TECHNIKS RETENTION KNOBS

QUALITY & PERFORMANCE GUARANTEED



MegaFORCE

MEGAFORCE HIGH-TORQUE RETENTION KNOBS

SUPERIOR PERFORMANCE AND SAFETY!

FEATURES

- Rolled threads maintain material grain structure improving thread strength up to 20%
- Each MegaFORCE Retention knob is magnetic particle tested to ensure material integrity and physical soundness
- Tested at 2.5X the pulling forces of the drawbar



TECHNIKS RETENTION KNOBS

THE RIGHT CONNECTION

FEATURES

- All mating surfaces precision ground
- Manufactured from aircraft quality AMS-6274 alloy steel
- Hardened for maximum longevity

MEGAFORCE RETENTION KNOBS



FEATURES

- **Rolled threads maintain material grain structure improving thread strength up to 20%**
- **Each MegaFORCE Retention knob is magnetic particle tested to ensure material integrity and physical soundness**
- **Tested at 2.5X the pulling forces of the drawbar**

The longer overall length engages threads deeper in the tool holder, reducing taper swelling and maximizing taper/spindle contact for the most rigid connection.

MegaFORCE also features a redesigned, blended radii for improved overall strength, making MegaFORCE the strongest high-torque retention knob in the market.

CAT40/50 ANSI/ISO MEGAFORCE RETENTION KNOBS

Part No.	Type	θ	d1	d2	L	l1	l2	T
40NTRK-MF	CAT40 - ANSI	45°	.74"	.49"	1.62"	.64"	.44"	5/8" - 11
40TRK-MF	CAT40 - ANSI Coolant-Through	45°	.74"	.49"	1.62"	.64"	.44"	5/8" - 11
50NTRK-MF	CAT50 - ANSI	45°	1.14"	.82"	2.3"	1"	.7"	1" - 8
50TRK-MF	CAT50 - ANSI Coolant-Through	45°	1.14"	.82"	2.3"	1"	.7"	1" - 8
M50TRK-MF	CAT50 - ANSI Coolant-Through Mazak O-ring Seal Groove	45°	1.14"	.82"	2.58"	1"	.7"	1" - 8

CAT40/50 DIN MEGAFORCE RETENTION KNOBS

Part No.	Type	θ	d1	d2	L	l1	l2	T
4008TRK-MF	CAT40 - DIN	75°	.748"	.551"	2.126"	1.024"	.787"	5/8" - 11
4008TRKC-MF	CAT40 - DIN Coolant-Through	75°	.748"	.551"	2.126"	1.024"	.787"	5/8" - 11
4030TRK-MF	CAT40 - DIN Coolant-Through	75°	.748"	.551"	2.126"	1.024"	.787"	5/8" - 11
5030TRK-MF	CAT50 - DIN Coolant-Through	75°	1.102"	.827"	2.913"	1.339'	.984'	1" - 8



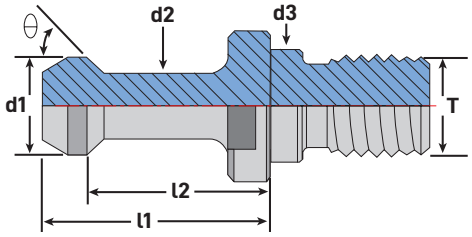
MEGAFORCE VS STANDARD RETENTION KNOBS

SUPERIOR PERFORMANCE AND SAFETY!

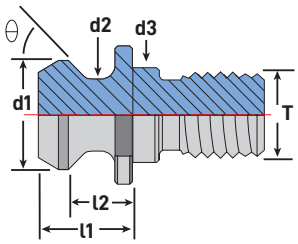
The blended radii improves strength

Pilot provides greater stability

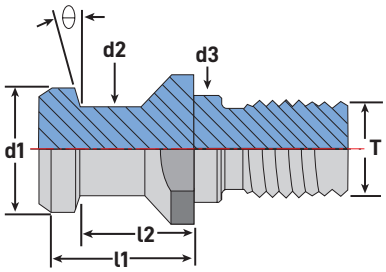
Deeper thread engagement reduces taper swelling



