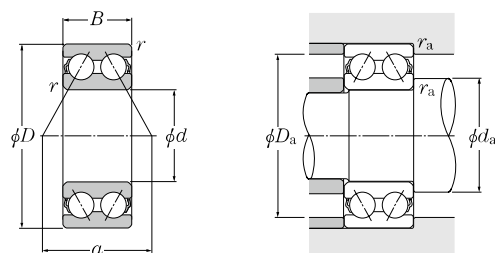


Double Row Angular Contact Ball Bearings

NTN



Dynamic equivalent radial load
 $P_r = X F_r + Y F_a$

e	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
	X	Y	X	Y
0.68	1	0.92	0.67	1.41

Static equivalent radial load
 $P_{0r} = F_r + 0.76 F_a$

d 10 ~ 65mm

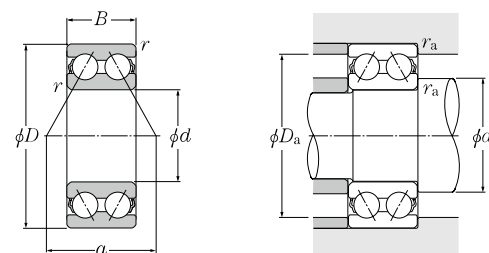
	Boundary dimensions			Basic load rating		Fatigue load limit	Allowable speed		Bearing number	Installation-related dimensions			Load center	Mass
	mm	mm	mm	dynamic	static		Grease	Oil		mm	mm	mm	mm	kg
	d	D	B	$r_s \min^{-1}$	C_r	C_{0r}	C_u	C_{0u}		d_a	D_a	r_{as}	a	(approx.)
10	30	14.3	0.6	7.15	3.90	0.230	17 000	22 000	5200S	15	25	0.6	14.5	0.05
12	32	15.9	0.6	10.5	5.80	0.350	15 000	20 000	5201S	17	27	0.6	16.7	0.06
15	35	15.9	0.6	11.7	7.05	0.420	13 000	17 000	5202S	20	30	0.6	18.3	0.07
	42	19	1	17.6	10.2	0.620	11 000	15 000	5302S	21	36	1	22	0.13
17	40	17.5	0.6	14.6	9.05	0.540	11 000	15 000	5203S	22	35	0.6	20.8	0.1
	47	22.2	1	21.0	12.6	0.770	10 000	13 000	5303S	23	41	1	25	0.18
20	47	20.6	1	19.6	12.4	0.750	10 000	13 000	5204S	26	41	1	24.3	0.16
	52	22.2	1.1	24.6	15.0	0.930	9 000	12 000	5304S	27	45	1	26.7	0.22
25	52	20.6	1	21.3	14.7	0.880	8 500	11 000	5205S	31	46	1	26.8	0.18
	62	25.4	1.1	32.5	20.7	1.30	7 500	10 000	5305S	32	55	1	31.8	0.35
30	62	23.8	1	29.6	21.1	1.30	7 100	9 500	5206S	36	56	1	31.6	0.3
	72	30.2	1.1	40.5	28.1	1.70	6 300	8 500	5306S	37	65	1	36.5	0.57
35	72	27	1.1	39.0	28.7	1.70	6 300	8 000	5207S	42	65	1	36.6	0.46
	80	34.9	1.5	51.0	36.0	2.20	5 600	7 500	5307S	44	71	1.5	41.6	0.76
40	80	30.2	1.1	44.0	33.5	2.00	5 600	7 100	5208S	47	73	1	41.5	0.62
	90	36.5	1.5	56.5	41.0	2.50	5 300	6 700	5308S	49	81	1.5	45.5	1.03
45	85	30.2	1.1	49.5	38.0	2.30	5 000	6 700	5209S	52	78	1	43.4	0.67
	100	39.7	1.5	68.5	51.0	3.10	4 500	6 000	5309S	54	91	1.5	50.6	1.37
50	90	30.2	1.1	53.0	43.5	2.70	4 800	6 000	5210S	57	83	1	45.9	0.72
	110	44.4	2	81.5	61.5	3.80	4 300	5 600	5310S	60	100	2	55.6	1.84
55	100	33.3	1.5	56.0	49.0	3.00	4 300	5 600	5211S	64	91	1.5	50.1	1.01
	120	49.2	2	95.0	73.0	4.50	3 800	5 000	5311S	65	110	2	60.6	2.4
60	110	36.5	1.5	69.0	62.0	3.80	3 800	5 000	5212S	69	101	1.5	56.5	1.33
	130	54	2.1	125	98.5	6.00	3 400	4 500	5312S	72	118	2	69.2	2.92
65	120	38.1	1.5	76.5	69.0	4.20	3 600	4 500	5213S	74	111	1.5	59.7	1.71
	140	58.7	2.1	142	113	7.00	3 200	4 300	5313S	77	128	2	72.8	3.67

1) Smallest allowable dimension for chamfer dimension r_s .

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NTN



Dynamic equivalent radial load
 $P_r = X F_r + Y F_a$

e	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
	X	Y	X	Y
0.68	1	0.92	0.67	1.41

Static equivalent radial load
 $P_{0r} = F_r + 0.76 F_a$

d 70 ~ 85mm

	Boundary dimensions			Basic load rating		Fatigue load limit	Allowable speed		Bearing number	Installation-related dimensions			Load center	Mass
	mm	mm	mm	dynamic	static		Grease	Oil		mm	mm	mm	mm	kg
	d	D	B	$r_s \min^{-1}$	C_r	C_{0r}	C_u	C_{0u}		d_a	D_a	r_{as}	a	(approx.)
70	125	39.7	1.5	94.0	82.0	5.00	3 400	4 500	5214S	79	116	1.5	63.8	1.75
	150	63.5	2.1	159	128	7.90	3 000	3 800	5314S	82	138	2	78.3	4.55
75	130	41.3	1.5	93.5	83.0	5.10	3 200	4 300	5215S	84	121	1.5	66.1	1.88
80	140	44.4	2	99.0	93.0	5.70	3 000	3 800	5216S	90	130	2	69.6	2.51
85	150	49.2	2	116	110	6.70	2 800	3 600	5217S	95	140	2	75.3	3.16

1) Smallest allowable dimension for chamfer dimension r_s .

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