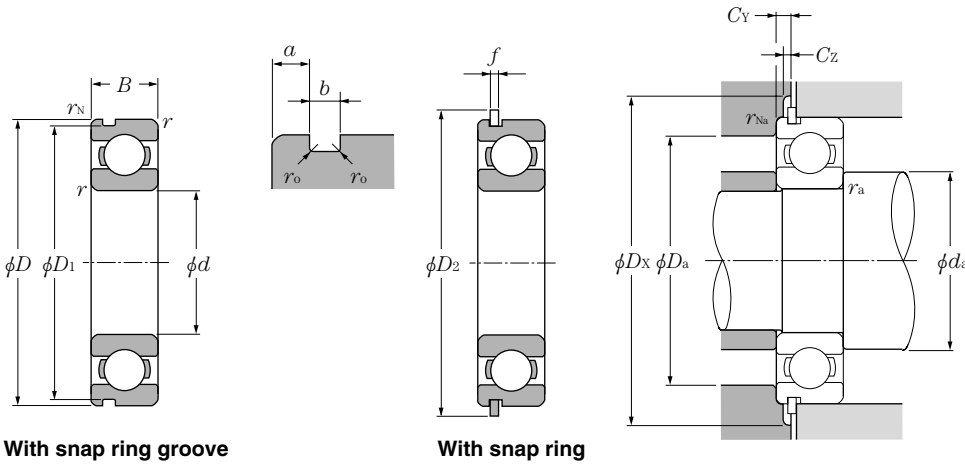


d 65 ~ 85mm

d	Boundary dimensions				Basic load ratings				Factor f_0	Limiting speeds			Bearing numbers			
	mm				dynamic		static			grease open type	min ⁻¹ oil		open type	non- contact shielded type	low- torque sealed type	contact sealed type
	D	B	$r_{s\ min}^{1)}$	$r_{NS\ min}$	C_r	C_{or}	C_r	C_{or}			ZZ	LLB				
65	85	10	0.6	0.5	11.6	11.0	1 180	1 120	16.2	7 400	8 700	4 100	6813	ZZ	LLB	LLU
	90	13	1	0.5	17.4	16.1	1 770	1 640	16.6	7 000	8 200	4 000	6913	ZZ	LLB	LLU
	100	11	0.6	—	20.5	18.7	2 090	1 910	16.5	6 500	7 700	—	16013	—	—	—
	100	18	1.1	0.5	30.5	25.2	3 100	2 570	15.8	6 500	7 700	3 900	6013	ZZ	LLB	LLU
	120	23	1.5	0.5	57.5	40.0	5 850	4 100	14.4	5 500	6 500	3 600	6213	ZZ	LLB	LLU
	140	33	2.1	0.5	92.5	60.0	9 450	6 100	13.2	4 900	5 800	3 300	6313	ZZ	LLB	LLU
	160	37	2.1	—	111	72.5	11 300	7 400	12.7	4 400	5 200	—	6413	—	—	—
70	90	10	0.6	0.5	12.1	11.9	1 230	1 220	16.1	6 900	8 100	3 800	6814	ZZ	LLB	LLU
	100	16	1	0.5	23.7	21.2	2 420	2 160	16.3	6 500	7 700	3 700	6914	ZZ	LLB	LLU
	110	13	0.6	—	24.4	22.6	2 480	2 300	16.5	6 100	7 100	—	16014	—	—	—
	110	20	1.1	0.5	38.0	31.0	3 900	3 150	15.6	6 100	7 100	3 600	6014	ZZ	LLB	LLU
	125	24	1.5	0.5	62.0	44.0	6 350	4 500	14.5	5 100	6 000	3 400	6214	ZZ	LLB	LLU
	150	35	2.1	0.5	104	68.0	10 600	6 950	13.2	4 600	5 400	3 100	6314	ZZ	LLB	LLU
	180	42	3	—	128	89.5	13 100	9 100	12.7	4 100	4 800	—	6414	—	—	—
75	95	10	0.6	0.5	12.5	12.9	1 280	1 310	16.0	6 400	7 600	3 600	6815	ZZ	LLB	LLU
	105	16	1	0.5	24.4	22.6	2 480	2 300	16.5	6 100	7 200	3 500	6915	ZZ	LLB	LLU
