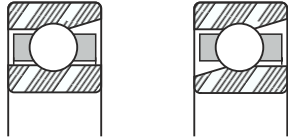


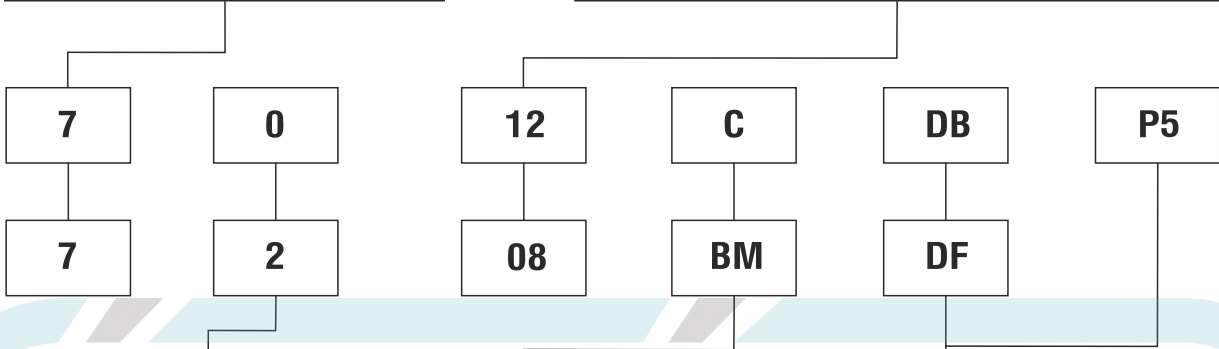


## Type Code: 7



## BORE DIAMETER DESIGNATION

5 X -- = mm  
 5 X 08 = 40 mm  
 5 X 12 = 60 mm



## SIZE DESIGNATIONS

0=70xx  
 2=72xx  
 3=73xx  
 4=74xx

## Mounting

/DB: mount in sets, back to back  
 /DF: mount in sets, face to face  
 /DT: mount in sets, tandem

## Clearance:

/C2: Less than nominal clearance  
 /C0: Nominal clearance, omitted in designation  
 /C3: Larger clearance, than C0  
 /C4: Larger clearance, than C3  
 /C5: Larger clearance, than C4  
 /C9: Non-Standard

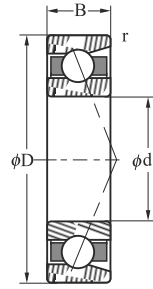
## Designs, Types and Features

/C: nominal contact angle  $\alpha=15^\circ$   
 /AC: nominal contact angle  $\alpha=25^\circ$   
 /A: nominal contact angle  $\alpha=30^\circ$   
 /B: nominal contact angle  $\alpha=40^\circ$   
 /M: brass solid retainer  
 /TN: Glass-fiber reinforced nylon cage

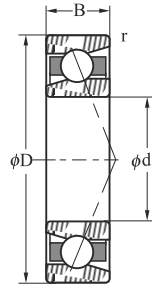
## Tolerance class:

/P0: Equals grade ABEC 1, omissible  
 /P6: Equals grade ABEC 3  
 /P5: Equals grade ABEC 5  
 /P4: Equals grade ABEC 7  
 /P2: Equals tolerance class ABEC 9

