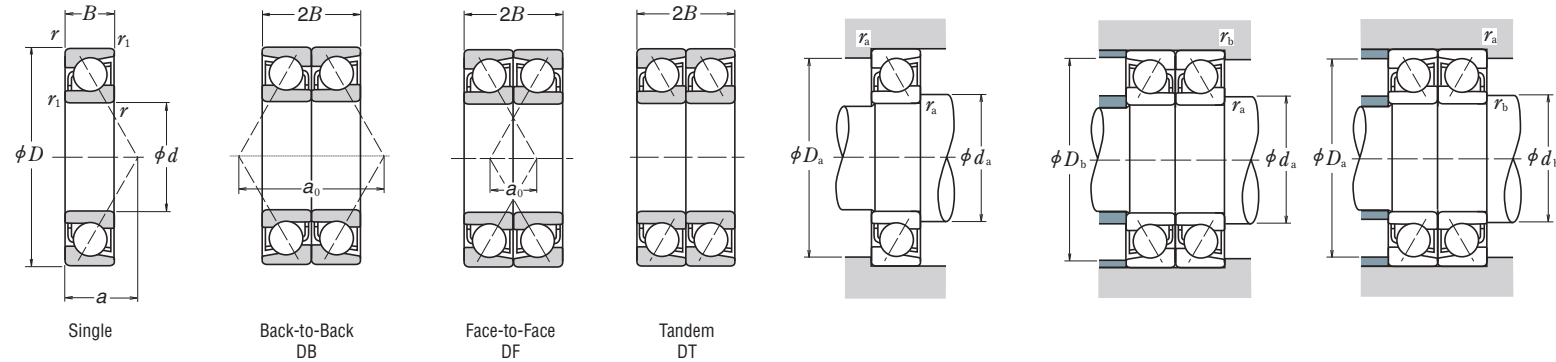


ANGULAR CONTACT BALL BEARINGS
SINGLE/MATCHED MOUNTINGS

Bore Diameter 25 – 40 mm


Dynamic Equivalent Load $P = XF_r + YF_a$

Contact Angle	$\frac{if_0 F_a}{C_{or}}$	e	Single, DT				DB or DF			
			$F_a/F_r \leq e$		$F_a/F_r > e$		$F_a/F_r \leq e$		$F_a/F_r > e$	
			X	Y	X	Y	X	Y	X	Y
30°	—	0.80	1	0	0.39	0.76	1	0.78	0.63	1.24
40°	—	1.14	1	0	0.35	0.57	1	0.55	0.57	0.93

 *For i , use 2 for DB and DF and 1 for DT

Static Equivalent Load $P_0 = X_0 F_r + Y_0 F_a$

Contact Angle	Single, DT		DB or DF		Single or DT mounting When $F_r > 0.5 F_r + Y_0 F_a$ use $F_0 = F_r$
	X_0	Y_0	X_0	Y_0	
	X_0	Y_0	X_0	Y_0	
30°	0.5	0.33	1	0.66	
40°	0.5	0.26	1	0.52	

