HSA63	-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
HSA100	-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.



ORDERING EXAMPLE

① **HSKA50** - ② **MTB** ③ **1** - ④ **045**

① Shank Size

② Holder's Name

③ MT No.

④ G.L. Length

Order No.			MT No.	L	ØD1	ØC1	N/W (kg)
HSA50	-MTB1 -100	25510	1	100	12.065	25	1.2
	-MTB2 -120	25520	2	120	17.780	32	1.4
	-MTB3 -140	25530	3	140	23.825	40	1.5
HSA63	-MTB1 -100	26510	1	100	12.065	25	1.6
	-MTB2 -120	26520	2	120	17.780	32	1.8
	-MTB3 -140	26530	3	140	23.825	40	2.2
	-MTB4 -160	26540	4	160	31.267	50	2.5
HSA100	-MTB2 -120	27520	2	120	17.780	32	3.0
	-MTB3 -140	27530	3	140	23.825	40	3.4
	-MTB4 -160	27540	4	160	31.267	50	3.7
	-MTB5 -200	27550	5	200	44.399	65	4.9

NOTE :

1.Coolant pipe is included.

2.For tongue type Morse taper shank cutting tools.

หัวจับ

FACE MILL ARBOR (Type A)

Thru-the-tool Coolant Available (Option)



FIG.1

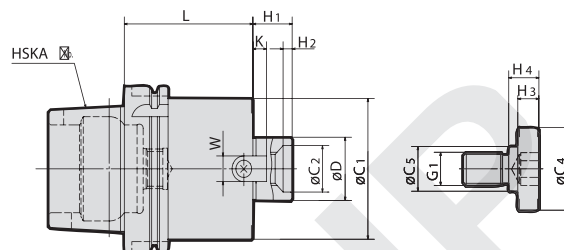


FIG.3

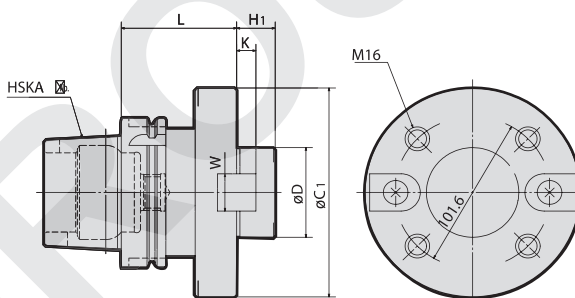
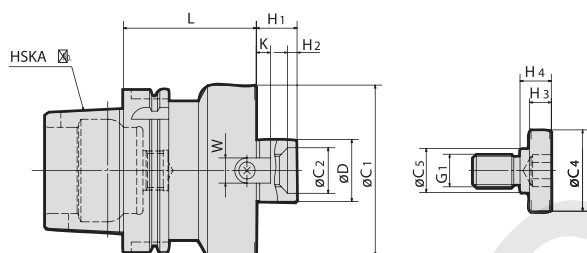


FIG.2



Order No.		FIG.	ØD (h6)	L	ØC1	ØC2	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
									W1	K1		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	2	25.4	60	50	-	22	-	9.5	5	M12	33	23	10	12	0.8
	-FMA25.4 -060	1	25.4		50	-	22	-	9.5	5	M12	33	23	10	12	1.2
HSKA63	-FMA31.75 -060	2	31.75	60	60	24	30	6	12.7	7	M16	40	23	10	15	1.4
	-FMA38.1 -060	2	38.1		80	28	34		15.9	9	M20	50	27	14	20	1.8
	-FMA25.4 -060	1	25.4		50	-	22	-	9.5	5	M12	33	23	10	12	2.5
HSKA100	-FMA31.75 -060	1	31.75	60	60	24	30	6	12.7	7	M16	40	23	10	16	2.8
	-FMA38.1 -060	1	38.1		80	28	34		15.9	9	M20	50	27	14	20	3.4
	-FMA50.8 -075	2	50.8	75	98	38	36	10	19.05	10	M24	65	37	14	24	4.9
	-FMA47.625 -075	3	47.625		128.6	-	38	-	25.4	12.5	-	-	-	-	-	6.2

NOTE :

1. Coolant pipe is included.

ORDERING EXAMPLE

①	HSKA63	-	②	FMA	③	25.4	-	④	035
---	--------	---	---	-----	---	------	---	---	-----

① Shank Size

② Name

③ ØD

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Drill Chuck

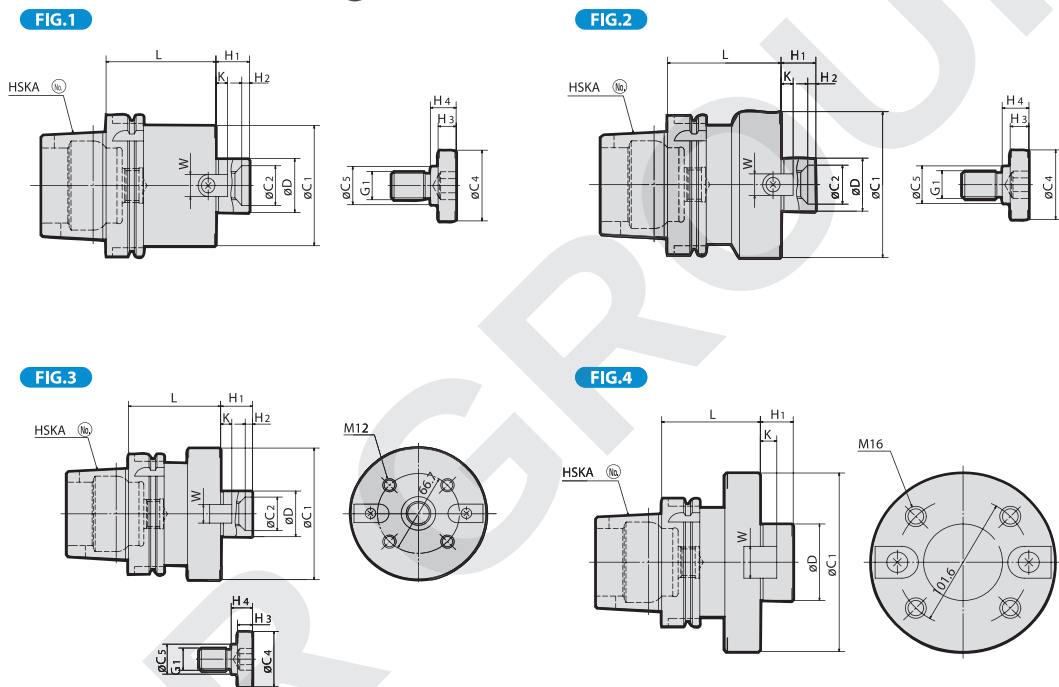
Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

Thru-the-tool Coolant Available (Option)



	Order No.			FIG.	ØD (h6)	L	ØC1	ØC3	H1	H2	KEY		G1	CLAMP BOLT				N/W (kg)
											W1	K1		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	320672			38.1		85	28	26	6	15.9	9	M20	50	27	14	20	1.8
	-FMB27 -060				27		80	-	26	-	12	6	M12	33	23	10	12	1.7
	-FMB40 -060	620676			40		85	28	26	6	16	8.5	M20	50	27	14	20	1.8
HSKA100	-FMB25.4 -060			1	25.4	60	80	-	26	-	9.5	5	M12	33	23	10	12	2.9
	-FMB38.1 -060				38.1		85	28	26	6	15.9	9	M20	50	27	14	20	3.5
	-FMB38.1F -075	650684		2	38.1	75	110	28	26	6	15.9	9	M20	50	27	14	20	4.8
	-FMB27 -060	650686			27		80	-	26	-	12	6	M12	33	23	10	12	2.9
	-FMB40 -060	650262		1	40	60	85	28	26	6	16	8.5	M20	50	27	14	20	3.5
	-FMB40F -075	350265			40		110	28	26	6	16	8.5	M20	50	27	14	20	4.8
	-FMB60 -075	350692		4	60	75	140	-	25	-	25.4	12.5	-	-	-	-	-	6.8

NOTE :

- Coolant pipe is included
- For Sandvik and Seco cutters.

ORDERING EXAMPLE

①	HSKA63	-	②	FMB	③	25.4	-	④	060
① Shank Size									
② Name									
③ OD									
④ G.L. Length									

หัวจับ

FACE MILL ARBOR (Type C)

Thru-the-tool Coolant Available (Option)



FIG.1

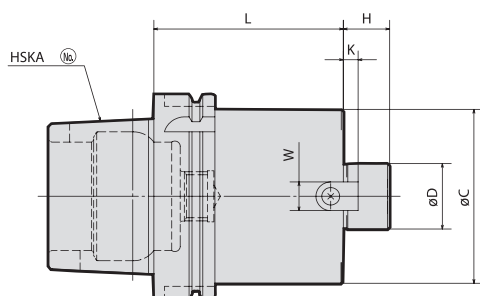
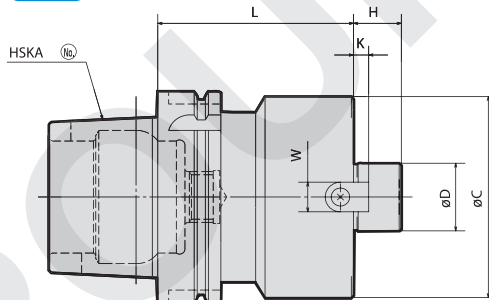


FIG.2



Order No.			FIG.	ØD (h6)	L	ØC	H	KEY		CLAMP BOLT	N/W (kg)
								K	W		
HSKA63	-FMC25.4 -060	320680	2	25.4	60	70	20	5	9.5	M12x35L	1.5
	-FMC38.1 -060	320682	2	38.1	60	85	22	7	15.9	M16x40L	0.8
	-FMC22 -060	320684	1	22	60	45	18	5	10	M10x30L	1.1
	-FMC27 -060	320686	2	27	60	70	20	6	12	M12x35L	1.5
	-FMC32 -060		2	32	60	85	22	7	14	M16x40L	1.8
HSKA100	-FMC25.4 -045			25.4	45	70	20	5	9.5	M12x35L	2.9
	-FMC38.1 -045			38.1	45	85	22	7	15.9	M16x40L	3.5
	-FMC22 -060	350704	1	22	60	45	18	5	10	M10x30L	2.4
	-FMC27 -060			27	45	70	20	6	12	M12x35L	3.0
	-FMC32 -060			32	45	85	22	7	14	M16x40L	3.4

NOTE :

- Coolant pipe is included.
- For Sandvik and Seco cutters.

ORDERING EXAMPLE

① HSKA63 - ② FMC ③ 25.4 - ④ 060

① Shank Size

② Name

③ ØD

④ G.L. Length

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Milling Chuck

Hard Chuck

Collet Chuck

Hy-Dual Chuck

Tap Chuck

Boring Chuck

Drill Chuck

Side Lock Chuck

Morse Taper Holder

Face Mill Arbor

Shell Mill Arbor

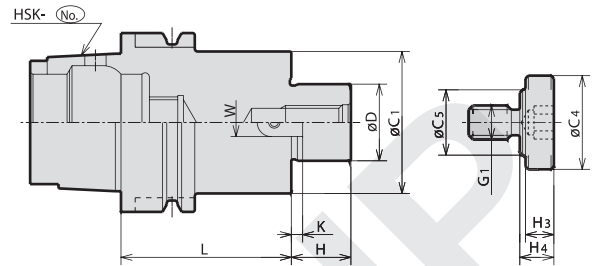
ARBOR

หัวจับ



หัวจับ

SHELL MILL ARBOR (Type A)



	Order No.		ØD(h6)	L	ØC1	H	KEY		G1	CLAMP BOLT				N/W (kg)
							W1	K1		ØC4	ØC5	H3	H4	
HSKA50	-SMA16-060	25610	16	60	34	17	7.95	3	M8	20	15	7	9	0.6
	-120	25611		120										1.0
	-SMA22-060	25620	22	60	42	27	7.95	3.5	M10	28	18	9	11	1.0
	-120	25621		120										1.7
	-SMA27-060	25630	27	60	50	36	9.95	4	M12	33	23	10	12	1.3
	-120	25631		120										2.2
HSKA63	-SMA32-060	25640	32	60	60	38	9.95	4.5	M16	40	23	10	16	1.7
	-120	25641		120										2.9
	-SMA16-060	26610	16	60	34	17	7.95	3	M8	20	15	7	9	0.8
	-120	26611		120										1.2
	-SMA22-060	26620	22	60	42	27	7.95	3.5	M10	28	18	9	11	1.1
	-120	26621		120										1.8
HSKA100	-SMA27-045	26630	27	60	50	36	9.95	4	M12	33	23	10	12	1.4
	-120	26631		120										2.3
	-SMA32-045	26640	32	60	60	38	9.95	4.5	M16	40	23	10	16	1.8
	-120	26641		120										3.1
	-SMA22-075	27620	22	60	42	27	7.95	3.5	M10	28	18	9	11	2.3
	-120	27621		120										2.7
HSKA100	-SMA27-060	27630	27	60	50	36	9.95	4	M12	33	23	10	12	2.8
	-120	27631		120										3.7
	-SMA32-045	27640	32	60	60	38	9.95	4.5	M16	40	23	10	16	3.0
	-120	27641		120										4.3
	-SMA40-045	27650	40	60	80	38	11.95	4.5	M20	50	27	14	20	3.0
	-120	27651		120										5.4

NOTE :

1. Coolant pipe is included.

ORDERING EXAMPLE

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

หัวจับ

HARD CHUCK



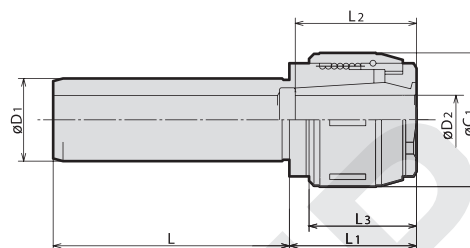
(sold separately)

Collet → Page 936

Screw → Page 933

Wrench → Page 934

Thru-the-tool Coolant Available



Order No.			ØD1	L	L1	L2	L3	ØD2	ØC1	N/W (kg)
ST32	-CTH16	30002	32	95	48	50	42	16	52	1.0
ST42	-CTH16	30004	42							1.5

ORDERING EXAMPLE

① ST32 ② CTH ③ 16

① Shank Size

② Holder's Name

③ Cutter's Shank Dia.

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Hard Chuck

Collet Chuck

Tap Holder

Boring Chuck

Side Lock Chuck

Face Mill Arbor

Side Cutter Arbor

หัวจับ

COLLET CHUCK (Slim Type)



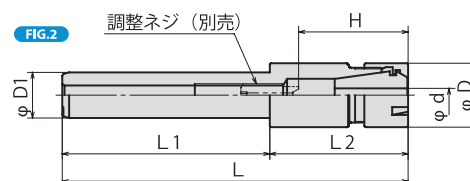
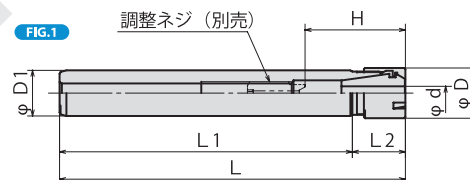
(sold separately)

Collet → Page 939

Screw → Page 932

Wrench → Page 934

Nut → Page 942



Order No.			Fig	ØD	ØD1	L	L1	L2	H (調整量)	COLLET	NUT	Adjust Screw
ST16	SSC07-100	303377	1	16	16	100	80	17	25 ~ 40	CR07-d CROH07-D	ER11MN	M6 x 20L-CTW
	SSC07-150	303378				150	133					
	SSC07-200	303379				200	183					
	SSC10-100	308331				100	77	23	31 ~ 48	CR10-d CROH10-d	ER16MN	RAS10-25-2.5
ST20	SSC10-150	308332	1	22	20	150	127					
	SSC10-200	308333				200	177					
	SSC10-250	308334				250	227					
	SSC13-150	308335	2	28	20	150	90	60	35 ~ 52	CR13-d CROH13-d	ER20MN	RAS13-25-2.5
	SSC13-200	308336				200	140					

NOTE : 1. Collet and chuck wrench are sold separately.

