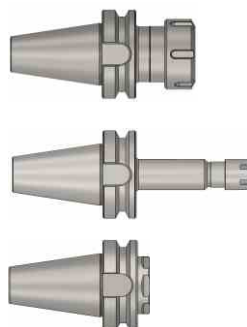


Precision Tool Holders

BT (MAS 403)



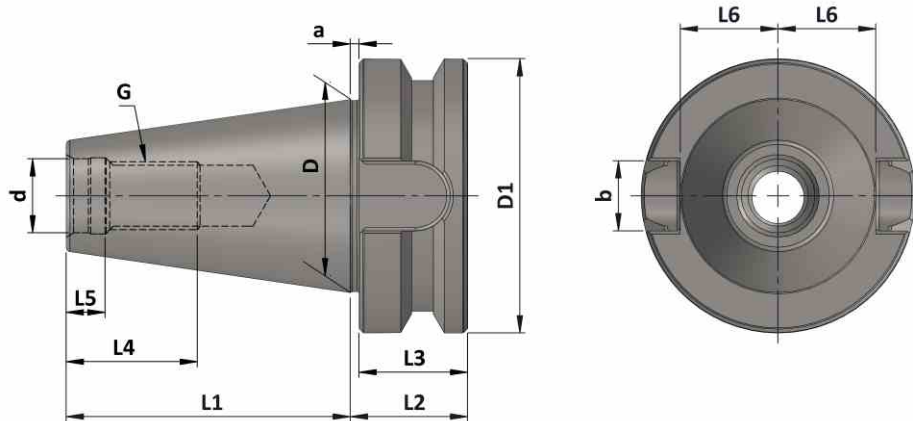
INDEX

Sr. No.	Contents		Page No.
1	Technical Information : BT-MAS 403		3
2	Collet Chuck ER (DIN 6499) • Collet Chuck ER (AD) • Collet Chuck ER (AD+B) • Collet Chuck ER M-Type (AD+B) • Collet Chuck ER A Short GP		4 - 8
3	Weldon Type End Mill Holder (DIN 6359) • Weldon (WN) (AD) • Weldon (WN) (AD+B)		9 - 13
4	Face Mill Holder (DIN 6357) • FMH (AD) • FMH-K Through Coolant (AD+B)		14 - 15
5	Morse Taper Adaptor (MTA) (DIN 6383)		16
6	Combi Shell Mill Adaptor (CSMA) (DIN 6358)		17
7	Reduction Sleeve (BT50 x BT40)		18
8	Boring Bar Blank		19
9	Arbor		20

INDEX

Sr. No.	Contents		Page No.
10	NC Drill Chuck (NCDC)		21
11	Master Mandrell		22
12	Die & Mould Chuck (DMC)		23 - 24
13	Power Milling Chuck (PMC)		25 - 26
14	Milling Cutter Arbor (MCA)		27 - 29
15	Floating Reamer Holder (FRH)		30
16	Shrink Fit Holder (SFH)		31 - 36
17	Minimum Length Compensation Tapping Chuck (MLC)		37 - 38
18	Quick Change Tapping Chuck (Q)		39
19	Hydraulic Expansion Chuck (HC)		40
20	Quick Change Tapping Chuck (KWFLK)		41 - 42
21	Precision Tool Holders (BT - MAS 403) Inch Series • Side Lock Adaptor (SLA) • Face Mill Holder (FMH)	 	43 - 44

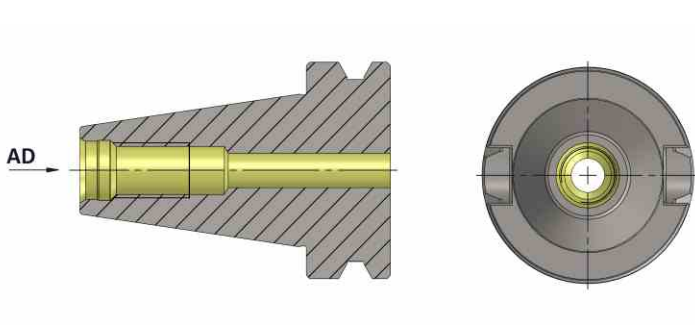
BT (MAS 403) Form A



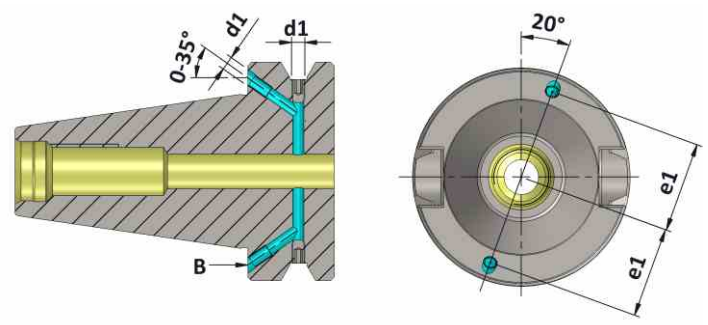
BT (MAS 403)
Holders

ISO	d	d1	D	D1	a	b	e1	G	L1	L2	L3	L4	L5	L6
30	12.5	-	31.75	46	2	16.1	-	M12	48.4	22	20	24	7.0	16.3
40	17	M4	44.45	63	2	16.1	27	M16	65.4	27	25	32	9.0	22.6
50	25	M6	69.85	100	3	25.7	42	M24	101.8	38	35	47	13.0	35.4

BT (MAS 403) Form AD



BT (MAS 403) Form AD+B



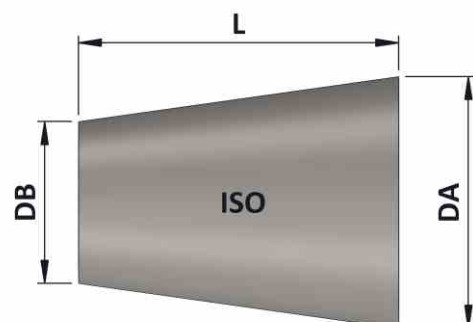
Material :- Case hardened steel, tensile strength in the core min. 950 N/mm²

Execution :- Case hardened to HRC 58 ± 2, Case Depth 0.8 mm., Silver finish.

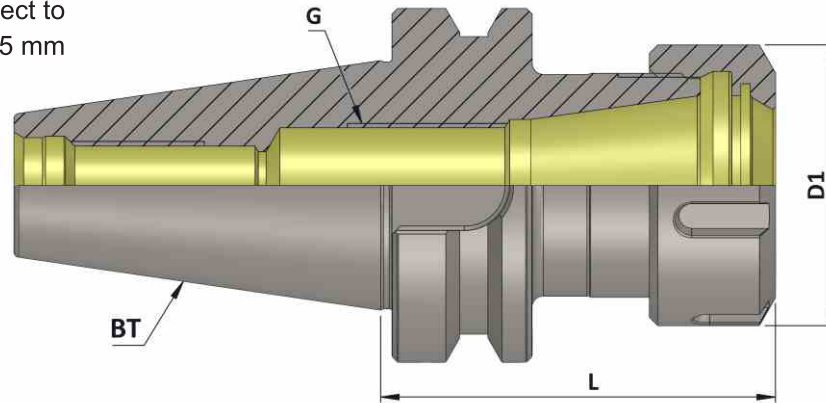
Accuracy :- 7:24 Taper Angle Class AT 3 As per DIN 2080

Taper Class AT 3 Details

ISO	L	DA-DB	AT 3
30	42	12.280	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



Maximum Run out of the
Internal Taper with respect to
the External Taper 0.005 mm



BT (MAS 403) Collet Chuck ER (AD)

(Balanced to 6.3 G 15000 RPM)

