

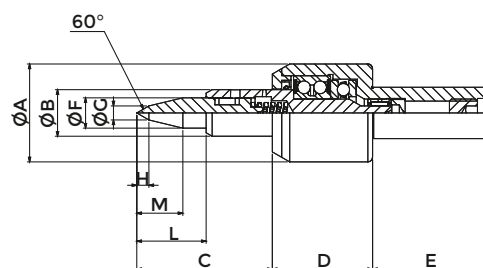


LIVE CENTER

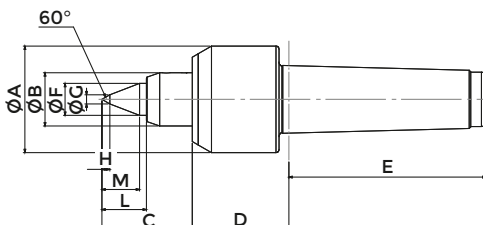
LIVE CENTER WITH DIFFERENTIAL LOAD



VERSION CIL.



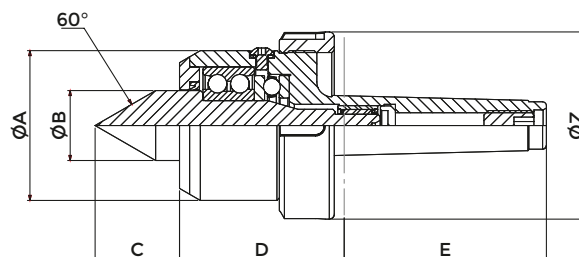
VERSION C.M.



SERIE-K1

CODE N.	SHANK	A	D	E	B	F	G	H	M	L	C	WEIGHT (Kg)	LOAD (N)	MAX ROUNDS (r.p.m.)	MAX THRUST Max (N)	MAX OSCILLATION Max (MM)
450-00200	CM3	42	48	81	20	13	6	5,2	19,7	25,3	53,3	0,6	ASS.1800/RAD.610	6000	600	0,6
450-00209	CM4	60	61,5	102,5	28	16	6	5,2	19,7	26,6	54	1,1	ASS.3040/RAD.1130	4500	900	0,6
450-00218	CM5	70	63,5	129,5	35	21	6	5,2	24,4	28,9	59,6	1,9	ASS.3730/RAD.1500	4000	1200	0,8
450-00201	CIL.22	42	43	50	20	13	6	5,2	19,7	25,3	53,3	0,6	ASS.1800/RAD.610	6000	600	0,6
450-00210	CIL.28	60	55	50	28	16	6	5,2	19,7	26,6	54	1,1	ASS.3040/RAD.1130	4500	900	0,6
450-00219	CIL.32	70	57	50	35	21	6	5,2	24,4	28,9	59,6	1,9	ASS.3730/RAD.1500	4000	1200	0,8

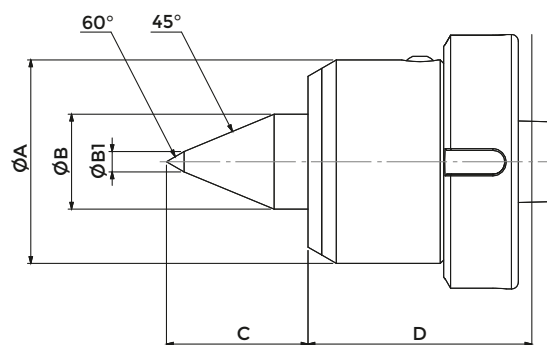
HIGH PRECISION LIVE CENTER WITH RING NUT



SERIE-MWS60 HP

CODE N.	SHANK	A	B	C	D	E	Z	WEIGHT (Kg)	LOAD (N)	MAX ROUNDS (r.p.m.)
450-00124	CM3	60	28	34	66	81	75	1,1	ASS.3040/RAD.970	4500
450-00143	CM4	70	35	69,5	69,5	102,5	82	1,9	ASS.3730/RAD.1730	4000
450-00166	CM5	90	40	50	76,5	129,5	105	3,9	ASS.5100/RAD.2530	2800
450-00191	CM6	130	65	71	92,5	195	160	9,1	ASS.6680/RAD.4570	2400

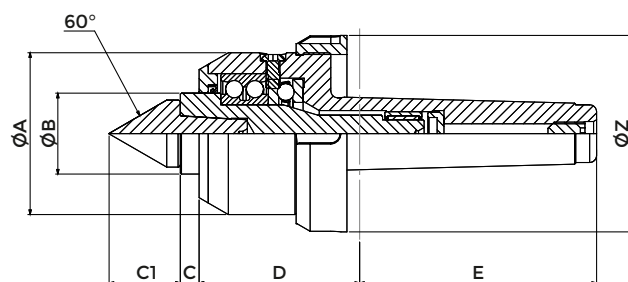
double angles live center



SERIE-MWS45 HP

CODE N.	SHANK	A	B	B1	C	D	E	WEIGHT (Kg)	LOAD (N)	MAX ROUNDS (r.p.m.)
450-00125	CM3	60	28	6	41,5	66	81	1,1	ASS.3040/RAD.970	4500
450-00144	CM4	70	35	9	51,4	69,5	102,5	1,9	ASS.3730/RAD.1730	4000
450-00167	CM5	90	40	12	51,5	76,5	129,5	3,9	ASS.5100/RAD.2530	2800