2. CROH collet is used for thru-the-tool coolant application.

ORDERING EXAMPLE

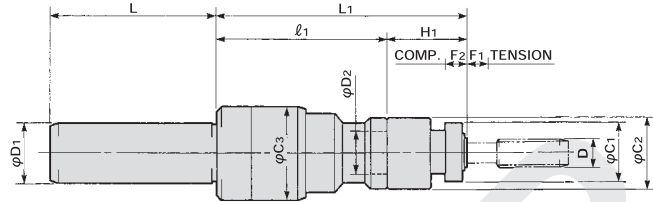
① ST2 ② SSC ③ 10 ④ 100

① Shank Size ØD1

② Holder's home

③ Max. ØD2

④ G.L. Length



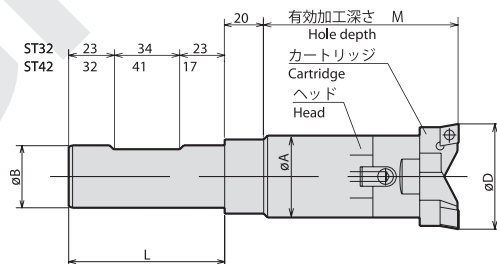
Order No.			ØD1	ØD2	L	L1	ℓ1	ØC1	ØC2	ØC3	H1	F1	F2	D	Tap Collet Code	N/W (kg)
ST32	-TPC20-150	30026	32	20	112	150	105	32	40	47	45	15	15	M4-M14	TCC20-(D)	1.5
	-TPC29-175	30028		29		175	120	45	55	63	55			M12-M27	TCC29-(D)	2.5
ST42	-TPC20-150	30030	42	20	117	150	105	32	40	47	45			M4-M14	TCC20-(D)	2.1
	-TPC29-175	30032		29		175	120	45	55	63	55			M12-M27	TCC29-(D)	3.0

ORDERING EXAMPLE

① **ST32** - ② **TPC** ③ **20** - ④ **150**

① Shank Size OD1
 ② Name
 ③ Max. ØD2
 ④ L1

หัวจับ สำหรับคว้านรูหยาบ
BORING SYSTEM - TWINCUT



FEATURES

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

Order No.			Rang	Shank		Head	Cartridge	Insert	M	L	ØA	ØB	N/W (kg)
ST32	-TWC25 - 100 - S	32010	Ø 25 ~ 33	ST32	-SBS1 - 100	HE25	CT25	WT14-079	100	80	24	32	1.1
	-TWC32 - 100 - S	32020	Ø 32 ~ 45		-SBS2 - 100	HE32	CT32	WT32-095	100		31		1.3
	-TWC44 - 100 - S	32030	Ø 44 ~ 63		-SBS3 - 100	HE44	CT44		100		42		1.9
	-TWC62 - 140 - S	32040	Ø 62 ~ 89		-SBS4 - 140	HE62	CT62	WT62-127	140		54		3.0
	-TWC88 - 140 - S	32050	Ø 88 ~ 126		-SBS5 - 140	HE88	CT88		140		64		4.1
ST42	-TWC25 - 100 - S	32110	Ø 25 ~ 33	ST42	-SBS1 - 100	HE25	CT25	WT25-079	100	90	24	42	1.7
	-TWC32 - 100 - S	32120	Ø 32 ~ 45		-SBS2 - 100	HE32	CT32	WT32-095	100		31		1.9
	-TWC44 - 100 - S	32130	Ø 44 ~ 63		-SBS3 - 100	HE44	CT44		100		42		2.3
	-TWC62 - 125 - S	32140	Ø 62 ~ 89		-SBS4 - 125	HE62	CT62	WT62-127	125		54		3.3
	-TWC88 - 125 - S	32150	Ø 88 ~ 126		-SBS5 - 125	HE88	CT88		125		64		4.1

NOTE :

- NOTE :
1. Insert are sold separately.
 2. Thru-the-tool coolant type is manufactured to orders.

ORDERING EXAMPLE

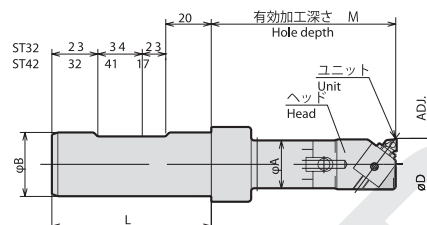
①	②	③	④	⑤
ST32	-	TWC	25	- 100 S
① Shank Size OB				
② Name				
③ MAX. OD				
④ M				
⑤ Set				

หัวจับ สำหรับคว้านรูละเอียด

BORING SYSTEM - FINECUT [ANGULAR TYPE]



Easy adjustment in 0.002mm increments!



Order No.	Rang	Shank	Head	Unit	Insert	M	L	ØA	N/W (kg)
ST32	-FIC27AN-100-S 620091	ST32	-SBS1-100	FCH27AN	FIC0AN	100	80	24	1.1
	-FIC30AN-100-S 620092			FCH30AN					1.2
	-FIC33AN-100-S 620093		-SBS2-100	FCH33AN				31	1.3
	-FIC36AN-100-S 620094			FCH36AN					1.4
	-FIC44AN-100-S 620095		-SBS3-100	FCH44AN	FIC2AN	140		42	1.8
	-FIC56AN-140-S 620096		-SBS4-140	FCH56AN				54	3.2
	-FIC69AN-140-S 620097		-SBS5-140	FCH69AN	FIC3AN	FT3-063		64	4.2
	-FIC82AN-140-S 620098			FCH82AN				64	4.0
ST42	-FIC27AN-100-S 620111	ST42	-SBS1-100	FCH27AN	FIC0AN	100	90	24	1.7
	-FIC30AN-100-S 620112			FCH30AN					1.8
	-FIC33AN-100-S 620113		-SBS2-100	FCH33AN				31	1.9
	-FIC36AN-100-S 620114			FCH36AN					1.9
	-FIC44AN-100-S 620115		-SBS3-100	FCH44AN	FIC2AN	125		42	2.4
	-FIC56AN-125-S 620116		-SBS4-125	FCH56AN				54	3.5
	-FIC69AN-125-S 620117		-SBS5-125	FCH69AN	FIC3AN	FT3-063		64	4.4
	-FIC82AN-125-S 620118			FCH82AN				64	6.0

NOTE :

1. Insert are sold separately.

2. Thru-the-tool coolant type is manufactured to orders.

ORDERING EXAMPLE

①	②	③	④	⑤	⑥
ST32	-	FIC	27	AN	- 100 S
① Shank Size ØB					
② Name					
③ MAX. ØD					
④ Angular type					
⑤ M					
⑥ Set					

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Hard Chuck

Collet Chuck

Tap Holder

Boring Chuck

Side Lock Chuck

Face Mill Arbor

Side Cutter Arbor

หัวจับ สำหรับคว้านรูละเอียด <BORING SYSTEM> FIRSTCUT

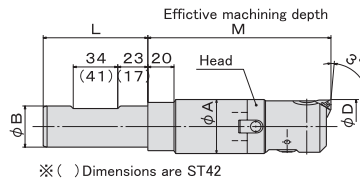


Fig. 1

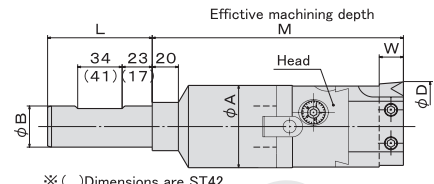


Fig. 2

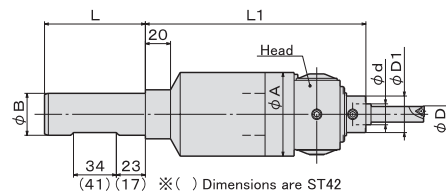
Order No.	Fig	CODE	D Range	SHANK	HEAD	Boring Tool	Insert	L	M	ØA	ØB	W	N/W (kg)
ST32	1	-FIC25N-130-S	620450	Ø25 ~ 32	-SBS1-100	FCH25N	TP □□0802□□	80	100	24	32	-	1.1
		-FIC32N-140-S	620452	Ø32 ~ 44 注4	-SBS2-100	FCH32N			110	31			1.4
		-FIC44N-140-S	620454	Ø44 ~ 57	-SBS3-100	FCH44N			140	42			2.4
		-FIC55N-175-S	620456	Ø55 ~ 73	-SBS4-140	FCH55N			175	54			3.4
ST42	1	-FIC25N-130-S	620470	Ø25 ~ 32	-SBS1-100	FCH25N	TP □□0802□□	90	100	24	42	-	1.7
		-FIC32N-140-S	620472	Ø32 ~ 44 注4	-SBS2-100	FCH32N			110	31			2.0
		-FIC44N-140-S	620474	Ø44 ~ 57	-SBS3-100	FCH44N			140	42			2.6
		-FIC55N-160-S	620476	Ø55 ~ 73	-SBS4-125	FCH55N			160	54			3.8
ST32	2	-FIC70N-195-S	620458	Ø70 ~ 140	-SBS5-140	FCH70N	TBS119C12 SBS919 TBS919 TSBS919	180	195	64	19	□	5.2
		-FIC70N-180-S	620478	Ø70 ~ 140	-SBS5-125	FCH70N	TBS119C12 SBS919 TBS919 TSBS919		180	64			5.4

NOTE :
 1. Adjustable in 0.01mm per scale.
 2. Insert on FIC70N is square shank tool.
 3. Inserts and bites are sold separately.
 4. The max machining range means when installed included spacer.
 Without spacer, the max machining range is Ø42mm.

ORDERING EXAMPLE

①	②	③	④	⑤	⑥
ST32	-	FIC	25	N	- 130 - S
① Shank Size					
② Holder's Name					
③ Max ØD					
④ New Jig Borer Type					
⑤ G.L. Length					
⑥ Set					

หัวจับ สำหรับคว้านรูละเอียด FIRSTCUT [Small-hole Boring Tool]



Order No.		CODE	D Rang	Shank		Head	L	L1	ØA	ØB	Ød	ØD1	DIAL CALIBRATION	COLLET	N/W (kg)
ST32	-FIC1NJ-136-S	620460	Ø3 ~ 23	ST32	-SBS3-100	FCH1NJ	80	136	46	32	10	18	Ø0.005	SSCP10-□	1.9
	-FIC2NJ-175-S	620462	Ø3 ~ 28		-SBS5-140	FCH2NJ		175	64		16	28	Ø0.010	SSCP16-□	4.4
ST42	-FIC1NJ-136-S	620480	Ø3 ~ 23	ST42	-SBS3-100	FCH1NJ	90	136	46	42	10	18	Ø0.005	SSCP10-□	2.5
	-FIC2NJ-160-S	620482	Ø3 ~ 28		-SBS5-125	FCH2NJ		160	64		16	28	Ø0.010	SSCP16-□	4.6

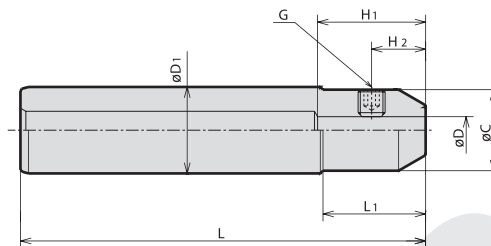
NOTE : Inserts and bites and collets are sold separately.

ORDERING EXAMPLE

①	②	③	④	⑤	⑥
ST32	-	FIC	1	NJ	- 136 - S
① Shank Size					
② Holder's Name					
③ Head No.					
④ New Jig Borer Type					
⑤ G.L. Length					
⑥ Set					

หัวจับ

SLIM SIDE LOCK HOLDER



Order No.			ØD1	ØD (H6)	ØC	L	L1	H1	H2	G	N/W (kg)
ST25	-S06	30502	25	6	20	120	30	30	13	M6	0.38
	-S08	30504		8					15		0.37
	-S10	30506		10					20	M10	0.42
ST32	-S06	30509	32	6	20	150	38	30	13	M6	0.72
	-S08	30510		8					15		0.72
	-S10	30512		10					30	M10	0.75
	-S12	30514		12	32		◇	20	0.77		

ORDERING EXAMPLE

①	ST32	-	②	S	③	06	-	④	030
---	------	---	---	---	---	----	---	---	-----

- ① Shank Size
② Holder's Name
③ Cutter's Shank Dia.
④ L1

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Hard Chuck

Collet Chuck

Tap Holder

Boring Chuck

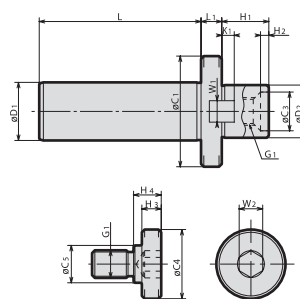
Side Lock Chuck

Face Mill Arbor

Side Cutter Arbor

หัวจับ

FACE MILL ARBOR (TYPE A)



Order No.			ØD	ØD2 (h6)	L	L1	ØC1	ØC3	H1	H2	KEY		G1	Clamp Bolt						Clamp Bolt	N/W (kg)
											W1	K1		ØC4	ØC5	H3	H4	W2			
ST32	-FMA25.4	30462	32	25.4	112	15	50	◇	22	◇	9.5	5	M12	33	23	10	12	10	MBA-M12	1.1	
	-FMA31.75	30464		31.75		15	60	24	30	6	12.7	7	M16	40	23	10	16	14	-M16	1.3	
	-FMA38.1	30466		38.1		18	80	28	34	6	15.9	9	M20	50	27	14	20	17	-M20	1.9	
ST42	-FMA25.4	30468	42	25.4	117	15	50	◇	22	◇	9.5	5	M12	33	23	10	12	10	MBA-M12	1.7	
	-FMA31.75	30470		31.75		15	60	24	30	6	12.7	7	M16	40	23	10	16	14	-M16	1.9	
	-FMA38.1	30472		38.1		18	80	28	34	6	15.9	9	M20	50	27	14	20	17	-M20	2.5	
	-FMA50.8	30474		50.8		20	100	38	36	10	19.0	10	M24	65	37	14	24	17	-M24	3.4	

ORDERING EXAMPLE

①	ST32	-	②	FMA	-	③	25.4
---	------	---	---	-----	---	---	------

- ① Shank Size ØD1
② Name
③ ØD2

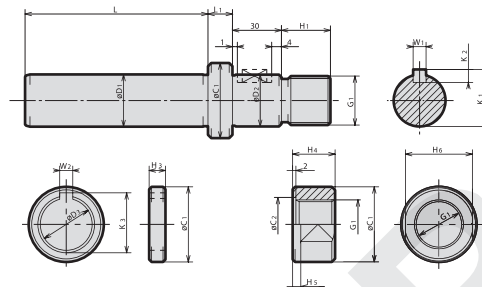
ARBOR

หัวจับ



หัวจับ

SIDE CUTTER ARBOR



Order No.				ØD1	ØD2 (h6)	L1			ØC1	G1xP	H1	L	W1	K1	K2	ØC3	H3	W2	K3	ØC2	H4	H5	H6	N/W (kg)
						Stand- ard	Option																	
ST32	-SCA15.875	-015	30422	32	15.875	15	30	60	26	M14x1.5	16	112	3.18	17.42	3.18	15.875	5	3.18	17.7	17	13	3	22	1.0
	-SCA22.225	-015	30426		22.225				34	M20x1.5	21		3.18	23.82	3.18	22.225		3.18	24.1	23	18	4	30	1.2
	-SCA25.4	-015	30430		25.4				40	M24x2	25		6.35	27.78	6.35	25.4		6.35	28.1	28	21	4	32	1.4
	-SCA31.75	-015	30434		31.75				46	M30x2	30		7.92	34.92	7.92	31.75		7.92	35.2	33	26	5	41	1.7
ST42	-SCA25.4	-015	30438	42	25.4	15	30	60	40	M24x2	25	117	6.35	27.78	6.35	25.4	10	6.35	28.1	28	21	4	32	2.0
	-SCA31.75	-015	30442		31.75				46	M30x2	30		7.93	34.92	7.92	31.75		7.92	35.2	33	26	5	41	2.3
	-SCA38.1	-015	30446		38.1				55	M36x3	36		9.52	42.06	9.52	38.1		9.52	42.3	41	31	5	46	2.7

ORDERING EXAMPLE

① **ST32** - ② **SCA** ③ **25.4** - ④ **015**

① Shank Size ØD1

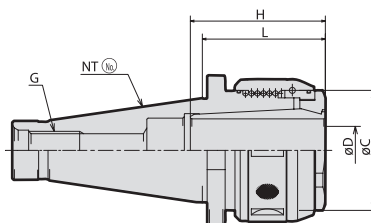
② Name

③ ØD2

④ L1

หัวจับ

NT SHANK - HARD CHUCK



(sold separately)

Collet	➔	Page 936
Screw	➔	Page 933
Wrench	➔	Page 934

Order No.			ØD	L	ØC	H	G
NT30W	-CTH20	33004	20	62	60	50	W1/2 - 12
NT40 _{U(M)}	-CTH25	33006 (33026)	25	65	68	68	5/8-11 UNC (M16x2)
	-CTH32	33008 (33028)	32	82.6	80	70 (Short)	
NT50 _{U(M)}	-CTH32	33010 (33030)	32	76.2	80	80	1-8 UNC (M24x3)
	-CTH42	33012 (33032)	42	82	95	90	
	-CTH50 (50.8)	33014 (33034)	50 (50.8)	120	105	95	

NOTE : 1. Chuck wrench is included.

