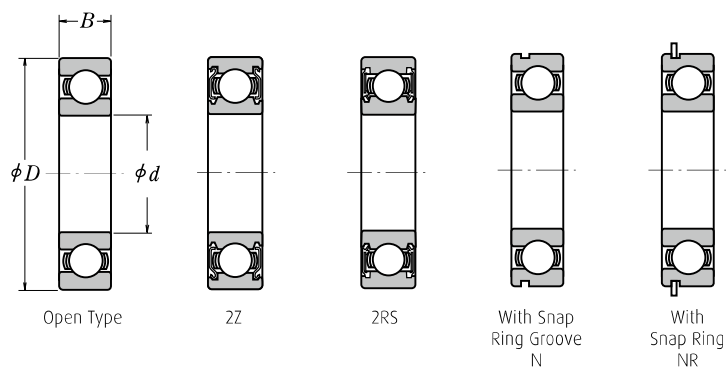


Single Row Deep Groove Ball Bearings (Inch)

Bore Diameter $\frac{1}{8}$ – $1\frac{1}{4}$ 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 _{or}	Open Grease Z ZZ	RS 2RS	Open Oil Z	
$\frac{1}{8}$	$\frac{3}{8}$	$\frac{5}{32}$	KLNJ $\frac{1}{8}$							665	230	40 000		48 000	0,0013
$\frac{3}{16}$	$\frac{1}{2}$	$\frac{5}{32}$	KLNJ $\frac{3}{16}$							1 350	490	38 000		45 000	0,0026
$\frac{1}{4}$	$\frac{3}{4}$	$\frac{7}{32}$	KLNJ $\frac{1}{4}$							2 530	1 030	32 000		38 000	0,008
	$\frac{3}{4}$	$\frac{5}{32}$	KLNJ $\frac{1}{4}$							2 530	1 030	32 000	22 000		0,009
$\frac{3}{8}$	$\frac{7}{8}$	$\frac{7}{32}$	KLNJ $\frac{3}{8}$							3 460	1 410	29 000		36 000	0,011
	$\frac{7}{8}$	$\frac{5}{32}$	KLNJ $\frac{3}{8}$							3 460	1 410	29 000	20 000		0,012
	$1\frac{1}{2}$	$\frac{5}{16}$	MJ $\frac{3}{8}$							10 100	4 200	20 000		27 000	0,074
$\frac{1}{2}$	$1\frac{1}{8}$	$\frac{1}{4}$	KLNJ $\frac{1}{2}$							4 180	2 010	26 000		32 000	0,019
	$1\frac{1}{8}$	$\frac{5}{16}$	KLNJ $\frac{1}{2}$							4 180	2 010	26 000	17 000		0,023
	$1\frac{1}{16}$	$\frac{3}{8}$	LJ $\frac{1}{2}$							6 950	3 220	21 000	14 700	28 500	0,037
	$1\frac{3}{8}$	$\frac{5}{8}$	MJ $\frac{1}{2}$							12 100	5 100	18 500	12 900	25 000	0,096
$\frac{5}{8}$	$1\frac{3}{8}$	$\frac{3}{32}$	KLNJ $\frac{5}{8}$							5 800	3 370	22 000		28 000	0,033
	$1\frac{3}{8}$	$\frac{1}{32}$	KLNJ $\frac{5}{8}$							5 800	3 370	22 000	13 000		0,04
	$1\frac{1}{16}$	$\frac{7}{16}$	LJ $\frac{5}{8}$							10 900	5 000	18 000	12 500	24 000	0,059
	$1\frac{1}{16}$	$\frac{5}{8}$	MJ $\frac{5}{8}$							12 600	5 600	16 500	11 500	22 000	0,117
