1) MATERIALS FOR KBS CYLINDRICAL ROLLER BEARING'S OUTER RING, INNER RING & ROLLING ELEMENTS

1.1) For **KBS** rolling bearings the through-hardening steel material GCr5 is the most commonly used, which contains approximately 1% carbon and 1.5% chromium. Please refer to Table 1.1, which shows chemical composition of material GCr15 and with its Interchangeable material in other nations.

Table 1.1

Name	Standard	Chemical Composition (%)					
		C	Mn	Si	Cr	S≤	P≤
G Cr15	KBS	0,95~1,05	0,20~0,40	0,15~0,35	1,30~1,65	0,02	0,027
SUJ 2	JIS G 4805	0,95~1,10	0,50≤	0,15~0,35	1,30~1,60	0,025	0,025
100Cr6	DIN	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-
E52100	AISI	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-
ISO	683/XVII	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-
SKF	-	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-	- ditto-

Note: **KBS** supplies all general bearings with material of G Cr15 as normal products, unless otherwise specified by customer for special usage before ordering. i.e. Pure carbon or Stainless Steel etc.

2) MATERIAL FOR RETAINERS OF CYLINDRICAL ROLLER BEARINGS

2.1) The retainer is demanded to bear hitting load and have the lowest friction with the rolling elements when **KBS** bearing is working. So, low carbon steel cage is adopted. (Please refer to Table 2.1)

Table 2.1

Name	Standard	Chemical Composition (%)					
		C	Mn	Si	S≤	P≤	Cr ≤
10F	Chinese GB	0,07~0,14	0,25~0,50	0,07≤	0,035	0,035	0,15
SPCC	JIS G 3141	0,12≤	0,50≤	-	0,045	0,040	-

Note: 1) **KBS** supply bearings with retainer material of 10F as normal products, unless otherwise specified by customers for other materials before ordering.
2) For single row cylindrical roller bearings when outer ring diameter D less than 400mm low carbon steel pressing cage is adopted. While for larger ones, machined brass cage is adopted.

3) ACCURACY GRADE FOR CYLINDRICAL ROLLER BEARINGS

3.1) Generally, the tolerance for cylindrical roller bearing is in accuracy grade P0, P6 and P5 Please refer to Table 3.1

Table 3.1 Normal Tolerances for Radial Bearings Inner ring
(Unit: μm)

Nominal bore dimension d(mm)		Deviation of the mean bore diameter from the nominal △dmp										Deviation of the bore diameter Vdp Diameter series 9				
		P0		P6		P5		P4		P2		P0	P6	P5	P4	P2
over	incl.	high	low	high	low	high	low	high	low	high	low	max.				
0,6	2,5	0	-8	0	-7	0	-5	0	-4	0	-2,5	10	9	5	4	2,5
2,5	10	0	-8	0	-7	0	-5	0	-4	0	-2,5	10	9	5	4	2,5
10	18	0	-8	0	-7	0	-5	0	-4	0	-2,5	10	9	5	4	2,5
18	30	0	-10	0	-8	0	-6	0	-5	0	-2,5	13	10	6	5	2,5
30	50	0	-12	0	-10	0	-8	0	-6	0	-2,5	15	13	8	6	2,5
50	80	0	-15	0	-12	0	-9	0	-7	0	-4,0	19	15	9	7	4,0
80	120	0	-20	0	-15	0	-10	0	-8	0	-5,0	25	19	10	8	5,0
120	150	0	-25	0	-18	0	-13	0	-10	0	-7,0	31	23	13	10	7,0
150	180	0	-25	0	-18	0	-13	0	-10	0	-7,0	31	23	13	10	7,0
180	250	0	-30	0	-22	0	-15	0	-12	0	-8,0	38	28	15	12	8,0
250	315	1	-35	0	-25	0	-18	—	—	—	—	44	31	18	—	
315	400	0	-40	0	-30	0	-23	—	—	—	—	50	38	23	—	—

Deviation of the bore diameter Vdp										Mean deviation of the bore diameter Vdmp					Radial run out Kia				
Diameter series 0, 1					Diameter series 2, 3, 4														
P0	P6	P5	P4	P2	P0	P6	P5	P4	P2	P0	P6	P5	P4	P2	P0	P6	P5	P4	P2
max.					max.					max.					max.				
8	7	4	3	2,5	6	5	4	3	2,5	6	5	3	2,0	1,5	10	5	4	2,5	1,5
8	7	4	3	2,5	6	5	4	3	2,5	6	5	3	2,0	1,5	10	6	4	2,5	1,5
8	7	4	3	2,5	6	5	4	3	2,5	6	5	3	2,0	1,5	10	7	4	2,5	1,5
10	8	5	4	2,5	8	6	5	4	2,5	8	6	3	2,5	1,5	13	8	4	3,0	2,5
12	10	6	5	2,5	9	8	6	5	2,5	9	8	4	3,0	1,5	15	10	5	4,0	2,5
19	15	7	6	4,0	11	9	7	6	4,0	11	9	5	3,5	2,0	20	10	5	4,0	2,5
25	19	8	6	5,0	15	11	8	6	5,0	15	11	5	4,0	2,5	25	13	6	5,0	2,5
31	23	10	8	7,0	19	14	10	8	7,0	19	14	7	5,0	3,5	30	18	8	6,0	2,5
31	23	10	8	7,0	19	14	10	8	7,0	19	14	7	5,0	3,5	30	18	8	6,0	5,0
38	28	12	9	8,0	23	17	12	9	8,0	23	17	8	6,0	4,0	40	20	10	8,0	5,0
44	31	14	—	—	26	19	14	—	—	26	19	9	—	—	50	25	13	—	—
50	38	18	—	—	30	23	18	—	—	30	23	12	—	—	60	30	15	—	—

Side run out Sd			Axial run out Sia △Bs			Deviation of the width								Parallel deviation between end surfaces VBs				
						For single bearing						For pair bearing						
P5	P4	P2	P5	P4	P2	P0, P6		P5, P4		P2		P0, P6		P5, P4		P0	P6	P5	P4	P2
max.			max.			high	low	high	low	high	low	high	low	high	low	max.				
7	3	1,5	7	3	1,5	0	-40	0	-40	0	-40	—	—	0	-7	12	12	5	2,5	1,5
7	3	1,5	7	3	1,5	0	-120	0	-40	0	-40	0	-8	0	-7	15	15	5	2,5	1,5
7	3	1,5	7	3	1,5	0	-120	0	-80	0	-80	0	-8	0	-7	20	20	5	2,5	1,5
8	4	1,5	8	4	2,5	0	-120	0	-120	0	-120	0	-10	0	-8	20	20	5	2,5	1,5
8	4	1,5	8	4	2,5	0	-120	0	-120	0	-120	0	-12	0	-10	20	20	5	3,0	1,5
8	5	1,5	8	5	2,5	0	-150	0	-150	0	-150	0	-15	0	-12	25	25	5	4,0	1,5
9	5	2,5	9	5	2,5	0	-200	0	-200	0	-200	0	-20	0	-15	25	25	7	4,0	2,5
10	6	2,5	10	7	2,5	0	-250	0	-250	0	-250	0	-25	0	-18	30	30	8	5,0	2,5
10	6	4,0	10	7	5,0	0	-250	0	-250	0	-300	0	-25	0	318	30	30	8	5,0	4,0
11	7	5,0	13	8	5,0	0	-300	0	-300	0	-350	0	-30	0	-22	30	30	10	6,0	5,0
13	—	—	15	—	—	0	-350	0	-350	—	—	1	-35	0	-25	35	35	13	—	—
15	—	—	20	—	—	0	-400	0	-400	—	—	0	-40	0	-30	40	40	15	—	—

Note: Values for larger sizes on request

Out ring (Unit: μm)

Nominal bore dimension D(mm)		Deviation of the mean bore diameter from the nominal △Dmp										Deviation of the outer ring diameter (Open type) VDp Diameter series 9				
		P0		P6		P5		P4		P2		P0	P6	P5	P4	P2
over	incl.	high	low	high	low	high	low	high	low	high	low	max.				
2,5	6	0	-8	0	-7	0	-5	0	-4	0	-2,5	10	9	5	4	2,5
6	18	0	-8	0	-7	0	-5	0	-4	0	-2,5	10	9	5	4	2,5
18	30	0	-9	0	-8	0	-6	0	-5	0	-4,0	12	10	6	5	4,0
30	50	0	-11	0	-7	0	-6	0	-6	0	-4,0	14	11	7	6	4,0
50	80	0	-13	0	-9	0	-7	0	-7	0	-4,0	16	14	9	7	4,0
80	120	0	-15	0	-10	0	-8	0	-8	0	-5,0	19	16	10	8	5,0
120	150	0	-18	0	-15	0	-11	0	-9	0	-5,0	23	19	11	9	5,0
150	180	0	-25	0	-18	0	-13	0	-10	0	-7,0	31	23	13	10	7,0
180	250	0	-30	0	-20	0	-15	0	-11	0	-8,0	38	25	15	11	8,0
250	315	0	-35	0	-25	0	-18	0	-13	0	-8,0	44	31	18	13	8,0
315	400	1	-40	0	-28	0	-20	0	-15	0	-10,0	50	35	20	15	10,0
400	500	0	-45	0	-33	0	-23	—	—	—	—	56	41	23	—	—

