



6

SPINDLE TOOLING AND QUICK CHANGE TOOLPOSTS



BISON



TABLE OF CONTENTS

I REVOLVING CENTERS • MORSE TAPER 321-327

TYPE	DESCRIPTION	PAGE
8811 R	REVOLVING TAILSTOCK CENTERS WITH 60° ANGLE TIP	321
8812 R	REVOLVING TAILSTOCK CENTERS WITH SMALLER BODY DIAMETER	321
8813 R	REVOLVING TAILSTOCK CENTERS WITH SMALLER BODY DIAMETER AND EXTENDED POINT	321
8814 R	REVOLVING TAILSTOCK CENTERS WITH EXTENDED POINT	321
8814 NC	NC REVOLVING CENTERS WITH EXTENDED POINT FOR HIGH SPEEDS	322
8815 NC	NC REVOLVING CENTERS WITH EXTENDED POINT AND DRAW OFF NUT	322
8823	REVOLVING TAILSTOCK CENTERS WITH RADIAL COMPENSATION	322
8824	REVOLVING TAILSTOCK CENTERS WITH RADIAL COMPENSATION AND EXTENDED POINT	322
8809	HEAVY DUTY REVOLVING CENTERS WITH HOLLOW TIP	323
8810	HEAVY DUTY REVOLVING TAILSTOCK CENTERS WITH CARBIDE TIP	323
8811	HEAVY DUTY TAILSTOCK CENTERS	323
8814	HEAVY DUTY REVOLVING TAILSTOCK CENTERS WITH EXTENDED POINT	323
8815	HEAVY DUTY REVOLVING CENTERS WITH DRAW OFF NUT	324
8816	HEAVY DUTY REVOLVING CENTERS WITH DRAW OFF NUT AND CARBIDE TIP	324
8831	REVOLVING TAILSTOCK CENTERS FOR INTERCHANGEABLE INSERTS	324
8832	REVOLVING TAILSTOCK CENTERS FOR INTERCHANGEABLE INSERTS	324
8825	TRUNCATED 60° POINT CENTERS FOR HOLDING TUBULAR WORKPIECES	325
8882	TRUNCATED 75° POINT CENTERS WITH INTERCHANGEABLE PLATES	325
8410	HYDRAULIC FACE DRIVERS	325
8831-KPL	REVOLVING TAILSTOCK CENTERS - SET WITH INTERCHANGEABLE INSERTS	326
8832-KPL	REVOLVING TAILSTOCK CENTERS - SET WITH INTERCHANGEABLE INSERTS	327

II SOLID CENTERS • MORSE TAPER 328-329

TYPE	DESCRIPTION	PAGE
8711	60° SOLID CENTERS - CARBIDE TIP	328
8712	60° SOLID CENTERS	328
8720	60° SOLID CENTERS WITH SPANNER FLATS	328
8721	60° CARBIDE TIPPED SOLID CENTERS WITH SPANNER FLATS	328
8725	60° SOLID CENTERS WITH DRAW OFF NUT	328
8726	60° CARBIDE TIPPED SOLID CENTERS WITH DRAW OFF NUT	328
8730	SOLID CENTERS 60° WITH HALF POINT	330
8731	SOLID CENTERS 60° CARBIDE TIPPED WITH HALF POINT	330
8735	SOLID CENTERS WITH HOLLOW TIP	330
8740	HALF POINT SOLID CENTERS WITH HOLLOW TIP	330

III TOOLHOLDERS • ANSI B5.50/CAT 330-335

TYPE	DESCRIPTION	PAGE
7607 AD	COLLET CHUCKS FOR ER COLLETS	331
7614	TG COLLET CHUCKS	331
7652	DOUBLE ANGLE COLLET CHUCKS	331
7636 AD	WELDON TYPE END MILL HOLDERS	332
7636 M-AD	WELDON TYPE METRIC END MILL HOLDERS	332
7318	STUB ARBOR HOLDERS	333



TABLE OF CONTENTS

TYPE	DESCRIPTION	PAGE
7374	SEMI FLUSH SLITTING SAW HOLDERS	333
7385	SHELL MILL HOLDERS	333
1690	REDUCING ADAPTERS FOR TOOLS WITH 7:24 SHANK	334
1691	REDUCING ADAPTERS FOR TOOLS WITH MT SHANK	334
2191	MACHINABLE BLANK ADAPTERS	334
2852	CONTROL ARBORS	334
7382	FACE MILL HOLDERS FOR MILLING CUTTERS	334
7658	KEYLESS DRILL CHUCKS WITH INTEGRAL CAT FLANGE	334
5357	DRILL CHUCK ADAPTERS FOR JACOBS TAPER	335
7630	CAT SHRINK FIT HOLDERS	335
9886	PULL STUDS WITH THROUGH HOLE	335

TYPE	DESCRIPTION	PAGE
5377	JACOBS TAPER ADAPTERS FOR BT TAPER	338
7388	SHELL MILL HOLDERS FOR MILLING CUTTERS	338
7656	KEYLESS DRILL CHUCKS WITH INTEGRAL BT FLANGE	338
7632	BT SHRINK FIT HOLDERS	339
9883	PULL STUDS	339

V TOOLHOLDERS • NMTB TAPER 340-343

TYPE	DESCRIPTION	PAGE
7616	COLLET CHUCKS FOR ER COLLETS	341
7616 QC	QUICK CHANGE CHUCKS FOR ER COLLETS	341
7620 QC	WELDON TYPE END MILL HOLDERS	341
7640	COLLET CHUCKS FOR TG COLLETS	341
7665	COLLET CHUCKS FOR DA180 COLLETS	341
1650	REDUCTION ADAPTERS FOR NMTB TAPERS	342
1657 QC	MORSE TAPER ADAPTERS	342
5370	JACOBS TAPER ADAPTERS	342
7311 QC	SHELL MILL HOLDERS	342
7311 QC L	EXTENDED SHELL MILL HOLDERS	342
7349	FACE MILL HOLDERS FOR MILLING CUTTERS	342
7657	INTEGRAL KEYLESS DRILL CHUCKS	342
7170	LONG MILLING MACHINE ARBORS	343

IV TOOLHOLDERS • MAS 403/BT TAPER 336-340

TYPE	DESCRIPTION	PAGE
7624	WELDON END MILL HOLDERS	337
7626 AD	COLLET CHUCKS FOR ER COLLETS	337
7626-S	COLLET CHUCKS FOR ER COLLETS - SLIM DESIGN	337
1661	COMBI REDUCING ADAPTERS FOR TOOLS WITH MT SHANK	338
2192	BORING BAR BLANKS	338
2854	TEST ARBORS	338

TABLE OF CONTENTS



VI TOOLHOLDERS • HSK-A • DIN 69893-A 344-346

TYPE	DESCRIPTION	PAGE
2856	CONTROL ARBOR	345
5390	HSK DRILL CHUCK ADAPTERS FOR JACOBS TAPER	345
5391	HSK INTEGRAL KEYLESS DRILL CHUCKS	345
7885	WELDON TYPE END MILL HOLDERS	345
7887	COLLET CHUCKS FOR ER COLLETS	345
7891	MACHINABLE BLANK ADAPTERS	345
1313	COOLANT TUBES	346
7634	HSK SHRINK FIT HOLDERS	346
7888	METRIC SHELL MILL HOLDERS	346

VII TOOLHOLDERS • MORSE TAPER 348-351

TYPE	DESCRIPTION	PAGE
5362	DRILL CHUCK MANDRELS FOR JACOBS TAPER	349
7711	COLLET CHUCKS FOR ER COLLETS	349
7720	END MILL HOLDERS WITH MT SHANK TANGED	349
7721	END MILL HOLDERS WITH MT SHANK THREADED	349
1751	REDUCTION SLEEVES FOR MORSE TAPER	350
2842	MT FACE MILL HOLDERS	350

TYPE	DESCRIPTION	PAGE
5310	DRIVER ARBORS FOR REAMERS	350
7411	SHELL MILL ARBORS WITH MT SHANK	350
7470	MT TO THREADED MOUNT ADAPTER	350
7725-M	ANNULAR CUTTER HOLDERS FOR MT SHANK	350
1761	EXTENSION SLEEVES FOR MORSE TAPER	351
1762	EXTENSION SLEEVES FOR MORSE TAPER	351
1764	ELONGATING SLEEVES FOR MORSE TAPER	351
1765	ELONGATING SLEEVES FOR MORSE TAPER	351

VIII TOOLHOLDERS • CYLINDRICAL SHANK 352-354

TYPE	DESCRIPTION	PAGE
5312	DRIVER ARBORS FOR REAMERS	353
7565	STUB MILLING MACHINE ARBORS	353
7567	STRAIGHT SHANK SHELL MILL ARBORS	353
7725-S	ANNULAR CUTTER HOLDERS FOR STRAIGHT SHANK	353
7812	COLLET CHUCKS FOR ER COLLETS	353
1875	SOLID SOCKETS WITH MT HOLE	354
5275	FLOATING REAMER HOLDERS	354
5353	JACOBS TAPER ADAPTERS	354
7817	DA STRAIGHT SHANK COLLET EXTENSIONS	354



TABLE OF CONTENTS

IX TOOLHOLDERS - R8 SHANK 355

TYPE	DESCRIPTION	PAGE
1855	MORSE TAPER ADAPTERS FOR R8 SHANK	355
5355	R8 TO JACOBS TAPER ADAPTERS	355
7560	SLITTING SAW STUB MILL ARBORS	355
7567	R8 SHELL MILL ARBORS	355
7725-R	ANNULAR CUTTER HOLDERS FOR R8 SHANK	355
7814	COLLET CHUCKS FOR ER, TG OR DA COLLETS	355
7820	END MILL HOLDERS WITH R8 SHANK	355

TYPE	DESCRIPTION	PAGE
3000-R8	R8 ROUND COLLETS	357
3000-R8-M	R8 ROUND COLLETS - METRIC	358
7618-M	ER COLLETS - METRIC	358
7618-M-KPL	ER COLLETS METRIC - SET	358
3000-5C-M	5C (385E) COLLETS - METRIC	359
3000-KPL-M	5C (385E) COLLETS - SET - METRIC	359
3010-173E	DEAD LENGTH COLLETS 173E (DIN 6343)	359
3010-185E	DEAD LENGTH COLLETS 185E (DIN 6343)	360

X KEYLESS DRILL CHUCKS AND ACCESSORIES 356

TYPE	DESCRIPTION	PAGE
5133	KEYLESS DRILL CHUCKS FOR INDUSTRIAL AND CNC USE	356

XII QUICKCHANGE TOOLPOSTS AND TOOLHOLDERS 361-362

TYPE	DESCRIPTION	PAGE
4414	QUICK CHANGE TOOLPOSTS	362
4494	STANDARD TOOLHOLDERS	362
4495	VEE TYPE TOOLHOLDERS	362
4496	PART OFF TOOLHOLDERS	362
4497	MORSE TAPER TOOLHOLDERS	362
4498	TOOLHOLDERS FOR BORING BARS	362
4499	TOOLHOLDERS FOR BORING BARS	362

XI COLLETS 356-360

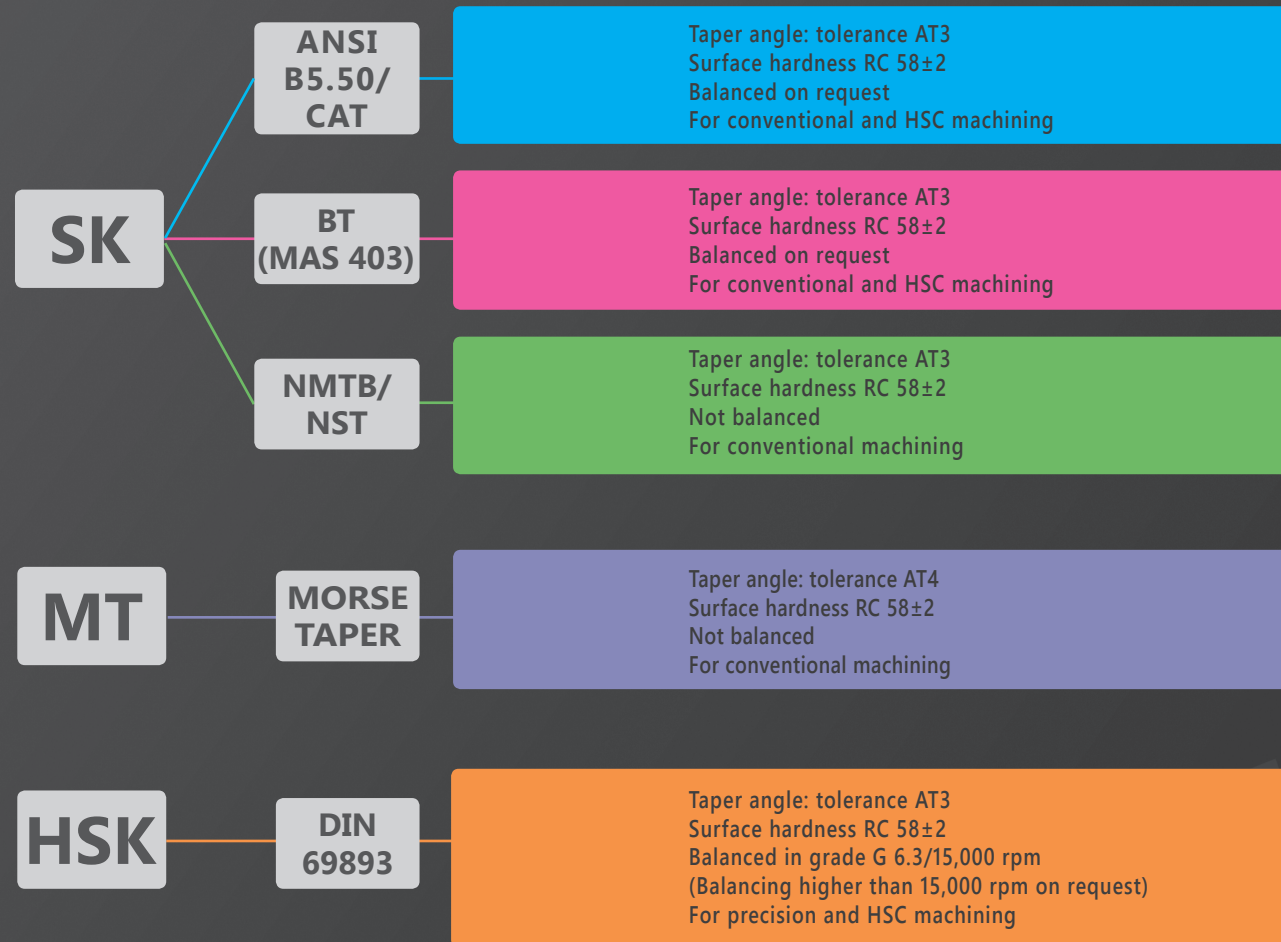
TYPE	DESCRIPTION	PAGE
7618	ER COLLETS	356
7618-KPL	ER COLLETS - SET	356
3000-5C	5C (385E) COLLETS	357
3000-16C	16C COLLETS	357

XIII SPARE PARTS & ACCESSORIES 363-366

SPINDLE TOOLING AND QUICK CHANGE TOOLPOSTS

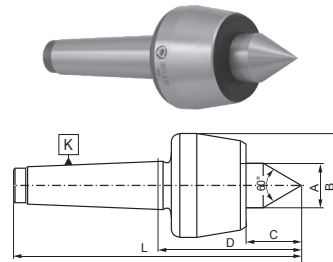
Machining with the newest generation of cutting tools requires using very high parameters; the grinding machine spindle rotational speeds can reach in excess of 40.000 rpm. When you are doing precision work at this level, it is imperative that you protect the bearings and use balanced holders.

Type of tool shanks for milling machines and machining centers

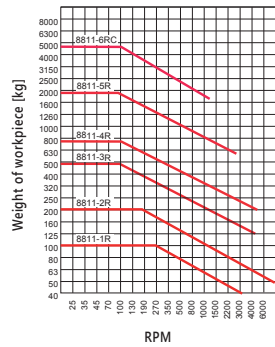


8811 R

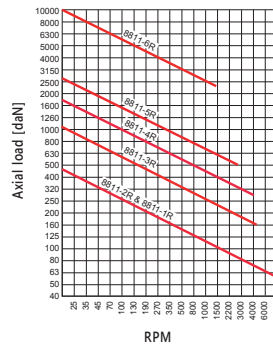
■ Revolving centers with 60° point



Radial load
Service life of roller bearing: 2000 h



Axial load
Service life of roller bearing: 2000 h

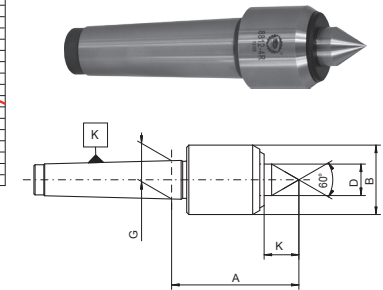


K MT	Max. weight [lbs]	RPM	Max. concentr. err. [in] Precision	Code No.	Max. concentr. err. [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]
1	220	7,000	-	-	0.0002	7-568-001	0.59	1.42	0.67	2.38	4.49
2	440	7,000	0.0001	7-568-102	0.0002	7-568-002	0.79	1.77	0.93	2.54	5.06
3RL*	880	6,300	0.0001	7-568-103L	0.0002	7-568-003L	0.87	1.97	1.08	2.76	5.94
3	1,100	5,000	0.0001	7-568-103	0.0002	7-568-003	0.98	2.36	1.20	3.11	6.30
4	1,760	3,800	0.0001	7-568-104	0.0002	7-568-004	1.26	2.76	1.57	4.00	8.03
5	4,400	3,000	0.0001	7-568-105	0.0002	7-568-005	1.57	3.54	1.95	5.04	10.14
6	7,700	2,600	-	-	0.0004	7-568-006	1.97	4.13	2.26	5.98	13.15
6RC**	11,000	1,500	-	-	0.0004	7-568-006C	2.46	5.51	2.64	7.64	14.80

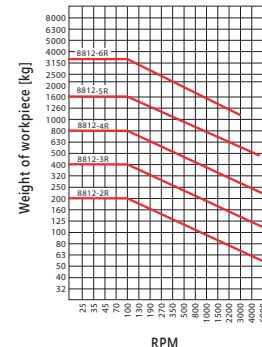
*Slim body design **Heavy duty

8812 R

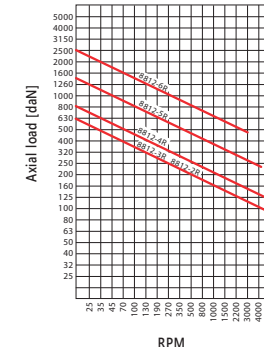
■ Revolving centers with 60° point and small body diameter



Radial load
Service life of roller bearing: 2000 h



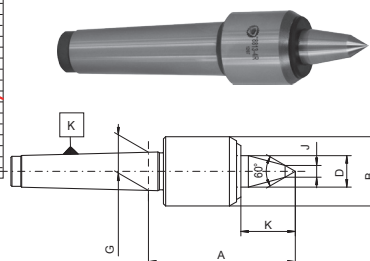
Axial load
Service life of roller bearing: 2000 h



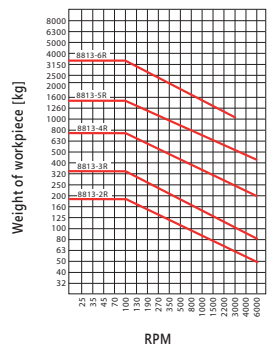
K MT	Max. weight [lbs]	RPM	Max. concentr. error [in]	Code No.	A [in]	B [in]	D [in]	G [in]	K [in]
2	440	7,000	0.0002	7-563-002	2.44	1.26	0.59	0.70	0.71
3	880	7,000	0.0002	7-563-003	2.44	1.34	0.59	0.94	0.71
4	1,760	6,300	0.0002	7-563-004	2.97	1.65	0.79	1.23	0.98
5	3,520	4,300	0.0004	7-563-005	4.09	2.28	1.18	1.75	1.34
6	7,700	3,000	0.0008	7-563-006	5.63	3.15	1.65	2.49	1.93

8813 R

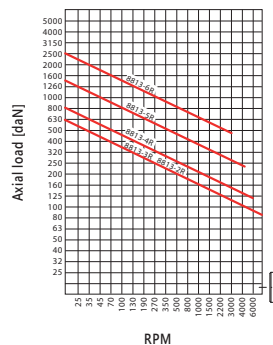
■ Extended revolving centers with 60° point and small body diameter



Radial load
Service life of roller bearing: 2000 h



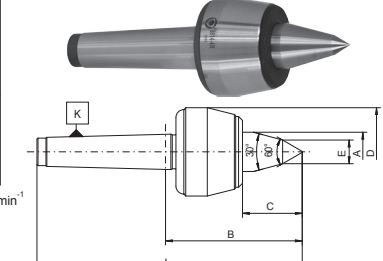
Axial load
Service life of roller bearing: 2000 h



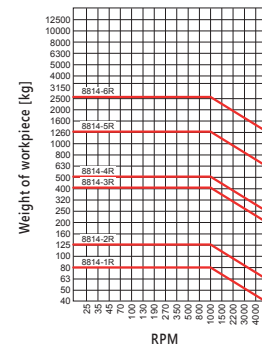
K MT	Max. weight [lbs]	RPM	Max. concentr. error [in]	Code No.	A [in]	B [in]	D [in]	G [in]	K [in]	J [in]
2	374	7,000	0.0003	7-562-002	2.87	1.26	0.59	0.70	1.14	0.39
3	748	7,000	0.0003	7-562-003	2.91	1.34	0.59	0.94	1.18	0.43
4	1,540	6,300	0.0003	7-562-004	3.48	1.65	0.79	1.23	1.50	0.51
5	3,080	4,300	0.0004	7-562-005	4.69	2.28	1.18	1.75	1.93	0.55
6	6,600	3,000	0.0008	7-562-006	6.46	3.15	1.65	2.49	2.76	0.71

8814 R

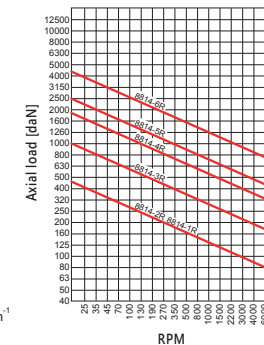
■ Extended revolving centers with 60° point



Radial load
Service life of roller bearing: 2000 h



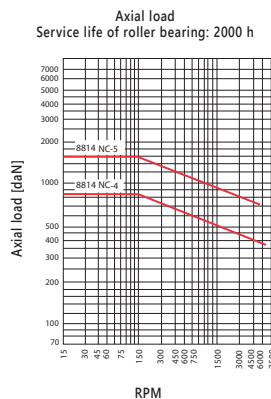
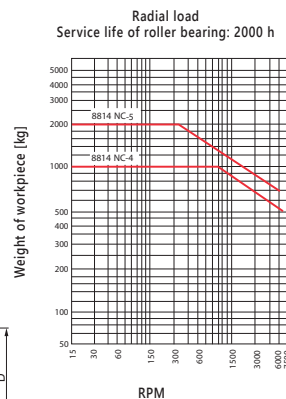
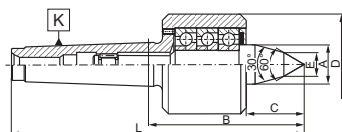
Axial load
Service life of roller bearing: 2000 h



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in]	Code No.	A [in]	B [in]	C [in]	D [in]	E [in]	L [in]
1	176	7,000	0.0004	7-560-001	0.59	2.62	0.91	1.42	0.35	4.72
2	308	7,000	0.0002	7-560-002	0.79	2.93	1.32	1.77	0.39	5.45
3	880	5,000	0.0002	7-560-003	0.98	3.62	1.71	2.36	0.47	6.81
4	1,100	3,800	0.0002	7-560-004	1.26	4.47	2.05	2.76	0.55	8.50
5	2,640	3,000	0.0002	7-560-005	1.57	5.68	2.57	3.54	0.63	10.74
6	5,500	2,600	0.0004	7-560-006	1.97	6.71	3.05	4.13	0.71	13.88

8814 NC

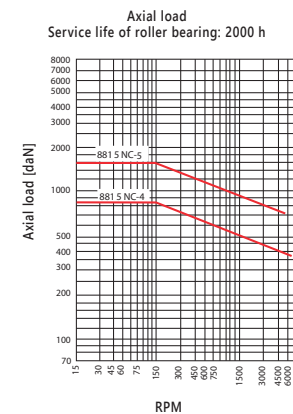
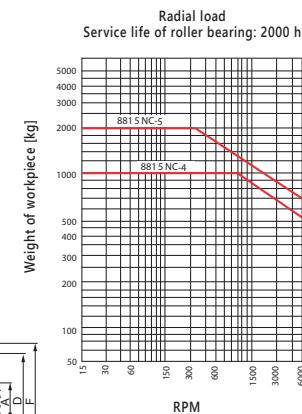
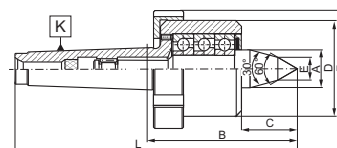
- High speed NC extended revolving centers with 60° point



K	MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	E [in]	L [in]
4		2,200	7,000	0.0002	7-566-004	0.0004	7-566-0040	1.10	4.67	1.93	2.76	0.55	8.70
5		4,400	6,000	0.0002	7-566-005	0.0004	7-566-0050	1.57	5.93	2.66	3.74	0.63	11.02

8815 NC

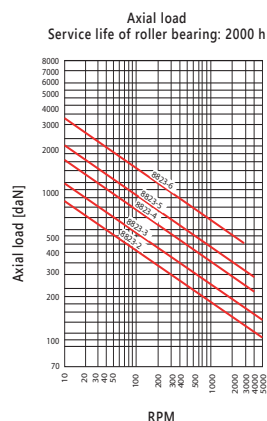
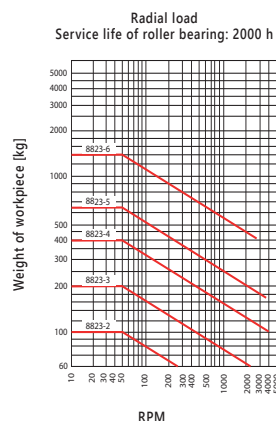
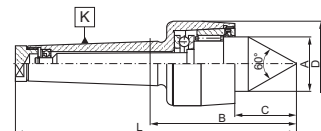
- High speed NC extended revolving centers with 60° point and draw off nut



K	MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	E [in]	F [in]	L [in]
4		2,200	7,000	0.0002	7-569-004	0.0004	7-569-0040	1.10	4.67	1.93	2.76	0.55	3.23	8.70
5		4,400	6,000	0.0002	7-569-005	0.0004	7-569-0050	1.57	5.93	2.66	3.74	0.63	4.33	11.02

8823

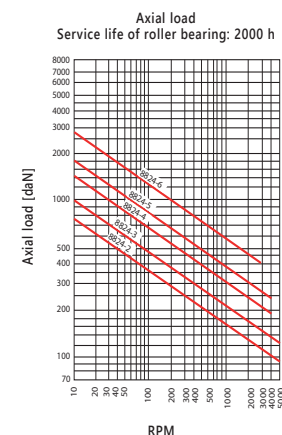
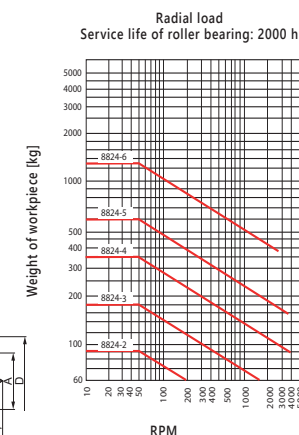
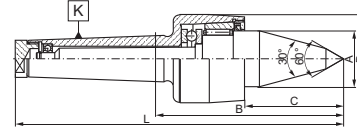
- Radial compensation revolving centers with 60° point



K	MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]
2		220	8,000	0.0002	7-567-002	0.0002	7-567-0020	0.94	2.87	1.04	1.73	5.41
3		440	6,000	0.0001	7-567-003	0.0002	7-567-0030	1.10	3.35	1.28	1.89	6.54
4		880	4,500	0.0001	7-567-004	0.0002	7-567-0040	1.50	3.72	1.71	2.36	7.74
5		1,430	4,000	0.0001	7-567-005	0.0002	7-567-0050	1.97	4.59	2.19	2.95	9.69
6		3,080	3,000	0.0001	7-567-006	0.0003	7-567-0060	2.38	5.31	2.46	3.54	12.48

8824

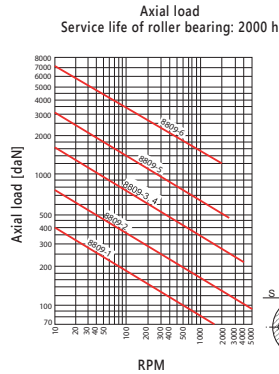
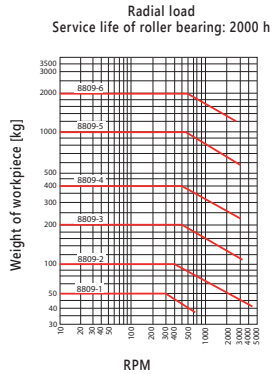
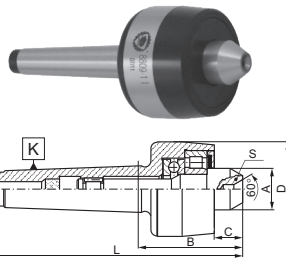
- Radial compensation revolving centers with 60° point



K	MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]
2		198	8,000	0.0006	7-559-002	0.94	3.35	1.52	1.73	5.89
3		396	6,000	0.0006	7-559-003	1.10	3.94	1.87	1.89	7.13
4		770	4,500	0.0006	7-559-004	1.50	4.63	2.62	2.36	8.64
5		1,320	4,000	0.0006	7-559-005	1.97	5.81	3.41	2.95	10.91
6		2,860	3,000	0.0006	7-559-006	2.38	6.57	3.72	3.54	13.74

8809

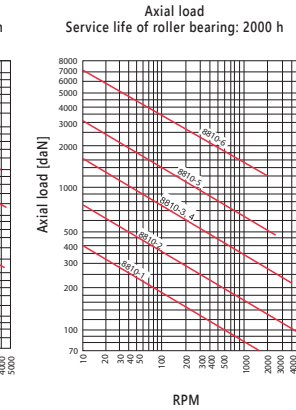
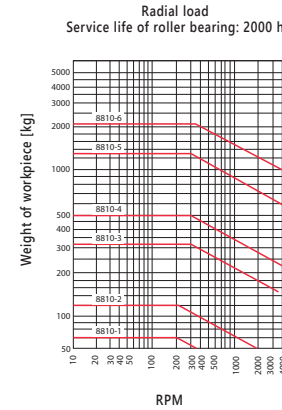
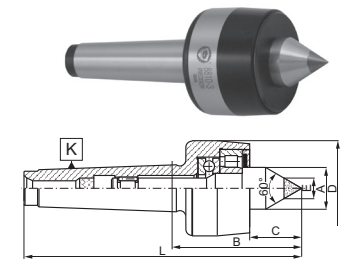
- Hollow-tipped HD revolving centers with 60° point



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]	E [in]	F [in]
1	110	5,000	0.0002	7-554-101	0.0003	7-554-001	0.59	1.73	0.45	1.50	3.84	0.10	0.17
2	220	5,000	0.0001	7-554-102	0.0003	7-554-002	0.71	2.01	0.63	1.57	4.53	0.10	0.21
3	440	4,000	0.0001	7-554-103	0.0003	7-554-003	0.98	2.60	0.73	2.20	5.79	0.16	0.33
4	880	3,000	0.0001	7-554-104	0.0003	7-554-004	1.26	2.80	0.77	2.52	6.81	0.25	0.52
5	2,200	2,500	0.0002	7-554-105	0.0004	7-554-005	1.57	3.72	1.22	3.35	8.82	0.25	0.52
6	4,400	2,000	0.0002	7-554-106	0.0004	7-554-006	2.46	5.16	1.73	5.12	12.32	0.39	0.83

8810

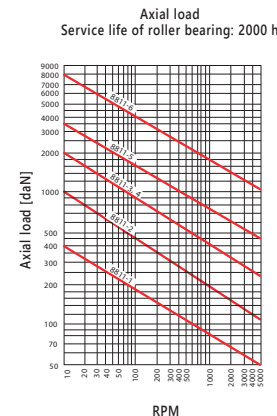
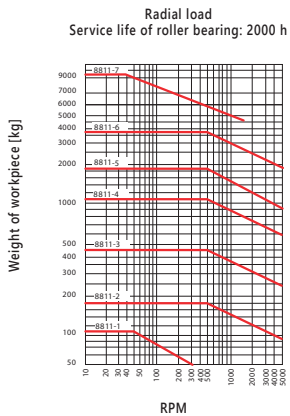
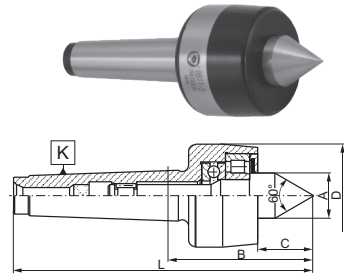
- Carbide-tipped HD revolving centers with 60° point



