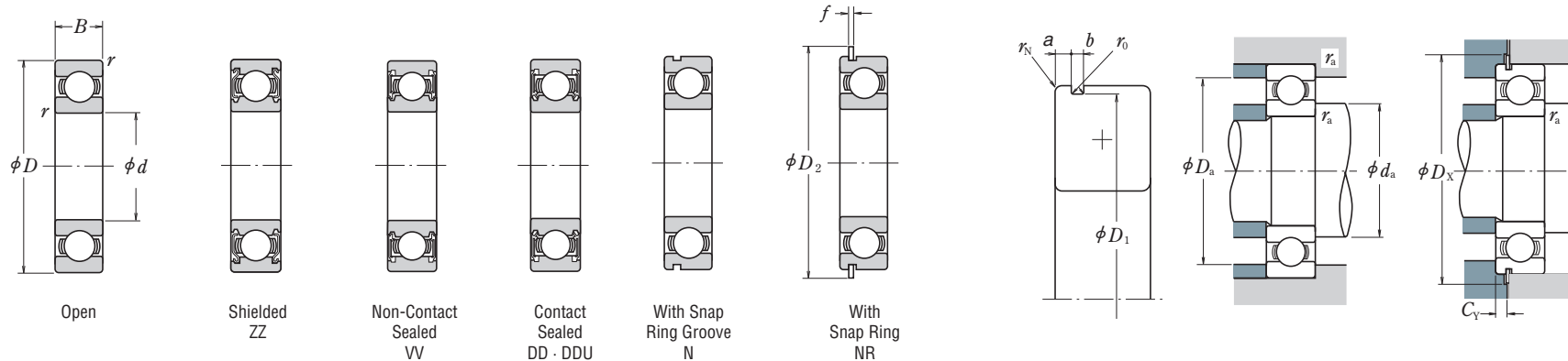


■ SINGLE-ROW DEEP GROOVE BALL BEARINGS

Bore Diameter 32 – 45 mm



Dynamic Equivalent Load

$$P = XF_r + YF_a$$

$\frac{f_0 F_a}{C_{0r}}$	e	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
		0.172	0.19	1	0
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

