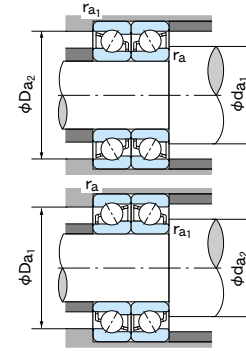
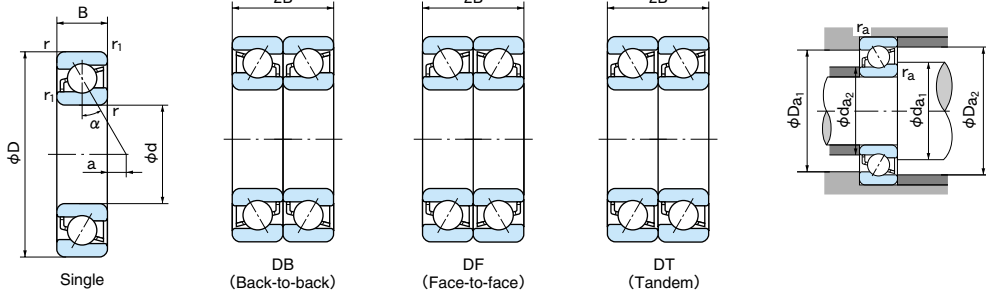


Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 10~17mm



• Dynamic equivalent radial load
 $Pr = XFr + YFa$

Contact angle	iFa Cor	e	Single or DT				DB or DF			
			$\frac{Fa}{Fr} > e$		$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$		$\frac{Fa}{Fr} \leq e$	
			X	Y	X	Y	X	Y	X	Y
15°	0.015	0.38			1.47	1.65	0.72	2.39		
	0.029	0.40	0.44	1.40	1	1.57	0.72	2.28		
	0.058	0.43		1.30		1.46		2.11		
	0.087	0.46		1.23		1.38		2.00		
	0.17	0.50	0.44	1.19	1	1.34	0.72	1.93		
30°	0.29	0.55		1.02		1.14		1.66		
	0.44	0.56	0.44	1.00	1	1.12	0.72	1.63		
	0.58	0.56		1.00		1.12		1.63		
	0.8	0.58	0.39	0.76	1	0.78	0.63	1.24		
	1.14	0.58	0.35	0.57	1	0.55	0.57	0.93		
40°										

• Static equivalent radial load
 $Por = XoFr + YoFa$

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
When $Por < Fr$, use $Pr = Fr$

- $i = 2$ for DB or DF mounting
 $i = 1$ for Single or DT mounting
- Single or DT mounting
When $Fa/Fr \leq e$, use $Pr = Fr$

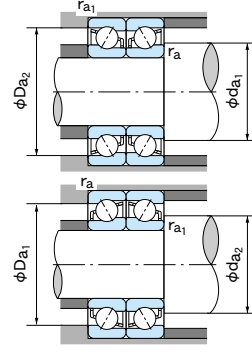
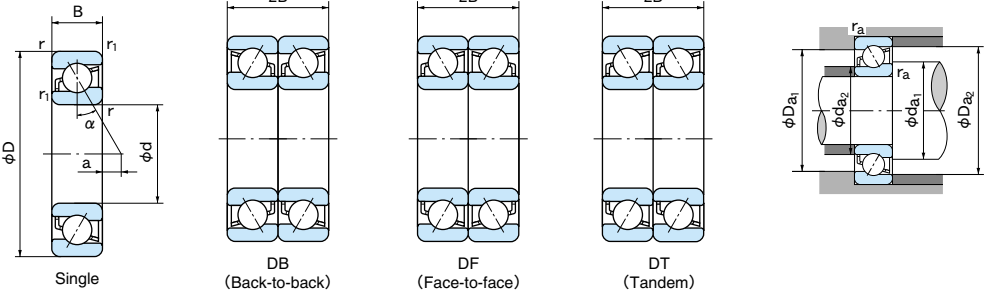
1N=0.102kgf

d	Boundary dimensions (mm)					Load center (mm)				Bearing No.				Basic dynamic load rating Cr(N)		Basic static load rating Cor(N)		Limiting speed (rpm)				Abutment and fillet dimensions (mm)						Mass (kg)	Bearing No.
	D	B	r (min)	r1 (min)	a (1)	Single	Duplex			Single	Duplex	Single	Duplex	Grease lubrication	Oil lubrication	Single	Duplex	d a1 (min)	d a2 (min)	D a1 (max)	D a2 (max)	r a (max)	r a1 (max)	Single					
														Single	Duplex	Single	Duplex												
10	26	8	0.3	0.15	1.2	7000	7000DB	7000DF	7000DT	5000	8150	2340	4650	23000	19000	31000	26000	12	12	24	25	0.3	0.15	0.022	7000				
	26	8	0.3	0.15	-1.9	7000C	7000CDB	7000CDF	7000CDT	5350	8700	2500	5000	44000	35000	61000	49000	12	12	24	25	0.3	0.15	0.022	7000C				
	30	9	0.6	0.3	1.3	7200	7200DB	7200DF	7200DT	5400	8800	2710	5400	22000	18000	30000	24000	15	12	25	27.4	0.6	0.3	0.034	7200				
	30	9	0.6	0.3	3.9	7200B	7200BDB	7200BDF	7200BDT	5150	8350	2570	5150	19000	16000	28000	22000	15	12	25	27.4	0.6	0.3	0.034	7200B				
	30	9	0.6	0.3	-2.2	7200C	7200CDB	7200CDF	7200CDT	6950	11300	3300	6650	40000	32000	55000	44000	15	15	25	27.4	0.6	0.3	0.034	7200C				
	35	11	0.6	0.3	1.0	7300	7300DB	7300DF	7300DT	9300	15100	4300	8600	20000	16000	26000	21000	15	12	30	32.4	0.6	0.3	0.055	7300				
	35	11	0.6	0.3	3.9	7300B	7300BDB	7300BDF	7300BDT	8950	14500	4150	8250	18000	14000	24000	19000	15	12	30	32.4	0.6	0.3	0.055	7300B				
	35	11	0.6	0.3	-2.8	7300C	7300CDB	7300CDF	7300CDT	9850	16000	4600	9250	36000	29000	49000	39000	15	15	30	32.4	0.6	0.3	0.055	7300C				
12	28	8	0.3	0.15	1.7	7001	7001DB	7001DF	7001DT	5050	8800	2710	5700	22000	18000	29000	23000	14	14	26	27	0.3	0.15	0.024	7001				
	28	8	0.3	0.15	-1.7	7001C	7001CDB	7001CDF	7001CDT	5800	9450	2910	5800	40000	32000	55000	44000	14	14	26	27	0.3	0.15	0.024	7001C				
	32	10	0.6	0.3	1.4	7201	7201DB	7201DF	7201DT	7600	12400	3960	7950	20000	16000	27000	22000	17	14	27	29.4	0.6	0.3	0.040	7201				
	32	10	0.6	0.3	4.2	7201B	7201BDB	7201BDF	7201BDT	7200	11700	3800	7550	17000	15000	24000	20000	17	14	27	29.4	0.6	0.3	0.040	7201B				
	32	10	0.6	0.3	-2.5	7201C	7201CDB	7201CDF	7201CDT	7950	13000	3900	7750	36000	29000	50000	40000	17	17	27	29.4	0.6	0.3	0.040	7201C				
	37	12	1	0.6	1.1	7301	7301DB	7301DF	7301DT	11200	18200	5250	10500	18000	15000	24000	20000	18	15	31	33.4	1	0.6	0.063	7301				
	37	12	1	0.6	4.3	7301B	7301BDB	7301BDF	7301BDT	10800	17500	5050	10100	16000	13000	22000	18000	18	15	31	33.4	1	0.6	0.063	7301B				
	37	12	1	0.6	-3.1	7301C	7301CDB	7301CDF	7301CDT	10800	17500	4900	9800	33000	26000	45000	36000	18	18	31	33.4	1	0.6	0.063	7301C				
15	32	9	0.3	0.15	2.3	7002	7002DB	7002DF	7002DT	6150	9950	3400	6850	18000	15000	24000	20000	17	17	30	31	0.3	0.15	0.035	7002				
	32	9	0.3	0.15	-1.8	7002C	7002CDB	7002CDF	7002CDT	6650	10800	3700	7450	34000	27000	47000	38000	17	17	30	31	0.3	0.15	0.035	7002C				
	35	11	0.6	0.3	1.7	7202	7202DB	7202DF	7202DT	9050	14700	4700	9400	17000	14000	23000	19000	20	17	30	32.4	0.6	0.3	0.048	7202				
	35	11	0.6	0.3	5.0	7202B	7202BDB	7202BDF	7202BDT	8600	14000	4500	8950	16000	12000	21000	17000	20	17	30	32.4	0.6	0.3	0.048	7202B				
	35	11	0.6	0.3	-2.6	7202C	7202CDB	7202CDF	7202CDT	8700	14200	4550	9150	32000	26000	44000	35000	20	20	30	32.4	0.6	0.3	0.048	7202C				
	42	13	1	0.6	1.7	7302	7302DB	7302DF	7302DT	13600	22000	7100	14200	16000	13000	21000	17000	21	18	36	38.4	1	0.6	0.085	7302				
	42	13	1	0.6	5.5	7302B	7302BDB	7302BDF	7302BDT	12800	21000	6750	13500	14000	11000	19000	16000	21	18	36	38.4	1	0.6	0.085	7302B				
	42	13	1	0.6	-3.1	7302C	7302CDB	7302CDF	7302CDT	13300	21700	6850	13700	28000	22000	39000	31000	21	21	36	38.4	1	0.6	0.085	7302C				
17	35	10	0.3	0.15	2.5	7003	7003DB	7003DF	7003DT	6400	10400	3800	7650	17000	13000	22000	18000	19	19	33	34	0.3	0.15	0.045	7003				
	35	10	0.3	0.15	-2.0	7003C	7003CDB	7003CDF	7003CDT	7000	11400	4150	8300	31000	25000	42000	34000	19	19	33	34	0.3	0.15	0.045	7003C				
	40	12	0.6	0.3	2.2	7203	7203DB	7203DF	7203DT	11900	19400	6600	13200	16000	13000	21000	17000	22	19	35	37.4	0.6	0.3	0.070	7203				
	40	12	0.6	0.3	6.0	7203B	7203BDB	7203BDF	7203BDT	11300	18400	6300	12600	14000	11000	19000	15000	22	19	35	37.4	0.6	0.3	0.070	7203B				
	40	12	0.6	0.3	-2.7	7203C	7203CDB	7203CDF	7203CDT	10900	17800	5900	11800	28000	22000	39000	31000	22	22	35	37.4	0.6	0.3	0.070	7203C				
	47	14	1	0.6	2.2	7303	7303DB	7303DF	7303DT	15900	25900	8650	17300	14000	11000	19000	15000	23	21	41	43.4	1	0.6	0.120	7303				
	47	14	1	0.6	6.4	7303B	7303BDB	7303BDF	7303BDT	15200	24700	8250	16500	13000	10000	17000	14000	23	21	41	43.4	1	0.6	0.120	7303B				
	47	14	1	0.6	-3.2	7303C	7303CDB	7303CDF	7303CDT	15900	25800	8350	16700	25000	20000	34000	27000	23	23	41	43.4	1	0.6	0.120	7303C				

