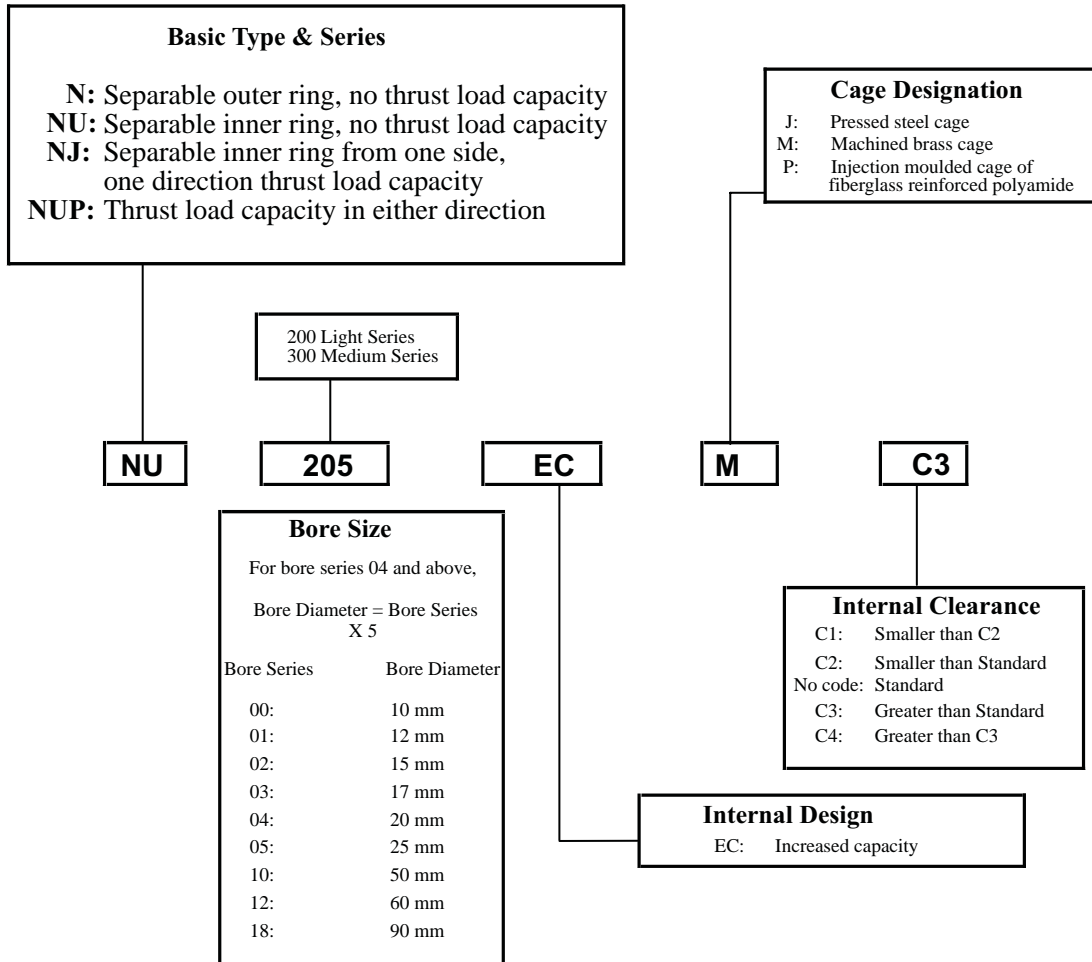
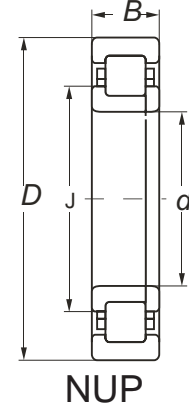
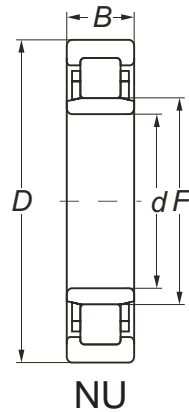
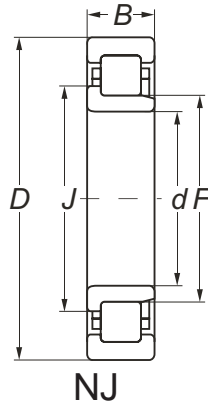
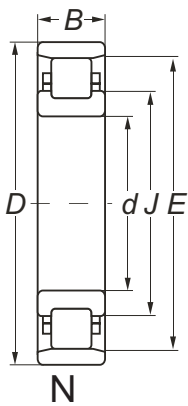