ORDERING EXAMPLE

①	NT30	-	②	W	③	CTH	-	④	20
---	------	---	---	---	---	-----	---	---	----

- ① Shank Size
- ② G Type
- ③ Name
- ④ Cutter's Dia. ØD

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Hard Chuck

Face Mill Arbor

S-Holder

หัวจับ

NT SHANK - FACE MILL ARBOR (TYPE A)



FIG.1

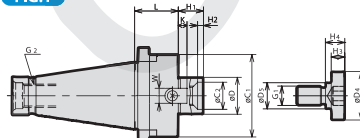


FIG.2

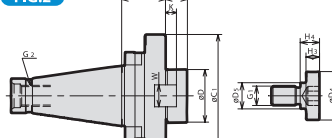
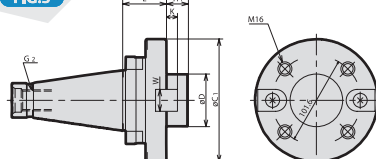


FIG.3



Order No.				FIG.	ØD2 (h6)	L	ØC1	ØC2	H1	H2	KEY		G1	Clamp Bolt				G2	N/W (kg)
											W	K		ØC4	ØC5	H3	H4		
NT40 U (M)	-FMA25.4	-030	35702 (35704)	1	25.4	30	50	-	22	-	9.5	5	M12	33	23	10	12	5/8-11 UNC (M16x2.0)	
	-FMA31.75	-030	35706 (35708)		31.75		60	24	30	6	12.7	7	M16	40	23		16		
	-FMA38.1	-030	35710 (35712)	2	38.1		80	28	34	6	15.9	9	M20	50	27	14	20		
	-FMA50.8	-030	35714 (35716)		50.8		98	38	36	10	19.05	10	M24	65	37	24			
NT50 U (M)	-FMA25.4	-030	35720 (35722)	1	25.4	30	50	-	22	-	9.5	5	M12	33	23	10	12	1-8UNC (M24x3.0)	
	-FMA31.75	-030	35724 (35726)		31.75		60	24	30	6	12.7	7	M16	40	23		16		3.5
	-FMA38.1	-030	35728 (35730)		38.1		80	28	34	6	15.9	9	M20	50	27		20		4.0
	-FMA50.8	-030	35732 (35734)		50.8		98	38	36	10	19.05	10	M24	65	37	14	24		4.0
	-FMA47.625	-045	35736 (35738)	3	47.625	45	128.57	-	38	-	25.4	12.5	-	-	-	-	-		6.0

ORDERING EXAMPLE

①	NT50	②	U _(M)	-	③	FMA	④	31.75	-	⑤	030
---	------	---	------------------	---	---	-----	---	-------	---	---	-----

- ① Shank Size ØB
- ② Name
- ③ MAX. ØD
- ④ M
- ⑤ Set

หัวจับ ชุด A

NT SHANK - HARD CHUCK (A-Set)



ORDERING EXAMPLE

①	②	③	④	⑤
NT30	W	- CTH	20	A

- ① Shank Size
- ② Thread type
- ③ Name
- ④ Cutter's Dia. ØD
- ⑤ Set type

Order No.			HARD CHUCK	STRAIGHT COLLET	HOOK SPANNER
NT30W	-CTH20 A	33302	NT30W -CTH20	SC20-06, 08, 10, 12, 16	FS58-62G
NT40U(M)	-CTH25 A	33304 (33404)	NT40U(M) -CTH25	SC25-06, 08, 10, 12, 16, 20	FS68-75G
NT40U(M)	-CTH32 A	33306 (33406)	NT40U(M) -CTH32	SC32-06, 08, 10, 12, 16, 20, 25	FS80-90G
NT50U(M)	-CTH32 A	33308 (33408)	NT50U(M) -CTH32	SC32-06, 08, 10, 12, 16, 20, 25	FS80-90G
NT50U(M)	-CTH42 A	33310 (33410)	NT50U(M) -CTH42	SC42-06, 08, 10, 12, 16, 20, 25, 32	FS92-100

NOTE : Please refer to P.??? for dimension of HARD CHUCK.

หัวจับ ชุด B

NT SHANK - HARD CHUCK (B-Set)



ORDERING EXAMPLE

①	②	③	④	⑤
NT30	W	- CTH	20	B

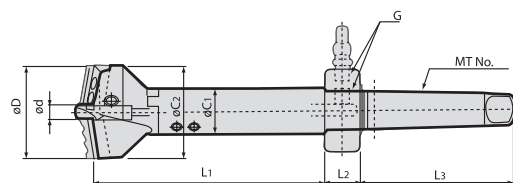
- ① Shank Size
- ② Thread type
- ③ Name
- ④ Cutter's Dia. ØD
- ⑤ Set type

Order No.			HARD CHUCK	STRAIGHT COLLET	TAPER COLLET	DRILL CHUCK ARBOR	HOOK SPANNER
NT30W	-CTH20 B	33322	NT30W -CTH20	SC20-06, 08, 10, 12, 16	20-MT1, MT2	20-J6	FS58-62G
NT40U(M)	-CTH25 B	33324 (33424)	NT40U(M) -CTH25	SC25-06, 08, 10, 12, 16, 20	25-MT1, MT2	25-J6	FS68-75G
NT40U(M)	-CTH32 B	33326 (33426)	NT40U(M) -CTH32	SC32-06, 08, 10, 12, 16, 20, 25	32-MT1, MT2	32-J6	FS80-90G
NT50U(M)	-CTH32 B	33328 (33428)	NT50U(M) -CTH32	SC32-06, 08, 10, 12, 16, 20, 25	32-MT1, MT2, MT3	32-J6	FS80-90G
NT50U(M)	-CTH42 B	33330 (33430)	NT50U(M) -CTH42	SC42-06, 08, 10, 12, 16, 20, 25, 23	42-MT1, MT2, MT3, MT4	42-J6	FS92-100

NOTE : Please refer to P.??? for dimension of HARD CHUCK.

ดอกสว่าน

MORSE TAPER SHANK SET (Standard)



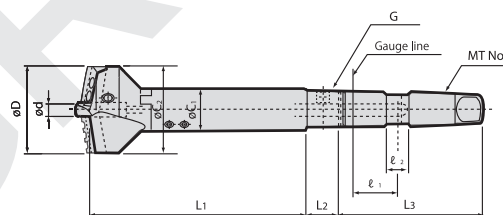
The contents of set (A ~ D drill)

- | | | | |
|------------------|-------|-------------|-------|
| 1. Standard head | 1pcs. | 4. Blade | 2set. |
| 2. Shank | 1pcs. | 5. Oil plug | 1pcs. |
| 3. Center Drill | 2pcs. | 6. Wrench | 1set. |
- (* The content of a set of more than E dose not include center drill blade.)

Order No.			ØD2 Hole dia.	Set blade		Ød	L1	L2	L3	QC1	QC2	MT No.	G	N/W (kg)
MT4	-A _{1S} 55-200S	54000	50 ~ 55	BK50	BK53	12	200	30	130	29	48	MT4	PT1/4	2.1
	-A ₂ 65-200S	54001	55 ~ 65	BK55	BK60					35	53			2.2
	-B 80-200S	54002	65 ~ 80	BK65	BK73					38	78			2.7
	-C 100-200S	54003	80 ~ 100	BK80	BK90					45	98			3.2
	-D 120-200S	54004	100 ~ 120	BK100	BK110					55	118			4.3
MT5	-E 150-200S	54005	120 ~ 150	Blade sold separately		20	200	30	163	65	148	MT5	PT1/4	7.0
	-F 180-200S	54006	150 ~ 180							75	178			9.4
	-G 210-200S	54007	180 ~ 210							85	207			12.5
MT6	-H 240-300S	54008	210 ~ 240			20	300	40	228	95	237	MT6	PT3/8	23.9
	-I 270-300S	54009	240 ~ 270											28.6

ดอกสว่าน

MORSE TAPER SHANK SET (For Oil-Hole Adapter)



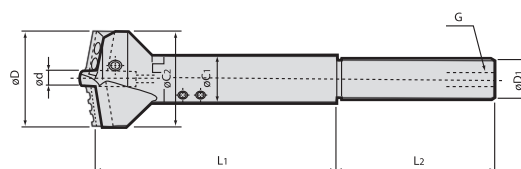
The contents of set (A ~ D drill)

- | | | | |
|------------------|-------|-------------|-------|
| 1. Standard head | 1pcs. | 4. Blade | 2set. |
| 2. Shank | 1pcs. | 5. Oil plug | 1pcs. |
| 3. Center Drill | 2pcs. | 6. Wrench | 1set. |

Order No.			ØD2 Hole dia.	Set blade		Ød	L1	L2	L3	ℓ1	ℓ2	C1	C2	MT No.	G	N/W (kg)
MT4	-A _{1S} 55-200-OHS	54530	50 ~ 55	BK50	BK53	12	200	30	130	41	20	29	48	MT4	PT1/4	2.1
	-A ₂ 65-200-OHS	54531	55 ~ 65	BK55	BK60							35	53			2.2
	-B 80-200-OHS	54532	65 ~ 80	BK65	BK73							38	78			2.7
	-C 100-200-OHS	54533	80 ~ 100	BK80	BK90							45	98			3.2
	-D 120-200-OHS	54534	100 ~ 120	BK100	BK110											4.3

ดอกสว่าน

STRAIGHT SHANK SET (For Turret Lathe)



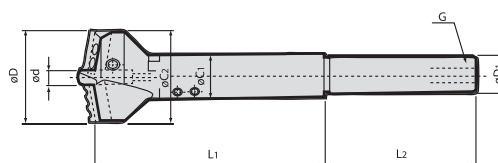
The contents of set (A ~ D drill)

- | | | | |
|------------------|-------|-------------|-------|
| 1. Standard head | 1pcs. | 4. Blade | 2set. |
| 2. Shank | 1pcs. | 5. Oil plug | 1pcs. |
| 3. Center Drill | 2pcs. | 6. Wrench | 1set. |

Order No.			ØD2 Hole dia.	Set blade		Ød	L1	L2	C1	C2	Ød1	H	G	N/W (kg)
ST45	-A _{1S} 55-200S	54550	50 ~ 55	BK50	BK53	12	200	140	29	48	45	42	PT1/4	
	-A ₂ 65-200S	54551	55 ~ 65	BK55	BK60				35	53				
	-B 80-200S	54552	65 ~ 80	BK65	BK73				38	78				
	-C 100-200S	54553	80 ~ 100	BK80	BK90				45	98				
	-D 120-200S	54554	100 ~ 120	BK100	BK110									

ดอกส่วาน

STRAIGHT SHANK SET (Standard)



The contents of set (A ~ D drill)

- | | | | |
|------------------|-------|------------|-------|
| 1. Standard head | 1pcs. | 4. Blade | 2set. |
| 2. Shank | 1pcs. | 5.Oil plug | 1pcs |
| 3. Center Drill | 2pcs. | 6.Wrench | 1set. |

Order No.			ØD2 Hole dia.	Set blade		Ød	L1	L2	ØC1	ØC2	ØD1	G	N/W (kg)
ST32	-A1s 55-200S 54500	50 ~ 55	BK50	BK53	12	200	130	29	48	32	PT1/4		
	-A2 65-200S 54501	55 ~ 65	BK55	BK60				53					
	-B 80-200S 54502	65 ~ 80	BK65	BK73				63					
	-C 100-200S 54503	80 ~ 100	BK80	BK90				78					
	-D 120-200S 54504	100 ~ 120	BK100	BK110				98					
ST42	-A1s 55-200S 54510	50 ~ 55	BK50	BK53	12	200	130	29	48	42	PT1/4		
	-A2 65-200S 54511	55 ~ 65	BK55	BK60				53					
	-B 80-200S 54512	65 ~ 80	BK65	BK73				68					
	-C 100-200S 54513	80 ~ 100	BK80	BK90				78					
	-D 120-200S 54514	100 ~ 120	BK100	BK110				98					

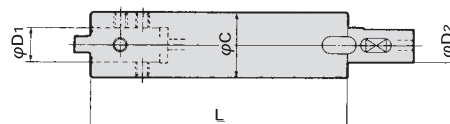
ORDERING EXAMPLE

① **ST45** ② **A1s55** ③ **200**

- ① Shank size
② Max. ØD
③ L1

ส่วนขยาย

EXTENSION ARBOR (For Standard Head)



Order No.			L	ØD1, D2	ØC	HEAD	N/W (kg)
EXT	-A-150	54151	150	16	29	A1s55 • A265	0.8
	-300	54301	300				1.6
	-B-150	54152	150	18	35	B 80	1.2
	-300	54302	300				2.3
	-C-150	54153	150	20	38	C100	1.4
	-300	54303	300				2.7
	-D-150	54154	150	22	45	D120	1.9
	-300	54304	300				3.8
	-E-150	54155	150	30	55	E150	2.8
	-300	54305	300				5.5
	-F-150	54156	150	35	65	F180	3.9
	-300	54306	300				7.8
	-G-150	54157	150	40	75	G210	5.1
	-300	54307	300				10.2
	-H-150	54158	150	45	85	H240	6.4
	-300	54308	300				12.8
	-I-150	54159	150	50	95	I270	7.9
	-300	54309	300				16.0

ORDERING EXAMPLE

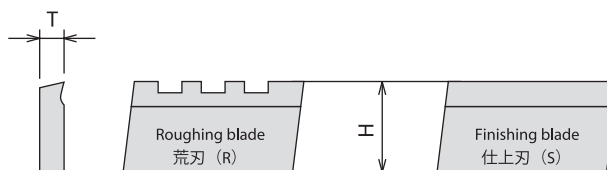
① **EXT** - ② **A** - ③ **150**

- ① Name
- ② Head type
- ③ L

ใบมีด

BLADE (For Standard Head)

Each set consists of a roughing blade (R) and a finishing blades (S).



