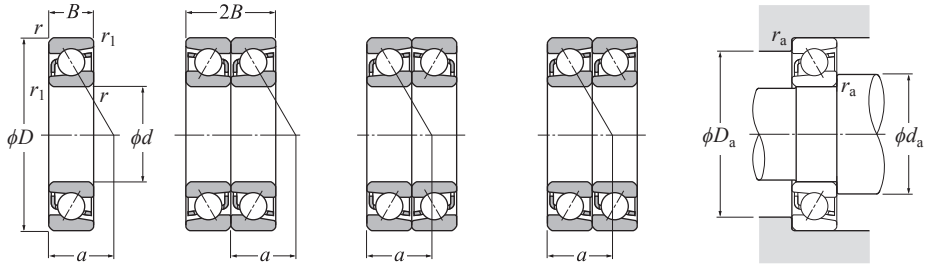
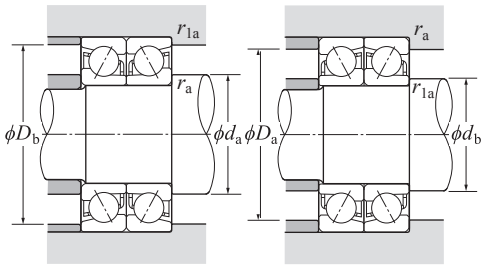


Single row | Back-to-back arrangement (DB) | Face-to-face arrangement (DF) | Tandem arrangement (DT)

d 30–55 mm

Boundary dimensions mm						Basic load rating dynamic kN	static kN	Fatigue load limit kN	Allowable speed 1) min^{-1} Grease lubrication	Oil lubrication	Bearing number 2)	Load center mm	Mass kg
d	*D*	*B*	*2B*	$r_{s\,min}$ 3)	$r_{ls\,min}$ 3)	C_r	C_{0r}	C_u				*a*	Single row (approx.)
30	62	16	32	1	0.6	24.9	14.8	1.16	12 000	16 000	**7206**	21.5	0.193
	62	16	32	1	0.6	22.7	13.5	1.06	11 000	14 000	**7206B**	27.5	0.197
	72	19	38	1.1	0.6	37.5	22.3	1.75	11 000	15 000	**7306**	24.5	0.345
	72	19	38	1.1	0.6	34.0	20.5	1.61	9 600	13 000	**7306B**	31.5	0.352
35	55	10	20	0.6	0.3	13.3	8.85	0.640	13 000	17 000	**7907**	18	0.088
	62	14	28	1	0.6	19.4	12.6	0.955	12 000	16 000	**7007**	21	0.18
	72	17	34	1.1	0.6	33.0	20.1	1.57	11 000	14 000	**7207**	24	0.281
	72	17	34	1.1	0.6	30.0	18.4	1.44	9 300	12 000	**7207B**	31	0.287
	80	21	42	1.5	1	44.0	26.3	2.05	9 800	13 000	**7307**	27	0.462
	80	21	42	1.5	1	40.5	24.2	1.89	8 400	11 000	**7307B**	34.5	0.469
40	62	12	24	0.6	0.3	14.0	10.2	0.705	11 000	15 000	**7908**	20.5	0.13
	68	15	30	1	0.6	20.8	14.6	1.07	10 000	14 000	**7008**	23	0.222
	80	18	36	1.1	0.6	39.0	25.1	1.97	9 600	13 000	**7208**	26.5	0.355