Cylindrical Roller Bearings



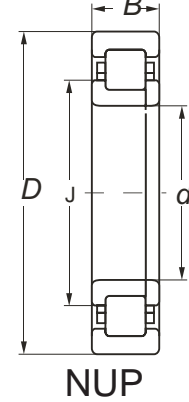
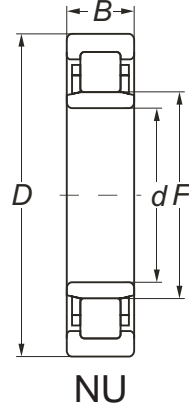
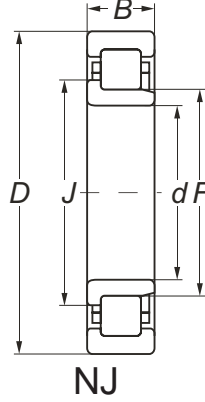
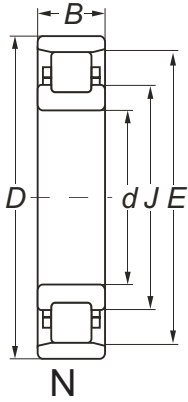
CYLINDRICAL ROLLER BEARINGS SINGLE ROW

N, NJ, NU and NUP 1000 SERIES



Inner bore <i>d</i> mm	Bearing number	Principal dimensions					Basic load ratings		Max runout speed		Mass kg
		<i>D</i>	<i>B</i>	<i>F</i>	<i>J</i>	<i>E</i>	dynamic <i>C</i>	static <i>C₀</i>	grease	oil	
		mm					N		r/min		
25	1005	47	12	30.5	32.7	41.5	11300	10500	10500	12600	0.084
30	1006	55	13	36.5	39.8	48.5	14300	13800	8400	10500	0.120
35	1007	62	14	42.0	46.6	55.0	28600	30400	7000	9100	0.160
40	1008	68	15	47.0	49.8	61.0	20000	20800	6600	8400	0.220
45	1009	75	16	52.5	55.5	67.5	35600	41600	6300	7700	0.260
50	1010	80	16	57.5	60.5	72.5	24600	27600	5900	7000	0.310
55	1011	90	18	64.5	67.7	80.5	45700	55600	4900	5900	0.400
60	1012	95	18	69.5	72.7	85.5	29920	35200	4600	5600	0.480
65	1012	100	18	74.5	77.7	90.5	30400	37200	4400	5200	0.510
70	1014	110	20	80.0	84.0	100.0	44800	53760	4200	4900	0.700
75	1015	115	20	85.0	89.0	105.0	46600	56800	3900	4600	0.740
80	1016	125	22	91.5	95.9	113.5	52800	65200	3700	4400	0.990
80	1017	130	22	96.5	100.9	118.5	54500	69200	3500	4200	1.050
90	1018	140	24	103.0	107.8	127.0	64700	83200	3300	3900	1.350
95	1019	145	24	108.0	112.8	132.0	67300	88000	3100	3700	1.400
100	1020	150	24	113.0	117.8	137.0	68600	91200	30100	3500	1.450
105	1021	160	26	119.5	124.7	145.5	80800	109600	2800	3300	1.850
110	1022	170	28	125.0	131.0	155.0	102400	132800	2600	3100	2.300
120	1024	180	28	135.0	141.0	165.0	107200	146400	2300	2800	2.450
130	1026	200	33	148.0	154.8	182.0	132000	179200	2200	2600	3.750
140	1028	210	33	158.0	164.8	192.0	137600	196000	2100	2500	4.000
150	1030	225	35	169.5	176.7	205.5	155200	220000	1800	2200	4.850
160	1032	240	38	180.0	188.0	220.0	183200	260000	1600	2100	5.950
170	1034	260	42	193.0	201.8	237.0	220000	320000	1500	1900	4.900
180	1036	280	46	205.0	215.0	255.0	268800	380000	1400	1800	10.500
190	1038	290	46	215.0	225.0	265.0	277600	400000	1400	1800	10.000
200	1040	310	51	229.0	239.4	281.0	304000	456000	1300	1600	14.000
220	1044	340	56	250.0	262.0	310.0	396000	588000	1200	1500	18.500
240	1048	360	56	270.0	282.0	330.0	418400	640000	1100	1400	20.000
260	1052	400	65	296.0	309.6	364.0	501600	772000	1000	1200	29.000
280	1056	420	65	316.0	329.6	384.0	528000	848000	900	1100	32.500
300	1060	460	74	340.0	356.0	420.0	686400	1096000	800	1000	44.000
320	1064	480	74	360.0	376.0	440.0	704000	1144000	700	900	48.500
340	1068	520	82	385.0	403.0	475.0	864000	1408000	700	900	65.000

