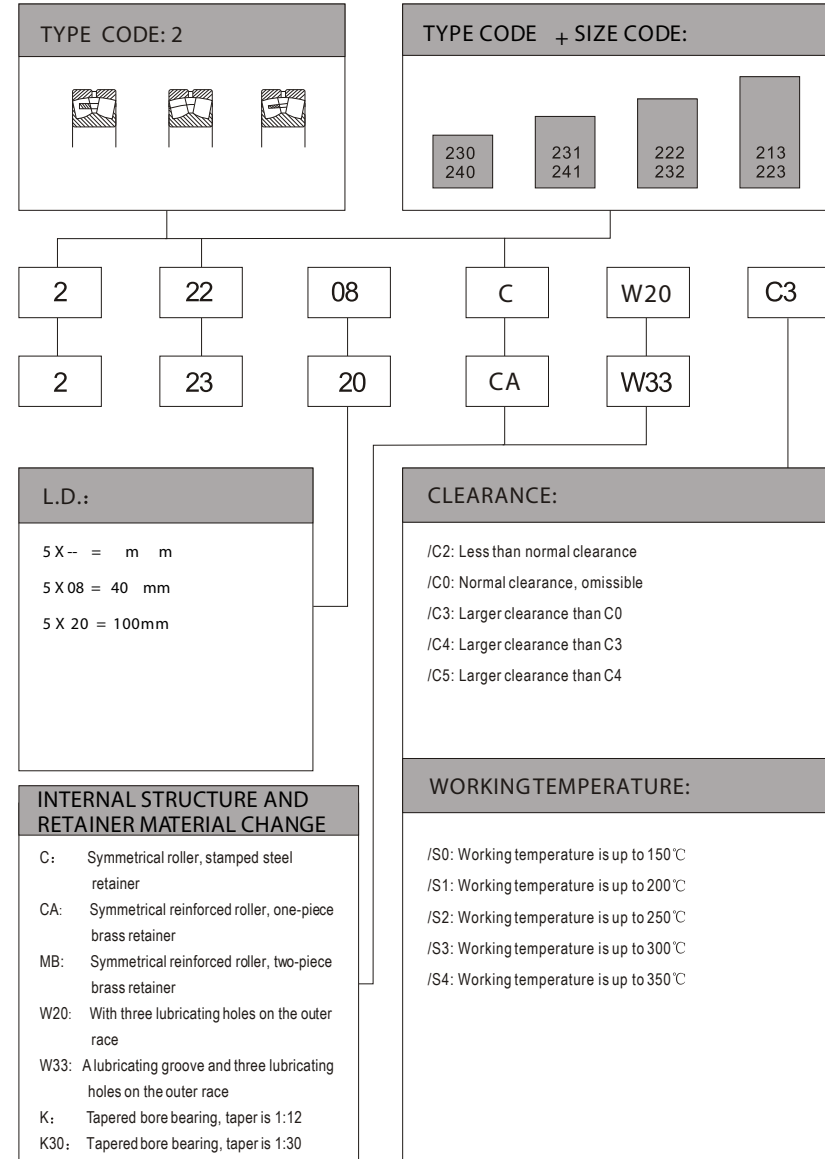


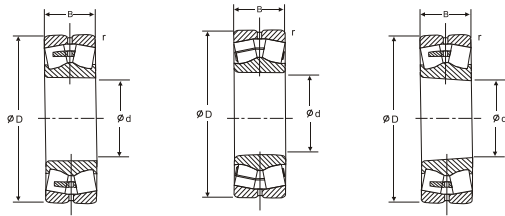
SPHERICAL ROLLER BEARINGS



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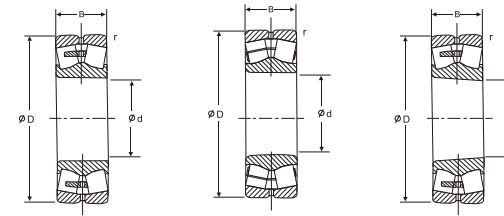


SPHERICAL ROLLER BEARINGS



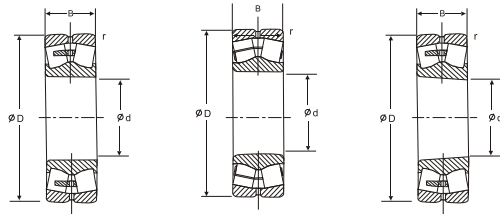
Principal dimensions(mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic Cr	Static Cor	Grease	Oil
25	52	18	1.0	0.17	22205 W33	22205 K/W33	39	36	8000	10000
	62	17	1.1	0.28	21305 W33	-	41	41	8500	12000
30	62	20	1.0	0.29	22206 W33	22206 K/W33	64	60	10000	14000
	72	19	1.1	0.41	21306 W33	21306 K/W33	55	61	7500	10000
35	72	23	1.1	0.46	22207 W33	22207 K/W33	88	85	9000	12000
	80	21	1.5	0.55	21307 W33	21307 K/W33	65	72	6700	9500
40	80	23	1.1	0.53	22208 W33	22208 K/W33	96	90	8000	11000
	90	23	1.5	0.75	21308 W33	21308 K/W33	104	108	7000	9500
45	90	33	1.5	1.05	22308 W33	22308 K/W33	150	140	6000	8000
	85	23	1.1	0.59	22209 W33	22209 K/W33	102	98	7500	10000
50	100	25	1.5	0.99	21309 W33	21309 K/W33	125	127	6300	8500
	100	36	1.5	1.40	22309 W33	22309 K/W33	183	183	5300	7000
55	90	23	1.1	0.63	22210 W33	22210 K/W33	104	108	7000	9500
	110	27	2.0	1.35	21310 W33	21310 K/W33	156	166	5600	7500
60	110	40	2.0	1.90	22310 W33	22310 K/W33	220	224	4800	6300
	100	25	1.5	0.84	22211 W33	22211 K/W33	125	127	6300	8500
65	120	29	2.0	1.70	21311 W33	21311 K/W33	158	166	5600	7500
	120	43	2.0	2.45	22311 W33	22311 K/W33	270	280	4300	5600
70	110	28	1.5	1.15	22212 W33	22212 K/W33	156	166	5600	7500
	130	31	2.1	2.10	21312 W33	21312 K/W33	212	240	4800	6300
75	130	46	2.1	3.10	22312 W33	22312 K/W33	310	335	4000	5300
	100	35	1.1	0.95	24013 W33	24013 K30/W33	132	173	4300	6300
80	120	31	1.5	1.55	22213 W33	22213 K/W33	193	218	5000	7000
	140	33	2.1	2.55	21313 W33	21313 K/W33	238	270	4300	6000
85	140	48	2.1	3.75	22313 W33	22313 K/W33	340	360	3800	6000
	125	31	1.5	1.55	22214 W33	22214 K/W33	208	228	5000	6700
90	150	35	2.1	3.10	21314 W33	21314 K/W33	285	325	4000	5600
	150	51	2.1	4.55	22314 W33	22314 K/W33	400	430	3400	4500
95	115	40	1.1	1.55	24015 W33	24015 K30/W33	173	232	3800	5300
	130	31	1.5	1.70	22215 W33	22215 K/W33	212	240	4800	6300
100	160	37	2.1	3.75	21315 W33	21315 K/W33	285	325	4000	5600
	160	55	2.1	5.55	22315 W33	22315 K/W33	440	475	3200	4300