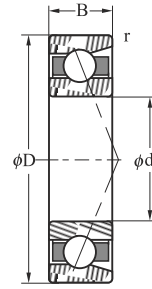
# ANGULAR CONTACT BALL BEARINGS



7000 A



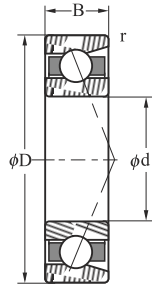
7000 B



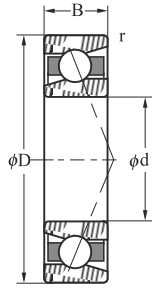
7000 C

Principal dimensions mm (in)				Weight kg (lb)	Bearing Number	Basic Load Rating kN (lbf)		Limiting Speed (rpm)	
d	D	B	r <sub>min</sub>			Dynamic C <sub>r</sub>	Static C <sub>0r</sub>	Grease	Oil
17 0.6692	35	10	0.15	0.040	7003C	6.93	3.94	29000	39000
	1.3779	0.3937	0.005	0.088		1560	890		
	35	10	0.15	0.031	7003A	6.44	3.70	20000	27000
	1.3779	0.3937	0.005	0.068		1450	830		
	40	12	0.30	0.067	7203C	10.08	5.52	28000	36000
	1.5748	0.4724	0.011	0.147		2270	1240		
	40	12	0.30	0.060	7203A	10.80	6.34	18000	25000
	1.5748	0.4724	0.011	0.132		2430	1430		
	40	12	0.30	0.062	7203B	9.90	5.86	16000	21000
	1.5748	0.4724	0.011	0.136		2230	1320		
	47	14	1.00	0.109	7303C	15.70	8.25	26000	35000
	1.8503	0.5511	0.039	0.24		3530	1860		
	47	14	0.60	0.111	7303A	14.31	8.30	17000	23000
	1.8503	0.5511	0.023	0.244		3220	1870		
47	14	0.60	0.113	7303B	13.32	7.68	14000	19000	
1.8503	0.5511	0.023	0.249		3000	1730			
20 0.7874	42	12	0.30	0.071	7004C	9.45	5.81	26000	34000
	1.6535	0.4724	0.011	0.156		2130	1310		
	42	12	0.30	0.063	7004A	8.73	5.38	18000	24000
	1.6535	0.4724	0.011	0.138		1960	1210		
	47	14	0.60	0.113	7204C	13.14	7.82	24000	32000
	1.8503	0.5511	0.023	0.249		2960	1760		
	47	14	0.60	0.100	7204A	13.05	8.06	16000	22000
	1.8503	0.5511	0.023	0.22		2940	1810		
	47	14	0.60	0.104	7204B	11.97	7.39	14000	19000
	1.8503	0.5511	0.023	0.229		2690	1660		
	52	15	1.10	0.140	7304C	18.50	9.95	23000	31000
	2.0472	0.5905	0.043	0.308		4160	2240		
	52	15	0.60	0.140	7304A	16.83	9.98	15000	20000
	2.0472	0.5905	0.023	0.308		3790	2250		
52	15	0.60	0.144	7304B	15.57	9.26	12000	17000	
2.0472	0.5905	0.023	0.317		3500	2080			
25 0.9842	47	12	0.30	0.083	7005C	10.53	7.15	22000	29000
	1.8503	0.4724	0.011	0.183		2370	1610		
	47	12	0.30	0.074	7005A	9.63	6.58	15000	20000
	1.8503	0.4724	0.011	0.163		2170	1480		
