

Spherical Roller Bearings



This version supersedes all previously published versions. All the bearing mentioned in this catalogue are manufactured with normal tolerance class. We can, however, supply other class bearing against specific requirement.

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2 WHEELERS



3 WHEELERS



4 WHEELERS



TRACTORS



LCV, HCV



INDUSTRIES



RAILWAYS



AEROSPACE



Founded in 1946, NBC is India's first bearings manufacturer and the last word in quality and durability. In 2020, the company acquired leading European manufacturer, Kinex Bearings to further boost its expertise.

75 years since its beginning, NBC remains India's leading bearings manufacturer and exporter. NBC is also the world's only bearings manufacturer to receive the prestigious Deming Grand Prize for Total Quality Management.



Products from NBC

Since the challenges faced by industry are many, NBC offers a diverse range of exceptional bearings. NBC bearings are available in sizes from 04 mm bore to 2000 mm outer diameter.



* Products with special features like high temperature application, special heat treatment, coated roller/faces and cage options are also available across product range.

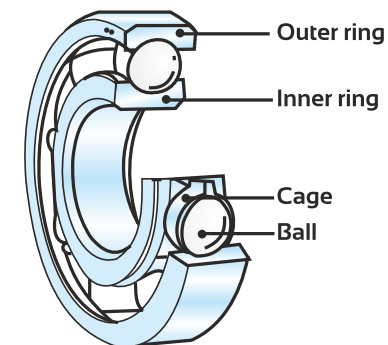
15 Technical Data – Ball Bearing

15.1 Deep Groove Ball Bearing

The deep groove ball bearing are non- separable bearings . These bearings can take radial & axial load and can run at high speed. They are available as plain or sealed bearings. The bearings are economically prized and hence most widely used. The bearings are available in metric and inch series. Angular misalignment capability of these bearings are very limited, hence while mounting bearing positioned must be perfectly aligned in housing and shaft.

Minimum load of $P/Cr > 0.01$ is required for these bearings for smooth and slippage free operation.

The ball bearing consists of inner, outer ball, cage & seals.



Equivalent load rating

For bearings under dynamic load, use following condition and formula

Load ratio	Equivalent dynamic load
$\frac{F_a}{F_r} \leq e$	$P = F_r$
$\frac{F_a}{F_r} > e$	$P = XF_r + YF_a$

Where

P = Equivalent dynamic bearing load for combined load (N)

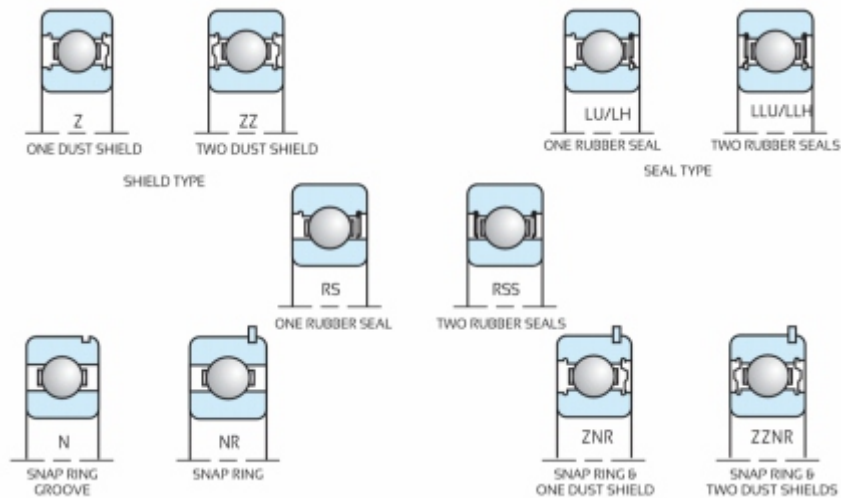
F_a = Axial dynamic bearing load (N)

F_r Radial dynamic bearing load (N)

Single row deep groove ball bearing with shield / seal

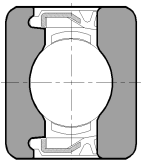
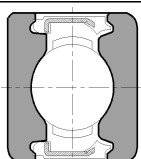
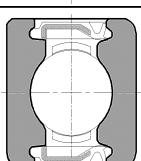
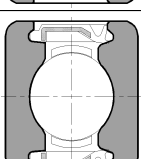
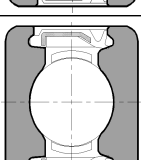
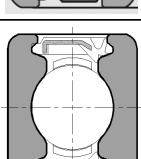
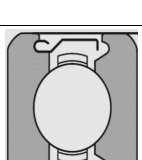
The bearings are with non- contact shield (Z) and contact type of rubber seals (RS, LU, LH). These are most commonly used rubber seals. Apart from these seals new design rubber seals were developed specific to applications. Depending upon the application requirement seals/shield is fixed on one side or both side. The bearings are also available with groove (N) on outer diameter and snap ring (R) for axial locating.

Different variants are shown below:



Note: Design variants & seals option are available for all types of bearings. For more information contact NEI sales/ technical cell.

Guidelines are given below for selection of seals based on operating conditions

Construction	Sealed Type						Shielded Type
	RS	LB	LU	LH	LH1	LV	Z
							
	Rubber seal is affixed in outer ring seal groove & seal lip is in contact with inner ring outer diameter.	Rubber seal is affixed in outer ring seal groove & seal lip is aligned with V-groove of inner ring surface with labyrinth clearance.	Rubber seal is affixed in outer ring seal groove & seal lip is in contact with inner ring v-groove.	Basic construction same as LU type, but specially designed lip on edge of seal prevents penetration by foreign matter, low torque construction.	Basic construction same as LH type, Additionally vent hole provided to evacuate vacuum from bearing.	3 - Lip design, Rubber seal is affixed in outer ring seal groove & seal lip is in contact with inner ring v-groove, 3rd lip is in contact with inner ring outer diameter.	Metal shield plate is affixed to outside ring, normally inner ring incorporates a V-groove and labyrinth clearance.
	Contact Type	Non Contact Type	Contact Type	Contact Type	Contact Type	Contact Type	Non Contact Type
Torque	Medium	Low	High	Medium	Medium	High	Low
Dust Proofing	Good	Better than Z Type	Very Good	Good	Good	Excellent	Good
Water Proofing	Very Good	Poor	Very Good	Very Good	Very Good	Excellent	Poor
Note : Seal's material will be selected based on operating temperature.							
Note: For other detailed information on seals/shield contact NEI Technical Cell.							

Double row deep groove ball bearing

Double row ball bearings are available in 62 & 63 series.

The load carrying Capacity of these bearings are more than single row. The bore and outer diameter dimensions are same. Width is slightly bigger than single row.



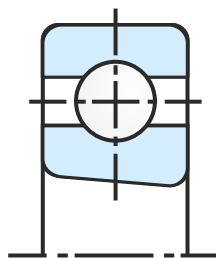
TMB Ball Bearing

TMB ball bearings have the same boundary dimensions as standard deep groove ball bearings, but have undergone a special heat treatment that considerably extends wear life. These bearings were especially effective in countering reduced wear life due to the effects of infiltration of dust and other foreign matter.

TMB 62 series bearings can be used in place of standard. 63 series bearings enabling lighter weight, more compact designs. For dimensional specifications and other detailed information about TMB ball bearings contact engineering.

Single Row Deep groove Radial Ball Bearing with Tapered Bore

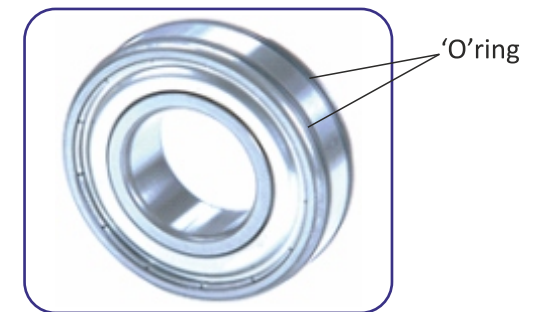
The single row radial ball bearings with tapered bore are identical to single row radial ball bearings except that these have tapered bore which is used for easier mounting and for the adjustment of radial clearance. Dimensions of tapered bore diameter refer to small bore.



SINGLE ROW RADIAL
BALL BEARING WITH
TAPER BORE

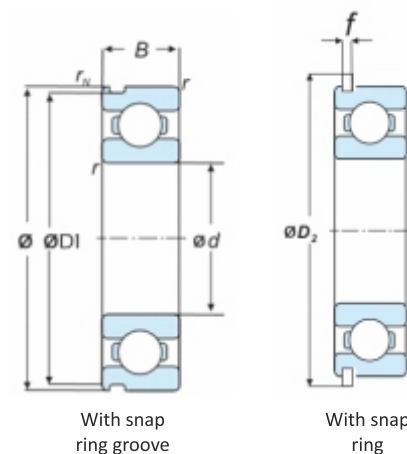
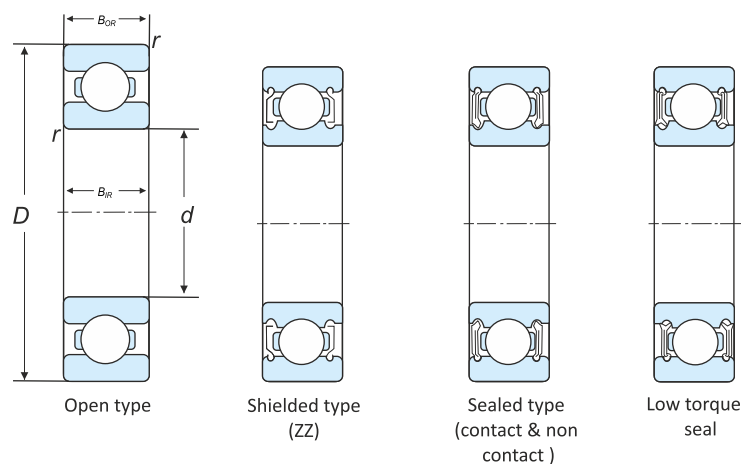
Creep prevention deep groove ball bearing

The dimensional boundary are the same as plain bearings. In the circumference of outside diameter there is groove in which the 'O' rings are placed. The 'O ring' is in contact with the inside of the housing inner diameter. This contact prevent rotation of bearing inside housing. It is used in assemblies where tight fit between bearing OD and housing inner diameter is not possible.



Note: The limiting speeds for Deep Grove Ball Bearing mentioned in data table are valid for open type, shield (Z, ZZ) and non contact rubber seal (LB, LLB) bearings in application using grease/oil. Limiting speed for grease includes open type, Z, ZZ, LB, LLB bearings. Limiting speed for oil includes open type, Z, LB bearings. For contact type sealed bearings contact NEI engineering.

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

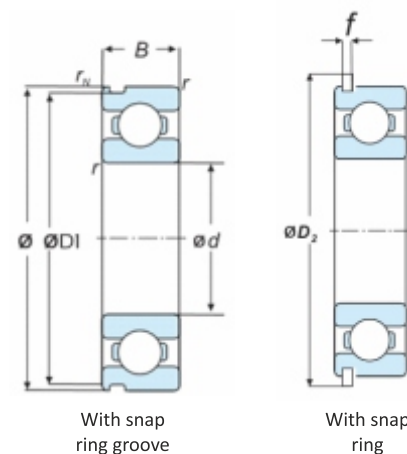
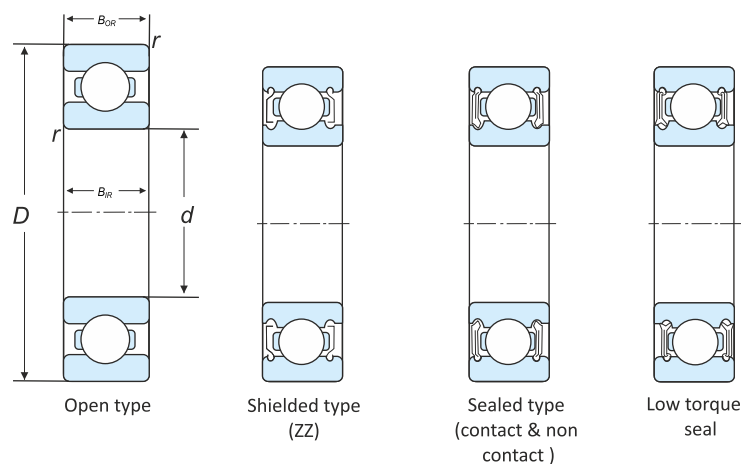
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx.)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type		Sealed Bearings*			Snap Ring Groove	Snap Ring		
															Non Contact Type	Low Torque Type	Contact Type				
10	26	8	8	0.3	5.05	1.96	515	200	0.17	29000	34000	6000	Z	ZZ	-	-	RS	RSS	-	-	0.019
10	30	9	9	0.6	6.64	2.64	677	269	0.22	25000	30000	6200	Z	ZZ	-	LH	RS	RSS	N	NR	0.032
10	28	8	8	0.3	5.65	2.39	576	244	0.19	24000	29000	N1566	-	-	-	-	-	RSS	-	-	0.026
12	35	11	11	0.3	7.53	3.32	767	339	0.26	23000	27000	6300	Z	ZZ	-	LH	LU	LLU	-	-	0.053
12	24	6	6	0.3	3.20	1.46	326	149	0.10	27000	32000	6901	-	-	-	-	RS	RSS	-	-	0.011
12	28	8	8	0.3	5.65	2.39	576	244	0.19	26000	30000	6001	Z	ZZ	-	-	RSA/LUAX2	-	-	-	0.021
12	28	8	8	0.3	5.85	2.39	597	244	0.19	26000	30000	AST6001	-	-	-	-	RS	-	-	-	0.021
12	32	10	10	0.6	7.66	3.1	781	316	0.26	22000	26000	6201	Z	ZZ	-	LH	RS/LU/LUAX2	RSS/RSSA1	N1	NR	0.038
12	32	10	10	0.6	7.66	3.1	781	316	0.26	22000	26000	TM6201	-	-	-	-	LU	-	-	-	0.038
12	32	10	10	0.6	7.94	3.1	809	316	0.26	22000	26000	AST6201	-	-	-	-	-	-	-	-	0.038
12	32	14	14	0.6	62	2.7	6322	275	0.26	22000	26000	62201	Z	-	-	-	-	RSS	-	-	0.05
12	37	12	12	1	10.80	4.2	1101	428	0.35	20000	24000	6301	Z	ZZ	-	LH	LU	LLU	-	-	0.061
12	37	12	12	1	12.45	4.2	1270	428	0.35	20000	24000	ML6301	-	-	-	-	-	-	-	-	0.061
12	40	12	12	1	12.65	5	1290	510	0.42	18000	21000	613963	-	-	-	-	-	-	-	-	0.072

