Table 1: Inner Ring of Class 0 Tolerance

μm

d mm		Δdmp		V_{dp} 2)			V_{dmp}	K_{ia}	ΔBs			V_{BS}
				Diameter series					All	Normal	Modfiy 3)	
				9	0, 1	2, 3, 4						
Over	To	Upper value	Lower Value	max			max	max	Upper value	Lower Value		max
0.6 1)	**2.5**	0	-8	10	8	6	6	10	0	-40		12
2.5	**10**		-8	10	8	6	6	10		-120	-250	15
10	**18**		-8	10	8	6	6	10		-120	-250	20
18	**30**		-10	13	10	8	8	13		-120	-250	20
30	**50**		-12	15	12	9	9	15		-120	-250	20
50	**80**		-15	19	19	11	11	20		-150	-380	25
80	**120**		-20	25	25	15	15	25		-200	-380	25
120	**180**		-25	31	31	19	19	30		-250	-500	30
180	**250**		-30	38	38	23	23	40		-300	-500	30

Note: 1) Including 0.6.
2) Diameter series 7 and 8, no regular value.
3) Indicating the single internal ring of the bearing to be use in pair or group during installation.

Table 2: Outer Ring of Class O Tolerance

μm

D mm		ΔDmp		V_{Dp} 2)4)				V_{Dmp} 4)	K_{ea}	ΔCs 5)	ΔC1s 5)	V_{Cs} 5) V_{C1s} 5)
				Open			Close					
				Diameter series								
				9	0, 1	2, 3, 4	2, 3, 4					
Over	To	Upper value	Lower Value	max			max	max	max	Upper value	Lower Value	max
2.5 1)	**6**	0	-8	10	8	6	10	6	15	Be same with ΔBs and VBS of the inner ring		
6	**18**		-8	10	8	6	10	6	15			
18	**30**		-9	12	9	7	12	7	15			
30	**50**		-11	14	11	8	16	8	20			
50	**80**		-13	16	13	10	20	10	25			
80	**120**		-15	19	19	11	26	11	35			
120	**150**		-18	23	23	14	30	14	40			
150	**180**		-25	31	31	19	38	19	45			
180	**250**		-30	38	38	23	—	23	50			
250	**315**		-35	44	44	26	—	26	60			

Note: 1) Including 2.5.
2) Diameter series 7 and 8, no regular value.
3) Diameter series 9,0 and 1, no regular value.
4) Suitable for inside and outside breake ring befor installation or after discharge.
5) Only suitable for deep groove ball bearings.

Table 3: Inner Ring of Class 6 Tolerance m

d mm		D**d**mp		V_{dp}[2)]			V_{dmp}	K_{ia}	D**Bs**			V_{BS}
				Diameter series					All	Normal	Modfiy[3)]	
				9	0, 1	2, 3, 4						
Over	To	Upper value	Lower Value	max			max	max	Upper value	Lower Value		max
0.6[1)]	**2.5**		-7	9	7	5	5	5		-40		12
2.5	**10**		-7	9	7	5	5	6		-120	-250	15
10	**18**		-7	9	7	5	5	7		-120	-250	20
18	**30**		-8	10	8	6	6	8		-120	-250	20
30	**50**	0	-10	13	10	8	8	10	0	-120	-250	20
50	**80**		-12	15	15	9	9	10		-150	-380	25
80	**120**		-15	19	19	11	11	13		-200	-380	25
120	**180**		-18	23	23	14	14	18		-250	-500	30
180	**250**		-22	28	28	17	17	20		-300	-500	30

Note: 1) Including 0.6.
2) Diameter series 7 and 8, no regular value.
3) Indicating the single internal ring of the bearing to be use in pair or group during installation.

