



SHAANXI FROTUNE TRADING CO., LTD

陕西嘉汇丰贸易有限公司

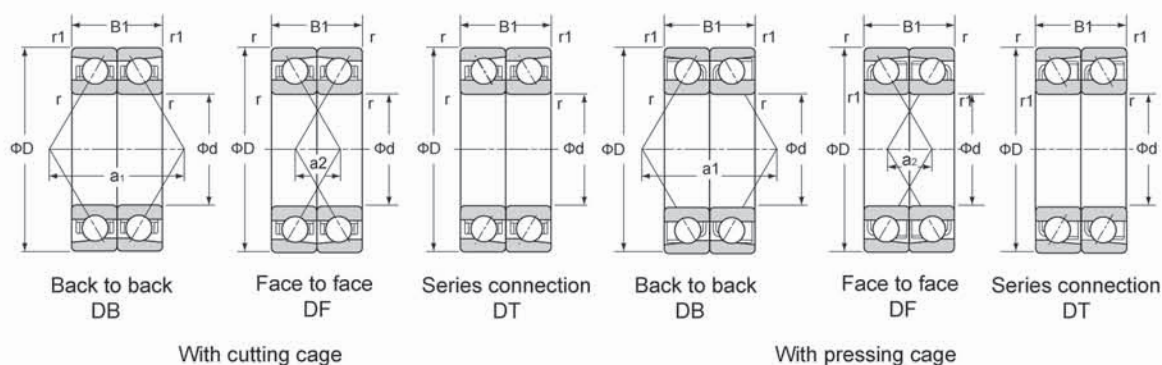
Add: ADD:A1007 FENG HUANG XIN CHENG FENG CHENG III ROAD XI'AN CHINA

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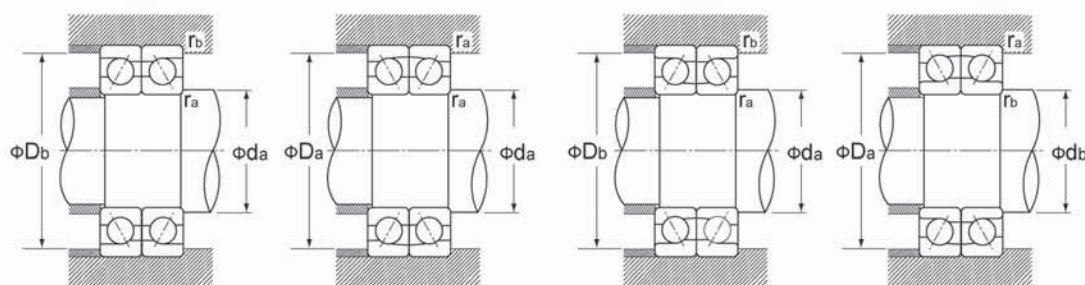
Angular Contact Ball Bearings





Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
10	22	12	0.3	0.15	4.90	3.05	-	-	42000	55000
	26	16	0.3	0.15	8.10	4.65	-	-	27000	34000
	26	16	0.3	0.15	7.55	4.35	-	-	20000	27000
	26	16	0.3	0.15	8.60	4.95	-	-	37000	50000
	30	18	0.6	0.3	7.55	4.40	8.80	5.45	23000	29000
	30	18	0.6	0.3	6.95	4.05	8.10	5.05	18000	23000
	30	18	0.6	0.3	8.10	4.70	9.45	5.85	32000	43000
	35	22	0.6	0.3	13.8	7.55	15.1	8.60	21000	27000
12	24	12	0.3	0.15	5.15	3.45	-	-	37000	49000
	28	16	0.3	0.15	8.80	5.45	-	-	23000	29000
	28	16	0.3	0.15	8.10	5.05	-	-	18000	24000
	28	16	0.3	0.15	9.40	5.85	-	-	32000	43000
	32	20	0.6	0.3	12.1	7.25	13.0	8.05	22000	27000
	32	20	0.6	0.3	11.3	6.80	12.1	7.50	16000	21000
	32	20	0.6	0.3	12.8	7.70	13.8	8.55	30000	40000
	37	24	1	0.6	16.6	9.20	18.1	10.5	20000	24000
15	28	14	0.3	0.15	7.75	5.30	-	-	31000	41000
	32	18	0.3	0.15	9.95	6.85	-	-	20000	26000
	32	18	0.3	0.15	9.05	6.30	-	-	15000	20000
	32	18	0.3	0.15	10.7	7.40	-	-	28000	37000
	35	22	0.6	0.3	13.2	8.55	13.2	8.55	19000	24000
	35	22	0.6	0.3	12.1	7.85	12.1	7.85	14000	19000
	35	22	0.6	0.3	14.1	9.15	14.1	9.15	26000	35000
	42	26	1	0.6	20.3	12.9	21.8	14.4	16000	20000
17	30	14	0.3	0.15	7.05	4.60	-	-	28000	38000
	35	20	0.3	0.15	10.9	8.25	-	-	18000	23000
	35	20	0.3	0.15	9.90	7.50	-	-	14000	18000
	35	20	0.3	0.15	11.9	8.95	-	-	25000	33000
	40	24	0.6	0.3	16.5	11.0	16.5	11.0	17000	21000
	40	24	0.6	0.3	15.2	10.1	15.2	10.1	12000	17000
	40	24	0.6	0.3	17.7	11.8	17.7	11.8	23000	30000
	47	28	1	0.6	24.2	15.8	26.0	17.5	15000	18000
	47	28	1	0.6	22.5	14.6	24.1	16.2	11000	15000
20	47	28	1	0.6	25.7	16.8	25.7	16.8	20000	27000
	37	18	0.3	0.15	11.8	9.15	-	-	24000	31000
	42	24	0.6	0.3	16.7	12.2	-	-	15000	19000
	42	24	0.6	0.3	15.2	11.1	-	-	11000	15000
	42	24	0.6	0.3	18.0	13.2	-	-	21000	28000
	47	28	1	0.6	23.5	16.8	24.9	18.3	14000	17000
	47	28	1	0.6	21.6	15.4	22.9	16.8	10000	14000
	47	28	1	0.6	25.2	18.0	26.7	19.6	19000	26000
	52	30	1.1	0.6	28.3	18.8	30.4	20.8	13000	17000
	52	30	1.1	0.6	26.3	17.4	28.2	19.3	10000	13000
	52	30	1.1	0.6	30.1	19.9	32.3	22.2	18000	24000

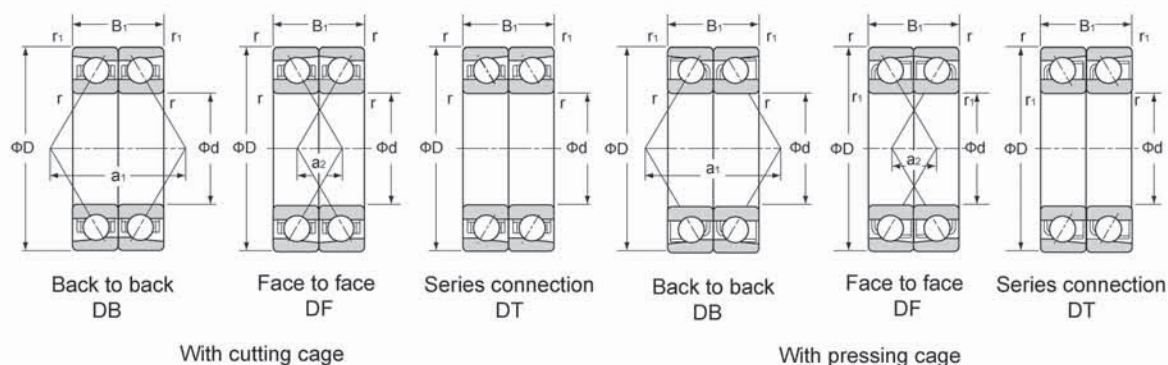


With cutting cage

With pressing cage

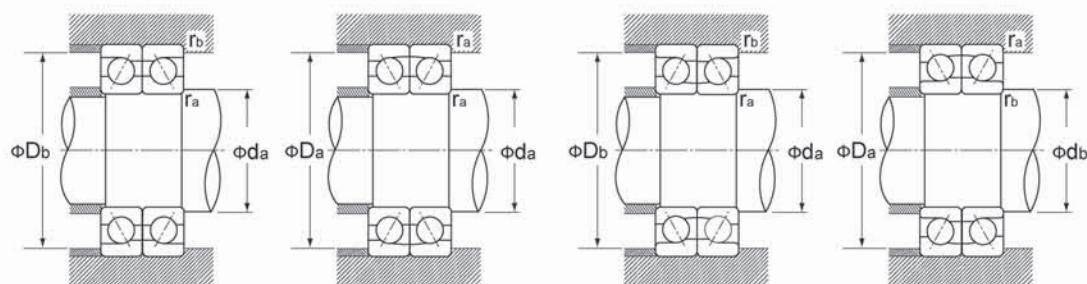
d 10 ~ (20)mm

Bearing Designation ²⁾			Distance of working points		Shoulder Dimensions (mm)						Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)		d _a (min.)	d _b (min.)	D _a (max.)	D _b (max.)	r _a (max.)	r _b (max.)	Approx
7900CDB	7900CDF	7900CDT	10.3	1.7	12.5	-	19.5	20.8	0.3	0.15	0.016
7000DB	7000DF	7000DT	18.2	2.2	12.5	-	23.5	24.8	0.3	0.15	0.042
7000BDB	7000BDF	7000BDT	23.1	7.1	12.5	-	23.5	24.8	0.3	0.15	0.042
7000CDB	7000CDF	7000CDT	12.7	3.3	12.5	-	23.5	24.8	0.3	0.15	0.042
7200DB	7200DF	7200DT	20.8	2.8	14.5	12.5	25.5	27.5	0.6	0.3	0.062
7200BDB	7200BDF	7200BDT	26.2	8.2	14.5	12.5	25.5	27.5	0.6	0.3	0.062
7200CDB	7200CDF	7200CDT	14.5	3.5	14.5	12.5	25.5	27.5	0.6	0.3	0.062
7300DB	7300DF	7300DT	24.0	2.0	14.5	12.5	30.5	32.5	0.6	0.3	0.108
7901CDB	7901CDF	7901CDT	10.8	1.2	14.5	-	21.5	22.8	0.3	0.15	0.020
7001DB	7001DF	7001DT	19.9	3.9	14.5	-	25.5	26.8	0.3	0.15	0.048
7001BDB	7001BDF	7001BDT	25.2	9.2	14.5	-	25.5	26.8	0.3	0.15	0.048
7001CDB	7001CDF	7001CDT	13.5	2.5	14.5	-	25.5	26.8	0.3	0.15	0.048
7201DB	7201DF	7201DT	22.7	2.7	16.5	14.5	27.5	29.5	0.6	0.3	0.076
7201BDB	7201BDF	7201BDT	28.5	8.5	16.5	14.5	27.5	29.5	0.6	0.3	0.076
7201CDB	7201CDF	7201CDT	15.9	4.1	16.5	14.5	27.5	29.5	0.6	0.3	0.076
7301DB	7301DF	7301DT	26.2	2.2	17.5	16.5	31.5	32.5	1	0.5	0.130
7902CDB	7902CDF	7902CDT	12.8	1.2	17.5	-	25.5	26.8	0.3	0.15	0.031
7002DB	7002DF	7002DT	22.6	4.6	17.5	-	29.5	30.8	0.3	0.15	0.068
7002BDB	7002BDF	7002BDT	29.2	11.1	17.5	-	29.5	30.8	0.3	0.15	0.070
7002CDB	7002CDF	7002CDT	15.3	2.7	17.5	-	29.5	30.8	0.3	0.15	0.068
7202DB	7202DF	7202DT	25.7	3.7	19.5	17.5	30.5	32.5	0.6	0.3	0.096
7202BDB	7202BDF	7202BDT	32.4	10.4	19.5	17.5	30.5	32.5	0.6	0.3	0.096
7202CDB	7202CDF	7202CDT	17.8	4.2	19.5	17.5	30.5	32.5	0.6	0.3	0.096
7302DB	7302DF	7302DT	30.0	4.0	20.5	19.5	36.5	37.5	1	0.5	0.176
7903CDB	7903CDF	7903CDT	13.4	0.6	19.5	-	27.5	28.8	0.3	0.15	0.032
7003DB	7003DF	7003DT	25.3	5.3	19.5	-	32.5	33.8	0.3	0.15	0.090
7003BDB	7003BDF	7003BDT	32.2	12.2	19.5	-	32.5	33.8	0.3	0.15	0.096
7003CDB	7003CDF	7003CDT	17.1	2.9	19.5	-	32.5	33.8	0.3	0.15	0.087
7203DB	7203DF	7203DT	28.8	4.8	21.5	19.5	35.5	37.5	0.6	0.3	0.144
7203BDB	7203BDF	7203BDT	36.3	12.3	21.5	19.5	35.5	37.5	0.6	0.3	0.146
7203CDB	7203CDF	7203CDT	19.8	4.2	21.5	19.5	35.5	37.5	0.6	0.3	0.144
7303DB	7303DF	7303DT	33.1	5.1	22.5	21.5	41.5	42.5	1	0.5	0.248
7303BDB	7303BDF	7303BDT	41.7	13.7	22.5	21.5	41.5	42.5	1	0.5	0.254
7303CDB	7303CDF	7303CDT	22.8	5.2	22.5	21.5	41.5	42.5	1	0.5	0.215
7904CDB	7904CDF	7904CDT	16.6	1.4	22.5	-	34.5	35.8	0.3	0.15	0.083
7004DB	7004DF	7004DT	30.2	6.2	24.5	-	47.5	39.5	0.6	0.3	0.158
7004BDB	7004BDF	7004BDT	38.4	14.4	24.5	-	37.5	39.5	0.6	0.3	0.158
7004CDB	7004CDF	7004CDT	20.4	3.6	24.5	-	37.5	39.5	0.6	0.3	0.158
7204DB	7204DF	7204DT	33.9	5.9	25.5	24.5	41.5	42.5	1	0.5	0.224
7204BDB	7204BDF	7204BDT	42.9	14.9	25.5	24.5	41.5	42.5	1	0.5	0.224
7204CDB	7204CDF	7204CDT	23.2	4.8	25.5	24.5	41.5	42.5	1	0.5	0.224
7304DB	7304DF	7304DT	35.8	5.8	27	24.5	45	47.5	1	0.6	0.319
7304BDB	7304BDF	7304BDT	45.2	15.2	27	24.5	45	47.5	1	0.6	0.326
7304CDB	7304CDF	7304CDT	24.6	5.4	27	24.5	45	47.5	1	0.6	0.319



Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
20	72	38	1.1	0.6	57.8	38.2	-	-	7400	11000
	72	38	1.1	0.6	54.4	35.9	-	-	6400	9600
25	42	18	0.3	0.15	12.7	10.9	-	-	20000	27000
	47	24	0.6	0.3	18.3	14.8	-	-	13000	17000
	47	24	0.6	0.3	16.6	13.4	-	-	10000	13000
	47	24	0.6	0.3	20.0	16.0	-	-	18000	24000
	52	30	1	0.6	24.9	19.0	26.3	20.6	12000	15000
	52	30	1	0.6	22.7	17.4	24.0	18.8	9200	12000
	52	30	1	0.6	26.9	20.5	28.4	22.2	17000	23000
	62	34	1.1	0.6	40.3	28.8	42.9	31.6	11000	14000
	62	34	1.1	0.6	37.2	26.6	39.6	29.2	8300	11000
	62	34	1.1	0.6	42.8	30.6	45.6	33.7	15000	20000
	80	42	1.5	1	64.5	46.3	69.2	51.5	6400	9100
	80	42	1.5	1	60.0	43.0	64.3	47.8	5500	8200
30	47	18	0.3	0.15	13.5	12.5	-	-	18000	23000
	55	26	1	0.6	20.5	18.7	-	-	16000	21000
	55	26	1	0.6	23.6	20.2	-	-	11000	14000
	55	26	1	0.6	21.3	18.4	-	-	8500	11000
	55	26	1	0.6	25.7	22.0	-	-	16000	21000
	62	32	1	0.6	34.7	27.4	36.6	29.7	10000	13000
	62	32	1	0.6	31.6	25.0	33.3	27.1	7700	10000
	62	32	1	0.6	37.4	29.5	39.5	32.0	14000	19000
	72	38	1.1	0.6	48.9	37.8	51.8	41.2	9200	12000
	72	38	1.1	0.6	44.9	34.7	47.5	37.9	6900	9200
	72	38	1.1	0.6	52.5	40.5	55.6	44.2	13000	17000
	90	46	1.5	1	77.3	56.9	82.9	63.2	5700	8100
	90	46	1.5	1	71.8	52.8	77.0	58.6	4900	7300
35	55	20	0.6	0.3	20.4	19.4	-	-	15000	20000
	62	28	1	0.6	21.6	21.8	-	-	14000	19000
	62	28	1	0.6	28.4	25.2	-	-	9800	12000
	62	28	1	0.6	25.7	22.8	-	-	7400	9900
	62	28	1	0.6	31.0	27.4	-	-	13000	18000
	72	34	1.1	0.6	45.7	37.3	48.2	40.4	8800	11000
	72	34	1.1	0.6	41.6	34.1	43.9	36.9	6600	8800
	72	34	1.1	0.6	49.4	40.2	52.1	43.5	12000	16000
	80	42	1.5	1	57.5	44.0	64.9	52.8	8200	10000
	80	42	1.5	1	52.7	40.5	59.5	48.6	6200	8200
	80	42	1.5	1	61.6	47.2	69.6	56.6	11000	15000
	100	50	1.5	1	98.2	73.9	105	82.1	5000	7200
	100	50	1.5	1	91.3	68.6	97.9	76.2	4300	6500
40	62	24	0.6	0.3	25.6	24.9	-	-	13000	18000
	68	30	1	0.6	22.6	24.4	-	-	13000	17000
	68	30	1	0.6	30.4	29.2	-	-	8900	11000
	68	30	1	0.6	27.4	26.4	-	-	6600	8900

