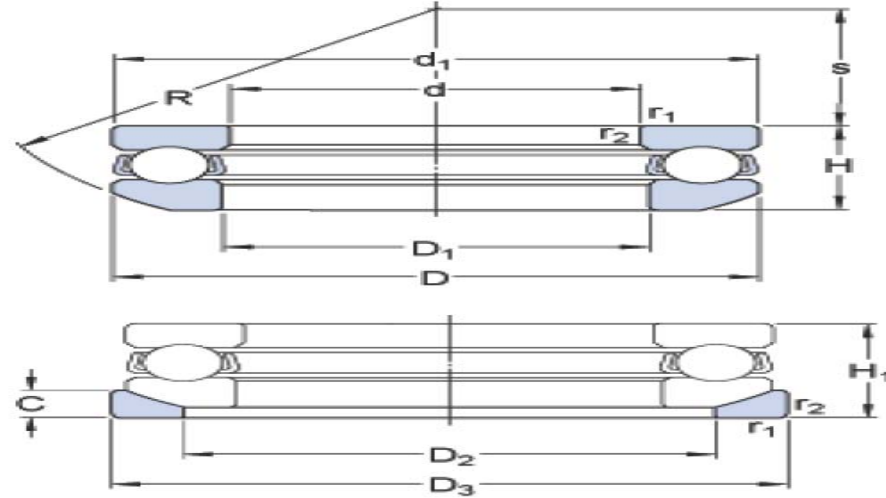
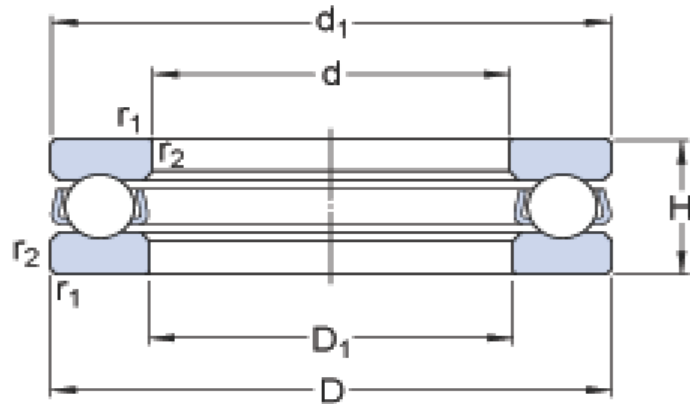


Thrust Ball Bearing



No seat Washer Item

With Seat Washer Item

Designations	Principal dimensions				Basic load ratings		Fatigue load limit	Speed ratings		Seat washer	
	Bearing	d	D	H	H1	dynamic	static	Pu	Reference speed		Limiting speed
	mm				C /kN	C0 /kN	kN	r/min			
BA 3	3	8	3.5			0.806	0.72	0.027	26000	36000	
BA 4	4	10	4			0.761	0.72	0.027	22000	30000	
BA 5	5	12	4			0.852	0.965	0.036	20000	28000	
BA 6	6	14	5			1.78	1.92	0.071	17000	24000	
BA 7	7	17	6			2.51	2.9	0.108	14000	19000	
BA 8	8	19	7			3.19	3.8	0.143	12000	17000	
BA 9	9	20	7			3.12	3.8	0.143	12000	16000	
51200	10	26	11			12.7	18.6	0.695	8000	11000	
51100	10	24	9			8.71	12.2	0.45	9500	13000	