$\frac{3}{4}$	$1\frac{1}{8}$	$\frac{5}{16}$	KLNJ $\frac{3}{4}$							8 200	4 400	17 000		22 500	0,048
	$1\frac{1}{8}$	$\frac{7}{16}$	KLNJ $\frac{3}{4}$							8 200	4 400	17 000		22 500	0,066
	$1\frac{7}{8}$	$\frac{3}{16}$	LJ $\frac{3}{4}$							14 200	6 700	15 500	10 800	21 000	0,109
	2	$\frac{1}{16}$	MJ $\frac{3}{4}$							16 500	7 850	14 700	10 300	20 000	0,156
$\frac{7}{8}$	$1\frac{7}{8}$	$\frac{3}{8}$	KLNJ $\frac{7}{8}$							12 000	6 400	14 800		20 000	0,078
	$1\frac{7}{8}$	$\frac{1}{2}$	KLNJ $\frac{7}{8}$							12 000	6 400	14 800	10 200		0,102
	2	$\frac{5}{16}$	LJ $\frac{7}{8}$							14 400	7 000	14 300	10 000	19 500	0,116
	$2\frac{1}{4}$	$\frac{1}{16}$	MJ $\frac{7}{8}$							19 200	9 400	13 300	9 300	18 000	0,197
1	2	$\frac{3}{8}$	KLNJ1							11 800	7 200	13 600		18 500	0,085
	2	$\frac{1}{2}$	KLNJ1							11 800	7 200	13 600	9 500	18 500	0,112
	$2\frac{1}{4}$	$\frac{5}{8}$	LJ1							18 600	9 700	12 700	8 900	17 000	0,169
	$2\frac{1}{2}$	$\frac{3}{4}$	MJ1							22 100	11 000	12 200	8 500	16 500	0,262
$1\frac{1}{8}$	$2\frac{1}{8}$	$\frac{3}{8}$	KLNJ $1\frac{1}{8}$							11 700	7 300	13 000		17 500	0,088
	$2\frac{1}{2}$	$\frac{5}{8}$	KLNJ $1\frac{1}{8}$							20 200	11 300	11 700	8 200	15 500	0,219
	$2\frac{5}{16}$	$\frac{13}{16}$	MJ $1\frac{1}{8}$							30 800	16 600	10 800	7 500	14 500	0,347
$1\frac{1}{4}$	$2\frac{1}{4}$	$\frac{3}{8}$	KLNJ $1\frac{1}{4}$							12 800	8 700	11 900		16 000	0,096
	$2\frac{1}{4}$	$\frac{1}{2}$	KLNJ $1\frac{1}{4}$							12 800	8 700	11 900			0,128
	$2\frac{3}{4}$	$\frac{1}{16}$	LJ $1\frac{1}{4}$							27 700	15 000	10 600	7 400	14 400	0,276
	$3\frac{1}{8}$	$\frac{7}{8}$	MJ $1\frac{1}{4}$							37 700	19 600	9 800	6 800	13 200	0,476

