

ISO Bore Tolerance Chart

For bore tolerance system, Nominal sizes from 1 - 160mm DIN 7160 (8.65)

Nominal dimension over to	Tolerance Zones																			
	U7	S7	R7	P7	P9	N7	N9	M7	K7	J7	JS9	H7	H8	H11	G7	F7	F8	E8	E9	D10
	deviations in μm																			
1 3	-18	-14	-10	-6	-6	-4	-4	-2	0	+4	+12.5	+10	+14	+60	+12	+16	+20	+28	+39	+60
	-28	-24	-20	-16	-31	-14	-29	-12	-10	-6	-12.5	0	0	0	+2	+6	+6	+14	+14	+20
3 6	-19	-15	-11	-8	-12	-4	0	0	+3	+6	+15	+12	+18	+75	+16	+22	+28	+38	+50	+78
	-31	-27	-23	-20	-42	-16	-30	-12	-9	-6	-15	0	0	0	+4	+10	+10	+20	+20	+30
6 10	-22	-17	-13	-9	-15	-4	0	0	+5	+8	+18	+15	+22	+90	+20	+28	+35	+47	+61	+98
	-37	-32	-28	-24	-51	-19	-36	-15	-10	-7	-18	0	0	0	+5	+13	+13	+25	+25	+40
10 18	-26	-21	-16	-11	-18	-5	0	0	+6	+10	+21.5	+18	+27	+110	+24	+34	+43	+59	+75	+120
	-44	-39	-34	-29	-61	-23	-43	-18	-12	-8	-21.5	0	0	0	+6	+16	+16	+32	+32	+50
18 24	-33	-27	-20	-14	-22	-7	0	0	+6	+12	+26	+21	+33	+130	+28	+41	+53	+73	+92	+149
	-54	-48	-41	-35	-74	-28	-52	-21	-15	-9	-26	0	0	0	+7	+20	+20	+40	+40	+65
24 30	-40	-27	-20	-14	-22	-7	0	0	+6	+12	+26	+21	+33	+130	+28	+41	+53	+73	+92	+149
	-61	-48	-41	-35	-74	-28	-52	-21	-15	-9	-26	0	0	0	+7	+20	+20	+40	+40	+65
30 40	-51	-34	-25	-17	-26	-8	0	0	+7	+14	+31	+25	+39	+160	+34	+50	+64	+89	+112	+180
	-76	-59	-50	-42	-88	-33	-62	-25	-18	-11	-31	0	0	0	+9	+25	+25	+50	+50	+80
40 50	-61	-34	-25	-17	-26	-8	0	0	+7	+14	+31	+25	+39	+160	+34	+50	+64	+89	+112	+180
	-86	-59	-50	-42	-88	-33	-62	-25	-18	-11	-31	0	0	0	+9	+25	+25	+50	+50	+80
50 65	-76	-42	-30	-21	-32	-9	0	0	+9	+18	+37	+30	+46	+190	+40	+60	+76	+106	+134	+220
	-106	-75	-60	-51	-106	-39	-74	-30	-21	-12	-37	0	0	0	+10	+30	+30	+60	+60	+100
65 80	-91	-48	-32	-21	-32	-9	0	0	+9	+18	+37	+30	+46	+190	+40	+60	+76	+106	+134	+220
	-121	-78	-62	-51	-106	-39	-74	-30	-21	-12	-37	0	0	0	+10	+30	+30	+60	+60	+100
80 100	-111	-58	-38	-24	-37	-10	0	0	+10	+22	+43.5	+35	+54	+220	+47	+71	+90	+126	+159	+260
	-146	-93	-73	-59	-124	-45	-87	-35	-25	-13	-43.5	0	0	0	+12	+36	+36	+72	+72	+120
100 120	-133	-66	-41	-24	-37	-10	0	0	+10	+22	+43.5	+35	+54	+220	+47	+71	+90	+126	+159	+260
	-166	-101	-76	-59	-124	-45	-87	-35	-25	-13	-43.5	0	0	0	+12	+36	+36	+72	+72	+120
120 140	-155	-77	-48	-28	-43	-12	0	0	+12	+26	+50	+40	+63	+250	+54	+83	+106	+148	+185	+305
	-195	-117	-88	-68	-143	-52	-100	-40	-28	-14	-50	0	0	0	+14	+43	+43	+85	+85	+145
140 160	-175	-85	-50	-28	-43	-12	0	0	+12	+26	+50	+40	+63	+250	+54	+83	+106	+148	+185	+305
	-215	-125	-90	-68	-143	-52	-100	-40	-28	-14	-50	0	0	0	+14	+43	+43	+85	+85	+145