51201	12	28	11		13.3	20.8	0.765	8000	11000	
51101	12	26	9		10.4	16.6	0.62	9000	13000	
53201	12	28	11.4	13	13.3	20.8	0.765	8000	11000	U 201
51202	15	32	12		15.9	25	0.915	7000	10000	
51102	15	28	9		10.6	18.3	0.67	8500	12000	
53202	15	32	13.3	15	15.9	25	0.915	7000	10000	U 202
51203	17	35	12		16.3	27	1	6700	9500	
51103	17	30	9		11.4	21.2	0.78	8500	12000	
53203	17	35	13.2	15	16.3	27	1	6700	9500	U 203
51204	20	40	14		21.2	37.5	1.4	6000	8000	
51104	20	35	10		15.1	29	1.08	7500	10000	
53204	20	40	14.7	17	21.2	37.5	1.4	5600	8000	U 204
51405	25	60	24		42.3	67	2.45	3600	5000	
51305	25	52	18		34.5	60	2.24	4500	6300	
51205	25	47	15		26.5	50	1.86	5300	7500	
51105	25	42	11		18.2	39	1.43	6300	9000	
53205	25	47	16.7	19	26.5	50	1.86	5000	7000	U 205
51406	30	70	28		70.2	122	4.5	3000	4300	
51306	30	60	21		35.8	65.5	2.4	3800	5300	
51206	30	52	16		25.1	51	1.86	4800	6700	
51106	30	47	11		19	43	1.6	6000	8500	
53306	30	60	22.6	25	35.8	65.5	2.4	3800	5300	U 306
53206	30	52	17.8	20	25.1	51	1.86	4500	6300	U 206
51407	35	80	32		76.1	137	5.1	2600	3600	
51307	35	68	24		49.4	96.5	3.55	3400	4800	
51207	35	62	18		35.1	73.5	2.7	4000	5600	
51107	35	52	12		19.9	51	1.86	5600	7500	

53307	35	68	25.6	28	49.4	96.5	3.55	3200	4500	U 307
53207	35	62	19.9	22	35.1	73.5	2.7	4000	5600	U 207
51408	40	90	36		95.6	183	6.8	2400	3400	
51308	40	78	26		61.8	122	4.5	3000	4300	
51208	40	68	19		44.2	96.5	3.6	3800	5300	
51108	40	60	13		25.5	63	2.32	5000	7000	
53408	40	90	38.2	42	95.6	183	6.8	2400	3200	U 408
53308	40	78	28.5	31	61.8	122	4.5	2800	4000	U 308
53208	40	68	20.3	23	44.2	96.5	3.6	3600	5300	U 208
51409	45	100	39		124	240	9	2200	3000	
51309	45	85	28		76.1	153	5.6	2800	4000	
51209	45	73	20		39	86.5	3.2	3600	5000	
51109	45	65	14		26.5	69.5	2.55	4500	6300	
53309	45	85	30.1	33	76.1	153	5.6	2600	3800	U 309
53209	45	73	21.3	24	39	86.5	3.2	3400	4800	U 209
51410	50	110	43		159	340	12.5	2000	2800	
51310	50	95	31		81.9	170	6.3	2600	3600	
51210	50	78	22		49.4	116	4.3	3400	4500	
51110	50	70	14		27	75	2.8	4300	6300	
53410	50	110	45.6	50	159	340	12.5	1900	2600	U 410
53310	50	95	34.3	37	81.9	170	6.3	2400	3400	U 310
53210	50	78	23.5	26	49.4	116	4.3	3200	4500	U 210
51411	55	120	48		195	400	14.6	1800	2400	
51311	55	105	35		101	224	8.3	2200	3200	
51211	55	90	25		58.5	134	4.9	2800	4000	
51111	55	78	16		30.2	81.5	3	3800	5300	
53411	55	120	50.5	55	195	400	14.6	1700	2400	U 411

