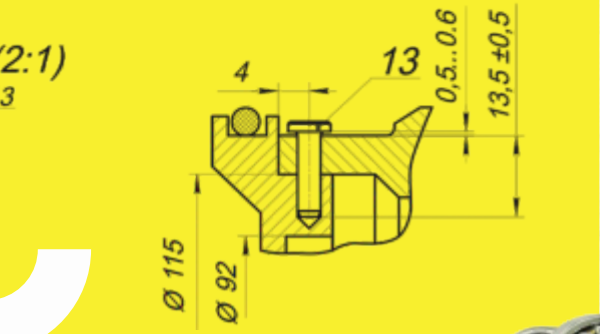
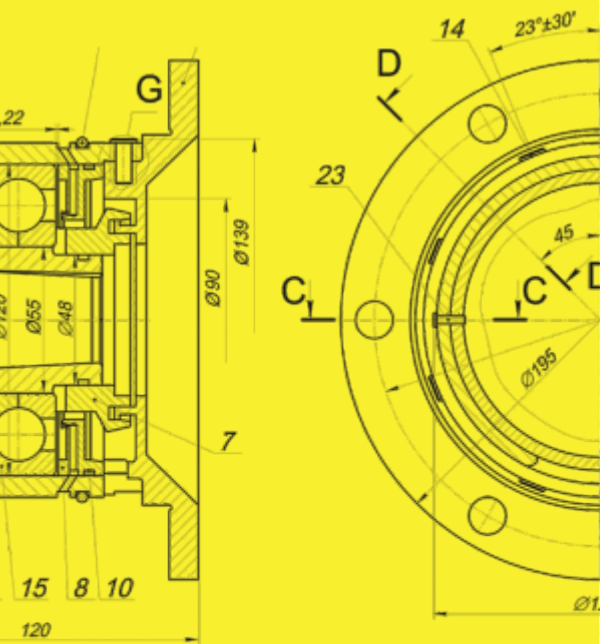




CK BIRLA GROUP



CATALOGUE/TC-106, 01/2024



# Cylindrical 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



WINNER DERIVING GRAND PRIZE

## Products from NBC

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.



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.




## Cylindrical Roller Bearing

# 18 Cylindrical Roller Bearing

The cylindrical roller bearing consists of straight geometry for outer ring, inner ring and roller. The cage can be polyamide, steel or brass. The outer and inner rings are separable. These bearing can accommodate high radial load as the roller make a line contact with raceway. The bearings are available in number of design and sizes. Different types of bearings are designated as NU, NJ, NUP, N, NF and NH for single-row bearings and NNU & NN for double-row bearings.

Depending on the type of flange on inner or outer, Cylindrical Roller Bearings are classified into the following types:

Configuration	Design	Description
NU		<ul style="list-style-type: none"> <li>Outer ring has flanges on both sides and inner does not have any flange</li> <li>The outer assembly and inner are separable and can be mounted independently</li> <li>Used as floating bearings</li> </ul>
NJ		<ul style="list-style-type: none"> <li>Outer ring has flanges on both sides and inner has flange on one side only</li> <li>The outer assembly and inner are separable and can be mounted independently</li> <li>Can be used on floating side as well as fixed side</li> </ul>
N		<ul style="list-style-type: none"> <li>Inner ring has flanges on both sides and outer does not have any flange</li> <li>The inner assembly and outer are separable and can be mounted independently</li> <li>Used as floating bearings</li> </ul>
NUP		<ul style="list-style-type: none"> <li>Outer ring has flanges on both sides and inner has flange on one side only</li> <li>Loose Lip is fixed on the inner ring flange less side</li> <li>Can be used on fixed side</li> </ul>
NF		<ul style="list-style-type: none"> <li>Inner ring has flanges on both sides and outer has flange on one side only</li> <li>The inner assembly and outer are separable and can be mounted independently</li> <li>Can be used on floating side as well as fixed side</li> </ul>
NH		<ul style="list-style-type: none"> <li>Outer ring has both side flanges and inner has flange on one side only</li> <li>L-shape collar rests on the inner outer diameter</li> <li>Can be used on fixed side</li> </ul>

NJK		<ul style="list-style-type: none"> <li>Outer ring has flanges on both sides and inner has a flange on one side only</li> <li>The outer assembly and inner are separable and can be mounted independently</li> <li>Can be used on floating side as well as fixed side</li> </ul>
MUB		<ul style="list-style-type: none"> <li>Inner ring has flanges on both sides and outer has a flange on one side only</li> <li>Retaining clip is mounted from inside in outer</li> <li>Non-separable assembly</li> </ul>
CR		<ul style="list-style-type: none"> <li>Inner ring has flanges on both side and outer does not have any flange</li> <li>Retaining clip is mounted from inside in outer on both sides of rollers</li> <li>Non-separable assembly</li> </ul>

Some cylindrical roller bearings have no flange on either the inner or outer ring, so the rings can move axially relative to each other. These can be used on as floating bearings. Cylindrical roller bearings, in which either the inner or outer rings has two flange on both sides and the other ring has one, are capable of taking some axial load in one direction. The bearings are designed for maximum load carrying capacity. With optimized design stress distribution is uniform and edge loading is minimized. The separable parts are interchangeable. The bearings are available in double-row and four row.