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

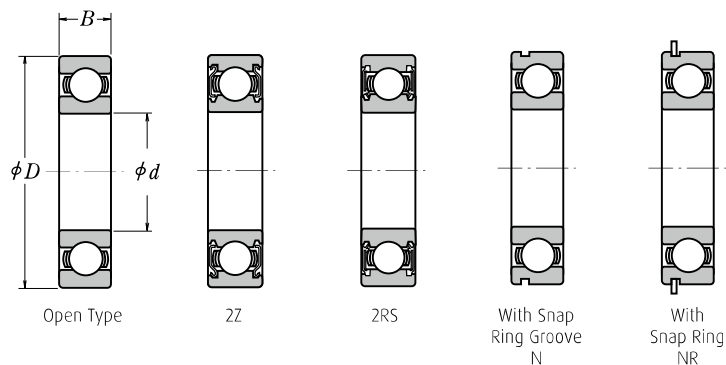
E

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 $\frac{1}{8}$ – $1\frac{1}{4}$ 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	
$\frac{1}{8}$	$\frac{3}{8}$	$\frac{5}{32}$	KLNJ $\frac{1}{8}$							665	230	40 000		48 000	0,0013
$\frac{3}{16}$	$\frac{1}{2}$	$\frac{5}{32}$	KLNJ $\frac{3}{16}$							1 350	490	38 000		45 000	0,0026
$\frac{1}{4}$	$\frac{3}{4}$	$\frac{7}{32}$	KLNJ $\frac{1}{4}$							2 530	1 030	32 000		38 000	0,008
	$\frac{3}{4}$	$\frac{5}{32}$	KLNJ $\frac{1}{4}$							2 530	1 030	32 000	22 000		0,009
$\frac{3}{8}$	$\frac{7}{8}$	$\frac{7}{32}$	KLNJ $\frac{3}{8}$							3 460	1 410	29 000		36 000	0,011
	$\frac{7}{8}$	$\frac{5}{32}$	KLNJ $\frac{3}{8}$							3 460	1 410	29 000	20 000		0,012
	$1\frac{1}{2}$	$\frac{5}{16}$	MJ $\frac{3}{8}$							10 100	4 200	20 000		27 000	0,074
$\frac{1}{2}$	$1\frac{1}{8}$	$\frac{1}{4}$	KLNJ $\frac{1}{2}$							4 180	2 010	26 000		32 000	0,019
	$1\frac{1}{8}$	$\frac{5}{16}$	KLNJ $\frac{1}{2}$							4 180	2 010	26 000	17 000		0,023
	$1\frac{1}{16}$	$\frac{3}{8}$	LJ $\frac{1}{2}$							6 950	3 220	21 000	14 700	28 500	0,037
	$1\frac{3}{8}$	$\frac{5}{8}$	MJ $\frac{1}{2}$							12 100	5 100	18 500	12 900	25 000	0,096
$\frac{5}{8}$	$1\frac{3}{8}$	$\frac{3}{32}$	KLNJ $\frac{5}{8}$							5 800	3 370	22 000		28 000	0,033
	$1\frac{3}{8}$	$\frac{1}{32}$	KLNJ $\frac{5}{8}$							5 800	3 370	22 000	13 000		0,04
	$1\frac{1}{16}$	$\frac{7}{16}$	LJ $\frac{5}{8}$							10 900	5 000	18 000	12 500	24 000	0,059
	$1\frac{1}{16}$	$\frac{5}{8}$	MJ $\frac{5}{8}$							12 600	5 600	16 500	11 500	22 000	0,117
$\frac{3}{4}$	$1\frac{1}{8}$	$\frac{5}{16}$	KLNJ $\frac{3}{4}$							8 200	4 400	17 000		22 500	0,048
	$1\frac{1}{8}$	$\frac{7}{16}$	KLNJ $\frac{3}{4}$							8 200	4 400	17 000		22 500	0,066
	$1\frac{7}{8}$	$\frac{3}{16}$	LJ $\frac{3}{4}$							14 200	6 700	15 500	10 800	21 000	0,109
	2	$\frac{1}{16}$	MJ $\frac{3}{4}$							16 500	7 850	14 700	10 300	20 000	0,156
$\frac{7}{8}$	$1\frac{7}{8}$	$\frac{3}{8}$	KLNJ $\frac{7}{8}$							12 000	6 400	14 800		20 000	0,078
	$1\frac{7}{8}$	$\frac{1}{2}$	KLNJ $\frac{7}{8}$							12 000	6 400	14 800	10 200		0,102
	2	$\frac{5}{16}$	LJ $\frac{7}{8}$							14 400	7 000	14 300	10 000	19 500	0,116
	$2\frac{1}{4}$	$\frac{1}{16}$	MJ $\frac{7}{8}$							19 200	9 400	13 300	9 300	18 000	0,197
1	2	$\frac{3}{8}$	KLNJ1							11 800	7 200	13 600		18 500	0,085
	2	$\frac{1}{2}$	KLNJ1							11 800	7 200	13 600	9 500	18 500	0,112
	$2\frac{1}{4}$	$\frac{5}{8}$	LJ1							18 600	9 700	12 700	8 900	17 000	0,169
	$2\frac{1}{2}$	$\frac{3}{4}$	MJ1							22 100	11 000	12 200	8 500	16 500	0,262
$1\frac{1}{8}$	$2\frac{1}{8}$	$\frac{3}{8}$	KLNJ $1\frac{1}{8}$							11 700	7 300	13 000		17 500	0,088
	$2\frac{1}{2}$	$\frac{5}{8}$	KLNJ $1\frac{1}{8}$							20 200	11 300	11 700	8 200	15 500	0,219
	$2\frac{9}{16}$	$\frac{13}{16}$	MJ $1\frac{1}{8}$							30 800	16 600	10 800	7 500	14 500	0,347
$1\frac{1}{4}$	$2\frac{1}{4}$	$\frac{3}{8}$	KLNJ $1\frac{1}{4}$							12 800	8 700	11 900		16 000	0,096
	$2\frac{1}{4}$	$\frac{1}{2}$	KLNJ $1\frac{1}{4}$							12 800	8 700	11 900			0,128
	$2\frac{3}{4}$	$\frac{1}{16}$	LJ $1\frac{1}{4}$							27 700	15 000	10 600	7 400	14 400	0,276
	$3\frac{1}{8}$	$\frac{7}{8}$	MJ $1\frac{1}{4}$							37 700	19 600	9 800	6 800	13 200	0,476

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