Deviation of the bore diameter VDp										Deviation of the outer ring diameter (with seals & shields) VDp		Mean deviation of the out ring diameter VDmp				
Diameter series 0, 1					Diameter series 2, 3, 4					2, 3, 4	0, 1, 2, 3, 4					
P0	P6	P5	P4	P2	P0	P6	P5	P4	P2	P0	P6	P0	P6	P5	P4	P2
max.					max.					max.		max.				
8	7	4	3	2,5	6	5	4	3	2,5	10	9	6	5	3	2,0	1,5
8	7	4	3	2,5	6	5	4	3	2,5	10	9	6	5	3	2,0	1,5
9	8	5	4	4,0	7	6	5	4	4,0	12	10	7	6	3	2,5	2,0
11	9	5	5	4,0	8	7	5	5	4,0	16	13	8	7	4	3,0	2,0
13	11	7	5	4,0	10	8	7	5	4,0	20	16	10	8	5	3,5	2,0
19	16	8	6	5,0	11	10	8	6	5,0	26	20	11	10	5	4,0	2,5
23	19	8	7	5,0	14	11	8	7	5,0	30	25	14	11	6	5,0	2,5
31	23	10	8	7,0	19	14	10	8	7,0	38	30	19	14	7	5,0	3,5
38	25	11	8	8,0	23	15	11	8	8,0	—	—	23	15	8	6,0	4,0
44	31	14	10	8,0	26	19	14	10	8,0	—	—	26	19	9	7,0	4,0
50	35	15	11	10,0	30	21	15	11	10,0	—	—	30	21	10	8,0	5,0
56	41	17	—	—	34	25	17	—	—	—	—	34	25	12	—	—

Radial run out Kea					Side run out SD			Axial run out Sea			Deviation of the width △Cs	Parallel deviation between end surfaces Vcs				
P0	P6	P5	P4	P2	P5	P4	P2	P5	P4	P2	For all class	P0	P6	P5	P4	P2
max.					max.			max.				max.				
15	8	5	3	1,5	8	4	1,5	8	5	1,5	With "d" of the same model bearing, and refer to relative value of △Bs	With "d" of the same model bearing, and refer to relative value of Vcs		5	2,5	1,5
15	8	5	3	1,5	8	4	1,5	8	5	1,5				5	2,5	1,5
15	9	6	4	2,5	8	4	1,5	8	5	2,5				5	2,5	1,5
20	10	7	5	2,5	8	4	1,5	8	5	2,5				5	2,5	1,5
25	13	8	5	4,0	8	4	1,5	10	5	4,0				6	3,0	1,5
35	18	10	6	5,0	9	5	2,5	11	6	5,0				8	4,0	2,5
40	20	11	7	5,0	10	5	2,5	13	7	5,0				8	5,0	2,5
45	23	13	8	5,0	10	5	2,5	14	8	5,0				8	5,0	2,5
50	25	15	10	7,0	11	7	4,0	15	10	7,0				10	7,0	4,0
60	30	18	11	7,0	13	8	5,0	18	10	7,0				11	7,0	5,0
70	35	20	13	8,0	13	10	7,0	20	13	8,0				13	8,0	7,0
80	40	23	—	—	15	—	—	23	—	—				15	—	—

Note: **KBS** supply cylindrical roller bearings in P0 grade as normal products, unless otherwise be clearly specified by end user before ordering.

4) CLEARANCE

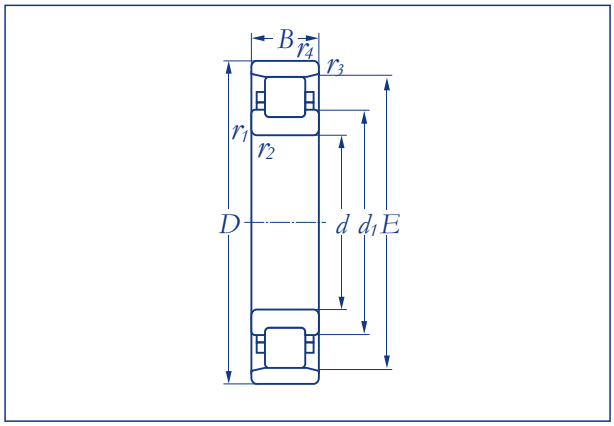
4.1) Cylindrical roller bearings with inner ring and outer ring (Exceptional drawn cup and heavy duty type) are available with the radial clearance the same as that adopted in cylindrical roller bearings. Please refer to Table4.1

Table 4.1 Radial clearance for cylindrical roller bearings

Nominal bore diameter d (mm)		Radial Clearance									
		C2		CN		C3		C4		C5	
over	incl.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
—	10	0	25	20	45	35	60	50	75	—	—
10	24	0	25	20	45	35	60	50	75	65	90
24	30	0	25	20	45	35	60	50	75	70	95
30	40	5	30	25	50	45	70	60	85	80	105
40	50	5	35	30	60	50	80	70	100	95	125
50	65	10	40	40	70	60	90	80	110	110	140
65	80	10	45	40	75	65	100	90	125	130	165
80	100	15	50	50	85	75	110	105	140	155	190
100	120	15	55	50	90	85	125	125	165	180	220
120	140	15	60	60	105	100	145	145	190	200	245
140	160	20	70	70	120	115	165	165	215	225	275
160	180	25	75	75	125	120	175	170	220	250	300
180	200	35	90	90	145	140	195	195	250	275	330
200	225	45	105	105	165	160	220	220	280	305	365
225	250	45	110	110	175	170	235	235	300	330	395
250	280	55	125	125	195	190	260	260	330	370	440
280	315	55	130	130	205	200	275	275	350	410	485
315	355	65	145	145	225	225	305	305	385	455	535
355	400	100	190	190	280	280	370	370	460	510	600
400	450	110	210	210	310	310	410	410	510	565	665
450	500	110	220	220	330	330	440	440	550	625	735

Note: **KBS** supply cylindrical roller bearings with radial clearance of CN as normal products unless otherwise clearly specified by the end user before ordering.

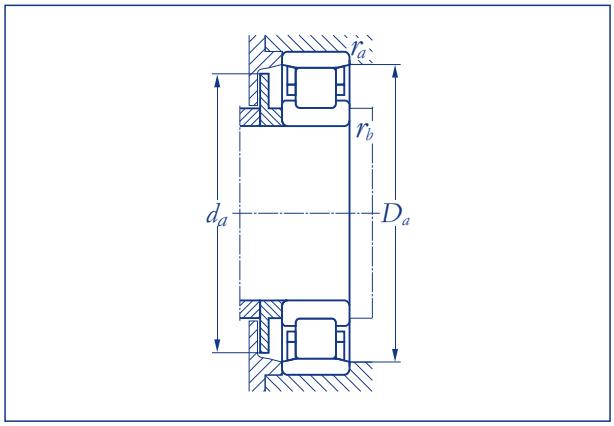
Cylindrical roller bearings single row
Series **N 2**



N 2..

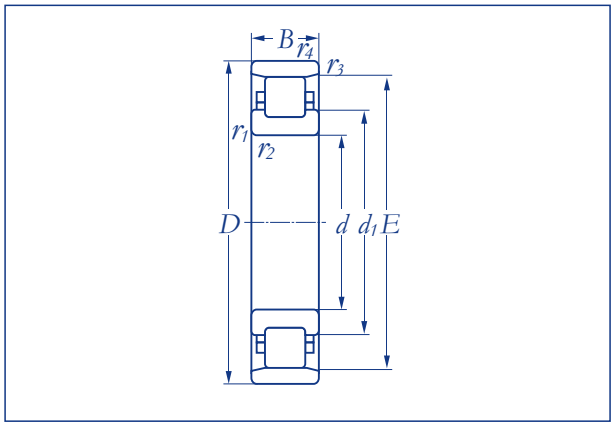
Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
N 203 EC	66	17	40	12	13.700	11.400	11.200	13.300
N 204 EC	110	20	47	14	20.000	17.600	9.100	11.200
N 205 EC	130	25	52	15	22.800	21.600	7.700	9.800
N 206 EC	200	30	62	16	30.400	29.200	6.600	8.400
N 207 EC	300	35	72	17	38.700	38.400	5.900	7.000
N 208 EC	370	40	80	18	43.100	42.400	5.200	6.300
N 209 EC	430	45	85	19	48.400	51.200	4.600	5.600
N 210 EC	480	50	90	20	51.500	55.600	4.400	5.200
N 212 EC	810	60	110	22	74.800	81.600	3.700	4.400
N 213 EC	1.050	65	120	23	84.800	94.400	3.300	3.900
N 214 EC	1.150	70	125	24	95.200	109.600	3.100	3.700
N 215 EC	1.250	75	130	25	104.000	124.800	3.100	3.700
N 216 EC	1.500	80	140	26	110.400	132.800	2.800	3.300
N 217 EC	1.900	85	150	28	132.000	160.000	2.600	3.100
N 218 EC	2.350	90	160	30	146.400	176.000	2.500	3.000
N 219 EC	2.850	95	170	32	176.000	212.000	2.300	2.800
N 220 EC	3.450	100	180	34	200.800	244.000	2.200	2.600
N 221 EC	3.950	105	190	36	211.200	252.000	2.100	2.500
N 222 EC	4.800	110	200	38	233.600	292.000	1.900	2.300
N 224 EC	5.700	120	215	40	272.800	344.000	1.600	2.100
N 226 EC	6.450	130	230	40	286.400	364.000	1.500	1.900
N 228	8.300	140	250	42	246.400	320.000	1.600	2.100
N 230	10.500	150	270	45	286.400	372.000	1.400	1.800
N 232 EC	15.000	160	290	48	400.800	544.000	1.200	1.500

