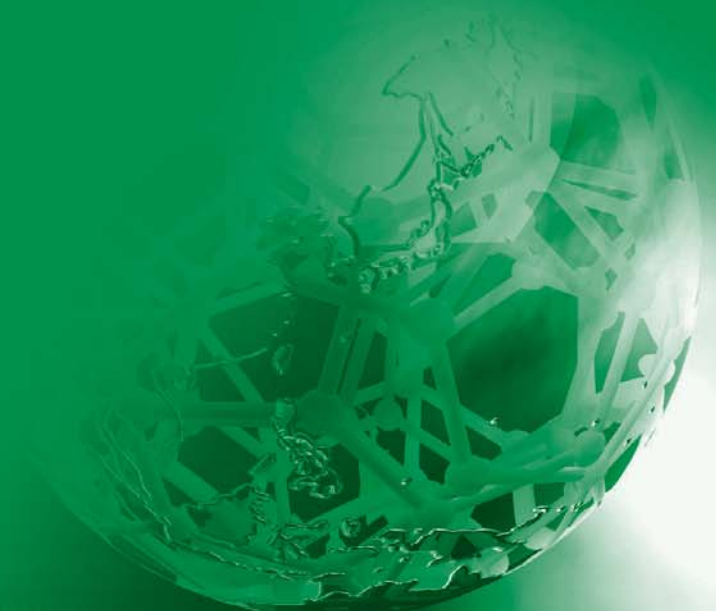
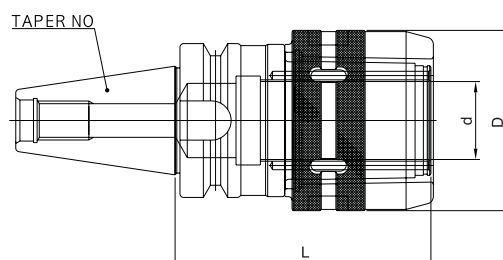


TOOL HOLDERS



SELECTION

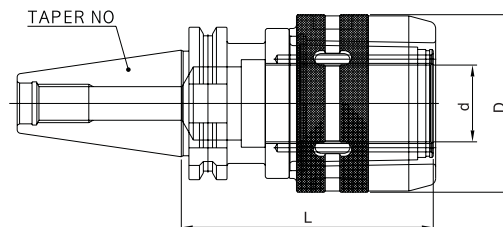
MILLING CHUCK(BT)	H 3
MILLING CHUCK(SK,CAT)	H 4
END MILL COLLET(CK,K)	H 5
ER COLLET CHUCK(BT)	H 6
ER COLLET CHUCK(SK,CAT)	H 8
EXTENTION ER COLLET CHUCK	H 9
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JACOBS TAPER ADAPTER(SK, CAT)	H 11
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MORSE TAPER ADAPTER A TYPE(SK, CAT)	H 13
MORSE TAPER ADAPTER B TYPE(BT)	H 14
MORSE TAPER ADAPTER B TYPE(SK, CAT)	H 15
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END MILL HOLDER(BT)	H 18
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TAPPING CHUCK(MTA)	H 41
MORSE TAPER ADAPTER(NT)	H 42
END MILL HOLDER(NT)	H 43
FACE MILL ARBOR(NT), CENTERING PLUG(NT)	H 44
FACE MILL ARBOR(MTA)	H 45
TOOL CLAMPER (TCP)	H 46


MAS 403-BT

TAPER No.	CODE No.	d	D	L	COLLET	WEIGHT
30	BT30-C20-75	20	54	75	K20, CK20	1.5
35	BT35-C20-75	20	54	75	K20, CK20	1.7
	BT35-C25-95	25	62.5	95	K25, CK25	2.3
	BT35-C32-105	32	74	105	K32, CK32	3.0
40	BT40-C20-105	20	54	105	K20, CK20	2.1
	BT40-C20-120	20	54	120	K20, CK20	2.3
	BT40-C25-105	25	62.5	105	K25, CK25	2.5
	BT40-C32-90	32	74	90	K32, CK32	3.0
	BT40-C32-105	32	74	105	K32, CK32	3.1
	BT40-C32-120	32	74	120	K32, CK32	3.3
45	BT45-C20-105	20	54	105	K20, CK20	2.6
	BT45-C25-105	25	62.5	105	K25, CK25	3.0
	BT45-C32-105	32	74	105	K32, CK32	3.6
	BT45-C42-115	42	92	115	K42, CK42	4.8
50	BT50-C20-105	20	54	105	K20, CK20	4.5
	BT50-C20-135	20	54	135	K20, CK20	4.9
	BT50-C20-165	20	54	165	K20, CK20	5.4
	BT50-C25-105	25	62.5	105	K25, CK25	5.2
	BT50-C25-135	25	62.5	135	K25, CK25	5.8
	BT50-C32-105	32	74	105	K32, CK32	6.0
	BT50-C32-115	32	74	115	K32, CK32	6.2
	BT50-C32-135	32	74	135	K32, CK32	6.7
	BT50-C32-165	32	74	165	K32, CK32	7.4
	BT50-C42-115	42	92	115	K42, CK42	6.7
	BT50-C42-135	42	92	135	K42, CK42	7.6
	BT50-C42-165	42	92	165	K42, CK42	8.3

■ Additional charge is imposed on the spanner.

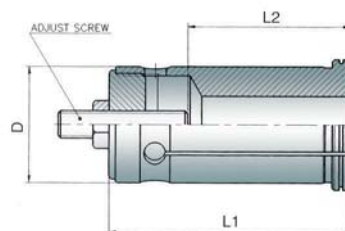
■ Other accessories are available by placing extra order.



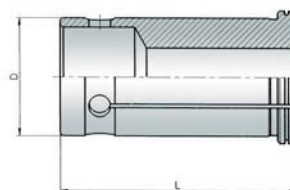
● **MAS 403-BT / ANSI-B-5.50-CAT**

TAPER No.	CODE No.	d	D	L	COLLET	WEIGHT
40	SK40 -C20-105	20	54	105	K20, CK20	2.5
	(CAT) C25-105	25	62.5	105	K25, CK25	2.8
	C32-105	32	74	105	K32, CK32	3.1
	C32-135	32	74	135	K32, CK32	3.5
45	SK45 -C20-105	20	54	105	K20, CK20	2.6
	(CAT) C25-105	25	62.5	105	K25, CK25	2.8
	C32-105	32	74	105	K32, CK32	3.6
50	SK50 -C20-105	20	54	105	K20, CK20	4.5
	(CAT) C25-105	25	62.5	105	K25, CK25	4.8
	C32-105	32	74	105	K32, CK32	6.0
	C32-115	32	74	115	K32, CK32	6.2
	C32-135	32	74	135	K32, CK32	6.7
	C32-165	32	74	165	K32, CK32	7.4
	C42-115	42	92	115	K42, CK42	7.2
	C42-135	42	92	135	K42, CK42	7.6
	C42-165	42	92	165	K42, CK42	8.3

- Additional charge is imposed on the spanner.
- Other accessories are available by placing extra order.

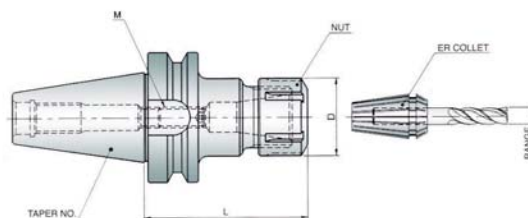
CK


CODE No.	D	L1	L2
CK20-6. 8. 10. 12. 16	20	63	20~50
CK25-6. 8. 10. 12. 16. 20	25	72	25~50
CK32-6. 8. 10. 12. 16. 20. 25	32	78	25~63
CK42-6. 8. 10. 12. 16. 20. 25. 32	42	93	25~75

K


CODE No.	D	L
K20-6. 8. 10. 12. 16	20	55
K25-6. 8. 10. 12. 16. 20	25	60
K32-6. 8. 10. 12. 16. 20. 25	32	65
K42-6. 8. 10. 12. 16. 20. 25. 32	42	70

※ The size in inch or decimals is available on your request.



● **MAS 403-BT**

TAPER No.	CODE No.	RANGE	D	L	M	NUT	COLLET	WEIGHT
30	BT30-ER11- 70	0.5~7.0	19	70	M6	ZEIKENER11	ER11+ET1-12	0.5
	BT30-ER11-100			100				0.5
	BT30-ER16-70	0.5~10.0	28	70	M10	ZEIKENER16	ER16+ET1-16	1.0
	BT30-ER16-100			100				1.1
	BT30-ER20-80	1.0~13.0	34	80	M12	ZEIKENER20	ER20+ET1-20	1.2
	BT30-ER20-100			100				1.3
	BT30-ER25-70	1.0~16.0	42	70	M12	ZEIKENER25	ER25+ET1-25	1.2
	BT30-ER25-100			100				1.3
	BT30-ER32-60	2.0~20.0	50	60	M12	ZEIKENER32	ER32+ET1-32	1.4
	BT30-ER32-90			90				1.9
35	BT35-ER11-100	0.5~7.0	19	100	M6	ZEIKENER11	ER11+ET1-12	0.6
	BT35-ER16-70	0.5~10.0	28	70	M10	ZEIKENER16	ER16+ET1-16	1.1
	BT35-ER16-100			100				1.2
	BT35-ER20-80	1.0~13.0	34	80	M12	ZEIKENER20	ER20+ET1-20	1.3
	BT35-ER20-100			100				1.4
	BT35-ER25-70	1.0~16.0	42	70	M12	ZEIKENER25	ER25+ET1-25	1.3
	BT35-ER25-100			100				1.4
	BT35-ER32-60	2.0~20.0	50	60	M12	ZEIKENER32	ER32+ET1-32	1.5
	BT35-ER32-90			90				1.9

- Additional charge is imposed on the spanner, collet.
- Other accessories are available by placing extra order.

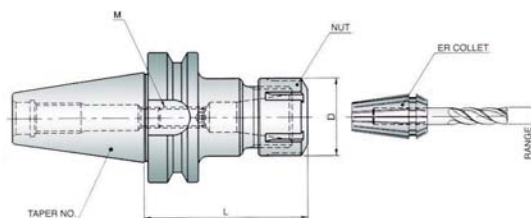


ER COLLET CHUCK (ER) ER 夹头刀柄 (ER)

●MAS 403-BT

TAPER No.	CODE No.	RANGE	D	L	M	NUT	COLLET	WEIGHT
40	BT40-ER11- 75	0.5~7.0	19	75	M6	ZEIKENER11	ER11+ET1-12	1.0
	BT40-ER16- 75			75				1.1
	BT40-ER16-100	0.5~10.0	28	100	M12	ZEIKENER16	ER16+ET1-16	1.2
	BT40-ER16-135			135				1.4
	BT40-ER20- 75			75				1.4
	BT40-ER20-100	1.0~13.0	34	100	M12	ZEIKENER20	ER20+ET1-20	1.8
	BT40-ER20-135			135				2.2
	BT40-ER25- 75			75				1.4
	BT40-ER25-100	1.0~16.0	42	100	M12	ZEIKENER25	ER25+ET1-25	1.8
	BT40-ER25-135			135				2.2
	BT40-ER25-150			150				2.4
	BT40-ER32- 60			60				1.8
	BT40-ER32-100	2.0~20.0	50	100	M12	ZEIKENER32	ER32+ET1-32	2.2
	BT40-ER32-120			120				2.4
45	BT40-ER40- 80	3.0~26.0	63	80	M12	ZEIKENER40	ER40+ET1-40	1.5
	BT45-ER11- 75	0.5~7.0	19	75	M6	ZEIKENER11	ER11+ET1-12	2.6
	BT45-ER16-100	0.5~10.0	28	100	M12	ZEIKENER16	ER16+ET1-16	3.1
	BT45-ER20-100	1.0~13.0	34	100	M12	ZEIKENER20	ER20+ET1-20	3.3
	BT45-ER25-100	1.0~16.0	42	100	M12	ZEIKENER25	ER25+ET1-25	3.5
	BT45-ER32-100	2.0~20.0	50	100	M12	ZEIKENER32	ER32+ET1-32	3.8
50	BT50-ER16-100			100				4.2
	BT50-ER16-120	0.5~10.0	28	120	M12	ZEIKENER16	ER16+ET1-16	4.4
	BT50-ER16-165			165				4.6
	BT50-ER20-100			100				4.6
	BT50-ER20-135	1.0~13.0	34	135	M12	ZEIKENER20	ER20+ET1-20	4.8
	BT50-ER20-165			165				5.0
	BT50-ER25-100			100				4.7
	BT50-ER25-135	1.0~16.0	42	135	M12	ZEIKENER25	ER25+ET1-25	4.8
	BT50-ER25-165			165				5.0
	BT50-ER32-100			100				5.2
	BT50-ER32-165	2.0~20.0	50	165	M12	ZEIKENER32	ER32+ET1-32	5.7
	BT50-ER32-180			180				5.8
	BT50-ER40-100			100				5.6
	BT50-ER40-150	3.0~26.0	63	150	M12	ZEIKENER40	ER40+ET1-40	6.1
	BT50-ER50-100			100				5.8
	BT50-ER50-150	12.0~34.0	78	150	M12	ZEIKENER50	ER40+ET1-50	6.3

- Additional charge is imposed on the spanner, collet.
- Other accessories are available by placing extra order.