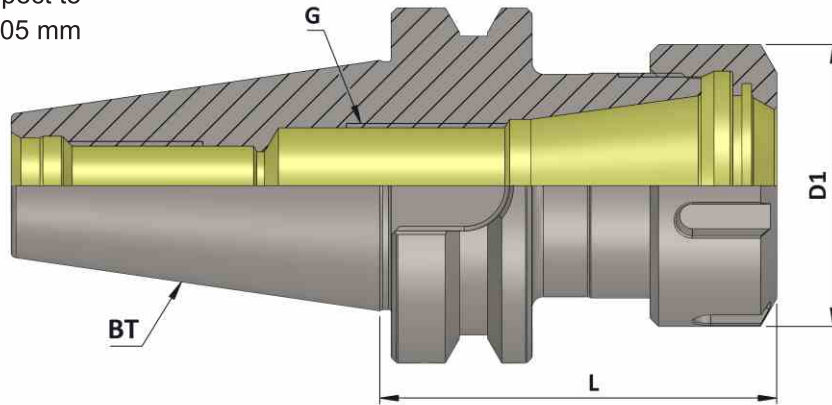
Item Name	Item Code	ISO	Suitable Collet	Collet Capacity	D1	G	L	Nut	Spanner
BT 30 ER 16 060 AD/6.3G15000 SL	K10101149117110	30	ER 16	0.5-10	32	M10X1p	60	UM/ER16	E16
BT 30 ER 16 100 AD/6.3G15000 SL	K10101149148110	30	ER 16	0.5-10	32	M10X1p	100	UM/ER16	E16
BT 30 ER 20 060 AD/6.3G15000 SL	K10101150117110	30	ER 20	1.0-13	35	M10X1p	60	UM/ER20	E20
BT 30 ER 20 100 AD/6.3G15000 SL	K10101150148110	30	ER 20	1.0-13	35	M10X1p	100	UM/ER20	E20
BT 30 ER 25 060 AD/6.3G15000 SL	K10101151117110	30	ER 25	1.0-16	42	M18X1p	60	UM/ER25	E25
BT 30 ER 25 100 AD/6.3G15000 SL	K10101151148110	30	ER 25	1.0-16	42	M18X1p	100	UM/ER25	E25
BT 30 ER 32 060 AD/6.3G15000 SL	K10101152117110	30	ER 32	2.0-20	50	M22X1.5p	60	UM/ER32	E32
BT 30 ER 32 100 AD/6.3G15000 SL	K10101152148110	30	ER 32	2.0-20	50	M22X1.5p	100	UM/ER32	E32
BT 30 ER 40 080 AD/6.3G15000 SL	K10101153131110	30	ER 40	3.0-26	63	M30X1.5p	80	UM/ER40	E40

(Balanced to 2.5 G 25000 RPM)

Item Name	Item Code	ISO	Suitable Collet	Collet Capacity	D1	G	L	Nut	Spanner
BT 30 ER 32 050 AD/2.5G25000SL	K10101152111228	30	ER 32	2.0-20	50	M22X1.5P	50	UM/ER32	E32
BT 40 ER 16 070 AD/6.3G15000 SL	K10102149125110	40	ER 16	0.5-10	32	M10X1p	70	UM/ER16	E16
BT 40 ER 16 100 AD/6.3G15000 SL	K10102149148110	40	ER 16	0.5-10	32	M10X1p	100	UM/ER16	E16
BT 40 ER 16 160 AD/6.3G15000 SL	K10102149175110	40	ER 16	0.5-10	32	M10X1p	160	UM/ER16	E16
BT 40 ER 20 070 AD/6.3G15000 SL	K10102150125110	40	ER 20	1.0-13	35	M10X1p	70	UM/ER20	E20
BT 40 ER 20 100 AD/6.3G15000 SL	K10102150148110	40	ER 20	1.0-13	35	M10X1p	100	UM/ER20	E20
BT 40 ER 20 160 AD/6.3G15000 SL	K10102150175110	40	ER 20	1.0-13	35	M10X1p	160	UM/ER20	E20
BT 40 ER 25 070 AD/6.3G15000 SL	K10102151125110	40	ER 25	1.0-16	42	M18X1p	70	UM/ER25	E25
BT 40 ER 25 100 AD/6.3G15000 SL	K10102151148110	40	ER 25	1.0-16	42	M18X1p	100	UM/ER25	E25
BT 40 ER 25 160 AD/6.3G15000 SL	K10102151175110	40	ER 25	1.0-16	42	M18X1p	160	UM/ER25	E25
BT 40 ER 32 070 AD/6.3G15000 SL	K10102152125110	40	ER 32	2.0-20	50	M22X1.5p	70	UM/ER32	E32
BT 40 ER 32 100 AD/6.3G15000 SL	K10102152148110	40	ER 32	2.0-20	50	M22X1.5p	100	UM/ER32	E32
BT 40 ER 32 160 AD/6.3G15000 SL	K10102152175110	40	ER 32	2.0-20	50	M22X1.5p	160	UM/ER32	E32
BT 40 ER 40 070 AD/6.3G15000 SL	K10102153125110	40	ER 40	3.0-26	63	M30X1.5p	70	UM/ER40	E40
BT 40 ER 40 100 AD/6.3G15000 SL	K10102153148110	40	ER 40	3.0-26	63	M30X1.5p	100	UM/ER40	E40
BT 40 ER 40 160 AD/6.3G15000 SL	K10102153175110	40	ER 40	3.0-26	63	M30X1.5p	160	UM/ER40	E40
BT 40 ER 50 100 AD/6.3G15000 SL	K10102154148110	40	ER 50	10.0-34	78	M16X2p	100	UM/ER50	E50

Note: All Dimensions are in mm

Maximum Run out of the
Internal Taper with respect to
the External Taper 0.005 mm



BT (MAS 403) Collet Chuck ER (AD)

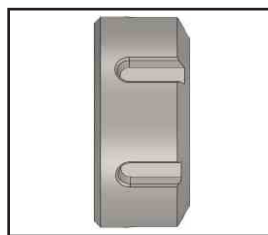
(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	Suitable Collet	Collet Capacity	D1	G	L	Nut	Spanner
BT50 ER 16 080 AD/6.3G15000 SL	K10103149131110	50	ER 16	0.5-10	32	M10X1p	80	UM/ER16	E16
BT50 ER 16 100 AD/6.3G15000 SL	K10103149148110	50	ER 16	0.5-10	32	M10X1p	100	UM/ER16	E16
BT50 ER 16 160 AD/6.3G15000 SL	K10103149175110	50	ER 16	0.5-10	32	M10X1p	160	UM/ER16	E16
BT50 ER 20 100 AD/6.3G15000 SL	K10103150148110	50	ER 20	1.0-13	35	M10X1p	100	UM/ER20	E20
BT50 ER 20 160 AD/6.3G15000 SL	K10103150175110	50	ER 20	1.0-13	35	M10X1p	160	UM/ER20	E20
BT50 ER 25 080 AD/6.3G15000 SL	K10103151131110	50	ER 25	1.0-16	42	M18X1p	80	UM/ER25	E25
BT50 ER 25 100 AD/6.3G15000 SL	K10103151148110	50	ER 25	1.0-16	42	M18X1p	100	UM/ER25	E25
BT50 ER 25 160 AD/6.3G15000 SL	K10103151175110	50	ER 25	1.0-16	42	M18X1p	160	UM/ER25	E25
BT50 ER 32 080 AD/6.3G15000 SL	K10103152131110	50	ER 32	2.0-20	50	M22X1.5p	80	UM/ER32	E32
BT50 ER 32 100 AD/6.3G15000 SL	K10103152148110	50	ER 32	2.0-20	50	M22X1.5p	100	UM/ER32	E32
BT50 ER 32 160 AD/6.3G15000 SL	K10103152175110	50	ER 32	2.0-20	50	M22X1.5p	160	UM/ER32	E32
BT50 ER 40 080 AD/6.3G15000 SL	K10103153131110	50	ER 40	3.0-26	63	M30X1.5p	80	UM/ER40	E40
BT50 ER 40 100 AD/6.3G15000 SL	K10103153148110	50	ER 40	3.0-26	63	M30X1.5p	100	UM/ER40	E40
BT50 ER 40 160 AD/6.3G15000 SL	K10103153175110	50	ER 40	3.0-26	63	M30X1.5p	160	UM/ER40	E40
BT50 ER 50 100 AD/6.3G15000 SL	K10103154148110	50	ER 50	10.0-34	78	M16X2p	100	UM/ER50	E50
BT50 ER 50 160 AD/6.3G15000 SL	K10103154175110	50	ER 50	10.0-34	78	M16X2p	160	UM/ER50	E50