Order No.	Hole dia. D mm	T	H	Blade	Head No.
BK50	52002	50 (50 ~ 53)		A19 R&S	A1-55
BK51	52032	51		A19.5 R&S	
BK52	52034	52		A20 R&S	
BK53	52004	53 (53 ~ 55)		A20.5 R&S	
BK54	52036	54		A21 R&S	
BK55	52006	55		A21.5 R&S	
BK55	52006	55 (55 ~ 60)		A21.5 R&S	A2-65
BK56	52038	56		A22 R&S	
BK57	52040	57		A22.5 R&S	
BK58	52042	58		A23 R&S	
BK59	52044	59		A23.5 R&S	
BK60	52008	60 (60 ~ 65)		A24 R&S	
BK61	52046	61		A24.5 R&S	B-80
BK62	52048	62		A25 R&S	
BK63	52050	63		A25.5 R&S	
BK64	52052	64		A26 R&S	
BK65	52010	65		B26.5 R&S	
BK65	52010	65 (65 ~ 73)		B26.5 R&S	B-80
BK66	52054	66		B27 R&S	
BK67	52056	67		B27.5 R&S	
BK68	52058	68		B28 R&S	
BK69	52060	69		B28.5 R&S	
BK70	52062	70		B29 R&S	B-80
BK71	52064	71		B29.5 R&S	
BK72	52066	72		B30 R&S	
BK73	52012	73 (73 ~ 80)		B30.5 R&S	
BK74	52068	74		B31 R&S	
BK75	52070	75		B31.5 R&S	C-100
BK76	52072	76		B32 R&S	
BK77	52074	77		B32.5 R&S	
BK78	52076	78		B33 R&S	
BK79	52078	79		B33.5 R&S	
BK80	52014	80		C34 R&S	C-100
BK80	52014	80 (80 ~ 90)		C34 R&S	
BK81	52080	81		C34.5 R&S	
BK82	52082	82		C35 R&S	
BK83	52084	83		C35.5 R&S	
BK84	52086	84		C36 R&S	C-100
BK85	52088	85		C36.5 R&S	
BK86	52090	86		C37 R&S	
BK87	52092	87		C37.5 R&S	
BK88	52094	88		C38 R&S	
BK89	52096	89		C38.5 R&S	C-100
BK90	52016	90 (90 ~ 100)		C39 R&S	
BK91	52098	91		C39.5 R&S	
BK92	52100	92		C40 R&S	
BK93	52102	93		C40.5 R&S	
BK94	52104	94		C41 R&S	D-120
BK95	52106	95		C41.5 R&S	
BK96	52108	96		C42 R&S	
BK97	52110	97		C42.5 R&S	
BK98	52112	98		C43 R&S	
BK99	52114	99		C43.5 R&S	D-120
BK100	52018	100		D44 R&S	
BK100	52018	100 (100 ~ 110)		D44 R&S	
BK101	52116	101		D44.5 R&S	
BK102	52118	102		D45 R&S	
BK103	52120	103		D45.5 R&S	
BK104	52122	104		D46 R&S	D-120
BK105	52124	105		D46.5 R&S	
BK106	52126	106		D47 R&S	
BK107	52128	107		D47.5 R&S	

Order No.	Hole dia. D mm	T	H	Blade	Head No.
BK108	52130	108		D48 R&S	D-120
BK109	52132	109		D48.5 R&S	
BK110	52020	110 (110 ~ 120)		D49 R&S	
BK111	52134	111		D49.5 R&S	
BK112	52136	112		D50 R&S	
BK113	52138	113		D50.5 R&S	
BK114	52140	114		D51 R&S	D-120
BK115	52142	115		D51.5 R&S	
BK116	52144	116		D52 R&S	
BK117	52146	117		D52.5 R&S	
BK118	52148	118		D53 R&S	
BK119	52150	119		D53.5 R&S	
BK120D	52152	120		D54 R&S	E-150
BK120E	52154	120			
BK125	52156	125			
BK130	52158	130			
BK135	52160	135			
BK140	52162	140			
BK145	52164	145			F-180
BK150E	52166	150			
BK150F	52168	150			
BK155	52170	155			
BK160	52172	160			
BK165	52174	165			
BK170	52176	170			G-210
BK175	52178	175			
BK180	52180	180			
BK180	52180	180			
BK190	52182	190			
BK200	52184	200			
BK210	52186	210			H-240
BK210	52186	210			
BK220	52188	220			
BK230	52190	230			
BK240	52192	240			
BK240	52192	240			
BK250	52194	250			I-270
BK260	52196	260			
BK270	52198	270			

CENTER DRILL

ORDER NO.	DIA.	HEAD
CD-12	51062	12mm A1-55, A2-65, B80, C100, D120
CD-12C	51061	12mm A1-55, A2-65, B80, C100, D120
CD-20	51066	20mm E150, F180, G210, H240, I270

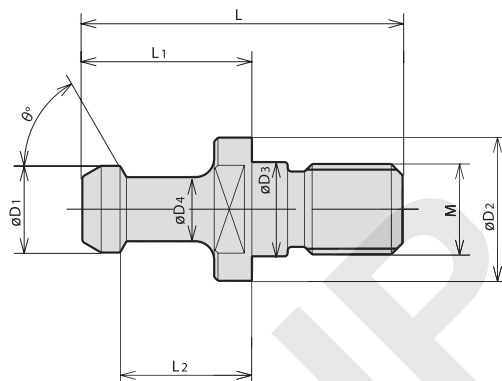
ARBOR'S ACCESSORIES

อุปกรณ์เสริม



พูลสตัด

PULL STUD BOLT WITH COOLANT HOLE



Order No.			ØD1	ØD2	ØD3	ØD4	L	L1	L2	M	Ø°	Ød	FIG.	Standard Machine manufacturer	
BT30 (BBT30)	P30T-MAS1 (SKD)	17000	11	16.5	12.5	7	43	23	18	M12	45	-	-	MAS-I 型	
	P30T-MAS2 (SKD)	17001	11	16.5	12.5	7	43	23	18	M12	60	-	-	MAS-II 型	
	P30T-JIS SKD	17308	12	16.5	12.5	8	43	23.4	18.4	M12	75	-	-	JIS 規格	
BT35	P35T-1 (MAS1)	17013	13	20	12.5	8.5	48	28	22.5	M12	45	-	-	MAS-I 型	
BT40 (BBT40)	P40T-MAS1	17032	15	23	17	10	60	35	28	M16	45	-	-	MAS-I 型	
	P40T-MAS2	17034	15	23	17	10	60	35	28	M16	60	-	-	MAS-II 型	
	P40T-F2	17036	15	23	17	10	60	35	28	M16	90	-	-	BT40-90° 型	
	P40T-1 SKD	17320	15	23	17	10	60	35	28	M16	45	-	-	MAS-I 型	
	P40T-2 SKD	17322	15	23	17	10	60	35	28	M16	60	-	-	MAS-II 型	
	P40T-F2 SKD	17324	15	23	17	10	60	35	28	M16	90	-	-	BT40-90° 型	
	P40T-JIS	17430	19	23	17	14	54	29	23	M16	75	-	-	JIS 規格	
	P40T-JIS SKD	17338	19	23	17	14	54	29	23	M16	75	-	-	JIS 規格	
	P40T-V7.5N ヤマザキ	17422	18.8	22	17	12.45	44.1	19.11	14.03	M16	45	-	-	ヤマザキマザック	
	P40T-V7.5N ヤマザキ SKD	17334	18.8	22	17	12.45	44.1	19.11	14.03	M16	45	-	-	ヤマザキマザック	
	P40T-ヤマザキ(キュウガタ 90°)	17428	15	23	17	10	54.6	29.6	22.6	M16	90	-	-	ヤマザキマザック	
	P40T-M1 ミツイ	17418	15	23	17	10	50	25	18	M16	90	-	-	三井精機工業	
BT50 (BBT50)	P50T-MAS1	17062	23	38	25	17	85	45	35	M24	45	-	-	MAS-I 型	
	P50T-MAS2	17064	23	38	25	17	85	45	35	M24	60	-	-	MAS-II 型	
	P50T-Y3	17070	23	38	25	17	85	45	35	M24	90	-	-	BT50-90° 型	
	P50T-JIS	17495	28	38	25	21	74	34	25	M24	75	-	-	JIS 規格	
	P50T-V15N/V20 ヤマザキ	17492	28.96	37	25	20.83	65.2	25.2	17.58	M24	45	-	-	ヤマザキマザック	
	P50T-1G	17446	23	38	25	17	85	45	35	M24	45	-	-	MAS-I 型	
	P50T-2G	17448	23	38	25	17	85	45	35	M24	60	-	-	MAS-II 型	
	P50T-M ミツイ	17488	24	36	25	18	71	31	23	M24	90	-	-	三井精機工業	
	P50T-4R ジュウコウロング	17498	23	38	25	17	110	70	60	M24	45	-	-	三菱重工業	

NOTE : 1. Please check operation manual of machines to select appropriate type of the pull stud.
2. SKD in Code means dies steel, metal of high-tensile strength.

การเลือกใช้พูลสตัด

MACHINE MAKER / TYPE OF SPINDLE TAPER & PULL STUD BOLT CODE

Machinery manufacturer	Machine Name	Shank	External size standard	Order No.
池貝 IKEGAI	TV4(ひとつぼ君), 4F, 4L	BT 40	MAS-I 型	17032, (17320)
	TV-U4, 4LII H4 TH500 THU500	40	JIS 規格	17430, (17338)
	TV5(あにき), U5 MXシリーズ BX110Pシリーズ BX130Pシリーズ TH600 THU600 AH6, 8	50	MAS-I 型	17062
イワシタ	IAMシリーズ	BT 40	MAS-II 型	17034, (17322)
	IAMシリーズ	50	MAS-II 型	17064
エンシュウ ENSHU	S300 SS300 DTセンタシリーズ JE30S ES400	BT 30	MAS-I 型	(17000)
	E-130 JE130 JE30S JE30G ES400 EV360, EV360T	30	MAS-II 型	(17001)
	スーパ400, 450FV VMCシリーズ HMCシリーズ	40	MAS-I 型	17032, (17320)
	JEシリーズ ES450, 450T EV450, 530S GE460H, 480H	40	MAS-II 型	17034, (17322)
	EV650, 600MV VMCシリーズ HMCシリーズ VE65E	50	MAS-I 型	17062
オークマ OKUMA	JE80, 80G EV530 EG580, 590H	50	MAS-II 型	17064
	MA, MB, MC, MD, MF, MU, MX-Aシリーズ VH-40 VR-40 MP-46V GENOSシリーズ	BT 40	MAS-II 型	17034, (17322)
	センタスルー(JIS)	40	JIS 規格	17434, (17344)
	MA, MB, MC, MD, MX-B MCV-A, B MCR, MU, MFシリーズ MCM-B	50	MAS-II 型	17064
オークマ (大隈豊和機械)	センタスルー	50	MAS-II 型	17468
	MILLAC Vシリーズ, Hシリーズ MAC TURNシリーズ MM-300 ML-300	BT 40	MAS-I 型	17032, (17320)
	センタスルー	40	MAS-I 型	17416
	MILLAC Vシリーズ, Hシリーズ VTMシリーズ VMP-10, 16	50	MAS-II 型	17064
大阪機工 OKK	センタスルー	50	MAS-II 型	17476
	PM300, 350	BT 30	JIS 規格	(17308)
	PCV, TRC, VM, AMC, DGM, VP, GC, HM, HP, VCシリーズ PG8 PM400Ⅲ DV5,	40	MAS-I 型	17032, (17320)
	MCV-350, 410/40 PCH-400, 500 HPV400 MPH-400	40	90° 型	17036, (17324)
	MCV, MCH, MHA, KCV, ACM, DCM, VM, HMシリーズ PCV-510, 620 VG5000 GC600 DV5	50	90° 型	17070
大鳥機工	PCV50, 55, 60	50	MAS-I 型	17062
	OSH-54 OSVシリーズ OSU-545 BMVII-85	BT 40	MAS-I 型	17032, (17320)
	FTV-500, 500HV	40	JIS 規格	17430, (17338)
	BMV-40NC(OP), 400NC(OP), 500LNC, 500ANC OSV-139 FTV-1200	50	MAS-I 型	17062
オーエム製作所 OM	OMC-40HS	BT 40	MAS-I 型	17032, (17320)
	OMC-50V, 50HS	50	MAS-I 型	17062
	TDC Omega-M, VTLex-M, Neoαシリーズ	50	MAS-II 型	17064
	センタスルー	50	MAS-II 型	17472
キタムラ機械 KITAMURA	HX-250G	BT 30	JIS 規格	(17308)
	センタスルー	30	JIS 規格	(17310)
	Mycenter-3XG, 4XIF, 7X, HX400G, Supercell-400 Mytrunnion-5 JIGc	40	JIS 規格	17430, (17338)
	センタスルー	40	JIS 規格	17432
	Mycenter-4XIF, 7X, HX500i, 630i, 800iL, 1000i, 1250i, BridgeCen	50	JIS 規格	17495
キラ・コーポレーション KIRA	センタスルー	50	JIS 規格	17496
	VMC, HMC, Arik, KN, VTCシリーズ PC-30E 30F 30H 30W KPC30a, 30b HPC-	BT 30	MAS-I 型	(17000)
	センタスルー	30	JIS 規格	(17310)
	KV, Arik, VTC, KNシリーズ PC40G	40	MAS-I 型	17032, (17320)
倉敷機械 KURASHIKI	センタスルー	40	JIS 規格	17432
	KV-500, 500H, 700	BT 40	MAS-I 型	17032, (17320)
コマツNTC KOMATSU NTC	KVシリーズ KMVシリーズ KBTシリーズ KHシリーズ CMNシリーズ KHM-125 KBM11X	50	MAS-I 型	17062
	N, Zシリーズ	BT 30	MAS-I 型	(17000)
	TMC, NH, NV, H, N, Z, ZV, ZHシリーズ	40	MAS-I 型	17032, (17320)
	ZV5400 ZH4000, 5000(センタスルー)	40	MAS-I 型	17416
	TMC, CNC, N, ZVシリーズ	50	MAS-I 型	17062
静岡鐵工所 SHIZUOKA	ZV5500(センタスルー)	50	MAS-I 型	17470
	CM-210G, 350B CM300-A, 300-5A	BT 30	MAS-I 型	(17000)
	Bシリーズ CM-350 SSR-550 HSR-7, 10	40	90° 型	17036, (17324)
新日本工機 SHINNIHON	Bシリーズ SMVシリーズ SG-600	50	90° 型	17070
	CMV-50, 70T	BT 40	MAS-II 型	17034, (17322)
ジェイテクト JTEKT	CMV, DC, ESP, FSP, HF, HPS, PS, RB, BFRシリーズ PC-55V EXI-70K	50	MAS-II 型	17064
	PV640J	BT 30	MAS-I 型	(17000)
	FA, FV, FVN, FXN, JV, PVシリーズ e500H4, UX570	40	MAS-I 型	17032, (17320)
	FV, FVN, FHN, FXN, PV, BN, FH, FA, RB, SBシリーズ SV-65 e500H5	50	MAS-I 型	17062
	DN-1V, 2V, 1H(センタスルー)	50	MAS-I 型	17462

Note : 1. Please check operation manual of machines to select appropriate type of the pull stud.
2. Code in brace like (17320) means that its material is dies steel, metal of high-tensile strength.