53311	55	105	39.3	42	101	224	8.3	2200	3000	U 311
53211	55	90	27.3	30	58.5	134	4.9	2800	3800	U 211
51312	60	110	35		101	224	8.3	2200	3000	
51212	60	95	26		59.2	140	5.1	2800	3800	
51112	60	85	17		41.6	122	4.55	3600	5000	
51412 M	60	130	51		199	430	16	1600	2200	
53312	60	110	38.3	42	101	224	8.3	2000	3000	U 312
53212	60	95	28	31	59.2	140	5.1	2600	3600	U 212
53412 M	60	130	54	58	199	430	16	1600	2200	U 412
51313	65	115	36		106	240	8.8	2000	3000	
51213	65	100	27		60.5	150	5.5	2600	3600	
51413 M	65	140	56		216	490	18	1500	2200	
51113	65	90	18		37.7	108	4	3400	4800	
53313	65	115	39.4	43	106	240	8.8	2000	2800	U 313
53213	65	100	28.7	32	60.5	150	5.5	2600	3600	U 213
53414 M	70	150	63.6	69	234	550	19.3	1400	2000	U 414
51314	70	125	40		135	320	11.8	1900	2600	
51414 M	70	150	60		234	550	19.3	1400	2000	
51214	70	105	27		62.4	160	5.85	2600	3600	
51114	70	95	18		40.3	120	4.4	3400	4500	
53314	70	125	44.2	48	135	320	11.8	1800	2600	U 314
53214	70	105	27	32	62.4	160	5.85	2600	3600	U 214
53415 M	75	160	69	75	251	610	20.8	1300	1800	U 415
51415 M	75	160	65		251	610	20.8	1300	1800	
51315	75	135	44		163	390	14	1700	2400	
51215	75	110	27		63.7	170	6.2	2400	3400	
51115	75	100	19		44.2	134	4.9	3200	4300	

53315	75	135	48.1	52	163	390	14	1700	2400	U 315
53215	75	110	28.3	32	63.7	170	6.2	2400	3400	U 215
51416 M	80	170	68		302	750	25	1200	1700	
51316	80	140	44		159	390	13.7	1700	2400	
51216	80	115	28		76.1	208	7.65	2400	3400	
51116	80	105	19		44.9	140	5.1	3000	4300	
53316	80	140	47.6	52	159	390	13.7	1600	2200	U 316
53216	80	115	29.5	33	76.1	208	7.65	2400	3200	U 216
51317	85	150	49		174	405	14	1600	2200	
51217	85	125	31		97.5	275	9.8	2200	3000	
51117	85	110	19		44.9	146	5.4	3000	4300	
53317	85	150	53.1	58	174	405	14	1500	2000	U 317
53217	85	125	33.1	37	97.5	275	9	2000	3000	U 217
51417 M	85	180	72		286	750	24	1200	1600	
51318	90	155	50		182	440	14.6	1500	2200	
51218	90	135	35		112	290	10.4	2000	2800	
51118	90	120	22		59.2	208	7.5	2600	3800	
53318	90	155	54.6	59	182	440	14.6	1400	2000	U 318
53418 M	90	190	81.2	88	307	815	25.5	1100	1500	U 418
53218	90	135	38.5	42	112	290	10.4	1900	2600	U 218
51418 M	90	190	77		307	815	25.5	1100	1500	
51420 M	100	210	85		371	1060	31.5	950	1400	
51320	100	170	55		225	570	18.3	1400	1900	
51220	100	150	38		119	325	10.8	1800	2400	
53420 M	100	210	90	98	371	1060	31.5	950	1300	U 420
51120	100	135	25		80.6	265	9.15	2400	3200	
53320	100	170	59.2	64	225	570	18.3	1300	1800	U 320