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

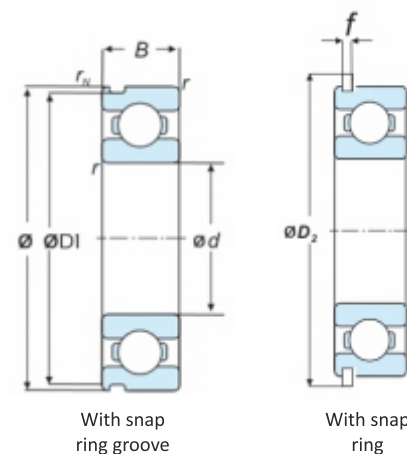
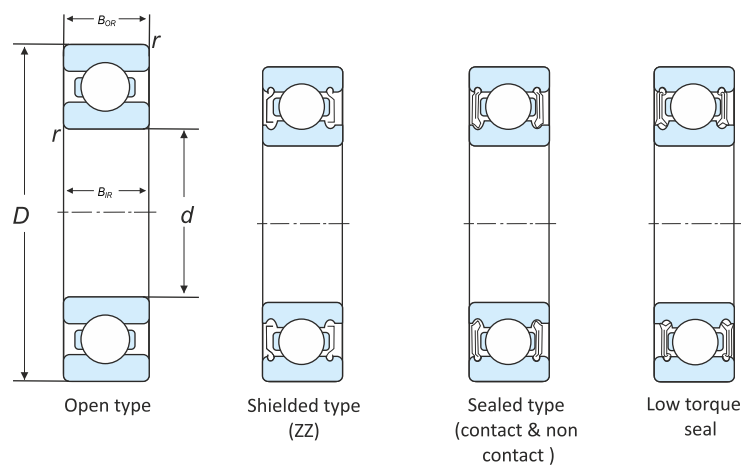
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
15	28	7	7	0.3	4.10	2.06	418	210	0.13	24000	28000	6902	Z -	-	-	RS	RSS	-	-	0.018
15	32	9	9	0.3	6.20	2.84	632	290	0.20	22000	26000	6002	Z ZZ	-	LLH	LU/LUA	LLU	-	-	0.035
15	32	9	9	0.3	6.20	2.84	632	290	0.20	22000	26000	TMB6002	Z -	-	-	-	-	-	-	0.035
15	32	8	8	0.3	5.60	2.84	571	290	0.20	22000	26000	16002	- -	-	-	-	-	-	-	0.025
15	35	11	11	0.6	8.60	3.6	877	367	0.30	19000	23000	6202	Z ZZ	-	-	LU/LUAX2LU/LLUA/LLVA	-	-	-	0.052
15	35	11	11	0.6	8.60	3.6	877	367	0.30	19000	23000	TM6202	- -	-	-	-	-	-	-	0.052
15	35	14	14	0.6	7.70	3.7	785	377	0.30	22000	25000	62202	- -	-	-	-	RSS	-	-	0.06
15	35	11	11	0.6	8.48	3.72	865	379	0.29	24000	27000	6202C	- -	-	-	-	LLWA	-	-	0.044
15	42	13	13	1	12.70	5.54	1295	565	0.45	17000	21000	6302	Z ZZ	-	-	RS	RSS	-	-	0.084
15	42	13	13	1	14.65	5.54	1493	565	0.45	17000	21000	ML6302	- -	-	-	-	-	-	-	0.084
16	42	13	13	1	10.66	4.55	1087	464	0.37	17000	21000	BB1002	- -	-	-	-	-	-	-	0.084
17	30	7	7	0.3	5.15	2.58	525	263	0.17	20000	24000	6903	- -	-	-	-	-	-	-	0.016
17	35	8	8	0.3	7.55	3.35	770	342	0.25	20000	24000	16003	- -	-	-	-	-	-	-	0.032
17	35	10	10	0.3	7.55	3.35	770	342	0.25	20000	24000	6003	Z ZZ	-	LLHA	LU	LLU	-	-	0.039

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

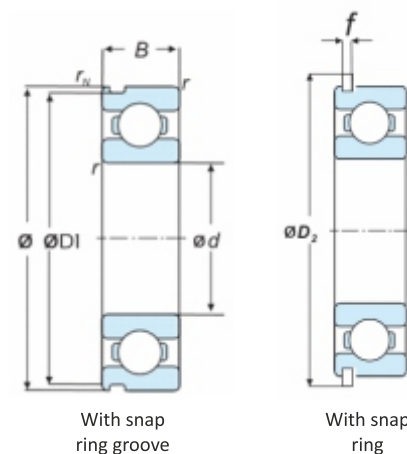
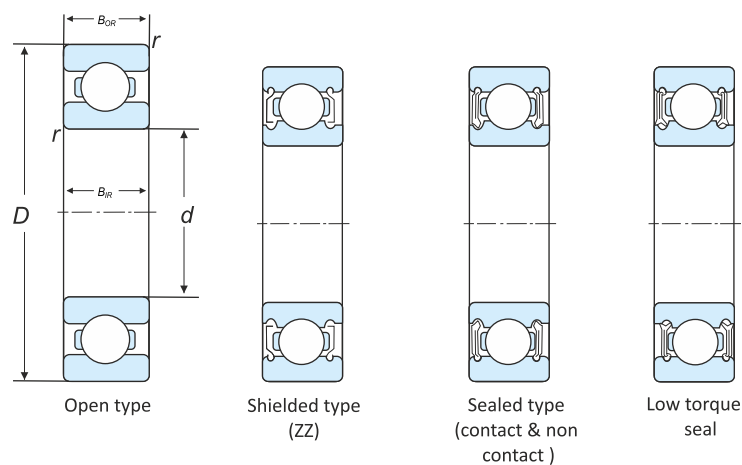
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
17	35	10	10	0.3	7.55	3.35	770	342	0.25	20000	24000	TM6003	- -	-	-	-	-	-	0.039	
17	40	12	12	0.6	10.60	4.6	1081	469	0.38	18000	21000	6203	Z ZZ	-	LLH/LLHALU/LUAX2	LLU	-	-	0.065	
17	40	12	12	0.6	10.60	4.6	1081	469	0.38	18000	21000	TM6203	- -	-	-	-	-	-	0.065	
17	40	12	12	0.6	10.60	4.6	1081	469	0.38	18000	21000	TMB6203	- -	-	-	LLU	-	-	0.065	
17	40	12	12	0.6	12.22	4.6	1246	469	0.38	18000	21000	ML6203	- -	-	-	-	-	-	0.065	
17	40	12	12	0.6	11.66	5.2	1188	530	0.43	18000	21000	6203C	- -	-	LLHA	LU	LLVA	N1	0.061	
17	40	12	12	0.6	13.44	5.2	1371	530	0.43	18000	21000	ML6203C	- -	-	-	-	-	-	0.061	
17	40	16	16	0.6	9.60	4.6	979	469	0.43	16000	18000	62203	- -	-	-	-	RSS	-	0.09	
17	42	12	12	0.6	12.88	5.7	1313	581	0.43	18000	21000	6203A/42	- -	-	LH	LU	-	-	0.078	
17	42	12	12	0.6	12.88	5.7	1313	581	0.43	18000	21000	TMB6203A/42	- -	-	-	LU	-	-	0.078	
17	47	14	14	1	15.00	6.55	1530	668	0.55	16000	19000	6303	Z ZZ	-	LLHA	LU	LLU/LLWA/LLVA	-	0.116	
17	47	14	14	1	17.30	6.55	1764	668	0.55	16000	19000	ML6303	- -	-	-	LUA	-	-	0.116	
17	40	12	12	0.6	10.60	4.6	1081	469	0.38	18000	21000	6203SPL	- -	-	-	-	LLV	-	0.068	
17	47	14	14	1	15.00	6.55	1530	668	0.55	19000	21000	6303A	- -	-	-	-	LLWA	-	0.105	

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

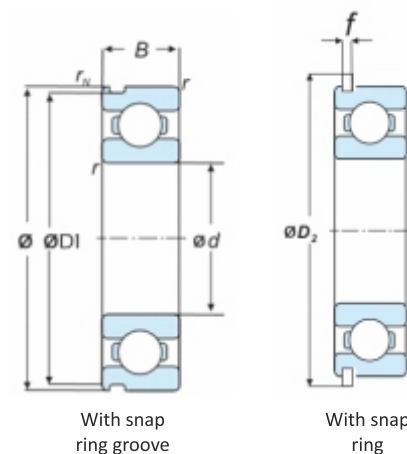
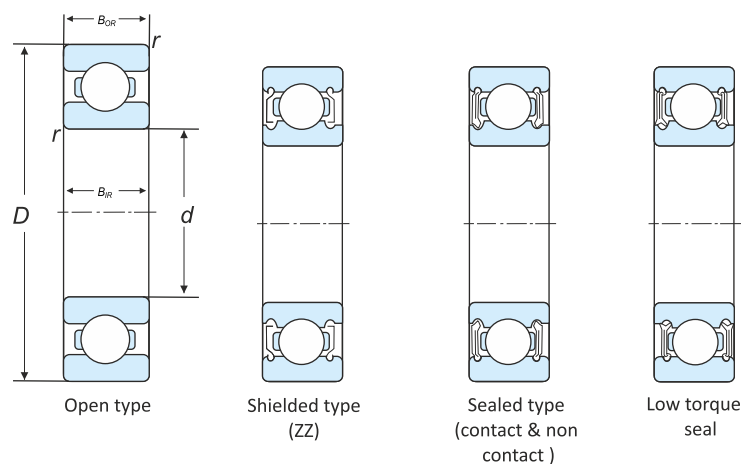
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when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
18	56	16	16	1.1	22.98	10.4	2343	1061	0.84	13000	15000	63/18	- -	-	-	-	LLU	-	-	0.196
18	56	16	16	1.1	26.50	10.4	2702	1061	0.84	13000	15000	ML63/18	- -	-	-	-	LLU	-	-	0.196
20	32	9	9	0.3	4.44	2.47	453	252	0.15	21000	23000	6904/32	- -	-	LLH	-	RSS	-	-	0.026
20	37	9	9	0.3	7.05	3.7	719	377	0.12	18000	20000	6904	- -	-	-	-	-	-	-	0.036
20	42	8	8	0.3	7.40	4	755	408	0.21	16000	18000	16004	- -	-	-	-	-	-	-	0.049
20	42	9	9	0.6	8.65	4.5	882	459	0.32	15000	18000	98204	- -	-	-	-	-	-	-	0.052
20	42	12	12	0.6	10.40	5.05	1061	515	0.36	18000	21000	6004	Z ZZ	-	LH/LLH	LU	LLU	-	-	0.069
20	42	12	12	0.6	10.77	5.05	1099	515	0.36	18000	21000	AST6004	- -	-	-	-	-	-	-	0.069
20	47	14	14	1	15.21	6.7	1551	683	0.56	16000	18000	6204	Z ZZ	-	LLHA	LU/LUA	LLU/RSS	N	-	0.114
20	47	14	14	1	15.21	6.7	1551	683	0.56	16000	18000	TM6204	- -	-	LLHA	-	-	-	-	0.114
20	47	14	14	1	15.21	6.7	1551	683	0.56	16000	18000	TMB6204	- -	-	-	-	LLU	-	-	0.114
20	47	14	14	1	15.76	6.7	1607	683	0.56	16000	18000	AST6204	- -	-	-	-	-	-	-	0.114
20	47	14	14	1	15.76	6.7	1607	683	0.56	16000	18000	ASTB6204	- -	-	-	-	-	-	-	0.114
20	47	14	14	1	14.21	6.5	1449	663	0.44	16000	18000	6204M	- -	-	-	-	-	N	-	0.105