105	140	33	2.0	2.10	22216 W33	22216 K/W33	238	270	4300	6000
	170	39	2.1	4.45	21316 W33	21316 K/W33	325	375	3800	5300
110	170	58	2.1	6.60	22316 W33	22316 K/W33	490	540	3000	4000

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Principal dimensions(mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic Cr	Static Cor	Grease	Oil
85	150	36.0	2.0	2.66	22217 W33	22217 K/W33	285	325	4000	5600
	180	41.0	2.3	5.20	21317 W33	21317 K/W33	326	375	3800	5300
90	180	60.0	3.0	7.65	22317 W33	22317 K/W33	550	620	2800	3800
	160	40.0	2.0	3.40	22218 W33	22218 K/W33	325	375	3800	5300
95	160	52.4	2.0	4.65	23218 W33	23218 K/W33	355	440	2800	3800
	190	43.0	3.0	6.10	21318 W33	21318 K/W33	380	450	3800	4800
100	190	64.0	3.0	9.05	22318 W33	22318 K/W33	610	695	2600	3600
	170	43.0	2.1	4.15	22219 W33	22219 K/W33	380	450	3600	4800
105	200	45.0	3.0	7.05	21319 W33	21319 K/W33	425	490	3400	4500
	200	67.0	3.0	10.50	22319 W33	22319 K/W33	670	765	2600	3400
110	160	50.0	1.5	3.15	24020 W33	24020 K30/W33	285	415	2800	4000
	165	52.0	2.0	4.55	23120 W33	23120 K/W33	365	490	3000	4000
115	165	65.0	2.0	5.65	24120 W33	24120 K30/W33	455	640	2400	3200
	180	46.0	2.1	4.90	22220 W33	22220 K/W33	428	490	3400	4500
120	180	60.3	2.1	6.85	23220 W33	23220 K/W33	475	600	2400	3400
	215	47.0	3.0	8.80	21320 W33	21320 K/W33	425	490	3400	4500
125	215	73.0	3.0	13.50	22320 W33	22320 K/W33	815	950	2400	3000
	170	45.0	2.0	3.80	23022 W33	23022 K/W33	310	440	3400	4300
130	170	60.0	2.0	5.00	24022 W33	24022 K30/W33	415	620	2400	3600
	180	56.0	2.0	5.75	23122 W33	23122 K/W33	430	585	2800	3600
135	180	69.0	2.0	7.10	24122 W33	24122 K30/W33	520	750	2200	3000
	200	53.0	2.1	7.00	22222 W33	22222 K/W33	560	640	3000	4000
140	200	69.8	2.1	9.86	23222 W33	23222 K/W33	600	785	2200	3200
	240	80.0	3.0	18.40	22322 W33	22322 K/W33	950	1120	2000	2800
145	180	46.0	2.0	4.20	23024 W33	23024 K/W33	355	510	3200	4000
	180	60.0	2.0	5.45	24024 W33	24024 K/W33	430	670	2400	3400
150	200	62.0	2.0	8.00	23124 W33	23124 K/W33	510	695	2600	3400
	200	80.0	2.0	10.30	24124 W33	24124 K30/W33	655	950	1900	2600
155	215	58.0	2.1	8.70	22224 W33	22224 K/W33	630	765	2800	3800
	215	76.0	2.1	12.00	23224 W33	23224 K/W33	695	930	2000	2900
160	260	86.0	3.0	23.00	22324 W33	22324 K/W33	965	1120	2000	2600