Note : (1) "a" means the distance between back face and load center.

Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 20~35mm



• Dynamic equivalent radial load
 $Pr = XFr + YFa$

Contact angle	iFa / Cor	e	Single or DT				DB or DF			
			Fa / Fr > e		Fa / Fr ≤ e		Fa / Fr > e		Fa / Fr ≤ e	
			X	Y	X	Y	X	Y	X	Y
15°	0.015	0.38	1.47	1.65	0.44	1.40	1	1.57	0.72	2.39
	0.029	0.40	1.30	1.46	0.58	0.43	1.30	1.46	0.72	2.11
	0.087	0.46	1.23	1.38	0.87	0.46	1.23	1.38	0.72	2.00
	0.12	0.47	1.19	1.34	0.95	0.47	1.19	1.34	0.72	1.93
	0.17	0.50	1.12	1.26	1.00	0.44	1.00	1.12	0.72	1.82
30°	0.29	0.55	1.02	1.14	0.44	1.00	1	1.12	0.72	1.66
	0.44	0.56	1.00	1.12	0.58	0.56	1.00	1.12	0.72	1.63
	0.58	0.56	1.00	1.12	0.72	0.58	0.56	1.00	0.72	1.63
40°	0.8	0.39	0.76	1	0.78	0.63	1.24	0.35	0.57	0.93

• Static equivalent radial load
 $Por = XoFr + YoFa$

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
When $Por < Fr$, use $Pr = Fr$

• $i = 2$ for DB or DF mounting
• $i = 1$ for Single or DT mounting
• Single or DT mounting
When $Fa / Fr \leq e$, use $Pr = Fr$

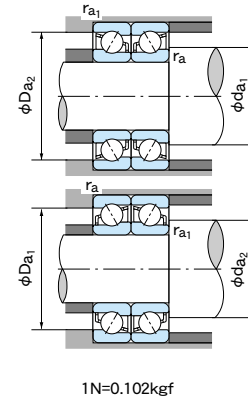
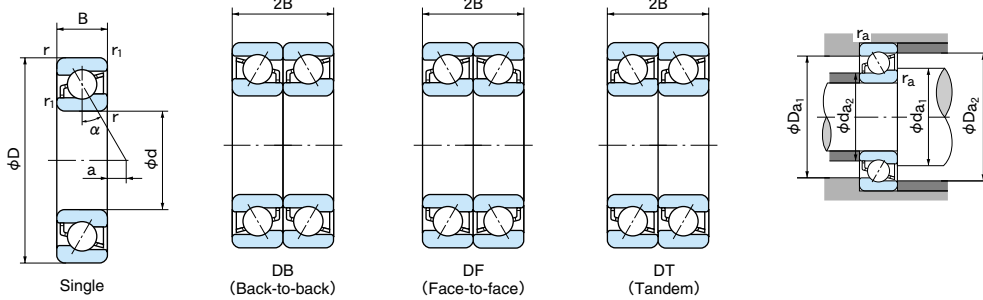
1N=0.102kgf