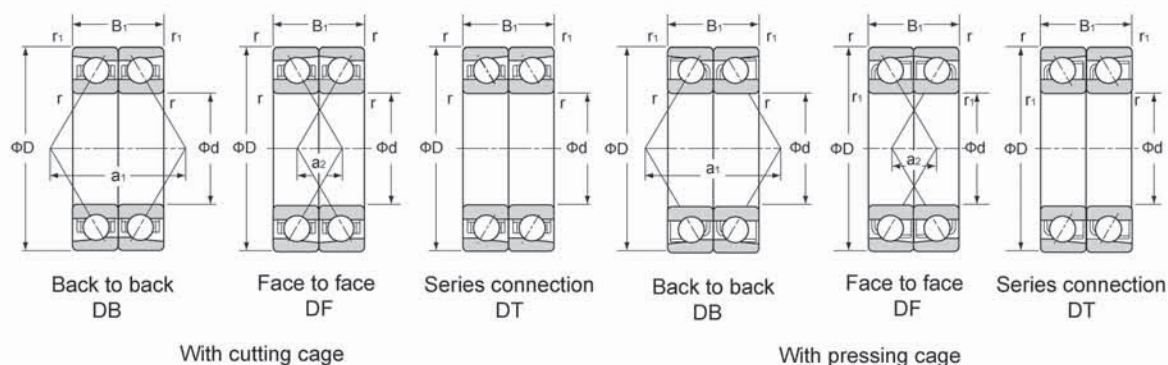


With cutting cage

With pressing cage

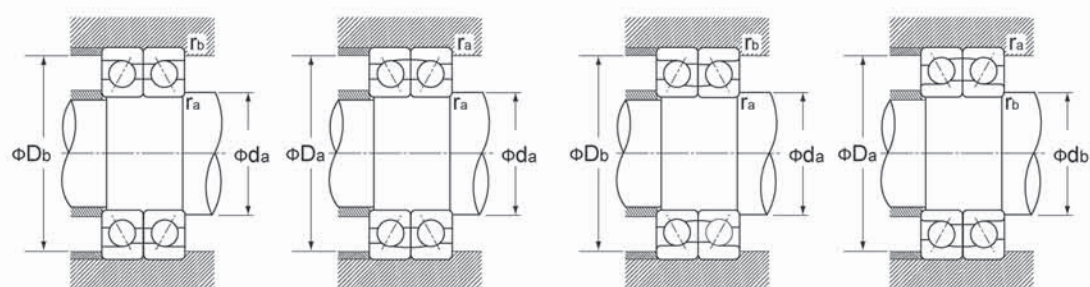
d (20) ~ (40)mm

Bearing Designation ²⁾			Distance of working points				Shoulder Dimensions (mm)				Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)		d _a (min.)	d _b (min.)	D _a (max.)	D _b (max.)	r _a (max.)	r _b (max.)	Approx
7404DB	7404DF	7404DT	46.1	8.1	27	-	65	67.5	1	0.6	0.790
7404BDB	7404BDF	7404BDT	58.4	20.4	27	-	65	67.5	1	0.6	0.790
7905CDB	7905CDF	7905CDT	18.2	0.2	27.5	-	39.5	40.8	0.3	0.15	0.082
7005DB	7005DF	7005DT	32.9	8.9	29.5	-	42.5	44.5	0.6	0.3	0.182
7005BDB	7005BDF	7005BDT	42.3	18.3	29.5	-	42.5	44.5	0.6	0.3	0.182
7005CDB	7005CDF	7005CDT	21.7	2.3	29.5	-	42.5	44.5	0.6	0.3	0.182
7205DB	7205DF	7205DT	37.5	7.5	30.5	29.5	46.5	47.5	1	0.5	0.280
7205BDB	7205BDF	7205BDT	47.7	17.7	30.5	29.5	46.5	47.5	1	0.5	0.287
7205CDB	7205CDF	7205CDT	25.5	4.5	30.5	29.5	46.5	47.5	1	0.5	0.279
7305DB	7305DF	7305DT	42.1	8.1	32	29.5	55	57.5	1	0.6	0.486
7305BDB	7305BDF	7305BDT	53.5	19.5	32	29.5	55	57.5	1	0.6	0.486
7305CDB	7305CDF	7305CDT	28.7	5.3	32	29.5	55	57.5	1	0.6	0.486
7405DB	7405DF	7405DT	52.8	10.8	33.5	30.5	71.5	74.5	1.5	0.8	1.05
7405BDB	7405BDF	7405BDT	67.2	25.2	33.5	30.5	71.5	74.5	1.5	0.8	1.05
7906CDB	7906CDF	7906CDT	19.3	1.3	32.5	-	44.5	45.8	0.3	0.15	0.092
ACH006CDB	ACH006CDF	ACH006CDT	24.4	1.6	36	-	49	51.5	1	0.5	0.244
7006DB	7006DF	7006DT	37.5	11.5	35.5	-	49.5	50.5	1	0.5	0.266
7006BDB	7006BDF	7006BDT	48.7	22.7	35.5	-	49.5	50.5	1	0.5	0.266
7006CDB	7006CDF	7006CDT	24.4	1.6	35.5	-	49.5	50.5	1	0.5	0.266
7206DB	7206DF	7206DT	43.0	11.0	35.5	34.5	56.5	57.5	1	0.5	0.416
7206BDB	7206BDF	7206BDT	55.2	23.2	35.5	34.5	56.5	57.5	1	0.5	0.416
7206CDB	7206CDF	7206CDT	28.5	3.5	35.5	34.5	56.5	57.5	1	0.5	0.416
7306DB	7306DF	7306DT	49.0	11.0	37	34.5	65	67.5	1	0.6	0.724
7306BDB	7306BDF	7306BDT	62.6	24.6	37	34.5	65	67.5	1	0.6	0.724
7306CDB	7306CDF	7306CDT	32.9	5.1	37	34.5	65	67.5	1	0.6	0.724
7406DB	7406DF	7406DT	58.5	12.5	38.5	35.5	81.5	84.5	1.5	0.8	1.37
7406BDB	7406BDF	7406BDT	74.6	28.6	38.5	35.5	81.5	84.5	1.5	0.8	1.37
7907CDB	7907CDF	7907CDT	22.1	2.1	40	-	50	52.5	0.6	0.3	0.148
ACH007CDB	ACH007CDF	ACH007CDT	27.0	1.0	41	-	56	58.5	1	0.5	0.324
7007DB	7007DF	7007DT	42.3	14.3	40.5	-	56.5	57.5	1	0.5	0.339
7007BDB	7007BDF	7007BDT	55.1	27.1	40.5	-	56.5	57.5	1	0.5	0.341
7007CDB	7007CDF	7007CDT	27.0	1.0	40.5	-	56.5	57.5	1	0.5	0.338
7207DB	7207DF	7207DT	48.5	14.5	42	39.5	65	67.5	1	0.6	0.623
7207BDB	7207BDF	7207BDT	62.7	28.7	42	39.5	65	67.5	1	0.6	0.630
7207CDB	7207CDF	7207CDT	31.6	2.4	42	39.5	65	67.5	1	0.6	0.622
7307DB	7307DF	7307DT	54.8	12.8	43.5	40.5	71.5	74.5	1.5	0.8	0.996
7307BDB	7307BDF	7307BDT	70.1	28.1	43.5	40.5	71.5	74.5	1.5	0.8	1.01
7307CDB	7307CDF	7307CDT	36.7	5.3	43.5	40.5	71.5	74.5	1.5	0.8	0.995
7407DB	7407DF	7407DT	65.2	15.2	43.5	40.5	91.5	94.5	1.5	0.8	2.11
7407BDB	7407BDF	7407BDT	83.3	33.3	43.5	40.5	91.5	94.5	1.5	0.8	2.11
7908CDB	7908CDF	7908CDT	25.7	1.7	45	-	57	59.5	0.6	0.3	0.214
ACH008CDB	ACH008CDF	ACH008CDT	29.5	0.5	46	-	62	64.5	1	0.5	0.406
7008DB	7008DF	7008DT	46.3	16.3	45.5	-	62.5	63.5	1	0.5	0.419
7008BDB	7008BDF	7008BDT	60.5	30.5	45.5	-	62.5	63.5	1	0.5	0.424



Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
40	68	30	1	0.6	33.4	31.8	-	-	12000	16000
	80	36	1.1	0.6	54.6	46.7	57.4	50.3	8000	10000
	80	36	1.1	0.6	49.7	42.7	52.2	45.9	6000	8000
	80	36	1.1	0.6	59.1	50.4	62.0	54.3	11000	15000
	90	46	1.5	1	70.2	54.9	79.3	65.9	7400	9200
	90	46	1.5	1	64.5	50.5	72.8	60.6	5500	7400
	90	46	1.5	1	75.3	58.8	85.0	70.5	10000	14000
	110	54	2	1	114	87.1	122	96.8	4600	6600
45	110	54	2	1	105	80.8	113	89.8	3900	5900
	68	24	0.6	0.3	27.0	28.2	-	-	12000	16000
	75	32	1	0.6	25.2	28.0	-	-	11000	15000
	75	32	1	0.6	36.2	35.4	-	-	8000	10000
	75	32	1	0.6	32.5	32.0	-	-	6000	8000
	75	32	1	0.6	39.6	38.5	-	-	11000	15000
	85	38	1.1	0.6	61.3	53.2	64.4	57.2	7500	9400
	85	38	1.1	0.6	55.8	48.6	58.6	52.3	5600	7500
	85	38	1.1	0.6	66.3	57.4	69.7	61.8	10000	14000
	100	50	1.5	1	89.6	74.2	94.9	80.9	6600	8200
	100	50	1.5	1	82.1	68.2	87.1	74.3	4900	6600
	100	50	1.5	1	96.1	79.5	102	86.7	9000	12000
50	120	58	2	1	138	108	148	120	4200	6000
	120	58	2	1	128	100	138	111	3600	5400
	72	24	0.6	0.3	28.3	31.4	-	-	11000	15000
	72	24	0.6	0.3	21.4	25.6	-	-	11000	15000
	80	32	1	0.6	26.2	30.9	-	-	10000	14000
	80	32	1	0.6	38.4	40.2	-	-	7300	9200
	80	32	1	0.6	34.5	36.2	-	-	5500	7400
	80	32	1	0.6	42.2	43.9	-	-	10000	13000
	90	40	1.1	0.6	64.0	58.7	67.0	62.9	6800	8500
	90	40	1.1	0.6	58.0	53.5	60.7	57.3	5100	6800
	90	40	1.1	0.6	69.6	63.6	72.8	68.1	9400	12000
	110	54	2	1	114	96.3	121	105	5800	7300
55	110	54	2	1	105	88.6	111	96.6	4400	5800
	110	54	2	1	122	103	129	112	8000	11000
	130	62	2.1	1.1	158	131	-	-	3800	5500
	130	62	2.1	1.1	147	121	-	-	3300	4900
	80	26	1	0.6	32.0	37.0	-	-	10000	14000
	80	26	1	0.6	23.0	29.2	-	-	10000	14000
	90	36	1.1	0.6	32.4	39.1	-	-	9200	13000
	90	36	1.1	0.6	50.5	52.5	-	-	6600	8300
	90	36	1.1	0.6	45.4	47.5	-	-	5000	6600
	90	36	1.1	0.6	55.4	57.3	-	-	9100	12000
	100	42	1.5	1	79.1	74.2	82.8	79.6	6100	7600
	100	42	1.5	1	71.6	67.6	75.0	72.4	4600	6100

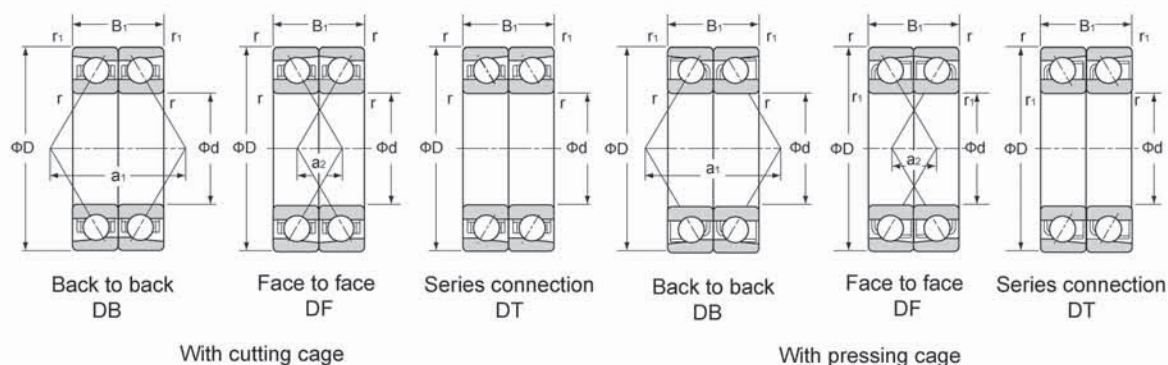


With cutting cage

With pressing cage

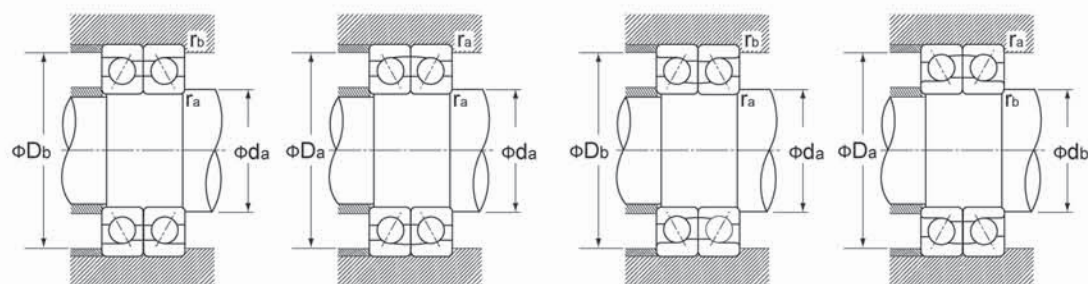
d (40) ~ (55)mm

Bearing Designation ²⁾			Distance of working points		Shoulder Dimensions (mm)						Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)		d _a (min.)	d _b (min.)	D _a (max.)	D _b (max.)	r _a (max.)	r _b (max.)	Approx
7008CDB	7008CDF	7008CDT	29.5	0.5	45.5	-	62.5	63.5	1	0.5	0.417
7208DB	7208DF	7208DT	52.7	16.7	47	44.5	73	75.5	1	0.6	0.764
7208BDB	7208BDF	7208BDT	68.3	32.3	47	44.5	73	75.5	1	0.6	0.764
7208CDB	7208CDF	7208CDT	34.1	1.9	47	44.5	73	75.5	1	0.6	0.764
7308DB	7308DF	7308DT	60.5	14.5	48.5	45.5	81.5	84.5	1.5	0.8	1.31
7308BDB	7308BDF	7308BDT	77.5	31.5	48.5	45.5	81.5	84.5	1.5	0.8	1.31
7308CDB	7308CDF	7308CDT	40.4	5.6	48.5	45.5	81.5	84.5	1.5	0.8	1.31
7408DB	7408DF	7408DT	70.9	16.9	50	45.5	100	104.5	2	1	2.46
7408BDB	7408BDF	7408BDT	90.8	36.8	50	45.5	100	104.5	2	1	2.46
7909CDB	7909CDF	7909CDT	27.1	3.1	50	-	63	65.5	0.6	0.3	0.254
ACH009CDB	ACH009CDF	ACH009CDT	32.1	0.1	51	-	69	71.5	1	0.5	0.516
7009DB	7009DF	7009DT	50.7	18.7	50.5	-	69.5	70.5	1	0.5	0.531
7009BDB	7009BDF	7009BDT	66.3	34.3	50.5	-	69.5	70.5	1	0.5	0.546
7009CDB	7009CDF	7009CDT	32.1	0.1	50.5	-	69.5	70.5	1	0.5	0.531
7209DB	7209DF	7209DT	56.0	18.0	52	49.5	78	80.5	1	0.6	0.921
7209BDB	7209BDF	7209BDT	72.8	34.8	52	49.5	78	80.5	1	0.6	0.934
7209CDB	7209CDF	7209CDT	36.2	1.8	52	49.5	78	80.5	1	0.6	0.928
7309DB	7309DF	7309DT	67.2	17.2	53.5	50.5	91.5	94.5	1.5	0.8	1.75
7309BDB	7309BDF	7309BDT	86.3	36.3	53.5	50.5	91.5	94.5	1.5	0.8	1.75
7309CDB	7309CDF	7309CDT	44.6	5.4	53.5	50.5	91.5	94.5	1.5	0.8	1.75
7409DB	7409DF	7409DT	77.2	19.2	55	50.5	110	114.5	2	1	3.41
7409BDB	7409BDF	7409BDT	99.1	41.1	55	50.5	110	114.5	2	1	3.42
7910CDB	7910CDF	7910CDT	28.3	4.3	55	-	67	69.5	0.6	0.3	0.256
ACH910CDB	ACH910CDF	ACH910CDT	28.3	4.3	55	-	67	69.5	0.6	0.3	0.278
ACH010CDB	ACH010CDF	ACH010CDT	33.4	1.4	56	-	74	76.5	1	0.5	0.558
7010DB	7010DF	7010DT	53.8	21.8	55.5	-	74.5	75.5	1	0.5	0.576
7010BDB	7010BDF	7010BDT	70.5	38.5	55.5	-	74.5	75.5	1	0.5	0.595
7010CDB	7010CDF	7010CDT	33.6	1.6	55.5	-	74.5	75.5	1	0.5	0.576
7210DB	7210DF	7210DT	60.7	20.7	57	54.5	83	85.5	1	0.6	1.02
7210BDB	7210BDF	7210BDT	79.2	39.2	57	54.5	83	85.5	1	0.6	1.04
7210CDB	7210CDF	7210CDT	38.9	1.1	57	54.5	83	85.5	1	0.6	1.02
7310DB	7310DF	7310DT	74.4	20.4	60	55.5	100	104.5	2	1	2.28
7310BDB	7310BDF	7310BDT	95.8	41.8	60	55.5	100	104.5	2	1	2.28
7310CDB	7310CDF	7310CDT	49.0	5.0	60	55.5	100	104.5	2	1	2.28
7410DB	7410DF	7410DT	83.3	21.3	62	-	118	123	2	1	3.84
7410BDB	7410BDF	7410BDT	106.9	44.9	62	-	118	123	2	1	3.84
7911CDB	7911CDF	7911CDT	31.1	5.1	61	-	74	76.5	1	0.5	0.356
ACH911CDB	ACH911CDF	ACH911CDT	31.1	5.1	61	-	74	76.5	1	0.5	0.435
ACH011CDB	ACH011CDF	ACH011CDT	37.4	1.4	62	-	83	85	1	0.6	0.826
7011DB	7011DF	7011DT	59.9	23.9	62	-	83	85.5	1	0.6	0.850
7011BDB	7011BDF	7011BDT	78.8	42.8	62	-	83	85.5	1	0.6	0.862
7011CDB	7011CDF	7011CDT	37.4	1.4	62	-	83	85.5	1	0.6	0.849
7211DB	7211DF	7211DT	66.6	24.6	63.5	60.5	91.5	94.5	1.5	0.8	1.27
7211BDB	7211BDF	7211BDT	87.3	45.3	63.5	60.5	91.5	94.5	1.5	0.8	1.27



Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
55	100	42	1.5	1	85.9	80.4	90.0	86.1	8400	11000
	120	58	2	1	132	113	139	123	5400	6700
	120	58	2	1	121	104	128	113	4000	5400
	120	58	2	1	141	121	149	132	7400	9800
	140	66	2.1	1.1	192	165	-	-	3500	5000
	140	66	2.1	1.1	179	153	-	-	3000	4500
60	85	26	1	0.6	37.8	43.6	-	-	9100	13000
	85	26	1	0.6	22.6	29.0	-	-	9100	13000
	95	36	1.1	0.6	33.7	42.3	-	-	8600	12000
	95	36	1.1	0.6	51.8	56.1	-	-	6200	7700
	95	36	1.1	0.6	46.4	50.7	-	-	4600	6200
	95	36	1.1	0.6	56.9	61.3	-	-	8500	11000
	110	44	1.5	1	95.7	91.5	100	98.0	5500	6900
	110	44	1.5	1	86.8	83.3	90.8	89.2	4100	5500
	110	44	1.5	1	104	99.0	109	106	7500	10000
	130	62	2.1	1.1	150	131	159	143	5000	6200
	130	62	2.1	1.1	138	121	146	132	3700	5000
	130	62	2.1	1.1	161	141	171	153	6800	9100
	150	70	2.1	1.1	209	187	-	-	3200	4600
	150	70	2.1	1.1	194	173	-	-	2800	4100
65	90	26	1	0.6	33.7	42.3	-	-	8600	12000
	90	26	1	0.6	23.2	30.8	-	-	8600	12000
	100	36	1.1	0.6	34.9	45.3	-	-	8000	11000
	100	36	1.1	0.6	54.7	62.8	-	-	5800	7200
	100	36	1.1	0.6	48.9	56.6	-	-	4300	5800
	100	36	1.1	0.6	60.2	68.7	-	-	7900	11000
	120	46	1.5	1	109	108	114	116	5200	6400
	120	46	1.5	1	99.0	98.7	103	105	3900	5200
	120	46	1.5	1	119	117	124	125	7100	9400
	140	66	2.1	1.1	170	151	180	164	4600	5800
	140	66	2.1	1.1	156	139	165	151	3500	4600
	140	66	2.1	1.1	182	161	193	176	6300	8500
	160	74	2.1	1.1	226	209	-	-	3000	4300
	160	74	2.1	1.1	209	194	-	-	2600	3900
70	100	32	1	0.6	47.0	58.0	-	-	7800	11000
	100	32	1	0.6	29.2	39.1	-	-	7800	11000
	110	40	1.1	0.6	47.7	60.9	-	-	7400	9800
	110	40	1.1	0.6	69.3	78.7	-	-	5300	6600
	110	40	1.1	0.6	62.1	71.1	-	-	4000	5300
	110	40	1.1	0.6	76.2	86.0	-	-	7300	9700
	125	48	1.5	1	113	111	124	127	4900	6100
	125	48	1.5	1	103	101	112	116	3700	4900
	125	48	1.5	1	123	120	135	138	6700	8900
	150	70	2.1	1.1	191	172	203	187	4300	5400