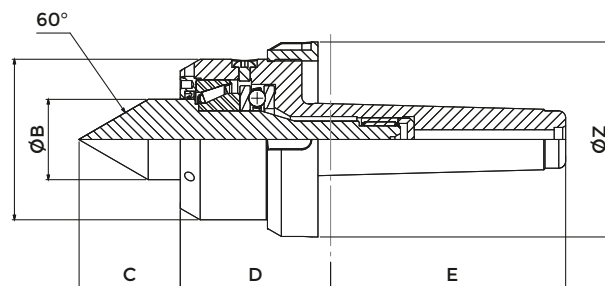
HIGH PRECISION LIVE CENTER WITH RING NUT AND INTERCHANGEABLE POINT



SERIE-MWS-IP HP

CODE N.	SHANK	A	B	C1	C	D	E	Z	MAX ROUNDS (r.p.m.)	WEIGHT (Kg)	LOAD (N)
450-00126	CM3	60	28	25	7	37	66	81	4500	1,1	ASS.3040/RAD.970
450-00145	CM4	70	35	29	8	41	69,5	102,5	4000	1,9	ASS.3730/RAD.1730
450-00168	CM5	90	40	35	8	46	76,5	129,5	2800	3,9	ASS.5100/RAD.2530

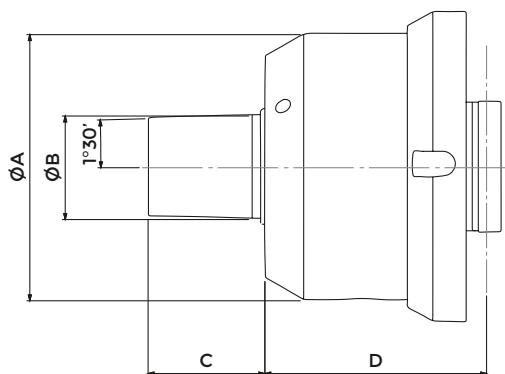
HIGH LOAD LIVE CENTER WITH RING NUT



SERIE-MWS/CP

CODE N.	SHANK	A	B	C	D	E	Z	ECCENTRICITY (mm)	MAX ROUNDS (r.p.m.)	WEIGHT (Kg)	LOAD (N)
450-00129	CM3	60	28	38	51	92	75	0,005	4000	1,9	ASS.3040/RAD.2350
450-00151	CM4	70	35	46	54	11,5	82	0,005	4000	1,9	ASS.3730/RAD.3450
450-00172	CM5	90	40	53	65	136	105	0,005	2800	3,9	ASS.6370/RAD.4010
450-00191	CM6	130	65	71	92,5	195	160	0,010	2400	9,1	ASS.10290/RAD.13960

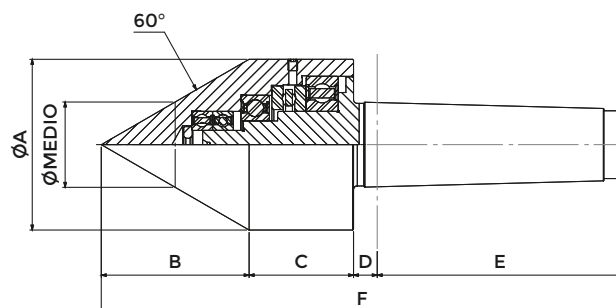
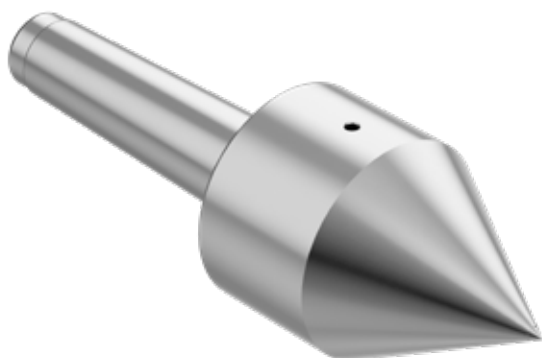
SERIE MWS/CP-F



SERIE-MWS/CP-F

CODE N.	SHANK	A	B	C	D
450-00154	CM4	70	35	40	54
450-00177	CM5	90	35	40	65
450-00192	CM6	130	35	40	92,5

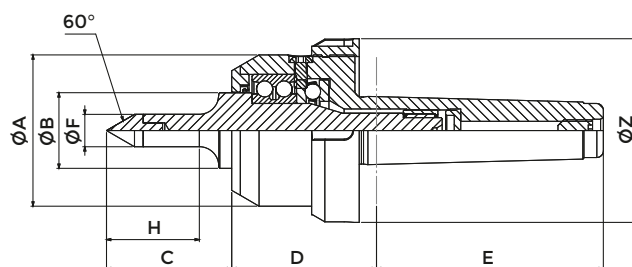
LIVE CENTER WITH INTEGRAL POINT FOR TUBES



SERIE-MWS/TU

CODE N.	SHANK	WEIGHT (Kg)	LOAD (N)	A	B	C	D	E	F	ECCENTRICITY (mm)	MAX ROUNDS (r.p.m.)
450-00128	CM3	1,5	ASS.2450/RAD.900	60	52	30	10	81	173	0,015/0,008	5700
450-00147	CM4	2,3	ASS.3730/RAD.1320	70	60,5	45,5	11,5	102,5	220	0,015/0,008	4500
450-00149	CM4	2,3	ASS.3730/RAD.1320	90	78	28	11,5	102,5	220	0,015/0,008	4500
450-00148	CM4	2,3	ASS.3730/RAD.1320	110	95	10	11,5	102,5	220	0,015/0,008	4500
450-00170	CM5	4	ASS.4740/RAD.2360	90	78	55	12,5	129,5	275	0,02/0,01	3600
450-00171	CM5	4	ASS.4740/RAD.2360	110	95	38	12,5	129,5	275	0,02/0,01	3600
450-00176	CM5	4	ASS.4740/RAD.2360	200	173	15	12,5	129,5	330	0,02/0,01	3600
450-00190	CM6	10	ASS.6680/RAD.2480	110	95	60	17	182	354	0,02/0,015	2600