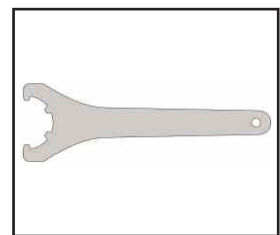
Accessories



For Collet ER (DIN 6499)
Ref. Page No. 229-235



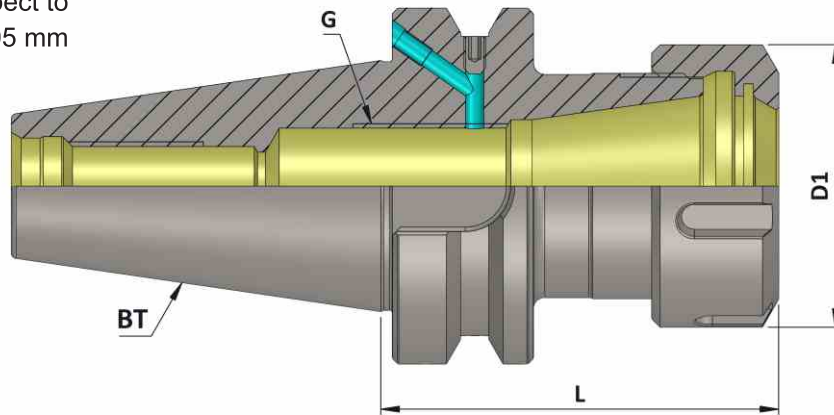
For ER Nut
Ref. Page No. 213



For ER Spanner
Ref. Page No. 215

Note: All Dimensions are in mm

Maximum Run out of the
Internal Taper with respect to
the External Taper 0.005 mm



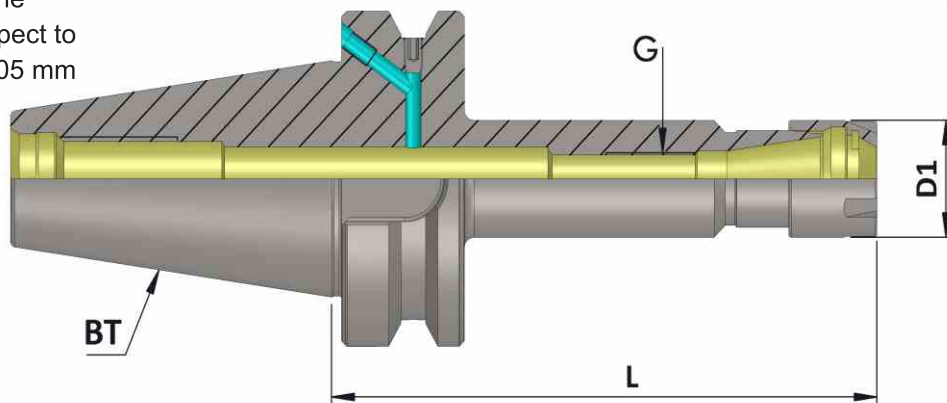
BT (MAS 403) Collet Chuck ER (AD+B)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	Suitable Collet	Collet Capacity	D1	G	L	Nut	Spanner
BT40 ER 16 070 AD+B/6.3G15000SL	K10102149125112	40	ER 16	0.5-10	32	M10X1p	70	UM/ER16	E16
BT40 ER 16 100 AD+B/6.3G15000SL	K10102149148112	40	ER 16	0.5-10	32	M10X1p	100	UM/ER16	E16
BT40 ER 16 160 AD+B/6.3G15000SL	K10102149175112	40	ER 16	0.5-10	32	M10X1p	160	UM/ER16	E16
BT40 ER 20 070 AD+B/6.3G15000 SL	K10102150125112	40	ER 20	1.0-13	35	M10X1p	70	UM/ER20	E20
BT40 ER 20 100 AD+B/6.3G15000 SL	K10102150148112	40	ER 20	1.0-13	35	M10X1p	100	UM/ER20	E20
BT40 ER 20 160 AD+B/6.3G15000 SL	K10102150175112	40	ER 20	1.0-13	35	M10X1p	160	UM/ER20	E20
BT40 ER 25 070 AD+B/6.3G15000 SL	K10102151125112	40	ER 25	1.0-16	42	M18X1p	70	UM/ER25	E25
BT40 ER 25 100 AD+B/6.3G15000 SL	K10102151148112	40	ER 25	1.0-16	42	M18X1p	100	UM/ER25	E25
BT40 ER 25 160 AD+B/6.3G15000 SL	K10102151175112	40	ER 25	1.0-16	42	M18X1p	160	UM/ER25	E25
BT40 ER 32 070 AD+B/6.3G15000 SL	K10102152125112	40	ER 32	2.0-20	50	M22X1.5p	70	UM/ER32	E32
BT40 ER 32 100 AD+B/6.3G15000 SL	K10102152148112	40	ER 32	2.0-20	50	M22X1.5p	100	UM/ER32	E32
BT40 ER 32 160 AD+B/6.3G15000 SL	K10102152175112	40	ER 32	2.0-20	50	M22X1.5p	160	UM/ER32	E32
BT40 ER 40 070 AD+B/6.3G15000 SL	K10102153125112	40	ER 40	3.0-26	63	M30X1.5p	70	UM/ER40	E40
BT40 ER 40 100 AD+B/6.3G15000 SL	K10102153148112	40	ER 40	3.0-26	63	M30X1.5p	100	UM/ER40	E40
BT40 ER 40 160 AD+B/6.3G15000 SL	K10102153175112	40	ER 40	3.0-26	63	M30X1.5p	160	UM/ER40	E40
BT40 ER 50 100 AD+B/6.3G15000 SL	K10102154148112	40	ER 50	10.0-34	78	M16X2p	100	UM/ER50	E50
BT 50 ER 16 080 AD+B/6.3G 15000 SL	K10103149131233	50	ER 16	0.5-10	32	M10X1p	80	UM/ER16	E16
BT 50 ER 16 100 AD+B/6.3G 15000 SL	K10103149148112	50	ER 16	0.5-10	32	M10X1p	100	UM/ER16	E16
BT 50 ER 16 160 AD+B/6.3G 15000 SL	K10103149175112	50	ER 16	0.5-10	32	M10X1p	160	UM/ER16	E16
BT 50 ER 25 080 AD+B/6.3G 15000 SL	K10103151131112	50	ER 25	1.0-16	42	M18X1p	80	UM/ER25	E25
BT 50 ER 25 100 AD+B/6.3G 15000 SL	K10103151148112	50	ER 25	1.0-16	42	M18X1p	100	UM/ER25	E25
BT 50 ER 25 160 AD+B/6.3G 15000 SL	K10103151175112	50	ER 25	1.0-16	42	M18X1p	160	UM/ER25	E25
BT 50 ER 32 080 AD+B/6.3G 15000 SL	K10103152131112	50	ER 32	2.0-20	50	M22X1.5p	80	UM/ER32	E32
BT 50 ER 32 100 AD+B/6.3G 15000 SL	K10103152148112	50	ER 32	2.0-20	50	M22X1.5p	100	UM/ER32	E32
BT 50 ER 32 160 AD+B/6.3G 15000 SL	K10103152175112	50	ER 32	2.0-20	50	M22X1.5p	160	UM/ER32	E32
BT 50 ER 40 080 AD+B/6.3G 15000 SL	K10103153131112	50	ER 40	3.0-26	63	M30X1.5p	80	UM/ER40	E40
BT 50 ER 40 100 AD+B/6.3G 15000 SL	K10103153148112	50	ER 40	3.0-26	63	M30X1.5p	100	UM/ER40	E40
BT 50 ER 40 160 AD+B/6.3G 15000 SL	K10103153175112	50	ER 40	3.0-26	63	M30X1.5p	160	UM/ER40	E40
BT 50 ER 50 100 AD+B/6.3G 15000 SL	K10103154148112	50	ER 50	10.0-34	78	M16X2p	100	UM/ER50	E50
BT 50 ER 50 160 AD+B/6.3G 15000 SL	K10103154175112	50	ER 50	10.0-34	78	M16X2p	160	UM/ER50	E50

Note: All Dimensions are in mm

Maximum Run out of the
Internal Taper with respect to
the External Taper 0.005 mm