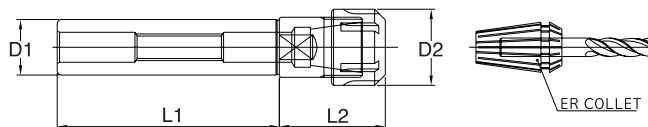


● **DIN69871-SK / ANSI-B-5.50-CAT**

TAPER No.	CODE No.	RANGE	D	L	M	NUT	COLLET
40	SK40-ER11- 75	0.5~7.0	19	75	M6	ZEIKENER11	ER11+ET1-12
	(CAT40)-ER16- 75			75			
	-ER16-100	0.5~10.0	28	100	M12	ZEIKENER16	ER16+ET1-16
	-ER16-135			135			
	-ER20- 75			75			
	-ER20-100	1.0~13.0	34	100	M12	ZEIKENER20	ER20+ET1-20
	-ER20-135			135			
	-ER25- 75			75			
	-ER25-100	1.0~16.0	42	100	M12	ZEIKENER25	ER25+ET1-25
	-ER25-135			135			
	-ER25-150			150			
	-ER32- 60			60			
	-ER32-100	2.0~20.0	50	100	M12	ZEIKENER32	ER32+ET1-32
	-ER32-120			120			
45	-ER40-100	3.0~26.0	63	100	M12	ZEIKENER40	ER40+ET1-40
	SK45-ER11- 75	0.5~7.0	19	75	M6	ZEIKENER11	ER11+ET1-12
	(CAT40)-ER16-100	0.5~10.0	28	100	M10	ZEIKENER16	ER16+ET1-16
	-ER20-100	1.0~13.0	34	100	M12	ZEIKENER20	ER20+ET1-20
	-ER25-100	1.0~16.0	42	100	M12	ZEIKENER25	ER25+ET1-25
	-ER32-100	2.0~20.0	50	100	M12	ZEIKENER32	ER32+ET1-32
	-ER40-100	3.0~26.0	63	100	M12	ZEIKENER40	ER40+ET1-40
50	SK50-ER16-100			100			
	(CAT50)-ER16-120	0.5~10.0	28	120	M12	ZEIKENER16	ER16+ET1-16
	-ER16-165			165			
	-ER20-100			100			
	-ER20-135	1.0~13.0	34	135	M12	ZEIKENER20	ER20+ET1-20
	-ER20-165			165			
	-ER25-100			100			
	-ER25-135	1.0~16.0	42	135	M12	ZEIKENER25	ER25+ET1-25
	-ER25-165			165			
	-ER32-100			100			
	-ER32-165	2.0~20.0	50	165	M12	ZEIKENER32	ER32+ET1-32
	-ER32-180			180			
	-ER40-100	3.0~26.0	63	100	M12	ZEIKENER40	ER40+ET1-40
	-ER40-150			150			
	-ER50-100	12.0~34.0	78	100	M12	ZEIKENER50	ER50+ET1-50
	-ER50-150			150			

- Additional charge is imposed on the spanner, collet.
- Other accessories are available by placing extra order.

EXTENSION ER COLLET CHUCK 加长 ER夹头刀柄.

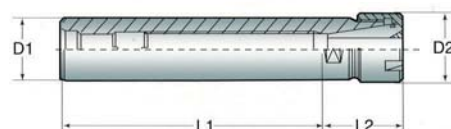


●STRAIGHT-K

●STANDARD TYPE

CODE No.	RANGE	D ₁	D ₂	L ₁	L ₂	NUT	COLLET
K16-ER11-100	0.5~7.0	16	19	100	32	ZEIKENER11	ER11+ET1-12
K16-ER16-100	0.5~10.0	16	28	100	36	ZEIKENER16	ER16+ET1-16
K20-ER16-100	0.5~10.0	20	28	100	36	ZEIKENER16	ER16+ET1-16
K20-ER20-100	1.0~13.0	20	34	100	40	ZEIKENER20	ER20+ET1-20
K20-ER25-100	1.0~16.0	20	42	100	50	ZEIKENER25	ER25+ET1-25
K25-ER20-100	1.0~13.0	25	34	100	40	ZEIKENER20	ER20+ET1-20
K25-ER25-100	1.0~16.0	25	42	100	50	ZEIKENER25	ER25+ET1-25
K32-ER16-100	0.5~10.0	32	28	100	36	ZEIKENER16	ER16+ET1-16
K32-ER20-100	1.0~13.0	32	34	100	40	ZEIKENER20	ER20+ET1-20
K32-ER25-100	1.0~16.0	32	42	100	50	ZEIKENER25	ER25+ET1-25
K32-ER32-100	2.0~20.0	32	50	100	58	ZEIKENER32	ER32+ET1-32

EXTENSION ER COLLET CHUCK 平面铣刀刀柄 (FMC)

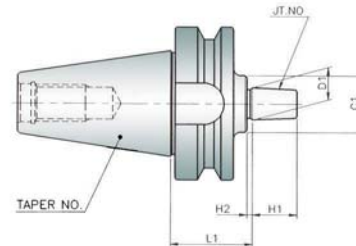


●STRAIGHT-K

●SLIM TYPE

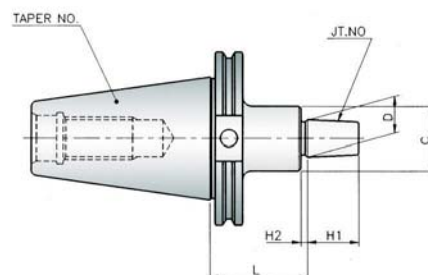
CODE No.	RANGE	D ₁	D ₂	L ₁	L ₂	NUT	COLLET	SPANNER (OPTION)
K16-ER11M-140	0.5~7.0	16	16	140	33	ER-11M	ER11+ET1-12	E11M
K20-ER16M-140	0.5~10.0	20	22	140	41	ER-16M	ER16+ET1-16	E16M
K20-ER20M-140	1.0~13.0	20	28	140	41	ER-20M	ER20+ET1-20	E20M
K25-ER16M-140	0.5~10.0	25	22	140	41	ER-16M	ER16+ET1-16	E16M
K25-ER20M-140	1.0~13.0	25	28	140	45	ER-20M	ER20+ET1-20	E20M
K25-ER25M-140	1.0~16.0	25	35	140	45	ER-25M	ER25+ET1-25	E25M

- Additional charge is imposed on the spanner, collet.
- Other accessories are available by placing extra order.



●MAS 403-BT

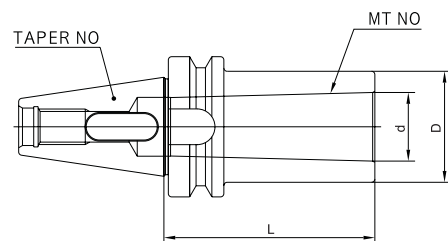
TAPER No.	CODE No.	JT NO.	D1	L1	H1	H2	C1	WEIGHT		
30	BT30-JTA 1- 30	1	9.754	30	14	3	30	0.9		
	BT30-JTA 2- 30	2	14.199	30	20	4		1.0		
	BT30-JTA 6- 30	6	17.17	30	24	4		1.0		
35	BT35-JTA 1- 30	1	9.754	30	14	3	30	1.0		
	BT35-JTA2S- 30	2Short	13.94	30	18			1.0		
	BT35-JTA 2- 30	2	14.199	30	20			1.0		
	BT35-JTA33- 30	33	15.85	30	24	4		1.0		
	BT35-JTA 6- 30	6	17.17	30		24		1.0		
	BT35-JTA 3- 30	3	20.599	30	28	5	35	1.0		
	40	BT40-JTA 1- 45	1	9.754	45	14	3	30	1.1	
BT40-JTA 1- 90		90			1.4					
BT40-JTA2S- 45		2Short	13.94	45	20	1.1				
BT40-JTA2S- 90				90		18			1.4	
BT40-JTA 2- 45		2	14.199	45		24	4		1.1	
BT40-JTA 2- 90				90			20		1.4	
BT40-JTA33- 45		33	15.85	45	35		1.1			
BT40-JTA33- 90				90			24		1.4	
BT40-JTA 6- 45		6	17.17	45		5	35		1.1	
BT40-JTA 6- 90				90					1.4	
BT40-JTA 3- 45		3	20.599	45	5			35	1.2	
BT40-JTA 3- 90				90					28	1.5
45	BT45-JTA 1- 45	1	9.754	45		14	3		30	2.5
	BT45-JTA2S- 45	2Short	13.94	45		18				2.5
	BT45-JTA 2- 45	2	14.199	45	20	2.5				
	BT45-JTA33- 45	33	15.85	45	24	4	2.5			
	BT45-JTA 6- 45	6	17.17	45		24	2.5			
	BT45-JTA 3- 45	3	20.599	45	28	5	35	2.5		
50	BT50-JTA 1- 45	1	9.754	45	14	3	30	4.0		
	BT50-JTA 1-105			105				14	4.4	
	BT50-JTA2S- 45	2Short	13.94	45	18			4.0		
	BT50-JTA2S-105			105				4.4		
	BT50-JTA 2- 45	2	14.199	45		20		4	4.0	
	BT50-JTA 2-105			105				20	4.4	
	BT50-JTA33- 45	33	15.85	45	24			4	4.0	
	BT50-JTA33-105			105				4.4		
	BT50-JTA 6- 45	6	17.17	45		5		35	4.0	
	BT50-JTA 6-105			105					4.4	
	BT50-JTA 3- 45	3	20.599	45	28		5		35	4.0
	BT50-JTA 3-105			105						28



●DIN69871-SK / ANSI-B-5.50-CAT

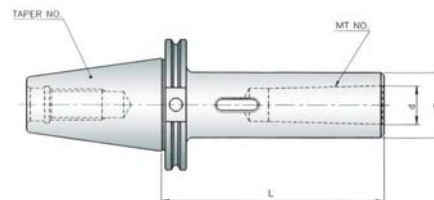
TAPER No.	CODE No.	JT No.	D	L	H1	H2	C	WEIGHT
40	SK40 -JTA 1- 45	1	9.754	45	15	3	30	1.1
	(CAT40) -JTA 2S- 45	2Short	13.94	45	18	3		
	-JTA 2- 45	2	14.199	45	20	4		
	-JTA33- 45	33	15.85	45	24	4		1.4
	-JTA 6- 45	6	17.17	45	24	4		
	-JTA 6- 90	6	17.17	90	24	4		1.5
45	-JTA 6- 105	6	17.17	105	24	4	30	2.5
	SK45 -JTA 1- 45	1	9.754	45	14	3		
	(CAT45) -JTA2S- 45	2Short	13.94	45	18	3		
	-JTA 2- 45	2	14.199	45	20	4		
	-JTA33- 45	33	15.85	45	24	4		
50	-JTA 6- 45	6	17.17	45	24	4	30	4.0
	SK50 -JTA 1- 45	1	9.754	45	14	3		
	(CAT50) -JTA2S- 45	2Short	13.94	45	18	3		
	-JTA 2- 45	2	14.199	45	20	4		
	-JTA33- 45	33	14.85	45	24	4		
	-JTA 6- 45	6	17.17	45	24	4		
	-JTA 6- 105	6	17.17	105	24	4		4.4

MORSE TAPER ADAPTER A TYPE (MTA) A型莫氏锥柄变换刀柄 (MTA)



● MAS 403-BT

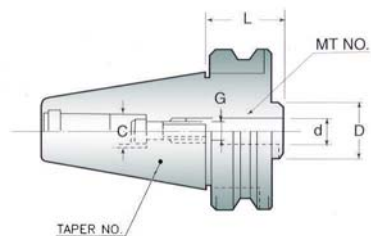
TAPER No.	CODE No.	MT No.	L	d	D	WEIGHT
30	BT30-MTA1- 45	1	45	12.065	25	0.4
	BT30-MTA2- 60	2	60	17.780	32	0.5
	BT30-MTA3- 75	3	75	23.825	40	0.7
35	BT35-MTA1- 45	1	45	12.065	25	0.9
	BT35-MTA2- 60	2	60	17.780	32	1.0
	BT35-MTA3- 75	3	75	23.825	40	1.1
40	BT40-MTA1- 45	1	45	12.065	25	1.0
	BT40-MTA1- 120		120			1.3
	BT40-MTA2- 60	2	60	17.780	32	1.0
	BT40-MTA2- 120		120			1.4
	BT40-MTA3- 75	3	75	23.825	40	1.2
	BT40-MTA3- 135		135			1.8
	BT40-MTA4- 95	4	95	31.267	50	1.1
	BT40-MTA4- 165		165			2.4
45	BT45-MTA1- 45	1	45	12.065	25	2.4
	BT45-MTA2- 45	2	45	17.780	32	2.3
	BT45-MTA3- 75	3	75	23.825	40	2.5
	BT45-MTA4- 90	4	90	31.267	50	2.7
	BT45-MTA5- 120	5	120	44.399	65	3.4
50	BT50-MTA1- 45	1	45	12.065	25	4.0
	BT50-MTA1- 120		120			4.3
	BT50-MTA1- 180		180			4.3
	BT50-MTA2- 45	2	45	17.780	32	4.0
	BT50-MTA2- 135		135			4.4
	BT50-MTA2- 180		180			4.6
	BT50-MTA3- 45	3	45	23.825	40	3.9
	BT50-MTA3- 150		150			4.7
	BT50-MTA3- 180		180			4.9
	BT50-MTA4- 75	4	75	31.267	50	4.0
	BT50-MTA4- 180		180			5.4
	BT50-MTA5- 105	5	105	44.399	65	4.5
	BT50-MTA5- 210		210			7.2