	200	52.0	2.0	6.00	23026 W33	23026 K/W33	430	610	2800	3600
165	200	69.0	2.0	8.05	24026 W33	24026 K30/W33	540	815	2000	3000
	210	64.0	2.0	8.80	23126 W33	23126 K/W33	560	780	2400	3200
170	210	80.0	2.0	11.00	24126 W33	24126 K30/W33	580	1000	1800	2400
	230	64.0	3.0	11.00	22226 W33	22226 K/W33	735	930	2600	3600

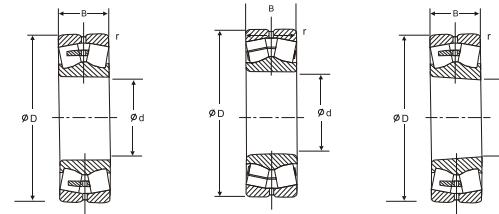
SPHERICAL ROLLER BEARINGS



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Principal dimensions(mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic Cr	Static Cor	Grease	Oil
130	230	80	3.0	14.50	23226 W33	23226 K/W33	780	1060	1900	2600
	280	93	4.0	29.00	23226 W33	23226 K/W33	1120	1320	1800	2400
	210	53	2.0	6.55	23028 W33	23028 K/W33	465	680	2600	3400
140	210	69	2.0	8.55	24028 W33	24028 K30/W33	570	900	2000	2800
	225	68	2.1	10.50	23128 W33	23128 K/W33	630	900	2200	2800
	225	85	2.1	13.50	24128 W33	24128 K30/W33	765	1160	1700	2400
150	250	68	3.0	14.00	22228 W33	22228 K/W33	710	900	2400	3200
	250	88	3.0	19.00	23228 W33	23228 K/W33	915	1250	1700	2400
	300	102	4.0	36.50	23228 W33	23228 K/W33	1290	1560	1700	2200
150	225	56	2.1	7.85	23030 W33	23030 K/W33	510	750	2400	3200
	225	75	2.1	10.50	24030 W33	24030 K30/W33	655	1040	2000	2600
	250	80	2.1	16.00	23130 W33	23130 K/W33	830	1200	1500	2600
160	250	100	2.1	20.00	24130 W33	24130 K30/W33	1020	1530	1500	2200
	270	73	3.0	18.00	22230 W33	22230 K/W33	850	1080	2200	3000
	270	96	3.0	24.50	23230 W33	23230 K/W33	1080	1450	1800	3200
160	320	108	4.0	43.50	22330 W33	22330 K/W33	1460	1760	1800	2000
	240	60	2.1	9.70	23032 W33	23032 K/W33	585	880	2400	3000
	240	80	2.1	13.00	24032 W33	24032 K30/W33	750	1200	1700	2400
170	270	86	2.1	20.50	23132 W33	23132 K/W33	980	1370	1900	2400
	270	109	2.1	25.00	24132 W33	24132 K30/W33	1180	1760	1400	1900
	290	80	3.0	22.50	22232 W33	22232 K/W33	1000	1290	2000	2800
170	290	104	3.0	31.00	23232 W33	23232 K/W33	1220	1660	1500	2200
	340	114	4.0	52.00	22332 W33	22332 K/W33	1600	1960	1500	1900
	260	67	2.1	13.00	23034 W33	23034 K/W33	710	1060	2200	2800
180	260	90	2.1	17.50	24034 W33	24034 K30/W33	900	1460	1600	2400
	280	88	2.1	22.00	23134 W33	23134 K/W33	1040	1500	1800	2400
	280	109	2.1	27.50	24134 W33	24134 K30/W33	1220	1860	1300	1900
180	310	86	4.0	28.50	22234 W33	22234 K/W33	1120	1460	1900	2600