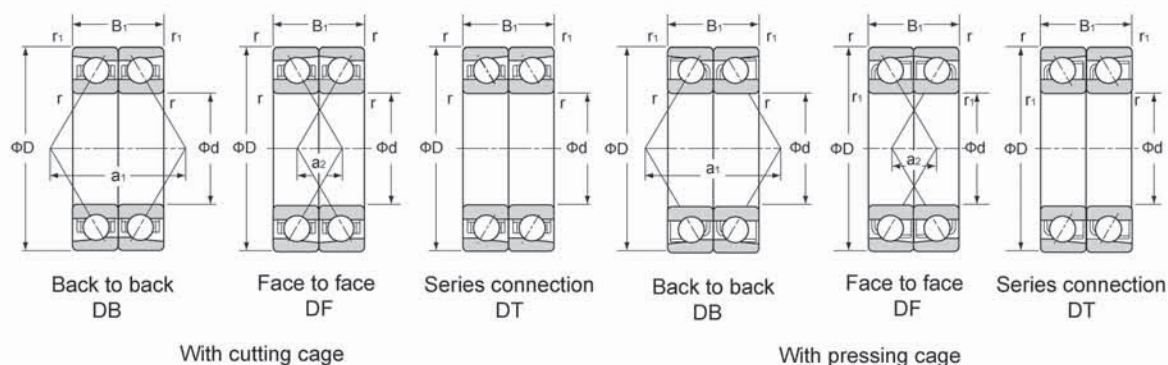


With cutting cage

With pressing cage

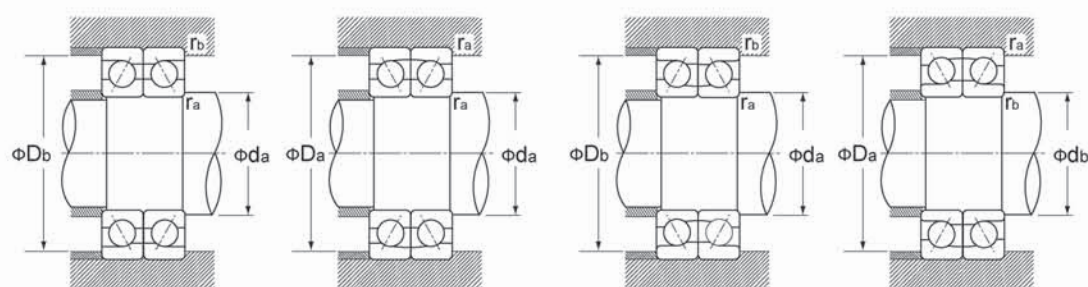
d (55) ~ (70)mm

Bearing Designation ²⁾			Distance of working points		Shoulder Dimensions (mm)						Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)		d_a	d_b	D_a	D_b	r_a	r_b	Approx
			a_1	a_2	(min.)	(min.)	(max.)	(max.)	(max.)	(max.)	
7211CDB	7211CDF	7211CDT	42.2	0.2	63.5	60.5	91.5	94.5	1.5	0.8	1.27
7311DB	7311DF	7311DT	80.4	22.4	65	59.5	110	114.5	2	1	3.03
7311BDB	7311BDF	7311BDT	103.7	45.7	65	60.5	110	114.5	2	1	3.07
7311CDB	7311CDF	7311CDT	52.9	5.1	65	60.5	110	114.5	2	1	3.04
7411DB	7411DF	7411DT	89.9	23.9	67	-	128	133	2	1	4.72
7411BDB	7411BDF	7411BDT	115.7	49.7	67	-	128	133	2	1	4.72
7912CDB	7912CDF	7912CDT	32.6	6.6	66	-	79	81.5	1	0.5	0.374
ACH912CDB	ACH912CDF	ACH912CDT	32.4	6.4	66	-	79	81.5	1	0.5	0.418
ACH012CDB	ACH012CDF	ACH012CDT	38.8	2.8	67	-	88	90	1	0.6	0.884
7012DB	7012DF	7012DT	62.8	26.8	67	-	88	90.5	1	0.6	0.894
7012BDB	7012BDF	7012BDT	83.0	47.0	67	-	88	90.5	1	0.6	0.921
7012CDB	7012CDF	7012CDT	38.8	2.8	67	-	88	90.5	1	0.6	0.892
7212DB	7212DF	7212DT	72.3	28.3	68.5	65.5	101.5	104.5	1.5	0.8	1.64
7212BDB	7212BDF	7212BDT	95.0	51.0	68.5	65.5	101.5	104.5	1.5	0.8	1.64
7212CDB	7212CDF	7212CDT	45.3	1.3	68.5	65.5	101.5	104.5	1.5	0.8	1.64
7312DB	7312DF	7312DT	86.5	24.5	72	67	118	123	2	1	3.62
7312BDB	7312BDF	7312BDT	111.6	49.6	72	67	118	123	2	1	3.62
7312CDB	7312CDF	7312CDT	56.7	5.3	72	67	118	123	2	1	3.62
7412DB	7412DF	7412DT	97.0	27.0	72	-	138	143	2	1	6.22
7412BDB	7412BDF	7412BDT	125.1	55.1	72	-	138	143	2	1	6.26
7913CDB	7913CDF	7913CDT	33.8	7.8	71	-	84	86.5	1	0.5	0.466
ACH913CDB	ACH913CDF	ACH913CDT	33.8	7.8	71	-	84	86.5	1	0.5	0.446
ACH013CDB	ACH013CDF	ACH013CDT	40.1	4.1	72	-	93	95	1	0.6	0.942
7013DB	7013DF	7013DT	65.9	29.9	72	-	93	95.5	1	0.6	0.965
7013BDB	7013BDF	7013BDT	87.6	51.6	72	-	93	95.5	1	0.6	0.983
7013CDB	7013CDF	7013CDT	40.2	4.2	72	-	93	95.5	1	0.6	0.964
7213DB	7213DF	7213DT	76.4	30.4	73.5	70.5	111.5	114.5	1.5	0.8	2.04
7213BDB	7213BDF	7213BDT	100.6	54.6	73.5	70.5	111.5	114.5	1.5	0.8	2.04
7213CDB	7213CDF	7213CDT	47.8	1.8	73.5	70.5	111.5	114.5	1.5	0.8	2.04
7313DB	7313DF	7313DT	92.5	26.5	77	72	128	133	2	1	4.44
7313BDB	7313BDF	7313BDT	119.4	53.4	77	72	128	133	2	1	4.44
7313CDB	7313CDF	7313CDT	60.6	5.4	77	72	128	133	2	1	4.44
7413DB	7413DF	7413DT	102.9	28.9	77	-	148	153	2	1	6.82
7413BDB	7413BDF	7413BDT	132.7	58.7	77	-	148	153	2	1	6.82
7914CDB	7914CDF	7914CDT	38.8	6.8	76	-	94	96.5	1	0.5	0.664
ACH914CDB	ACH914CDF	ACH914CDT	38.8	6.8	76	-	94	96.5	1	0.5	0.738
ACH014CDB	ACH014CDF	ACH014CDT	44.1	4.1	77	-	103	105	1	0.6	1.28
7014DB	7014DF	7014DT	72.0	32.0	77	-	103	105.5	1	0.6	1.32
7014BDB	7014BDF	7014BDT	95.5	55.5	77	-	103	105.5	1	0.6	1.32
7014CDB	7014CDF	7014CDT	44.1	4.1	77	-	103	105.5	1	0.6	1.32
7214DB	7214DF	7214DT	80.3	32.3	78.5	75.5	116.5	119.5	1.5	0.8	2.24
7214BDB	7214BDF	7214BDT	105.8	57.8	78.5	75.5	116.5	119.5	1.5	0.8	2.24
7214CDB	7214CDF	7214CDT	50.1	2.1	78.5	75.5	116.5	119.5	1.5	0.8	2.24
7314DB	7314DF	7314DT	98.5	28.5	82	77	138	143	2	1	5.67



Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
70	150	70	2.1	1.1	175	158	186	172	3200	4300
	150	70	2.1	1.1	205	184	217	200	5900	7900
	180	84	3	1.1	242	230	-	-	2700	3900
	180	84	3	1.1	241	237	-	-	2300	3500
75	105	32	1	0.6	47.7	60.9	-	-	7400	9800
	105	32	1	0.6	30.0	41.4	-	-	7400	9800
	115	40	1.1	0.6	48.4	63.2	-	-	7000	9300
	115	40	1.1	0.6	70.9	83.4	-	-	5000	6300
	115	40	1.1	0.6	63.5	75.2	-	-	3800	5000
	115	40	1.1	0.6	78.0	91.3	-	-	6900	9200
	130	50	1.5	1	129	130	134	139	4600	5800
	130	50	1.5	1	116	119	122	127	3500	4600
	130	50	1.5	1	140	141	146	151	6400	8500
	160	74	2.1	1.1	208	194	221	212	4000	5000
	160	74	2.1	1.1	191	178	202	195	3000	4000
	160	74	2.1	1.1	223	208	236	227	5500	7400
	190	90	3	1.1	278	282	-	-	2500	3600
	190	90	3	1.1	257	261	-	-	2200	3300
80	110	32	1	0.6	48.4	63.2	-	-	7000	9300
	110	32	1	0.6	30.7	43.7	-	-	7000	9300
	125	44	1.1	0.6	56.7	75.3	-	-	6500	8600
	125	44	1.1	0.6	86.7	101	-	-	4600	5800
	125	44	1.1	0.6	77.7	91.3	-	-	3500	4600
	125	44	1.1	0.6	95.3	111	-	-	6400	8500
	140	52	2	1	139	143	145	152	4300	5400
	140	52	2	1	125	130	131	139	3200	4300
	140	52	2	1	151	155	157	165	5900	7900
	170	78	2.1	1.1	226	218	239	238	3800	4700
	170	78	2.1	1.1	207	200	219	218	2800	3800
	170	78	2.1	1.1	242	233	256	255	5200	6900
	200	96	3	1.1	313	332	-	-	2400	3400
	200	96	3	1.1	290	307	-	-	2100	3100
85	120	36	1.1	0.6	63.2	81.3	-	-	6500	8600
	120	36	1.1	0.6	36.9	52.3	-	-	6500	8600
	130	44	1.1	0.6	57.6	77.8	-	-	6200	8200
	130	44	1.1	0.6	88.6	107	-	-	4400	5500
	130	44	1.1	0.6	79.3	96.7	-	-	3300	4400
	130	44	1.1	0.6	97.6	117	-	-	6000	8000
	150	56	2	1	160	167	167	178	4000	5000
	150	56	2	1	145	152	151	162	3000	4000
	150	56	2	1	174	181	182	193	5500	7400
	180	82	3	1.1	243	243	258	265	3500	4400
	180	82	3	1.1	223	223	236	244	2700	3500
	180	82	3	1.1	261	261	277	284	4900	6500

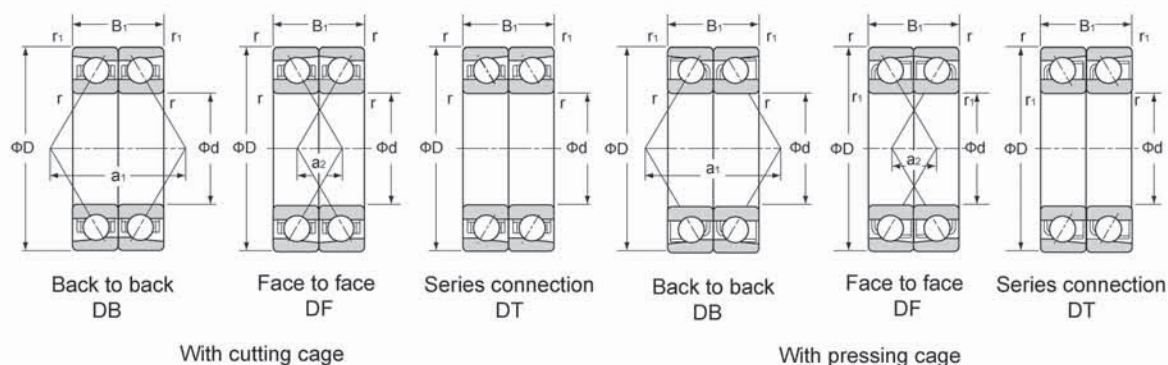


With cutting cage

With pressing cage

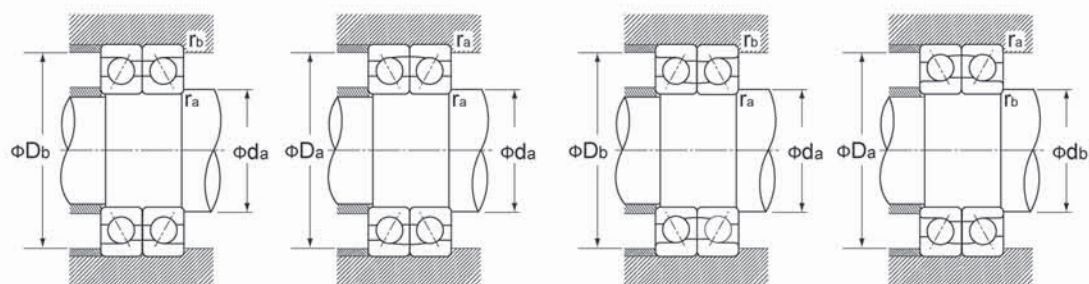
d (70) ~ (85)mm

Bearing Designation ²⁾			Distance of working points		Shoulder Dimensions (mm)						Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)		d_a	d_b	D_a	D_b	r_a	r_b	Approx
			a_1	a_2	(min.)	(min.)	(max.)	(max.)	(max.)	(max.)	
7314BDB	7314BDF	7314BDT	127.3	57.3	82	77	138	143	2	1	5.74
7314CDB	7314CDF	7314CDT	64.5	5.5	82	77	138	143	2	1	5.66
7414DB	7414DF	7414DT	115.3	31.3	84	-	166	173	2.5	1	9.98
7414BDB	7414BDF	7414BDT	148.4	66.4	84	-	166	173	2.5	1	9.98
7915CDB	7915CDF	7915CDT	40.1	8.1	81	-	99	101.5	1	0.5	0.794
ACH915CDB	ACH915CDF	ACH915CDT	40.1	8.1	81	-	99	101.5	1	0.5	0.782
ACH015CDB	ACH015CDF	ACH015CDT	45.4	5.4	82	-	108	110	1	0.6	1.35
7015DB	7015DF	7015DT	74.9	34.9	82	-	108	110.5	1	0.6	1.38
7015BDB	7015BDF	7015BDT	99.7	59.7	82	-	108	110.5	1	0.6	1.38
7015CDB	7015CDF	7015CDT	45.5	5.5	82	-	108	110.5	1	0.6	1.38
7215DB	7215DF	7215DT	84.2	34.2	83.5	80.5	121.5	124.5	1.5	0.8	2.46
7215BDB	7215BDF	7215BDT	111.0	61.0	83.5	80.5	121.5	124.5	1.5	0.8	2.46
7215CDB	7215CDF	7215CDT	52.5	2.5	83.5	80.5	121.5	124.5	1.5	0.8	2.46
7315DB	7315DF	7315DT	104.9	30.9	87	82	148	153	2	1	6.81
7315BDB	7315BDF	7315BDT	135.6	61.6	87	82	148	153	2	1	6.91
7315CDB	7315CDF	7315CDT	68.5	5.5	87	82	148	153	2	1	6.81
7415DB	7415DF	7415DT	122.7	32.7	89	-	176	183	2.5	1	11.8
7415BDB	7415BDF	7415BDT	157.9	67.9	89	-	176	183	2.5	1	11.8
7916CDB	7916CDF	7916CDT	41.5	9.5	86	-	104	106.5	1	0.5	0.736
ACH916CDB	ACH916CDF	ACH916CDT	41.4	9.4	86	-	104	106.5	1	0.5	0.824
ACH016CDB	ACH016CDF	ACH016CDT	49.5	5.5	87	-	118	120	1	0.6	1.83
7016DB	7016DF	7016DT	81.2	37.2	87	-	118	120.5	1	0.6	1.86
7016BDB	7016BDF	7016BDT	108.0	64.0	87	-	118	120.5	1	0.6	1.86
7016CDB	7016CDF	7016CDT	49.5	5.5	87	-	118	120.5	1	0.6	1.86
7216DB	7216DF	7216DT	89.5	37.5	90	85.5	130	134.5	2	1	3.20
7216BDB	7216BDF	7216BDT	118.3	66.3	90	85.5	130	134.5	2	1	3.26
7216CDB	7216CDF	7216CDT	55.5	3.5	90	85.5	130	134.5	2	1	3.20
7316DB	7316DF	7316DT	111.2	33.2	92	87	158	163	2	1	8.11
7316BDB	7316BDF	7316BDT	143.9	65.9	92	87	158	163	2	1	8.22
7316CDB	7316CDF	7316CDT	72.5	5.5	92	87	158	163	2	1	8.11
7416DB	7416DF	7416DT	130.0	34.0	94	-	186	193	2.5	1	15.3
7416BDB	7416BDF	7416BDT	167.2	71.2	94	-	186	193	2.5	1	15.8
7917CDB	7917CDF	7917CDT	45.5	9.5	92	-	113	115	1	0.6	1.05
ACH917CDB	ACH917CDF	ACH917CDT	45.5	9.5	92	-	113	115	1	0.6	1.17
ACH017CDB	ACH017CDF	ACH017CDT	50.8	6.8	92	-	123	125	1	0.6	1.92
7017DB	7017DF	7017DT	84.7	40.7	92	-	123	125.5	1	0.6	1.94
7017BDB	7017BDF	7017BDT	113.0	69.0	92	-	123	125.5	1	0.6	1.94
7017CDB	7017CDF	7017CDT	51.1	7.1	92	-	123	125.5	1	0.6	1.94
7217DB	7217DF	7217DT	95.9	39.9	95	90.5	140	144.5	2	1	3.74
7217BDB	7217BDF	7217BDT	126.6	70.6	95	90.5	140	144.5	2	1	3.74
7217CDB	7217CDF	7217CDT	59.5	3.5	95	90.5	140	144.5	2	1	3.74
7317DB	7317DF	7317DT	117.5	35.5	99	92	166	173	2.5	1	9.06
7317BDB	7317BDF	7317BDT	152.2	70.2	99	92	166	173	2.5	1	9.06
7317CDB	7317CDF	7317CDT	76.5	5.5	99	92	166	173	2.5	1	9.06



Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
85	210	104	4	1.5	331	360	-	-	2300	3300
	210	104	4	1.5	307	334	-	-	2000	3000
90	125	36	1.1	0.6	64.3	85.2	-	-	6200	8200
	125	36	1.1	0.6	37.9	55.3	-	-	6200	8200
	140	48	1.5	1	75.5	103	-	-	5800	7700
	140	48	1.5	1	106	127	-	-	4100	5100
	140	48	1.5	1	94.9	114	-	-	3100	4100
	140	48	1.5	1	116	138	-	-	5700	7500
	160	60	2	1	183	193	191	206	3800	4700
	160	60	2	1	166	176	173	188	2800	3800
	160	60	2	1	199	209	208	223	5200	6900
	190	86	3	1.1	261	270	277	294	3300	4200
	190	86	3	1.1	240	248	254	270	2500	3300
	190	86	3	1.1	281	289	297	315	4600	6100
	225	108	4	1.5	351	393	-	-	2100	3100
	225	108	4	1.5	325	364	-	-	1800	2800
95	130	36	1.1	0.6	65.3	88.3	-	-	5900	7900
	130	36	1.1	0.6	38.9	58.2	-	-	5900	7900
	145	48	1.5	1	76.7	106	-	-	5500	7400
	145	48	1.5	1	108	134	-	-	3900	4800
	145	48	1.5	1	96.8	121	-	-	2900	3900
	145	48	1.5	1	119	147	-	-	5300	7100
	170	64	2.1	1.1	198	207	208	221	3500	4400
	170	64	2.1	1.1	180	188	188	201	2700	3500
	170	64	2.1	1.1	216	224	226	240	4900	6500
	200	90	3	1.1	280	298	297	325	3200	4000
	200	90	3	1.1	256	273	272	298	2400	3200
	200	90	3	1.1	300	319	318	348	4400	5800
100	140	40	1.1	0.6	90.2	117	-	-	5500	7400
	140	40	1.1	0.6	54.7	80.8	-	-	5500	7400
	150	48	1.5	1	77.8	110	-	-	5300	7100
	150	48	1.5	1	111	141	-	-	3800	4700
	150	48	1.5	1	99.4	127	-	-	2800	3800
	150	48	1.5	1	122	154	-	-	5200	6900
	180	68	2.1	1.1	223	235	233	252	3300	4100
	180	68	2.1	1.1	202	214	211	229	2500	3300
	180	68	2.1	1.1	242	254	254	273	4600	6100
	215	94	3	1.1	298	323	337	387	2900	3600
	215	94	3	1.1	274	297	309	356	2200	2900
	215	94	3	1.1	320	346	361	415	4000	5300
105	145	40	1.1	0.6	92.1	123	-	-	5300	7100
	145	40	1.1	0.6	56.3	85.2	-	-	5300	7100
	160	52	2	1	88.4	126	-	-	5000	6700
	160	52	2	1	130	164	-	-	3500	4400

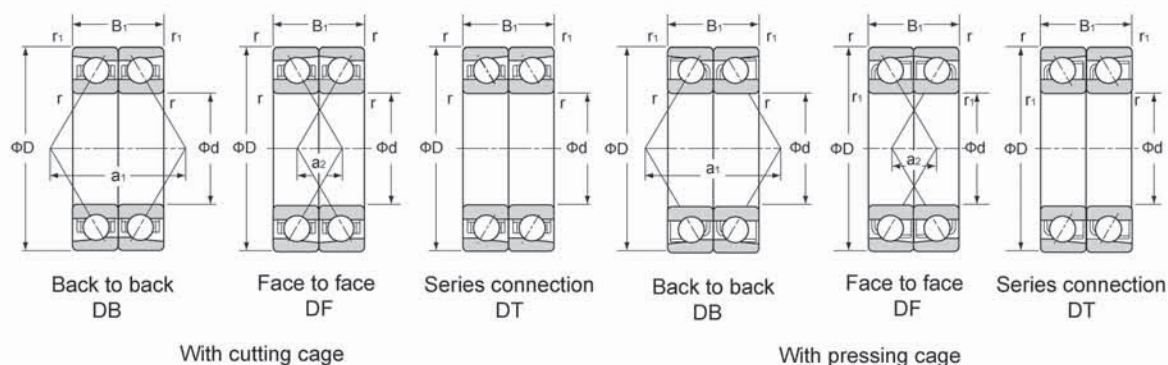


With cutting cage

With pressing cage

d (85) ~ (105)mm

Bearing Designation ²⁾			Distance of working points		Shoulder Dimensions (mm)		Shoulder Dimensions (mm)		Shoulder Dimensions (mm)		Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)	(mm)	da (min.)	db (min.)	Da (max.)	Db (max.)	ra (max.)	rb (max.)	Approx
7417DB	7417DF	7417DT	137.5	33.5	103	-	192	201.5	3	1.5	17.1
7417BDB	7417BDF	7417BDT	176.2	72.2	103	-	192	201.5	3	1.5	17.1
7918CDB	7918CDF	7918CDT	46.8	10.8	97	-	118	120	1	0.6	1.10
ACH918CDB	ACH918CDF	ACH918CDT	46.8	10.8	97	-	118	120	1	0.6	1.23
ACH018CDB	ACH018CDF	ACH018CDT	54.8	6.8	98.5	-	131.5	134.5	1.5	0.8	2.46
7018DB	7018DF	7018DT	90.4	42.4	98.5	-	131.5	134.5	1.5	0.8	2.52
7018BDB	7018BDF	7018BDT	120.5	72.5	98.5	-	131.5	134.5	1.5	0.8	2.52
7018CDB	7018CDF	7018CDT	54.8	6.8	98.5	-	131.5	134.5	1.5	0.8	2.52
7218DB	7218DF	7218DT	102.2	42.2	100	95.5	150	154.5	2	1	4.97
7218BDB	7218BDF	7218BDT	134.9	74.9	100	95.5	150	154.5	2	1	5.06
7218CDB	7218CDF	7218CDT	63.5	3.5	100	95.5	150	154.5	2	1	4.96
7318DB	7318DF	7318DT	123.9	37.9	104	97	176	183	2.5	1	10.6
7318BDB	7318BDF	7318BDT	160.5	74.5	104	97	176	183	2.5	1	10.6
7318CDB	7318CDF	7318CDT	80.5	5.5	104	97	176	183	2.5	1	10.6
7418DB	7418DF	7418DT	145.0	37.0	108	-	207	216.5	3	1.5	22.7
7418BDB	7418BDF	7418BDT	186.2	78.2	108	-	207	216.5	3	1.5	22.7
7919CDB	7919CDF	7919CDT	48.1	12.1	102	-	123	125	1	0.6	1.15
ACH919CDB	ACH919CDF	ACH919CDT	48.1	12.1	102	-	123	125	1	0.6	1.29
ACH019CDB	ACH019CDF	ACH019CDT	56.1	8.1	103.5	-	136.5	139.5	1.5	0.8	2.57
7019DB	7019DF	7019DT	94.5	46.5	103.5	-	136.5	139.5	1.5	0.8	2.64
7019BDB	7019BDF	7019BDT	126.4	78.4	103.5	-	136.5	139.5	1.5	0.8	2.64
7019CDB	7019CDF	7019CDT	56.7	8.7	103.5	-	136.5	139.5	1.5	0.8	2.64
7219DB	7219DF	7219DT	108.5	44.5	107	102	158	163	2	1	5.56
7219BDB	7219BDF	7219BDT	143.2	79.2	107	102	158	163	2	1	5.56
7219CDB	7219CDF	7219CDT	67.5	3.5	107	102	158	163	2	1	5.56
7319DB	7319DF	7319DT	130.2	40.2	109	102	186	193	2.5	1	12.2
7319BDB	7319BDF	7319BDT	168.8	78.8	109	102	186	193	2.5	1	12.2
7319CDB	7319CDF	7319CDT	84.5	5.5	109	102	186	193	2.5	1	12.2
7920CDB	7920CDF	7920CDT	52.1	12.1	107	-	133	135	1	0.6	1.55
ACH920CDB	ACH920CDF	ACH920CDT	52.1	12.1	107	-	133	135	1	0.6	1.74
ACH020CDB	ACH020CDF	ACH020CDT	57.5	9.5	108.5	-	141.5	144.5	1.5	0.8	2.68
7020DB	7020DF	7020DT	96.2	48.2	108.5	-	141.5	144.5	1.5	0.8	2.74
7020BDB	7020BDF	7020BDT	128.9	80.9	108.5	-	141.5	144.5	1.5	0.8	2.74
7020CDB	7020CDF	7020CDT	57.5	9.5	108.5	-	141.5	144.5	1.5	0.8	2.74
7220DB	7220DF	7220DT	115.4	47.4	112	107	168	173	2	1	6.64
7220BDB	7220BDF	7220BDT	152.3	84.3	112	107	168	173	2	1	6.64
7220CDB	7220CDF	7220CDT	71.8	3.8	112	107	168	173	2	1	6.64
7320DB	7320DF	7320DT	138.8	44.8	114	107	201	208	2.5	1	15.1
7320BDB	7320BDF	7320BDT	180.4	86.4	114	107	201	208	2.5	1	15.1
7320CDB	7320CDF	7320CDT	89.6	4.4	114	107	201	208	2.5	1	15.1
7921CDB	7921CDF	7921CDT	53.5	13.5	112	-	138	140	1	0.6	1.62
ACH921CDB	ACH921CDF	ACH921CDT	53.5	13.5	112	-	138	140	1	0.6	1.81
ACH021CDB	ACH021CDF	ACH021CDT	61.5	9.5	115	-	150	154.5	2	0.8	3.41
7021DB	7021DF	7021DT	103.7	51.7	115	-	150	154.5	2	1	3.46

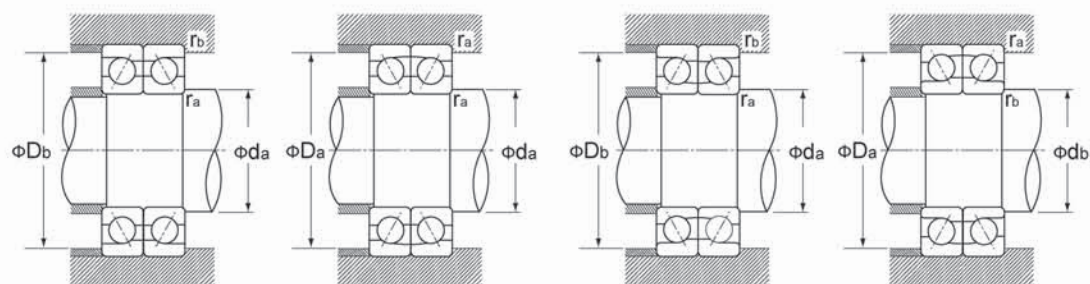


Matched Angular Contact Ball Bearings

Boundary Dimensions (mm)					Basic Load Rating(kN)				Limiting Speed ¹⁾ (rpm)	
d	D	B ₁	r (min.)	r ₁ (min.)	With cutting cage		With pressing cage		Grease	Oil
					C _r	C _{or}	C _r	C _{or}		
105	160	52	2	1	116	148	-	-	2600	3500
	160	52	2	1	143	179	-	-	4800	6400
	190	72	2.1	1.1	243	265	-	-	3100	3900
	190	72	2.1	1.1	220	241	-	-	2300	3100
	190	72	2.1	1.1	264	287	-	-	4300	5700
	225	98	3	1.1	337	386	-	-	2800	3500
	225	98	3	1.1	310	355	-	-	2100	2800
	225	98	3	1.1	362	413	-	-	3900	5100
110	150	40	1.1	0.6	93.8	129	-	-	5100	6800
	150	40	1.1	0.6	56.7	87.3	-	-	5100	6800
	170	56	2	1	99.5	144	-	-	4800	6300
	170	56	2	1	149	186	-	-	3300	4200
	170	56	2	1	134	167	-	-	2500	3300
	170	56	2	1	164	203	-	-	4600	6100
	200	76	2.1	1.1	263	297	-	-	3000	3700
	200	76	2.1	1.1	238	270	-	-	2200	3000
	200	76	2.1	1.1	286	321	-	-	4100	5400
	240	100	3	1.1	377	452	-	-	2600	3200
	240	100	3	1.1	346	416	-	-	1900	2600
	240	100	3	1.1	404	484	-	-	3500	4700
120	165	44	1.1	0.6	117	162	-	-	4700	6200
	165	44	1.1	0.6	66.2	104	-	-	4700	6200
	180	56	2	1	103	153	-	-	4400	5900
	180	56	2	1	157	206	-	-	3100	3900
	180	56	2	1	140	186	-	-	2300	3100
	180	56	2	1	173	226	-	-	4300	5700
	215	80	2.1	1.1	283	332	-	-	2700	3400
	215	80	2.1	1.1	257	302	-	-	2100	2800
	215	80	2.1	1.1	308	359	-	-	3800	5000
	260	110	3	1.1	400	504	-	-	2400	3000
	260	110	3	1.1	366	462	-	-	1800	2400
	260	110	3	1.1	431	542	-	-	3300	4400

Remarks:

- 1) The above indicated Limiting Speed is for the types with machined cage; the one for types with pressed cage shall be 80% of above data.
- 2) Suffix B: 40° contacting angle; C: 15° contacting angle; no suffix: 30°

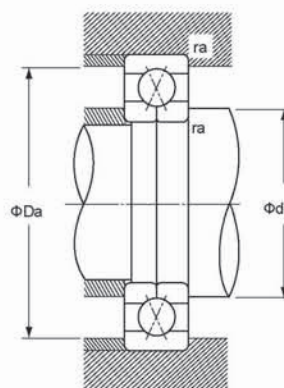
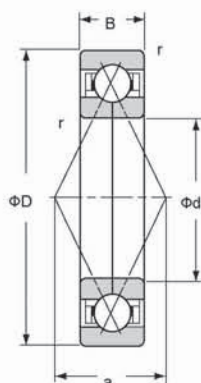


With cutting cage

With pressing cage

d (105) ~120 mm

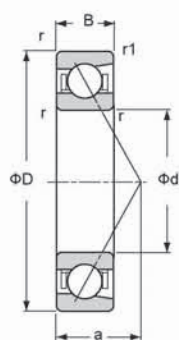
Bearing Designation ²⁾			Distance of working points		Shoulder Dimensions (mm)						Mass (kg)
Back to back DB	Face to face DF	Series connection DT	(mm)		d _a (min.)	d _b (min.)	D _a (max.)	D _b (max.)	r _a (max.)	r _b (max.)	Approx
a ₁	a ₂										
7021BDB	7021BDF	7021BDT	137.2	85.2	115	-	150	154.5	2	1	3.46
7021CDB	7021CDF	7021CDT	62.0	10.0	115	-	150	154.5	2	1	3.46
7221DB	7221DF	7221DT	122.1	50.1	117	-	178	183	2	1	8.36
7221BDB	7221BDF	7221BDT	161.0	89.0	117	-	178	183	2	1	8.54
7221CDB	7221CDF	7221CDT	75.9	3.9	117	-	178	183	2	1	8.35
7321DB	7321DF	7321DT	144.3	46.3	119	-	211	218	2.5	1	17.2
7321BDB	7321BDF	7321BDT	187.5	89.5	119	-	211	218	2.5	1	17.2
7321CDB	7321CDF	7321CDT	93.2	4.8	119	-	211	218	2.5	1	17.2
7922CDB	7922CDF	7922CDT	54.8	14.8	117	-	143	145	1	0.6	1.68
ACH922CDB	ACH922CDF	ACH922CDT	54.8	14.8	117	-	143	145	1	0.6	1.88
ACH022CDB	ACH022CDF	ACH022CDT	65.5	9.5	120	-	160	164.5	2	0.8	4.27
7022DB	7022DF	7022DT	108.9	52.9	120	-	160	164.5	2	1	4.28
7022BDB	7022BDF	7022BDT	145.5	89.5	120	-	160	164.5	2	1	4.28
7022CDB	7022CDF	7022CDT	65.5	9.5	120	-	160	164.5	2	1	4.28
7222DB	7222DF	7222DT	128.7	52.7	122	-	188	193	2	1	9.80
7222BDB	7222BDF	7222BDT	169.7	93.7	122	-	188	193	2	1	10.1
7222CDB	7222CDF	7222CDT	80.1	4.1	122	-	188	193	2	1	9.80
7322DB	7322DF	7322DT	152.7	52.7	124	-	226	233	2.5	1	20.2
7322BDB	7322BDF	7322BDT	199.3	99.3	124	-	226	233	2.5	1	20.2
7322CDB	7322CDF	7322CDT	97.7	2.3	124	-	226	233	2.5	1	20.2
7924CDB	7924CDF	7924CDT	60.2	16.2	127	-	158	160	1	0.6	2.56
ACH924CDB	ACH924CDF	ACH924CDT	60.2	16.2	127	-	158	160	1	0.6	2.58
ACH024CDB	ACH024CDF	ACH024CDT	68.2	12.2	130	-	170	174.5	2	0.8	4.57
7024DB	7024DF	7024DT	114.6	58.6	130	-	170	174.5	2	1	4.54
7024BDB	7024BDF	7024BDT	153.9	97.9	130	-	170	174.5	2	1	4.54
7024CDB	7024CDF	7024CDT	68.2	12.2	130	-	170	174.5	2	1	4.54
7224DB	7224DF	7224DT	137.0	57.0	132	-	203	208	2	1	11.0
7224BDB	7224BDF	7224BDT	180.5	100.5	132	-	203	208	2	1	11.0
7224CDB	7224CDF	7224CDT	85.0	5.0	132	-	203	208	2	1	11.0
7324DB	7324DF	7324DT	164.7	54.7	134	-	246	253	2.5	1	25.2
7324BDB	7324BDF	7324BDT	214.4	104.4	134	-	246	253	2.5	1	25.2
7324CDB	7324CDF	7324CDT	105.9	4.1	134	-	246	253	2.5	1	25.2