53220	100	150	40.9	45	119	325	10.8	1700	2400	U 220
51322 M	110	190	63		291	800	24.5	1200	1700	
53322 M	110	190	67.2	72	281	815	24.5	1100	1600	U 322
51222	110	160	38		125	365	11.6	1700	2400	
51122	110	145	25		83.2	285	9.5	2200	3200	
53222	110	160	40.2	45	125	365	11.6	1700	2400	U 222
51422 M	110	230	95		410	1220	34.5	900	1300	
51224	120	170	39		127	390	11.8	1600	2200	
51124	120	155	25		85.2	305	9.65	2200	3000	
51424 M	120	250	102		432	1320	36	800	1100	
53324 M	120	210	74.1	80	325	980	28.5	1000	1400	U 324
53224	120	170	40.8	46	127	390	11.8	1500	2200	U 224
51324 M	120	210	70		332	980	28	1100	1500	
51426 M	130	270	110		520	1730	45	750	1000	
51226	130	190	45		186	585	17	1400	2000	
51126	130	170	30		119	440	13.4	1900	2600	
51326 M	130	225	75		351	1060	30	1000	1400	
53226	130	190	47.9	53	186	585	17	1300	1800	U 226
51428 M	140	280	112		520	1730	44	700	1000	
51328 M	140	240	80		416	1370	36.5	950	1300	
51228	140	200	46		208	630	18	1400	1900	
51128	140	180	31		111	440	12.9	1800	2600	
53228	140	200	48.6	55	190	620	17.6	1300	1800	U 228
51430 M	150	300	120		559	1960	48	670	950	
51330 M	150	250	80		423	1460	39	900	1300	
51230 M	150	215	50		247	800	21.6	1300	1800	
51130 M	150	190	31		111	440	12.5	1700	2400	

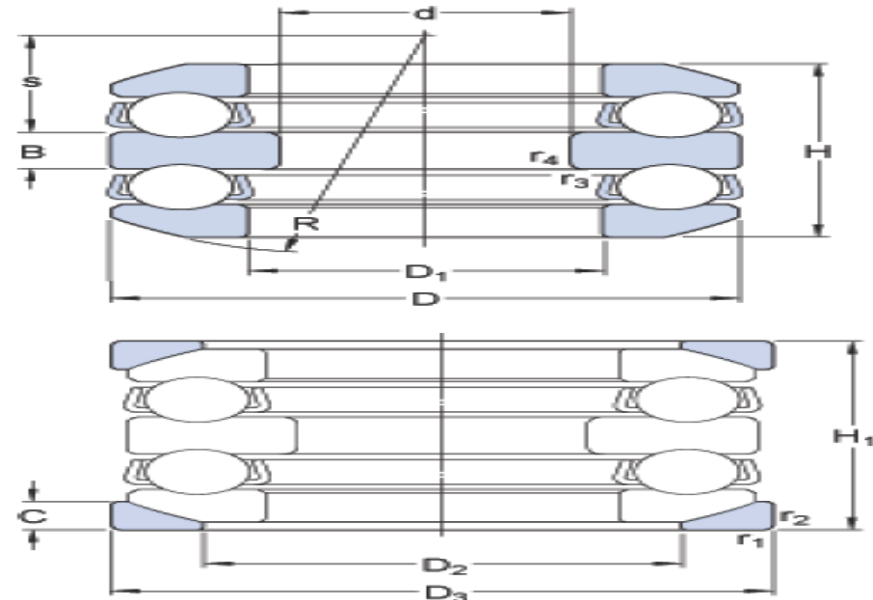
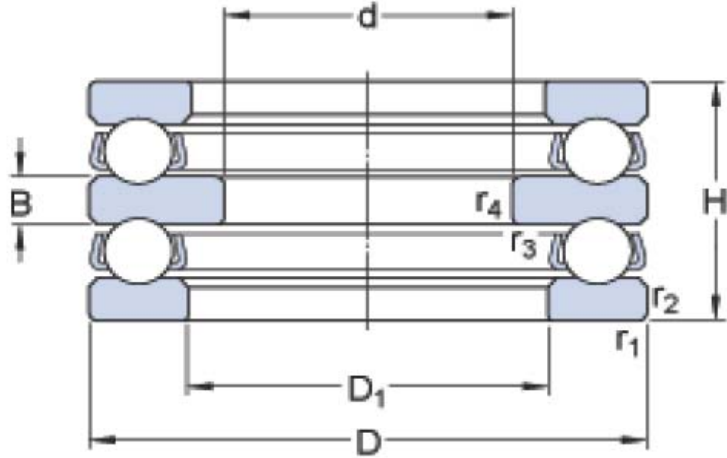
51332 M	160	270	87		442	1600	40	850	1200	
51232 M	160	225	51		247	800	21.2	1200	1700	
51132 M	160	200	31		112	465	12.9	1700	2400	
51234 M	170	240	55		281	980	25	1100	1600	
51134 M	170	215	34		133	540	14.3	1600	2200	
51334 M	170	280	87		449	1700	41.5	800	1100	
51136 M	180	225	34		135	570	15	1500	2200	
51336 M	180	300	95		520	2000	47.5	750	1100	
51236 M	180	250	56		296	1080	27	1100	1500	
51338 M	190	320	105		559	2200	51	700	950	
51238 M	190	270	62		338	1250	30	1000	1400	
51138 M	190	240	37		172	710	18	1400	2000	
51140 M	200	250	37		168	710	17.6	1400	1900	
51340 M	200	340	110		624	2600	58.5	630	900	
51240 M	200	280	62		332	1250	30	1000	1400	
51244 M	220	300	63		358	1460	33.5	950	1300	
51144 M	220	270	37		178	800	19	1300	1900	
51148 M	240	300	45		234	1040	23.6	1100	1600	
51248 M	240	340	78		449	1960	42.5	800	1100	
51152 M	260	320	45		238	1100	24	1100	1500	
51252 M	260	360	79		488	2240	46.5	750	1100	
51256 M	280	380	80		488	2320	47.5	750	1000	
51156 M	280	350	53		319	1460	30.5	950	1300	
51260 M	300	420	95		585	3000	57	630	850	
51160 M	300	380	62		364	1760	35.5	850	1200	
51164 M	320	400	63		371	1860	36.5	800	1100	
51264 F	320	440	95		572	3000	56	600	850	