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	E [in]	L [in]
1	132	5,000	0.0002	7-553-101	0.0003	7-553-001	0.59	1.95	0.67	1.50	0.28	4.06
2	264	5,000	0.0001	7-553-102	0.0003	7-553-002	0.71	2.22	0.85	1.57	0.28	4.74
3	704	4,000	0.0001	7-553-103	0.0003	7-553-003	0.98	2.95	1.08	2.20	0.43	6.14
4	1,100	3,000	0.0001	7-553-104	0.0003	7-553-004	1.26	3.35	1.32	2.52	0.55	7.36
5	2,750	2,500	0.0002	7-553-105	0.0004	7-553-005	1.57	4.25	1.73	3.35	0.71	9.33
6	4,840	2,000	0.0002	7-553-106	0.0004	7-553-006	2.46	5.96	2.52	5.12	0.71	13.13

8811

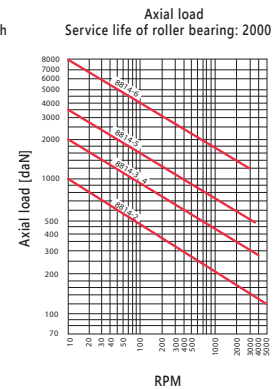
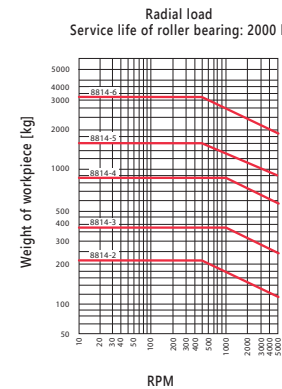
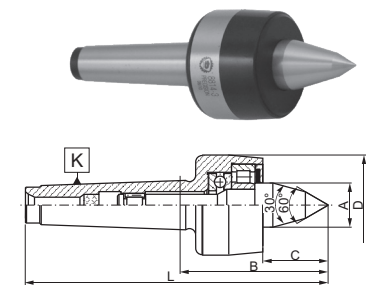
- HD revolving centers with 60° point



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]
1	220	5,000	0.0002	7-565-101	0.0003	7-565-001	0.59	1.95	0.67	1.50	4.06
2	396	5,000	0.0001	7-565-102	0.0003	7-565-002	0.71	2.22	0.85	1.57	4.74
3	990	4,000	0.0001	7-565-103	0.0003	7-565-003	0.98	2.95	1.08	2.20	6.14
4	2,200	3,000	0.0001	7-565-104	0.0003	7-565-004	1.26	3.35	1.32	2.52	7.36
5	4,180	2,500	0.0002	7-565-105	0.0004	7-565-005	1.57	4.25	1.73	3.35	9.33
6	8,140	2,000	0.0002	7-565-106	0.0004	7-565-006	2.46	5.96	2.52	5.12	13.13
7	20,900	1,000	0.0005	7-565-107	0.0008	7-565-007	2.95	7.74	2.89	5.91	17.60

8814

- HD extended revolving centers with 60° point

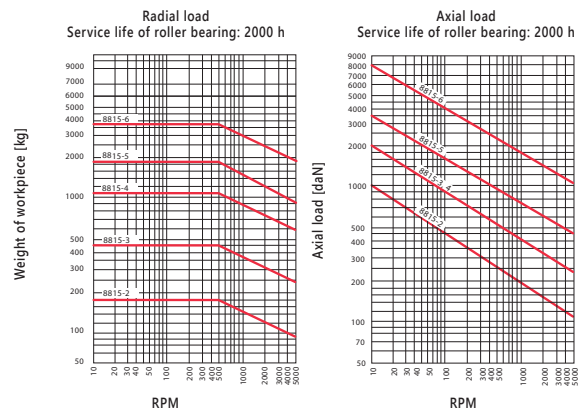
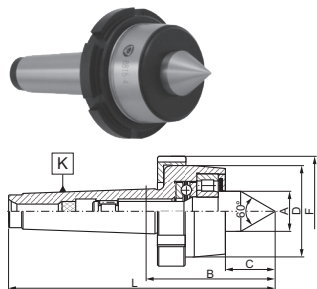


K MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]
2	506	5,000	0.0003	7-561-102	0.0006	7-561-002	0.71	2.54	1.16	1.57	5.06
3	836	4,000	0.0003	7-561-103	0.0006	7-561-003	0.98	3.46	1.59	2.20	6.65
4	1,870	3,000	0.0003	7-561-104	0.0006	7-561-004	1.26	4.06	2.03	2.52	8.07
5	3,520	2,500	0.0004	7-561-105	0.0008	7-561-005	1.57	5.12	2.60	3.35	10.20
6	6,930	2,000	0.0004	7-561-106	0.0008	7-561-006	2.46	7.01	3.62	5.12	14.19

* Using heavy duty centers with lighter workpieces and/or lower axial load than specified, might result in higher runout

8815

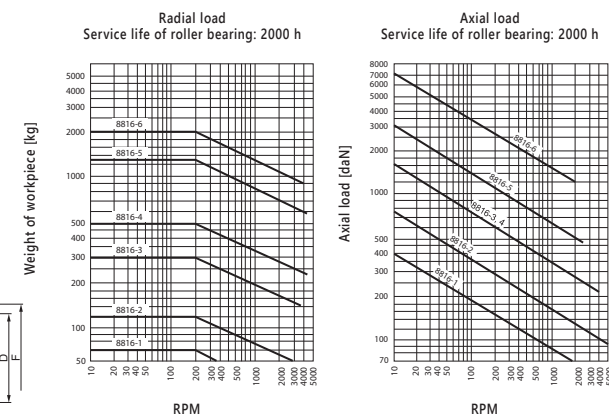
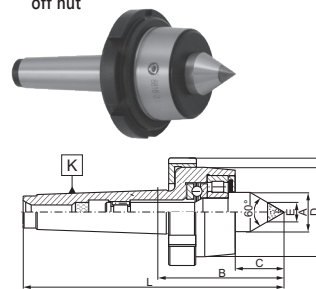
- HD revolving centers with 60° point angle and draw off nut



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	F [in]	L [in]
1	220	5,000	0.0002	7-558-101	0.0003	7-558-001	0.59	1.95	0.67	1.50	1.97	4.06
2	396	5,000	0.0001	7-558-102	0.0003	7-558-002	0.71	2.22	0.85	1.57	2.05	4.74
3	990	4,000	0.0001	7-558-103	0.0003	7-558-003	0.98	2.95	1.08	2.20	2.68	6.14
4	2,200	3,000	0.0001	7-558-104	0.0003	7-558-004	1.26	3.35	1.32	2.52	2.99	7.36
5	4,180	2,500	0.0002	7-558-105	0.0004	7-558-005	1.57	4.25	1.73	3.35	3.94	9.33
6	8,140	2,000	0.0002	7-558-106	0.0004	7-558-006	2.46	5.96	2.52	5.12	5.91	13.13

8816

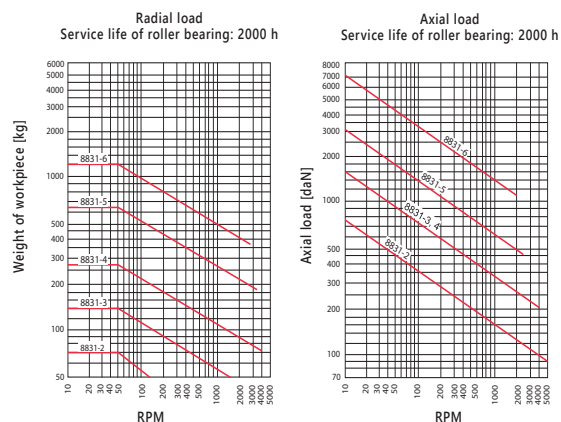
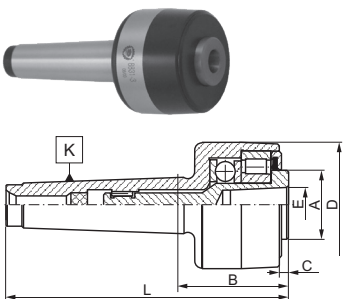
- Carbide-tipped HD revolving centers with 60° point angle and draw off nut



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	F [in]	E [in]	L [in]
1	132	5,000	0.0002	7-557-101	0.0003	7-557-001	0.59	1.95	0.67	1.50	1.97	0.28	4.06
2	264	5,000	0.0001	7-557-102	0.0003	7-557-002	0.71	2.22	0.85	1.57	2.05	0.28	4.74
3	660	4,000	0.0001	7-557-103	0.0003	7-557-003	0.98	2.95	1.08	2.20	2.68	0.43	6.14
4	1,100	3,000	0.0001	7-557-104	0.0003	7-557-004	1.26	3.35	1.32	2.52	2.99	0.55	7.36
5	2,750	2,500	0.0002	7-557-105	0.0004	7-557-005	1.57	4.25	1.73	3.35	3.94	0.71	9.33
6	4,400	2,000	0.0002	7-557-106	0.0004	7-557-006	2.46	5.96	2.52	5.12	5.91	0.71	13.13

8831

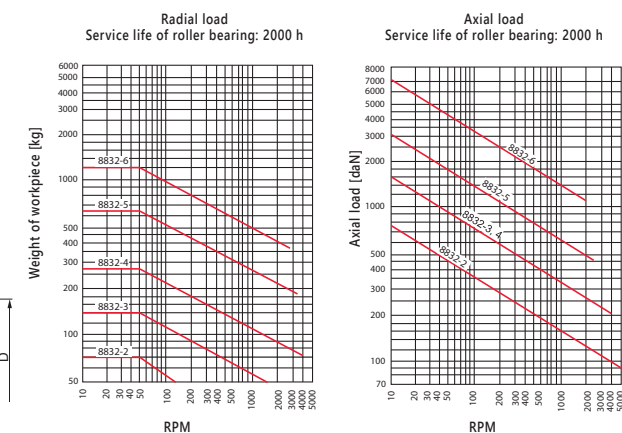
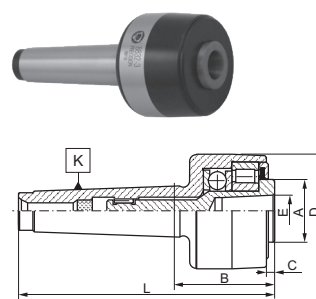
- Revolving centers with interchangeable inserts - body only



K MT	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]	E [in]
2	0.0004	7-571-102	0.0008	7-571-1020	0.71	1.54	0.16	1.57	4.06	0.28
3	0.0004	7-571-103	0.0008	7-571-1030	0.98	2.05	0.18	2.20	5.24	0.47
4	0.0004	7-571-104	0.0008	7-571-1040	1.26	2.24	0.22	2.52	6.26	0.59
5	0.0006	7-571-105	0.0012	7-571-1050	1.57	2.76	0.24	3.35	7.83	0.87
6	0.0006	7-571-106	0.0012	7-571-1060	2.46	3.70	0.26	5.12	10.87	1.10

8832

- Revolving centers with interchangeable inserts - body only

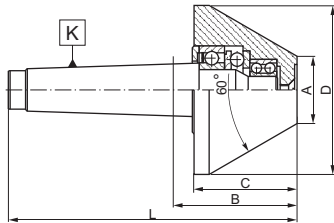


K MT	Max. concentr. error [in] Precision	Code No.	Max. concentr. error [in] Standard	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]	E [in]
2	0.0004	7-570-102	0.0008	7-570-1020	0.87	1.61	0.12	1.77	4.13	0.39
3	0.0004	7-570-103	0.0008	7-570-1030	0.98	2.05	0.18	2.20	5.24	0.59
4	0.0004	7-570-104	0.0008	7-570-1040	1.26	2.24	0.22	2.52	6.26	0.79
5	0.0006	7-570-105	0.0012	7-570-1050	1.57	2.76	0.24	3.35	7.83	0.98
6	0.0006	7-570-106	0.0012	7-570-1060	2.46	3.70	0.26	5.12	10.87	1.18

* Using heavy duty centers with lighter workpieces and/or lower axial load than specified might result in higher runout

8825

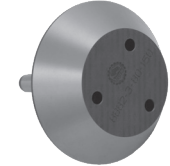
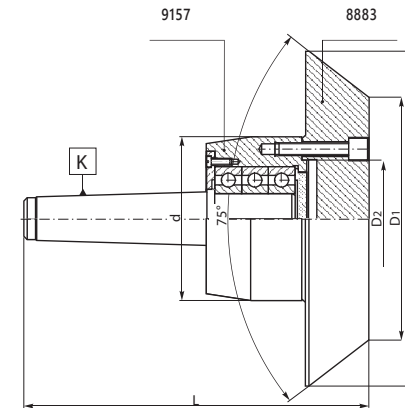
■ Bull nose revolving centers with 60° truncated point



Size	K MT	Max. weight [lbs]	RPM	Max. concentr. error [in]	Code No.	A [in]	B [in]	C [in]	D [in]	L [in]
1	1	220	5,000	0.0003	7-575-010	0.79	1.59	1.38	1.97	3.70
2	2	396	5,000	0.0003	7-575-020	1.18	1.63	1.38	2.36	4.15
2-1	2	660	4,500	0.0003	7-575-021	1.18	2.32	2.09	3.15	4.84
3	3	770	4,500	0.0003	7-575-030	1.18	2.32	2.09	3.15	5.51
3-1	3	1,210	3,000	0.0003	7-575-031	1.57	2.64	2.40	3.94	5.83
3-2	3	1,320	3,000	0.0003	7-575-032	1.97	2.99	2.76	4.72	6.18
4	4	1,320	3,000	0.0003	7-575-040	1.57	2.70	2.40	3.94	6.73
4-1	4	1,540	3,000	0.0003	7-575-041	1.97	3.05	2.76	4.72	7.09
4-2	4	1,540	3,000	0.0004	7-575-042	2.76	3.05	2.76	5.51	7.09
5	5	1,650	3,000	0.0004	7-575-050	1.97	3.05	2.76	4.72	8.15
5-1	5	1,650	2,000	0.0008	7-575-051	3.94	3.05	2.76	6.69	8.15
6	6	4,400	1,000	0.0020	7-575-060	7.09	4.57	4.21	11.50	11.73

8882

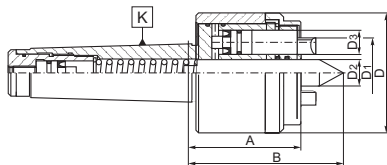
■ Pipe revolving centers with 75° truncated point and interchangeable inserts



K MT	d [in]	D [in]	D ₁ [in]	D ₂ [in]	L [in]	Max. weight [lbs]	RPM	Max. concentr. error [in]	Set	Head Only Code No.	Body Only
3	3.15	5.91	3.74	2.20	7.09	1,540	4,000	0.0020	7-573-3301	7-573-0301	7-573-033
3	3.15	7.87	5.71	2.20	7.09	1,540	4,000	0.0020	7-573-3302	7-573-0302	7-573-033
4	3.94	5.91	3.74	2.76	8.11	2,200	3,500	0.0020	7-573-4401	7-573-0401	7-573-044
4	3.94	7.87	5.71	2.76	8.11	2,200	3,500	0.0020	7-573-4402	7-573-0402	7-573-044
4	3.94	9.84	7.68	2.76	8.11	2,200	3,500	0.0020	7-573-4403	7-573-0403	7-573-044
4	4.92	7.87	5.71	3.74	8.46	3,300	3,200	0.0020	7-573-4502	7-573-0502	7-573-054
4	4.92	9.84	7.68	3.74	8.46	3,300	3,200	0.0020	7-573-4503	7-573-0503	7-573-054
4	4.92	11.81	9.65	3.74	8.46	3,300	3,200	0.0020	7-573-4504	7-573-0504	7-573-054
5	4.92	7.87	5.71	3.74	9.53	3,300	3,200	0.0020	7-573-5502	7-573-0502	7-573-055
5	4.92	9.84	7.68	3.74	9.53	3,300	3,200	0.0020	7-573-5503	7-573-0503	7-573-055
5	4.92	11.81	9.65	3.74	9.53	3,300	3,200	0.0020	7-573-5504	7-573-0504	7-573-055
5	6.30	9.84	7.68	4.92	9.65	3,960	3,000	0.0020	7-573-5601	7-573-0601	7-573-065
5	6.30	11.81	9.65	4.92	9.65	3,960	3,000	0.0020	7-573-5602	7-573-0602	7-573-065

8410

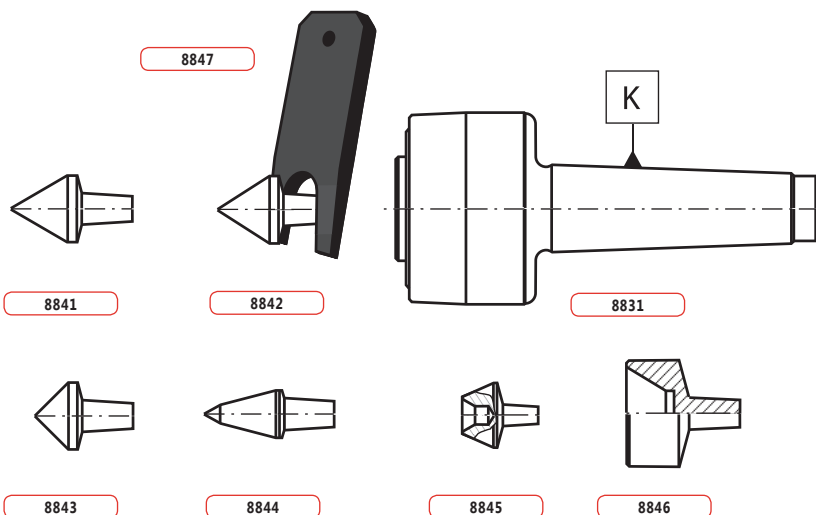
■ Hydraulic face drivers



Code No.	D ₁ [in]	K MT	D [in]	D ₂ [in]	D ₃ [in]	A [in]	B [in]	Max. concentr. error [in]	Max. weight [lbs]
7-590-041	1.06	4	2.68	0.47	0.47	2.52	3.15	0.0008	121
7-590-051	1.06	5	2.68	0.47	0.47	2.52	3.15	0.0008	121
7-590-043	1.57	4	3.19	0.55	0.47	2.64	3.31	0.0008	143
7-590-053	1.57	5	3.19	0.55	0.47	2.64	3.31	0.0008	143
7-590-054	1.97	5	3.54	0.79	0.71	3.39	4.45	0.0012	220
7-590-055	2.48	5	3.94	0.79	0.71	3.39	4.45	0.0012	220

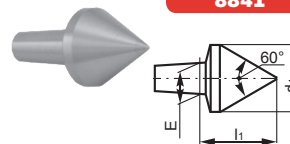
8831-KPL

- Revolving centers with interchangeable inserts
- Set provided with main body and seven different inserts in plastic case



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in]	Code No.	Max. concentr. error [in]	Code No.
			Precision		Standard	
2	154	5,000	0.0004	7-571-002	0.0008	7-571-0020
3	264	4,000	0.0004	7-571-003	0.0008	7-571-0030
4	616	3,000	0.0004	7-571-004	0.0008	7-571-0040
5	1,430	2,500	0.0006	7-571-005	0.0012	7-571-0050
6	2,640	2,000	0.0006	7-571-006	0.0012	7-571-0060

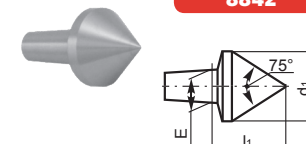
8841



Code No.	W*	d ₁	E	l ₁
7-571-202	2	0.71	0.28	0.83
7-571-203	3	0.98	0.47	1.10
7-571-204	4	1.10	0.59	1.20
7-571-205	5	1.57	0.87	1.67
7-571-206	6	2.36	1.10	2.42

*Size

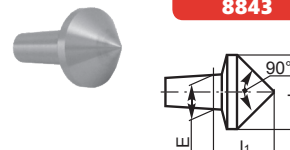
8842



Code No.	W*	d ₁	E	l ₁
7-571-302	2	0.71	0.28	0.69
7-571-303	3	0.98	0.47	0.91
7-571-304	4	1.10	0.59	0.98
7-571-305	5	1.57	0.87	1.34
7-571-306	6	2.36	1.10	1.99

*Size

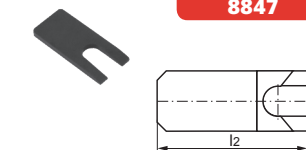
8843



Code No.	W*	d ₁	E	l ₁
7-571-402	2	0.71	0.28	0.59
7-571-403	3	0.98	0.47	0.75
7-571-404	4	1.10	0.59	0.83
7-571-405	5	1.57	0.87	1.10
7-571-406	6	2.36	1.10	1.57

*Size

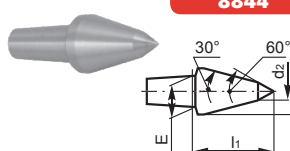
8847



Code No.	W*	l ₁	l ₂
7-571-902	2	0.79	1.97
7-571-903	3	1.18	2.76
7-571-904	4	1.77	3.94
7-571-905	5	2.17	4.72
7-571-906	6	2.56	6.30

*Size

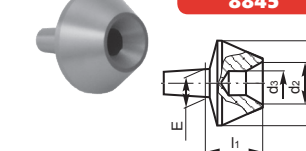
8844



Code No.	W*	d ₁	d ₂	E	l ₁
7-571-502	2	0.59	0.24	0.28	1.06
7-571-503	3	0.71	0.31	0.47	1.22
7-571-504	4	0.98	0.47	0.59	1.59
7-571-505	5	1.10	0.51	0.87	1.79
7-571-506	6	1.57	0.71	1.10	2.50

*Size

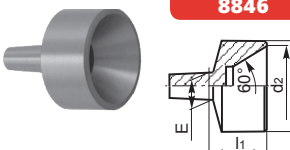
8845



Code No.	W*	d ₁	d ₂	d ₃	E	l ₁
7-571-602	2	1.10	0.47	0.24	0.28	0.73
7-571-603	3	1.57	0.75	0.39	0.47	0.94
7-571-604	4	2.17	0.87	0.39	0.59	1.44
7-571-605	5	2.76	1.26	0.39	0.87	1.65
7-571-606	6	3.94	1.97	0.59	1.10	2.20

*Size

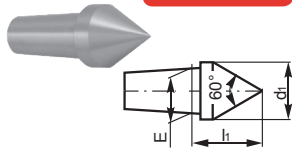
8846



Code No.	W*	d ₁	d ₂	E	l ₁
7-571-702	2	1.10	0.94	0.28	0.85
7-571-703	3	1.57	1.38	0.47	1.04
7-571-704	4	2.17	1.89	0.59	1.54
7-571-705	5	2.76	2.48	0.87	1.85
7-571-706	6	3.94	3.54	1.10	2.44

*Size

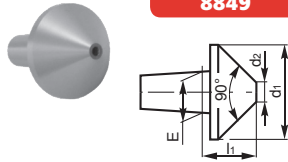
8848



Code No.	W*	d ₁	E	l ₁
7-570-202	2	0.59	0.39	0.75
7-570-203	3	0.79	0.59	0.98
7-570-204	4	0.98	0.79	1.18
7-570-205	5	1.26	0.98	1.38
7-570-206	6	1.42	1.18	1.73

*Size

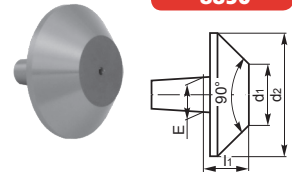
8849



Code No.	W*	d ₁	d ₂	E	l ₁
7-570-302	2	0.87	0.12	0.39	0.59
7-570-303	3	1.42	0.24	0.59	0.87
7-570-304	4	1.77	0.39	0.79	0.98
7-570-305	5	2.20	0.55	0.98	1.18
7-570-306	6	2.76	0.71	1.18	1.42

*Size

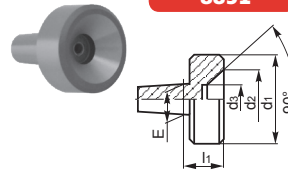
8850



Code No.	W*	d ₁	d ₂	E	l ₁
7-570-402	2	1.46	0.71	0.39	0.59
7-570-403	3	2.48	1.30	0.59	0.87
7-570-404	4	2.76	1.38	0.79	0.98
7-570-405	5	3.15	1.50	0.98	1.18
7-570-406	6	3.94	1.97	1.18	1.42

*Size

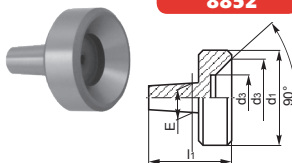
8851



Code No.	W*	d ₁	d ₂	d ₃	E	l ₁
7-570-502	2	0.87	0.71	0.31	0.39	0.59
7-570-503	3	1.42	1.10	0.47	0.59	0.87
7-570-504	4	1.77	1.46	0.67	0.79	0.98
7-570-505	5	2.20	1.73	0.79	0.98	1.18
7-570-506	6	2.76	2.28	0.94	1.18	1.42

*Size

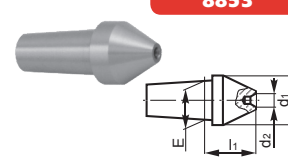
8852



Code No.	W*	d ₁	d ₂	d ₃	E	l ₁
7-570-602	2	1.18	0.98	0.59	0.39	0.59
7-570-603	3	1.77	1.50	0.87	0.59	0.87
7-570-604	4	2.48	2.09	1.18	0.79	0.98
7-570-605	5	2.76	2.36	1.42	0.98	1.18
7-570-606	6	3.94	3.46	2.13	1.18	1.42

*Size

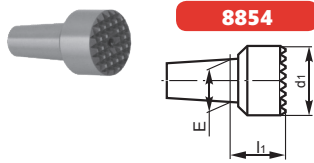
8853



Code No.	W*	d ₁	d ₂	E	l ₁
7-570-702	2	0.59	0.05	0.39	0.59
7-570-703	3	0.79	0.05	0.59	0.87
7-570-704	4	0.98	0.10	0.79	0.98
7-570-705	5	1.26	0.10	0.98	1.18
7-570-706	6	1.42	0.16	1.18	1.42

*Size

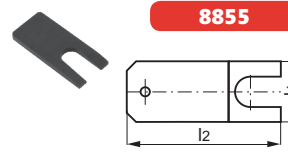
8854



Code No.	W*	d ₁	E	l ₁
7-570-802	2	0.71	0.39	0.59
7-570-803	3	0.98	0.59	0.87
7-570-804	4	1.26	0.79	0.98
7-570-805	5	1.77	0.98	1.18
7-570-806	6	2.20	1.18	1.42

*Size

8855

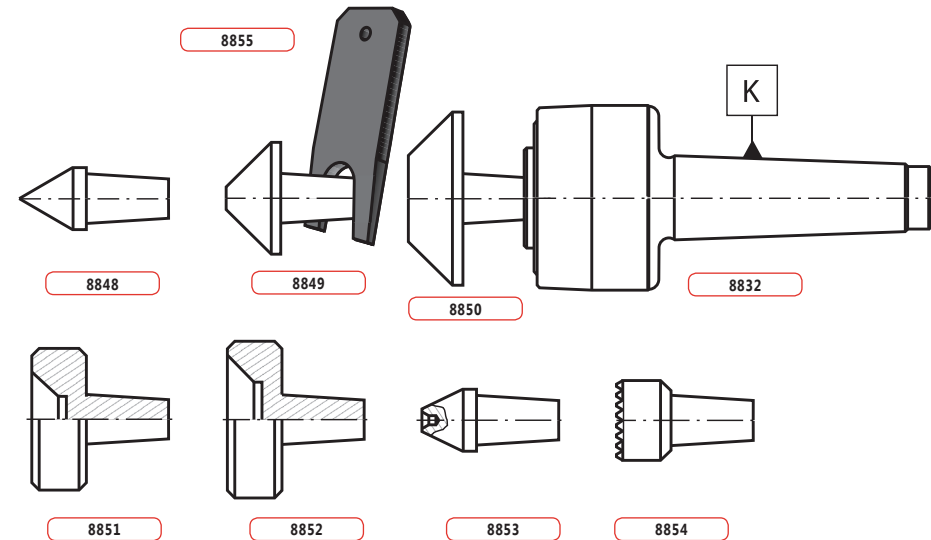


Code No.	W*	l ₁	l ₂
7-570-902	2	0.79	2.36
7-570-903	3	1.18	3.15
7-570-904	4	1.57	3.94
7-570-905	5	1.97	4.72
7-570-906	6	2.36	6.30

*Size

8832-KPL

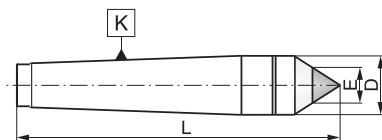
- Revolving centers with interchangeable inserts
- Set provided with main body and eight different inserts in plastic case



K MT	Max. weight [lbs]	RPM	Max. concentr. error [in]	Code No.	Max. concentr. error [in]	Code No.
			Precision		Standard	
2	154	5,000	0.0004	7-570-002	0.0008	7-570-0020
3	264	4,000	0.0004	7-570-003	0.0008	7-570-0030
4	616	3,000	0.0004	7-570-004	0.0008	7-570-0040
5	1,430	2,500	0.0006	7-570-005	0.0012	7-570-0050
6	2,640	2,000	0.0006	7-570-006	0.0012	7-570-0060

8711

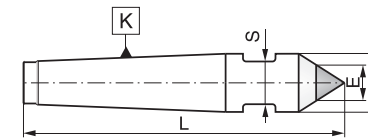
- Carbide-tipped solid centers with full point



Code No.	K MT	L [in]	D [in]	E [in]
7-550-000	0	2.76	0.36	0.20
7-550-005	1	3.15	0.48	0.28
7-550-010	2	3.94	0.71	0.28
7-550-015	3	4.92	0.95	0.43
7-550-020	4	6.30	1.24	0.55
7-550-025	5	7.87	1.76	0.71
7-550-030	6	10.63	2.51	0.71

8721

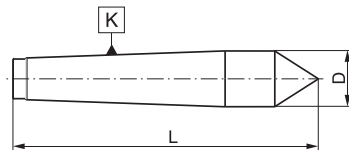
- Carbide-tipped solid centers with full point and spanner flats



Code No.	K MT	L [in]	D [in]	E [in]	S [in]
7-543-000	0	3.07	0.36	0.20	0.28
7-543-001	1	3.54	0.48	0.28	0.39
7-543-002	2	4.41	0.71	0.28	0.51
7-543-003	3	5.43	0.95	0.43	0.75
7-543-004	4	6.89	1.24	0.55	0.94
7-543-005	5	8.54	1.76	0.71	1.42
7-543-006	6	11.42	2.51	0.71	2.17

8712

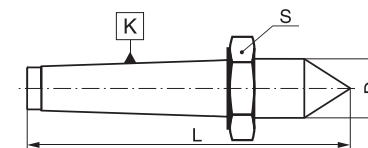
- Solid centers with full point



Code No.	K MT	L [in]	D [in]
7-555-000	0	2.76	0.36
7-555-005	1	3.15	0.48
7-555-010	2	3.94	0.71
7-555-015	3	4.92	0.95
7-555-020	4	6.30	1.24
7-555-025	5	7.87	1.76
7-555-030	6	10.63	2.51
7-555-035	7	14.17	3.29

8725

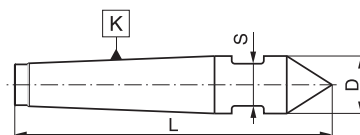
- Solid centers with full point and draw off nut



Code No.	K MT	L [in]	D [in]	S [in]	①
7-545-000	0	3.07	0.36	0.75	7-545-900
7-545-001	1	3.54	0.48	0.94	7-545-901
7-545-002	2	4.41	0.71	1.26	7-545-902
7-545-003	3	5.43	0.95	1.61	7-545-903
7-545-004	4	6.89	1.24	2.17	7-545-904
7-545-005	5	8.54	1.76	2.95	7-545-905
7-545-006	6	11.42	2.51	3.94	7-545-906

8720

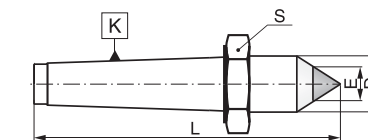
- Solid centers with full point and spanner flats



Code No.	K MT	L [in]	D [in]	S [in]
7-542-000	0	3.07	0.36	0.28
7-542-001	1	3.54	0.48	0.39
7-542-002	2	4.41	0.71	0.51
7-542-003	3	5.43	0.95	0.75
7-542-004	4	6.89	1.24	0.94
7-542-005	5	8.54	1.76	1.42
7-542-006	6	11.42	2.51	2.17

8726

- Carbide-tipped solid centers with full point and draw off nut



Code No.	K MT	L [in]	D [in]	E [in]	S [in]	①
7-546-000	0	3.07	0.36	0.20	0.75	7-545-900
7-546-001	1	3.54	0.48	0.28	0.94	7-545-901
7-546-002	2	4.41	0.71	0.28	1.26	7-545-902
7-546-003	3	5.43	0.95	0.43	1.61	7-545-903
7-546-004	4	6.89	1.24	0.55	2.17	7-545-904
7-546-005	5	8.54	1.76	0.71	2.95	7-545-905
7-546-006	6	11.42	2.51	0.71	3.94	7-545-906

