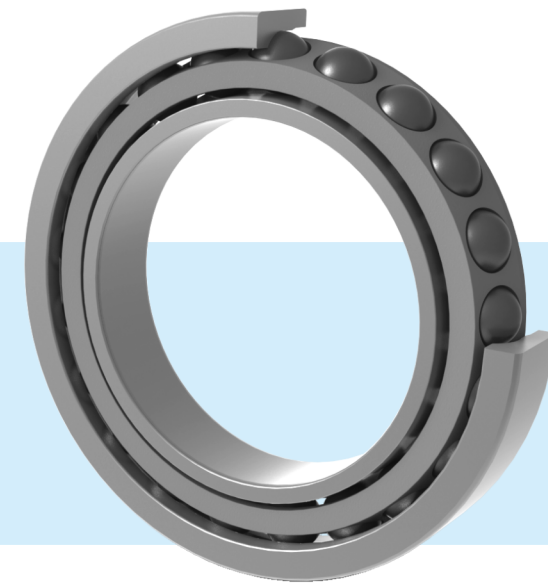


Angular contact ball bearing



Angular contact ball bearing

Angular contact ball bearing

Angular contact ball bearings can take radial load and axial load simultaneously. Single row angular contact ball bearings can only take single direction axial load, so angular contact ball bearings are often used in pairs. The paired angular contact ball bearings with manufactured clearance are the most convenient. The contact angles between steel balls and the inner ring/outer ring fall into 15°, 25° and 40°. The larger the contact angle is, the higher axial load it can take. The smaller the contact angle is, the higher rotation speed. Generally, contact angel of 15° is applied to high precision and high speed bearings.

1. Single row angular contact ball bearing

This type of bearing is designed with a certain contact angle, so they are suited to take single direction axial load or combined load. Structurally, axial thrust load will be generated after taking radial load, so angular contact ball bearings are often used in pairs, or more than two sets matched. The rigidity of single row angular contact ball bearings can be improved through preloading. Therefore, they are applied to the spindles of machine tools with high rotating precision.

The contact angles of standard products including 15°, 25°, 40°. The cages of bearings with 15° and 25° contact angles are often made of plastic. The materials of the cages of bearing with 40° contact angle are made of copper, nylon, steel sheet, etc.

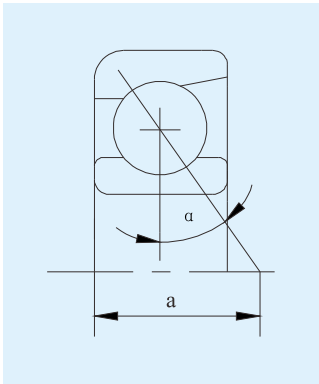
In addition, the quantity of the steel balls may also vary with the structure of the cage even for the same type; accordingly the load ratings are also different from the values specified in the specification table.

For angular contact ball bearings with contact angles of 15° and 25°, products with high precision of class P4 of higher are available.

These products are especially suitable for the spindles of high speed and precision machine tools and spinning machines.

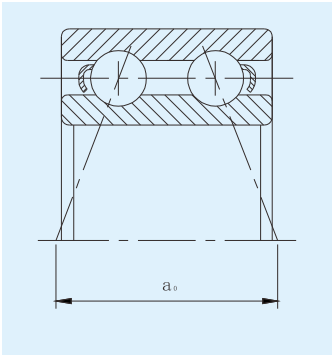
2. Matched pair angular contact ball bearing

The structures and features of matched pair angular contact ball bearings are shown in Table 1.



3. Double-row angular contact ball bearings

The inner and outer rings of the back-to-back matched bearings are combined into one structure, which can take two directional axial loads, and has large offset load capability. They can be used as fixed end bearings. Pressed cages or nylon cages are normally used.

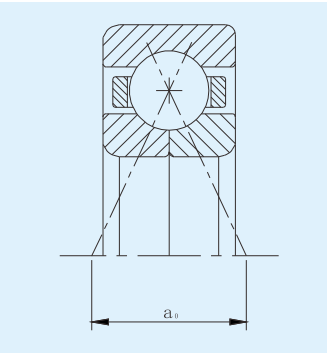


4. Four-point contact ball bearing

Four-point contact ball bearings are normally composed of an inner ring and two pieces of half outer rings or an outer ring and two pieces of half inner rings, which can take axial loads in both directions.

When contact angle is 35°, the large axial load capacity makes it suitable to take pure axial load, or combined load with large axial load.

Machined cages made of copper alloy are often used.



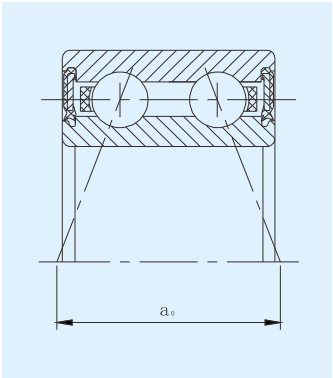
● High temperature resistance, high rotation speed and high reliability

Since double row ball bearings for magnetic clutches of air conditioner works at high temperature for a long time near the engine, special heat treatment process and high performance grease are adopted by C&U to ensure high temperature performance.

● Excellent sealing performance

With the severe working environment and the long term exposure to dust contamination and water vapor, the requirements of this working environment are met completely by means of unique seal structure.

These products are featured by high precision and low-noise, and can be mass-produced for all sizes and specifications.



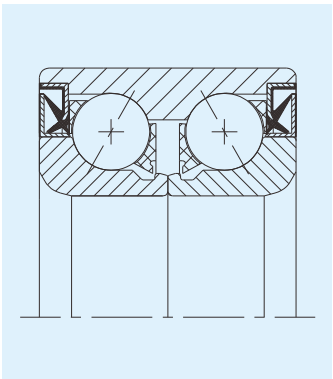
6. First generation wheel hub bearing

First generation wheel hub bearings are dedicated products designed and manufactured according to the mounting dimensions and working conditions provided by customers. Their features are as follows:

● High quality steel and fine lubricating grease make wheel hub bearings possess advantages such as large load rating, impact resistance, mud and slurry resistance, compact structure and light weight.

● Capable of taking relatively high axial load and radial load simultaneously

● Long life of the bearing can be ensured without adding lubricant at the time of installation.



5. Magnetic clutch bearings for automobile compressors

Magnetic clutch bearings for automobile compressors are dedicated products designed and manufactured according to the mounting dimensions and working conditions provided by customers. This kind of bearing is similar to a double row radial ball bearing in structure, but double-row ball bearings for magnetic clutches have the following advantages:

Table 1 The structures and features of matched pair angular contact ball bearings

Sketch	Structures	Features
	Back to back matched pair DB E.g: 7209 CDB	Capable of taking radial load and axial load in double direction. The application point distance a_0 is large, so they are applicable for situations where require large torque load.
	Face to face matched pair DF E.g: 7209 BDF	Capable of taking radial load and axial load in double direction. Compared with back to back matched pair type, the application point distance is smaller, so the torque load capacity is limited.
	Tandem matched pair DT E.g: 7209 CDT	Capable of carrying radial load and single-direction axial load. This type carries axial load in pairs and is used to situations with a large unidirectional load.

Note: The value of the application point a_0 is not provided in the specification table. Please contact the technical center of C&U Group if needed.

7. Precautions for the application of angular contact ball bearings

In severe working conditions such as reaching the limit speed and limit temperature, or with little lubricant, or under high vibration and torque load, some bearings may not be suitable due to differences in cage design. In these cases, please contact C&U.

In addition, if the ratio between the axial load and radial load of the matched pair bearings exceeds the value of e due to excessively low load during operating(specified in the specification table), sliding will occur between the balls and the raceways, and scratches will result.

Large angular contact ball bearings with heavy balls and cages are particularly prone to this tendency. Please contact C&U if such load conditions are predicted in advance when selection.

8. Dimensional accuracy & running accuracy

Please refer to Section 5 for the dimensional and running accuracy for single row angular contact bearing, double row angular contact ball bearing, and four-point contact ball bearing.

Regarding the dimensional accuracy and running accuracy of bearings for magnetic clutches and first generation wheel hub bearings, please contact C&U if needed.

9. Recommended fit

Please refer to Section 6 for the fit of single row angular contact bearing, double row angular contact ball bearing, and four-point contact ball bearing.

Regarding the fit of bearings for magnetic clutches and first generation wheel hub bearings for sedan, please contact C&U Group if needed.

12. Single row angular contact ball bearing

Static equivalent load $P_0=X_0F_r+Y_0F_a$

Nominal contact angle	Single row or tandem arrangement		Back to back arrangement Face to face arrangement	
	X_0	Y_0	X_0	Y_0
15°	0.5	0.46	1	0.92
25°	0.5	0.38	1	0.76
40°	0.5	0.26	1	0.52

Note: For single row or tandem arrangement, when $P_0>0.5F_r+Y_0F_a$, $P_0=F_r$.

10. Clearance

Matched pair bearings with precision higher than Class P5 are often used in spindles of machine tools with preloading. However, the internal clearance had been adjusted correspondingly during the manufacturing process to achieve light, medium, or heavy preload when installed. Furthermore, the fit is also special. For more information, please see Table 7.3.

Clearance (or preloading) of matched pair bearings can be obtained by using shims or other means to ensure that the faces of the rings of both bearings are in contact with each other.

Please refer to Section 6 for clearance of four-point contact ball bearing.

For the details of clearance of other types of bearings, please contact C&U.

11. Limit speed

The limit speed stated in the specification table is applicable to bearings with machined cage. Limit speed of the bearings with pressed cage are 80 % of this value. The limit speed of bearings with contact angles at 15 ° and 25 ° are the value of bearings with precision higher than Class P5 (with machined cage made of synthetic resin and formed cage made of polyamide). However, it is necessary to revise the limit rotation speed according to the load conditions. In addition, speed higher than the limit speed is also available by modifying the lubrication conditions. Please refer to Section 10 for details.

Dynamic equivalent load $P=XF_r+YF_a$

Nominal contact angle	$\frac{if_0F_a^*}{C_{0r}}$	e	Single row or tandem arrangement				Back to back arrangement or face to face arrangement			
			$F_a/F_r \leq e$		$F_a/F_r > e$		$F_a/F_r \leq e$		$F_a/F_r > e$	
			X	Y	X	Y	X	Y	X	Y
15°	0.178	0.38	1	0	0.44	1.47	1	1.65	0.72	2.39
	0.357	0.40	1	0	0.44	1.40	1	1.57	0.72	2.38
	0.714	0.43	1	0	0.44	1.30	1	1.46	0.72	2.11
	1.070	0.46	1	0	0.44	1.23	1	1.38	0.72	2.00
	1.430	0.47	1	0	0.44	1.19	1	1.34	0.72	1.93
	2.140	0.50	1	0	0.44	1.12	1	1.26	0.72	1.82
	3.570	0.55	1	0	0.44	1.02	1	1.14	0.72	1.66
	5.350	0.56	1	0	0.44	1.00	1	1.12	0.72	1.63
25°	—	0.68	1	0	0.41	0.87	1	0.92	0.67	1.41
40°	—	1.14	1	0	0.35	0.57	1	0.55	0.57	0.93

Note: i=2 for back to back arrangement and face to face arrangement, and i=1 for tandem arrangement.

13.Double row angular contact ball bearing

Dynamic equivalent load $P=XF_r+YF_a$

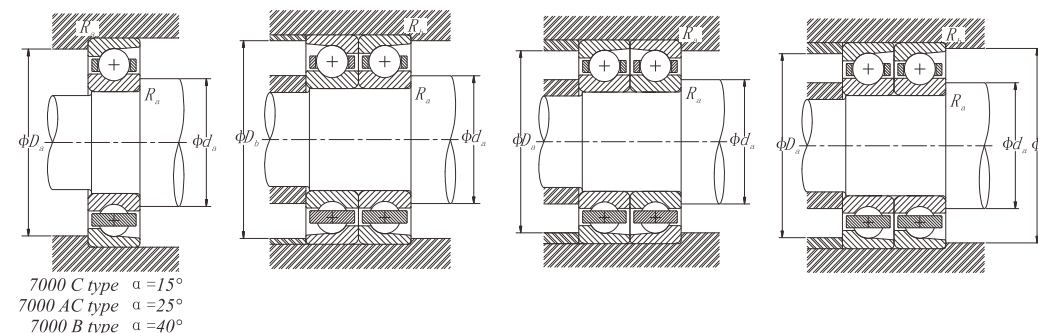
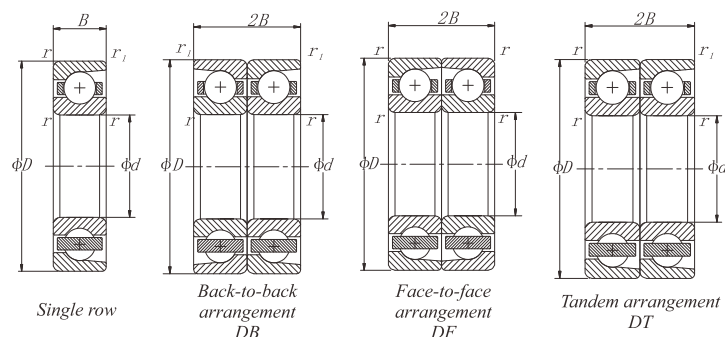
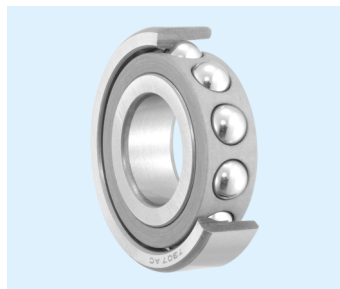
Static equivalent load $P=F_r+0.76F_a$

$F_a/F_r \leq e$		$F_a/F_r > e$		e
X	Y	X	Y	
1	0.92	0.67	1.41	0.68

14.Four-point contact ball bearing

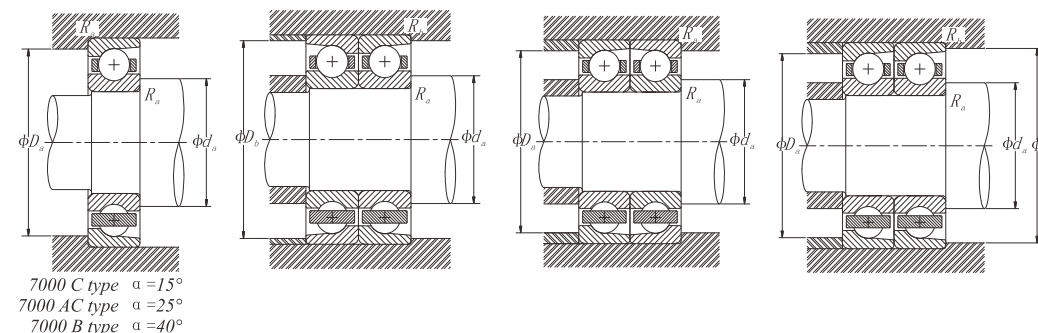
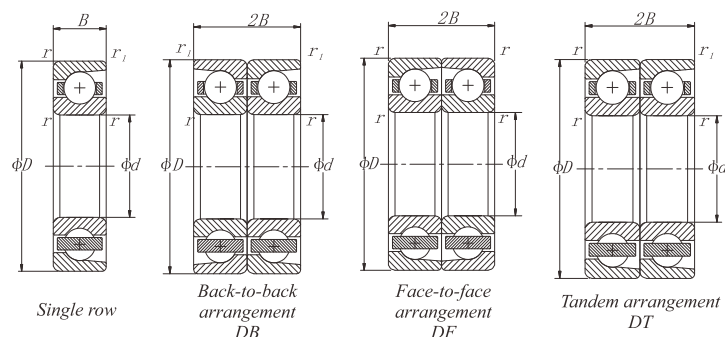
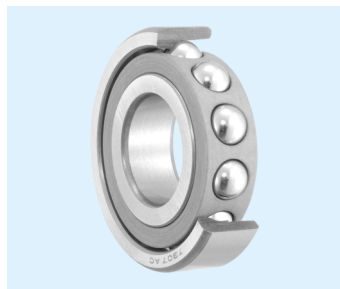
Dynamic equivalent load $P_a=F_a$

