

Bore Diameter 25 – 45 mm

Dynamic Equivalent Load

$$P = XF_r + YF_a$$

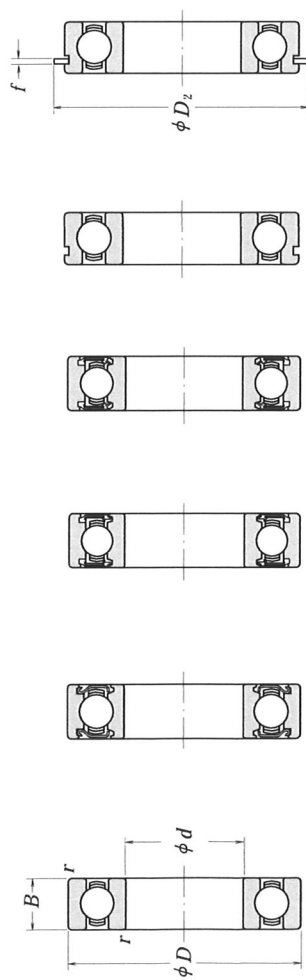
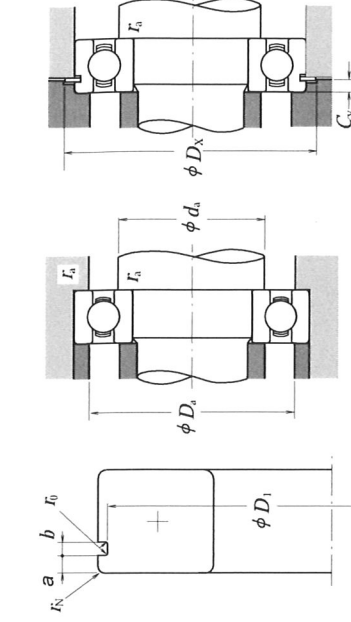
$\frac{f_0 F_a}{C_{0r}}$	e	$\frac{F_a \leq e}{F_r}$		$\frac{F_a > e}{F_r}$	
		X	Y	X	Y
0.172	0.19	1	0	0.56	2.30
0.345	0.22	1	0	0.56	1.99
0.689	0.26	1	0	0.56	1.71
1.03	0.28	1	0	0.56	1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34	1	0	0.56	1.31
3.45	0.38	1	0	0.56	1.15
5.17	0.42	1	0	0.56	1.04
6.89	0.44	1	0	0.56	1.00

Static Equivalent Load

$$F_r > 0.8, P_0 = 0.6F_r + 0.5F_a$$

$$F_r \leq 0.8, P_0 = F_r$$

$$F_a > 0.8, P_0 = F_r$$



Boundary Dimensions (mm)	Basic Load Ratings (N)			Factor	Limiting Speeds (min ⁻¹)				Bearing Numbers		
	d	D	B	r	C _r	C _{0r}	C _r	C _{0r}	Open	Shielded	Sealed
25	37	7	0.3	16.1	18 000	10 000	22 000	6805	ZZ	DD	DDU
	42	9	0.3	15.4	16 000	10 000	19 000	6905	ZZ	DD	DDU
	47	8	0.3	15.1	15 000	—	18 000	16005	—	—	—
	47	12	0.6	14.5	15 000	9 500	18 000	6005	ZZ	VV	DDU
	52	15	1	13.9	13 000	9 000	15 000	6205	ZZ	VV	DDU
28	62	17	1.1	13.2	11 000	8 000	13 000	6305	ZZ	VV	DDU
	52	12	0.6	14.5	14 000	8 500	16 000	60/28	ZZ	VV	DDU
	58	16	1	13.9	12 000	8 000	14 000	62/28	ZZ	VV	DDU
	68	18	1.1	12.4	10 000	7 500	13 000	63/28	ZZ	VV	DDU
	30	42	7	0.3	16.4	15 000	9 000	6806	ZZ	VV	DD
30	47	9	0.3	15.8	14 000	8 500	17 000	6906	ZZ	VV	DDU
	55	9	0.3	15.2	13 000	—	15 000	16006	—	—	—
	55	13	1	14.7	13 000	8 000	15 000	6006	ZZ	VV	DDU
	62	16	1	13.8	11 000	7 500	13 000	6206	ZZ	VV	DDU
	72	19	1.1	13.3	9 500	6 700	12 000	6306	ZZ	VV	DDU
32	58	13	1	14.5	12 000	7 500	14 000	60/32	ZZ	VV	DDU
	65	17	1	13.6	10 000	7 100	12 000	62/32	ZZ	VV	DDU
	75	20	1.1	13.2	9 000	6 300	11 000	63/32	ZZ	VV	DDU
35	47	7	0.3	16.7	14 000	7 500	16 000	6807	ZZ	VV	DD
	55	10	0.6	15.5	12 000	7 500	15 000	6907	ZZ	VV	DDU
	62	9	0.3	15.6	11 000	—	13 000	16007	—	—	—
	62	14	1	14.8	11 000	6 700	13 000	6007	ZZ	VV	DDU
	72	17	1.1	13.8	9 500	6 300	11 000	6207	ZZ	VV	DDU
40	80	21	1.5	13.2	8 500	6 000	10 000	6307	ZZ	VV	DDU
	52	7	0.3	17.0	12 000	6 700	14 000	6808	ZZ	VV	DD
	62	12	0.6	15.7	11 000	6 300	13 000	6908	ZZ	VV	DDU
	68	9	0.3	16.0	10 000	—	12 000	16008	—	—	—
	68	15	1	15.3	10 000	6 000	12 000	6008	ZZ	VV	DDU
45	80	18	1.1	14.0	8 500	5 600	10 000	6208	ZZ	VV	DDU
	90	23	1.5	13.2	7 500	5 300	9 000	6308	ZZ	VV	DDU
	58	7	0.3	17.2	11 000	6 000	13 000	6809	ZZ	VV	DD
	68	12	0.6	15.9	9 500	5 600	12 000	6909	ZZ	VV	DDU
	75	10	0.6	15.9	9 000	—	11 000	16009	—	—	—
50	85	19	1.1	14.4	7 500	5 300	9 000	6209	ZZ	VV	DDU
	100	25	1.5	13.1	6 700	4 800	8 000	6309	ZZ	VV	DDU

Notes (1) For tolerances for the snap ring grooves and snap ring dimensions, refer to Pages A50 to A53.