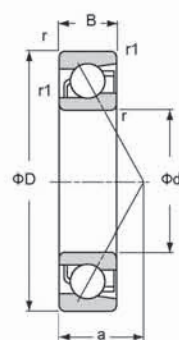
Four-Point Contact Ball Bearings

d 20 ~ 110mm

Boundary Dimensions (mm)				Basic Load Rating (kN)		Limiting Speed (rpm)		Bearing Designations	Distance of working points (mm) a	Shoulder Dimension (mm)			Mass (kg) Approx
d	D	B	r (min.)	C _r	C _{or}	Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
20	47	14	1	23.5	15.3	12000	16000	6204BI	23.5	25.5	41.5	1	0.129
	52	15	1.1	27.4	18.1	11000	15000	6304BI	25.2	27	45	1	0.179
25	52	15	1	26.7	18.8	10000	14000	6205BI	27.0	30.5	46.5	1	0.156
	62	17	1.1	40.8	28.0	9200	13000	6305BI	30.5	32	55	1	0.285
30	62	16	1	36.3	27.6	8600	12000	6206BI	32.6	35.5	56.5	1	0.241
	72	19	1.1	49.5	36.6	7800	11000	6306BI	35.7	37	65	1	0.426
35	72	17	1.1	47.1	36.7	7500	10000	6207BI	37.5	42	65	1	0.351
	80	21	1.5	61.2	46.4	7000	9600	6307BI	40.3	43.5	71.5	1.5	0.565
40	80	18	1.1	55.9	46.5	6600	9000	6208BI	42.7	47	73	1	0.451
	90	23	1.5	74.1	57.6	6200	8500	6308BI	45.5	48.5	81.5	1.5	0.778
45	85	19	1.1	58.7	51.3	6100	8400	6209BI	45.9	52	78	1	0.512
	100	25	1.5	87.9	70.0	5500	7600	6309BI	50.8	53.5	91.5	1.5	1.04
50	90	20	1.1	65.4	58.0	5700	7900	6210BI	49.0	57	83	1	0.575
	110	27	2	103	83.7	5000	6900	6310BI	56.0	60	100	2	1.35
55	100	21	1.5	80.0	72.3	5200	7100	6211BI	54.3	63.5	91.5	1.5	0.763
	120	29	2	119	98.5	4500	6200	6311BI	61.3	65	110	2	1.72
60	110	22	1.5	91.7	87.6	4600	6300	6212BI	60.6	68.5	101.5	1.5	0.983
	130	31	2.1	145	126	4100	5700	6312BI	67.2	72	118	2	2.17
65	120	23	1.5	95.1	90.1	4300	5900	6213BI	64.8	73.5	111.5	1.5	1.23
	140	33	2.1	164	145	3800	5300	6313BI	72.1	77	128	2	2.67
70	125	24	1.5	103	99.0	4100	5600	6214BI	68.3	78.5	116.5	1.5	1.35
	150	35	2.1	184	165	3600	4900	6314BI	77.0	82	138	2	3.25
75	130	25	1.5	108	108	3900	5300	6215BI	71.8	83.5	121.5	1.5	1.47
	160	37	2.1	200	187	3400	4600	6315BI	82.3	87	148	2	3.90
80	140	26	2	126	128	3600	4900	6216BI	77.0	90	130	2	1.80
	170	39	2.1	217	210	3100	4300	6316BI	87.5	92	158	2	4.63
85	150	28	2	146	150	3400	4600	6217BI	82.3	95	140	2	2.25
	180	41	3	234	234	3000	4100	6317BI	92.8	99	166	2.5	5.45
90	160	30	2	167	173	3100	4300	6218BI	87.5	100	150	2	2.77
	190	43	3	252	260	2800	3800	6318BI	98.0	104	176	2.5	6.36
95	170	32	2.1	190	198	3000	4100	6219BI	92.8	107	158	2	3.37
	200	45	3	269	287	2600	3600	6319BI	103.3	109	186	2.5	7.37
100	180	34	2.1	201	213	2800	3800	6220BI	98.0	112	168	2	4.02
110	200	38	2.1	242	275	2500	3400	6222BI	108.5	122	188	2	5.64



With cutting cage

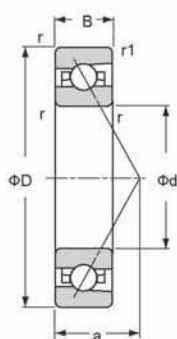


With pressing cage

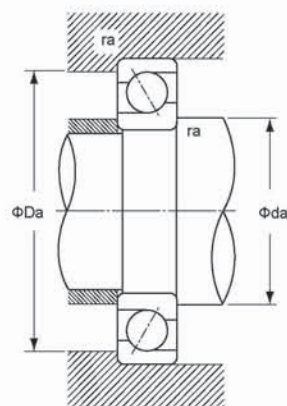
Single Row Angular Contact Ball Bearings

d 10 ~ (20)mm

Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
d	D	B	r (min.)	r _i (min.)	with cutting cage C _r	C _{or}	with pressing cage C _r	C _{or}	Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
10	22	6	0.3	0.15	3.00	1.50	-	-	52000	69000	7900C	5.1	12.5	19.5	0.3	0.008
	26	8	0.3	0.15	5.00	2.35	-	-	34000	42000	7000	9.1	12.5	23.5	0.3	0.021
	26	8	0.3	0.15	4.65	2.15	-	-	25000	33000	7000B	11.6	12.5	23.5	0.3	0.021
	26	8	0.3	0.15	5.30	2.45	-	-	47000	62000	7000C	6.4	12.5	23.5	0.3	0.021
	30	9	0.6	0.3	4.65	2.20	5.40	2.75	29000	37000	7200	10.4	14.5	25.5	0.6	0.031
	30	9	0.6	0.3	4.30	2.00	4.95	2.50	22000	29000	7200B	13.1	14.5	25.5	0.6	0.031
	30	9	0.6	0.3	5.00	2.35	5.80	2.95	40000	54000	7200C	7.2	14.5	25.5	0.6	0.031
	35	11	0.6	0.3	8.50	3.75	9.30	4.30	27000	33000	7300	12.0	14.5	30.5	0.6	0.054
12	24	6	0.3	0.15	3.20	1.70	-	-	48000	62000	7901C	5.4	14.5	21.5	0.3	0.010
	28	8	0.3	0.15	5.40	2.75	-	-	29000	37000	7001	9.9	14.5	25.5	0.3	0.024
	28	8	0.3	0.15	4.95	2.50	-	-	22000	29000	7001B	12.6	14.5	25.5	0.3	0.024
	28	8	0.3	0.15	5.80	2.95	-	-	40000	54000	7001C	6.7	14.5	25.5	0.3	0.024
	32	10	0.6	0.3	7.45	3.65	8.00	4.05	27000	34000	7201	11.4	16.5	27.5	0.6	0.038
	32	10	0.6	0.3	6.95	3.40	7.40	3.75	20000	27000	7201B	14.2	16.5	27.5	0.6	0.038
	32	10	0.6	0.3	7.90	3.85	8.50	4.30	38000	50000	7201C	7.9	16.5	27.5	0.6	0.038
	37	12	1	0.6	10.2	4.60	11.2	5.25	24000	31000	7301	13.1	17.5	31.5	1	0.065
15	28	7	0.3	0.15	4.75	2.65	-	-	39000	52000	7902C	6.4	17.5	25.5	0.3	0.015
	32	9	0.3	0.15	6.10	3.45	-	-	26000	32000	7002	11.3	17.5	29.5	0.3	0.035
	32	9	0.3	0.15	5.55	3.15	-	-	19000	25000	7002B	14.6	17.5	29.5	0.3	0.035
	32	9	0.3	0.15	6.60	3.70	-	-	35000	47000	7002C	7.6	17.5	29.5	0.3	0.035
	35	11	0.6	0.3	8.10	4.25	8.10	4.25	24000	29000	7202	12.9	19.5	30.5	0.6	0.048
	35	11	0.6	0.3	7.45	3.95	7.45	3.95	18000	24000	7202B	16.2	19.5	30.5	0.6	0.048
	35	11	0.6	0.3	8.65	4.55	8.65	4.55	33000	43000	7202C	8.9	19.5	30.5	0.6	0.048
	42	13	1	0.6	12.5	6.45	13.4	7.20	20000	25000	7302	15.0	20.5	36.5	1	0.088
17	30	7	0.3	0.15	4.35	2.30	-	-	36000	47000	7903C	6.7	19.5	27.5	0.3	0.016
	35	10	0.3	0.15	6.75	4.15	-	-	23000	28000	7003	12.7	19.5	32.5	0.3	0.045
	35	10	0.3	0.15	6.10	3.75	-	-	17000	23000	7003B	16.1	19.5	32.5	0.3	0.045
	35	10	0.3	0.15	7.30	4.45	-	-	31000	41000	7003C	8.6	19.5	32.5	0.3	0.045
	40	12	0.6	0.3	10.2	5.50	10.2	5.50	21000	26000	7203	14.4	21.5	35.5	0.6	0.070
	40	12	0.6	0.3	9.35	5.05	9.35	5.05	16000	21000	7203B	18.2	21.5	35.5	0.6	0.070
	40	12	0.6	0.3	10.9	5.90	10.9	5.90	29000	38000	7203C	9.9	21.5	35.5	0.6	0.070
	47	14	1	0.6	14.9	7.90	16.0	8.75	18000	23000	7303	16.5	22.5	41.5	1	0.120
20	47	14	1	0.6	13.8	7.30	14.8	8.10	14000	18000	7303B	20.8	22.5	41.5	1	0.120
	47	14	1	0.6	15.8	8.40	15.8	8.40	25000	33000	7303C	11.4	22.5	41.5	1	0.120
	37	9	0.3	0.15	7.30	4.55	-	-	30000	39000	7904C	8.3	22.5	34.5	0.3	0.035
	42	12	0.6	0.3	10.3	6.10	-	-	19000	24000	7004	15.1	24.5	37.5	0.6	0.079
	42	12	0.6	0.3	9.35	5.55	-	-	14000	19000	7004B	19.2	24.5	37.5	0.6	0.079
	42	12	0.6	0.3	11.1	6.60	-	-	26000	35000	7004C	10.2	24.5	37.5	0.6	0.079
	47	14	1	0.6	14.5	8.40	15.4	9.15	17000	22000	7204	17.0	25.5	41.5	1	0.112
	47	14	1	0.6	13.3	7.70	14.1	8.40	13000	17000	7204B	21.5	25.5	41.5	1	0.112
20	47	14	1	0.6	15.5	9.00	16.5	9.80	24000	32000	7204C	11.6	25.5	41.5	1	0.112
	52	15	1.1	0.6	17.4	9.40	18.7	10.4	17000	21000	7304	17.9	27	45	1	0.150
	52	15	1.1	0.6	16.2	8.70	17.3	9.65	13000	17000	7304B	22.6	27	45	1	0.150
	52	15	1.1	0.6	18.5	9.95	19.9	11.1	23000	31000	7304C	12.3	27	45	1	0.150



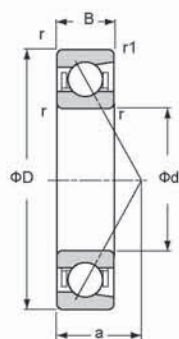
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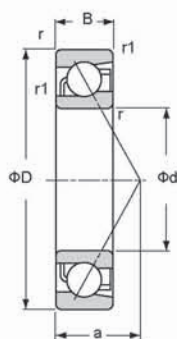
Single Row Angular Contact Ball Bearings

d (20) ~ (45)mm

Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
d	D	B	r	r ₁	with cutting cage		with pressing cage		Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
(min.)	(min.)	(min.)	(min.)	(min.)	C _r	C _{0r}	C _r	C _{0r}								
20	72	19	1.1	0.6	35.6	19.1	-	-	9600	13000	7404	23.1	27	65	1	0.395
	72	19	1.1	0.6	33.5	17.9	-	-	8500	12000	7404B	29.2	27	65	1	0.395
25	42	9	0.3	0.15	7.80	5.45	-	-	25000	33000	7905C	9.1	27.5	39.5	0.3	0.041
	47	12	0.6	0.3	11.3	7.40	-	-	17000	21000	7005	16.4	29.5	42.5	0.6	0.091
	47	12	0.6	0.3	10.2	6.70	-	-	12000	17000	7005B	21.1	29.5	42.5	0.6	0.091
	47	12	0.6	0.3	12.3	8.00	-	-	23000	30000	7005C	10.8	29.5	42.5	0.6	0.091
	52	15	1	0.6	15.3	9.50	16.2	10.3	15000	19000	7205	18.8	30.5	46.5	1	0.135
	52	15	1	0.6	14.0	8.70	14.7	9.40	12000	15000	7205B	23.9	30.5	46.5	1	0.135
	52	15	1	0.6	16.6	10.2	17.5	11.1	21000	28000	7205C	12.7	30.5	46.5	1	0.135
	62	17	1.1	0.6	24.8	14.4	26.4	15.8	14000	17000	7305	21.1	32	55	1	0.243
	62	17	1.1	0.6	22.9	13.3	24.4	14.6	10000	14000	7305B	26.8	32	55	1	0.243
	62	17	1.1	0.6	26.4	15.3	28.1	16.8	19000	25000	7305C	14.3	32	55	1	0.243
	80	21	1.5	1	39.7	23.2	42.6	25.7	8200	11000	7405	26.4	33.5	71.5	1.5	0.527
	80	21	1.5	1	36.9	21.5	39.6	23.9	7300	10000	7405B	33.6	33.5	71.5	1.5	0.527
30	47	9	0.3	0.15	8.30	6.25	-	-	22000	29000	7906C	9.7	32.5	44.5	0.3	0.046
	55	13	1	0.6	12.6	9.55	-	-	20000	26000	ACH006C	12.2	36	49	1	0.122
	55	13	1	0.6	14.5	10.1	-	-	14000	18000	7006	18.8	35.5	49.5	1	0.133
	55	13	1	0.6	13.1	9.20	-	-	11000	14000	7006B	24.3	35.5	49.5	1	0.133
	55	13	1	0.6	15.8	11.0	-	-	20000	26000	7006C	12.2	35.5	49.5	1	0.133
	62	16	1	0.6	21.3	13.7	22.5	14.8	13000	16000	7206	21.5	35.5	56.5	1	0.208
	62	16	1	0.6	19.4	12.5	20.5	13.6	9600	13000	7206B	27.6	35.5	56.5	1	0.208
	62	16	1	0.6	23.0	14.7	24.3	16.0	18000	24000	7206C	14.3	35.5	56.5	1	0.208
	72	19	1.1	0.6	30.1	18.9	31.9	20.6	12000	14000	7306	24.5	37	65	1	0.362
	72	19	1.1	0.6	27.6	17.4	29.3	19.0	8700	12000	7306B	31.3	37	65	1	0.362
	72	19	1.1	0.6	32.3	20.3	34.2	22.1	16000	21000	7306C	16.5	37	65	1	0.362
	90	23	1.5	1	47.6	28.4	51.0	31.6	7300	9700	7406	29.3	38.5	81.5	1.5	0.686
	90	23	1.5	1	44.2	26.4	47.4	29.3	6500	8900	7406B	37.3	38.5	81.5	1.5	0.686
35	55	10	0.6	0.3	12.5	9.70	-	-	19000	25000	7907C	11.0	40	50	0.6	0.074
	62	14	1	0.6	13.3	10.9	-	-	18000	23000	ACH007C	13.5	41	56	1	0.162
	62	14	1	0.6	17.5	12.6	-	-	12000	15000	7007	21.2	40.5	56.5	1	0.170
	62	14	1	0.6	15.8	11.4	-	-	9200	12000	7007B	27.6	40.5	56.5	1	0.170
	62	14	1	0.6	19.1	13.7	-	-	17000	22000	7007C	13.5	40.5	56.5	1	0.170
	72	17	1.1	0.6	28.1	18.6	29.7	20.2	11000	14000	7207	24.2	42	65	1	0.295
	72	17	1.1	0.6	25.6	17.0	27.0	18.5	8300	11000	7207B	31.4	42	65	1	0.295
	72	17	1.1	0.6	30.4	20.1	32.1	21.7	15000	20000	7207C	15.8	42	65	1	0.295
	80	21	1.5	1	35.4	22.0	39.9	26.4	10000	13000	7307	27.4	43.5	71.5	1.5	0.475
	80	21	1.5	1	32.5	20.2	36.6	24.3	7700	10000	7307B	35.0	43.5	71.5	1.5	0.475
	80	21	1.5	1	37.9	23.6	42.8	28.3	14000	19000	7307C	18.3	43.5	71.5	1.5	0.475
	100	25	1.5	1	60.4	37.0	64.8	41.1	6500	8600	7407	32.6	43.5	91.5	1.5	0.950
	100	25	1.5	1	56.2	34.3	60.2	38.1	5700	7900	7407B	41.7	43.5	91.5	1.5	0.950
40	62	12	0.6	0.3	15.7	12.4	-	-	17000	22000	7908C	12.8	45	57	0.6	0.107
	68	15	1	0.6	13.9	12.2	-	-	16000	21000	ACH008C	14.7	46	62	1	0.203
	68	15	1	0.6	18.7	14.6	-	-	11000	14000	7008	23.2	45.5	62.5	1	0.210
	68	15	1	0.6	16.8	13.2	-	-	8300	11000	7008B	30.2	45.5	62.5	1	0.210