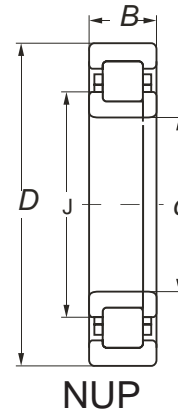
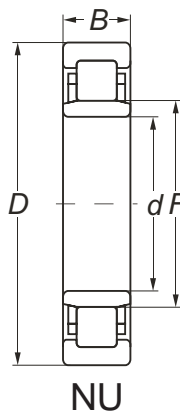
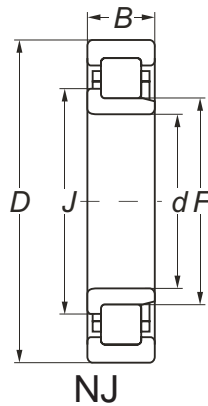
N
 NJ
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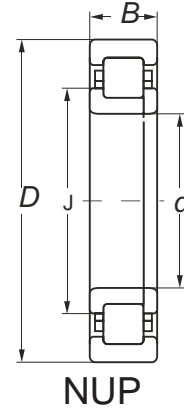
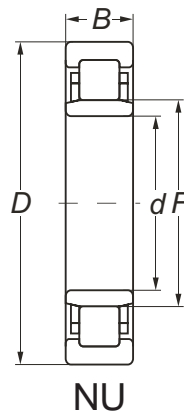
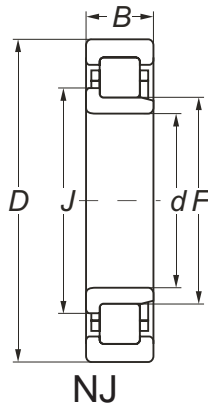
Inner bore <i>d</i> mm	Bearing number	Principal dimensions					Basic load ratings		Max runout speed		Mass kg
		<i>D</i>	<i>B</i>	<i>F</i>	<i>J</i>	<i>E</i>	dynamic C	static Co	grease	oil	
				mm				N		r/min	
15	202	35	11	19.3	21.9	N/A	10000	8100	12600	15400	0.047
17	203	40	12	22.1	25.0	35.1	13700	11400	11200	13300	0.068
20	204	47	14	26.5	29.7	41.5	20000	17600	9100	11200	0.110
25	205	52	15	31.5	34.7	46.5	22800	21600	7700	9800	0.130
30	206	62	16	37.5	41.2	55.5	30400	29200	6600	8400	0.200
35	207	72	17	44.0	48.1	64.0	38700	38400	5900	7000	0.300
40	208	80	18	49.5	54.0	71.5	43100	42400	5200	6300	0.370
45	209	85	19	54.5	59.0	76.5	48400	51200	4600	5600	0.430
50	210	90	20	59.5	64.0	81.5	51500	55600	4400	5200	0.480
55	211	100	21	66.0	70.8	90.0	67300	76000	4200	4900	0.660
60	212	110	22	72.0	77.5	100.0	74800	81600	3700	4400	0.810
65	213	120	23	78.5	84.4	108.5	84800	94400	3300	3900	1.050
70	214	125	24	83.5	89.4	113.5	95200	109600	3100	3700	1.150
75	215	130	25	88.5	94.3	118.5	104000	124800	3100	3700	1.250
80	216	140	26	95.3	101.0	127.3	110400	132800	2800	3300	1.500
85	217	150	28	100.5	107.0	136.5	132000	160000	2600	3100	1.900
90	218	160	30	107.0	114.0	145.0	146400	176000	2500	2600	2.350
95	219	170	34	112.5	120.0	154.5	200800	244000	2200	2500	3.450
100	220	180	36	119.0	127.0	163.0	211200	252000	2100	2300	3.850
105	221	190	38	125.0	134.0	173.0	233600	292000	1900	2100	4.000
110	222	200	40	132.5	141.0	180.5	272800	344000	1600	1900	4.800
120	224	215	40	143.5	153.0	195.5	286400	364000	1500	1800	5.750
130	226	230	42	153.5	164.0	209.5	312800	408000	1400	1600	6.450
140	228	250	45	169.0	179.0	221.0	356800	480000	1300	1500	8.300
150	230	270	48	182.0	193.0	238.0	400800	544000	1200	1500	10.500
160	232	290	52	195.0	206.0	259.0	492800	652000	1200	1400	15.000
170	234	310	52	207.0	220.0	279.0	501600	680000	1100	1300	19.000
180	236	320	55	217.0	230.0	289.0	554400	772000	1100	3000	19.500
190	238	340	32	230.0	224.0	306.0	716000	212000	2300	2800	23.500
200	240	360	58	243.0	258.0	323.0	612000	848000	1000	1200	28.500
200	244	400	65	270.0	286.0	350.0	612000	864000	1000	1200	38.500
240	248	440	72	295.0	313.0	385.0	761600	1096000	900	1100	51.000
260	252	480	80	320.0	340.0	420.0	936000	1360000	700	900	68.500
280	256	500	80	340.0	360.0	449.0	912000	1360000	700	900	71.500