$$\frac{F_a}{F_r} > 0.8, P_0 = 0.6F_r + 0.5F_a$$

$$\frac{F_a}{F_r} \leq 0.8, P_0 = F_r$$

Boundary Dimensions (mm)				Basic Load Ratings (N)		Factor	Limiting Speeds (min ⁻¹)			Bearing Designations			With Snap Ring Groove		Snap Ring Groove Dimensions (1) (mm)					Snap Ring (1) Dimensions (mm)		Abutment and Fillet Dimensions (mm)					Mass (kg)																						
d	D	B	r min.	C _r	C _{0r}	f ₀	Grease		Oil	Open	Shielded	Sealed	a max.	b min.	D ₁ max.	r ₀ max.	r _N min.	D ₂ max.	f max.	d _a (2) min.	D _a (2) max.	r _a max.	D _x min.	C _Y max.	approx.																								
32	58	13	1	16 600	9 150	14.5	12 000	7 500	14 000	60/32	ZZ	VV	DDU	N	NR	2.08	1.35	55.6	0.4	0.5	63.7	1.12	37	38.5	53	1	64.5	2.9	0.122																				
	65	17	1	22 800	11 600	13.6	10 000	7 100	12 000																					62/32	ZZ	VV	DDU	N	NR	3.28	1.9	62.6	0.6	0.5	70.7	1.7	37	40	60	1	71.5	4.6	0.225
	75	20	1.1	33 000	17 000	13.2	9 000	6 300	11 000																					63/32	ZZ	VV	DDU	N	NR	3.28	1.9	71.83	0.6	0.5	81.6	1.7	38.5	44.5	68.5	1	83	4.6	0.389
35	47	7	0.3	5 400	4 100	16.7	14 000	7 500	16 000	6807	ZZ	VV	DD	N	NR	1.30	0.95	45.7	0.25	0.3	49.8	0.85	37	37	45	0.3	50.5	1.8	0.027																				
	55	10	0.6	11 600	7 250	15.5	12 000	7 500	15 000																					6907	ZZ	VV	DDU	N	NR	1.70	0.95	53.7	0.25	0.5	57.8	0.85	39	39	51	0.6	58.5	2.3	0.075
	62	9	0.3	12 800	8 200	15.6	11 000	—	13 000																					16007	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40	62	14	1	17 600	10 300	14.8	13 000	6 700	15 000	6007	ZZ	VV	DDU	N	NR	2.08	1.9	59.61	0.6	0.5	67.7	1.7	40	41.5	57	1	68.5	3.4	0.151																				
	72	17	1.1	28 200	15 300	13.8	11 000	6 300	13 000																					6207	ZZ	VV	DDU	N	NR	3.28	1.9	68.81	0.6	0.5	78.6	1.7	41.5	44.5	65.5	1	80	4.6	0.284
	80	21	1.5	36 500	19 200	13.2	10 000	6 000	12 000																					6307	ZZ	VV	DDU	N	NR	3.28	1.9	76.81	0.6	0.5	86.6	1.7	43	47	72	1.5	88	4.6	0.464
40	52	7	0.3	7 000	5 550	17.0	12 000	6 700	14 000	6808	ZZ	VV	DD	N	NR	1.30	0.95	50.7	0.25	0.3	54.8	0.85	42	42	50	0.3	55.5	1.8	0.031																				
	62	12	0.6	15 000	10 000	15.7	11 000	6 300	13 000																					6908	ZZ	VV	DDU	N	NR	1.70	0.95	60.7	0.25	0.5	64.8	0.85	44	46	58	0.6	65.5	2.3	0.112
	68	9	0.3	13 900	9 650	16.0	10 000	—	12 000																					16008	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45	68	15	1	18 400	11 500	15.3	12 000	6 000	14 000	6008	ZZ	VV	DDU	N	NR	2.49	1.9	64.82	0.6	0.5	74.6	1.7	45	47.5	63	1	76	3.8	0.19																				
	80	18	1.1	32 000	17 900	14.0	9 500	5 600	12 000																					6208	ZZ	VV	DDU	N	NR	3.28	1.9	76.81	0.6	0.5	86.6	1.7	46.5	50.5	73.5	1	88	4.6	0.366
	90	23	1.5	45 000	24 000	13.2	9 000	5 300	11 000																					6308	ZZ	VV	DDU	N	NR	3.28	2.7	86.79	0.6	0.5	96.5	2.46	48	53	82	1.5	98	5.4	0.636
45	58	7	0.3	7 250	6 150	17.2	11 000	6 000	13 000	6809	ZZ	VV	DD	N	NR	1.30	0.95	56.7	0.25	0.3	60.8	0.85	47	47.5	56	0.3	61.5	1.8	0.038																				
	68	12	0.6	15 500	10 900	15.9	9 500	5 600	12 000																					6909	ZZ	VV	DDU	N	NR	1.70	0.95	66.7	0.25	0.3(3)	70.8	0.85	49	50	64	0.6	72	2.3	0.126
	75	10	0.6	16 400	11 400	15.9	9 000	—	11 000																					16009	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45	75	16	1	23 000	15 200	15.3	10 000	5 300	12 000	6009	ZZ	VV	DDU	N	NR	2.49	1.9	71.83	0.6	0.5	81.6	1.7	50	53.5	70	1	83	3.8	0.241																				
	85	19	1.1	34 500	20 400	14.4	9 000	5 300	11 000																					6209	ZZ	VV	DDU	N	NR	3.28	1.9	81.81	0.6	0.5	91.6	1.7	51.5	55.5	78.5	1	93	4.6	0.42
	100	25	1.5	58 500	32 000	13.1	7 500	4 800	9 500																					6309	ZZ	VV	DDU	N	NR	3.28	2.7	96.8	0.6	0.5	106.5	2.46	53	61.5	92	1.5	108	5.4	0.829

- Notes** (1) For tolerances of snap ring grooves and snap ring dimensions, refer to Pages A116 to A119.
 (2) When heavy axial loads are applied, d_a and D_a can be adjusted up to the shoulder diameter of the races. Please consult NSK for details.
 (3) Does not conform to ISO464.

- Remarks** 1. Diameter Series 7 (extra-thin wall) bearings are also available; please contact NSK for details.
 2. When using bearings with rotating outer rings, contact NSK if they are sealed, shielded, or have snap rings.