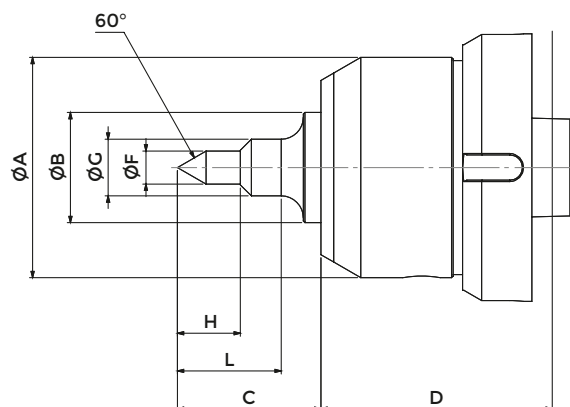
LIVE CENTER WITH HARD METAL POINT FOR GRINDING



SERIE-MWS/RT60

CODE N.	SHANK	A	B	C	D	E	F	H	Z	MAX ROUNDS (r.p.m.)	WEIGHT (Kg)	LOAD (N)
450-00130	CM3	60	28	58	55	92	15	41	75	4500	1,1	ASS.3040/RAD.1240
450-00150	CM4	70	35	58	57	115	15	41	82	4000	1,9	ASS.3730/RAD.1540
450-00173	CM5	90	40	58	70	136	15	41	105	2800	3,9	ASS.5100/RAD.1710

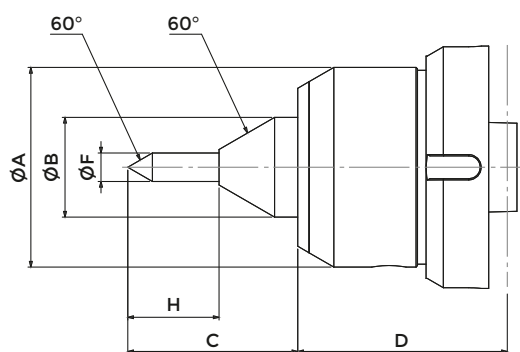
LIVE CENTER WITH HARD METAL POINT FOR GRINDING



SERIE-MWS/RTR

CODE N.	SHANK	A	B	C	D	E	F	G	H	Z	L	MAX ROUNDS (r.p.m.)	WEIGHT (Kg)	LOAD (N)
450-00131	CM3	60	28	46	55	92	10	18	20	75	33	4500	1,1	ASS.3040/RAD.1240
450-00152	CM4	70	35	46	57	115	10	18	20	82	33	4000	1,9	ASS.3730/RAD.1540
450-00174	CM5	90	40	46	70	136	10	18	20	105	33	2800	3,9	ASS.5100/RAD.1710

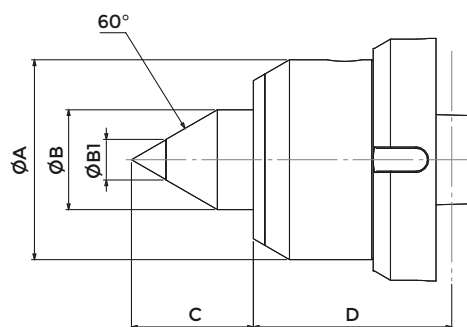
LIVE CENTER WITH HARD METAL POINT FOR GRINDING



SERIE-MWS/RTS

CODE N.	SHANK	A	B	C	D	E	F	H	Z
450-00132	CM3	60	28	53	55	92	9,7	32	75
450-00153	CM4	70	35	58,9	57	115	9,7	32	82
450-00175	CM5	90	40	64	70	136	9,7	32	105

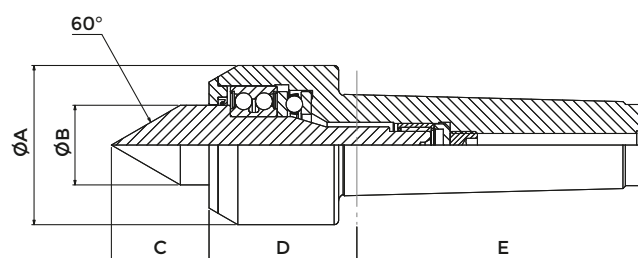
LIVE CENTER WITH HARD METAL POINT FOR GRINDING



SERIE-MWS/RTD

CODE N.	SHANK	A	B	B1	C	D	E	Z
450-00127	CM3	60	28	11	34	55	92	75
450-00146	CM4	70	35	14	43	57	115	82
450-00169	CM5	90	40	20	50	70	136	105

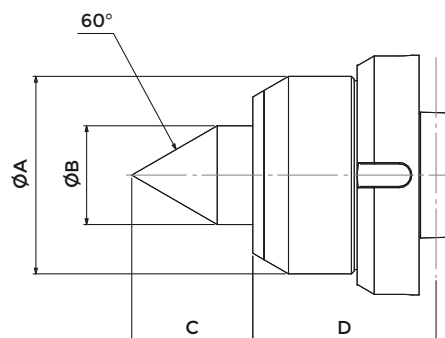
HIGH SPEED LIVE CENTER WITHOUT RING NUT



SERIE-K1 SPEED

CODE N.	SHANK	A	B	C	D	E	LOAD (N)	MAX ROUNDS (r.p.m.)
450-00196	CM2	42	20	25	48	64	ASS.1650/RAD.610	6500
450-00198	CM3	42	20	25	48	81	ASS.2110/RAD.630	6000
450-00207	CM4	62	28	34	61,5	102,5	ASS.3040/RAD.1490	4500
450-00217	CM5	70	35	43	61,5	139,5	ASS.3730/RAD.1750	4000