●DIN69871-SK / ANSI-B-5.50-CAT

TAPER No.	CODE No.	MT No.	L	d	D	WEIGHT
40	SK40 -MTA1- 45	1	45	12.065	25	1.0
	(CAT40)-MTA1- 120		120			1.3
	-MTA2- 60	2	60	17.780	32	1.0
	-MTA2- 120		120			1.4
	-MTA3- 75	3	75	23.825	40	1.2
	-MTA3- 135		135			1.8
	-MTA4- 95	4	95	31.267	50	1.1
	-MTA4- 165		165			2.4
45	SK45 -MTA1- 45	1	45	12.065	25	2.4
	(CAT45)-MTA1- 120		120			2.7
	-MTA2- 45	2	45	17.780	32	2.3
	-MTA2- 135		135			2.9
	-MTA3- 75	3	75	23.825	40	2.5
	-MTA3- 150		150			3.2
	-MTA4- 90	4	90	31.267	50	2.7
	-MTA4- 180		180			4.1
50	-MTA5- 120	5	120	44.399	63	3.4
	SK50 -MTA1- 45	1	45	12.065	25	4.0
	(CAT50)-MTA1- 120		120			4.3
	-MTA1- 180		180			4.3
	-MTA2- 45	2	45	17.780	32	4.0
	-MTA2- 135		135			4.4
	-MTA2- 180		180			4.6
	-MTA3- 45	3	45	23.825	40	3.9
	-MTA3- 150		150			4.7
	-MTA3- 180		180			4.9
	-MTA4- 75	4	75	31.267	50	4.0
	-MTA4- 180		180			5.4
	-MTA5- 105	5	105	44.399	65	4.5
	-MTA5- 210		210			7.2

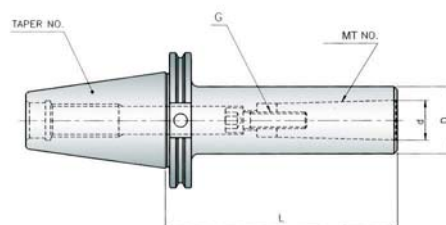
MORSE TAPER ADAPTER B TYPE (MTB)

B型莫氏锥柄变换刀柄 (MTB)

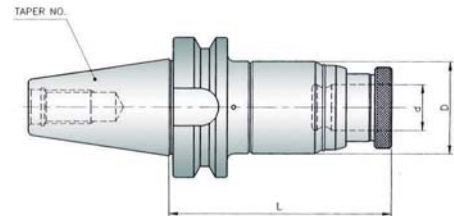


●MAS 403-BT

TAPER No.	CODE No.	MT No.	L	d	D	C	G	WEIGHT
30	BT30-MTB1-50	1	50	12.065	25	10	M 6×1	0.8
	BT30-MTB2-50	2	50	17.780	32	—	M 10×1.5	0.8
35	BT35-MTB1-50	1	50	12.066	25	10	M 6×1	0.9
	BT35-MTB2-50	2	50	17.780	32	—	M 10×1.5	0.8
	BT35-MTB3-70	3	70	23.825	40	—	M 12×1.75	1.0
40	BT40-MTB1-50	1	50	12.065	25	10	M 6×1	1.0
	BT40-MTB2-50	2	50	17.780	32	13.5	M 10×1.5	1.1
	BT40-MTB3-70	3	70	23.825	40	—	M 12×1.75	1.1
	BT40-MTB4-95	4	95	31.267	50	—	M 16×2	1.3
45	BT45-MTB1-45	1	45	12.065	25	10	M 6×1	2.4
	BT45-MTB2-60	2	60	17.780	32	16	M 10×1.5	2.4
	BT45-MTB3-65	3	65	23.825	40	18	M 12×1.75	2.4
	BT45-MTB4-70	4	70	31.267	50	—	M 16×2	2.5
50	BT50-MTB1-45	1	45	12.065	25	10	M 6×1	3.9
	BT50-MTB2-60	2	60	17.780	32	16	M 10×1.5	3.9
	BT50-MTB3-65	3	65	23.825	40	18	M 12×1.75	3.9
	BT50-MTB4-70	4	70	31.267	50	20.5	M 16×2	3.9


●DIN69871-SK / ANSI-B-5.50-CAT

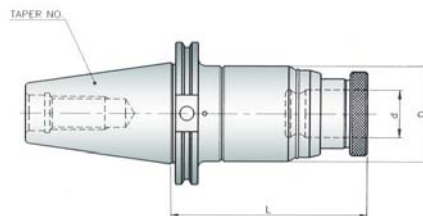
TAPER No.	CODE No.	MT No.	L	d	D	G	WEIGHT
40	SK40 -MTB1- 50	1	50	12.065	25	M 6×1	1.0
	(CAT40)-MTB2-50	2	50	17.780	32	M 10×1.5	1.1
	-MTB3-70	3	70	23.825	40	M 12×1.75	1.2
	-MTB4-95	4	95	31.267	50	M 16×2	1.3
45	SK45 -MTB1- 50	1	50	12.065	25	M 6×1	2.4
	(CAT45)-MTB2-60	2	60	17.780	32	M 10×1.5	2.4
	-MTB3-65	3	65	23.825	40	M 12×1.75	2.4
	-MTB4-70	4	70	31.267	50	M 16×2	2.5
50	SK50 -MTB1- 50	1	50	12.065	25	M 6×1	3.9
	(CAT50)-MTB2-60	2	60	17.780	32	M 10×1.5	3.9
	-MTB3-65	3	65	23.825	40	M 12×1.75	3.9
	-MTB4-70	4	70	31.267	50	M 16×2	3.9



● **MAS 403-BT**

TAPER No.	CODE No.	TAP SIZE	LENGH COMPENSATION		d	D	L	TAP ADAPTER CODE	WEIGHT
			COMP.	TEN.					
30	BT30-TC12-100	M3-M12	5	15	19	45	100	TCS12	1.2
35	BT35-TC12- 90	M3-M12	5	15	19	45	90	TCS12	1.2
	BT35-TC24-110	M8-M24	5	20	31	63	110	TCS24	1.8
40	BT40-TC12- 90	M3-M12	5	15	19	45	90	TCS12	1.5
	BT40-TC12-130						130		1.6
	BT40-TC24-100						100		2.1
	BT40-TC24-187	M8-M24	5	20	31	63	187	TCS24	3.5
45	BT45-TC12-115	M3-M12	5	15	19	45	115	TCS12	3.0
	BT45-TC24-105	M8-M24	5	20	31	63	105	TCS24	3.2
	BT45-TC38-130	M18-M38	10	25	48	98	130	TCS38	6.8
50	BT50-TC12-130						130		4.2
	BT50-TC12-175	M3-M12	5	15	19	45	175	TCS12	4.8
	BT50-TC12-220						220		5.1
	BT50-TC24-142						142		5.8
	BT50-TC24-187	M8-M24	5	20	31	63	187	TCS24	6.2
	BT50-TC38-175	M18-M38	10	25	48	98	175	TCS38	8.3

※ Having a built-in floating.



●DIN69871-SK / ANSI-B-5.50-CAT

TAPER No.	CODE No.	TAP SIZE	LENGTH COMPENSATION		d	D	L	TAP ADAPTER CODE	WEIGHT
			COMP.	TEN.					
40	SK40-TC12-90	M3~M12	5	15	19	45	90	TCS12	
	(CAT40)-TC12-130						130		
	-TC24-100	M8~M24	5	20	31	63	100	TCS24	
	-TC24-142						142		
45	SK45-TC12-115	M3~M12	5	15	19	45	115	TCS12	
	(CAT45)-TC24-105	M8~M24	5	20	31	63	105	TCS24	
	-TC38-130	M18~M38	10	25	48	98	130	TCS38	
	SK50-TC12-130	M3~M12	5	15	19	45	130	TCS12	
50	(CAT50)-TC12-175						175		
	-TC12-220						220		
	-TC24-142	M8~M24	5	20	31	63	142	TCS24	
	-TC24-187						187		
	-TC38-175	M18~M38	10	25	48	98	175	TCS38	

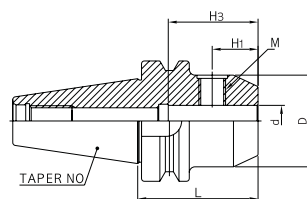


FIG1

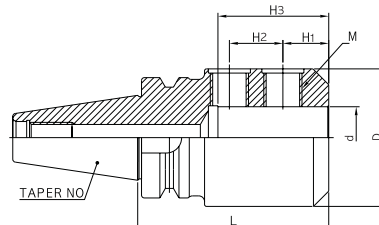


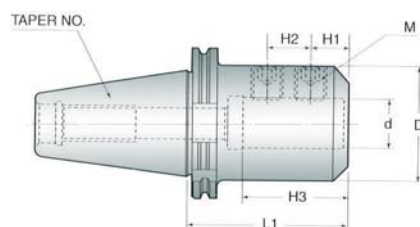
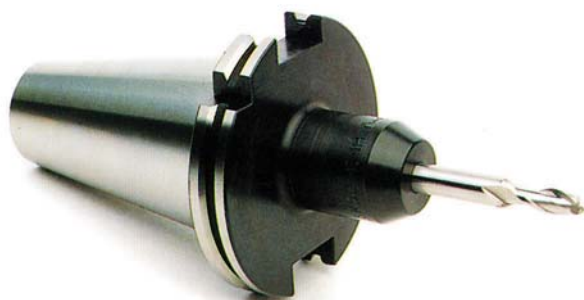
FIG2

● **MAS 403-BT**

TAPER No.	CODE No.	FIG.	d (H5)	D	L1	H1	H2	H3	M	WEIGHT
30	BT30-EMH 6- 60	1	6	25	60	18	—	35	M6	0.7
	BT30-EMH 8- 60	1	8	28	60	18	—	35	M8	0.8
	BT30-EMH10- 60	1	10	35	60	20	—	39	M10	0.9
	BT30-EMH12- 60	1	12	42	60	22.5	—	44	M12	1.1
	BT30-EMH16- 90	1	16	48	90	24	—	47	M14	1.3
	BT30-EMH20- 90	1	20	52	90	25	—	49	M16	1.4
35	BT35-EMH 6- 60	1	6	25	60	18	—	35	M6	0.8
	BT35-EMH 8- 60	1	8	28	60	18	—	35	M8	0.9
	BT35-EMH10- 60	1	10	35	60	20	—	39	M10	1.0
	BT35-EMH12- 60	1	12	42	60	22.5	—	44	M12	1.2
	BT35-EMH16- 60	1	16	48	60	24	—	47	M14	1.3
	BT35-EMH20- 60	1	20	52	60	25	—	49	M16	1.4
40	BT40-EMH 6- 75	1	6	25	75	18	—	35	M6	1.1
	BT40-EMH 8- 75	1	8	28	75	18	—	35	M8	1.1
	BT40-EMH10- 75	1	10	35	75	20	—	39	M10	1.2
	BT40-EMH12- 75	1	12	42	75	22.5	—	44	M12	1.4
	BT40-EMH16- 75	1	16	48	75	24	—	47	M14	1.5
	BT40-EMH20- 75	1	20	52	75	25	—	49	M16	1.6
	BT40-EMH25- 90	2	25	65	90	24	25	54	M18	2.2
45	BT45-EMH 6- 90	1	6	25	90	18	—	35	M6	2.3
	BT45-EMH 8- 90	1	8	28	90	18	—	35	M8	2.5
	BT45-EMH10- 90	1	10	35	90	20	—	39	M10	2.7
	BT45-EMH12- 90	1	12	42	90	22.5	—	44	M12	2.9
	BT45-EMH16- 90	1	16	48	90	24	—	47	M14	3.0
	BT45-EMH20- 90	1	20	52	90	25	—	49	M16	3.2
	BT45-EMH25- 105	2	25	65	105	24	25	54	M18	3.9
50	BT50-EMH 6- 90	1	6	25	90	18	—	35	M6	3.7
	BT50-EMH 8- 90	1	8	28	90	18	—	35	M8	3.9
	BT50-EMH10- 90	1	10	35	90	20	—	39	M10	4.1
	BT50-EMH12- 90	1	12	42	90	22.5	—	44	M12	4.3
	BT50-EMH16- 90	1	16	48	90	24	—	47	M14	4.4
	BT50-EMH20- 90	1	20	52	90	25	—	49	M16	4.6
	BT50-EMH25- 105	2	25	65	105	24	25	54	M18	5.3
	BT50-EMH32- 120	2	32	72	120	24	28	58	M20	5.6
	BT50-EMH40- 120	2	40	90	120	30	32	68	M20	7.3
	BT50-EMH42- 120	2	42	90	120	30	32	68	M20	7.1

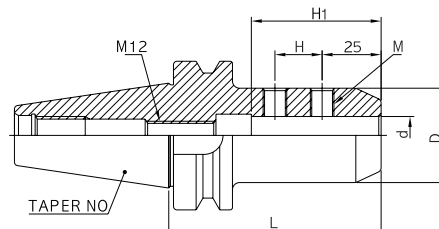
※ d(Tolerance of a inside diameter)=H5

■ Other accessories are available by placing extra order.