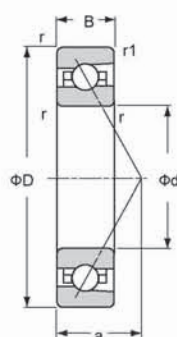
With cutting cage



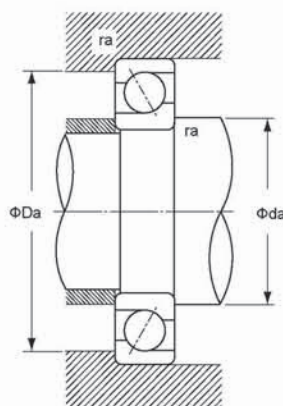
With pressing cage

d (40) ~ (55)mm

Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
d	D	B	r (min.)	r ₁ (min.)	with cutting cage C _r	C _{0r}	with pressing cage C _r	C _{0r}	Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
40	68	15	1	0.6	20.5	15.9	-	-	15000	20000	7008C	14.8	45.5	62.5	1	0.210
	80	18	1.1	0.6	33.6	23.3	35.3	25.1	10000	12000	7208	26.3	47	73	1	0.382
	80	18	1.1	0.6	30.6	21.3	32.1	23.0	7500	10000	7208B	34.2	47	73	1	0.382
	80	18	1.1	0.6	36.4	25.2	38.2	27.1	14000	18000	7208C	17.0	47	73	1	0.382
	90	23	1.5	1	43.2	27.4	48.8	32.9	9200	12000	7308	30.3	48.5	81.5	1.5	0.657
	90	23	1.5	1	39.7	25.2	44.8	30.3	6900	9200	7308B	38.8	48.5	81.5	1.5	0.657
	90	23	1.5	1	46.3	29.4	52.3	35.3	13000	17000	7308C	20.2	48.5	81.5	1.5	0.657
	110	27	2	1	69.9	43.5	75.0	48.4	5900	7900	7408	35.5	50	100	2	1.23
	110	27	2	1	64.9	40.4	69.6	44.9	5200	7200	7408B	45.4	50	100	2	1.23
45	68	12	0.6	0.3	16.6	14.1	-	-	15000	20000	7909C	13.6	50	63	0.6	0.127
	75	16	1	0.6	15.5	14.0	-	-	14000	19000	ACH009C	16.0	51	69	1	0.258
	75	16	1	0.6	22.2	17.7	-	-	10000	12000	7009	25.3	50.5	69.5	1	0.260
	75	16	1	0.6	20.0	16.0	-	-	7500	10000	7009B	33.2	50.5	69.5	1	0.260
	75	16	1	0.6	24.4	19.3	-	-	14000	18000	7009C	16.0	50.5	69.5	1	0.260
	85	19	1.1	0.6	37.7	26.6	39.6	28.6	9400	12000	7209	28.0	52	78	1	0.430
	85	19	1.1	0.6	34.3	24.3	36.1	26.1	7000	9400	7209B	36.4	52	78	1	0.430
	85	19	1.1	0.6	40.8	28.7	42.9	30.9	13000	17000	7209C	18.1	52	78	1	0.430
	100	25	1.5	1	55.1	37.1	58.4	40.4	8200	10000	7309	33.6	53.5	91.5	1.5	0.875
	100	25	1.5	1	50.6	34.1	53.6	37.2	6200	8200	7309B	43.1	53.5	91.5	1.5	0.875
	100	25	1.5	1	59.2	39.7	62.7	43.4	11000	15000	7309C	22.3	53.5	91.5	1.5	0.875
	120	29	2	1	84.9	53.8	91.1	59.8	5400	7100	7409	38.6	55	110	2	1.55
	120	29	2	1	78.9	50.0	84.7	55.5	4800	6600	7409B	49.5	55	110	2	1.55
50	72	12	0.6	0.3	17.4	15.7	-	-	14000	18000	7910C	14.2	55	67	0.6	0.128
	72	12	0.6	0.3	13.2	12.8	-	-	14000	18000	ACH910C	14.2	55	67	0.6	0.139
	80	16	1	0.6	16.1	15.5	-	-	13000	17000	ACH010C	16.7	56	74	1	0.279
	80	16	1	0.6	23.6	20.1	-	-	9200	11000	7010	26.9	55.5	74.5	1	0.290
	80	16	1	0.6	21.2	18.1	-	-	6900	9200	7010B	35.3	55.5	74.5	1	0.290
	80	16	1	0.6	26.0	21.9	-	-	13000	17000	7010C	16.8	55.5	74.5	1	0.290
	90	20	1.1	0.6	39.4	29.4	41.3	31.5	8500	11000	7210	30.4	57	83	1	0.485
	90	20	1.1	0.6	35.7	26.7	37.4	28.6	6400	8500	7210B	39.6	57	83	1	0.485
	90	20	1.1	0.6	42.8	31.8	44.8	34.1	12000	16000	7210C	19.4	57	83	1	0.485
	110	27	2	1	70.1	48.1	74.3	52.5	7300	9100	7310	37.2	60	100	2	1.14
	110	27	2	1	64.4	44.3	68.2	48.3	5500	7300	7310B	47.9	60	100	2	1.14
	110	27	2	1	75.1	51.6	79.6	56.2	10000	13000	7310C	24.5	60	100	2	1.14
	130	31	2.1	1.1	97.4	65.3	-	-	4900	6600	7410	41.6	62	118	2	1.92
	130	31	2.1	1.1	90.2	60.4	-	-	4400	6000	7410B	53.5	62	118	2	1.92
55	80	13	1	0.6	19.7	18.5	-	-	13000	17000	7911C	15.5	61	74	1	0.178
	80	13	1	0.6	14.2	14.6	-	-	13000	17000	ACH911C	15.5	61	74	1	0.195
	90	18	1.1	0.6	20.0	19.5	-	-	12000	16000	ACH011C	18.7	62	83	1	0.413
	90	18	1.1	0.6	31.1	26.3	-	-	8300	10000	7011	29.9	62	83	1	0.420
	90	18	1.1	0.6	27.9	23.7	-	-	6200	8300	7011B	39.4	62	83	1	0.420
	90	18	1.1	0.6	34.1	28.6	-	-	11000	15000	7011C	18.7	62	83	1	0.420
	100	21	1.5	1	48.7	37.1	51.0	39.8	7600	9500	7211	33.3	63.5	91.5	1.5	0.635
	100	21	1.5	1	44.1	33.8	46.2	36.2	5700	7600	7211B	43.6	63.5	91.5	1.5	0.635



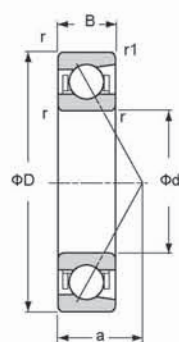
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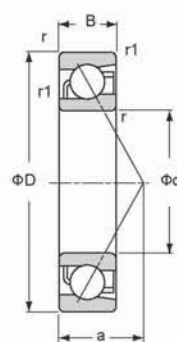
Single Row Angular Contact Ball Bearings

d (55) ~ (70)mm

Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
d	D	B	r	r ₁	with cutting cage C _r	with pressing cage C _{or}	with cutting cage C _r	with pressing cage C _{or}	Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
55	100	21	1.5	1	52.9	40.2	55.4	43.1	11000	14000	7211C	21.1	63.5	91.5	1.5	0.635
	120	29	2	1	80.9	56.5	85.8	61.7	6700	8400	7311	40.2	65	110	2	1.45
	120	29	2	1	74.3	52.0	78.7	56.7	5000	6700	7311B	51.8	65	110	2	1.45
	120	29	2	1	86.8	60.6	91.9	66.1	9300	12000	7311C	26.4	65	110	2	1.45
	140	33	2.1	1.1	118	82.4	-	-	4500	6000	7411	45.0	67	128	2	2.36
	140	33	2.1	1.1	110	76.5	-	-	4000	5500	7411B	57.8	67	128	2	2.36
60	85	13	1	0.6	23.2	21.8	-	-	12000	16000	7912C	16.3	66	79	1	0.187
	85	13	1	0.6	13.9	14.5	-	-	12000	16000	ACH912C	16.2	66	79	1	0.209
	95	18	1.1	0.6	20.8	21.2	-	-	11700	15000	ACH012C	19.4	67	88	1	0.442
	95	18	1.1	0.6	31.9	28.1	-	-	7700	9700	7012	31.4	67	88	1	0.450
	95	18	1.1	0.6	28.6	25.3	-	-	5800	7700	7012B	41.5	67	88	1	0.450
	95	18	1.1	0.6	35.0	30.6	-	-	11000	14000	7012C	19.4	67	88	1	0.450
	110	22	1.5	1	58.9	45.7	61.7	49.0	6900	8600	7212	36.1	68.5	101.5	1.5	0.820
	110	22	1.5	1	53.4	41.6	55.9	44.6	5100	6900	7212B	47.5	68.5	101.5	1.5	0.820
	110	22	1.5	1	64.0	49.5	67.0	53.0	9500	13000	7212C	22.7	68.5	101.5	1.5	0.820
	130	31	2.1	1.1	92.5	65.6	98.1	71.6	6200	7700	7312	43.2	72	118	2	1.81
	130	31	2.1	1.1	84.9	60.3	90.0	65.8	4600	6200	7312B	55.8	72	118	2	1.81
	130	31	2.1	1.1	99.2	70.3	105	76.7	8600	11000	7312C	28.4	72	118	2	1.81
	150	35	2.1	1.1	129	93.6	-	-	4100	5500	7412	48.5	72	138	2	2.85
	150	35	2.1	1.1	119	86.7	-	-	3700	5100	7412B	62.6	72	138	2	2.85
65	90	13	1	0.6	20.8	21.2	-	-	11000	15000	7913C	16.9	71	84	1	0.205
	90	13	1	0.6	14.3	15.4	-	-	11000	15000	ACH913C	16.9	71	84	1	0.223
	100	18	1.1	0.6	21.5	22.6	-	-	10100	14000	ACH013C	20.0	72	93	1	0.471
	100	18	1.1	0.6	33.7	31.4	-	-	7200	9000	7013	33.0	72	93	1	0.470
	100	18	1.1	0.6	30.1	28.3	-	-	5400	7200	7013B	43.8	72	93	1	0.470
	100	18	1.1	0.6	37.1	34.3	-	-	10000	13000	7013C	20.1	72	93	1	0.470
	120	23	1.5	1	67.3	54.2	70.2	57.8	6400	8000	7213	38.2	73.5	111.5	1.5	1.02
	120	23	1.5	1	60.9	49.3	63.6	52.6	4800	6400	7213B	50.3	73.5	111.5	1.5	1.02
	120	23	1.5	1	73.1	58.7	76.3	62.6	8900	12000	7213C	23.9	73.5	111.5	1.5	1.02
	140	33	2.1	1.1	105	75.3	111	82.2	5800	7200	7313	46.3	77	128	2	2.22
	140	33	2.1	1.1	96.1	69.3	102	75.6	4300	5800	7313B	59.7	77	128	2	2.22
	140	33	2.1	1.1	112	80.7	119	88.1	8000	11000	7313C	30.3	77	128	2	2.22
	160	37	2.1	1.1	139	104	-	-	3900	5200	7413	51.4	77	148	2	3.41
	160	37	2.1	1.1	129	96.8	-	-	3500	4800	7413B	66.3	77	148	2	3.41
70	100	16	1	0.6	29.0	28.9	-	-	10000	12000	7914C	19.4	76	94	1	0.332
	100	16	1	0.6	18.0	19.5	-	-	10000	12000	ACH914C	19.4	76	94	1	0.369
	110	20	1.1	0.6	29.4	30.5	-	-	9300	13000	ACH014C	22.1	77	103	1	0.642
	110	20	1.1	0.6	42.7	39.4	-	-	6600	8300	7014	36.0	77	103	1	0.660
	110	20	1.1	0.6	38.3	35.5	-	-	5000	6600	7014B	47.8	77	103	1	0.660
	110	20	1.1	0.6	46.9	43.0	-	-	9200	12000	7014C	22.1	77	103	1	0.660
	125	24	1.5	1	69.8	55.6	76.3	63.5	6100	7600	7214	40.2	78.5	116.5	1.5	1.12
	125	24	1.5	1	63.2	50.6	69.1	57.8	4600	6100	7214B	52.9	78.5	116.5	1.5	1.12
	125	24	1.5	1	75.9	60.2	83.0	68.8	8400	11000	7214C	25.1	78.5	116.5	1.5	1.12
	150	35	2.1	1.1	118	85.8	125	93.6	5400	6700	7314	49.3	82	138	2	2.70



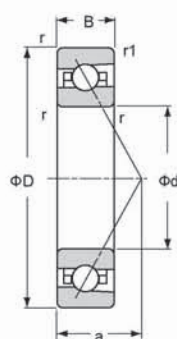
With cutting cage



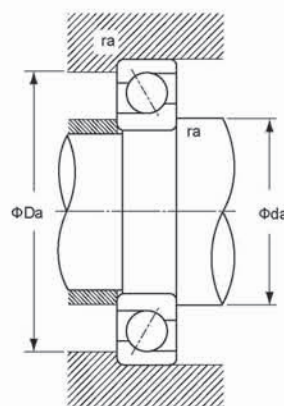
With pressing cage

d (70) ~ (85)mm

Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
d	D	B	r (min.)	r ₁ (min.)	with cutting cage C _r	C _{or}	with pressing cage C _r	C _{or}	Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
75	150	35	2.1	1.1	108	78.9	114	86.0	4000	5400	7314B	63.7	82	138	2	2.70
	150	35	2.1	1.1	126	91.9	134	100	7500	9900	7314C	32.2	82	138	2	2.70
	180	42	3	1.1	149	115	-	-	3500	4600	7414	57.6	84	166	2.5	4.99
	180	42	3	1.1	148	119	-	-	3100	4300	7414B	74.2	84	166	2.5	4.99
	105	16	1	0.6	29.4	30.5	-	-	9300	12000	7915C	20.1	81	99	1	0.350
	105	16	1	0.6	18.5	20.7	-	-	9300	12000	ACH915C	20.1	81	99	1	0.391
	115	20	1.1	0.6	29.8	31.6	-	-	8800	12000	ACH015C	22.7	82	108	1	0.677
	115	20	1.1	0.6	43.6	41.7	-	-	6300	7800	7015	37.4	82	108	1	0.690
	115	20	1.1	0.6	39.1	37.6	-	-	4700	6300	7015B	49.9	82	108	1	0.690
	115	20	1.1	0.6	48.0	45.6	-	-	8700	11000	7015C	22.7	82	108	1	0.690
	130	25	1.5	1	79.2	65.2	82.7	69.5	5800	7200	7215	42.1	83.5	121.5	1.5	1.23
	130	25	1.5	1	71.7	59.3	74.9	63.3	4300	5800	7215B	55.5	83.5	121.5	1.5	1.23
	130	25	1.5	1	86.1	70.6	89.9	75.3	8000	11000	7215C	26.2	83.5	121.5	1.5	1.23
	160	37	2.1	1.1	128	97.0	136	106	5000	6300	7315	52.4	87	148	2	3.15
	160	37	2.1	1.1	118	89.2	125	97.3	3800	5000	7315B	67.8	87	148	2	3.15
	160	37	2.1	1.1	137	104	146	113	7000	9200	7315C	34.2	87	148	2	3.15
	190	45	3	1.1	171	141	-	-	3300	4400	7415	61.3	89	176	2.5	5.90
	190	45	3	1.1	158	131	-	-	2900	4000	7415B	78.9	89	176	2.5	5.90
80	110	16	1	0.6	29.8	31.6	-	-	8800	11000	7916C	20.7	86	104	1	0.368
	110	16	1	0.6	18.9	21.8	-	-	8800	11000	ACH916C	20.7	86	104	1	0.412
	125	22	1.1	0.6	34.9	37.7	-	-	8100	11000	ACH016C	24.7	87	118	1	0.915
	125	22	1.1	0.6	53.4	50.6	-	-	5800	7200	7016	40.6	87	118	1	0.930
	125	22	1.1	0.6	47.8	45.7	-	-	4300	5800	7016B	54.0	87	118	1	0.930
	125	22	1.1	0.6	58.7	55.3	-	-	8000	11000	7016C	24.7	87	118	1	0.930
	140	26	2	1	85.3	71.5	89.0	76.2	5400	6700	7216	44.8	90	130	2	1.50
	140	26	2	1	77.1	65.0	80.5	69.3	4000	5400	7216B	59.2	90	130	2	1.50
	140	26	2	1	92.8	77.5	96.9	82.7	7500	9900	7216C	27.7	90	130	2	1.50
	170	39	2.1	1.1	139	109	147	119	4700	5900	7316	55.6	92	158	2	3.85
	170	39	2.1	1.1	127	100	135	109	3500	4700	7316B	71.9	92	158	2	3.85
	170	39	2.1	1.1	149	117	158	127	6500	8600	7316C	36.2	92	158	2	3.85
	200	48	3	1.1	193	166	-	-	3100	4100	7416	65.0	94	186	2.5	6.00
	200	48	3	1.1	179	154	-	-	2700	3800	7416B	83.6	94	186	2.5	6.00
85	120	18	1.1	0.6	38.9	40.6	-	-	8100	11000	7917C	22.7	92	113	1	0.523
	120	18	1.1	0.6	22.7	26.1	-	-	8100	11000	ACH917C	22.7	92	113	1	0.586
	130	22	1.1	0.6	35.4	38.9	-	-	7800	10000	ACH017C	25.4	92	123	1	0.959
	130	22	1.1	0.6	54.6	53.7	-	-	5500	6800	7017	42.3	92	123	1	0.970
	130	22	1.1	0.6	48.8	48.4	-	-	4100	5500	7017B	56.5	92	123	1	0.970
	130	22	1.1	0.6	60.1	58.7	-	-	7600	10000	7017C	25.5	92	123	1	0.970
	150	28	2	1	98.6	83.6	103	89.2	5000	6300	7217	47.9	95	140	2	1.87
	150	28	2	1	89.2	76.0	93.1	81.1	3800	5000	7217B	63.3	95	140	2	1.87
	150	28	2	1	107	90.6	112	96.6	7000	9200	7217C	29.7	95	140	2	1.87
	180	41	3	1.1	150	122	159	133	4400	5500	7317	58.8	99	166	2.5	4.53
	180	41	3	1.1	137	112	145	122	3300	4400	7317B	76.1	99	166	2.5	4.53
	180	41	3	1.1	161	130	170	142	6100	8100	7317C	38.3	99	166	2.5	4.53



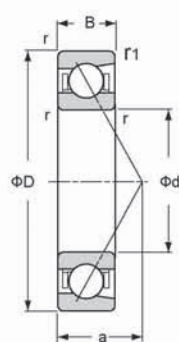
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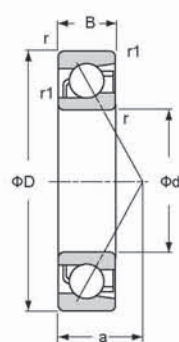
Single Row Angular Contact Ball Bearings

d (85) ~ (105)mm

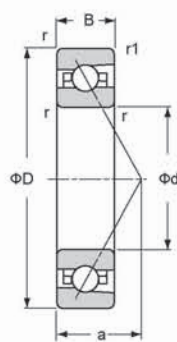
Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
d	D	B	r	r ₁ (min.)(min.)	with cutting cage C _r	with pressing cage C _{or}	with cutting cage C _r	with pressing cage C _{or}	Grease	Oil			d _a (min.)	D _a (max.)	r _a (max.)	
85	210	52	4	1.5	204	180	-	-	3000	3900	7417	68.7	103	192	3	8.54
	210	52	4	1.5	189	167	-	-	2600	3600	7417B	88.1	103	192	3	8.54
90	125	18	1.1	0.6	39.6	42.6	-	-	7800	10000	7918C	23.4	97	118	1	0.551
	125	18	1.1	0.6	23.3	27.6	-	-	7800	10000	ACH918C	23.4	97	118	1	0.615
	140	24	1.5	1	46.5	51.3	-	-	7300	9600	ACH018C	27.4	98.5	131.5	1.5	1.23
	140	24	1.5	1	65.2	63.3	-	-	5100	6400	7018	45.2	98.5	131.5	1.5	1.26
	140	24	1.5	1	58.4	57.1	-	-	3900	5100	7018B	60.2	98.5	131.5	1.5	1.26
	140	24	1.5	1	71.7	69.1	-	-	7100	9400	7018C	27.4	98.5	131.5	1.5	1.26
	160	30	2	1	113	96.7	118	103	4700	5900	7218	51.1	100	150	2	2.30
	160	30	2	1	102	88.0	107	93.8	3500	4700	7218B	67.4	100	150	2	2.30
	160	30	2	1	123	105	128	112	6500	8600	7218C	31.7	100	150	2	2.30
	190	43	3	1.1	161	135	171	147	4200	5200	7318	61.9	104	176	2.5	5.30
	190	43	3	1.1	148	124	156	135	3100	4200	7318B	80.2	104	176	2.5	5.30
	190	43	3	1.1	173	145	183	158	5800	7700	7318C	40.3	104	176	2.5	5.30
	225	54	4	1.5	216	196	-	-	2800	3700	7418	72.5	108	207	3	11.4
	225	54	4	1.5	200	182	-	-	2500	3400	7418B	93.1	108	207	3	11.4
95	130	18	1.1	0.6	40.2	44.1	-	-	7400	9800	7919C	24.1	102	123	1	0.574
	130	18	1.1	0.6	23.9	29.1	-	-	7400	9800	ACH919C	24.1	102	123	1	0.644
	145	24	1.5	1	47.2	53.2	-	-	7000	9200	ACH019C	28.1	103.5	136.5	1.5	1.28
	145	24	1.5	1	66.6	67.1	-	-	4800	6000	7019	47.2	103.5	136.5	1.5	1.32
	145	24	1.5	1	59.6	60.5	-	-	3600	4800	7019B	63.2	103.5	136.5	1.5	1.32
	145	24	1.5	1	73.4	73.4	-	-	6700	8900	7019C	28.3	103.5	136.5	1.5	1.32
	170	32	2.1	1.1	122	103	128	111	4400	5500	7219	54.3	107	158	2	2.78
	170	32	2.1	1.1	111	94.0	116	101	3300	4400	7219B	71.6	107	158	2	2.78
	170	32	2.1	1.1	133	112	139	120	6100	8100	7219C	33.8	107	158	2	2.78
	200	45	3	1.1	172	149	183	162	4000	4900	7319	65.1	109	186	2.5	6.12
	200	45	3	1.1	158	137	167	149	3000	4000	7319B	84.4	109	186	2.5	6.12
	200	45	3	1.1	185	160	196	174	5500	7300	7319C	42.3	109	186	2.5	6.12
100	140	20	1.1	0.6	55.6	58.5	-	-	7000	9200	7920C	26.1	107	133	1	0.773
	140	20	1.1	0.6	33.7	40.4	-	-	7000	9200	ACH920C	26.1	107	133	1	0.869
	150	24	1.5	1	47.9	54.9	-	-	6700	8800	ACH020C	28.7	108.5	141.5	1.5	1.34
	150	24	1.5	1	68.4	70.6	-	-	4700	5900	7020	48.1	108.5	141.5	1.5	1.37
	150	24	1.5	1	61.2	63.6	-	-	3500	4700	7020B	64.4	108.5	141.5	1.5	1.37
	150	24	1.5	1	75.3	77.2	-	-	6500	8600	7020C	28.7	108.5	141.5	1.5	1.37
	180	34	2.1	1.1	137	117	144	126	4100	5200	7220	57.7	112	168	2	3.32
	180	34	2.1	1.1	124	107	130	115	3100	4200	7220B	76.2	112	168	2	3.32
	180	34	2.1	1.1	149	127	156	136	5700	7600	7220C	35.9	112	168	2	3.32
	215	47	3	1.1	184	161	207	194	3600	4600	7320	69.4	114	201	2.5	7.53
	215	47	3	1.1	168	148	190	178	2700	3600	7320B	90.2	114	201	2.5	7.53
	215	47	3	1.1	197	173	222	208	5000	6700	7320C	44.8	114	201	2.5	7.53
105	145	20	1.1	0.6	56.7	61.5	-	-	6700	8800	7921C	26.7	112	138	1	0.810
	145	20	1.1	0.6	34.6	42.6	-	-	6700	8800	ACH921C	26.7	112	138	1	0.907
	160	26	2	1	54.4	63.1	-	-	6300	8300	ACH021C	30.7	115	150	2	1.70



