

# Deep Groove Ball Bearings

Non-Contact Sealed / Contact Sealed

Deep Groove Ball Bearings – Non-Contact Sealed / Contact Sealed

RoHS 10

**Non-Contact Sealed**  
B6\_\_VV

Installation Diagram

**Contact Sealed**  
B6\_\_DDU

Installation Diagram

Material: 52100 Bearing Steel \*The material of rubber seal is NBR (Nitrile Rubber). Bearing Accuracy JIS B 1514 Class 0

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)	
					Cr (Dynamic) kN	Co (Static) kN		Ds		dh	R		
Non-Contact Rubber Sealed	Contact Rubber Sealed							(min)	(max.)	(max.)	(max.)		
B6800VV	B6800DDU	10	19	5	0.3	1.72	0.84	24000	12	12	17	0.3	5
B6900VV	B6900DDU	10	22	6	0.3	2.7	1.27	22000	12	12.5	20	0.3	9
B6000VV	B6000DDU	10	26	8	0.3	4.55	1.96	22000	12	12.5	24	0.3	18
B6200VV	B6200DDU	10	30	9	0.6	5.1	2.39	18000	14	16	26	0.6	32
B6300VV	B6300DDU	10	35	11	0.6	8.1	3.45	17000	14	16.5	31	0.6	52
B6801VV	B6801DDU	12	21	5	0.3	1.92	1.04	20000	14	14	19	0.3	6
B6901VV	B6901DDU	12	24	6	0.3	2.89	1.46	20000	14	14.5	22	0.3	10
B6001VV	B6001DDU	12	28	8	0.3	5.1	2.37	18000	14	15.5	26	0.3	22
B6201VV	B6201DDU	12	32	10	0.6	6.1	2.75	17000	16	17	28	0.6	37
B6301VV	B6301DDU	12	37	12	1	9.7	4.2	16000	17	18	32	1	60
B6802VV	B6802DDU	15	24	5	0.3	2.07	1.26	17000	17	17	22	0.3	7
B6902VV	B6902DDU	15	28	7	0.3	3.65	2	17000	17	17	26	0.3	15
B6002VV	B6002DDU	15	32	9	0.3	5.6	2.83	15000	17	19	30	0.3	31
B6202VV	B6202DDU	15	35	11	0.6	7.65	3.6	14000	19	20.5	31	0.6	45
B6302VV	B6302DDU	15	42	13	1	11.4	5.45	13000	20	22.5	37	1	83
B6803VV	B6803DDU	17	26	5	0.3	2.63	1.57	15000	19	19	24	0.3	7
B6903VV	B6903DDU	17	30	7	0.3	4.6	2.55	15000	19	19.5	28	0.3	19
B6003VV	B6003DDU	17	35	10	0.6	6	3.25	13000	19	21.5	33	0.3	41
B6203VV	B6203DDU	17	40	12	0.6	9.55	4.6	12000	21	23.5	36	0.6	67
B6303VV	B6303DDU	17	47	14	1	13.6	6.65	11000	22	25.5	42	1	113
B6804VV	B6804DDU	20	32	7	0.3	4	2.47	13000	22	22	30	0.3	17
B6904VV	B6904DDU	20	37	9	0.3	6.4	3.7	12000	22	24	35	0.3	37
B6004VV	B6004DDU	20	42	12	0.6	9.4	5	11000	24	25.5	38	0.6	68
B6204VV	B6204DDU	20	47	14	1	12.8	6.6	11000	25	26.5	42	1	107
B6304VV	B6304DDU	20	52	15	1.1	15.9	7.9	10000	26.5	28	45.5	1	145
B6805VV	B6805DDU	25	37	7	0.3	4.5	3.15	10000	27	27	35	0.3	21
B6905VV	B6905DDU	25	42	9	0.3	7.05	4.55	10000	27	28.5	40	0.3	42
B6005VV	B6005DDU	25	47	12	0.6	10.1	5.85	9500	29	30	43	0.6	79
B6205VV	B6205DDU	25	52	15	1	14	7.85	9000	30	32	47	1	129
B6305VV	B6305DDU	25	62	17	1.1	20.6	11.2	8000	31.5	36	55.5	1	235
B6806VV	B6806DDU	30	42	7	0.3	4.7	3.65	9000	32	32	40	0.3	24
B6906VV	B6906DDU	30	47	9	0.3	7.25	5	8500	32	34	45	0.3	52
B6006VV	B6006DDU	30	55	13	1	13.2	8.3	8000	35	36.5	50	1	116
B6206VV	B6206DDU	30	62	16	1	19.5	11.3	7500	35	38.5	57	1	199
B6907VV	B6907DDU	35	55	10	0.6	10.6	7.25	7500	39	39	51	0.6	75
B6007VV	B6007DDU	35	62	14	1	16	10.3	6700	40	41.5	57	1	151
B6207VV	B6207DDU	35	72	17	1.1	25.7	15.3	6300	41.5	44.5	65.5	1	284
B6307VV	B6307DDU	35	80	21	1.5	33.5	19.2	6000	43	47	72	1.5	464
B6908VV	B6908DDU	40	62	12	0.6	13.7	10	6300	44	46	58	0.6	112
B6008VV	B6008DDU	40	68	15	1	16.8	11.5	6000	45	47.5	63	1	190
B6208VV	B6208DDU	40	80	18	1.1	29.1	17.9	5600	46.5	50.5	73.5	1	366
B6909VV	B6909DDU	45	68	12	0.6	14.1	10.9	5600	49	50	64	0.6	126
B6009VV	B6009DDU	45	75	16	1	20.9	15.2	5300	50	53.5	70	1	241
B6209VV	B6209DDU	45	85	19	1.1	31.5	20.4	5300	51.5	55.5	78.5	1	420
B6910VV	B6910DDU	50	72	12	0.6	14.5	11.7	5300	54	55	68	0.6	135
B6010VV	B6010DDU	50	80	16	1	21.8	16.6	4800	55	58.5	75	1	261
B6210VV	B6210DDU	50	90	20	1.1	35	23.2	4800	56.5	60	83.5	1	459

