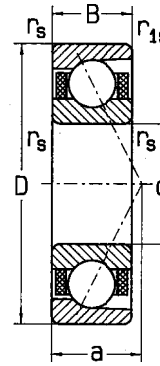


# Single Row Angular Contact Ball Bearings for High Rotational Speed

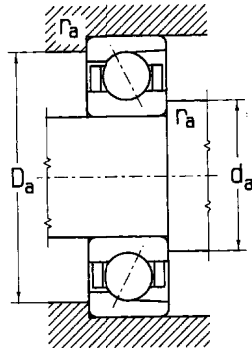
Sizes 7 mm – 30 mm



C

Dimensions						Basic Load Rating		Limiting Speed for Lubricating by		Bearing Designation
d	D	B	r <sub>s</sub> min	r <sub>1s</sub> min	a	Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil Mist	
mm						kN lbf		min <sup>-1</sup>		
<b>7</b>	22	7	0.3	0.15	5	1.47 329	0.464 104	94,000	140,000	<b>A727CBTA</b>
<b>9</b>	26	8	0.6	0.3	5.5	2.42 541	0.841 188	71,000	106,000	<b>A729CBTA</b>
<b>10</b>	30	9	0.6	0.3	6	3.1 695	1.18 266	60,000	89,000	<b>B7200CBTB</b>
	30	9	0.6	0.3	6.5	5.62 1,260	2.87 643	42,000	63,000	<b>B7200CATB</b>
<b>12</b>	32	10	0.6	0.3	7	3.41 746	1.34 299	56,000	84,000	<b>B7201CBTB</b>
	32	10	0.6	0.3	7.5	6.68 1,500	3.48 779	38,000	56,000	<b>B7201CATB</b>
	32	10	0.6	0.3	10.5	6.19 1,390	3.35 750	33,000	50,000	<b>A7201AATA</b>
<b>15</b>	35	11	0.6	0.3	7.5	4.06 909	1.66 376	50,000	75,000	<b>B7202CBTB</b>
	35	11	0.6	0.3	8	7.64 1,710	4.14 926	33,000	50,000	<b>B7202CATB</b>
<b>17</b>	35	10	0.3	0.15	9	6.19 1,390	3.48 779	30,000	45,000	<b>A7003CTA</b>
	40	12	0.6	0.3	8.5	4.92 1,100	2.04 455	45,000	67,000	<b>B7203CBTB</b>
	40	12	0.6	0.3	9	9.81 2,200	5.31 1,190	28,000	42,000	<b>B7203CATB</b>
<b>20</b>	42	12	0.6	0.3	10	9.81 2,200	5.52 1,230	28,000	42,000	<b>A7004CTA</b>
	47	14	1	0.6	10	6.07 1,360	2.7 607	40,000	60,000	<b>B7204BTB</b>
	47	14	1	0.6	10.5	13.3 2,990	7.36 1,650	25,000	38,000	<b>B7204CATB</b>
	47	14	1	0.6	15	12.6 2,820	6.94 1,550	22,000	33,000	<b>B7204AATB</b>
<b>25</b>	47	12	0.6	0.3	11	11 2,460	6.81 1,530	25,000	38,000	<b>A7005CTA</b>
	52	15	1	0.6	11	8.25 1,850	3.8 858	33,000	50,000	<b>B7205CBTB</b>
	52	15	1	0.6	11.5	14.4 3,220	8.58 1,920	22,000	33,000	<b>B7205CATB</b>
	52	15	1	0.6	17	13.6 3,040	8.1 1,810	20,000	30,000	<b>B7205AATB</b>
<b>30</b>	55	13	1	0.6	12	14.4 3,220	9.44 2,110	22,000	30,000	<b>A7006CTA</b>
	62	16	1	0.6	12	10.8 2,420	5.2 1,170	28,000	42,000	<b>B7206CBTB</b>
	62	16	1	0.6	13	20 4,470	12.3 2,760	20,000	30,000	<b>B7206CATB</b>
	62	16	1	0.6	19	18.9 4,220	11.7 2,610	17,000	25,000	<b>B7206AATB</b>