Single Row

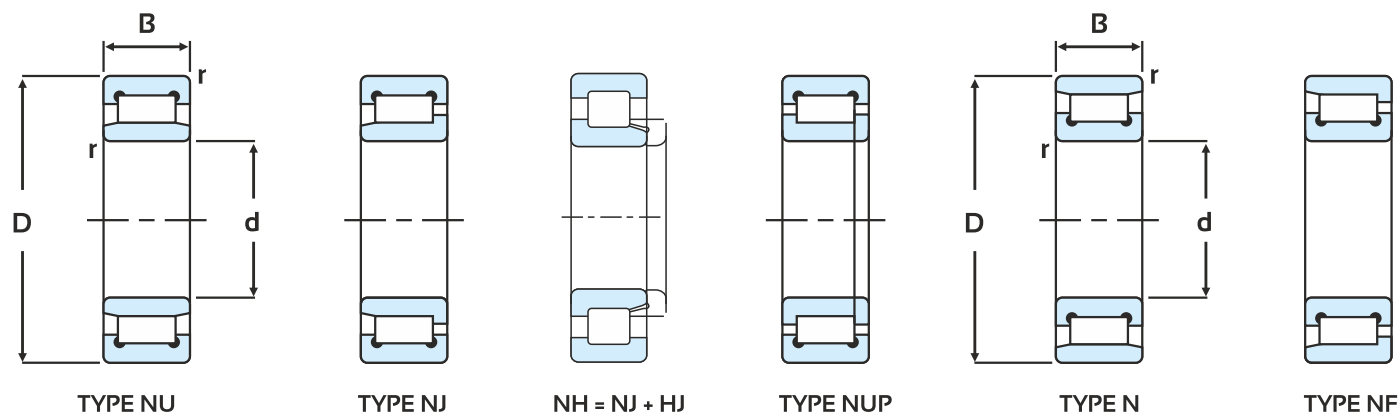


Double Row



Four Row

## Single Row Cylindrical Roller Bearing (Metric series)



Dynamic equivalent  
radial load

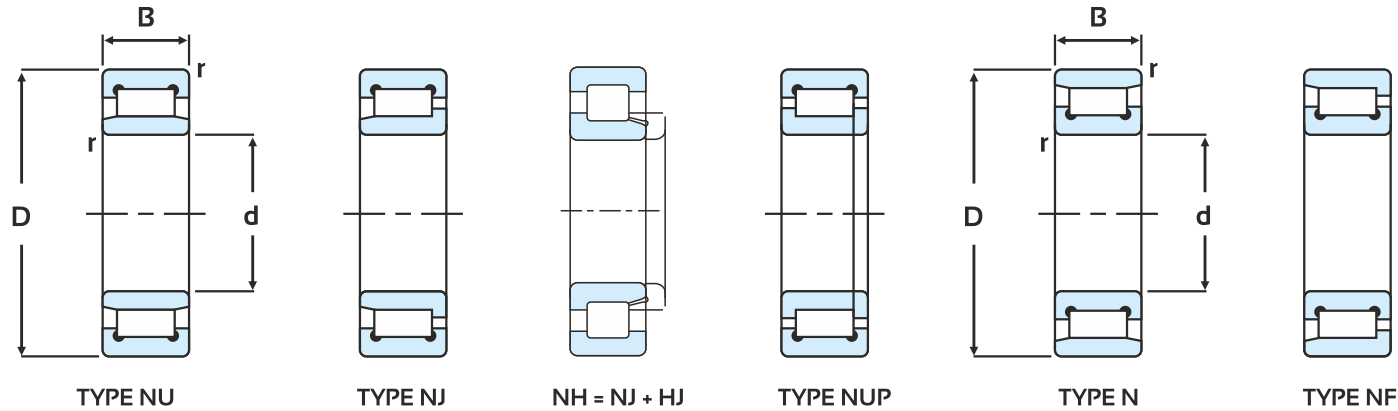
$$P_r = F_r$$

Static equivalent  
radial load

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		Cu		
d	D	B	r	Cr	Cor	Cr	Cor			
20	47	14	1.5	32	23	3255	2325	3	NJ204ECPC3	0.11
20	47	14	1.5	31	25	3129	2508	3	NJ204ET2X	0.12
20	52	15	2	34	27	3487	2763	3	NJ304E	0.17
22	58	17	1.5	36	38	3688	3843	5	22X58X17	0.240
25	52	15	1.0	33	28	3345	2824	3	NU205E	0.130
25	52	15	1.0	38	28	3823	2824	3	MLNU205EXAT2X	0.151
25	52	15	1.0	33	28	3345	2824	3	NJ205	0.137
25	52	15	1.0	36	27	3677	2733	3	NJ205E	0.140
25	52	15	0.6	33	28	3321	2895	3	N205E	0.210
25	52	15	0.6	33	28	3345	2824	3	NUP205E	0.140
25	52	18	1.0	32	30	3282	3017	4	NJ2205E	0.200
25	52	18	1.0	39	35	3974	3528	4	NJ2205ET2X	0.154
25	62	17	1.1	46	38	4738	3823	5	NJ305E	0.245
25	62	17	1.1	33	25	3334	2569	3	NU305	0.230
25	62	17	1.5	56	48	5686	4883	6	NJK305*	0.245
25	62	17	1.1	33	25	3334	2569	3	NJ305	0.240
25	62	17	1.1	33	25	3334	2569	3	N305	0.230
25	62	17	1.1	46	38	4738	3823	5	NU305E	0.386
25	62	24	1.1	64	56	6496	5719	7	NJ2305E	0.424
25	62	24	1.1	67	60	6832	6106	7	NU2305E	0.350
30	55	13	1.0	22	20	2238	1988	2	NUP1006	0.137
30	58	17	1.5	36	38	3688	3843	5	30X58X17	0.190
30	61.935	19.05	3.17/1.5	57	58	5857	5882	7	CR30	0.300
30	62	20	1.0	48	38	4944	3894	5	NJ2206EF	0.300
30	62	16	0.8	45	37	4573	3793	5	ASTN206E/TS1N206ET2X	0.203

## Single Row Cylindrical Roller Bearing (Metric series)



Dynamic equivalent radial load

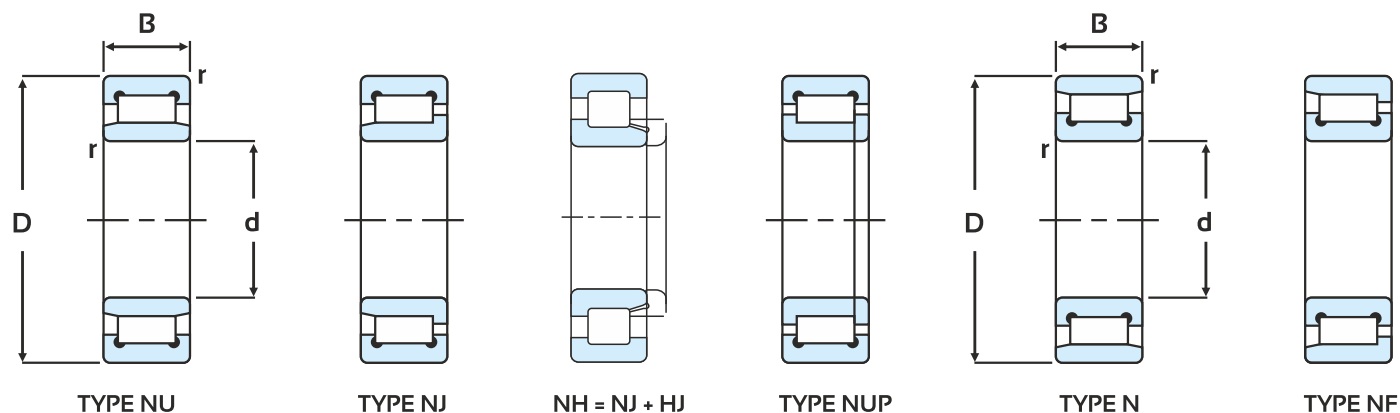
$$P_r = F_r$$

Static equivalent radial load

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
30	55	13	1.0	22	20	2238	1988	2	NUP1006	0.137
30	58	17	1.5	36	38	3688	3843	5	30X58X17	0.190
30	61.935	19.05	3.17/1.5	57	58	5857	5882	7	CR30	0.300
30	62	20	1.0	48	38	4944	3894	5	NJ2206EF	0.300
30	62	16	0.8	45	37	4573	3793	5	ASTN206E/TS1N206ET2X	0.203
30	62	16	1.0	44	38	4477	3824	5	NJ206EC3	0.210
30	62	16	1.0	45	39	4614	3977	5	NJ206ECPC3	0.240
30	72	19	1.1	77	68	7878	6932	8	NUP306EN	0.360
30	72	19	2.0	58	48	5903	4934	6	N306EF	0.350
30	72	19	2.0	61	52	6236	5302	6	NU306E	0.400
30	72	19	2.0	61	52	6236	5302	6	NJ306E	0.400
30	80	22	4.0	80	68	8175	6942	8	NI274	0.720
30	80	26	1.5	103	108	10504	11009	13	N1302	0.780
35	62	14	0.6	25	23	2581	2355	3	NU1007T2X	0.16
35	72	17	1.1	67	63	6873	6442	8	NJ207EF	0.300
35	72	17	1.1	56	50	5731	5107	6	NJ207ET2X	0.307
35	72	23	1.1	69	66	7010	6687	8	NJ2207E	0.460
35	72	17	1.1	56	50	5733	5109	6	TS1N1522EJ2	0.327
35	72	17	1.0	61	55	6190	5618	7	NU207E	0.320

## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

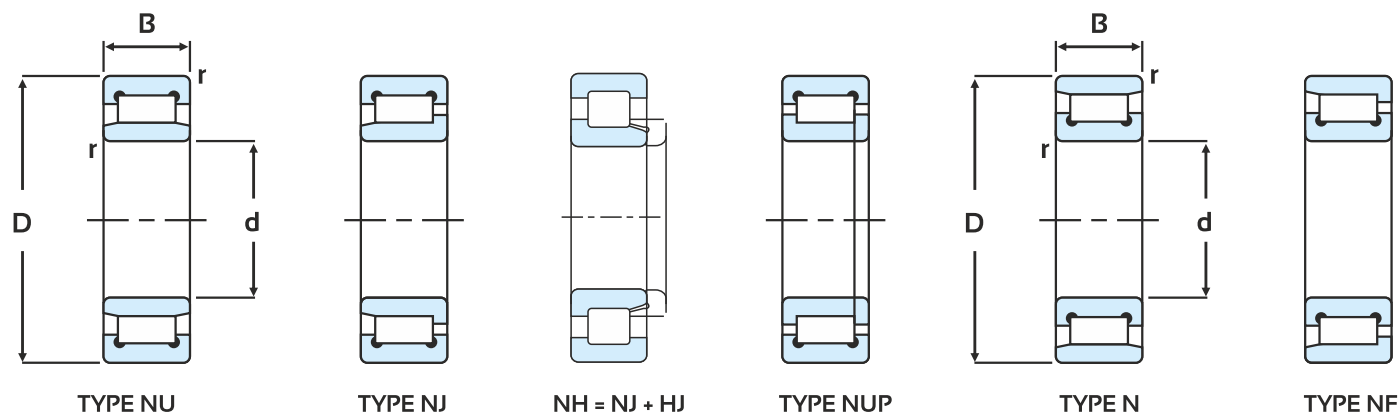
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
35	80	21	1.5	52	43	5297	4383	5	N307	0.464
35	80	21	1.1/1.5	52	43	5297	4383	5	NJ307/J	0.487
35	80	21	1.5	75	65	7606	6659	8	NJ307EJ	0.500
35	80	21	1.5/4	82	80	8323	8186	10	N1076	0.530
35	80	21	1.5	77	68	7878	6932	8	NJ307EF	0.480
35	80	23	1.0	81	78	8254	7910	9	NU307ENS	0.570
35	80	26	1.5	106	112	10800	11448	14	MUB7307	0.674
35	90	23	2.0	114	105	11668	10693	13	N1242	0.781
40	68	15	1	32	31	3232	3110	4	TS1RNU1008N	0.13
40	68	15	0.6	25	26	2549	2651	3	NU1008EMN	0.23
40	68	15	0.6	25	26	2549	2651	3	NU1008EM	0.23
40	74	21.5	1	35	34	3541	3487	4	ASTN1551/TS1N1551NT2X	0.347
40	80	18	1.1	49	43	4989	4373	5	N208	0.372
40	80	18	1.1	62	55	6348	5647	7	NUP208E	0.384
40	80	18	1.1	62	55	6348	5647	7	NUP208EN	0.380
40	80	18	1.1	62	55	6348	5647	7	NJ208	0.386
40	80	18	1.1	62	55	6348	5647	7	NU208E	0.377

## Single Row Cylindrical Roller Bearing (Metric series)



Dynamic equivalent  
radial load

$$P_r = F_r$$

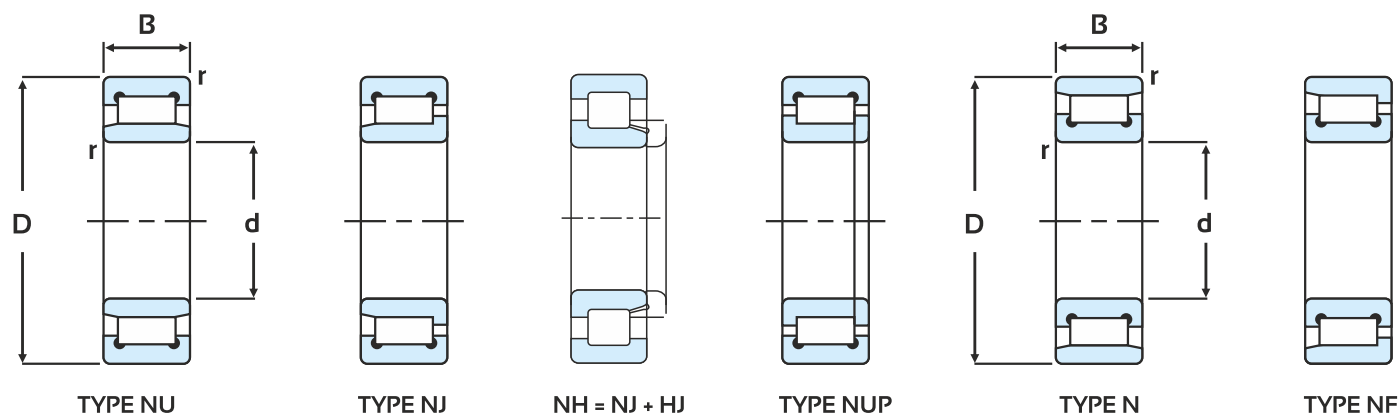
Static equivalent  
radial load

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
40	80	18	1.1	49	43	4989	4373	5	NUP208/J	0.340
40	80	23	1.1	85	83	8711	8481	10	NU2208E	0.480
40	80	23	1.1	85	83	8711	8481	10	NJ2208E	0.480
40	80	23	1.1	92	81	9343	8267	10	MLNU2208ET2X	0.482
40	80	23	1.1	76	83	7778	8481	10	NJ2208ECP	0.480
40	90	23	1.5	76	66	7798	6728	8	N308	0.643
40	90	23	1.5	93	78	9483	7954	10	N308EC3	0.650
40	90	23	1.5	84	83	8565	8433	10	NU308EC3	0.750
40	90	23	4.0	114	105	11668	10693	13	WUB61308UM	0.730
40	90	23	1.5	93	81	9453	8287	10	NJ308E	0.760
40	90	23	2.5	90	78	9179	7951	10	NF308E/C3	0.760
40	90	33	1.5	114	122	11645	12450	15	NJ2308E	1.060
45	85	19	1.1	71	67	7193	6779	8	NUP209E	0.504
45	85	19	1.1	71	67	7193	6779	8	NJ209E	0.493
45	85	23	1.1	89	90	9111	9195	11	NU2209EN	0.540
45	85	19	1.1	74	71	7549	7219	9	NUP209EJ2N	0.470
45	95	32	2.1	87	101	8871	10299	12	N8025FC	1.080



## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

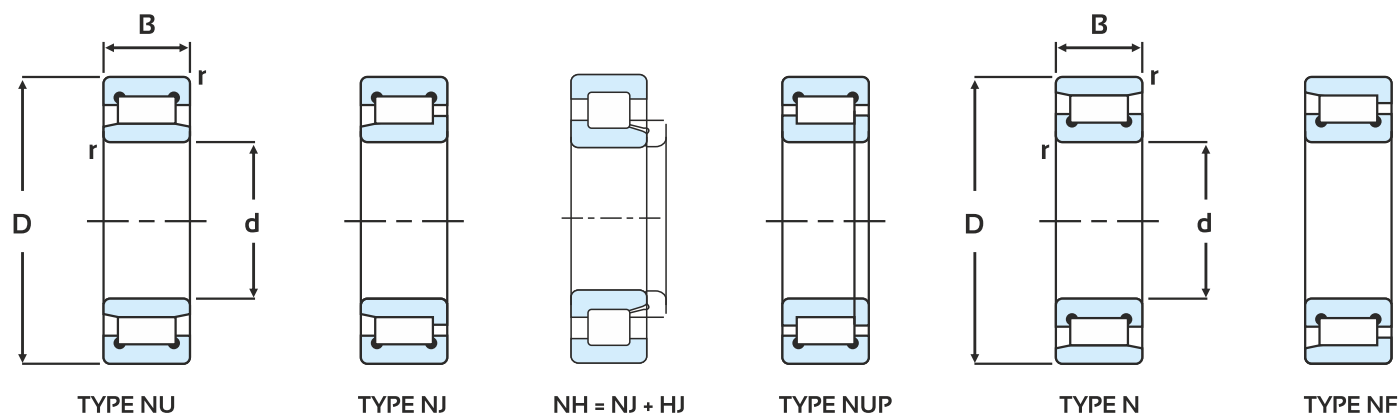
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
45	100	25	1.5	83	71	8426	7238	9	NU309	0.857
45	100	25	1.5	83	71	8426	7238	9	NU309N	0.845
45	100	25	1.5	83	71	8426	7238	9	NF309	0.870
45	100	25	1.5	83	71	8426	7238	9	NJ309	0.886
45	100	25	1.5	83	71	8426	7238	9	NUP309N	0.898
45	100	25	1.5	83	71	8426	7238	9	NJ309VN	0.919
45	100	25	1.5	113	102	11474	10438	12	NU309E	0.890
45	100	25	1.5	113	102	11474	10438	12	NU309EN	0.890
45	100	25	1.0	113	102	11474	10438	12	NUP309E	0.888
45	100	25	2.5	115	105	11691	10714	13	NUP309V	0.948
45	100	25	1.5	109	98	11120	10020	12	NUP309EM	0.940
45	100	31	1.5	157	171	16052	17401	21	MUB7309UM	1.249
45	100	36	2.0	177	176	18027	17971	22	WUB1304	1.350
45	100	36	4.5	202	176	20609	17977	22	MLGR-WUBN1304UM	1.354
45	100	36	2.0	202	176	20609	17987	22	MLGR-NJK2309	1.343
45	100	36	2.0	177	176	17930	17946	22	NJK2309N	1.330
45	120	29	3.0	138	122	14031	12416	15	NUP409ENEJP6	1.771

## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

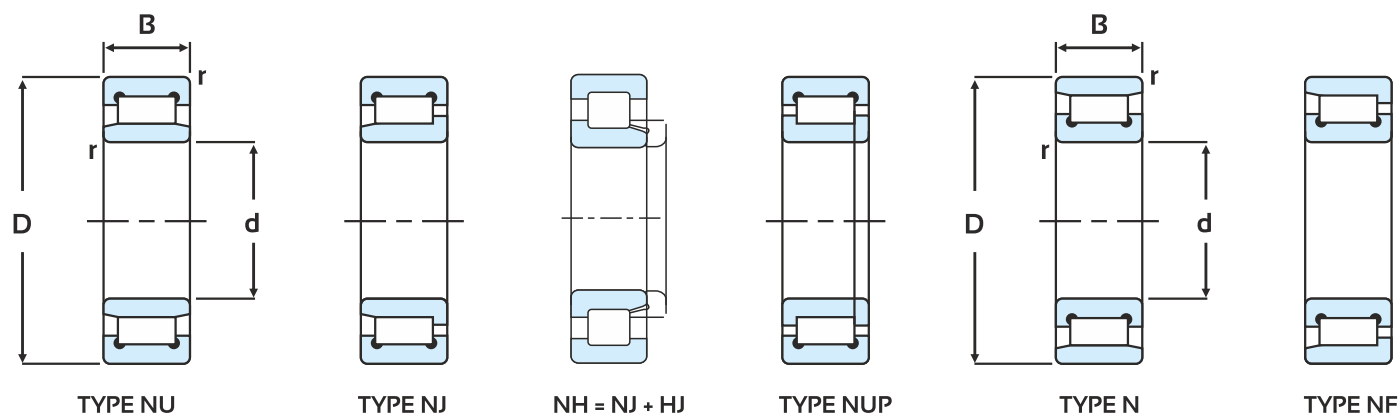
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
49.93	80	15	0.6	51	54	5149	5494	7	CR50	0.280
50	90	20	1.1	54	51	5492	5189	6	NJ210E	0.560
50	90	23	1.1	72	74	7318	7503	9	NH2210	0.648
50	110	27	2.0	97	86	9921	8787	11	N310	1.116
50	110	27	2.0	97	86	9921	8787	11	NU310	1.190
50	110	27	2.0	127	118	12951	11981	14	NU310E	1.100
50	110	27	2.0	97	86	9921	8787	11	NJ310	1.140
50	110	27	2.0	97	86	9921	8787	11	NUP310N	1.195
55	100	21	1.5	65	62	6610	6340	8	NU211	0.638
55	100	21	1.5	65	62	6610	6340	8	NJ211	0.652
55	120	29	2.0	152	141	15527	14373	17	NJ311EF	1.500
60	110	22	1.5	96	82	9784	8389	10	NUP212E	0.966
60	110	26	1.0	132	137	13449	13955	17	N1072	1.140
60	110	22	1.5	96	82	9784	8389	10	NUP212EJ	0.897
60	110	22	1.5	96	82	9784	8389	10	NU212ET2X	0.802
60	130	31	2.1	151	159	15362	16167	19	N312EM	1.800
60	130	31	2.1	151	159	15362	16167	19	N312EC3	1.800

## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

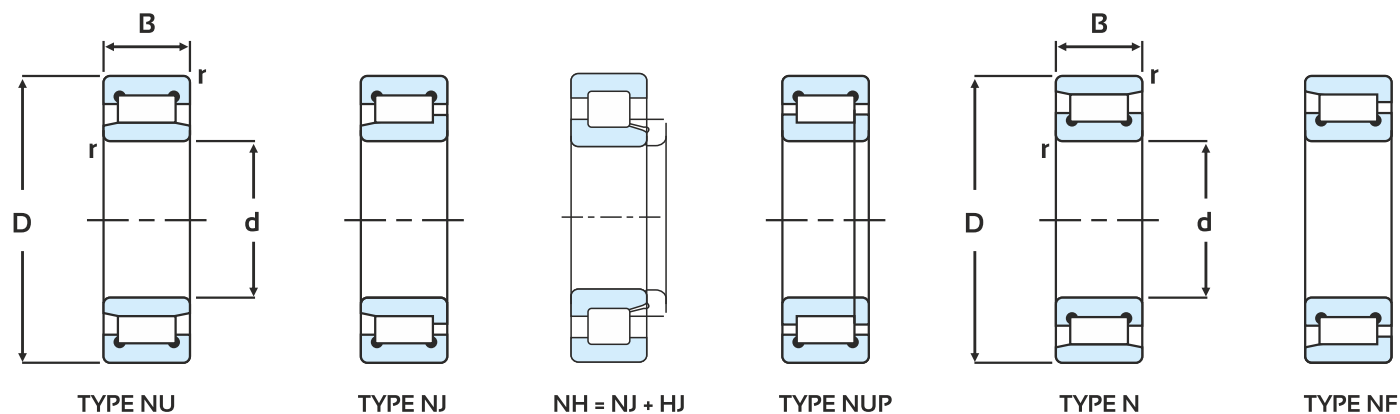
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		Cu		
d	D	B	r	Cr	Cor	Cr	Cor			
60	130	31	3.5	178	151	18119	15352	18	N312EF(2312)	1.800
60	130	31	2.1	174	165	17702	16825	20	NU312EJ2	1.865
65	140	33	2.1	204	193	20756	19715	23	NUP313E	2.370
65	140	33	2.1	181	193	20756	19721	23	NJ313EMC3	2.230
65	140	33	2.1	182	193	18532	19715	23	N313EM	2.300
70	150	35	2.1	158	168	18039	17125	20	N314	2.150
70	150	35	2.1	185	172	21087	17492	20	N314EF	2.150
70	150	35	2.1	219	242	22311	24635	29	NU314EMC4	2.700
75	160	37	2.1	267	261	27229	26585	30	NUP315E	3.450
75	160	37	2.1	248	274	25278	27929	32	NU315EC3	3.520
80	170	39	2.1	257	284	26206	28949	32	NU316EM	4.000
85	180	41	3.0	293	333	29866	33955	37	NU317EMC3	4.200
90	190	43	3.0	349	349	35609	35617	39	N318EC3	5.200
90	190	43	3.0	315	355	32120	36199	39	NU318EM	6.500
90	190	64	3.0	504	530	51376	54027	58	N2318E	8.000
95	200	45	3.0	331	381	33741	38838	41	NU319EMC3	7.500
95	200	45	3.0	340	390	34669	39768	42	NU319EM	8.000

## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

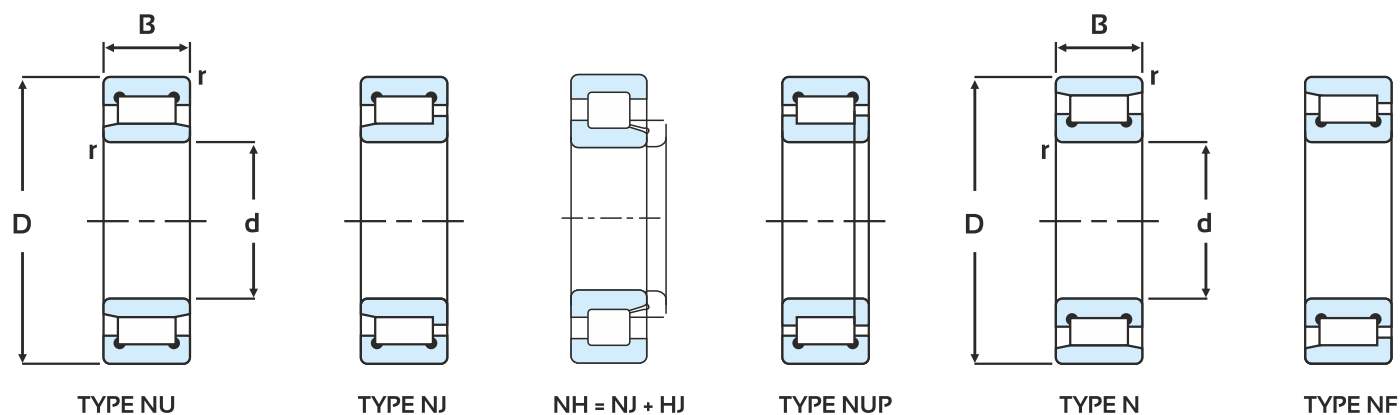
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		Cu		
d	D	B	r	Cr	Cor	Cr	Cor			
100	180	34	2.1	277	303	28245	30866	33	NU220E	3.500
100	215	47	3.0	353	395	35963	40265	42	NU320M	8.750
100	215	47	3.0	358	397	36534	40469	42	N320MC3	8.500
100	215	73	3.0	670	735	68319	74946	78	NJ2320EMC4	11.9
105	225	49	3.0	364	423	37105	43119	44	N321M	9.810
105	225	49	3.0	364	423	37105	43119	44	NU321M	9.910
110	200	38	2.1	255	315	26020	32142	34	NU222M	5.500
110	200	38	2.1	296	371	30183	37830	40	NU222EM	5.400
110	240	50	3.0	380	420	38736	42814	43	NU322M	11.600
120	180	28	1.1	173	259	17640	26410	28	NU1024MC3	2.600
120	215	40	2.1	288	365	29358	37207	38	NU224MC3	6.300
120	215	40	2.1	327	430	33344	43846	45	NU224EMC3	6.300
120	215	40	2.1	318	358	32424	36493	37	TS2NUP224	6.640
120	260	55	3.0	490	645	50000	65816	65	NU324M	15.500
130	230	40	3.0	295	385	30071	39246	39	NU226M	7.300
130	230	40	3.0	376	475	38360	48404	49	NU226EMC3	7.400
130	230	79.4	5.0	588	776	59985	79113	79	NU5226M	14.000