51264 M	320	440	95		572	3000	56	600	850	
51268 F	340	460	96		605	3200	58.5	600	800	
51168 M	340	420	64		377	1960	37.5	800	1100	
51368 F	340	540	160		1040	5850	10.4	400	560	
59172 F	360	440	48		255	1500	27.5	900	1200	
51272 F	360	500	110		741	4150	73.5	530	750	
51172 F	360	440	65		390	2080	38	750	1100	
BD1B 634132	366	440	65		296	1460	27	750	110	
351793	380	460	36		186	1140	20.8	1000	1400	
59176 F	380	460	48		255	1530	28	850	1200	
51276 F	380	520	112		728	4150	72	500	700	
51176 F	380	460	65		397	2200	40	750	1000	
51080 F	400	440	30		124	830	16.3	1100	1600	
59180 F	400	480	48		260	1630	28.5	850	1200	
51280 F	400	540	112		761	4500	76.5	500	700	
51180 F	400	480	65		403	2280	40.5	700	1000	
BD1B 351955	415.2	544.9	125		923	5700	96.5	450	630	
59184 F	420	500	48		265	1700	30	850	1200	
51284 F	420	580	130		884	5500	90	430	600	
51184 F	420	500	65		410	2400	41.5	700	1000	
51084 F	420	460	30		125	880	16.6	1100	1600	
51088 F	440	480	30		127	915	17	1100	1500	
59188 F	440	540	60		238	1500	25	700	1000	
51288 F	440	600	130		904	5700	93	430	600	
51188 F	440	540	80		527	3250	55	600	850	
BD1B 634131	440	520	65		302	1630	27.5	670	950	
51092 F	460	500	30		130	950	17.6	1100	1500	