●DIN69871-SK / ANSI-B-5.50-CAT

TAPER No.	CODE No.	d	D	L1	H1	H2	H3	M	WEIGHT
40	SK40 -EMH 6- 75	6	25	75	18	—	35	M6	1.1
	(CAT40)-EMH 8- 75	8	28	75	18	—	35	M8	1.1
	-EMH10- 75	10	35	75	20	—	39	M10	1.2
	-EMH12- 75	12	42	75	22.5	—	44	M12	1.4
	-EMH16- 75	16	48	75	24	—	47	M14	1.5
	-EMH20- 75	20	50	75	25	—	49	M16	1.6
	-EMH25- 90	25	65	90	24	25	54	M18	2.2
45	-EMH32- 120	32	72	120	24	28	58	M20	3.2
	SK45 -EMH 6- 90	6	25	90	18	—	35	M6	2.3
	(CAT45)-EMH 8- 90	8	28	90	18	—	35	M8	2.5
	-EMH10- 90	10	35	90	20	—	39	M10	2.7
	-EMH12- 90	12	42	90	22.5	—	44	M12	2.9
	-EMH16- 90	16	48	90	24	—	47	M14	3.0
	-EMH20- 90	20	52	90	25	—	49	M16	3.2
50	-EMH25- 105	25	63	105	24	25	54	M18	3.9
	-EMH32- 120	32	72	120	24	28	58	M16	
	SK50 -EMH 6- 90	6	25	90	18	—	35	M6	3.7
	(CAT50)-EMH 8- 90	8	28	90	18	—	35	M8	3.9
	-EMH10- 90	10	35	90	20	—	39	M10	4.1
	-EMH12- 90	12	42	90	22.5	—	44	M12	4.3
	-EMH16- 90	16	48	90	24	—	47	M14	4.4
	-EMH20- 90	20	52	90	25	—	47	M16	4.6
	-EMH25- 105	25	65	105	24	25	54	M18	5.3
	-EMH32- 120	32	72	120	24	28	58	M20	5.6
	-EMH40- 120	40	90	120	30	32	68	M20	7.3
	-EMH42- 120	42	90	120	30	32	68	M20	7.1

■ Other accessories are available by placing extra order.

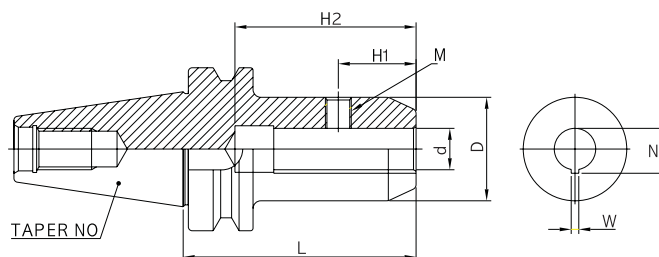


● **MAS 403-BT**

TAPER No.	CODE No.	d	L	H	D	M	H1		WEIGHT
							MIN.	MAX.	
30	BT30-SLA16- 75	16	75	20	40	M10	55	70	0.8
	BT30-SLA20- 75	20	75	20	50	M12	55	70	0.7
	BT30-SLA25- 75	25	75	20	49	M14	55	70	0.9
35	BT35-SLA20- 75	20	75	20	50	M12	55	70	1.2
	BT35-SLA25- 90	25	90	20	50	M14	55	70	1.4
40	BT40-SLA20- 90	20	90	20	50	M12	55	70	1.8
	BT40-SLA25- 90	25	90	20	50	M14	55	70	1.7
	BT40-SLA32- 90	32	90	25	60	M16	65	80	1.9
	BT40-SLA42- 90	42	90	25	80	M18	65	80	1.7
45	BT45-SLA20- 90	20	90	20	50	M12	55	70	3.0
	BT45-SLA25- 90	25	90	20	50	M14	55	70	2.9
	BT45-SLA32- 90	32	90	25	60	M16	65	80	3.0
50	BT50-SLA20- 105	20	105	20	50	M12	55	70	4.8
	BT50-SLA25- 105	25	105	20	50	M14	55	70	4.7
	BT50-SLA32- 105	32	105	25	60	M16	65	80	4.9
	BT50-SLA42- 105	42	105	25	80	M18	65	80	4.6

※ U-drill and straight boring bar are available.

■ Other accessories are available by placing extra order.



●MAS 403-BT

TAPER No.	CODE No.	D1	L1	H1	H2	C	M	W	N	WEIGHT
40	BT40-SLB 26-105	26	105	40	85	50	M10	5	28.2	1.3
	BT40-SLB 35-135	35	135	55	105	60	M10	6	37.6	2.2
	BT40-SLB35T-135	35	135	55	105	60	M10	7	38.2	2.2
45	BT45-SLB 26-105	26	105	40	85	50	M10	5	28.2	2.7
	BT45-SLB 35-135	35	135	55	106	60	M10	6	37.6	4.2
	BT45-SLB35T-135	35	135	55	106	60	M10	7	38.2	4.2
50	BT50-SLB 26-105	26	105	40	85	50	M10	5	28.2	4.4
	BT50-SLB 35-135	35	135	55	106	60	M10	6	37.6	4.7
	BT50-SLB35T-135	35	135	55	106	60	M10	7	38.2	4.7
	BT50-SLB 48-165	48	165	65	129	80	M10	8	51.0	6.5

※ To be used in combination with DSA drill socket.

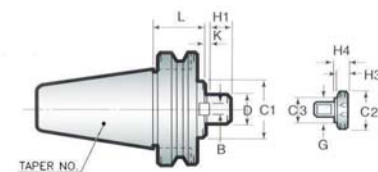


FIG1

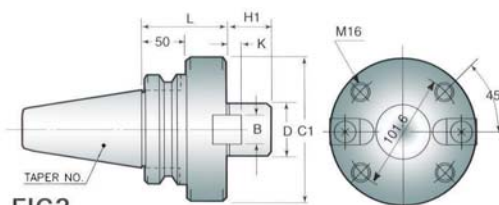


FIG2

● **MAS 403-BT**

TAPER No.	CODE No.	FIG	D	L	C1	H1	H2	B	K	G	C2	C3	H3	H4	WEIGHT
30	BT30-FMA25.4-45	1	25.4	45	50	22	—	9.5	5	M12	33	23	10	12	1.1
35	BT35-FMA25.4-45	1	25.4	45	50	22	—	9.5	5	M12	33	23	10	12	1.1
	BT35-FMA31.75-60		31.75	60	60	30	6	12.7	7	M16	40	23	10	16	1.6
40	BT40-FMA25.4-45	1	25.4	45	50	22	—	9.5	5	M12	33	23	10	12	1.5
	BT40-FMA25.4-90			90											3.1
	BT40-FMA31.75-45		31.75	45	60	30	6	12.7	7	M16	40	23	10	16	1.9
	BT40-FMA31.75-75			75											2.7
	BT40-FMA38.1-60		38.1	60	80	34	6	15.9	9	M20	50	27	14	20	2.9
	BT45-FMA25.4-45	1	25.4	45	50	22	—	9.5	5	M12	33	23	10	12	2.8
45	BT45-FMA25.4-120			120											4.0
	BT45-FMA31.75-45		31.75	45	60	30	6	12.7	7	M16	40	23	10	16	2.5
	BT45-FMA31.75-105			105											4.3
	BT45-FMA38.1-45		38.1	45	80	34	6	15.9	9	M20	50	27	14	20	3.0
	BT45-FMA38.1-75			75											4.2
50	BT45-FMA50.8-75	1	50.8	75	100	36	10	19.05	10	M24	65	37	14	24	4.7
	BT50-FMA25.4-45	1	25.4	45	50	22	—	9.5	5	M12	33	23	10	12	3.7
	BT50-FMA25.4-90			90											4.6
	BT50-FMA25.4-150			150											5.5
	BT50-FMA31.75-45		31.75	45	60	30	6	12.7	7	M16	40	23	10	16	4.5
	BT50-FMA31.75-75			75											5.3
	BT50-FMA31.75-105			105											6.1
	BT50-FMA38.1-45	1	38.1	45	80	34	6	15.9	9	M20	50	27	14	20	4.3
	BT50-FMA38.1-75			75											5.6
	BT50-FMA50.8-45		50.8	45	100	36	10	19.05	10	M24	65	37	14	24	4.9
	BT50-FMA50.8-75			75											6.8
	BT50-FMA47.625-75	2	47.625	75	128.57	38	—	25.4	12.5	—	—	—	—	—	7.7

■ Other accessories are available by placing extra order.

●MAS 403-BT
●METRIC TYPE

TAPER No.	CODE No.	FIG	D	L	C1	C2	H1	H2	W	K	G	C3	C4	H3	H4	WEIGHT
30	BT30-FMB27-40	4	27	40	80	—	26	—	12	6	M12	33	23	10	10	2.1
35	BT35-FMB27-40	4	27	40	80	—	26	—	12	6	M12	33	23	10	10	2.2
	BT35-FMB40-40	4	40	40	85	28	26	6	16	8.5	M20	50	27	14	20	2.2
40	BT40-FMB27-60	4	27	60	80	—	26	—	12	6	M12	33	23	10	10	2.5
	BT40-FMB27-90			90												4.7
	BT40-FMB40-60	4	40	60	85	28	26	6	16	8.5	M20	50	27	14	20	7.4
45	BT45-FMB27-60	1	27	60	80	—	26	—	12	6	M12	33	23	10	10	3.9
	BT45-FMB40-90	1	40	60	—	28	26	6	16	8.5	M20	50	27	14	20	4.0
	BT45-FMB40F-75	2	40	75	110	28	26	6	16	8.5	M20	50	27	14	20	5.1
50	BT50-FMB27-45	1	27	45	80	—	26	—	12	6	M12	33	23	10	12	4.0
	BT50-FMB27-90			90												5.8
	BT50-FMB27-150			150												8.2
	BT50-FMB40-45	1	40	45	85	28	26	6	16	8.5	M20	50	27	14	20	4.7
	BT50-FMB40-75			75												6.1
	BT50-FMB40-105			105												8.7
	BT50-FMB40F-75	2	40	75	110	28	26	6	16	8.5	M20	50	27	14	20	6.6
	BT50-FMB60-75	3	60	75	140	—	25	—	25.4	12.5	—	—	—	—	—	7.9

●MAS 403-BT
●INCH TYPE

TAPER No.	CODE No.	FIG	D	L	C1	C2	H1	H2	W	K	G	C3	C4	H3	H4	WEIGHT
30	BT30-FMB25.4-40	4	25.4	40	80	—	26	—	9.5	5	M12	33	23	10	12	2.1
35	BT35-FMB25.4-40	4	25.4	40	80	—	26	—	9.5	5	M12	33	23	10	12	2.2
	BT35-FMB38.1-40	4	38.1	40	85	28	26	6	15.9	9	M20	50	27	14	20	2.2
40	BT40-FMB25.4-60	4	25.4	60	80	—	26	—	9.5	5	M12	33	23	10	12	2.5
	BT40-FMB25.4-90			90												4.7
	BT40-FMB38.1-60	4	38.1	60	85	28	26	6	15.9	9	M20	60	27	14	20	7.4
45	BT45-FMB25.4-60	1	25.4	60	80	—	26	—	9.5	5	M12	33	23	10	12	3.9
	BT45-FMB38.1-60	1	38.1	60	—	28	26	6	15.9	9	M20	60	27	14	20	4.0
	BT45-FMB38.1F-75	2	38.1	75	110	28	26	6	15.9	9	M20	50	27	14	20	5.1
50	BT50-FMB25.4-45	1	25.4	45	80	—	26	—	9.5	5	M12	33	23	10	12	4.0
	BT50-FMB25.4-90			90												5.8
	BT50-FMB25.4-150			150												8.2
	BT50-FMB38.1-45	1	38.1	45	85	28	26	6	15.9	9	M20	50	27	14	20	4.7
	BT50-FMB38.1-75			75												6.1
	BT50-FMB38.1-105			105												8.7
	BT50-FMB38.1F-75	2	38.1	75	110	28	26	6	15.9	9	M20	50	27	14	20	6.6

■ Other accessories are available by placing extra order.