	52	15	0.60	0.139	7205C	14.94	9.79	20000	27000
	2.0472	0.5905	0.023	0.306		3360	2200		
	52	15	0.60	0.126	7205A	14.58	9.89	13000	18000
	2.0472	0.5905	0.023	0.277		3280	2230		
	52	15	0.60	0.129	7205B	13.32	9.02	11000	15000
	2.0472	0.5905	0.023	0.284		3000	2030		
	62	17	1.10	0.222	7305C	26.40	15.30	19000	26000
	2.4409	0.6693	0.043	0.489		5940	3440		
	62	17	0.60	0.230	7305A	23.76	15.17	12000	16000
	2.4409	0.6693	0.023	0.507		5350	3410		
62	17	0.60	0.236	7305B	21.96	14.02	10000	14000	
2.4409	0.6693	0.023	0.52		4940	3160			
30 1.1811	55	13	0.60	0.130	7006C	13.59	9.89	19000	25000
	2.1653	0.5118	0.023	0.286		3060	2230		
	55	13	0.60	0.111	7006A	12.51	9.07	12000	17000
	2.1653	0.5118	0.023	0.244		2820	2040		
	62	16	0.60	0.218	7206C	20.70	14.11	17000	23000
	2.4409	0.6299	0.023	0.48		4660	3180		
	62	16	0.60	0.191	7206A	20.25	14.21	11000	15000
	2.4409	0.6299	0.023	0.421		4560	3200		
	62	16	0.60	0.197	7206B	18.45	12.96	10000	13000
	2.4409	0.6299	0.023	0.434		4150	2920		
	72	19	1.10	0.330	7306C	32.50	20.30	16000	22000
	2.8346	0.7480	0.043	0.727		7310	4570		
	72	19	0.60	0.341	7306A	30.15	21.41	10000	14000
	2.8346	0.7480	0.023	0.751		6780	4820		
72	19	0.60	0.349	7306B	27.90	19.68	9100	12000	
2.8346	0.7480	0.023	0.769		6280	4430			
35 1.3779	62	14	0.60	0.169	7007C	17.19	13.15	16000	22000
	2.4409	0.5511	0.023	0.372		3870	2960		
	62	14	0.60	0.148	7007A	15.75	12.10	11000	15000
	2.4409	0.5511	0.023	0.326		3540	2720		
	72	17	0.60	0.316	7207C	27.45	19.10	15000	20000
	2.8346	0.6693	0.023	0.696		6180	4300		
	72	17	0.60	0.284	7207A	26.73	19.30	10000	13000
	2.8346	0.6693	0.023	0.626		6010	4340		
	72	17	0.60	0.289	7207B	24.39	17.66	8800	11000
	2.8346	0.6693	0.023	0.637		5490	3970		
	80	21	1.00	0.440	7307C	40.50	25.80	14000	19000
	3.1496	0.8268	0.039	0.97		9110	5810		
	80	21	1.00	0.459	7307A	36.00	25.25	9300	12000
	3.1496	0.8268	0.039	1.012		8100	5680		
80	21	1.00	0.469	7307B	32.85	23.23	8000	10000	
3.1496	0.8268	0.039	1.034		7390	5230			