Static equivalent load $P_{0a}=F_a$



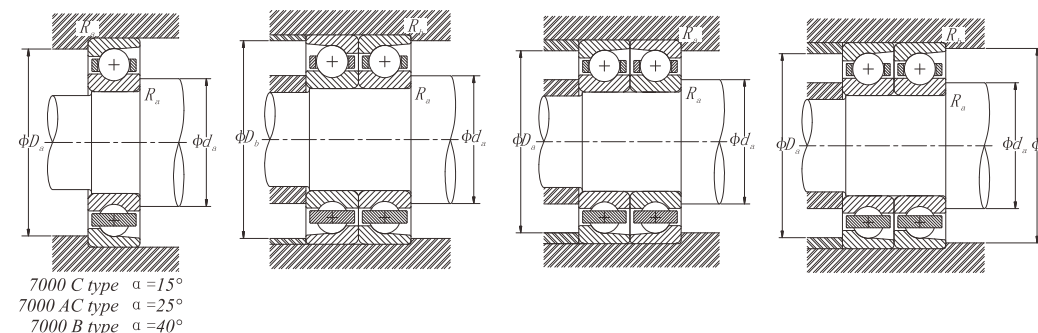
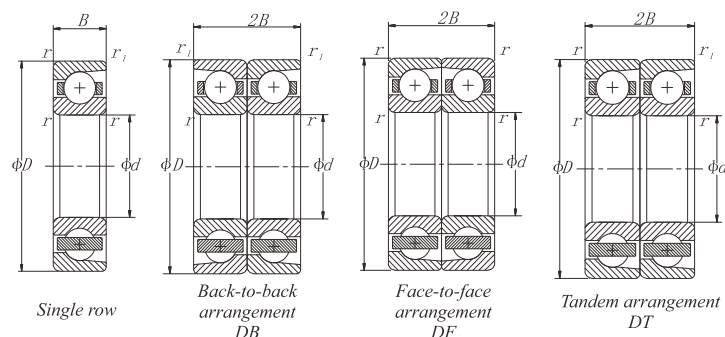
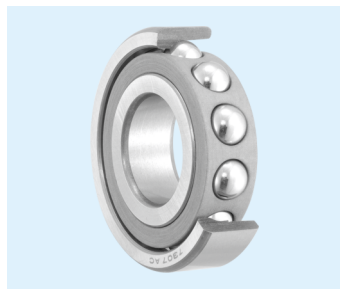
d 10~17 mm

Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	$2B$	r (Min)	r_1 (Min)	C_r	C_{or}	Grease	Oil			C_r	C_{or}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d_s Min	D_s Max	D_b Max	R_s Max	R_b Max	
10	26	8	16	0.30	0.15	5.32	2.49	41,000	58,000	7000C	36100	8.62	4.98	34,800	46,400	7000CDB	7000CDF	7000CDT	12.5	23.5	24.5	0.3	0.15	0.023
	26	8	16	0.30	0.15	5.14	2.41	36,000	50,000	7000AC	46100	8.33	4.82	30,000	40,000	7000ACDB	7000ACDF	7000ACDT	12.5	23.5	24.5	0.3	0.15	0.023
	30	9	18	0.60	0.30	6.42	2.94	39,000	54,000	7200C	36200	10.40	5.88	32,400	43,200	7200CDB	7200CDF	7200CDT	15.0	25.0	27.5	0.6	0.3	0.029
	30	9	18	0.60	0.30	6.22	2.85	33,000	46,000	7200AC	46200	10.08	5.70	27,600	36,800	7200ACDB	7200ACDF	7200ACDT	15.0	25.0	27.5	0.6	0.3	0.029
	30	9	18	0.60	0.30	4.98	2.49	22,000	30,000	7200B	66200	8.07	4.98	18,000	24,000	7200BDB	7200BDF	7200BDT	15.0	25.0	27.5	0.6	0.3	0.029
	35	11	22	0.60	0.30	9.71	4.52	34,000	47,000	7300C	36300	15.73	9.04	28,200	37,600	7300CDB	7300CDF	7300CDT	15.0	30.0	32.5	0.6	0.3	0.039
	35	11	22	0.60	0.30	9.48	4.39	27,000	37,000	7300AC	46300	15.36	8.78	22,200	29,600	7300ACDB	7300ACDF	7300ACDT	15.0	30.0	32.5	0.6	0.3	0.040
	35	11	22	0.60	0.30	8.75	4.05	22,000	29,000	7300B	66300	14.18	8.10	17,400	23,200	7300BDB	7300BDF	7300BDT	15.0	30.0	32.5	0.6	0.3	0.041
	28	8	16	0.30	0.15	5.80	2.90	37,000	52,500	7001C	36101	9.40	5.80	31,500	42,000	7001CDB	7001CDF	7001CDT	14.5	25.5	26.5	0.3	0.15	0.025
	28	8	16	0.30	0.15	5.58	2.79	32,000	45,000	7001AC	46101	9.04	5.58	27,000	36,000	7001ACDB	7001ACDF	7001ACDT	14.5	25.5	26.5	0.3	0.15	0.025
	32	10	20	0.60	0.30	7.92	3.84	35,000	49,000	7201C	36201	12.83	7.68	29,400	39,200	7201CDB	7201CDF	7201CDT	17.0	27.0	29.5	0.6	0.3	0.034
	32	10	20	0.60	0.30	7.66	3.73	30,000	42,000	7201AC	46201	12.41	7.46	25,200	33,600	7201ACDB	7201ACDF	7201ACDT	17.0	27.0	29.5	0.6	0.3	0.035
12	32	10	20	0.60	0.30	7.43	4.31	20,000	27,000	7201B	66201	12.04	8.62	16,200	21,600	7201BDB	7201BDF	7201BDT	17.0	27.0	29.5	0.6	0.3	0.036
	37	12	24	1.00	0.60	9.97	4.75	31,000	43,000	7301C	36301	16.15	9.50	25,800	34,400	7301CDB	7301CDF	7301CDT	18.0	31.0	33.5	1.0	0.5	0.043
	37	12	24	1.00	0.60	9.69	4.59	25,000	34,000	7301AC	46301	15.70	9.18	20,400	27,200	7301ACDB	7301ACDF	7301ACDT	18.0	31.0	33.5	1.0	0.5	0.044
	37	12	24	1.00	0.60	8.84	4.19	19,000	26,000	7301B	66301	14.32	8.38	15,600	20,800	7301BDB	7301BDF	7301BDT	18.0	31.0	33.5	1.0	0.5	0.045
	32	9	18	0.30	0.15	6.24	3.39	32,000	45,000	7002C	36102	10.11	6.78	27,000	36,000	7002CDB	7002CDF	7002CDT	17.5	29.5	30.5	0.3	0.15	0.035
	32	9	18	0.30	0.15	5.97	3.24	27,000	38,000	7002AC	46102	9.67	6.48	22,800	30,400	7002ACDB	7002ACDF	7002ACDT	17.5	29.5	30.5	0.3	0.15	0.035
	35	11	22	0.60	0.30	7.70	4.06	31,000	43,000	7202C	36202	12.47	8.12	25,800	34,400	7202CDB	7202CDF	7202CDT	20.0	30.0	32.5	0.6	0.3	0.045
	35	11	22	0.60	0.30	7.39	3.90	26,000	37,000	7202AC	46202	11.97	7.80	22,200	29,600	7202ACDB	7202ACDF	7202ACDT	20.0	30.0	32.5	0.6	0.3	0.046
	35	11	22	0.60	0.30	7.93	4.31	17,000	24,000	7202B	66202	12.85	8.62	14,400	19,200	7202BDB	7202BDF	7202BDT	20.0	30.0	32.5	0.6	0.3	0.047
	42	13	26	1.00	0.60	13.20	6.75	27,000	37,000	7302C	36302	21.38	13.50	22,200	29,600	7302CDB	7302CDF	7302CDT	21.0	36.0	38.5	1.0	0.5	0.055
	42	13	26	1.00	0.60	12.80	6.54	21,000	29,000	7302AC	46302	20.74	13.08	17,400	23,200	7302ACDB	7302ACDF	7302ACDT	21.0	36.0	38.5	1.0	0.5	0.056
	42	13	26	1.00	0.60	12.45	6.58	17,000	22,000	7302B	66302	20.17	13.16	13,200	17,600	7302BDB	7302BDF	7302BDT	21.0	36.0	38.5	1.0	0.5	0.057
15	35	10	20	0.30	0.15	6.61	3.81	28,000	40,000	7003C	36103	10.71	7.62	24,000	32,000	7003CDB	7003CDF	7003CDT	19.5	32.5	33.5	0.3	0.15	0.045
	35	10	20	0.30	0.15	6.30	3.65	25,000	35,000	7003AC	46103	10.21	7.30	21,000	28,000	7003ACDB	7003ACDF	7003ACDT	19.5	32.5	33.5	0.3	0.15	0.046
	40	12	24	0.60	0.30	10.90	5.82	27,000	38,000	7203C	36203	17.66	11.64	22,800	30,400	7203CDB	7203CDF	7203CDT	22.0	35.0	37.5	0.6	0.3	0.062
	40	12	24	0.60	0.30	10.50	5.61	23,000	32,000	7203AC	46203	17.01	11.22	19,200	25,600	7203ACDB	7203ACDF	7203ACDT	22.0	35.0	37.5	0.6	0.3	0.064



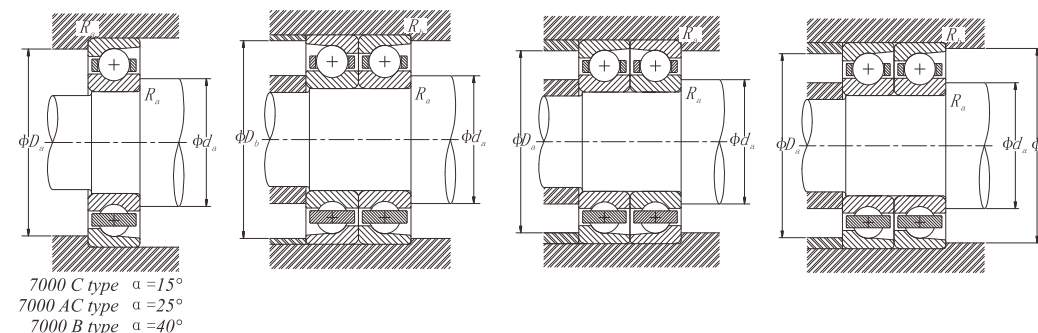
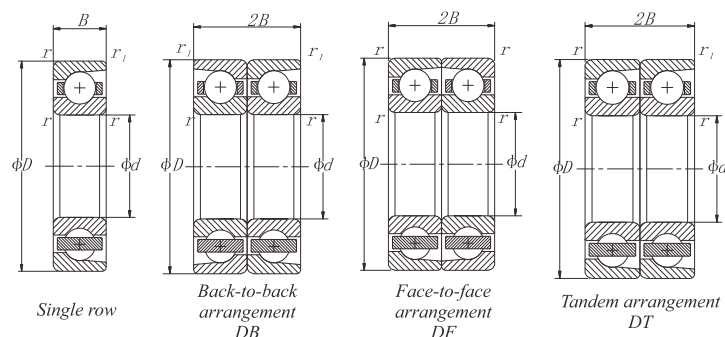
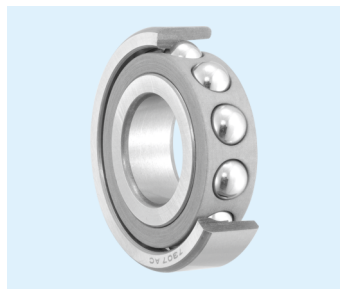
d 17~30 mm

Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r	r ₁	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
17	40	12	24	0.60	0.30	9.93	5.54	15,000	21,000	7203B	66203	16.09	11.08	12,600	16,800	7203BDB	7203BDF	7203BDT	22.0	35.0	37.5	0.6	0.3	0.066
	47	14	28	1.00	0.60	15.70	8.24	24,000	33,000	7303C	36303	25.43	16.48	19,800	26,400	7303CDB	7303CDF	7303CDT	23.0	41.0	43.5	1.0	0.5	0.105
	47	14	28	1.00	0.60	15.20	7.99	19,000	27,000	7303AC	46303	24.62	15.98	16,200	21,600	7303ACDB	7303ACDF	7303ACDT	23.0	41.0	43.5	1.0	0.5	0.107
	47	14	28	1.00	0.60	14.80	8.02	15,000	20,000	7303B	66303	23.98	16.04	12,000	16,000	7303BDB	7303BDF	7303BDT	23.0	41.0	43.5	1.0	0.5	0.109
20	42	12	24	0.60	0.30	11.10	6.56	24,000	34,000	7004C	36104	17.98	13.12	20,400	27,200	7004CDB	7004CDF	7004CDT	25.0	37.0	39.5	0.6	0.3	0.079
	42	12	24	0.60	0.30	10.60	6.27	21,000	29,000	7004AC	46104	17.17	12.54	17,400	23,200	7004ACDB	7004ACDF	7004ACDT	25.0	37.0	39.5	0.6	0.3	0.080
	47	14	28	1.00	0.60	14.50	8.05	23,000	32,000	7204C	36204	23.49	16.10	19,200	25,600	7204CDB	7204CDF	7204CDT	26.0	41.0	43.5	1.0	0.5	0.098
	47	14	28	1.00	0.60	14.00	7.77	20,000	27,000	7204AC	46204	22.68	15.54	16,200	21,600	7204ACDB	7204ACDF	7204ACDT	26.0	41.0	43.5	1.0	0.5	0.100
	47	14	28	1.00	0.60	13.30	7.63	13,000	18,000	7204B	66204	21.55	15.26	10,800	14,400	7204BDB	7204BDF	7204BDT	26.0	41.0	43.5	1.0	0.5	0.102
	52	15	30	1.10	0.60	18.50	9.96	21,000	29,000	7304C	36304	29.97	19.92	17,400	23,200	7304CDB	7304CDF	7304CDT	27.0	45.0	47.0	1.0	0.6	0.136
	52	15	30	1.10	0.60	17.90	9.62	17,000	24,000	7304AC	46304	29.00	19.24	14,400	19,200	7304ACDB	7304ACDF	7304ACDT	27.0	45.0	47.0	1.0	0.6	0.138
	52	15	30	1.10	0.60	17.30	9.67	13,000	18,000	7304B	66304	28.03	19.34	10,800	14,400	7304BDB	7304BDF	7304BDT	27.0	45.0	47.0	1.0	0.6	0.140
25	47	12	24	0.60	0.30	11.70	7.44	21,000	29,000	7005C	36105	18.95	14.88	17,400	23,200	7005CDB	7005CDF	7005CDT	30.0	42.0	44.5	0.6	0.3	0.091
	47	12	24	0.60	0.30	11.10	7.08	18,000	25,000	7005AC	46105	17.98	14.16	15,000	20,000	7005ACDB	7005ACDF	7005ACDT	30.0	42.0	44.5	0.6	0.3	0.093
	52	15	30	1.00	0.60	16.60	10.20	20,000	28,000	7205C	36205	26.89	20.40	16,800	22,400	7205CDB	7205CDF	7205CDT	31.0	46.0	48.5	1.0	0.5	0.122
	52	15	30	1.00	0.60	15.90	9.77	17,000	24,000	7205AC	46205	25.76	19.54	14,400	19,200	7205ACDB	7205ACDF	7205ACDT	31.0	46.0	48.5	1.0	0.5	0.125
	52	15	30	1.00	0.60	14.80	9.39	11,000	16,000	7205B	66205	23.98	18.78	9,600	12,800	7205BDB	7205BDF	7205BDT	31.0	46.0	48.5	1.0	0.5	0.129
	62	17	34	1.10	0.60	26.00	14.50	18,000	24,000	7305C	36305	42.12	29.00	14,400	19,200	7305CDB	7305CDF	7305CDT	32.0	55.0	57.0	1.0	0.6	0.227
	62	17	34	1.10	0.60	25.20	14.10	14,000	20,000	7305AC	46305	40.82	28.20	12,000	16,000	7305ACDB	7305ACDF	7305ACDT	32.0	55.0	57.0	1.0	0.6	0.230
	62	17	34	1.10	0.60	24.40	14.10	11,000	15,000	7305B	66305	39.53	28.20	9,000	12,000	7305BDB	7305BDF	7305BDT	32.0	55.0	57.0	1.0	0.6	0.234
30	55	13	26	1.00	0.60	15.10	10.25	17,500	25,000	7006C	36106	24.46	20.50	15,000	20,000	7006CDB	7006CDF	7006CDT	36.0	49.0	51.5	1.0	0.5	0.133
	55	13	26	1.00	0.60	14.40	9.80	15,000	21,000	7006AC	46106	23.33	19.60	12,600	16,800	7006ACDB	7006ACDF	7006ACDT	36.0	49.0	51.5	1.0	0.5	0.135
	62	16	32	1.00	0.60	23.00	14.70	17,000	23,000	7206C	36206	37.26	29.40	13,800	18,400	7206CDB	7206CDF	7206CDT	36.0	56.0	58.5	1.0	0.5	0.190
	62	16	32	1.00	0.60	22.10	14.10	14,000	20,000	7206AC	46206	35.80	28.20	12,000	16,000	7206ACDB	7206ACDF	7206ACDT	36.0	56.0	58.5	1.0	0.5	0.193
	62	16	32	1.00	0.60	20.50	13.50	9,400	13,000	7206B	66206	33.21	27.00	7,800	10,400	7206BDB	7206BDF	7206BDT	36.0	56.0	58.5	1.0	0.5	0.197
	72	19	38	1.10	0.60	32.20	20.10	15,000	21,000	7306C	36306	52.16	40.20	12,600	16,800	7306CDB	7306CDF	7306CDT	37.0	65.0	67.0	1.0	0.6	0.339
	72	19	38	1.10	0.60	31.00	19.30	12,000	17,000	7306AC	46306	50.22	38.60	10,200	13,600	7306ACDB	7306ACDF	7306ACDT	37.0	65.0	67.0	1.0	0.6	0.345
	72	19	38	1.10	0.60	31.10	19.30	9,600	13,000	7306B	66306	50.38	38.60	7,800	10,400	7306BDB	7306BDF	7306BDT	37.0	65.0	67.0	1.0	0.6	0.352



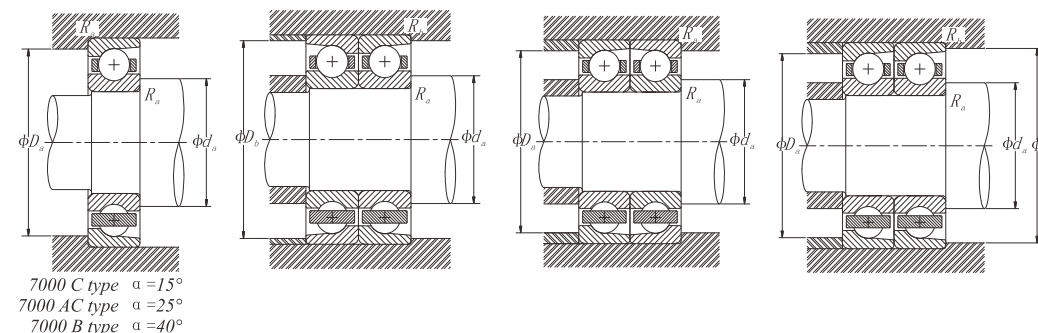
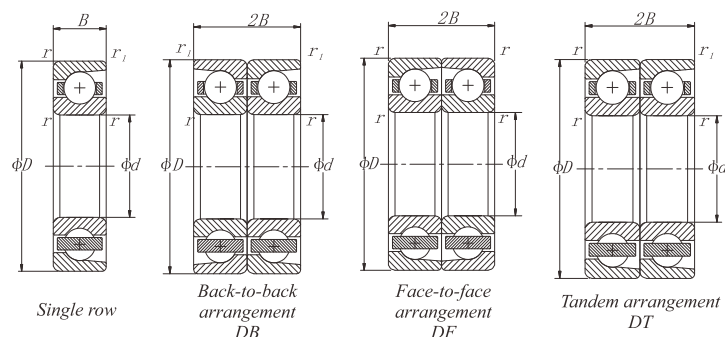
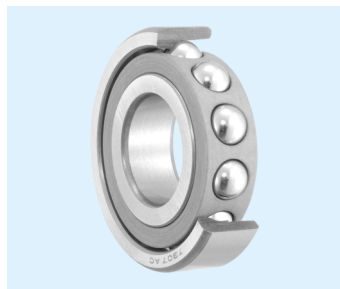
d 35~50 mm

Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)	
d	D	B	2B	r (Min)	r _i (Min)	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}			Back-to-back	Face-to-face	Tandem	d _a Min	D _a Max	D _b Max	R _a Max	R _b Max		
35	62	14	28	1.00	0.60	19.10	13.70	15,000	22,000	7007C	36107	30.94	27.40		13,000	18,000	7007CDB	7007CDF	7007CDT	41.0	56.0	58.5	1.0	0.5	0.160
	62	14	28	1.00	0.60	18.20	13.10	13,000	19,000	7007AC	46107	29.48	26.20		11,000	15,000	7007ACDB	7007ACDF	7007ACDT	41.0	56.0	58.5	1.0	0.5	0.180
	72	17	34	1.10	0.60	30.40	20.00	15,000	20,000	7207C	36207	49.25	40.00		12,000	16,000	7207CDB	7207CDF	7207CDT	42.0	65.0	67.0	1.0	0.6	0.275
	72	17	34	1.10	0.60	29.10	19.10	12,000	17,000	7207AC	46207	47.14	38.20		10,000	14,000	7207ACDB	7207ACDF	7207ACDT	42.0	65.0	67.0	1.0	0.6	0.281
	72	17	34	1.10	0.60	27.10	18.40	8,100	11,000	7207B	66207	43.90	36.80		6,600	8,800	7207BDB	7207BDF	7207BDT	42.0	65.0	67.0	1.0	0.6	0.287
	80	21	42	1.50	1.00	38.50	25.50	13,000	18,000	7307C	36307	62.37	51.00		11,000	14,000	7307CDB	7307CDF	7307CDT	43.5	71.5	74.5	1.5	0.8	0.455
	80	21	42	1.50	1.00	37.00	24.50	11,000	15,000	7307AC	46307	59.94	49.00		9,000	12,000	7307ACDB	7307ACDF	7307ACDT	43.5	71.5	74.5	1.5	0.8	0.462
	80	21	42	1.50	1.00	38.40	24.40	8,400	11,000	7307B	66307	62.21	48.80		6,600	8,800	7307BDB	7307BDF	7307BDT	43.5	71.5	74.5	1.5	0.8	0.469
40	68	15	30	1.00	0.60	20.60	15.90	14,000	19,000	7008C	36108	33.37	31.80		11,000	15,000	7008CDB	7008CDF	7008CDT	46.0	62.0	64.5	1.0	0.5	0.219
	68	15	30	1.00	0.60	19.50	15.10	12,000	17,000	7008AC	46108	31.59	30.20		10,000	14,000	7008ACDB	7008ACDF	7008ACDT	46.0	62.0	64.5	1.0	0.5	0.222
	80	18	36	1.10	0.60	35.20	25.80	13,000	18,000	7208C	36208	57.02	51.60		11,000	14,000	7208CDB	7208CDF	7208CDT	47.0	73.0	75.0	1.0	0.6	0.340
	80	18	36	1.10	0.60	33.60	24.70	11,000	15,000	7208AC	46208	54.43	49.40		9,000	12,000	7208ACDB	7208ACDF	7208ACDT	47.0	73.0	75.0	1.0	0.6	0.355
	80	18	36	1.10	0.60	32.10	23.00	8,300	11,000	7208B	66208	52.00	46.00		6,600	8,800	7208BDB	7208BDF	7208BDT	47.0	73.0	75.0	1.0	0.6	0.375
	90	23	46	1.50	1.00	51.00	34.40	12,000	16,000	7308C	36308	65.93	54.20		9,750	13,000	7308CDB	7308CDF	7308CDT	48.5	81.5	84.5	1.5	0.8	0.610
	90	23	46	1.50	1.00	49.20	33.20	9,500	13,000	7308AC	46308	63.18	51.60		7,500	10,000	7308ACDB	7308ACDF	7308ACDT	48.5	81.5	84.5	1.5	0.8	0.625
	90	23	46	1.50	1.00	44.80	30.20	7,400	9,900	7308B	66308	72.58	60.40		5,900	7,900	7308BDB	7308BDF	7308BDT	48.5	81.5	84.5	1.5	0.8	0.636
45	75	16	32	1.00	0.60	24.40	19.30	12,000	17,500	7009C	36109	39.53	38.60		10,500	14,000	7009CDB	7009CDF	7009CDT	51.0	69.0	71.5	1.0	0.5	0.270
	75	16	32	1.00	0.60	23.10	18.30	11,000	15,000	7009AC	46109	37.42	36.60		9,000	12,000	7009ACDB	7009ACDF	7009ACDT	51.0	69.0	71.5	1.0	0.5	0.282
	85	19	38	1.10	0.60	38.10	27.80	12,000	17,000	7209C	36209	61.72	55.60		10,000	14,000	7209CDB	7209CDF	7209CDT	52.0	78.0	80.0	1.0	0.6	0.395
	85	19	38	1.10	0.60	36.40	26.60	10,000	14,000	7209AC	46209	58.97	53.20		8,200	11,000	7209ACDB	7209ACDF	7209ACDT	52.0	78.0	80.0	1.0	0.6	0.404
	85	19	38	1.10	0.60	36.00	26.30	7,400	9,900	7209B	66209	58.32	52.60		5,900	7,900	7209BDB	7209BDF	7209BDT	52.0	78.0	80.0	1.0	0.6	0.410
	100	25	50	1.50	1.00	68.90	45.80	11,000	14,000	7309C	36309	111.62	91.60		8,400	11,200	7309CDB	7309CDF	7309CDT	53.5	91.5	94.5	1.5	0.8	0.810
	100	25	50	1.50	1.00	66.40	44.00	8,600	12,000	7309AC	46309	107.57	88.00		7,200	9,600	7309ACDB	7309ACDF	7309ACDT	53.5	91.5	94.5	1.5	0.8	0.837
	100	25	50	1.50	1.00	58.30	40.10	6,600	8,900	7309B	66309	94.45	80.20		5,300	7,100	7309BDB	7309BDF	7309BDT	53.5	91.5	94.5	1.5	0.8	0.854
50	80	16	32	1.00	0.60	25.60	20.70	11,000	16,000	7010C	36110	41.47	41.40		9,600	12,800	7010CDB	7010CDF	7010CDT	56.0	74.0	76.5	1.0	0.5	0.300
	80	16	32	1.00	0.60	24.20	19.60	9,900	14,000	7010AC	46110	39.20	39.20		8,400	11,200	7010ACDB	7010ACDF	7010ACDT	56.0	74.0	76.5	1.0	0.5	0.306
	90	20	40	1.10	0.60	44.80	34.00	11,000	15,000	7210C	36210	72.58	68.00		9,000	12,000	7210CDB	7210CDF	7210CDT	57.0	83.0	85.0	1.0	0.6	0.448
	90	20	40	1.10	0.60	42.70	32.50	9,400	13,000	7210AC	46210	69.17	65.00		7,500	10,000	7210ACDB	7210ACDF	7210ACDT	57.0	83.0	85.0	1.0	0.6	0.457