ISO Shaft Tolerance Chart

For shaft tolerance system, Nominal sizes from 1 - 160mm DIN 7160 (8.65)

Nominal dimension over to		Tolerance Zones																	
		u8	s6	r6	p6	n6	m6	k6	j6	j7	js7	h6	h8	h9	n11	g6	f7	e8	d9
		deviations in μm																	
1	3	+32	+20	+16	+12	+10	+8	+6	+4	+6	+5	0	0	0	0	-2	-6	-14	-20
		+18	+14	+10	+6	+4	+2	0	-2	-4	-5	-6	-14	-25	-60	-8	-16	-28	-45
3	6	+41	+27	+23	+20	+16	+12	+9	+6	+8	+6	0	0	0	0	-4	-10	-20	-30
		+23	+19	+15	+12	+8	+4	+1	-2	-4	-6	-8	-18	-30	-75	-12	-22	-38	-60
6	10	+50	+32	+28	+24	+19	+15	+10	+7	+10	+7.5	0	0	0	0	-5	-13	-25	-40
		+28	+23	+19	+15	+10	+6	+1	-2	-5	-7.5	-9	-22	-36	-90	-14	-28	-47	-76
10	18	+60	+39	+34	+29	+23	+18	+12	+8	+12	+9	0	0	0	0	-6	-16	-32	-50
		+33	+28	+23	+18	+12	+7	+1	-3	-6	-9	-11	-27	-43	-110	-17	-34	-59	-93
18	24	-74	+48	+41	+35	+28	+21	+15	+9	+13	+10.5	0	0	0	0	-7	-20	-40	-65
		+41	+35	+28	+22	+15	+8	+2	-4	-8	-10.5	-13	-33	-52	-130	-20	-41	-73	-117
24	30	-81	+48	+41	+35	+28	+21	+15	+9	+13	+10.5	0	0	0	0	-7	-20	-40	-65
		+48	+35	+28	+22	+15	+8	+2	-4	-8	-10.5	-13	-33	-52	-130	-20	-41	-73	-117
30	40	+99	+59	+50	+42	+33	+25	+19	+11	+15	+12.5	0	0	0	0	-9	-25	-50	-80
		+60	+43	+34	+26	+17	+9	+2	-5	-10	-12.5	-16	-39	-62	-160	-25	-50	-89	-142
40	50	+109	+59	+50	+42	+33	+25	+19	+11	+15	+12.5	0	0	0	0	-9	-25	-50	-80
		+70	+43	+34	+26	+17	+9	+2	-5	-10	-12.5	-16	-39	-62	-160	-25	-50	-89	-142
50	65	+133	+72	+60	+51	+39	+30	+21	+12	+18	+16	0	0	0	0	-10	-30	-60	-100
		+87	+53	+41	+32	+20	+11	+2	-7	-12	-15	-19	-46	-74	-190	-29	-60	-106	-174
65	80	+148	+78	+62	+51	+39	+30	+21	+12	+18	+16	0	0	0	0	-10	-30	-60	-100
		+102	+59	+43	+32	+20	+11	+2	-7	-12	-15	-19	-46	-74	-190	-29	-60	-106	-174
80	100	+178	+93	+73	+59	+45	+35	+25	+13	+20	+17.5	0	0	0	0	-12	-36	-72	-120
		+124	+71	+51	+37	+23	+13	+3	-9	-15	-17.5	-22	-54	-87	-220	-34	-71	-126	-207
100	120	+198	+101	+76	+59	+45	+35	+25	+13	+20	+17.5	0	0	0	0	-12	-36	-72	-120
		+144	+79	+54	+37	+23	+13	+3	-9	-15	-17.5	-22	-54	-87	-220	-34	-71	-126	-207
120	140	+233	+117	+88	+68	+52	+40	+28	+14	+22	+20	0	0	0	0	-14	-43	-85	-145
		+170	+92	+63	+43	+27	+15	+3	-11	-18	-20	-25	-63	-100	-250	-39	-83	-148	-245
140	160	+253	+125	+90	+68	+52	+40	+28	+14	+22	+20	0	0	0	0	-14	-43	-85	-145
		+190	+100	+65	+43	+27	+15	+3	-11	-18	-20	-25	-63	-100	-250	-39	-83	-148	-245