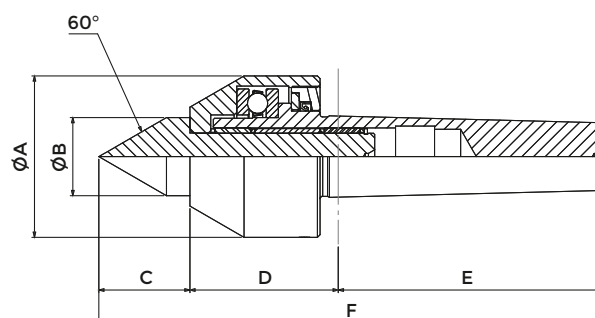
HIGH SPEED LIVE CENTER WITHOUT RING NUT



SERIE-K1 SPEED/RN

CODE N.	SHANK	A	B	C	D	E	Z
450-00211	CM4	60	28	34	61,5	102,5	75
450-00220	CM5	70	35	43	63,5	129,5	82

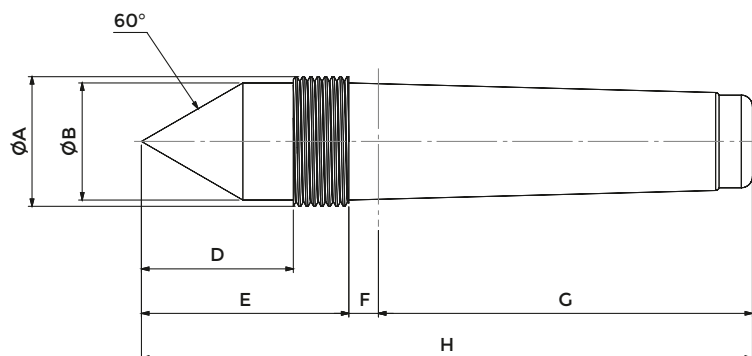
LOW SPEED LIVE CENTER WITHOUT RING NUT, ROTARY POINT AND BODY



SERIE-K1 SLOW

CODE N.	SHANK	A	B	C	D	E	F	WEIGHT (Kg)	LOAD (N)	MAX ROUNDS (r.p.m.)
450-00001	CM3	56	24	28	57	81	166	1,3	ASS.4380/RAD.790	4000
450-00002	CM4	62	30	35	56,5	102,5	194	1,8	ASS.4040/RAD.880	3500
450-00003	CM5	79	38	45	65,5	129,5	240	3,5	ASS.6330/RAD.1540	2500

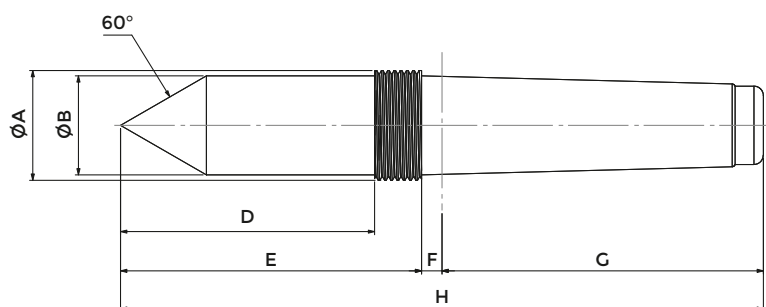
DEAD CENTER FOR CNC LATHE



SERIE-K3

CODE N.	SHANK	A	B	D	E	F	G	H
450-00038	CM3	M30X1,5	24	35	50	5	81	136
450-00063	CM4	M35X1,5	31,5	41	56	6,5	102,5	165
450-00091	CM5	M50X1,5	44	65	80	6,5	129,5	216
450-00113	CM6	M70X2	64	80,5	95,5	8	182	285,5

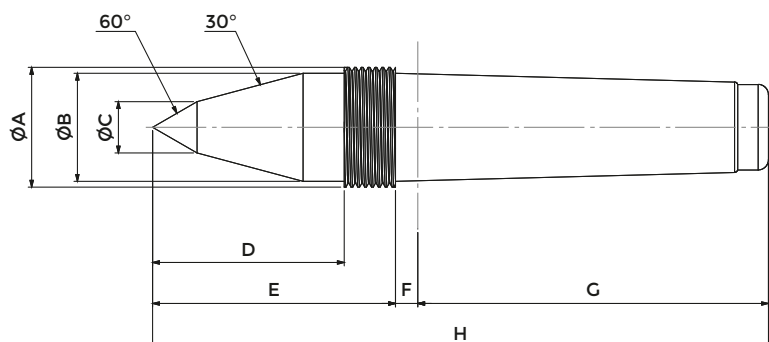
EXTENDED DEAD CENTER FOR CNC LATHE



SERIE-K3L

CODE N.	SHANK	A	B	D	E	F	G	H
450-00045	CM3	M30X1,5	24	70	85	5	81	171
450-00055	CM4	M35X1,5	31,5	81	96	6,5	102,5	205
450-00098	CM5	M50X1,5	44	105	120	6,5	129,5	256
450-00105	CM6	M70X2	64	110,5	125,5	8	182	315,5

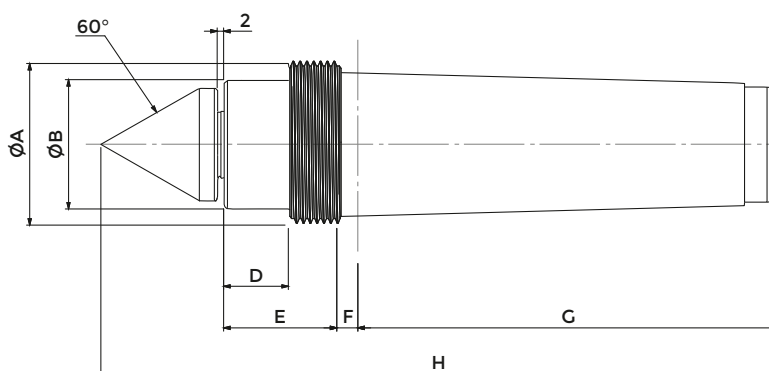
DEAD CENTER FOR CNC LATHE



SERIE-K3R

CODE N.	SHANK	A	B	C	D	E	F	G	H
450-00041	CM3	M30X1,5	24	12	47	62	5	81	148
450-00066	CM4	M35X1,5	31,5	15	56	71	6,5	102,5	180
450-00094	CM5	M50X1,5	44	18	80	95	6,5	129,5	231
450-00115	CM6	M70X2	64	20	124,4	139,4	8	182	329,4