Cylindrical roller bearings single row
Series **N 2**



Designation	Dimensions(mm)										
	d_1	E	$r_{1.2}$ min	$r_{3.4}$ min	s[1]	d_a min	d_a max	D_a max	D_a min	r_a max	r_b max
N 203 EC	25,0	35,1	0,6	0,3	1,0	21,0	23	38,0	37	0,6	0,3
N 204 EC	29,7	41,5	1,0	0,6	1,0	25,0	40	43,0	43	1,0	0,6
N 205 EC	34,7	46,5	1,0	0,6	1,3	30,0	45	48,0	48	1,0	0,6
N 206 EC	41,2	55,5	1,0	0,6	1,3	35,0	54	58,0	57	1,0	0,6
N 207 EC	48,1	64,0	1,1	0,6	1,3	41,5	62	68,0	66	1,0	0,6
N 208 EC	54,0	71,5	1,1	1,1	1,4	46,5	69	73,5	73	1,0	1,0
N 209 EC	59,0	76,5	1,1	1,1	1,2	51,5	74	78,5	78	1,0	1,0
N 210 EC	64,0	81,5	1,1	1,1	1,5	56,5	79	83,5		1,0	1,0
N 212 EC	77,5	100,0	1,5	1,5	1,4	68,0	98	102,0	102	1,5	1,5
N 213 EC	84,4	108,5	1,5	1,5	1,4	73,0	106	112,0	111	1,5	1,5
N 214 EC	89,4	113,5	1,5	1.5	1,2	78,0	111	117,0	116	1,5	1,5
N 215 EC	94,3	118,5	1,5	1,5	1,2	83,0	116	122,0	121	1,5	1,5
N 216 EC	101,0	127,3	2,0	2,0	1,4	89,0	125	131,0	130	2,0	2,0
N 217 EC	107,0	136,5	2,0	2,0	1,5	94,0	134	141,0	139	2,0	2,0
N 218 EC	114,0	145,0	2,0	2,0	1,8	99,0	142	151,0	148	2,0	2,0
N 219 EC	120,0	154,5	2,1	2,1	1,7	106,0	152	159,0	157	2,0	2,0
N 220 EC	127,0	163,0	2,1	2,1	1,7	116,0	160	169,0	166	2,0	2,0
N 221 EC	134,0	173,0	2,1	2,1	2,0	116,0	170	179,0	176	2,0	2,0
N 222 EC	141,0	180,5	2,1	2,1	2,1	121,0	177	189,0	183	2,0	2,0
N 224 EC	153,0	195,5	2,1	2,1	1,9	131,0	192	204,0	199	2,0	2,0
N 226 EC	164,0	209,5	3,0	3,0	2,1	143,0	206	217,0	213	2,5	2,5
N 228	179,0	221,0	3,0	3,0	2,5	153,0	218	237,0	225	2,5	2,5
N 230	193,0	238,0	3,0	3,0	2,5	163,0	234	257,0	242	2,5	2,5
N 232 EC	206,0	259,0	3,0	3,0	2,7	173,0	255	277,0	263	2,5	2,5

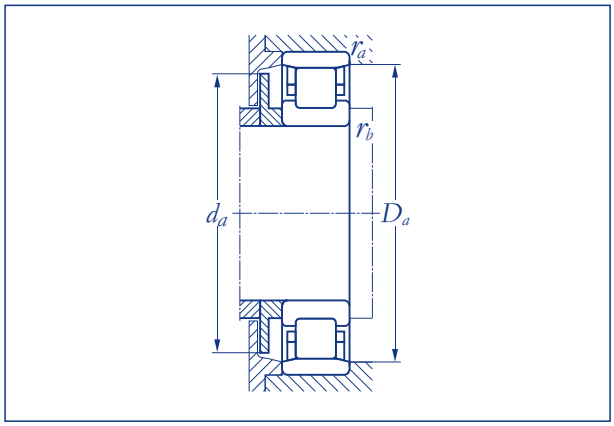
Cylindrical roller bearings single row
Series **N 22**



N 22..

Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
N 2206 EC	260	30	62	20	38.700	39.200	6.600	8.400
N 2207 EC	400	35	72	23	47.500	50.400	5.900	7.000
N 2208 EC	490	40	80	23	56.300	60.000	5.200	6.300
N 2209 EC	520	45	85	23	58.900	65.200	4.600	5.600
N 2211 EC	790	55	100	25	79.200	94.400	4.200	4.900
N 2212 EC	1.100	60	110	28	102.400	122.400	3.700	4.400
N 2219 EC	3.850	95	170	43	228.800	300.000	2.300	2.800

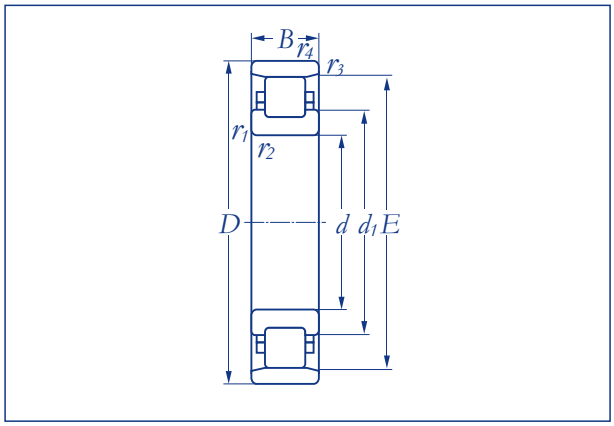
Cylindrical roller bearings single row
Series **N 22**



N 22..

Designation	Dimensions(mm)										
	d_1	E	$r_{1.2}$ min	$r_{3.4}$ min	s[1]	d_a min	d_a max	D_a max	D_a min	r_a max	r_b max
N 2206 EC	41,2	55,5	1,0	0,6	1,8	35,0	54	58,0	57	1,0	0,6
N 2207 EC	48,1	64,0	1,1	0,6	2,8	41,5	62	68,0	66	1,0	0,6
N 2208 EC	54,0	71,5	1,1	1,1	1,9	46,5	69	73,5	73	1,0	1,0
N 2209 EC	59,0	76,5	1,1	1,1	1,7	51,5	74	78,5	78	1,0	1,0
N 2211 EC	70,8	90,0	1,5	1,1	1,5	63,0	88	93,5	92	1,5	1,0
N 2212 EC	77,5	100,0	1,5	1,5	1,4	68,0	98	102,0	102	1,5	1,5
N 2219 EC	120,0	154,5	2,1	2,1	3,0	106,0	152	159,0	157	2,0	2,0

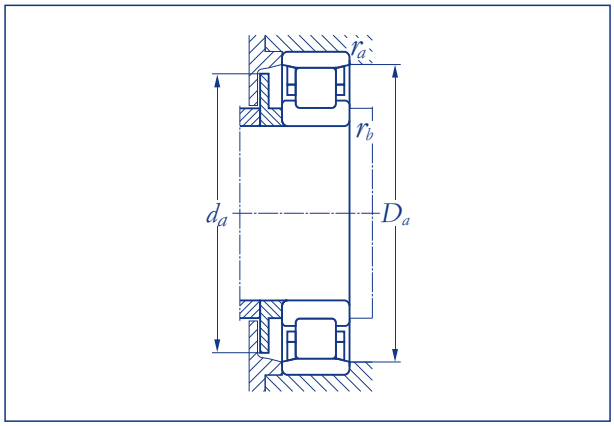
Cylindrical roller bearings single row
Series **N 3**



N 3..