BT (MAS 403) Collet Chuck ER-M Type (AD+B)

(Balanced to 2.5 G 25000 RPM)

Item Name	Item Code	ISO	Suitable Collet	Collet Capacity	D1	G	L	Nut	Spanner
BT 40 ER11M 070 AD+B/2.5G 25000 SL	K10102156125230	40	ER 11	0.5-7	16	M6X1P	70	ER11M	E11M
BT 40 ER11M 100 AD+B/2.5G 25000 SL	K10102156148230	40	ER 11	0.5-7	16	M6X1P	100	ER11M	E11M
BT 40 ER11M 160 AD+B/2.5G 25000 SL	K10102156175230	40	ER 11	0.5-7	16	M6X1P	160	ER11M	E11M
BT 40 ER16M 070 AD+B/2.5G 25000 SL	K10102157125230	40	ER 16	0.5-10	22	M10X1P	70	ER16M	E16M
BT 40 ER16M 100 AD+B/2.5G 25000 SL	K10102157148230	40	ER 16	0.5-10	22	M10X1P	100	ER16M	E16M
BT 40 ER16M 120 AD+B/2.5G 25000 SL	K10102157162112	40	ER 16	0.5-10	22	M10X1P	120	ER16M	E16M
BT 40 ER16M 160 AD+B/2.5G 25000 SL	K10102157175112	40	ER 16	0.5-10	22	M10X1P	160	ER16M	E16M
BT 40 ER20M 120 AD+B/2.5G 25000 SL	K10102158162112	40	ER 20	1.0-13	28	M10X1P	120	ER20M	E20M
BT 40 ER20M 160 AD+B/2.5G 25000 SL	K10102158175112	40	ER 20	1.0-13	28	M10X1P	160	ER20M	E20M
BT 40 ER25M 070 AD+B/2.5G 25000 SL	K10102159125230	40	ER 25	1.0-16	35	M18X1P	70	ER25M	E25M
BT 40 ER25M 100 AD+B/2.5G 25000 SL	K10102159148230	40	ER 25	1.0-16	35	M18X1P	100	ER25M	E25M
BT 40 ER25M 120 AD+B/2.5G 25000 SL	K10102159162112	40	ER 25	1.0-16	35	M18X1P	120	ER25M	E25M
BT 40 ER25M 160 AD+B/2.5G 25000 SL	K10102159175112	40	ER 25	1.0-16	35	M18X1P	160	ER25M	E25M

Accessories



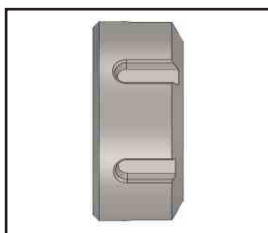
For Collet ER (DIN 6499)
Ref. Page No. 229-235



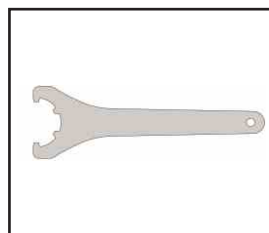
For Tap Collet ER-G
Ref. Page No. 236-240



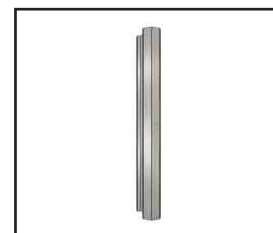
For Q.C.Tap Collet ERT
Ref. Page No. 243-251



For ER Nut
Ref. Page No. 213-214 &
217-218



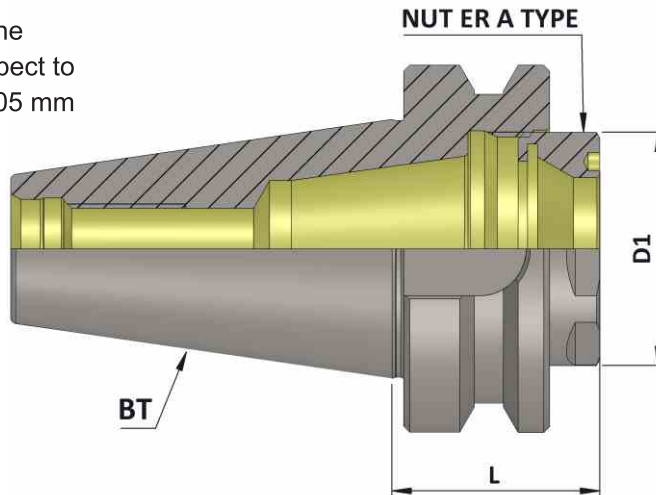
For ER Spanner
Ref. Page No. 215-216



For Sealing Disc
Ref. Page No. 219-226

Note: All Dimensions are in mm

Maximum Run out of the
Internal Taper with respect to
the External Taper 0.005 mm



BT (MAS 403) Short Length Collet Chuck ER – A

(Balanced to 2.5 G 25000 RPM)

Item Name	Item Code	ISO	Suitable Collet	Collet Capacity	D1	L	Suitable Nut
BT 30 ER 25A 022 AD/2.5G25000 SL	K10101151500228	30	ER 25	1-16	32	22	ER25A

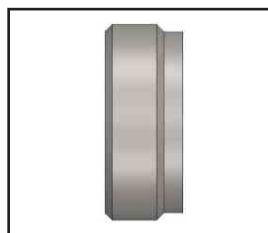
(Balanced to 6.3 G 15000 RPM)

BT 40 ER 32A 32 AD/6.3G15000 SL	K10102244248110	40	ER 32	2-20	40	32	ER32A
BT 50 ER 32A 43 AD/6.3G15000 SL	K10103244249110	50	ER 32	2-20	40	43	ER32A

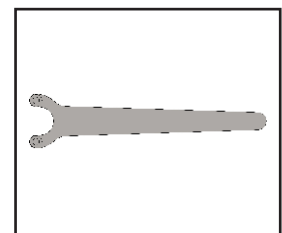
Accessories



For Collet ER (DIN 6499)
Ref. Page No. 229-233



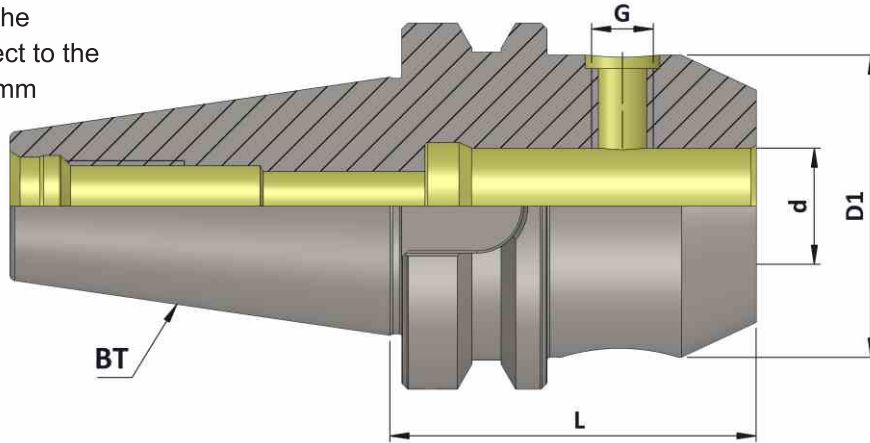
For ER A Nut
Ref. Page No. 214



For ER A Spanner
Ref. Page No. 216

Note: All Dimensions are in mm

Maximum Run out of the
Internal Dia with respect to the
External Taper 0.005 mm



BT (MAS 403) (WN) (AD)

(Balanced to 6.3 G 15000 RPM)