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

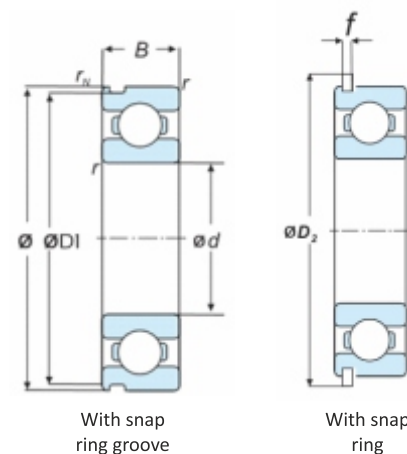
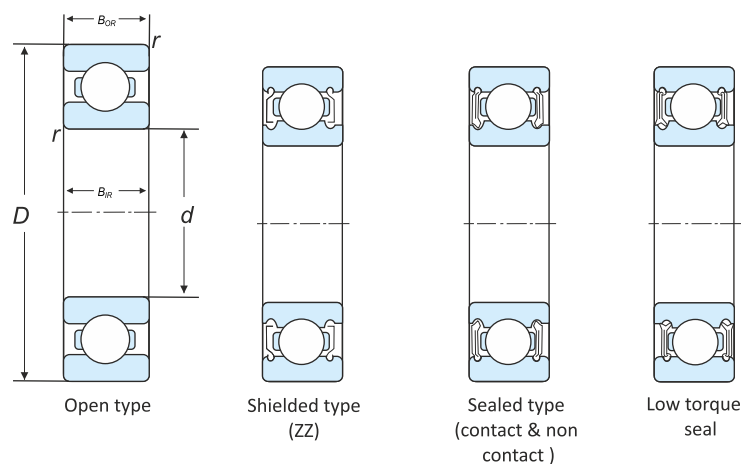
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
20	47	16	16	1	15.21	6.7	1551	683	0.56	16000	18000	TMB6204/2B	- -	-	-	-	LLU	-	-	0.11
20	47	15.88	15.88	0.6	15.21	6.7	1551	683	0.56	16000	18000	BB1003	- -	-	-	-	-	-	-	0.12
20	47	18	18	1	12.80	6.7	1305	683	0.56	11000	16000	62204	- -	-	-	-	-	-	-	0.14
20	50	14	14	1	15.21	6.7	1551	683	0.56	16000	18000	1838002	- -	-	-	-	-	-	-	0.125
20	52	15	15	1.1	17.65	7.85	1800	800	0.66	14000	17000	6304	Z ZZ	-	-	RS	RSS	N	-	0.147
20	52	15	15	1.1	18.29	7.85	1865	800	0.66	14000	17000	AST6304	- -	-	-	-	-	-	-	0.147
20	52	15	15	1.1	20.09	9	2049	918	0.75	14000	17000	6304M	- -	-	-	-	-	-	-	0.142
20	55	11	11	1.1	17.65	7.85	1800	800	0.55	14000	17500	20x55x11	- -	-	-	-	-	-	-	0.136
20	56	17	17	1.1	22.76	10.2	2320	1040	0.86	13000	15000	20x56x17	- -	-	-	-	-	N	-	0.19
20	62	16	16	1	25.97	12.2	2649	1244	1.02	10000	12000	BB1063	- ZZ	-	-	-	-	-	-	0.254
20	42	12	12	0.6	10.40	5.05	1061	515	0.36	18000	21000	N1344	- -	-	-	-	-	-	-	0.067
20	47	16	16	1	16.29	7.16	1662	730	0.60	16000	18000	N1389X19	- -	-	-	-	LLUA	-	-	0.112
20	47	16	16	1	16.88	7.16	1721	730	0.60	16000	18000	ASTBN1389X19-	-	-	LLH1A	-	LLUA	-	-	0.112
20	52	14	14	1	20.09	9	2049	918	0.75	14000	17000	SP6304M	- -	-	-	-	-	-	-	0.138

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

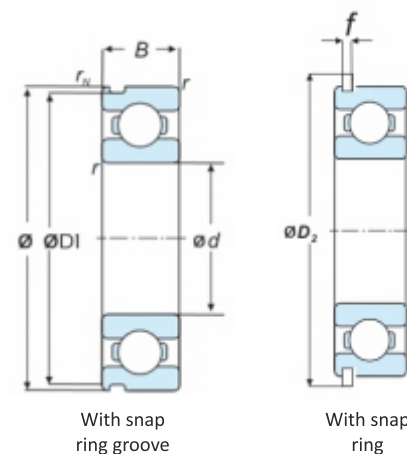
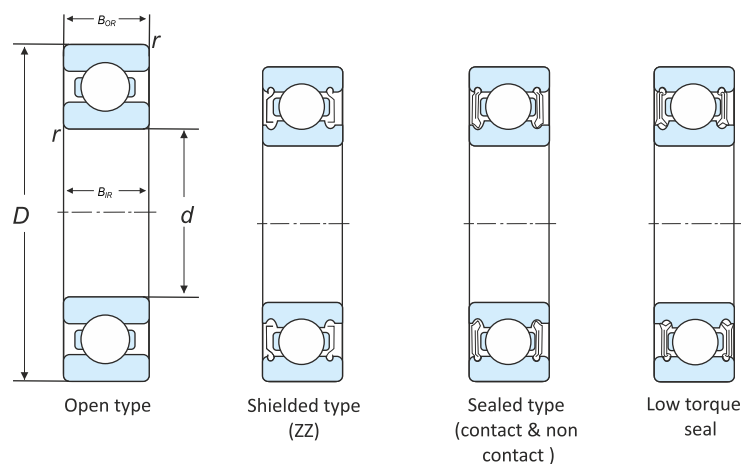
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
20	52	15	15	1.1	20.09	9	2049	918	0.75	14000	17000	G1361	- -	-	-	-	LLUA	-	-	0.153
20	52	15	15	1.1	20.82	9	2123	918	0.75	14000	17000	ASTBG1361	- -	-	-	-	LLUA	-	-	0.153
20	52	15	15	1.1	20.09	9	2049	918	0.75	14000	17000	N1426	- -	-	-	-	-	-	-	0.142
20	52	15	15	1.1	23.17	9	2362	918	0.75	14000	17000	MLN1426	- -	-	-	-	-	N	-	0.142
20	52	15	15	1.1	20.09	9	2049	918	0.75	16000	18000	6304MA	- -	-	-	-	LLUA	-	-	0.11
22	52	15	15	1	17.65	7.85	1800	800	0.76	19000	21000	6304/22	- -	-	-	-	-	-	-	0.13
22	52	15	15	1	20.15	9	2054	921	0.75	18000	20000	6304/22M	- -	-	-	-	LLU	-	-	0.141
22	52	15	15	1	20.87	9	2128	921	0.75	18000	20000	AST6304/22M	- -	-	-	-	LLUA	-	-	0.141
22	56	16	16	1.1	22.98	10.4	2343	1061	0.87	13000	15000	63/22	- -	-	-	-	-	-	-	0.164
22	56	16	16	1.1	22.98	10.4	2343	1061	0.87	13000	15000	TM63/22	- -	-	LLHA	-	-	N	-	0.164
22	56	16	16	1.1	23.81	10.4	2427	1061	0.87	13000	15000	AST63/22.PX10	- -	-	-	-	-	-	-	0.164
22	44	12	12	0.6	10.43	5.15	1064	525	0.36	17000	20000	60/22	- -	-	-	-	LLV	-	-	0.074
22	50	14	14	1	16.85	7.95	1718	811	0.51	14000	17000	62/22	- -	-	-	-	-	-	-	0.114
22	52	15	15	1.1	20.09	9	2049	918	0.76	18000	20000	G1360	- -	-	-	-	LLUA	-	-	0.142

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

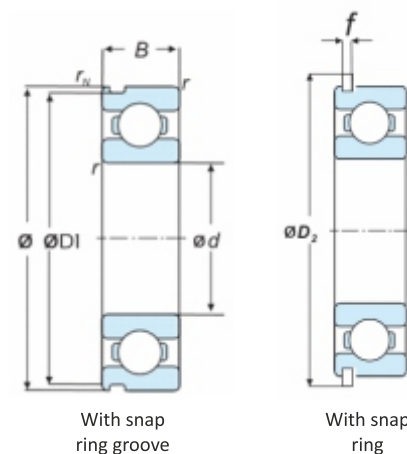
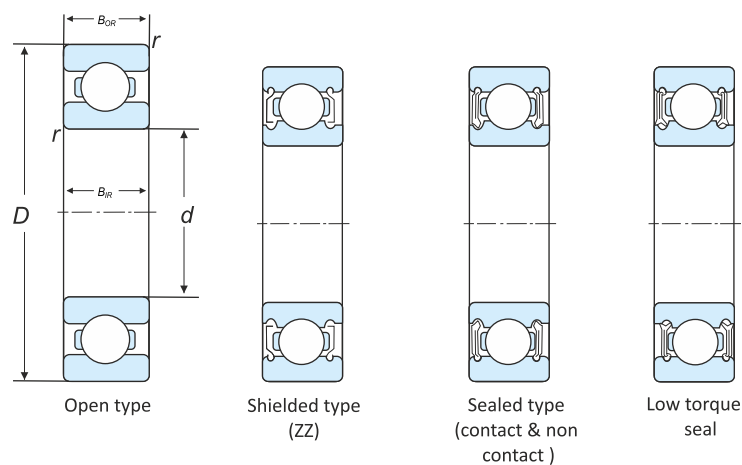
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring			
														Non Contact Type	Low Torque Type	Contact Type					
22	52	15	15	1.1	20.82	9	2123	918	0.76	18000	20000	ASTG1360	-	-	-	-	-	LLUA	-	-	0.142
22	52	15	15	1.1	20.09	9	2049	918	0.76	18000	20000	N1360	-	-	-	-	-	-	-	-	0.136
22	52	15	15	1.1	23.17	9	2362	918	0.76	18000	20000	MLN1360	-	-	-	-	-	-	-	-	0.136
22	56	11.5	11.5	1.5/1	18.43	9.5	1879	969	0.70	13000	15000	N1422	-	-	-	-	-	-	-	-	0.135
25	42	9	9	0.3	7.80	4.55	795	464	0.28	16000	19000	6905	-	-	-	-	-	-	N	NR	0.042
25	47	8	8	0.3	8.35	5.1	851	520	0.32	15000	18000	16005	-	-	-	-	-	-	-	-	0.06
25	47	12	12	0.6	11.20	5.85	1142	597	0.39	15000	18000	6005	Z	ZZ	-	LLH	-	RSS/LLUA1	-	-	0.088
25	47	12	12	0.6	11.20	5.85	1142	597	0.39	15000	18000	TMB6005	-	-	-	-	-	-	N	NR	0.088
25	52	9	9	0.6	11.60	6.5	1183	663	0.45	14000	17000	98205	-	-	-	-	-	-	-	-	0.085
25	52	15	15	1	15.50	7.85	1581	800	0.57	13000	15000	6205	Z	ZZ	-	-	LU	LLU/LLUA	-	-	0.129
25	52	15	15	1	15.50	7.85	1581	800	0.57	13000	15000	TM6205	Z	-	-	-	-	-	-	-	0.129
25	52	15	15	1	15.50	7.85	1581	800	0.57	13000	15000	TMB6205	-	-	-	-	-	-	-	-	0.129
25	52	15	15	1	17.87	7.85	1823	800	0.57	13000	15000	ML6205	-	-	-	-	-	-	-	-	0.129
25	52	18	18	1	14.10	7.8	1438	795	0.57	13000	15000	62205	-	-	-	-	-	-	-	-	0.16