CYLINDRICAL ROLLER BEARINGS SINGLE ROW

NJ, NU and NUP 2200 SERIES



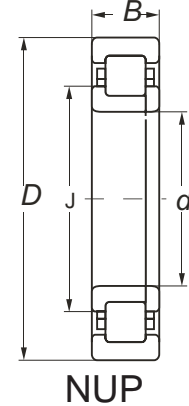
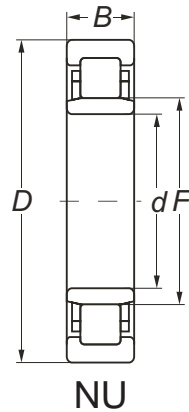
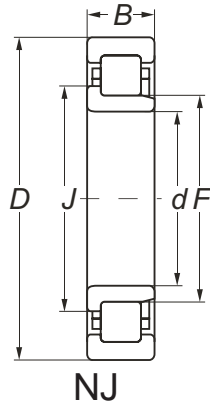
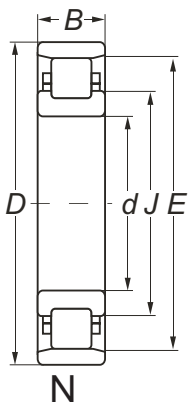
Inner bore d mm	Bearing number	Principal dimensions				Basic load ratings		Max runout speed		Mass kg
		D	B mm	F	J	dynamic C	static C_0 N	grease oil	r/min	
20	2204	47	18	26.5	29.7	23700	22000	9100	11200	0.14
25	2205	52	18	31.5	34.7	27200	27200	7700	9800	0.16
30	2206	62	20	37.5	41.2	38700	39200	6600	8400	0.26
35	2207	72	23	44.0	48.1	47500	50400	5900	7000	0.40
40	2208	80	23	49.5	54.0	56300	60000	5200	6300	0.49
45	2209	85	23	54.5	59.0	58900	65200	4600	5600	0.52
50	2210	90	23	59.5	64.0	62400	70400	4400	5200	0.56
55	2211	100	25	66.0	70.8	79200	94400	4200	4900	0.79
60	2212	110	28	72.0	77.5	102400	122400	3700	4400	1.10
65	2213	120	31	78.5	84.4	117600	144000	3300	3900	1.40
70	2214	125	31	83.5	89.4	123200	154400	3100	3700	1.50
75	2215	130	31	88.5	94.3	128800	166400	3100	3700	1.60
80	2216	140	33	95.3	101.0	149600	196000	2800	3300	2.00
85	2217	150	36	100.5	107.0	172800	224000	2600	3100	2.45
90	2218	160	40	107.0	114.0	193600	252000	2500	3000	3.15
95	2219	170	43	112.5	120.0	228800	300000	2300	2800	4.00
100	2220	180	46	119.0	134.0	268800	360000	2200	2600	4.75
110	2222	200	53	132.5	127.0	304000	416000	1900	2300	6.70
120	2224	215	58	143.5	141.0	365600	504000	1600	2100	8.30
130	2226	230	64	153.5	153.0	422400	588000	1500	1900	10.50
140	2228	250	68	169.0	164.0	457600	664000	1400	1800	13.50
150	2230	270	73	182.0	179.0	501600	744000	1300	1600	19.00
160	2232	290	80	193.0	194.0	647200	960000	1200	1500	24.00
170	2234	310	86	205.0	205.0	774400	1144000	1200	1500	30.00
180	2236	320	86	215.0	229.0	808000	1200000	1100	1400	31.50
190	2238	340	92	228.0	242.7	880000	1328000	1100	1300	39.00
200	2240	360	98	241.0	256.3	984000	1520000	1000	1200	46.00
220	2244	400	108	259.0	279.4	1256000	1824000	800	1100	62.50
240	2248	440	120	295.0	N/A	1160000	1888000	800	1000	84.00
260	2252	480	130	327.0	N/A	1432000	2400000	700	900	110.00
280	2256	500	130	364.0	N/A	1760000	2600000	600	800	115.00
300	2260	540	140	390.0	N/A	1672000	2760000	600	800	145.00
320	2264	580	150	416.0	N/A	1904000	3200000	600	700	180.00
340	2268	620	165	437.0	N/A	2112000	3600000	500	700	225.00