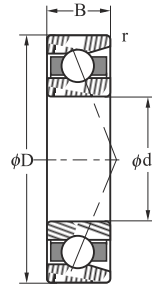
# ANGULAR CONTACT BALL BEARINGS



7000 A



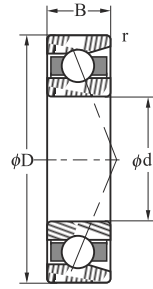
7000 B



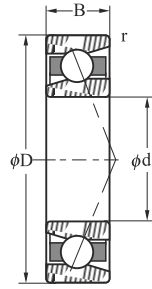
7000 C

Principal dimensions mm (in)				Weight kg (lb)	Bearing Number	Basic Load Rating kN (lbf)		Limiting Speed (rpm)	
d	D	B	r <sub>min</sub>			Dynamic C <sub>r</sub>	Static C <sub>or</sub>	Grease	Oil
40 1.5748	68	15	0.60	0.209	7008C	18.54	15.26	14000	20000
	2.6771	0.5905	0.023	0.46		4170	3430		
	68	15	0.60	0.186	7008A	16.92	14.02	10000	13000
	2.6771	0.5905	0.023	0.41		3810	3150		
	80	18	0.60	0.413	7208C	32.85	24.19	13000	18000
	3.1496	0.7086	0.023	0.910		7390	5440		
	80	18	0.60	0.370	7208A	31.95	24.10	9100	12000
	3.1496	0.7086	0.023	0.815		7190	5420		
	80	18	0.60	0.378	7208B	28.80	22.08	7900	10000
	3.1496	0.7086	0.023	0.833		6480	4970		
	90	23	1.50	0.606	7308C	49.50	32.50	13000	17000
	3.5433	0.9055	0.059	1.336		11140	7310		
90	23	1.00	0.628	7308A	44.10	31.68	8200	11000	
3.5433	0.9055	0.039	1.384		9920	7130			
90	23	1.00	0.643	7308B	40.50	29.28	7000	9400	
3.5433	0.9055	0.039	1.417		9110	6590			
45 1.7716	75	16	0.60	0.268	7009C	21.96	18.53	13000	18000
	2.9527	0.6299	0.023	0.590		4940	4170		
	85	19	0.60	0.405	7209A	35.55	27.55	8300	11000
	3.3464	0.748	0.023	0.893		8000	6200		
	85	19	0.60	0.415	7209B	32.40	25.15	7000	9400
	3.3464	0.748	0.023	0.915		7290	5660		
	100	25	1.50	0.830	7309C	64.00	43.00	11000	15000
	3.9370	0.9842	0.059	1.830		14400	9680		
	100	25	1.00	0.840	7309A	57.15	41.76	7400	9500
	3.9370	0.9842	0.039	1.852		12860	9400		
	100	25	1.00	0.861	7309B	52.65	38.40	6300	8500
	3.9370	0.9842	0.039	1.898		11850	8640		
50 1.9685	80	16	0.60	0.285	7010C	23.40	20.74	12000	16000
	3.1496	0.6299	0.023	0.628		5270	4670		
	80	16	0.60	0.255	7010A	21.33	19.30	8200	10000
	3.1496	0.6299	0.023	0.562		4800	4340		
	90	20	0.60	0.519	7210C	38.70	30.24	11000	14000
	3.5433	0.7874	0.023	1.144		8710	6800		
	90	20	0.60	0.457	7210A	37.35	30.24	7500	9500