1

2

3

4

5

6

8726

8725

8721

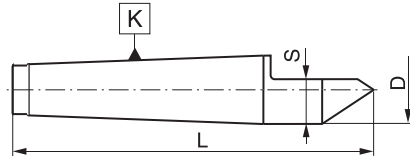
8720

8712

8711

8730

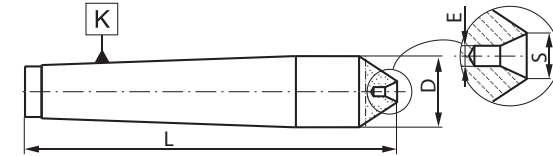
■ Solid centers with half point



Code No.	K MT	L [in]	D [in]	S [in]
7-540-000	0	2.76	0.36	0.22
7-540-001	1	3.15	0.48	0.30
7-540-002	2	3.94	0.71	0.43
7-540-003	3	4.92	0.95	0.59
7-540-004	4	6.30	1.24	0.82
7-540-005	5	7.87	1.76	1.15
7-540-006	6	10.63	2.51	1.68

8735

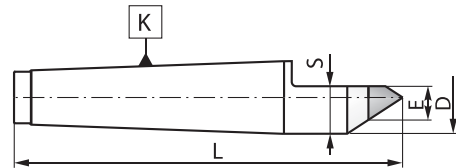
■ Solid centers with center bore



Code No.	K MT	L [in]	D [in]	E [in]	S [in]
7-547-000	0	2.60	0.36	0.04	0.08
7-547-001	1	2.91	0.48	0.06	0.13
7-547-002	2	3.70	0.71	0.10	0.21
7-547-003	3	4.53	0.95	0.16	0.33
7-547-004	4	5.75	1.24	0.25	0.52

8731

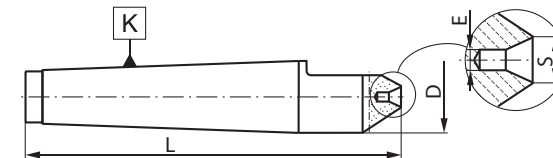
■ Carbide-tipped solid centers with half point



Code No.	K MT	L [in]	D [in]	E [in]	S [in]
7-541-000	0	2.76	0.36	0.20	0.31
7-541-001	1	3.15	0.48	0.28	0.41
7-541-002	2	3.94	0.71	0.28	0.51
7-541-003	3	4.92	0.95	0.43	0.72
7-541-004	4	6.30	1.24	0.55	0.93
7-541-005	5	7.87	1.76	0.71	1.26
7-541-006	6	10.63	2.51	0.71	1.64

8740

■ Solid centers with half point and center bore

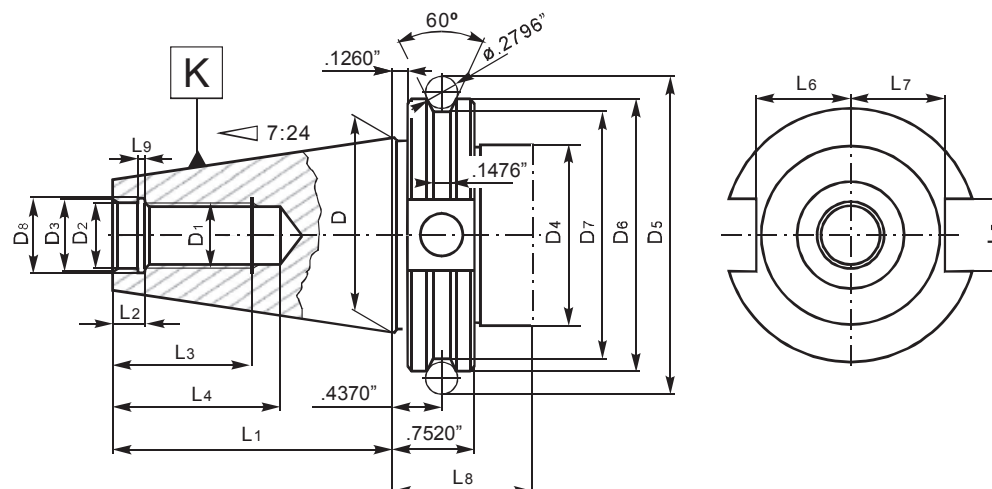


Code No.	K MT	L [in]	D [in]	E [in]	S [in]
7-548-000	0	2.60	0.36	0.04	0.09
7-548-001	1	2.91	0.48	0.06	0.13
7-548-002	2	3.70	0.71	0.10	0.21
7-548-003	3	4.53	0.95	0.16	0.33

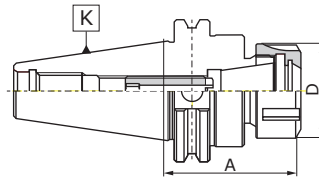
ANSI B5.50/CAT TAPER

Standard features of the tools:

- Manufactured with Chrome Manganese steel
- Carburized with depth of case 0.7 mm
- Hardened and precision ground
- Surface hardness HRC 58±2
- Taper angle: tolerance AT3



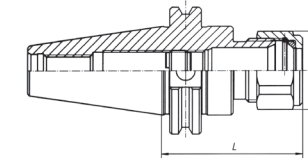
Taper 7:24	Measure	D	D2 H8	D3	D4 ±0.002"	D5 ±0.002"	D6 -0.004"	D7 -0.02"	D8	L	L2	L3	L4 min.	L5 ±0.01"	L6	L7	L8 min.	L9
40	inches	1.7500	0.6409	0.7205	1.7500	2.8457	2.5020	2.2287	0.6690	2.6929	0.2170	1.2598	1.6614	0.6449	0.9843	0.8898	1.3858	0.0394
40	mm	44.75	16.28	18.30	44.45	72.28	63.55	56.61	17.00	68.40	5.50	32.00	42.20	16.38	25.00	22.60	35.20	1.00
50	inches	2.7500	1.0307	1.1220	2.7500	4.2209	3.8772	3.5925	1.0630	4.0060	0.2760	1.8504	2.4213	1.0197	1.4843	1.3898	1.3858	0.0394
50	mm	69.85	26.18	28.50	69.85	107.21	98.48	91.25	27.00	101.75	7.00	47.00	61.50	25.90	37.70	35.30	35.20	1.00



7607 AD

- Collet chucks for ER collets
- Wrenches sold separately

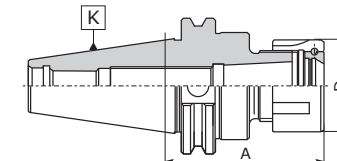
Code No.	K 7:24	Collet size	A [in]	D [in]	Clamping range	RPM		
7-188-415	CAT40	ER16	2.50	1.10	0.125 - 0.438	7,000	7-178-816	7-188-916
7-188-417	CAT40	ER16	3.00	1.10	0.125 - 0.438	7,000	7-178-816	7-188-916
7-188-418	CAT40	ER16	4.00	1.10	0.125 - 0.438	7,000	7-178-816	7-188-916
7-188-420	CAT40	ER20	2.50	1.38	0.125 - 0.500	7,000	7-188-820	7-188-9020
7-188-422	CAT40	ER20	4.00	1.38	0.125 - 0.500	7,000	7-188-820	7-188-9020
7-188-424	CAT40	ER25	2.50	1.65	0.125 - 0.625	7,000	7-188-825	7-188-9025
7-188-426	CAT40	ER25	4.00	1.65	0.125 - 0.625	7,000	7-188-825	7-188-9025
7-188-430	CAT40	ER32	2.50	1.97	0.125 - 0.750	7,000	7-188-832	7-188-9032
7-188-431	CAT40	ER32	3.00	1.97	0.125 - 0.750	7,000	7-188-832	7-188-9032
7-188-432	CAT40	ER32	4.00	1.97	0.125 - 0.750	7,000	7-188-832	7-188-9032
7-188-443	CAT40	ER40	2.50	2.40	0.125 - 1.000	7,000	7-188-840	7-188-9040
7-188-440	CAT40	ER40	4.00	2.40	0.125 - 1.000	7,000	7-188-840	7-188-9040
7-188-446	CAT40	ER40	6.00	2.40	0.125 - 1.000	7,000	7-188-840	7-188-9040
7-188-510	CAT50	ER16	6.00	1.30	0.125 - 0.438	7,000	7-188-816	7-178-916
7-188-520	CAT50	ER20	4.00	1.38	0.125 - 0.500	7,000	7-188-820	7-188-9020
7-188-525	CAT50	ER25	6.00	1.65	0.125 - 0.625	7,000	7-188-825	7-188-9025
7-188-532	CAT50	ER32	6.00	1.97	0.125 - 0.750	7,000	7-188-832	7-188-9032
7-188-543	CAT50	ER40	2.50	2.40	0.125 - 1.000	7,000	7-188-840	7-188-9040
7-188-545	CAT50	ER40	4.00	2.40	0.125 - 1.000	7,000	7-188-840	7-188-9040
7-188-003	CAT40	ER11	2.50	0.73	0.0313 - 0.250	15,000 (G6.3)	7-188-811	7-188-911
7-188-006	CAT40	ER11	4.00	0.73	0.0313 - 0.250	15,000 (G6.3)	7-188-811	7-188-911
7-188-009	CAT40	ER16	2.50	1.10	0.125 - 0.438	15,000 (G6.3)	7-178-816	7-188-916
7-188-012	CAT40	ER16	3.00	1.10	0.125 - 0.438	15,000 (G6.3)	7-178-816	7-188-916
7-188-015	CAT40	ER16	4.00	1.10	0.125 - 0.438	15,000 (G6.3)	7-178-816	7-188-916
7-188-018	CAT40	ER20	2.50	1.38	0.125 - 0.500	15,000 (G6.3)	7-188-820	7-188-9020
7-188-021	CAT40	ER20	4.00	1.38	0.125 - 0.500	15,000 (G6.3)	7-188-820	7-188-9020
7-188-024	CAT40	ER25	2.50	1.65	0.125 - 0.625	15,000 (G6.3)	7-188-825	7-188-9025
7-188-027	CAT40	ER25	4.00	1.65	0.125 - 0.625	15,000 (G6.3)	7-188-825	7-188-9025
7-188-030	CAT40	ER32	2.50	1.97	0.125 - 0.750	15,000 (G6.3)	7-188-832	7-188-9032
7-188-033	CAT40	ER32	3.00	1.97	0.125 - 0.750	15,000 (G6.3)	7-188-832	7-188-9032
7-188-036	CAT40	ER32	4.00	1.97	0.125 - 0.750	15,000 (G6.3)	7-188-832	7-188-9032
7-188-039	CAT40	ER32	5.00	1.97	0.125 - 0.750	15,000 (G6.3)	7-188-832	7-188-9032
7-188-041	CAT40	ER40	2.50	2.40	0.125 - 1.000	15,000 (G6.3)	7-188-840	7-188-9040
7-188-044	CAT40	ER40	4.00	2.40	0.125 - 1.000	15,000 (G6.3)	7-188-840	7-188-9040
7-188-047	CAT40	ER40	5.00	2.40	0.125 - 1.000	15,000 (G6.3)	7-188-840	7-188-9040
7-188-109	CAT40	ER16	2.50	1.10	0.125 - 0.438	20,000 (G2.5)	7-178-816	7-188-916
7-188-115	CAT40	ER16	4.00	1.10	0.125 - 0.438	20,000 (G2.5)	7-178-816	7-188-916
7-188-133	CAT40	ER32	3.00	1.97	0.125 - 0.750	20,000 (G2.5)	7-188-832	7-188-9032



7652

- Double angle collet chucks
- Wrenches sold separately

Code No.	K 7:24	Collet size	L [in]	D [in]	Clamping range	RPM		
7-193-250	CAT40	DA 100	3.50	1.09	0.125 - 0.391	7,000	7-193-810	7-193-910
7-193-150	CAT40	DA 200	3.00	1.07	0.125 - 0.563	7,000	7-193-805	7-193-905
7-193-415	CAT40	DA 180	2.75	1.54	0.125 - 0.750	7,000	7-193-818	7-193-918
7-193-424	CAT40	DA 180	4.00	1.54	0.125 - 0.750	7,000	7-193-818	7-193-918
7-193-524	CAT50	DA 180	4.00	1.54	0.125 - 0.750	7,000	7-193-818	7-193-918
7-193-526	CAT50	DA 180	6.00	1.54	0.125 - 0.750	7,000	7-193-818	7-193-918
7-193-528	CAT50	DA 180	8.00	1.54	0.125 - 0.750	7,000	7-193-818	7-193-918
7-193-015	CAT40	DA 180	2.75	1.54	0.125 - 0.750	15,000 (G6.3)	7-193-818	7-193-918
7-193-024	CAT40	DA 180	4.00	1.54	0.125 - 0.750	15,000 (G6.3)	7-193-818	7-193-918



7614

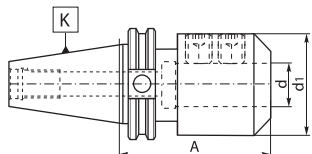
- TG collet chucks
- Wrenches sold separately

Code No.	K 7:24	Collet size	A [in]	D [in]	Clamping range	RPM		
7-180-403	CAT40	TG100	3.000	2.500	0.094 - 1.000	7,000	7-180-9100	7-180-930
7-180-404	CAT40	TG100	4.000	2.500	0.094 - 1.000	7,000	7-180-9100	7-180-930
7-180-501	CAT50	TG75	3.000	2.125	0.125 - 0.750	7,000	7-180-901	7-188-932
7-180-503	CAT50	TG100	3.125	2.500	0.094 - 1.000	7,000	7-180-9100	7-180-930
7-180-504	CAT50	TG100	3.500	2.500	0.094 - 1.000	7,000	7-180-9100	7-180-930
7-180-505	CAT50	TG100	5.500	2.500	0.094 - 1.000	7,000	7-180-9100	7-180-930
7-180-507	CAT50	TG100	7.500	2.500	0.094 - 1.000	7,000	7-180-9100	7-180-930
7-180-513	CAT50	TG150	3.000	3.500	0.500 - 1.500	7,000	7-180-9150	7-180-935
7-180-514	CAT50	TG150	3.500	3.500	0.500 - 1.500	7,000	7-180-9150	7-180-935
7-180-517	CAT50	TG150	5.500	3.500	0.500 - 1.500	7,000	7-180-9150	7-180-935
7-180-010	CAT40	TG100	3.000	2.500	0.094 - 1.000	15,000 (G6.3)	7-180-9100	7-180-930

7636 AD



- Weldon type end mill holders
- Through the spindle coolant capacity



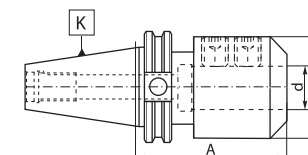
Code No. 15,000 RPM G6.3	Code No. 7000 RPM	K 7:24	d [in]	A [in]	d ₁ [in]	
7-185-002	-	CAT40	1/8	1.375	0.750	7-195-081
7-185-004	7-185-405	CAT40	1/8	2.500	0.750	7-195-081
7-185-006	-	CAT40	3/16	1.375	0.750	7-195-091
7-185-008	7-185-407	CAT40	3/16	2.500	0.750	7-195-091
-	7-185-4074	CAT40	3/16	4.000	0.750	7-195-091
7-185-014	7-185-409	CAT40	1/4	2.500	0.827	7-195-110
-	7-185-4094	CAT40	1/4	4.000	0.827	7-195-110
7-185-012	-	CAT40	1/4	1.375	0.827	7-195-110
7-185-020	7-185-4115	CAT40	5/16	2.500	1.000	7-195-301
7-185-018	-	CAT40	5/16	1.375	1.000	7-195-110
-	7-185-4117	CAT40	5/16	4.000	1.000	7-195-110
7-185-034	-	CAT40	1/2	1.750	1.250	7-195-210
7-185-024	-	CAT40	3/8	1.375	1.000	7-195-210
7-185-026	7-185-412	CAT40	3/8	2.500	1.000	7-195-210
-	7-185-4122	CAT40	3/8	5.000	1.000	7-195-210
7-185-030	7-185-4123	CAT40	7/16	2.500	1.150	7-195-210
-	7-185-4127	CAT40	7/16	4.000	1.150	7-195-210
7-185-036	7-185-413	CAT40	1/2	2.625	1.250	7-195-301
-	7-185-417	CAT40	1/2	5.000	1.250	7-195-301
7-185-042	7-185-431	CAT40	5/8	3.750	1.500	7-195-412
7-185-040	-	CAT40	5/8	1.750	1.250	7-195-412
-	7-185-437	CAT40	5/8	5.500	1.500	7-195-412
7-185-048	-	CAT40	3/4	1.750	1.750	7-195-513
7-185-050	7-185-441	CAT40	3/4	3.750	1.750	7-195-513
-	7-185-447	CAT40	3/4	5.500	1.750	7-195-513
7-185-056	7-185-450	CAT40	7/8	3.500	2.000	7-195-513 x2
-	7-185-451	CAT40	7/8	4.000	2.000	7-195-513 x2
7-185-054	-	CAT40	7/8	1.750	2.000	7-195-513 x2
7-185-060	-	CAT40	1	2.000	2.250	7-195-615 x2
7-185-062	7-185-461	CAT40	1	4.000	2.250	7-195-615 x2
-	7-185-465	CAT40	1	6.000	2.250	7-195-615 x2
-	7-185-470	CAT40	1.1/4	2.000	2.250	7-195-605
7-185-068	7-185-471	CAT40	1.1/4	4.250	2.500	7-195-615 x2
-	7-185-472	CAT40	1.1/4	4.375	2.500	7-195-615 x2
-	7-185-475	CAT40	1.1/4	6.000	2.500	7-195-615 x2
-	7-185-481	CAT40	1.1/2	4.625	2.750	7-195-615 x2
-	7-185-485	CAT40	1.1/2	6.000	2.750	7-195-615 x2

Code No. 15,000 RPM G6.3	Code No. 7000 RPM	K 7:24	d [in]	A [in]	d ₁ [in]	
-	7-185-509	CAT50	1/4	2.500	0.813	7-195-110
7-185-102	-	CAT50	1/4	1.375	0.813	7-195-110
-	7-185-5101	CAT50	1/4	4.000	0.813	7-195-210
7-185-108	-	CAT50	5/16	2.500	0.875	7-195-120
7-185-110	-	CAT50	3/8	1.375	0.375	7-195-210
-	7-185-511	CAT50	3/8	2.500	1.000	7-195-210
-	7-185-512	CAT50	3/8	2.500	1.000	7-195-210
-	7-185-513	CAT50	3/8	6.500	1.000	7-195-210
-	7-185-514	CAT50	3/8	8.000	1.000	7-195-210
7-185-120	7-185-516	CAT50	7/16	2.500	1.150	7-195-210
-	7-185-517	CAT50	7/16	4.500	1.150	7-195-210
7-185-124	-	CAT50	1/2	1.750	1.375	7-195-301
-	7-185-521	CAT50	1/2	2.625	1.250	7-195-301
-	7-185-522	CAT50	1/2	4.625	1.250	7-195-301
-	7-185-523	CAT50	1/2	6.625	1.250	7-195-301
-	7-185-526	CAT50	1/2	8.000	1.250	7-195-301
7-185-134	-	CAT50	5/8	1.750	1.750	7-195-412
-	7-185-531	CAT50	5/8	3.750	1.500	7-195-412
-	7-185-532	CAT50	5/8	5.750	1.500	7-195-412
-	7-185-533	CAT50	5/8	7.750	1.500	7-195-412
7-185-142	-	CAT50	3/4	1.750	1.750	7-195-513
-	7-185-541	CAT50	3/4	3.750	1.750	7-195-513
-	7-185-542	CAT50	3/4	5.375	1.750	7-195-513
-	7-185-543	CAT50	3/4	7.750	1.750	7-195-513
-	7-185-547	CAT50	3/4	12.000	1.190	7-195-508
-	7-185-551	CAT50	7/8	3.750	2.000	7-195-513 x2
-	7-185-552	CAT50	7/8	5.750	2.000	7-195-513 x2
-	7-185-553	CAT50	7/8	7.750	2.000	7-195-513 x2
7-185-152	-	CAT50	7/8	1.750	2.040	7-195-513 x2
7-185-160	-	CAT50	1	2.000	2.375	7-195-615 x2
-	7-185-561	CAT50	1	4.000	2.250	7-195-615 x2
-	7-185-562	CAT50	1	6.000	2.250	7-195-615 x2
-	7-185-563	CAT50	1	8.000	2.250	7-195-615 x2
-	7-185-567	CAT50	1	12.000	1.625	7-195-610
7-185-170	-	CAT50	1-1/4	2.000	2.750	7-195-615
-	7-185-571	CAT50	1-1/4	4.000	2.500	7-195-615 x2
-	7-185-572	CAT50	1-1/4	6.000	2.500	7-195-615 x2
-	7-185-573	CAT50	1-1/4	8.000	2.500	7-195-615 x2
-	7-185-577	CAT50	1-1/4	12.000	1.875	7-195-610 x2
7-185-180	-	CAT50	1-1/2	2.500	2.750	7-195-615
-	7-185-581	CAT50	1-1/2	4.000	2.750	7-195-615 x2
-	7-185-582	CAT50	1-1/2	6.000	2.750	7-195-615 x2
-	7-185-583	CAT50	1-1/2	8.000	2.750	7-195-615 x2
-	7-185-591	CAT50	2	5.625	3.750	7-195-824 x2
-	7-185-592	CAT50	2	7.625	3.750	7-195-824 x2
-	7-185-593	CAT50	2	9.625	3.750	7-195-824 x2
-	7-185-595	CAT50	2-1/2	6.000	4.000	7-195-824 x2

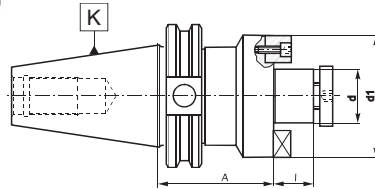
7636 M-AD



- Weldon type metric end mill holders
- Through the spindle coolant capacity
- Balancing on request - 15,000 RPM (G6.3)



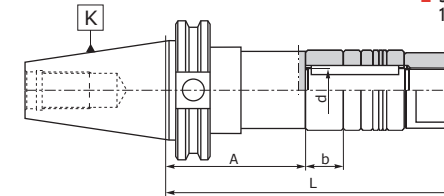
Code No. 7000 RPM	K 7:24	d [mm]	A [in]	d ₁ [mm]	
7-185-6400	CAT40	6	2.50	25	7-195-006M
7-185-6402	CAT40	6	4.00	25	7-195-006M
7-185-6404	CAT40	8	2.50	28	7-195-008M
7-185-6406	CAT40	10	2.50	35	7-195-010M
7-185-6408	CAT40	12	2.50	42	7-195-012M
7-185-6410	CAT40	16	3.00	48	7-195-014M
7-185-6412	CAT40	20	3.00	52	7-195-016M
7-185-6414	CAT40	25	4.00	63	7-195-018M x2
7-185-6416	CAT40	25	6.00	63	7-195-018M x2
7-185-6418	CAT40	32	4.00	72	7-195-020M x2
7-185-6420	CAT40	32	6.00	72	7-195-020M x2
7-185-6500	CAT50	10	2.50	35	7-195-010M
7-185-6502	CAT50	10	4.50	35	7-195-010M
7-185-6504	CAT50	20	3.75	52	7-195-016M
7-185-6506	CAT50	16	3.75	48	7-195-014M
7-185-6508	CAT50	16	5.75	48	7-195-014M
7-185-6510	CAT50	12	4.75	42	7-195-012M
7-185-6512	CAT50	12	2.50	42	7-195-012M
7-185-6514	CAT50	20	5.75	52	7-195-016M
7-185-6516	CAT50	25	4.00	63	7-195-018M x2
7-185-6518	CAT50	25	6.00	63	7-195-018M x2
7-185-6520	CAT50	32	4.00	72	7-195-020M x2
7-185-6522	CAT50	32	6.00	72	7-195-020M x2
7-185-6524	CAT50	40	6.00	80	7-195-020M x2
7-185-6526	CAT50	40	4.00	80	7-195-020M x2
7-185-6528	CAT50	40	4.00	80	7-195-020M x2



7385

■ Shell mill holders

Code No. 15,000 RPM G6.3	Code No. 7000 RPM	K 7:24	d [in]	A [in]	L [in]	d1 [in]			Key Screw
7-186-005	7-186-403	CAT40	1/2"	1.375	0.563	1.375	7-080-005	7-080-105	7-080-150
7-186-010	7-186-405	CAT40	3/4"	1.375	0.688	1.750	7-080-010	7-080-110	7-080-155
7-186-015	-	CAT40	3/4"	4.000	0.688	1.750	7-080-010	7-080-110	7-080-155
7-186-020	7-186-407	CAT40	1"	2.063	0.688	2.250	7-080-015	7-080-115	7-080-160
7-186-025	-	CAT40	1"	4.000	0.688	2.250	7-080-015	7-080-115	7-080-160
7-186-030	7-186-409	CAT40	1-1/4"	2.125	0.688	2.750	7-080-020	7-080-120	-
7-186-035	-	CAT40	1-1/4"	4.000	0.688	2.750	7-080-020	7-080-120	-
7-186-040	7-186-411	CAT40	1-1/2"	2.400	0.938	3.750	7-080-025	7-080-125	-
7-186-045	-	CAT40	1-1/2"	4.000	0.938	3.750	7-080-025	7-080-125	-
-	7-186-503	CAT50	1/2"	1.500	0.563	1.375	7-080-005	7-080-105	7-080-150
-	7-186-505	CAT50	1/2"	3.500	0.563	1.375	7-080-005	7-080-105	7-080-150
-	7-186-507	CAT50	1/2"	5.500	0.563	1.375	7-080-005	7-080-105	7-080-150
-	7-186-509	CAT50	3/4"	1.500	0.688	1.750	7-080-010	7-080-110	7-080-155
-	7-186-511	CAT50	3/4"	3.500	0.688	1.750	7-080-010	7-080-110	7-080-155
-	7-186-512	CAT50	3/4"	4.500	0.688	1.750	7-080-010	7-080-110	7-080-155
-	7-186-513	CAT50	3/4"	5.500	0.688	1.750	7-080-010	7-080-110	7-080-155
-	7-186-514	CAT50	3/4"	9.000	0.688	1.750	7-080-010	7-080-110	7-080-155
-	7-186-515	CAT50	1"	2.000	0.688	2.250	7-080-015	7-080-115	7-080-160
-	7-186-517	CAT50	1"	4.000	0.688	2.250	7-080-015	7-080-115	7-080-160
-	7-186-519	CAT50	1"	6.000	0.688	2.250	7-080-015	7-080-115	7-080-160
-	7-186-520	CAT50	1"	10.000	0.688	2.250	7-080-015	7-080-115	7-080-160
-	7-186-521	CAT50	1-1/4"	1.500	0.688	2.750	7-080-020	7-080-120	7-080-160
-	7-186-523	CAT50	1-1/4"	3.500	0.688	2.750	7-080-020	7-080-120	7-080-160
-	7-186-525	CAT50	1-1/4"	5.500	0.688	2.750	7-080-020	7-080-120	7-080-160
-	7-186-526	CAT50	1-1/4"	12.000	0.688	2.750	7-080-020	7-080-120	7-080-160
-	7-186-527	CAT50	1-1/2"	2.400	0.938	3.750	7-080-025	7-080-125	-
-	7-186-529	CAT50	1-1/2"	4.000	0.938	3.750	7-080-025	7-080-125	-
-	7-186-531	CAT50	1-1/2"	6.000	0.938	3.750	7-080-025	7-080-125	-
-	7-186-532	CAT50	1-1/2"	12.000	0.938	3.750	7-080-025	7-080-125	-
-	7-186-533	CAT50	2"	2.400	0.938	4.875	7-080-030	7-080-130	7-080-175
-	7-186-535	CAT50	2"	4.000	0.938	4.875	7-080-030	7-080-130	7-080-175
-	7-186-537	CAT50	2"	6.000	0.938	4.875	7-080-030	7-080-130	7-080-175
-	7-186-540	CAT50	2-1/2"	2.400	1.125	4.875	7-080-035	7-080-135	7-080-175
-	7-186-541	CAT50	2-1/2"	4.000	1.125	4.875	7-080-035	7-080-135	7-080-175
-	7-186-543	CAT50	2-1/2"	6.000	1.125	4.875	7-080-035	7-080-135	7-080-175

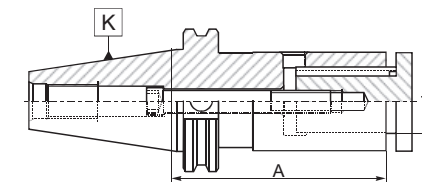


7318

■ Stub arbor holders

■ Spacers included: 1/16" x2,
1/8", 1/4", 3/8" x2, 3/4"

Code No.	K 7:24	d [in]	A [in]	L [in]	Nut Code No.	Spacer b = 1/16"	Spacer b = 1/8"	Spacer b = 1/4"	Spacer b = 3/8"	Spacer b = 3/4"
7-191-410	CAT40	1	4.00	7.58	7-030-010R	7-020-090	7-020-100	7-020-110	7-020-120	7-020-140
7-191-415	CAT40	1-1/4	4.00	7.78	7-030-015R	7-020-175	7-020-185	7-020-195	7-020-205	7-020-225
7-191-420	CAT40	1-1/2	4.00	8.00	7-030-020R	7-020-260	7-020-270	7-020-280	7-020-290	7-020-310
7-191-510	CAT50	1	4.00	7.58	7-030-010R	7-020-090	7-020-100	7-020-110	7-020-120	7-020-140
7-191-515	CAT50	1	6.00	9.58	7-030-010R	7-020-090	7-020-100	7-020-110	7-020-120	7-020-140
7-191-520	CAT50	1-1/4	4.00	7.78	7-030-015R	7-020-175	7-020-185	7-020-195	7-020-205	7-020-225
7-191-525	CAT50	1-1/4	6.00	9.78	7-030-015R	7-020-175	7-020-185	7-020-195	7-020-205	7-020-225
7-191-530	CAT50	1-1/2	4.00	8.00	7-030-020R	7-020-260	7-020-270	7-020-280	7-020-290	7-020-310
7-191-535	CAT50	1-1/2	6.00	10.00	7-030-020R	7-020-260	7-020-270	7-020-280	7-020-290	7-020-310



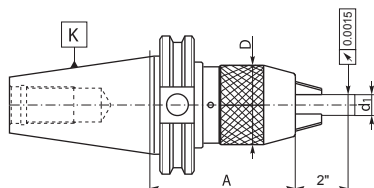
7374

■ Semi flush slitting saw holders

Code No.	K 7:24	d [in]	A [in]			
7-192-405	CAT40	5/8	4.00	7-192-905	7-192-805	7-192-6520
7-192-410	CAT40	1	4.00	7-192-910	7-192-810	7-192-6523
7-192-415	CAT40	1-1/4	4.00	7-192-915	7-192-815	7-192-6523
7-192-510	CAT50	1	4.00	7-192-910	7-192-810	7-192-6524
7-192-515	CAT50	1	6.00	7-192-935	7-192-835	7-192-6524
7-192-520	CAT50	1-1/4	4.00	7-192-915	7-192-815	7-192-6524
7-192-525	CAT50	1-1/4	6.00	7-192-945	7-192-845	7-192-6524

7658

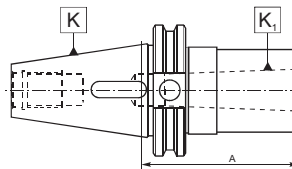
- Keyless drill chucks with integral CAT flange



Code No.	K 7:24	d ₁ [mm]	d ₁ [in]	A [in]	D [in]
7-187-433	CAT40	1-13	0.0313 - 0.5000	4.13	2.00
7-187-435	CAT40	3-16	0.1250 - 0.6250	5.12	2.25
7-187-563	CAT50	1-13	0.0313 - 0.5000	4.13	2.00
7-187-565	CAT50	3-16	0.1250 - 0.6250	4.33	2.25

1691

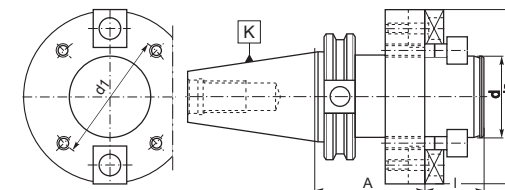
- Reducing adapters for tools with MT shank



Code No.	K 7:24	K ₁ MT	A [in]
7-183-401	CAT40	1	1.500
7-183-402	CAT40	2	2.000
7-183-403	CAT40	3	3.000
7-183-404	CAT40	4	3.500
7-183-501	CAT50	1	1.500
7-183-502	CAT50	2	2.000
7-183-503	CAT50	3	2.500
7-183-504	CAT50	4	3.375
7-183-505	CAT50	5	4.000
7-183-504	CAT50	4	3.375
7-183-505	CAT50	5	4.000

7382

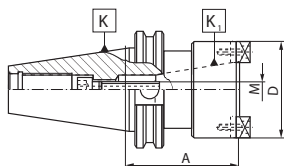
- Face mill holders for milling cutters



Code No.	K 7:24	d [in]	A [in]	d ₁ [in]	d ₂ [in]	l [in]		
7-182-502	CAT50	2.00	2.40	4.00	4.85	0.398	7-182-802	7-182-902
7-182-504	CAT50	2.00	4.00	4.00	4.85	0.398	7-182-802	7-182-902
7-182-506	CAT50	2.00	6.00	4.00	4.85	0.398	7-182-802	7-182-902
7-182-512	CAT50	2.50	2.40	4.00	5.00	1.125	7-182-804	7-182-904
7-182-514	CAT50	2.50	4.00	4.00	5.00	1.125	7-182-804	7-182-904
7-182-516	CAT50	2.50	6.00	4.00	5.00	1.125	7-182-804	7-182-904