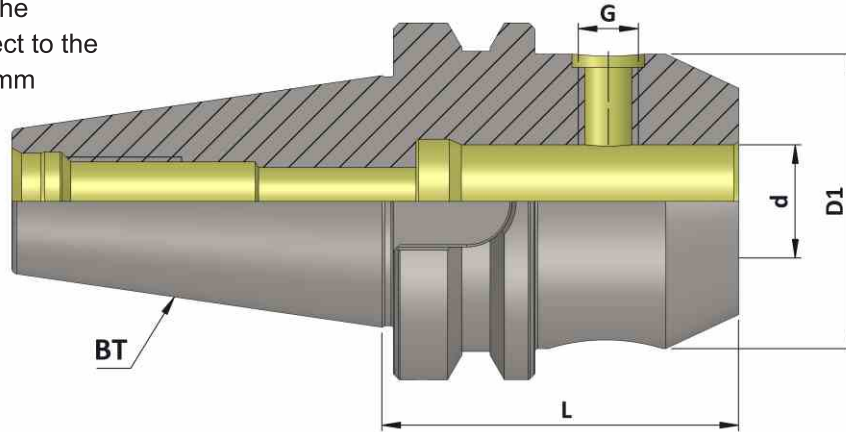
Item Name	Item Code	ISO	d	D1	G	L	Screw Qty.
BT 30 WN06 050 AD/6.3G15000SL	K10101111111110	30	6	25	M6	50	1
BT 30 WN08 050 AD/6.3G15000 SL	K10101112111110	30	8	28	M8	50	1
BT 30 WN10 050 AD/6.3G15000 SL	K10101113111110	30	10	35	M10	50	1
BT 30 WN12 055 AD/6.3G15000 SL	K10101114115110	30	12	42	M12	55	1
BT 30 WN14 055 AD/6.3G15000 SL	K10101258115110	30	14	44	M12	55	1
BT 30 WN16 063 AD/6.3G15000 SL	K10101115119110	30	16	48	M14	63	1
BT 30 WN18 063 AD/6.3G15000 SL	K10101259119110	30	18	50	M14	63	1
BT 30 WN20 070 AD/6.3G15000 SL	K10101116125110	30	20	52	M16	70	1

BT 40 WN06 050 AD/6.3G15000 SL	K10102111111110	40	6	25	M6	50	1
BT 40 WN06 100 AD/6.3G15000 SL	K10102111148110	40	6	25	M6	100	1
BT 40 WN06 160 AD/6.3G15000 SL	K10102111175110	40	6	25	M6	160	1
BT 40 WN08 050 AD/6.3G15000 SL	K10102112111110	40	8	28	M8	50	1
BT 40 WN08 100 AD/6.3G15000 SL	K10102112148110	40	8	28	M8	100	1
BT 40 WN08 160 AD/6.3G15000 SL	K10102112175110	40	8	28	M8	160	1
BT 40 WN10 063 AD/6.3G15000 SL	K10102113119110	40	10	35	M10	63	1
BT 40 WN10 100 AD/6.3G15000 SL	K10102113148110	40	10	35	M10	100	1
BT 40 WN10 160 AD/6.3G15000 SL	K10102113175110	40	10	35	M10	160	1
BT 40 WN12 063 AD/6.3G15000 SL	K10102114119110	40	12	42	M12	63	1
BT 40 WN12 100 AD/6.3G15000 SL	K10102114148110	40	12	42	M12	100	1
BT 40 WN12 160 AD/6.3G15000 SL	K10102114175110	40	12	42	M12	160	1
BT 40 WN14 063 AD/6.3G15000 SL	K10102258119110	40	14	44	M12	63	1
BT 40 WN14 100 AD/6.3G15000 SL	K10102258148110	40	14	44	M12	100	1
BT 40 WN14 160 AD/6.3G15000 SL	K10102258175110	40	14	44	M12	160	1
BT 40 WN16 063 AD/6.3G15000 SL	K10102115119110	40	16	48	M14	63	1
BT 40 WN16 100 AD/6.3G15000 SL	K10102115148110	40	16	48	M14	100	1
BT 40 WN16 160 AD/6.3G15000 SL	K10102115175110	40	16	48	M14	160	1
BT 40 WN18 063 AD/6.3G15000 SL	K10102259119110	40	18	50	M14	63	1
BT 40 WN18 100 AD/6.3G15000 SL	K10102259148110	40	18	50	M14	100	1
BT 40 WN18 160 AD/6.3G15000 SL	K10102259175110	40	18	50	M14	160	1
BT 40 WN20 063 AD/6.3G15000 SL	K10102116119110	40	20	52	M16	63	1
BT 40 WN20 100 AD/6.3G15000 SL	K10102116148110	40	20	52	M16	100	1
BT 40 WN20 160 AD/6.3G15000 SL	K10102116175110	40	20	52	M16	160	1

Note: All Dimensions are in mm

Continued

Maximum Run out of the
Internal Dia with respect to the
External Taper 0.005 mm



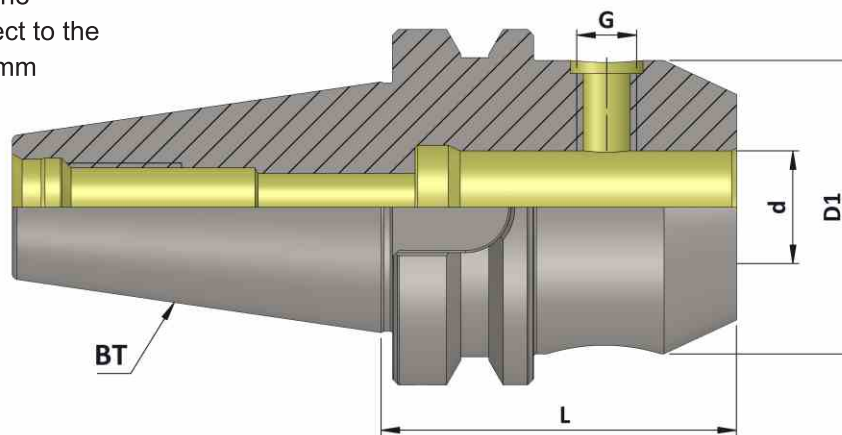
BT (MAS 403) (WN) (AD)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	d	D1	G	L	Screw Qty.
BT 40 WN25 090 AD/6.3G15000 SL	K10102117140110	40	25	65	M18X2	90	2
BT 40 WN25 160 AD/6.3G15000 SL	K10102117175110	40	25	65	M18X2	160	2
BT 40 WN32 100 AD/6.3G15000 SL	K10102118148110	40	32	72	M20X2	100	2
BT 40 WN32 160 AD/6.3G15000 SL	K10102118175110	40	32	72	M20X2	160	2
BT 40 WN40 105 AD/6.3G15000 SL	K10102119152110	40	40	80	M20X2	105	2
BT 40 WN40 160 AD/6.3G15000 SL	K10102119175110	40	40	80	M20X2	160	2
BT 50 WN06 063 AD/6.3G15000 SL	K10103111119110	50	6	25	M6	63	1
BT 50 WN06 100 AD/6.3G15000 SL	K10103111148110	50	6	25	M6	100	1
BT 50 WN06 160 AD/6.3G15000 SL	K10103111175110	50	6	25	M6	160	1
BT 50 WN08 063 AD/6.3G15000 SL	K10103112119110	50	8	28	M8	63	1
BT 50 WN08 100 AD/6.3G15000 SL	K10103112148110	50	8	28	M8	100	1
BT 50 WN08 160 AD/6.3G15000 SL	K10103112175110	50	8	28	M8	160	1
BT 50 WN10 080 AD/6.3G15000 SL	K10103113125110	50	10	35	M10	80	1
BT 50 WN10 100 AD/6.3G15000 SL	K10103113148110	50	10	35	M10	100	1
BT 50 WN10 160 AD/6.3G15000 SL	K10103113175110	50	10	35	M10	160	1
BT 50 WN12 080 AD/6.3G15000 SL	K10103114131110	50	12	42	M12	80	1
BT 50 WN12 100 AD/6.3G15000 SL	K10103114148110	50	12	42	M12	100	1
BT 50 WN12 160 AD/6.3G15000 SL	K10103114175110	50	12	42	M12	160	1
BT 50 WN14 080 AD/6.3G15000 SL	K10103258131110	50	14	44	M12	80	1
BT 50 WN14 100 AD/6.3G15000 SL	K10103258148110	50	14	44	M12	100	1
BT 50 WN14 160 AD/6.3G15000 SL	K10103258175110	50	14	44	M12	160	1
BT 50 WN16 080 AD/6.3G15000 SL	K10103115131110	50	16	48	M14	80	1
BT 50 WN16 100 AD/6.3G15000 SL	K10103115148110	50	16	48	M14	100	1
BT 50 WN16 160 AD/6.3G15000 SL	K10103115175110	50	16	48	M14	160	1
BT 50 WN18 080 AD/6.3G15000 SL	K10103259131110	50	18	50	M14	80	1
BT 50 WN18 100 AD/6.3G15000 SL	K10103259148110	50	18	50	M14	100	1
BT 50 WN18 160 AD/6.3G15000 SL	K10103259175110	50	18	50	M14	160	1
BT 50 WN20 080 AD/6.3G15000 SL	K10103116131110	50	20	52	M16	80	1
BT 50 WN20 100 AD/6.3G15000 SL	K10103116148110	50	20	52	M16	100	1
BT 50 WN20 160 AD/6.3G15000 SL	K10103116175110	50	20	52	M16	160	1