	310	110	4.0	37.50	23234 W33	23234 K/W33	1400	1930	1400	2000
	360	120	4.0	61.00	22334 W33	22334 K/W33	1760	2160	1400	1800
180	250	52	2.0	7.90	23936 W33	23936 K/W33	431	830	2200	2800
	280	74	2.1	17.00	23036 W33	23036 K/W33	830	1250	2000	2600
	280	100	2.1	23.00	24036 W33	24036 K30/W33	1060	1730	1500	2200
200	300	98	3.0	28.00	23136 W33	23136 K/W33	1200	1760	1700	2000
	300	118	3.0	34.50	24136 W33	24136 K30/W33	1400	2160	1300	1700
	320	86	4.0	29.50	22236 W33	22236 K/W33	1180	1560	1600	2600

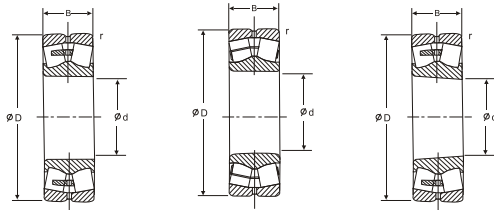
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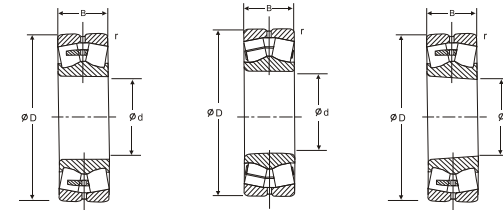
Principal dimensions(mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic Cr	Static Cor	Grease	Oil
180	320	112	4.0	39.5	23236 W33	23236 K/W33	1500	2120	1300	1900
	380	126	4.0	71.5	23336 W33	23336 K/W33	2000	2450	1300	1700
	260	52	2.0	8.30	23938 W33	23938 K/W33	414	800	2200	2600
190	290	75	2.1	18.0	23038 W33	23038 K/W33	865	1340	1900	2400
	290	100	2.1	24.5	24038 W33	24038 K30/W33	1120	1800	1400	2000
	320	104	3.0	35.0	23138 W33	23138 K/W33	1370	2080	1500	2000
200	320	128	3.0	43.0	24138 W33	24138 K30/W33	1500	2500	1200	1600
	340	92	4.0	38.6	22238 W33	22238 K/W33	1270	1700	1700	2400
	340	120	4.0	48.0	23228 W33	23228 K/W33	1660	2400	1300	1800
200	400	132	5.0	82.5	22338 W33	22338 K/W33	2120	2650	1200	1800
	280	60	2.1	11.5	23940 W33	23940 K/W33	646	1040	2000	2400
	310	82	2.1	23.3	23040 W33	23040 K/W33	1000	1530	1800	2200
200	310	109	2.1	31.0	24040 W33	24040 K30/W33	1200	2120	1300	1900
	340	112	3.0	43.0	23140 W33	23140 K/W33	1600	2360	1500	1900
	340	140	3.0	53.6	24140 W33	24140 K30/W33	1800	2800	1100	1500
220	360	98	4.0	43.5	22240 W33	22240 K/W33	1460	1930	1600	2200
	360	128	4.0	58.0	23240 W33	23240 K/W33	1860	2700	1200	1700
	420	138	5.0	95.0	22340 W33	22340 K/W33	2320	2900	1200	1500
240	300	60	2.1	12.5	23944 W33	23944 K/W33	546	1060	1900	2200
	340	90	3.0	30.5	23044 W33	23044 K/W33	1220	1860	1600	2000
	340	118	3.0	40.0	24044 W33	24044 K30/W33	1550	2600	1200	1700
240	370	120	4.0	53.5	23144 W33	23144 K/W33	1800	2750	1300	1700
	370	150	4.0	57.0	24144 W33	24144 K30/W33	2120	3350	1000	1400
	400	108	4.0	60.5	22244 W33	22244 K/W33	1760	2360	1500	2000