ARBOR'S ACCESSORIES

อุปกรณ์เสริม



ACCESSORIES

อุปกรณ์เสริม

	Machinery manufacturer	Machine Name	Shank	External size standard	Order No.
	スギノマシン	セルフセンター V15, NSV15, VC15, H15, H15B	BT 30	MAS-II 型	(17001)
	滝沢鉄工所 TAKIZAWA	MAC-V1E, 430VP VP10	BT 40	MAS-I 型	17032, (17320)
		MAC-V40, 40B Y520	40	JIS 規格	17430, (17338)
		MAC-V40, 40B Y520(セントスルー)	40	JIS 規格	17432
	武田機械	MV, TK-VSシリーズ	BT 40	MAS-I 型	17032, (17320)
		VSシリーズ	50	MAS-II 型	17064
	ツガミ SUGAMI	VMA3-III VMC3-III VML3-III VA31H, 32H VA3	BT 30	MAS-I 型	(17000)
		FMA3-III FMA5-III	40	MAS-II 型	17034, (17322)
		VMA4-III	40	MAS-I 型	17032, (17320)
		VMT4-III	40	JIS 規格	17430, (17338)
	東芝機械マシナリー TOSHIBA	JRV400, 450 NX76B	BT 40	MAS-I 型	17032, (17320)
		BMC, BTD, BP, MPC, MPE, MPF, MPH, VMC, BF, BTU, NX, BTH, BSF, B TFシリーズ	50	MAS-I 型	17062
	ニイガタマシンテクノ NIIGATA	PN40, 40A SPN40 EF40H ENシリーズ VNシリーズ PNシリーズ	BT 40	MAS-II 型	17034, (17322)
		HNシリーズ BHNシリーズ SPN50, 63 ULTY501, 701, 901 MPN-80	50	MAS-II 型	17064
	浜井産業 HAMAI	FZ-16, 16L, 16E, 26, 26L DZ-16, 16L, 16LA	BT 30	MAS-I 型	(17000)
		MC-3VA, 3VS, 4VS EN-3, 4, 6 EN-40 HN-40	40	MAS-I 型	17032, (17320)
		MC-50V, 70V, 80V, 6V, 5VA, 6VA, 8VA T-80MH, 180MH	50	MAS-I 型	17062
	ファナック FANUC	ROBO DRILL/DRILL/DRILL MATEシリーズ α-T14iA α-T21iD α-T21iE α-T21iF α-D14iA α-D21iA	BT 30	MAS-I 型	(17000)
		セントスルー	30	メーカー規格	(17312)
	ブラザー工業 BROTHER	TC-221, 225, 227, 229, 229N, 22A, 311, 312N, 31A, 321, 323, 324, 324N, 325, 32A, 32B, S2A, S2B, S2C, R2A, 22B, S2D, 32BN, 31B, R2B, S500X1, S700X1	BT 30	MAS-II 型	(17001)
		セントスルー	30	メーカー規格	(17314)
		TC-731, 731S	40	MAS-I 型	17032, (17320)
	ホーコス	HFN, HTNC, ESシリーズ NJ50 RS50H PM70H RM70 ES50H ES50V-I	BT 30	MAS-I 型	(17000)
		HFN, HTNC, RM, DM, HFNシリーズ NS70 MOH630 THMC410 TM70H TG70H MBE	40	MAS-I 型	17032, (17320)
		セントスルー	40	MAS-I 型	17406
		HFN, HTNCシリーズ G50H C50H DM100H RM100H NM100 DM100H NM100	50	MAS-I 型	17062
		セントスルー	50	MAS-I 型	17450
	豊和工業 HOWA	MMN, MDT, MBN, MSN, MEN, MJN, MZN, MKNシリーズ	BT 30	MAS-I 型	(17000)
		セントスルー	30	メーカー規格	(17312)
		MBN, MCN, MHNシリーズ MCV-800	40	MAS-I 型	17032, (17320)
		セントスルー	40	MAS-I 型	17406
		MBN-800 HS-500	50	MAS-I 型	17062
		セントスルー	50	MAS-I 型	17450
	牧野フライス製作所 MAKINO	a1, A, Vシリーズ J55, 88 D300, 500, 800Z BH50	BT 40	JIS 規格	17430, (17338)
		セントスルー	40	JIS 規格	17434
		BNC, FNC, MCシリーズ SF64 A55, 66, 88 FB127シリーズ	40	MAS-I 型	17032, (17320)
		a1, A, V, GFシリーズ	50	JIS 規格	17495
		セントスルー	50	JIS 規格	17497
		FDNC, FNC, GF, MC, MCC, MCD, MCFシリーズ GN1712-A a71, 81 A77, 88, 99, 100 V77	50	MAS-I 型	17062
	牧野フライス精機 MAKINO	MSA30, 40, 50 MS5A, 5B MSX30 PS1-W MSJ25 MSJX25 MSB58, 512, 516	BT 30	MAS-I 型	(17000)
		MSA30, 40, 50 MS5A, 5B MSX30 MSB58, 512, 516, S5B	40	MAS-I 型	17032, (17320)
		セントスルー	40	MAS-I 型	17406
	松浦機械製作所 MATSUURA	μMASTER, 400V-24, FX-1	BT 30	MAS-II 型	(17001)
		VX-0, -1 FX-0, 1G, 2 LX-0, 160 LF-160 LV-500	30	JIS 規格	(17308)
		MC, RA, MAM, FXM, FX, H.Max, V.Max, H.Plus, R.Plus, V.Plusシリーズ Mold Plus800 MX-520 VX-1000	40	JIS 規格	17430, (17338)
		セントスルー	40	JIS 規格	17432
		MC-1000V, 1250V, 1500V, 2000V MC900H, 900HG H.Plusシリーズ	50	MAS-II 型	17064
		RA-4G(#50) MC-1500VG(#50) MC-900HG LX-1500	50	JIS 規格	17495
	三井精機工業 MITSUI	VS, HR, HT, HUシリーズ VT3A VU50A	BT40	メーカー規格	17418
		Vertexシリーズ	40	JIS 規格	17430, (17338)
		セントスルー	40	-	-
		VU, VJ, VS, H, HU, HS, HR, HPTシリーズ	50	メーカー規格	17488
		セントスルー	50	メーカー規格	17490
	三菱重工業 MITUBISHI	V-360 M-V4C, V5C M-H4B, H5B MPAシリーズ M-Vシリーズ M-Hシリーズ	BT 40	MAS-I 型	17032, (17320)
		V, M-V, M-H, M-VS, MPA, MAF, MVR, MHT, MKH, DHシリーズ	50	MAS-II 型	17064
		セントスルー	50	MAS-II 型	17452

Note : 1.Please check operation manual of machines to select appropriate type of the pull stud.
2.Code in brance like (17320) means that its material is dies steel, metal of high-tensile strength.

Machinery manufacturer	Machine Name	Shank	External size standard	Order No.
森精機製作所 DMGMORISEIKI	TV-300, 400 ACCUMILL4000 ULTIMILLH3000, V3000 MILLTAP700 MAX300	BT 30	MAS-I 型	(17000)
	セントスルー	30	-	-
	SV, SH, SLV, MV, MH, NV, NMV, NVD, NH, AFM, Dura Vertical, NVX, NHX, VS, NTシリーズ SuperTILT500 SLV5000, 5250	40	90° 型	17036, (17324)
	セントスルー	40	JIS 規格	17411, (17332)
	SV, SH, MV, MH, MB, NV, NH, NVX, NHX, VS, NMH, NMV, NTシリーズ	50	90° 型	17017
森精機製作所(日立精機) (formerlyHITACHI)	VKシリーズ VM-40, 50 VS-40, 50, 60 VKCシリーズ VAシリーズ HG-400 HSシリーズ HK-630 HAシリーズ	BT 40	MAS-I 型	17032, (17320)
	VK-45, 55, 65, 85 VAシリーズ VGシリーズ VFシリーズ VS-50, 60 HSシリーズ HK-630 HGシリーズ HCシリーズ	50	90° 型	17070
ヤマザキマザック MAZAK	IMPULSE30 タイプA, B, C UN-600V, 600H	BT 30	MAS-II 型	(17001)
	VTC, V, VQC, AJV, FJV, FH, FF, VARIAXIS, NEXUS, INTEGREX, VCN, HCN, PFH, μシリーズ ANGULAX900	40	メーカー規格	17422, (17334)
	VTC, V, VQC, AJV, FJV, SV, H, FH, MTV, HV, INTEGREX, VORIEK, VC N, HCN, VERSATECH, μシリーズ	50	メーカー規格	17492
	H-12, 12N, 15, 20, 25 V12, 15, 20 VQC-10/15, 20/50	50	-	-
安田工業 YASUDA	YBM, YPC, VPCシリーズ H30i H40	BT 40	MAS-I 型	17032, (17320)
	VBMMi40	40	JIS 規格	17430, (17338)
	セントスルー	40	JIS 規格	17438
	YBM, YMCシリーズ	50	MAS-I 型	17062
	セントスルー	50	MAS-I 型	17470
碌々産業 ROKUROKU	LIBERO RXシリーズ	BT 30	MAS-I 型	(17000)
	KX, MX, LX, GR-655N VERTIMACシリーズ RMシリーズ GIGA	40	MAS-I 型	17032, (17320)

Note : 1.Please check operation manual of machines to select appropriate type of the pull stud.
2.Code in brace like (17320) means that its material is dies steel, metal of high-tensile strength.

BT Series

・ 汎 BT

HKS Series

・ 汎 HSK

ST Series

・ 汎 ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

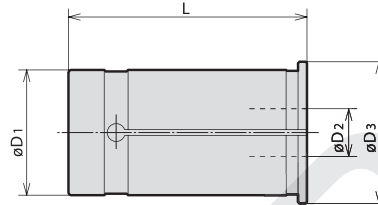
ARBOR'S ACCESSORIES

อุปกรณ์เสริม



คอเล็ทก้านตรง

STRAIGHT COLLET



ORDERING EXAMPLE

①	②	③
SC	16	6

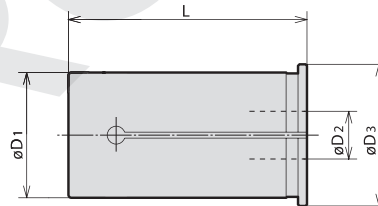
① Name

② D1

③ D2

คอเล็ทก้านตรง

STRAIGHT COLLET (Oil-Hole Type)



ORDERING EXAMPLE

①	②	③
SCOH	32	20

① Name

② D1

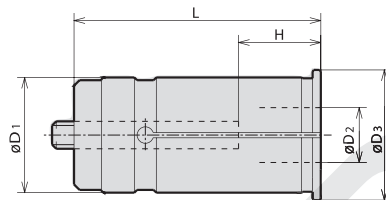
③ D2

	Order No. SC ① - ②	ØD3	L
SC16	-6 • 8 • 10 • 12	20	47
SC20	-6 • 8 • 10 • 12 • 16	23.5	50
SC25	-6 • 8 • 10 • 12 • 16 • 20	30	60
SC32	-6 • 8 • 10 • 12 • 16 • 20 • 25	37.5	70
SC42	-6 • 8 • 10 • 12 • 16 • 20 • 25 • 32	47.5	80

	Order No. SCOH ① - ②	ØD3	L	Minimum insertion amount
	-6			27
	-8			30
SCOH20	-10	23.5	54.5	34
	-12			35
	-16			38
	-6			27
	-8			30
SCOH25	-10	30	60	32
	-12			35
	-16			38
	-20			41
	-6			27
	-8			30
	-10			32
SCOH32	-12	37.5	70	35
	-16			38
	-20			40
	-25			44
	-6			27
	-8			30
	-10			32
SCOH42	-12	47.5	80	35
	-16			42
	-20			45
	-25			50
	-32			

คอลเล็ตก้านตรง

STRAIGHT COLLET WITH ADJUST SCREW



Order No.	ØD3	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 : Applicable to Micron chucks and Hard chucks.

ORDERING EXAMPLE			
①	②	③	
NC	32	-	6
① Name	② D1	③ D2	

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

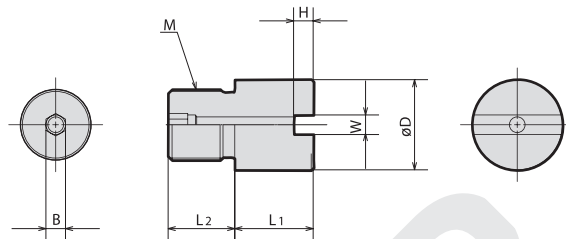
ARBOR'S ACCESSORIES

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สกรู

ADJUST SCREW (For BT•BBT shank standard MICRON CHUCK)



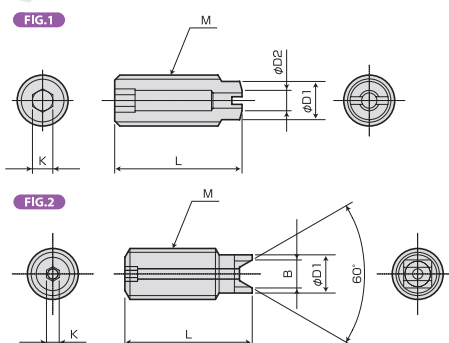
Order No.	Order No.	ØD3	M	L1	L2	W	H	B	Micron Chuck
HAS1620-05	17602			5					
HAS1620-15	17604	15	M10x1.0	15	14	5	3.5	5	HPC16 HPC20
HAS1620-25	17606			25					
HAS2532-10	17612			10					
HAS2532-20	17614	23	M18x1.0	20	17	5	5	5	HPC25 HPC32
HAS2532-35	17616			35					
HAS4250-10	17622			10					
HAS4250-20	17624	33	M18x1.0	20	17	5	5	5	HPC42 HPC50
HAS4250-35	17626			35					

NOTE : 1. The above Adjust Screw are sold separately.

2. Above Adjust Screw can not be used for HSK shank tool. Adjust Screws for HSK shank chuck are manufactured to order.

สกรูปรับ (สำหรับ SLIM CHUCK)

ADJUST SCREW (For SLIM CHUCK, COLLET CHUCK)



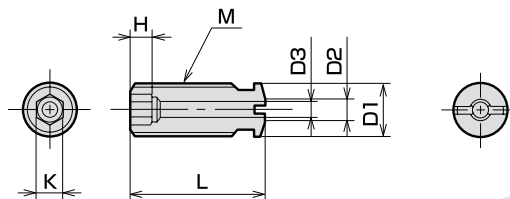
Order No.	FIG	M	L	D1	D2	K	B	HOLDER
M6x20L-CTW (note1)	1	M6x1.0	20	4.5	3	3	-	SSC07 RSC07
RAS10-25-2.5 (note2)	2	M10x1.5	25	7.5	-	2.5	5.5	SSC10 RSC10
RAS13-25-2.5 (note2)		M12x1.5		9.5			7.2	SSC13 RSC13
RAS16-25-5 (note2)	2	M18x1.5	25	13.5	-	5	9.5	- RSC16
RAS20-25-5 (note2)		M24x1.5		17.5				- RSC20

(Note 1) of less than 3 drill, in order to enter the coolant hole, can not be for your use for the projected adjustment. CTW is not in the two-piece shape.

(Note 2) of less than 2 drill, in order to enter the coolant hole, can not be for your use for the projected adjustment.