1690

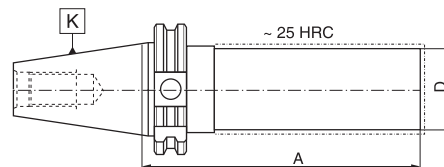
- Reducing adapters for tools with 7:24 shank



Code No.	K 7:24	K ₁ 7:24	A [in]	D [in]	M [in]		
7-184-504	CAT50	CAT40	3.15	3.46	5/8"-11	7-184-802	7-184-902

2191

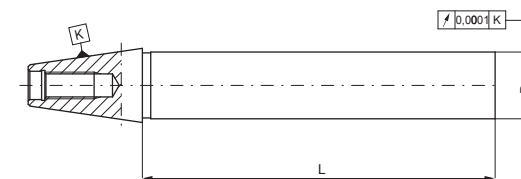
- Machinable blank adapters



Code No.	K 7:24	D [mm]	A [mm]
7-184-102	CAT40	40	280
7-184-104	CAT40	63	280
7-184-106	CAT50	50	330
7-184-108	CAT50	80	330

2852

- Control arbor

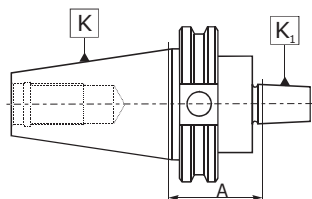


Code No.	K 7:24	D [mm]	L [mm]
7-184-202	CAT40	40	300
7-184-204	CAT50	50	300



5357

■ ANSI B5.50/CAT drill chuck adapters for Jacobs taper

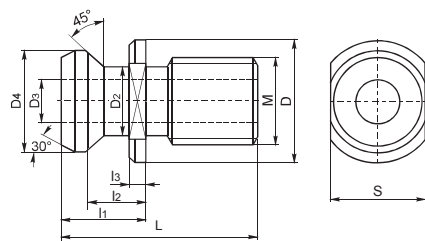


Code No.	K 7:24	K ₁ Jacobs	A [in]
7-181-401	CAT40	J1	1.50
7-181-402	CAT40	J2	1.50
7-181-433	CAT40	J33	1.50
7-181-403	CAT40	J3	1.50
7-181-404	CAT40	J4	1.50
7-181-405	CAT40	J5	1.50
7-181-406	CAT40	J6	1.50
7-181-502	CAT50	J2	1.50
7-181-533	CAT50	J33	1.50
7-181-503	CAT50	J3	1.50
7-181-504	CAT50	J4	1.50
7-181-505	CAT50	J5	1.50
7-181-506	CAT50	J6	1.50



9886

■ Pull studs with through hole



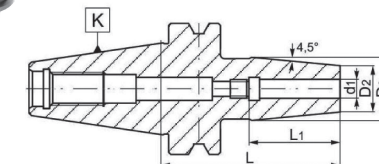
Code No.	Size	M	D [in]	D2 [in]	D3 [in]	D4 [in]	L [in]	I1 [in]	I2 [in]	I3 [in]	S [in]
7-189-905	CAT40	5/8-11UNC	0.898	0.492	0.280	0.744	1.496	0.640	0.437	0.118	0.748
7-189-950	CAT50	1-8	1.400	0.823	0.500	1.146	2.244	1.000	0.700	0.197	1.185
7-189-941	HAAS 40	5/8-11UNC	1.280	0.394	0.118	0.591	2.299	1.260	0.984	0.236	0.748

Code No.	K 7:24	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-018-402	CAT40	3	80	36	14	22
7-018-404	CAT40	3	120	36	14	22
7-018-406	CAT40	3	160	36	14	22
7-018-408	CAT40	4	80	36	14	22
7-018-410	CAT40	4	120	36	14	22
7-018-412	CAT40	4	160	36	15	22
7-018-414	CAT40	5	80	36	16	22
7-018-416	CAT40	5	120	36	16	22
7-018-418	CAT40	5	160	36	16	22
7-018-420	CAT40	6	80	36	21	27
7-018-422	CAT40	6	120	36	21	27
7-018-424	CAT40	6	160	36	21	27
7-018-426	CAT40	8	80	36	21	27
7-018-428	CAT40	8	120	36	21	27
7-018-430	CAT40	8	160	36	21	27
7-018-432	CAT40	10	80	42	24	32
7-018-434	CAT40	10	120	42	24	32
7-018-436	CAT40	10	160	42	24	32
7-018-438	CAT40	12	80	47	24	32
7-018-440	CAT40	12	120	47	24	32
7-018-442	CAT40	12	160	47	24	32
7-018-444	CAT40	14	80	47	27	34
7-018-446	CAT40	14	120	47	27	34
7-018-448	CAT40	14	160	47	27	34
7-018-450	CAT40	16	80	50	27	34
7-018-452	CAT40	16	120	50	27	34
7-018-454	CAT40	16	160	50	27	34
7-018-456	CAT40	18	80	50	33	42
7-018-458	CAT40	18	120	50	33	42
7-018-460	CAT40	18	160	50	33	42
7-018-462	CAT40	20	80	52	33	42
7-018-464	CAT40	20	120	52	33	42
7-018-466	CAT40	20	160	52	33	42
7-018-468	CAT40	25	100	58	44	53
7-018-470	CAT40	25	120	58	44	53
7-018-472	CAT40	25	160	58	44	53
7-018-474	CAT40	32	100	58	44	53
7-018-476	CAT40	32	120	58	44	53
7-018-478	CAT40	32	160	58	44	53



7630

■ Shrink fit holders



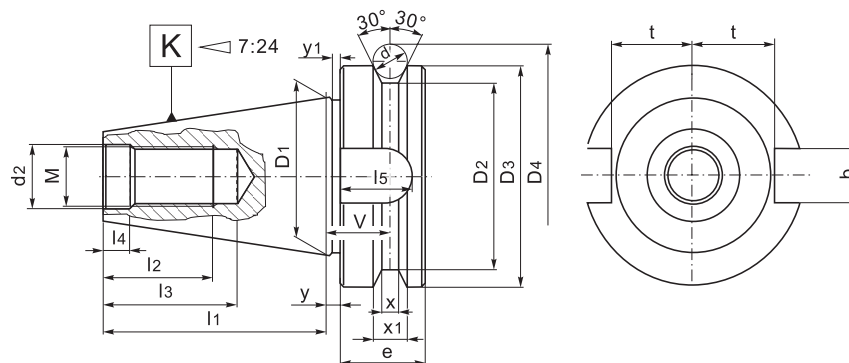
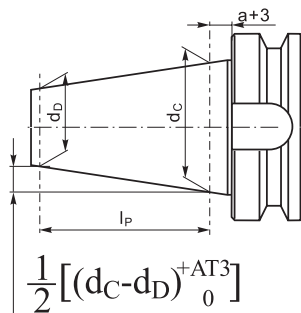
* Suitable for HSS and solid carbide tools with cylindrical shank (h6 tolerance)

Code No.	K 7:24	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-018-502	CAT50	6	80	36	21	27
7-018-504	CAT50	6	120	36	21	27
7-018-506	CAT50	6	160	36	21	27
7-018-508	CAT50	8	80	36	21	27
7-018-510	CAT50	8	120	36	21	27
7-018-512	CAT50	8	160	36	21	27
7-018-514	CAT50	10	80	42	24	32
7-018-516	CAT50	10	120	42	24	32
7-018-518	CAT50	10	160	42	24	32
7-018-520	CAT50	12	80	47	24	32
7-018-522	CAT50	12	120	47	24	32
7-018-524	CAT50	12	160	47	24	32
7-018-526	CAT50	14	80	47	27	34
7-018-528	CAT50	14	120	47	27	34
7-018-530	CAT50	14	160	47	27	34
7-018-532	CAT50	16	80	50	27	34
7-018-534	CAT50	16	120	50	27	34
7-018-536	CAT50	16	160	50	27	34
7-018-538	CAT50	18	80	50	33	42
7-018-540	CAT50	18	120	50	33	42
7-018-542	CAT50	18	160	50	33	42
7-018-544	CAT50	20	80	52	33	42
7-018-546	CAT50	20	120	52	33	42
7-018-548	CAT50	20	160	52	33	42
7-018-550	CAT50	25	100	58	44	53
7-018-552	CAT50	25	120	58	44	53
7-018-554	CAT50	25	160	58	44	53
7-018-556	CAT50	32	100	58	44	53
7-018-558	CAT50	32	120	58	44	53
7-018-560	CAT50	32	160	58	44	53

MAS 403/BT TAPER

Standard features of the tools:

- Manufactured with Chrome Manganese steel
- Carburized with depth of case 0.7 mm
- Hardened and precision ground
- Surface hardness RC 58±2
- Taper angle: tolerance AT3



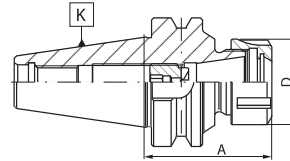
K 7:24	$d_C - d_D$ [in]	l_P [in]	a [in]	AT3 [in]
30	0.482	1.654	0.079	0.0001
40	0.677	2.323	0.079	0.0001
50	1.056	3.622	0.118	0.0002

K 7:24	Measure	D_1	D_2	D_3	D_4	l_1	l_2	l_3	l_4	l_5	bH12	t	d	$d_2 H7$	M	e	v	x	x_1	y	y_1
30	inches	1.250	1.496	1.811	2.209	1.906	0.945	1.339	0.276	0.669	0.634	0.642	0.315	0.492	M12	0.787	0.535	0.157	0.315	0.079	0.079
30	mm	31.75	38	46	56.1	48.4	24	34	7	17	16.1	16.3	8	12.5	M12	20	13.6	4	8	2	2
40	inches	1.750	2.087	2.480	2.976	2.575	1.181	1.693	0.354	0.827	0.634	0.890	0.394	0.669	M16	0.984	0.654	0.197	0.394	0.079	0.079
40	mm	44.45	53	63	75.6	65.4	30	43	9	21	16.1	22.6	10	17.0	M16	25	16.6	5	10	2	2
50	inches	2.750	3.346	3.937	4.685	4.008	1.772	2.441	0.512	1.220	1.012	1.394	0.591	0.984	M24	1.378	0.913	0.276	0.591	0.118	0.118
50	mm	69.85	85	100	119.0	101.8	45	62	13	31	25.7	35.4	15	25.0	M24	35	23.2	7	15	3	3



7626 AD

■ Collet chucks for ER collets

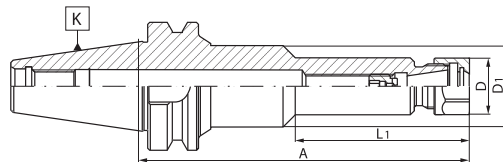


Code No.	K 7:24	Collet size	A [in]	D [in]	Clamping Range	RPM	
7-178-425	BT40	ER25	2.36	1.65	0.470 - 0.625	7,000	7-188-825
7-178-432	BT40	ER32	2.75	2.00	0.125 - 0.750	7,000	7-188-832
7-178-434	BT40	ER32	4.00	2.00	0.125 - 0.750	7,000	7-188-832
7-178-436	BT40	ER32	6.00	2.00	0.125 - 0.750	7,000	7-188-832
7-178-442	BT40	ER40	2.75	2.50	0.125 - 1.000	7,000	7-188-840
7-178-444	BT40	ER40	4.00	2.50	0.125 - 1.000	7,000	7-188-840
7-178-446	BT40	ER40	6.00	2.50	0.125 - 1.000	7,000	7-188-840
7-178-532	BT50	ER32	2.75	2.00	0.125 - 0.750	7,000	7-188-832
7-178-542	BT50	ER40	3.15	2.50	0.125 - 1.000	7,000	7-188-840
7-178-014	BT40	ER16	3.55	1.10	0.079 - 0.394	15,000 (G6.3)	7-178-816
7-178-025	BT40	ER25	2.36	1.65	0.470 - 0.625	15,000 (G6.3)	7-188-825
7-178-042	BT40	ER32	4.00	2.00	0.125 - 0.750	15,000 (G6.3)	7-188-832
7-178-132	BT50	ER32	2.75	2.00	0.125 - 0.750	15,000 (G6.3)	7-188-832
7-178-142	BT50	ER40	3.15	2.50	0.125 - 1.000	15,000 (G6.3)	7-188-840



7626-S

■ Collet chucks for ER collets
- slim design

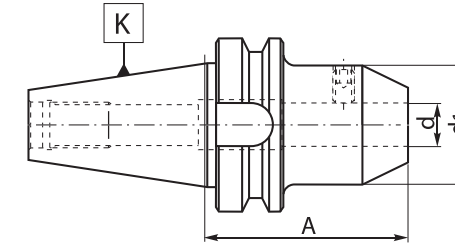


Code No.	K 7:24	Collet size	A [in]	Clamping range	L ₁ [in]	D [in]	D ₁ [in]		
7-178-414	BT40	ER16	3.94	0.079-0.394	—	1.10	—	7-178-816	M12x1.5x14LH
7-178-416	BT40	ER16	5.91	0.079-0.394	3.35	1.10	1.57	7-178-816	M12x1.5x14LH
7-178-514	BT50	ER16	3.94	0.079-0.394	—	1.10	—	7-178-816	M12x1.5x14LH
7-178-516	BT50	ER16	5.91	0.079-0.394	3.35	1.10	1.57	7-178-816	M12x1.5x14LH



7624

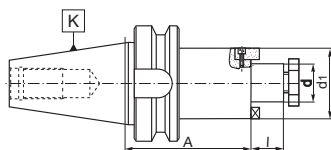
■ Weldon end mill holders
■ Through spindle coolant capacity



Code No.	K 7:24	d [in]	A [in]	d ₁ [in]	RPM	
7-179-402	BT40	3/16	2.50	.78	7,000	7-195-110
7-179-404	BT40	1/4	2.50	.78	7,000	7-195-110
7-179-407	BT40	5/16	2.50	.87	7,000	7-195-120
7-179-411	BT40	3/8	2.50	1.12	7,000	7-195-210
7-179-415	BT40	3/8	4.00	1.12	7,000	7-195-210
7-179-421	BT40	1/2	2.50	1.50	7,000	7-195-301
7-179-425	BT40	1/2	4.00	1.5	7,000	7-195-301
7-179-431	BT40	5/8	2.50	1.62	7,000	7-195-412
7-179-435	BT40	5/8	4.00	1.62	7,000	7-195-412
7-179-441	BT40	3/4	2.50	1.75	7,000	7-195-513
7-179-445	BT40	3/4	4.00	1.75	7,000	7-195-513
7-179-451	BT40	7/8	3.50	2.17	7,000	7-195-517 x2
7-179-461	BT40	1	3.50	2.38	7,000	7-195-618 x2
7-179-465	BT40	1	5.00	2.38	7,000	7-195-618 x2
7-179-475	BT40	1-1/4	4.00	2.69	7,000	7-195-618 x2
7-179-511	BT50	3/8	3.00	1.12	7,000	7-195-210
7-179-521	BT50	1/2	3.00	1.50	7,000	7-195-301
7-179-531	BT50	5/8	3.00	1.62	7,000	7-195-412
7-179-541	BT50	3/4	3.00	1.75	7,000	7-195-513
7-179-561	BT50	1	4.00	2.48	7,000	7-195-618 x2
7-179-571	BT50	1-1/4	4.00	2.69	7,000	7-195-618 x2
7-179-581	BT50	1-1/2	4.00	2.88	7,000	7-195-620 x2
7-179-591	BT50	2	5.00	3.62	7,000	7-195-622 x2
7-179-002	BT40	3/16	2.50	.78	15,000 (G6.3)	7-195-110
7-179-004	BT40	1/4	2.50	.78	15,000 (G6.3)	7-195-110
7-179-007	BT40	5/16	2.50	.87	15,000 (G6.3)	7-195-120
7-179-011	BT40	3/8	2.50	1.12	15,000 (G6.3)	7-195-210
7-179-021	BT40	1/2	2.50	1.50	15,000 (G6.3)	7-195-301
7-179-031	BT40	5/8	2.50	1.62	15,000 (G6.3)	7-195-412
7-179-041	BT40	3/4	2.50	1.75	15,000 (G6.3)	7-195-513
7-179-051	BT40	7/8	3.50	2.17	15,000 (G6.3)	7-195-517 x2
7-179-061	BT40	1	3.50	2.38	15,000 (G6.3)	7-195-618 x2

7388

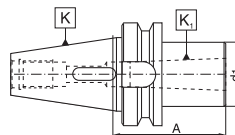
- Shell mill holders for milling cutters
- Max. RPM 7000



Code No.	K 7:24	d [in]	A [in]	I [in]	d ₁ [in]		
7-176-403	BT40	0.50	1.75	0.56	1.18	7-080-005	-
7-176-405	BT40	0.75	2.00	0.69	1.50	7-080-010	7-080-210
7-176-407	BT40	1.00	2.00	0.69	1.73	7-080-015	7-080-215
7-176-409	BT40	1.25	2.25	0.69	2.08	7-080-020	7-080-220
7-176-411	BT40	1.50	2.25	0.92	2.48	7-080-025	7-080-225
7-176-509	BT50	0.75	2.25	0.69	1.50	7-080-010	7-080-210
7-176-511	BT50	0.75	6.00	0.69	1.50	7-080-010	7-080-210
7-176-515	BT50	1.00	2.00	0.69	1.73	7-080-015	7-080-215
7-176-517	BT50	1.00	4.00	0.69	1.73	7-080-015	7-080-215
7-176-519	BT50	1.00	6.00	0.69	1.73	7-080-015	7-080-215
7-176-521	BT50	1.25	2.50	0.69	2.08	7-080-020	7-080-220
7-176-523	BT50	1.25	4.00	0.69	2.08	7-080-020	7-080-220
7-176-525	BT50	1.25	6.00	0.69	2.08	7-080-020	7-080-220
7-176-527	BT50	1.50	2.50	0.92	2.48	7-080-025	7-080-225
7-176-529	BT50	1.50	4.00	0.92	2.48	7-080-025	7-080-225
7-176-531	BT50	1.50	6.00	0.92	2.48	7-080-025	7-080-225
7-176-533	BT50	2.00	2.50	0.94	3.07	7-080-030	-
7-176-535	BT50	2.00	4.00	0.94	3.07	7-080-030	-

1661

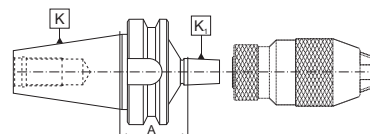
- Combi reducing adapters for tools with Morse Taper shank and drawbar thread or tang



Code No.	K 7:24	K ₁ MT	A [in]	d ₁ [in]
7-173-401	BT40	1	1.75	1.00
7-173-402	BT40	2	2.00	1.25
7-173-403	BT40	3	3.00	1.56
7-173-404	BT40	4	3.56	1.87
7-173-502	BT50	2	1.75	1.25
7-173-503	BT50	3	1.75	1.56
7-173-504	BT50	4	3.00	1.87
7-173-505	BT50	5	4.12	2.50

5377

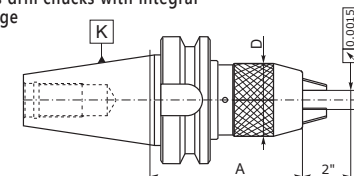
- Jacobs Taper Adapters for BT30, 40 and 50



Code No.	K 7:24	Jacobs Taper	A [in]
7-175-302	BT30	J2	1.00
7-175-303	BT30	J3	1.00
7-175-333	BT30	J33	1.00
7-175-402	BT40	J2	1.75
7-175-403	BT40	J3	1.75
7-175-404	BT40	J4	1.75
7-175-405	BT40	J5	1.75
7-175-406	BT40	J6	1.75
7-175-433	BT40	J33	1.75
7-175-503	BT50	J3	1.75
7-175-504	BT50	J4	1.75
7-175-505	BT50	J5	1.75
7-175-506	BT50	J6	1.75
7-175-533	BT50	J33	1.75

7656

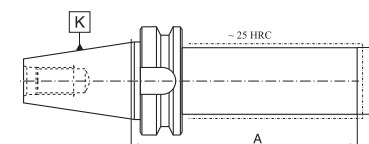
- Keyless drill chucks with integral BT flange



Code No.	K 7:24	d ₁ [in]	A [in]	D [in]
7-174-433	BT40	0.031 - 0.500	3.74	1.97
7-174-435	BT40	0.125 - 0.625	3.94	2.24
7-174-563	BT50	0.031 - 0.500	4.13	1.97
7-174-565	BT50	0.125 - 0.625	4.33	2.24

2192

- Boring bar blanks



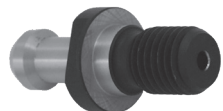
Code No.	K 7:24	D [in]	A [in]
7-140-140	BT40	2.50	13
7-140-150	BT50	4.00	13

2854

- Test arbors

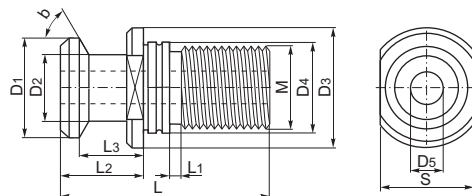


Code No.	K 7:24	D [in]	L [in]
7-140-240	BT40	1.575	11.8
7-140-250	BT50	1.969	11.8

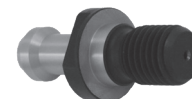


9883 A

■ Pull studs with through hole
(MAS 403-BT)

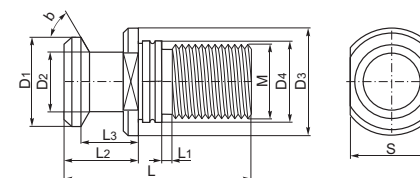


Code No.	Size	L [mm]	b [mm]	M [mm]	L1 [mm]	L2 [mm]	L3 [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	S [mm]
7-080-842	BT40	60	45°	M16	4	35	28	15	10	23	17	4	19
7-080-844	BT40	60	60°	M16	4	35	28	15	10	23	17	4	19
7-080-846	BT40	60	90°	M16	4	35	28	15	10	23	17	4	19
7-080-852	BT50	85	45°	M24	8	45	35	23	17	38	25	6	30
7-080-854	BT50	85	60°	M24	8	45	35	23	17	38	25	6	30
7-080-856	BT50	85	90°	M24	8	45	35	23	17	38	25	6	30



9883 B

■ Pull studs without through hole
(MAS 403-BT)



Code No.	Size	L [mm]	b [mm]	M [mm]	L1 [mm]	L2 [mm]	L3 [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	S [mm]
7-080-932	BT30	43	45°	M12	2	23	18	11	7	16,5	12,5	13
7-080-934	BT30	43	60°	M12	2	23	18	11	7	16,5	12,5	13
7-080-942	BT40	60	45°	M16	4	35	28	15	10	23	17	19
7-080-943	BT40	60	60°	M16	4	35	28	15	10	23	17	19
7-080-944	BT40	60	90°	M16	4	35	28	15	10	23	17	19
7-080-945	BT40	120	45°	M12	64	35	28	15	10	23	17	19
7-080-946	BT40	120	60°	M12	64	35	28	15	10	23	17	19
7-080-947	BT40	120	90°	M12	64	35	28	15	10	23	17	19
7-080-948	BT40	125	45°	M16	69	35	28	15	10	23	17	19
7-080-949	BT40	125	60°	M16	69	35	28	15	10	23	17	19
7-080-950	BT40	125	90°	M16	69	35	28	15	10	23	17	19
7-080-952	BT50	85	45°	M24	8	45	35	23	17	38	25	30
7-080-954	BT50	85	60°	M24	8	45	35	23	17	38	25	30
7-080-956	BT50	85	90°	M24	8	45	35	23	17	38	25	30
7-080-958	BT50	125	45°	M24	48	45	35	23	17	38	25	30
7-080-960	BT50	125	60°	M24	48	45	35	23	17	38	25	30
7-080-962	BT50	125	90°	M24	48	45	35	23	17	38	25	30

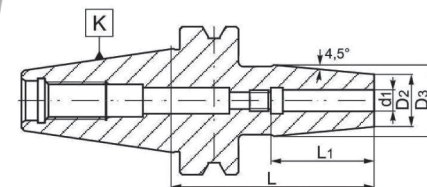
Code No.	K 7:24	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-177-402	BT40	3	80	36	14	22
7-177-404	BT40	3	120	36	14	22
7-177-406	BT40	3	160	36	14	22
7-177-408	BT40	4	80	36	14	22
7-177-410	BT40	4	120	36	14	22
7-177-412	BT40	4	160	36	14	22
7-177-414	BT40	5	80	36	16	22
7-177-416	BT40	5	120	36	16	22
7-177-418	BT40	5	160	36	16	22
7-177-420	BT40	6	90	36	21	27
7-177-422	BT40	6	120	36	21	27
7-177-424	BT40	6	160	36	21	27
7-177-426	BT40	8	90	36	21	27
7-177-428	BT40	8	120	36	21	27
7-177-430	BT40	8	160	36	21	27
7-177-432	BT40	10	90	42	24	32
7-177-434	BT40	10	120	42	24	32
7-177-436	BT40	10	160	42	24	32
7-177-438	BT40	12	90	47	24	32
7-177-440	BT40	12	120	47	24	32

Code No.	K 7:24	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-177-442	BT40	12	160	47	24	32
7-177-444	BT40	14	90	47	27	34
7-177-446	BT40	14	120	47	27	34
7-177-448	BT40	14	160	47	27	34
7-177-450	BT40	16	90	50	27	34
7-177-452	BT40	16	120	50	27	34
7-177-454	BT40	16	160	50	27	34
7-177-456	BT40	18	90	50	33	42
7-177-458	BT40	18	120	50	33	42
7-177-460	BT40	18	160	50	33	42
7-177-462	BT40	20	90	52	33	42
7-177-464	BT40	20	120	52	33	42
7-177-466	BT40	20	160	52	33	42
7-177-468	BT40	25	100	58	44	53
7-177-470	BT40	25	120	58	44	53
7-177-472	BT40	25	160	58	44	53
7-177-474	BT40	32	100	58	44	53
7-177-502	BT50	6	100	36	21	27
7-177-504	BT50	8	100	36	21	27
7-177-506	BT50	10	100	42	24	32
7-177-508	BT50	12	100	47	24	32



7632

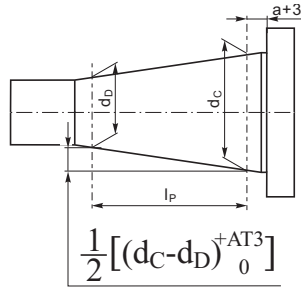
■ Shrink fit holders for mounting
of solid carbide and HSS cutters



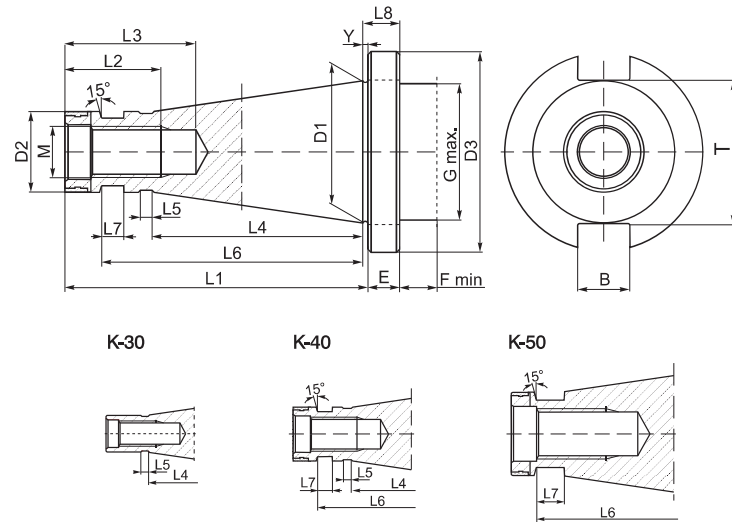
Code No.	K 7:24	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-177-510	BT50	14	100	47	27	34
7-177-512	BT50	16	100	50	27	34
7-177-514	BT50	18	100	50	33	42
7-177-516	BT50	20	100	52	33	42
7-177-518	BT50	25	110	58	44	53
7-177-520	BT50	32	110	58	44	53

NMTB TAPER

- Standard features of the tools:
- Manufactured with Chrome Manganese steel
- Carburized with depth of case 0.7 mm
- Hardened and precision ground
- Surface hardness HRC 58±2
- Taper angle: tolerance AT3



K 7:24	$d_C - d_0$ [in]	l_P [in]	a [in]	AT3 [in]
30	0.482	1.654	0.079	0.0001
40	0.677	2.323	0.079	0.0001
50	1.056	3.622	0.118	0.0002

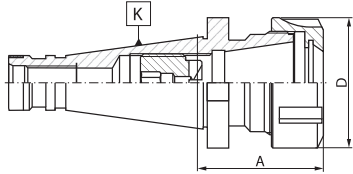


K 7:24	Measure	D1	D2	D3	L1	L2	L3	L4	L5	L6	L7	L8	B H12	T	E	M	Y	F	G
30	inches	1.250	0.673	1.811	2.756	0.945	1.378	1.906	0.118	-	-	0.423	0.634	1.276	0.345	1/2"x13 UNC-2B	0.078	0.335	1.181
30	mm	31.75	17.10	46.00	70.00	24.00	35.00	48.40	3.00	-	-	10.74	16.10	32.40	8.76	1/2"x13 UNC-2B	1.98	8.50	30.00
40	inches	1.750	0.984	2.500	3.740	1.181	1.614	2.575	0.197	3.228	0.276	0.392	0.634	1.772	0.314	5/8"x11 UNC-2B	0.078	0.453	1.654
40	mm	44.45	25.00	63.50	95.00	30.00	41.00	65.40	5.00	82.00	7.00	9.96	16.10	45.00	7.98	5/8"x11 UNC-2B	1.98	11.50	42.00
50	inches	2.750	1.559	3.500	5.118	1.772	2.362	-	-	4.528	0.524	0.594	1.012	2.780	0.453	1"x8 UNC-2B	0.142	0.453	2.480
50	mm	69.85	39.60	88.90	130.00	45.00	60.00	-	-	115.00	13.30	15.10	25.70	70.60	11.50	1"x8 UNC-2B	3.60	11.50	63.00



7616 QC

- Collet chucks for ER collets - quick change version

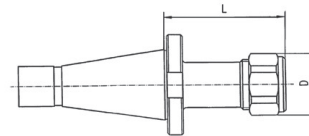


Code No.	K 7:24	Collet size	A [in]	Clamping range [in]	D [in]	
7-171-173	NMTB 30	ER16	2.00	0.079 - 0.394	1.26	7-178-816
7-171-303	NMTB 30	ER32	2.50	0.125 - 0.750	1.97	7-188-832
7-171-403	NMTB 30	ER40	3.50	0.125 - 1.000	2.48	7-188-840
7-171-174	NMTB 40	ER16	2.50	0.079 - 0.394	1.26	7-188-816
7-171-264	NMTB 40	ER25	2.50	0.125 - 0.625	1.65	7-188-825
7-171-304	NMTB 40	ER32	3.00	0.125 - 0.750	1.97	7-188-832
7-171-404	NMTB 40	ER40	2.50	0.125 - 1.000	2.48	7-188-840
7-171-405	NMTB 50	ER40	2.75	0.125 - 1.000	2.48	7-188-840



7665

- Collet chucks for DA180 collets

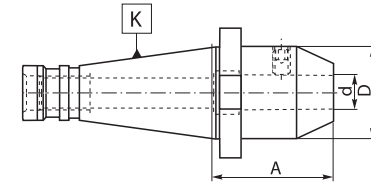


Code No.	K 7:24	Collet size	L [in]	Clamping range [in]	D [in]		
7-167-013	NMTB 30	DA180	3.00	0.25 - 0.75	1.54	7-193-818	7-193-918
7-167-014	NMTB 40	DA180	3.00	0.25 - 0.75	1.54	7-193-818	7-193-918
7-167-015	NMTB 50	DA180	3.00	0.25 - 0.75	1.54	7-193-818	7-193-918