	80	18	36	1.1	0.6	35.5	23.0	1.80	8 300	11 000	**7208B**	34	0.375
	90	23	46	1.5	1	54.0	33.0	2.58	8 600	12 000	**7308**	30.5	0.625
	90	23	46	1.5	1	49.5	30.5	2.37	7 400	9 900	**7308B**	39	0.636
45	68	12	24	0.6	0.3	17.4	12.9	0.895	10 000	14 000	**7909**	22.5	0.15
	75	16	32	1	0.6	24.7	17.7	1.29	9 500	13 000	**7009**	25.5	0.282
	85	19	38	1.1	0.6	44.0	28.7	2.25	8 700	12 000	**7209**	28.5	0.404
	85	19	38	1.1	0.6	40.0	26.2	2.04	7 400	9 900	**7209B**	37	0.41
	100	25	50	1.5	1	70.5	44.0	3.45	7 800	10 000	**7309**	33.5	0.837
	100	25	50	1.5	1	64.5	40.5	3.15	6 600	8 900	**7309B**	43	0.854
50	72	12	24	0.6	0.3	18.4	14.5	0.985	9 200	12 000	**7910**	23.5	0.157
	80	16	32	1	0.6	26.2	20.1	1.42	8 600	11 000	**7010**	27	0.306
	90	20	40	1.1	0.6	45.5	31.5	2.46	7 900	10 000	**7210**	30	0.457
	90	20	40	1.1	0.6	41.5	28.6	2.16	6 700	9 000	**7210B**	39.5	0.466
	110	27	54	2	1	82.5	52.5	4.10	7 100	9 400	**7310**	36.5	1.09
	110	27	54	2	1	75.5	48.5	3.80	6 000	8 100	**7310B**	47	1.11
55	80	13	26	1	0.6	19.2	16.1	1.07	8 400	11 000	**7911**	26	0.214
	90	18	36	1.1	0.6	34.5	26.3	1.90	7 900	11 000	**7011**	30	0.447
	100	21	42	1.5	1	56.5	39.5	3.10	7 100	9 500	**7211**	33	0.6
	100	21	42	1.5	1	51.5	36.0	2.74	6 100	8 200	**7211B**	43	0.612
	120	29	58	2	1	95.0	61.5	4.80	6 400	8 600	**7311**	40	1.39
	120	29	58	2	1	87.0	56.5	4.45	5 500	7 300	**7311B**	52	1.42