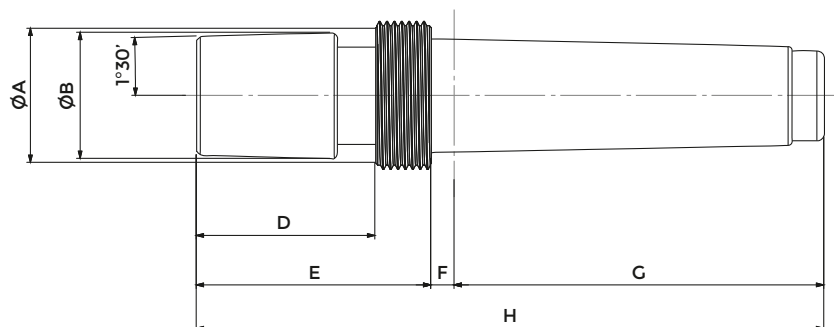
DEAD CENTER FOR CNC LATHE WITH INTERCHANGEABLE POIN



SERIE-K3/IP

CODE N.	SHANK	A	B	D	E	F	G	H
450-00039	CM3	M30X1,5	26	20	35	5	81	151
450-00064	CM4	M35X1,5	32	20	35	6,5	102,5	167
450-00092	CM5	M50X1,5	40	20	35	6,5	129,5	209

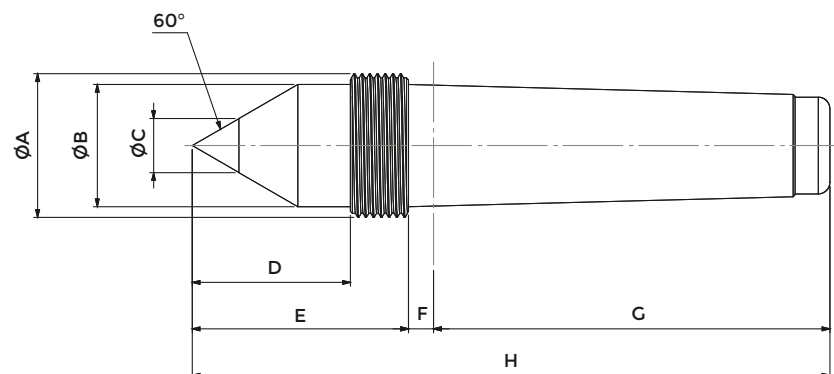
DEAD CENTER FOR CNC LATHE WITH POINT FOR FLANGE



SERIE-K3/F

CODE N.	SHANK	A	B	D	E	F	G	H
450-00042	CM3	M30X1,5	35	50	65	5	81	151
450-00067	CM4	M35X1,5	35	50	65	6,5	102,5	174
450-00095	CM5	M50X1,5	35	50	65	6,5	129,5	231
450-00116	CM6	M70X2	35	50	65	8	182	255

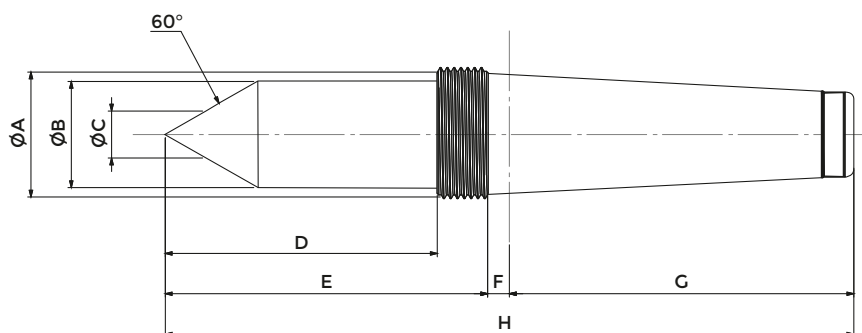
HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT

CODE N.	SHANK	A	B	C	D	E	F	G	H
450-00040	CM3	M30X1,5	24	11	35	50	5	81	136
450-00025	CM3	M30X1,5	24	24	35	50	5	81	136
450-00065	CM4	M35X1,5	31,5	14	41	56	6,5	102,5	165
450-00051	CM4	M35X1,5	31,5	31,5	41	56	6,5	102,5	165
450-00093	CM5	M50X1,5	44	25	65	80	6,5	129,5	216
450-00078	CM5	M50X1,5	44	44	65	80	6,5	129,5	216
450-00114	CM6	M70X2	64	40	80,5	95,5	8	182	285,5

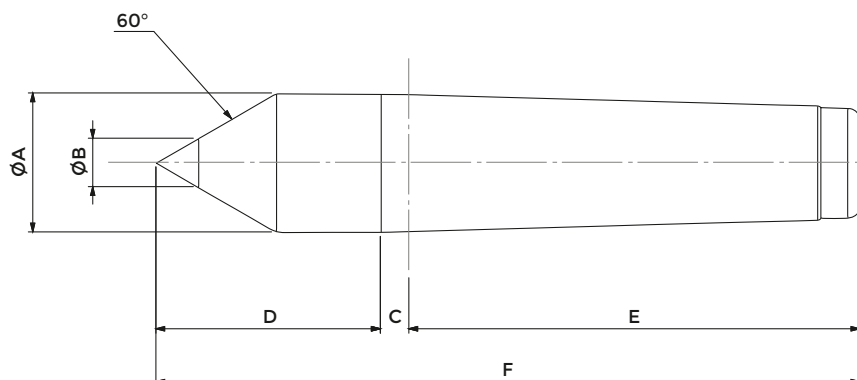
EXTENDED HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT L