MegaFORCE MAS Style



MegaFORCE ANSI/ISO



Style MegaFORCE DIN Style

CAT40/50 MAS MEGAFORCE RETENTION KNOBS

Part No.	Type	θ	d1	d2	L	l1	l2	T
4001TRK-MF	CAT40 - MAS 90°	90°	.591"	.394"	2.250"	1.266"	.990"	5/8" - 11
4005TRKC-MF	CAT40 - MAS 45° Coolant-Through	45°	.591"	.394"	2.250"	1.266"	.990"	5/8" - 11
4005TRK-MF	CAT40 - MAS 45°	45°	.591"	.394"	2.250"	1.266"	.990"	5/8" - 11
4009TRKC-MF	CAT40 - MAS 45° Coolant-Through	45°	.591"	.394"	2.250"	1.266"	.990"	5/8" - 11
4009TRK-MG	CAT40 - MAS 45°	45°	.591"	.394"	2.250"	1.266"	.990"	5/8" - 11
4014TRK-MF	CAT40 - MAS 60°	60°	.591"	.394"	2.250"	1.266"	.990"	5/8" - 11
5001TRKC-MF	CAT50 - MAS 90° Coolant-Through	90°	.906"	.669"	3.354"	1.780"	1.386"	1" - 8
5001TRK-MF	CAT50 - MAS 90°	90°	.906"	.669"	3.354"	1.780"	1.386"	1" - 8
5005TRKC-MF	CAT50 - MAS 45° Coolant-Through	45°	.906"	.669"	3.354"	1.780"	1.386"	1" - 8
5005TRK-MF	CAT50 - MAS 45°	45°	.906"	.669"	3.354"	1.780"	1.386"	1" - 8
5014TRKC-MF	CAT50 - MAS 60° Coolant-Through	60°	.906"	.669"	3.354"	1.780"	1.386"	1" - 8
5014TRCC-MF	CAT50 - MAS 60°	60°	.906"	.669"	3.354"	1.780"	1.386"	1" - 8
MAK050TRK-MF	CAT50 - MAS 45° Makino Coolant-Through	45°	.906"	.669"		1.780"	1.386"	1" - 8
TOY050TRK-MF	CAT50 - MAS 45° Toyoda Coolant-Through	45°	.906"	.669"		1.780"	1.386"	1" - 8

BT40 DIN MEGAFORCE RETENTION KNOBS

Part No.	Type	θ	d1	d2	L	l1	l2	T
4020TRK-MF	BT40 - MAS 75° Coolant-Through	75°	.748"	.551"	2.126"	1.142"	.906"	M16-2

BT30/40 MAS MEGAFORCE RETENTION KNOBS

Part No.	Type	θ	d1	d2	L	l1	l2	T
3003TRK-MF	BT30 - MAS 45°	45°						M12-1.75
3004TRK-MF	BT30 - MAS 60°	60°	.433"	.276"	1.693"	.906"	.709"	M12-1.75
4003TRKC-MF	BT40 - MAS 45° Coolant-Through	45°	.591"	.394"	2.362"	1.378"	1.102"	M16-2
4003TRK-MF	BT40 - MAS 45°	45°	.591"	.394"	2.362"	1.378"	1.102"	M16-2
4004TRKC-MF	BT40 - MAS 60° Coolant-Through	60°	.591"	.394"	2.362"	1.378"	1.102"	M16-2

RETENTION KNOBS

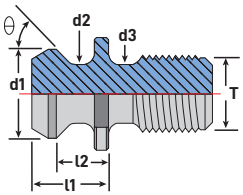


FEATURES

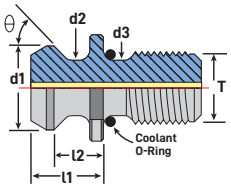
- **All mating surfaces precision ground**
- **Manufactured from aircraft quality AMS-6274 alloy steel**
- **Hardened for maximum longevity**

Please make sure that the Retention Knob you order is the correct one for your machine. Using the wrong Retention Knob can cause damage to your machine spindle, the toolholder, and may create a safety hazard.

