



SELF ALIGNING BALL BEARINGS

JVN Bearings FZE



Introduction

Self-aligning Ball Bearings have an inner ring with two raceways and an outer ring with a spherical raceway with its centre at the axis of the bearing. They have a self-aligning character, hence the name. They are suitable for applications where small deflection of shaft may occur in usage.

They are capable of

- Capable of carrying radial loads, but they are not suitable for axial loads
- Suitable for low or medium speed applications only

JVN can offer following variants

- Open basic design type
- Straight Bore and Tapered Bore type
- Sealed type
- With C2, CN, C3, radial clearance
- With extended Inner Ring
- Pressed Steel, machined Brass or Nylon Cage

JVN also offers as a set, Tapered Bore Self-aligning Ball Bearings with Adapter Sleeves.

Note:

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Nomenclature

JVN standard suffixes for Deep Groove Ball Bearings

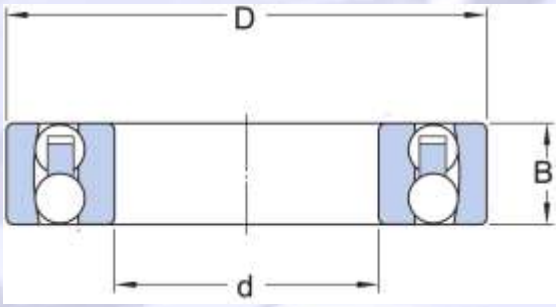
C2	Radial internal clearance less than normal.
CN	Normal radial internal clearance. Generally, no special suffix is used in JVN Bearings for normal radial internal clearance.
C3	Radial internal clearance higher than normal.
K	Tapered Bore, with taper of 1:12.
M	Machined Brass Cage.
p	Plastic / Polyamide / Nylon Cage.
P5	Dimensional and running accuracy confirming to ISO class 5
RS	Rubber Seal with Steel sheet reinforcement on one sides of the Bearing.
2RS	Rubber Seal with Steel sheet reinforcement on both sides of the Bearing.

Note: Most of the Bearings listed in the following pages of this chapter are available with above suffixes, subject to design or manufacturing constraints.

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12 Series: Double Row

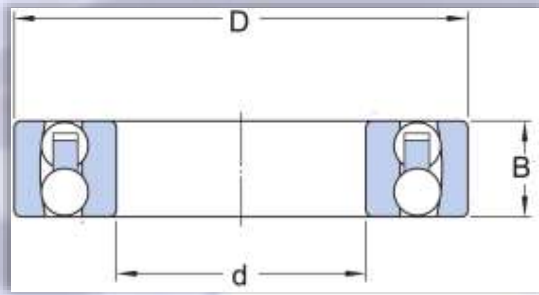


Principal Dimensions			Basic Load Ratings		Speed Ratings		Mass	
Designation	mm		Dynamic	Static	Reference speed	Limiting speed		
	d	D	C	C0	r/min		kg	
125	5	19	6	2510	480	63,000	45,000	0.009
126	6	19	6	2510	480	70,000	45,000	0.009
127	7	22	7	2650	560	63,000	40,000	0.014
128	8	22	7	2650	560	60,000	40,000	0.014
1200	10	30	9	5530	1180	56,000	36,000	0.034
1201	12	32	10	6240	1430	50,000	32,000	0.04
1202	15	35	11	7410	1760	45,000	28,000	0.049
1203	17	40	12	8840	2200	38,000	24,000	0.073
1204	20	47	14	12700	3400	32,000	20,000	0.12
1205	25	52	15	14300	4000	28,000	18,000	0.14
1206	30	62	16	15600	4650	24,000	15,000	0.22
1207	35	72	17	19000	6000	20,000	13,000	0.32
1208	40	80	18	19900	6950	18,000	11,000	0.42
1209	45	85	19	22900	7800	17,000	11,000	0.47
1210	50	90	20	26500	9150	16,000	10,000	0.53
1211	55	100	21	27600	10600	14,000	9,000	0.71
1212	60	110	22	31200	12200	12,000	8,500	0.9
1213	65	120	23	35100	14000	11,000	7,000	1.15
1214	70	125	24	35800	14600	11,000	7,000	1.25
1215	75	130	25	39000	15600	10,000	6,700	1.35
1216	80	140	26	39700	17000	9,500	6,000	1.65
1217	85	150	28	48800	20800	9,000	5,600	2.05
1218	90	160	30	57200	23600	8,500	5,300	2.5
1219	95	170	32	63700	27000	8,000	5,000	3.1
1220	100	180	34	68900	30000	7,500	4,800	3.7
1222	110	200	38	88400	39000	6,700	4,300	5.15
1224	120	215	42	119000	53000	6,300	4,000	6.75

Note:

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13 Series: Double Row

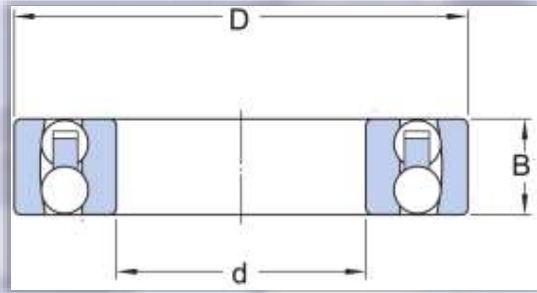


Principal Dimensions			Basic Load Ratings		Speed Ratings		Mass	
Designation	mm			Dynamic	Static	Reference speed		Limiting speed
	d	D	B	C	C0	r/min	kg	
1301	12	37	12	9360	2160	40,000	28,000	0.067
1302	15	42	13	10800	2600	34,000	24,000	0.094
1303	17	47	14	12700	3400	28,000	20,000	0.12
1304	20	52	15	14300	4000	26,000	18,000	0.16
1305	25	62	17	19000	5400	22,000	15,000	0.26
1306	30	72	19	22500	6800	19,000	13,000	0.39
1307	35	80	21	26500	8500	16,000	11,000	0.51
1308	40	90	23	33800	11200	14,000	9,500	0.68
1309	45	100	25	39000	13400	12,000	8,500	0.96
1310	50	110	27	43600	14000	12,000	8,000	1.2
1311	55	120	29	50700	18000	11,000	7,500	1.6
1312	60	130	31	58500	22000	9,000	6,300	1.95
1313	65	140	33	65000	25500	8,500	6,000	2.45
1314	70	150	35	74100	27500	8,500	6,000	3
1315	75	160	37	79300	30000	8,000	5,600	3.55
1316	80	170	39	88400	33500	7,500	5,300	4.2
1317	85	180	41	97500	38000	7,000	4,800	5
1318	90	190	43	117000	44000	6,700	4,500	5.8
1319	95	200	45	133000	51000	6,300	4,300	6.7
1320	100	215	47	143000	57000	6,000	4,000	8.3
1322	110	240	50	163000	72000	5,300	3,600	12

Note:

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2200 Series: Double Row



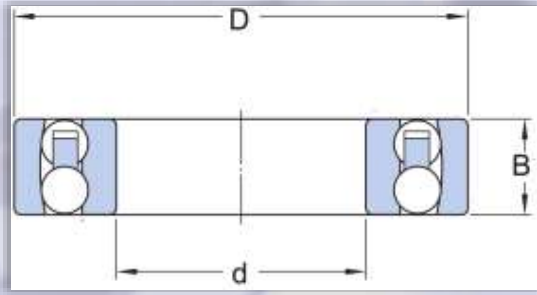
Principal Dimensions				Basic Load Ratings		Speed Ratings		Mass
Designation	mm			Dynamic	Static	Reference speed r/min	Limiting speed	
	d	D	B	C	C0			kg
2200	10	30	14	8060	1730	50,000	34,000	0.047
2201	12	32	14	8520	1900	45,000	30,000	0.053
2202	15	35	14	8710	2040	38,000	26,000	0.06
2203	17	40	16	10600	2550	34,000	24,000	0.088
2204	20	47	18	16800	4150	28,000	20,000	0.14
2205	25	52	18	16800	4400	26,000	18,000	0.16
2206	30	62	20	23800	6700	22,000	15,000	0.26
2207	35	72	23	30200	8800	18,000	12,000	0.4
2208	40	80	23	31900	10000	16,000	11,000	0.51
2209	45	85	23	32500	10600	15,000	10,000	0.55
2210	50	90	23	33800	11200	14,000	9,500	0.6
2211	55	100	25	39000	13400	12,000	8,500	0.81
2212	60	110	28	48800	17000	11,000	8,000	1.1
2213	65	120	31	57200	20000	10,000	7,000	1.45
2214	70	125	31	44200	17000	10,000	6,700	1.5
2215	75	130	31	58500	22000	9,000	6,300	1.6
2216	80	140	33	65000	25500	8,500	6,000	2
2217	85	150	36	58500	23600	8,000	5,600	2.5
2218	90	160	40	70200	28500	7,500	5,300	3.4
2219	95	170	43	83200	34500	7,000	5,000	4.1
2220	100	180	46	97500	40500	6,700	4,800	5

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2300 Series: Double Row



Principal Dimensions			Basic Load Ratings		Speed Ratings		Mass	
Designation	mm			Dynamic	Static	Reference speed		Limiting speed
	d	D	B	C	C0	r/min		kg
2300	10	35	17	11600	2700	38,000	28,000	0.085
2301	12	37	17	11700	2700	38,000	28,000	0.095
2302	15	42	17	11900	2900	32,000	24,000	0.12
2303	17	47	19	14300	3550	30,000	22,000	0.16
2304	20	52	21	18200	4750	26,000	19,000	0.22
2305	25	62	24	27000	7100	22,000	16,000	0.34
2306	30	72	27	31200	8800	18,000	13,000	0.5
2307	35	80	31	39700	11200	16,000	12,000	0.68
2308	40	90	33	54000	16000	14,000	10,000	0.93
2309	45	100	36	63700	19300	13,000	9,000	1.25
2310	50	110	40	63700	20000	14,000	9,500	1.65
2311	55	120	43	76100	24000	11,000	7,500	2.1
2312	60	130	46	87100	28500	9,500	7,000	2.6
2313	65	140	48	95600	32500	9,000	6,300	3.25
2314	70	150	51	111000	37500	8,000	6,000	3.9
2315	75	160	55	124000	43000	7,500	5,600	4.7
2316	80	170	58	135000	49000	7,000	5,300	6.1
2317	85	180	60	140000	51000	6,700	4,800	7.05
2318	90	190	64	151000	57000	6,300	4,500	8.45
2319	95	200	67	165000	64000	6,000	4,500	9.8
2320	100	215	73	190000	80000	5,600	4,000	12.5

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