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

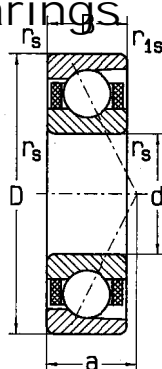


C

Abutment and Fillet Dimensions				Weight
d	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	~
mm				kg lbs
<b>7</b>	9.2	19.5	0.3	0.0134 0.030
<b>9</b>	12	22.5	0.6	0.0197 0.043
<b>10</b>	14	26	0.6	0.027 0.059
	14	26	0.6	0.028 0.062
<b>12</b>	16	28	0.6	0.035 0.077
	16	28	0.6	0.036 0.079
	16	28	0.6	0.036 0.079
<b>15</b>	19	31	0.6	0.042 0.092
	19	31	0.6	0.043 0.094
<b>17</b>	19	33	0.3	0.039 0.086
	21	36	0.6	0.060 0.132
	21	36	0.6	0.061 0.134
<b>20</b>	24	38	0.6	0.068 0.150
	25	42	1	0.098 0.216
	25	42	1	0.100 0.220
	25	42	1	0.102 0.225
<b>25</b>	28	43	0.6	0.080 0.176
	30	47	1	0.119 0.262
	30	47	1	0.122 0.269
	30	47	1	0.124 0.273
<b>30</b>	34	50	1	0.116 0.255
	35	57	1	0.184 0.405
	35	57	1	0.189 0.416
	35	57	1	0.192 0.423

# Single Row Angular Contact Ball Bearings for High Rotational Speed

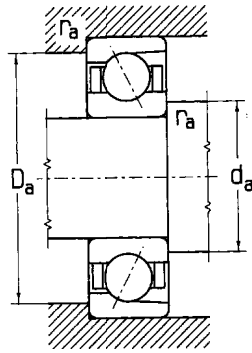
Sizes 35 mm – 70 mm



C

Dimensions						Basic Load Rating		Limiting Speed for Lubricating by		Bearing Designation
d	D	B	r <sub>s</sub> min	r <sub>1s</sub> min	a	Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil Mist	
mm						kN lbf		min <sup>-1</sup>		
<b>35</b>	62	14	1	0.6	14	18.1 4,060	12.8 2,870	17,000	25,000	A7007CTA
	72	17	1.1	0.6	13	13.3 2,990	6.8 1,530	25,000	38,000	B7207CBTB
	72	17	1.1	0.6	14	28.2 6,310	18.5 4,140	16,000	24,000	B7207CATB
<b>40</b>	80	18	1.1	0.6	14	15.8 3,550	8.15 1,850	22,000	33,000	B7208CBTB
	80	18	1.1	0.6	15.5	35.5 7,940	24.2 5,410	13,000	20,000	B7208CATB
<b>45</b>	75	16	1	0.6	16	23.3 5,210	18.1 4,060	13,000	20,000	A7009CTA
	85	19	1.1	0.6	15	18.1 4,060	9.5 2,150	20,000	30,000	B7209CBTB
	85	19	1.1	0.6	16.5	35.5 7,940	24.6 5,520	12,600	19,000	B7209CATB
<b>50</b>	90	20	1.1	0.6	16	20.7 4,640	11 2,460	18,000	27,000	B7210CBTB
	90	20	1.1	0.6	17.5	37.6 8,410	27.6 6,019	12,000	18,000	B7210CATB
	90	20	1.1	0.6	26	35.5 7,940	25.6 5,730	10,600	16,000	B7210AATB
<b>55</b>	100	21	1.5	1	17	24.2 5,410	13.7 3,100	17,000	25,000	B7211CBTB
	100	21	1.5	1	18.5	46.4 10,400	34.8 7,790	11,000	17,000	B7211CATB
<b>60</b>	110	22	1.5	1	18	27.1 6,070	15.6 3,480	15,000	22,000	B7212CBTB
	110	22	1.5	1	20	56.2 12,600	42.2 9,440	10,000	15,000	B7212CATB
	110	22	1.5	1	32	53.1 11,900	39.8 8,910	8,900	13,000	B7212AATB
<b>65</b>	120	23	1.5	1	21.5	68.1 15,300	55.2 12,300	8,900	13,000	B7213CATB
<b>70</b>	110	20	1.1	0.6	32	39.8 8,910	36.2 8,100	7,900	12,000	B7014AATB
	125	24	1.5	1	20.5	57.3 12,800	38.3 8,500	12,600	19,000	B7214CBTB
	125	24	1.5	1	22.5	73.6 16,500	60.7 13,600	7,900	12,000	B7214CATB

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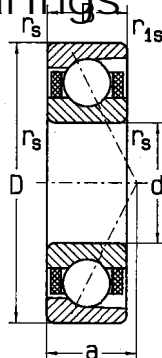