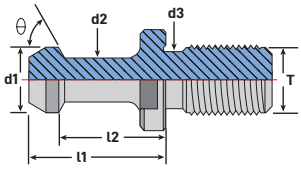
ANSI Style



21127-C Coolant Okuma



MAS Style



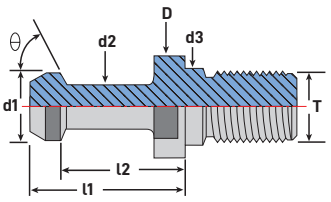
CAT RETENTION KNOBS

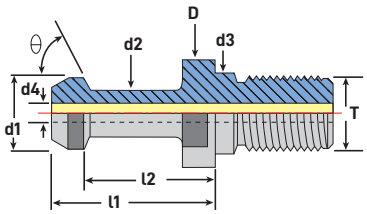
Part No.	Type	θ	d1	d2	d3	l1	l2	T
21006-15	CAT40-DIN	15°	.750"	.550"	.640"	1.024"	.787"	5/8 - 11
21007-15	CAT40-DIN	15°	.750"	.550"	-	1.028"	.792"	5/8 - 11
21003	CAT40-ANSI	45°	.740"	.490"	.490"	.640"	.440"	5/8 - 11
21003-45	CAT40-MAS-I	45°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21003-60	CAT40-MAS-II	60°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21003-90	CAT40-MAS-III	90°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21005-45	CAT50-MAS-I	45°	.906"	.669"	.827"	1.772"	1.378"	1 - 8
21005-60	CAT50-MAS-II	60°	.906"	.669"	.827"	1.772"	1.378"	1 - 8
21005-90	CAT50-MAS-III	90°	.906"	.669"	.827"	1.772"	1.378"	1 - 8
21008-15	CAT50-DIN	15°	1.101"	.825"	-	1.338"	.984"	1 - 8
21005	CAT50-ANSI	45°	1.140"	.820"	.820"	1.000"	.700"	1 - 8

CAT COOLANT STYLE RETENTION KNOBS

Part No.	Type	θ	d1	d2	d3	l1	l2	T
17836	CAT40, ANSI, w/ metric thread	45°	.740"	.490"	.490"	.630"	.56"	M16
21006-15C	CAT40-DIN Coolant	15°	.750"	.550"	.640"	1.024"	.787"	5/8 - 11
21007-15C	CAT40-DIN Coolant	15°	.750"	.550"	-	1.028"	.792"	5/8 - 11
21148-C	CAT40-Coolant Mori-Seiki	15°	.747"	.548"	.641"	1.024"	.787"	5/8 - 11
21003-C	CAT40-ANSI-C	45°	.740"	.490"	.490"	.640"	.440"	5/8 - 11
21003-45C	CAT40-Coolant-I	45°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21127-C	CAT40 - Coolant Okuma	45°	.740"	.490"	.490"	.640"	.440"	5/8 - 11
21003-60C	CAT40-Coolant-II	60°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21003-90C	CAT40-Coolant-III	90°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21003-45CSF	CAT40-Coolant-I SlimFIT	45°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21003-60CSF	CAT40-Coolant-II SlimFIT	60°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21003-90CSF	CAT40-Coolant-III SlimFIT	90°	.590"	.394"	.512"	1.266"	.990"	5/8 - 11
21005-45C	CAT50-Coolant-I	45°	.906"	.669"	.827"	1.772"	1.378"	1 - 8
21005-60C	CAT50-Coolant-II	60°	.906"	.669"	.827"	1.772"	1.378"	1 - 8
21005-90C	CAT50-Coolant-III	90°	.906"	.669"	.827"	1.772"	1.378"	1 - 8
21008-15C	CAT50-DIN Coolant	15°	1.101"	.825"	-	1.338"	.984"	1 - 8
21005-C	CAT50-ANSI-C	45°	1.140"	.820"	.820"	1.000"	.700"	1 - 8







BT RETENTION KNOBS

Dimensions in millimeters.

Part No.	Description	θ	D	d1	d2	d3	l1	l2	T
17801	BT30 - 45°	45°	16.5	11	7	12.5	23	18	M12
17803	BT40 - 45°	45°	23	15	10	17	35	28	M16
17834	BT40, ANSI, metric thread	45°	23	18.8	12.5	12.4	16	11	M16
17805	BT50 - 45°	45°	38	23	17	25	45	35	M24
17806	BT30 - 60°	60°	16.5	11	7	12.5	23	18	M12
17808	BT40 - 60°	60°	23	15	10	17	35	28	M16
17810	BT50 - 60°	60°	38	23	17	25	45	35	M24
17812	BT30 - 90°	90°	16.5	11	7	12.5	23	8	M12
17814	BT40 - 90°	90°	23	15	10	17	35	28	M16
17816	BT50 - 90°	90°	38	23	17	25	45	35	M24

BT COOLANT STYLE RETENTION KNOBS

Dimensions in millimeters.