Boundary Dimensions (mm)					Basic Load Ratings (Single)		Factor	Limiting Speeds ⁽¹⁾ (min ⁻¹)		Eff. Load Center (mm)	Abutment and Fillet Dimensions (mm)			Mass (kg)	Bearing Designations ⁽²⁾ Cage Designation ⁽⁴⁾				Basic Load Ratings (Matched)		Limiting Speeds ⁽¹⁾ (Matched)		Load Center Spacings (mm)		Abutment and Fillet Dimensions (mm)				
<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i> min.	<i>r</i> ₁ min.	<i>C</i> _r ^(N)	<i>C</i> _{0r}		Grease	Oil		<i>d</i> _a min.	<i>D</i> _a max.	<i>r</i> _a max.		approx.	Single	Standard	Option	Arrangement	<i>C</i> _r ^(N)	<i>C</i> _{0r}	Grease (min ⁻¹)	Oil (min ⁻¹)	DB <i>a</i> ₀	DF	<i>d</i> _b ⁽³⁾ min.	<i>D</i> _b max.	<i>r</i> _b ⁽³⁾ max.	
25	62	17	1.1	0.6	26 800	14 600	—	7 500	10 000	26.7	32	55	1	0.241	* 7305 BEA	W T85	(M), T MR, T7	DB —	DF —	DT —	43 500 —	29 300 —	6 000 8 000 8 500 12 000	53.5 19.5 53.5 19.5	30 30	57 57	0.6 0.6		
	62	17	1.1	0.6	28 400	14 900	—	10 000	15 000	26.8	32	55	1	0.229															
30	55	13	1	0.6	16 000	10 100	—	11 000	14 000	18.8	36	49	1	0.116	7006 A 7206 A 7206 B	W W W	(M), T, TYN (M), T, TYN (M), T	DB DB	DF DF	DT DT	26 000 40 000 29 500 29 500 36 500 27 000	20 200 29 500 29 500 29 500 27 000 27 000	8 500 8 000 12 000 11 000 5 600 7 500	12 000 11 000 42.6 10.6 54.6 22.6	37.5 42.6 35 35	11.5 10.6 22.6 22.6	35 35	50 57	0.6 0.6 0.6 0.6 0.6 0.6
	62	16	1	0.6	24 800	14 800	—	9 500	13 000	21.3	36	56	1	0.197															
	62	16	1	0.6	22 600	13 500	—	7 100	9 500	27.3	36	56	1	0.202															
	62	16	1	0.6	24 900	14 300	—	10 000	14 000	27.3	36	56	1	0.194															
	72	19	1.1	0.6	37 000	20 900	—	7 100	9 500	24.2	37	65	1	0.346															
	72	19	1.1	0.6	34 000	19 300	—	6 300	8 500	30.9	37	65	1	0.354															
35	72	19	1.1	0.6	38 000	20 600	—	9 000	13 000	30.9	37	65	1	0.336	* 7306 BEA	T85	MR, T7 (M), T (M), T	DB DB	DF DF	DT DT	— — 60 000 55 500 41 500 38 500	— — 60 000 55 500 41 500 38 500	8 000 5 600 11 000 7 500 54.6 61.8	22.6 22.6 10.4 23.8	35 35	57 67	0.6 0.6 0.6 0.6 0.6 0.6		
	72	19	1.1	0.6	38 000	20 600	—	9 000	13 000	30.9	37	65	1	0.336															
	72	19	1.1	0.6	38 000	20 600	—	9 000	13 000	30.9	37	65	1	0.336															
	72	19	1.1	0.6	38 000	20 600	—	9 000	13 000	30.9	37	65	1	0.336															
	72	19	1.1	0.6	38 000	20 600	—	9 000	13 000	30.9	37	65	1	0.336															
	72	19	1.1	0.6	38 000	20 600	—	9 000	13 000	30.9	37	65	1	0.336															
40	62	14	1	0.6	20 100	13 400	—	9 000	13 000	21.0	41	56	1	0.153	7007 A 7207 A 7207 B	W W W	(M), T, TYN (M), T, TYN (M), T	DB DB	DF DF	DT DT	32 500 53 000 26 800 40 000 26 800 40 000	26 800 40 000 40 000 40 000 36 500 36 500	7 500 6 700 10 000 9 500 10 000 9 500	42.0 47.9 14.0 13.9 14.0 13.9	40 40	57 67	0.6 0.6 0.6 0.6 0.6 0.6		
	72	17	1.1	0.6	32 500	20 100	—	8 500	12 000	23.9	42	65	1	0.287															
	72	17	1.1	0.6	29 800	18 400	—	6 000	8 000	30.9	42	65	1	0.294															
	72	17	1.1	0.6	34 000	19 600	—	8 500	12 000	30.9	42	65	1	0.271															
	80	21	1.5	1	44 000	26 300	—	6 300	8 500	27.1	44	71	1.5	0.464															
	80	21	1.5	1	42 000	24 400	—	8 000	11 000	34.6	44	71	1.5	0.451															
40	80	21	1.5	1	42 000	24 400	—	5 600	7 500	34.6	44	71	1.5	0.469	* 7307 BEA * 7307 BEA * 7307 BEA	T85 T85 W	MR, T7 (M), T MR, T7	DB —	DF DF	DT DT	— — 71 500 — 52 500 —	— — 71 500 — 52 500 —	6 700 5 000 9 500 6 700 9 000 9 000	9 500 6 700 6 700 6 700 6 000 6 000	61.9 54.2 12.2 12.2 69.2 69.2	27.9 27.2 27.2 27.2	41 41	74 74	1 1 1 1 1 1
	80	21	1.5	1	42 000	24 400	—	5 600	7 500	34.6	44	71	1.5	0.469															
	80	21	1.5	1	42 000	24 400	—	5 600	7 500	34.6	44	71	1.5	0.469															
	80	21	1.5	1	42 000	24 400	—	5 600	7 500	34.6	44	71	1.5	0.469															
	80	21	1.5	1	42 000	24 400	—	5 600	7 500	34.6	44	71	1.5	0.469															
	80	21	1.5	1	42 000	24 400	—	5 600	7 500	34.6	44	71	1.5	0.469															
40	68	15	1	0.6	21 500	15 400	—	8 500	11 000	23.1	46	62	1	0.190	7008 A 7208 A 7208 B	W W W	(M), T, TYN (M), T, TYN (M), T	DB DB	DF DF	DT DT	35 000 63 000 31 000 50 500 46 000 46 000	31 000 50 500 50 500 50 500 46 000 46 000	6 700 6 000 8 500 8 500 9 000 6 000	46.2 52.6 16.2 16.6 32.3 32.3	16.2 16.6 16.6 16.6 32.3 32.3	45 45	63 75	0.6 0.6 0.6 0.6 0.6 0.6	
	80	18	1.1	0.6	39 000	25 100	—	7 500	10 000	26.3	47	73	1	0.375															
	80	18	1.1	0.6	35 500	23 000	—	5 300	7 500	34.2	47	73	1	0.383															
	80	18	1.1	0.6	35 500	23 000	—	5 300	7 500	34.2	47	73	1	0.383															

- Notes** ⁽¹⁾ For applications operating near the limiting speed, refer to Page C077.
⁽²⁾ Suffixes A and B represent contact angles of 30° and 40° respectively.
⁽³⁾ Use the values of d_a (min) and r_a (max) for bearings with "—" in the d_b column.

- Note** ⁽⁴⁾ Cage designation (M) is usually omitted from the bearing designation.
Remark Bearings with an asterisk (*) are high-accuracy angular contact ball bearings. In arrangements, they are limited to SU universal matching types. See Page C073 for details.