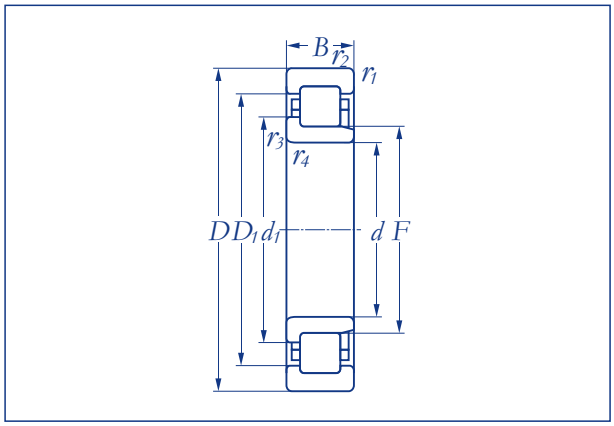
Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
N 303 EC	120	17	47	14	19.600	16.300	9.800	11.900
N 304 EC	150	20	52	15	24.600	20.800	8.400	10.500
N 305 EC	240	25	62	17	32.100	29.200	6.600	8.400
N 306 EC	360	30	72	19	40.900	38.400	6.300	7.700
N 307 EC	480	35	80	21	51.500	50.400	5.600	6.600
N 309 EC	880	45	100	25	79.200	80.000	4.400	5.200
N 310 EC	1.150	50	110	27	88.000	89.600	3.500	4.200
N 311 EC	1.450	55	120	29	110.400	114.400	3.300	3.900
N 312 EC	1.800	60	130	31	120.800	128.000	3.000	3.500
N 313 EC	2.250	65	140	33	146.400	156.800	2.800	3.300
N 315 EC	3.300	75	160	37	193.600	212.000	2.300	2.800
N 316 EC	3.900	80	170	39	208.000	232.000	2.200	2.600
N 317 EC	4.700	85	180	41	237.600	268.000	2.100	2.500
N 318 EC	5.400	90	190	43	255.200	288.000	1.900	2.300
N 319 EC	6.250	95	200	45	272.800	312.000	1.800	2.200
N 320 EC	7.550	100	215	47	312.800	352.000	1.600	2.100
N 321 EC	98.650	105	225	49	352.000	400.000	1.500	1.900
N 322 EC	10.500	110	240	50	374.400	432.000	1.400	1.800
N 324 EC	13.000	120	260	55	431.200	496.000	1.300	1.600
N 326 EC	18.500	130	280	58	501.600	600.000	1.200	1.500
N 328	20.000	140	300	62	475.200	568.000	1.300	1.600
N 330 EC	28.500	150	320	65	624.800	772.000	1.100	1.400
N 334 EC	38.500	170	360	72	761.600	944.000	900	1.100

Cylindrical roller bearings single row
Series **N 3**



Designation	Dimensions(mm)										
	d_1	E	$r_{1.2}$ min	$r_{3.4}$ min	s[1]	d_a min	d_a max	D_a max	D_a min	r_a max	r_b max
N 303 EC	27,7	40,2	1,0	0,6	1,0	22,0	38	43,0	42	1,0	0,6
N 304 EC	31,2	45,5	1,1	0,6	0,9	26,5	44	48,0	47	1,0	0,6
N 305 EC	38,1	54,0	1,1	1,1	1,3	31,5	52	56,0	56	1,0	1,0
N 306 EC	45,0	62,5	1,1	1,1	1,4	36,5	60	65,5	64	1,0	1,0
N 307 EC	51,0	70,2	1,5	1,1	1,2	43,0	68	73,5	72	1,5	1,0
N 309 EC	64,4	58,5	1,5	1,5	1,7	53,0	86	92,0		1,5	1,5
N 310 EC	71,2	97,0	2,0	2,0	1,9	59,0	95	101,0	99	2,0	2,0
N 311 EC	77,5	106,5	2,0	2,0	2,0	64,0	104	111,0	109	2,0	2,0
N 312 EC	84,3	115,0	2,1	2,1	2,1	71,0	112	119,0	118	2,0	2,0
N 313 EC	90,5	124,5	2,1	2,1	2,2	76,0	122	129,0	127	2,0	2,0
N 315 EC	104,0	143,0	2,1	2,1	1,8	86,0	140	149,0	146	2,0	2,0
N 316 EC	110,0	151,0	2,1	2,1	2,1	91,0	149	159,0	154	2,0	2,0
N 317 EC	117,0	160,0	3,0	3,0	2,3	98,0	157	167,0	163	2,5	2,5
N 318 EC	124,0	169,5	3,0	3,0	2,5	103,0	166	177,0	173	2,5	2,5
N 319 EC	132,0	177,5	3,0	3,0	2,9	108,0	174	187,0	181	2,5	2,5
N 320 EC	139,0	191,5	3,0	3,0	2,9	113,0	188	202,0	195	2,5	2,5
N 321 EC	145,0	201,0	3,0	3,0	3,4	118,0	198	212,0	203	2,5	2,5
N 322 EC	155,0	211,0	3,0	3,0	3,0	123,0	208	227,0	215	2,5	2,5
N 324 EC	168,0	230,0	3,0	3,0	3,7	133,0	226	247,0	234	2,5	2,5
N 326 EC	181,0	247,0	4,0	4,0	3,7	146,0	243	264,0	251	3,0	3,0
N 328	196,0	260,0	4,0	4,0	4,2	156,0	256	284,0	264	3,0	3,0
N 330 EC	209,0	283,0	4,0	4,0	4,0	166,0	279	304,0	287	3,0	3,0
N 334 EC	236,0	318,0	4,0	4,0	4,6	186,0	313	344,0	323	3,0	3,0

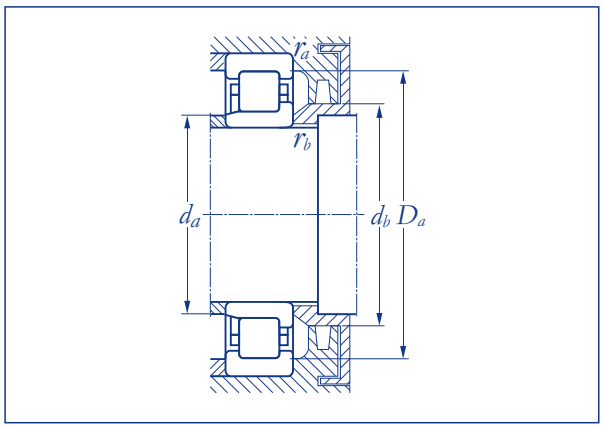
Cylindrical roller bearings single row
Series **NJ 2**

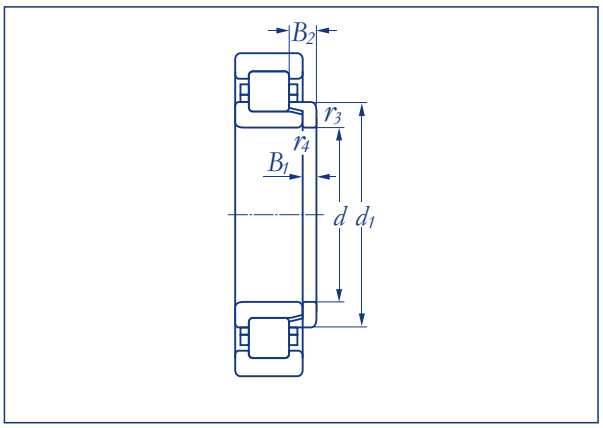


NJ 2..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NJ 202 EC	49	15	35	11	10.000	8.100	12.600	15.400
NJ 203 EC	70	17	40	12	13.700	11.400	11.200	13.300
NJ 204 EC	110	20	47	14	20.000	17.600	9.100	11.200
NJ 205 EC	140	25	52	15	22.800	21.600	7.700	9.800
NJ 206 EC	210	30	62	16	30.400	29.200	6.600	8.400
NJ 207 EC	310	35	72	17	38.700	38.400	5.900	7.000
NJ 208 EC	380	40	80	18	43.100	42.400	5.200	6.300
NJ 209 EC	440	45	85	19	48.400	51.200	4.600	5.600
NJ 210 EC	490	50	90	20	51.500	55.600	4.400	5.200
NJ 211 EC	670	55	100	21	67.300	76.000	4.200	4.900
NJ 212 EC	830	60	110	22	74.800	81.600	3.700	4.400
NJ 213 EC	1.050	65	120	23	84.800	94.400	3.300	3.900
NJ 214 EC	1.150	70	125	24	95.200	109.600	3.100	3.700
NJ 215 EC	1.300	75	130	25	104.000	124.800	3.100	3.700
NJ 216 EC	1.550	80	140	26	110.400	132.800	2.800	3.300
NJ 217 EC	1.950	85	150	28	132.000	160.000	2.600	3.100
NJ 218 EC	2.400	90	160	30	146.400	176.000	2.500	3.000
NJ 219 EC	2.900	95	170	32	176.000	212.000	2.300	2.800
NJ 220 EC	3.500	100	180	34	200.800	244.000	2.200	2.600
NJ 221 EC	4.100	105	190	36	211.200	252.000	2.100	2.500
NJ 222 EC	4.900	110	200	38	233.600	292.000	1.900	2.300
NJ 224 EC	5.850	120	215	40	272.800	344.000	1.600	2.100
NJ 226 EC	6.600	130	230	40	286.400	364.000	1.500	1.900
NJ 228 EC	8.500	140	250	42	312.800	408.000	1.400	1.800
NJ 230 EC	10.500	150	270	45	356.800	480.000	1.300	1.600
NJ 232 EC	15.000	160	290	48	400.800	544.000	1.200	1.500

