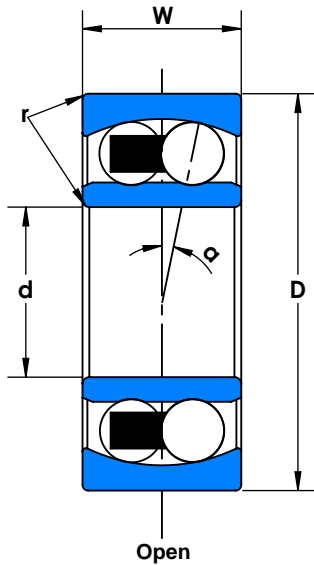
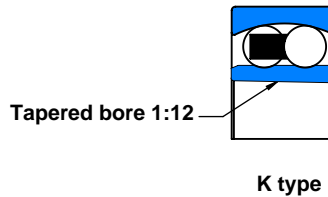


# Double Row Self Aligning Deep Groove Ball Bearing

1200 & 1200K Series



- Ring material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Ball material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Closures:** Open type only
- Cage design:** Pressed steel cage, machined cage or molded plastic cage
- Radial clearance:** C0 to C3, or as specified by the customer
- Precision level:** Abec 1 or as specified by the customer
- Bearing noise level:** Standard (Z1) to Z4
- Lubricant:** Oil lubricated or as specified by the customer
- Allowable aligning angle  $\alpha$ :** +/- 0.044 rad (2.5 degree)

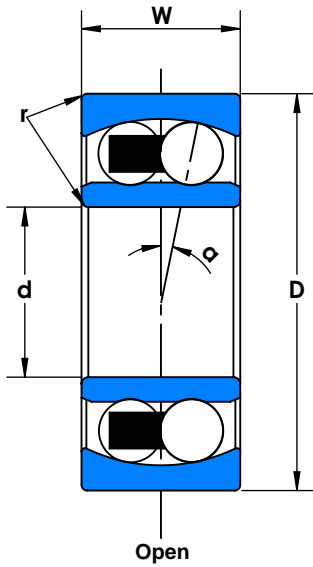


WJB Bearing No		Bore d		Outer Diameter D		Width W		Radius r*		Limiting Speed Oil Lube RPM	Basic Loading Rating kN		Weight (Ref) kg
		mm	inch	mm	inch	mm	inch	mm	inch		Dynamic Cr	Static Cor	
1200	1200K	10	0.1969	30	0.7480	9	0.3150	1.0	0.012	28000	5.5	1.2	0.034
1201	1201K	12	0.2362	32	0.7480	10	0.3150	1.0	0.012	26000	5.6	1.3	0.040
1202	1202K	15	0.2362	35	0.9449	11	0.3150	1.0	0.012	22000	7.5	1.8	0.049
1203	1203K	17	0.2756	40	0.8661	12	0.3150	1.0	0.012	20000	7.9	2.0	0.073
1204	1204K	20	0.2756	47	0.9449	14	0.3150	1.5	0.012	17000	9.9	2.6	0.120
1205	1205K	25	0.3150	52	0.8661	15	0.3150	1.5	0.012	14000	12.1	3.3	0.141
1206	1206K	30	0.3150	62	0.9449	16	0.3150	1.5	0.012	12000	15.6	4.7	0.220
1207	1207K	35	0.3543	72	1.0236	17	0.3150	2.0	0.024	10000	15.8	5.1	0.323
1208	1208K	40	0.3543	80	1.1811	18	0.3543	2.0	0.024	9200	19.3	6.5	0.417
1209	1209K	45	0.3937	85	1.1811	19	0.3543	2.0	0.024	8500	21.8	7.3	0.467
1210	1210K	50	0.4331	90	1.2598	20	0.3937	2.0	0.024	7900	22.7	8.1	0.526
1211	1211K	55	0.4724	100	1.2598	21	0.3937	2.5	0.024	7100	26.7	10.0	0.703
1212	1212K	60	0.5118	110	1.2598	22	0.3937	2.5	0.024	6400	30.2	11.5	0.898
1213	1213K	65	0.5512	120	1.3780	23	0.4331	2.5	0.024	5800	30.9	12.5	1.152
1214	1214K	70	0.5906	125	1.3780	24	0.4331	2.5	0.024	5700	34.7	13.8	1.261
1215	1215K	75	0.6299	130	1.3780	25	0.4331	2.5	0.024	5300	38.9	15.8	1.361
1216	1216K	80	0.5906	140	1.6535	26	0.5118	3.0	0.039	4900	39.8	16.9	1.669
1217	1217K	85	0.6693	150	1.5748	28	0.4724	3.0	0.039	4600	48.9	20.7	2.068
1218	1218K	90	0.6693	160	1.8504	30	0.5512	3.0	0.039	4300	56.9	23.6	2.522
1219	1219K	95	0.7874	170	1.8504	32	0.5512	3.5	0.039	4000	63.6	27.1	3.098
1220	1220K	100	0.7874	180	2.0472	34	0.5906	3.5	0.039	3800	68.9	29.8	3.701