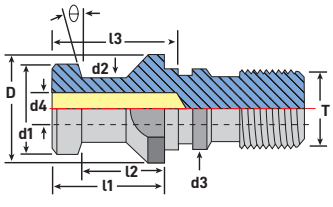
Part No.	Description	θ	D	d1	d2	d3	d4	l1	l2	T
17817	BT30 - 45˚ coolant	45°	16.5	11	7	12.5	4	23	18	M12
17818	BT40 - 45˚ coolant	45°	23	15	10	17	4	35	28	M16
17820	BT40 - 60˚ coolant	60°	23	15	10	17	4	35	28	M16
17822	BT40 - 90˚ coolant	90°	23	15	10	17	4	35	28	M16
17824	BT50 - 45˚ coolant	45°	38	23	17	25	5	45	35	M24
17826	BT50 - 60˚ coolant	60°	38	23	17	25	5	45	35	M24
17828	BT50 - 90˚ coolant	90°	38	23	17	25	5	45	35	M24



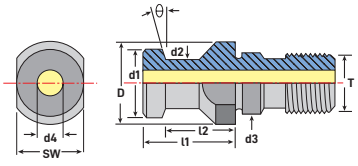
DIN 69871-A & B RETENTION KNOBS

Dimensions in millimeters.

Part No.	Description	θ	D	d1	d2	d3	d4	l1	l2	l3	SW	T
49001	DAT30-A	15˚	17	13	9	13	-	24	19	-	14	M12
49003	DAT40-A	15˚	23	19	14	17	7	26	20	-	19	M16
49005	DAT50-A	15˚	36	28	21	25	11.5	34	25	-	30	M24
49011	DAT30-B	15˚	17	13	9	13	-	24	19	2.3	14	M12
49013	DAT40-B	15˚	23	19	14	17	7	26	20	3.0	19	M16
49015	DAT50-B	15˚	36	28	21	25	11.5	34	25	4.5	30	M24



DIN 69871B



DIN 69871A

RETENTION KNOBS FOR CNC ROUTERS



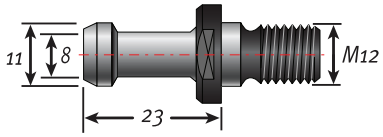
FEATURES

- **All mating surfaces precision ground**
- **Manufactured from aircraft quality AMS-6274 alloy steel**
- **Hardened for maximum longevity**

Match the dimensions and appearance of your retention knob to the drawings below. Use the manufacturer's print that came with your machine to verify your selection.

For safe operation, ensure the pull stud you order is the exact pull stud your machine uses. Using the wrong pull stud can cause damage to the spindle and/or toolholder, and can create a safety hazard.

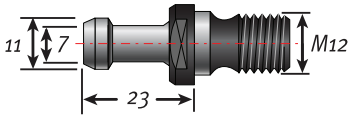
Dimensions in millimeters.



BT30 – 45˚

PART NO. 07801

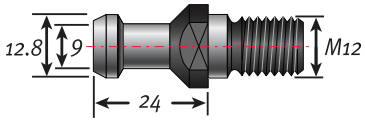
Includes: Heian, Shinx



BT30 – 60˚

PART NO. 07806

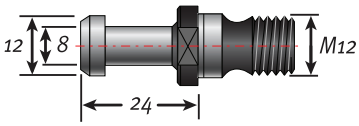
Includes: Shoda, Anderson (1997 and earlier, verify on manufacturer's print)



BT30 KOMO

PART NO. 750-19

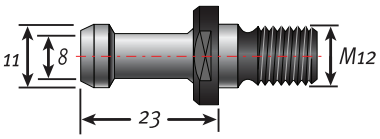
Only for BT30 KOMO routers



BT30 – 90˚

PART NO. 07812

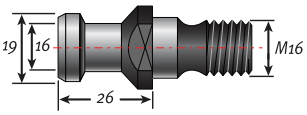
(verify on manufacturer's print)



BT35 – 60˚

PART NO. 4403502

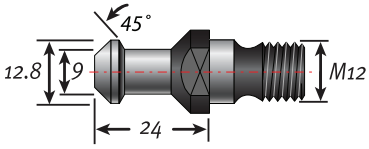
(Heian, verify on manufacturer's print)



DAT 40

PART NO. 49003

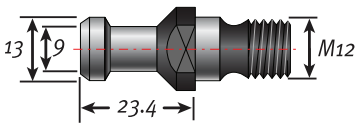
(verify on manufacturer's print)



COLOMBO ISO30 BALL STYLE FOR RS SPINDLES

PART NO. 49001-45

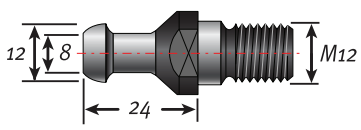
Includes: Motion Master
(verify on manufacturer's print)



COLOMBO ISO30 FOR BILLET SPINDLE

PART NO. 49001

Includes: Motion Master, Anderson (for newer machines, verify on manufacturer's print)



ISO30 FOR HSD SPINDLES

PART NO. 49019

Includes: Biesse, Bermag, Bussellato, CNT, DMS, CR Onsrud, Masterwood, Thermwood, and Holz-her