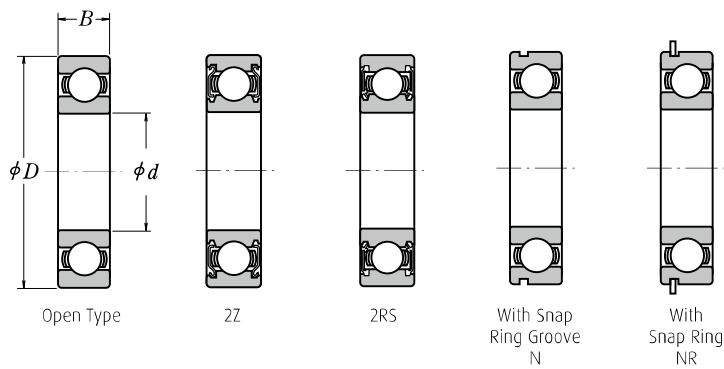


Single Row Deep Groove Ball Bearings (Inch)

Bore Diameter 1³/₈ – 3 Inch



Boundary Dimensions (Inch)			Basic Bearing (N)	Variants						Basic Load Ratings		Limiting Speeds (min ⁻¹)			Mass (kg)
d	D	B		Z	-2Z	RS	-2RS	N	NR	C _r	C _{0r}	Open Grease Z ZZ	RS 2RS	Open Oil Z	
1 ³ / ₈	2 ¹ / ₂	7 ¹ / ₁₆	KLNJ1 ³ / ₈							14 400	9 360	11 100		14 900	0,134
	2 ³ / ₁₆	9 ¹ / ₁₆	XLJ1 ³ / ₈							16 600	10 300	11 200		15 000	0,194
	3	1 ¹ / ₁₆	LJ1 ³ / ₈	•	•	•	•	•	•	30 200	17 500	9 800	6 800	13 200	0,333
	3 ¹ / ₂	7 ¹ / ₈	MJ1 ³ / ₈	•	•	•	•	•	•	45 300	24 000	8 800	6 200	11 900	0,608
1 ¹ / ₂	2 ³ / ₈	7 ¹ / ₁₆	KLNJ1 ¹ / ₂							15 000	10 300	10 300		13 900	0,142
	2 ¹ / ₁₆	9 ¹ / ₁₆	XLJ1 ¹ / ₂							14 300	9 500	10 200		13 800	0,202
	3 ¹ / ₄	3 ¹ / ₄	LJ1 ¹ / ₂	•	•	•	•	•	•	34 800	20 000	9 000	6 300	12 200	0,418
	3 ³ / ₄	1 ⁵ / ₁₆	MJ1 ¹ / ₂	•	•	•	•	•	•	49 500	26 700	8 200	5 700	11 000	0,753
1 ⁵ / ₈	2 ⁷ / ₈	9 ¹ / ₁₆	XLJ1 ⁵ / ₈							14 900	10 500	4 700		9 400	0,276
	3 ¹ / ₂	3 ¹ / ₄	LJ1 ⁵ / ₈	•	•	•	•	•	•	38 700	22 100	8 400	5 900	11 300	0,481
	4	1 ⁵ / ₁₆	MJ1 ⁵ / ₈	•	•			•	•	55 000	32 000	7 700		10 300	0,857
1 ³ / ₄	3	9 ¹ / ₁₆	XLJ1 ³ / ₄							21 800	15 100	9 100		12 300	0,238
	3 ³ / ₄	1 ³ / ₁₆	LJ1 ³ / ₄	•	•	•	•	•	•	42 700	24 800	7 800	5 500	10 600	0,594
	4 ¹ / ₄	1 ³ / ₁₆	MJ1 ³ / ₄	•	•			•	•	59 500	34 700	7 100		9 600	1,06
1 ⁷ / ₈	3 ³ / ₁₆	5 ¹ / ₈	XLJ1 ⁷ / ₈							22 700	16 600	8 300		11 200	0,297
	4	1 ³ / ₁₆	LJ1 ⁷ / ₈	•	•			•	•	50 500	31 200	7 200		9 800	0,708
	4 ¹ / ₂	1 ¹ / ₁₆	MJ1 ⁷ / ₈					•	•	69 000	41 000	6 600		8 900	1,22
2	3 ³ / ₁₆	5 ¹ / ₈	XLJ2							22 700	16 600	8 300		11 200	0,317
	4	1 ³ / ₁₆	LJ2	•	•			•	•	50 500	31 200	7 200		9 800	0,667
	4 ¹ / ₂	1 ¹ / ₁₆	MJ2					•	•	69 000	41 000	6 600		8 900	1,17
2 ¹ / ₄	3 ³ / ₁₆	5 ¹ / ₈	XLJ2 ¹ / ₄							29 400	21 300	7 600		10 300	0,338
	4 ¹ / ₂	7 ¹ / ₈	LJ2 ¹ / ₄	•	•			•	•	60 000	36 400	6 400		8 600	0,885
	5	1 ¹ / ₄	MJ2 ¹ / ₄					•	•	85 000	51 500	5 900		8 000	1,6
2 ¹ / ₂	3 ⁷ / ₈	1 ¹ / ₁₆	XLJ2 ¹ / ₂							31 800	25 200	6 700		9 000	0,421
	5	1 ⁵ / ₁₆	LJ2 ¹ / ₂					•	•	65 500	42 600	5 700		7 700	1,22
	5 ¹ / ₂	1 ¹ / ₄	MJ2 ¹ / ₂					•	•	96 500	60 000	5 300		7 100	2,04
2 ³ / ₄	4 ¹ / ₈	1 ¹ / ₁₆	XLJ2 ³ / ₄							24 500	21 300	3 100		6 300	0,535
	5 ¹ / ₄	1 ⁵ / ₁₆	LJ2 ³ / ₄							70 000	48 000	5 300		7 200	1,33
	6 ¹ / ₄	1 ³ / ₈	MJ2 ³ / ₄							118 000	77 000	4 600		6 200	2,89
3	4 ¹ / ₂	3 ¹ / ₄	XLJ3							41 100	33 500	5 800		7 800	0,753
	5 ³ / ₄	1 ¹ / ₁₆	LJ3							81 500	57 000	4 800		6 500	1,81
	7	1 ¹ / ₁₆	MJ3							138 000	96 500	4 000		5 400	4,25