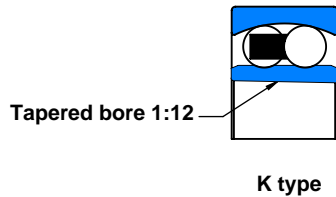
\*Maximum fillet which corner radius of bearing will clear

# Double Row Self Aligning Deep Groove Ball Bearing

1300 & 1300K Series



- Ring material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Ball material:** Standard AISI 52100 or 440C stainless steel equivalent.
- Closures:** Open type only
- Cage design:** Pressed steel cage, machined cage or molded plastic cage
- Radial clearance:** C0 to C3, or as specified by the customer
- Precision level:** Abec 1 or as specified by the customer
- Bearing noise level:** Standard (Z1) to Z4
- Lubricant:** Oil lubricated or as specified by the customer
- Allowable aligning angle  $\alpha$ :** +/- 0.052 rad (3.0 degree);

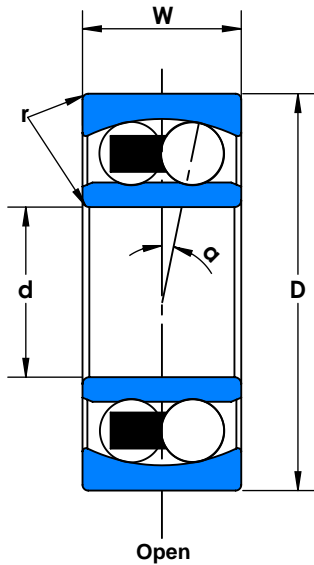


WJB Bearing No		Bore d		Outer Diameter D		Width W		Radius r*		Limiting Speed Oil Lube RPM	Basic Loading Rating kN		Weight (Ref) kg
		mm	inch	mm	inch	mm	inch	mm	inch		Dynamic Cr	Static Cor	
1300	1300K	10	0.1969	35	0.7480	11	0.3150	0.6	0.012	24000	7.4	1.6	0.058
1301	1301K	12	0.2362	37	0.7480	12	0.3150	1.0	0.012	22000	9.4	2.2	0.067
1302	1302K	15	0.2362	32	0.9449	13	0.3150	1.5	0.012	20000	9.6	2.3	0.094
1303	1303K	17	0.2756	47	0.8661	14	0.3150	1.5	0.012	17000	12.5	3.2	0.130
1304	1304K	20	0.2756	52	0.9449	15	0.3150	2.0	0.012	15000	12.4	3.3	0.163
1305	1305K	25	0.3150	62	0.8661	17	0.3150	2.0	0.012	12000	18.0	5.0	0.257
1306	1306K	30	0.3150	72	0.9449	19	0.3150	2.0	0.012	11000	21.3	6.3	0.387
1307	1307K	35	0.3543	80	1.0236	21	0.3150	2.5	0.024	9300	25.1	7.9	0.508
1308	1308K	40	0.3543	90	1.1811	23	0.3543	2.5	0.024	8400	29.5	9.7	0.717
1309	1309K	45	0.3937	100	1.1811	25	0.3543	2.5	0.024	7500	38.1	12.7	0.957
1310	1310K	50	0.4331	110	1.2598	27	0.3937	3.0	0.024	6800	43.4	14.4	1.211
1311	1311K	55	0.4724	120	1.2598	29	0.3937	3.0	0.024	6200	51.6	17.8	1.579
1312	1312K	60	0.5118	130	1.2598	31	0.3937	3.5	0.024	5500	57.4	20.9	1.960
1313	1313K	65	0.5512	140	1.3780	33	0.4331	3.5	0.024	5200	61.8	22.9	2.449
1314	1314K	70	0.5906	150	1.3780	35	0.4331	3.5	0.024	4900	74.3	27.8	2.994
1315	1315K	75	0.6299	160	1.3780	37	0.4331	3.5	0.024	4900	79.2	30.0	3.561
1316	1316K	80	0.5906	170	1.6535	39	0.5118	3.5	0.039	4300	88.5	33.1	4.182
1317	1317K	85	0.6693	180	1.5748	41	0.4724	4.0	0.039	4000	97.9	37.8	4.990
1318	1318K	90	0.6693	190	1.8504	43	0.5512	4.0	0.039	3800	116.1	44.5	5.806
1319	1319K	95	0.7874	200	1.8504	45	0.5512	4.0	0.039	3600	131.7	50.7	6.668
1320	1320K	100	0.7874	215	2.0472	47	0.5906	4.0	0.039	3400	142.3	57.4	8.301