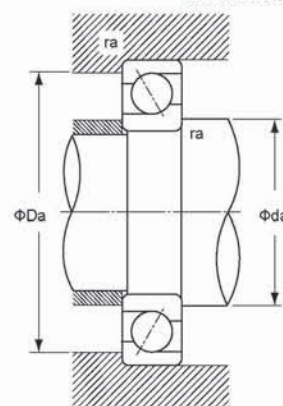
With cutting cage



With pressing cage



ACH type



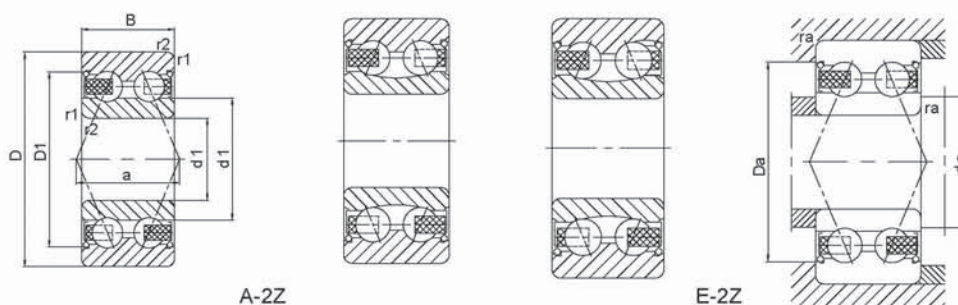
d (105) ~ 120mm

Boundary Dimensions (mm)					Basic Load Rating (kN)				Limiting Speed ¹⁾ (rpm)		Bearing Designation ²⁾	Working point position (mm) a	Shoulder Dimensions (mm)			Mass (kg) Approx
					with cutting cage		with pressing cage						d _a (min.)	D _a (max.)	r _a (max.)	
d	D	B	r	r ₁	C _r	C _{or}	C _r	C _{or}	Grease	Oil						
			(min.)	(min.)												
105	160	26	2	1	79.8	81.9	-	-	4400	5500	7021	51.8	115	150	2	1.73
	160	26	2	1	71.4	73.8	-	-	3300	4400	7021B	68.6	115	150	2	1.73
	160	26	2	1	87.8	89.6	-	-	6000	8000	7021C	31.0	115	150	2	1.73
	190	36	2.1	1.1	149	132	-	-	3900	4900	7221	61.0	117	178	2	3.95
	190	36	2.1	1.1	135	121	-	-	2900	3900	7221B	80.5	117	178	2	3.95
	190	36	2.1	1.1	162	143	-	-	5400	7200	7221C	38.0	117	178	2	3.95
	225	49	3	1.1	208	193	-	-	3500	4400	7321	72.1	119	211	2.5	8.62
	225	49	3	1.1	191	177	-	-	2600	3500	7321B	93.7	119	211	2.5	8.62
	225	49	3	1.1	223	207	-	-	4800	6400	7321C	46.6	119	211	2.5	8.62
110	150	20	1.1	0.6	57.7	64.4	-	-	6400	8500	7922C	27.4	117	143	1	0.840
	150	20	1.1	0.6	34.9	43.7	-	-	6400	8500	ACH922C	27.4	117	143	1	0.942
	170	28	2	1	61.3	71.9	-	-	6000	7900	ACH022C	32.7	120	160	2	2.13
	170	28	2	1	91.9	92.8	-	-	4200	5200	7022	54.4	120	160	2	2.14
	170	28	2	1	82.3	83.7	-	-	3100	4200	7022B	72.7	120	160	2	2.14
	170	28	2	1	101	101	-	-	5800	7700	7022C	32.8	120	160	2	2.14
	200	38	2.1	1.1	162	148	-	-	3700	4600	7222	64.3	122	188	2	4.65
	200	38	2.1	1.1	147	135	-	-	2800	3700	7222B	84.9	122	188	2	4.65
	200	38	2.1	1.1	176	160	-	-	5100	6800	7222C	40.0	122	188	2	4.65
	240	50	3	1.1	232	226	-	-	3200	4000	7322	76.4	124	226	2.5	10.1
	240	50	3	1.1	213	208	-	-	2400	3200	7322B	99.6	124	226	2.5	10.1
	240	50	3	1.1	249	242	-	-	4500	5900	7322C	48.8	124	226	2.5	10.1
120	165	22	1.1	0.6	71.7	81.2	-	-	5900	7800	7924C	30.1	127	158	1	1.15
	165	22	1.1	0.6	40.8	51.9	-	-	5900	7800	ACH924C	30.1	127	158	1	1.29
	180	28	2	1	63.1	76.5	-	-	5600	7400	ACH024C	34.1	130	170	2	2.29
	180	28	2	1	96.6	103	-	-	3900	4900	7024	57.3	130	170	2	2.27
	180	28	2	1	86.4	93.0	-	-	2900	3900	7024B	76.9	130	170	2	2.27
	180	28	2	1	106	113	-	-	5400	7100	7024C	34.1	130	170	2	2.27
	215	40	2.1	1.1	174	166	-	-	3400	4300	7224	68.5	132	203	2	5.49
	215	40	2.1	1.1	158	151	-	-	2600	3400	7224B	90.3	132	203	2	5.49
	215	40	2.1	1.1	190	180	-	-	4800	6300	7224C	42.5	132	203	2	5.49
	260	55	3	1.1	246	252	-	-	3000	3700	7324	82.3	134	246	2.5	12.6
	260	55	3	1.1	225	231	-	-	2200	3000	7324B	107.2	134	246	2.5	12.6
	260	55	3	1.1	265	271	-	-	4100	5500	7324C	53.0	134	246	2.5	12.6

Remarks:

1) The above indicated Limiting Speed is for the types with machined cage; the one for types with pressed cage shall be 80% of above data.

2) Suffix B: 40°, contacting angle; C: 15°, contacting angle; no suffix: 30°

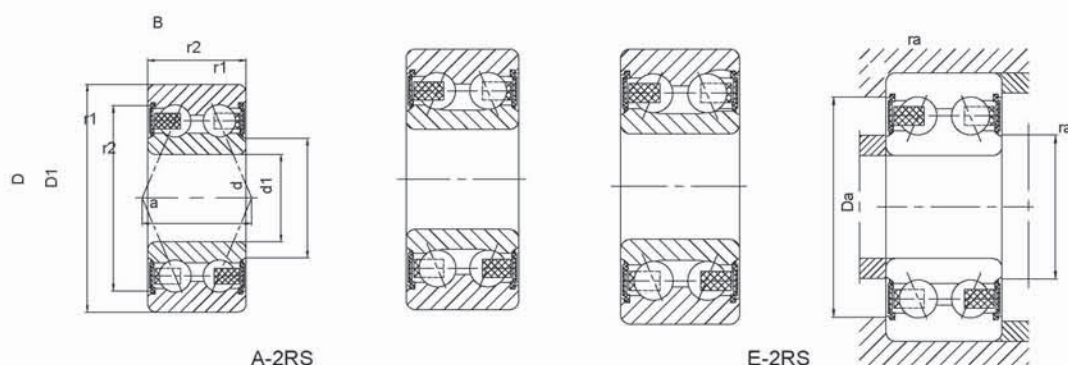


A-2Z

E-2Z

Double Row Angular Contact Ball Bearing

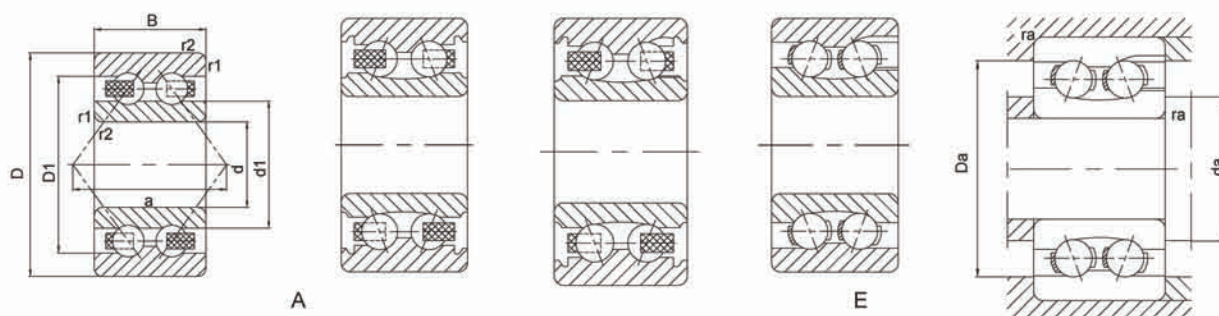
Boundary Dimensions			Basic Load Rating		Limiting Speed	Bearing Designation	Other dimension		Distance of working points	Shoulder Dimensions (mm)				Mass	
(mm)			(KN)		(rpm)	ZZ	d1≈	D1≈	(mm)					(kg)	
d	D	B	r1.2min	Cr	Cor					a	da(Min.)	da(Max)	Da(Max)	ra(Max)	Approx
10	30	14	0.6	7.41	4.3	16000	3200A-ZZ	17.7	25	18	15		25	0.6	0.051
12	32	15.9	0.6	10.1	5.6	15000	3201A-ZZ	19.1	27.7	20	17		27.7	0.6	0.058
15	35	15.9	0.6	11.2	6.8	12000	3202A-ZZ	22.1	30.7	22	20		30.7	0.6	0.066
	42	19	1	15.1	9.15	10000	3302A-ZZ	25.6	35.7	26	21		36	1	0.13
17	40	17.5	0.6	14	8.65	10000	3203A-ZZ	25.2	35	25	22		35	0.6	0.096
	47	22.2	1	21.2	12.5	9500	3303A-ZZ	27.6	40.2	29	23		41	1	0.18
20	47	20.6	1	18.6	12	9000	3204A-ZZ	29.6	40.9	30	26		41	1	0.16
	52	22.2	1.1	22.1	14.3	8500	3304A-ZZ	31.8	44	32	27		45	1	0.22
25	52	20.6	1	20.3	14	8000	3205A-ZZ	34.6	45.9	33	31		46	1	0.18
	62	25.4	1.1	31.2	20.8	7500	3305A-ZZ	38.4	53.4	38	32		55	1	0.35
30	62	23.8	1	28.1	20	7000	3206A-ZZ	41.4	55.2	38	36		56	1	0.29
	72	30.2	1.1	41	28.5	6300	3306A-ZZ	39.8	64.1	44	37	39.5	65	1	0.53
	72	30.2	1.1	45.7	42.5	6300	3306E-ZZ	39.8	64.1	44	37	39.5	65	1	0.59
35	72	27	1.1	37.1	27.5	6000	3207A-ZZ	48.1	63.9	45	42		65	1	0.44
	80	34.9	1.5	48.8	34	5600	3307A-ZZ	44.6	70.1	49	44	44.5	71	1.5	0.73
	80	34.9	1.5	53.9	51	5600	3307E-ZZ	44.6	70.1	49	44	44.5	71	1.5	0.79
40	80	30.2	1.1	44.9	33.5	5600	3208A-ZZ	47.8	72.1	49	47	47.5	73	1	0.58
	80	30.2	1.1	48.4	48	5600	3208E-ZZ	47.8	72.1	49	47	47.5	73	1	0.64
	90	36.5	1.5	59.2	43	5000	3308A-ZZ	50.8	80.1	56	49	50.5	81	1.5	0.95
	90	36.5	1.5	66	64	5000	3308E-ZZ	50.8	80.1	56	49	50.5	81	1.5	1.05
45	85	30.2	1.1	47.5	38	5000	3209A-ZZ	52.8	77.1	52	52	52.5	78	1	0.63
	85	30.2	1.1	50.1	53	5000	3209E-ZZ	52.8	77.1	52	52	52.5	78	1	0.69
50	90	30.2	1.1	47.5	39	4800	3210A-ZZ	57.8	82.1	56	57	57.5	83	1	0.66
	90	30.2	1.1	52.8	58.5	4800	3210E-ZZ	57.8	82.1	56	57	57.5	83	1	0.74



A-2RS

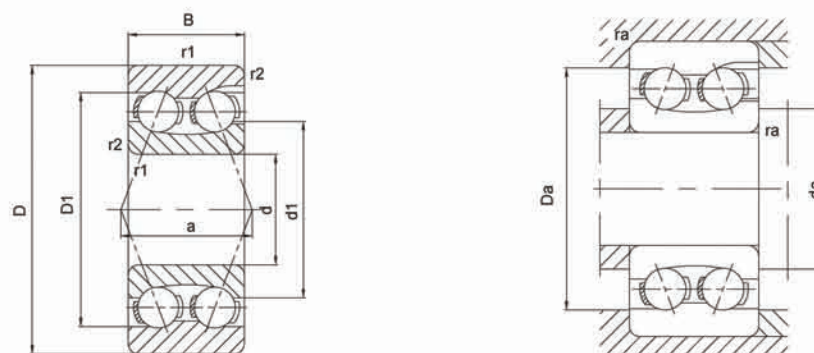
E-2RS

Boundary Dimensions			Basic Load Rating			Limiting Speed	Bearing Code	Other dimension		Distance of working points	Shoulder Dimensions (mm)				Mass
(mm)			(KN)			(rpm)		d1≈	D1≈	(mm)	a	da(Min.)	da(Max)	Da(Max)	ra(Max)
d	D	B	rr.2min	Cr	Cor										Approx
10	30	14	0.6	7.41	4.3	16000	3200-2RS	15.8	25	18	15	15.5	25	0.6	0.051
12	32	15.9	0.6	10.1	5.6	15000	3201-2RS	17.2	27.7	20	17	17	27.7	0.6	0.058
15	35	15.9	0.6	11.2	6.8	12000	3202-2RS	20.2	30.7	22	20	20	30.7	0.6	0.066
	42	19	1	15.1	9.15	10000	3302-2RS	23.7	35.7	26	21	23.5	36	1	0.13
17	40	17.5	0.6	14	8.65	10000	3203-2RS	23.3	35	25	22	23	35	0.6	0.096
	47	22.2	1	21.2	12.5	9500	3303-2RS	25.7	40.2	29	23	25.5	41	1	0.18
20	47	20.6	1	18.6	12	9000	3204-2RS	27.7	40.9	30	26	27.5	41	1	0.16
	52	22.2	1.1	22.1	14.3	8500	3304-2RS	29.9	44	32	27	29.5	45	1	0.22
25	52	20.6	1	20.3	12	8000	3205-2RS	32.7	45.9	33	31	32.5	46	1	0.18
	62	25.4	1.1	31.2	20.8	7500	3305-2RS	35.7	53.4	38	32	35.5	55	1	0.35
30	62	23.8	1	28.1	20	7000	3206-2RS	38.7	55.2	38	36	38.5	56	1	0.29
	72	30.2	1.1	41	28.5	6300	3306-2RS	39.8	64.1	44	37	39.5	65	1	0.53
	72	30.2	1.1	45.7	42.5	6300	3306E-2RS	39.8	64.1	44	37	39.5	65	1	0.59
35	72	27	1.1	37.1	27.5	6000	3207-2RS	45.4	63.9	45	42	45	65	1	0.44
	80	34.9	1.5	48.8	34	5600	3307-2RS	44.6	70.1	49	44	44.5	71	1.5	0.73
	80	34.9	1.5	53.9	51	5600	3307E-2RS	44.6	70.1	49	44	44.5	71	1.5	0.79
40	80	30.2	1.1	44.9	33.5	5600	3208-2RS	47.8	72.1	49	47	47.5	73	1	0.59
	80	30.2	1.1	48.4	48	5600	3208E-2RS	47.8	72.1	49	47	47.5	73	1	0.64
	90	36.5	1.5	59.2	43	5000	3308-2RS	50.8	80.1	56	49	50.5	81	1.5	0.95
	90	36.5	1.5	66	64	5000	3308E-2RS	50.8	80.1	56	49	50.5	81	1.5	1.05
45	85	30.2	1.1	47.5	38	5000	3209-2RS	52.8	77.1	52	52	52.5	78	1	0.63
	85	30.2	1.1	50.1	53	5000	3209E-2RS	52.8	77.1	52	52	52.5	78	1	0.69
50	90	30.2	1.1	47.5	39	4800	3210-2RS	57.8	82.1	56	57	57.5	83	1	0.66
	90	30.2	1.1	52.8	58.5	4800	3210E-2RS	57.8	82.1	56	57	57.5	83	1	0.74

