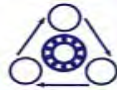




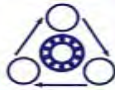
## ISO Shaft Limits

Shaft Diameter		Bearing Bore Tolerance		Shaft Diameter Tolerances													
nominal		d <sub>ms</sub>		f6 deviations		g6		g5		h11		h10		IT7	h9		IT5
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low		high	low	
mm		µm		µm													
3	6	0	-8	-10	-18	-4	-12	-4	-9	0	-75	0	-48	12	0	-30	5
6	10	0	-8	-13	-22	-5	-14	-5	-11	0	-90	0	-58	15	0	-36	6
10	18	0	-8	-16	-27	-6	-17	-6	-14	0	-110	0	-70	18	0	-43	8
18	30	0	-10	-20	-33	-7	-20	-7	-16	0	-130	0	-84	21	0	-52	9
30	50	0	-12	-25	-41	-9	-25	-9	-20	0	-160	0	-100	25	0	-62	11
50	80	0	-15	-30	-49	-10	-29	-10	-23	0	-190	0	-120	30	0	-74	13
80	120	0	-20	-36	-58	-12	-34	-12	-27	0	-220	0	-140	35	0	-87	15
120	180	0	-25	-43	-68	-14	-39	-14	-32	0	-250	0	-160	40	0	-100	18
180	250	0	-30	-50	-79	-15	-44	-15	-35	0	-290	0	-185	46	0	-115	20
250	315	0	-35	-56	-88	-17	-49	-17	-40	0	-320	0	-210	52	0	-130	23
315	400	0	-40	-62	-98	-18	-54	-18	-43	0	-360	0	-230	57	0	-140	25
400	500	0	-45	-68	-108	-20	-60	-20	-47	0	-400	0	-250	63	0	-155	27
500	630	0	-50	-76	-120	-22	-66			0	-440	0	-280	70	0	-175	
630	800	0	-75			-24	-74			0	-500	0	-320	80	0	-200	
800	1000	0	-100			-26	-82			0	-560	0	-360	90	0	-230	
1000	1250	0	-125			-28	-94			0	-660	0	-420	105	0	-260	



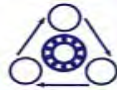
## ISO Shaft Limits

Shaft Diameter		Bearing Bore Tolerance		Shaft Diameter Tolerances													
nominal		d <sub>ms</sub>		h8 deviations		h7		h6		h5		j5		j6		js6	
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low	high	low	high	low
mm		µm		µm													
3	6	0	-8	0	-18	0	-12	0	-8	0	-5	+3	-2	+6	-2	+4	-4
6	10	0	-8	0	-22	0	-15	0	-9	0	-6	+4	-2	+7	-2	+4.5	-4.5
10	18	0	-8	0	-27	0	-18	0	-11	0	-8	+5	-3	+8	-3	+5.5	-5.5
18	30	0	-10	0	-33	0	-21	0	-13	0	-9	+5	-4	+9	-4	+6.5	-6.5
30	50	0	-12	0	-39	0	-25	0	-16	0	-11	+6	-5	+11	-5	+8	-8
50	80	0	-15	0	-46	0	-30	0	-19	0	-13	+6	-7	+12	-7	+9.5	-9.5
80	120	0	-20	0	-54	0	-35	0	-22	0	-15	+6	-9	+13	-9	+11	-11
120	180	0	-25	0	-63	0	-40	0	-25	0	-18	+7	-11	+14	-11	+12.5	-12.5
180	250	0	-30	0	-72	0	-46	0	-29	0	-20	+7	-13	+16	-13	+14.5	-14.5
250	315	0	-35	0	-81	0	-52	0	-32	0	-23	+7	-16	+16	-16	+16	-16
315	400	0	-40	0	-89	0	-57	0	-36	0	-25	+7	-18	+18	-18	+18	-18
400	500	0	-45	0	-97	0	-66.3	0	-40	0	-27	+7	-20	+20	-20	+20	-20
500	630	0	-50	0	-110	0	-70	0	-44							+22	-22
630	800	0	-75	0	-125	0	-80	0	-50							+25	-25
800	1000	0	-100	0	-140	0	-0	0	-56							+28	-28
1000	1250	0	-125	0	-165	0	-105	0	-66							+33	-33