7620 QC

- Weldon type end mill holders
- Compatible with Ericson Quick Change

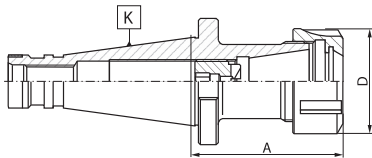


Code No.	K 7:24	d [in]	A [in]	
7-165-005Q	NMTB 30	3/16	2.00	7-195-091
7-165-007Q	NMTB 30	1/4	2.00	7-195-110
7-165-010Q	NMTB 30	3/8	2.00	7-195-208
7-165-015Q	NMTB 30	1/2	2.00	7-195-314
7-165-020Q	NMTB 30	5/8	2.50	7-195-412
7-165-025Q	NMTB 30	3/4	2.50	7-195-513
7-165-026Q	NMTB 30	7/8	4.00	7-195-513
7-165-027Q	NMTB 30	1	4.00	7-195-615
7-165-030Q	NMTB 40	3/16	2.00	7-195-091
7-165-032Q	NMTB 40	1/4	2.00	7-195-110
7-165-035Q	NMTB 40	3/8	2.00	7-195-208
7-165-040Q	NMTB 40	1/2	2.00	7-195-314
7-165-045Q	NMTB 40	5/8	2.50	7-195-412
7-165-050Q	NMTB 40	3/4	2.50	7-195-513
7-165-055Q	NMTB 40	7/8	3.50	7-195-513
7-165-060Q	NMTB 40	1	3.50	7-195-615
7-165-065Q	NMTB 40	1-1/4	4.00	7-195-615
7-165-070Q	NMTB 40	1-1/2	4.00	7-195-615
7-165-073Q	NMTB 50	3/16	2.75	7-195-091
7-165-075Q	NMTB 50	3/8	2.75	7-195-208
7-165-080Q	NMTB 50	1/2	2.75	7-195-314
7-165-085Q	NMTB 50	5/8	2.75	7-195-412
7-165-090Q	NMTB 50	3/4	2.875	7-195-513
7-165-095Q	NMTB 50	7/8	2.875	7-195-513
7-165-100Q	NMTB 50	1	3.50	7-195-615
7-165-105Q	NMTB 50	1-1/4	3.50	7-195-615
7-165-110Q	NMTB 50	1-1/2	4.00	7-195-615
7-165-115Q	NMTB 50	2	4.688	7-195-820



7616

- Collet chucks for ER collets

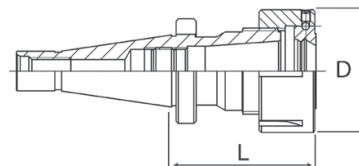


Code No.	K 7:24	Collet size	A [in]	Clamping range [in]	D [in]	
7-171-3030	NMTB 30	ER32	2.36	0.125 - 0.750	1.97	7-188-832
7-171-1740	NMTB 40	ER16	2.36	0.079 - 0.394	1.26	7-178-816
7-171-3040	NMTB 40	ER32	2.75	0.125 - 0.750	1.97	7-188-832
7-171-4040	NMTB 40	ER40	2.36	0.125 - 1.000	2.48	7-188-840



7640

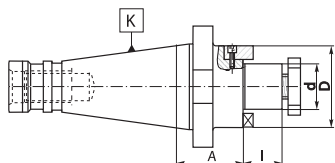
- Collet chucks for TG collets



Code No.	K 7:24	Collet Size	L [in]	D [in]		
7-132-305	NMTB 30	TG75	2.50	2.125	7-180-901	7-188-932
7-132-405	NMTB 40	TG75	2.50	2.125	7-180-901	-
7-132-410	NMTB 40	TG100	3.00	2.500	7-180-9100	7-180-930
7-132-510	NMTB 50	TG100	3.50	2.500	7-180-901	7-180-930
7-132-535	NMTB 50	TG150	5.00	3.500	7-180-9150	7-180-935

7311 QC

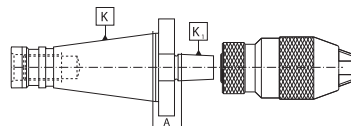
- Shell mill holders
- Compatible with Ericson Quick Change



Code No.	K 7:24	d [in]	A+I [in]		
7-060-005Q	NMTB 30	0.50	0.689	7-080-005	7-080-105
7-060-010Q	NMTB 30	0.75	0.689	7-080-010	7-080-110
7-060-015Q	NMTB 30	1.00	0.929	7-080-015	7-080-115
7-060-020Q	NMTB 30	1.25	0.929	7-080-020	7-080-120
7-060-030Q	NMTB 40	0.75	0.689	7-080-010	7-080-110
7-060-035Q	NMTB 40	1.00	0.937	7-080-015	7-080-115
7-060-040Q	NMTB 40	1.25	0.937	7-080-020	7-080-120
7-060-045Q	NMTB 40	1.50	0.937	7-080-025	7-080-125
7-060-050Q	NMTB 40	2.00	0.937	7-080-030	7-080-130
7-060-060Q	NMTB 50	0.75	0.752	7-080-010	7-080-110
7-060-065Q	NMTB 50	1.00	1.000	7-080-015	7-080-115
7-060-070Q	NMTB 50	1.25	1.000	7-080-020	7-080-120
7-060-075Q	NMTB 50	1.50	1.000	7-080-025	7-080-125
7-060-080Q	NMTB 50	2.00	1.000	7-080-030	7-080-130

5370

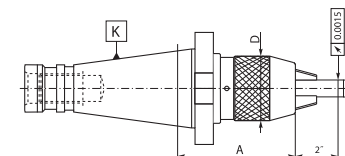
- Jacobs Taper adapters
- Compatible with Ericson Quick Change



Code No.	K 7:24	Jacobs Taper	A [in]
7-052-033Q	NMTB 30	JT3	0.47
7-052-0333Q	NMTB 30	JT33	0.47
7-052-036Q	NMTB 30	JT6	0.47
7-052-041Q	NMTB 40	JT1	0.55
7-052-042Q	NMTB 40	JT2	0.55
7-052-043Q	NMTB 40	JT3	0.55
7-052-0433Q	NMTB 40	JT33	0.55
7-052-046Q	NMTB 40	JT6	0.55
7-052-053Q	NMTB 50	JT3	0.71
7-052-054Q	NMTB 50	JT4	0.71
7-052-055Q	NMTB 50	JT5	0.71

7657

- Keyless drill chucks
- Compatible with Ericson Quick Change



Code No.	K 7:24	d _i [in]	A [in]	D [in]	Wrench
7-048-420Q	NMTB 40	0.031 - 0.500	3.46	2.00	7-188-932K
7-048-430Q	NMTB 40	0.125 - 0.625	3.90	2.25	7-188-932K

7349

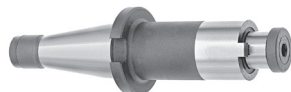
- Face mill holders for milling cutters
- Holders have 1" drive keys
- For 8" and larger face mill cutters



Code No.	K 7:24	Arbor Dia [in]	Arbor Length [in]	Mounting Bolts Circle Dia [in]	Mounting Bolts Thread [in]
7-170-005	NMTB 40	2.00	6.20	4.00	5/8-11
7-170-020	NMTB 40	2.50	6.20	4.00	5/8-11
7-170-010	NMTB 50	2.00	7.56	4.00	5/8-11
7-170-025	NMTB 50	2.50	7.56	4.00	5/8-11
7-170-030	NMTB 60	2.50	10.70	4.00	5/8-11

7311 QC L

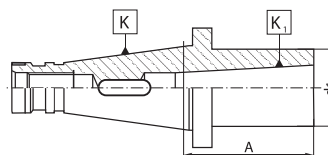
- Shell mill holders with 4" extension
- Compatible with Ericson Quick Change



Code No.	K 7:24	Arbor Dia [in]	Gage Length [in]		
7-075-002Q	NMTB 40	0.75	4.00	7-080-010	7-080-110
7-075-005Q	NMTB 40	1.00	4.00	7-080-015	7-080-115
7-075-010Q	NMTB 50	1.00	4.00	7-080-015	7-080-115
7-075-015Q	NMTB 50	1.25	4.00	7-080-020	7-080-120
7-075-020Q	NMTB 50	1.50	4.00	7-080-025	7-080-125

1657 QC

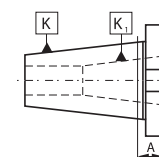
- Morse taper adapters for tools with tang
- Compatible with Ericson Quick Change



Code No.	K 7:24	K ₁ MT	A [in]	d _i [in]
7-100-005Q	NMTB 40	2	1.969	1.260
7-100-010Q	NMTB 40	3	2.559	1.575
7-100-015Q	NMTB 40	4	3.740	1.890
7-100-024Q	NMTB 50	2	0.906	1.260
7-100-025Q	NMTB 50	3	1.299	1.575
7-100-030Q	NMTB 50	4	2.087	1.890
7-100-035Q	NMTB 50	5	3.386	2.480

1650

- Reduction adapters for NMTB tapers



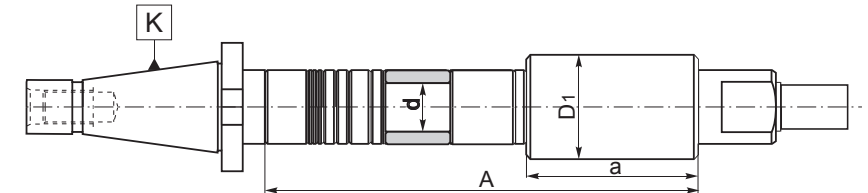
Code No.	K 7:24	K ₁ 7:24	A [in]
7-110-005	NMTB 40	30	0.511
7-110-010	NMTB 50	30	0.626
7-110-015	NMTB 50	40	0.626

Code No.	Type	K 7:24	Arbor diameter d [in]	Length A [in]	Running Bushing diameter D1 [in]	Running Bushing Length a [in]	Number of bushings	Weight [lbs]
7-010-005	30-7/8 A10-2	NMTB 30	0.875	10	1.625	2.625	1	6.15
7-010-010	31 A10-2	NMTB 30	1.000	10	1.625	2.625	1	6.83
7-010-015	31-1/4 A10-2	NMTB 30	1.250	10	1.625	2.625	1	8.37
7-010-017	31-1/4 A10-3	NMTB 30	1.250	10	1.875	3.125	1	9.14
7-010-027	41 A8	NMTB 40	1.000	8	-	-	-	6.43
7-010-028	41 A10	NMTB 40	1.000	10	-	-	-	7.42
7-010-030	41 A12	NMTB 40	1.000	12	-	-	-	8.42
7-010-035	41 A16-3	NMTB 40	1.000	16	1.875	3.125	1	11.00
7-010-037	41-1/4 A8	NMTB 40	1.250	8	-	-	-	8.53
7-010-038	41-1/4 A10	NMTB 40	1.250	10	-	-	-	10.55
7-010-040	41-1/4 A12	NMTB 40	1.250	12	-	-	-	11.86
7-010-045	41-1/4 A16-3	NMTB 40	1.250	16	1.875	3.125	1	14.77
7-010-055	50-7/8 A18-4	NMTB 50	0.875	18	2.125	3.750	1	16.00
7-010-057	51 A8	NMTB 50	1.000	8	-	-	-	9.43
7-010-060	51 A12	NMTB 50	1.000	12	-	-	-	11.37
7-010-065	51 A18-4	NMTB 50	1.000	18	2.125	3.750	1	17.28
7-010-070	51-1/4 A12	NMTB 50	1.250	12	-	-	-	14.57
7-010-075	51-1/4 A18-4	NMTB 50	1.250	18	2.125	3.750	1	20.32



7170 A

- Long milling machine arbors
- Equipped with assorted width of solid spacers
- Equipped with running bushings and threaded arbor nut
- Provided with 23/32 x 1-3/4 end pilots

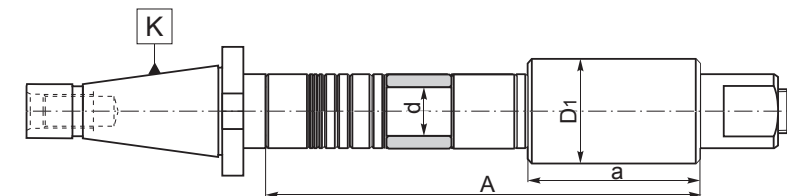


Code No.	Type	K 7:24	Arbor diameter d [in]	Length A [in]	Running Bushing diameter D1 [in]	Running Bushing Length a [in]	Number of bushings	Weight [lbs]
7-015-002	31 B2	NMTB 30	1.000	2	-	-	-	2.30
7-015-005	40-7/8 B14-3	NMTB 40	0.875	14	1.875	3.125	1	9.10
7-015-006	40-7/8 B16-3	NMTB 40	0.875	16	1.875	3.125	1	9.40
7-015-008	41 B3	NMTB 40	1.000	3	-	-	-	3.70
7-015-010	41 B14-3	NMTB 40	1.000	14	1.875	3.125	1	11.50
7-015-015	41 B20-3	NMTB 40	1.000	20	1.875	3.125	1	13.80
7-015-017	41-1/4 B3	NMTB 40	1.250	3	-	-	-	5.00
7-015-020	41-1/4 B14-3	NMTB 40	1.250	14	1.875	3.125	1	13.40
7-015-025	41-1/4 B20-3	NMTB 40	1.250	20	1.875	3.125	1	16.60
7-015-030	41-1/2 B20-4	NMTB 40	1.500	20	2.125	3.750	1	23.20
7-015-033	51 B3.1/2	NMTB 50	1.000	3.5	-	-	-	6.80
7-015-035	51 B15-4	NMTB 50	1.000	15	2.125	3.750	1	15.10
7-015-040	51 B18-4	NMTB 50	1.000	18	2.125	3.750	2	18.40
7-015-045	51 B24-4	NMTB 50	1.000	24	2.125	3.750	2	21.00
7-015-047	51-1/4 B3-1/2	NMTB 50	1.250	3.5	-	-	-	8.80
7-015-050	51-1/4 B15-4	NMTB 50	1.250	15	2.125	3.750	1	17.50
7-015-055	51-1/4 B18-4	NMTB 50	1.250	18	2.125	3.750	2	20.70
7-015-060	51-1/4 B24-4	NMTB 50	1.250	24	2.125	3.750	2	24.20
7-015-065	51-1/4 B30-4	NMTB 50	1.250	30	2.125	3.750	2	30.00
7-015-067	51-1/2 B3-1/2	NMTB 50	1.500	3.5	-	-	-	9.00
7-015-070	51-1/2 B18-4	NMTB 50	1.500	18	2.125	3.750	2	25.00
7-015-075	51-1/2 B24-5	NMTB 50	1.500	24	2.750	4.250	2	36.00
7-015-080	51-1/2 B30-5	NMTB 50	1.500	30	2.750	4.250	2	44.60
7-015-090	52 B24-5	NMTB 50	2.000	24	2.750	4.250	2	48.00
7-015-095	52 B30-5	NMTB 50	2.000	30	2.750	4.250	2	62.30
7-015-100	52 B36-5	NMTB 50	2.000	36	2.750	4.250	2	73.00
7-015-105	52-1/2 B36-6	NMTB 50	2.500	36	3.375	4.250	2	94.30



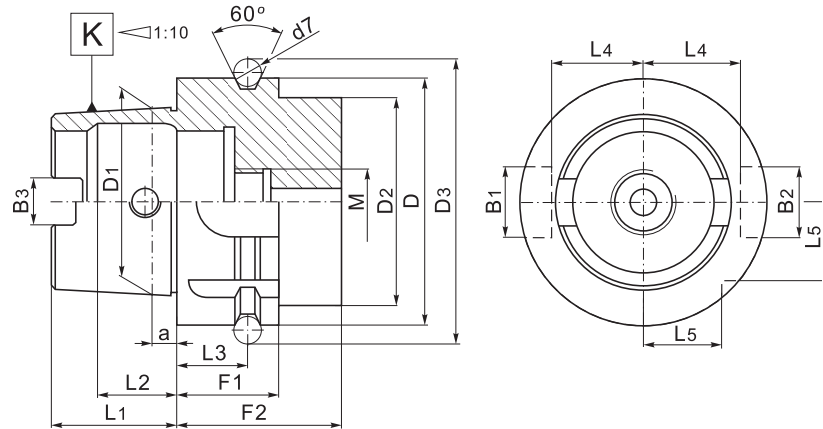
7170 B

- Long milling machine arbors
- Equipped with assorted width of solid spacers
- Equipped with running bushings and threaded arbor nut



HSK-A

- Standard features of the tools:
- Manufactured with Chrome Manganese steel
 - Carburized with depth of case 0.7 mm/0.03"
 - Hardened and precision ground
 - Surface hardness HRC 58±2
 - Taper angle: tolerance AT3
 - Balanced in grade G 6.3/15,000 rpm
(A fine balance is made on request)



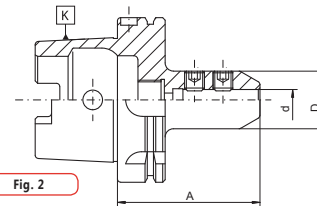
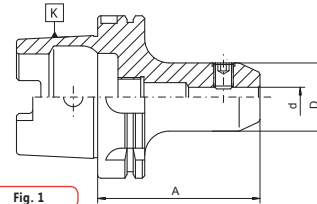
K HSK-A	Measure	D	D ₁	D ₂ max	D ₃	B ₁	B ₂	B ₃	a	d ₇	L ₁	L ₂	L ₃	L ₄	L ₅	F ₁	F ₂	M
63	inches	2.480	1.890	2.087	2.846	0.709	0.630	0.494	0.248	0.276	1.260	0.714	0.709	1.043	0.787	1.024	1.654	M18x0.04
63	mm	63	48	53	72.3	18	16	12.54	6.3	7	32	18.13	18	26.5	20	26	42	M18x1.00
100	inches	3.937	2.953	3.346	4.321	0.866	0.787	0.788	0.394	0.276	1.969	1.124	0.787	1.732	1.240	1.142	1.772	M24x0.06
100	mm	100	75	85	109.75	22	20	20.02	10	7	50	28.56	20	44	31.5	29	45	M24x1.50



7885

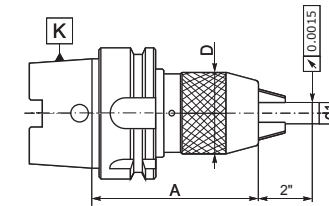
■ Weldon type end mill holders

Code No.	K HSK-A	d [in]	D [in]	L [in]		Fig. / No. of screws
7-306-6005	63	3/16	0.75	3.00	7-195-110	1
7-306-6010	63	1/4	0.82	3.00	7-195-110	1
7-306-6015	63	5/16	1.00	3.00	7-195-120	1
7-306-6020	63	3/8	1.00	3.50	7-195-120	1
7-306-6025	63	7/16	1.25	4.00	7-195-120	1
7-306-6030	63	1/2	1.25	4.00	7-195-312	1
7-306-6035	63	5/8	1.50	4.00	7-195-415	1
7-306-6040	63	3/4	1.75	4.50	7-195-513	1
7-306-6045	63	7/8	2.00	4.50	7-195-517	2
7-306-6050	63	1	2.25	4.50	7-195-618	2
7-306-6054	63	1-1/4	2.50	4.50	7-195-618	2



5391

■ Keyless drill chucks

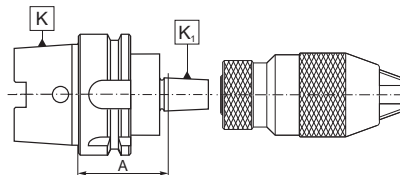


Code No.	K HSK-A	d ₁ [in]	A [in]	D [in]
7-311-6005	63	0.0313 - 0.5000	5.85	2.00
7-311-6008	63	0.1250 - 0.6250	6.18	2.25



5390

■ DIN69893-A (HSK) drill chuck adapters for Jacobs taper

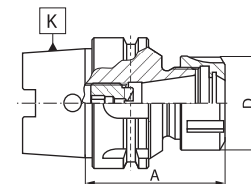


Code No.	K HSK-A	K ₁ Jacobs	A [in]
7-309-6001	63	J1	1.75
7-309-6004	63	J4	1.75
7-309-6005	63	J5	1.75
7-309-6006	63	J6	1.75
7-309-6035	63	J33	1.75



7887

■ Collet chucks for ER collets

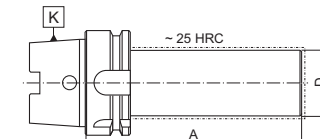


Code No.	K HSK-A	Collet size	Clamping range [in]	A [in]	D [in]		
7-305-6253	63	ER25	0.047 - 0.625	3.15	1.654	7-188-825	7-188-9025
7-305-6321	63	ER32	0.125 - 0.750	3.00	1.969	7-188-832	7-188-9032
7-305-6401	63	ER40	0.125 - 1.000	3.15	2.480	7-188-840	7-188-9040
7-305-6402	63	ER40	0.125 - 1.000	5.00	2.480	7-188-840	7-188-9040



7891

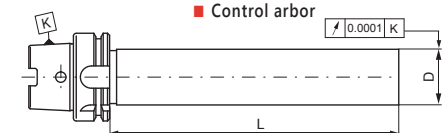
■ Machinable blank adapters



Code No.	K HSK-A	D [mm]	A [mm]
7-308-632	63	63	150
7-308-634	63	80	250
7-608-102	100	97	250

2856

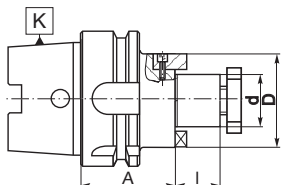
■ Control arbor



Code No.	K HSK-A	D [mm]	L [mm]
7-307-632	63	40	300
7-307-102	100	50	300

7888

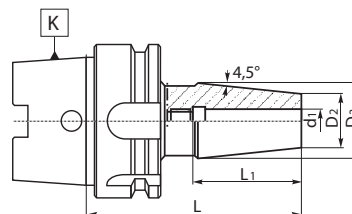
■ Shell mill holders - metric



Code No.	K HSK-A	d [mm]	A [mm]	L [mm]	D [mm]		
7-316-602	63	16	45	17	32	7-316-802	7-316-902
7-316-604	63	16	80	17	32	7-316-802	7-316-902
7-316-606	63	16	145	17	32	7-316-802	7-316-902
7-316-608	63	22	50	19	40	7-316-804	7-316-904
7-316-610	63	22	80	19	40	7-316-804	7-316-904
7-316-612	63	22	150	19	40	7-316-804	7-316-904
7-316-614	63	27	60	21	48	7-316-806	7-316-906
7-316-616	63	27	155	21	48	7-316-806	7-316-906
7-316-618	63	32	60	24	58	7-316-808	7-316-908
7-316-620	63	40	60	27	70	7-316-808	7-316-910
7-316-102	100	22	50	19	40	7-316-810	7-316-904
7-316-104	100	27	50	21	48	7-316-812	7-316-906
7-316-106	100	32	50	24	58	7-316-814	7-316-908
7-316-108	100	40	60	27	70	7-316-816	7-316-912
7-316-110	100	50	70	30	90	7-316-818	7-316-914

7634

■ Shrink fit holders



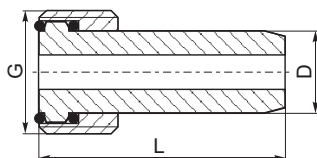
* Suitable for HSS and solid carbide tools with cylindrical shank (h6 tolerance)

Code No.	K HSK-A	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-318-602	63	3	80	36	14	22
7-318-604	63	3	120	36	14	22
7-318-606	63	3	160	36	14	22
7-318-608	63	4	80	36	14	22
7-318-610	63	4	120	36	14	22
7-318-612	63	4	160	36	14	22
7-318-614	63	5	80	36	16	22
7-318-616	63	5	120	36	16	22
7-318-618	63	5	160	36	16	22
7-318-620	63	6	80	36	21	27
7-318-622	63	6	120	36	21	27
7-318-624	63	6	160	36	21	27
7-318-626	63	8	80	36	21	27
7-318-628	63	8	120	36	21	27
7-318-630	63	8	160	36	21	27
7-318-632	63	10	85	42	24	32
7-318-634	63	10	120	42	24	32
7-318-636	63	10	160	42	24	32
7-318-638	63	12	90	47	24	32
7-318-640	63	12	120	47	24	32
7-318-642	63	12	160	47	24	32
7-318-644	63	14	90	47	27	34
7-318-646	63	14	120	47	27	34
7-318-648	63	14	160	47	27	34
7-318-650	63	16	95	50	27	34

Code No.	K HSK-A	d ₁ [mm]	L [mm]	L ₁ [mm]	D ₂ [mm]	D ₃ [mm]
7-318-652	63	16	120	50	27	34
7-318-654	63	16	160	50	27	34
7-318-656	63	18	95	50	33	42
7-318-658	63	18	120	50	33	42
7-318-660	63	18	160	50	33	42
7-318-662	63	20	100	52	33	42
7-318-664	63	20	120	52	33	42
7-318-666	63	20	160	52	33	42
7-318-668	63	25	115	58	44	53
7-318-670	63	25	120	58	44	53
7-318-672	63	25	160	58	44	53
7-318-674	63	32	115	58	44	53
7-318-102	100	6	85	36	21	27
7-318-104	100	6	120	36	21	27
7-318-106	100	6	160	36	21	27
7-318-108	100	8	85	36	21	27
7-318-110	100	8	120	36	21	27
7-318-112	100	8	160	36	21	27
7-318-114	100	10	90	42	24	32
7-318-116	100	10	120	42	24	32
7-318-118	100	10	160	42	24	32
7-318-120	100	12	95	47	24	32
7-318-122	100	12	120	47	24	32
7-318-124	100	12	160	47	24	32
7-318-126	100	14	95	47	27	34
7-318-128	100	14	120	47	27	34
7-318-130	100	14	160	47	27	34
7-318-132	100	16	100	50	27	34
7-318-134	100	16	120	50	27	34
7-318-136	100	16	160	50	27	34
7-318-138	100	18	100	50	33	42
7-318-140	100	18	120	50	33	42
7-318-142	100	18	160	50	33	42
7-318-144	100	20	105	52	33	42
7-318-146	100	20	120	52	33	42
7-318-148	100	20	160	52	33	42
7-318-150	100	25	115	58	44	53
7-318-152	100	25	160	58	44	53
7-318-154	100	32	120	58	44	53
7-318-156	100	32	160	58	44	53

1313

■ Coolant tubes



Code No.	K HSK-A	G [mm]	L [mm]	D [mm]
7-329-063	63	M24x1.5	36.5	12
7-329-100	100	M24x1.5	44	16



NEW REVOLVING CENTERS - „R” TYPE

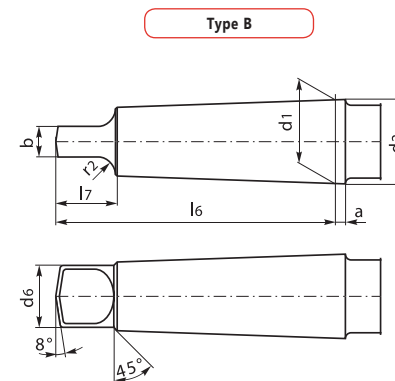
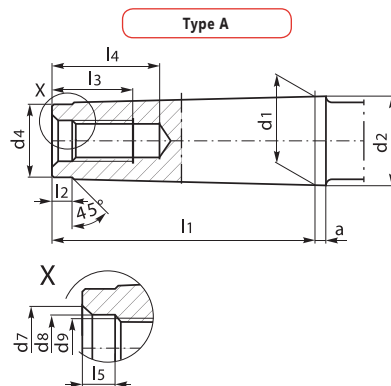
- Body hardened and ground
- High runout accuracy and concentricity
- Rotation speeds up to 7,000 rpm
- Max. workpiece weight up to 11,000 lbs
- Service life of bearings up to 2,000 operating hours



MORSE TAPER

Standard features of the tools:

- Manufactured with Chrome Manganese steel
- Carburized with depth of case 0.7 mm
- Hardened and precision ground
- Surface hardness HRC 58±2
- Taper angle: tolerance AT3

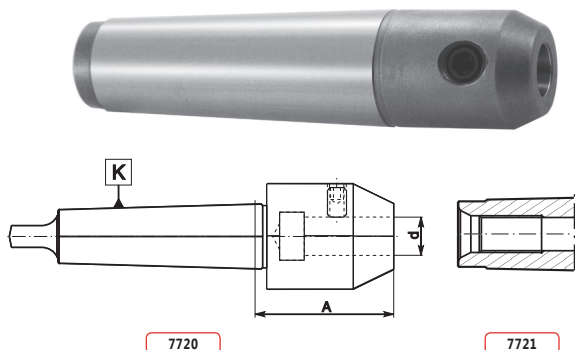


K MT	a [in]	b [in]	d ₁ [in]	d ₂ [in]	d ₄ [in]	d ₆ [in]	d ₇ [in]	d ₈ [in]	d ₉ [in]
0	0.118	0.154	0.356	0.362	0.236	0.236	-	-	-
1	0.138	0.205	0.048	0.480	0.354	0.343	0.335	0.252	-
2	0.197	0.248	0.070	0.709	0.551	0.531	0.520	0.413	3/8-16 UNC
3	0.197	0.311	0.938	0.949	0.748	0.728	0.630	0.512	3/8-16 UNC
4	0.256	0.469	1.231	1.244	0.984	0.965	0.846	0.669	1/2-13 UNC
5	0.256	0.626	1.748	1.760	1.406	1.406	1.024	0.827	5/8-11 UNC
6	0.315	0.748	2.494	2.512	2.008	2.008	1.260	0.984	1-8 UNC
7	0.374	1.122	3.270	3.287	2.598	2.630	-	-	-

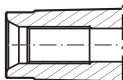
K MT	l ₁ [in]	l ₂ [in]	l ₃ [in]	l ₄ [in]	l ₅ [in]	l ₆ [in]	l ₇ [in]	r ₂ [in]	a/2
1.969	0.157	-	-	-	2.224	0.413	0.157	4	1°29'27"
2.106	0.197	0.630	0.866	0.157	2.441	0.531	0.197	5	1°25'43"
2.520	0.197	0.945	1.240	0.197	2.953	0.630	0.236	6	1°25'50"
3.189	0.276	0.945	1.319	0.217	3.701	0.787	0.276	7	1°26'16"
4.035	0.354	1.260	1.673	0.323	4.626	0.945	0.315	8	1°29'15"
5.098	0.394	1.575	2.067	0.394	5.886	1.142	0.394	10	1°30'26"
7.165	0.630	1.850	2.421	0.453	8.268	1.575	0.512	13	1°29'36"
9.862	0.709	-	-	-	11.260	2.126	0.748	19	1°29'22"

7720

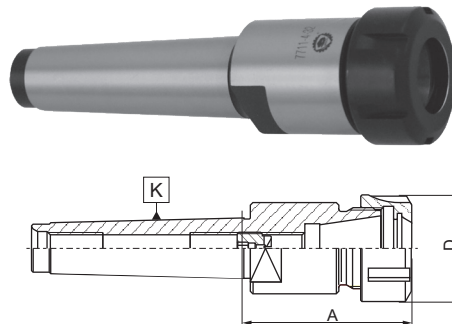
- End mill holders with MT shank
- Tanged


7721

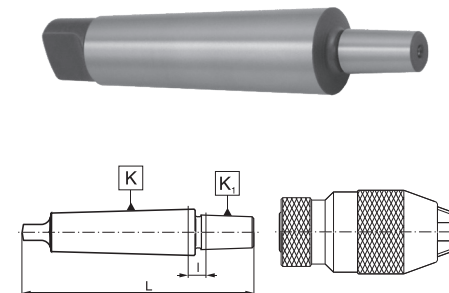
- End mill holders with MT shank
- With drawbar thread


7711

- Collet chucks for ER collets


5362

- Drill chuck mandrels for Jacobs taper with tang



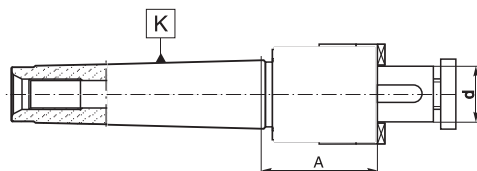
Code No.		K MT	d [in]	A [in]	
7720	7721				
7-155-005	7-150-005	2	3/16	2.008	7-195-091
7-155-007	7-150-007	2	1/4	2.008	7-195-110
7-155-010	7-150-010	2	3/8	2.008	7-195-208
7-155-015	7-150-015	2	1/2	3.465	7-195-314
7-155-020	7-150-020	2	5/8	2.717	7-195-412
7-155-025	7-150-025	3	3/16	2.008	7-195-091
7-155-027	7-150-027	3	1/4	2.008	7-195-110
7-155-030	7-150-030	3	3/8	2.008	7-195-208
7-155-035	7-150-035	3	1/2	2.126	7-195-314
7-155-040	7-150-040	3	5/8	3.976	7-195-412
7-155-045	7-150-045	3	3/4	2.835	7-195-513
7-155-050	7-150-050	4	3/8	2.067	7-195-208
7-155-055	7-150-055	4	1/2	2.185	7-195-314
7-155-060	7-150-060	4	5/8	2.264	7-195-412
7-155-065	7-150-065	4	3/4	2.420	7-195-513
7-155-070	7-150-070	4	7/8	2.500	7-195-513
7-155-075	7-150-075	4	1	3.169	7-195-615
7-155-080	7-150-080	5	3/8	2.067	7-195-208
7-155-085	7-150-085	5	1/2	2.185	7-195-314
7-155-090	7-150-090	5	5/8	2.264	7-195-412
7-155-095	7-150-095	5	3/4	2.500	7-195-513
7-155-100	7-150-100	5	7/8	2.420	7-195-513
7-155-105	7-150-105	5	1	2.736	7-195-615
7-155-110	7-150-110	5	1-1/4	2.815	7-195-615
7-155-115	7-150-115	5	1-1/2	3.500	7-195-615
7-155-120	7-150-120	5	2	4.197	7-195-820