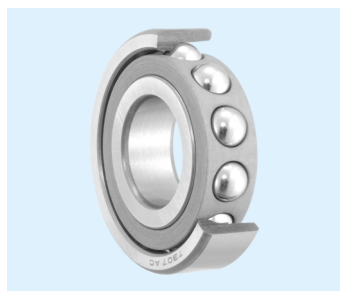
d 50~65 mm

Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement) (kN)		Limiting speeds (arrangement) (r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r	r ₁	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
50	90	20	40	1.10	0.60	37.40	28.60	6700	9000	7210B	66210	60.6	57.2	5,400	7,200	7210BDB	7210BDF	7210BDT	57.0	83.0	85.0	1.0	0.6	0.466
	110	27	54	2.00	1.00	80.20	54.40	9600	13000	7310C	36310	129.9	108.8	7,800	10,400	7310CDB	7310CDF	7310CDT	60.0	100.0	104.0	2.0	1.0	1.070
	110	27	54	2.00	1.00	77.30	52.40	7700	11000	7310AC	46310	125.2	104.8	6,600	8,800	7310ACDB	7310ACDF	7310ACDT	60.0	100.0	104.0	2.0	1.0	1.090
	110	27	54	2.00	1.00	68.20	47.90	5400	7500	7310B	66310	110.5	95.8	4,500	6,000	7310BDB	7310BDF	7310BDT	60.0	100.0	104.0	2.0	1.0	1.110
55	90	18	36	1.10	0.60	36.40	29.10	10,000	14,000	7011C	36111	59.0	58.2	8,400	11,200	7011CDB	7011CDF	7011CDT	62.0	83.0	85.0	1.0	0.6	0.210
	90	18	36	1.10	0.60	34.50	27.60	8,800	12,000	7011AC	46110	55.9	55.2	7,200	9,600	7011ACDB	7011ACDF	7011ACDT	62.0	83.0	85.0	1.0	0.6	0.214
	100	21	42	1.50	1.00	52.90	39.90	10,000	14,000	7211C	36211	85.7	79.8	8,400	11,200	7211CDB	7211CDF	7211CDT	63.5	91.5	94.5	1.5	0.8	0.589
	100	21	42	1.50	1.00	50.50	38.20	8,500	12,000	7211AC	46211	81.8	76.4	7,200	9,600	7211ACDB	7211ACDF	7211ACDT	63.5	91.5	94.5	1.5	0.8	0.600
	100	21	42	1.50	1.00	46.30	36.10	6,100	8,200	7211B	66211	75.0	72.2	4,900	6,600	7211BDB	7211BDF	7211BDT	63.5	91.5	94.5	1.5	0.8	0.612
	120	29	58	2.00	1.00	86.60	60.00	8,800	12,000	7311C	36311	140.3	120.0	7,200	9,600	7311CDB	7311CDF	7311CDT	65.0	110.0	114.0	2.0	1.0	1.370
	120	29	58	2.00	1.00	83.30	57.90	7,100	9,800	7311AC	46311	134.9	115.8	5,900	7,800	7311ACDB	7311ACDF	7311ACDT	65.0	110.0	114.0	2.0	1.0	1.390
	120	29	58	2.00	1.00	78.80	56.30	4,900	6,900	7311B	66311	127.7	112.6	4,100	5,500	7311BDB	7311BDF	7311BDT	65.0	110.0	114.0	2.0	1.0	1.420
	95	18	36	1.10	0.60	39.00	33.10	9,600	13,500	7012C	36112	63.2	66.2	8,100	10,800	7012CDB	7012CDF	7012CDT	67.0	88.0	90.0	1.0	0.6	0.467
	95	18	36	1.10	0.60	37.00	31.40	8,300	11,600	7012AC	46112	59.9	62.8	7,000	9,300	7012ACDB	7012ACDF	7012ACDT	67.0	88.0	90.0	1.0	0.6	0.478
60	110	22	44	1.50	1.00	61.00	48.30	9,100	13,000	7212C	36212	98.8	96.6	7,800	10,400	7212CDB	7212CDF	7212CDT	68.5	101.5	104.5	1.5	0.8	0.750
	110	22	44	1.50	1.00	58.20	46.00	7,800	11,000	7212AC	46212	94.3	92.0	6,600	8,800	7212ACDB	7212ACDF	7212ACDT	68.5	101.5	104.5	1.5	0.8	0.765
	110	22	44	1.50	1.00	56.10	44.40	5,700	7,600	7212B	66212	90.9	88.8	4,600	6,100	7212BDB	7212BDF	7212BDT	68.5	101.5	104.5	1.5	0.8	0.780
	130	31	62	2.10	1.10	99.10	70.00	8,100	11,000	7312C	36312	160.5	140.0	6,600	8,800	7312CDB	7312CDF	7312CDT	72.0	118.0	123.0	2.0	1.0	1.700
	130	31	62	2.10	1.10	95.30	67.30	6,500	9,100	7312AC	46312	154.4	134.6	5,500	7,300	7312ACDB	7312ACDF	7312ACDT	72.0	118.0	123.0	2.0	1.0	1.740
	130	31	62	2.10	1.10	90.00	65.50	4,500	6,300	7312B	66312	145.8	131.0	3,800	5,000	7312BDB	7312BDF	7312BDT	72.0	118.0	123.0	2.0	1.0	1.770
	100	18	36	1.10	0.60	41.50	37.20	9,000	13,000	7013C	36113	67.2	74.4	7,800	10,400	7013CDB	7013CDF	7013CDT	72.0	93.0	95.0	1.0	0.6	0.495
	100	18	36	1.10	0.60	39.30	35.40	7,800	11,000	7013AC	46113	63.7	70.8	6,600	8,800	7013ACDB	7013ACDF	7013ACDT	72.0	93.0	95.0	1.0	0.6	0.509
	120	23	46	1.50	1.00	60.70	49.30	8,400	12,000	7213C	36213	98.3	98.6	7,200	9,600	7213CDB	7213CDF	7213CDT	73.5	111.5	114.5	1.5	0.8	0.945
	120	23	46	1.50	1.00	57.70	47.10	7,100	9,900	7213AC	46213	93.5	94.2	5,900	7,900	7213ACDB	7213ACDF	7213ACDT	73.5	111.5	114.5	1.5	0.8	0.962
65	120	23	46	1.50	1.00	63.60	52.60	5,200	7,000	7213B	66213	103.0	105.2	4,200	5,600	7213BDB	7213BDF	7213BDT	73.5	111.5	114.5	1.5	0.8	0.981
	140	33	66	2.10	1.10	112.20	80.50	7,500	10,000	7313C	36313	181.8	161.0	6,000	8,000	7313CDB	7313CDF	7313CDT	77.0	128.0	133.0	2.0	1.0	2.090
	140	33	66	2.10	1.10	107.90	77.40	6,000	8,400	7313AC	46313	174.8	154.8	5,000	6,700	7313ACDB	7313ACDF	7313ACDT	77.0	128.0	133.0	2.0	1.0	2.110
	140	33	66	2.10	1.10	101.80	75.40	4,200	5,900	7313B	66313	164.9	150.8	3,500	4,700	7313BDB	7313BDF	7313BDT	77.0	128.0	133.0	2.0	1.0	2.150

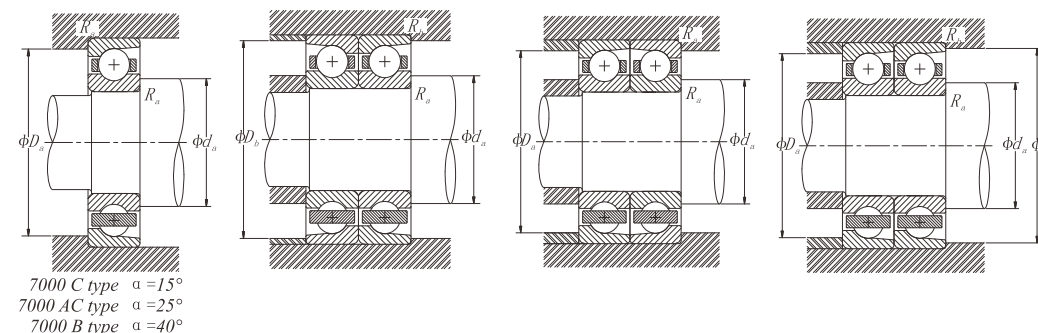
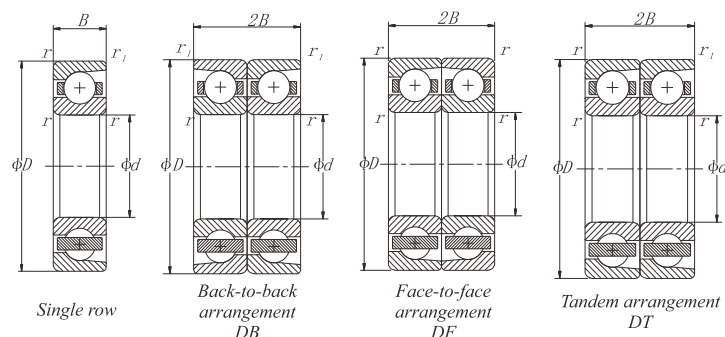


d 70~85 mm

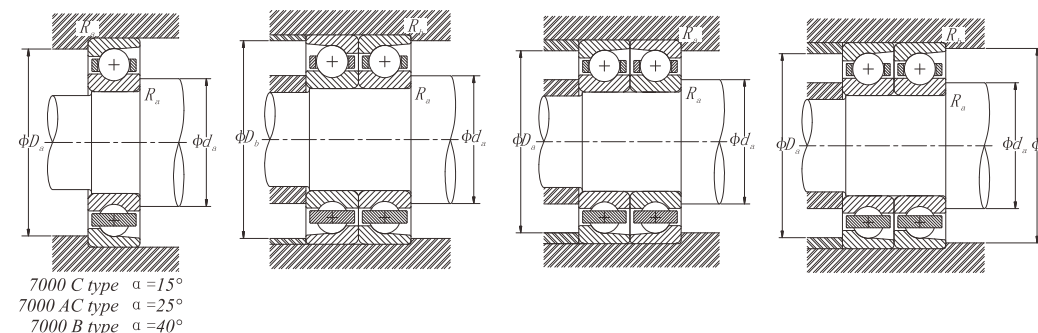
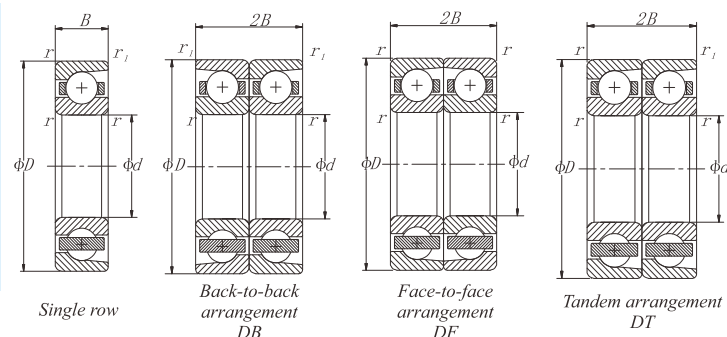
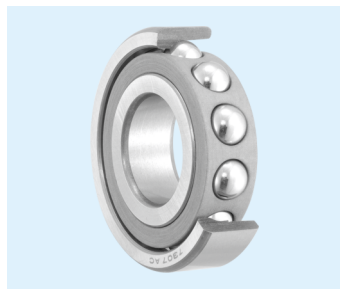
Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r (Min)	r ₁ (Min)	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
70	110	20	40	1.10	0.60	49.90	45.50	8,300	11,500	7014C	36114	80.8	91.0	6,900	9,200	7014CDB	7014CDF	7014CDT	77.0	103.0	105.0	1.0	0.6	0.690
	110	20	40	1.10	0.60	47.30	43.30	7,100	10,000	7014AC	46114	76.6	86.6	6,000	8,000	7014ACDB	7014ACDF	7014ACDT	77.0	103.0	105.0	1.0	0.6	0.705
	125	24	48	1.50	1.00	76.10	63.50	8,000	11,000	7214C	36214	123.3	127.0	6,600	8,800	7214CDB	7214CDF	7214CDT	78.5	116.5	119.5	1.5	0.8	1.070
	125	24	48	1.50	1.00	72.50	60.60	6,800	9,400	7214AC	46214	117.5	121.2	5,600	7,500	7214ACDB	7214ACDF	7214ACDT	78.5	116.5	119.5	1.5	0.8	1.090
	125	24	48	1.50	1.00	69.10	57.80	4,900	6,500	7214B	66214	111.9	115.6	3,900	5,200	7214BDB	7214BDF	7214BDT	78.5	116.5	119.5	1.5	0.8	1.110
	150	35	70	2.10	1.10	126.20	91.90	7,000	9,500	7314C	36314	204.4	183.8	5,700	7,600	7314CDB	7314CDF	7314CDT	82.0	138.0	143.0	2.0	1.0	2.510
	150	35	70	2.10	1.10	121.30	88.30	5,600	7,800	7314AC	46314	196.5	176.6	4,700	6,200	7314ACDB	7314ACDF	7314ACDT	82.0	138.0	143.0	2.0	1.0	2.560
	150	35	70	2.10	1.10	114.40	86.00	4,400	5,800	7314B	66314	185.3	172.0	3,500	4,600	7314BDB	7314BDF	7314BDT	82.0	138.0	143.0	2.0	1.0	2.610
	115	20	40	1.10	0.60	51.20	48.30	7,800	11,000	7015C	36115	82.9	96.6	6,600	8,800	7015CDB	7015CDF	7015CDT	82.0	108.0	110.0	1.0	0.6	0.730
	115	20	40	1.10	0.60	48.50	46.00	6,700	9,500	7015AC	46115	78.6	92.0	5,700	7,600	7015ACDB	7015ACDF	7015ACDT	82.0	108.0	110.0	1.0	0.6	0.745
	130	25	50	1.50	1.00	75.90	64.40	7,600	10,500	7215C	36215	123.0	128.8	6,300	8,400	7215CDB	7215CDF	7215CDT	83.5	121.5	124.5	1.5	0.8	1.150
	130	25	50	1.50	1.00	72.20	61.50	6,400	9,000	7215AC	46215	117.0	123.0	5,400	7,200	7215ACDB	7215ACDF	7215ACDT	83.5	121.5	124.5	1.5	0.8	1.170
75	130	25	50	1.50	1.00	68.60	58.30	4,500	6,000	7215B	66215	111.1	116.6	3,600	4,800	7215BDB	7215BDF	7215BDT	83.5	121.5	124.5	1.5	0.8	1.190
	160	37	74	2.10	1.10	137.50	104.10	6,500	8,900	7315C	36315	222.8	208.2	5,300	7,100	7315CDB	7315CDF	7315CDT	87.0	148.0	153.0	2.0	1.0	3.020
	160	37	74	2.10	1.10	132.10	100.00	5,300	7,300	7315AC	46315	214.0	200.0	4,400	5,800	7315ACDB	7315ACDF	7315ACDT	87.0	148.0	153.0	2.0	1.0	3.070
	160	37	74	2.10	1.10	124.50	97.30	4,100	5,400	7315B	66315	201.7	194.6	3,200	4,300	7315BDB	7315BDF	7315BDT	87.0	148.0	153.0	2.0	1.0	3.130
	125	22	44	1.10	0.60	58.70	55.20	7,300	10,000	7016C	36116	95.1	110.4	6,000	8,000	7016CDB	7016CDF	7016CDT	87.0	118.0	120.0	1.0	0.6	0.980
	125	22	44	1.10	0.60	55.50	52.50	6,300	8,800	7016AC	46116	89.9	105.0	5,300	7,000	7016ACDB	7016ACDF	7016ACDT	87.0	118.0	120.0	1.0	0.6	0.994
	140	26	52	2.00	1.00	93.20	81.50	7,100	9,800	7216C	36216	151.0	163.0	5,900	7,800	7216CDB	7216CDF	7216CDT	90.0	130.0	134.0	2.0	1.0	1.360
	140	26	52	2.00	1.00	88.70	78.00	6,000	8,300	7216AC	46216	143.7	156.0	5,000	6,600	7216ACDB	7216ACDF	7216ACDT	90.0	130.0	134.0	2.0	1.0	1.390
	140	26	52	2.00	1.00	80.50	69.20	4,300	5,700	7216B	66216	130.4	138.4	3,400	4,600	7216BDB	7216BDF	7216BDT	90.0	130.0	134.0	2.0	1.0	1.420
	170	39	78	2.10	1.10	149.00	116.90	6,100	8,400	7316C	36316	241.4	233.8	5,000	6,700	7316CDB	7316CDF	7316CDT	92.0	158.0	163.0	2.0	1.0	3.590
	170	39	78	2.10	1.10	143.10	112.20	5,000	6,900	7316AC	46316	231.8	224.4	4,100	5,500	7316ACDB	7316ACDF	7316ACDT	92.0	158.0	163.0	2.0	1.0	3.650
	170	39	78	2.10	1.10	134.80	109.20	3,800	5,100	7316B	66316	218.4	218.4	3,100	4,100	7316BDB	7316BDF	7316BDT	92.0	158.0	163.0	2.0	1.0	3.720
85	130	22	44	1.10	0.60	60.20	58.60	6,900	9,800	7017C	36117	97.5	117.2	5,900	7,800	7017CDB	7017CDF	7017CDT	92.0	123.0	125.0	1.0	0.6	1.020
	130	22	44	1.10	0.60	56.90	55.50	6,000	8,400	7017AC	46117	92.2	111.0	5,000	6,700	7017ACDB	7017ACDF	7017ACDT	92.0	123.0	125.0	1.0	0.6	1.040
	150	28	56	2.00	1.00	92.40	78.90	6,600	9,200	7217C	36217	149.7	157.8	5,500	7,400	7217CDB	7217CDF	7217CDT	95.0	140.0	144.0	2.0	1.0	1.760
	150	28	56	2.00	1.00	87.90	75.30	5,600	7,800	7217AC	46217	142.4	150.6	4,700	6,200	7217ACDB	7217ACDF	7217ACDT	95.0	140.0	144.0	2.0	1.0	1.780