Single Row Deep Groove Ball Bearings



Basic Type & Series

- 600: Metric, extra small
- 16000: Metric, thin section
- 6000: Metric, extra light
- 6200: Metric, light
- 6300: Metric, medium
- 6800: Metric, extra thin section
- 6900: Metric, very thin section
- BL 200: Metric, maximum capacity, light
- BL 300: Metric, maximum capacity, medium
- KLNJ: Inch, small
- XLJ: Inch, extra light
- IJ: Inch, light
- MJ: Inch, medium

Features

- V: Single non-contact seal
- VV: Double non-contact seal
- Z: Single shield
- ZZ: Double shield
- DU: Single contact seal
- DDU: Double contact seal
- NR: Snap ring and groove
- M: Brass cage
- Blank: Steel cage

- Noise Level
E: Electric Motor Grade

62

05

ZZ

C3

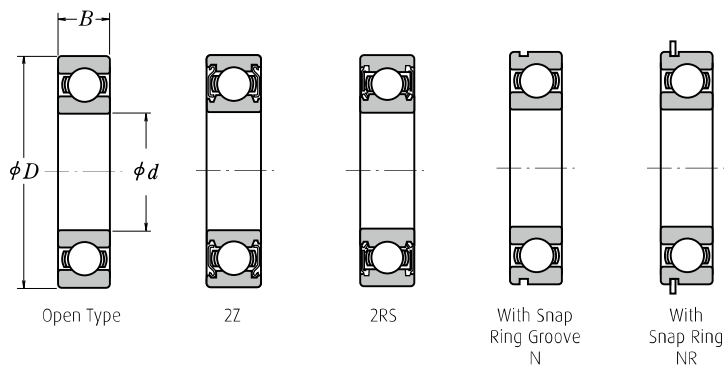
E

Bore Diameter
(04 and up: multiply last two numbers by 5 to get bore in mm)
00: 10 mm 03: 17 mm 12: 60 mm
01: 12 mm 04: 20 mm 20: 100 mm
02: 15 mm 05: 25 mm
Inch: directly indicated

Internal Clearance
C2: Tight
Blank: Normal
C3: Loose
C4: Extra Loose

Single Row Deep Groove Ball Bearings (Inch)