51292 F	460	620	130		923	5850	95	430	600	
59192 F	460	560	60		242	1430	25	700	950	
51192 F	460	560	80		527	3250	54	600	800	
59196 F	480	580	60		442	2800	45	670	950	
51296 F	480	650	135		995	6550	102	400	560	
51196 F	480	580	80		540	3550	56	560	800	
51096 F	480	520	30		133	1000	18	1000	1500	
510/500 F	500	540	30		133	1120	18.3	1000	1400	
591/500 F	500	600	60		449	2900	46.5	670	950	
512/500 F	500	670	135		1010	6800	104	380	530	
511/500 F	500	600	80		553	3600	57	560	800	
510/530 F	530	580	38		203	1600	25	850	1200	
591/530 F	530	640	67		468	3150	48	600	850	
511/530 F	530	640	85		650	4400	68	530	750	
351794	530	590	36		178	1370	21.6	900	1200	
591/560 F	560	670	67		475	3250	49	600	800	
511/560 F	560	670	85		650	4650	68	500	700	
510/560 F	560	610	38		203	1660	25	850	1200	
510/600 F	600	650	38		212	1800	26.5	800	1100	
350769	600	800	90		676	5000	69.5	450	630	
591/600 F	600	710	67		475	3400	49	560	800	
511/600 F	600	710	85		663	4800	69.5	500	700	
BD1-8000	600	870	118		1120	8000	118	220	300	
510/630 F	630	680	38		221	1930	28	800	1100	
591/630 F	630	750	73		540	4000	57	530	750	
511/630 F	630	750	95		728	5400	76.5	450	630	
511/670 M	670	800	105		852	6700	91.5	400	560	

510/670 F	670	730	45		286	2400	34	700	950	
591/670 F	670	800	78		540	4150	57	480	670	
511/670 F	670	800	105		852	6700	91.5	400	560	
591/710 JR	710	845	85		676	5400	72	450	630	
510/710 F	710	780	53		358	2850	39	600	850	
511/710 F	710	850	112		936	7650	100	380	530	
591/750 F	750	900	90		741	6400	83	400	600	
591/750 M	750	900	90		741	6200	80	400	600	
511/750 M	750	900	120		1010	8650	110	340	480	
510/750 F	750	820	53		364	3050	40.5	600	850	
511/800 F	800	950	120		1010	9000	112	340	480	
591/800 M	800	950	90		761	6550	83	400	560	
510/800 F	800	870	53		371	3200	40.5	560	800	
511/850 F	850	1000	120		1060	9500	116	320	450	
510/850 M	850	920	53		377	3450	43	560	800	
591/850 M	850	1000	90		761	6800	83	380	560	
511/900 F	900	1060	130		1120	10400	125	300	430	
591/900 M	900	1060	95		630	7650	90	360	500	
511/900 M	900	1060	130		1120	10400	125	300	430	
510/900 M	900	980	63		527	4900	58.5	480	670	
511/950 F	950	1120	135		1330	12000	137	280	400	
510/950 M	950	1080	63		540	5100	60	480	670	
591/950 M	950	1120	103		852	8150	95	340	480	
591/1000 M	1000	1180	109		923	9150	102	320	430	
510/1000 M	1000	1090	70		572	5500	63	430	600	
511/1000 F	1000	1180	140		1330	13200	150	260	380	
511/1060 M	1060	1250	150		1430	15000	163	240	340	

591/1060 F	1060	1250	115		1010	10400	112	300	400	
510/1060 M	1060	1150	70		572	5850	64	430	600	
511/1120 F	1120	1320	160		1530	16300	173	220	320	
511/1180 F	1180	1400	175		1780	20000	204	200	280	
351006 A	1250	1500	150		1430	16000	160	220	300	
BD1B 351890 A	1380	1535	130		1330	16300	156	240	340	
511/1400F	1400	1630	180		1820	2200	208	180	260	



No seat Washer Item

With Seat Washer Item

52202	10	32	22		15.9	25	0.915	5300	7500	
52204	15	40	26		21.2	37.5	1.4	4300	6000	
52305	20	52	34		34.5	60	2.24	3200	4500	
52205	20	47	28		26.5	50	1.86	3800	5300	
52406	20	70	52		70.2	122	4.5	2200	3200	