240	400	144	4.0	81.5	23244 W33	23244 K/W33	2360	3450	1100	1500
	460	145	5.0	120.0	22344 W33	22344 K/W33	2700	3450	1000	1400
	320	60	2.1	13.5	23948 W33	23948 K/W33	564	1160	1700	2000
240	360	92	3.0	33.5	23048 W33	23048 K/W33	1290	2060	1500	1800
	360	118	3.0	43.0	24048 W33	24048 K30/W33	1600	2700	1100	1600
	400	128	4.0	66.5	23148 W33	23148 K/W33	2080	3200	1200	1000
260	400	160	4.0	83.0	24148 W33	24148 K30/W33	2400	3800	900	1300
	440	120	4.0	83.0	22248 W33	22248 K/W33	2200	3000	1300	1800
	440	160	4.0	110.0	23248 W33	23248 K/W33	2900	4300	950	1300
260	500	155	5.0	155.0	22348 W33	22348 K/W33	3100	4000	950	1300
	360	75	2.1	23.5	23952 W33	23952 K/W33	880	1800	1500	1900
	400	104	4.0	48.5	23052 W33	23052 K/W33	1600	2550	1300	1700

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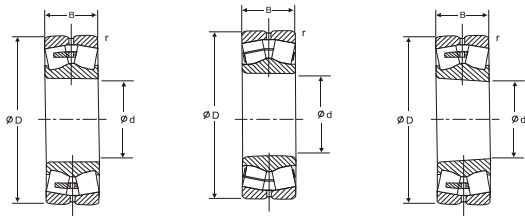
Principal dimensions(mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic C	Static Cor	Grease	Oil
260	400	140	4.0	65.5	24052 W33	24052 K30/W33	2040	3450	1000	1400
	440	144	4.0	90.5	23152 W33	23152 K/W33	2550	3600	1100	1400
	440	180	4.0	110.0	24152 W33	24152 K30/W33	3000	4800	850	1200
	480	130	5.0	110.0	22252 W33	22252 K/W33	2650	3550	1200	1600
	480	174	5.0	140.0	23252 W33	23252 K/W33	3250	4750	850	1200
	540	165	6.0	190.0	22352 W33	22352 K/W33	3550	4550	850	1100
280	380	75	2.1	25.0	23956 W33	23956 K/W33	845	1760	1400	1700
	420	106	4.0	52.5	23056 W33	23056 K/W33	1730	2850	1300	1600
	420	140	4.0	69.5	24056 W33	24056 K30/W33	2160	3800	950	1400
	460	146	5.0	97.0	23156 W33	23156 K/W33	2650	4250	1000	1300
	460	180	5.0	120.0	24156 W33	24156 K30/W33	3100	5100	800	1100
	500	130	5.0	115.0	22256 W33	22256 K/W33	2700	3750	1100	1500
	500	176	5.0	150.0	23256 W33	23256 K/W33	3250	4900	800	1100
	580	175	6.0	235.0	22356 W33	22356 K/W33	4000	5200	800	1100
300	380	60	2.1	16.5	23860 W33	23860 K/W33	656	1600	1400	1700
	420	90	3.0	39.5	23960 W33	23960 K/W33	1200	2500	1300	1600
	460	118	4.0	71.6	23060 W33	23060 K/W33	2120	3460	1200	1500
	460	160	4.0	87.0	24060 W33	24060 K30/W33	2700	4750	850	1200
	500	160	5.0	125.0	23160 W33	23160 K/W33	3200	5100	950	1200
	500	200	5.0	160.0	24160 W33	24160 K30/W33	3750	6300	700	1000
	540	140	5.0	145.0	22260 W33	22260 K/W33	3150	4250	1000	1400