● MAS 403-BT

● METRIC TYPE

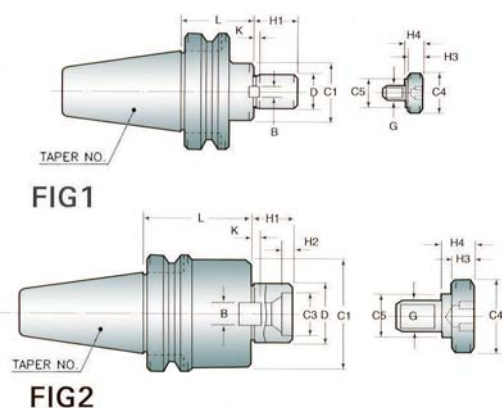
TAPER No.	CODE No.	FIG	D	L	C	H	W	K	G	WEIGHT
30	BT30-FMC22-40	3	22	40	45	18	10	5	M10	0.8
35	BT35-FMC22-30	2	22	30	—	18	10	5	M10	0.9
	BT35-FMC27-35	3	27	35	75	20	12	6	M12	1.1
	BT35-FMC32-40	3	32	40	85	22	14	7	M16	1.9
40	BT40-FMC22-45	1	22	45	45	15	10	5	M10	1.3
	BT40-FMC27-60	3	27	60	70	20	12	6	M12	1.5
	BT40-FMC32-60	3	32	60	85	22	14	7	M16	2.3
45	BT45-FMC22-45	1	22	45	45	15	10	5	M10	2.6
	BT45-FMC27-45	1	27	45	70	20	12	6	M12	4.1
	BT45-FMC32-60	2	32	60	—	22	14	7	M16	3.9
50	BT50-FMC22-60	1	22	60	45	18	10	5	M10	4.2
	BT50-FMC22-105			105						4.7
	BT50-FMC22-150			150						5.3
	BT50-FMC27-45	1	27	45	70	20	12	6	M12	4.1
	BT50-FMC27-90			90						5.5
	BT50-FMC27-150			150						7.3
	BT50-FMC32-45	1	32	45	85	22	14	7	M16	4.2
	BT50-FMC32-75			75						5.5
	BT50-FMC32-105			105						7.0

● MAS 403-BT

● INCH TYPE

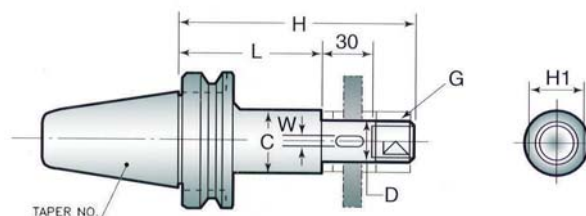
TAPER No.	CODE No.	FIG	D	L	C	H	W	K	G	WEIGHT
30	BT30-FMC25.4-40	3	25.4	40	70	20	9.5	6	M12	1.1
35	BT35-FMC25.4-35	3	25.4	35	70	20	9.5	6	M12	1.2
	BT35-FMC38.1-40	3	38.1	40	85	22	15.9	7	M16	2.0
40	BT40-FMC25.4-60	3	25.4	60	70	20	9.5	6	M12	1.5
	BT40-FMC25.4-90			90						2.2
	BT40-FMC38.1-60	3	38.1	60	85	22	15.9	7	M16	2.3
	BT40-FMC38.1-75			75						2.6
45	BT45-FMC25.4-45	1	25.4	45	70	20	9.5	6	M12	2.9
	BT45-FMC38.1-45	2	38.1	45	—	22	15.9	7	M16	3.0
50	BT50-FMC25.4-45	1	25.4	45	70	20	9.5	6	M12	4.1
	BT50-FMC25.4-90			90						5.5
	BT50-FMC25.4-150			150						7.3
	BT50-FMC38.1-45	1	38.1	45	85	22	15.9	7	M16	4.2
	BT50-FMC38.1-75			75						5.5
	BT50-FMC38.1-105			105						7.0

■ Other accessories are available by placing extra order.


●MAS 403-BT

TAPER No.	CODE No.	FIG	D	L	C1	C2	C3	H1	H2	B	K	G	C4	C5	H3	H4	WEIGHT											
30	BT30-SMA16- 30	1	16	30	38	—	—	17	—	8	3	M8	20	15	7	9	0.9											
	BT30-SMA22- 30	1	22	30	42	—	—	27	—	8	3.5	M10	28	18	9	11	1.0											
40	BT40-SMA16- 60	1	16	60	38			17		8	3	M8	20	15	7	9	1.3											
	BT40-SMA16- 120			120													1.7											
	BT40-SMA22- 60	1	22	60	42			27		8	3.5	M10	28	18	9	11	1.4											
	BT40-SMA22- 120			120													2.1											
	BT40-SMA27- 45	2	27	45	50	—	—	36	—	10	4	M12	33	23	10	12	1.4											
	BT40-SMA27- 105			105													2.3											
	BT40-SMA32- 45	2	32	45	60	—		38	—	10	4.5	M16	40	23	10	16	1.6											
	BT40-SMA32- 75			75													2.3											
BT40-SMA40- 60	2	40	60	80	—	28	38	6	12	5	M20	50	27	14	20	2.0												
50	BT50-SMA16- 75	1	16	75	38	—	—	17	—	8	3	M8	20	15	7	9	4.2											
	BT50-SMA16- 120			120													5.8											
	BT50-SMA22- 75	1	22	75	42	—	—	27	—	8	3.5	M10	28	18	9	11	4.3											
	BT50-SMA22- 120			120													4.8											
	BT50-SMA22- 180			180													5.5											
	BT50-SMA27- 60	2	27	60	50	—	—	36	—	10	4	M12	33	23	10	12	4.3											
	BT50-SMA27- 105	2		105		60											—	24	38	6	10	4.5	M16	40	23	10	16	5.2
	BT50-SMA27- 150	150		5.8																								
	BT50-SMA32- 45	2	32	45	60	—	24	38	6	10	4.5	M16	40	23	10	16	4.2											
	BT50-SMA32- 75	2		75		70											—	—	—	—	—	—	—	—	—	—	—	5.2
	BT50-SMA32- 105			105																								6.2
	BT50-SMA40- 45	2	40	45	80	—	28	38	6	12	5	M20	50	27	14	20	4.3											
BT50-SMA40- 75	75			5.5																								

■ Other accessories are available by placing extra order.



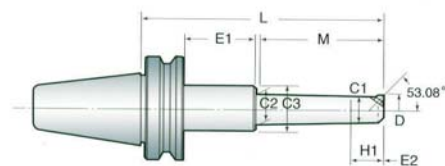
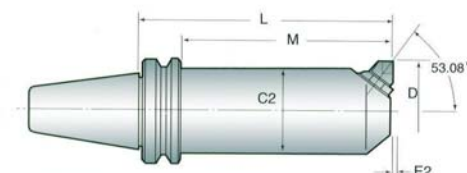
● **MAS 403-BT**

TAPER No.	CODE No.	H	H1	C	W	G	D	L	WEIGHT
30	BT30-SCA12.7 - 60	105	17	20		M12	12.7	60	1.0
	BT30-SCA15.875 - 60	106	23	26		M14	15.875	60	1.1
	BT30-SCA22.225 - 60	110	29	34	—	M20	22.225	60	1.2
	BT30-SCA25.4 - 60	115	32	40	3.18(4)	M24	25.4	60	1.3
35	BT35-SCA12.7 - 75	120	17	20	3.18(6)	M12	12.7	75	1.1
	BT35-SCA15.875 - 75	121	23	26	6.35(7)	M14	15.875	75	1.3
	BT35-SCA22.225 - 75	126	29	34	—	M20	22.225	75	1.6
	BT35-SCA25.4 - 75	130	32	40	3.18(4)	M24	25.4	130	1.9
40	BT40-SCA12.7 - 75	120	17	20	3.18(6)	M12	12.7	75	1.2
	BT40-SCA12.7 -105	150					12.7	105	1.3
	BT40-SCA15.875 - 75	121	23	26	—	M14	15.875	75	1.4
	BT40-SCA15.875 -105	151					15.875	105	1.5
	BT40-SCA22.225 - 75	126	29	34	3.18(4)	M20	22.225	75	1.7
	BT40-SCA22.225 -120	171					22.225	120	2.0
	BT40-SCA25.4 -75	130	32	40	3.18(6)	M24	25.4	75	2.0
	BT40-SCA25.4 -120	175					25.4	120	2.4
45	BT40-SCA31.75 -90	150	41	46	6.35(7)	M30	31.75	90	2.6
	BT45-SCA12.7 -75	120	17	20	7.92(8)	M12	12.7	75	2.6
	BT45-SCA15.875 -90	136	23	26	—	M14	15.875	90	2.8
	BT45-SCA22.225 -90	141	29	34	3.18(4)	M20	22.225	90	3.1
	BT45-SCA25.4 -90	145	32	40	3.18(6)	M24	25.4	90	3.4
50	BT45-SCA31.75 -90	150	41	46	6.35(7)	M30	31.75	90	3.8
	BT50-SCA12.7 -75	120	17	20	7.92(8)	M12	12.7	75	4.1
	BT50-SCA12.7 -105	150					12.7	105	4.2
	BT50-SCA15.875 -90	136	23	26	3.14(4)	M14	15.875	90	4.2
	BT50-SCA15.875 -120	166					15.875	120	4.3
	BT50-SCA22.225 -90	144	29	34	3.18(6)	M20	22.225	90	4.4
	BT50-SCA22.225 -135	186					22.225	135	4.7
	BT50-SCA25.4 -90	145	32	40	6.35(3)	M24	25.4	90	4.5
	BT50-SCA25.4 -135	190					25.4	135	4.9
	BT50-SCA31.75 -90	150	41	46	7.92(3)	M30	31.75	90	4.7
	BT50-SCA31.75 -135	195					31.75	135	5.2
	BT50-SCA38.1 -90	156	46	55	9.52(10)	M36	38.1	90	4.9
	BT50-SCA38.1 -135	201					38.1	135	5.9

※ The size cutter of JIS B4206, JIS B4107 and JIS B4109 could be equipped.

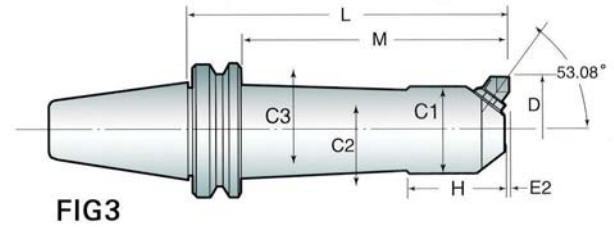
※ The key and collet are included as accessories and the depth of collar included is 3,5,7,8,10 and 12mm each.

■ Other accessories are available by placing extra order.


FIG1

FIG2
●MAS 403-BT

CODE No.	FIG.	D		L	M	C1	C2	C3	H	E1	E2	MICRO UNIT	WEIGHT
		MIN.	MAX.										
BT30-BCA13.5-105	1	13.5	16	105	68	12	13.0	44	15	5	0.2	M1B2 E/F	1.1
BT30-BCA14.5-105	1	14.5	17	105	68	13	14.0	44	15	5	0.2	M1B2 E/F	1.1
BT30-BCA16-105	3	16	22.5	105	73	14	15	—	18	—	0.2	M1A2 E/F	1.1
BT30-BCA19-120	1	19	23	120	85	16	18	44	23	3	0.2	M2B2 E/F	1.2
BT30-BCA23-135	3	23	29	135	105	19	22	—	24	—	0.2	M3B2XT	1.2
BT30-BCA29-150	1	29	41	150	115	25	28	44	30	8	0.2	M3A2XT	1.4
BT30-BCA29-195				195	115					53			1.8
BT30-BCA38-150	1	38	49	150	115	33	35	55	41	8	0.2	M5B2XT	1.7
BT30-BCA39-210				210	175		37						2.3
BT30-BCA46-150	1	46	66	150	115	38	41	55	45	8	0.2	M5A2XT	2.9
BT30-BCA46-210				210	175		45						3.0
BT30-BCA62-165	2	62	87	165	135	51					0.2	M7A2XT	2.9
BT35-BCA13.5-90	1	13.5	16	90	60	12	13	44	15	3	0.2	M1B2 E/F	0.8
BT35-BCA14.5-90	1	14.5	17	90	60	14	14	44	15	3	0.2	M1B2 E/F	0.8
BT35-BCA16-105	1	16	22.5	105	73	15	15	44	18	5	0.2	M1A2 E/F	0.9
BT35-BCA19-105	1	19	23	105	73	18	18	44	23	5	0.2	M2B2 E/F	0.9
BT35-BCA23-105	1	23	29	105	75	22	22	44	24	3	0.2	M3B2XT	0.9
BT35-BCA29-120	1	29	41	120	90	28	28	44	30	3	0.2	M3A2XT	1.1
BT35-BCA38-135	1	38	49	135	105	35	35	48	41	3	0.2	M5B2XT	1.4
BT35-BCA46-150	1	46	66	150	120	42	42	48	45	3	0.2	M5A2XT	1.9
BT35-BCA62-150	2	62	87	150	125	—	—	—	—	—	0.3	M7A2XT	2.6
BT35-BCA83-135	4	83	108	135	110	—	—	—	—	—	0.3	M7A2XT	3.6

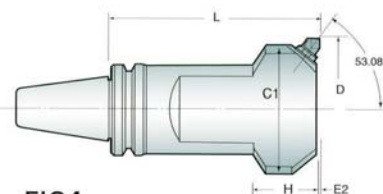
■ Other accessories are available by placing extra order.