d 85~100 mm

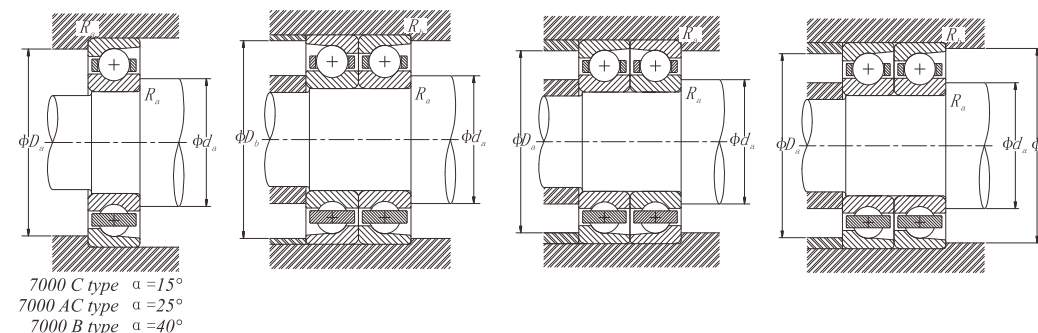
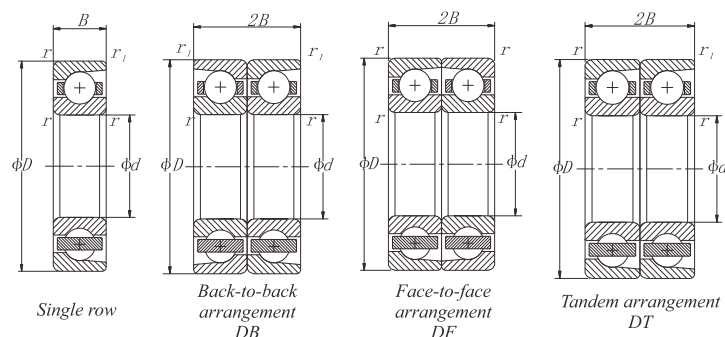
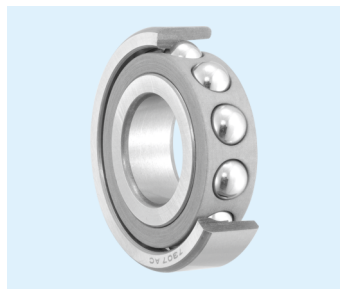


Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r	r ₁	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
85	150	28	56	2.00	1.00	79.70	70.20	4000	5300	7217B	66217	129.1	140.4	3,200	4,200	7217BDB	7217BDF	7217BDT	95.0	140.0	144.0	2.0	1.0	1.820
	180	41	82	3.00	1.10	160.70	130.50	5800	7900	7317C	36317	260.3	261.0	4,700	6,300	7317CDB	7317CDF	7317CDT	99.0	166.0	173.0	2.5	1.0	4.260
	180	41	82	3.00	1.10	154.30	125.30	4700	6500	7317AC	46317	250.0	250.6	3,900	5,200	7317ACDB	7317ACDF	7317ACDT	99.0	166.0	173.0	2.5	1.0	4.340
	180	41	82	3.00	1.10	145.40	121.80	3600	4800	7317B	66317	235.5	243.6	2,900	3,800	7317BDB	7317BDF	7317BDT	99.0	166.0	173.0	2.5	1.0	4.430
90	140	24	48	1.50	1.00	66.60	65.80	6,500	9,100	7018C	36118	107.9	131.6	5,500	7,300	7018CDB	7018CDF	7018CDT	98.5	131.5	134.5	1.5	0.8	1.310
	140	24	48	1.50	1.00	63.00	62.40	5,600	7,850	7018AC	46118	102.1	124.8	4,700	6,300	7018ACDB	7018ACDF	7018ACDT	98.5	131.5	134.5	1.5	0.8	1.350
	160	30	60	2.00	1.00	122.60	104.80	6,200	8,600	7218C	36218	198.6	209.6	5,200	6,900	7218CDB	7218CDF	7218CDT	100.0	150.0	154.0	2.0	1.0	2.140
	160	30	60	2.00	1.00	116.90	99.90	5,300	7,300	7218AC	46218	189.4	199.8	4,400	5,800	7218ACDB	7218ACDF	7218ACDT	100.0	150.0	154.0	2.0	1.0	2.180
	160	30	60	2.00	1.00	106.60	93.70	3,800	5,000	7218B	66218	172.7	187.4	3,000	4,000	7218BDB	7218BDF	7218BDT	100.0	150.0	154.0	2.0	1.0	2.220
	190	43	86	3.00	1.10	183.10	158.00	5,500	7,500	7318C	36318	296.6	316.0	4,500	6,000	7318CDB	7318CDF	7318CDT	104.0	176.0	183.0	2.5	1.0	4.970
	190	43	86	3.00	1.10	175.70	151.70	4,400	6,200	7138AC	46318	284.6	303.4	3,700	5,000	7318ACDB	7138ACDF	7138ACDT	104.0	176.0	183.0	2.5	1.0	5.060
	190	43	86	3.00	1.10	156.20	135.20	3,400	4,500	7318B	66318	253.0	270.4	2,700	3,600	7318BDB	7318BDF	7318BDT	104.0	176.0	183.0	2.5	1.0	5.160
	145	24	48	1.50	1.00	73.50	73.20	6,200	8,750	7019C	36119	119.1	146.4	5,300	7,000	7019CDB	7019CDF	7019CDT	103.5	136.5	139.5	1.5	0.8	1.370
	145	24	48	1.50	1.00	69.50	69.30	5,300	7,500	7019AC	46119	112.6	138.6	4,500	6,000	7019ACDB	7019ACDF	7019ACDT	103.5	136.5	139.5	1.5	0.8	1.410
95	170	32	64	2.00	1.10	132.60	111.90	5,900	8,200	7219C	36219	214.8	223.8	4,900	6,600	7219CDB	7219CDF	7219CDT	107.0	158.0	163.0	2.0	1.0	2.620
	170	32	64	2.00	1.10	126.50	106.80	5,000	6,900	7219AC	46219	204.9	213.6	4,100	5,500	7219ACDB	7219ACDF	7219ACDT	107.0	158.0	163.0	2.0	1.0	2.670
	170	32	64	2.00	1.10	115.80	100.60	3,500	4,700	7219B	66219	187.6	201.2	2,800	3,800	7219BDB	7219BDF	7219BDT	107.0	158.0	163.0	2.0	1.0	2.720
	200	45	90	3.00	1.10	185.00	159.80	5,200	7,100	7319C	36319	299.7	319.6	4,300	5,700	7319CDB	7319CDF	7319CDT	109.0	186.0	193.0	2.5	1.0	5.770
	200	45	90	3.00	1.10	177.60	153.50	4,200	5,800	7319AC	46319	287.7	307.0	3,500	4,600	7319ACDB	7319ACDF	7319ACDT	109.0	186.0	193.0	2.5	1.0	5.890
	200	45	90	3.00	1.10	167.20	149.20	3,200	4,200	7319B	66319	270.9	298.4	2,500	3,400	7319BDB	7319BDF	7319BDT	109.0	186.0	193.0	2.5	1.0	6.000
	150	24	48	1.50	1.00	75.30	77.20	6,000	8,400	7020C	36120	122.0	154.4	5,000	6,700	7020CDB	7020CDF	7020CDT	108.5	141.5	144.5	1.5	0.8	1.400
	150	24	48	1.50	1.00	71.20	73.10	5,100	7,200	7020AC	46120	115.3	146.2	4,300	5,800	7020ACDB	7020ACDF	7020ACDT	108.5	141.5	144.5	1.5	0.8	1.470
	180	34	68	2.10	1.10	149.00	126.90	5,600	7,700	7220C	36220	241.4	253.8	4,600	6,200	7220CDB	7220CDF	7220CDT	112.0	168.0	173.0	2.0	1.0	3.120
	180	34	68	2.10	1.10	142.10	121.20	4,700	6,600	7220AC	46220	230.2	242.4	4,000	5,300	7220ACDB	7220ACDF	7220ACDT	112.0	168.0	173.0	2.0	1.0	3.260
100	180	34	68	2.10	1.10	130.20	114.30	3,400	4,500	7220B	66220	210.9	228.6	2,700	3,600	7220BDB	7220BDF	7220BDT	112.0	168.0	173.0	2.0	1.0	3.400
	215	47	94	3.00	1.10	222.10	206.80	4,900	6,700	7320C	36320	359.8	413.6	4,000	5,400	7320CDB	7320CDF	7320CDT	114.0	201.0	208.0	2.5	1.0	7.050
	215	47	94	3.00	1.10	213.60	198.60	3,900	5,500	7320AC	46320	346.0	397.2	3,300	4,400	7320ACDB	7320ACDF	7320ACDT	114.0	201.0	208.0	2.5	1.0	7.180
	215	47	94	3.00	1.10	190.10	177.40	3,000	4,000	7320B	66320	308.0	354.8	2,400	3,200	7320BDB	7320BDF	7320BDT	114.0	201.0	208.0	2.5	1.0	7.320
	215	47	94	3.00	1.10	190.10	177.40	3,000	4,000	7320B	66320	308.0	354.8	2,400	3,200	7320BDB	7320BDF	7320BDT	114.0	201.0	208.0	2.5	1.0	7.320



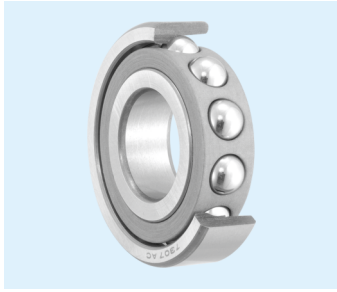
d 105~130 mm

Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement) (kN)		Limiting speeds (arrangement) (r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r (Min)	r _s (Min)	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
105	160	26	52	2.00	1.00	88.1	89.4	5600	7900	7021C	36121	142.7	178.8	1788	6300	7021CDB	7021CDF	7021CDT	115.0	150.0	154.0	2.0	1.0	1.780
	160	26	52	2.00	1.00	83.3	84.7	4800	6800	7021AC	46121	134.9	169.4	1694	5400	7021ACDB	7021ACDF	7021ACDT	115.0	150.0	154.0	2.0	1.0	1.860
	190	36	72	2.10	1.10	162.4	142.9	5300	7300	7221C	36221	263.1	285.8	2858	5800	7221CDB	7221CDF	7221CDT	117.0	178.0	183.0	2.0	1.0	3.700
	190	36	72	2.10	1.10	154.9	136.7	4500	6200	7221AC	46221	250.9	273.4	2734	5000	7221ACDB	7221ACDF	7221ACDT	117.0	178.0	183.0	2.0	1.0	3.790
	190	36	72	2.10	1.10	142.0	128.9	3200	4300	7221B	66221	230.0	257.8	2578	3400	7221BDB	7221BDF	7221BDT	117.0	178.0	183.0	2.0	1.0	3.870
	225	49	98	3.00	1.10	222.6	206.8	4600	6300	7321C	36321	360.6	413.6	4136	5000	7321CDB	7321CDF	7321CDT	119.0	211.0	218.0	2.5	1.0	8.070
	225	49	98	3.00	1.10	213.9	198.6	3800	5200	7321AC	46321	346.5	397.2	3972	4200	7321ACDB	7321ACDF	7321ACDT	119.0	211.0	218.0	2.5	1.0	8.200
	225	49	98	3.00	1.10	190.4	177.3	2900	4500	7321B	66321	308.4	354.6	3546	3600	7321BDB	7321BDF	7321BDT	119.0	211.0	218.0	2.5	1.0	8.360
	170	28	56	2.00	1.00	104.3	106.3	5300	7500	7022C	36122	169.0	212.6	2126	6000	7022CDB	7022CDF	7022CDT	120.0	160.0	164.0	2.0	1.0	2.200
	170	28	56	2.00	1.00	98.7	101.1	4600	6450	7022AC	46122	159.9	202.2	2022	5200	7022ACDB	7022ACDF	7022ACDT	120.0	160.0	164.0	2.0	1.0	2.300
	200	38	76	2.10	1.10	175.8	159.6	5000	7000	7222C	36222	284.8	319.2	3192	5600	7222CDB	7222CDF	7222CDT	122.0	188.0	193.0	2.0	1.0	4.370
	200	38	76	2.10	1.10	167.8	152.9	4300	5900	7222AC	46222	271.8	305.8	3058	4700	7222ACDB	7222ACDF	7222ACDT	122.0	188.0	193.0	2.0	1.0	4.450
110	200	38	76	2.10	1.10	153.9	144.3	3000	4000	7222B	66222	249.3	288.6	2886	3200	7222BDB	7222BDF	7222BDT	122.0	188.0	193.0	2.0	1.0	4.540
	240	50	100	3.00	1.10	248.4	240.1	4400	6000	7322C	36322	402.4	480.2	4802	4800	7322CDB	7322CDF	7322CDT	124.0	226.0	233.0	2.5	1.0	9.400
	240	50	100	3.00	1.10	239.0	231.4	3500	4900	7322AC	46322	387.2	462.8	4628	3900	7322ACDB	7322ACDF	7322ACDT	124.0	226.0	233.0	2.5	1.0	9.600
	240	50	100	3.00	1.10	225.8	225.3	2700	3700	7322B	66322	365.8	450.6	4506	3000	7322BDB	7322BDF	7322BDT	124.0	226.0	233.0	2.5	1.0	9.800
	180	28	56	2.00	1.00	112.1	116.5	5000	7000	7024C	36124	181.6	233.0	2330	5600	7024CDB	7024CDF	7024CDT	130.0	170.0	174.0	2.0	1.0	2.330
	180	28	56	2.00	1.00	106.1	110.5	4300	6000	7024AC	46124	171.9	221.0	2210	4800	7024ACDB	7024ACDF	7024ACDT	130.0	170.0	174.0	2.0	1.0	2.470
	215	40	80	2.10	1.10	198.4	192.2	4600	6400	7224C	36224	321.4	384.4	3844	5100	7224CDB	7224CDF	7224CDT	132.0	203.0	208.0	2.0	1.0	6.180
	215	40	80	2.10	1.10	189.2	183.5	3900	5500	7224AC	46224	306.5	367.0	3670	4400	7224ACDB	7224ACDF	7224ACDT	132.0	203.0	208.0	2.0	1.0	6.260
	215	40	80	2.10	1.10	165.4	161.4	2800	3700	7224B	66224	267.9	322.8	3228	3000	7224BDB	7224BDF	7224BDT	132.0	203.0	208.0	2.0	1.0	6.320
	260	55	110	2.10	1.10	265.1	270.6	4000	5500	7324C	36324	429.5	541.2	5412	4400	7324CDB	7324CDF	7324CDT	134.0	246.0	253.0	2.5	1.0	14.500
	260	55	110	2.10	1.10	254.1	260.5	3300	4500	7324AC	46324	411.6	521.0	5210	3600	7324ACDB	7324ACDF	7324ACDT	134.0	246.0	253.0	2.5	1.0	14.700
	260	55	110	2.10	1.10	225.1	231.3	2500	3300	7324B	66324	364.7	462.6	4626	2600	7324BDB	7324BDF	7324BDT	134.0	246.0	253.0	2.5	1.0	14.900
130	200	33	66	2.00	1.00	129.0	137.0	4500	6400	7026C	36126	209.0	274.0	2740	5100	7026CDB	7026CDF	7026CDT	140.0	190.0	194.0	2.0	1.0	3.610
	200	33	66	2.00	1.00	122.0	130.0	3900	5500	7026AC	46126	197.6	260.0	2600	4400	7026ACDB	7026ACDF	7026ACDT	140.0	190.0	194.0	2.0	1.0	3.730
	230	40	80	3.00	1.10	206.5	209.0	4300	6000	7226C	36226	334.5	418.0	4180	4800	7226CDB	7226CDF	7226CDT	144.0	216.0	223.0	2.5	1.0	9.960
	230	40	80	3.00	1.10	196.5	199.8	3700	5100	7226AC	46226	318.3	399.6	3996	4100	7226ACDB	7226ACDF	7226ACDT	144.0	216.0	223.0	2.5	1.0	7.150