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

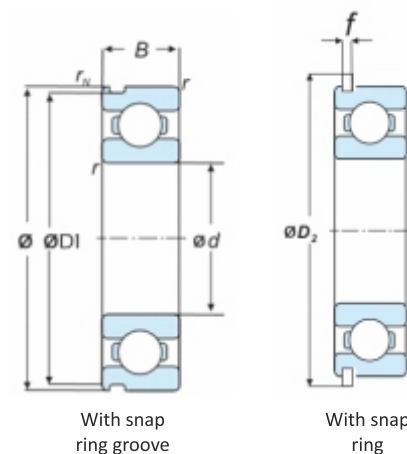
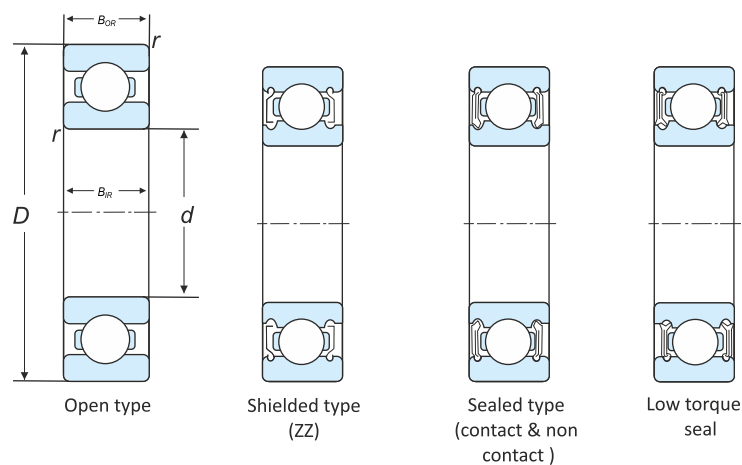
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring			
														Non Contact Type	Low Torque Type	Contact Type					
25	52	12	12	0.6	15.20	18.05	1550	1841	0.63	9000	15000	420205	-	-	-	-	-	-	-	0.1	
25	52	15	15	1	19.54	9.3	1992	948	0.76	13000	15000	6205C	Z	-	-	-	-	LLU/LLUA	N	0.128	
25	52	15	15	1	19.54	9.3	1992	948	0.76	13000	15000	TM6205C	-	-	-	-	-	LLU	N	0.128	
25	52	15	15	1	20.24	9.3	2064	948	0.76	13000	15000	AST6205C	-	-	-	-	-	LLU	N	0.128	
25	52	15	15	1	20.24	9.3	2064	948	0.76	13000	15000	ASTB6205C	-	-	-	-	-	-	-	0.128	
25	56	15	15	1.1	19.65	9.5	2003	969	0.75	16000	18000	25X56X15	Z	-	-	-	-	-	-	0.162	
25	62	12	12	0.6	21.65	11.3	2207	1152	0.83	13500	16000	1838001	-	-	-	-	-	-	-	0.176	
25	62	17	17	1.1	23.50	10.9	2396	1111	0.91	12000	14000	6305	Z	ZZ	-	-	LU	LLU	N	NR	0.225
25	62	17	17	1.1	23.50	10.9	2396	1111	0.91	12000	14000	TMB6305	-	-	-	-	-	LLU	-	NR	0.225
25	62	17	17	1.1	27.10	10.9	2763	1111	0.91	12000	14000	ML6305	-	-	-	-	-	-	-	-	0.225
25	62	14	14	0.2	17.70	10.3	1805	1050	0.68	6700	11400	6007/25	-	-	-	-	-	-	-	-	0.211
25	62	17	17	1.5	26.20	12.1	2671	1234	1.02	16000	18000	6305CS	Z	-	-	-	-	LLU/LLUA	NX	-	0.225
25	62	17	17	1.5	27.14	12.1	2768	1234	1.02	16000	18000	AST6305CS	-	-	-	-	-	-	-	-	0.225
25	68	12	12	0.6	22.64	11.1	2309	1132	0.89	14000	15000	N1287	-	-	-	-	-	-	-	-	0.234

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

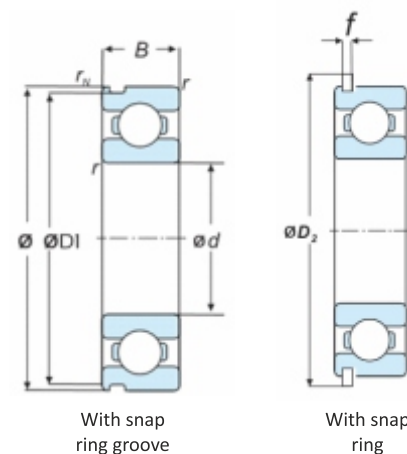
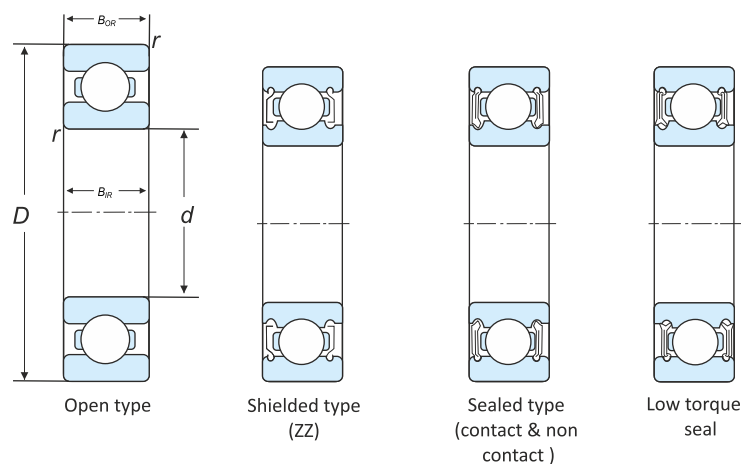
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
25	72	17	17	1.1	23.50	10.9	2396	1111	0.89	12000	14000	SP72X25X17	-	-	-	-	-	-	-	0.37
25	72	19	19	2	30.08	14.5	3067	1479	1.19	7700	13100	6306/25	-	-	-	-	LU	LLU	N	0.365
25	72	19	19	2	30.08	14.5	3067	1479	1.19	7700	13100	TM6306/25	-	-	-	-	-	LLU	N	0.365
25	72	19	19	2	31.17	14.5	3178	1479	1.19	7700	13100	AST6306/25	-	-	-	-	LU	-	-	0.365
25	52	15	15	1	20.09	9	2049	918	0.76	13000	15000	G1362	-	-	-	-	-	-	-	0.128
25	56	15	15	1	19.76	9.5	2015	969	0.75	12500	14500	N1468	-	-	-	-	-	-	-	0.152
25	62	17	17	0.3	26.20	12.1	2671	1234	1.02	12000	14000	G1332	-	-	-	-	-	-	-	0.229
25	62	17	17	1.1	29.19	13.5	2977	1377	1.12	12000	14000	N1366	-	-	-	-	-	-	-	0.224
25	62	17	17	1.8	26.20	12.1	2671	1234	1.02	12000	14000	N1332	-	-	-	LH1A	-	LLH1/LLH1A	NX	0.229
25	62	17	17	1.8	30.21	12.1	3080	1234	1.02	12000	14000	MLN1332	-	-	-	LH1A	-	LLH1A	NX	0.229
25	62	17	17	1.8	30.21	12.1	3080	1234	1.02	12000	14000	MLBN1332	-	-	-	-	-	-	-	0.229
25	62	19	19	0.4	26.20	12.1	2671	1234	1.02	12000	14000	N1415	-	-	-	-	-	LLU	NX	0.253
25	62	19	19	0.4	30.21	12.1	3080	1234	1.02	12000	14000	MLBN1415	-	-	-	-	-	LLU	N	0.253
25	64	17	17	0.5	24.75	11.5	2524	1173	0.98	11500	13500	N1464	-	-	-	-	-	-	-	0.26

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

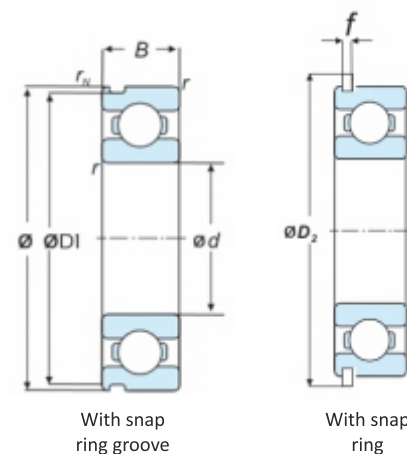
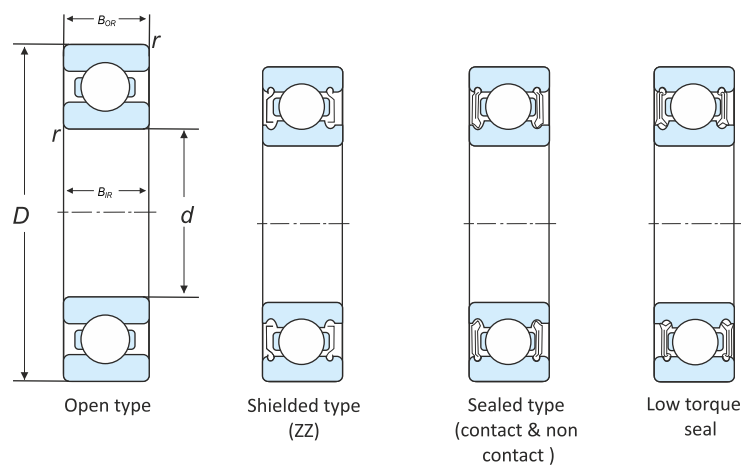
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring			
														Non Contact Type	Low Torque Type	Contact Type					
25	64	17	17	0.5	28.54	11.5	2911	1173	0.98	11500	13500	MLN1464	-	-	-	RLLA	-	-	-	N2R	0.26
25	68	18	18	0.3	29.60	14	3018	1428	1.16	11000	13000	G1335	-	-	-	-	-	-	-	-	0.312
25	68	18	18	0.3	29.60	14	3018	1428	1.16	11000	13000	63/25LLUNX-	-	-	-	-	-	LLU	NX	-	0.302
25	80	21	21	1.5	38.50	17.6	3926	1795	1.47	10000	12000	6405	-	-	-	-	LU	-	-	-	0.536
25.5	72	19	19	1.1	27.10	14.5	2763	1479	1.19	10000	12000	872489	-	-	-	-	-	-	-	-	0.363
28	58	16	16	1	19.80	9.75	2019	994	0.74	12000	14000	62/28	-	-	-	LLH/LLHA	-	LLU	N	NR	0.171
28	58	16	16	1	19.80	9.75	2019	994	0.74	12000	14000	TM62/28	-	-	-	LLHA	-	-	-	-	0.171
28	68	18	18	1.1	29.60	14	3018	1428	1.18	11000	13000	63/28	-	-	-	-	LU	LLU	N	NR	0.293
28	68	18	18	1.1	30.67	14	3127	1428	1.18	11000	13000	AST63/28	-	-	-	-	-	-	-	-	0.293
28	68	17	17	1.1	29.60	14	3018	1428	1.18	11000	13000	SP63/28	-	-	-	-	-	-	-	-	0.254
28	72	18	18	1.5	28.53	15.4	2909	1570	1.13	9800	11000	72x28x18	-	-	-	-	-	-	-	-	0.35
28	72	18	18		24.64	14.6	2513	1489	0.98	9800	11000	BB1087	-	-	-	-	-	-	-	-	0.36
28	72	18	18		24.64	14.6	2513	1489	0.98	9800	11000	TMBB1087	-	-	-	-	-	-	-	-	0.36
30	47	9	9	0.3	8.00	4.9	816	500	0.29	14000	17000	6906	-	-	-	-	-	-	-	-	0.05

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

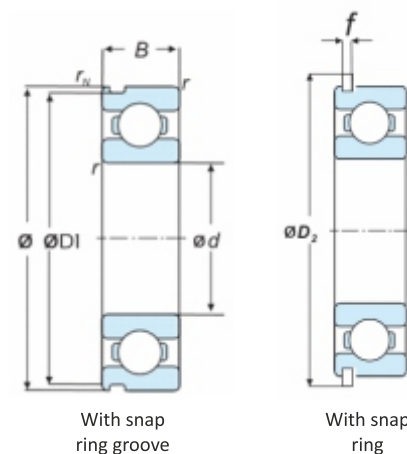
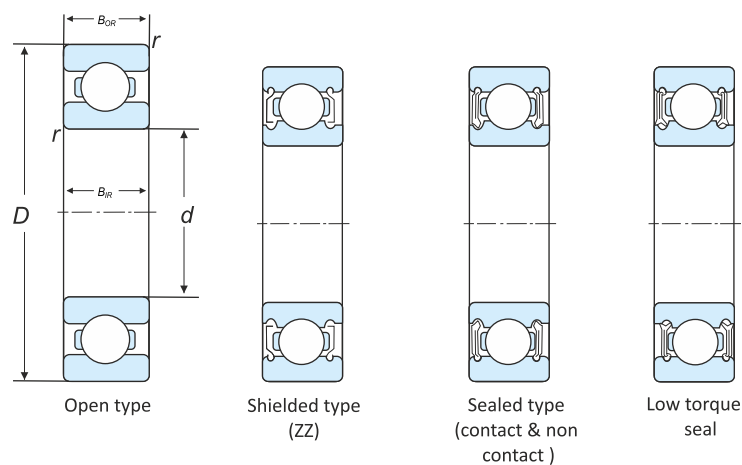
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
30	55	13	13	1	14.70	8.3	1499	846	0.54	13000	15000	6006	Z ZZ	LBRA	LLHA	LU	LLU	N	NR	0.116
30	55	13	13	1	16.95	8.3	1729	846	0.54	13000	15000	MLB6006	- -	-	-	-	-	-	-	0.116
30	55	11	11	1	14.70	8.3	1499	846	0.54	13000	15000	SP6006	- -	-	-	-	-	-	-	0.1
30	55	9	9	0.3	11.20	7.35	1142	749	0.37	13000	15000	16006	- -	-	-	-	-	-	-	0.091
30	62	16	16	1	21.60	11.3	2203	1152	0.82	11000	13000	6206	Z ZZ	-	LLH	RS	RSS	N	NR	0.201
30	62	16	16	1	25.97	12.8	2649	1305	1.03	11000	13000	6206C	- -	-	-	LU	-	-	-	0.195
30	62	16	16	1	26.91	12.8	2744	1305	1.03	11000	13000	AST6206C	- -	-	-	LU	-	-	-	0.195
30	62	16	16	1	26.91	12.8	2744	1305	1.03	11000	13000	ASTB6206C	- -	-	-	-	-	-	-	0.195
30	62	20	20	1	19.50	11.3	1988	1152	1.03	7500	13000	62206	- -	-	-	-	-	-	-	0.25
30	62	14	14	1	20.60	11.3	2101	1152	0.87	7500	13000	420206	- -	-	-	-	-	-	-	0.18
30	72	19	19	1.1	30.08	14.5	3067	1479	1.19	10000	12000	6306	Z ZZ	LLBR	LLH	LU	LLU	N	NR	0.334
30	72	19	19	1.1	30.08	14.5	3067	1479	1.19	10000	12000	TM6306	- -	-	-	-	LLU	N	NR	0.334
30	72	19	19	1.1	31.17	14.5	3178	1479	1.19	10000	12000	AST6306	- -	-	-	-	-	-	-	0.334
30	72	19	19	1.1	36.15	17.28	3687	1762	1.45	10000	12000	6306C	- -	-	-	-	-	-	-	0.331