● **MAS 403-BT**

CODE No.	FIG.	D		L	M	C1	C2	C3	H	E1	E2	MICRO UNIT	WEIGHT		
		MIN.	MAX.												
BT40-BCA13.5-105	1	13.5	16	105	68	12	13.0	44	15	5	0.2	M1B2 E/F	1.1		
BT40-BCA14.5-105	1	14.5	17	105	68	13	14.0	44	15	5	0.2	M1B2 E/F	1.1		
BT40-BCA16-105	3	16	22.5	105	73	14	15	—	18	—	0.2	M1A2 E/F	1.1		
BT40-BCA19-120	1	19	23	120	85	16	18	44	23	3	0.2	M2B2 E/F	1.2		
BT40-BCA23-135	3	23	29	135	105	19	22	—	24	—	0.2	M3B2XT	1.2		
BT40-BCA29-150	1	29	41	150	115	25	28	44	30	8	0.2	M3A2XT	1.4		
BT40-BCA29-195				195	115					53			1.8		
BT40-BCA38-150	1	38	49	150	115	33	35	55	41	8	0.2	M5B2XT	1.7		
BT40-BCA38-210				210	175		37						2.3		
BT40-BCA46-150	1	46	66	150	115	38	41	55	45	8	0.2	M5A2XT	2.9		
BT40-BCA46-210				210	175		45						3.0		
BT40-BCA62-165	2	62	87	165	135	51	—	—	—	—	0.2	M7A2XT	2.9		
BT40-BCA62-210				210	180								4.0		
BT40-BCA83-150	2	83	108	150	120	63	—	—	—	—	0.2	M7A2XT	3.4		
BT40-BCA83-210				210	180								5.5		
BT40-BCA98-150	4	98	142	150	120	83	—	—	85	—	0.2	M10A2XT	4.8		
BT45-BCA13.5-105	1	13.5	16	105	65	12	13	44	15	7	0.2	M1B2 E/F	2.2		
BT45-BCA14.5-105	1	14.5	17	105	65	13	14	44	15	7	0.2	M1B2 E/F	2.2		
BT45-BCA16-120	1	16	22.5	120	75	14	15	44	18	12	0.2	M1A2 E/F	2.2		
BT45-BCA19-135	1	19	23	135	90	16	18	44	23	12	0.2	M2B2 E/F	2.2		
BT45-BCA23-150	1	23	29	150	105	19	22	44	24	12	0.2	M3B2 E/F	2.7		
BT45-BCA29-165	1	29	41	165	115	25	28	44	40	17	0.2	M3A2XT	2.8		
BT45-BCA29-180				180	130								2.9		
BT45-BCA38-165	1	38	49	165	115	33	35	55	41	17	0.2	M5B2XT	2.8		
BT45-BCA38-210				210	160		37			17			3.2		
BT45-BCA46-165	1	46	66	165	115	38	41	55	45	17	0.2	M5A2XT	3.2		
BT45-BCA46-225				225	175		45			17			3.7		
BT45-BCA46-255				255	205					17			4.2		
BT45-BCA62-180	1	62	87	180	142	51	—	—	60	—	0.2	M7A2XT	4.5		
BT45-BCA62-225	—			225	185		57			3			4.7		
BT45-BCA62-300	—			300	260		60			70			6.1		
BT45-BCA83-165	2	83	108	165	130	63	—	—	70	—	0.2	M7A2XT	5.1		
BT45-BCA83-240	—			240	200		62			—			7.6		
BT45-BCA83-315	—			315	270					—			9.6		
BT45-BCA98-165	2	98	142	165	130	83	—	—	—	—	0.2	M10A2XT	7.1		
BT45-BCA98-240				240	200								10.1		
BT45-BCA98-315				315	—								14.3		

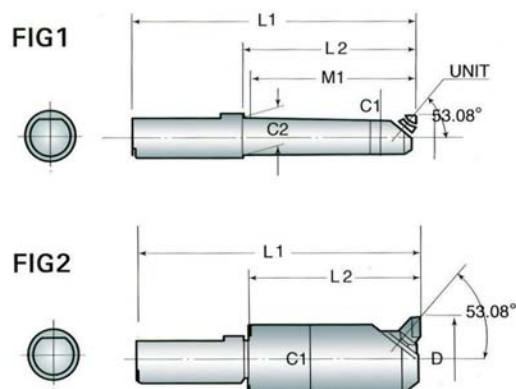
■ Other accessories are available by placing extra order.


FIG4
●MAS 403-BT

CODE No.	FIG.	D		L	M	C1	C2	C3	H	E1	E2	MICRO UNIT	WEIGHT	
		MIN.	MAX.											
BT50-BCA13.5-120	1	13.5	16	120	67	12	13	44	15	10	0.2	M1B2 E/F	4.0	
BT50-BCA13.5-195				85						5.0				
BT50-BCA14.5-120	1	14.5	17	120	67	13	14	44	15	10	0.2	M1B2 E/F	4.0	
BT50-BCA14.5-195				85						5.0				
BT50-BCA16-120	1	16	22.5	120	73	14	15	44	18	4	0.2	M1A2 E/F	4.0	
BT50-BCA16-195				195						79			5.0	
BT50-BCA19-135	1	19	23	135	86	16	18	44	23	6	0.2	M2B2 E/F	4.0	
BT50-BCA19-120				210						81			5.0	
BT50-BCA23-150	1	23	29	150	105	19	22	44	24	2	0.2	M3B2XT	4.0	
BT50-BCA23-225				225						77			5.1	
BT50-BCA29-165	1	29	41	165	115	25	28	44	30	7	0.2	M3A2XT	4.5	
BT50-BCA29-225				225						67			5.5	
BT50-BCA38-165	1	38	49	165	115	33	35	55	41	7	0.2	M5B2XT	4.5	
BT50-BCA38-225				225	172		37			10			5.6	
BT50-BCA46-165	1	46	66	165	115	38	41	55	45	7	0.2	M5A2XT	5.0	
BT50-BCA46-225	3			225	182		45	—		—			—	5.5
BT50-BCA46-255	1			255	206			55		6			6.0	
BT50-BCA62-180	2	62	87	180	137	51	—	—	—	—	0.2	M7A2XT	6.0	
BT50-BCA62-240	1			240	184		57	70	60	13			7.0	
BT50-BCA62-330				330	280		60			7			8.5	
BT50-BCA83-165	2	83	108	165	122	63	—	—	—	—	0.2	M7A2XT	9.5	
BT50-BCA83-240	1			240	190		62	90	95	7			9.0	
BT50-BCA83-345				345	295					7			12.0	
BT50-BCA98-165	2	98	142	165	122	83	—	—	—	—	0.2	M10A2XT	8.5	
BT50-BCA98-240	3			240	197		92	85	—	—			11.5	
BT50-BCA98-345				345	302								17.0	
BT50-BCA132-210	4	132	176	210	—	108	—	—	65	—	0.2	M10A2XT	12.0	
BT50-BCA132-315	315			—	—		—	18.5						
BT50-BCA166-225	4	166	210	225	—	142	—	—	70	—	0.2	M10A2XT	13.0	
BT50-BCA166-315				315	—		—	—		18.5				
BT50-BCA200-210	4	200	244	210	—	176	—	—	75	—	0.2	M10A2XT	20.0	

■ Other accessories are available by placing extra order.

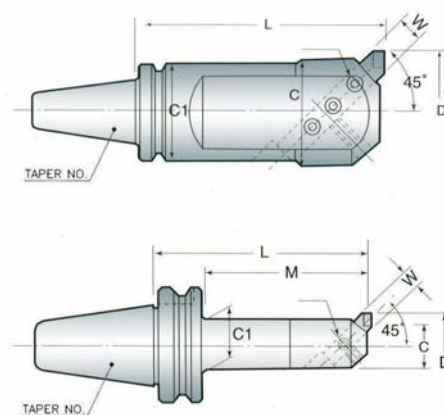
STRAIGHT SHANK



●STRAIGHT SHANK

CODE No.	FIG.	D		L1	L2	M1	C1	C2	MICRO UNIT	WEIGHT
		MIN.	MAX.							
ST25-BCA13.5-75	1	13.5	15.9	135	75	67	12	13	M1B2E or F	0.5
ST25-BCA14.5-75	1	14.5	16.9	135	75	67	12	14	M1B2E or F	0.5
ST25-BCA16-90	1	16	22.4	150	90	82	14	15	M1A2E or F	0.5
ST25-BCA19-90	1	19	23.0	150	90	82	16	18	M2B2E or F	0.5
ST25-BCA23-120	1	23	29.4	180	120	110	19	22	M3B-2XT	0.5
ST25-BCA29-120	2	29	41.8	180	120	110	25	28	M3A-2XT	1
ST25-BCA38-120	2	38	49.2	180	120	115	33	35	M5B-2XT	1
ST25-BCA46-120	2	46	66.6	180	120	115	38	-	M5A-2XT	1.5
ST32-BCA13.5-75	1	13.5	15.9	145	75	67	12	13	M1B2E or F	0.5
ST32-BCA14.5-75	1	14.5	16.9	145	75	67	12	14	M1B2E or F	0.5
ST32-BCA16-90	1	16	22.4	160	90	82	14	15	M1A2E or F	0.5
ST32-BCA19-90	1	19	23.0	160	90	82	16	18	M2B2E or F	0.5
ST32-BCA23-120	1	23	29.4	190	120	110	19	22	M3B-2XT	1
ST32-BCA29-120	1	29	41.8	190	120	110	25	28	M3A-2XT	1
ST32-BCA38-120	2	38	49.2	190	120	115	33	35	M5B-2XT	1.5
ST32-BCA46-120	2	46	68.6	190	120	115	38	-	M5A-2XT	1.5
ST32-BCA62-120	2	62	87.4	190	120	115	51	-	M7A-2XT	2.5
ST42-BCA13.5-85	1	13.5	15.9	165	85	67	12	13	M1B2E or F	1.0
ST42-BCA14.5-85	1	14.5	16.9	165	85	67	12	14	M1B2E or F	1.0
ST42-BCA16-100	1	16	22.4	180	100	82	14	15	M1A2E or F	1.0
ST42-BCA19-100	1	19	23.0	180	100	82	16	18	M2B2E or F	1.0
ST42-BCA23-120	1	23	29.4	200	120	110	19	22	M3B-2XT	1.5
ST42-BCA29-120	1	29	41.8	200	120	110	25	28	M3A-2XT	1.5
ST42-BCA38-130	1	38	49.2	210	130	125	33	35	M5B-2XT	1.5
ST42-BCA46-135	1	46	66.6	215	135	130	38	44	M5A-2XT	1.5
ST42-BCA62-135	2	62	87.4	215	135	130	51	-	M7A-2XT	2.5
ST42-BCA83-150	2	83	108	230	150	145	63	-	M7A-2XT	3.0

■ Other accessories are available by placing extra order.

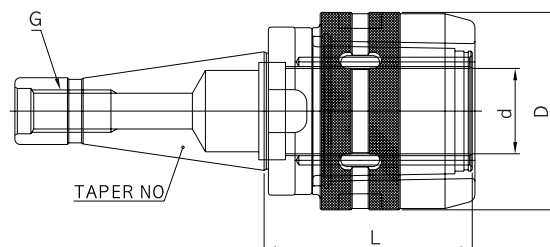

●MAS 403-BT

TAPER No.	CODE No.	D.		L	C	C1	W	M	WEIGHT
		MIN.	MAX.						
30	BT30-BSA25-120	25	38	120	20	22	8	90	1.0
	BT30-BSA30-135	30	42	135	24	26	8	105	1.1
	BT30-BSA38-150	38	52	150	30	33	10	120	1.4
	BT30-BSA42-150	42	56	150	34	37	10	125	1.6
	BT30-BSA50-150	50	65	150	40	44	13	125	1.8
40	BT40-BSA25-135	25	38	135	20	22	8	108	1.3
	BT40-BSA30-165	30	42	165	24	26	8	138	1.5
	BT40-BSA38-180	38	52	180	30	33	10	153	1.8
	BT40-BSA42-210	42	56	210	34	37	10	183	2.3
	BT40-BSA50-180	50	65	180	40	44	13	153	2.4
	BT40-BSA50-225	50	65	225	40	44	13	198	2.9
	BT40-BSA62-180	62	90	180	50	56	16	153	3.2
	BT40-BSA62-240	62	90	240	50	56	16	213	4.2
	BT40-BSA72-180	72	110	180	60	63	19	153	4.4
	BT40-BSA72-240	72	110	240	60	63	19	213	5.7
	BT40-BSA90-180	90	125	180	75	75	19	153	5.4
	BT40-BSA90-180	90	125	180	75	75	19	153	5.4
50	BT50-BSA25-135	25	38	135	20	22	8	95	4.4
	BT50-BSA30-165	30	42	165	24	26	8	125	4.6
	BT50-BSA38-180	38	52	180	30	33	10	140	4.8
	BT50-BSA42-210	42	56	210	34	37	10	170	5.0
	BT50-BSA50-180	50	65	180	40	44	13	140	5.4
	BT50-BSA50-240	50	65	240	40	44	13	200	5.7
	BT50-BSA62-195	62	90	195	50	56	16	155	6.1
	BT50-BSA62-270	62	90	270	50	56	16	230	7.5
	BT50-BSA72-195	72	110	195	60	66	19	155	6.9
	BT50-BSA72-285	72	110	285	60	66	19	245	9.3
	BT50-BSA90-210	90	125	210	75	80	19	170	9.2
	BT50-BSA90-300	90	125	300	75	80	19	260	12.3
	BT50-BSA105-195	105	160	195	90	90	25	157	10.5
	BT50-BSA105-285	105	160	285	90	90	25	247	14.8

※ A separate purchase should be made for a square bite.