Code No.	K MT	Collet size	A [in]	Clamping range [in]	D [in]	
7-171-3216	2	ER16	1.71	0.079 - 0.394	1.26	7-188-816
7-171-3220	2	ER20	1.87	0.125 - 0.500	1.38	7-188-820
7-171-3225	2	ER25	2.24	0.047 - 0.625	1.65	7-188-825
7-171-3232	2	ER32	2.58	0.125 - 0.750	1.97	7-188-832
7-171-3316	3	ER16	1.71	0.079 - 0.394	1.26	7-188-816
7-171-3320	3	ER20	1.79	0.125 - 0.500	1.38	7-188-820
7-171-3325	3	ER25	2.68	0.047 - 0.625	1.65	7-188-825
7-171-3003	3	ER32	2.89	0.125 - 0.750	1.97	7-188-832
7-171-3340	3	ER40	3.35	0.125 - 1.000	2.48	7-188-840
7-171-3425	4	ER25	2.15	0.047 - 0.625	1.65	7-188-825
7-171-3432	4	ER32	3.31	0.125 - 0.750	1.97	7-188-832
7-171-3440	4	ER40	3.15	0.125 - 1.000	2.48	7-188-840
7-171-3532	5	ER32	2.58	0.125 - 0.750	1.97	7-188-832
7-171-3540	5	ER40	2.66	0.125 - 1.000	2.48	7-188-840

Code No.	K MT	K _J Jacobs	L [in]	I [in]
7-052-101	1	1	3.30	0.2
7-052-102	1	2	3.50	0.2
7-052-103	1	3	4.00	0.3
7-052-106	1	6	3.70	0.3
7-052-133	1	33	3.70	0.3
7-052-201	2	1	4.00	0.4
7-052-202	2	2	4.20	0.3
7-052-203	2	3	4.40	0.3
7-052-206	2	6	4.20	0.3
7-052-233	2	33	4.20	0.3
7-052-302	3	2	5.00	0.4
7-052-303	3	3	5.20	0.3
7-052-304	3	4	5.70	0.4
7-052-305	3	5	6.00	0.5
7-052-306	3	6	5.00	0.4
7-052-333	3	33	5.00	0.3
7-052-403	4	3	6.30	0.5
7-052-404	4	4	6.70	0.4
7-052-405	4	5	6.90	0.4
7-052-406	4	6	6.10	0.5
7-052-433	4	33	6.10	0.5
7-052-503	5	3	7.60	0.5
7-052-504	5	4	8.00	0.5
7-052-505	5	5	8.20	0.5
7-052-506	5	6	7.30	0.5
7-052-533	5	33	7.40	0.6

7411

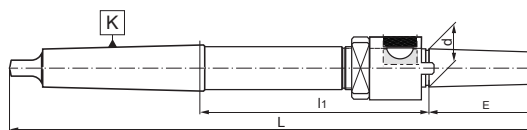
- Shell mill arbors with MT shank



Code No.	K MT	A [in]	d [in]
7-050-010	4	3/4	1.122
7-050-015	4	1	1.122
7-050-020	4	1-1/4	1.122
7-050-025	4	1-1/2	1.122
7-050-030	5	1	1.201
7-050-035	5	1-1/4	1.122
7-050-040	5	1-1/2	1.122

5310

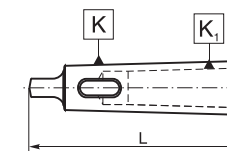
- Driver arbors for reamers



Code No.	K MT	d [in]	L [in]	E [in]	L ₁ [in]			
7-067-004	2	3/8	9	2.25	3.80	7-068-954	7-068-904	7-068-804
7-067-005	2	1/2	9.50	2.50	4.05	7-068-955	7-068-905	7-068-804
7-067-006	3	5/8	10	2.75	3.55	7-068-956	7-068-906	7-068-806
7-067-007	3	3/4	11	3.00	4.30	7-068-957	7-068-907	7-068-807
7-067-008	4	1	12	3.50	3.87	7-068-958	7-068-908	7-068-807
7-067-009	4	1-1/4	13	3.75	4.62	7-068-959	7-068-909	7-068-809
7-067-010	5	1-1/2	15.55	4.50	5.67	7-068-960	7-068-910	7-068-810
7-067-011	5	1-3/4	16.73	4.50	5.35	7-068-961	7-068-911	7-068-811
7-067-012	5	2	17.52	5.00	5.63	7-068-962	7-068-912	7-068-811

1751

- Reduction sleeves for Morse tapers



* completely hardened, grounded internally and externally

Code No.	K MT	K ₁ MT	L [in]
7-450-003	1	0	85
7-450-005	2	1	92
7-450-010	3	1	99
7-450-015	3	2	112
7-450-020	4	1	124
7-450-025	4	2	124
7-450-030	4	3	140
7-450-035	5	1	156
7-450-040	5	2	156
7-450-045	5	3	156
7-450-050	5	4	174
7-450-051	6	2	218
7-450-052	6	3	218
7-450-055	6	4	218
7-450-060	6	5	218

7725-M

- Annular cutter holders for MT shank



Code No.	MT Shank	Type	Cutter Shank Size [in]	Gage Length [in]
7-981-300	2	HEN-3	3/4	2
7-981-306	2	HEN-3-6	3/4	6
7-981-400	3	HEN-4	3/4	2
7-981-406	3	HEN-4-6	3/4	6
7-981-412	3	HEN-4-12	3/4	12
7-981-800	3	HEN-8	1-1/4	2-3/4

2842

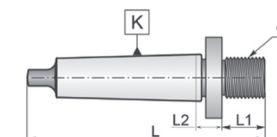
- MT Face mill holders
- Holders have four mounting holes with the thread 5/8-11 on 4" bolt circle to hold 8" or larger milling cutters



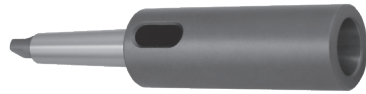
Code No.	MT Shank	Arbor dia [in]	Arbor Length [in]	Gage Length [in]
7-170-035	5	2	9.57	2
7-170-045	5	2-1/2	9.57	6
7-170-040	6	2	13.58	2
7-170-050	6	2-1/2	13.58	6

7470

- MT to threaded mount adapter

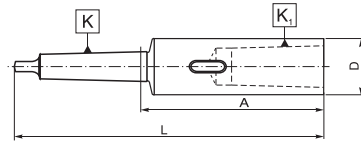


Code No.	K MT	Thread G	L [in]	L ₁ [in]	L ₂ [in]
7-052-610	2	3/8-24	3.7	0.6	0.197
7-052-613	2	1/2-20	4.0	0.6	0.472
7-052-616	2	5/8-16	4.1	0.7	0.500



1761

■ Extension sleeves for Morse tapers



* Completely hardened, grounded internally and externally

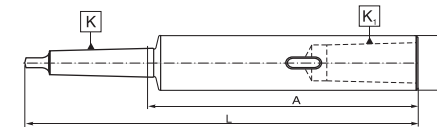
Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-405-002	1	1	5.71	3.27	0.79
7-405-005	1	2	6.30	3.86	1.18
7-405-003	1	3	7.20	4.76	1.42
7-405-010	2	1	6.30	3.35	0.79
7-405-015	2	2	6.89	3.94	1.18
7-405-020	2	3	7.72	4.76	1.42
7-405-025	2	4	8.70	5.75	1.89
7-405-030	3	1	6.89	3.19	0.79
7-405-035	3	2	7.64	3.94	1.18
7-405-040	3	3	8.46	4.76	1.42
7-405-045	3	4	9.45	5.75	1.89
7-405-050	3	5	10.83	7.13	2.48
7-405-055	4	1	7.87	3.25	0.79
7-405-060	4	2	8.46	3.84	1.18
7-405-065	4	3	9.45	4.82	1.42

Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-405-070	4	4	10.43	5.81	1.89
7-405-075	4	5	11.81	7.19	2.48
7-405-076	4	6	14.21	9.59	3.23
7-405-077	5	1	9.13	3.25	0.79
7-405-080	5	2	9.72	3.84	1.18
7-405-085	5	3	10.55	4.67	1.42
7-405-090	5	4	11.81	5.93	1.89
7-405-095	5	5	13.19	7.30	2.48
7-405-100	5	6	15.59	9.70	3.23
7-405-101	6	1	11.57	3.31	0.79
7-405-102	6	2	12.17	3.90	1.18
7-405-103	6	3	12.99	4.72	1.42
7-405-105	6	4	13.98	5.71	1.89
7-405-110	6	5	15.35	7.09	2.48
7-405-115	6	6	17.76	9.49	3.23



1764

■ Elongating sleeves for Morse tapers



* Completely hardened ground internally and externally

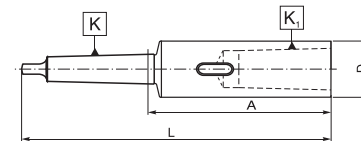
Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-407-005	1	1	7.87	5.43	0.79
7-407-010	1	1	9.84	7.40	0.79
7-407-015	1	1	11.81	9.37	0.79
7-407-020	1	1	13.78	11.34	0.79
7-407-025	1	1	15.75	13.31	0.79
7-407-030	1	1	17.72	15.28	0.79
7-407-035	1	1	19.69	17.24	0.79
7-407-040	2	2	7.87	4.92	0.98
7-407-045	2	2	9.84	6.89	0.98
7-407-050	2	2	11.81	8.86	0.98
7-407-055	2	2	13.78	10.83	0.98
7-407-060	2	2	15.75	12.80	0.98
7-407-065	2	2	17.72	14.76	0.98
7-407-070	2	2	19.69	16.73	0.98

Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-407-075	2	2	23.62	20.67	0.98
7-407-080	3	3	9.84	6.14	1.26
7-407-085	3	3	11.81	8.11	1.26
7-407-090	3	3	13.78	10.08	1.26
7-407-095	3	3	15.75	12.05	1.26
7-407-100	3	3	17.72	14.02	1.26
7-407-105	3	3	19.69	15.98	1.26
7-407-110	3	3	23.62	19.92	1.26
7-407-115	4	4	11.81	7.19	1.57
7-407-120	4	4	13.78	9.15	1.57
7-407-125	4	4	15.75	11.12	1.57
7-407-130	4	4	17.72	13.09	1.57
7-407-135	4	4	19.69	15.06	1.57
7-407-140	4	4	23.62	19.00	1.57



1762

■ Extension sleeves for Morse tapers



* Only tang is hardened, grounded internally and externally

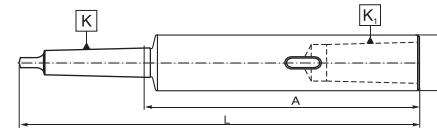
Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-406-002	1	1	5.71	3.27	0.79
7-406-005	1	2	6.30	3.86	1.18
7-406-003	1	3	7.20	4.76	1.42
7-406-010	2	1	6.30	3.35	0.79
7-406-015	2	2	6.89	3.94	1.18
7-406-020	2	3	7.72	4.76	1.42
7-406-025	2	4	8.70	5.75	1.89
7-406-030	3	1	6.89	3.19	0.79
7-406-035	3	2	7.64	3.94	1.18
7-406-040	3	3	8.46	4.76	1.42
7-406-045	3	4	9.45	5.75	1.89
7-406-050	3	5	10.83	7.13	2.48
7-406-055	4	1	7.87	3.25	0.79
7-406-060	4	2	8.46	3.84	1.18
7-406-065	4	3	9.45	4.82	1.42

Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-406-070	4	4	10.43	5.81	1.89
7-406-075	4	5	11.81	7.19	2.48
7-406-076	4	6	14.21	9.59	3.23
7-406-077	5	1	9.13	3.25	0.79
7-406-080	5	2	9.72	3.84	1.18
7-406-085	5	3	10.55	4.67	1.42
7-406-090	5	4	11.81	5.93	1.89
7-406-095	5	5	13.19	7.30	2.48
7-406-100	5	6	15.59	9.70	3.23
7-406-101	6	1	11.57	3.31	0.79
7-406-102	6	2	12.17	3.90	1.18
7-406-103	6	3	12.99	4.72	1.42
7-406-105	6	4	13.98	5.71	1.89
7-406-110	6	5	15.35	7.09	2.48
7-406-115	6	6	17.76	9.49	3.23



1765

■ Elongating sleeves for Morse tapers



* Only tang is hardened, grounded internally and externally

Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-408-005	1	1	7.87	5.43	0.79
7-408-010	1	1	9.84	7.40	0.79
7-408-015	1	1	11.81	9.37	0.79
7-408-020	1	1	13.78	11.34	0.79
7-408-025	1	1	15.75	13.31	0.79
7-408-030	1	1	17.72	15.28	0.79
7-408-035	1	1	19.69	17.24	0.79
7-408-040	2	2	7.87	4.92	0.98
7-408-045	2	2	9.84	6.89	0.98
7-408-050	2	2	11.81	8.86	0.98
7-408-055	2	2	13.78	10.83	0.98
7-408-060	2	2	15.75	12.80	0.98
7-408-065	2	2	17.72	14.76	0.98
7-408-070	2	2	19.69	16.73	0.98

Code No.	K MT	K ₁ MT	L [in]	A [in]	D [in]
7-408-075	2	2	23.62	20.67	0.98
7-408-080	3	3	9.84	6.14	1.26
7-408-085	3	3	11.81	8.11	1.26
7-408-090	3	3	13.78	10.08	1.26
7-408-095	3	3	15.75	12.05	1.26
7-408-100	3	3	17.72	14.02	1.26
7-408-105	3	3	19.69	15.98	1.26
7-408-110	3	3	23.62	19.92	1.26
7-408-115	4	4	11.81	7.19	1.57
7-408-120	4	4	13.78	9.15	1.57
7-408-125	4	4	15.75	11.12	1.57
7-408-130	4	4	17.72	13.09	1.57
7-408-135	4	4	19.69	15.06	1.57
7-408-140	4	4	23.62	19.00	1.57

CYLINDRICAL
SHANK

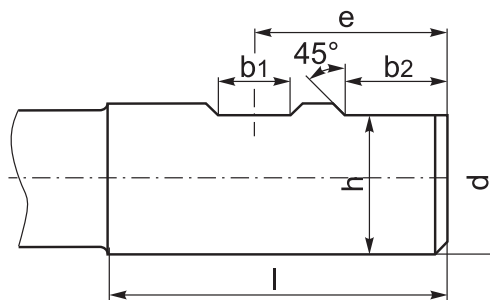
Standard features of the tools:

- Manufactured with Chrome Manganese steel
- Carburized with depth of case 0.7 mm
- Hardened and precision ground
- Surface hardness HRC 58±2

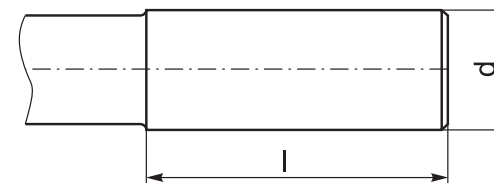
d [in]	l [in]	e [in]	b ₁ min [in]	b ₁ max [in]	h [in]	b ₂ [in]
3/8	1-9/16	25/32	0.280	0.282	0.325	-
1/2	1-25/32	57/64	0.330	0.332	0.440	-
5/8	1-29/32	61/64	0.400	0.402	0.560	-
3/4	2-1/32	1-1/64	0.455	0.457	0.685	-
7/8	2-1/32	1-1/64	0.455	0.457	0.810	1/2
1	2-9/32	1-9/64	0.515	0.517	0.925	1/2
1-1/4	2-9/32	1-9/64	0.515	0.517	1.156	1/2
1-1/2	2-11/16	1-3/16	0.515	0.517	1.406	9/16
2	3-1/4	1-27/32	0.700	0.702	1.900	27/32
2-1/2	3-1/2	1-15/16	0.700	0.702	2.400	27/32

Type B

- Type B - with two clamping flats (Weldon)
- d = 7/8" - 2-1/2"

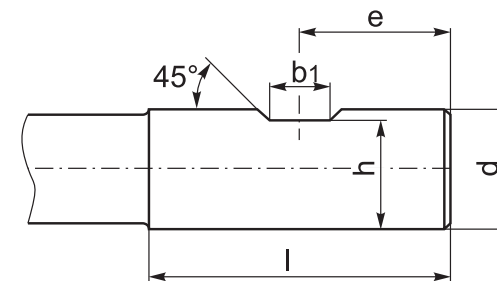


Type A



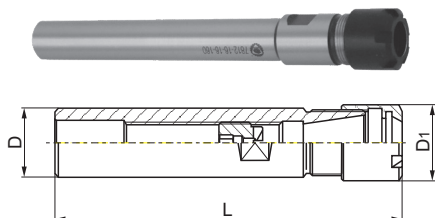
Type B

- Type B - with one clamping flat (Weldon)
- d = 3/8" - 2-1/2"



7812

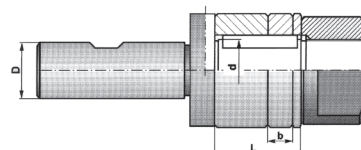
■ Collet chucks for ER collets



Code No.	D [in]	Collet size	L [in]	D ₁ [in]		
7-171-1105	1/2	ER11	6.2	0.630	7-171-951	7-171-961
7-171-1106	5/8	ER11	6.2	0.630	7-171-951	7-171-961
7-171-1606	5/8	ER16	6	0.875	7-171-966	7-171-976
7-171-1607	3/4	ER16	6.5	0.875	7-171-966	7-171-976
7-171-2007	3/4	ER20	5.5	1.338	7-188-821	7-171-982
7-171-2009	1	ER20	5.5	1.338	7-188-821	7-171-982
7-171-2303	3/4	ER25	6.5	1.650	7-188-825	7-188-9025
7-171-2305	1	ER25	6.5	1.650	7-188-825	7-188-9025
7-171-3001	1	ER32	3.75	1.970	7-188-832	7-188-9032
7-171-4001	1	ER40	4.5	2.480	7-188-840	7-188-9040
7-171-4002	1-1/4	ER40	4.75	2.480	7-188-840	7-188-9040

7565

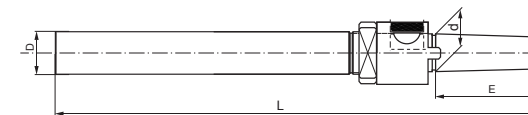
■ Stub milling machine Arbors with Weldon shank



Code No.	Shank Dia D [in]	Arbor dia d [in]	A [in]	Wrench size [in]	L [in]
7-072-005	1/2	1/2	0.87	0.75	1.00
7-072-010	1/2	5/8	1.00	0.87	1.00
7-072-015	1/2	3/4	1.16	1.00	1.00
7-072-020	3/4	1/2	0.87	0.75	1.00
7-072-025	3/4	5/8	1.00	0.87	1.00
7-072-030	3/4	3/4	1.16	1.00	1.00
7-072-035	3/4	7/8	1.37	1.12	1.00
7-072-040	3/4	1	1.50	1.12	1.00
7-072-045	3/4	1-1/4	1.75	1.50	1.00

5312

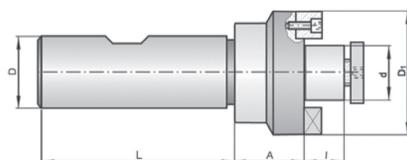
■ Driver arbors for reamers



Code No.	Shank D [in]	d [in]	L [in]	E [in]			
7-068-004	1/2	3/8	9.00	2.25	7-068-954	7-068-904	7-068-804
7-068-005	5/8	1/2	9.50	2.50	7-068-955	7-068-905	7-068-804
7-068-006	3/4	5/8	10.00	2.75	7-068-956	7-068-906	7-068-806
7-068-007	7/8	3/4	11.00	3.00	7-068-957	7-068-907	7-068-807
7-068-008	1 1/8	1	12.00	3.50	7-068-958	7-068-908	7-068-807
7-068-009	1 3/8	1 1/4	13.00	3.75	7-068-959	7-068-909	7-068-809
7-068-010	1 5/8	1 1/2	15.55	4.00	7-068-960	7-068-910	7-068-810
7-068-011	2	1 3/4	16.73	4.50	7-068-961	7-068-911	7-068-811
7-068-012	2 1/8	2	17.52	5.00	7-068-962	7-068-912	7-068-811

7567

■ Straight shank shell mill arbors



Code No.	D [in]	d [in]	A [in]	L [in]	D ₁ [in]		
7-064-005	3/4	0.75	0.703	0.672	1.750	7-080-110	7-080-010
7-064-010	1	1.00	0.714	0.672	2.125	7-080-115	7-080-015
7-064-015	1	1.25	0.845	0.672	2.500	7-080-120	7-080-020
7-064-025	1-1/4	0.75	1.000	0.690	1.770	7-080-110	7-080-010
7-064-030	1-1/4	1.00	1.000	0.690	2.280	7-080-115	7-080-015

7725-S

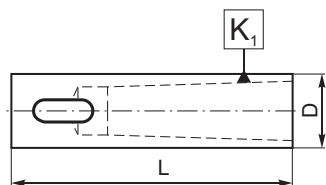
■ Annular cutter holders for straight shank



Code No.	Type	Shank Size [in]	Shank Type	Cutter Shank Size [in]	Gage Length [in]
7-980-100	HEN-1	1/2	3 flats	3/4	2-1/8
7-980-200	HEN-2	3/4	3 flats	3/4	2
7-980-206	HEN-2-6	3/4	3 flats	3/4	3
7-980-212	HEN-2-12	3/4	3 flats	3/4	12
7-983-906	HEN-9-6	3/4	2 flats	3/4	6
7-980-900H	Spare ejecting spring	3/4	-	1-1/4	12

1875

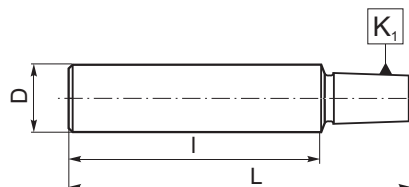
- Solid sockets with MT hole



Code No.	Socket Number	L [in]	K ₁ MT	D [in]
7-400-005	1	3-1/2	1	1
7-400-010	2	3-1/2	1	1-1/4
7-400-015	3	3-1/2	1	1-1/2
7-400-020	4	4	2	1
7-400-025	5	4	2	1-1/4
7-400-030	6	4	2	1-1/2
7-400-035	7	4	2	1-3/4
7-400-040	8	4	2	2
7-400-045	9	4-3/4	3	1-1/4
7-400-050	10	4-3/4	3	1-1/2
7-400-055	11	4-3/4	3	1-3/4
7-400-060	12	4-3/4	3	2
7-400-065	13	6	4	1-1/2
7-400-070	14	6	4	1-3/4
7-400-075	15	6	4	2
7-400-080	16	7-3/8	5	2-1/4
7-400-085	17	7-3/8	5	2-1/2
7-400-090	18	10-1/8	6	3-1/4
7-400-095	19	10-1/8	6	3-1/2

5353

- Jacobs taper adapters



Code No.	D [in]	L [in]	L [in]	Jacobs Taper K1
7-052-700	1/2	2.5	3.1	0
7-052-701	1/2	2.5	3.3	1
7-052-702	1/2	2.5	3.5	2
7-052-703	1/2	2.5	3.9	3
7-052-7033	1/2	2.5	3.7	33
7-052-706	1/2	2.5	3.7	6
7-052-721	5/8	2.5	3.3	1
7-052-722	5/8	2.5	3.5	2
7-052-723	5/8	2.5	3.9	3
7-052-7233	5/8	2.5	3.5	33
7-052-726	5/8	2.5	3.6	6
7-052-742	3/4	3.0	4.0	2
7-052-743	3/4	3.0	4.3	3
7-052-7433	3/4	3.0	4.1	33
7-052-744	3/4	3.0	4.8	4
7-052-746	3/4	3.0	4.1	5
7-052-762	1	3.0	4.1	2
7-052-763	1	3.0	4.3	3
7-052-7633	1	3.0	4.2	33
7-052-764	1	3.0	4.8	4
7-052-766	1	3.0	4.2	6

7817

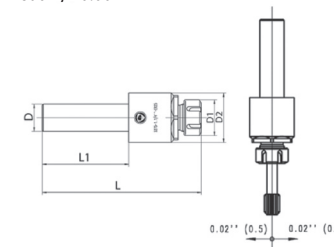
- DA straight shank collet extensions



Code No.	D1 [in]	Collet Type	L [in]	D [in]	Nut	Wrench
7-167-003	3/4	DA200	5.5	0.86	7-193-805S	7-193-905S
7-167-004	3/4	DA200	7.5	0.86	7-193-805S	7-193-905S
7-167-005	1	DA100	5.5	1.09	7-193-810	7-193-910
7-167-010	1	DA100	7.5	1.09	7-193-810	7-193-910
7-167-023	1-1/4	DA180	3.0	1.54	7-193-818	7-193-918
7-167-025	1-1/4	DA180	5.5	1.54	7-193-818	7-193-918

5275

- Floating reamer holders
- Through spindle coolant capacity
- Balanced 7,000 RPM
- Parallel float +/- 0.002"



Code No.	D [in]	Collet Size	L [in]	L1 [in]	D1 [in]	D2 [in]	Nut	Wrench
7-162-255	1-1/4	ER25	7.35	4	1.65	2.284	7-188-825	7-188-925
7-162-250	1	ER25	7.35	4	1.65	2.284	7-188-825	7-188-925

7819
7816
7814

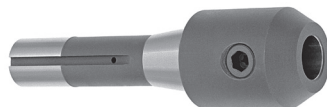
■ R8 Collet chucks for ER, TG or DA collets



Code No.	Type	Shank	Collet Type	L [in]	D [in]		
7-171-1608	7814	R8	ER16	1.490	1.26	7-188-816	7-188-9016
7-171-2008	7814	R8	ER20	1.770	1.38	7-188-820	7-188-9020
7-171-2508	7814	R8	ER25	1.970	1.65	7-188-825	7-188-9025
7-171-3008	7814	R8	ER32	2.280	1.97	7-188-832	7-188-9032
7-171-4008	7814	R8	ER40	2.360	2.48	7-188-840	7-188-9040
7-161-110	7819	R8	TG100	3.125	2.50	7-180-9100	7-180-930
7-167-020	7816	R8	DA180	2.780	1.54	7-193-818	7-193-918

7820

■ End mill holders with R8 shank



Code No.	Shank	Hole Dia [in]	Gage Length [in]	Set Screw
7-160-005	R8	3/16	1.300	7-195-091
7-160-007	R8	1/4	1.300	7-195-110
7-160-010	R8	3/8	1.300	7-195-208
7-160-015	R8	1/2	1.300	7-195-314
7-160-020	R8	5/8	1.496	7-195-412
7-160-025	R8	3/4	2.362	7-195-513
7-160-030	R8	7/8	2.736	7-195-513
7-160-035	R8	1	3.228	7-195-615
7-160-040	R8	1-1/4	3.228	7-195-615
7-160-045	R8	1-1/2	3.740	7-195-615

1855

■ Morse taper adapters for R8 shank



Code No.	Shank	MT Socket	Drawbar Thread [in]
7-115-005	R8	2	7/16-20
7-115-010	R8	3	7-16-20

7725-R

■ Annular cutter holders for R8 shank



Code No.	Type	Shank	Cutter Shank Size [in]	Gage Length [in]
7-982-500	HEN-5	R8	3/4	1-3/4

7567

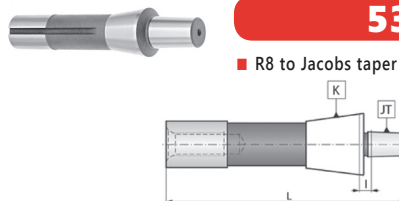
■ R8 shell mill arbors



Code No.	Arbor Dia [in]	Shank	Gage Length [in]
7-065-005	1/2	R8	1.024
7-065-010	3/4	R8	0.945
7-065-015	1	R8	0.945
7-065-020	1-1/4	R8	0.945
7-065-025	1-1/2	R8	0.945

5355

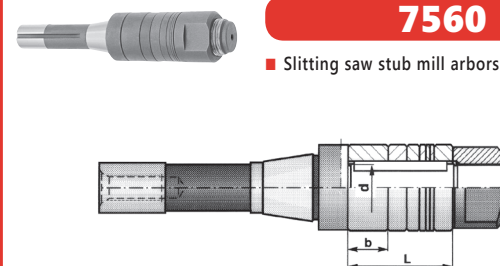
■ R8 to Jacobs taper adapters



Code No.	Shank Size K	Jacobs Taper JT	L [in]	I [in]
7-052-801	R8	1	5.00	0.87
7-052-802	R8	2	5.18	0.90
7-052-803	R8	3	5.57	1.04
7-052-806	R8	6	5.27	1.03
7-052-804	R8	4	5.95	1.03
7-052-805	R8	5	6.16	1.10
7-052-833	R8	33	5.35	0.94

7560

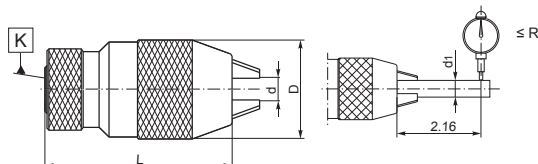
■ Slitting saw stub mill arbors with R8 shank



Code No.	Shank	Arbor dia [in]	D [in]	Wrench size [in]	L [in]	Overall Length [in]	Nut
7-070-005	R8	1	1.50	1.25	2	8.3	7-030-010R
7-070-010	R8	1-1/4	1.75	1.50	2	8.5	7-030-015R

5133

- Keyless drill chucks for industrial and CNC use



Code No.	Max. concentr. error	Clamping Range d [in]	Clamping Range d [mm]	K Jacobs	D	L	d ₁
7-051-135	0.005	1/32 - 1/2	1-13	2	2	3.8	1/4 - 1/2
7-051-137	0.005	1/32 - 1/2	1-13	33	2	3.8	1/4 - 1/2
7-051-138	0.005	1/32 - 1/2	1-13	6	2	3.8	1/4 - 1/2
7-051-168	0.005	1/8 - 5/8	3-16	6	2.3	4.06	1/4 - 5/8
7-051-169	0.005	1/8 - 5/8	3-16	3	2.3	4.33	1/4 - 5/8
7-051-335	0.0015	1/32 - 1/2	1-13	2	2	3.8	1/4 - 1/2
7-051-337	0.0015	1/32 - 1/2	1-13	33	2	3.8	1/4 - 1/2
7-051-338	0.0015	1/32 - 1/2	1-13	6	2	3.8	1/4 - 1/2
7-051-368	0.0015	1/8 - 5/8	3-16	6	2.3	4.06	1/4 - 5/8
7-051-369	0.0015	1/8 - 5/8	3-16	3	2.3	4.33	1/4 - 5/8

CLAMPING OF TOOLS
IN COLLET HOLDERS

- To use, first insert the collet into the chuck nut by squeezing the collet and pressing
- Place the sleeve into the chuck nut's collar ring until fully seated
- Then load the collet into the chuck
- Put the tool into the collet's hole and clamp the nut by the wrench
- For collet removal simply squeeze the collet while pulling it from chuck nut at the angle

7618-KPL

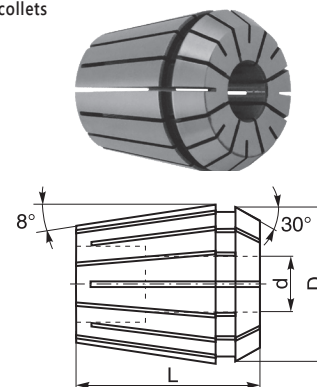
- ER collets - set



Code No.	Collet	Clamping range d [in]	Full set pcs.
7-171-195	ER16	1/8 - 3/8	7
7-171-225	ER20	1/8 - 1/2	10
7-171-295	ER25	1/8 - 9/16	12
7-171-395	ER32	1/8 - 3/4	11
7-171-495	ER40	1/8 - 1	15

7618

- ER collets



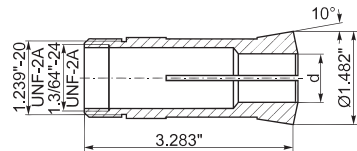
Code No.	Collet size	d [in]	D [mm / in]	L [mm / in]
7-171-1621	ER16	1/16	17 / 0.67	27.5 / 1.08
7-171-162	ER16	1/32	17 / 0.67	27.5 / 1.08
7-171-166	ER16	1/4	17 / 0.67	27.5 / 1.08
7-171-163	ER16	1/8	17 / 0.67	27.5 / 1.08
7-171-168	ER16	11/32	17 / 0.67	27.5 / 1.08
7-171-164	ER16	3/16	17 / 0.67	27.5 / 1.08
7-171-1623	ER16	3/32	17 / 0.67	27.5 / 1.08
7-171-169	ER16	3/8	17 / 0.67	27.5 / 1.08
7-171-167	ER16	5/16	17 / 0.67	27.5 / 1.08
7-171-1630	ER16	5/32	17 / 0.67	27.5 / 1.08
7-171-165	ER16	7/32	17 / 0.67	27.5 / 1.08
7-171-1663	ER16	9/32	17 / 0.67	27.5 / 1.08
7-171-203	ER20	1/16	21 / 0.83	31.5 / 1.24
7-171-223	ER20	1/2	21 / 0.83	31.5 / 1.24
7-171-211	ER20	1/4	21 / 0.83	31.5 / 1.24
7-171-205	ER20	1/8	21 / 0.83	31.5 / 1.24
7-171-215	ER20	11/32	21 / 0.83	31.5 / 1.24
7-171-219	ER20	13/32	21 / 0.83	31.5 / 1.24
7-171-222	ER20	15/32	21 / 0.83	31.5 / 1.24
7-171-207	ER20	3/16	21 / 0.83	31.5 / 1.24
7-171-204	ER20	3/32	21 / 0.83	31.5 / 1.24
7-171-217	ER20	3/8	21 / 0.83	31.5 / 1.24
7-171-213	ER20	5/16	21 / 0.83	31.5 / 1.24
7-171-206	ER20	5/32	21 / 0.83	31.5 / 1.24
7-171-221	ER20	7/16	21 / 0.83	31.5 / 1.24
7-171-209	ER20	7/32	21 / 0.83	31.5 / 1.24
7-171-212	ER20	9/32	21 / 0.83	31.5 / 1.24
7-171-2333	ER25	1/16	26 / 1.02	34 / 1.34
7-171-254	ER25	1/2	26 / 1.02	34 / 1.34
7-171-238	ER25	1/4	26 / 1.02	34 / 1.34
7-171-2337	ER25	1/8	26 / 1.02	34 / 1.34
7-171-244	ER25	11/32	26 / 1.02	34 / 1.34
7-171-248	ER25	13/32	26 / 1.02	34 / 1.34
7-171-252	ER25	15/32	26 / 1.02	34 / 1.34
7-171-256	ER25	17/32	26 / 1.02	34 / 1.34
7-171-260	ER25	19/32	26 / 1.02	34 / 1.34
7-171-234	ER25	3/16	26 / 1.02	34 / 1.34