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

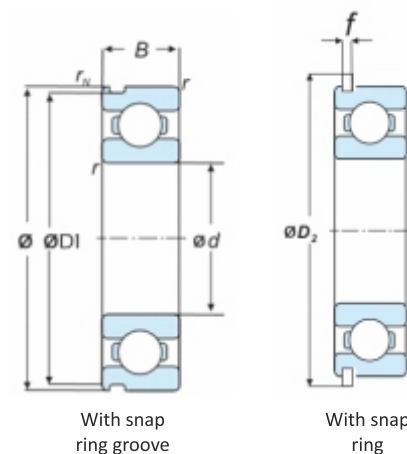
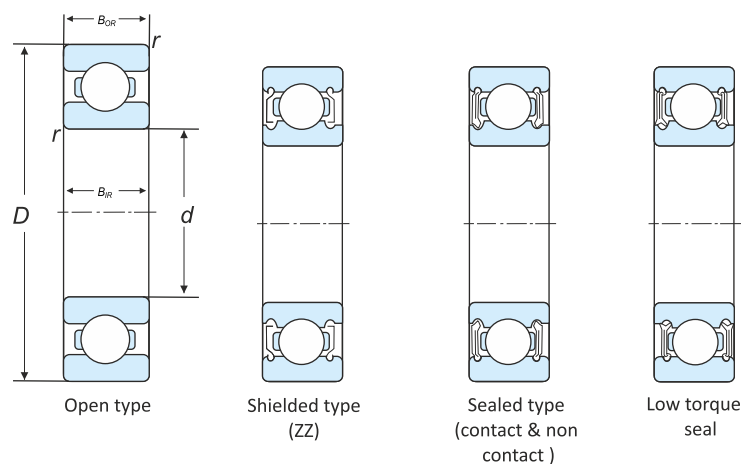
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring			
														Non Contact Type	Low Torque Type	Contact Type					
30	72	17	17	1.1	29.70	16.7	3029	1703	1.36	12000	14000	420306	-	-	-	-	-	-	-	0.3	
30	72	21	21	1.1	36.15	17.28	3687	1762	1.45	15000	16000	N1345	-	-	-	-	LLU	N	-	0.35	
30	72	21	21	1.1	37.46	17.28	3819	1762	1.45	15000	16000	ASTN1345	-	-	-	LLH1	-	LLU	N	-	0.35
30	90	23	23	1.5	45.07	22.8	4595	2325	1.84	7800	9200	6406	-	-	-	-	-	N	NR	0.698	
30	90	23	23	1.5	51.97	22.8	5299	2325	1.84	7800	9200	ML6406	-	-	-	-	-	-	-	0.698	
30	56	12	12	1.5/1.0	18.43	9.5	1879	969	0.69	13000	15000	N1530	-	-	-	-	-	-	-	0.108	
30	56	12	12	1.5/1.0	19.09	9.5	1947	969	0.69	13000	15000	ASTN1530	-	-	-	-	-	-	-	0.108	
30	56	13.5	13.5	1.5/1.0	18.43	9.5	1879	969	0.69	13000	15000	N1626	-	-	-	-	-	-	-	0.12	
30	56	13.5	13.5	1.5/1.0	19.09	9.5	1947	969	0.69	13000	15000	ASTN1626	-	-	-	-	-	-	-	0.12	
30	62	15	15	1.5/1.0	19.76	11	2015	1122	0.75	11000	13000	N1424	-	-	-	-	-	-	-	0.186	
30	62	15	15	1.5/1.0	22.78	11	2323	1122	0.75	11000	13000	MLN1424	Z	-	-	-	-	-	-	0.189	
30	62	16	16	1	21.60	11.3	2203	1152	0.82	11000	13000	N1624	-	-	-	-	-	LLH1	N	-	0.198
30	62	16	16	1	22.38	11.3	2282	1152	0.82	11000	13000	ASTN1624	-	-	-	-	-	LLH1	N	-	0.198
30	72	19	19	1.1	36.15	17.28	3687	1762	1.45	10000	12000	N1392	-	-	-	-	-	LLU	N	-	0.328

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

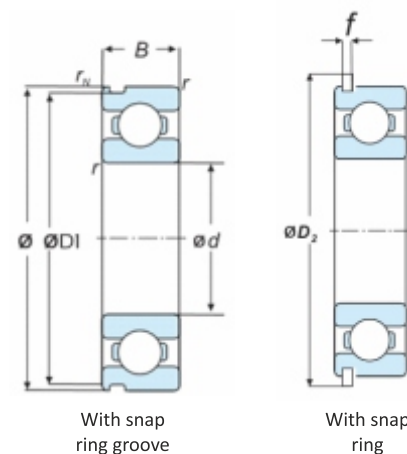
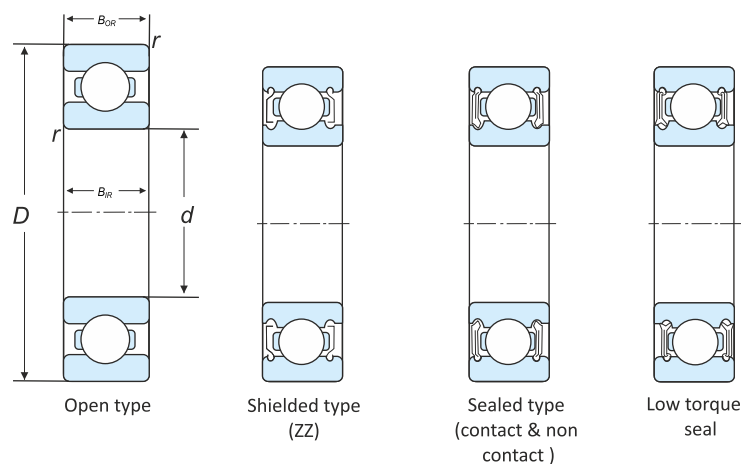
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
34.991	72	15	18.5	1.5	28.40	15.3	2896	1560	1.12	9800	11000	BB1103	- -	-	-	-	-	-	-	0.3
35	62	9	9	0.3	11.70	8.2	1193	836	0.42	12000	14000	16007	- -	-	-	-	-	-	-	0.11
35	62	14	14	0.5	17.70	10.3	1805	1050	0.66	12000	14000	6007	Z ZZ	-	-	RS	RSS	N	NR	0.154
35	62	14	14	0.5	17.70	10.3	1805	1050	0.66	12000	14000	TM6007	- -	-	-	-	-	-	NR	0.154
35	62	14	14	0.5	17.70	10.3	1805	1050	0.66	12000	14000	TMB6007	- -	-	-	-	-	-	-	0.154
35	62	14	14	0.5	20.41	10.3	2081	1050	0.66	12000	14000	MLB6007	- -	-	-	-	-	-	-	0.154
35	62	14	14	0.5	17.70	10.3	1805	1050	0.66	12000	14000	6007SPL	- -	-	-	-	RSS	-	-	0.154
35	72	17	17	1.1	28.40	15.3	2896	1560	1.12	9800	11000	6207	Z ZZ	-	-	LU	LLU	N	NR	0.28
35	72	17	17	1.1	28.40	15.3	2896	1560	1.12	9800	11000	TM6207.PX1	- -	-	-	-	-	-	-	0.28
35	72	17	17	1.5	28.40	15.3	2896	1560	1.12	9800	11000	TMB6207X19	- -	-	-	-	LLU	-	-	0.28
35	72	17	17	1.1	32.75	15.3	3340	1560	1.12	9800	11000	ML6207	- ZZ	-	-	-	LLU/LLH1	N	NR	0.28
35	72	17	17	1.5	28.40	15.3	2896	1560	1.12	9800	11000	6207RO	- -	-	-	-	-	-	-	0.286
35	72	23	23	1.1	25.50	15.2	2600	1550	1.12	6300	11000	62207	- -	-	-	-	-	-	-	0.39
35	80	21	21	1.5	37.00	19.2	3773	1958	1.51	8800	10000	6307	Z ZZ	LLBR	LLH/LLH1	LU	LLU	N	NR	0.457

Note: 1.* All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

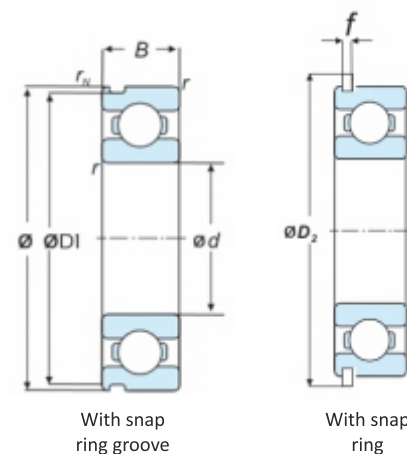
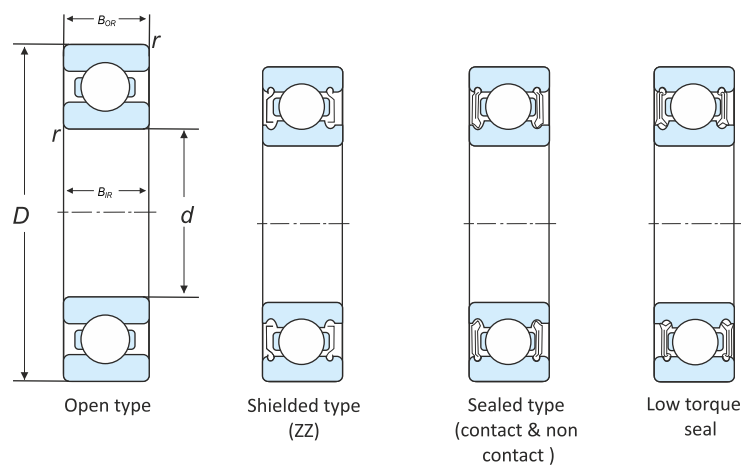
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring			
														Non Contact Type	Low Torque Type	Contact Type					
35	80	21	21	1.5	42.67	19.2	4351	1958	1.51	8800	10000	ML6307	-	-	-	-	-	LLU	NX	-	0.459
35	80	26	21	1.5	37.00	19.2	3773	1958	1.51	8800	10000	SP6307	-	-	-	-	-	LLU	-	-	0.483
35	80	21	21	1.5	37.00	19.2	3773	1958	1.51	8800	10000	CR-6307	-	-	-	-	-	LLU	-	-	0.445
35	80	21	21	1.5	38.33	19.2	3909	1958	1.51	8800	10000	ASTBCR-6307	-	-	-	-	-	LLU	-	-	0.445
35	100	25	25	1.5	53.61	27.8	5467	2835	2.25	7800	9100	6407	-	-	-	-	-	-	-	-	0.925
35	72	15	15	1.5	22.20	13.8	2264	1407	0.88	9800	11000	N1201	-	-	-	-	-	-	-	-	0.277
35	72	15	15	1.5	22.20	13.8	2264	1407	0.88	9800	11000	TMN1201	-	-	-	-	-	-	-	-	0.277
35	72	15	15	1.5	25.60	13.8	2610	1407	0.88	9800	11000	MLN1201.PX1-	-	-	-	-	-	-	-	-	0.277
35	72	21	21	1.1	31.41	16	3203	1632	1.25	9800	11000	N1485	-	-	-	-	-	LLH1A	N	-	0.335
35	85	23	23	1.5	40.88	21.3	4169	2172	1.70	8500	9800	N1206LLU	-	-	-	-	-	LLU	-	-	0.623
35	90	25	25	1.5	49.40	26.2	5037	2672	2.13	8300	9500	N1412	-	-	-	-	-	LLU	-	-	0.697
35	90	25	25	1.5	56.96	26.2	5808	2672	2.13	8300	9500	MLBN1412	-	-	-	-	-	LLU	-	-	0.697
36	64	12	12	1.5/1.0	19.87	11.1	2026	1132	0.74	12000	14000	N1506	-	-	-	-	-	-	-	-	0.133
36	64	12	12	1.5/1.0	22.91	11.1	2336	1132	0.74	12000	14000	MLN1506	-	-	-	-	-	-	-	-	0.133