C

Abutment and Fillet Dimensions				Weight
d	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	~
mm				kg lbs
<b>35</b>	39.5	57	1	0.155 0.341
	42	65	1	0.268 0.590
	42	65	1	0.275 0.606
<b>40</b>	47	73	1	0.337 0.742
	47	73	1	0.347 0.764
<b>45</b>	49	70	1	0.242 0.533
	52	78	1	0.381 0.839
	52	78	1	0.391 0.861
<b>50</b>	57	83	1	0.432 0.951
	57	83	1	0.443 0.975
	57	83	1	0.447 0.984
<b>55</b>	62	91	1.5	0.567 1.249
	62	91	1.5	0.582 1.282
<b>60</b>	67	101	1.5	0.735 1.618
	67	101	1.5	0.754 1.660
	67	101	1.5	0.759 1.671
<b>65</b>	72	111	1.5	0.994 2.189
<b>70</b>	75	103	1	0.597 1.315
	77	116	1.5	1.04 2.29
	77	116	1.5	1.07 2.36

# Single Row Angular Contact Ball Bearings for High Rotational Speed

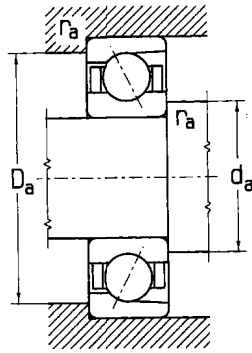
Sizes 75 mm – 120 mm



C

Dimensions						Basic Load Rating		Limiting Speed for Lubricating by		Bearing Designation
d	D	B	r <sub>s</sub> min	r <sub>1s</sub> min	a	Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil Mist	
mm						kN <i>lbf</i>		min <sup>-1</sup>		
<b>75</b>	130	25	1.5	1	23.5	73.6 <i>16,500</i>	61.9 <i>13,900</i>	7,500	11,000	<b>B7215CATB</b>
	130	25	1.5	1	37.5	69.4 <i>15,500</i>	58.4 <i>13,100</i>	6,700	10,000	B7215AATB
<b>80</b>	125	22	1.1	0.6	22	53.1 <i>11,900</i>	50.1 <i>11,200</i>	7,500	11,000	<b>B7016CATB</b>
	125	22	1.1	0.6	36	52.1 <i>11,700</i>	49.2 <i>11,000</i>	6,700	10,000	B7016AATB
	140	26	2	1	24.5	87.4 <i>19,600</i>	73.6 <i>16,500</i>	6,700	10,000	<b>B7216CATB</b>
	140	26	2	1	40	81 <i>18,100</i>	68.1 <i>15,300</i>	6,300	9,400	B7216AATB
<b>85</b>	130	22	1.1	0.6	37	55.2 <i>12,300</i>	52.1 <i>11,700</i>	6,300	9,400	<b>B7017AAMB</b>
	150	28	2	1	26.5	98.1 <i>22,000</i>	85.8 <i>19,200</i>	6,300	9,400	<b>B7217CATB</b>
	150	28	2	1	42.5	90.9 <i>20,300</i>	81 <i>18,100</i>	6,000	8,900	<b>B7217AATB</b>
<b>90</b>	140	24	1.5	1	24	65.6 <i>14,700</i>	63.1 <i>14,100</i>	6,300	9,400	<b>B7018CATB</b>
<b>100</b>	180	34	2.1	1.1	51	136 <i>30,400</i>	121 <i>27,100</i>	5,300	7,900	<b>B7220AATB</b>
<b>120</b>	180	28	2	1	30	98.1 <i>22,000</i>	104 <i>23,300</i>	5,000	7,500	<b>B7024CATB</b>

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.



C

Abutment and Fillet Dimensions				Weight
d	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	~
mm				kg lbs
<b>75</b>	82	121	1.5	1.16 2.55
	82	121	1.5	1.26 2.77
<b>80</b>	85	118	1	0.841 1.852
	85	118	1	0.848 1.867
	90	130	2	1.41 3.10
	90	130	2	1.42 3.13
<b>85</b>	90	123	1	1.06 2.33
	95	140	2	1.80 3.96
	95	140	2	1.82 4.01
<b>90</b>	96	132	1.5	1.15 2.53
<b>100</b>	112	168	2	3.32 7.31
<b>120</b>	128	171	2	2.10 4.62