CODE N.	SHANK	A	B	C	D	E	F	G	H
450-00046	CM3	M30X1,5	24	11	70	85	5	81	171
450-00047	CM3	M30X1,5	24	24	70	85	5	81	171
450-00056	CM4	M35X1,5	31,5	14	81	96	6,5	102,5	205
450-00057	CM4	M35X1,5	31,5	31,5	81	96	6,5	102,5	205
450-00099	CM5	M50X1,5	44	25	105	120	6,5	129,5	256
450-00100	CM5	M50X1,5	44	44	105	120	6,5	129,5	256
450-00106	CM6	M70X2	64	40	110,5	125,5	8	182	315,5

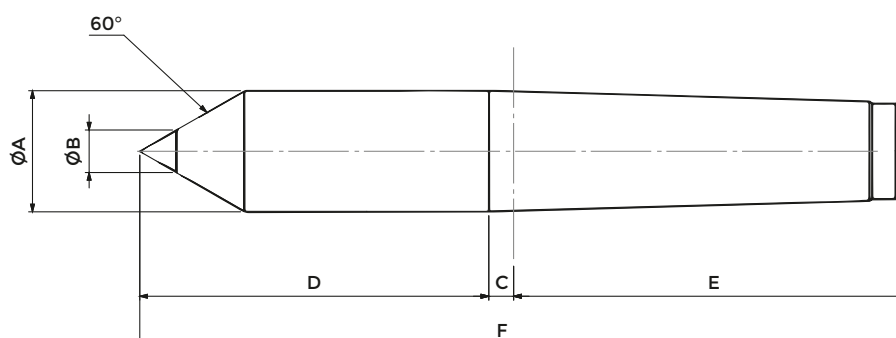
HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT-NG

CODE N.	SHANK	A	B	C	D	E	F
450-00036	CM3	24,1	11	5	39	81	125
450-00034	CM3	24,1	24,1	5	39	81	125
450-00061	CM4	31,6	14	6,5	51	102,5	160
450-00073	CM4	31,6	31,6	6,5	51	102,5	160
450-00089	CM5	44,7	25	6,5	64	129,5	200
450-00082	CM5	44,7	44,7	6,5	64	129,5	200
450-00111	CM6	63,8	40	8	80	182	270

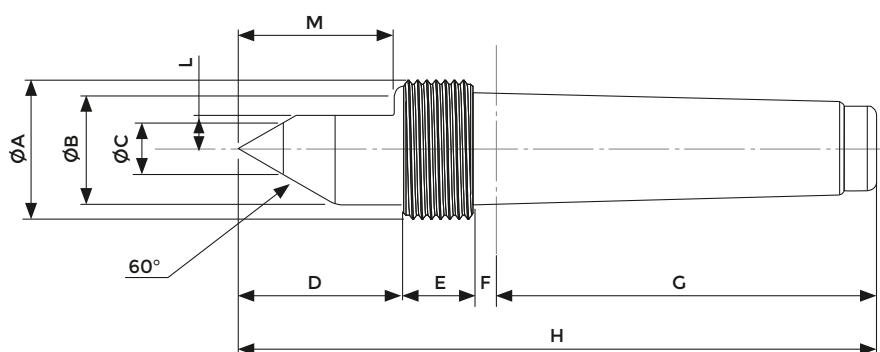
EXTENDED HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT-NGL

CODE N.	SHANK	A	B	C	D	E	F
450-00031	CM3	24,1	11	5	74	81	160
450-00030	CM3	24,1	24,1	5	74	81	160
450-00069	CM4	31,6	14	6,5	91	102,5	200
450-00068	CM4	31,6	31,6	6,5	91	102,5	200
450-00087	CM5	44,7	25	6,5	104	129,5	240
450-00086	CM5	44,7	44,7	6,5	104	129,5	240
450-00109	CM6	63,8	40	8	110	180	300

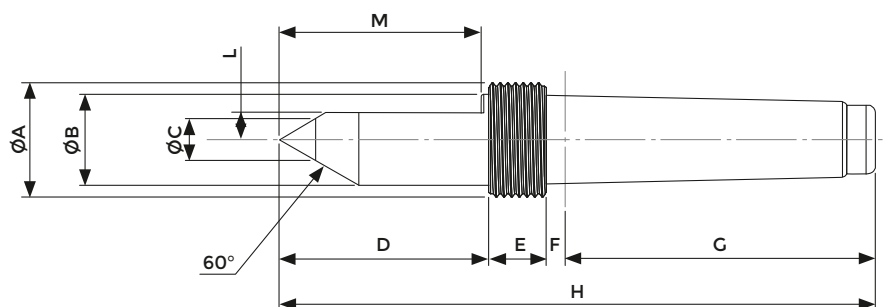
HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT-T

CODE N.	SHANK	A	B	C	D	E	F	G	H	L	M
450-00026	CM3	M30X1,5	24	11	35	50	5	81	136	7	33
450-00043	CM3	M30X1,5	24	18	35	50	5	81	136	10,5	33
450-00044	CM3	M30X1,5	24	24	35	50	5	81	136	9	33
450-00052	CM4	M35X1,5	31,6	14	41	56	6,5	102,5	165	8,5	38
450-00053	CM4	M35X1,5	31,6	20	41	56	6,5	102,5	165	11,5	38
450-00054	CM4	M35X1,5	31,6	31,6	41	56	6,5	102,5	165	10,5	38
450-00079	CM5	M50X1,5	44,7	14	65	80	6,5	129,5	216	9	61
450-00096	CM5	M50X1,5	44,7	30	65	80	6,5	129,5	216	17	61
450-00097	CM5	M50X1,5	44,7	44,7	65	80	6,5	129,5	216	17	61
450-00104	CM6	M70X2	64	40	80,5	95,5	8	182	285,5	22	75

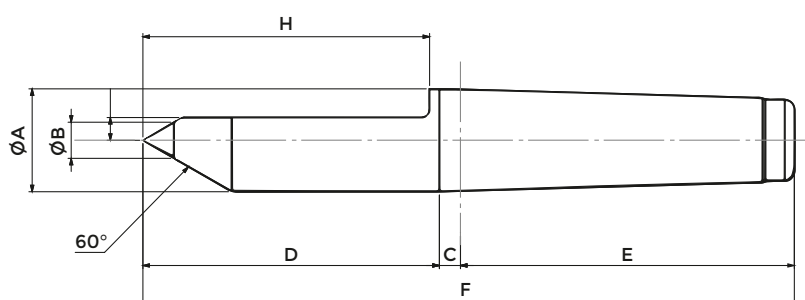
EXTENDED HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT-TL