## Single Row Cylindrical Roller Bearing (Metric series)



Dynamic equivalent  
radial load

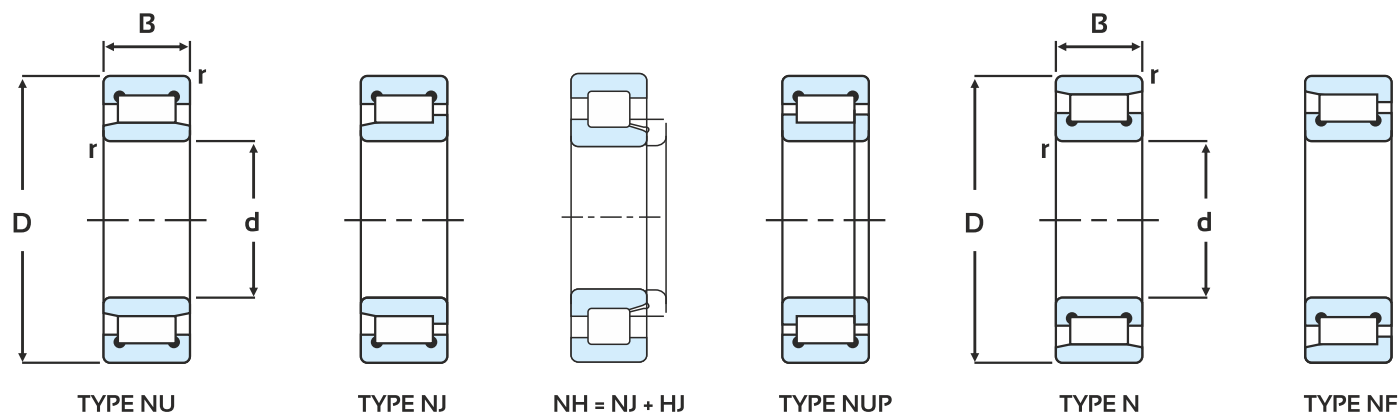
$$P_r = F_r$$

Static equivalent  
radial load

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
130	230	64	3.0	530	735	54081	75000	75	NU2226E	12.200
130	230	64	3.0	520	730	53023	74437	75	NU2226EM	11.500
130	280	58	4.0	561	671	57244	68469	66	NU326M	17.000
140	250	42	3.0	345	450	35168	45872	45	NU228M	9.300
140	250	42	3.0	413	548	42092	55858	55	NU228EMC3	9.400
140	250	68	3.0	510	750	52004	76476	75	NU2228MC3	14.400
150	270	45	3.0	405	550	41284	56065	54	NU230M	11.800
150	270	88.9	6.0	816	1104	83207	112528	108	NU5230M	22.000
150	280	93	3.0	790	1180	80530	120285	114	72727 (With Sleeve AHX3228)	32.000
150	320	65	4.0	800	985	81549	100407	93	NU330M1C3	25.600
160	290	196.8	2.0	1600	3000	163148	305904	287	NU160X290X197	36.560
160	340	68	4.0	685	970	69827	98879	90	NU332MC3	31.000
160	340	114	4.0	1330	1840	135714	187755	170	NU2332E	53.000
160	290	80	3.0	940	1170	95918	119266	112	NU2232E	24.000
160	240	38	2.1	235	335	23979	34183	33	NU1032C3	6.200
160	340	68	4.0	710	950	72448	96938	88	N332M	30.400

## Single Row Cylindrical Roller Bearing (Metric series)



Dynamic equivalent radial load

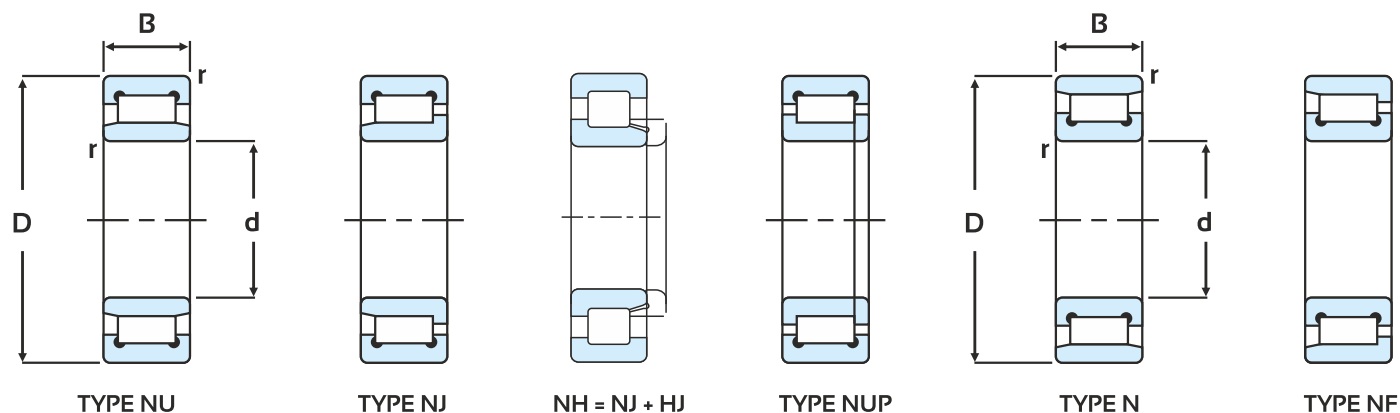
$$P_r = F_r$$

Static equivalent radial load

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
160	290	48	3.0	500	664	51020	67755	63	NU232M	14.400
170	360	72	5.0	920	1020	93781	103976	93	N334	38.700
170	310	52	4.0	600	790	61224	80612	74	N234M	18.000
170	310	52	4.0	610	850	62181	86646	80	NU234MC3	19.500
170	310	52	4.0	615	825	62710	84124	77	NU234EM	17.900
180	320	108	3.0	1106	1553	112787	158267	144	NU5236M	37.000
180	320	52	4.0	525	735	53571	75000	68	NU236M	18.500
180	380	75	4.0	917	118	93476	11978	11	NJ336E	43.500
180	280	46	2.1	381	465	38856	47448	44	NU1036	11.000
180	380	75	4.0	917	1175	93476	119776	105	NU336	43.000
190	400	78	5.0	975	1290	99388	128440	114	NU338M	50.400
200	360	120.65	6.0	1538	2229	156734	227217	200	NU5240	53.700
200	360	120.65	6.0	1620	2391	165173	243731	214	NU5240M	57.250
200	310	51	2.1	400	590	40816	60204	54	NU1040M	13.800
200	360	58	4.0	630	880	64220	89704	79	NU240	28.000
200	360	58	4.0	765	1060	78006	108086	95	NJ240M	26.900
200	420	138	5.0	1900	2620	193679	267074	228	NU2340EM	93.300

## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

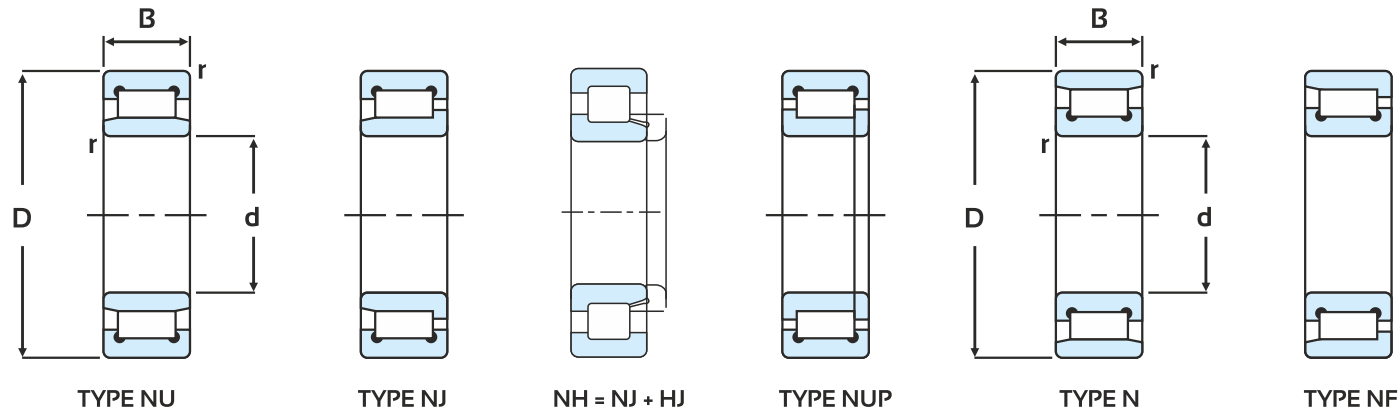
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		Cu		
d	D	B	r	Cr	Cor	Cr	Cor			
210	340	95.2	6.0	955	1835	97448	187244	165	NU5044M	31.000
220	400	65	4.0	799	1150	81448	117227	100	NU244M	38.000
220	400	65	4.0	1038	1264	105918	128979	110	NUP244	38.500
240	440	146.05	4.0	3010	4298	306784	438124	363	NU5248	100.000
240	360	56	3.0	534	832	54434	8645	73	NU1048M	19.700
260	400	65	4.0	655	1090	66836	111224	93	NU1052M	30.200
260	360	46	2.1	415	598	42265	60988	52	NF1952	14.050
280	500	165.1	4.0	3353	5239	341777	534027	425	NU5256	139.000
280	380	46	2.1	431	643	43908	65535	55	NU1956	14.960
280	380	46	2.1	431	643	43908	65535	55	NF1956	14.960
280	500	165.1	4.0	3416	5353	348165	545667	434	N1112	144.740
300	460	74	4.0	850	1350	86734	137755	110	NU1060E	44.500
320	440	56	3.0	700	1100	71355	112130	90	NU1964	25.310
320	670	200	7.5	3740	5920	381360	603650	447	NU2364M	341.000
340	710	212	7.5	4710	7250	480269	739268	538	NU2368EM	415.000
380	680	175	6.0	3832	5790	390600	590214	428	NU2276	274.240
380	680	177	6.0	3853	5800	393111	591836	429	N1205	281.750

## Single Row Cylindrical Roller Bearing (Metric series)



**Dynamic equivalent radial load**

$$P_r = F_r$$

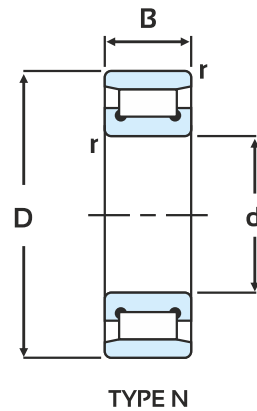
**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
400	600	90	5.0	1370	2320	139653	236493	175	NU1080	91.000
400	700	162	5.0	3453	5039	351984	513660	368	N1130	271.200
440	540	40	2.1	330	720	33649	73417	55	N1888MW33C3	18.800
460	580	56	3.0	550	1100	56082	112165	82	N1892MW33C3	32.400
460	760	240	7.5	5600	10400	571428	1061224	737	NU3192M	467.000
460	680	100	6.0	1850	3360	188775	342857	243	NU1092M	124.700
480	790	248	7.5	5900	11000	602040	1122448	770	NU3196M	507.800
530	710	180	6.0	3731	8129	380285	828665	573	42629/530	220.000
600	730	60	3.0	560	1290	57102	131539	89	N18/600MW33C3	44.200
670	980	308	10.0	8188	10000	834659	1019368	648	N1009	780.000
700	930	160	8.0	3419	6903	348494	703619	449	327/700	300.000
720	880	62	4	860	2000	87692	203936	131	N18/720MW33C3	77.000



## Single Row Cylindrical Roller Bearing (Inch series)



**Dynamic equivalent  
radial load**

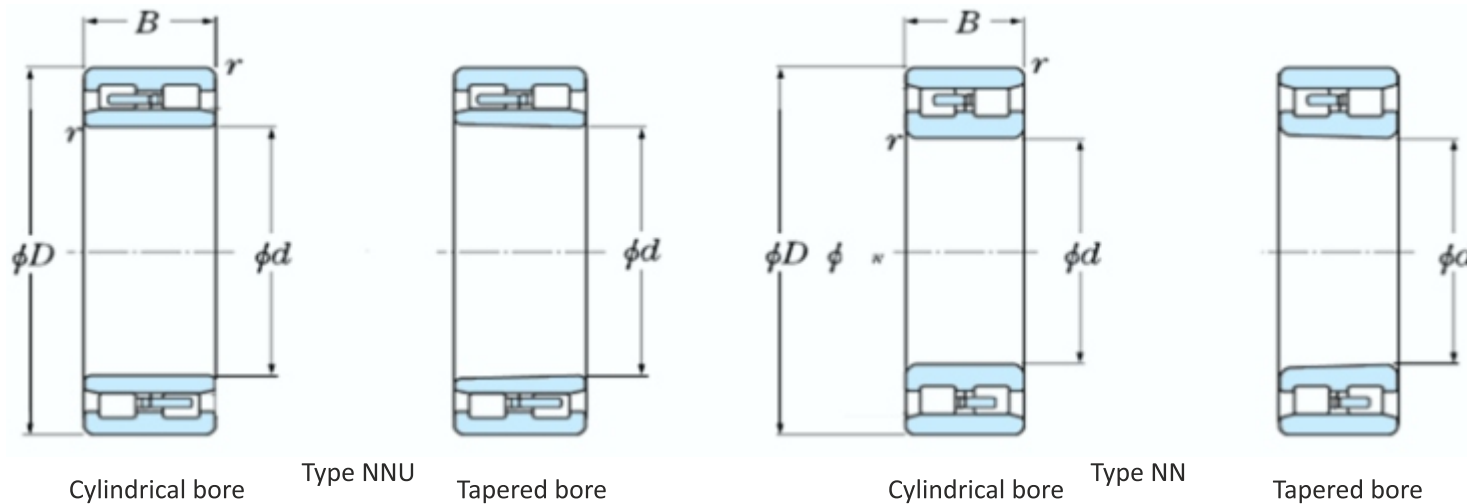
$$P_r = F_r$$

**Static equivalent  
radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
101.60	184.15	31.75	3.2	225	270	22936	27523	30	CRL32	3.800
101.60	215.9	44.4	4.0	390	450	39768	45886	49	CRM32	8.160
107.95	190.5	31.75	3.2	235	285	23979	29081	31	CRL34	4.000
114.30	203.2	33.337	3.2	255	315	25994	32110	35	CRL36	4.600
114.30	238.125	50.8	4.8	440	505	44852	51478	55	CRM36	11.000
127.00	228.6	34.925	3.2	288	370	29358	37717	41	CRL40	6.500
127.00	254.0	50.8	4.8	465	550	47401	56065	60	CRM40	12.000
139.70	241.30	34.93	3.00	296	390	30204	39795	43	CRL44	7.20
390.53	579.97	190.50	4.00	3572	6107	364237	622731	669	N1113	207.25
469.90	698.50	139.70	6.00	3795	387	336391	629969	677	N1050	190.00