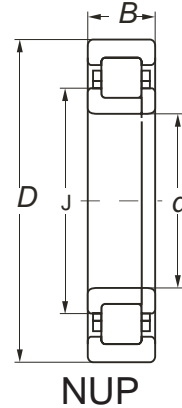
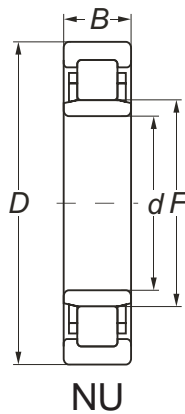
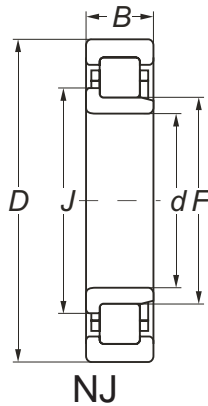
Inner bore <i>d</i> mm	Bearing number	Principal dimensions				Basic load ratings		Max runout speed		Mass kg
		<i>D</i>	<i>B</i> mm	<i>F</i>	<i>J</i>	dynamic C	static Co N	grease oil	r/min	
20	2304	52	21	27.5	31.2	33000	30400	7700	9800	0.21
25	2305	62	24	34.0	38.1	44800	44000	6300	7700	0.35
30	2306	72	27	40.5	45.0	58900	60000	5600	6600	0.53
35	2307	80	31	46.2	51.0	73000	78400	4900	5900	0.72
40	2308	90	33	52.0	57.5	89600	96000	4400	5200	0.94
45	2309	100	36	58.5	64.4	110400	122400	3900	4600	1.30
50	2310	110	40	65.0	71.2	128800	148800	3500	4200	1.70
55	2311	120	43	70.5	77.5	160800	185600	3300	3900	2.20
60	2312	130	46	77.0	84.3	179200	212000	3000	3500	2.75
65	2313	140	48	82.5	90.5	200800	232000	2800	3300	3.30
70	2314	150	35	89.0	97.3	164000	182400	2500	3000	2.85
70	2314	150	51	89.0	97.3	220000	260000	2500	3000	4.00
75	2315	160	55	95.0	104.0	264000	320000	2300	2800	4.90
80	2316	170	58	101.0	110.0	286400	352000	2200	2600	5.85
85	2317	180	60	108.0	117.0	316800	392000	2100	2500	6.85
90	2318	190	64	113.5	124.0	352000	432000	1900	2300	8.00
95	2319	200	67	121.5	132.0	374400	468000	1800	2200	9.35
100	2320	215	73	127.5	139.0	466400	588000	1600	2100	12.00
110	2322	240	80	143.0	155.0	545600	720000	1400	1800	17.00
120	2324	260	86	154.0	168.0	633600	832000	1300	1600	24.00
130	2326	280	93	167.0	181.0	748000	1000000	1200	1500	30.00
140	2328	300	102	180.0	195.0	840000	1144000	1200	1500	37.00
150	2330	320	108	193.0	209.0	952000	1304000	1100	1400	45.00
160	2332	340	114	204.0	221.6	1056000	1488000	1000	1200	53.00
170	2334	360	120	220.0	235.7	984000	1440000	900	1100	63.00
180	2336	380	126	232.0	248.0	1120000	1632000	900	1100	73.00
190	2338	400	132	240.0	262.5	1464000	2040000	800	1000	82.50
200	2340	420	138	247.0	276.1	1640000	2280000	800	1000	96.00
220	2344	460	145	275.0	302.2	1864000	2600000	700	900	120.00
240	2348	500	155	310.0	N/A	1696000	2600000	600	800	155.00
280	2356	580	175	362.0	N/A	2160000	3440000	500	700	230.00