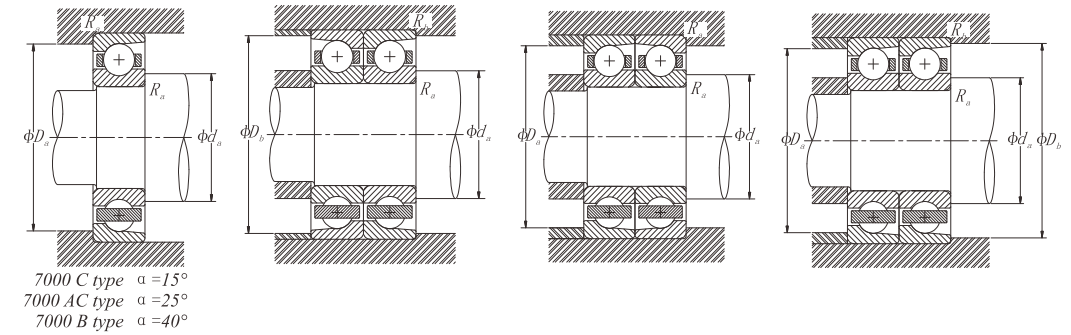
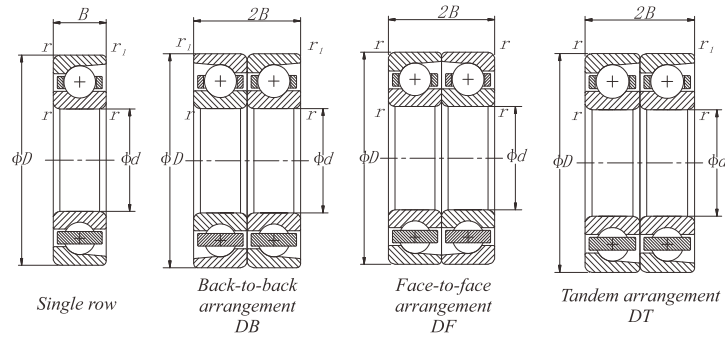


d 130~160 mm

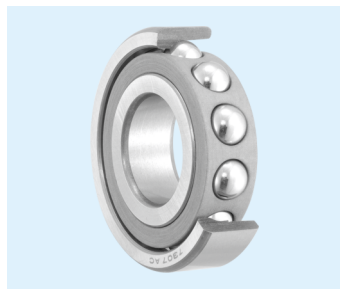
Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r (Min)	r ₁ (Min)	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
130	230	40	80	3.00	1.10	171.0	174.5	2500	3400	7226B	66226	277.0	349.0	2000	2700	7226BDB	7226BDF	7226BDT	144.0	216.0	223.0	2.5	1.0	7.330
	280	58	116	4.00	1.50	294.1	314.1	3700	5100	7326C	36326	476.4	628.2	3100	4100	7326CDB	7326CDF	7326CDT	148.0	262.0	271.5	3.0	1.5	17.400
	280	58	116	4.00	1.50	281.9	302.3	3000	4200	7326AC	46326	456.7	604.6	2500	3400	7326ACDB	7326ACDF	7326ACDT	148.0	262.0	271.5	3.0	1.5	17.600
	280	58	116	4.00	1.50	249.7	268.4	2300	3100	7326B	66322	404.5	536.8	1900	2500	7326BDB	7326BDF	7326BDT	148.0	262.0	271.5	3.0	1.5	17.800
140	210	33	66	2.00	1.00	132.0	145.0	4300	6000	7028C	36128	213.8	290.0	3600	4800	7028CDB	7028CDF	7028CDT	150.0	200.0	204.0	2.0	1.0	3.820
	210	33	66	2.00	1.00	125.0	138.0	3700	5200	7028AC	46128	202.5	276.0	3100	4200	7028ACDB	7028ACDF	7028ACDT	150.0	200.0	204.0	2.0	1.0	3.960
	250	42	84	3.00	1.10	237.8	254.2	4000	5500	7228C	36228	385.2	508.4	3300	4400	7228CDB	7228CDF	7228CDT	154.0	236.0	243.0	2.5	1.0	8.600
	250	42	84	3.00	1.10	226.5	242.6	3400	4700	7228AC	46228	366.9	485.2	2800	3800	7228ACDB	7228ACDF	7228ACDT	154.0	236.0	243.0	2.5	1.0	8.780
	250	42	84	3.00	1.10	197.3	212.2	2300	3600	7228B	66228	319.6	424.4	2200	2900	7228BDB	7228BDF	7228BDT	154.0	236.0	243.0	2.5	1.0	8.900
	300	62	124	4.00	1.50	324.0	360.9	3500	4800	7328C	36328	524.9	721.8	2900	3800	7328CDB	7328CDF	7328CDT	158.0	282.0	291.5	3.0	1.5	20.100
	300	62	124	4.00	1.50	310.5	347.2	2800	3900	7328AC	46328	503.0	694.4	2300	3100	7328ACDB	7328ACDF	7328ACDT	158.0	282.0	291.5	3.0	1.5	21.500
	300	62	124	4.00	1.50	275.0	308.2	2100	3300	7328B	66328	445.5	616.4	2000	2600	7328BDB	7328BDF	7328BDT	158.0	282.0	291.5	3.0	1.5	22.440
	225	35	70	2.10	1.10	150.9	168.1	4000	5600	7030C	36130	244.5	336.2	3400	4500	7030CDB	7030CDF	7030CDT	162.0	213.0	218.0	2.0	1.0	4.650
	225	35	70	2.10	1.10	142.5	159.3	3400	4800	7030AC	46130	230.9	318.6	2900	3800	7030ACDB	7030ACDF	7030ACDT	162.0	213.0	218.0	2.0	1.0	4.820
	270	45	90	3.00	1.10	270.3	303.7	3700	5100	7230C	36230	437.9	607.4	3100	4100	7230CDB	7230CDF	7230CDT	164.0	256.0	263.0	2.5	1.0	10.800
	270	45	90	3.00	1.10	257.5	289.4	3100	4400	7230AC	46230	417.2	578.8	2600	3500	7230ACDB	7230ACDF	7230ACDT	164.0	256.0	263.0	2.5	1.0	11.000
160	270	45	90	3.00	1.10	224.6	253.9	2200	3400	7230B	66230	363.9	507.8	2000	2700	7230BDB	7230BDF	7230BDT	164.0	256.0	263.0	2.5	1.0	11.200
	320	65	130	4.00	1.50	342.5	401.1	3300	4500	7330C	36330	554.9	802.2	2700	3600	7330CDB	7330CDF	7330CDT	168.0	302.0	311.5	3.0	1.5	24.800
	320	65	130	4.00	1.50	327.5	382.9	2600	3700	7330AC	46330	530.6	765.8	2200	3000	7330ACDB	7330ACDF	7330ACDT	168.0	302.0	311.5	3.0	1.5	25.100
	320	65	130	4.00	1.50	288.8	339.8	2000	2600	7330B	66330	467.9	679.6	1600	2100	7330BDB	7330BDF	7330BDT	168.0	302.0	311.5	3.0	1.5	25.400
	240	38	76	2.10	1.10	170.9	192.8	3700	5300	7032C	36132	276.9	385.6	3200	4200	7032CDB	7032CDF	7032CDT	172.0	228.0	233.0	2.0	1.0	5.820
	240	38	76	2.10	1.10	161.5	182.7	3200	4500	7032AC	46132	261.6	365.4	2700	3600	7032ACDB	7032ACDF	7032ACDT	172.0	228.0	233.0	2.0	1.0	5.960
	290	48	96	3.00	1.10	286.5	332.7	3500	4800	7232C	36232	464.1	665.4	2900	3800	7232CDB	7232CDF	7232CDT	174.0	276.0	283.0	2.5	1.0	13.500
	290	48	96	3.00	1.10	272.8	317.8	2900	4100	7232AC	46232	441.9	635.6	2500	3300	7232ACDB	7232ACDF	7232ACDT	174.0	276.0	283.0	2.5	1.0	13.700
	290	48	96	3.00	1.10	237.5	277.7	2000	2700	7232B	66232	384.8	555.4	1600	2200	7232BDB	7232BDF	7232BDT	174.0	276.0	283.0	2.5	1.0	13.900
	340	68	136	4.00	1.50	374.9	456.1	3100	4200	7332C	36332	607.3	912.2	2500	3400	7332CDB	7332CDF	7332CDT	178.0	322.0	331.5	3.0	1.5	29.700
	340	68	136	4.00	1.50	358.5	435.3	2500	3400	7332AC	46332	580.8	870.6	2000	2700	7332ACDB	7332ACDF	7332ACDT	178.0	322.0	331.5	3.0	1.5	29.800
	340	68	136	4.00	1.50	316.2	386.3	1800	2400	7332B	66332	512.2	772.6	1400	1900	7332BDB	7332BDF	7332BDT	178.0	322.0	331.5	3.0	1.5	29.900



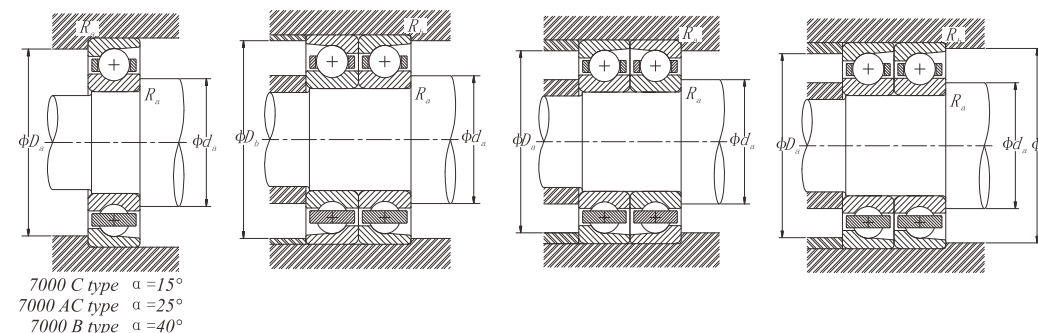
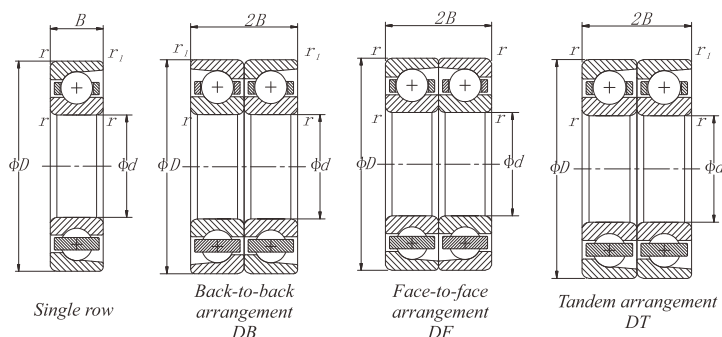
d 170 mm