	115	13	0.6	—	25.0	24.0	2 540	2 450	16.6	5 700	6 700	—	16015	—	—	—
	115	20	1.1	0.5	39.5	33.5	4 050	3 400	15.8	5 700	6 700	3 300	6015	ZZ	LLB	LLU
	130	25	1.5	0.5	66.0	49.5	6 750	5 050	14.7	4 800	5 600	3 200	6215	ZZ	LLB	LLU
	160	37	2.1	0.5	113	77.0	11 600	7 850	13.2	4 300	5 000	2 900	6315	ZZ	LLB	LLU
	190	45	3	—	138	99.0	14 000	10 100	12.7	3 800	4 500	—	6415	—	—	—
80	100	10	0.6	0.5	12.7	13.3	1 290	1 360	16.0	6 000	7 100	3 400	6816	ZZ	LLB	LLU
	110	16	1	0.5	24.9	24.0	2 540	2 450	16.6	5 700	6 700	3 200	6916	ZZ	LLB	LLU
	125	14	0.6	—	25.4	25.1	2 590	2 560	16.4	5 300	6 200	—	16016	—	—	—
	125	22	1.1	0.5	47.5	40.0	4 850	4 050	15.6	5 300	6 200	3 100	6016	ZZ	LLB	LLU
	140	26	2	0.5	72.5	53.0	7 400	5 400	14.6	4 500	5 300	3 000	6216	ZZ	LLB	LLU
	170	39	2.1	0.5	123	86.5	12 500	8 850	13.3	4 000	4 700	2 700	6316	ZZ	LLB	LLU
	200	48	3	—	164	125	16 700	12 800	12.3	3 600	4 200	—	6416	—	—	—
85	110	13	1	0.5	18.7	19.0	1 910	1 940	16.2	5 700	6 700	3 100	6817	ZZ	LLB	LLU
	120	18	1.1	0.5	32.0	29.6	3 250	3 000	16.4	5 400	6 300	3 000	6917	ZZ	LLB	LLU
	130	14	0.6	—	25.9	26.2	2 640	2 670	16.4	5 000	5 900	—	16017	—	—	—
	130	22	1.1	0.5	49.5	43.0	5 050	4 400	15.8	5 000	5 900	2 900	6017	ZZ	LLB	LLU
	150	28	2	0.5	83.5	64.0	8 500	6 500	14.7	4 200	5 000	2 800	6217	ZZ	LLB	LLU
	180	41	3	0.5	133	97.0	13 500	9 850	13.3	3 800	4 500	2 600	6317	ZZ	LLB	LLU

1) Smallest allowable dimension for chamfer dimension r .



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

$\frac{f_0 \cdot F_a}{C_{or}}$	e	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