CODE N.	SHANK	A	B	C	D	E	F	G	H	L	M
450-00048	CM3	M30X1,5	24	11	70	85	5	81	171	7	68
450-00049	CM3	M30X1,5	24	18	70	85	5	81	171	10,5	68
450-00050	CM3	M30X1,5	24	24	70	85	5	81	171	9	68
450-00058	CM4	M35X1,5	31,6	14	81	96	6,5	102,5	205	8,5	78
450-00059	CM4	M35X1,5	31,6	20	81	96	6,5	102,5	205	11,5	78
450-00077	CM4	M35X1,5	31,6	31,6	81	96	6,5	102,5	205	10,5	78
450-00101	CM5	M50X1,5	44,7	14	105	120	6,5	129,5	256	9	101
450-00102	CM5	M50X1,5	44,7	30	105	120	6,5	129,5	256	17	101
450-00103	CM5	M50X1,5	44,7	44,7	105	120	6,5	129,5	256	17	101
450-00107	CM6	M70X2	64	40	110,5	125,5	8	182	315,5	22	105

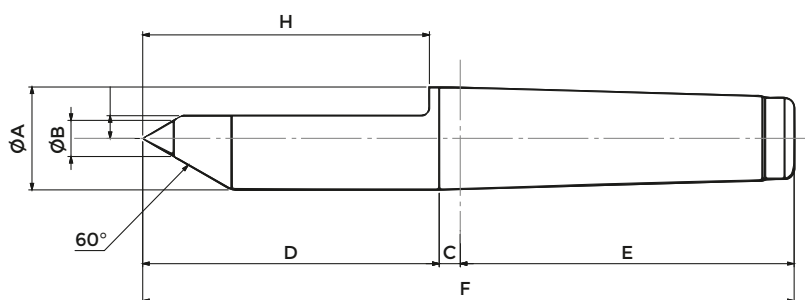
HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT-NGT

CODE N.	SHANK	A	B	C	D	E	F	G	H
450-00037	CM3	24,1	11	5	39	81	125	7	37
450-00033	CM3	24,1	18	5	39	81	125	10,5	37
450-00032	CM3	24,1	24,1	5	39	81	125	9	37
450-00076	CM4	31,6	14	6,5	51	102,5	160	8,5	48
450-00075	CM4	31,6	20	6,5	51	102,5	160	11,5	48
450-00074	CM4	31,6	31,6	6,5	51	102,5	160	10,5	48
450-00090	CM5	44,7	14	6,5	64	129,5	200	9	60
450-00081	CM5	44,7	30	6,5	64	129,5	200	17	60
450-00080	CM5	44,7	44,7	6,5	64	129,5	200	17	60
450-00112	CM6	63,8	40	8	80	182	270	22	75

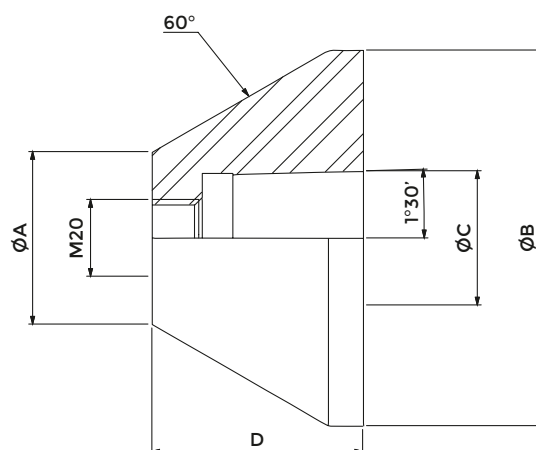
EXTENDED HARD METAL DEAD CENTER FOR GRINDING



SERIE-K4/RT-NGTL

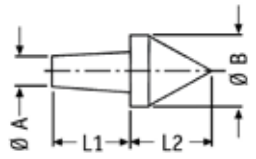
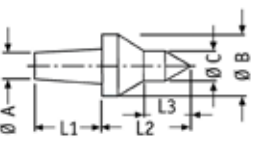
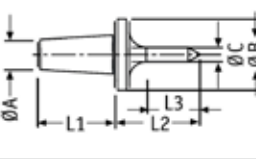
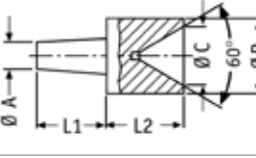
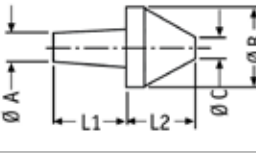
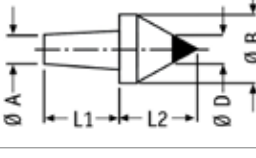
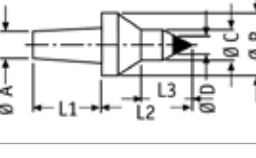
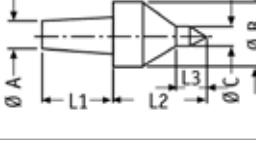
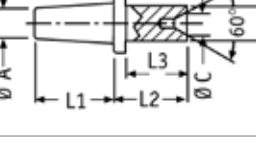
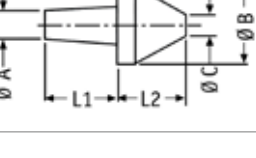
CODE N.	SHANK	A	B	C	D	E	F	G	H
450-00029	CM3	24,1	11	5	74	81	160	7	72
450-00028	CM3	24,1	18	5	74	81	160	10,5	72
450-00027	CM3	24,1	24,1	5	74	81	160	9	72
450-00072	CM4	31,6	14	6,5	91	102,5	200	8,5	88
450-00071	CM4	31,6	20	6,5	91	102,5	200	11,5	88
450-00070	CM4	31,6	31,6	6,5	91	102,5	200	10,5	88
450-00085	CM5	44,7	14	6,5	104	129,5	240	9	100
450-00084	CM5	44,7	30	6,5	104	129,5	240	17	100
450-00083	CM5	44,7	44,7	6,5	104	129,5	240	17	100
450-00108	CM6	63,8	40	8	110	182	300	22	105

