

Selection by Dimensions (Metric)

Bore Diameter 20 mm

Bore Diameter	OD	Width	Part Number	Type	Bearing Type
20	47	12	E20	D1	Single Row Radial Ball Bearings
	47	14	1204J	G	Double Row Self Aligning Ball Bearings
	47	14	1204KTN	G1	Double Row Self Aligning Ball Bearings
	47	14	1204TN	G	Double Row Self Aligning Ball Bearings
	47	14	6204	B	Single Row Radial Ball Bearings
	47	14	6204DDU	B2	Single Row Radial Ball Bearings
	47	14	6204DDUNR	B5	Single Row Radial Ball Bearings
	47	14	6204DU	B2	Single Row Radial Ball Bearings
	47	14	6204NR	B3	Single Row Radial Ball Bearings
	47	14	6204TCG12P4	B	Super Precision Bearings
	47	14	6204TCG12P4	B	Super Precision Bearings
	47	14	6204VV	B6	Single Row Radial Ball Bearings
	47	14	6204Z	B1	Single Row Radial Ball Bearings
	47	14	6204ZNR	B4	Single Row Radial Ball Bearings
	47	14	6204ZZ	B1	Single Row Radial Ball Bearings
	47	14	6204ZZNR	B4	Single Row Radial Ball Bearings
	47	14	7204BEAT85	D	Single Row Angular Contact Ball Bearings
	47	14	7204BEAT85SUN	D	Single Row Angular Contact Ball Bearings
	47	14	7204BW	D	Single Row Angular Contact Ball Bearings
	47	14	7204BWG	D	Single Row Angular Contact Ball Bearings
	47	14	L20	D1	Single Row Radial Ball Bearings
	47	14	N204ET	H	Cylindrical Roller Bearings
	47	14	N204W	H	Cylindrical Roller Bearings
	47	14	NF204W	H4	Cylindrical Roller Bearings
	47	14	NJ204ET	H1	Cylindrical Roller Bearings
	47	14	NJ204W	H1	Cylindrical Roller Bearings
	47	14	NU204ET	H2	Cylindrical Roller Bearings
	47	14	NU204W	H2	Cylindrical Roller Bearings
	47	14	NUP204W	H3	Cylindrical Roller Bearings
	47	15	20TAC47BSUC10PN7B	D	Super Precision Bearings
	47	15,25	30204J	F	Tapered Roller Bearings
	47	18	2204J	G	Double Row Self Aligning Ball Bearings
	47	18	2204-2RSTN	G2	Double Row Self Aligning Ball Bearings
	47	18	2204EKTN	G1	Double Row Self Aligning Ball Bearings
	47	18	2204ETN	G	Double Row Self Aligning Ball Bearings
	47	18	2204KJ	G1	Double Row Self Aligning Ball Bearings
	47	18	2204M	G	Double Row Self Aligning Ball Bearings
	47	18	4204J	L	Double Row Ball Bearings
	47	18	4204BTN	L	Double Row Ball Bearings
	47	18	51304	E	Thrust Ball Bearings
	47	18	NJ2204W	H1	Cylindrical Roller Bearings
	47	18	NU2204W	H3	Cylindrical Roller Bearings
	47	19,25	32204J	F	Tapered Roller Bearings
	47	20,6	3204B-2RSTN	M2	Double Row Angular Contact Ball Bearings
	47	20,6	3204B-22TN	M1	Double Row Angular Contact Ball Bearings
	47	20,6	3204BTN	M	Double Row Angular Contact Ball Bearings
	47	20,6	3204J	M	Double Row Angular Contact Ball Bearings
	47	20,64	LDJK20M	P1	Double Row Angular Contact Ball Bearings
	47	28	52205	N	Thrust Ball Bearings
	47	28	7204ASTRDULP3	D	Super Precision Bearings
	47	28	7204ASTRDUMP3	D	Super Precision Bearings
	47	28	7204CTRDULP3	D	Super Precision Bearings
	47	28	7204CTRDUMP3	D	Super Precision Bearings
	47	30	BSB020047DUHP3	D	Super Precision Bearings
	47	31,75	BSB078DUHP3	D	Super Precision Bearings
	47	40	11204TN	G4	Double Row Self Aligning Ball Bearings
	50	36	54205	N1	Thrust Ball Bearings
	52	15	1304J	G	Double Row Self Aligning Ball Bearings
	52	15	1304KJ	G1	Double Row Self Aligning Ball Bearings
	52	15	1304TN	G	Double Row Self Aligning Ball Bearings
	52	15	21304CDE4	K	Spherical Roller Bearings