\*Maximum fillet which corner radius of bearing will clear

# Double Row Self Aligning Deep Groove Ball Bearing

2200 & 2200K Series



**Ring material:** Standard AISI 52100 or 440C stainless steel equivalent.

**Ball material:** Standard AISI 52100 or 440C stainless steel equivalent.

**Closures:** open, seals, or shields

**Seal materials:** NBR, EPDM, ACM, FKM and Silicone

**Seal contact type:** Standard, light and tight contact

**Cage design:** Pressed steel cage, machined cage or molded plastic cage

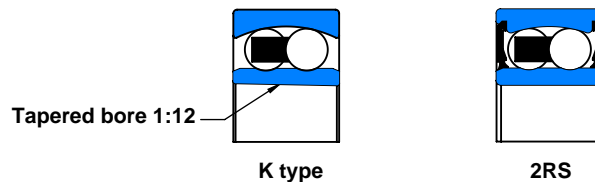
**Radial clearance:** C0 to C3, or as specified by the customer

**Precision level:** Abec 1 or as specified by the customer

**Bearing noise level:** Standard (Z1) to Z4

**Lubricant:** Standard industrial grease

**Allowable aligning angle  $\alpha$ :** +/- 0.044 rad (2.5 degree); -2RS +/- 0.026 rad (1.5 degree)

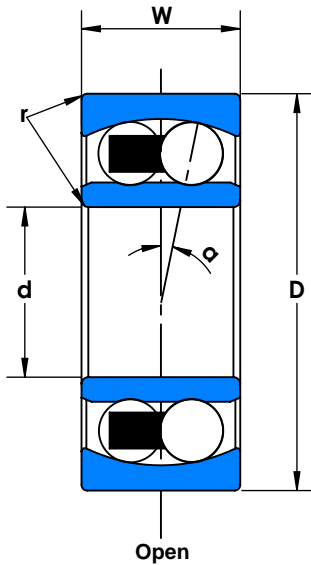


WJB Bearing No		Bore d		Outer Diameter D		Width W		Radius r*		Limiting Speed		Basic Loading Rating kN		Weight (Ref) kg
		mm	inch	mm	inch	mm	inch	mm	inch	Oil Lube RPM	Grease Lube RPM	Dynamic Cr	Static Cor	
2200	2200K	10	0.1969	30	0.7480	14	0.3150	1.0	0.012	29000	15000	5.5	1.2	0.034
2201	2201K	12	0.2362	32	0.7480	14	0.3150	1.0	0.012	26000	14000	5.6	1.3	0.040
2202	2202K	15	0.2362	35	0.9449	14	0.3150	1.0	0.012	22000	12000	7.5	1.8	0.049
2203	2203K	17	0.2756	40	0.8661	16	0.3150	1.0	0.012	20000	11000	7.9	2.0	0.073
2204	2204K	20	0.2756	47	0.9449	18	0.3150	1.5	0.012	17000	9100	9.9	2.6	0.120
2205	2205K	25	0.3150	52	0.8661	18	0.3150	1.5	0.012	15000	7900	12.1	3.3	0.141
2206	2206K	30	0.3150	62	0.9449	20	0.3150	1.5	0.012	12000	6600	15.6	4.7	0.220
2207	2207K	35	0.3543	72	1.0236	23	0.3150	2.0	0.024	10000	5700	15.8	5.1	0.323
2208	2208K	40	0.3543	80	1.1811	23	0.3543	2.0	0.024	9300	5000	19.3	6.5	0.417
2209	2209K	45	0.3937	85	1.1811	23	0.3543	2.0	0.024	8500	4600	21.8	7.3	0.467
2210	2210K	50	0.4331	90	1.2598	23	0.3937	2.0	0.024	7900	4300	22.7	8.1	0.526
2211	2211K	55	0.4724	100	1.2598	25	0.3937	2.5	0.024	7100	3900	26.7	10.0	0.703
2212	2212K	60	0.5118	110	1.2598	28	0.3937	2.5	0.024	6500	3500	30.2	11.5	0.898
2213	2213K	65	0.5512	120	1.3780	31	0.4331	2.5	0.024	5900	3200	30.9	12.5	1.152
2214	2214K	70	0.5906	125	1.3780	31	0.4331	2.5	0.024	5600	3100	34.7	13.8	1.261
2215	2215K	75	0.6299	130	1.3780	31	0.4331	2.5	0.024	5300	2900	38.9	15.8	1.361
2216	2216K	80	0.5906	140	1.6535	33	0.5118	3.0	0.039	5000	2700	39.8	16.9	1.669
2217	2217K	85	0.6693	150	1.5748	36	0.4724	3.0	0.039	4600	2500	48.9	20.7	2.068
2218	2218K	90	0.6693	160	1.8504	40	0.5512	3.0	0.039	4300	2400	56.9	23.6	2.522
2219	2219K	95	0.7874	170	1.8504	43	0.5512	3.5	0.039	4000	2200	63.6	27.1	3.098
2220	2220K	100	0.7874	180	2.0472	46	0.5906	3.5	0.039	3800	2100	68.9	29.8	3.701