Code No.	Collet size	d [in]	D [mm / in]	L [mm / in]
7-171-2335	ER25	3/32	26 / 1.02	34 / 1.34
7-171-246	ER25	3/8	26 / 1.02	34 / 1.34
7-171-242	ER25	5/16	26 / 1.02	34 / 1.34
7-171-2338	ER25	5/32	26 / 1.02	34 / 1.34
7-171-262	ER25	5/8	26 / 1.02	34 / 1.34
7-171-250	ER25	7/16	26 / 1.02	34 / 1.34
7-171-236	ER25	7/32	26 / 1.02	34 / 1.34
7-171-258	ER25	9/16	26 / 1.02	34 / 1.34
7-171-240	ER25	9/32	26 / 1.02	34 / 1.34
7-171-354	ER32	1/2	33 / 1.3	40 / 1.57
7-171-338	ER32	1/4	33 / 1.3	40 / 1.57
7-171-330	ER32	1/8	33 / 1.3	40 / 1.57
7-171-366	ER32	11/16	33 / 1.3	40 / 1.57
7-171-344	ER32	11/32	33 / 1.3	40 / 1.57
7-171-348	ER32	13/32	33 / 1.3	40 / 1.57
7-171-352	ER32	15/32	33 / 1.3	40 / 1.57
7-171-356	ER32	17/32	33 / 1.3	40 / 1.57
7-171-360	ER32	19/32	33 / 1.3	40 / 1.57
7-171-364	ER32	21/32	33 / 1.3	40 / 1.57
7-171-368	ER32	23/32	33 / 1.3	40 / 1.57
7-171-334	ER32	3/16	33 / 1.3	40 / 1.57
7-171-328	ER32	3/32	33 / 1.3	40 / 1.57
7-171-370	ER32	3/4	33 / 1.3	40 / 1.57
7-171-346	ER32	3/8	33 / 1.3	40 / 1.57
7-171-340	ER32	5/16	33 / 1.3	40 / 1.57
7-171-332	ER32	5/32	33 / 1.3	40 / 1.57
7-171-362	ER32	5/8	33 / 1.3	40 / 1.57
7-171-350	ER32	7/16	33 / 1.3	40 / 1.57
7-171-336	ER32	7/32	33 / 1.3	40 / 1.57
7-171-358	ER32	9/16	33 / 1.3	40 / 1.57
7-171-339	ER32	9/32	33 / 1.3	40 / 1.57
7-171-454	ER40	1/2	41 / 1.61	46 / 1.81
7-171-438	ER40	1/4	41 / 1.61	46 / 1.81
7-171-430	ER40	1/8	41 / 1.61	46 / 1.81
7-171-466	ER40	11/16	41 / 1.61	46 / 1.81
7-171-444	ER40	11/32	41 / 1.61	46 / 1.81
7-171-474	ER40	13/16	41 / 1.61	46 / 1.81
7-171-448	ER40	13/32	41 / 1.61	46 / 1.81
7-171-482	ER40	15/16	41 / 1.61	46 / 1.81
7-171-452	ER40	15/32	41 / 1.61	46 / 1.81
7-171-456	ER40	17/32	41 / 1.61	46 / 1.81
7-171-460	ER40	19/32	41 / 1.61	46 / 1.81
7-171-486	ER40	1	41 / 1.61	46 / 1.81
7-171-464	ER40	21/32	41 / 1.61	46 / 1.81
7-171-468	ER40	23/32	41 / 1.61	46 / 1.81
7-171-472	ER40	25/32	41 / 1.61	46 / 1.81
7-171-476	ER40	27/32	41 / 1.61	46 / 1.81
7-171-480	ER40	29/32	41 / 1.61	46 / 1.81
7-171-434	ER40	3/16	41 / 1.61	46 / 1.81
7-171-470	ER40	3/4	41 / 1.61	46 / 1.81
7-171-446	ER40	3/8	41 / 1.61	46 / 1.81
7-171-484	ER40	31/32	41 / 1.61	46 / 1.81
7-171-442	ER40	5/16	41 / 1.61	46 / 1.81
7-171-432	ER40	5/32	41 / 1.61	46 / 1.81
7-171-462	ER40	5/8	41 / 1.61	46 / 1.81
7-171-450	ER40	7/16	41 / 1.61	46 / 1.81
7-171-436	ER40	7/32	41 / 1.61	46 / 1.81
7-171-478	ER40	7/8	41 / 1.61	46 / 1.81
7-171-458	ER40	9/16	41 / 1.61	46 / 1.81
7-171-440	ER40	9/32	41 / 1.61	46 / 1.81



3000-5C

■ 5C (385E) collets



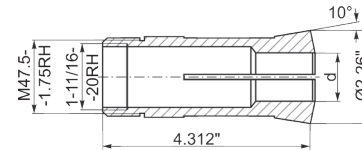
Code No.	Size	d [in]	Code No.	Size	d [in]
7-168-002	5C-3/64	3/64	7-168-070	5C-37/64	37/64
7-168-004	5C-1/16	1/16	7-168-072	5C-19/32	19/32
7-168-006	5C-5/64	5/64	7-168-074	5C-39/64	39/64
7-168-008	5C-3/32	3/32	7-168-076	5C-5/8	5/8
7-168-010	5C-7/64	7/64	7-168-078	5C-41/64	41/64
7-168-012	5C-1/8	1/8	7-168-080	5C-21/32	21/32
7-168-014	5C-9/64	9/64	7-168-082	5C-43/64	43/64
7-168-016	5C-5/32	5/32	7-168-084	5C-11/16	11/16
7-168-018	5C-11/64	11/64	7-168-086	5C-45/64	45/64
7-168-020	5C-3/16	3/16	7-168-088	5C-23/32	23/32
7-168-022	5C-13/64	13/64	7-168-090	5C-47/64	47/64
7-168-024	5C-7/32	7/32	7-168-092	5C-3/4	3/4
7-168-026	5C-15/64	15/64	7-168-094	5C-49/64	49/64
7-168-028	5C-1/4	1/4	7-168-096	5C-25/32	25/32
7-168-030	5C-17/64	17/64	7-168-098	5C-51/64	51/64
7-168-032	5C-9/32	9/32	7-168-100	5C-13/16	13/16
7-168-034	5C-19/64	19/64	7-168-102	5C-53/64	53/64
7-168-036	5C-5/16	5/16	7-168-104	5C-27/32	27/32
7-168-038	5C-21/64	21/64	7-168-106	5C-55/64	55/64
7-168-040	5C-11/32	11/32	7-168-108	5C-7/8	7/8
7-168-042	5C-23/64	23/64	7-168-110	5C-57/64	57/64
7-168-044	5C-3/8	3/8	7-168-112	5C-29/32	29/32
7-168-046	5C-25/64	25/64	7-168-114	5C-59/64	59/64
7-168-048	5C-13/32	13/32	7-168-116	5C-15/16	15/16
7-168-050	5C-27/64	27/64	7-168-118	5C-61/64	61/64
7-168-052	5C-7/16	7/16	7-168-120	5C-31/32	31/32
7-168-054	5C-29/64	29/64	7-168-122	5C-63/64	63/64
7-168-056	5C-15/32	15/32	7-168-124	5C-1	1
7-168-058	5C-31/64	31/64	7-168-126	5C-1-1/64	1-1/64
7-168-060	5C-1/2	1/2	7-168-128	5C-1-1/32	1-1/32
7-168-062	5C-33/64	33/64	7-168-130	5C-1-3/64	1-3/64
7-168-064	5C-17/32	17/32	7-168-132	5C-1-1/16	1-1/16
7-168-066	5C-35/64	35/64	7-168-140	5C-1-1/8	1-1/8
7-168-068	5C-9/16	9/16	7-168-404	5C-1/16	1/16*

* Emergency collet



3000-16C

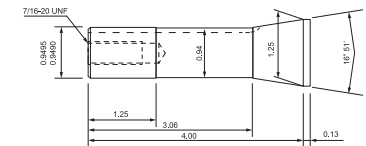
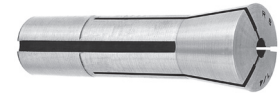
■ 16C collets



Code No.	Size	d [in]	Code No.	Size	d [in]
7-164-006	16C-5/64	5/64	7-164-078	16C-41/64	41/64
7-164-008	16C-3/32	3/32	7-164-080	16C-21/32	21/32
7-164-012	16C-1/8	1/8	7-164-082	16C-43/64	43/64
7-164-014	16C-9/64	9/64	7-164-084	16C-11/16	11/16
7-164-016	16C-5/32	5/32	7-164-086	16C-45/64	45/64
7-164-018	16C-11/64	11/64	7-164-088	16C-23/32	23/32
7-164-020	16C-3/16	3/16	7-164-090	16C-47/64	47/64
7-164-022	16C-13/64	13/64	7-164-092	16C-3/4	3/4
7-164-024	16C-7/32	7/32	7-164-094	16C-49/64	49/64
7-164-026	16C-15/64	15/64	7-164-096	16C-25/32	25/32
7-164-028	16C-1/4	1/4	7-164-098	16C-51/64	51/64
7-164-030	16C-17/64	17/64	7-164-100	16C-13/16	13/16
7-164-032	16C-9/32	9/32	7-164-102	16C-53/64	53/64
7-164-034	16C-19/64	19/64	7-164-104	16C-27/32	27/32
7-164-036	16C-5/16	5/16	7-164-106	16C-55/64	55/64
7-164-038	16C-21/64	21/64	7-164-108	16C-7/8	7/8
7-164-040	16C-11/32	11/32	7-164-110	16C-57/64	57/64
7-164-042	16C-23/64	23/64	7-164-112	16C-29/32	29/32
7-164-044	16C-3/8	3/8	7-164-114	16C-59/64	59/64
7-164-046	16C-25/64	25/64	7-164-116	16C-15/16	15/16
7-164-048	16C-13/32	13/32	7-164-118	16C-61/64	61/64
7-164-050	16C-27/64	27/64	7-164-120	16C-31/32	31/32
7-164-052	16C-7/16	7/16	7-164-122	16C-63/64	63/64
7-164-054	16C-29/64	29/64	7-164-124	16C-1	1
7-164-056	16C-15/32	15/32	7-164-132	16C-1-1/16	1-1/16
7-164-058	16C-31/64	31/64	7-164-140	16C-1-1/8	1-1/8
7-164-060	16C-1/2	1/2	7-164-142	16C-1-3/16	1-3/16
7-164-062	16C-33/64	33/64	7-164-144	16C-1-1/4	1-1/4
7-164-064	16C-17/32	17/32	7-164-146	16C-1-5/16	1-5/16
7-164-066	16C-35/64	35/64	7-164-148	16C-1-3/8	1-3/8
7-164-068	16C-9/16	9/16	7-164-150	16C-1-7/16	1-7/16
7-164-070	16C-37/64	37/64	7-164-152	16C-1-1/2	1-1/2
7-164-072	16C-19/32	19/32	7-164-154	16C-1-9/16	1-9/16
7-164-074	16C-39/64	39/64	7-164-156	16C-1-5/8	1-5/8
7-164-076	16C-5/8	5/8			

3000-R8

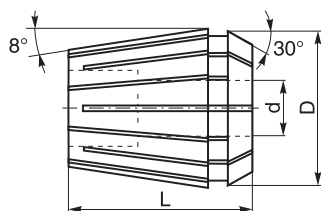
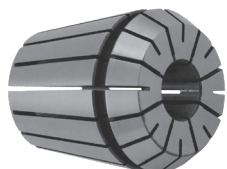
■ R8 round collets



Code No.	Size	d [in]
7-169-010	R8-3/32	3/32
7-169-012	R8-1/8	1/8
7-169-015	R8-5/32	5/32
7-169-018	R8-3/16	3/16
7-169-021	R8-7/32	7/32
7-169-025	R8-1/4	1/4
7-169-028	R8-9/32	9/32
7-169-031	R8-5/16	5/16
7-169-034	R8-11/32	11/32
7-169-037	R8-3/8	3/8
7-169-040	R8-13/32	13/32
7-169-043	R8-7/16	7/16
7-169-046	R8-15/32	15/32
7-169-050	R8-1/2	1/2
7-169-053	R8-17/32	17/32
7-169-056	R8-9/16	9/16
7-169-059	R8-19/32	19/32
7-169-062	R8-5/8	5/8
7-169-065	R8-21/32	21/32
7-169-068	R8-11/16	11/16
7-169-071	R8-23/32	23/32
7-169-075	R8-3/4	3/4
7-169-078	R8-25/32	25/32
7-169-087	R8-7/8	7/8
7-169-099	R8-1	1

7618-M

■ ER collets - metric



Code No.	Collet size	Clamping range d [mm]	D [mm / in]	L [mm / in]
7-171-503	ER16	3 - 2.5	17 / 0.67	27.5 / 1.08
7-171-5035	ER16	3.5 - 3	17 / 0.67	27.5 / 1.08
7-171-504	ER16	4 - 3.5	17 / 0.67	27.5 / 1.08
7-171-5045	ER16	4.5 - 4	17 / 0.67	27.5 / 1.08
7-171-505	ER16	5 - 4.5	17 / 0.67	27.5 / 1.08
7-171-5055	ER16	5.5 - 5	17 / 0.67	27.5 / 1.08
7-171-506	ER16	6 - 5.5	17 / 0.67	27.5 / 1.08
7-171-507	ER16	7 - 6	17 / 0.67	27.5 / 1.08
7-171-508	ER16	8 - 7	17 / 0.67	27.5 / 1.08
7-171-509	ER16	9 - 8	17 / 0.67	27.5 / 1.08
7-171-510	ER16	10 - 9	17 / 0.67	27.5 / 1.08
7-171-603	ER20	3 - 2.5	21 / 0.83	31.5 / 1.24
7-171-6035	ER20	3.5 - 3	21 / 0.83	31.5 / 1.24
7-171-604	ER20	4 - 3.5	21 / 0.83	31.5 / 1.24
7-171-6045	ER20	4.5 - 4	21 / 0.83	31.5 / 1.24
7-171-605	ER20	5 - 4.5	21 / 0.83	31.5 / 1.24
7-171-6055	ER20	5.5 - 5	21 / 0.83	31.5 / 1.24
7-171-606	ER20	6 - 5.5	21 / 0.83	31.5 / 1.24
7-171-607	ER20	7 - 6	21 / 0.83	31.5 / 1.24
7-171-608	ER20	8 - 7	21 / 0.83	31.5 / 1.24
7-171-609	ER20	9 - 8	21 / 0.83	31.5 / 1.24
7-171-610	ER20	10 - 9	21 / 0.83	31.5 / 1.24
7-171-611	ER20	11 - 10	21 / 0.83	31.5 / 1.24
7-171-612	ER20	12 - 11	21 / 0.83	31.5 / 1.24
7-171-613	ER20	13 - 12	21 / 0.83	31.5 / 1.24
7-171-703	ER25	3 - 2.5	26 / 1.02	34 / 1.34
7-171-7035	ER25	3.5 - 3	26 / 1.02	34 / 1.34
7-171-704	ER25	4 - 3.5	26 / 1.02	34 / 1.34
7-171-7045	ER25	4.5 - 4	26 / 1.02	34 / 1.34
7-171-705	ER25	5 - 4.5	26 / 1.02	34 / 1.34

Code No.	Collet size	Clamping range d [mm]	D [mm / in]	L [mm / in]
7-171-7055	ER25	5.5 - 5	26 / 1.02	34 / 1.34
7-171-706	ER25	6 - 5.5	26 / 1.02	34 / 1.34
7-171-707	ER25	7 - 6	26 / 1.02	34 / 1.34
7-171-708	ER25	8 - 7	26 / 1.02	34 / 1.34
7-171-709	ER25	9 - 8	26 / 1.02	34 / 1.34
7-171-710	ER25	10 - 9	26 / 1.02	34 / 1.34
7-171-711	ER25	11 - 10	26 / 1.02	34 / 1.34
7-171-712	ER25	12 - 11	26 / 1.02	34 / 1.34
7-171-713	ER25	13 - 12	26 / 1.02	34 / 1.34
7-171-714	ER25	14 - 13	26 / 1.02	34 / 1.34
7-171-715	ER25	15 - 14	26 / 1.02	34 / 1.34
7-171-716	ER25	16 - 15	26 / 1.02	34 / 1.34
7-171-803	ER32	3 - 2.5	33 / 1.3	40 / 1.57
7-171-8035	ER32	3.5 - 3	33 / 1.3	40 / 1.57
7-171-804	ER32	4 - 3.5	33 / 1.3	40 / 1.57
7-171-8045	ER32	4.5 - 4	33 / 1.3	40 / 1.57
7-171-805	ER32	5 - 4.5	33 / 1.3	40 / 1.57
7-171-8055	ER32	5.5 - 5	33 / 1.3	40 / 1.57
7-171-806	ER32	6 - 5.5	33 / 1.3	40 / 1.57
7-171-807	ER32	7 - 6	33 / 1.3	40 / 1.57
7-171-808	ER32	8 - 7	33 / 1.3	40 / 1.57
7-171-809	ER32	9 - 8	33 / 1.3	40 / 1.57
7-171-810	ER32	10 - 9	33 / 1.3	40 / 1.57
7-171-811	ER32	11 - 10	33 / 1.3	40 / 1.57
7-171-812	ER32	12 - 11	33 / 1.3	40 / 1.57
7-171-813	ER32	13 - 12	33 / 1.3	40 / 1.57
7-171-814	ER32	14 - 13	33 / 1.3	40 / 1.57
7-171-815	ER32	15 - 14	33 / 1.3	40 / 1.57
7-171-816	ER32	16 - 15	33 / 1.3	40 / 1.57
7-171-817	ER32	17 - 16	33 / 1.3	40 / 1.57
7-171-818	ER32	18 - 17	33 / 1.3	40 / 1.57
7-171-819	ER32	19 - 18	33 / 1.3	40 / 1.57
7-171-820	ER32	20 - 19	33 / 1.3	40 / 1.57
7-171-903	ER40	3 - 2.5	41 / 1.61	46 / 1.81
7-171-9035	ER40	3.5 - 3	41 / 1.61	46 / 1.81
7-171-904	ER40	4 - 3.5	41 / 1.61	46 / 1.81
7-171-9045	ER40	4.5 - 4	41 / 1.61	46 / 1.81
7-171-905	ER40	5 - 4.5	41 / 1.61	46 / 1.81
7-171-9055	ER40	5.5 - 5	41 / 1.61	46 / 1.81
7-171-906	ER40	6 - 5.5	41 / 1.61	46 / 1.81
7-171-907	ER40	7 - 6	41 / 1.61	46 / 1.81
7-171-908	ER40	8 - 7	41 / 1.61	46 / 1.81
7-171-909	ER40	9 - 8	41 / 1.61	46 / 1.81
7-171-910	ER40	10 - 9	41 / 1.61	46 / 1.81
7-171-911	ER40	11 - 10	41 / 1.61	46 / 1.81
7-171-912	ER40	12 - 11	41 / 1.61	46 / 1.81
7-171-913	ER40	13 - 12	41 / 1.61	46 / 1.81
7-171-914	ER40	14 - 13	41 / 1.61	46 / 1.81
7-171-915	ER40	15 - 14	41 / 1.61	46 / 1.81
7-171-916	ER40	16 - 15	41 / 1.61	46 / 1.81
7-171-917	ER40	17 - 16	41 / 1.61	46 / 1.81
7-171-918	ER40	18 - 17	41 / 1.61	46 / 1.81
7-171-919	ER40	19 - 18	41 / 1.61	46 / 1.81
7-171-920	ER40	20 - 19	41 / 1.61	46 / 1.81
7-171-921	ER40	21 - 20	41 / 1.61	46 / 1.81
7-171-922	ER40	22 - 21	41 / 1.61	46 / 1.81
7-171-923	ER40	23 - 22	41 / 1.61	46 / 1.81
7-171-924	ER40	24 - 23	41 / 1.61	46 / 1.81
7-171-925	ER40	25 - 24	41 / 1.61	46 / 1.81
7-171-926	ER40	26 - 25	41 / 1.61	46 / 1.81

7618-M-KPL

■ ER collets metric - set



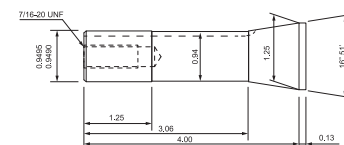
Code No.	Collet	Clamping range d [mm]	Full set pcs.
7-171-595	ER16	2-10	8
7-171-695	ER20	2-13	11
7-171-795	ER25	2-16	14
7-171-895	ER32	2-20	18
7-171-935	ER40	2-26	24

CLAMPING OF TOOLS
IN COLLET HOLDERS

- To use, first insert the collet into the chuck nut by squeezing the collet and pressing
- Place the sleeve into the chuck nut's collar ring until fully seated
- Then load the collet into the chuck
- Put the tool into the collet's hole and clamp the nut by the wrench
- For collet removal simply squeeze the collet while pulling it from chuck nut at the angle

3000-R8-M

■ R8 round collets - metric

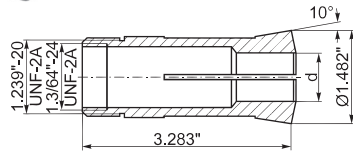


Code No.	Size	d [in]
7-169-602	R8-2	2
7-169-603	R8-3	3
7-169-604	R8-4	4
7-169-605	R8-5	5
7-169-606	R8-6	6
7-169-607	R8-7	7
7-169-608	R8-8	8
7-169-609	R8-9	9
7-169-610	R8-10	10
7-169-611	R8-11	11
7-169-612	R8-12	12
7-169-613	R8-13	13
7-169-614	R8-14	14
7-169-615	R8-15	15
7-169-616	R8-16	16
7-169-617	R8-17	17
7-169-618	R8-18	18
7-169-619	R8-19	19
7-169-620	R8-20	20



3000-5C-M

■ 5C (385E) collets - metric



Code No.	Size	d [mm]	Code No.	Size	d [mm]
7-168-603	5C-3	3	7-168-615	5C-15	15
7-168-6035	5C-3.5	3.5	7-168-6155	5C-15.5	15.5
7-168-604	5C-4	4	7-168-616	5C-16	16
7-168-6045	5C-4.5	4.5	7-168-6165	5C-16.5	16.5
7-168-605	5C-5	5	7-168-617	5C-17	17
7-168-6055	5C-5.5	5.5	7-168-6175	5C-17.5	17.5
7-168-606	5C-6	6	7-168-618	5C-18	18
7-168-6065	5C-6.5	6.5	7-168-6185	5C-18.5	18.5
7-168-607	5C-7	7	7-168-619	5C-19	19
7-168-6075	5C-7.5	7.5	7-168-6195	5C-19.5	19.5
7-168-608	5C-8	8	7-168-620	5C-20	20
7-168-6085	5C-8.5	8.5	7-168-6205	5C-20.5	20.5
7-168-609	5C-9	9	7-168-621	5C-21	21
7-168-6095	5C-9.5	9.5	7-168-6215	5C-21.5	21.5
7-168-610	5C-10	10	7-168-622	5C-22	22
7-168-6105	5C-10.5	10.5	7-168-6225	5C-22.5	22.5
7-168-611	5C-11	11	7-168-623	5C-23	23
7-168-6115	5C-11.5	11.5	7-168-6235	5C-23.5	23.5
7-168-612	5C-12	12	7-168-624	5C-24	24
7-168-6125	5C-12.5	12.5	7-168-6245	5C-24.5	24.5
7-168-613	5C-13	13	7-168-625	5C-25	25
7-168-6135	5C-13.5	13.5	7-168-6255	5C-25.5	25.5
7-168-614	5C-14	14	7-168-626	5C-26	26
7-168-6145	5C-14.5	14.5			



3000-KPL-M

■ 5C (385E) collets - set - metric

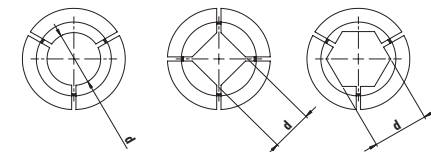
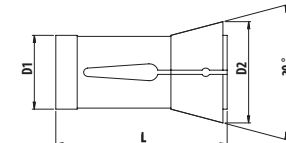
Code No.	Collet size	Clamping range [mm]	Collets in set
7-168-674	5C	3-26	24
7-168-685	5C	3-25	45

Code No.	Type	D ₁ [mm]	D ₂ [mm]	L [mm]	d [mm]	Shape
7-163-6017	173E-4-EG	48	60	94	4	○
7-163-6074	173E-5-EG	48	60	94	5	○
7-163-6075	173E-6-EG	48	60	94	6	○
7-163-6076	173E-7-EG	48	60	94	7	○
7-163-6007	173E-8-EG	48	60	94	8	○
7-163-6008	173E-9-EG	48	60	94	9	○
7-163-6077	173E-9-EO	48	60	94	9	○
7-163-6045	173E-10-EO	48	60	94	10	○
7-163-6078	173E-11-EO	48	60	94	11	○
7-163-6009	173E-12-EO	48	60	94	12	○
7-163-6079	173E-13-EO	48	60	94	13	○
7-163-6025	173E-14-EO	48	60	94	14	○
7-163-6046	173E-15-EO	48	60	94	15	○
7-163-6080	173E-16-EO	48	60	94	16	○
7-163-6081	173E-17-EO	48	60	94	17	○
7-163-6034	173E-18-EO	48	60	94	18	○
7-163-6082	173E-19-EO	48	60	94	19	○
7-163-6026	173E-20-EO	48	60	94	20	○
7-163-6083	173E-21-EO	48	60	94	21	○
7-163-6084	173E-22-EO	48	60	94	22	○
7-163-6085	173E-23-EO	48	60	94	23	○
7-163-6086	173E-24-EO	48	60	94	24	○
7-163-6027	173E-25-EO	48	60	94	25	○
7-163-6087	173E-26-EO	48	60	94	26	○
7-163-6088	173E-27-EO	48	60	94	27	○
7-163-6089	173E-28-EO	48	60	94	28	○
7-163-6090	173E-29-EO	48	60	94	29	○
7-163-6091	173E-30-EO	48	60	94	30	○
7-163-6092	173E-31-EO	48	60	94	31	○
7-163-6035	173E-32-EO	48	60	94	32	○
7-163-6093	173E-33-EO	48	60	94	33	○
7-163-6094	173E-34-EO	48	60	94	34	○
7-163-6095	173E-35-EO	48	60	94	35	○
7-163-6096	173E-36-EO	48	60	94	36	○
7-163-6097	173E-37-EO	48	60	94	37	○
7-163-6098	173E-38-EO	48	60	94	38	○
7-163-6099	173E-39-EO	48	60	94	39	○
7-163-6100	173E-40-EO	48	60	94	40	○
7-163-6020	173E-41-EO	48	60	94	41	○
7-163-6041	173E-42-EO	48	60	94	42	○
7-163-6120	173E-4-K	48	60	94	4	□
7-163-6121	173E-5-K	48	60	94	5	□
7-163-6048	173E-6-K	48	60	94	6	□
7-163-6122	173E-7-K	48	60	94	7	□
7-163-6123	173E-8-K	48	60	94	8	□
7-163-6124	173E-9-K	48	60	94	9	□
7-163-6125	173E-10-K	48	60	94	10	□
7-163-6126	173E-11-K	48	60	94	11	□
7-163-6272	173E-12-K	48	60	94	12	□
7-163-6127	173E-13-K	48	60	94	13	□
7-163-6128	173E-14-K	48	60	94	14	□
7-163-6129	173E-16-K	48	60	94	16	□
7-163-6130	173E-18-K	48	60	94	18	□
7-163-6131	173E-20-K	48	60	94	20	□
7-163-6132	173E-22-K	48	60	94	22	□
7-163-6133	173E-24-K	48	60	94	24	□



3010-173E

■ Dead length collets 173E (DIN 6343)

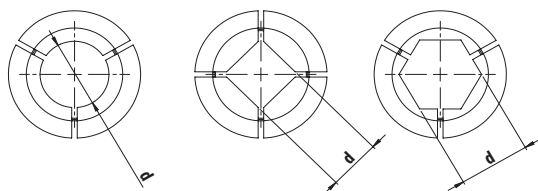
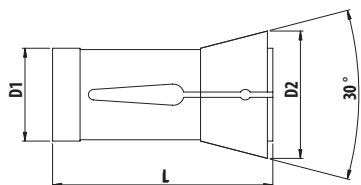


Code No.	Type	D ₁ [mm]	D ₂ [mm]	L [mm]	d [mm]	Shape
7-163-6134	173E-25-K	48	60	94	25	□
7-163-6135	173E-28-K	48	60	94	28	□
7-163-6136	173E-30-K	48	60	94	30	□
7-163-6101	173E-4-S	48	60	94	4	○
7-163-6102	173E-5-S	48	60	94	5	○
7-163-6103	173E-6-S	48	60	94	6	○
7-163-6104	173E-7-S	48	60	94	7	○
7-163-6105	173E-8-S	48	60	94	8	○
7-163-6106	173E-9-S	48	60	94	9	○
7-163-6107	173E-10-S	48	60	94	10	○
7-163-6108	173E-11-S	48	60	94	11	○
7-163-6109	173E-12-S	48	60	94	12	○
7-163-6110	173E-13-S	48	60	94	13	○
7-163-6111	173E-14-S	48	60	94	14	○
7-163-6112	173E-15-S	48	60	94	15	○
7-163-6113	173E-16-S	48	60	94	16	○
7-163-6114	173E-17-S	48	60	94	17	○
7-163-6115	173E-19-S	48	60	94	19	○
7-163-6116	173E-22-S	48	60	94	22	○
7-163-6117	173E-24-S	48	60	94	24	○
7-163-6118	173E-27-S	48	60	94	27	○
7-163-6047	173E-30-S	48	60	94	30	○
7-163-6119	173E-32-S	48	60	94	32	○
7-163-6021	173E-36-S	48	60	94	36	○

EG - Round and clean
EO - Round with grooved surface
S - Hexagon
K - Square

3010-185E

■ Dead length collets 185E
(DIN 6343)



Code No.	Type	D ₁ [mm]	D ₂ [mm]	L [mm]	d [mm]	Shape
7-163-6138	185E-4-EG	66	84	110	4	○
7-163-6139	185E-5-EG	66	84	110	5	○
7-163-6013	185E-6-EG	66	84	110	6	○
7-163-6140	185E-7-EG	66	84	110	7	○
7-163-6037	185E-8-EG	66	84	110	8	○
7-163-6141	185E-9-EG	66	84	110	9	○
7-163-6142	185E-9-EO	66	84	110	9	○
7-163-6029	185E-10-EO	66	84	110	10	○
7-163-6143	185E-11-EO	66	84	110	11	○
7-163-6014	185E-12-EO	66	84	110	12	○
7-163-6144	185E-13-EO	66	84	110	13	○
7-163-6015	185E-14-EO	66	84	110	14	○
7-163-6016	185E-15-EO	66	84	110	15	○
7-163-6145	185E-16-EO	66	84	110	16	○
7-163-6146	185E-17-EO	66	84	110	17	○
7-163-6147	185E-18-EO	66	84	110	18	○
7-163-6148	185E-19-EO	66	84	110	19	○
7-163-6149	185E-20-EO	66	84	110	20	○