Note: All Dimensions are in mm

Maximum Run out of the
Internal Dia with respect to the
External Taper 0.005 mm



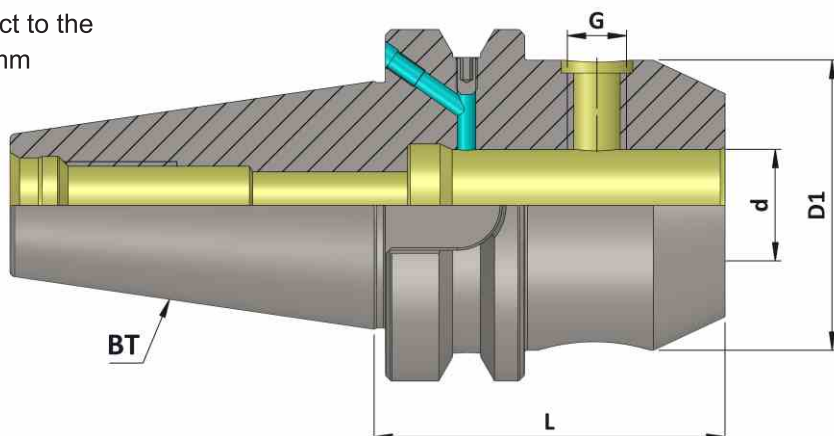
BT (MAS 403) (WN) (AD)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	d	D1	G	L	Screw Qty.
BT 50 WN25 100 AD/6.3G15000 SL	K10103117148110	50	25	65	M18X2	100	2
BT 50 WN25 160 AD/6.3G15000 SL	K10103117175110	50	25	65	M18X2	160	2
BT 50 WN32 105 AD/6.3G15000 SL	K10103118152110	50	32	72	M20X2	105	2
BT 50 WN32 160 AD/6.3G15000 SL	K10103118175110	50	32	72	M20X2	160	2
BT 50 WN40 115 AD/6.3G15000 SL	K10103119159110	50	40	80	M20X2	115	2
BT 50 WN40 160 AD/6.3G15000 SL	K10103119175110	50	40	80	M20X2	160	2
BT 50 WN50 125 AD/6.3G15000 SL	K10103120164110	50	50	100	M24X2	125	2

Note: All Dimensions are in mm

Maximum Run out of the
Internal Dia with respect to the
External Taper 0.005 mm



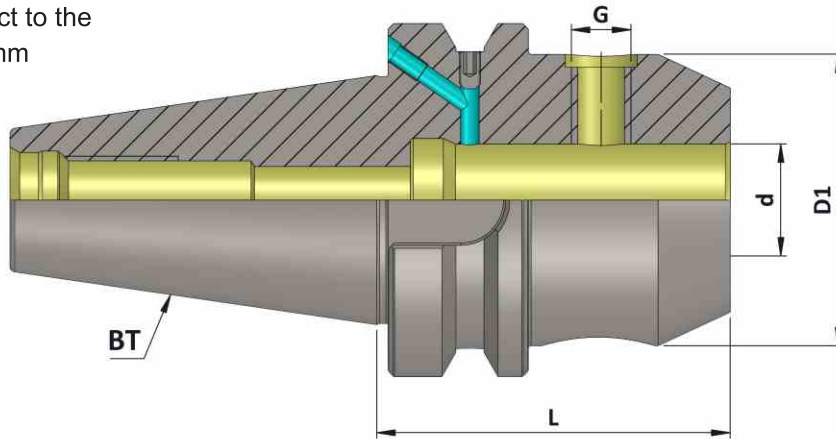
BT (MAS 403) (WN) (AD+B)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	d	D1	G	L	Screw Qty.
BT 40 WN06 050 AD+B/6.3G15000 SL	K10102111111112	40	6	25	M6	50	1
BT 40 WN06 100 AD+B/6.3G15000 SL	K10102111148112	40	6	25	M6	100	1
BT 40 WN06 160 AD+B/6.3G15000 SL	K10102111175112	40	6	25	M6	160	1
BT 40 WN08 050 AD+B/6.3G15000 SL	K10102112111112	40	8	28	M8	50	1
BT 40 WN08 100 AD+B/6.3G15000 SL	K10102112148112	40	8	28	M8	100	1
BT 40 WN08 160 AD+B/6.3G15000 SL	K10102112175112	40	8	28	M8	160	1
BT 40 WN10 063 AD+B/6.3G15000 SL	K10102113119112	40	10	35	M10	63	1
BT 40 WN10 100 AD+B/6.3G15000 SL	K10102113148112	40	10	35	M10	100	1
BT 40 WN10 160 AD+B/6.3G15000 SL	K10102113175112	40	10	35	M10	160	1
BT 40 WN12 063 AD+B/6.3G15000 SL	K10102114119112	40	12	42	M12	63	1
BT 40 WN12 100 AD+B/6.3G15000 SL	K10102114148112	40	12	42	M12	100	1
BT 40 WN12 160 AD+B/6.3G15000 SL	K10102114175112	40	12	42	M12	160	1
BT 40 WN14 063 AD+B/6.3G15000 SL	K10102258119112	40	14	44	M12	63	1
BT 40 WN14 100 AD+B/6.3G15000 SL	K10102258148112	40	14	44	M12	100	1
BT 40 WN14 160 AD+B/6.3G15000 SL	K10102258175112	40	14	44	M12	160	1
BT 40 WN16 063 AD+B/6.3G15000 SL	K10102115119112	40	16	48	M14	63	1
BT 40 WN16 100 AD+B/6.3G15000 SL	K10102115148112	40	16	48	M14	100	1
BT 40 WN16 160 AD+B/6.3G15000 SL	K10102115175112	40	16	48	M14	160	1
BT 40 WN18 063 AD+B/6.3G15000 SL	K10102259119112	40	18	50	M14	63	1
BT 40 WN18 100 AD+B/6.3G15000 SL	K10102259148112	40	18	50	M14	100	1
BT 40 WN18 160 AD+B/6.3G15000 SL	K10102259175112	40	18	50	M14	160	1
BT 40 WN20 063 AD+B/6.3G15000 SL	K10102116119112	40	20	52	M16	63	1
BT 40 WN20 100 AD+B/6.3G15000 SL	K10102116148112	40	20	52	M16	100	1
BT 40 WN20 160 AD+B/6.3G15000 SL	K10102116175112	40	20	52	M16	160	1
BT 40 WN25 090 AD+B/6.3G15000 SL	K10102117140112	40	25	65	M18X2	90	2
BT 40 WN25 160 AD+B/6.3G15000 SL	K10102117175112	40	25	65	M18X2	160	2
BT 40 WN32 100 AD+B/6.3G15000 SL	K10102118148112	40	32	72	M20X2	100	2
BT 40 WN32 160 AD+B/6.3G15000 SL	K10102118175112	40	32	72	M20X2	160	2
BT 40 WN40 105 AD+B/6.3G15000 SL	K10102119152112	40	40	80	M20X2	105	2
BT 40 WN40 160 AD+B/6.3G15000 SL	K10102119175112	40	40	80	M20X2	160	2