สกรูปรับ สำหรับรุ่น H และ M

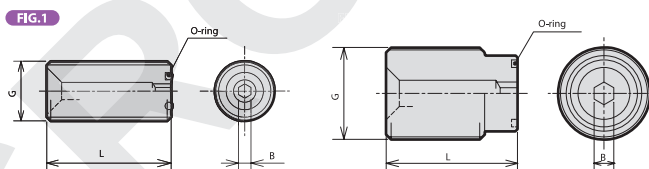
ADJUST SCREW for MICRON CHUCK H Series, M Series



Order No.		M	L	D1	D2	D3	K	H	Micron Chuck
AS17-2-M5-CTW	17672	M5x0.8	17	5			2.5		HPC06H
AS17-2-M6-CTW	17676	M6x1.0	17	6	3	2	3	3	HPC07H
AS22-2-M6-CTW	17678		22						HPC08H, HPC08M
AS22-2-M8-CTW	17680	M8x1.25		8	5	4	4	5	HPC09H, HPC10H
AS25-2-M8-CTW	17682		25						HPC09M, HPC10M, HPC11M ~12M
AS-25-2-M10-CTW	17684	M10x1.5		10	6	5	5	6	HPC11H ~ 16H

สกรูปรับ

ADJUST SCREW for Hard Chuck, New Milling Chuck



Order No.	Fig	G	L	B	O-ring
OR-M10(-25)	1	M10x1.5	25	2.5	S-5
OR-M12(-25)		M12x1.5	25	2.5	S-5
OR-M14(-35)		M14x1.5	35	4	P-6
OR-M18(-25)		M18x1.5	25	5	P-9
OR-M18(-35)		M18x1.5	35	5	P-9
OR-M24-25		M24x1.5	25	6	P-9
OR-M24(-35)	2	M24x1.5	35	6	P-9
OR-M28-25		M28x1.5	25	6	P-16
OR-M28-30		M28x1.5	30	6	P-16
OR-M28(-40)		M28x1.5	40	6	P-16
OR-M36-20		M36x1.5	20	6	P-21
OR-M36(-40)		M36x1.5	40	6	P-21

ORDERING EXAMPLE

① **OR** ② **M10** - ③ **25**

① Name

② G

③ L

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

ARBOR'S ACCESSORIES

อุปกรณ์เสริม



ประแจหัวจับ CHUCK WRENCH



HOOK SPANNER				
Order Code	WRENCH CODE	CHUCK CODE		
		MICRON CHUCK	Hard Chuck	Hy-Dual Chuck
FS52-55G	35852	HPC16, HPC20	CTH12L, CTH16	-
FS58-62G	35853	HPC25, HPC16S, HPC20S	CTH20, CT25G	HDU16, HDC20
FS68-75G	35854	HPC32, HPC25S	CTH25, CT32G	HDU25
FS80-90G	35855	HPC42, HPC32S	CTH32	HDU32
FS92-100	-	-	CTH42	-
FS105-115	35829	-	CTH50	-

ประแจหัวจับ CHUCK WRENCH for MICRON CHUCK H SERIES, M SERIES



HOOK SPANNER		
Order Code	WRENCH CODE	CHUCK CODE
		MICRON CHUCK
FP45-48G	35851	HPC03H ~ HPC16H HPC03M ~ HPC12M

ประแจหัวจับ CHUCK WRENCH for COLLET CHUCK



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

ประแจหัวจับ

CHUCK WRENCH for SLIM CHUCK

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

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

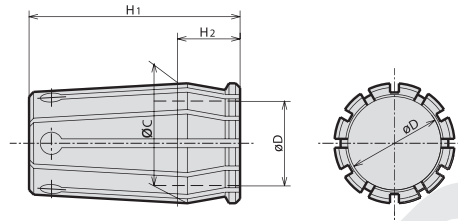
ARBOR'S ACCESSORIES

อุปกรณ์เสริม



คอเลต

SPRING COLLET (For HARD CHUCK)



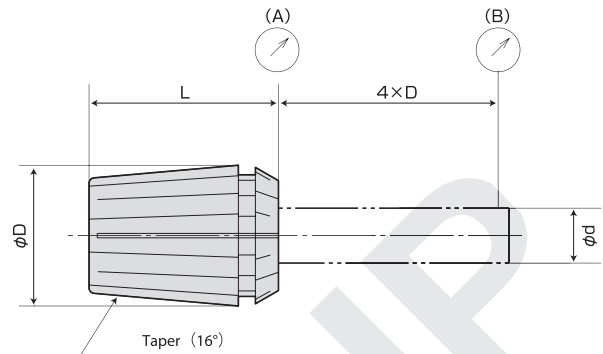
BT Series รุ่น BT
HKS Series รุ่น HSK
ST Series รุ่น ST
Versatile Tool
Cutting Tool
Accessories
Drill Chuck
Pull Stub
Straight Collet
Adjust Screw
Chuck Wrench
Spring Collet
Collet
Nose Piece
Nut
Locking Fixture
Point Finder
Tool Setter
Tool Presetter

Order No.	ØD										ØC	H1	H2	Application folder			
														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	
*C32-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	50.8	65.00	95	25	-	CTH50	-

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

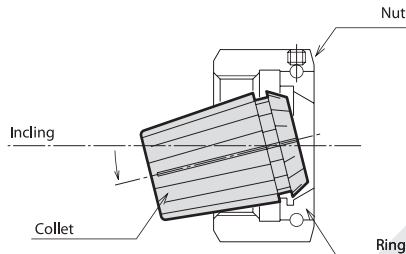
คอลเลต

CR COLLET (For SHOKEI MILLING CHUCK)



Easy collet setting

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



GRADE	Runout (Max. μ m)	
	Mouth(A)	Tip(B)
Ultra precision class (AA)	1	3
Precision class(A)	2	5
Normal class (STD)	5	15

Etc. class	Application use
Ultra precision • Precision Class	Reamer center drill, Carbide small-diameter drill, end mill Internal Institute for grinding stone, high-frequency motor tool Carbide drill, Lathe for rotary tool (tool rotation)
Normal class	General drill, tap Lathe for rotary tool (work rotation)

CHUCK	RSC07		RSC10		RSC13		RSC16		RSC20	
Order No.	CR07-d GRADE		CR10-d GRADE		CR13-d GRADE		CR16-d GRADE		CR20-d GRADE	
Ød	Ød	把握範囲 RANGE	Ød	把握範囲 RANGE	Ød	把握範囲 RANGE	Ød	把握範囲 RANGE	Ød	把握範囲 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
	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	2.5	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	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	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	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	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	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	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	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	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	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
ØD	11		16		20		25		32	
L	18		27		31		35		40	

CR type tap collets are also available.

ORDERING EXAMPLE

①	CR07	-	② 1.5	③ AA
①	Chuck Type			
②	Ød			
③	Grade			

ARBOR'S ACCESSORIES

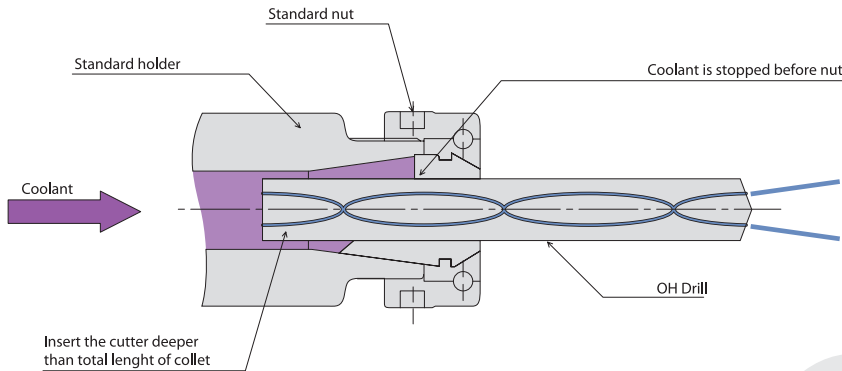
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OIL HOLE CR COLLET

FEATURE

- 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



Collet grade	Runout accuracy (MAX. μ m) RUNOUT
	4 x D
Ultra precision grade (AA)	5 μ m

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

CHUCK	RSC07		RSC10		RSC13		RSC16		RSC20	
Order No.	CROH07-d GRADE		CROH10-d GRADE		CROH13-d GRADE		CROH16-d GRADE		CROH20-d GRADE	
	$\varnothing d$	把握範囲 RANGE	$\varnothing d$	把握範囲 RANGE	$\varnothing d$	把握範囲 RANGE	$\varnothing d$	把握範囲 RANGE	$\varnothing d$	把握範囲 RANGE
	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 ~ 1.5	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
	$\varnothing d$				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
$\varnothing D$	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	CHOH01	-	② 1.5	③ AA
---	--------	---	-------	------

① Chuck Type

② $\varnothing d$

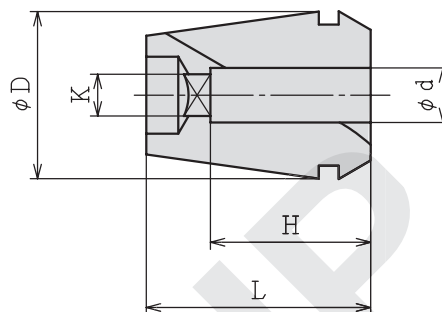
③ Grade

Designed by JSR GROUP

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คอลเลต

CR TAP COLLET (CR-GB)



CR Collet having square bottom for shank end of tap (for synchro tap)

Order No.			Tap size	Ød	K	H	ØD	L	Tap Holder	Collet Chuck
CR10GB	-M4	84700	M4	5	4	15	16	27	-	RSC10
	-M5	84702	M5	5.5	4.5	15				
	-M6	84704	M6	6	4.5	15				
	-M8	84706	M8	6.2	5	20				
	-M10	84708	M10	7	5.5	20				
	-P1/8	84710	P1/8	8	6	20				
CR13GB	-M4	84712	M4	5	4	15	20	31	SYFN12	RSC13
	-M5	84714	M5	5.5	4.5	15				
	-M6	84716	M6	6	4.5	15				
	-M8	84718	M8	6.2	5	20				
	-M10	84720	M10	7	5.5	20				
	-P1/8	84722	P1/8	8	6	20				
	-M12	84724	M12	8.5	6.5	20				
CR16GB	-M4	84726	M4	5	4	15	25	35	SYFN16S	RSC16
	-M5	84728	M5	5.5	4.5	15				
	-M6	84730	M6	6	4.5	15				
	-M8	84732	M8	6.2	5	20				
	-M10	84734	M10	7	5.5	20				
	-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	15	32	40	SYFN20	RSC20
	-M5	84750	M5	5.5	4.5	15				
	-M6	84752	M6	6	4.5	15				
	-M8	84754	M8	6.2	5	20				
	-M10	84756	M10	7	5.5	0				
	-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.

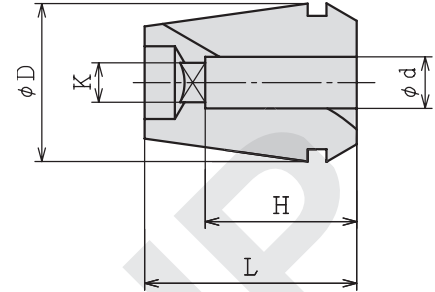
ARBOR'S ACCESSORIES

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คอลเลต

OIL HOLE CR TAP COLLET (CR-GH)



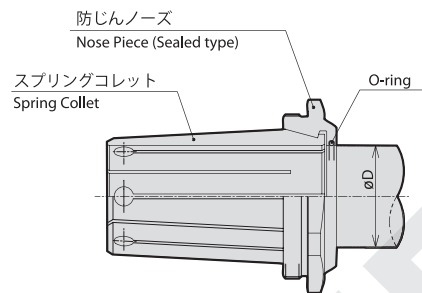
OH-type collet is for high-pressure centre-through coolant feeding (for synchro tapping).

	Order No.		Tap size	Ød	K	H	ØD	L	Tap Holder	Collet Chuck
Drill Chuck	-M6	84800	M6	6	4.5	22	16	27	-	RSC10
	-M8	84802	M8	6.2	5	22				
	-M10	84804	M10	7	5.5	22				
Pull Stub	-P1/8	84806	P1/8	8	6	22				
Straight Collet	-M6	84808	M6	6	4.5	25	20	31	STFN12	RSC13
	-M8	84810	M8	6.2	5	25				
	-M10	84812	M10	7	5.5	25				
Adjust Screw	-P1/8	84814	P1/8	8	6	25				
Chuck Wrench	-M12	84816	M12	8.5	6.5	25	25	35	SYFN16S	RSC16
	-M6	84818	M6	6	4.5	25				
	-M8	84820	M8	6.2	5	25				
Spring Collet	-M10	84822	M10	7	5.5	25				
Collet	-P1/8	84824	P1/8	8	6	25	25	35	SYFN16S	RSC16
	-M12	84826	M12	8.5	6.5	30				
	-M14	84828	M14	10.5	8	30				
Nose Piece	-P1/4	84830	P1/4	11	9	30				
Nut	-M16	84832	M16	12.5	10	30	32	40	SYFN20	RSC20
	-P3/8	84834	P3/8	14	11	30				
	-M6	84836	M6	6	4.5	25				
Locking Fixture	-M8	84838	M8	6.2	5	25	32	40	SYFN20	RSC20
	-M10	84840	M10	7	5.5	30				
	-P1/8	84842	P1/8	8	6	30				
Point Finder	-M12	84844	M12	8.5	6.5	30				
Tool Setter	-M14	84846	M14	10.5	8	30	32	40	SYFN20	RSC20
	-P1/4	84848	P1/4	11	9	35				
	-M16	84850	M16	12.5	10	35				
Tool Presetter	-P3/8	84852	P3/8	14	11	35	32	40	SYFN20	RSC20
	-M18	84854	M18	14	11	35				
	-M20	84856	M20	15	12	35				

NOTE : 1. Above table is for a tap of JIS standard shank.
2. Run-out accuracy is subject to ordinary (STD) class.
3. Gap-through collet is also available. Please order separately.

แป้นหมุน

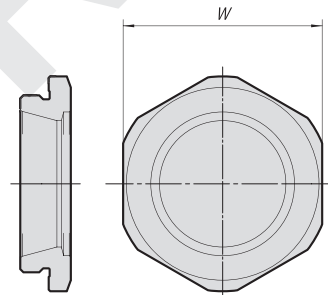
NOSE PIECE (For HARD CHUCK)



Order No.	ØD										Hard Chuck Code.
NG16-ØD	6	8	10	12	16						CTH16
NG20-ØD	6	8	10	12	16	20					CTH20
NG25-ØD				12	16	20	25				CTH25
NG32-ØD					16	20	25	32			CTH32
NG42-ØD						20	25	32	42		CTH42
NG50-ØD								32	42	50 50.8	CTH50

แป้นหมุน

NOSE PIECE (For HARD CHUCK)



Order No.		W	Hard Chuck Code.
N16-16	33702	39	CTH16
N20-20	33703	43	CTH20
N25-25	33704	51	CTH25
N32-32	33706	63	CTH32
N42-42	33708	74	CTH42
N50-50	33710	84	CTH50

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

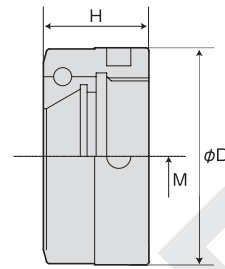
ARBOR'S ACCESSORIES

อุปกรณ์เสริม



นัต สำหรับคอเลต

NUT FOR COLLET CHUCK



Standard use

Order No.	M	ØD	H	CHUCK
RSN07NB(Ni) 30891	M16x1.0	24	11.5	RSC07
RSN10NB(Ni) 30892	M21x1.0	30	15.5	RSC10
RSN13NB(Ni) 30893	M26x1.0	36	17.5	RSC13
RSN16NB(Ni) 30894	M32x1.0	42	17.5	RSC16
RSN20NB(Ni) 30895	M40x1.0	50	17.5	RSC20

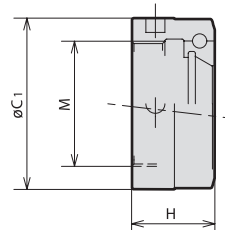
Through-Coolant use

Order No.	M	ØD	H	CHUCK
RSN10NB-OH 30870	M21x1.0	30	15.5	RSC10
RSN13NB-OH 30871	M26x1.0	36	17.5	RSC13
RSN16NB-OH 30872	M32x1.0	42		RSC16
RSN20NB-OH 30873	M40x1.0	50		RSC20

(Note) It is not possible to correspond to the center through the use of OH nut only.