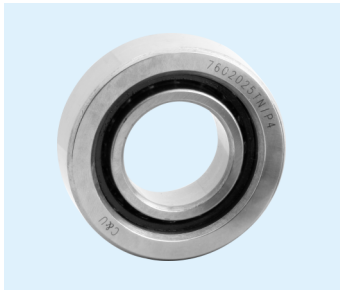
Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement)(kN)		Limiting speeds (arrangement)(r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r (Min)	r _s (Min)	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _a Max	D _b Max	R _s Max	R _b Max	
170	260	42	84	2.10	1.10	204.7	234.5	3500	4900	7034C	36134	331.6	469.0	2900	3900	7034CDB	7034CDF	7034CDT	182.0	248.0	253.0	2.0	1.0	7.800
	260	42	84	2.10	1.10	193.5	222.3	3000	4200	7034AC	46134	313.5	444.6	2500	3400	7034ACDB	7034ACDF	7034ACDT	182.0	248.0	253.0	2.0	1.0	7.960
	310	52	104	4.00	1.50	320.8	389.1	3200	4500	7234C	36234	519.7	778.2	2700	3600	7234CDB	7234CDF	7234CDT	188.0	292.0	301.5	3.0	1.5	16.900
	310	52	104	4.00	1.50	305.5	371.2	2800	3800	7234AC	46234	494.9	742.4	2300	3000	7234ACDB	7234ACDF	7234ACDT	188.0	292.0	301.5	3.0	1.5	17.000
	310	52	104	4.00	1.50	266.2	325.0	1900	2500	7234B	66234	431.2	650.0	1500	2000	7234BDB	7234BDF	7234BDT	188.0	292.0	301.5	3.0	1.5	17.100
	360	72	144	4.00	1.50	418.3	520.6	2900	4000	7334C	36334	677.6	1041.2	2400	3200	7334CDB	7334CDF	7334CDT	188.0	342.0	351.5	3.0	1.5	35.200
	360	72	144	4.00	1.50	400.9	500.5	2300	3200	7334AC	46334	649.5	1001.0	1900	2600	7334ACDB	7334ACDF	7334ACDT	188.0	342.0	351.5	3.0	1.5	35.300
	360	72	144	4.00	1.50	354.9	444.2	1700	2300	7334B	66334	574.9	888.4	1400	1800	7334BDB	7334BDF	7334BDT	188.0	342.0	351.5	3.0	1.5	35.400



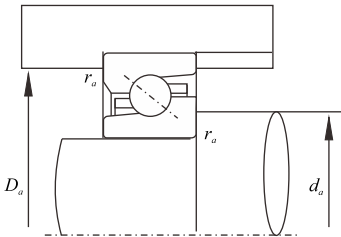
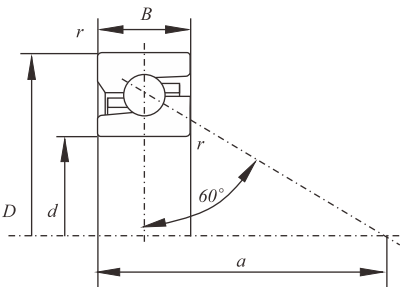
d 180~240mm



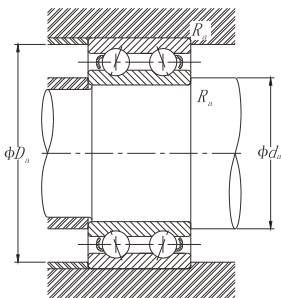
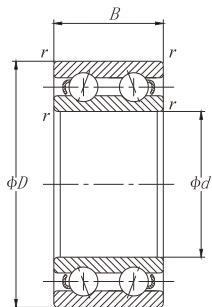
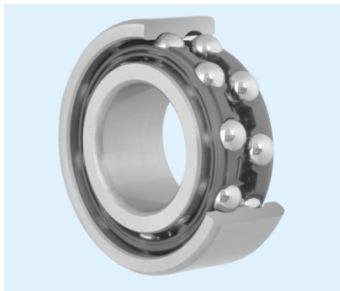
Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Nominal numbers (old)	Basic load ratings (arrangement) (kN)		Limiting speeds (arrangement) (r/min)		Nominal numbers			Mounting dimensions (mm)					Reference mass (kg)
d	D	B	2B	r	r ₁	C _r	C _{0r}	Grease	Oil			C _r	C _{0r}	Grease	Oil	Back-to-back	Face-to-face	Tandem	d _s Min	D _s Max	D _b Max	R _s Max	R _b Max	
180	280	46	92	2.10	1.10	228.2	275.9	3200	4600	7036C	36136	369.7	551.8	2800	3700	7036CDB	7036CDF	7036CDT	192.0	268.0	273.0	2.0	1.0	10.40
	280	46	92	2.10	1.10	215.7	261.3	2800	3900	7036AC	46136	349.4	522.6	2300	3100	7036ACDB	7036ACDF	7036ACDT	192.0	268.0	273.0	2.0	1.0	10.40
	320	52	104	4.00	1.50	333.2	417.3	3100	4300	7236C	36236	539.8	834.6	2600	3400	7236CDB	7236CDF	7236CDT	198.0	302.0	311.5	3.0	1.5	17.70
	320	52	104	4.00	1.50	317.1	399.2	2600	3700	7236AC	46236	513.7	798.4	2200	3000	7236ACDB	7236ACDF	7236ACDT	198.0	302.0	311.5	3.0	1.5	17.70
	320	52	104	4.00	1.50	275.5	348.4	1700	2400	7236B	66236	446.3	696.8	1400	1900	7236BDB	7236BDF	7236BDT	198.0	302.0	311.5	3.0	1.5	17.70
	380	75	150	4.00	1.50	442.0	576.5	2700	3800	7336C	36336	716.0	1153.0	2300	3000	7336CDB	7336CDF	7336CDT	198.0	362.0	371.5	3.0	1.5	40.90
	380	75	150	4.00	1.50	422.9	550.3	2200	3100	7336AC	46336	685.1	1100.6	1900	2500	7336ACDB	7336ACDF	7336ACDT	198.0	362.0	371.5	3.0	1.5	40.90
	380	75	150	4.00	1.50	373.0	488.2	1600	2100	7336B	66336	604.3	976.4	1300	1700	7336BDB	7336BDF	7336BDT	198.0	362.0	371.5	3.0	1.5	40.90
190	290	46	92	2.10	1.10	246.6	306.6	3100	4400	7038C	36138	399.5	613.2	2600	3500	7038CDB	7038CDF	7038CDT	202.0	278.0	283.0	2.0	1.0	10.80
	290	46	92	2.10	1.10	233.2	290.6	2700	3800	7038AC	46138	377.8	581.2	2300	3000	7038ACDB	7038ACDF	7038ACDT	202.0	278.0	283.0	2.0	1.0	10.80
	340	55	110	4.00	1.50	344.6	449.8	2900	4100	7238C	36238	558.3	899.6	2500	3300	7238CDB	7238CDF	7238CDT	208.0	322.0	331.5	3.0	1.5	21.30
	340	55	110	4.00	1.50	327.0	427.4	2500	3500	7238AC	46238	529.7	854.8	2100	2800	7238ACDB	7238ACDF	7238ACDT	208.0	322.0	331.5	3.0	1.5	21.30
	340	55	110	4.00	1.50	283.7	373.8	1600	2300	7238B	66238	459.6	747.6	1400	1800	7238BDB	7238BDF	7238BDT	208.0	322.0	331.5	3.0	1.5	21.30
	400	78	156	5.00	2.00	484.8	643.2	2600	3600	7338C	36338	785.4	1286.4	2200	2900	7338CDB	7338CDF	7338CDT	212.0	378.0	390.0	4.0	2.0	47.00
	400	78	156	5.00	2.00	464.6	618.3	2100	2900	7338AC	46338	752.7	1236.6	1700	2300	7338ACDB	7338ACDF	7338ACDT	212.0	378.0	390.0	4.0	2.0	47.00
	400	78	156	5.00	2.00	411.3	548.7	1500	2000	7338B	66338	666.3	1097.4	1200	1600	7338BDB	7338BDF	7338BDT	212.0	378.0	390.0	4.0	2.0	47.00
200	310	51	102	2.10	1.10	264.6	340.4	2900	4100	7040C	36140	428.7	680.8	2500	3300	7040CDB	7040CDF	7040CDT	212.0	298.0	303.0	2.0	1.0	14.00
	310	51	102	2.10	1.10	250.1	322.5	2500	3500	7040AC	46140	405.2	645.0	2100	2800	7040ACDB	7040ACDF	7040ACDT	212.0	298.0	303.0	2.0	1.0	14.00
	360	58	116	4.00	1.50	368.5	489.9	2800	3900	7240C	36240	597.0	979.8	2300	3100	7240CDB	7240CDF	7240CDT	218.0	342.0	351.5	3.0	1.5	25.30
	360	58	116	4.00	1.50	350.0	466.4	2400	3300	7240AC	46240	567.0	932.8	2000	2600	7240ACDB	7240ACDF	7240ACDT	218.0	342.0	351.5	3.0	1.5	25.30
	360	58	116	4.00	1.50	303.9	407.9	1500	2100	7240B	66240	492.3	815.8	1300	1700	7240BDB	7240BDF	7240BDT	218.0	342.0	351.5	3.0	1.5	25.30
	420	80	160	5.00	2.00	512.2	711.0	2500	3400	7340C	36340	829.8	1422.0	2000	2700	7340CDB	7340CDF	7340CDT	222.0	398.0	410.0	4.0	2.0	53.10
	420	80	160	5.00	2.00	490.1	678.7	2000	2800	7340AC	46340	794.0	1357.4	1700	2200	7340ACDB	7340ACDF	7340ACDT	222.0	398.0	410.0	4.0	2.0	53.10
	420	80	160	5.00	2.00	432.5	602.0	1400	1900	7340B	66340	700.7	1204.0	1100	1500	7340BDB	7340BDF	7340BDT	222.0	398.0	410.0	4.0	2.0	53.10
220	340	56	112	3.00	3.00	311.5	430.5	2700	3800	7044C	36144	504.6	861.0	2300	3000	7044CDB	7044CDF	7044CDT	244.0	319.0	326.0	2.5	1.0	18.50
	340	56	112	3.00	3.00	294.5	407.8	2300	3200	7044AC	46144	477.1	815.6	1900	2600	7044ACDB	7044ACDF	7044ACDT	244.0	319.0	326.0	2.5	1.0	18.50
	400	65	130	4.00	1.50	445.4	633.6	2500	3500	7244C	36244	721.5	1267.2	2100	2800	7244CDB	7244CDF	7244CDT	248.0	374.0	383.0	3.0	1.5	36.50
	400	65	130	4.00	1.50	423.6	605.5	2100	3000	7244AC	46244	686.2	1211.0	1800	2400	7244ACDB	7244ACDF	7244ACDT	248.0	374.0	383.0	3.0	1.5	36.50
	400	65	130	4.00	1.50	368.1	528.8	1400	1900	7244B	66244	596.3	1057.6	1100	1500	7244BDB	7244BDF	7244BDT	248.0	374.0	383.0	3.0	1.5	36.50
	460	88	176	5.00	2.00	538.0	784.8	2300	3100	7344C	36344	871.6	1569.6	1900	2500	7344CDB	7344CDF	7344CDT	252.0	429.0	441.0	4.0	2.0	73.00
	460	88	176	5.00	2.00	513.5	752.8	1800	2500	7344AC	46344	831.9	1505.6	1500	2000	7344ACDB	7344ACDF	7344ACDT	252.0	429.0	441.0	4.0	2.0	73.00
	460	88	176	5.00	2.00	450.1	663.3	1300	1800	7344B	66344	729.2	1326.6	1100	1400	7344BDB	7344BDF	7344BDT	252.0	429.0	441.0	4.0	2.0	73.00
240	360	56	112	3.00	3.00	330.0	472.4	2500	3500	7048C	36148	534.6	944.8	2100	2800	7048CDB	7048CDF	7048CDT	265.0	339.0	345.0	2.5	1.0	19.50
	360	56	112	3.00	3.00	312.1	447.2	2100	3000	7048AC	46148	505.6	894.4	1800	2400	7048ACDB	7048ACDF	7048ACDT	265.0	339.0	345.0	2.5	1.0	19.50
	440	72	144	4.00	1.50	475.4	725.3	2300	3200	7248C	36248	770.1	1450.6	1900	2600	7248CDB	7248CDF	7248CDT	269.0	413.0	422.0	3.0	1.5	50.50
	440	72	144	4.00	1.50	450.8	688.4	1900	2700	7248AC	46248	730.3	1376.8	1600	2200	7248ACDB	7248ACDF	7248ACDT	269.0	413.0	422.0	3.0	1.5	50.50
	440	72	144	4.00	1.50	390.3	601.4	1300	1800	7248B	66248	632.3	1202.8	1100	1400	7248BDB	7248BDF	7248BDT	269.0	413.0	422.0	3.0	1.5	50.50
	500	95	190	5.00	2.00	615.0	947.0	2100	2800	7348C	36348	996.3	1894.0	1700	2200	7348CDB	7348CDF	7348CDT	273.0	468.0	480.0	4.0	2.0	92.30
	500	95	190	5.00	2.00	587.0	908.0	1700	2300	7348AC	46348	950.9	1816.0	1400	1800	7348ACDB	7348ACDF	7348ACDT	273.0	468.0	480.0	4.0	2.0	92.30
	500	95	190	5.00	2.00	515.1	801.0	1200	1600	7348B	66348	834.5	1602.0	980	1300	7348BDB	7348BDF	7348BDT	273.0	468.0	480.0	4.0	2.0	92.30



Ball screw bearing 760
Contact angle $\alpha=60^\circ$

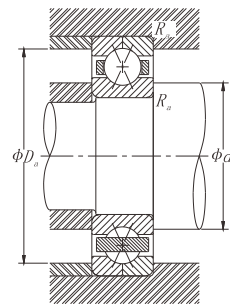
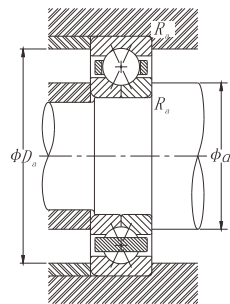
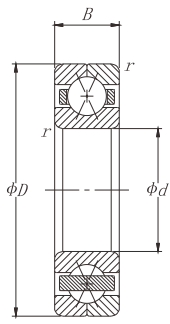
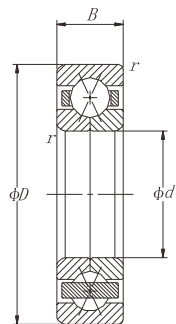
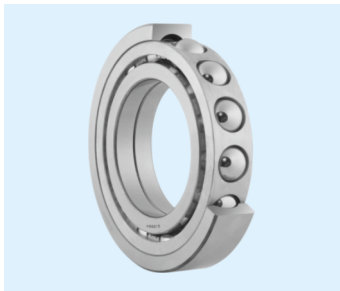