	3.5433	0.7874	0.023	1.007		8400	6800		
	90	20	0.60	0.468	7210B	33.75	27.46	6400	8600
	3.5433	0.7874	0.023	1.031		7600	6180		
	110	27	2.00	1.050	7310C	75.00	51.50	10000	14000
	4.3307	1.0629	0.078	2.315		16880	11590		
110	27	1.0	1.091	7310A	66.60	49.92	6700	8900	
4.3307	1.0629	0.039	2.405		14990	11230			
110	27	1.0	1.110	7310B	61.20	46.08	5700	7700	
4.3307	1.0629	0.039	2.447		13770	10370			
55 2.1653	90	18	0.60	0.421	7011C	30.60	27.46	11000	14000
	3.5433	0.7086	0.023	0.928		6890	6180		
	90	18	0.60	0.388	7011A	27.90	25.25	7500	10000
	3.5433	0.7086	0.023	0.855		6280	5680		
	100	21	1.0	0.679	7211C	47.70	38.40	10000	13000
	3.9370	0.8267	0.039	1.497		10730	8640		
	100	21	1.0	0.604	7211A	45.90	37.92	6700	9000
	3.9370	0.8267	0.039	1.331		10330	8530		
	100	21	1.0	0.617	7211B	41.85	34.56	5800	7800
	3.9370	0.8267	0.039	1.36		9420	7780		
	120	29	2.0	1.340	7311C	87.00	60.50	9400	13000
	4.7244	1.1417	0.078	2.954		19580	13610		
120	29	1.0	1.400	7311A	77.40	59.04	6100	8200	
4.7244	1.1417	0.039	3.087		17420	13280			
120	29	1.0	1.441	7311B	71.10	54.24	5200	6900	
4.7244	1.1417	0.039	3.177		16000	12200			
60 2.3622	95	18	0.6	0.449	7012C	31.50	29.28	10000	13000
	3.7401	0.7086	0.023	0.990		7090	6590		
	95	18	0.6	0.406	7012A	28.80	26.98	6800	9100
	3.7401	0.7086	0.023	0.895		6480	6070		
	110	22	1.0	0.878	7212C	57.60	47.52	9200	12000
	4.3307	0.8661	0.039	1.935		12960	10690		
	110	22	1.0	0.787	7212A	55.35	47.04	6300	8400
	4.3307	0.8661	0.039	1.735		12450	10580		
	110	22	1.0	0.804	7212B	50.40	42.72	5400	7200
	4.3307	0.8661	0.039	1.772		11340	9610		
	130	31	2.1	1.680	7312C	99.00	70.50	8700	12000
	5.1181	1.2204	0.082	3.704		22280	15860		
130	31	1.1	1.729	7312A	88.20	68.64	5600	7500	
5.1181	1.2204	0.043	3.812		19850	15440			
130	31	1.1	1.769	7312B	81.00	63.36	4800	6500	
5.1181	1.2204	0.043	3.900		18230	14260			
65 2.5590	100	18	0.6	0.483	7013C	33.30	33.12	9400	12000
	3.9370	0.7086	0.023	1.065		7490	7450		