\*Maximum fillet which corner radius of bearing will clear

# Double Row Self Aligning Deep Groove Ball Bearing

2300 & 2300K Series



**Ring material:** Standard AISI 52100 or 440C stainless steel equivalent.

**Ball material:** Standard AISI 52100 or 440C stainless steel equivalent.

**Closures:** open, seals, or shields

**Seal materials:** NBR, EPDM, ACM, FKM and Silicone

**Seal contact type:** Standard, light and tight contact

**Cage design:** Pressed steel cage, machined cage or molded plastic cage

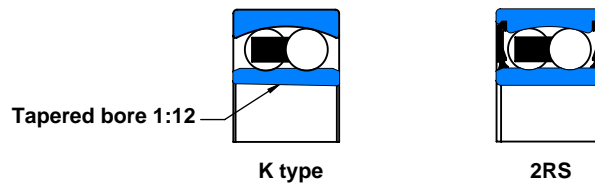
**Radial clearance:** C0 to C3, or as specified by the customer

**Precision level:** Abec 1 or as specified by the customer

**Bearing noise level:** Standard (Z1) to Z4

**Lubricant:** Standard industrial grease

**Allowable aligning angle  $\alpha$ :** +/- 0.052 rad (3.0 degree); -2RS +/- 0.026 rad (1.5 degree)



WJB Bearing No		Bore d		Outer Diameter D		Width W		Radius r*		Limiting Speed		Basic Loading Rating kN		Weight (Ref) kg
		mm	inch	mm	inch	mm	inch	mm	inch	Oil Lube RPM	Grease Lube RPM	Dynamic Cr	Static Cor	
2300	2300K	10	0.1969	35	0.7480	17	0.3150	1.0	0.012	24000	----	10.1	2.2	0.082
2301	2301K	12	0.2362	37	0.7480	17	0.3150	1.5	0.012	22000	----	11.7	2.7	0.088
2302	2302K	15	0.2362	42	0.9449	17	0.3150	1.5	0.012	20000	11000	12.0	2.9	0.111
2303	2303K	17	0.2756	47	0.8661	19	0.3150	1.5	0.012	18000	9400	14.5	3.6	0.154
2304	2304K	20	0.2756	52	0.9449	21	0.3150	2.0	0.012	15000	8300	18.0	4.7	0.205
2305	2305K	25	0.3150	62	0.8661	24	0.3150	2.0	0.012	13000	6600	24.5	6.6	0.327
2306	2306K	30	0.3150	72	0.9449	27	0.3150	2.0	0.012	11000	5800	31.4	8.8	0.490
2307	2307K	35	0.3543	80	1.0236	31	0.3150	2.5	0.024	9800	5100	39.4	11.3	0.658
2308	2308K	40	0.3543	90	1.1811	33	0.3543	2.5	0.024	8600	4600	44.9	13.6	0.903
2309	2309K	45	0.3937	100	1.1811	36	0.3543	2.5	0.024	7700	4100	54.3	16.7	1.202
2310	2310K	50	0.4331	110	1.2598	40	0.3937	3.0	0.024	7000	3700	64.5	20.2	1.601
2311	2311K	55	0.4724	120	1.2598	43	0.3937	3.0	0.024	6400	3400	75.2	24.0	2.050
2312	2312K	60	0.5118	130	1.2598	46	0.3937	3.5	0.024	5800	3000	87.2	28.2	2.531
2313	2313K	65	0.5512	140	1.3780	48	0.4331	3.5	0.024	5300	2900	96.1	32.5	3.148
2314	2314K	70	0.5906	150	1.3780	51	0.4331	3.5	0.024	4900	2600	109.4	37.6	3.579
2315	2315K	75	0.6299	160	1.3780	55	0.4331	3.5	0.024	4600	2600	123.2	42.9	4.627
2316	2316K	80	0.5906	170	1.6535	58	0.5118	3.5	0.039	4300	2300	128.1	45.4	5.942
2317	2317K	85	0.6693	180	1.5748	60	0.4724	4.0	0.039	4100	----	140.1	51.2	6.895
2318	2318K	90	0.6693	190	1.8504	64	0.5512	4.0	0.039	3900	----	151.2	57.4	8.255
2319	2319K	95	0.7874	200	1.8504	67	0.5512	4.0	0.039	3700	----	164.6	64.5	9.571
2320	2320K	100	0.7874	215	2.0472	73	0.5906	4.0	0.039	3400	----	191.3	79.2	12.111

\*Maximum fillet which corner radius of bearing will clear