d	Boundary dimensions (mm)					Bearing No.				Basic dynamic load rating Cr(N)		Basic static load rating Cor(N)		Limiting speed (rpm)				Abutment and fillet dimensions (mm)					Mass (kg)		Bearing No.
	D	B	r (min)	r1 (min)	a (1)	Single	Duplex			Single	Duplex	Single	Duplex	Grease lubrication	Oil lubrication		da1 (min)	da2 (min)	Da1 (max)	Da2 (max)	ra (max)	ra1 (max)	Single		
														Single	Duplex	Single	Duplex								
20	42	12	0.6	0.3	2.9	7004	7004DB	7004DF	7004DT	10300	16700	6050	12100	15000	12000	20000	16000	24	24	38	40	0.6	0.3	0.079	7004
	42	12	0.6	0.3	-2.4	7004C	7004CDB	7004CDF	7004CDT	11200	18200	6600	13200	26000	21000	35000	28000	24	24	38	40	0.6	0.3	0.079	7004C
	47	14	1	0.6	2.7	7204	7204DB	7204DF	7204DT	14500	23500	8300	16600	13000	10000	18000	14000	26	23	41	43.4	1	0.6	0.110	7204
	47	14	1	0.6	7.1	7204B	7204BDB	7204BDF	7204BDT	13700	22300	7850	15700	11000	9500	16000	13000	26	23	41	43.4	1	0.6	0.110	7204B
	47	14	1	0.6	-3.1	7204C	7204CDB	7204CDF	7204CDT	14700	23800	8150	16300	24000	19000	33000	26000	26	26	41	43.4	1	0.6	0.110	7204C
	52	15	1.1	0.6	2.9	7304	7304DB	7304DF	7304DT	18700	30500	10400	20800	13000	10000	17000	13000	27	25	45	47	1	0.6	0.150	7304
	52	15	1.1	0.6	7.6	7304B	7304BDB	7304BDF	7304BDT	17800	28900	9900	19800	10000	9000	15000	12000	27	25	45	47	1	0.6	0.150	7304B
	52	15	1.1	0.6	-3.2	7304C	7304CDB	7304CDF	7304CDT	18600	30000	10000	20000	22000	18000	31000	25000	27	27	45	47	1	0.6	0.150	7304C
	25	47	12	0.6	0.3	4.4	7005	7005DB	7005DF	7005DT	11300	18400	7400	14800	13000	10000	17000	13000	29	29	43	45	0.6	0.3	0.091
47		12	0.6	0.3	-1.8	7005C	7005CDB	7005CDF	7005CDT	12900	21000	8650	17300	22000	18000	31000	25000	29	29	43	45	0.6	0.3	0.091	7005C
52		15	1	0.6	3.6	7205	7205DB	7205DF	7205DT	16200	26300	10200	20500	12000	9500	15000	12000	31	28	46	48.4	1	0.6	0.135	7205
52		15	1	0.6	8.9	7205B	7205BDB	7205BDF	7205BDT	15300	24800	9700	19400	9500	8000	14000	11000	31	28	46	48.4	1	0.6	0.135	7205B
52		15	1	0.6	-3.1	7205C	7205CDB	7205CDF	7205CDT	16700	27100	10300	20700	21000	17000	29000	23000	31	31	46	48.4	1	0.6	0.135	7205C
62		17	1.1	0.6	4.1	7305	7305DB	7305DF	7305DT	26400	43000	15800	31500	10000	8500	14000	11000	32	30	55	57	1	0.6	0.245	7305
62		17	1.1	0.6	9.8	7305B	7305BDB	7305BDF	7305BDT	25100	40500	15100	30000	8500	7300	12000	10000	32	30	55	57	1	0.6	0.245	7305B
62		17	1.1	0.6	-3.4	7305C	7305CDB	7305CDF	7305CDT	26600	43000	15500	31000	18000	14000	25000	20000	32	32	55	57	1	0.6	0.245	7305C
30		55	13	1	0.6	5.8	7006	7006DB	7006DF	7006DT	14500	23600	10100	20300	12000	8500	14000	11000	35	35	50	52	1	0.6	0.135
	55	13	1	0.6	-1.6	7006C	7006CDB	7006CDF	7006CDT	16000	25900	11100	24000	19000	15000	26000	21000	35	35	50	52	1	0.6	0.135	7006C
	62	16	1	0.6	5.3	7206	7206DB	7206DF	7206DT	22500	36500	14800	29600	10000	8000	13000	10000	36	33	56	58.4	1	0.6	0.210	7206
	62	16	1	0.6	11.3	7206B	7206BDB	7206BDF	7206BDT	21200	34500	13900	27900	8500	7000	12000	9500	36	33	56	58.4	1	0.6	0.210	7206B
	62	16	1	0.6	-2.7	7206C	7206CDB	7206CDF	7206CDT	23200	37500	14900	29700	18000	14000	24000	19000	36	36	56	58.4	1	0.6	0.210	7206C
	72	19	1.1	0.6	5.2	7306	7306DB	7306DF	7306DT	33500	54500	22400	44500	9000	7000	12000	9500	37	35	65	67	1	0.6	0.360	7306
	72	19	1.1	0.6	11.9	7306B	7306BDB	7306BDF	7306BDT	32000	52000	21000	42000	7500	6100	10000	8500	37	35	65	67	1	0.6	0.360	7306B
	72	19	1.1	0.6	-3.6	7306C	7306CDB	7306CDF	7306CDT	32500	52500	20400	40500	16000	13000	22000	18000	37	37	65	67	1	0.6	0.360	7306C
	35	62	14	1	0.6	7	7007	7007DB	7007DF	7007DT	17500	28500	12600	25200	9500	7500	13000	10000	40	40	57	59	1	0.6	0.170
62		14	1	0.6	-1.4	7007C	7007CDB	7007CDF	7007CDT	19300	31000	13700	27500	16000	13000	23000	18000	40	40	57	59	1	0.6	0.170	7007C
72		17	1.1	0.6	6.9	7207	7207DB	7207DF	7207DT	29700	48000	20000	40000	8500	7000	11000	9500	42	40	65	67	1	0.6	0.295	7207
72		17	1.1	0.6	14.1	7207B	7207BDB	7207BDF	7207BDT	28000	45500	19000	38000	7500	6000	10000	8000	42	40	65	67	1	0.6	0.295	7207B
72		17	1.1	0.6	-2.8	7207C	7207CDB	7207CDF	7207CDT	30500	49500	20100	40000	15000	12000	21000	17000	42	42	65	67	1	0.6	0.295	7207C
80		21	1.5	1	6.1	7307	7307DB	7307DF	7307DT	40000	65000	26300	52500	8000	6300	10000	8500	44	40	71	74.6	1.5	1	0.475	7307
80		21	1.5	1	13.7	7307B	7307BDB	7307BDF	7307BDT	37500	61500	24900	49500	7000	5500	9500	7500	44	40	71	74.6	1.5	1	0.475	7307B
80		21	1.5	1	-3.9	7307C	7307CDB	7307CDF	7307CDT	40500	66000	26000	52000	14000	11000	19000	15000	44	44	71	74.6	1.5	1	0.475	7307C

Note : (1) "a" means the distance between back face and load center.

Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 60~75mm



• Dynamic equivalent radial load
Pr = XFr + YFa

Contact angle	iFa Cor	e	Single or DT				DB or DF			
			Fa / Fr > e		Fa / Fr ≤ e		Fa / Fr > e		Fa / Fr ≤ e	
			X	Y	X	Y	X	Y	X	Y
15°	0.015	0.38	1.47	1.65	1.47	1.65	2.39	2.39	2.39	2.39
	0.029	0.40	0.44	1.40	1	1.57	0.72	2.28	2.11	2.11
	0.058	0.43	1.30	1.30	1.46	1.46	2.00	2.00	2.00	2.00
	0.087	0.46	1.23	1.23	1.38	1.38	1.82	1.82	1.82	1.82
	0.12	0.47	0.44	1.19	1	1.34	0.72	1.93	1.93	1.93
	0.17	0.50	1.12	1.12	1.26	1.26	1.82	1.82	1.82	1.82
30°	0.29	0.55	1.02	1.14	1.14	1.66	1.66	1.66	1.66	1.66
	0.44	0.56	0.44	1.00	1	1.12	0.72	1.63	1.63	1.63
	0.58	0.56	1.00	1.00	1.12	1.12	1.63	1.63	1.63	1.63
40°	0.8	0.57	0.39	0.76	1	0.78	0.63	1.24	1.24	1.24
40°	1.14	0.57	1	0.55	0.57	0.93	0.93	0.93	0.93	0.93

• Static equivalent radial load
Por = XoFr + YoFa

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
When Por < Fr, use Pr = Fr

• i = 2 for DB or DF mounting
i = 1 for Single or DT mounting
• Single or DT mounting
When Fa / Fr ≤ e, use Pr = Fr

