

# 69 Series Ball Bearing

This is a 69 series ball bearing. It comes with detailed specifications including dimensions, load ratings, speed limits and weight.

Series	Type	Bore	Bore Tolerance	Outer Diameter	Outer Diameter Tolerance	Width	Width Tolerance	Basic Load Ratings		Limiting Speed	Weight
								C <sub>r</sub>	C <sub>0</sub>		
604	604	4	h6	12	±0.014	4	±0.009	0.8	0.4	10000	0.0022
605	605	5	h6	14	±0.012	4	±0.008	1.1	0.5	9000	0.0030
606	606	6	h6	16	±0.010	4	±0.007	1.5	0.7	8000	0.0040
607	607	7	h6	18	±0.008	4	±0.006	2.0	0.9	7000	0.0050
608	608	8	h6	20	±0.007	4	±0.005	2.6	1.2	6000	0.0060
609	609	9	h6	22	±0.006	4	±0.004	3.3	1.5	5000	0.0070
6000	6000	10	h6	25	±0.005	4	±0.003	4.2	1.9	4000	0.0080
6001	6001	11	h6	28	±0.004	4	±0.002	5.3	2.4	3000	0.0090
6002	6002	12	h6	30	±0.003	4	±0.002	6.5	2.9	2500	0.0100
6003	6003	14	h6	36	±0.002	4	±0.001	8.5	3.8	1800	0.0120
6004	6004	16	h6	42	±0.001	4	±0.001	11.0	4.8	1300	0.0140
6005	6005	18	h6	48	±0.001	4	±0.001	14.0	6.2	1000	0.0160
6006	6006	20	h6	54	±0.001	4	±0.001	17.5	7.8	750	0.0180
6007	6007	22	h6	60	±0.001	4	±0.001	22.0	9.8	550	0.0200
6008	6008	24	h6	66	±0.001	4	±0.001	27.0	12.0	400	0.0220
6009	6009	26	h6	72	±0.001	4	±0.001	33.0	14.5	300	0.0240
6010	6010	28	h6	78	±0.001	4	±0.001	40.0	17.5	220	0.0260
6011	6011	30	h6	84	±0.001	4	±0.001	48.0	21.0	160	0.0280
6012	6012	32	h6	90	±0.001	4	±0.001	57.0	25.0	120	0.0300
6013	6013	34	h6	96	±0.001	4	±0.001	67.0	29.5	90	0.0320
6014	6014	36	h6	102	±0.001	4	±0.001	78.0	35.0	70	0.0340
6015	6015	38	h6	108	±0.001	4	±0.001	90.0	41.0	55	0.0360
6016	6016	40	h6	114	±0.001	4	±0.001	103.0	48.0	45	0.0380
6017	6017	42	h6	120	±0.001	4	±0.001	117.0	56.0	35	0.0400

## Product Overview

### High-Performance Ball Bearings

The 69 series ball bearings are precision-engineered components designed for reliable performance in diverse industrial applications. These bearings offer a wide range of sizes, from compact models for small-scale machinery to robust units capable of supporting heavier loads. With optimized load ratings and speed limits, they ensure smooth operation and durability across various mechanical systems.

#### Series Compatibility

604, 605, 606, 607, 608, 609, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6011, 6012, 6013, 6014, 6015, 6016, 6017, 6018

## Technical Specifications

### Model Dimensions and Performance

Model	Inner Diameter (mm)	Outer Diameter (mm)	Width (mm)	Dynamic Load (kN)	Static Load (kN)
604	4	12	4	0.97	0.36
605	5	14	5	1.33	0.505
606	6	17	6	2.19	0.865
607	7	19	6	2.24	0.91
608	8	22	7	3.35	1.4
609	9	24	7	3.4	1.45
6000	10	26	8	4.55	1.96
6001	12	28	8	5.1	2.39
6002	15	32	9	5.6	2.84
6003	17	35	10	6.8	3.35
6004	20	42	12	9.4	5.05
6005	25	47	12	10.1	5.85
6006	30	55	13	13.2	8.3
6007	35	62	14	16	10.3
6008	40	68	15	16.3	11.5
6009	45	75	16	21	15.1
6010	50	80	16	21.8	16.6
6011	55	90	18	28.3	21.2
6012	60	95	18	29.5	23.2
6013	65	100	18	31.9	25
6014	70	110	20	39.7	31
6015	75	115	20	41.6	33.5
6016	80	125	22	47.5	40
6017	85	130	22	49.5	43
6018	90	140	24	58	49.5

## Performance Metrics

### Operating Speed Range

**4000 r/min**

Minimum Speed Limit

**43000 r/min**

Maximum Speed Limit