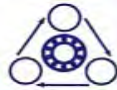
## ISO Shaft Limits

Shaft Diameter		Bearing Bore Tolerance		Shaft Diameter Tolerances											
nominal		d <sub>ms</sub>		k5 deviations		k6		m5		m6		n6		p6	
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low	high	low
mm		µm		µm											
3	6	0	-8	+6	+1										
6	10	0	-8	+7	+1										
10	18	0	-8	+8	+1	+12	+1	+15	+7	+18	+7	+23	+12	+29	+18
18	30	0	-10	+11	+2	+15	+2	+17	+8	+21	+8	+28	+15	+35	+22
30	50	0	-12	+13	+2	+18	+2	+20	+9	+25	+9	+33	+17	+42	+26
50	80	0	-15	+15	+2	+21	+2	+24	+11	+30	+11	+39	+20	+51	+32
80	120	0	-20	+18	+3	+25	+3	+28	+13	+35	+13	+45	+23	+59	+37
120	180	0	-25	+21	+3	+28	+3	+33	+15	+40	+15	+52	+27	+68	+43
180	250	0	-30	+24	+4	+33	+4	+37	+17	+46	+17	+60	+31	+79	+50
250	315	0	-35	+27	+4	+36	+4	+43	+20	+52	+20	+66	+34	+88	+56
315	400	0	-40	+29	+4	+40	+4	+46	+21	+57	+21	+73	+37	+98	+62
400	500	0	-45	+32	+5	+45	+5	+50	+23	+63	+23	+80	+40	+108	+68
500	630	0	-50			+44	0			+70	+26	+88	+44	+122	+79
630	800	0	-75			+50	0			+80	+30	+100	+50	+138	+88
800	1000	0	-100			+56	0			+90	+34	+112	+56	+156	+100
1000	1250	0	-125			+66	0			+106	+40	+132	+66	+186	+120



## ISO Shaft Limits

Shaft Diameter		Bearing Bore Tolerance		Shaft Diameter Tolerances			
nominal		d <sub>ms</sub>		r6 deviations		r7	
over	incl.	max	min	high	low	high	low
mm		µm		µm			
120	140	0	-25	+88	+63	+103	+63
140	160	0	-25	+90	+65	+105	+65
160	180	0	-25	+93	+68	+108	+68
180	200	0	-30	+106	+77	+123	+77
200	225	0	-30	+109	+80	+126	+80
225	250	0	-30	+113	+84	+130	+84
250	280	0	-35	+126	+94	+146	+94
280	315	0	-35	+130	+98	+150	+98
315	355	0	-40	+144	+108	+165	+108
355	400	0	-40	+150	+114	+171	+114
400	450	0	-45	+166	+126	+189	+126
450	500	0	-45	+172	+132	+195	+132
500	560	0	-50	+194	+150	+220	+150
560	630	0	-50	+199	+155	+225	+155
630	710	0	-75	+225	+175	+255	+175
710	800	0	-75	+2355	+185	+265	+185
800	900	0	-100	+266	+210	+300	+210
900	1000	0	-100	+276	+220	+310	+220
1000	1120	0	-125	+316	+250	+355	+250
1120	1250	0	-125	+326	+260	+365	+260



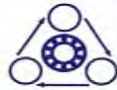
## ISO Housing Limits

Housing Bore Diameter		Bearing Outside Diameter Tolerance		Housing Bore Tolerances											
nominal		D <sub>ms</sub>		F8 deviations		F7		F6		G7		G6		H11	
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low	high	low
mm		µm		µm											
10	18	0	-8	+43	+16	+34	+16	+27	+16	+24	+6	+17	+6	+110	0
18	30	0	-9	+53	+20	+41	+20	+33	+20	+28	+7	+20	+7	+130	0
30	50	0	-11	+64	+25	+50	+25	+41	+25	+34	+9	+25	+9	+160	0
50	80	0	-13	+76	+30	+60	+30	+49	+30	+40	+10	+29	+10	+190	0
80	120	0	-15	+90	+36	+71	+36	+58	+36	+47	+12	+34	+12	+220	0
120	150	0	-18	+106	+43	+83	+43	+68	+43	+54	+14	+39	+14	+250	0
150	180	0	-25	+106	+43	+83	+43	+68	+43	+54	+14	+39	+14	+250	0
180	250	0	-30	+122	+50	+96	+50	+79	+50	+61	+15	+44	+15	+290	0
250	315	0	-35	+137	+56	+108	+56	+88	+56	+69	+17	+49	+17	+320	0
315	400	0	-40	+151	+62	+119	+62	+98	+62	+75	+18	+54	+18	+360	0
400	500	0	-45	+165	+68	+131	+68	+108	+68	+83	+20	+60	+20	+400	0
500	630	0	-50	+186	76	+146	+76	+120	+76	+92	+22	+66	+22	+440	0
630	800	0	-75							+104	+24	+74	+24	+500	0
800	1000	0	-100							+116	+26	+82	+26	+560	0
1000	1250	0	-125							+133	+28	+94	+28	+660	0
1250	1600	0	-160							+155	+30	+108	+30	+780	0