Part Number Example: B6002VV, B6902DDU

# Deep Groove Ball Bearings

Contact Sealed, Stainless Steel

Deep Groove Ball Bearings – Contact Sealed, Stainless Steel

RoHS 10

**Contact Sealed**  
SB6\_\_DDU

Installation Diagram

Material: 440C Stainless Steel or Equivalent \* Rubber seals are NBR (Nitrile Rubber). Bearing Accuracy JIS B 1514 Class 0

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)	
					Cr (Dynamic) kN	Co (Static) kN		Ds		dh	R		
								(min)	(max.)	(max.)	(max.)		
SB600DDU	10	26	8	0.3	3.9	1.58	22000	12	13	24	0.3	18	
SB620DDU	10	30	9	0.6	4.35	1.91	18000	14	16	26	0.6	32	
SB6001DDU	12	28	8	0.3	4.35	1.89	18000	14	15.5	26	0.3	22	
SB6201DDU	12	32	10	0.6	5.8	2.44	17000	16	17	28	0.6	37	
SB6002DDU	15	35	9	0.3	4.75	2.27	15000	17	19	30	0.3	31	
SB6202DDU	15	35	11	0.6	6.5	2.98	14000	19	20.5	31	0.6	45	
SB6003DDU	17	35	10	0.3	5.1	2.6	13000	19	21.5	33	0.3	41	
SB6203DDU	17	40	12	0.6	8.15	3.85	12000	21	23.5	36	0.6	67	
SB6004DDU	20	42	12	0.6	7.95	4	11000	24	25.5	38	0.6	68	
SB6204DDU	20	47	14	1	10.9	5.25	11000	25	26.5	42	1	107	
SB6005DDU	25	47	12	0.6	8.55	4.65	9500	29	30	43	0.6	79	
SB6205DDU	25	52	15	1	11.9	6.3	9000	30	32	47	1	129	
SB6006DDU	30	55	13	1	11.3	6.6	8000	35	36.5	50	1	116	
SB6206DDU	30	62	16	1	16.5	9.05	7500	35	38.5	57	1	199	
SB6007DDU	35	62	14	1	13.6	8.2	6700	40	41.5	57	1	151	
SB6207DDU	35	72	17	1.1	21.8	12.2	6300	41.5	44.5	65.5	1	284	
SB6008DDU	40	68	15	1	14.2	9.25	6000	45	47.5	63	1	190	
SB6208DDU	40	80	18	1.1	24.8	14.3	5600	46.5	50.5	73.5	1	366	

Part Number Example: SB6004DDU

## Structure & Features of Ball Bearings

Type	Open Type	Double Shielded	Non-Contact Sealed	Contact Sealed
Friction Torque	Low	Low	Low	Large Due to seal contact
High Speed	Good	Good	Good	Acceptable
Dust Resistance	Poor	Acceptable	Good	Excellent
Water Resistance	Poor	Poor	Poor	Good Usable in the conditions of exposure to water splashes
Operating Temperature	Depends on Lubricant		-10 – +110°C	

The table above is for reference to compare the four types.