ISO Tolerances for Shafts (ISO 286-2)

Nominal Shaft Sizes (mm)																				
Dia-mm	3<6	6<10	10<18	18<30	30<40	40<50	50<65	65<80	80<100	100<120	120<140	140<160	160<180	180<200	200<225	225<250	250<280	280<315	315<355	355<400
a12	-270 -390	-280 -430	-290 -470	-300 -510	-310 -560	-320 -570	-340 -640	-360 -660	-380 -730	-410 -760	-460 -860	-520 -920	-580 -980	-660 -1120	-740 -1200	-820 -1280	-920 -1440	-1050 -1570	-1200 -1770	-1350 -1920
d6	-30 -38	-40 -49	-50 -61	-65 -78	-80 -96		-100 -119		-120 -142		-145 -170			-170 -199			-190 -222		-210 -246	
e6	-20 -28	-25 -34	-32 -43	-40 -53	-50 -66		-60 -79		-72 -94		-85 -110			-100 -129			-110 -142		-125 -161	
e13	-220	-270	-334	-410	-50 -440		-60 -520		-72 -612		-85 -715			-100 -820			-110 -920		-125 -1015	
f5	-25	-32	-40	-49	-25 -36		-30 -43		-36 -51		-43 -61			-50 -70			-56 -79		-62 -87	
f6	-10 -18	-13 -22	-16 -27	-20 -33	-25 -41		-30 -49		-36 -58		-43 -68			-50 -79			-56 -88		-62 -98	
f7	-10 -22	-13 -28	-16 -34	-20 -41	-25 -50		-30 -60		-36 -71		-43 -83			-50 -96			-56 -108		-62 -119	
g5	-4 -9	-5 -11	-6 -14	-7 -16	-9 -20		-10 -23		-12 -27		-14 -32			-15 -35			-17 -40		-18 -43	
g6	-4 -12	-5 -14	-6 -17	-7 -20	-9 -25		-10 -29		-12 -34		-14 -39			-15 -44			-17 -49		-18 -54	
g7	-4 -16	-5 -20	-6 -24	-7 -28	-9 -34		-10 -40		-12 -47		-14 -54			-15 -61			-17 -69		-18 -75	
h4	0 -4	-0 -4	-0 -5	-0 -6	-0 -7		-0 -8		0 -10		-0 -12			-0 -14			0 -16		-0 -18	
h5	0 -5	-0 -6	-0 -8	-0 -9	-0 -11		-0 -13		0 -15		-0 -18			-0 -20			0 -23		-0 -25	
h6	0 -8	0 -9	0 -11	0 -13	-0 -16		-0 -19		0 -22		-0 -25			-0 -29			0 -32		-0 -36	
h7	0 -12	-0 -15	-0 -18	0 -21	-0 -25		-0 -30		0 -35		-0 -40			-0 -46			0 -52		-0 -57	
h8	0 -18	-0 -22	-0 -27	0 -33	-0 -39		-0 -46		0 -54		-0 -63			-0 -72			0 -81		-0 -89	
h9	0 -30	-0 -36	-0 -43	0 -52	-0 -62		-0 -74		0 -87		-0 -100			-0 -115			0 -130		-0 -140	
h10	0 -48	-0 -58	-0 -70	0 -84	-0 -100		-0 -120		0 -140		-0 -160			-0 -185			0 -210		-0 -230	
h11	0 -75	-0 -90	-0 -110	0 -130	-0 -160		-0 -190		0 -220		-0 -250			-0 -290			0 -320		-0 -360	
h12	0 -120	-0 -150	-0 -180	0 -210	-0 -250		-0 -300		0 -350		-0 -400			-0 -460			0 -520		-0 -570	
j5	3 -2	+4 -2	+5 -3	+5 -4	+6 -5		+6 -7		6 -9		+7 -11			+7 -13			7 -16		+7 -18	
j6	6 -2	7 -2	+8 -3	+9 -4	+11 -5		+12 -7		13 -9		+14 -11			+16 -13			16 -16		+18 -18	
j7	8 -4	10 -5	+12 -6	+13 -8	+15 -10		+18 -12		20 -15		+22 -18			+25 -21			26 -26		+29 -28	
js5	2.5 -2.5	3 -3	4 -4	+4.5 -4.5	+5.5 -5.5		+6.5 -6.5		7.5 -7.5		9 -9			+10 -10			11.5 -11.5		+12.5 -12.5	
js6	4 -4	4.5 -4.5	5.5 -5.5	+6.5 -6.5	+8 -8		+9.5 -9.5		11 -11		12.5 -12.5			+14.5 -14.5			+16 -16		18 -18	
js7	6 -6	7.5 -7.5	9 -9	+10.5 -10.5	+12.5 -12.5		+15 -15		17.5 -17.5		20 -20			+23 -23			+26 -26		28.5 -28.5	
k5	6 1	+7 1	+9 1	+11 2	+13 2		+15 2		18 3		21 3			+24 4			27 4		+29 4	
k6	9 1	+10 1	+12 1	+15 2	+18 2		+21 2		25 3		28 3			+33 4			36 4		+40 4	
k7	13 1	+16 1	+19 1	+23 2	+27 2		+32 2		38 3		43 3			+50 4			56 4		+61 4	
m5	9 4	+12 6	+15 7	+17 8	+20 9		+24 11		28 13		33 15			+37 17			43 20		+46 21	
m6	12 4	+15 6	+18 7	+21 8	+25 9		+30 11		35 13		40 15			+46 17			52 20		+57 21	
m7	16 4	+21 6	+25 7	+29 8	+34 9		+41 11		48 13		55 15			+63 17			72 20		+78 21	
n5	13 8	+16 10	+20 12	+24 15	+28 17		+33 20		38 23		45 27			+51 31			57 34		+62 37	
n6	16 8	+19 10	+23 12	+28 15	+33 17		+39 20		45 23		52 27			+60 31			66 34		+73 37	
n7	20 8	+25 10	+30 12	+36 15	+42 17		+50 20		58 23		67 27			+77 31			86 34		+94 37	
p5	17 12	+21 15	+26 18	+31 22	+37 26		+45 32		52 37		61 43			+70 50			79 56		+87 62	
p6	20 12	+24 15	+29 18	+35 22	+42 26		+51 32		59 37		68 43			+79 50			88 56		+98 62	
r6	23 15	+28 19	+34 23	+41 28	+50 34		+60 41	62 43	73 51	+76 54	88 63	+90 65	93 68	+106 77	109 80	+113 84	+126 94	130 98	+144 108	150 114