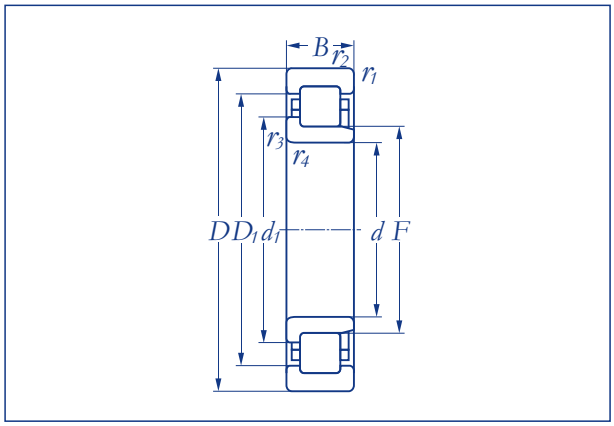
Cylindrical roller bearings single row
Series **NJ 2**





Designation	Dimensions(mm)												Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max			B_1	B_2
NJ 202 EC	21,9	27,9	19,3	0,6	0,3	1,0	17,0	18	23	31,0	0,6	0,3	**HJ 202 EC**	5	2,5	5,0
NJ 203 EC	25,0	32,4	22,1	0,6	0,3	1,0	19,0	21	27	36,0	0,6	0,3	**HJ 203 EC**	8	3,0	5,5
NJ 204 EC	29,7	38,8	26,5	1,0	0,6	1,0	24,0	25	31	42,0	1,0	0,6	**HJ 204 EC**	11	3,0	5,5
NJ 205 EC	34,7	43,8	31,5	1,0	0,6	1,3	29,0	30	36	47,0	1,0	0,6	**HJ 205 EC**	14	3,0	6,0
NJ 206 EC	41,2	52,5	37,5	1,0	0,6	1,3	34,0	36	43	57,0	1,0	0,6	**HJ 206 EC**	25	4,0	7,0
NJ 207 EC	48,1	60,7	44,0	1,1	0,6	1,3	39,0	42	50	65,5	1,0	0,6	**HJ 207 EC**	33	4,0	7,0
NJ 208 EC	54,0	67,9	49,5	1,1	1,1	1,4	46,5	48	56	73,5	1,0	1,0	**HJ 208 EC**	47	5,0	8,5
NJ 209 EC	59,0	73,0	54,5	1,1	1,1	1,2	51,5	53	61	78,5	1,0	1,0	**HJ 209 EC**	52	5,0	8,5
NJ 210 EC	64,0	78,0	59,5	1,1	1,1	1,5	56,5	57	66	83,5	1,0	1,0	**HJ 210 EC**	58	5,0	9,0
NJ 211 EC	70,8	86,3	66,0	1,5	1,1	1,0	61,5	64	73	92,0	1,5	1,0	**HJ 211 EC**	83	6,0	9,5
NJ 212 EC	77,5	95,7	72,0	1,5	1,5	1,4	68,0	70	80	102,0	1,5	1,5	**HJ 212 EC**	100	6,0	10,0
NJ 213 EC	84,4	104,0	78,5	1,5	1,5	1,4	73,0	76	87	112,0	1,5	1,5	**HJ 213 EC**	120	6,0	10,0
NJ 214 EC	89,4	109,0	83,5	1,5	1,5	1,2	78,0	81	92	117,0	1,5	1,5	**HJ 214 EC**	150	7,0	11,0
NJ 215 EC	94,3	114,0	88,5	1,5	1,5	1,2	83,0	86	97	122,0	1,5	1,5	**HJ 215 EC**	160	7,0	11,0
NJ 216 EC	101,0	123,0	95,3	2,0	2,0	1,4	89,0	93	104	131,0	2,0	2,0	**HJ 216 EC**	210	8,0	12,5
NJ 217 EC	107,0	131,0	100,5	2,0	2,0	1,5	94,0	98	110	141,0	2,0	2,0	**HJ 217 EC**	240	8,0	12,5
NJ 218 EC	114,0	140,0	107,0	2,0	2,0	1,8	99,0	104	117	151,0	2,0	2,0	**HJ 218 EC**	310	9,0	14,0
NJ 219 EC	120,0	149,0	112,5	2,1	2,1	1,7	106,0	110	123	159,0	2,0	2,0	**HJ 219 EC**	330	9,0	14,0
NJ 220 EC	127,0	157,0	119,0	2,1	2,1	1,7	111,0	116	130	169,0	2,0	2,0	**HJ 220 EC**	520	10,0	15,0
NJ 221 EC	134,0	164,0	125,0	2,1	2,1	2,0	116,0	122	137	179,0	2,0	2,0	**HJ 221 EC**	510	10,0	16,0
NJ 222 EC	141,0	174,0	132,5	2,1	2,1	2,1	121,0	130	145	189,0	2,0	2,0	**HJ 222 EC**	600	11,0	17,0
NJ 224 EC	153,0	188,0	143,5	2,1	2,1	1,9	131,0	140	156	204,0	2,0	2,0	**HJ 224 EC**	690	11,0	17,0
NJ 226 EC	164,0	202,0	153,5	3,0	3,0	2,1	143,0	150	167	217,0	2,5	2,5	**HJ 226 EC**	750	11,0	17,0
NJ 228 EC	179,0	217,0	169,0	3,0	3,0	2,4	153,0	166	183	237,0	2,5	2,5	**HJ 228 EC**	960	11,0	18,0
NJ 230 EC	193,0	234,0	182,0	3,0	3,0	2,5	163,0	178	197	257,0	2,5	2,5	**HJ 230 EC**	250	12,0	19,5
NJ 232 EC	206,0	250,0	195,0	3,0	3,0	2,7	173,0	191	210	277,0	2,5	2,5	**HJ 232 EC**	450	12,0	20,0

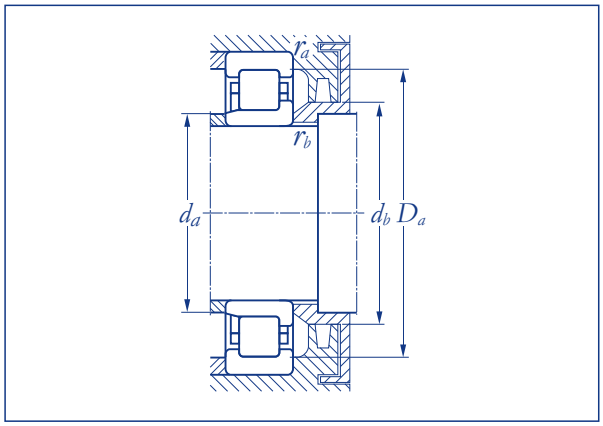
Cylindrical roller bearings single row
Series **NJ 2**

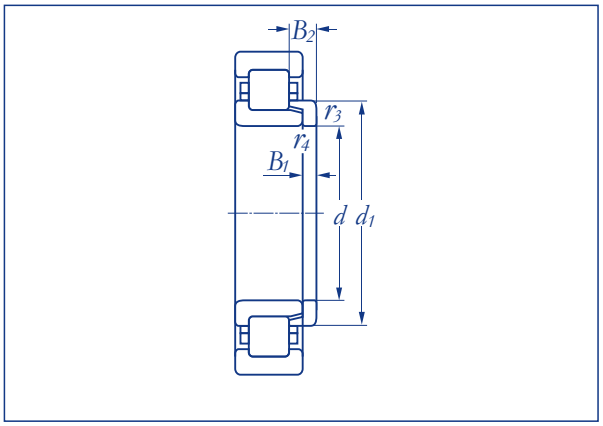


NJ 2..

Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NJ 234 EC	19.500	170	310	52	492.800	652.000	1.200	1.500
NJ 236 EC	20.000	180	320	52	501.600	680.000	1.100	1.400
NJ 238 EC	24.500	190	310	55	554.400	772.000	1.100	1.300
NJ 240 EC	29.000	200	360	58	612.000	848.000	1.000	1.200
NJ 244	39.000	220	400	65	612.000	864.000	1.000	1.200
NJ 248	52.500	240	440	72	761.600	1.096.000	900	1.100
NJ 252	71.000	260	480	80	936.000	1.360.000	700	900
NJ 256	73.000	280	500	80	912.000	1.360.000	700	900
NJ 260	89.500	300	540	85	1.136.000	1.696.000	700	900

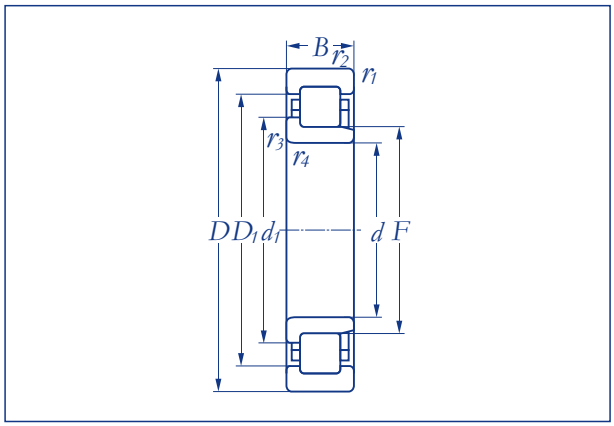
Cylindrical roller bearings single row
Series **NJ 2**





Designation	Dimensions(mm)												Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max			B_1	B_2
NJ 234 EC	220	269	207	4	4	2,9	186	203	224	294	3	2,5	**HJ 234 EC**	1.650	12.000	20,0
NJ 236 EC	230	279	217	4	4	2,9	196	213	234	304	3	3,0	**HJ 236 EC**	1.700	12.000	20,0
NJ 238 EC	224	295	230	4	4	3,0	206	248	248	324	3	3,0	**HJ 238 EC**	2.100	13.000	21,5
NJ 240 EC	258	312	243	4	4	2,6	216	263	262	344	3	3,0	**HJ 240 EC**	31.000	2.550	14,0
NJ 244	286	332	270	4	4	2,3	236	288	290	384	3	3,0	**HJ 244**	20.000	3.650	15,0
NJ 248	313	365	295	4	4	3,4	256	313	317	424	3	3,0	**HJ 248**	31.500	4.700	16,0
NJ 252	340	397	320	5	5	3,4	280	333	344	460	4	4,0	**HJ 252**	32.000	6.300	18,0
NJ 256	360	417	340	5	5	3,8	300	358	364	480	4	4,0	**HJ 256**	20.000	6.700	18,0
NJ 260	387	451	364	5	5	4,8	320	20	368	520	4	4,0	**HJ 260**	20.000	8.600	20,0

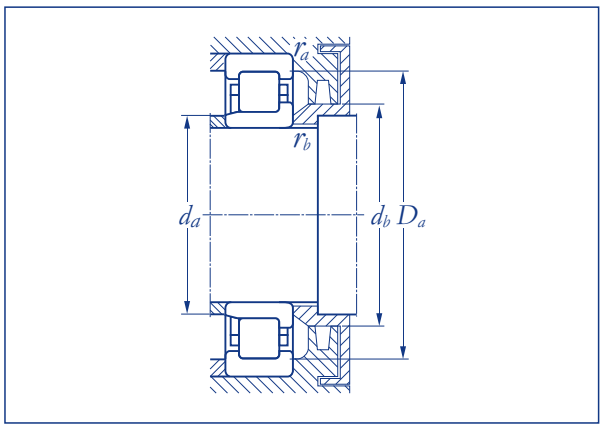
Cylindrical roller bearings single row
Series **NJ 22**

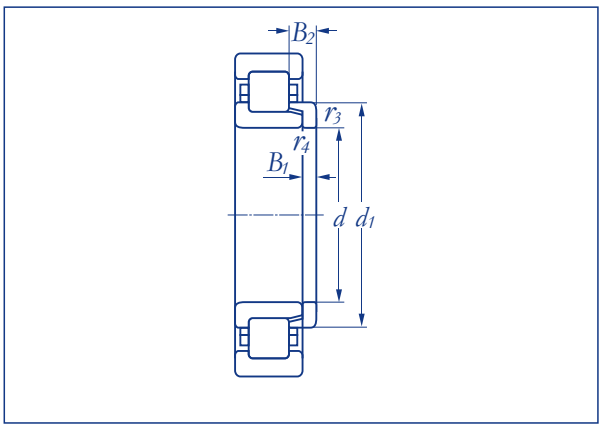


NJ 22..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NJ 2203 EC	95	17	40	16	19.000	17.200	11.200	13.300
NJ 2204 EC	140	20	47	18	23.700	22.000	9.100	11.200
NJ 2205 EC	170	25	52	18	27.200	27.200	7.700	9.800
NJ 2206 EC	270	30	62	20	38.700	39.200	6.600	8.400
NJ 2207 EC	410	35	72	23	47.500	50.400	5.900	7.000
NJ 2208 EC	500	40	80	23	56.300	60.000	5.200	6.300
NJ 2209 EC	540	45	85	23	58.900	65.200	4.600	5.600
NJ 2210 EC	580	50	90	23	62.400	70.400	4.400	5.200
NJ 2211 EC	810	55	100	25	79.200	94.400	4.200	4.900
NJ 2212 EC	1.100	60	110	28	102.400	122.400	3.700	4.400
NJ 2213 EC	1.450	65	120	31	117.600	144.000	3.300	3.900
NJ 2214 EC	1.550	70	125	31	123.200	154.400	3.100	3.700
NJ 2215 EC	1.600	75	130	31	128.800	166.400	3.100	3.700
NJ 2216 EC	2.050	80	140	33	149.600	196.000	2.800	3.300
NJ 2217 EC	2.550	85	150	36	172.800	224.000	2.600	3.100
NJ 2218 EC	3.200	90	160	40	193.600	252.000	2.500	3.000
NJ 2219 EC	3.950	95	170	43	228.800	300.000	2.300	2.800
NJ 2220 EC	4.800	100	180	46	268.800	360.000	2.200	2.600
NJ 2222 EC	6.850	110	200	53	304.000	416.000	1.900	2.300
NJ 2224 EC	8.500	120	215	58	365.600	504.000	1.600	2.100
NJ 2226 EC	10.500	130	230	64	422.400	588.000	1.500	1.900
NJ 2228 EC	13.500	140	250	68	457.600	664.000	1.400	1.800
NJ 2230 EC	19.500	150	270	73	501.600	744.000	1.300	1.600
NJ 2232 EC	24.500	160	290	80	647.200	960.000	1.200	1.500
NJ 2236 EC	31.500	180	320	86	808.000	1.200.000	1.100	1.400