52306	25	60	38		35.8	65.5	2.4	2800	4000	
52206	25	52	29		25.1	51	1.86	3600	5000	
54306	25	60	41.3	46	35.8	65.5	2.4	2800	3800	U 306
52407	25	80	59		76.1	137	5.1	2000	2800	
54208	30	68	38.6	44	44.2	96.5	3.6	2800	3800	U 208
54207	30	62	37.8	42	35.1	73.5	2.7	2800	4000	U 207
52308	30	78	49		61.8	122	4.5	2200	3000	
52307	30	68	44		49.4	96.5	3.55	2400	3400	
54307	30	68	47.2	52	49.4	96.5	3.55	2400	3400	U 307
52408	30	90	65		95.6	183	6.8	1800	2400	
52207	30	62	34		35.1	73.5	2.7	3000	4300	
52208	30	68	36		44.2	96.5	3.6	2800	3800	
54308	30	78	54.1	59	61.8	122	4.5	2200	3000	U 308
52409	35	100	72		124	240	9	1600	2200	
52309	35	85	52		76.1	153	5.6	2000	2800	
54409	35	100	78.9	86	124	240	9	1500	2000	U 409
54209	35	73	39.6	45	39	86.5	3.2	2600	3600	U 209
52209	35	73	37		39	86.5	3.2	2600	3600	
54309	35	85	56.2	62	76.1	153	5.6	1900	2800	U 309
54310	40	95	64.7	70	81.9	170	6.3	1700	2400	U 310
52210	40	78	39		49.4	116	4.3	2400	3400	
52310	40	95	58		81.9	170	6.3	1800	2600	
54410	40	110	83.2	92	148	305	11.4	1400	1900	U 410
52411	45	120	87		195	400	14.6	1300	1800	
52211	45	90	45		58.5	134	4.9	2200	3000	
54211	45	90	49.6	55	58.5	134	4.9	2200	3000	U 211
52311	45	105	64		101	224	8.3	1600	2200	
52212	50	95	46		59.2	140	5.1	2000	2800	
54312	50	110	70.7	78	101	224	8.3	1500	2200	U 312

52412 M	50	130	93		199	430	16	1200	1700	
52312	50	110	64		101	224	8.3	1600	2200	
52213	55	100	47		60.5	150	5.5	2000	2800	
52214	55	105	47		62.4	160	5.85	1900	2600	
52414 M	55	250	107		234	550	19.3	800	1100	
52313	55	115	64		106	240	8.8	1600	2200	
52314	55	125	72		135	320	11.8	1400	2000	
52215	60	110	47		63.7	170	6.2	1900	2600	
52315	60	135	79		163	390	14	1300	1800	
52216	65	115	48		76.1	208	7.65	2400	3400	
54316	65	140	86.1	95	159	390	13.7	1300	1800	U 316
52316	65	140	79		159	390	13.7	1300	1800	
54416 M	65	170	128.5	140	307	750	25	850	1200	U 416
52217	70	125	55		97.5	275	9.8	1600	2200	
54317	70	150	95.2	105	174	405	14	1100	1500	U 317
52218	75	135	62		112	290	11.6	1500	2000	
54420 M	80	210	159.9	176	371	1060	31.5	700	950	U 420
52220	85	150	67		119	325	10.8	1300	1800	
52320	85	170	97		225	570	18.3	1000	1400	
52222	95	160	67		125	365	11.6	1300	1800	
52224	100	170	68		127	390	11.8	1200	1700	
52226	110	190	80		182	585	16.6	1100	1500	
52228	120	200	81		156	355	10	1000	1400	
52230 M	130	215	89		178	490	13.4	950	1300	
52232 M	140	225	90		238	830	22.4	900	1300	
52236 M	150	250	98		302	1120	28.5	800	1100	
52234 M	150	240	97		270	930	24	850	1200	