Bore Diameter 1³/₈ – 3 Inch



Boundary Dimensions (Inch)			Basic Bearing (N)	Variants						Basic Load Ratings		Limiting Speeds (min ⁻¹)			Mass (kg)
d	D	B		Z	-2Z	RS	-2RS	N	NR	C _r	C _{0r}	Open Grease Z ZZ	RS 2RS	Open Oil Z	
1 ³ / ₈	2 ¹ / ₂	7 ¹ / ₁₆	KLNJ1 ³ / ₈							14 400	9 360	11 100		14 900	0,134
	2 ³ / ₁₆	9 ¹ / ₁₆	XLJ1 ³ / ₈							16 600	10 300	11 200		15 000	0,194
	3	1 ¹ / ₁₆	LJ1 ³ / ₈	•	•	•	•	•	•	30 200	17 500	9 800	6 800	13 200	0,333
	3 ¹ / ₂	7 ¹ / ₈	MJ1 ³ / ₈	•	•	•	•	•	•	45 300	24 000	8 800	6 200	11 900	0,608
1 ¹ / ₂	2 ³ / ₈	7 ¹ / ₁₆	KLNJ1 ¹ / ₂							15 000	10 300	10 300		13 900	0,142
	2 ¹ / ₁₆	9 ¹ / ₁₆	XLJ1 ¹ / ₂							14 300	9 500	10 200		13 800	0,202
	3 ¹ / ₄	3 ¹ / ₄	LJ1 ¹ / ₂	•	•	•	•	•	•	34 800	20 000	9 000	6 300	12 200	0,418
	3 ³ / ₄	1 ⁵ / ₁₆	MJ1 ¹ / ₂	•	•	•	•	•	•	49 500	26 700	8 200	5 700	11 000	0,753
1 ⁵ / ₈	2 ⁷ / ₈	9 ¹ / ₁₆	XLJ1 ⁵ / ₈							14 900	10 500	4 700		9 400	0,276
	3 ¹ / ₂	3 ¹ / ₄	LJ1 ⁵ / ₈	•	•	•	•	•	•	38 700	22 100	8 400	5 900	11 300	0,481
	4	1 ⁵ / ₁₆	MJ1 ⁵ / ₈	•	•			•	•	55 000	32 000	7 700		10 300	0,857
1 ³ / ₄	3	9 ¹ / ₁₆	XLJ1 ³ / ₄							21 800	15 100	9 100		12 300	0,238
	3 ³ / ₄	1 ³ / ₁₆	LJ1 ³ / ₄	•	•	•	•	•	•	42 700	24 800	7 800	5 500	10 600	0,594
	4 ¹ / ₄	1 ³ / ₁₆	MJ1 ³ / ₄	•	•			•	•	59 500	34 700	7 100		9 600	1,06
1 ⁷ / ₈	3 ³ / ₁₆	5 ¹ / ₈	XLJ1 ⁷ / ₈							22 700	16 600	8 300		11 200	0,297
	4	1 ³ / ₁₆	LJ1 ⁷ / ₈	•	•			•	•	50 500	31 200	7 200		9 800	0,708
	4 ¹ / ₂	1 ¹ / ₁₆	MJ1 ⁷ / ₈					•	•	69 000	41 000	6 600		8 900	1,22
2	3 ³ / ₁₆	5 ¹ / ₈	XLJ2							22 700	16 600	8 300		11 200	0,317
	4	1 ³ / ₁₆	LJ2	•	•			•	•	50 500	31 200	7 200		9 800	0,667
	4 ¹ / ₂	1 ¹ / ₁₆	MJ2					•	•	69 000	41 000	6 600		8 900	1,17
2 ¹ / ₄	3 ³ / ₁₆	5 ¹ / ₈	XLJ2 ¹ / ₄							29 400	21 300	7 600		10 300	0,338
	4 ¹ / ₂	7 ¹ / ₈	LJ2 ¹ / ₄	•	•			•	•	60 000	36 400	6 400		8 600	0,885
	5	1 ¹ / ₄	MJ2 ¹ / ₄					•	•	85 000	51 500	5 900		8 000	1,6
2 ¹ / ₂	3 ⁷ / ₈	1 ¹ / ₁₆	XLJ2 ¹ / ₂							31 800	25 200	6 700		9 000	0,421
	5	1 ⁵ / ₁₆	LJ2 ¹ / ₂					•	•	65 500	42 600	5 700		7 700	1,22
	5 ¹ / ₂	1 ¹ / ₄	MJ2 ¹ / ₂					•	•	96 500	60 000	5 300		7 100	2,04
2 ³ / ₄	4 ¹ / ₈	1 ¹ / ₁₆	XLJ2 ³ / ₄							24 500	21 300	3 100		6 300	0,535
	5 ¹ / ₄	1 ⁵ / ₁₆	LJ2 ³ / ₄							70 000	48 000	5 300		7 200	1,33
	6 ¹ / ₄	1 ³ / ₈	MJ2 ³ / ₄							118 000	77 000	4 600		6 200	2,89
3	4 ¹ / ₂	3 ¹ / ₄	XLJ3							41 100	33 500	5 800		7 800	0,753
	5 ³ / ₄	1 ¹ / ₁₆	LJ3							81 500	57 000	4 800		6 500	1,81
	7	1 ¹ / ₁₆	MJ3							138 000	96 500	4 000		5 400	4,25

Radial Internal Clearances

Bore Diameter (mm)		Radial Internal Clearance Groups (µm)			
over	include	CN		C3	
		min.	max.	min.	max.
6	10	2	13	8	23
10	18	3	18	11	25
18	24	5	20	13	28
24	30	5	20	13	28
30	40	6	20	15	33
40	50	6	23	18	36
50	65	8	28	23	43
65	80	10	30	25	51
80	100	12	36	30	58

Interchange

	Description	NSK	SKF	FAG
Part Number	See Interchange list			
Suffixes	Polyamide cage Steel cage Brass cage Normal clearance Loose clearance	TNG J M Blank C3	TN9 J M Blank C3	TVH J M Blank C3