Table 4: Outer Ring of Class 6 Tolerance m

D mm		D**D**mp		V_{Dp}[2)4)]				V_{Dmp}[4)]	K_{ea}	DC_s[5)]	DC_{1s}[5)]	V_{Cs}[5)] V_{C1s}[5)]
				Open			Close					
				Diameter series								
				9	0, 1	2, 3, 4	2, 3, 4					
Over	To	Upper value	Lower Value	max			max	max	max	Upper value	Lower Value	max
2.5[1)]	**6**		-7	9	7	5	9	5	8			
6	**18**		-7	9	7	5	9	5	8			
18	**30**		-8	10	8	6	10	6	9			
30	**50**		-9	11	9	7	13	7	10			
50	**80**	0	-11	14	11	8	16	8	13	Be same with DBs and VBS of the inner ring		
80	**120**		-13	16	16	10	20	10	18			
120	**150**		-15	19	19	11	25	11	20			
150	**180**		-18	23	23	14	30	14	23			
180	**250**		-20	25	25	15	—	15	25			
250	**315**		-25	31	31	19	—	19	30			

Note: 1) Including 2.5.
2) Diameter series 7 and 8, no regular value.
3) Diameter series 9,0 and 1, no regular value.
4) Suitable for inside and outside breake ring befor installation or after discharge.
5) Only suitable for deep groove ball bearings.

Table 5: Inner Ring of Class 5 Tolerance m

d mm		ΔdMp		V_{dp}[2]		V_{dmp}	K_{ia}	S_d	S_{ia}[3]	ΔBs			V_{BS}
				Diameter series						All	Normal	Modfiy[4]	
				9	0, 1 2, 3, 4								
Over	To	Upper value	Lower Value	max			max	max		Upper value	Lower Value		max
0.6[1]	**2.5**	0	-5	5	4	3	4	7	7	0	-40	-250	5
2.5	**10**		-5	5	4	3	4	7	7		-40	-250	5
10	**18**		-5	5	4	3	4	7	7		-80	-250	5
18	**30**		-6	6	5	3	4	8	8		-120	-250	5
30	**50**		-8	8	6	4	5	8	8		-120	-250	5
50	**80**		-9	9	7	5	5	8	8		-150	-250	6
80	**120**		-10	10	8	5	6	9	9		-200	-380	7
120	**180**		-13	13	10	7	8	10	10		-250	-380	8
180	**250**		-15	15	12	8	10	11	13		-300	-500	10

Note: 1) Including 0.6.
2) Diameter series 7 and 8, no regular value.
3) Indicating the single internal ring of the bearing to be use in pair or group during installation.

Table 4: Outer Ring of Class 6 Tolerance m

d mm		ΔdMp		V_{Ddp}[2][3]		V_{Dmp}	K_{ea}	S_D[4] S_D[5]	S_{ea}[4][3]	S_{ea1}[5]	ΔCs[5] ΔC1s[5]		V_{Cs}[5] V_{C1s}[5]
				Diameter series									
				9	0, 1 2, 3, 4								
Over	To	Upper value	Lower Value	max		max	max	max	max	max	Upper value	Lower Value	max
0.6[1]	**2.5**	0	-5	5	4	3	5	8	8	11	Be same with ΔBs and VBS of the inner ring		5
2.5	**10**		-5	5	4	3	5	8	8	11			5
10	**18**		-5	5	4	3	6	8	8	11			5
18	**30**		-6	6	5	3	7	8	8	11			5
30	**50**		-8	8	6	4	8	8	10	14			6
50	**80**		-9	9	7	5	10	9	11	16			8
80	**120**		-10	10	8	5	11	10	13	18			8
120	**180**		-13	13	10	7	13	10	14	20			8
180	**250**		-15	15	11	8	15	15	11	21			10
250	**315**		-18	18	14	9	18	13	18	25			11

Note: 1) Including 2.5.
2) Diameter series 7 and 8, no regular value.
3) Diameter series 9,0 and 1, no regular value.
4) Suitable for inside and outside breake ring befor installation or after discharge.
5) Only suitable for deep groove ball bearings.

Table 7: Inner Ring of Class 4 Tolerance m

d mm		Δdmp				V_{dp} 2)		V_{dmp}	K_{ia}	S_d	S_{ia} 4)	ΔBs			V_{BS}
						Diameter series						All	Normal	Modfiy 5)	
						9	0, 1,2,3,4								
Over	To	Upper value	Lower Value	Upper value	Lower Value	max		max	max	max	max	Upper value	Lower Value		max
0.6 1)	2.5	0	-4	0	-4	4	3	2	2.5	3	3	0	-40	-250	2.5
2.5	10		-4		-4	4	3	2	2.5	3	3		-40	250	2.5
10	18		-4		-4	4	3	2	2.5	3	3		-80	-250	2.5
18	30		-5		-5	5	4	2.5	3	4	4		-120	-250	2.5
30	50		-6		-6	6	5	3	4	4	4		-120	-250	3
50	80		-7		-7	7	5	3.5	4	5	5		-150	-250	4
80	120		-8		-8	8	6	4	5	5	5		-200	-380	4
120	180		-10		-10	10	8	5	6	6	7		-250	-380	5
180	250		-12		-12	12	9	6	8	7	8		-300	-500	6