	540	192	5.0	190.0	23260 W33	23260 K/W33	3900	5850	750	1000
320	440	90	3.0	42.0	23964 W33	23964 K/W33	1430	2700	1400	1500
	480	121	4.0	78.0	23064 W33	23064 K/W33	2240	3800	1100	1400
	480	160	4.0	100.0	24064 W33	24064 K30/W33	2850	5100	800	1200
	540	176	5.0	165.0	23164 W33	23164 K/W33	3750	6000	850	1100
	540	218	5.0	210.0	24164 W33	24164 K/W33	4250	7100	670	900
	580	150	5.0	175.0	22264 W33	22264 K/W33	3600	4900	950	1300
	580	208	5.0	240.0	23264 W33	23264 K/W33	4400	6700	700	950
340	460	90	3.0	45.5	23968 W33	23968 K/W33	1460	2800	1300	1400
	520	133	5.0	105.0	23068 W33	23068 K/W33	2700	4550	1000	1300
	520	180	5.0	140.0	24068 W33	24068 K30/W33	3450	6200	750	1100
	580	190	5.0	210.0	23168 W33	23168 K/W33	4250	6800	800	1000
	580	243	5.0	280.0	24168 W33	24168 K30/W33	5300	8650	600	850
	620	224	6.0	295.0	23268 W33	23268 K/W33	5100	7800	560	800
360	480	90	3.0	46.0	23972 W33	23972 K/W33	1400	2750	1200	1300

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Principal dimensions(mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic C	Static Cor	Grease	Oil
360	540	134	5.0	110	23072 W33	23072 K/W33	2750	4800	950	1200
	540	180	5.0	145	24072 W33	24072 K30/W33	3550	6550	700	1000
	600	192	5.0	220	23172 W33	23172 K/W33	4300	6950	750	1000
	600	243	5.0	280	24172 W33	24172 K30/W33	5600	9300	560	800
	650	170	6.0	255	22272 W33	22272 K/W33	4300	6200	630	850
	650	232	6.0	335	23272 W33	23272 K/W33	5400	8300	530	750
380	520	106	4.0	69	23976 W33	23976 K/W33	1960	3800	1100	1200
	560	135	5.0	115	23076 W33	23076 K/W33	2900	5000	900	1200
	560	180	5.0	150	24076 W33	24076 K30/W33	3600	6800	670	850
	620	194	5.0	230	23176 W33	23176 K/W33	4400	7100	560	1000
	620	243	5.0	300	24176 W33	24176 K30/W33	5700	9800	460	850
	680	240	6.0	375	23276 W33	23276 K/W33	5850	9150	500	750
400	540	106	4.0	71	23980 W33	23980 K/W33	2000	3900	1100	1200
	600	148	5.0	150	23080 W33	23080 K/W33	3250	5700	850	1100
	600	200	5.0	205	24080 W33	24080 K30/W33	4300	8000	630	900
	650	200	6.0	265	23180 W33	23180 K/W33	4650	7850	530	950
	650	250	6.0	340	24180 W33	24180 K30/W33	6200	10600	430	800
	720	256	6.0	450	23280 W33	23280 K/W33	6550	10400	430	670
	820	243	7.5	650	22380 W33	22380 K/W33	7500	10400	430	750
420	560	106	4.0	74	23984 W33	23984 K/W33	2040	4150	1000	1100