(2) When heavy axial loads are applied, increase d_1 and decrease d_2 from the above values.

(3) Ring types N and NR applicable only to open-type bearings. Please consult NSK about the snap ring groove dimensions of sealed or shielded bearings.

With Snap Ring Groove		Snap Ring Groove Dimensions (mm)				Snap Ring (°) Dimensions (mm)				Abutment and Fillet Dimensions (mm)				Mass (kg)
		a	b	D ₁	r ₀	r _N	D ₂	f	d ₂ (°)	D _a (°)	r _a	D _s	C _y	approx.
N	NR	1.3	0.95	35.7	0.25	0.3	39.8	0.85	27	27	0.3	40.5	1.8	0.021
N	NR	1.7	0.95	40.7	0.25	0.3	44.8	0.85	27	28.5	0.3	45.5	2.3	0.042
N	NR	—	—	—	—	—	—	—	27	45	0.3	—	—	0.059
N	NR	2.06	1.35	44.6	0.4	0.5	52.7	1.12	29	30	0.6	53.5	2.9	0.079
N	NR	2.46	1.35	49.73	0.4	0.5	57.9	1.12	30	32	0.7	58.5	3.3	0.125
N	NR	3.28	1.9	59.61	0.6	0.5	67.7	1.7	31.5	36	55.5	1	4.6	0.235
N	NR	2.06	1.35	49.73	0.4	0.5	57.9	1.12	32	34	0.6	58.5	2.9	0.096
N	NR	2.46	1.35	55.6	0.4	0.5	63.7	1.12	33	35.5	1	64.5	3.3	0.175
N	NR	3.28	1.9	64.82	0.6	0.5	74.6	1.7	34.5	38	61.5	1	76	0.287
N	NR	1.3	0.95	40.7	0.25	0.3	44.8	0.85	32	32	0.3	45.5	1.8	0.024
N	NR	1.7	0.95	45.7	0.25	0.3	49.8	0.85	32	34	0.3	50.5	2.3	0.052
N	NR	—	—	—	—	—	—	—	32	53	0.3	—	—	0.087
N	NR	2.08	1.35	52.6	0.4	0.5	60.7	1.12	35	36.5	0.7	61.5	2.9	0.116
N	NR	3.28	1.9	59.61	0.6	0.5	67.7	1.7	35	38.5	1	68.5	4.6	0.199
N	NR	3.28	1.9	68.81	0.6	0.5	78.6	1.7	36.5	42.5	1	80	4.6	0.345
N	NR	2.08	1.35	55.6	0.4	0.5	63.7	1.12	37	38.5	1	64.5	2.9	0.122
N	NR	3.28	1.9	62.6	0.6	0.5	70.7	1.7	37	40	0.6	71.5	4.6	0.225
N	NR	3.28	1.9	71.83	0.6	0.5	81.6	1.7	38.5	44.5	1	83	4.6	0.389
N	NR	1.3	0.95	45.7	0.25	0.3	49.8	0.85	37	37	0.3	50.5	1.8	0.027
N	NR	1.7	0.95	53.7	0.25	0.5	57.8	0.85	39	39	0.6	58.5	2.3	0.075
N	NR	—	—	—	—	—	—	—	37	60	0.3	—	—	0.107
N	NR	2.08	1.9	59.61	0.6	0.5	67.7	1.7	40	41.5	1	68.5	3.4	0.151
N	NR	3.28	1.9	68.81	0.6	0.5	78.6	1.7	41.5	44.5	1	80	4.6	0.284
N	NR	3.28	1.9	76.81	0.6	0.5	86.6	1.7	43	47	1.5	88	4.6	0.464
N	NR	1.3	0.95	50.7	0.25	0.3	54.8	0.85	42	42	0.3	55.5	1.8	0.031
N	NR	1.7	0.95	60.7	0.25	0.5	64.8	0.85	44	46	0.6	65.5	2.3	0.112
N	NR	—	—	—	—	—	—	—	42	66	0.3	—	—	0.13
N	NR	2.49	1.9	64.82	0.6	0.5	74.6	1.7	45	47.5	1	76	3.8	0.19
N	NR	3.28	1.9	76.81	0.6	0.5	86.6	1.7	46.5	50.5	1	88	4.6	0.366
N	NR	3.28	2.7	86.79	0.6	0.5	96.5	2.46	48	53	1.5	98	5.4	0.636
N	NR	1.3	0.95	56.7	0.25	0.3	60.8	0.85	47	47.5	0.3	61.5	1.8	0.038
N	NR	1.7	0.95	66.7	0.25	0.3	70.8	0.85	49	50	0.6	72	2.3	0.126
N	NR	—	—	—	—	3(4)	—	—	49	71	0.6	—	—	0.167
N	NR	2.49	1.9	71.83	0.6	0.5	81.6	1.7	50	53.5	1	83	3.8	0.241
N	NR	3.28	1.9	81.81	0.6	0.5	91.6	1.7	51.5	55.5	1	93	4.6	0.42
N	NR	3.28	2.7	96.8	0.6	0.5	106.5	2.46	53	61.5	1.5	108	5.4	0.829