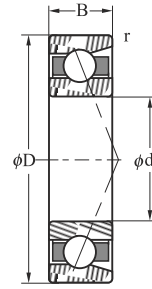
# ANGULAR CONTACT BALL BEARINGS



7000 A



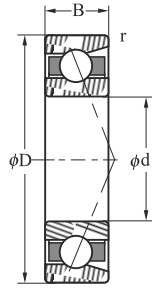
7000 B



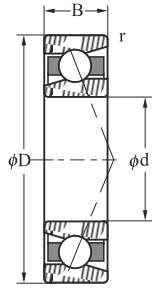
7000 C

Principal dimensions mm (in)				Weight kg (lb)	Bearing Number	Basic Load Rating kN (lbf)		Limiting Speed (rpm)		
d	D	B	r <sub>min</sub>			Dynamic C <sub>r</sub>	Static Cor	Grease	Oil	
65 2.559	100 3.9370	18 0.7086	0.6 0.023	0.445 0.981	7013A	30.15 6780	30.24 6800	6400	8600	
	120 4.7244	23 0.9055	1.0 0.039	1.130 2.491	7213C	63.00 14180	52.80 11880	8600	11000	
	120 4.7244	23 0.9055	1.0 0.039	1.020 2.249	7213A	63.45 14280	55.68 12530	5800	7700	
	140 5.5118	23 0.9055	1.0 0.039	1.040 2.293	7213B	57.15 12860	50.40 11340	4900	6700	
	140 5.5118	33 1.2992	2.1 0.082	2.060 4.542	7313C	112.00 25200	80.50 18110	8100	11000	
	140 5.5118	33 1.2992	1.1 0.043	2.110 4.652	7313A	99.90 22480	78.72 17710	5200	6900	
	90 3.5433	33 1.2992	1.1 0.043	2.160 4.762	7313B	91.80 20660	72.48 16310	4500	6000	
	70 2.7559	110 4.3307	20 0.7874	0.6 0.023	0.688 1.517	7014C	42.30 9520	41.28 9290	8700	11000
		110 4.3307	20 0.7874	0.6 0.023	0.615 1.356	7014A	38.25 8610	37.92 8530	5900	7900
		125 4.9212	24 0.9448	1.0 0.039	1.230 2.712	7214C	68.40 15390	57.60 12960	7900	10000
125 4.9212		24 0.9448	1.0 0.039	1.100 2.425	7214A	68.85 15490	60.96 13720	5400	7200	
125 4.9212		24 0.9448	1.0 0.039	1.130 2.491	7214B	62.10 13970	55.68 12530	4700	6200	
150 5.9055		35 1.3779	2.1 0.082	2.500 5.512	7314C	126.00 28350	92.00 20700	7500	10000	
150 5.9055		35 1.3779	1.1 0.043	2.590 5.710	7314A	112.50 25310	89.76 20200	4800	6500	
150 5.9055		35 1.3779	1.1 0.043	2.640 5.821	7314B	102.60 23090	82.56 18530	4200	5500	
75 2.9527		115 4.5275	20 0.7874	0.6 0.023	0.739 1.629	7015C	43.20 9720	43.68 9830	8200	10000
		115 4.5275	20 0.7874	0.6 0.023	0.652 1.437	7015A	39.15 8810	39.84 8960	5500	7400
	130 5.1181	25 0.9842	1.0 0.039	1.351 2.978	7215C	71.55 16100	62.88 14150	7400	9500	
	130 5.1181	25 0.9842	1.0 0.039	1.181 2.604	7215A	71.10 16000	65.76 14800	5000	6700	
	130 5.1181	25 0.9842	1.0 0.039	1.211 2.670	7215B	64.35 14480	59.52 13390	4300	5700	
	160 6.2992	37 1.4566	2.1 0.082	3.090 6.813	7315C	137.00 30830	104.00 23400	7000	9300	
	160 6.2992	37 1.4566	1.1 0.043	3.121 6.881	7315A	122.40 27540	101.76 22900	4600	6000	
	160 6.2992	37 1.4566	1.1 0.043	3.181 7.014	7315B	112.50 25310	93.60 21060	3900	5100	
	80 3.1496	125 4.9212	22 0.8661	0.6 0.023	0.958 2.112	7016C	52.92 11910	53.28 11990	7600	10000
		125 4.9212	22 0.8661	0.6 0.023	0.872 1.922	7016A	48.15 10830	48.48 10910	5200	6900
140 5.5118		26 1.0236	1.0 0.039	1.622 3.576	7216C	83.70 18830	74.40 16740	6900	9200	
140 5.5118		26 1.0236	1.0 0.039	1.452 3.201	7216A	80.10 18020	72.96 16420	4800	6300	
140 5.5118		26 1.0236	1.0 0.039	1.482 3.267	7216B	72.45 16300	66.72 15010	4100	5400	
170 6.6929		39 1.5354	2.1 0.082	3.550 7.827	7316C	149.00 33530	117.00 26330	6500	8700	
170 6.6929		39 1.5354	1.1 0.043	3.702 8.162	7316A	132.30 29770	114.24 25700	4300	5600	
170 6.6929		39 1.5354	1.1 0.043	3.782 8.339	7316B	121.50 27340	104.64 23540	3600	4800	
85 3.3464		130 5.1181	22 0.8661	0.6 0.023	1.005 2.216	7017C	54.00 12150	56.16 12640	7200	9500
		130 5.1181	22 0.8661	0.6 0.023	0.909 2.004	7017A	49.05 11040	51.36 11560	4800	6600
	150 5.9055	28 1.1023	1.0 0.039	2.036 4.489	7217C	93.60 21060	86.88 19550	6600	8600	
	150 5.9055	28 1.1023	1.0 0.039	1.825 4.024	7217A	89.55 20150	84.96 19120	4500	5900	
	150 5.9055	28 1.1023	1.0 0.039	1.865 4.112	7217B	81.00 18230	77.28 17390	3800	5000	
	180 7.0866	41 1.6141	3.0 0.082	4.180 9.216	7317C	161.00 36230	130.00 29250	6200	8200	
	180 7.0866	41 1.6141	1.1 0.043	4.326 9.538	7317A	143.10 32200	127.68 28730	4000	5300	
	180 7.0866	41 1.6141	1.1 0.043	4.415 9.735	7317B	131.40 29570	117.12 26350	3400	4600	
	140 5.5118	24 0.9448	1.0 0.039	1.332 2.937	7018C	64.35 14480	66.24 14900	6700	9000	