## ISO Housing Limits

Housing Bore Diameter		Bearing Outside Diameter Tolerance		Housing Bore Tolerances		H9		H8		H7		H6		J7	
nominal		D <sub>ms</sub>		H10 deviations		H9		H8		H7		H6		J7	
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low	high	low
mm		µm		µm		µm		µm		µm		µm		µm	
10	18	0	-8	+70	0	+43	0	+27	0	+18	0	+11	0	+10	-8
18	30	0	-9	+84	0	+52	0	+33	0	+21	0	+13	0	+12	-9
30	50	0	-11	+100	0	+62	0	+39	0	+25	0	+16	0	+14	-11
50	80	0	-13	+120	0	+74	0	+46	0	+30	0	+19	0	+18	-12
80	120	0	-15	+140	0	+87	0	+54	0	+35	0	+22	0	+22	-13
120	150	0	-18	+160	0	+100	0	+63	0	+40	0	+25	0	+26	-14
150	180	0	-25	+160	0	+100	0	+63	0	+40	0	+25	0	+26	-14
180	250	0	-30	+185	0	+115	0	+72	0	+46	0	+29	0	+30	-16
250	315	0	-35	+210	0	+130	0	+81	0	+52	0	+32	0	+36	-16
315	400	0	-40	+230	0	+140	0	+89	0	+57	0	+36	0	+39	-18
400	500	0	-45	+250	0	+155	0	+97	0	+63	0	+40	0	+43	-20
500	630	0	-50	+280	0	+175	0	+110	0	+70	0	+44	0		
630	800	0	-75	+320	0	+200	0	+125	0	+80	0	+50	0		
800	1000	0	-100	+360	0	+230	0	+140	0	+90	0	+56	0		
1000	1250	0	-125	+420	0	+260	0	+165	0	+105	0	+66	0		
1250	1600	0	-160	+500	0	+310	0	+195	0	+125	0	+78	0		



## ISO Housing Limits

Housing Bore Diameter		Bearing Outside Diameter Tolerance		Housing Bore Tolerances		J6		JS6		K6		K7		M6	
nominal		D <sub>ms</sub>		JS7 deviations		J6		JS6		K6		K7		M6	
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low	high	low
mm		µm		µm											
10	18	0	-8	+9	-9	+6	-5	+5.5	-5.5	+2	-9	+6	-12	-4	-15
18	30	0	-9	+10.5	-10.5	+8	-5	+6.5	-6.5	+2	-11	+6	-15	-4	-17
30	50	0	-11	+12.5	-12.5	10	-6	+8	-8	+3	-13	+7	-18	-4	-20
50	80	0	-13	+15	-15	+13	-6	+9.5	-9.5	+4	-15	+9	-21	-5	-24
80	120	0	-15	+17.5	-17.5	+16	-6	+11	-11	+4	-18	+10	-25	-6	-28
120	150	0	-18	+20	-20	+18	-7	+12.5	-12.5	+4	-21	+12	-28	-8	-33
150	180	0	-25	+20	-20	+18	-7	+12.5	-12.5	+4	-21	+12	-28	-8	-33
180	250	0	-30	+23	-23	+22	-7	+14.5	-14.5	+5	-24	+13	-33	-8	-37
250	315	0	-35	+26	-26	+25	-7	+16	-16	+5	-27	+16	-36	-9	-41
315	400	0	-40	+28.5	-28.5	+29	-7	+18	-18	+7	-29	+17	-40	-10	-46
400	500	0	-45	+31.5	-31.5	+33	-7	+20	-20	+8	-32	+18	-45	-10	-50
500	630	0	-50	+35	-35			+22	-22	0	-44	0	-70	-26	-70
630	800	0	-75	+40	-40			+25	-25	0	-50	0	-90	-30	-80
800	1000	0	-100	+45	-45			+28	-28	0	-56	0	-90	-34	-90
1000	1250	0	-125	+52	-52			+33	-33	0	-66	0	-105	-40	-106
1250	1600	0	-160	+62	-62			+39	-39	0	-78	0	-125	-48	-126



## ISO Housing Limits

Housing Bore Diameter		Bearing Outside Diameter Tolerance		Housing Bore Tolerances											
nominal		D <sub>ms</sub>		M7 deviations		N6		N7		P7		R6		R7	
over	incl.	max	min	high	low	high	low	high	low	high	low	high	low	high	low
mm		µm		µm											
10	18	0	-8	0	-18	-9	-20	-5	-23	-11	-29	-20	-31	-16	-34
18	30	0	-9	0	-21	-11	-24	-7	-28	-14	-35	-24	-37	-20	-41
30	50	0	-11	0	-25	-12	-28	-8	-33	-17	-42	-29	-45	-25	-50
50	65	0	-13	0	-30	-14	-33	-9	-39	-21	-51	-35	-54	-30	-60
65	80	0	-13	0	-30	-14	-33	-9	-39	-21	-51			-32	-62
80	120	0	-15	0	-35	-16	-38	-10	-45	-24	-59				
120	150	0	-18	0	-40	-20	-45	-12	-52	-28	-68				
150	180	0	-25	0	-40	-20	-45	-12	-52	-28	-68				
180	250	0	-30	0	-46	-22	-51	-14	-60	-33	-79				
250	315	0	-35	0	-52	-25	-57	-14	-66	-36	-88				
315	400	0	-40	0	-57	-26	-62	-16	-76	-41	-98				
400	500	0	-45	0	-63	-27	-47	-17	-80	-45	-108				
500	630	0	-50			-44	-88	-44	-114	-78	-148				
630	800	0	-75			-50	-100	-50	-130	-88	-168				
800	1000	0	-100			-56	-112	-56	-146	-100	-190				
1000	1250	0	-125			-66	-132	-66	-171	-120	-225				
1250	1600	0	-160			-78	-156	-78	-203	-140	-265				