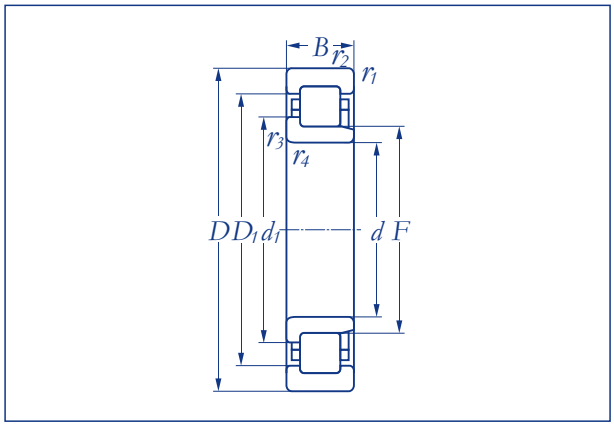
Cylindrical roller bearings single row
Series **NJ 22**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NJ 2203 EC	25,0	32,4	22,1	0,6	0,3	1,5	19,0	21	27	36,0	0,6	0,3	**HJ 2203 EC**	8	3	6,0
NJ 2204 EC	29,7	38,8	26,5	1,0	0,6	2,0	24,0	25	31	42,0	1,0	0,6	**HJ 2204 EC**	12	3	7,5
NJ 2205 EC	34,7	43,8	31,5	1,0	0,6	1,8	29,0	30	36	47,0	1,0	0,6	**HJ 2205 EC**	14	3	6,5
NJ 2206 EC	41,2	52,5	37,5	1,0	0,6	1,8	34,0	36	43	57,0	1,0	0,6	**HJ 2206 EC**	28	4	7,5
NJ 2207 EC	48,1	60,7	44,0	1,1	0,6	2,8	39,0	42	50	65,5	1,0	0,6	**HJ 2207 EC**	36	4	8,5
NJ 2208 EC	54,0	67,9	49,5	1,1	1,1	1,9	46,5	48	56	73,5	1,0	1,0	**HJ 2208 EC**	48	5	9,0
NJ 2209 EC	59,0	73,0	54,5	1,1	1,1	1,7	51,5	53	61	78,5	1,0	1,0	**HJ 2209 EC**	53	5	9,0
NJ 2210 EC	64,0	78,0	59,5	1,1	1,1	1,5	56,5	57	66	83,5	1,0	1,0	**HJ 2210 EC**	58	5	9,0
NJ 2211 EC	70,8	86,3	66,0	1,5	1,1	1,5	61,5	64	73	92,0	1,5	1,0	**HJ 2211 EC**	85	6	10,0
NJ 2212 EC	77,5	95,7	72,0	1,5	1,5	1,4	68,0	70	80	102,0	1,5	1,5	**HJ 2212 EC**	100	6	10,0
NJ 2213 EC	84,4	104,0	78,5	1,5	1,5	1,9	73,0	76	87	112,0	1,5	1,5	**HJ 2213 EC**	120	6	10,5
NJ 2214 EC	89,4	109,0	83,5	1,5	1,5	1,7	78,0	81	92	117,0	1,5	1,5	**HJ 2214 EC**	150	7	11,5
NJ 2215 EC	94,3	114,0	88,5	1,5	1,5	1,7	83,0	86	97	122,0	1,5	1,5	**HJ 2215 EC**	160	7	11,5
NJ 2216 EC	101,0	123,0	95,3	2,0	2,0	1,4	89,0	93	104	131,0	2,0	2,0	**HJ 2216 EC**	210	8	12,5
NJ 2217 EC	107,0	131,0	100,5	2,0	2,0	2,0	94,0	98	110	141,0	2,0	2,0	**HJ 2217 EC**	240	8	12,5
NJ 2218 EC	114,0	140,0	107,0	2,0	2,0	2,6	99,0	104	117	151,0	2,0	2,0	**HJ 2218 EC**	310	9	15,0
NJ 2219 EC	120,0	149,0	112,5	2,1	2,1	3,0	106,0	110	123	159,0	2,0	2,0	**HJ 2219 EC**	350	9	15,5
NJ2 221 EC	134,0	164,0	125,0	2,1	2,1	2,0	116,0	122	137	179,0	2,0	2,0	**HJ 2221 EC**	510	10	16,0
NJ 2220 EC	127,0	157,0	119,0	2,1	2,1	2,5	111,0	116	130	169,0	2,0	2,0	**HJ 2220 EC**	430	10	16,0
NJ 2222 EC	141,0	174,0	132,5	2,1	2,1	3,7	121,0	129	145	189,0	2,0	2,0	**HJ 2222 EC**	630	11	19,5
NJ 2224 EC	153,0	188,0	143,5	2,1	2,1	3,8	131,0	140	156	204,0	2,0	2,0	**HJ 2224 EC**	740	11	20,0
NJ 2226 EC	164,0	202,0	153,5	3,0	3,0	4,3	143,0	149	167	217,0	2,5	2,5	**HJ 2226 EC**	830	11	21,0
NJ 2228 EC	179,0	217,0	169,0	3,0	3,0	4,4	153,0	164	183	237,0	2,5	2,5	**HJ 2228 EC**	1.050	11	23,0
NJ 2230 EC	194,0	234,0	182,0	3,0	3,0	4,9	163,0	179	197	257,0	2,5	2,5	**HJ 2230 EC**	1.350	12	24,5
NJ 2232 EC	205,0	252,0	193,0	3,0	3,0	4,5	173,0	188	209	277,0	2,5	2,5	**HJ 2232 EC**	1.550	12	24,5
NJ 2236 EC	229,0	280,0	215,0	4,0	4,0	4,2	196,0	210	218	304,0	3,0	3,0	**HJ 2236 EC**	1.850	12	24,0

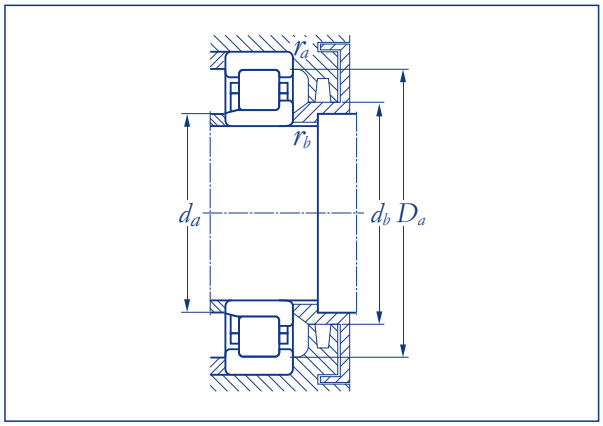
Cylindrical roller bearings single row
Series **NJ 23**

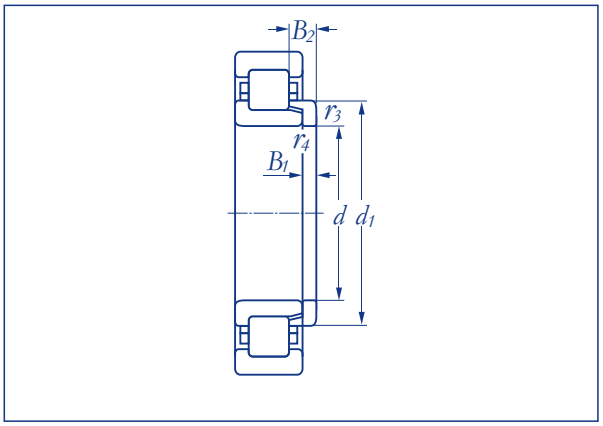


NJ 23..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NJ 2304 EC	220	20	52	21	33.000	30.400	7.700	9.800
NJ 2305 EC	360	25	62	24	44.800	44.000	6.300	7.700
NJ 2306 EC	540	30	72	27	58.900	60.000	5.600	6.600
NJ 2307 EC	730	35	80	31	73.000	78.400	4.900	5.900
NJ 2308 EC	960	40	90	33	89.600	96.000	4.400	5.200
NJ 2309 EC	1.300	45	100	36	110.400	122.400	3.900	4.600
NJ 2310 EC	1.750	50	110	40	128.800	148.800	3.500	4.200
NJ 2311 EC	2.250	55	120	43	160.800	185.600	3.300	3.900
NJ 2312 EC	2.800	60	130	46	179.200	212.000	3.000	3.500
NJ 2313 EC	3.350	65	140	48	200.800	232.000	2.800	3.300
NJ 2314 EC	2.750	70	150	35	164.000	182.400	2.500	3.000
NJ 2314 EC	4.050	70	150	51	220.000	260.000	2.500	3.000
NJ 2315 EC	5.000	75	160	55	264.000	320.000	2.300	2.800
NJ 2316 EC	5.950	80	170	58	286.400	352.000	2.200	2.600
NJ 2317 EC	7.000	85	180	60	316.800	392.000	2.100	2.500
NJ 2318 EC	8.150	90	190	64	352.000	432.000	1.900	2.300
NJ 2319 EC	9.550	95	200	67	374.400	468.000	1.800	2.200
NJ 2320 EC	12.000	100	215	73	466.400	588.000	1.600	2.100
NJ 2322 EC	17.000	110	240	80	545.600	720.000	1.400	1.800
NJ 2324 EC	24.000	120	260	86	633.600	832.000	1.300	1.600
NJ 2326 EC	30.500	130	280	93	748.000	1.000.000	1.200	1.500
NJ 2328 EC	37.500	140	300	102	840.000	1.144.000	1.200	1.500
NJ 2330 EC	46.000	150	320	108	952.000	1.304.000	1.100	1.400
NJ 2332 EC	54.000	160	340	114	1.056.000	1.488.000	1.000	1.200

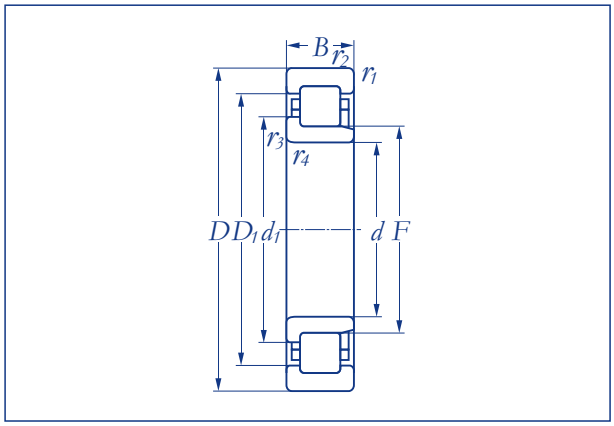
Cylindrical roller bearings single row
Series **NJ 23**