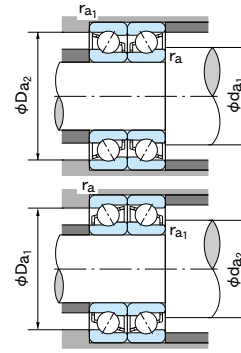
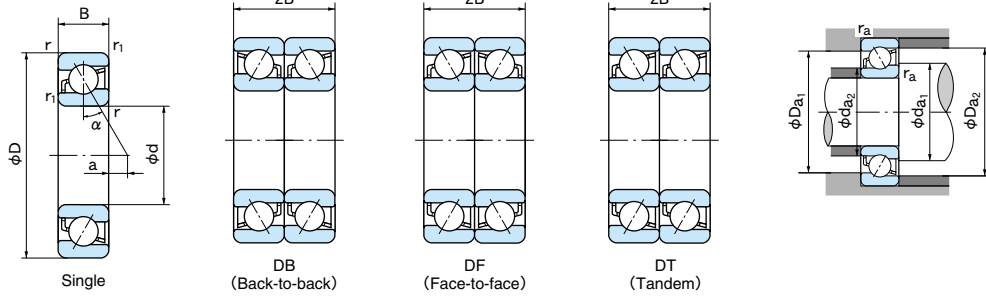
1N=0.102kgf

d	Boundary dimensions (mm)				Load center (mm) a ⁽¹⁾	Bearing No.				Basic dynamic load rating Cr(N)		Basic static load rating Cor(N)		Limiting speed (rpm)				Abutment and fillet dimensions (mm)						Mass (kg)	Bearing No.	
	D	B	r (min)	r1 (min)		Single		Duplex		Single	Duplex	Single	Duplex	Grease lubrication		Oil lubrication		d_a1 (min)	d_a2 (min)	D_a1 (max)	D_a2 (max)	r_a (max)	r_a1 (max)			Single
60	95	18	1.1	0.6	13.4	7012	7012DB	7012DF	7012DT	32000	51500	28000	56000	6000	4500	7600	6200	66	66	89	91	1	0.6	0.450	7012	
	95	18	1.1	0.6	-0.1	7012C	7012CDB	7012CDF	7012CDT	35500	57500	30500	61500	10000	8000	14000	11000	66	66	89	91	1	0.6	0.450	7012C	
	110	22	1.5	1	13.5	7212	7212DB	7212DF	7212DT	62000	100000	48500	97500	5300	4300	7100	5600	69	65	101	104.6	1.5	1	0.820	7212	
	110	22	1.5	1	24.7	7212B	7212BDB	7212BDF	7212BDT	58000	94000	46000	92000	4800	3800	6300	5000	69	65	101	104.6	1.5	1	0.820	7212B	
	110	22	1.5	1	-1.2	7212C	7212CDB	7212CDF	7212CDT	64500	105000	49500	98500	9400	7500	13000	10000	69	69	101	104.6	1.5	1	0.820	7212C	
	130	31	2.1	1.1	11.9	7312	7312DB	7312DF	7312DT	98000	159000	71500	148000	4800	3800	6300	5000	72	67	118	123	2	1	1.81	7312	
	130	31	2.1	1.1	24.4	7312B	7312BDB	7312BDF	7312BDT	92500	151000	67500	135000	4300	3400	5500	4500	72	67	118	123	2	1	1.81	7312B	
	130	31	2.1	1.1	-4.5	7312C	7312CDB	7312CDF	7312CDT	99500	162000	70000	140000	8400	6700	12000	9600	72	72	118	123	2	1	1.81	7312C	
	65	100	18	1.1	0.6	14.8	7013	7013DB	7013DF	7013DT	33500	54500	31000	62500	5600	4300	7100	6000	71	71	94	96	1	0.6	0.470	7013
100		18	1.1	0.6	0.5	7013C	7013CDB	7013CDF	7013CDT	37500	60500	34500	69000	9700	7800	13000	10000	71	71	94	96	1	0.6	0.470	7013C	
120		23	1.5	1	15.2	7213	7213DB	7213DF	7213DT	70000	114000	57800	116000	4900	3900	6500	5300	74	70	111	114.6	1.5	1	1.02	7213	
120		23	1.5	1	27.4	7213B	7213BDB	7213BDF	7213BDT	66000	107000	54500	109000	4300	3400	5600	4600	74	70	111	114.6	1.5	1	1.02	7213B	
120		23	1.5	1	-0.8	7213C	7213CDB	7213CDF	7213CDT	73500	120000	59000	118000	8600	6900	12000	9600	74	74	111	114.6	1.5	1	1.02	7213C	
140		33	2.1	1.1	13.1	7313	7313DB	7313DF	7313DT	111000	180000	82000	165000	4400	3600	5800	4700	77	72	128	133	2	1	2.22	7313	
140		33	2.1	1.1	26.6	7313B	7313BDB	7313BDF	7313BDT	105000	170000	77500	155000	4000	3200	5300	4200	77	72	128	133	2	1	2.22	7313B	
140		33	2.1	1.1	-4.7	7313C	7313CDB	7313CDF	7313CDT	113000	183000	81000	162000	7800	6200	11000	8800	77	77	128	133	2	1	2.22	7313C	
70		110	20	1.1	0.6	16.0	7014	7014DB	7014DF	7014DT	42500	69000	39500	78500	5000	4000	6600	5300	76	76	104	106	1	0.6	0.660	7014
	110	20	1.1	0.6	0.4	7014C	7014CDB	7014CDF	7014CDT	47000	76500	43000	86500	8900	7100	12000	9600	76	76	104	106	1	0.6	0.660	7014C	
	125	24	1.5	1	16.1	7214	7214DB	7214DF	7214DT	76500	124000	63500	127000	4500	3800	6300	5000	79	75	116	119.6	1.5	1	1.12	7214	
	125	24	1.5	1	29.0	7214B	7214BDB	7214BDF	7214BDT	71500	116000	59500	120000	4300	3200	5600	4500	79	75	116	119.6	1.5	1	1.12	7214B	
	125	24	1.5	1	-0.7	7214C	7214CDB	7214CDF	7214CDT	80000	130000	65000	130000	8200	6600	11000	8800	79	79	116	119.6	1.5	1	1.12	7214C	
	150	35	2.1	1.1	14.3	7314	7314DB	7314DF	7314DT	125000	203000	94000	188000	4000	3200	5300	4300	82	77	138	143	2	1	2.70	7314	
	150	35	2.1	1.1	28.7	7314B	7314BDB	7314BDF	7314BDT	118000	191000	88500	177000	3600	2900	4800	3900	82	77	138	143	2	1	2.70	7314B	
	150	35	2.1	1.1	-4.8	7314C	7314CDB	7314CDF	7314CDT	127000	206000	92500	185000	7300	5800	10000	8000	82	82	138	143	2	1	2.70	7314C	
	75	115	20	1.1	0.6	17.4	7015	7015DB	7015DF	7015DT	43500	70500	41500	83000	4800	3800	6300	5000	81	81	109	111	1	0.6	0.695	7015
115		20	1.1	0.6	1.0	7015C	7015CDB	7015CDF	7015CDT	48500	78500	46000	92000	8400	6700	12000	9600	81	81	109	111	1	0.6	0.695	7015C	
130		25	1.5	1	17.1	7215	7215DB	7215DF	7215DT	79000	129000	68500	137000	4300	3400	5800	4700	84	80	121	124.6	1.5	1	1.23	7215	
130		25	1.5	1	30.6	7215B	7215BDB	7215BDF	7215BDT	74000	120000	64000	128000	4000	3200	5300	4300	84	80	121	124.6	1.5	1	1.23	7215B	
130		25	1.5	1	-0.7	7215C	7215CDB	7215CDF	7215CDT	83500	135000	70000	141000	7800	6200	11000	8800	84	84	121	124.6	1.5	1	1.23	7215C	
160		37	2.1	1.1	15.4	7315	7315DB	7315DF	7315DT	136000	221000	106000	212000	3800	3000	5000	4000	87	82	148	153	2	1	3.15	7315	
160		37	2.1	1.1	30.9	7315B	7315BDB	7315BDF	7315BDT	128000	208000	100000	200000	3400	2700	4500	3600	87	82	148	153	2	1	3.15	7315B	
160		37	2.1	1.1	-4.9	7315C	7315CDB	7315CDF	7315CDT	138000	225000	104000	209000	6800	5400	9400	7500	87	87	148	153	2	1	3.15	7315C	

Note : (1) "a" means the distance between back face and load center.

Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 80~95mm



• Dynamic equivalent radial load
 $Pr = XFr + YFa$

Contact angle	iFa/Cor	e	Single or DT				DB or DF			
			Fa/Fr > e		Fa/Fr ≤ e		Fa/Fr > e		Fa/Fr ≤ e	
			X	Y	X	Y	X	Y	X	Y
15°	0.015	0.38			1.47	1.65			1.65	2.39
	0.029	0.40	0.44	1.40	1	1.57	0.72	2.28		
	0.058	0.43		1.30		1.46		2.11		
	0.087	0.46		1.23		1.38		2.00		
	0.12	0.47	0.44	1.19	1	1.34	0.72	1.93		
30°	0.17	0.50			1.12	1.26		1.82		
	0.29	0.55		1.02		1.14		1.66		
	0.44	0.56	0.44	1.00	1	1.12	0.72	1.63		
	0.58	0.56		1.00		1.12		1.63		
	0.8	0.8	0.39	0.76	1	0.78	0.63	1.24		
40°	-	-	1.14	0.35	0.57	1	0.55	0.57	0.93	

• Static equivalent radial load
 $Por = XoFr + YoFa$

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
When $Por < Fr$, use $Pr = Fr$

• $i = 2$ for DB or DF mounting
 $i = 1$ for Single or DT mounting
• Single or DT mounting
When $Fa/Fr \leq e$, use $Pr = Fr$

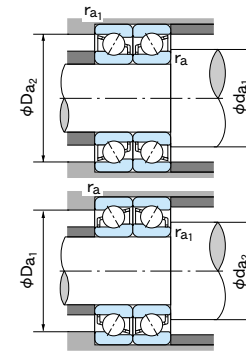
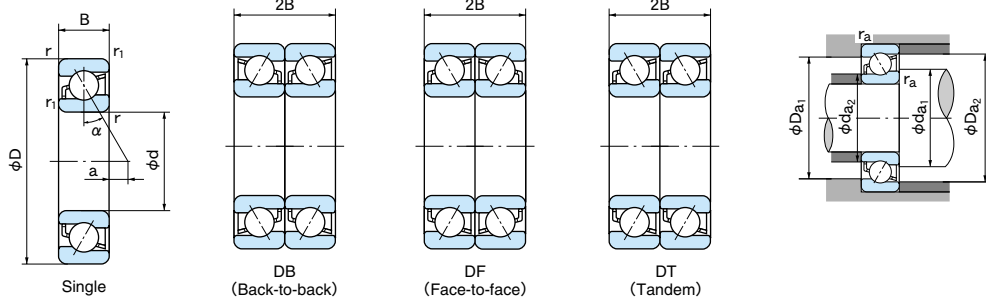
1N=0.102kgf

Boundary dimensions (mm)	Load center (mm)	Bearing No.	Basic dynamic load rating Cr(N)	Basic static load rating Cor(N)	Limiting speed (rpm)				Abutment and fillet dimensions (mm)						Mass (kg)	Bearing No.	
					Grease lubrication		Oil lubrication		da1 (min)	da2 (min)	Da1 (max)	Da2 (max)	ra (max)	ra1 (max)			Single
					Single	Duplex	Single	Duplex									
80	125	7016	53500	50500	4400	3500	5800	4600	86	86	119	121	1	0.6	0.925	7016	
		7016DB	86500	101000	3200	2800	4200	3400	92	92	158	163	2	1	0.6	0.925	7016C
	140	7216	89000	76500	4000	3200	5400	4300	90	86	130	134	2	1	1.50	7216	
		7216DB	145000	153000	2800	2800	4000	4000	90	86	130	134	2	1	1.50	7216B	
		7216B	135000	143000	3600	2800	5000	4000	90	86	130	134	2	1	1.50	7216C	
		7216C	152000	156000	7300	5800	10000	8000	90	90	130	134	2	1	1.50	7216C	
	170	7316	147000	119000	3600	2800	4800	3800	92	87	158	163	2	1	4.18	7316	
		7316DB	239000	238000	2800	2800	3800	3800	92	87	158	163	2	1	4.18	7316B	
		7316B	226000	225000	3200	2500	4200	3400	92	87	158	163	2	1	4.18	7316B	
		7316C	243000	235000	6400	5100	8800	7000	92	92	158	163	2	1	4.18	7316C	
	85	130	7017	54500	53500	4100	3300	5500	4400	91	91	124	126	1	0.6	0.960	7017
			7017DB	88500	107000	2800	2800	3800	3800	91	91	124	126	1	0.6	0.960	7017C
150		7217	103000	89500	3800	3000	5000	4000	95	91	140	144	2	1	1.87	7217	
		7217DB	167000	179000	2600	2600	3600	3600	95	91	140	144	2	1	1.87	7217B	
		7217B	159000	168000	3400	2600	4500	3800	95	91	140	144	2	1	1.87	7217C	
180		7317	159000	133000	3400	2600	4500	3600	99	92	166	173	2.5	1	4.90	7317	
	7317DB	258000	266000	2600	2600	3600	3600	99	92	166	173	2.5	1	4.90	7317B		
90	140	7018	65000	63000	3800	3200	5200	4200	97	97	133	135.6	1.5	1	1.26	7018	
		7018DB	106000	126000	2800	2800	3800	3800	97	97	133	135.6	1.5	1	1.26	7018C	
	160	7218	118000	103000	3500	2800	4700	3700	100	96	150	154	2	1	2.30	7218	
		7218DB	191000	206000	2800	2800	3700	3700	100	96	150	154	2	1	2.30	7218B	
		7218B	179000	194000	3200	2500	4300	3400	100	96	150	154	2	1	2.30	7218C	
	190	7318	171000	147000	3200	2600	4300	3400	104	97	176	183	2.5	1	5.76	7318	
		7318DB	277000	295000	2600	2600	3400	3400	104	97	176	183	2.5	1	5.76	7318B	
		7318B	262000	278000	2800	2300	3800	3000	104	97	176	183	2.5	1	5.76	7318C	
	95	145	7019	67000	66500	3800	3100	5200	4200	102	102	138	140.6	1.5	1	1.36	7019
			7019DB	109000	133000	2800	2800	3800	3800	102	102	138	140.6	1.5	1	1.36	7019C
		170	7219	126000	112000	3400	2600	4500	3600	107	102	158	163	2	1	2.78	7219
			7219DB	205000	225000	2600	2600	3600	3600	107	102	158	163	2	1	2.78	7219B
7219B			195000	210000	3000	2400	4000	3200	107	102	158	163	2	1	2.78	7219C	
200		7319	183000	163000	3000	2400	4000	3200	109	102	186	193	2.5	1	6.68	7319	
	7319DB	297000	325000	2400	2400	3200	3200	109	102	186	193	2.5	1	6.68	7319B		
200	7319B	280000	153000	2500	2200	3600	3000	109	102	186	193	2.5	1	6.68	7319B		
	7319C	300000	161000	5400	4300	7500	6000	109	109	186	193	2.5	1	6.68	7319C		

Note : (1) "a" means the distance between back face and load center.

Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 100~120mm



• Dynamic equivalent radial load
 $Pr = XFr + YFa$

Contact angle	iFa Cor	e	Single or DT				DB or DF			
			Fa/Fr > e		Fa/Fr ≤ e		Fa/Fr > e		Fa/Fr ≤ e	
			X	Y	X	Y	X	Y	X	Y
15°	0.015	0.38	0.44	1.47	1	1.65	0.72	2.39	1	1.63
	0.029	0.40	1.30	1.46	1	1.57	2.28	1	1.61	
	0.058	0.43	1.23	1.38	1	1.50	2.11	1	1.58	
	0.087	0.46	1.17	1.34	1	1.43	2.00	1	1.55	
	0.12	0.47	1.12	1.26	1	1.38	1.82	1	1.52	
30°	0.29	0.55	0.44	1.02	1	1.14	1.66	1	1.63	
	0.44	0.56	1.00	1.12	1	1.12	1.63	1	1.63	
	0.58	0.56	1.00	1.12	1	1.12	1.63	1	1.63	
	0.8	0.59	0.76	1	0.78	0.63	1.24	1	1.24	
	1.14	0.35	0.57	1	0.55	0.57	0.93	1	0.93	
40°	1.14	0.35	0.57	1	0.55	0.57	0.93	1	0.93	

• Static equivalent radial load
 $Por = XoFr + YoFa$

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
When $Por < Fr$, use $Pr = Fr$