	620	150	5.0	155	23084 W33	23084 K/W33	3400	6000	600	1100
	620	200	5.0	210	24084 W33	24084 K30/W33	4400	9300	530	900
	700	224	6.0	350	23184 W33	23184 K/W33	5600	9300	480	900
	700	280	6.0	445	24184 W33	24184 K30/W33	7350	12600	400	700
	760	272	7.5	535	23284 W33	23284 K/W33	7350	11600	450	630
440	600	118	4.0	99	23988 W33	23988 K/W33	2450	4900	950	1000
	650	157	6.0	130	23088 W33	23088 K/W33	3850	6550	580	1000
	650	212	6.0	245	24088 W33	24088 K30/W33	4800	9150	500	850
	720	226	5.0	360	23188 W33	23188 K/W33	6000	10000	450	850
	720	280	6.0	460	24188 W33	24188 K30/W33	7500	13200	400	700
	790	280	7.5	590	23288 W33	23288 K/W33	7800	12500	430	600
460	580	118	3.0	75	24892 W33	24892 K30/W33	1790	4900	560	1100
	620	118	4.0	105	23992 W33	23992 K/W33	2500	5000	600	1000
	680	163	6.0	205	23092 W33	23092 K/W33	3900	6950	560	950
	680	218	6.0	275	24092 W33	24092 K30/W33	5200	10000	480	800
	760	240	7.5	440	23192 W33	23192 K/W33	6400	10000	430	800

SPHERICAL ROLLER BEARINGS



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Principal dimensions (mm)				Weight Kg	Bearing Number		Basic Load Rating (kN)		Limiting Speed (rpm)	
d	D	B	r _{min}		Cylindrical Bore	Tapered Bore	Dynamic C	Static Cor	Grease	Oil
460	760	300	7.5	560.0	24192 W33	24192 K30/W33	8300	14600	360	670
	830	296	7.5	895.0	23292 W33	23292 K/W33	8500	13700	400	560
480	600	90	3.0	61.0	23896 W33	23896 K/W33	1440	3750	530	1100
	650	128	5.0	125.0	23996 W33	23896 K/W33	2900	5700	560	1000
490	700	165	6.0	215.0	23096 W33	23096 K/W33	3900	6800	530	950
	700	218	6.0	265.0	24096 W33	24096 K30/W33	5300	10400	450	750
500	790	248	7.5	485.0	23196 W33	23196 K/W33	6950	12000	400	750
	790	308	7.5	605.0	24196 W33	24196 K30/W33	8000	15800	340	630
500	870	310	7.5	800.0	23296 W33	23296 K/W33	8300	15000	380	530
	620	90	3.0	62.0	238/500 W33	238/500 K/W33	14800	4000	550	1000
500	670	128	5.0	130.0	239/500 W33	239/500 K/W33	2900	6000	530	950
	720	167	6.0	225.0	230/500 W33	230/500 K/W33	4150	7800	500	900
500	720	218	6.0	295.0	240/500 W33	240/500 K30/W33	5500	11000	430	700
	830	264	7.5	580.0	231/500 W33	231/500 K/W33	7850	12900	380	700
500	830	325	7.5	700.0	241/500 W33	241/500 K30/W33	9800	17000	320	600
	920	336	7.5	985.0	232/500 W33	232/500 K/W33	10500	17300	360	500