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

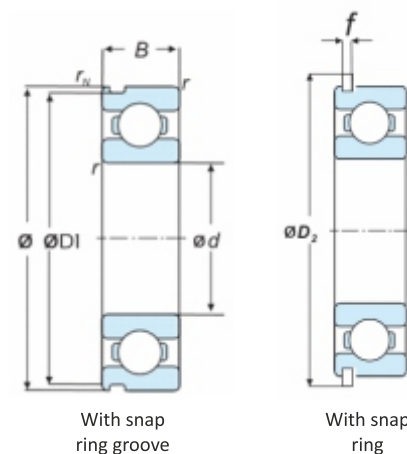
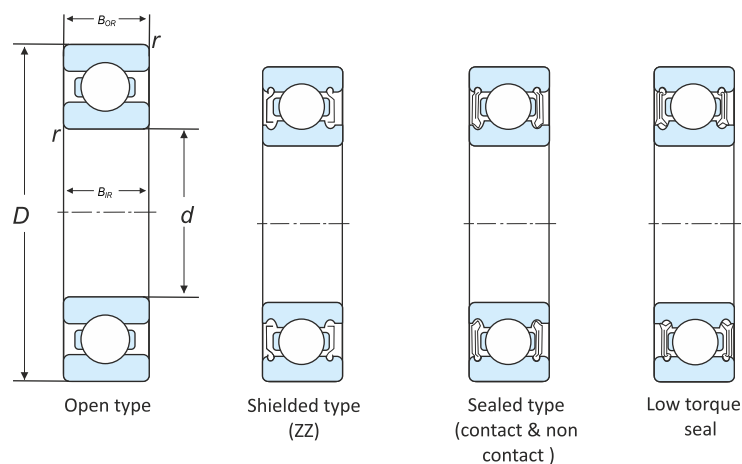
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static													
mm					KN		Kgf		KN	rpm											
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring			
												Non Contact Type	Low Torque Type	Contact Type							
40	58	12	12	0.6	11.42	7.91	1165	807	0.45	11000	13000	N1305	-	-	-	-	-	-	0.084		
40	62	12	12	0.6	15.21	10	1551	1020	0.59	10000	12000	6908	-	-	-	-	-	-	0.11		
40	68	9	9	0.3	11.10	8.55	1132	872	4.60	10000	12000	16008	-	-	-	-	-	-	0.13		
40	68	15	15	1	18.60	11.5	1897	1173	0.71	10000	12000	6008	-	ZZ	-	-	-	LLU	N	NR	0.195
40	68	15	15	1	21.45	11.5	2187	1173	0.71	10000	12000	ML6008	-	ZZ	-	-	-	-	-	-	0.195
40	80	18	18	1.1	32.50	18	3314	1835	1.27	8700	10000	6208	Z	ZZ	-	LLHA	LU	LLU	N	NR	0.357
40	80	18	18	1.1	32.50	18	3314	1835	1.27	8700	10000	TM6208	-	-	-	LLHA	-	-	N	-	0.357
40	80	18	18	1.1	32.50	18	3314	1835	1.27	8700	10000	TMB6208	-	-	-	-	-	LLU	N	-	0.357
40	80	18	18	1.1	33.67	18	3434	1835	1.27	8700	10000	AST6208	-	-	-	-	-	-	-	-	0.357
40	80	18	18	1.1	37.48	18	3822	1835	1.27	8700	10000	ML6208	-	-	-	-	-	-	-	-	0.357
40	80	18	18	1.1	29.10	18	2967	1835	1.27	8700	10000	6208K	-	-	-	-	-	-	-	-	0.363
40	85	18	18	1.1	32.50	18	3314	1835	1.26	11000	12000	40X85X18	-	-	-	-	-	-	NX	NXR	0.467
40	90	23	23	1.5	45.07	22.9	4595	2335	1.84	7800	9200	6308	Z	ZZ	-	LLH	RSS/LU	LLU	N	NR	0.599

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

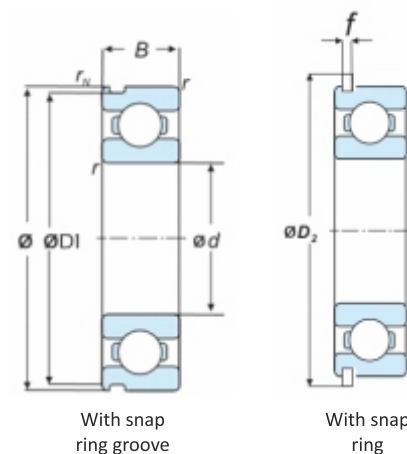
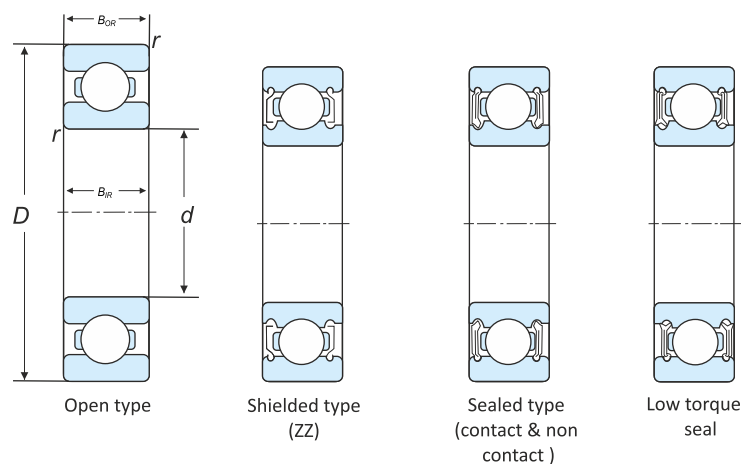
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
40	90	23	23	1.5	51.97	22.9	5299	2335	1.84	7800	9200	ML6308	- -	-	-	- -	-	-	0.599	
40	90	23	23	1.5	49.17	26	5014	2651	2.11	7800	9200	6308C	- -	-	-	- LLU	-	-	0.62	
40	90	23	23	1.5	56.70	26	5782	2651	2.11	7800	9200	ML6308C	- -	-	-	- -	-	-	0.62	
40	90	23	23	1.5	45.07	22.9	4595	2335	2.11	7800	9200	6308RO	-	-	-	-	-	-	0.665	
40	90	23	23	1.5	56.61	28	5773	2855	2.37	11000	13000	N1334	- -	-	-	- -	N	-	0.538	
40	90	23	23	1.5	58.65	28	5981	2855	2.37	11000	13000	ASTBN1334	- -	-	-	- -	N	-	0.538	
40	110	27	27	2	61.90	38	6312	3875	3.07	7000	8200	6408	- -	-	-	- -	N	NR	1.21	
40	100	25	25	1.5	58.50	32	5965	3263	2.57	7400	8400	N1451	- -	-	-	- -	-	-	0.897	
42.025	90	23	23	0.6/1.5	45.18	24	4607	2447	1.87	7800	9200	N1270	- -	-	RSS	- -	N	-	0.548	
45	75	16	16	1	23.20	15.1	2366	1540	0.93	9200	11000	6009	Z ZZ	-	-	- LLU/LLUA	N	NR	0.237	
45	75	16	16	1	26.75	15.1	2728	1540	0.93	9200	11000	ML6009	- -	-	-	- -	-	-	0.237	
45	75	12	12	1	23.20	15.1	2366	1540	0.93	9200	11000	SP6009	- -	-	-	- -	-	-	0.2	
45	85	19	19	1.1	36.00	20.5	3671	2090	1.44	7800	9200	6209	Z ZZ	-	-	LU LLU	N	NR	0.4	
45	85	19	19	1.1	36.00	20.5	3671	2090	1.44	7800	9200	TM6209	- -	-	-	- -	N	-	0.4	

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

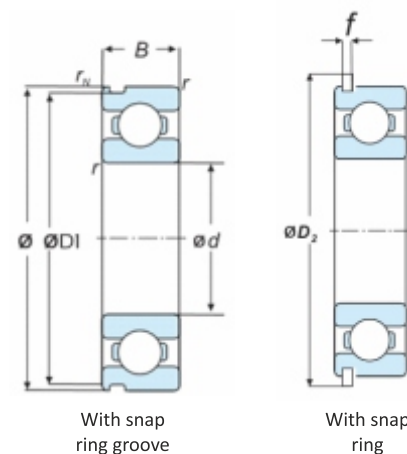
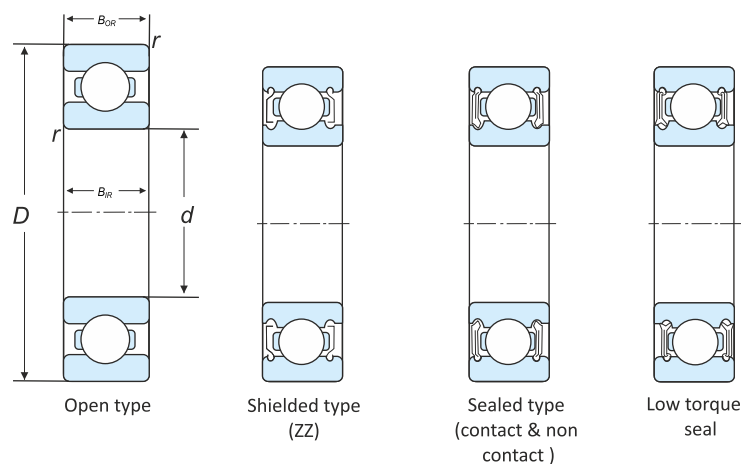
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers							Mass (Kg) (Approx)	
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
45	85	19	19	1.1	32.70	20.5	3334	2090	1.44	7800	9200	6209K	- -	-	-	-	-	-	0.41	
45	100	25	25	1.5	58.50	32	5965	3263	2.54	7000	8200	6309	Z ZZ	-	LLH/LLHA	-	LLU	N	NR	0.825
45	100	25	25	0.3	58.50	32	5965	3263	2.54	7000	8200	TMB6309X19	- -	-	LLHA	-	-	-	-	0.825
45	100	25	25	1.5	67.46	32	6879	3263	2.54	7000	8200	ML6309	- -	-	-	-	-	-	-	0.825
45	120	29	29	1.1	71.50	44.4	7291	4528	3.58	6300	7400	6409	- -	-	-	-	-	-	-	1.55
45	68	12	12	0.6	14.50	10.86	1479	1107	0.62	4000	5500	6909	- -	-	-	LUA	LLUA		-	0.126
50	80	10	10	0.6	14.70	11.3	1499	1152	0.61	8400	9800	16010	- -	-	-	-	-	-	-	0.19
50	80	16	16	1	24.20	16.6	2468	1693	0.99	8400	9800	6010	Z -	-	-	LU	LLU/LLUA	N	NR	0.262
50	80	16	16	1	27.91	16.6	2846	1693	0.99	8400	9800	ML6010	- -	-	-	-	-	-	-	0.262
50	90	20	20	1.1	39.00	23.2	3977	2366	1.58	7100	8300	6210	Z ZZ	-	LLHA	LU	LLU	N	NR	0.457
50	90	20	20	1.1	39.00	23.2	3977	2366	1.58	7100	8300	TM6210	- -	-	-	LU	-	-	NR	0.457
50	90	20	20	1.1	39.00	23.2	3977	2366	1.58	7100	8300	TMB6210	- -	-	-	LU	-	-	NR	0.457
50	90	20	20	1.1	35.00	23.2	3569	2366	1.58	7100	8300	6210K	- -	-	-	-	-	-	-	0.46
50	110	27	27	2	68.50	38	6985	3875	3.02	6400	7500	6310	Z -	LBRA	-	LU	LLU	N	NR	1.065

Note: 1.* All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

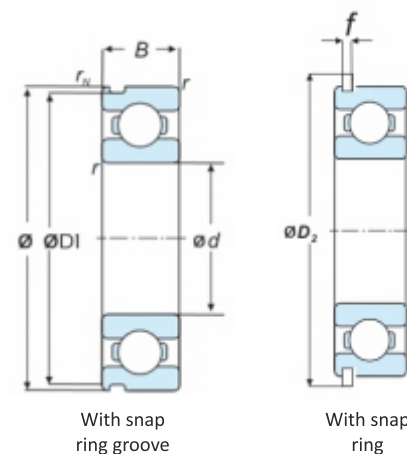
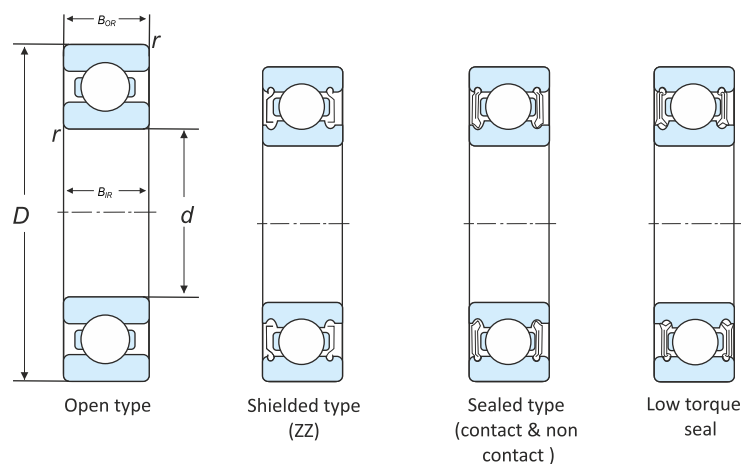
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
50	130	31	31	2.1	92.28	55.13	9410	5622	3.40	5700	6700	6410	- -	-	-	-	-	-	1.9	
55	80	13	13	1	17.70	13.3	1805	1356	0.73	8200	9600	6911	- ZZ	-	-	-	-	-	0.19	
55	90	18	18	1.1	31.50	21.3	3212	2172	1.29	7700	9000	6011	- -	-	-	-	LLU	-	0.39	
55	100	21	21	1.5	48.00	29.3	4895	2988	2.00	6400	7600	6211	Z ZZ	-	-	LU	LLU	N	0.597	
55	100	21	21	1.5	48.00	29.3	4895	2988	2.00	6400	7600	6211RO	- -	-	-	-	-	-	0.607	
55	100	21	21	1.5	43.40	29.3	4426	2988	2.00	6400	7600	6211K	- ZZ	-	-	-	-	-	0.607	
55	120	29	29	2	79.50	44.4	8107	4528	3.53	5800	6800	6311	Z ZZ	-	-	LU	LLU	-	1.372	
55	120	29	29	2	82.36	44.4	8399	4528	3.53	5800	6800	AST6311	- -	-	-	-	-	-	NR	1.375
55	130	31	31	1.5	97.46	52.4	9938	5343	4.42	9000	10000	N1336	- -	LLBA	-	-	-	-	1.79	
55	130	31	31	1.5	100.97	52.4	10296	5343	4.42	9000	10000	ASTN1336	- -	LLBA	-	-	-	-	1.79	
55	140	33	33	2.1	93.55	56.5	9539	5761	3.90	5200	6100	6411	-	-	-	-	-	-	2.3	
60	85	13	13	1	16.40	14.2	1672	1448	0.70	7600	8900	6912	- -	-	-	-	RSS	-	0.19	
60	95	18	18	1.1	35.14	24.22	3584	2470	1.19	7000	8300	6012	- -	-	-	-	-	-	0.414	
60	95	11	11	0.6	22.10	17.5	2254	1785	0.96	6000	7000	16012	- -	-	-	-	-	-	0.285	