LIVE CENTER FOR CHUCK APPLICATION

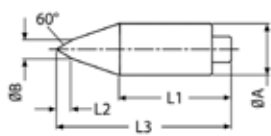
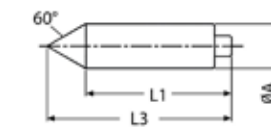
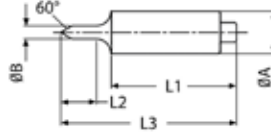
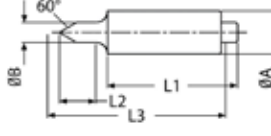
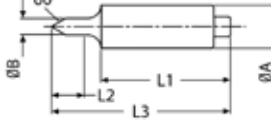


CODE N.	MODEL	A	B	C	D
450-00119	MWS 45X98	45	98	35	55
450-00120	MWS 95X148	95	148	35	55
450-00121	MWS 145X198	145	198	35	55
450-00122	MWS 195X248	195	248	35	55
450-00123	MWS 245X298	245	298	35	55

TECHNICAL DATA INTERCHANGEABLE POINTS FOR SERIE-MWS-IP HP

	CODE N.	FORM	MORSE TAPER	L1	L2	L3	A	B	C	D
	450-00133	A	3	27	28	-	10,4	25	-	-
	450-00156	A	4	29	31	-	12	29	-	-
	450-00179	A	5	30	36	-	17,2	35	-	-
	450-00135	B	3	27	34	16	10,4	25	12	-
	450-00158	B	4	29	37	16,5	12	29	12	-
	450-00181	B	5	30	42	19	17,2	35	15	-
	450-00136	C	3	27	30	19	10,4	25	5	-
	450-00159	C	4	29	30	19	12	29	5	-
	450-00182	C	5	29	30	19	17,2	29	5	-
	450-00139	D	3	27	30	-	10,4	29	23	-
	450-00162	D	4	29	30	-	12	29	23	-
	450-00185	D	5	30	35	-	17,2	35	27	-
	450-00141	E	3	27	35	-	10,4	59	26	-
	450-00164	E	4	29	35	-	12	59	26	-
	450-00187	E	5	30	35	-	17,2	59	26	-
	450-00134	F	3	27	28	-	10,4	25	-	11
	450-00157	F	4	29	31	-	12	29	-	11
	450-00180	F	5	30	36	-	17,2	35	-	14
	450-00137	G	3	27	34	16	10,4	25	12	7
	450-00160	G	4	29	37	16,5	12	29	12	7
	450-00183	G	5	30	42	19	17,2	35	15	11
	450-00138	H	3	27	34	11	10,4	25	7	-
	450-00161	H	4	29	37	13	12	29	7	-
	450-00184	H	5	30	42	12	17,2	35	7	-
	450-00140	I	3	27	25	21	10,4	12	8	-
	450-00163	I	4	29	25	21	12	12	8	-
	450-00186	I	5	30	25	21	17,2	12	8	-
	450-00142	L	3	27	35	-	10,4	78	46	-
	450-00165	L	4	29	35	-	12	78	46	-
	450-00188	L	5	30	35	-	17,2	78	46	-

TECHNICAL DATA INTERCHANGEABLE POINTS FOR SERIE-K1

	CODE N.	FORM	MORSE TAPER	L1	L2	L3	A	B
	450-00203	A	CM3/DIAM22	34	5	54	13	6
	450-00213	A	CM4/DIAM28	35	5	55	16	6
	450-00222	A	CM5/DIAM32	32	5	57	21	6
	450-00202	B	CM3/DIAM22	42	-	54	13	-
	450-00212	B	CM4/DIAM28	41	-	55	16	-
	450-00221	B	CM5/DIAM32	38	-	57	21	-
	450-00206	C	CM3/DIAM22	39	11	54	13	4
	450-00216	C	CM4/DIAM28	38	11	55	16	4
	450-00225	C	CM5/DIAM32	37	11	57	21	4
	450-00204	D	CM3/DIAM22	39	11	54	13	6
	450-00214	D	CM4/DIAM28	38	12	55	16	6
	450-00223	D	CM5/DIAM32	37	12	57	21	6
	450-00205	E	CM3/DIAM22	39	11	54	13	5
	450-00215	E	CM4/DIAM28	38	11	55	16	5
	450-00224	E	CM5/DIAM32	37	11	57	21	5

SPRINGS FOR SERIE-K1

SPRINGS	CODE N.	SERIES	Nm
GOLD SPRING 	450-00227	CM3/DIAM22	261
	450-00228	CM4/DIAM28	320
	450-00229	CM5/DIAM32	380
GREEN SPRING 	450-00237	CM3/DIAM22	61,3
	450-00240	CM4/DIAM28	87,3
	450-00241	CM5/DIAM32	96,4
RED SPRING 	450-00234	CM3/DIAM22	24,5
	450-00235	CM4/DIAM28	44,4
	450-00236	CM5/DIAM32	34,1
BLUE SPRING 	450-00238	CM3/DIAM22	17,8
	450-00239	CM4/DIAM28	25,8
	450-00233	CM5/DIAM32	23
YELLOW SPRING 	450-00230	CM3/DIAM22	9,8
	450-00231	CM4/DIAM28	13,7
	450-00232	CM5/DIAM32	14,1



READY, ALWAYS.