Cylindrical Roller Bearings

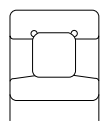
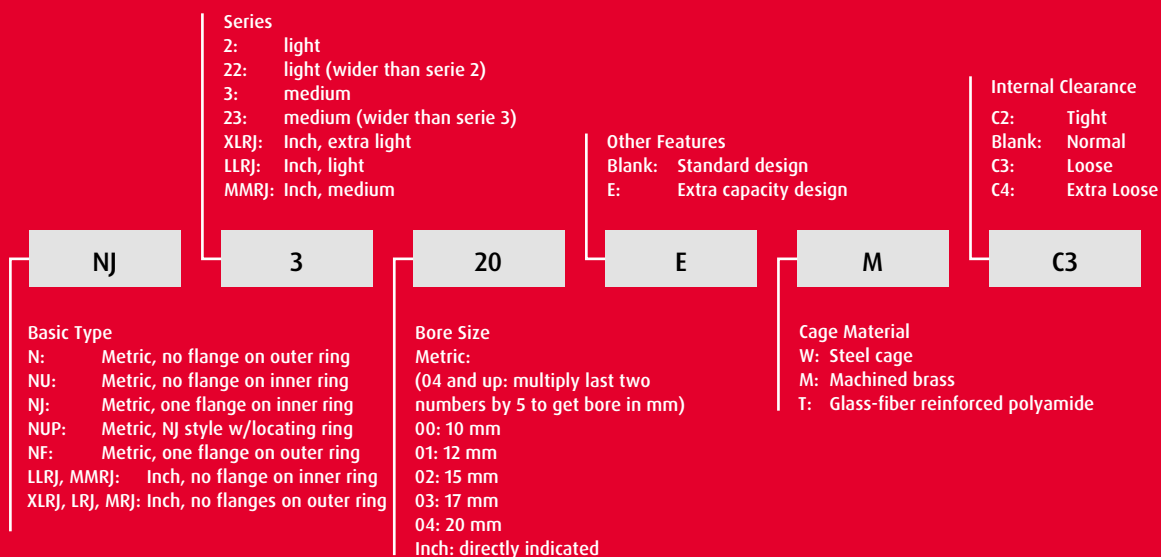


Applications

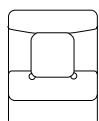
- › Traction Motors (NH and NU) › Electric Motors, medium to large size › Pumps and Compressors (Centrifugal Pump, Deepwell Pump, Slurry Pump, Screw Compressor) › Plastic Forming Equipment › Blowers and Fans › Gears and Drives › Coal Pulverizers (NN)
- › Construction Equipment › Heavy Equipment › Machine Tool Spindle › Calender Rolls of Paper Making Machines › Transmissions
- › Printing Presses › Mold Oscillator Tables › Continuous Casters, Float End › Turbines › Crushers › Journal Boxes › Speed Reducers
- › Table Rollers for Steel Mills › Oil Field Equipment (Pump Jack)

Interchange

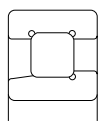
	Description	NSK	SKF	FAG	SNR
Part Number	See Interchange list				
	Polyamide cage	T	P	TVP2	G15
	Steel cage	W	J	Blank	Blank
	Machined brass cage	M	M	M, M1	M
	Extra Capacity	E	EC	E	E
	Tight Clearance	C2	C2	C2	J20
	Normal Clearance	Blank	Blank	Blank	Blank
	Loose Clearance	C3	C3	C3	J30



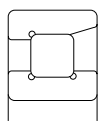
NU/LLRJ, MMRJ



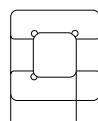
N/XLRJ, LRJ, MRJ



NJ



NF



NUP

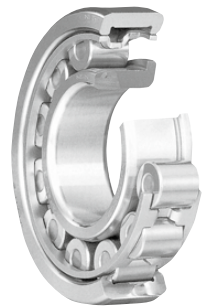
Radial Internal Clearances

Nominal Bore Diameter d (mm)		Clearance in Bearings with Cylindrical Bores									
		C2		CN		C3		C4		C5	
over	include	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
–	10	0	25	20	45	35	60	50	75	–	–
10	24	0	25	20	45	35	60	50	75	65	90
24	30	0	25	20	45	35	60	50	75	70	95
30	40	5	30	25	50	45	70	60	85	80	105
40	50	5	35	30	60	50	80	70	100	95	125
50	65	10	40	40	70	60	90	80	110	110	140
65	80	10	45	40	75	65	100	90	125	130	165
80	100	15	50	50	85	75	110	105	140	155	190
100	120	15	55	50	90	85	125	125	165	180	220
120	140	15	60	60	105	100	145	145	190	200	245
140	160	20	70	70	120	115	165	165	215	225	275
160	180	25	75	75	125	120	170	170	220	250	300
180	200	35	90	90	145	140	195	195	250	275	330
200	225	45	105	105	165	160	220	220	280	305	365
225	250	45	110	110	175	170	235	235	300	330	395
250	280	55	125	125	195	190	260	260	330	370	440
280	315	55	130	130	205	200	275	275	350	410	485
215	355	65	145	145	225	225	305	305	385	455	535
355	400	100	190	190	280	280	370	370	460	510	600
400	450	110	210	210	310	310	410	410	510	565	665
450	500	110	220	220	330	330	440	440	550	625	735