When $P_{or} < F_r$ use $P_{or} = F_r$

Bearing numbers		Snap ring groove dimensions mm				Snap ring dimensions mm		Abutment and fillet dimensions mm								Mass ⁴⁾ kg
snap ²⁾ ring groove	snap ²⁾ ring	D_1 max	a max	b min	r_0 max	D_2 max	f max	d_a min	d_a max ³⁾	D_a max	D_x (approx.)	C_Y max	C_Z min	r_{as} max	r_{Ns} max	(approx.)
N	NR	82.9	1.7	1.3	0.4	89.4	1.12	69	70	81	91	2.5	1.2	0.6	0.5	0.128
N	NR	87.9	2.1	1.3	0.4	94.4	1.12	70	71.5	85	96	2.9	1.2	1	0.5	0.206
—	—	—	—	—	—	—	—	69	—	96	—	—	—	0.6	—	0.307
N	NR	96.8	2.87	2.7	0.6	106.5	2.46	71.5	74	93.5	108	5	2.5	1	0.5	0.421
N	NR	115.21	4.06	3.1	0.6	129.7	2.82	73	80.5	112	131.5	6.5	2.9	1.5	0.5	0.99
N	NR	135.23	4.9	3.1	0.6	149.7	2.82	76	86	129	152	7.3	2.9	2	0.5	2.08
—	—	—	—	—	—	—	—	76	—	149	—	—	—	2	—	3.3
N	NR	87.9	1.7	1.3	0.4	94.4	1.12	74	75.5	86	96	2.5	1.2	0.6	0.5	0.137
N	NR	97.9	2.5	1.3	0.4	104.4	1.12	75	77.5	95	106	3.3	1.2	1	0.5	0.334
—	—	—	—	—	—	—	—	74	—	106	—	—	—	0.6	—	0.441
N	NR	106.81	2.87	2.7	0.6	116.6	2.46	76.5	80.5	103.5	118	5	2.5	1	0.5	0.604
N	NR	120.22	4.06	3.1	0.6	134.7	2.82	78	85	117	136.5	6.5	2.9	1.5	0.5	1.07
N	NR	145.24	4.9	3.1	0.6	159.7	2.82	81	92.5	139	162	7.3	2.9	2	0.5	2.52
—	—	—	—	—	—	—	—	83	—	167	—	—	—	2.5	—	4.83
N	NR	92.9	1.7	1.3	0.4	99.4	1.12	79	80	91	101	2.5	1.2	0.6	0.5	0.145
N	NR	102.6	2.5	1.3	0.4	110.7	1.12	80	82.5	100	112	3.3	1.2	1	0.5	0.353
—	—	—	—	—	—	—	—	79	—	111	—	—	—	0.6	—	0.464
N	NR	111.81	2.87	2.7	0.6	121.6	2.46	81.5	85.5	108.5	123	5	2.5	1	0.5	0.649
N	NR	125.22	4.06	3.1	0.6	139.7	2.82	83	90.5	122	141.5	6.5	2.9	1.5	0.5	1.18
N	NR	155.22	4.9	3.1	0.6	169.7	2.82	86	99	149	172	7.3	2.9	2	0.5	3.02
—	—	—	—	—	—	—	—	88	—	177	—	—	—	2.5	—	5.72
N	NR	97.9	1.7	1.3	0.4	104.4	1.12	84	85	96	106	2.5	1.2	0.6	0.5	0.154
N	NR	107.6	2.5	1.3	0.4	115.7	1.12	85	88	105	117	3.3	1.2	1	0.5	0.373
—	—	—	—	—	—	—	—	84	—	121	—	—	—	0.6	—	0.597
N	NR	120.22	2.87	3.1	0.6	134.7	2.82	86.5	91.5	118.5	136.5	5.3	2.9	1	0.5	0.854
N	NR	135.23	4.9	3.1	0.6	149.7	2.82	89	95.5	131	152	7.3	2.9	2	0.5	1.4
N	NR	163.65	5.69	3.5	0.6	182.9	3.1	91	105	159	185	8.4	3.1	2	0.5	3.59
—	—	—	—	—	—	—	—	93	—	187	—	—	—	2.5	—	6.76
N	NR	107.6	2.1	1.3	0.4	115.7	1.12	90	91	105	117	2.9	1.2	1	0.5	0.27
N	NR	117.6	3.3	1.3	0.4	125.7	1.12	91.5	94	113.5	127	4.1	1.2	1	0.5	0.536
—	—	—	—	—	—	—	—	89	—	126	—	—	—	0.6	—	0.626
N	NR	125.22	2.87	3.1	0.6	139.7	2.82	91.5	97	123.5	141.5	5.3	2.9	1	0.5	0.89
N	NR	145.24	4.9	3.1	0.6	159.7	2.82	94	103	141	162	7.3	2.9	2	0.5	1.79
N	NR	173.66	5.69	3.5	0.6	192.9	3.1	98	112	167	195	8.4	3.1	2.5	0.5	4.23

2) Sealed and shielded bearings are also available.

3) This dimension applies to sealed and shielded bearings.

4) Does not include bearings with snap rings.