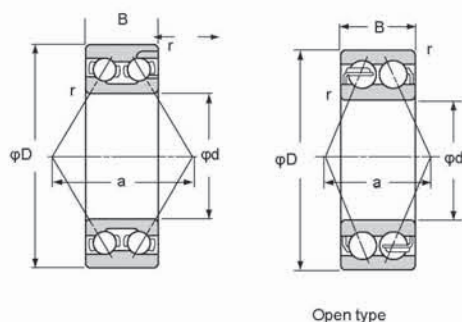


Double Row Angular Contact Ball Bearing

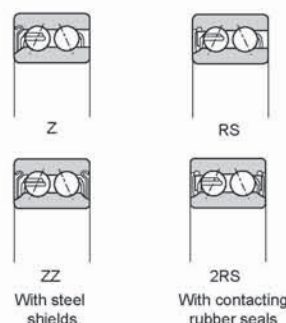
Boundary Dimensions				Basic Load Rating (K N)		Limiting Speed(rpm)		Bearing Designation	Other dimension		Distance of working points	Boundary Shoulder Dimensions (mm)			Mass
(mm)				Open type							(mm)				(kg)
d	D	B	r1.2min	Cr	Cor	Grease	Oil	OPEN	d1=	D1=	a	da(Min.)	Da (MAX.)	ra (MAX.)	Approx
10	30	14	0.6	7.41	4.3	16000	22000	3200A	17.7	23.6	18	15	25	0.6	0.051
12	32	15.9	0.6	10.1	5.6	15000	20000	3201A	19.1	26.5	20	17	27	0.6	0.058
15	35	15.9	0.6	11.2	6.8	12000	17000	3202A	22.1	29.5	22	20	30	0.6	0.066
	42	19	1	15.1	9.15	10000	15000	3302A	25.6	34.3	26	21	36	1	0.13
17	40	17.5	0.6	14	8.65	10000	15000	3203A	25.2	33.6	25	22	35	0.6	0.096
	47	22.2	1	21.2	12.5	9500	14000	3303A	27.6	38.8	29	23	41	1	0.18
20	47	20.6	1	18.6	12	9000	13000	3204A	29.6	39.5	30	26	41	1	0.16
	52	22.2	1.1	22.1	14.3	8500	12000	3304A	31.8	42.6	32	27	45	1	0.22
25	52	20.6	1	20.3	14	8000	11000	3205A	34.6	44.5	33	31	46	1	0.18
	62	25.4	1.1	31.2	20.8	7500	10000	3305A	38.4	51.4	38	32	55	1	0.35
30	62	23.8	1	28.1	20	7000	9500	3206A	41.4	53.2	38	36	56	1	0.29
	72	30.2	1.1	41	28.5	6300	8500	3306A	39.8	64.1	44	37	65	1	0.53
	72	30.2	1.1	45.7	42.5	6300	8500	3306E	39.8	64.1	44	37	65	1	0.59
35	72	27	1.1	37.1	27.5	6000	8000	3207A	48.1	61.9	45	42	65	1	0.44
	80	34.9	1.5	48.8	34	5600	7500	3307A	44.6	70.1	49	44	71	1.5	0.73
	80	34.9	1.5	53.9	51	5600	7500	3307E	44.6	70.1	49	44	71	1.5	0.79
40	80	30.2	1.1	44.9	33.5	5600	7500	3208A	47.8	72.1	49	47	73	1	0.58
	80	30.2	1.1	48.4	48	5600	7500	3208E	47.8	72.1	49	47	73	1	0.64
	90	36.5	1.5	59.2	43	5000	6700	3308A	50.8	80.1	56	49	81	1.5	0.95
	90	36.5	1.5	66	64	5000	6700	3308E	50.8	80.1	56	49	81	1.5	1.05
45	85	30.2	1.1	47.5	38	5000	6700	3209A	52.8	77.1	52	52	78	1	0.63
	85	30.2	1.1	50.1	53	5000	6700	3209E	52.8	77.1	52	52	78	1	0.69
	100	39.7	1.5	72.1	73.5	4500	6000	3309	63.8	86.3	64	54	91	1.5	1.4
50	90	30.2	1.1	47.5	39	4800	6300	3210A	57.8	82.1	56	57	83	1	0.66
	90	30.2	1.1	52.8	58.5	4800	6300	3210E	57.8	82.1	56	57	83	1	0.74
	110	44.4	2	88	96.5	4000	5300	3310	73.3	97	73	60	100	2	1.95
55	100	33.3	1.5	57.2	67	4300	5600	3211	70.4	88.3	64	64	91	1.5	1.05
	120	49.2	2	95.2	108	3800	5000	3311	81	110	80	65	110	2	2.55
60	110	36.5	1.5	72.1	85	3800	5000	3212	78	98.3	71	69	101	1.5	1.4
	130	54	2.1	112	127	3400	4500	3312	87.2	115	86	72	118	2	3.25



Boundary Dimensions				Basic Load Rating (K N)		Limiting Speed(rpm)		Bearing Designation	Other dimension		Distance of working points		Shoulder Dimensions (mm)		Mass (kg)
(mm)				Open type		Grease	Oil		d1=	D1=	a	da(Min.)	Da (MAX.)	ra (MAX.)	
d	D	B	r1. 2min	Cr	Cor			OPEN	d1=	D1=	a	da(Min.)	Da (MAX.)	ra (MAX.)	Approx
65	120	38.1	1.5	78.1	95	3600	4800	3213	83.7	105	76	74	111	1.5	1.75
	140	58.7	2.1	128	150	3200	4300	3313	92.5	122	94	77	128	2	4.1
70	125	39.7	1.5	76.5	98	3200	4300	3214	90.6	111	81	79	116	1.5	1.9
	150	63.5	2.1	147	173	2800	3800	3314	99.2	131	101	82	138	2	5.05
75	130	41.3	1.5	84.2	110	3200	4300	3215	94.7	116	84	84	121	1.5	2.1
	160	68.3	2.1	157	186	2600	3600	3315	106	139	107	87	148	2	6.15
80	140	44.4	2	101	134	2800	3800	3216	102	127	91	90	130	2	2.65
	170	68.3	2.1	176	212	2400	3400	3316	113	148	112	92	158	2	6.95
85	150	49.2	2	110	146	2600	3600	3217	107	133	97	95	140	2	3.4
	180	73	3	194	240	2200	3200	3317	120	157	119	99	166	2.5	8.3
90	160	52.4	2	128	173	2400	3400	3218	115	143	104	100	150	2	4.15
	190	73	3	220	285	2000	3000	3318	128	169	125	104	176	2.5	9.25
95	170	55.6	2.1	147	204	2200	3200	3219	124	154	111	107	158	2	5
	200	77.8	3	238	315	1900	2800	3319	135	178	133	109	186	2.5	11
100	180	60.3	2.1	157	220	2000	3000	3220	129	160	118	112	168	2	6.1
	215	82.6	3	255	355	1800	2600	3320	142	187	139	114	201	2.5	13.5
110	200	69.8	2.1	190	270	1900	2800	3222	143	178	132	122	188	2	8.8
	240	92.1	3	292	425	1700	2400	3322	155	205	153	124	226	2.5	19



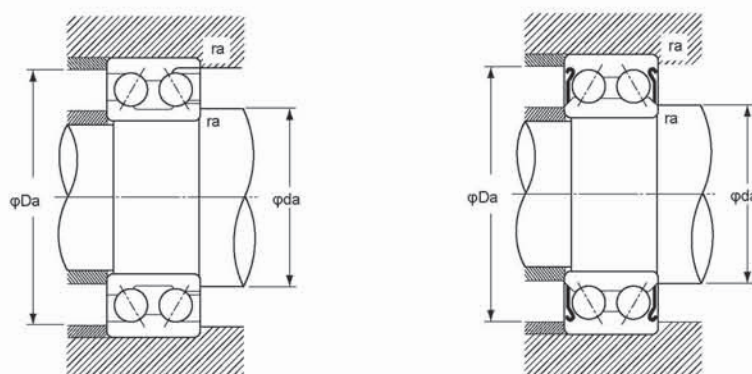
With ball filling notch
32,33 series



Without ball filling notch
52,53 series

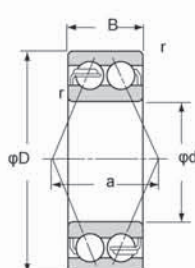
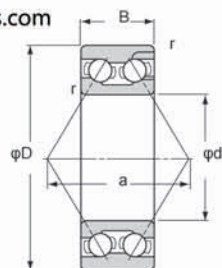
Double Row Angular Contact Ball Bearing

Boundary Dimensions (mm)				Basic Load Rating(kN)				Limiting Speed (rpm)		
d	D	B	r (min.)	Open type		Sealed type		Grease Open Z,ZZ	Oil RS,2RS	Oil open Z
10	30	14.3	0.6	7.35	5.35	-	-	15000	-	20000
12	32	15.9	0.6	9.70	7.15	-	-	14000	-	18000
15	35	15.9	0.6	9.70	7.45	-	-	12000	-	16000
	42	19	1	15.2	11.9	-	-	10000	-	14000
17	40	17.5	0.6	13.8	10.8	-	-	11000	-	14000
	40	17.5	0.6	13.2	8.15	12.7	8.35	11000	11000	14000
	47	22.2	1	21.7	17.1	-	-	9400	-	13000
20	47	20.6	1	17.2	15.0	-	-	9000	-	12000
	47	20.6	1	19.7	12.6	16.0	10.8	8800	8800	12000
	52	22.2	1.1	20.8	18.4	-	-	8200	-	11000
	52	22.2	1.1	24.7	15.0	19.8	12.8	8300	8300	11000
25	52	20.6	1	18.9	18.2	-	-	7800	-	10000
	52	20.6	1	21.4	14.8	18.9	13.8	7700	7700	10000
	62	25.4	1.1	28.9	26.5	-	-	6800	-	9100
	62	25.4	1.1	32.7	20.8	27.5	18.5	6900	6900	9200
30	62	23.8	1	27.3	27.0	-	-	6500	-	8700
	62	23.8	1	29.7	21.3	25.4	18.3	6400	6400	8600
	72	30.2	1.1	38.1	36.1	-	-	5800	-	7800
	72	30.2	1.1	41.0	28.5	34.3	25.2	5800	5800	7700
35	72	27	1.1	36.8	37.5	-	-	5600	-	7500
	72	27	1.1	39.2	29.0	31.7	24.6	5500	5500	7300
	80	34.9	1.5	48.6	46.8	-	-	5200	-	7000
	80	34.9	1.5	51.2	36.2	46.1	32.8	5100	5100	6800
40	80	30.2	1.1	42.0	43.9	-	-	5000	-	6700
	80	30.2	1.1	44.4	33.6	36.5	29.1	5000	5000	6700
	90	36.5	1.5	54.1	53.8	-	-	4600	-	6100
	90	36.5	1.5	62.7	45.4	51.4	37.8	4600	4600	6100
45	85	30.2	1.1	45.4	51.4	-	-	4600	-	6100
	85	30.2	1.1	49.9	38.4	41.7	33.9	4600	4600	6100
	100	39.7	1.5	66.1	67.3	-	-	4100	-	5500
	100	39.7	1.5	75.1	55.7	68.9	51.4	4100	4100	5500
50	90	30.2	1.1	45.1	52.1	-	-	4300	-	5700
	90	30.2	1.1	53.3	43.6	44.1	37.9	4300	4300	5600
	110	44.4	2	86.1	88.6	-	-	3800	-	5000
	110	44.4	2	88.5	67.0	81.8	62.2	3600	3600	4800



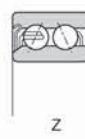
d 10 ~50mm

Bearing Designation			Distance of working points (mm) (Open) a	Shoulder Dimensions ¹⁾ (mm)				Mass (kg) Approx
Open type	With steel shields	With contacting rubber seals		da (min.)	da (max.)	Da (max.)	ra (max.)	
3200	-	-	19.5	14.5	-	25.5	0.6	0.052
3201	-	-	21.7	16.5	-	27.5	0.6	0.063
3202	-	-	23.6	19.5	-	30.5	0.6	0.072
3302	-	-	27.6	20.5	-	36.5	1	0.132
3203	-	-	26.6	21.5	-	35.5	0.6	0.100
5203	5203 ZZ	5203 2RS	20.0	21.5	23.5	35.5	0.6	0.091
3303	-	-	31.0	22.5	-	41.5	1	0.192
3204	-	-	31.5	25.5	-	41.5	1	0.170
5204	5204 ZZ	5204 2RS	23.5	25.5	26.6	41.5	1	0.120
3304	-	-	33.8	27	-	45	1	0.230
5304	5304 ZZ	5304 2RS	25.9	27	28.3	45	1	0.230
3205	-	-	34.4	30.5	-	46.5	1	0.190
5205	5205 ZZ	5205 2RS	26.1	30.5	32.3	46.5	1	0.190
3305	-	-	40.5	32	-	55	1	0.369
5305	5305 ZZ	5305 2RS	31.1	32	33.4	55	1	0.340
3206	-	-	40.7	35.5	-	56.5	1	0.320
5206	5206 ZZ	5206 2RS	30.8	35.5	38.6	56.5	1	0.290
3306	-	-	47.2	37	-	65	1	0.585
5306	5306 ZZ	5306 2RS	36.2	37	41.3	65	1	0.510
3207	-	-	46.9	42	-	65	1	0.480
5207	5207 ZZ	5207 2RS	36.1	42	43.9	65	1	0.430
3307	-	-	53.4	43.5	-	71.5	1.5	0.816
5307	5307 ZZ	5307 2RS	41.0	43.5	45.5	71.5	1.5	0.790
3208	-	-	52.6	47	-	73	1	0.650
5208	5208 ZZ	5208 2RS	39.2	47	49.5	73	1	0.570
3308	-	-	58.9	48.5	-	81.5	1.5	1.07
5308	5308 ZZ	5308 2RS	44.9	48.5	52.1	81.5	1.5	1.05
3209	-	-	56.3	52	-	78	1	0.710
5209	5209 ZZ	5209 2RS	42.2	52	55.3	78	1	0.620
3309	-	-	65.6	53.5	-	91.5	1.5	1.42
5309	5309 ZZ	5309 2RS	51.0	53.5	58.2	91.5	1.5	1.42
3210	-	-	58.8	57	-	83	1	0.760
5210	5210 ZZ	5210 2RS	44.5	57	58.9	83	1	0.670
3310	-	-	71.7	60	-	100	2	1.95
5310	5310 ZZ	5310 2RS	56.6	60	64.4	100	2	1.93

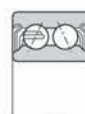


Open type

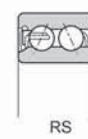
With ball filling notch
32,33 series



ZZ



With steel
shields



RS



2RS

With contacting
rubber seals

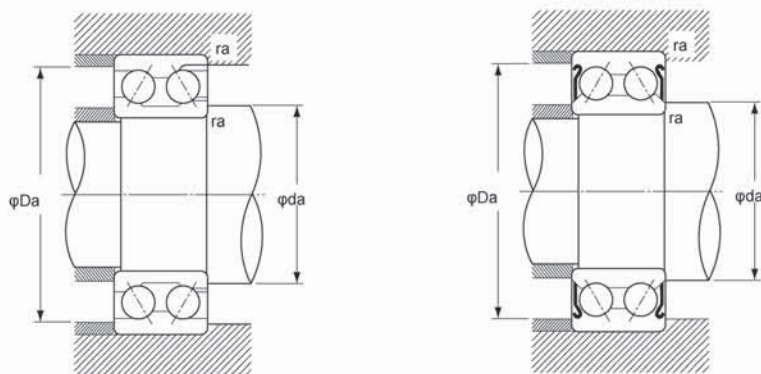
Without ball filling notch
52,53 series

Double Row Angular Contact Ball Bearings

Boundary Dimensions (mm)				Basic Load Rating(kN)				Limiting Speed (rpm)		
d	D	B	r (min.)	Open type		Sealed type		Grease	Oil	
				Cr	Cor	Cr	Cor	Open Z,ZZ	RS,2RS	open Z
55	100	33.3	1.5	50.9	60.2	-	-	3900	-	5100
	100	33.3	1.5	65.9	55.2	52.9	44.7	3800	3800	5100
	120	49.2	2	101	106	-	-	3400	-	4500
	120	49.2	2	110	85.1	95.7	74.3	3300	3300	4500
60	110	36.5	1.5	64.0	76.8	-	-	3500	-	4700
	110	36.5	1.5	74.4	60.8	62.6	55.9	3500	3500	4700
	130	54	2.1	125	132	-	-	3100	-	4200
	130	54	2.1	126	98.7	110	87.1	3100	3100	4100
65	120	38.1	1.5	76.4	97.4	-	-	3200	-	4300
	120	38.1	1.5	86.9	75.3	69.2	63.1	3200	3200	4300
	140	58.7	2.1	142	153	-	-	2900	-	3900
	140	58.7	2.1	142	113	142	113	2900	2900	3900
70	125	39.7	1.5	77.9	96.4	-	-	3100	-	4100
	125	39.7	1.5	94.5	82.6	76.3	70.3	3100	3100	4100
	150	63.5	2.1	151	160	-	-	2700	-	3600
	150	63.5	2.1	160	129	160	129	2700	2700	3600
75	130	41.3	1.5	92.4	120	-	-	2900	-	3900
	160	68.3	2.1	169	189	-	-	2500	-	3300
	160	68.3	2.1	174	147	174	147	2500	2500	3300
80	140	44.4	2	97.5	121	-	-	2700	-	3600
	170	68.3	2.1	184	213	-	-	2400	-	3100
85	150	49.2	2	114	143	-	-	2500	-	3400
	180	73	3	188	219	-	-	2200	-	3000
90	160	52.4	2	132	167	-	-	2400	-	3100
	190	73	3	205	242	-	-	2100	-	2800
95	170	55.6	2.1	152	193	-	-	2200	-	3000
	200	77.8	3	218	270	-	-	2000	-	2600
100	180	60.3	2.1	172	221	-	-	2100	-	2800
	215	82.6	3	249	324	-	-	1800	-	2500
105	190	65.1	2.1	182	237	-	-	2000	-	2600
	225	87.3	3	265	354	-	-	1800	-	2300
110	200	69.8	2.1	201	263	-	-	1900	-	2500
	240	92.1	3	281	388	-	-	1600	-	2200

Remarks:

1) The Max. of da is suitable for sealed types



d 55 ~ 110mm

Bearing Designation			Distance of working points (mm) (Open) a	Shoulder Dimensions ¹⁾ (mm)				Mass (kg) Approx
Open type	With steel shields	With contacting rubber seals		d _a (min.)	D _a (max.)	r _a (max.)		
3211	-	-	65.0	63.5	-	91.5	1.5	1.05
5211	5211 ZZ	5211 2RS	50.2	63.5	66.2	91.5	1.5	0.960
3311	-	-	79.3	65	-	110	2	2.53
5311	5311 ZZ	5311 2RS	61.6	65	71.8	110	2	2.30
3212	-	-	71.3	68.5	-	101.5	1.5	1.40
5212	5212 ZZ	5212 2RS	53.8	68.5	74.1	101.5	1.5	1.36
3312	-	-	87.4	72	-	118	2	3.24
5312	5312 ZZ	5312 2RS	67.2	72	79.2	118	2	3.16
3213	-	-	76.8	73.5	-	111.5	1.5	1.75
5213	5213 ZZ	5213 2RS	58.8	73.5	79.0	111.5	1.5	1.66
3313	-	-	92.7	77	-	128	2	4.08
5313	5313 ZZ	5313 2RS	70.9	77	85.9	128	2	3.91
3214	-	-	80.7	78.5	-	116.5	1.5	1.92
5214	5214 ZZ	5214 2RS	61.4	78.5	83.5	116.5	1.5	1.81
3314	-	-	99.7	82	-	138	2	5.04
5314	5314 ZZ	5314 2RS	76.0	82	92.9	138	2	4.89
3215	-	-	84.7	83.5	-	121.5	1.5	2.10
3315	-	-	108.7	87	-	148	2	6.16
5315	5315 ZZ	5315 2RS	81.5	87	99.6	148	2	5.97
3216	-	-	90.7	90	-	130	2	2.64
3316	-	-	113.1	92	-	158	2	6.93
3217	-	-	98.4	95	-	140	2	3.39
3317	-	-	118.8	99	-	166	2.5	8.30
3218	-	-	104.1	100	-	150	2	4.14
3318	-	-	125.5	104	-	176	2.5	9.23
3219	-	-	110.6	107	-	158	2	5.00
3319	-	-	132.2	109	-	186	2.5	10.9
3220	-	-	116.8	112	-	168	2	6.10
3320	-	-	140.4	114	-	201	2.5	13.5
3221	-	-	124.2	117	-	178	2	7.37
3321	-	-	148.1	119	-	211	2.5	15.6
3222	-	-	131.4	122	-	188	2	8.80
3322	-	-	156.4	124	-	226	2.5	18.9