■ Other accessories are available by placing extra order.

ISO-NT

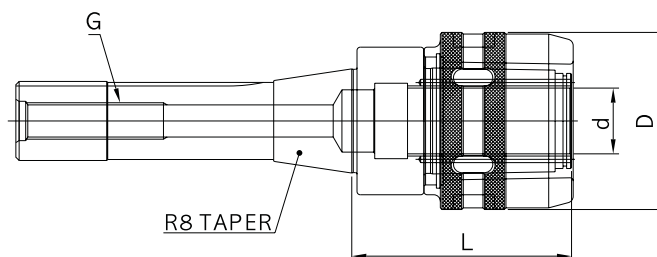


●ISO-NT

TAPER No.	CODE No.	d	D	L	COLLET	G
30	NT30-C20	20	54	67	K20, CK20	U1/2"-13
40	NT40-C20	20	54	70	K20, CK20	U5/8"-11
	NT40-C32	32	74	80	K32, CK32	U5/8"-11
50	NT50-C20	20	54	83	K20, CK20	U1"-8
	NT50-C32	32	74	85	K32, CK32	U1"-8
	NT50-C42	42	92	102	K42, CK42	U1"-8

※ Advise in advance if want a draw bolt(G) in metric.
ex) NT 40M - C32

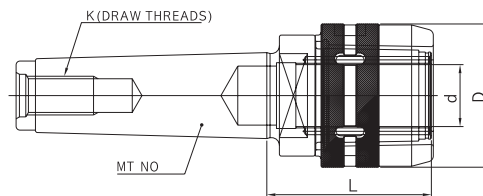
- Additional charge is imposed on the spanner.
- Other accessories are available by placing extra order.



●BRIDGEPORT-R8

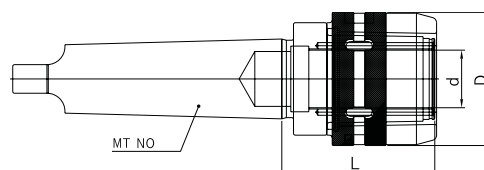
CODE NO.	d	D	L	COLLET	G
R8-C20	20	54	69	K20, CK20	U7/16"-20

- Additional charge is imposed on the spanner.
- Other accessories are available by placing extra order.


●DIN228-MTB

MT No.	CODE No.	d	D	L	K	COLLET
MT3	MTB3-C20	20	54	74	M12×1.75	K20, CK20
MT4	MTB4-C32	32	74	110	M16×2	K32, CK32
MT5	MTB5-C32	32	74	85	M20×2.5	K32, CK32
	MTB5-C42	42	92	114	M20×2.5	K42, CK42

- Additional charge is imposed on the spanner.
- Other accessories are available by placing extra order.


●DIN228-MTA

MT NO.	CODE NO.	d	D	L	COLLET
MT4	MTA4-C32	32	74	98	K32, CK32
MT5	MTA5-C32	32	74	85	K32, CK32
MT6	MTA5-C42	42	92	114	K42, CK42
	MTA6-C42	42	92	99	K42, CK42

※ Please advise the model of machine and company name for selection of cotter home.

- Additional charge is imposed on the spanner.
- Other accessories are available by placing extra order.



MACHINE SPINDLE TAPER	STANDARD SET CODE No.	MILLING CHUCK	END MILL COLLET	MORSE TAPER COLLET	DRILL CHUCK BAR	CENTERING BAR
R8	SR8-20	R8-C20	K20-(6-16) (5PCS)	K20-MT1,2	K20-J6	K20-C10
NT30	SNT30-20	NT30-C20	K20-(6-16) (5PCS)	K20-MT1,2	K20-J6	K20-C10
NT40	SNT40-32A	NT40-C32	K32-(6-25) (7PCS)	—	—	—
	SNT40-32	NT40-C32	K32-(6-25) (7PCS)	K32-MT1,2,3	K32-J6	K32-C10
NT50	SNT50-32A	NT50-C32	K32-(6-25) (7PCS)	—	—	—
	SNT50-32	NT50-C32	K32-(6-25) (7PCS)	K32-MT1,2,3	K32-J6	K32-C10
	SNT50-42A	NT50-C42	K42-(6-32) (8PCS)	—	—	—
	SNT50-42	NT50-C42	K42-(6-32) (8PCS)	K42-MT1,2,3,4	K42-J6	K42-C15
NT60	SNT60-42	NT60-C42	K42-(6-32) (8PCS)	K42-MT1,2,3,4	K42-J6	K42-C15

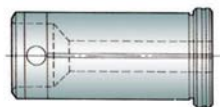
※ Wooden box available for set

Above set will be made in INCH unless you specify a standard of size in advance.

■ Other accessories are available by placing extra order.

● **END MILL COLLET**

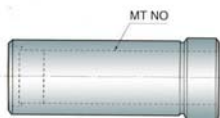
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CODE No.	SET
K20-6, 8, 10, 12, 16	5pcs
K32-6, 8, 10, 12, 16, 20, 25	7pcs
K42-6, 8, 10, 12, 16, 20, 25, 32	8pcs

● **TAPER COLLET**

锥形夹头.



CODE No.
K20-MT1, 2
K32-MT1, 2, 3
K42-MT1, 2, 3, 4

● **DRILL CHUCK ARBOR**

钻加头刀柄.



CODE No.
K20-J6
K32-J6
K42-J6

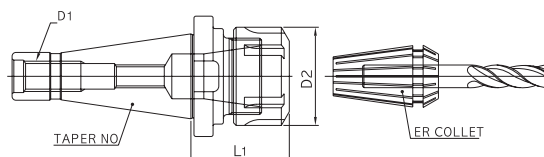
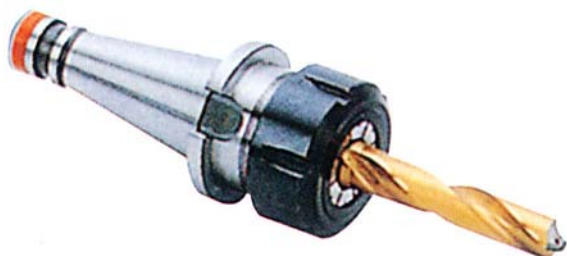
● **CENTERING BAR**

中心检测棒.



CODE No.
K20-C10
K32-C10
K42-C16

ISO-NT

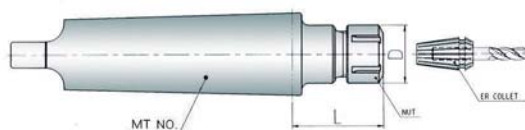


ISO-NT

TAPER No.	CODE No.	RANGE	D1	D2	L1	NUT	COLLET
30	NT30-ER16-40	0.5~10.0	U1/2"-13	28	40	Hi-Q/ER16	ER16
	NT30-ER20-40	1.0~13.0		34	40	Hi-Q/ER20	ER20
	NT30-ER25-50	1.0~16.0		42	50	Hi-Q/ER25	ER25
	NT30-ER32-50	2.0~20.0		50	50	Hi-Q/ER32	ER32
40	NT40-ER16-40	0.5~10.0	U5/8"-11	28	40	Hi-Q/ER16	ER16
	NT40-ER20-40	1.0~13.0		34	40	Hi-Q/ER20	ER20
	NT40-ER25-50	1.0~16.0		42	50	Hi-Q/ER25	ER25
	NT40-ER32-50	2.0~20.0		50	50	Hi-Q/ER32	ER32
	NT40-ER40-55	3.0~26.0		63	55	Hi-Q/ER40	ER40
	NT40-ER50-70	12.0~34.0		78	70	Hi-Q/ER50	ER50
50	NT50-ER16-40	0.5~10.0	U1"-8	28	40	Hi-Q/ER16	ER16
	NT50-ER20-40	1.0~13.0		34	40	Hi-Q/ER20	ER20
	NT50-ER25-55	1.0~16.0		42	55	Hi-Q/ER25	ER25
	NT50-ER32-55	2.0~20.0		50	55	Hi-Q/ER32	ER32
	NT50-ER40-60	3.0~26.0		63	60	Hi-Q/ER40	ER40
	NT50-ER50-65	12.0~34.0		78	65	Hi-Q/ER40	ER40

■ Additional charge is imposed on the spanner.

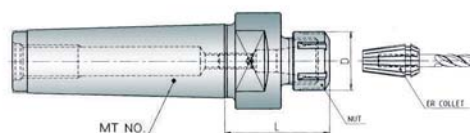
■ Other accessories are available by placing extra order.


●DIN228-MTA

MT No.	CODE No.	RANGE	D	L	NUT	COLLET
1	MTA1-ER11	0.5~ 7.0	19	35	Hi-Q/ER11	ER11
	MTA1-ER16	0.5~10.0	28	40	Hi-Q/ER16	ER16
2	MTA2-ER20	1.0~13.0	34	50	Hi-Q/ER20	ER20
	MTA2-ER25	1.0~16.0	42	50	Hi-Q/ER25	ER25
3	MTA3-ER25	1.0~16.0	42	60	Hi-Q/ER25	ER25
	MTA3-ER32	2.0~20.0	50	70	Hi-Q/ER32	ER32
5	MTA4-ER20	1.0~13.0	34	40	Hi-Q/ER20	ER20
	MTA4-ER25	1.0~16.0	42	60	Hi-Q/ER25	ER25
	MTA4-ER32	2.0~20.0	50	65	Hi-Q/ER32	ER32
	MTA4-ER40	3.0~26.0	63	80	Hi-Q/ER40	ER40
5	MTA5-ER40	3.0~26.0	63	80	Hi-Q/ER40	ER40
	MTA5-ER50	12.0~34.0	78	80	Hi-Q/ER50	ER50

■ Additional charge is imposed on the spanner.

■ Other accessories are available by placing extra order.


●DIN228-MTB

MT NO	CODE NO	RANGE	D	L	NUT	COLLET
1	MTB1-ER16	0.5~10.0	28	40	Hi-Q/ER16	ER16
2	MTB2-ER20	1.0~13.0	34	54	Hi-Q/ER20	ER20
	MTB2-ER25	1.0~16.0	42	50	Hi-Q/ER25	ER25
3	MTB3-ER25	1.0~16.0	42	60	Hi-Q/ER25	ER25
	MTB3-ER32	2.0~20.0	50	70	Hi-Q/ER32	ER32
4	MTB4-ER32	2.0~20.0	50	70	Hi-Q/ER32	ER32
	MTB4-ER40	3.0~26.0	63	80	Hi-Q/ER40	ER40
5	MTB5-ER40	3.0~26.0	63	80	Hi-Q/ER40	ER40
	MTB5-ER50	12.0~34.0	78	80	Hi-Q/ER50	ER50

■ Additional charge is imposed on the spanner.

■ Other accessories are available by placing extra order.

NT / MT



● NT / MT

MACHINE SPINDLE TAPER	STANDARD CODE No.	ER COLLET CHUCK	ER COLLET	ER NUT
NT40	SNT40-ER32	NT40-ER32	ER32- ϕ 3,6,8,10,12,16,20(7PCS)	Hi-Q/ER32
	SNT40-ER40	NT40-ER40	ER40- ϕ 6,8,10,12,16,20,25(7PCS)	Hi-Q/ER40
NT50	SNT50-ER40	NT50-ER40	ER40- ϕ 6,8,10,12,16,20,25(7PCS)	Hi-Q/ER40
	SNT50-ER50-A	NT50-ER50	ER50- ϕ 12,16,20,26,30,32(6PCS)	Hi-Q/ER50
	SNT50-ER50-B	NT50-ER50	ER50- ϕ 2,14,16,18,20,22,24,26,28,30,32,34(12PCS)	Hi-Q/ER50
MT4	SMT4-ER32-A	MT4-ER32	ER32- ϕ 3,4,5,6,8,10,12,16,20(9PCS)	Hi-Q/ER32
	SMT4-ER32-B	MT4-ER32	ER32- ϕ 3,4,5,6,7,8,9,10,11,12,13,14,15,16, ϕ 17,18,19,20(18PCS)	Hi-Q/ER32
MT5	SMT5-ER32-A	MT5-ER32	ER32- ϕ 3,4,5,6,8,10,12,16,20(9PCS)	Hi-Q/ER32
	SMT5-ER32-B	MT5-ER32	ER32- ϕ 3,4,5,6,7,8,9,10,11,12,13,14,15,16, ϕ 17,18,19,20(18PCS)	Hi-Q/ER32

※ Wooden box available for set.

※ Seperate purchase needed for GM/ER NUT.

※ Additional collet available by placing extra order.

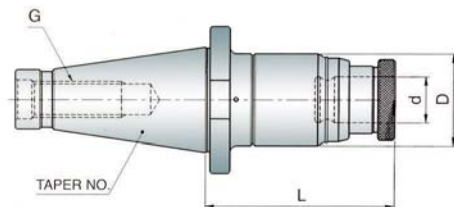
■ Other accessories are available by placing extra order.