CYLINDRICAL ROLLER BEARINGS SINGLE ROW

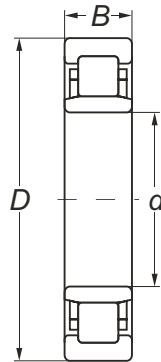
N, NJ, NU and NUP 300 SERIES



Inner bore <i>d</i> mm	Bearing number	Principal dimensions					Basic load ratings		Max runout speed		Mass kg
		<i>D</i>	<i>B</i>	<i>F</i>	<i>J</i>	<i>E</i>	dynamic <i>C</i>	static <i>C</i> ₀	grease	oil	
		mm					N		r/min		
15	302	42	13	21.0	24.3	N/A	15500	12200	11200	13300	0.086
20	304	52	15	27.5	27.7	45.5	24600	20800	8400	10500	0.150
25	305	62	17	34.0	31.2	54.0	32100	29200	6600	8400	0.240
30	306	72	19	40.5	38.1	62.5	40900	38400	6300	7700	0.360
35	307	80	21	46.2	45.0	70.2	51500	50400	5600	6600	0.480
40	308	90	23	52.0	51.0	80.0	64700	62400	4600	5600	0.650
45	309	100	25	58.5	57.5	88.5	79200	80000	4400	5200	0.900
50	310	110	27	65.0	64.4	97.0	88000	89600	3500	4200	1.150
55	311	120	29	70.5	71.2	106.5	110400	114400	3300	3900	1.450
60	312	130	31	77.0	77.5	115.0	120800	128000	3000	3500	1.800
65	313	140	33	82.5	84.3	124.5	146400	156800	2800	3300	2.250
70	314	150	35	89.0	90.5	133.0	164000	182400	2500	3000	2.750
75	315	160	37	95.0	97.3	143.0	193600	212000	2300	2800	3.300
80	316	170	39	101.0	104.0	151.0	208000	232000	2200	2600	3.950
85	317	180	41	108.0	110.0	160.0	237600	268000	2100	2500	4.700
90	318	190	43	113.5	117.0	169.5	255200	288000	1900	2300	5.450
95	319	200	45	121.5	124.0	177.5	272800	312000	1800	2200	6.250
100	320	215	47	127.5	132.0	191.5	312800	352000	1600	2100	7.600
105	321	225	49	133.0	139.0	201.0	352000	400000	1500	1900	8.800
110	322	240	50	143.0	145.0	211.0	374400	432000	1400	1800	10.500
120	324	260	55	154.0	155.0	230.0	431200	496000	1300	1600	13.500
130	326	280	58	167.0	168.0	247.0	501600	600000	1200	1500	18.500
140	328	300	62	180.0	181.0	260.0	545600	664000	1200	1500	22.500
150	330	320	65	193.0	195.0	283.0	624800	772000	1100	1400	27.500
160	332	340	68	204.0	209.0	300.0	704000	864000	1000	1200	32.500
170	334	360	72	220.0	N/A	318.0	647200	832000	1100	1300	38.500
180	336	380	75	232.0	N/A	335.0	730400	944000	1000	1200	42.500
190	338	400	79	245.0	N/A	353.0	912000	1200000	800	1000	50.000
200	340	420	80	260.0	N/A	370.0	792000	1056000	900	1100	56.000
220	344	460	88	284.0	N/A	406.0	968000	1304000	800	1000	72.500
240	348	500	95	310.0	N/A	442.0	1160000	1600000	700	900	94.500



