



RADIAL INTERNAL CLEARANCE															
SINGLE ROW BALL BEARING - NO LOAD METHOD (0.0001")															
Basic Bore Diameter (mm)		C2		Standard		C3		C4							
		Acceptance Limits													
Over	Incl.	Low	High	Low	High	Low	High	Low	High						
2.5	10	0	3	1	5	3	9	6	11						
10	18		3.5							7	4	10	7	13	
18	24		4							8	5	11	8	14	
24	30	0.5	4.5	2	8	5	11	9	16						
30	40									6	13	11	18		
40	50		4.5	2.5	9	7	14	12	20						
50	65		6	3.5	11	9	17	15	24						
65	80		4	12	10	20	18	28							
80	100	7	4.5	14	12	23	21	33							
100	120	1	8	6	16	14	26	24	38						
120	140		9							7	19	16	32	28	45
140	160		9							7	21	18	36	32	51
160	180		10							8	24	21	40	36	58
180	200		12							10	28	25	46	42	64

DIMENSIONAL TOLERANCES - SINGLE ROW BALL BEARING (0.0001")																					
BASIC BORE DIAMETER		BORE VARIATION					WIDTH - INNER & OUTER RINGS					WIDTH - VARIATION (PARALLELISM)					RACEWAY, RADIAL RUNOUT				
Over	Incl.	ABEC																			
mm		1	3	5	7	9	1	3	5	7	9	1	3	5	7	9	1	3	5	7	9
0	10	-3	-3	-2	-1.5				-15	-15	-15	6	6				4	2.5	1.5	1	0.5
10	18					-1	-50	-50	-30	-30	-30	8	8					3			
18	30	-4	-3	-2.5	-2									2	1	0.5	5	3	1.5	1	
30	50	-4.5	-4	-3	-2.5				-50	-50	-50	8	8				6	4	2	1.5	1
50	80	-6	-4.5	-3.5	-3	-1.5	-60	-60	-60	-60	-60	10	10	2.5	1.5	0.5	8	4	2	1.5	1
80	120	-8	-6	-4	-3	-2	-80	-80	-80	-80	-80			3	1.5	1	10	5	2.5	2	
120	150	-10					-100	-100	-100	-100	-100	12	12			1					
150	180	-10	-7	-5	-4	-3	-100	-100	-120	-120	-120				2	1.5	12	7	3	2.5	1
180	250	-12	-8.5	-6	-4.5	-3	-120	-120	-140	-140	-140	12	12	4	2.5	2	16	8	4	3	2

DIMENSIONAL CONTROL																
NOMINAL BORE DIAMETER		OUTSIDE VARIATION					WIDTH - VARIATION (PARALLELISM)					RACEWAY, RADIAL RUNOUT				
Over	Incl.	ABEC														
mm		1	3	5	7	9	1	3	5	7	9	1	3	5	7	9
0	18	-3		-2	-1.5	-1	6	6				6		2	1	0.5
18	30	-3.5	-3	-2.5	-2				2	1	0.5	6	4	2.5	1.5	
30	50	-4.5		-3	-2.5	-1.5	8	8				8		3	2	1
50	80	-5	-4.5	-3.5		-1.5	10	10	2.5	1	0.5	10	5	3	2	1.5
80	120	-6	-5	-4	-3	-2			3	1.5	1	14	7	4	2.5	2
120	150	-7	-6	-4.5	-3.5	-2						16	8	4.5		
150	180	-10	-7	-5	-4	-3	12	12	3	2	1	18	9	5	3	2
180	250	-12	-8	-6	-4.5	-3			4	3	1.5	20	10	6	4	3
250	310	-14	-10	-7	-5	-3	14	14	4.5	3	2	24	12	7	4.5	3



TAPERED ROLLER BEARING - 0.0001"									
CONE BORE		CLASS 4		CLASS 3		CLASS 0		CLASS 00	
Over	Incl.	High	Low	High	Low	High	Low	High	Low
inch		Core Bore Variation							
0	3	5	0	5	0	5	0	3	0
3	12	10		10		15	—	—	—
12	24	20	0	20	0	—	—	—	—
24	36	30		20		—	—	—	—
36	48	40							

TAPERED ROLLER BEARING - 0.0001"											
CONE BORE		CONE O.D.		CLASS 4		CLASS 3		CLASS 0		CLASS 00	
Over	Incl.	Over	Incl.	High	Low	High	Low	High	Low	High	Low
inch				Overall Bearing Width Variation							
0	3	—	—	80	0	80	-80	80	-80	80	-80
4	12	—	—	140	-100	80	-80	80	-80	80	-80
12	24	—	20	150	-150	80	-80	—	—	—	—
12	24	20	—			150	-150				
24	—	—	—								

TAPERED ROLLER BEARING - 0.0001"													
CUP O.D.		CLASS 4		CLASS 3		CLASS 0		CLASS 00					
Over	Incl.	Cup O.D. Variation		Cup O.D. Variation		Cup O.D. Variation		Cup O.D. Variation		Cup O.D. Variation			
inch		High	Low	High	Low	High	Low	High	Low	High	Low		
		Max.		Max.		Max.		Max.		Max.			
0	12	10	0	20	5	0	3	5	0	1.5	3	0	0.75
12	24	20		20	10		7	—	—	—	—	—	—
24	36	30	0	30	15	0	—	—	—	—	—	—	—
36	48	40		30	20		30	—	—	—	—	—	—
48	—	50											

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