• $i = 2$ for DB or DF mounting
 $i = 1$ for Single or DT mounting
• Single or DT mounting
When $Fa/Fr \leq e$, use $Pr = Fr$

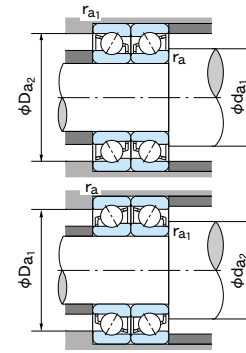
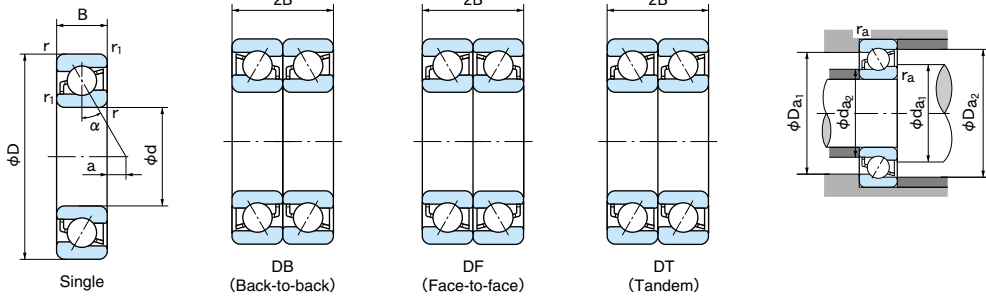
1N=0.102kgf

Boundary dimensions (mm)	Load center (mm)	Bearing No.	Basic dynamic load rating Cr(N)		Basic static load rating Cor(N)		Limiting speed (rpm)				Abutment and fillet dimensions (mm)					Mass (kg)										
			d	D	B	r _(min)	r _{1 (min)}	a ⁽¹⁾	Single	Duplex	Single	Duplex	Single	Duplex	Single	Duplex	Single	Bearing No.								
100	24	7020	150	24	1.5	1	24.1	68500	111000	70500	141000	3600	2800	4800	3800	107	107	143	145.6	1.5	1	1.37	7020			
			150	24	1.5	1	2.4	7020C	7020CDB	7020CDF	7020CDT	76000	123000	6400	5100	8800	7000	107	107	143	145.6	1.5	1	1.37	7020C	
	180	34	7220	2.1	1.1	23.4	7220	7220DB	7220DF	7220DT	144000	234000	3200	2400	4200	3400	112	107	168	173	2	1	3.32	7220		
				2.1	1.1	41.8	7220B	7220BDB	7220BDF	7220BDT	135000	219000	2800	2200	3700	3000	112	107	168	173	2	1	3.32	7220B		
				2.1	1.1	-0.8	7220C	7220CDB	7220CDF	7220CDT	150000	244000	5700	4600	7900	6300	112	112	168	173	2	1	3.32	7220C		
	215	47	7320	3	1.1	22.0	7320	7320DB	7320DF	7320DT	207000	335000	2800	2200	3800	3000	114	107	201	208	2.5	1	8.18	7320		
				3	1.1	42.7	7320B	7320BDB	7320BDF	7320BDT	196000	320000	2400	2000	3300	2800	114	107	201	208	2.5	1	8.18	7320B		
				3	1.1	-5.3	7320C	7320CDB	7320CDF	7320CDT	211000	340000	5100	4100	7000	5600	114	114	201	208	2.5	1	8.18	7320C		
	105	26	7021	160	26	2	1	25.2	80000	130000	81500	163000	3300	2600	4400	3500	113	113	152	155	2	1	1.73	7021		
				160	26	2	1	2.3	7021C	7021CDB	7021CDF	7021CDT	97000	158000	6000	4800	8300	6600	113	113	152	155	2	1	1.73	7021C
		190	36	7221	2.1	1.1	24.6	7221	7221DB	7221DF	7221DT	157000	254000	3000	2400	4000	3200	117	112	178	183	2	1	3.93	7221	
					2.1	1.1	44.0	7221B	7221BDB	7221BDF	7221BDT	147000	239000	2700	2100	3600	2900	117	112	178	183	2	1	3.93	7221B	
2.1					1.1	-0.9	7221C	7221CDB	7221CDF	7221CDT	163000	265000	5400	4300	7500	6000	117	117	178	183	2	1	3.93	7221C		
225		49	7321	3	1.1	23.1	7321	7321DB	7321DF	7321DT	219000	355000	2700	2100	3600	2800	119	112	211	218	2.5	1	9.34	7321		
				3	1.1	44.8	7321B	7321BDB	7321BDF	7321BDT	208000	335000	2400	1900	3200	2600	119	112	211	218	2.5	1	9.34	7321B		
				3	1.1	-5.3	7321C	7321CDB	7321CDF	7321CDT	224000	365000	4800	3800	6700	5400	119	119	211	218	2.5	1	9.34	7321C		
110		28	7022	170	28	2	1	26.2	92000	149000	92500	185000	3200	2500	4300	3300	118	118	162	165	2	1	2.14	7022		
				170	28	2	1	2.2	7022C	7022CDB	7022CDF	7022CDT	107000	173000	5700	4600	7900	6300	118	118	162	165	2	1	2.14	7022C
		200	38	7222	2.1	1.1	25.7	7222	7222DB	7222DF	7222DT	170000	276000	2800	2200	3800	3000	122	117	188	193	2	1	4.62	7222	
					2.1	1.1	46.1	7222B	7222BDB	7222BDF	7222BDT	159000	259000	2600	2000	3400	2800	122	117	188	193	2	1	4.62	7222B	
	2.1				1.1	-1.0	7222C	7222CDB	7222CDF	7222CDT	171000	277000	5200	4200	7100	5700	122	122	188	193	2	1	4.62	7222C		
	240	50	7322	3	1.1	25.5	7322	7322DB	7322DF	7322DT	244000	395000	2600	2000	3400	2700	124	117	226	233	2.5	1	11.0	7322		
				3	1.1	48.5	7322B	7322BDB	7322BDF	7322BDT	231000	375000	2200	1800	3000	2400	124	117	226	233	2.5	1	11.0	7322B		
				3	1.1	-4.7	7322C	7322CDB	7322CDF	7322CDT	237000	385000	4600	3700	6300	5000	124	124	226	233	2.5	1	11.0	7322C		
	120	28	7024	180	28	2	1	29.3	96500	157000	103000	206000	2900	2300	3800	3000	128	128	172	175	2	1	2.27	7024		
				180	28	2	1	3.3	7024C	7024CDB	7024CDF	7024CDT	109000	178000	5300	4200	7300	5800	128	128	172	175	2	1	2.27	7024C
		215	40	7224	2.1	1.1	28.4	7224	7224DB	7224DF	7224DT	182000	295000	2600	2100	3400	2700	132	127	203	208	2	1	6.05	7224	
					2.1	1.1	50.3	7224B	7224BDB	7224BDF	7224BDT	170000	277000	169000	335000	2300	1900	3100	2500	132	127	203	208	2	1	6.05
2.1					1.1	-0.6	7224C	7224CDB	7224CDF	7224CDT	185000	300000	176000	350000	4800	3800	6600	5300	132	132	203	208	2	1	6.05	7224C
260		55	7324	3	1.1	27.3	7324	7324DB	7324DF	7324DT	260000	420000	2200	1800	3000	2400	134	127	246	253	2.5	1	14.2	7324		
				3	1.1	52.2	7324B	7324BDB	7324BDF	7324BDT	245000	400000	253000	505000	2100	1700	2800	2200	134	127	246	253	2.5	1	14.2	7324B

Note : (1) "a" means the distance between back face and load center.

Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 130~160mm



• Dynamic equivalent radial load
Pr = XFr + YFa

Contact angle	iFa Cor	e	Single or DT				DB or DF			
			Fa > e		Fa ≤ e		Fa > e		Fa ≤ e	
			X	Y	X	Y	X	Y	X	Y
15°	0.015	0.38			0.44	1.47	1	1.65	0.72	2.39
	0.029	0.40			1.40	1	1.57	0.72	2.28	
	0.058	0.43			1.30	1	1.46	0.72	2.11	
	0.087	0.46			1.23	1	1.38	0.72	2.00	
	0.12	0.47			1.19	1	1.34	0.72	1.93	
	0.17	0.50			1.12	1	1.26	0.72	1.82	
30°	0.29	0.55			1.02	1	1.14	0.72	1.66	
	0.44	0.56			1.00	1	1.12	0.72	1.63	
	0.58	0.56			1.00	1	1.12	0.72	1.63	
40°	—	0.8			0.39	0.76	1	0.78	0.63	1.24
	—	1.14			0.35	0.57	1	0.55	0.57	0.93

• Static equivalent radial load
Por = XoFr + YoFa

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
When Por < Fr, use Pr = Fr

• i = 2 for DB or DF mounting
i = 1 for Single or DT mounting
• Single or DT mounting
When Fa/Fr ≤ e, use Pr = Fr

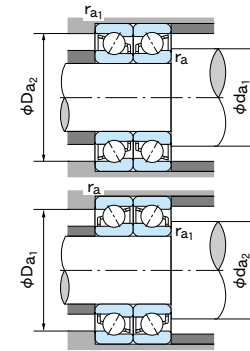
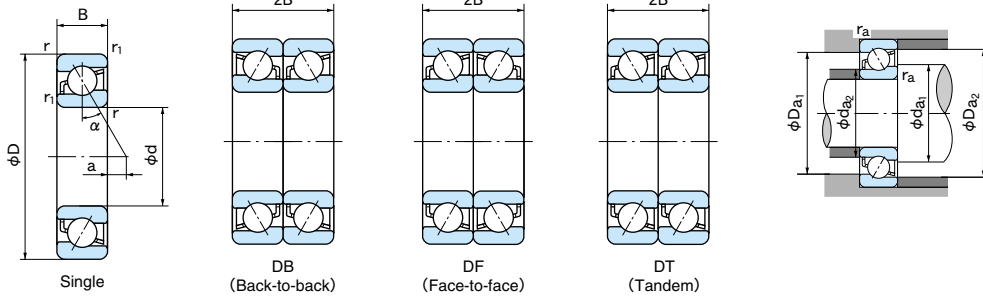
1N=0.102kgf

Boundary dimensions (mm)					Load center (mm)	Bearing No.				Basic dynamic load rating Cr(N)		Basic static load rating Cor(N)		Limiting speed (rpm)				Abutment and fillet dimensions (mm)						Mass (kg)	
d	D	B	r (min)	r1 (min)	a (1)	Single	Duplex			Single	Duplex	Single	Duplex	Grease lubrication	Oil lubrication	Single	Duplex	Single	Duplex	Single	Duplex	Single	Bearing No.		
														Single	Duplex	Single	Duplex	Single	Duplex	Single	Duplex	Single			
130	200	33	2	1	31.1	7026	7026DB	7026DF	7026DT	117000	190000	125000	250000	2600	3600	2700	3600	138	138	192	195	2	1	3.43	7026
	200	33	2	1	2.5	7026C	7026CDB	7026CDF	7026CDT	130000	211000	138000	276000	4800	3800	6700	5400	138	138	192	195	2	1	3.43	7026C
	230	40	3	1.1	32	7226	7226DB	7226DF	7226DT	196000	320000	198000	395000	2400	1900	3100	2500	144	137	216	223	2.5	1	6.88	7226
	230	40	3	1.1	55.5	7226B	7226BDB	7226BDF	7226BDT	184000	298000	185000	370000	2100	1700	2800	2300	144	137	216	223	2.5	1	6.88	7226B
	230	40	3	1.1	0.9	7226C	7226CDB	7226CDF	7226CDT	214000	350000	216000	430000	4400	3500	6100	4900	144	144	216	223	2.5	1	6.88	7226C
	280	58	4	1.5	30.2	7326	7326DB	7326DF	7326DT	300000	490000	330000	660000	2200	1700	2900	2200	148	139	262	271	3	1.5	17.4	7326
280	58	4	1.5	57.0	7326B	7326BDB	7326BDF	7326BDT	284000	460000	310000	620000	1900	1500	2600	2000	148	139	262	271	3	1.5	17.4	7326B	
140	210	33	2	1	34	7028	7028DB	7028DF	7028DT	120000	194000	133000	265000	2400	1900	3300	2600	148	148	202	205	2	1	3.63	7028
	210	33	2	1	3.7	7028C	7028CDB	7028CDF	7028CDT	133000	216000	146000	292000	4600	3700	6300	5000	148	148	202	205	2	1	3.63	7028C
	250	42	3	1.1	35.3	7228	7228DB	7228DF	7228DT	211000	345000	228000	525000	2200	1800	3000	2400	154	147	236	243	2.5	1	8.78	7228
	250	42	3	1.1	60.8	7228B	7228BDB	7228BDF	7228BDT	197000	320000	214000	425000	2000	1600	2600	2200	154	147	236	243	2.5	1	8.78	7228B
	250	42	3	1.1	1.3	7228C	7228CDB	7228CDF	7228CDT	223000	360000	235000	470000	4100	3300	5600	4500	154	154	236	243	2.5	1	8.78	7228C
	300	62	4	1.5	32.5	7328	7328DB	7328DF	7328DT	300000	490000	335000	670000	2000	1600	2600	2000	158	149	282	291	3	1.5	21.5	7328
300	62	4	1.5	61.3	7328B	7328BDB	7328BDF	7328BDT	284000	460000	315000	635000	1700	1400	2400	1900	158	149	282	291	3	1.5	21.5	7328B	
150	225	35	2.1	1.1	36.6	7030	7030DB	7030DF	7030DT	137000	222000	154000	305000	2300	1800	3000	2400	159	159	216	219	2	1	4.42	7030
	225	35	2.1	1.1	4.1	7030C	7030CDB	7030CDF	7030CDT	152000	247000	169000	340000	4300	3400	5900	4700	159	159	216	219	2	1	4.42	7030C
	270	45	3	1.1	38.1	7230	7230DB	7230DF	7230DT	249000	405000	280000	560000	2000	1600	2800	2200	164	157	256	263	2.5	1	11.0	7230
	270	45	3	1.1	65.6	7230B	7230BDB	7230BDF	7230BDT	223000	360000	246000	490000	1800	1500	2600	2000	164	157	256	263	2.5	1	11.0	7230B
	270	45	3	1.1	1.5	7230C	7230CDB	7230CDF	7230CDT	261000	425000	287000	575000	3800	3000	5200	4200	164	164	256	263	2.5	1	11.0	7230C
	320	65	4	1.5	35.3	7330	7330DB	7330DF	7330DT	330000	535000	380000	765000	1700	1400	2400	1800	168	159	302	311	3	1.5	25.1	7330
320	65	4	1.5	66.1	7330B	7330BDB	7330BDF	7330BDT	310000	505000	360000	725000	1500	1300	2200	1600	168	159	302	311	3	1.5	25.1	7330B	
160	240	38	2.1	1.1	38.7	7032	7032DB	7032DF	7032DT	155000	252000	176000	350000	2100	1700	2800	2300	169	169	231	234	2	1	5.44	7032
	240	38	2.1	1.1	4.1	7032C	7032CDB	7032CDF	7032CDT	172000	280000	194000	390000	4000	3200	5500	4400	169	169	231	234	2	1	5.44	7032C
	290	48	3	1.1	41.0	7232	7232DB	7232DF	7232DT	263000	425000	305000	615000	1900	1500	2600	2000	174	167	276	283	2.5	1	13.7	7232
	290	48	3	1.1	70.4	7232B	7232BDB	7232BDF	7232BDT	246000	400000	287000	575000	1700	1400	2200	1800	174	167	276	283	2.5	1	13.7	7232B
	290	48	3	1.1	2.4	7232C	7232CDB	7232CDF	7232CDT	288000	470000	335000	670000	3600	2900	4900	3900	174	167	276	283	2.5	1	13.7	7232C
	340	68	4	1.5	38.2	7332	7332DB	7332DF	7332DT	345000	565000	420000	845000	1700	1400	2200	1800	178	169	322	331	3	1.5	30.2	7332
340	68	4	1.5	70.9	7332B	7332BDB	7332BDF	7332BDT	325000	530000	395000	795000	1500	1200	2000	1600	178	169	322	331	3	1.5	30.2	7332B	

Note : (1) "a" means the distance between back face and load center.