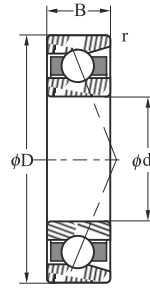
# ANGULAR CONTACT BALL BEARINGS



7000 A



7000 B



7000 C

Principal dimensions mm (in)				Weight kg (lb)	Bearing Number	Basic Load Rating kN (lbf)		Limiting Speed (rpm)		
d	D	B	r <sub>min</sub>			Dynamic C <sub>r</sub>	Static Cor	Grease	Oil	
<b>90</b> 3.5433	140	24	1.0	1.183	<b>7018A</b>	58.50	60.96	4700	6200	
	5.5118	0.9448	0.039	2.608		13160	13720			
	160	30	1.0	2.501		<b>7218C</b>	110.70	100.80	6200	8200
	6.2992	1.1811	0.039	5.514		24910	22680			
	160	30	1.0	2.243		<b>7218A</b>	106.20	98.88	4200	5600
	6.2992	1.1811	0.039	4.945		23900	22250			
	160	30	1.0	2.285		<b>7218B</b>	96.30	90.24	3600	4800
	6.2992	1.1811	0.039	5.038		21670	20300			
	190	43	3.0	4.880		<b>7318C</b>	183.00	158.00	5800	7800
	7.4803	1.6929	0.118	10.760		41180	35550			
190	43	1.1	5.054	<b>7318A</b>	153.90	141.12	3800	5000		
7.4803	1.6929	0.043	11.144	34630	31750					
190	43	1.1	5.164	<b>7318B</b>	140.40	129.60	3200	4300		
7.4803	1.6929	0.043	11.386	31590	29160					
<b>95</b> 3.7401	145	24	1.0	1.411	<b>7019C</b>	66.15	70.08	6500	8600	
	5.7086	0.9448	0.039	3.111		14890	15770			
	145	24	1.0	1.422		<b>7019A</b>	60.30	64.32	4400	5800
	5.7086	0.9448	0.039	3.135		13570	14470			
	170	32	1.1	3.041		<b>7219C</b>	125.10	115.20	5800	7700
	6.6929	1.2598	0.043	6.705		28150	25920			
	170	32	1.1	2.673		<b>7219A</b>	119.70	113.28	3900	5200
	6.6929	1.2598	0.043	5.893		26930	25490			
	170	32	1.1	2.733		<b>7219B</b>	108.90	102.72	3300	4500
	6.6929	1.2598	0.043	6.026		24500	23110			
200	45	3.0	5.650	<b>7319C</b>	196.00	174.00	5500	7300		
7.8740	1.7716	0.118	12.458	44100	39150					
200	45	1.1	5.822	<b>7319A</b>	164.70	155.52	3500	4800		
7.8740	1.7716	0.043	12.837	37060	34990					
200	45	1.1	5.974	<b>7319B</b>	150.30	143.04	3000	4000		
7.8740	1.7716	0.043	13.172	33820	32180					
<b>100</b> 3.9370	150	24	1.0	1.455	<b>7020C</b>	67.95	73.92	6100	8200	
	5.9055	0.9448	0.039	3.208		15290	16630			
	150	24	1.0	1.473		<b>7020A</b>	61.65	67.68	4200	5500
	5.9055	0.9448	0.039	3.247		13870	15230			
	180	34	1.1	3.643		<b>7220C</b>	130.50	121.92	5500	7300
	7.0866	1.3385	0.043	8.032		39360	2743200			
	180	34	1.1	3.211		<b>7220A</b>	129.60	120.96	3700	4900
	7.0866	1.3385	0.043	7.080		29160	27220			
	180	34	1.1	3.272		<b>7220B</b>	117.00	109.44	3200	4300
	7.0866	1.3385	0.043	7.214		26330	24620			
	215	47	3.0	6.900		<b>7320C</b>	222.00	207.00	5200	6900
	8.4645	1.8503	0.118	15.214		49950	46580			
215	47	1.1	7.284	<b>7320A</b>	186.30	185.28	3300	4500		
8.4645	1.8503	0.043	16.061	41920	41690					
215	47	1.1	7.423	<b>7320B</b>	171.00	170.88	2900	3800		
8.4645	1.8503	0.043	16.367	38480	38450					