●PULL STUD BOLT

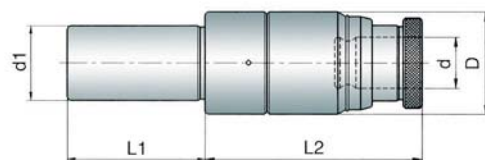
CODE No.	D	d2	d1	d	L	I	G	θ°	TYPE
PS-1	15	23	17	10	60	35	M16	45°	BT40- I STANDARD
PS-2	15	23	17	10	60	35	M16	60°	BT40- II STANDARD
PS-3	19	31	21	14	70	40	M20	45°	BT45- I STANDARD
PS-4	19	31	21	14	70	40	M20	60°	BT45- II STANDARD
PS-5	23	38	25	17	85	45	M24	45°	BT50- I STANDARD
PS-6	23	38	25	17	85	45	M24	60°	BT50- II STANDARD
PS-16	11	16.5	12.5	7	43	23	M12	45°	BT30- I STANDARD
PS-17	11	16.5	12.5	7	43	23	M12	60°	BT30- II STANDARD
PS-7	15	23	17	10	87	35	M12	45°	BT40- I FOR MTB3
PS-29	15	23	17	10	87	35	M12	60°	BT40- II FOR MTB3
PS-0	23	38	25	17	85	45	M24	90°	BT50 FOR OKK
PS-08	15	23	17	10	60	35	M16	90°	BT40 FOR OKK
PS-G41	29	37	25	21	65.2	25.2	M24	45°	BT50 FOR MAZAK
PS-G51	18.8	22	17	12	44.1	19.1	M16	45°	BT40 FOR MAZAK
PS-S2	25	39	25	18	95	55	M24	60°	FOR SHIN NIPPON KOKI

ISO-NT

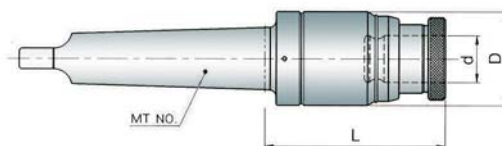


● ISO-NT

CODE No.	TAP SIZE	LENCH COMPENSATION		d	D	L	TAP ADAPTER CODE	G
		COMP.	TEN.					
NT40-TC12- 90	M3~M12	5	15	19	45	90	TCS12	U5/8"×11
NT40-TC12-130						130		
NT40-TC24-100	M8~M24	5	20	31	63	100	TCS24	
NT40-TC24-140						140		
NT40-TC12-100	M3~M12	5	15	19	45	100	TCS12	U1"×8
NT40-TC12-130						130		
NT40-TC12-150						150		
NT40-TC24-100	M8~M24	5	20	31	63	100	TCS24	
NT40-TC24-130						130		
NT40-TC38-150	M18~M38	10	25	48	98	150	TCS38	



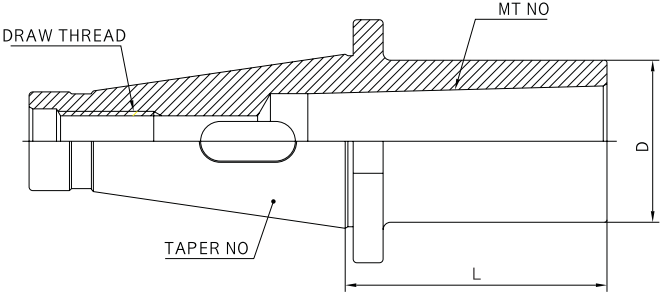
CODE NO.	TAP SIZE	LENCH COMPENSATION		L1	L2	D	d	TAP ADAPTER CODE
		COMP.	TEN.					
K32-TC12-100	M3~M12	5	15	60	100	45	32	TCS12
K32-TC24-120	M8~M24	5	20	60	120	63	32	TCS24
K42-TC12-100	M3~M12	5	15	70	100	45	42	TCS12
K42-TC24-120	M8~M24	5	20	70	120	63	42	TCS24



● **DIN228-MTA**

MT No.	CODE No.	TAP	Length COMPENSATION		d	D	L	TAP ADAPTER CODE
			COMP.	TEN.				
MT3	MTA3-TC12- 90	M3-M12	5	15	19	45	90	TCS12
	MTA3-TC24- 115	M8-M24	5	20	31	63	115	TCS24
MT4	MTA4-TC12- 105	M3-M12	5	15	19	45	105	TCS12
	MTA4-TC24- 115	M8-M24	5	20	31	63	115	TCS24
MT5	MTA5-TC12- 145	M3-M12	5	15	19	45	145	TCS12
	MTA5-TC24- 115	M8-M24	5	20	31	63	115	TCS24

MORSE TAPER ADAPTER (MTA)
A型莫氏锥柄变换刀柄 (MTA)



● **ISO-NT**

TAPER No.	CODE No.	MT No.	DRILL RANGE		D	L	DRAW THRED
			MIN	MAX			
40	NT40-MTA1-30	MT1	2.0	14.0	25	30	U 5/8" -11 (M16×2)
	NT40-MTA2-30	MT2	14.1	23.0	32	30	
	NT40-MTA3-35	MT3	23.1	32.0	40	45	
	NT40-MTA4-90	MT4	32.1	50.0	50	90	
50	NT50-MTA1-30	MT1	2.0	14.0	25	30	U 1"-8 (M24×3)
	NT50-MTA2-30	MT2	14.1	23.0	32	30	
	NT50-MTA3-30	MT3	23.1	32.0	40	30	
	NT50-MTA4-45	MT4	32.1	50.0	50	45	
	NT50-MTA5-105	MT5	50.1	75.0	60	105	

FIG1

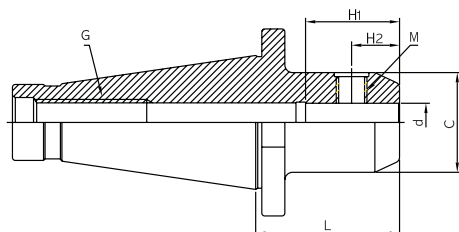
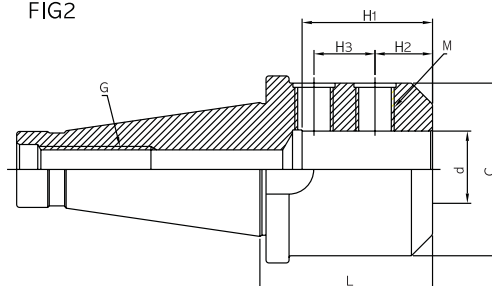


FIG2

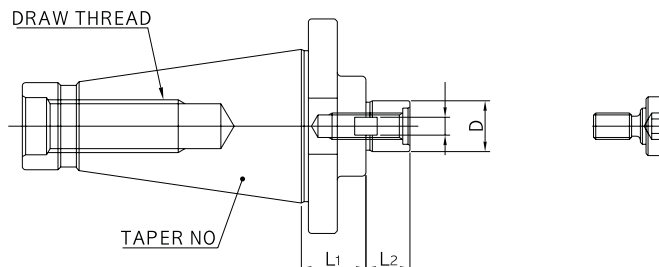


● ISO-NT

CODE No.	FIG	D	L	C	H1	H2	H3	M	G
NT40-EMH6-60	1	6	60	25	35	18	—	M6	U5/8"-11
NT40-EMH8-60		8		28	35	18	—	M8	
NT40-EMH10-60		10		35	39	20	—	M10	
NT40-EMH12-60		12	75	42	44	22.5	—	M12	
NT40-EMH16-75		16		48	47	24	—	M14	
NT40-EMH20-75		20		52	49	25	—	M16	
NT40-EMH25-90	2	25	90	65	54	24	25	M18	
NT40-EMH32-90		32		72	58	24	28	M20	
NT50-EMH6-60	1	6	60	25	35	18	—	M6	U1"-8
NT50-EMH8-60		8		28	35	18	—	M8	
NT50-EMH10-60		10		35	39	20	—	M10	
NT50-EMH12-60		12	75	42	44	22.5	—	M12	
NT50-EMH16-75		16		48	47	24	—	M14	
NT50-EMH20-75		20		52	49	25	—	M16	
NT50-EMH25-90	2	25	90	65	54	24	25	M18	
NT50-EMH32-90		32		72	58		28	M20	
NT50-EMH40-90		40							
NT50-EMH42-90		42		90	68	30	28	M20	
NT50-EMH50.8-118	2	50.8	118	—	—	—	—	M20	

■ Other accessories are available by placing extra order.

ISO-NT

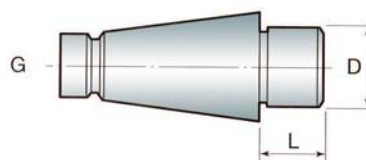


● ISO-NT

TAPER No.	CODE No.	CUTTER ϕ	L1	L2	D	DRAW THREAD	OLD CODE No.
40	NT40-FMA25.4	3" (75 ϕ)	30	22	25.4	U 5/8" -11 (M16 $\times$ 2)	NT40-3R
	NT40-FMA31.75	4" (100 ϕ)	30	30	31.75		NT40-4R
	NT40-FMA38.1	5" (125 ϕ)	30	34	38.1		NT40-5R
	NT40-FMA50.8	6" (150 ϕ)	30	36	50.8		NT40-6R
50	NT50-FMA25.4	3" (75 ϕ)	30	22	25.4	U 1"-8 (M24 $\times$ 3)	NT50-3R
	NT50-FMA31.75	4" (100 ϕ)	30	30	31.75		NT50-4R
	NT50-FMA38.1	5" (125 ϕ)	30	34	38.1		NT50-5R
	NT50-FMA50.8	6" (150 ϕ)	30	36	50.8		NT50-6R
	NT50-FMA47.625	8" (200 ϕ)	45	38	47.625		NT50-8R
60	NT60-FMA50.8	6" (150 ϕ)	30	36	50.8	U 1 1/4"-7	NT60-6R
	NT60-FMA47.625	8" (200 ϕ)	45	38	47.625		NT60-8R

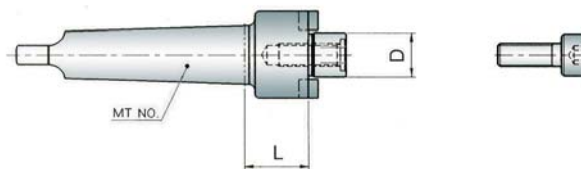
■ Other accessories are available by placing extra order.

ISO-NT



● ISO-NT

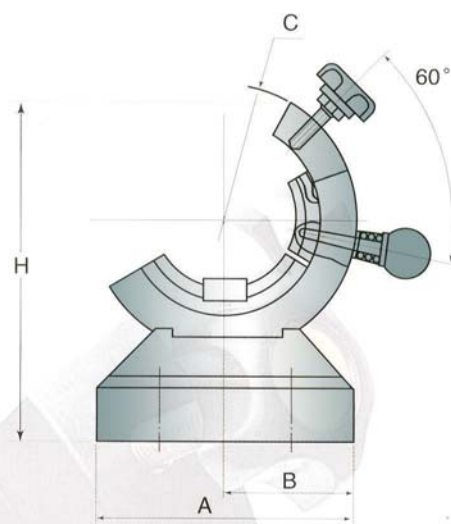
TYPE	CODE No.	D	L	G
50	NT50-CP47.625	47.625	38	U1 $\times$ 8
	NT50-CP60	60	38	
60	NT60-CP47.625	47.625	38	U1 1/4-7
	NT60-CP60	60	38	



● **DIN228-MTA**

MT No.	CODE No.	RANGE	D	L	NUT	COLLET
5	MTA5-FMA25.4	25.4	40	22	M12 × 17.5	6.5
	MTA5-FMA31.75	31.75	41.5	30	M16 × 2	
	MTA5-FMA38.1	38.1	45	34	M20 × 2.5	
6	MTA6-FMA25.4	25.4	45	22	M12 × 17.5	8
	MTA6-FMA31.75	31.75	45	30	M16 × 2	
	MTA6-FMA38.1	38.1	45	34	M20 × 2.5	
	MTA6-FMA50.8	50.8	45	36	M24 × 3	
	MTA6-FMA47.625	47.625	48	38	—	

■ Other accessories are available by placing extra order.



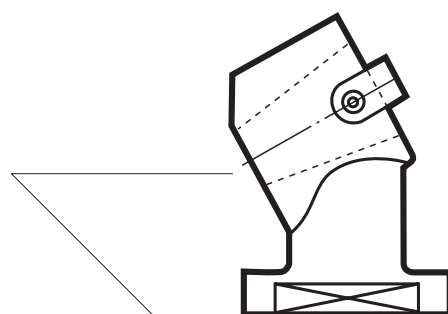
CODE No.	TAPER No.	A	B	C	H	WEIGHT
TCP-30	BT-30	125	65	108	135	3.0
TCP-40	BT-40	160	80	138	180	7.6
TCP-50	BT-50	180	90	165	205	8.6

※ NT, SK shank type is available on your request.

■ Characteristics

1. It has no effect on taper shank :
Don't make surface damages such as abrasion and scratch on the taper shank, which cause the Run-out of tool.
2. Easy to fasten or lose the pull stud bolt.
3. Safe and convinient in spanner wrench operation with milling chuck and ER collet.

■ Example for usage of other makers



Example for usage of other makers
serious elamage on the taper shank is
caused by extraneous substance in
SLEEVE.