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

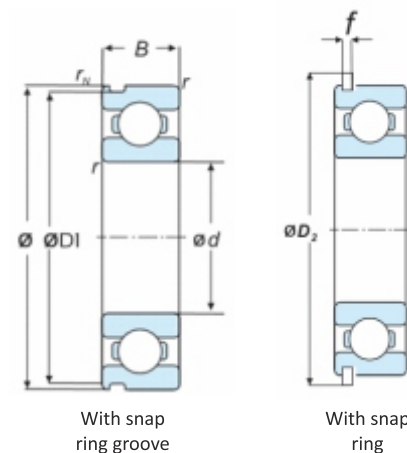
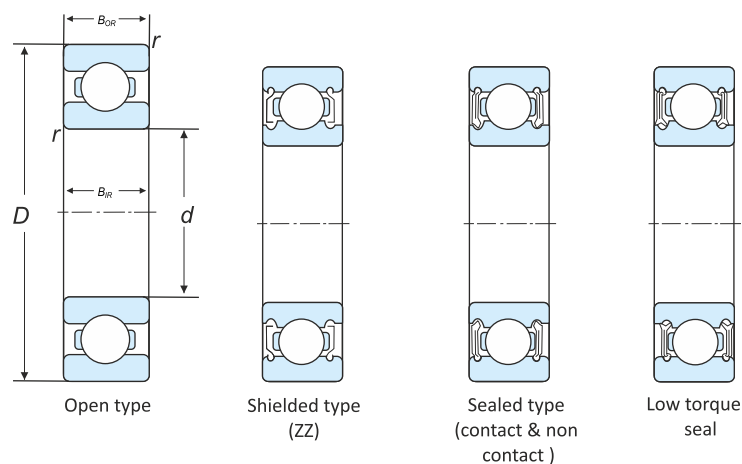
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
60	110	22	22	1.5	52.95	32.9	5399	3355	2.21	6000	7000	6212	Z ZZ	-	-	LU LLU	N	NR	0.769	
60	110	22	22	1.5	61.06	32.9	6226	3355	2.21	6000	7000	ML6212	- -	-	-	- -	-	-	0.769	
60	110	22	22	1.5	52.95	32.9	5399	3355	2.21	6000	7000	6212RO	- -	-	-	- -	-	-	0.769	
60	110	22	22	1.5	47.70	32.9	4864	3355	2.21	6000	7000	6212K	- ZZ	-	-	- -	-	-	0.769	
60	130	31	31	2.1	90.50	52	9228	5303	4.09	5400	6300	6312	Z ZZ	-	-	- -	-	-	1.689	
60	150	35	35	2.1	109.20	70.3	11135	7169	4.43	4800	5700	6412	-	-	-	- -	-	-	2.8	
65	90	13	13	1	22.20	17.5	2264	1785	0.95	5000	6000	6913	- -	-	-	- -	-	-	0.216	
65	100	18	18	1.5	34.00	25.2	3467	2570	1.46	6500	7700	6013	Z -	-	LLH	- LLU/LLUA	-	NR	0.425	
65	100	11	11	0.6	22.70	18.6	2315	1897	0.45	5000	6000	16013	- -	-	-	- -	-	-	0.297	
65	120	23	23	1.5	63.50	40.1	6475	4089	2.71	5500	6500	6213	Z ZZ	-	-	- -	N	NR	0.98	
65	125	23	23	1.5	63.50	40.1	6475	4089	2.69	5500	6500	6213/125	- ZZ	-	-	- RSS/LLU	-	-	1.17	
65	125	23	23	1.5	63.50	40.1	6475	4089	2.69	5500	6500	TMB6213/125	- -	-	-	- RSS	-	-	1.17	
65	140	33	33	2.1	103.00	59.8	10503	6098	4.68	4900	5800	6313	Z ZZ	-	-	LU LLU	-	NR	2.091	

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

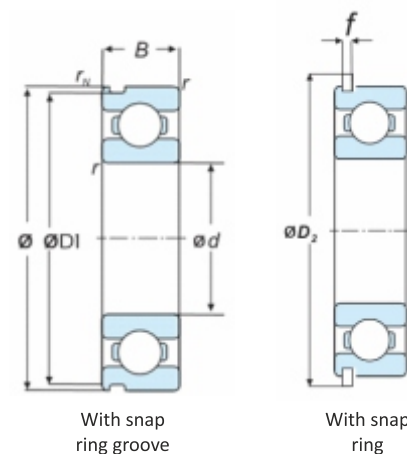
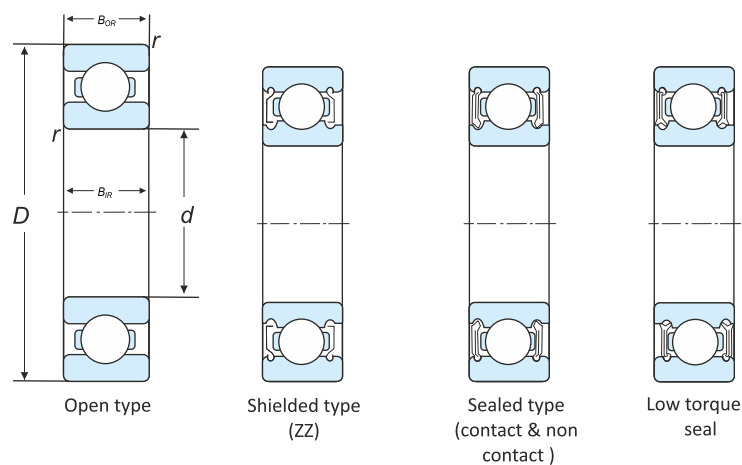
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers							Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static											
mm					KN		Kgf		KN	rpm									
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring	
												Non Contact Type	Low Torque Type	Contact Type					
65	90	13	13	1.6	22.20	17.5	2264	1785	0.96	5000	6000	N1364	- -	-	-	-	-	-	0.208
65	100	23.7	23.7	1.5	29.75	21.8	3033	2223	1.37	5000	6000	N1264	- -	-	RSSA1	-	-	-	0.625
70	100	16	16	1	26.30	21.1	2682	2152	1.16	6500	7700	6914	- -	-	-	-	-	-	0.334
70	110	20	20	1.1	42.00	30.8	4283	3141	1.83	6100	7100	6014	- -	-	-	LLUA	N	NR	0.587
70	125	24	24	1.5	69.00	44.1	7036	4497	2.97	5100	6000	6214	- -	-	-	-	-	-	1.056
70	150	35	35	2.1	115.00	68.04	11727	6938	5.32	4600	5400	6314	- ZZ	-	-	-	-	-	2.61
70	110	13	13	0.6	27.89	25	2844	2551	1.38	6000	7000	16014	- -	-	-	-	-	-	0.44
75	115	20	20	1.1	40.18	33.18	4097	3383	1.95	5700	6700	6015	- ZZ	-	-	-	RSS	-	0.649
75	130	25	25	1.5	68.93	44.9	7029	4579	2.94	4800	5600	6215	- -	-	-	-	-	-	1.139
75	130	25	25	1.5	66.10	49.5	6740	5048	2.94	4800	5600	6215K	- -	-	-	-	-	-	1.2
75	160	37	37	2.1	126.00	76.97	12848	7849	6.00	4300	5000	6315	- -	-	-	-	RSS	-	3.13
80	125	22	22	1.1	53.00	40	5405	4079	2.35	5200	6100	6016	- -	-	-	-	LLU	-	0.861
80	140	26	26	2	71.55	54.3	7296	5537	3.84	4500	5300	6216	- -	-	-	-	-	-	1.4
80	170	39	39	2.1	122.70	86.5	12512	8821	6.72	4000	4700	6316	- ZZ	-	-	-	RSS	-	3.59

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

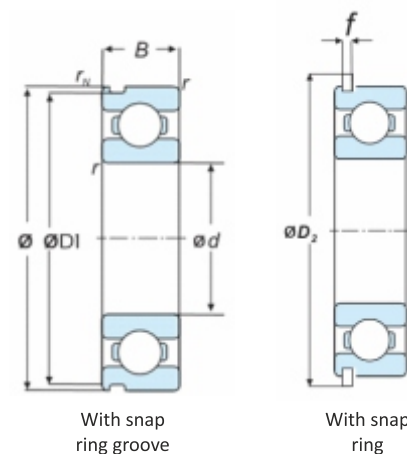
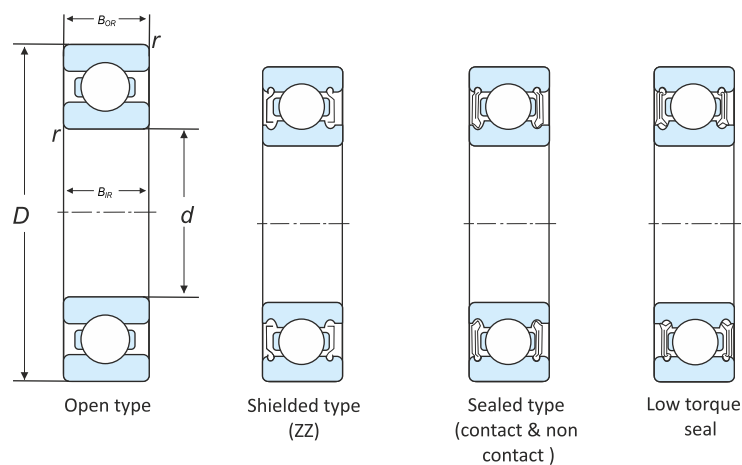
$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
80	150	28	28	2	92.69	64	9451	6526	4.19	4200	5000	N1390	-	-	-	-	-	-	-	1.972
85	130	22	22	2	47.30	40.15	4823	4094	2.34	4200	5000	6017	-	-	-	-	-	-	-	0.92
85	150	28	28	2	83.20	64	8484	6526	4.17	4200	5000	6217	-	-	-	-	-	-	-	1.8
85	150	28	28	2	83.20	64	8484	6526	4.17	4200	5000	6217K	-	-	-	-	-	-	-	1.8
85	180	41	41	3	132.42	96.59	13503	9849	7.48	3800	4500	6317	-	ZZ	-	-	-	-	-	4.23
90	140	24	24	1.5	58.00	49.8	5914	5078	2.94	4700	5600	6018	-	-	-	-	-	-	-	1.02
90	160	30	30	2	95.98	71.46	9787	7287	4.81	4000	4700	6218	-	-	-	-	-	-	-	2.15
90	190	43	43	3	142.33	107.23	14514	10934	8.28	3600	4200	6318	-	ZZ	-	-	-	-	-	4.91
95	145	24	24	1.5	60.00	53.8	6118	5486	2.92	4500	5300	6019	-	-	-	-	-	-	-	1.08
95	200	45	45	3	156.36	121.98	15944	12439	9.12	3300	3900	6319	-	-	-	-	-	-	-	5.67
100	150	24	24	1.5	64.46	56.13	6573	5724	3.11	4200	5000	6020	-	ZZ	-	-	-	-	-	1.15
100	180	34	34	2.1	122.14	92.72	12455	9455	6.30	3500	4200	6220	-	-	-	-	-	-	-	3.14
100	215	47	47	3	172.65	140.4	17605	14316	11.01	3200	3700	6320	-	ZZ	-	-	-	-	-	7
100	150	16	16	1	45.00	45	4589	4589	2.00	4000	5000	16020M	-	-	-	-	-	-	-	1