Note: 1) Including 0.6.
2) Only suitable for diameter series 0,1,2,3 and 4.
3) Diameter series 7 and 8, no regular value.
4) Only suitable for deep groove ball bearings.
5) Indicating the single internal ring of the bearing to be use in pair or group during installation.

Table 8: Outer Ring of Class 4 Tolerance m

D mm		ΔDmp		ΔDs 2)3)4)		V_{Dp} 3)4)		V_{Dmp}	K_{ea}	S_D 5) S_{d1} 6)	S_{ea} 5)6)	S_{ea1} 6)	ΔCs ΔC1s	V_{cs} V_{C1s}
						Diameter series								
						9	0, 1,2,3,4							
Over	To	Upper value	Lower Value	Upper value	Lower Value	max		max	max	max	max	Upper value	Lower Value	max
2.5 1)	6	0	-4	0	-4	4	3	2	3	4	5	7	ΔBe same with Bs and VBS of the inner ring	2.5
6	18		-4		-4	4	3	2	3	4	5	7		2.5
18	30		-5		-5	5	4	2.5	4	4	5	7		2.5
30	50		-6		-6	6	5	3	5	4	5	7		2.5
50	80		-7		-7	7	5	3.5	5	4	5	7		3
80	120		-8		-8	8	6	4	6	5	6	8		4
120	150		-9		-9	9	7	5	7	5	7	10		5
150	180		-10		-10	10	8	5	8	5	8	11		5
180	250		-11		-11	11	8	6	10	7	10	14		7
250	315		-13		-13	13	10	7	11	8	11	14		7

Note: 1) Including 2.5.
2) Diameter series 7 and 8, no regular value.
3) Diameter series 9,0 and 1, no regular value.
4) Suitable for inside and outside breake ring befor installation or after discharge.
5) Only suitable for deep groove ball bearings.

DEEP GROOVE BALL BEARINGS TOLERANCE

Deep Grove Ball Bearing Radial Clearance m

Bore Diameter d mm		C2		Standart (Omitted)		C3		C4		C5	
Over	To	min	max	min	max	min	max	min	max	min	max
2.5	**6**	0	7	2	13	8	23				
6	**10**	0	7	2	13	8	23	14	29	20	37
10	**18**	0	9	3	18	11	25	18	33	25	45
18	**24**	0	10	5	20	13	28	20	36	28	48
24	**30**	1	11	5	20	13	28	23	41	30	53
30	**40**	1	11	6	20	15	33	28	46	40	64
40	**50**	1	11	6	23	18	36	30	51	45	73
50	**65**	1	15	8	28	23	43	38	61	55	90
65	**80**	1	15	10	30	25	51	46	71	65	105
80	**100**	1	18	12	36	30	58	53	84	75	120
100	**120**	2	20	15	41	36	66	61	97	90	140
120	**140**	2	23	18	48	41	81	71	114	105	160
140	**160**	2	23	18	53	46	91	81	130	120	180
160	**180**	2	25	20	61	53	102	91	147	135	200
180	**200**	2	30	25	71	63	117	107	163	150	230
200	**225**	2	35	25	85	75	140	125	195	175	265
225	**250**	2	40	30	95	85	160	145	225	205	300

Electric Motor Bearing Radial Clearance m

Bore Diameter		Radial Clearance			
d mm		Deep Groove Ball Bearing		Cylindrical Roller Bearing	
Over	To	min	max	min	max
10 (include)	**18**	4	11	-	-
18	**24**	5	12	-	-
24	**30**	5	12	15	30
30	**40**	9	17	15	30
40	**50**	9	17	20	35
50	**65**	12	22	25	40
65	**80**	12	22	30	45
80	**100**	18	30	35	55
100	**120**	18	30	35	60
120	**140**	24	38	40	65
140	**160**	24	38	50	80
160	**180**	-	-	60	90
180	**200**	-	-	65	100