Code No.	Type	D ₁ [mm]	D ₂ [mm]	L [mm]	d [mm]	Shape
7-163-6030	185E-21-EO	66	84	110	21	○
7-163-6150	185E-22-EO	66	84	110	22	○
7-163-6151	185E-23-EO	66	84	110	23	○
7-163-6152	185E-24-EO	66	84	110	24	○
7-163-6153	185E-25-EO	66	84	110	25	○
7-163-6154	185E-26-EO	66	84	110	26	○
7-163-6155	185E-27-EO	66	84	110	27	○
7-163-6049	185E-28-EO	66	84	110	28	○
7-163-6156	185E-29-EO	66	84	110	29	○
7-163-6157	185E-30-EO	66	84	110	30	○
7-163-6158	185E-31-EO	66	84	110	31	○
7-163-6031	185E-32-EO	66	84	110	32	○
7-163-6159	185E-33-EO	66	84	110	33	○
7-163-6160	185E-34-EO	66	84	110	34	○
7-163-6161	185E-35-EO	66	84	110	35	○
7-163-6032	185E-36-EO	66	84	110	36	○
7-163-6162	185E-37-EO	66	84	110	37	○
7-163-6163	185E-38-EO	66	84	110	38	○
7-163-6164	185E-39-EO	66	84	110	39	○
7-163-6036	185E-40-EO	66	84	110	40	○
7-163-6165	185E-41-EO	66	84	110	41	○
7-163-6050	185E-42-EO	66	84	110	42	○
7-163-6166	185E-43-EO	66	84	110	43	○
7-163-6167	185E-44-EO	66	84	110	44	○
7-163-6168	185E-45-EO	66	84	110	45	○
7-163-6169	185E-46-EO	66	84	110	46	○
7-163-6170	185E-47-EO	66	84	110	47	○
7-163-6171	185E-48-EO	66	84	110	48	○
7-163-6172	185E-49-EO	66	84	110	49	○
7-163-6173	185E-50-EO	66	84	110	50	○
7-163-6174	185E-51-EO	66	84	110	51	○
7-163-6175	185E-52-EO	66	84	110	52	○
7-163-6176	185E-53-EO	66	84	110	53	○
7-163-6177	185E-54-EO	66	84	110	54	○
7-163-6178	185E-55-EO	66	84	110	55	○
7-163-6179	185E-56-EO	66	84	110	56	○
7-163-6180	185E-57-EO	66	84	110	57	○
7-163-6181	185E-58-EO	66	84	110	58	○
7-163-6182	185E-59-EO	66	84	110	59	○
7-163-6183	185E-60-EO	66	84	110	60	○
7-163-6208	185E-4-K	66	84	110	4	□
7-163-6209	185E-5-K	66	84	110	5	□
7-163-6210	185E-6-K	66	84	110	6	□

Code No.	Type	D ₁ [mm]	D ₂ [mm]	L [mm]	d [mm]	Shape
7-163-6211	185E-7-K	66	84	110	7	□
7-163-6212	185E-8-K	66	84	110	8	□
7-163-6213	185E-9-K	66	84	110	9	□
7-163-6214	185E-10-K	66	84	110	10	□
7-163-6215	185E-11-K	66	84	110	11	□
7-163-6216	185E-12-K	66	84	110	12	□
7-163-6217	185E-13-K	66	84	110	13	□
7-163-6218	185E-14-K	66	84	110	14	□
7-163-6219	185E-16-K	66	84	110	16	□
7-163-6220	185E-18-K	66	84	110	18	□
7-163-6221	185E-20-K	66	84	110	20	□
7-163-6222	185E-22-K	66	84	110	22	□
7-163-6223	185E-24-K	66	84	110	24	□
7-163-6224	185E-25-K	66	84	110	25	□
7-163-6225	185E-28-K	66	84	110	28	□
7-163-6226	185E-30-K	66	84	110	30	□
7-163-6227	185E-32-K	66	84	110	32	□
7-163-6228	185E-36-K	66	84	110	36	□
7-163-6229	185E-40-K	66	84	110	40	□
7-163-6184	185E-4-S	66	84	110	4	⬡
7-163-6185	185E-5-S	66	84	110	5	⬡
7-163-6186	185E-6-S	66	84	110	6	⬡
7-163-6187	185E-7-S	66	84	110	7	⬡
7-163-6188	185E-8-S	66	84	110	8	⬡
7-163-6189	185E-9-S	66	84	110	9	⬡
7-163-6190	185E-10-S	66	84	110	10	⬡
7-163-6191	185E-11-S	66	84	110	11	⬡
7-163-6192	185E-12-S	66	84	110	12	⬡
7-163-6193	185E-13-S	66	84	110	13	⬡
7-163-6194	185E-14-S	66	84	110	14	⬡
7-163-6195	185E-15-S	66	84	110	15	⬡
7-163-6196	185E-16-S	66	84	110	16	⬡
7-163-6197	185E-17-S	66	84	110	17	⬡
7-163-6198	185E-19-S	66	84	110	19	⬡
7-163-6199	185E-22-S	66	84	110	22	⬡
7-163-6200	185E-24-S	66	84	110	24	⬡
7-163-6012	185E-27-S	66	84	110	27	⬡
7-163-6201	185E-30-S	66	84	110	30	⬡
7-163-6202	185E-32-S	66	84	110	32	⬡
7-163-6203	185E-36-S	66	84	110	36	⬡
7-163-6204	185E-38-S	66	84	110	38	⬡
7-163-6205	185E-41-S	66	84	110	41	⬡
7-163-6206	185E-46-S	66	84	110	46	⬡
7-163-6207	185E-50-S	66	84	110	50	⬡

EG - Round and clean

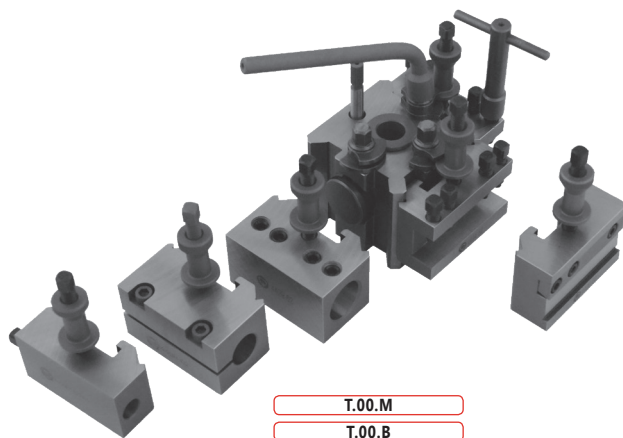
EO - Round with grooved surface

S - Hexagon

K - Square

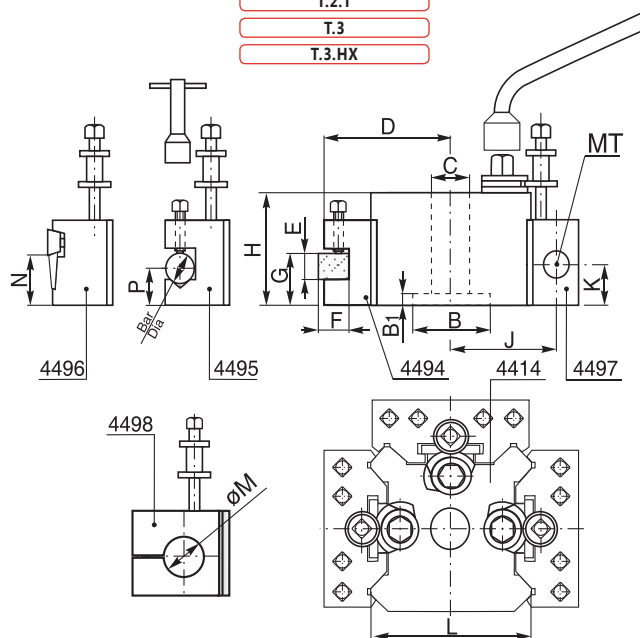
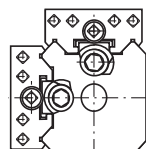
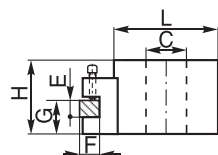
4414

■ Quick change toolposts



T.00.M
T.00.B
T.0

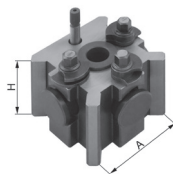
T.1
T.1.X
T.2
T.2.T
T.3
T.3.HX



Size	H [mm]	B [mm]	B ₁ [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G max. [mm]	G min. [mm]	Bar Dia [mm]	P max. [mm]	P min. [mm]	MT	J [mm]	K max. [mm]	K min. [mm]	L [mm]	N [mm]	M [mm]
T.00.M	37.0	—	—	11.2	50.0	12	11.0	27.0	17.0	11.0	22.5	12.5	—	—	—	—	58.0	16.0	—
T.00.B	42.0	—	—	16.0	50.0	12	11.0	32.0	17.0	11.0	27.5	12.5	—	—	—	—	58.0	16.0	—
T.0	51.0	22.22	12.5	19.0	62.0	16	13.0	36.5	20.5	16.0	32.0	16.0	1	52.5	28.5	16.0	73.0	27.0	19.0
T.1	63.5	31.75	8.5	19.0	62.0	20	13.0	46.0	30.0	16.0	44.5	25.5	1	52.5	41.0	22.0	73.0	27.0	19.0
T.1.X	73.0	31.75	8.5	19.0	62.0	20	13.0	57.0	35.0	16.0	54.0	32.0	1&2	52.5	51.0	28.5	73.0	27.0	19.0
T.2	71.5	44.45	9.5	25.5	74.5	20	19.0	52.5	36.5	19.0	46.0	24.0	2	65.0	47.5	27.0	97.0	33.5	25.4
T.2.T	76.0	44.45	9.5	25.5	84.0	25	25.5	58.5	39.5	19.0	50.0	24.0	2	70.0	51.0	27.0	106.0	33.5	25.4
T.3	95.5	50.80	11.5	25.5	101.5	32	25.5	74.5	51.0	25.5	51.0	28.5	3	85.5	58.2	36.5	125.5	39.5	38.0
T.3.HX	108.0	50.80	11.5	25.5	101.5	32	25.5	84.0	62.0	25.5	65.0	41.0	3	85.5	58.2	36.5	125.5	39.5	38.0

4414

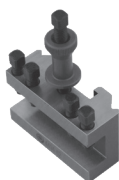
■ Quick change toolposts



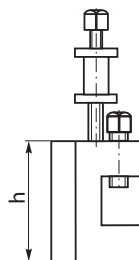
Code No.	Type	A x H [mm]	Clamping range
7-196-00T0	T.00.M	48 x 37	up to 89 mm
7-196-10T0	T.00.B	48 x 42	up to 89 mm
7-196-20T0	T.0	62 x 51	up to 114 mm
7-194-00T1	T.1	62 x 63	114 mm up to 127 mm
7-194-0T1X	T.1.X	62 x 73	114 mm up to 127 mm
7-196-00T2	T.2	82 x 71	127 mm up to 203 mm
7-197-0T2T	T.2.T	82 x 76	127 mm up to 203 mm
7-198-00T3	T.3	100 x 92	203 mm up to 292 mm
7-198-T3HX	T.3.HX	100 x 108	203 mm up to 292 mm

4494

■ Standard toolholders



Code No.	Size	For Type	b x h [mm]
7-196-9448	48	T.00M, T.00B	58 x 27
7-196-9462	62N	T.0	73 x 35
7-194-9462	62	T.1, T.1X	73 x 44
7-196-9482	82N	T.2	98.5 x 50
7-197-9482	82	T.2T	98.5 x 57
7-198-9410	100	T.3, T.3HX	124 x 70

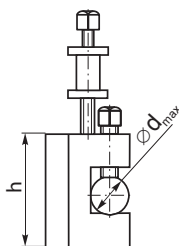


4495

■ Vee type toolholders



Code No.	Size	For Type	Ød _{max} [mm]	b x h [mm]
7-196-9548	48	T.00M, T.00B	11,0	58 x 27
7-194-9562	62N	T.0	16,0	73 x 35
7-196-9562	62	T.1, T.1X	16,0	73 x 44
7-196-9582	82N	T.2	19,0	98.5 x 50
7-197-9582	82	T.2T	19,0	98.5 x 57
7-198-9510	100	T.3, 3HX	25,5	124 x 70

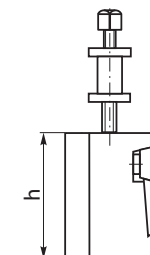


4496

■ Part off toolholders



Code No.	Size	For Type	b x h [mm]
7-196-9648	48	T.00M, T.00B	58 x 32
7-196-9662	62	T.0, T.1, T.1X	73 x 47.5
7-197-9682	82	T.2, T.2T	98.5 x 57
7-198-9610	100	T.3, T.3HX	124 x 70

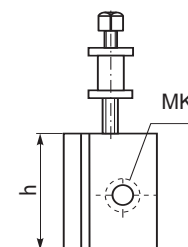


4497

■ Morse taper toolholders



Code No.	Size	For Type	Morse Taper MK
7-196-9762	62/1N	T.0	1
7-197-9762	62/1	T.1, T.1X	1
7-194-9762	62/2	T.1, T.1X	2
7-196-9782	82/2	T.2, T.2T	2
7-198-9700	100/3	T.3, T.3HX	3

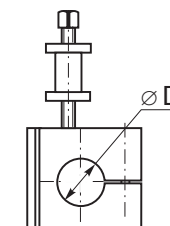


4498

■ Toolholders for boring bars



Code No.	Size	For Type	ØD [mm]
7-196-9862	62	T.0, T.1, T.1X	19
7-196-9882	82	T.2, T.2T	25.4
7-198-9810	100	T.3, T.3HX	38

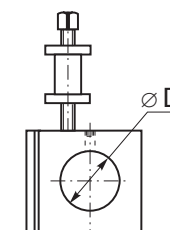


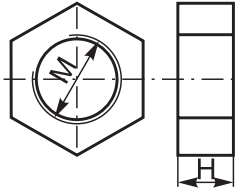
4499

■ Toolholders for boring bars

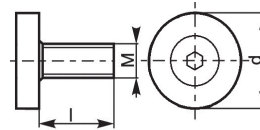


Code No.	Size	For Type	ØD [mm]
7-196-9962	62	T.0, T.1, T.1X	25
7-196-9982	82	T.2, T.2T	32
7-198-9900	100	T.3, T.3HX	40

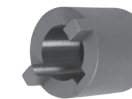
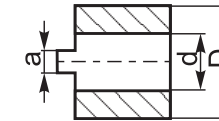



DRAW OFF NUT


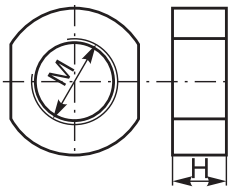
Code No.	Type	M [mm]	L [in]
7-545-900	S-0772/0	M12 x 1.5	0.413
7-545-901	S-0774/0	M16 x 1.5	0.472
7-545-902	S-0776/0	M22 x 1.5	0.610
7-545-903	S-0778/0	M27 x 1.5	0.689
7-545-904	S-0780/0	M36 x 1.5	0.827
7-545-905	S-0782/0	M48 x 1.5	0.906
7-545-906	S-0784/0	M68 x 1.5	1.004


CUTTER RETAINING SCREW


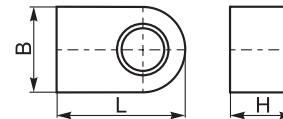
Code No.	Type	M [in]	L [in]	d [in]
7-080-005	9873-1/2"	1/4-28	0.500	0.626
7-080-010	9873-3/4"	3/8-24	0.626	0.874
7-080-015	9873-1"	1/2-20	0.811	1.189
7-080-020	9873-1.1/4"	2/8-18	0.931	1.500
7-080-025	9873-1.1/2"	3/4-16	1.126	1.874
7-080-030	9873-2"	1-14	2.500	1.375
7-080-035	9873-2.1/2"	1-14	2.500	1.375


**DRIVING RING
FOR 5310 REAMERS**


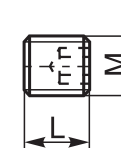
Code No.	Type	a [in]	d [in]	D [in]
7-068-904	U-0630/0	9/64	3/8	0.71
7-068-905	U-0631/0	11/64	1/2	0.79
7-068-906	U-0632/0	11/64	5/8	1.02
7-068-907	U-0633/0	15/64	3/4	1.26
7-068-908	U-0634/0	15/64	1	1.62
7-068-909	U-0635/0	19/64	1-1/4	2.00
7-068-910	U-0636/0	19/64	1-1/2	2.52
7-068-911	U-0637/0	25/64	1-3/4	3.00
7-068-912	U-0638/0	31/64	2	3.50


**DRAW OFF NUT
FOR 5310 REAMERS**


Code No.	Type	M [mm]	H [in]	Wrench size
7-068-954	U-0639/0	M12x1.0	0.24	19/32
7-068-955	U-0640/0	M16x1.5	0.28	25/32
7-068-956	U-0641/0	M20x1.5	0.32	7/8
7-068-957	U-0642/0	M22x1.5	0.36	1-1/16
7-068-958	U-0643/0	M30x2.0	0.47	1-7/16
7-068-959	U-0644/0	M36x3.0	0.55	1-13/16
7-068-960	U-0645/0	M45x3.0	0.63	2-3/16
7-068-961	U-0646/0	M52x3.0	0.63	2-9/16
7-068-962	U-0647/0	M60x4.0	0.71	3-1/8


DRIVE TANG


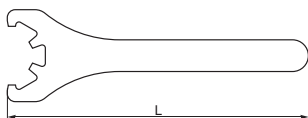
Code No.	Type	B [in]	H [in]	L [in]
7-080-105	U-7904/0	0.25	0.25	0.36
7-080-110	U-7903/0	0.31	0.27	0.40
7-080-115	U-2749/0	0.37	0.33	0.44
7-080-120	U-2750/0	0.50	0.39	0.56
7-080-125	U-2751/0	0.62	0.52	1.03
7-080-130	U-7902/0	0.75	0.68	1.34
7-080-135	U-7901/0	0.75	0.68	1.18
7-080-210	W-0225/0	0.31	0.31	0.61
7-080-215	W-0227/0	0.37	0.31	0.80
7-080-220	W-0229/0	0.50	0.34	0.94
7-080-225	W-0231/0	0.62	0.41	1.08
7-080-305	S-2111/0	0.47	0.35	0.94
7-080-310	S-2114/0	0.55	0.47	1.10
7-080-315	S-2117/0	0.31	0.28	0.67
7-080-320	S-2121/0	0.39	0.31	0.81
7-080-325	S-2124/0	0.63	0.47	1.26
7-080-330	U-5974/0	0.71	0.63	1.30
7-080-335	W-3649/0	0.55	0.47	0.90


HEX SOCKET SCREW


Code No.	M [in]	L [in]
7-195-081	8-32	5/16
7-195-091	10-32	5/16
7-195-110	1/4-28	1/4
7-195-120	5/16-24	1/4
7-195-208	3/8-24	5/16
7-195-210	3/8-24	25/64
7-195-301	7/16-20	15/32
7-195-314	7/16-20	25/64
7-195-412	9/16-18	15/32
7-195-513	5/8-18	1/2
7-195-517	5/8-18	19/32
7-195-610	3/4-16	23/64
7-195-615	3/4-16	19/32
7-195-618	3/4-16	45/64
7-195-620	3/4-16	25/32
7-195-622	1-14	15/16
7-195-820	1-14	53/64
7-195-824	1-14	15/16

KL 9833

■ Wrench for standard type nuts 9833



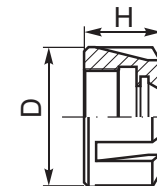
Code No.	Type	For Type	L [mm]
7-188-9016	KL9833-ER16	ER16	150
7-188-9020	KL9833-ER20	ER20	170
7-188-9025	KL9833-ER25	ER25	190
7-188-9032	KL9833-ER32	ER32	240
7-188-9040	KL9833-ER40	ER40	270
7-188-9050	KL9833-ER50	ER50	340

9833

■ Standard type ER (DIN 6499) collet nuts



Code No.	Type	For Type	D [mm]	H [mm]
7-188-816	9833-16	ER16	32	17.5
7-188-820	9833-20	ER20	35	19.0
7-188-825	9833-25	ER25	42	20.0
7-188-832	9833-32	ER32	50	22.5
7-188-840	9833-40	ER40	63	25.5

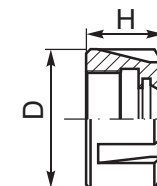


9833-ES

■ Balanced ER (DIN 6499) collet nuts

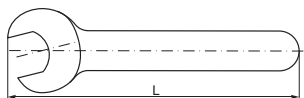


Code No.	Type	For Type	D [mm]	H [mm]
7-178-816E	9833-16 ES	ER16	32	17.5
7-178-820E	9833-20 ES	ER20	35	19.0
7-178-825E	9833-25 ES	ER25	42	20.0
7-178-832E	9833-32 ES	ER32	50	22.5
7-178-840E	9833-40 ES	ER40	63	25.5



KL 9833-D

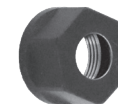
■ Wrench for hexagon type nuts 9833-D



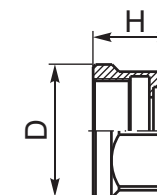
Code No.	Type	For Type	L [mm]
7-188-911	KL9833-11D	ER11	125
7-178-916	KL9833-16D	ER16	170
7-171-982	KL9833-20D	ER20	140

9833-D

■ Hexagon ER collet nuts (DIN 6499)

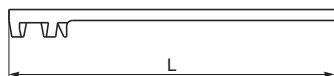


Code No.	Type	For Type	D [mm]	H [mm]
7-188-811	9833-11 D	ER11	19	11.0
7-178-816	9833-16 D	ER16	28	17.5
7-188-821	9833-20 D	ER20	34	20.0



KL 9833-S

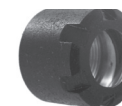
■ Wrench for mini type nuts 9833-S



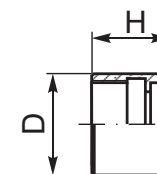
Code No.	Type	For Type	L [mm]
7-171-961	KL 9833-11S	ER11	95
7-171-976	KL 9833-16S	ER16	119
7-171-984	KL 9833-20S	ER20	131
7-171-996	KL 9833-25S	ER25	143

9833-S

■ Mini type ER collet nuts (DIN 6499)



Code No.	Type	For Type	D [mm]	H [mm]
7-171-951	9833-11 S	ER11	16	12
7-171-966	9833-16 S	ER16	22	18
7-171-974	9833-20 S	ER20	28	19
7-171-986	9833-25 S	ER25	35	20




STOP FOR QUICKCHANGE TOOLHOLDERS

Code No.	Type	For Type
7-196-001	U-5514/1	T.00M
7-196-002	U-5514/0	T.00B
7-196-003	U-6876/0	T.0, T.1, T.1X
7-196-004	U-5762/0	T.2, T.2T
7-196-005	U-6880/0	T.3, T.3HX


CLAMP PAD

Code No.	Type	For Type
7-196-401	U-5505/1	T.00M
7-196-402	U-5505/0	T.00B
7-196-403	U-6859/0	T.0, T.1, T.1X
7-196-404	U-6174/0	T.2
7-196-405	U-5756/0	T.2T
7-196-406	U-6867/0	T.3, T.3HX


TOOLPOSTS SCREW

Code No.	Type	For Type	Shape	Diameter	Thread
7-196-801	U-5516/1	T.00M	⬡	4 mm	M5x20
7-196-802	U-5516/0	T.00B	⬡	4 mm	M5x20
7-196-803	U-6877/0	T.0, T.1, T.1X	□	8 mm	M8x25
7-196-804	U-7386/0	T.2, T.2T	□	10 mm	M10x30
7-196-805	U-6881/0	T.3, T.3HX	□	13 mm	M12x40


CLAMP BOLT

Code No.	Type	For Type
7-196-101	U-5507/1	T.00M
7-196-102	U-5507/0	T.00B
7-196-103	U-6860/0	T.0, T.1, T.1X
7-196-104	U-6175/0	T.2
7-196-105	U-5757/0	T.2T
7-196-106	U-6868/0	T.3, T.3HX


T WRENCH

■ T-wrench with square socket

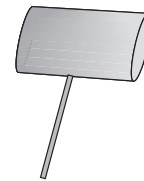
Code No.	Type	For Type	□
7-196-501	KL 4414-62X51	T0, T1, T1X	8 mm
7-196-502	KL 4414-82X71	T2, T2T	10 mm
7-196-503	KL 4414-100X108	T3, T3HX	13.5 mm


TOOLPOSTS SCREW

Code No.	Type	For Type	Shape	Diameter	Thread
7-196-901	U-5517/1	T.00M	⬡	4 mm	M5x16
7-196-902	U-5517/0	T.00B	⬡	4 mm	M5x16
7-196-903	U-6877/1	T.2, T.2T	□	8 mm	M8x25
7-196-904	U-7386/1	T.0, T.1, T.1X	□	10 mm	M10x30
7-196-905	U-6881/1	T.3, T.3HX	□	13 mm	M12x40


LOCATION PIN

Code No.	Type	For Type
7-196-201	U-7485/0	T.0
7-196-202	U-6863/0	T.1, T.1X
7-196-203	U-5760/0	T.2, T.2T
7-196-204	U-6871/0	T.3
7-196-205	U-7487/0	T.3HX


T WRENCH

■ T-wrench with hexagon socket

Code No.	Type	For Type	⬡
7-196-601	KL 4414-48	T00M, T00B	4 mm


STUD

Code No.	Type	For Type
7-196-301	U-5515/1	T.00M
7-196-302	U-5515/0	T.00B
7-196-303	U-8578/0	T.0, T.1, T.1X
7-196-304	U-5754/0	T.2, T.2T
7-196-305	U-5997/0	T.3, T.3HX


HEX WRENCH

■ L-wrench with hexagon socket

Code No.	Type	For Type
7-196-701	KL 4414-48 HEX	T.00M, T.00B
7-196-702	KL 4414-62X51 HEX	T.0, T.1, T.1X
7-196-703	KL 4414-82X71 HEX	T.2, T.2T
7-196-704	KL 4414-100X108 HEX	T.3, T.3HX

Code No.	Type	For Type
7-590-941L	S-2084/1	7-590-041
7-590-941L	S-2084/1	7-590-051
7-590-943L	S-2031/1	7-590-043
7-590-943L	S-2031/1	7-590-053
7-590-954L	S-2041/1	7-590-054
7-590-955L	S-2243/0	7-590-055



■ Set of 3 drivers for left rotations

Code No.	Type	For Type
7-590-941R	S-2084/0	7-590-041
7-590-941R	S-2084/0	7-590-051
7-590-943R	S-2031/0	7-590-043
7-590-943R	S-2031/0	7-590-053
7-590-954R	S-2041/0	7-590-054
7-590-955R	S-2242/0	7-590-055



■ Set of 3 drivers for right rotations

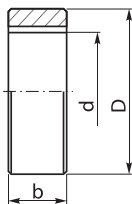
Code No.	Type	For Type
7-590-841	S-2083/0	7-590-041
7-590-841	S-2083/0	7-590-051
7-590-843	S-2030/0	7-590-043
7-590-843	S-2030/0	7-590-053
7-590-855	S-2040/0	7-590-054
7-590-855	S-2240/0	7-590-055



■ Centering tip

7285

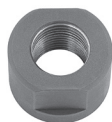
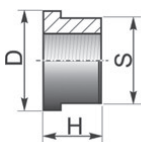
■ Spacer rings for milling arbors



Code No.	Width of Spacer „b“ [in]	d [in]	D [in]	Width of keyway [in]
7-020-005	0.0625	0.875	1.375	0.125
7-020-015	0.1250	0.875	1.375	0.125
7-020-025	0.2500	0.875	1.375	0.125
7-020-035	0.3750	0.875	1.375	0.125
7-020-045	0.5000	0.875	1.375	0.125
7-020-050	0.6250	0.875	1.375	0.125
7-020-055	0.7500	0.875	1.375	0.125
7-020-065	1.0000	0.875	1.375	0.125
7-020-075	1.2000	0.875	1.375	0.125
7-020-080	2.0000	0.875	1.375	0.125
7-020-090	0.0625	1.000	1.500	0.250
7-020-095	0.0938	1.000	1.500	0.250
7-020-100	0.1250	1.000	1.500	0.250

Code No.	Width of Spacer „b“ [in]	d [in]	D [in]	Width of keyway [in]
7-020-105	0.1875	1.000	1.500	0.250
7-020-110	0.2500	1.000	1.500	0.250
7-020-115	0.3125	1.000	1.500	0.250
7-020-120	0.3750	1.000	1.500	0.250
7-020-125	0.4375	1.000	1.500	0.250
7-020-130	0.5000	1.000	1.500	0.250
7-020-135	0.6250	1.000	1.500	0.250
7-020-140	0.7500	1.000	1.500	0.250
7-020-150	1.0000	1.000	1.500	0.250
7-020-155	1.2500	1.000	1.500	0.250
7-020-160	1.5000	1.000	1.500	0.250
7-020-165	2.0000	1.000	1.500	0.250
7-020-170	3.0000	1.000	1.500	0.250
7-020-175	0.0625	1.250	1.750	0.313
7-020-185	0.1250	1.250	1.750	0.313
7-020-190	0.1875	1.250	1.750	0.313
7-020-195	0.2500	1.250	1.750	0.313
7-020-200	0.3125	1.250	1.750	0.313
7-020-205	0.3750	1.250	1.750	0.313
7-020-215	0.5000	1.250	1.750	0.313
7-020-220	0.6250	1.250	1.750	0.313
7-020-225	0.7500	1.250	1.750	0.313
7-020-230	0.8750	1.250	1.750	0.313
7-020-235	1.0000	1.250	1.750	0.313
7-020-240	1.2500	1.250	1.750	0.313

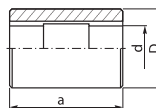
Code No.	Width of Spacer „b“ [in]	d [in]	D [in]	Width of keyway [in]
7-020-245	1.5000	1.250	1.750	0.313
7-020-250	2.0000	1.250	1.750	0.313
7-020-255	3.0000	1.250	1.750	0.313
7-020-260	0.0625	1.500	2.125	0.375
7-020-265	0.0938	1.500	2.125	0.375
7-020-270	0.1250	1.500	2.125	0.375
7-020-275	0.1875	1.500	2.125	0.375
7-020-280	0.2500	1.500	2.125	0.375
7-020-285	0.3125	1.500	2.125	0.375
7-020-290	0.3750	1.500	2.125	0.375
7-020-300	0.5000	1.500	2.125	0.375
7-020-310	0.7500	1.500	2.125	0.375
7-020-320	1.0000	1.500	2.125	0.375
7-020-325	1.2500	1.500	2.125	0.375
7-020-335	2.0000	1.500	2.125	0.375
7-020-340	3.0000	1.500	2.125	0.375
7-020-395	0.1250	2.000	2.750	0.500
7-020-400	0.1875	2.000	2.750	0.500
7-020-405	0.2500	2.000	2.750	0.500
7-020-415	0.3750	2.000	2.750	0.500
7-020-425	0.5000	2.000	2.750	0.500
7-020-435	0.7500	2.000	2.750	0.500
7-020-445	1.0000	2.000	2.750	0.500
7-020-460	2.0000	2.000	2.750	0.500
7-020-465	3.0000	2.000	2.750	0.500

RIGHT HAND NUTS
FOR MILLING ARBORS

Code No.	Arbor Dia [in]	Thread Size RH	Height H [in]	Flat S [in]	OD D [in]
7-030-005R	0.875	7/8-14	0.75	1.125	1.38
7-030-010R	1.000	1-14	0.88	1.250	1.62
7-030-015R	1.250	1-1/4-12	0.88	1.250	1.62
7-030-020R	1.500	1-1/2-12	1.31	1.813	2.10
7-030-025R	2.000	2-12	1.75	2.375	2.72

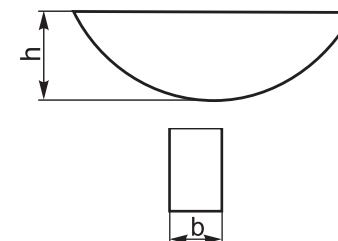
7275

■ Cylindrical bushings for milling arbors



Code No.	D [in]	d [in]	a [in]	Width of keyway
7-025-005	1.625	0.875	2.625	0.125
7-025-010	1.625	1.000	2.625	0.250
7-025-015	1.875	1.250	2.625	0.313
7-025-020	1.875	0.875	3.125	0.125
7-025-025	1.875	1.000	3.125	0.250
7-025-030	1.875	1.250	3.125	0.313
7-025-035	2.125	0.875	3.750	0.125
7-025-040	2.125	1.000	3.750	0.250
7-025-045	2.125	1.250	3.750	0.313
7-025-050	2.125	1.500	3.750	0.375
7-025-055	2.750	0.875	4.250	0.125
7-025-060	2.750	1.000	4.250	0.250
7-025-065	2.750	1.250	4.250	0.313
7-025-070	2.750	1.500	4.250	0.375
7-025-075	2.750	2.000	4.250	0.500

DRIVE KEY C



Code No.	Type	b [mm]	h [mm]
7-068-804	U-0097/0	3	3.7
7-068-806	U-0648/0	4	4.0
7-068-807	U-0098/0	5	6.5
7-068-809	U-0649/0	8	11.0
7-068-810	U-0650/0	10	16.0
7-068-811	U-0106/0	12	19.0

SHRINK FIT HOLDERS

Shrink fit holders are suitable for high speed machining and high accuracy applications. They are ideal for end milling, drilling, reaming, boring and other cutting operations.

Shrink fit holder increases the diameter of the shank under the influence of supplied heat allowing insertion of a tool. After cooling, the holder is shrinking, while clamping around the tool, which allows accurate clamping and provides a high level of tightness due to action of the centrifugal force.

These holders are available in DIN 69871, MAS 403-BT and DIN 69893-A.



1

2

3

4

5

6