Angular Contact Ball Bearings Single Mounting / Duplex Mounting

Bore Diameter : 170~200mm



• Dynamic equivalent radial load
 $Pr = XFr + YFa$

Contact angle	iFa / Cor	e	Single or DT				DB or DF					
			Fa > e		Fa ≤ e		Fa > e		Fa ≤ e			
			X	Y	X	Y	X	Y	X	Y		
15°	0.015	0.38	1.47	1.65	1.65	2.39	0.44	1.40	1	1.57	0.72	2.28
	0.029	0.40	1.30	1.46	1.46	2.11	0.058	0.43	1.30	1.34	0.72	2.00
	0.087	0.46	1.23	1.38	1.38	1.93	0.12	0.47	1.19	1.34	0.72	1.93
	0.17	0.50	1.12	1.26	1.26	1.82	0.29	0.55	1.02	1.14	0.72	1.66
	0.44	0.56	1.00	1.12	1.12	1.63	0.58	0.56	1.00	1.12	0.72	1.63
	0.58	0.56	1.00	1.12	1.12	1.63	0.58	0.56	1.00	1.12	0.72	1.63
30°	—	0.8	0.39	0.76	1	0.78	0.63	1.24	—	—	—	—
40°	—	1.14	0.35	0.57	1	0.55	0.57	0.93	—	—	—	—

• Static equivalent radial load
 $Por = XoFr + YoFa$

Contact angle	Single or DT		DB or DF	
	Xo	Yo	Xo	Yo
15°	0.5	0.46	1	0.92
30°	0.5	0.33	1	0.66
40°	0.5	0.26	1	0.52

• Single or DT mounting
 When $Por < Fr$, use $Pr = Fr$

• $i = 2$ for DB or DF mounting
 $i = 1$ for Single or DT mounting
 • Single or DT mounting
 When $Fa / Fr \leq e$, use $Pr = Fr$

1N=0.102kgf

d	Boundary dimensions (mm)			Load center (mm) a ⁽¹⁾	Bearing No.				Basic dynamic load rating Cr(N)		Basic static load rating Cor(N)		Limiting speed (rpm)				Abutment and fillet dimensions (mm)						Mass (kg) Bearing No.		
	D	B	r		Single	Duplex			Single	Duplex	Single	Duplex	Grease lubrication	Oil lubrication	Single	Duplex	Single	Duplex	Single	Duplex	Single				
170	260	42	2.1	1.1	41.1	7034	7034DB	7034DF	7034DT	179000	291000	210000	420000	2000	1600	2600	2100	179	179	251	254	2	1	7.87	7034
	260	42	2.1	1.1	3.8	7034C	7034CDB	7034CDF	7034CDT	206000	335000	236000	470000	3700	3000	5100	4100	179	179	251	254	2	1	7.87	7034C
	310	52	4	1.5	43.3	7234	7234DB	7234DF	7234DT	272000	440000	330000	660000	1800	1400	2400	1900	188	179	292	301	3	1.5	17.4	7234
	310	52	4	1.5	74.7	7234B	7234BDB	7234BDF	7234BDT	254000	410000	310000	620000	1600	1300	2200	1700	188	179	292	301	3	1.5	17.4	7234B
	310	52	4	1.5	2.2	7234C	7234CDB	7234CDF	7234CDT	299000	485000	360000	725000	3300	2600	4600	3700	188	179	292	301	3	1.5	17.4	7234C
	360	72	4	1.5	40.5	7334	7334DB	7334DF	7334DT	390000	630000	485000	970000	1600	1300	2200	1700	188	179	342	351	3	1.5	35.7	7334
360	72	4	1.5	75.2	7334B	7334BDB	7334BDF	7334BDT	365000	595000	460000	915000	1400	1100	2000	1600	188	179	342	351	3	1.5	35.7	7334B	
180	280	46	2.1	1.1	43.4	7036	7036DB	7036DF	7036DT	207000	335000	252000	505000	1900	1500	2500	2000	189	189	271	274	2	1	9.98	7036
	280	46	2.1	1.1	3.5	7036C	7036CDB	7036CDF	7036CDT	235000	385000	290000	580000	3500	2800	4800	3800	189	189	271	274	2	1	9.98	7036C
	320	52	4	1.5	46.2	7236	7236DB	7236DF	7236DT	281000	455000	350000	705000	1700	1300	2200	1800	198	189	302	311	3	1.5	19.9	7236
	320	52	4	1.5	48.9	7236B	7236BDB	7236BDF	7236BDT	262000	425000	330000	660000	1500	1200	2000	1700	198	189	302	311	3	1.5	19.9	7236B
	320	52	4	1.5	3.3	7236C	7236CDB	7236CDF	7236CDT	310000	500000	385000	775000	3200	2600	4400	3500	198	189	302	311	3	1.5	19.9	7236C
	380	75	4	1.5	43.3	7336	7336DB	7336DF	7336DT	410000	665000	535000	1070000	1400	1200	2000	1600	198	189	362	371	3	1.5	41.3	7336
380	75	4	1.5	80.0	7336B	7336BDB	7336BDF	7336BDT	385000	625000	505000	1010000	1300	1100	1900	1500	198	189	362	371	3	1.5	41.3	7336B	
190	290	46	2.1	1.1	46.3	7038	7038DB	7038DF	7038DT	218000	355000	277000	555000	1800	1400	2300	1900	199	199	281	284	2	1	10.7	7038
	290	46	2.1	1.1	4.7	7038C	7038CDB	7038CDF	7038CDT	248000	405000	310000	615000	3300	2600	4600	3700	199	199	281	284	2	1	10.7	7038C
	340	55	4	1.5	49.0	7238	7238DB	7238DF	7238DT	315000	510000	410000	825000	1600	1300	2200	1700	208	199	322	331	3	1.5	21.5	7238
	340	55	4	1.5	83.7	7238B	7238BDB	7238BDF	7238BDT	294000	475000	385000	770000	1400	1100	2000	1600	208	199	322	331	3	1.5	21.5	7238B
	400	78	5	2	46.1	7338	7338DB	7338DF	7338DT	445000	725000	610000	1220000	1400	1100	1900	1500	212	200	378	390	4	2	47.6	7338
	400	78	5	2	84.8	7338B	7338BDB	7338BDF	7338BDT	420000	680000	575000	1150000	1300	1000	1800	1400	212	200	378	390	4	2	47.6	7338B
200	310	51	2.1	1.1	48.1	7040	7040DB	7040DF	7040DT	226000	365000	277000	565000	1700	1300	2200	1800	209	209	301	304	2	1	13.8	7040
	310	51	2.1	1.1	3.9	7040C	7040CDB	7040CDF	7040CDT	274000	445000	360000	715000	3100	2500	4300	3400	209	209	301	304	2	1	13.8	7040C
	360	58	4	1.5	51.8	7240	7240DB	7240DF	7240DT	335000	550000	450000	900000	1500	1200	2000	1600	218	209	342	351	3	1.5	25.5	7240
	360	58	4	1.5	88.5	7240B	7240BDB	7240BDF	7240BDT	315000	510000	420000	840000	1300	1000	1900	1500	218	209	342	351	3	1.5	25.5	7240B
	420	80	5	2	49.5	7340	7340DB	7340DF	7340DT	475000	770000	655000	1310000	1300	1100	1800	1400	222	210	398	410	4	2	53.7	7340
	420	80	5	2	90.1	7340B	7340BDB	7340BDF	7340BDT	445000	725000	620000	1240000	1200	1000	1700	1300	222	210	398	410	4	2	53.7	7340B

Note : (1) "a" means the distance between back face and load center.