Note: All Dimensions are in mm

Maximum Run out of the
Internal Dia with respect to the
External Taper 0.005 mm



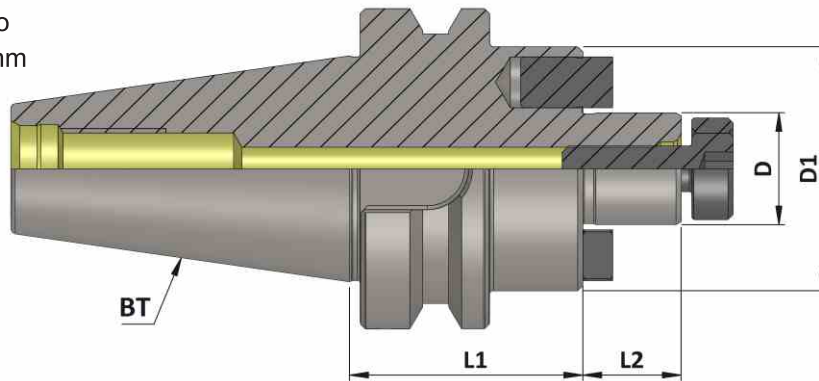
BT (MAS 403) (WN) (AD+B)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	d	D1	G	L	Screw Qty.
BT 50 WN06 063 AD+B/6.3G15000 SL	K10103111119112	50	6	25	M6	63	1
BT 50 WN06 100 AD+B/6.3G15000 SL	K10103111148112	50	6	25	M6	100	1
BT 50 WN06 160 AD+B/6.3G15000 SL	K10103111175112	50	6	25	M6	160	1
BT 50 WN08 063 AD+B/6.3G15000 SL	K10103112119112	50	8	28	M8	63	1
BT 50 WN08 100 AD+B/6.3G15000 SL	K10103112148112	50	8	28	M8	100	1
BT 50 WN08 160 AD+B/6.3G15000 SL	K10103112175112	50	8	28	M8	160	1
BT 50 WN10 080 AD+B/6.3G15000 SL	K10103113125112	50	10	35	M10	80	1
BT 50 WN10 100 AD+B/6.3G15000 SL	K10103113148112	50	10	35	M10	100	1
BT 50 WN10 160 AD+B/6.3G15000 SL	K10103113175112	50	10	35	M10	160	1
BT 50 WN12 080 AD+B/6.3G15000 SL	K10103114131112	50	12	42	M12	80	1
BT 50 WN12 100 AD+B/6.3G15000 SL	K10103114148112	50	12	42	M12	100	1
BT 50 WN12 160 AD+B/6.3G15000 SL	K10103114175112	50	12	42	M12	160	1
BT 50 WN14 080 AD+B/6.3G15000 SL	K10103258131112	50	14	44	M12	80	1
BT 50 WN14 100 AD+B/6.3G15000 SL	K10103258148112	50	14	44	M12	100	1
BT 50 WN14 160 AD+B/6.3G15000 SL	K10103258175112	50	14	44	M12	160	1
BT 50 WN16 080 AD+B/6.3G15000 SL	K10103115131112	50	16	48	M14	80	1
BT 50 WN16 100 AD+B/6.3G15000 SL	K10103115148112	50	16	48	M14	100	1
BT 50 WN16 160 AD+B/6.3G15000 SL	K10103115175112	50	16	48	M14	160	1
BT 50 WN18 080 AD+B/6.3G15000 SL	K10103259131112	50	18	50	M14	80	1
BT 50 WN18 100 AD+B/6.3G15000 SL	K10103259148112	50	18	50	M14	100	1
BT 50 WN18 160 AD+B/6.3G15000 SL	K10103259175112	50	18	50	M14	160	1
BT 50 WN20 080 AD+B/6.3G15000 SL	K10103116131112	50	20	52	M16	80	1
BT 50 WN20 100 AD+B/6.3G15000 SL	K10103116148112	50	20	52	M16	100	1
BT 50 WN20 160 AD+B/6.3G15000 SL	K10103116175112	50	20	52	M16	160	1
BT 50 WN25 100 AD+B/6.3G15000 SL	K10103117148112	50	25	65	M18X2	100	2
BT 50 WN25 160 AD+B/6.3G15000 SL	K10103117175112	50	25	65	M18X2	160	2
BT 50 WN32 105 AD+B/6.3G15000 SL	K10103118152112	50	32	72	M20X2	105	2
BT 50 WN32 160 AD+B/6.3G15000 SL	K10103118175112	50	32	72	M20X2	160	2
BT 50 WN40 115 AD+B/6.3G15000 SL	K10103119159112	50	40	80	M20X2	115	2
BT 50 WN40 160 AD+B/6.3G15000 SL	K10103119175112	50	40	80	M20X2	160	2
BT 50 WN50 125 AD+B/6.3G15000 SL	K10103120164112	50	50	100	M24X2	125	2

Note: All Dimensions are in mm

Maximum Run out of the
External Dia with respect to
the External Taper 0.005 mm



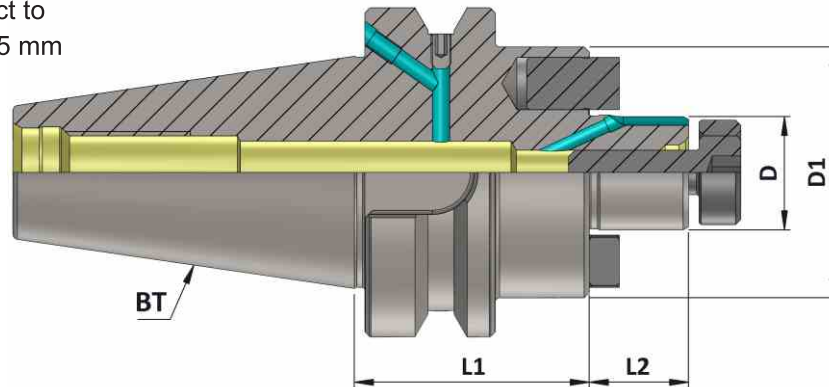
BT (MAS 403) FMH (AD)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	D	D1	L1	L2
BT 30 FMH16 035 AD/6.3G15000 SL SP.S	K10101126104232	30	16	38	35	17
BT 30 FMH22 040 AD/6.3G15000 SL SP.S	K10101127106232	30	22	48	40	19
BT 30 FMH27 040 AD/6.3G15000 SL SP.S	K10101128106232	30	27	58	40	21
BT 40 FMH16 045 AD/6.3G15000 SL SP.S	K10102126108232	40	16	38	45	17
BT 40 FMH16 100 AD/6.3G15000 SL SP.S	K10102126148232	40	16	38	100	17
BT 40 FMH16 160 AD/6.3G15000 SL SP.S	K10102126175232	40	16	38	160	17
BT 40 FMH22 045 AD/6.3G15000 SL SP.S	K10102127108232	40	22	48	45	19
BT 40 FMH22 100 AD/6.3G15000 SL SP.S	K10102127148232	40	22	48	100	19
BT 40 FMH22 160 AD/6.3G15000 SL SP.S	K10102127175232	40	22	48	160	19
BT 40 FMH27 045 AD/6.3G15000 SL SP.S	K10102128108232	40	27	58	45	21
BT 40 FMH27 100 AD/6.3G15000 SL SP.S	K10102128148232	40	27	58	100	21
BT 40 FMH27 160 AD/6.3G15000 SL SP.S	K10102128175232	40	27	58	160	21
BT 40 FMH32 050 AD/6.3G15000 SL SP.S	K10102129111232	40	32	78	50	24
BT 40 FMH32 100 AD/6.3G15000 SL SP.S	K10102129148232	40	32	78	100	24
BT 40 FMH32 160 AD/6.3G15000 SL SP.S	K10102129175232	40	32	78	160	24
BT 40 FMH40 055 AD/6.3G15000 SL SP.S	K10102130115232	40	40	88	55	27
BT 40 FMH40 100 AD/6.3G15000 SL SP.S	K10102130148232	40	40	88	100	27
BT 40 FMH40 160 AD/6.3G15000 SL SP.S	K10102130175232	40	40	88	160	27
BT 50 FMH16 060 AD/6.3G15000 SL SP.S	K10103126117232	50	16	38	60	17
BT 50 FMH16 100 AD/6.3G15000 SL SP.S	K10103126148232	50	16	38	100	17
BT 50 FMH16 160 AD/6.3G15000 SL SP.S	K10103126175232	50	16	38	160	17
BT 50 FMH22 060 AD/6.3G15000 SL SP.S	K10103127117232	50	22	48	60	19
BT 50 FMH22 100 AD/6.3G15000 SL SP.S	K10103127148232	50	22	48	100	19
BT 50 FMH22 160 AD/6.3G15000 SL SP.S	K10103127175232	50	22	48	160	19
BT 50 FMH27 060 AD/6.3G15000 SL SP.S	K10103128117232	50	27	58	60	21
BT 50 FMH27 100 AD/6.3G15000 SL SP.S	K10103128148232	50	27	58	100	21
BT 50 FMH27 160 AD/6.3G15000 SL SP.S	K10103128175232	50	27	58	160	21
BT 50 FMH32 060 AD/6.3G15000 SL SP.S	K10103129117232	50	32	78	60	24
BT 50 FMH32 100 AD/6.3G15000 SL SP.S	K10103129148232	50	32	78	100	24
BT 50 FMH32 160 AD/6.3G15000 SL SP.S	K10103129175232	50	32	78	160	24
BT 50 FMH40 060 AD/6.3G15000 SL SP.S	K10103130117232	50	40	88	60	27
BT 50 FMH40 100 AD/6.3G15000 SL SP.S	K10103130148232	50	40	88	100	27
BT 50 FMH40 160 AD/6.3G15000 SL SP.S	K10103130175232	50	40	88	160	27