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

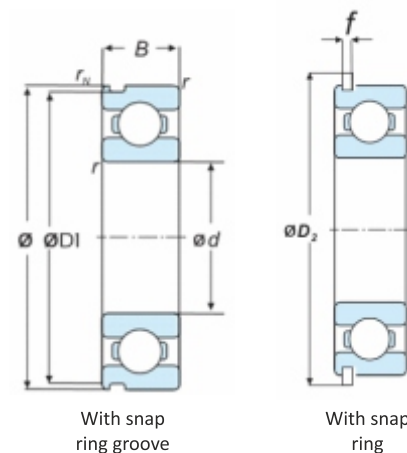
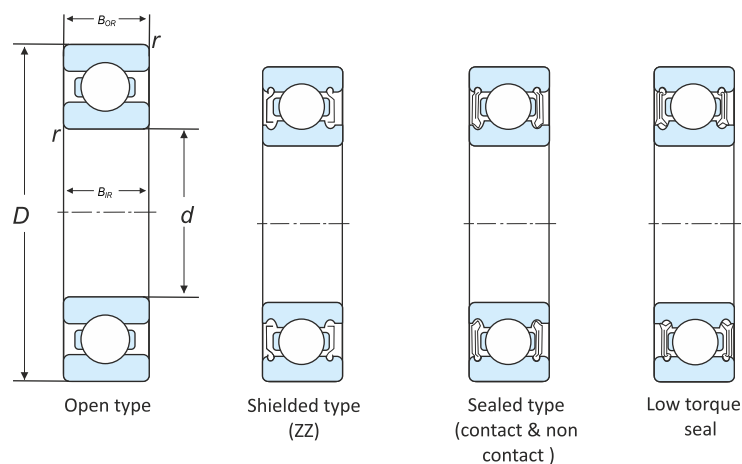
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
105	160	26	26	2	71.90	63.36	7332	6461	3.57	4000	4700	6021	-	-	-	-	-	-	-	1.59
105	225	49	49	3	240.00	154	24473	15704	7.70	2900	3500	6321	-	-	-	-	-	-	-	8.05
110	170	28	28	2	81.80	72.8	8341	7424	4.30	3800	4500	6022	-	-	-	-	-	-	-	1.9
110	200	38	38	2.1	110.82	100.43	11301	10241	7.06	3200	3800	6222	-	-	-	-	-	-	-	4.36
110	240	50	50	3	204.90	178.3	20894	18182	14.13	2900	3400	6322	-	-	-	-	-	-	-	8
120	215	40	40	2.1	155.00	131	15806	13358	8.87	2900	3400	6224	-	-	-	-	-	-	-	5.3
120	260	55	55	3	207.00	185	21108	18865	16.35	2600	3100	6324	-	-	-	-	-	-	-	12.4
120	180	19	19	1	63.00	63.5	6424	6475	3.20	3500	4000	16024M	-	-	-	-	-	-	-	2
130	230	40	40	3	167.00	146	17029	14888	7.78	2700	3100	6226	-	-	-	-	-	-	-	5.82
130	280	58	58	4	229.00	214	23352	21822	9.80	2300	2700	6326	-	-	-	-	-	-	-	15.2
140	250	42	42	3	179.10	167	18263	17029	9.64	2500	2900	6228	-	-	-	-	-	-	-	7.68
150	320	65	65	4	278	284	28348	28960	13.1	2000	2300	6330 C3	-	-	-	-	-	-	-	21.4
150	225	35	35	2.1	132	125	13460	12747	5.50	2700	3200	6030M	-	-	-	-	-	-	-	5.5
150	270	45	45	3	182	205	18559	20904	7.90	2200	2600	6230	-	-	-	-	-	-	-	9.67

Single Row Deep Groove Ball Bearing (Metric series)



Dynamic equivalent radial load

$$P_r = XF_r + YF_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

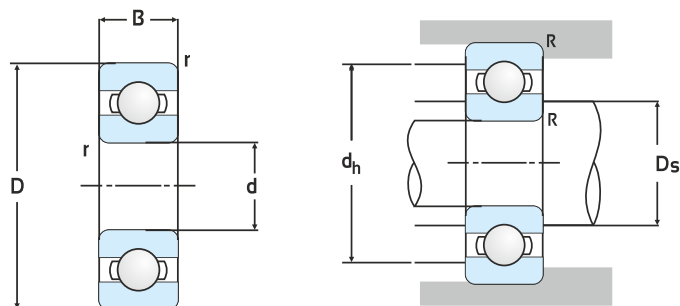
$$P_{or} = 0.6F_r + 0.5F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions					Basic Load Rating				Fatigue Load Limit	Limiting Speed		Bearing Numbers								Mass (Kg) (Approx)
					Dynamic	Static	Dynamic	Static												
mm					KN		Kgf		KN	rpm										
d	D	B _{IR}	B _{OR}	r _{smin}	C _r	C _{or}	C _r	C _{or}	C _u	Grease	Oil	Open type	Shield Type	Sealed Bearings*			Snap Ring Groove	Snap Ring		
														Non Contact Type	Low Torque Type	Contact Type				
160	240	38	38	2.1	143.00	144	14582	14684	5.65	2500	3000	6032M13	-	-	-	-	-	-	-	6
160	240	25	25	1.5	95.00	105	9687	10707	4.68	2500	3000	16032M	-	-	-	-	-	-	-	4
170	310	52	52	4	228	239	23250	24371	9.60	2000	2300	6234C3	-	-	-	-	-	-	-	15.4
170	260	42	42	2.1	161	160	16417	16316	7.55	2300	2800	6034	-	-	-	-	-	-	-	7.8
180	280	46	46	2.1	189.00	199	19273	20292	8.31	2300	2700	6036M	-	-	-	-	-	-	-	10.5
200	250	24	24	1.5	76	100	7750	10197	3.37	2300		61840	-	-	-	-	-	-	-	2.75
200	360	58	58	4	250	300	25493	30592	12.6	1650	1900	6240M	-	-	-	-	-	-	-	27
220	400	65	65	4	275.00	340	28042	34670	13.67	1500	1800	6244	-	-	-	-	-	-	-	30.4
240	360	56	56	3	250	310	25493	31611	11.45	1700	1900	6048MB	-	-	-	-	-	-	-	21

Note: 1. * All types of seals options can be made available, for more information contact us.
2. For snap groove & ring details contact NEI technical cell

Single Row Deep Groove Ball Bearing (Inch series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

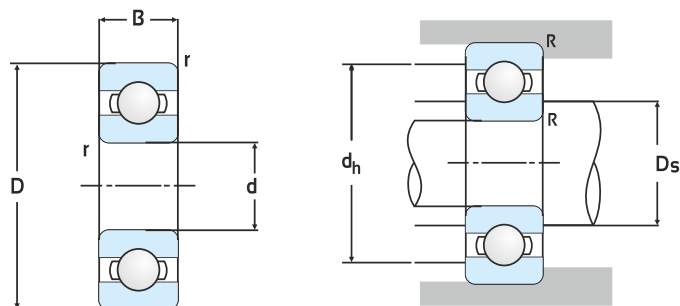
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions				Basic Load Rating				Bearing Number	Fatigue Load Limit	Limiting Speed		Abutment and Fillet Dimension (mm)			Mass (Kg) (Approx.)
				Dynamic	Static	Dynamic	Static								
mm/inch				KN		Kgf			KN	rpm					
d	D	B	rmin	Cr	Cor	Cr	Cor		Cu	Grease	Oil	dh	Ds	R	
9.525	222.3	5.556	0.40	2.49	1.11	254	113	S3	0.11	32000	44000	12.7	18.3	0.3	0.01
0.3750	0.8750	0.2188	0.02												
12.7	28.56	6.35	0.40	4.03	2.01	411	205	S5	0.15	23500	27000	17.5	23.8	0.3	0.019
0.5000	1.1250	0.2500	0.02												
	33.33	9.525	0.80	6.1	2.75	622	280	LS5	0.16	20000	24000	17.5	29.5	0.5	0.037
	1.313	0.375	0.03												
15.88	34.93	7.145	0.80	5.55	2.86	566	292	S7	0.21	19000	23000	20.6	28.6	0.5	0.033
0.6250	1.3750	0.2813	0.03												
	39.68	11.11	0.80	9.6	4.55	979	464	LS7	0.25	19000	23000	21.1	34.8	0.5	0.059
	1.5625	0.4375	0.03												
	46.03	15.88	1.60	11.6	5.65	1183	576	MS7	0.12	16000	18000	23.1	39.6	1.1	0.12
	1.8125	0.6250	0.06												
19.05	41.26	7.938	0.80	7.38	4.0	753	408	S8	0.29	16000	18000	26.2	35.7	0.5	0.047
0.7500	1.6250	0.3125	0.03												
	47.61	14.29	1.60	13.7	6.65	1397	678	LS8	0.28	15000	18000	25.9	41.1	1.1	0.11
	1.8750	0.5625	0.06												
	50.78	17.46	1.60	15.9	7.85	1621	800	MS8	0.45	14500	17000	26.9	43.7	1.1	0.122
	2.0000	0.6875	0.06												

Single Row Deep Groove Ball Bearing (Inch series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

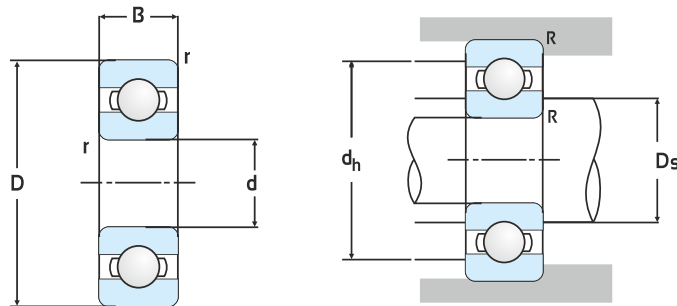
Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions				Basic Load Rating				Bearing Number	Fatigue Load Limit	Limiting Speed		Abutment and Fillet Dimension (mm)			Mass (Kg) (Approx.)
				Dynamic	Static	Dynamic	Static								
mm/inch				KN		Kgf			KN	rpm					
d	D	B	rmin	Cr	Cor	Cr	Cor		Cu	Grease	Oil	dh	Ds	R	
34.93 1.3750	76.18 3.0000	17.46 0.6875	1.60 0.06	20.8	13.3	2121	1356	LS12 1/2	0.98	10000	12000	46	68.3	1.1	0.367
	88.88 3.2500	22.23 0.8750	2.40 0.09	37.2	22.05	3793	2248	MS12 1/2	1.58	8600	10000	47.8	76.2	1.6	0.639
38.1 1.500	82.53 3.2500	19.05 0.7500	2.40 0.09	25.7	16	2621	1632	LS13	1.15	9000	10000	49.3	73.4	1.6	0.446
	95.23 3.7500	23.81 0.9375	2.40 0.09	47.7	26.7	4864	2723	MS13	1.44	8000	9500	50.8	82.6	1.6	0.761
41.28 1.6250	88.88 3.5000	19.05 0.7500	2.40 0.09	27.5	18.1	2804	1846	LS13 1/2	1.31	8500	10000	54.1	n.11	1.6	0.535
	101.6 4.000	23.81 0.9375	2.40 0.09	48.3	277.5	4925	28297	MS13 1/2	1.49	7600	9000	56.6	88.1	1.6	0.862
44.45 1.7500	95250 3.7500	20.64 0.8125	2.40 0.09	35	23.2	3569	2366	LS14	2.20	8000	9500	572	87.1	1.6	0.654
	108 4.2500	26.99 1.0625	2.40 0.09	56.25	32.7	5736	3334	MS14	1.76	7000	8300	59.4	93.7	1.6	1.084

Single Row Deep Groove Ball Bearing (Inch series)



Dynamic equivalent radial load

$$P_r = X F_r + Y F_a$$

F_a	e	$\frac{F_a}{F_r} < e$		$\frac{F_a}{F_r} > e$	
		X	Y	X	Y
C_{or}					
0.172	0.19				2.30
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.30	1	0	0.56	1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1.00

Static equivalent radial load

$$P_{or} = 0.6 F_r + 0.5 F_a$$

when $P_{or} < F_r$ use $P_{or} = F_r$

Boundry Dimensions				Basic Load Rating				Bearing Number	Fatigue Load Limit	Limiting Speed		Abutment and Fillet Dimension (mm)			Mass (Kg) (Approx.)
				Dynamic	Static	Dynamic	Static								
mm/inch				KN		Kgf			KN	rpm					
d	D	B	rmin	Cr	Cor	Cr	Cor		Cu	Grease	Oil	dh	Ds	R	
47.63	101.6	20.64	2.40	48.7	31.2	4966	3181	LS14 1/2	2.25	7800	9200	63.5	92.2	1.6	0.71
1.8750	4.0000	0.8125	0.09												
	114.3	26.99	2.40	62.1	38.5	6332	3926		MS14 1/2	2.08	6700	8000	65	100.1	1.6
	4.5000	1.0625	0.09												
50.8	101.6	20.64	2.40	48.7	31.2	4966	3181	LS15	2.26	7800	9200	63.5	92.2	1.6	0.671
2.0000	4.0000	0.8125	0.09												
	114.3	26.99	2.40	62.1	38.5	6332	3926	MS15	2.08	6700	8000	65	100.1	1.6	1.189
	4.5000	1.0625	0.09												