นัต สำหรับคอเลต

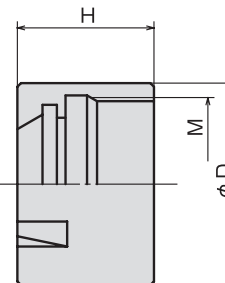
NUT FOR TAP HOLDER FOR SYNCHRONIZED MACHINE & TRACTION DRIVE SPEED ACCELERATOR



Order No.	M	ØC1	H	TDU No.
RSN10NB 30898	21x1.0	30	15.5	(TDU17)
RSN20NB 30899	40x1.0	50	17.5	(TDU40)

นัต สำหรับหัวจับแบบ Slim

NUT FOR SLIM CHUCK



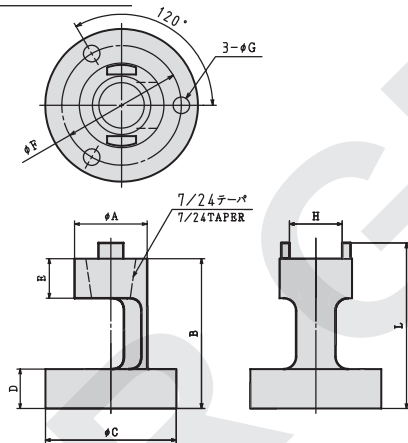
Order No.	M	ØD	H	CHUCK
ER11MN 30831	M13x0.75	16	11.3	SSC07
ER16MN 30833	M19x1.0	22	18	SSC10
ER20MN 30835	M24x1.0	28	19	SSC13
ER25MN 30837	M30x1.0	35	20	SYFN16S

LOCKING FIXTURE

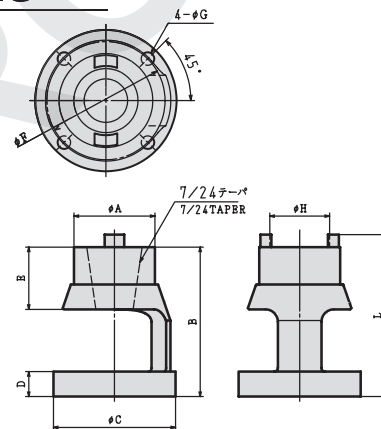


※The Picture is of 4 holes.
Please note that LF30 will be 3 holes

3 Hole



4 Hole



Order No.	TAPER	A	B	C	D	E	F	G	H	L	N/W (kg)
LF30	35905	NT30	46	95	83	25	25	65	9	33.5	1.2
LF40	35907	NT40	65	120	98	20	50	82	9	48	4.4
LF50	35909	NT50	95	175	128	25	70	115	9	77.6	9.0

ORDERING EXAMPLE

① TCC - ② M5

① Name

② NT No.

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

ARBOR'S ACCESSORIES

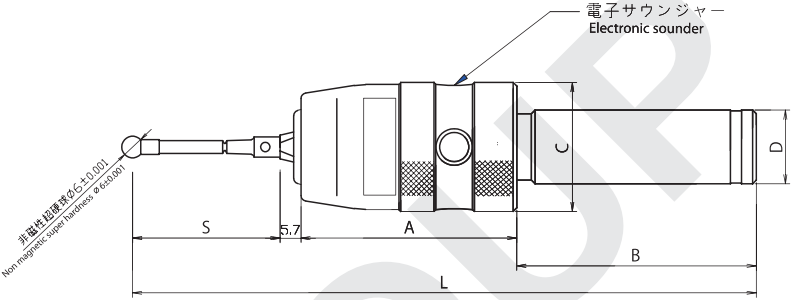
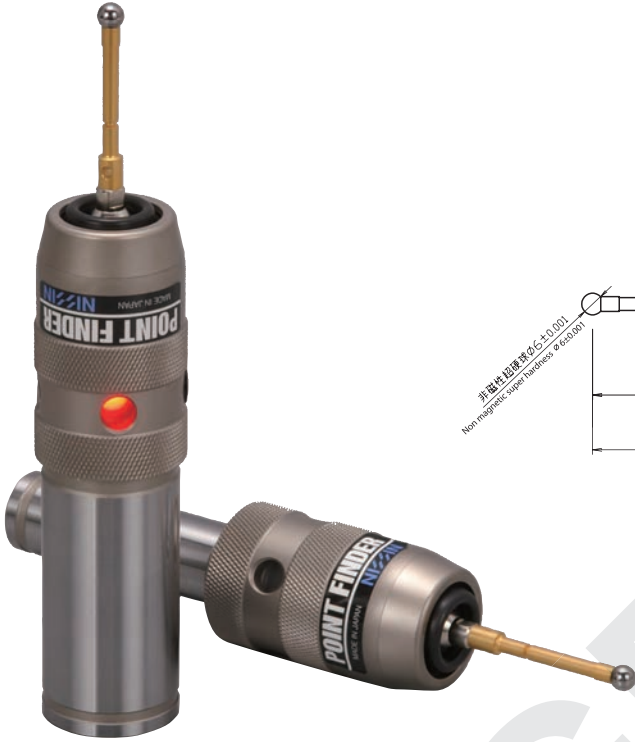
อุปกรณ์เสริม



ACCESSORIES

อุปกรณ์เสริม

POINT FINDER WITH BUZZER

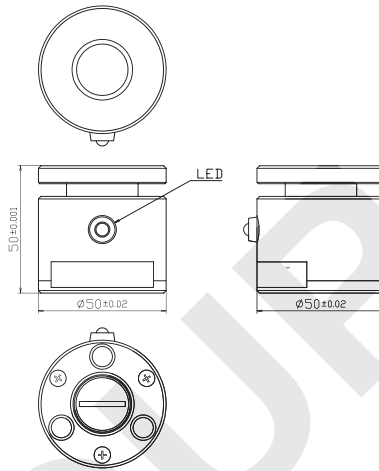


Order No.		D	S	A	B	L	C	質量 (g)	バッテリー(同梱)
PTC-20	83662	Ø20	40	58.6	65	169.3	35	350	マンガン電池
PTC-32	83664	Ø32	40	58.6	65	169.3	35	600	R1 (UM-5) 2本

スタイラスとワークの触圧が小さく、0.1 gf でLED が点灯。
肉薄のワークでも正確に測定。「ブザー付き」なら、電子音とLED で位置検出を同時に知らせます。
また、スタイラスがX・Y・Z 方向にスウィングする安全設計。新機構(特許出願中)の開発により、金属・非鉄金属の測定精度が飛躍的に向上しました。

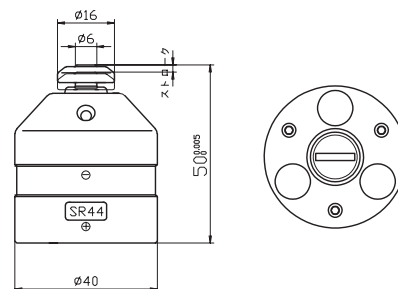
Stylus stroke / XY Axis.....	±13mm
Stylus stroke / Z Axis.....	±5mm
Buzzer frequency.....	2,700Hz
Measure force.....	0.1 gf
Repeatability.....	±0.5μm
Standard Stylus(φ6×40mm)	

NS TOOL SETTER



Order No.	SHOWA CODE
M-50	83666
機上で簡単に工具長計測。 作業時間を大幅に短縮します。 経年変化を防ぐためサブゼロ処理し、ブロックゲージを作る方法で超精密ラップを施してあります。鉄・非鉄金属(アルミ・銅等)ともに使用が可能(プラスチック・木型等にはマグネットケーブルをご使用ください)。可動幅は上下5mm、多少の油膜にも影響を受けません。工具長をオフセットに直接入力できます。	
Height.....	50mm±0.001mm
Parallelness.....	2/1000mm
Pressure.....	150gf
Measure force.....	0.001N (0.1gf)
Stroke.....	5mm
Mass.....	500g
LED	Red Camp

TOOL SETTER - i



Order No.	SHOWA CODE
i-50	83668
刃具径φ0.05mmの刃先位置検出が可能。 高速主軸タイプのマシニングセンター用 機上工具長測定器 セラミックスピンドルのマシニングセンター用として開発。内部接点方式のため、非通電性のワークにも使用可能。 傷に強いセラミックを刃先検出部に採用し、高輝度LED(青色)が位置検出を知らせます。また、底部にはマグネットが付いているため、縦型・横型のどちらにも対応します。 ※ポイントファインダー、NSツールセッターは日新産業株式の製品です。 その他の製品の取扱いも行っておりますのでご相談下さい。	
Min Tool Dia.....	For φ0.05mm ~φ6mm
Sensor Plate.....	Ceramic
Dimension.....	φ40×50mm+0~5/1000mm
Measure force.....	0.2N(20gf)
Stroke.....	1.5mm
Magnetic force.....	6N
Mass.....	200g
LED	Blue Lame
Repeatability.....	±0.001mm

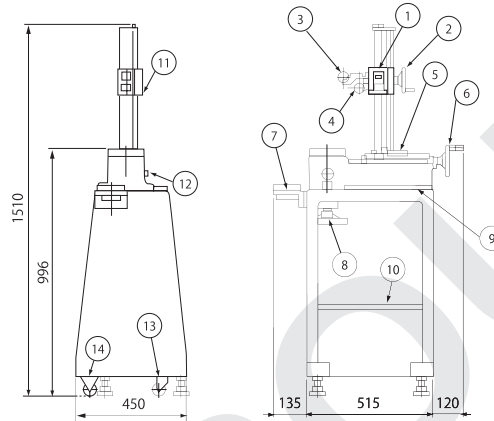
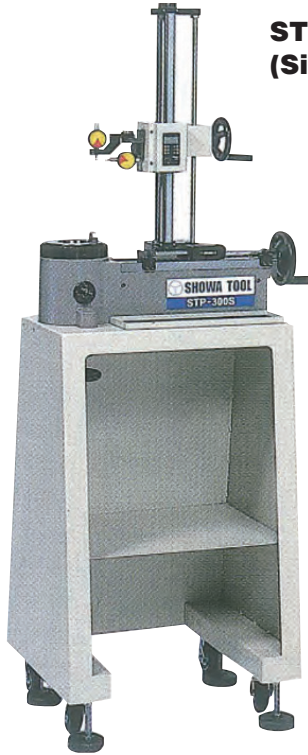
ARBOR'S ACCESSORIES

อุปกรณ์เสริม



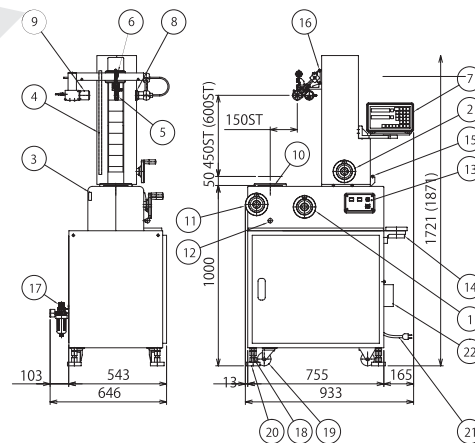
TOOL PRESETTER

STP-300S (Simple Type)



1. Z-axis Measurement Unit
2. Z-axis Handle
3. Z-axis Dial Gauge
4. X-axis Dial Gauge
5. X-axis Measurement Unit
6. X-axis Handle
7. Tool Setting Pot(Optional)
8. Tool Setting Handle
9. Plate
10. Shelf
11. Z-axis Moving Handle
12. Fixing for Spindle
13. Caster(Rotary type)
14. Caster

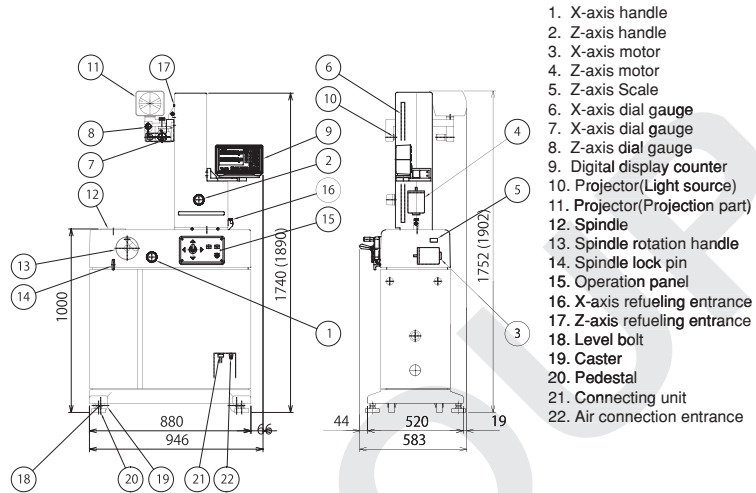
STP-300 (Standard Type)



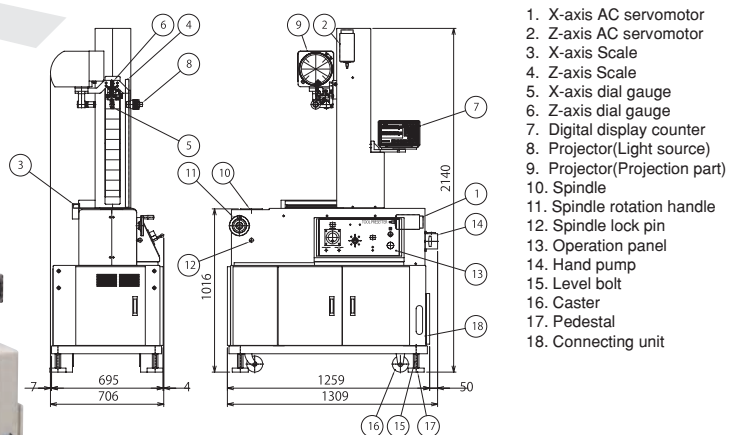
1. X-axis movement handle
2. Z-axis movement handle
3. X-axis Scale
4. Z-axis Scale
5. X-axis dial gauge
6. Z-axis dial gauge
7. Digital display counter
8. Back light
9. CCD camera
10. Spindle
11. Spindle rotation handle
12. Spindle lock pin
13. Operation panel
14. Tool tightening mount
15. X-axis refueling entrance
16. Z-axis refueling entrance
17. Filter regulator
18. Level bolt
19. Caster
20. Pedestal
21. Power cable
22. Oil receptacle



**STP-400
(Quality Type)**



**STP-500
(HI-Quality Type)**



BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Pull Stub

Straight Collet

Adjust Screw

Chuck Wrench

Spring Collet

Collet

Nose Piece

Nut

Locking Fixture

Point Finder

Tool Setter

Tool Presetter

ARBOR'S ACCESSORIES

อุปกรณ์เสริม



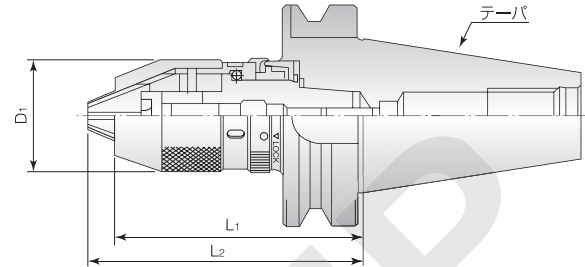
ACCESSORIES

อุปกรณ์เสริม

Order No.		STP-300S (Simple Type)	STP-300 (Standard Type)	STP-400 (Quality Type)	STP-500 (Hi-Quality Type)
		80070	80074	80076	80078
Measurement Rang	X-axis	0~Ø300	0~Ø300	0~Ø400	0~Ø500 0~Ø800
	Z-axis	30~430 (op.630)	50~500 (op.650)	50~500 (op.650)	50~650
Digital Display Unit	X-axis	0.02 (dia)	0.002 (dia)	0.002 (dia)	0.002 (dia)
	Z-axis	0.01	0.005 (0.001)	0.005 (0.001)	0.005 (0.001)
Dial Gauge Reading	X-axis	0.01	0.001	0.001	0.001
	Z-axis	0.01	0.01 (op.0.001)	0.01 (op.0.001)	0.01 (op.0.001)
Feed Mechanism	X-axis	Special screw	Ball screw	Ball screw	Ball screw
	Z-axis	Special screw	Ball screw	Ball screw	Ball screw
Operation Method (X-axis & Z-axis)		Manual (Using handle)	Manual (Using handle)	Electric (2 levels) Manual (Fine Adjustable)	Electric (2 levels) Plus handle (Fine adjustment)
Motor Type (X-axis & Z-axis)		-	-	Induction motor	AC Servo motor
Optical Projector	Screen Dia.	-	Ø80 (op.Ø180)	Ø120 (op.Ø180)	Ø180
	Magnification		x10 (op. x20)	x10 (op. x20)	x20
Spindle Shank (To be selected)		BT30,40,50 HSK32,40,50,63,80,100 KM32,40,50,63,80	BT30,35,40,45,50 (op.Ceramic Spindle) HSK32,40,50,63,80,100 KM32,40,50,63,80 (op. Tool height adjustment mechanism type) (op. Double spindle type TP-300N only)		
Auto Tool Locking		Manual (Using handle)	Air pressure 0.4~0.7MPa (4~7kgf/cm ²) (op. Hydraulic type)		
Tool Clamping Force		-	450 (Air pressure 0.5Mpa)	1200 (Hydraulic type)	
Power Supply		-	AC100V 10% 50/60Hz Please advise when ordering if another Voltage is required. (Optional)		
External Di. W x D x H (mm)		768x450x1520	933x646x1721	946x583x1740	1309x706x2140
Weight (kg)		70	350	400	700
Standard accessories		Battery for Digimatic scale unit		Light source lanmp	
		Master gauge L150, Taper cleaner, Wrench set, Cover set, Spanner, Pedestal, Manual, Accuracy Table			