Inner bore d mm	Bearing number	Principal dimensions				Basic load ratings		Max runout speed		Mass kg
		D	B mm	F	J	dynamic C	static Co N	grease oil	r/min	
30	406	90	23	45.0	50.5	48400	42400	5200	6300	0.75
35	407	100	25	53.0	59.0	61200	55600	4600	5600	1.00
40	408	110	27	58.0	64.8	77400	72000	4200	4900	1.30
45	409	120	29	64.5	71.8	84800	81600	3900	4600	1.65
50	410	130	31	70.8	78.8	104000	101600	3500	4200	2.00
55	411	140	33	77.2	85.2	113600	112000	3300	3900	2.50
60	412	150	35	83.0	91.8	134400	138400	3000	3500	3.00
65	413	160	37	89.3	98.5	146400	152000	2800	3300	3.60
70	414	180	42	100.0	110.0	183200	192000	2500	3000	5.25
75	415	190	45	104.5	116.0	211200	224000	2300	2800	6.25
80	416	200	48	110.0	122.0	242400	256000	2200	2600	7.30
85	417	210	52	113.0	126.0	255200	268000	2100	2500	8.70
90	418	225	54	123.5	137.0	304000	332000	1900	2300	10.50
95	419	240	55	133.5	147.0	330400	364000	1800	2200	13.50
100	420	250	58	139.0	153.0	343200	380000	1600	2100	14.00
105	421	260	60	144.5	159.0	400800	456000	1500	1900	19.00
110	422	280	65	155.0	171.0	418400	468000	1400	1800	20.00
120	424	310	72	170.0	188.0	515200	588000	1300	1600	28.00



Inner bore <i>d</i> mm	Bearing number	Principal dimensions		Basic load ratings		Max runout speed		Mass kg
		<i>D</i> mm	<i>B</i>	dynamic <i>C</i> N	static <i>C</i> ₀	grease oil	r/min	
40	NU 5208 M	80	30.16	86686	104000	7500	8900	0.736
45	NU 5209 M	85	30.16	89760	111000	6700	7900	0.795
50	NU 5210 M	90	30.16	92600	128000	6300	7500	0.877
55	NU 5211 M	100	33.34	119000	178000	5600	6700	1.200
60	NU 5212 M	110	36.50	150000	211000	5300	6300	1.590
65	NU 5213 M	120	38.10	139000	196000	4700	5600	1.880
70	NU 5214 M	125	39.69	178000	261000	4700	5600	2.220
75	NU 5215 M	130	41.28	196000	299000	4500	5300	2.410
80	NU 5216 M	140	44.45	185000	282000	4200	5000	2.910
85	NU 5217 M	150	49.21	211000	316000	3800	4500	3.690
90	NU 5218 M	160	52.40	237000	355000	3500	4200	4.480
95	NU 5219 M	170	55.56	335000	511000	3300	4000	5.650
100	NU 5220 M	180	60.32	304000	473000	3200	3800	6.490
105	NU 5221 M	190	65.10	362000	573000	3000	3500	7.940
110	NU 5222 M	200	69.85	464000	736000	3000	3500	10.000
120	NU 5224 M	215	76.20	482000	794000	2700	3200	11.800
130	NU 5226 M	230	79.38	511000	841000	2500	3000	13.800
140	NU 5228 M	250	82.55	596000	981000	2200	2700	17.100
150	NU 5230 M	270	88.90	736000	1260000	2000	2400	22.900
160	NU 5232 M	290	98.42	764000	1310000	1900	2200	28.900
170	NU 5234 M	310	104.77	891000	1470000	1800	2100	35.500
180	NU 5236 M	320	107.95	1058000	1713000	1600	1900	37.900
190	NU 5238 M	340	114.30	1115000	1820000	1700	2100	44.900
200	NU 5240 M	360	120.65	1306000	2110000	1450	1800	54.250