Boundary dimensions (mm)					Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers	Mounting dimensions (mm)			Reference mass (kg)
d	D	B	2B	r (Min)	C _r	C _{0r}	Grease	Oil		d _a	D _a	r _{amax}	
12	32	10	20	0.60	11.60	12.50	8000	10000	760201	17.0	27.0	0.6	0.040
15	35	11	22	0.60	12.50	15.00	6000	8000	760202	20.5	30.0	0.6	0.050
17	40	12	24	0.60	16.60	20.00	6000	8000	760203	23.0	34.5	0.6	0.075
20	47	14	28	1.00	19.30	25.00	5000	6900	760204	27.5	39.5	1.0	0.120
	47	15	30	1.00	19.30	25.00	5000	6900	760204X2	27.5	39.5	1.0	0.130
	52	15	30	1.10	24.50	32.00	4500	6300	760304	30.5	43.5	1.1	0.170
25	52	15	30	1.00	22.00	30.50	4500	6300	760205	32.0	45.0	1.0	0.150
	62	15	30	1.00	28.50	41.50	3800	5300	760305X2	38.0	52.0	1.0	0.240
	62	17	34	1.10	28.50	41.50	3800	5300	760305	38.0	52.0	1.1	0.270
30	62	15	30	1.00	26.00	39.00	3800	5300	760206X2	39.5	52.5	1.0	0.220
	62	16	32	1.00	26.00	39.00	3800	5300	760206	39.5	52.5	1.0	0.230
	72	19	38	1.10	34.50	55.00	3200	4400	760306	45.0	61.0	1.1	0.400
35	72	15	30	1.00	30.00	50.00	3200	4400	760207X2	46.5	60.5	1.1	0.300
	72	17	34	1.10	30.00	50.00	3200	4400	760207	46.5	60.5	1.0	0.350
	80	21	42	1.50	36.50	61.00	3000	4200	760307	51.0	67.0	1.5	0.550
40	72	15	30	1.00	28.00	49.00	3000	4200	760208X3	49.0	62.5	1.1	0.260
	80	18	36	1.10	37.50	64.00	2800	3900	760208	53.5	69.5	1.1	0.450
	90	20	40	1.50	50.00	83.00	2600	3600	760308X2	56.5	75.5	1.5	0.650
	90	23	46	1.50	50.00	83.00	2600	3600	760308	56.5	75.5	1.5	0.750
45	75	15	30	1.00	28.50	52.00	2800	3900	760209X3	52.0	68.0	1.0	0.250
	85	19	38	1.10	38.00	68.00	2600	3600	760209	57.0	73.0	1.1	0.500
	100	20	40	1.50	58.50	104.00	2200	3100	760309X2	64.5	85.5	1.5	0.810
	100	25	50	1.50	58.50	104.00	2200	3100	760309	64.5	85.5	1.5	1.000
50	90	20	40	1.10	39.00	75.00	2400	3300	760210	63.0	79.0	1.1	0.550
	100	20	40	1.50	58.50	104.00	2200	3000	760210X1	64.5	85.5	1.5	0.750
	110	27	54	2.00	69.50	127.00	2000	2800	760310	72.0	94.0	2.0	1.300
55	100	21	42	1.50	40.50	81.50	2200	3000	760211	69.5	85.5	1.5	0.750
	120	20	40	2.00	60.00	116.00	1900	2600	760311X2	77.0	97.5	2.0	1.200
	120	29	58	2.00	78.00	146.00	1900	2600	760311	77.0	101.0	2.0	1.700
60	110	22	44	1.50	56.00	112.00	2000	2800	760212	77.0	96.0	1.5	0.950
	120	20	40	1.50	61.00	120.00	2000	2800	760212X3	79.5	100.5	1.5	1.100
	130	31	62	2.10	88.00	166.00	1800	2500	760312	82.5	107.5	2.1	2.100



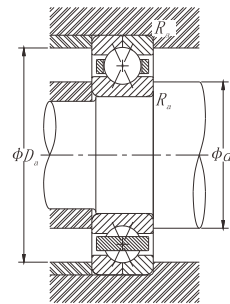
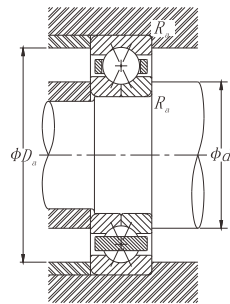
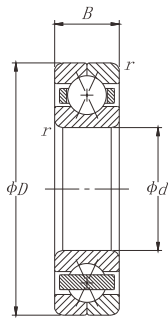
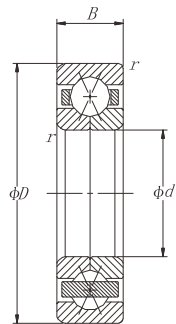
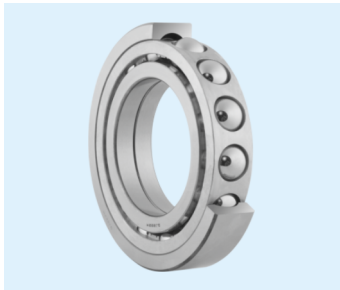
d 25~100 mm

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers		Nominal numbers (old)	Mounting dimensions (mm)			Reference mass (kg)
d	D	B	r (Min)	C _r	C _{or}	Grease	Oil				d _a Min	D _a Max	R _a Max	
25	52	20.6	1.0	20.6	16.3	7,300	9,800	3205		3056205	31.0	46.0	1.0	0.183
	62	25.4	1.1	28.9	19.4	6,700	8,900	3305		3056305	32.0	55.0	1.0	0.354
30	62	23.8	1.0	28.6	21.7	6,300	8,400	3206		3056206	36.0	56.0	1.0	0.303
	72	30.2	1.1	39.5	29.2	5,700	7,600	3306		3056306	37.0	65.0	1.0	0.558
35	72	27	1.1	31.57	24.5	5,500	7,400	3207		3056207	42.0	65.0	1.0	0.458
	80	34.9	1.5	49.5	37.4	5,000	6,600	3307		3056307	43.5	71.5	1.5	0.756
40	80	30.2	1.1	41.6	35.3	4,900	6,600	3208		3056208	47.0	73.0	1.0	0.627
	90	36.5	1.5	60.5	44.2	4,400	5,900	3308		3056308	48.5	81.5	1.5	1.030
45	85	30.2	1.1	44.3	35.8	4,400	5,900	3209		3056209	52.0	78.0	1.0	0.678
	100	39.7	1.5	72.4	54	4,000	5,300	3309		3056309	53.5	91.5	1.5	1.370
50	90	30.2	1.1	42.3	38.6	4,000	5,300	3210		3056210	57.0	83.0	1.0	0.698
	110	44.4	2.0	78.9	60.1	3,600	4,800	3310		3056310	60.0	100.0	2.0	1.980
55	100	33.3	1.5	56.9	47.9	3,600	4,900	3211		3056211	63.5	91.5	1.5	1.070
	120	49.2	2.0	92.09	75.25	3,300	4,400	3311		3056311	65.0	110.0	2.0	2.420
60	110	36.5	1.5	57.7	51.2	3,400	4,500	3212		3056212	68.5	101.5	1.5	1.340
	130	54	2.1	121.53	101.48	3,000	4,000	3312		3056312	72.0	118.0	2.0	3.070
65	120	38.1	1.5	73.5	66.6	3,100	4,200	3213		3056213	73.5	111.5	1.5	1.680
	140	58.7	2.1	129.6	103.6	2,800	3,700	3313		3056313	77.0	128.0	2.0	3.900
70	125	39.7	1.5	88.4	80	2,900	3,900	3214		3056214	78.5	116.5	1.5	1.840
	150	63.5	2.1	145	112	2,600	3,500	3314		3056314	82.0	138.0	2.0	5.200
75	130	41.3	1.5	91.3	84.5	2,700	3,600	3215		3056215	83.5	121.5	1.5	2.010
	160	68.3	2.1	176	140	2,400	3,200	3315		3056315	87.0	148.0	2.0	6.300
80	140	44.4	2.0	95.3	89.8	2,500	3,400	3216		3056216	90.0	130.0	2.0	2.710
85	150	49.2	2.0	124	110	2,400	3,200	3217		3056217	95.0	140.0	2.0	3.480
90	160	52.4	2.0	134.1	129.6	2,200	3,000	3218		3056218	100.0	150.0	2.0	4.240
95	170	55.6	2.1	163	184	2,100	2,800	3219		3056219	107.0	158.0	2.0	5.100
100	180	60.3	2.1	210	240	2,000	2,700	3220		3056220	112.0	168.0	2.0	5.880



d 30~90 mm

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers		Nominal numbers (old)		Mounting dimensions (mm)			Reference mass (kg)
d	D	B	r (Min)	C _r	C _{or}	Grease	Oil	QJ	QJF	176000	116000	d _s Min	D _s Max	R _s Max	
30	62	16	1.0	35.1	28.5	12,000	19,000	QJ206	QJF206	176206	116206	36.0	56.0	1.0	0.240
	72	19	1.1	49.4	38.0	10,000	17,000	QJ306	QJF306	176306	116306	37.0	65.0	1.0	0.420
35	72	17	1.1	46.2	39.0	10,000	17,000	QJ207	QJF207	176207	116207	42.0	65.0	1.0	0.350
	80	21	1.5	59.2	46.5	9,500	15,000	QJ307	QJF307	176307	116307	43.5	71.5	1.5	0.570
40	80	18	1.1	52.7	45.0	9,000	15,000	QJ208	QJF208	176208	116208	47.0	73.0	1.0	0.450
	90	23	1.5	71.5	58.5	8,500	14,000	QJ308	QJF308	176308	116308	48.5	81.5	1.5	0.780
45	85	19	1.1	58.5	51.0	8,500	14,000	QJ209	QJF209	176209	116209	52.0	78.0	1.0	0.520
	100	25	1.5	93.6	76.5	7,500	12,000	QJ309	QJF309	176309	116309	53.5	91.5	1.5	1.050
50	90	20	1.1	61.8	56.0	7,500	13,000	QJ210	QJF210	176210	116210	57.0	83.0	1.0	0.603
	110	27	2.0	111.0	91.5	6,700	11,000	QJ310	QJF310	176310	116310	60.0	100.0	2.0	1.380
55	100	21	1.5	79.3	76.5	7,000	11,000	QJ211	QJF211	176211	116211	63.5	91.5	1.5	0.780
	120	29	2.0	127.0	108.0	6,000	10,000	QJ311	QJF311	176311	116311	65.0	110.0	2.0	1.760
60	110	22	1.5	92.3	86.5	6,300	10,000	QJ212	QJF212	176212	116212	68.5	101.5	1.5	0.987
	130	31	2.1	146.0	125.0	5,600	9,000	QJ312	QJF312	176312	116312	72.0	118.0	2.0	2.180
65	120	23	1.5	104.0	104.0	5,600	9,500	QJ213	QJF213	176213	116213	73.5	111.5	1.5	1.240
	140	33	2.1	165.0	144.0	5,300	8,500	QJ313	QJF313	176313	116313	77.0	128.0	2.0	2.700
70	125	24	1.5	114.0	114.0	5,600	9,000	QJ214	QJF214	176214	116214	78.5	116.5	1.5	1.360
	150	35	2.1	186.0	166.0	4,800	8,000	QJ314	QJF314	176314	116314	82.0	138.0	2.0	3.270
75	130	25	1.5	117.0	122.0	5,300	8,500	QJ215	QJF215	176215	116215	83.5	121.5	1.5	1.530
	160	37	2.1	199.0	186.0	4,500	7,500	QJ315	QJF315	176315	116315	87.0	148.0	2.0	3.900
80	140	26	2.0	138.0	146.0	4,800	8,000	QJ216	QJF216	176216	116216	90.0	130.0	2.0	1.830
	170	39	2.1	216.0	208.0	4,300	7,000	QJ316	QJF316	176316	116316	92.0	158.0	2.0	4.640
85	150	28	2.0	148.0	160.0	4,500	7,500	QJ217	QJF217	176217	116217	95.0	140.0	2.0	2.300
	180	41	3.0	234.0	236.0	4,000	6,700	QJ317	QJF317	176317	116317	99.0	166.0	2.5	5.430
90	160	30	2.0	174.0	186.0	4,300	7,000	QJ218	QJF218	176218	116218	100.0	150.0	2.0	2.760
	190	43	3.0	265.0	285.0	3,800	6,300	QJ318	QJF318	176318	116318	104.0	176.0	2.5	6.310



d 95~200mm

Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Nominal numbers		Nominal numbers (old)		Mounting dimensions (mm)			Reference mass (kg)
d	D	B	r (Min)	C _r	C _{or}	Grease	Oil	QJ	QJF	176000	116000	d _s Min	D _s Max	R _s Max	
95	170	32	2.1	199.0	212.0	4,000	6,700	QJ219	QJF219	176219	116219	107.0	158.0	2.0	3.350
	200	45	3.0	286.0	315.0	3,600	6,000	QJ319	QJF319	176319	116319	109.0	186.0	2.5	7.410
100	180	34	2.1	225.0	240.0	3,800	6,300	QJ220	QJF220	176220	116220	112.0	168.0	2.0	4.020
	215	47	3.0	307.0	340.0	3,400	5,600	QJ320	QJF320	176320	116320	114.0	201.0	2.5	9.140
105	190	36	2.1	245.0	400.0	3,600	6,000	QJ221	QJF221	176221	116221	117.0	178.0	2.0	4.750
	225	49	3.0	350.0	570.0	3,200	5,600	QJ321	QJF321	176321	116321	119.0	211.0	2.5	10.4
110	200	38	2.1	265.0	305.0	3,400	5,600	QJ222	QJF222	176222	116222	122.0	188.0	2.0	5.620
	240	50	3.0	390.0	475.0	3,000	4,800	QJ322	QJF322	176322	116322	124.0	226.0	2.5	12.0
120	215	40	2.1	286.0	340.0	3,200	5,000	QJ224	QJF224	176224	116224	132.0	203.0	2.0	6.750
	260	55	3.0	390.0	490.0	2,800	4,500	QJ324	QJF324	176324	116324	134.0	246.0	2.5	15.90
130	230	40	3	296.0	365.0	2,800	4,800	QJ226	QJF226	176226	116226	144.0	216.0	2.5	7.700
	280	58	4	423.0	560.0	2,600	4,000	QJ326	QJF326	176326	116326	148.0	262.0	3.0	19.0
140	250	42	3	325.0	440.0	2,600	4,300	QJ228	QJF228	176228	116228	154.0	236.0	2.5	9.800
	300	62	4	468.0	640.0	2,400	3,800	QJ328	QJF328	176328	116328	158.0	282.0	3.0	24.0
150	270	45	3	337.0	530.0	2,400	4,000	QJ230	QJF230	176230	116230	164.0	256.0	2.5	12.0
	320	65	4	494.0	710.0	2,200	3,600	QJ330	QJF330	176330	116330	168.0	302.0	3.0	29.0
160	290	48	48	423.0	620.0	2,200	3,800	QJ232	QJF232	176232	116232	206.0	243.0	2.0	15.500
	340	68	68	540.0	815.0	2,000	3,400	QJ332	QJF332	176332	116332	224.0	276.0	2.0	34.500
170	310	52	52	436.0	670.0	2,200	3,400	QJ234	QJF234	176234	116234	221.0	258.0	2.0	19.500
	360	72	72	618.0	965.0	1,900	3,200	QJ334	QJF334	176334	116334	237.0	293.0	2.0	41.500
180	320	52	52	449.0	710.0	2,000	3,400	QJ236	QJF236	176236	116236	231.0	269.0	2.0	20.500
	380	75	75	637.0	1020.0	1,800	3,000	QJ336	QJF336	176336	116336	252.0	309.0	2.0	47.500
190	400	78	78	702.0	1160.0	1,700	2,800	QJ338	QJF338	176338	116338	263.0	326.0	2.0	49.000
200	360	58	58	540.0	915.0	1,800	3,000	QJ240	QJF240	176240	116240	258.0	302.0	2.0	28.500