หัวจับดอกสว่าน

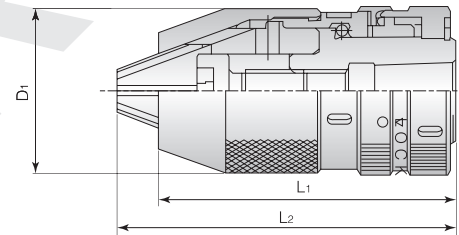
SUPER KEYLESS DREAM CHUCK - BT SHANK



Order No.	Capacity	D1	L1	L2	Taper	Attached Spanner	Weight (kg)
BT30-SLC13-110	0.5 ~ 13	51	110	122.5	BT30	FS13LC	1.4
BT40-SLC13-105	0.5 ~ 13	51	106	118.5	BT40	FS13LC	1.9
BT50-SLC13-115	0.5 ~ 13	51	115	127.5	BT50	FS13LC	4.5

หัวจับ

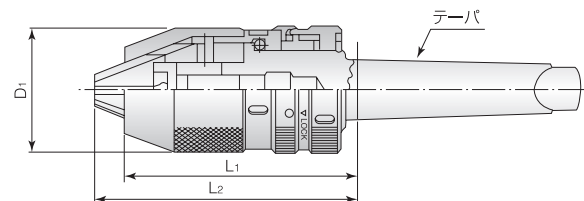
SUPER KEYLESS DREAM CHUCK - JACOBS TAPER SLC13



Order No.	Capacity	D1	L1	L2	Taper	Attached Spanner	Weight (kg)
SLC13-J6	0.5 ~ 13	51	90.5	103	JT6	FS13LC	1.0
SLC13-J33	0.5 ~ 13	51	90.5	103	JT33	FS13LC	1.0

หัวจับ

SUPER KEYLESS DREAM CHUCK - MT SHANK



Order No.	Capacity	D1	L1	L2	Taper	Attached Spanner	Weight (kg)
M2T-SLC13-95	0.5 ~ 13	51	95.5	108	MT2	FS13LC	1.2
M3T-SLC13-95	0.5 ~ 13	51	95.5	108	MT3	FS13LC	1.3
M4T-SLC13-95	0.5 ~ 13	51	95.5	108	MT4	FS13LC	1.7

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

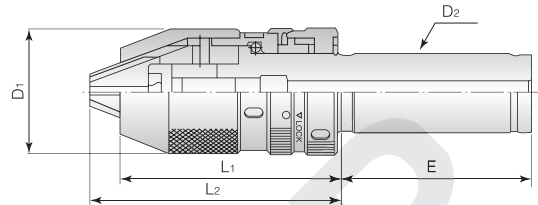
Super Keyless
Dream Chuck

CNC Keyless
Drill Chuck

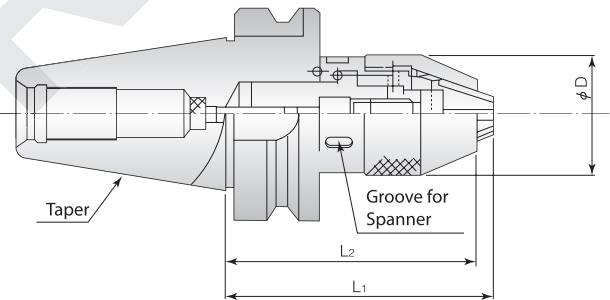
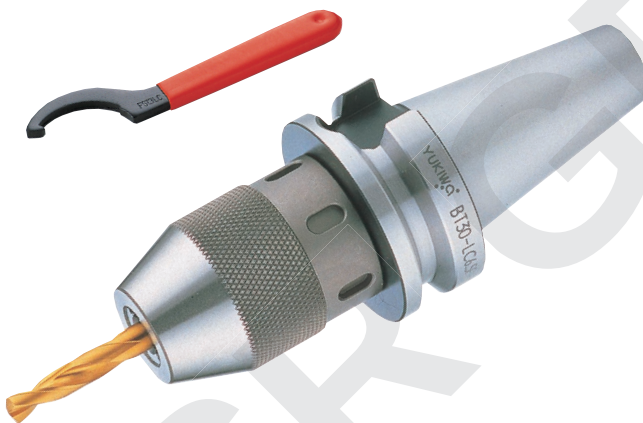
Keyless Drill
Chuck

Drill Chuck

Chuck Keys

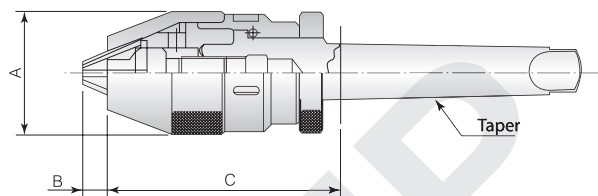


Order No.	Capacity	D1	L1	L2	D2	E	Attached Spanner	Weight (kg)
ST20-SLC13-150	0.5 ~ 13	51	90.5	103	ST20	60	FS13LC	1.2
ST25-SLC13-160	0.5 ~ 13	51	90.5	103	ST25	70	FS13LC	1.3
ST32-SLC13-170	0.5 ~ 13	51	90.5	103	ST32	80	FS13LC	1.5



	Order No.	Capacity	D1	L1	L2	Taper	Attached Spanner	Weight (kg)
BT30	-LC6.5F-70	0.5 ~ 6.5	34	76	70	BT30	FS6.5LC	0.7
	-LC13F-90	0.5 ~ 13	50	102	90		FS13LC	1.2
BT40	-LC6.5F-75	0.5 ~ 6.5	34	81	75	BT40	FS6.5LC	1.2
	-LC6.5F-115			121	115			1.4
	-LC6.5F-155			161	155			1.7
	-LC13F-95	0.5 ~ 13	50	107	95		FS13LC	1.7
	-LC13F-135			147	135			2.3
	-LC13F-175			187	175			2.8
	-LC16F-100	3 ~ 16	56	113	100		FS16LC	2.0
	-LC16F-140			153	140			2.8
	-LC16F-180			190	180			3.4
	BT50	-LC6.5F-85	0.5 ~ 6.5	34	91		85	BT50
-LC6.5F-130		136			130	4.1		
-LC6.5F-175		181			175	4.3		
-LC13F-105		0.5 ~ 13	50	117	105	FS13LC	4.3	
-LC13F-150				162	150		4.9	
-LC13F-195				207	195		5.4	
-LC16F-110		3 ~ 16	56	123	110	FS16LC	4.6	
-LC16F-155				168	155		5.3	
-LC16F-200	208			200	6.0			

หัวจับดอกสว่าน

CNC KEYLESS DRILL CHUCKS WITH MT SHANK - Pioneer in One-unit Structure. High Quality

	Order No.	Capacity	A	B	C	Taper	Attached Spanner	Weight (kg)
M2T	-LCS8-75	0.5 ~ 8	38	7.5	73.5	MT2	FS8LC	0.6
	-LCS13-95	0.5 ~ 13	50	12.5	97		FS13LC	1.2
M3T	-LCS13-95	0.5 ~ 13	50	12.5	97	MT3	FS13LC	1.3
	-LCS16-100	3 ~ 16	56	13	102		FS16LC	1.7
M4T	-LCS13-95	0.5 ~ 13	50	12.5	97	MT4	FS13LC	1.6
	-LCS16-100	3 ~ 16	56	13	102		FS16LC	2.0

- Runout accuracy of less than 0.05mm (less than 0.03mm in average) gives a high working efficiency.
- MT shank and chuck are united to ensure further safety and reliability.
- Stronger gripping torque by hook spanner and no loosening at emergency stopping.
- Compact size and short-mount design.

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Super Keyless

Dream Chuck

CNC Keyless

Drill Chuck

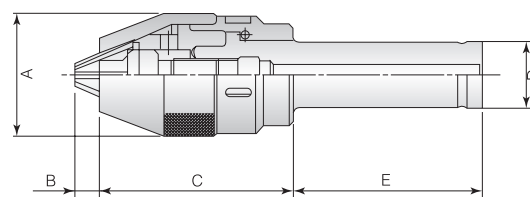
Keyless Drill

Chuck

Drill Chuck

Chuck Keys

หัวจับดอกสว่าน

CNC KEYLESS DRILL CHUCKS WITH STRAIGHT SHANK - Pioneer in One-unit Structure. High Quality

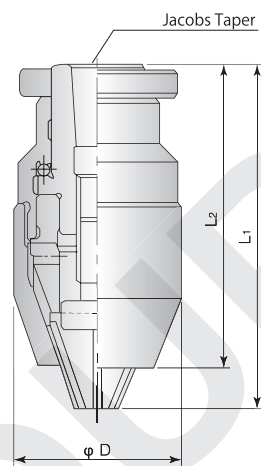
	Order No.	Capacity	A	B	C	ØD	E	Attached Spanner	Weight (kg)
ST20	-LCS8-120	0.5 ~ 8	38	7.5	61	20	60	FS8LC	0.6
	-LCS13-140	0.5 ~ 13	50	12.5	81			FS13LC	1.1
ST25	-LCS13-150	0.5 ~ 13	50	12.5	81	25	70	FS13LC	1.2
	-LCS16-155	3 ~ 16	56	13	86			FS16LC	1.5
ST32	-LCS13-160	0.5 ~ 13	50	12.5	80.5	32	80	FS13LC	1.4
	-LCS16-165	3 ~ 16	56	13	85.5			FS16LC	1.7

- Runout accuracy of less than 0.05mm (less than 0.03mm in average) gives a high working efficiency.
- ST shank and chuck are united to ensure further safety and reliability.
- Stronger gripping torque by hook spanner and no loosening at emergency stopping.
- Compact size and short-mount design.

หัวจับดอกสว่าน

KEYLESS DRILL CHUCK

World highest precision (Gold)



Highest precision (Silver)

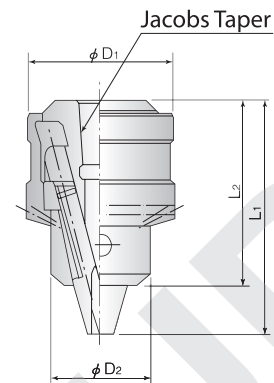


Order No.		Capacity	Jacobs Taper	D	L1	L2	Weight (kg)
LC3-J0	Gold	0.3 ~ 3	JT.NO.0	24	48	44	105
	Silver						
LC3-J1	Gold	0.3 ~ 3	JT.NO.1 ※	24	48	44	105
	Silver						
LC6.5	Gold	0.5 ~ 6.5	JT.NO.1	34	68	62	310
	Silver						
LC8	Gold	0.5 ~ 8	JT.NO.2S	38	76	68.5	400
	Silver						
LC10	Gold	0.5 ~ 10	JT.NO.2S	43	91	80	635
	Silver						
LC13	Gold	0.5 ~ 13	JT.NO.6	50	103	91	985
	Silver						
LC16	Gold	3 ~ 16	JT.NO.6	56	109	96	1,275
	Silver						

※ The inlet diameter of the tapered hole is special. The details must be inquired to us.

หัวจับดอกสว่าน

DRILL CHUCK - TAPER MOUNTED MODEL



Order No.	Capacity	Jacobs Taper	D1	D2	L1	L2	Weight (kg)
3MG	0.3 ~ 3	JT.NO.0	21	15	34.5	28	45
4MG	0.3 ~ 4	JT.NO.0	21	15	34.5	28	45
D5MG	0.5 ~ 5	JT.NO.D	27	18	41	32	80
5MG	0.5 ~ 5	JT.NO.1	32	22	49.5	40	145
6.5ELMG	0.5 ~ 6.5	JT.NO.1	32	22	49.5	40	145
6.5MG	0.5 ~ 6.5	JT.NO.1	37	26	54.5	43	220
J8MG	0.8 ~ 8	JT.NO.1	37	26	56.5	45	220
M8MG	0.8 ~ 8	MT.NO.1S	37	26	56.5	45	220
10ELMG	0.8 ~ 10	JT.NO.2S	37	26	61	51	225
10MG	0.8 ~ 10	JT.NO.2S	45	31	69	55	390
13ELMG	1.2 ~ 13	JT.NO.6	45	33	77.5	64	415
13MG	1.2 ~ 13	JT.NO.6	52.5	38	87	68	685
14MG	1.2 ~ 14	JT.NO.3	60	44	96	73	980
16MG	3.0 ~ 16	JT.NO.3	60	44	96	73	980
19MG	3.0 ~ 19	JT.NO.4	72.5	54	124.5	95	1,840

BT Series

รุ่น BT

HKS Series

รุ่น HSK

ST Series

รุ่น ST

Versatile Tool

Cutting Tool

Accessories

Drill Chuck

Super Keyless
Dream Chuck

CNC Keyless
Drill Chuck

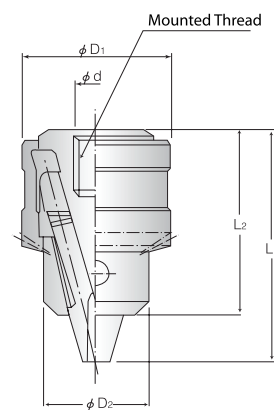
Keyless Drill
Chuck

Drill Chuck

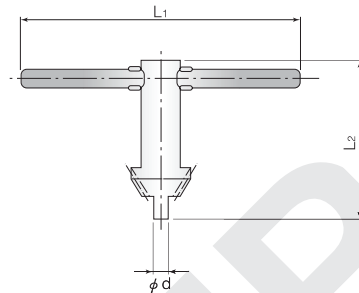
Chuck Keys

หัวจับดอกสว่าน

DRILL CHUCK - THREAD MOUNTED MODEL



Order No.	Capacity	Jacobs Taper	D1	D2	L1	L2	d	Weight (kg)
6.5EL	0.5 ~ 6.5	3/8 - 24	32	22	49.5	40	9.67	145
8L	0.8 ~ 8	3/8 - 24	32	22	51.5	43	9.67	155
6.5	0.5 ~ 6.5	3/8 - 24	37	26	54.5	43	9.67	220
10EL	0.8 ~ 10	3/8 - 24	37	26	61	51	9.67	220
10EL	0.8 ~ 10	1/2 - 20	37	26	61	51	12.85	225
MS13EL	2.0 ~ 13	1/2 - 20	42.8	32	73	60	12.85	370
13EL	1.2 ~ 13	1/2 - 20	45	33	77.5	64	12.85	445
16LL	4.5 ~ 16	1/2 - 20	45	33	75.5	62.5	12.85	425
16EL	3.0 ~ 16	1/2 - 20	52.5	38	88	71	12.85	705



BT Series
รุ่น BT
HKS Series
รุ่น HSK
ST Series
รุ่น ST
Versatile Tool
Cutting Tool
Accessories
Drill Chuck
Super Keyless Dream Chuck
CNC Keyless Drill Chuck
Keyless Drill Chuck
Drill Chuck
Chuck Keys

Order No.		L1	L2	d
JH-4	4 ^m /m (3 ^m /m)	52	30	3.175
JH-D5	D5 ^m /m	52	36	4
JH-5	5 ^m /m (6.5EL ^m /m, 8L ^m /m)	65	49	4
JH-6.5	6.5 ^m /m (M8 ^m /m, J8 ^m /m, 10EL ^m /m)	75	51	5.5
JH-10	10 ^m /m (M13EL ^m /m, 13EL ^m /m, 16LL ^m /m)	90	50	6.5
JH-13	13 ^m /m (16EL ^m /m)	110	59	8
JH-14	14 ^m /m (16 ^m /m BC13)	120	63	9
JH-19	19 ^m /m	125	79.5	9.5