1) This value achieved with machined cages; when pressed cages are used, 80 % of this value is acceptable. 2) Bearing numbers appended with the code "B" have a contact angle of 40°; bearings without this code have a contact angle of 30°. 3) Smallest allowable dimension for chamfer dimension *r* or r_1.



Dynamic equivalent radial load

$P_r = XF_r + YF_a$

Contact angle	*e*	Single, DT $F_a/F_r \le e$		Single, DT $F_a/F_r > e$		DB, DF $F_a/F_r \le e$		DB, DF $F_a/F_r > e$	
		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

Static equivalent radial load

$P_{0r} = X_0 F_r + Y_0 F_a$

Contact angle	Single, DT		DB, DF	
	X_0	Y_0	X_0	Y_0
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

For single and DT arrangement, when $P_{0r} < F_r$ use $P_{0r} = F_r$.

Basic load rating dynamic (duplex) kN	static kN	Allowable speed 1) (duplex) min^{-1} Grease lubrication	Oil lubrication	Bearing number DB	DF	DT	Installation-related dimensions mm d_a Min.	d_b Min.	D_a Max.	D_b Max.	r_{as} Max.	r_{1as} Max.
C_r	C_{0r}											
40.5	29.6	9 800	13 000	**DB**	**DF**	**DT**	35.5	34.5	56.5	57.5	1	0.6
37.0	27.1	8 600	11 000	**DB**	**DF**	**DT**	35.5	34.5	56.5	57.5	1	0.6
60.5	44.5	8 900	12 000	**DB**	**DF**	**DT**	37	34.5	65	67.5	1	0.6
55.5	41.0	7 700	10 000	**DB**	**DF**	**DT**	37	34.5	65	67.5	1	0.6
21.6	17.7	10 000	13 000	**DB**	**DF**	**DT**	39.5	39.5	50.5	52.5	0.6	0.3
31.5	25.1	9 400	13 000	**DB**	**DF**	**DT**	40.5	40.5	56.5	57.5	1	0.6
53.5	40.0	8 600	11 000	**DB**	**DF**	**DT**	42	39.5	65	67.5	1	0.6
49.0	36.5	7 500	10 000	**DB**	**DF**	**DT**	42	39.5	65	67.5	1	0.6
72.0	52.5	7 800	10 000	**DB**	**DF**	**DT**	43.5	40.5	71.5	74.5	1.5	1
66.0	48.5	6 800	9 000	**DB**	**DF**	**DT**	43.5	40.5	71.5	74.5	1.5	1
22.8	20.4	9 000	12 000	**DB**	**DF**	**DT**	44.5	44.5	57.5	59.5	0.6	0.3
34.0	29.2	8 300	11 000	**DB**	**DF**	**DT**	45.5	45.5	62.5	63.5	1	0.6
63.5	50.5	7 700	10 000	**DB**	**DF**	**DT**	47	44.5	73	75.5	1	0.6
58.0	46.0	6 700	8 900	**DB**	**DF**	**DT**	47	44.5	73	75.5	1	0.6
88.0	66.0	6 900	9 200	**DB**	**DF**	**DT**	48.5	45.5	81.5	84.5	1.5	1
80.5	60.5	6 000	8 000	**DB**	**DF**	**DT**	48.5	45.5	81.5	84.5	1.5	1
28.3	25.7	8 100	11 000	**DB**	**DF**	**DT**	49.5	49.5	63.5	65.5	0.6	0.3
40.0	35.5	7 500	10 000	**DB**	**DF**	**DT**	50.5	50.5	69.5	70.5	1	0.6
71.5	57.5	6 900	9 200	**DB**	**DF**	**DT**	52	49.5	78	80.5	1	0.6
65.0	52.5	6 000	8 000	**DB**	**DF**	**DT**	52	49.5	78	80.5	1	0.6
114	88.0	6 200	8 200	**DB**	**DF**	**DT**	53.5	50.5	91.5	94.5	1.5	1
105	81.0	5 400	7 200	**DB**	**DF**	**DT**	53.5	50.5	91.5	94.5	1.5	1
29.9	28.9	7 300	9 800	**DB**	**DF**	**DT**	54.5	54.5	67.5	69.5	0.6	0.3
42.5	40.0	6 800	9 100	**DB**	**DF**	**DT**	55.5	55.5	74.5	75.5	1	0.6
74.5	63.0	6 300	8 300	**DB**	**DF**	**DT**	57	54.5	83	85.5	1	0.6
67.5	57.0	5 500	7 300	**DB**	**DF**	**DT**	57	54.5	83	85.5	1	0.6
134	105	5 600	7 500	**DB**	**DF**	**DT**	60	55.5	100	104.5	2	1
123	96.5	4 900	6 500	**DB**	**DF**	**DT**	60	55.5	100	104.5	2	1
31.0	32.0	6 700	8 900	**DB**	**DF**	**DT**	60.5	60.5	74.5	75.5	1	0.6
56.0	52.5	6 300	8 400	**DB**	**DF**	**DT**	62	62	83	85.5	1	0.6
92.0	79.0	5 700	7 600	**DB**	**DF**	**DT**	63.5	60.5	91.5	94.5	1.5	1
83.5	72.0	5 000	6 600	**DB**	**DF**	**DT**	63.5	60.5	91.5	94.5	1.5	1
154	123	5 100	6 800	**DB**	**DF**	**DT**	65	60.5	110	114.5	2	1
142	113	4 500	5 900	**DB**	**DF**	**DT**	65	60.5	110	114.5	2	1

Note: For bearing series **79** and **70**, inner rings are constructed with groove abutments on both sides. Therefore, the inner ring chamfer dimension r_1 is identical to dimension *r*. Furthermore, the radius r_{1a} of the shaft corner roundness is likewise identical to r_a.