Note: All Dimensions are in mm

Maximum Run out of the
External Dia with respect to
the External Taper 0.005 mm



BT (MAS403) (FMH-K)

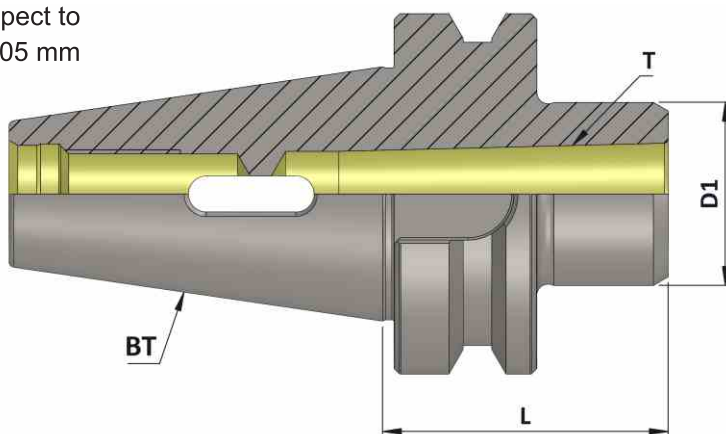
(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	D	D1	L1	L2
BT 40 FMH-K16 045 AD+B/6.3G15000 SL SP.S	K10102131108234	40	16	38	45	17
BT 40 FMH-K16 100 AD+B/6.3G15000 SL SP.S	K10102131148234	40	16	38	100	17
BT 40 FMH-K16 160 AD+B/6.3G15000 SL SP.S	K10102131175234	40	16	38	160	17
BT 40 FMH-K22 045 AD+B/6.3G15000 SL SP.S	K10102132108234	40	22	48	45	19
BT 40 FMH-K22 100 AD+B/6.3G15000 SL SP.S	K10102132148234	40	22	48	100	19
BT 40 FMH-K22 160 AD+B/6.3G15000 SL SP.S	K10102132175234	40	22	48	160	19
BT 40 FMH-K27 045 AD+B/6.3G15000 SL SP.S	K10102133108234	40	27	58	45	21
BT 40 FMH-K27 100 AD+B/6.3G15000 SL SP.S	K10102133148234	40	27	58	100	21
BT 40 FMH-K27 160 AD+B/6.3G15000 SL SP.S	K10102133175234	40	27	58	160	21
BT 40 FMH-K32 050 AD+B/6.3G15000 SL SP.S	K10102134111234	40	32	78	50	24
BT 40 FMH-K32 100 AD+B/6.3G15000 SL SP.S	K10102134148234	40	32	78	100	24
BT 40 FMH-K32 160 AD+B/6.3G15000 SL SP.S	K10102134175234	40	32	78	160	24
BT 40 FMH-K40 055 AD+B/6.3G15000 SL SP.S	K10102135115234	40	40	88	55	27
BT 40 FMH-K40 100 AD+B/6.3G15000 SL SP.S	K10102135148234	40	40	88	100	27
BT 40 FMH-K40 160 AD+B/6.3G15000 SL SP.S	K10102135175234	40	40	88	160	27

BT 50 FMH-K16 060 AD+B/6.3G15000 SL SP.S	K10103131117234	50	16	38	60	17
BT 50 FMH-K16 100 AD+B/6.3G15000 SL SP.S	K10103131148234	50	16	38	100	17
BT 50 FMH-K16 160 AD+B/6.3G15000 SL SP.S	K10103131175234	50	16	38	160	17
BT 50 FMH-K22 060 AD+B/6.3G15000 SL SP.S	K10103132117234	50	22	48	60	19
BT 50 FMH-K22 100 AD+B/6.3G15000 SL SP.S	K10103132148234	50	22	48	100	19
BT 50 FMH-K22 160 AD+B/6.3G15000 SL SP.S	K10103132175234	50	22	48	160	19
BT 50 FMH-K27 060 AD+B/6.3G15000 SL SP.S	K10103133117234	50	27	58	60	21
BT 50 FMH-K27 100 AD+B/6.3G15000 SL SP.S	K10103133148234	50	27	58	100	21
BT 50 FMH-K27 160 AD+B/6.3G15000 SL SP.S	K10103133175234	50	27	58	160	21
BT 50 FMH-K32 060 AD+B/6.3G15000 SL SP.S	K10103134117234	50	32	78	60	24
BT 50 FMH-K32 100 AD+B/6.3G15000 SL SP.S	K10103134148234	50	32	78	100	24
BT 50 FMH-K32 160 AD+B/6.3G15000 SL SP.S	K10103134175234	50	32	78	160	24
BT 50 FMH-K40 060 AD+B/6.3G15000 SL SP.S	K10103135117234	50	40	88	60	27
BT 50 FMH-K40 100 AD+B/6.3G15000 SL SP.S	K10103135148234	50	40	88	100	27
BT 50 FMH-K40 160 AD+B/6.3G15000 SL SP.S	K10103135175234	50	40	88	160	27

Note: All Dimensions are in mm

Maximum Run out of the
Internal Taper with respect to
the External Taper 0.005 mm



BT (MAS 403) (MTA)

(Balanced to 6.3 G 15000 RPM)

Item Name	Item Code	ISO	Morse Taper (T)	D1	L
BT 30 MT01 050 6.3G15000 SL	K10101447111122	30	1	25	50
BT 30 MT02 060 6.3G15000 SL	K10101448117122	30	2	32	60
BT 30 MT03 075 6.3G15000 SL	K10101449127122	30	3	40	75

BT 40 MT01 050 6.3G15000 SL	K10102447111122	40	1	25	50
BT 40 MT01 115 6.3G15000 SL	K10102447159122	40	1	25	115
BT 40 MT02 050 6.3G15000 SL	K10102448111122	40	2	32	50
BT 40 MT02 125 6.3G15000 SL	K10102448164122	40	2	32	125
BT 40 MT03 070 6.3G15000 SL	K10102449125122	40	3	40	70
BT 40 MT03 140 6.3G15000 SL	K10102449169122	40	3	40	140
BT 40 MT04 095 6.3G15000 SL	K10102451145122	40	4	48	95

BT 50 MT01 050 6.3G15000 SL	K10103447111122	50	1	25	50
BT 50 MT01 120 6.3G15000 SL	K10103447162122	50	1	25	120
BT 50 MT02 060 6.3G15000 SL	K10103448117122	50	2	32	60
BT 50 MT02 140 6.3G15000 SL	K10103448169122	50	2	32	140
BT 50 MT03 065 6.3G15000 SL	K10103449123122	50	3	40	65
BT 50 MT03 150 6.3G15000 SL	K10103449173122	50	3	40	150
BT 50 MT04 095 6.3G15000 SL	K10103451145122	50	4	48	95
BT 50 MT04 180 6.3G15000 SL	K10103451178122	50	4	48	180
BT 50 MT05 120 6.3G15000 SL	K10103450162122	50	5	63	120
BT 50 MT05 220 6.3G15000 SL	K10103450180122	50	5	63	220

Note: All Dimensions are in mm