Units: μm

Cylindrical Roller Bearings (Inch)

Bore Diameter 4¹/₄ – 6 Inch



Boundary Dimensions (Inch)			Bearing Numbers	Basic Load Ratings (N)		Limiting Speeds (min ⁻¹)		Mass (kg)
d	D	B		C _r	C _{0r}	Grease	Oil	
4 ¹ / ₄	6	7/8	XLRJ4 ¹ / ₄	84 000	114 000	2 500	4 100	1,22
	7 ¹ / ₂	1 ¹ / ₄	LLRJ4 ¹ / ₄	222 000	270 000	3 500	4 800	4,42
	7 ¹ / ₂	1 ¹ / ₄	LRJ4 ¹ / ₄	222 000	270 000	2 100	3 500	3,77
	8 ³ / ₄	1 ³ / ₄	MMRJ4 ¹ / ₄	302 000	359 000	3 100	4 200	8,48
	8 ³ / ₄	1 ³ / ₄	MRJ4 ¹ / ₄	302 000	359 000	1 900	3 100	8,16
4 ¹ / ₂	6 ¹ / ₄	7/8	XLRJ4 ¹ / ₂	80 000	124 000	2 300	3 900	1,24
	8	1 ¹ / ₆	LLRJ4 ¹ / ₂	211 000	273 000	3 200	4 400	4,81
	8	1 ¹ / ₆	LRJ4 ¹ / ₂	229 000	288 000	1 900	3 200	4,67
	9 ³ / ₈	2	MMRJ4 ¹ / ₂	359 000	423 000	2 900	3 900	11,1
	9 ³ / ₈	2	MRJ4 ¹ / ₂	417 000	478 000	1 700	2 900	10,8
4 ³ / ₄	6 ¹ / ₂	7/8	XLRJ4 ³ / ₄	92 000	133 000	2 200	3 700	1,3
	8 ¹ / ₄	1 ¹ / ₆	LLRJ4 ³ / ₄	210 000	274 000	3 100	4 200	4,81
	8 ¹ / ₄	1 ¹ / ₆	LRJ4 ³ / ₄	264 000	331 000	1 900	3 100	4,81
	10	2	MMRJ4 ³ / ₄	374 000	456 000	2 600	3 500	13,1
	10	2	MRJ4 ³ / ₄	478 000	568 000	1 500	2 600	12,3
5	7	1	XLRJ5	113 000	161 000	2 100	3 400	1,81
	9	1 ¹ / ₆	LLRJ5	243 000	322 000	2 800	3 800	6,53
	9	1 ¹ / ₆	LRJ5	281 000	369 000	1 700	2 800	6,49
	10	2	MMRJ5	374 000	456 000	2 600	3 500	12,3
	10	2	MRJ5	478 000	568 000	1 500	2 600	11,7
5 ¹ / ₄	7 ¹ / ₄	1	XLRJ5 ¹ / ₄	112 000	161 000	2 000	3 300	1,87
5 ¹ / ₂	7 ¹ / ₂	1	XLRJ5 ¹ / ₂	117 000	174 000	1 900	3 100	1,97
	9 ¹ / ₂	1 ¹ / ₆	LLRJ5 ¹ / ₂	249 000	339 000	2 600	3 500	6,89
	9 ¹ / ₂	1 ¹ / ₆	LRJ5 ¹ / ₂	288 000	389 000	1 600	2 600	6,71
	11	2	MMRJ5 ¹ / ₂	448 000	573 000	2 300	3 100	15,3
	11	2	MRJ5 ¹ / ₂	545 000	668 000	2 300	3 100	15,1
5 ³ / ₄	7 ³ / ₄	1	XLRJ5 ³ / ₄	122 000	186 000	1 800	3 000	2,05
6	8	1	XLRJ6	127 000	198 000	1 700	2 800	2,11
	10 ¹ / ₂	1 ¹ / ₆	LLRJ6	325 000	450 000	2 200	3 000	9,71
	10 ¹ / ₂	1 ¹ / ₆	LRJ6	325 000	450 000	1 300	2 200	9,62
	12	2 ¹ / ₄	MMRJ6	509 000	672 000	2 000	2 700	20,2
	12	2 ¹ / ₄	MRJ6	640 000	795 000	1 000	2 000	19,6