## Two Row Cylindrical Roller Bearing



**Dynamic equivalent radial load**

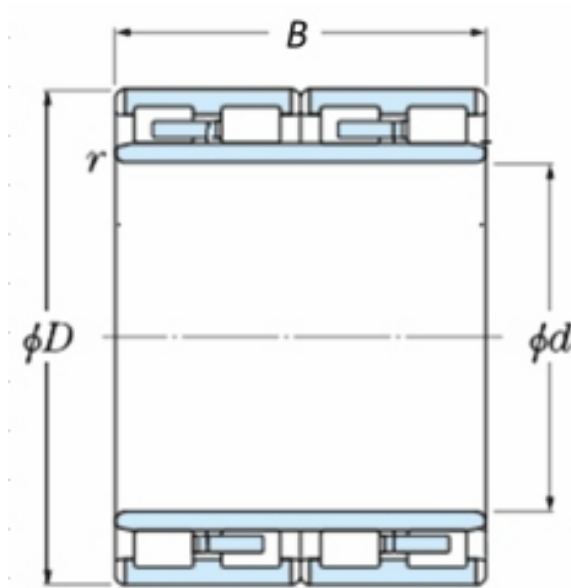
$$P_r = F_r$$

**Static equivalent radial load**

$$P_{or} = F_r$$

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic		Static				
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
120	180	46	2.0	225	375	22936	38226	40	NN3024K	4.020
120	260	103	4.0	925	1452	94303	148012	146	N1081	31.850
130	200	52	2.0	305	530	31091	54027	56	NN3026K	5.340
130.06	300.02	171.6	3.0	1571	2394	160179	243996	232	549722	70.000
149	249	173	2.0	1108	2996	112981	305496	297	6675125	39.300
220	370	150	4.0	1600	2800	163099	285423	247	NNU4144MW33	66.000
280	440	135	4.0	1770	3360	180612	342857	279	132756	99.500
320	480	160	4.0	2050	4150	208970	423038	334	NNU4064MW33	103.000
370	520	220	1.5	2650	6500	270215	662792	507	NNU319961	136.000
460	680	218	9.0	4313	8560	439602	872579	619	4202192	240.000
710	950	243	6.0	5734	15165	584506	1545872	980	42629/710	495.000

## Four Row Cylindrical Roller Bearing



Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)
				Dynamic	Static	Dynamic	Static			
mm				KN		Kgf		KN		
d	D	B	r	Cr	Cor	Cr	Cor	Cu		
100	140	80	1.5	356	503	36301.32	51290.91	58	N1105	3.61
120	165	90	1.5	597	813	60841	82875	89	N1106	5.560
150	230	156	2.5	969	1550	98756	158002	156	4R3040 (313891)	24.500
160	230	168	2.0	890	2150	90816	219387	215	315189	24.000
200	290	192	2.1	1500	3200	153061	326530	298	313811	41.000
230	330	206	2.1	1870	4000	190816	408163	358	313824	58.000
280	390	220	3.0	2200	5000	224489	510204	424	313822	81.500
340	480	350	1.5	4570	11200	466326	1142857	894	314485	207.000
480	680	500	12.5	9240	23530	942184	2399307	1693	N1452	598.200
650	900	650	7.5	19786	41510	2016896	4231397	2739	N1210	1246.000
690	980	715	20.0	18630	51500	1899664	5251351	3323	N1121	1805.000
698	1000	715	4.0	26686	53005	2720259	5403160	3403	N1227	1800.000
710	1000	715	4.0	26686	53005	2720261	5403160	3396	4R14205	1800.000
950	1360	975	6.0	34100	100000	3479591	10204081	5853	319862	5000.000

## Special Cylindrical Roller Bearing

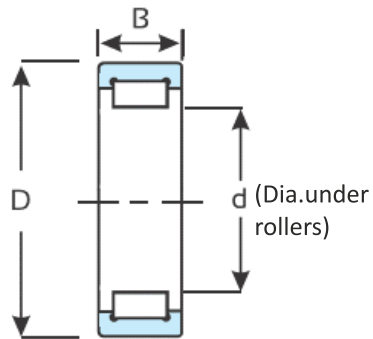


Fig 1

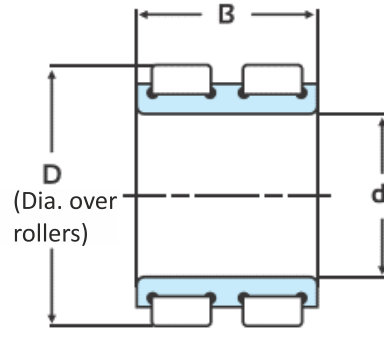


Fig 2

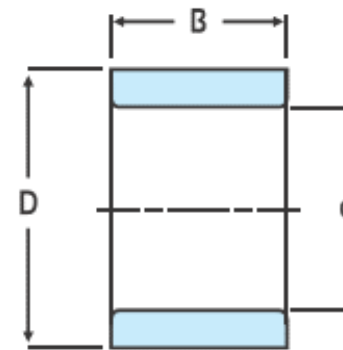


Fig 3

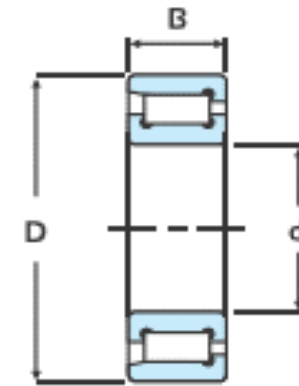


Fig 4

Boundary Dimension				Basic Load Rating				Fatigue Load Limit	Bearing Number	Mass Kg. (Approx.)	Refer figure	
				Dynamic	Static	Dynamic	Static					
mm				KN		Kgf		KN				
d	D	B	r	Cr	Cor	Cr	Cor	Cu				
26.993	50.782	17.4625	1.6	-	-	-	-	-	L3782	-	0.660	1
35	62	17	1.1	46	38	4738	3823	-	RNU305	-	0.187	1
58.5	100	25	2.4	83	71	8426	7238	-	RNU309	-	0.660	1
66.5	100	21	1.1	65	63	6622	6371	-	RNU211	-	0.450	1
120	260	103	4.0	925	1452	94304	148012	=	N1081	-	31.850	2
25.4	53.962	28.575	1.1	67	62	6850	6300	-	LO64	-	0.263	2
680	742.5	300	8	-	-	-	-	-	N1065	-	161.83	3
820	903	400	10	-	-	-	-	-	N1084	-	348.02	3
31.75	79.35	22.225	1.1	64	54	6565	5464	-	N1004	-	0.510	4