Designation	Dimensions(mm)													Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max				B_1	B_2
NJ 2304 EC	31,2	42,4	27,5	1,1	0,6	1,9	24,0	26	33	45,5	1,0	0,6		**HJ 2304 EC**	18	4	7,5
NJ 2305 EC	38,1	50,7	34,0	1,1	1,1	2,3	31,5	32	40	55,5	1,0	1,0		**HJ 2305 EC**	25	4	8,0
NJ 2306 EC	45,0	58,9	40,5	1,1	1,1	2,4	36,5	39	47	65,5	1,0	1,0		**HJ 2306 EC**	42	5	9,5
NJ 2307 EC	51,0	66,3	46,2	1,5	1,1	2,7	41,5	44	53	72,0	1,5	1,0		**HJ 2307 EC**	62	6	11,0
NJ 2308 EC	57,5	75,6	52,0	1,5	1,5	2,9	48,0	50	60	82,0	1,5	1,5		**HJ 2308 EC**	88	7	12,5
NJ 2309 EC	64,4	83,8	58,5	1,5	1,5	3,2	53,0	56	67	92,0	1,5	1,5		**HJ 2309 EC**	110	7	13,0
NJ 2310 EC	71,2	92,1	65,0	2,0	2,0	3,4	59,0	63	73	101,0	2,0	2,0		**HJ 2310 EC**	150	8	14,5
NJ 2311 EC	77,5	101,0	70,5	2,0	2,0	3,5	64,0	68	80	111,0	2,0	2,0		**HJ 2311 EC**	190	9	15,5
NJ 2312 EC	84,3	110,0	77,0	2,1	2,1	3,6	71,0	74	87	119,0	2,0	2,0		**HJ 2312 EC**	230	9	16,0
NJ 2313 EC	90,5	119,0	82,5	2,1	2,1	4.7	76,0	80	93	129,0	2,0	2,0		**HJ 2313 EC**	290	10	18,0
NJ 2314 EC	97,3		133,0	2,1	2,1	1,8	81,0	130		139,0	2,0	2,0					
NJ 2314 EC	97,3	127,0	89,0	2,1	2,1	4,8	81,0	86	100	139,0	2,0	2,0		**HJ 2314 EC**	340	10	18,5
NJ 2315 EC	104,0	136,0	95,0	2,1	2,1	4,8	86,0	92	107	149,0	2,0	2,0		**HJ 2315 EC**	420	11	19,5
NJ 2316 EC	110,0	144,0	101,0	2,1	2,1	5,1	91,0	98	113	159,0	2,0	2,0		**HJ 2316 EC**	480	11	20,0
NJ 2317 EC	117,0	153,0	108,0	3,0	3,0	5,8	98,0	105	120	167,0	2,5	2,5		**HJ 2317 EC**	590	12	22,0
NJ 2318 EC	124,0	162,0	113,5	3,0	3,0	6,0	103,0	110	127	177,0	2,5	2,5		**HJ 2318 EC**	650	12	22,0
NJ 2319 EC	132,0	170,0	121,5	3,0	3,0	6,9	108,0	118	135	187,0	2,5	2,5		**HJ 2319 EC**	810	13	24,5
NJ 2320 EC	139,0	182,0	127,5	3,0	3,0	5,9	113,0	124	142	202,0	2,5	2,5		**HJ 2320 EC**	930	13	23,5
NJ 2322 EC	155,0	201,0	143,0	3,0	3,0	7,5	123,0	139	159	227,0	2,5	2,5		**HJ 2322 EC**	1.250	14	26,5
NJ 2324 EC	168,0	219,0	154,0	3,0	3,0	7,2	133,0	150	171	247,0	2,5	2,5		**HJ 2324 EC**	1.450	14	26,0
NJ 2326 EC	181,0	236,0	167,0	4,0	4,0	8,7	146,0	163	185	264,0	3,0	3,0		**HJ 2326 EC**	1.700	14	28,0
NJ 2328 EC	195,0	252,0	180,0	4,0	4,0		156,0		199	284,0	3,0	3,0		**HJ 2328 EC**	2.150	15	31,0
NJ 2330 EC	209,0	270,0	193,0	4,0	4,0	10,5	166,0	189	213	304,0	3,0	3,0		**HJ 2330 EC**	2.500	15	31,5
NJ 2332 EC	221,0	286,0	204,0	4,0	4,0	11,0	176,0	200	225	324,0	3,0	3,0		**HJ 2332 EC**	2.800	15	32,0

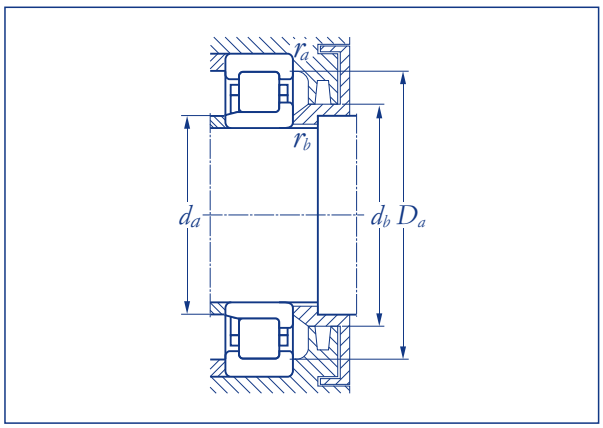
Cylindrical roller bearings single row
Series **NJ 3**

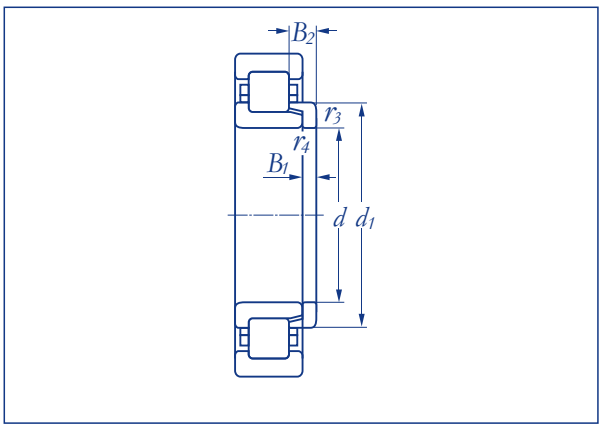


NJ 3..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NJ 302 EC	88	15	42	13	15.500	12.200	11.200	13.300
NJ 303 EC	120	17	47	14	19.600	16.300	9.800	11.900
NJ 304 EC	150	20	52	15	24.600	20.800	8.400	10.500
NJ 305 EC	250	25	62	19	32.100	29.200	6.600	8.400
NJ 306 EC	370	30	72	17	40.900	38.400	6.300	7.700
NJ 307 EC	490	35	80	21	51.500	50.400	5.600	6.600
NJ 308 EC	640	40	90	23	64.700	62.400	4.600	5.600
NJ 309 EC	920	45	100	25	79.200	80.000	4.400	5.200
NJ 310 EC	1.150	50	110	27	88.000	89.600	3.500	4.200
NJ 311 EC	1.500	55	120	29	110.400	114.400	3.300	3.900
NJ 312 EC	1.900	60	130	31	120.800	128.000	3.000	3.500
NJ 313 EC	2.300	65	140	33	146.400	156.800	2.800	3.300
NJ 314 EC	2.800	70	150	35	164.000	182.400	2.500	3.000
NJ 315 EC	3.350	75	160	37	193.600	212.000	2.300	2.800
NJ 316 EC	4.000	80	170	39	208.000	232.000	2.200	2.600
NJ 317 EC	4.800	85	180	41	237.600	268.000	2.100	2.500
NJ 318 EC	5.550	90	190	43	255.200	288.000	1.900	2.300
NJ 319 EC	6.450	95	200	45	272.800	312.000	1.800	2.200
NJ 320 EC	7.800	100	215	47	312.800	352.000	1.600	2.100
NJ 321 EC	8.950	105	225	49	352.000	400.000	1.500	1.900
NJ 322 EC	10.500	110	240	50	374.400	432.000	1.400	1.800
NJ 324 EC	13.500	120	260	55	431.200	496.000	1.300	1.600
NJ 326 EC	19.000	130	280	58	501.600	600.000	1.200	1.500
NJ 328 EC	23.000	140	300	62	545.600	664.000	1.200	1.500
NJ 330 EC	28.000	150	320	65	624.800	772.000	1.100	1.400
NJ 332 EC	33.000	160	340	68	704.000	864.000	1.000	1.200

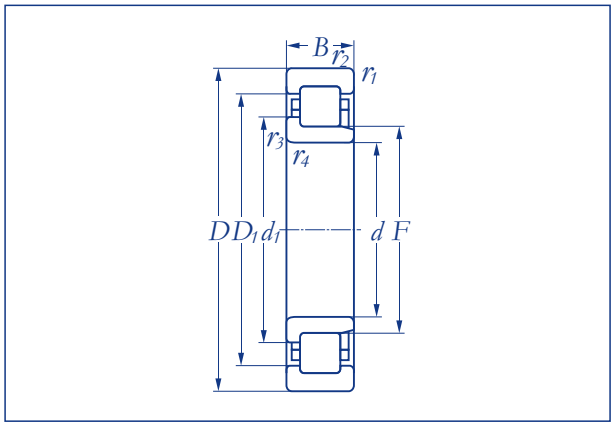
Cylindrical roller bearings single row
Series **NJ 3**





Designation	Dimensions(mm)													Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	D_a	r_a max	r_b max			B_1	B_2
NJ 302 EC	24,3	33,0	21,0	1,0	0,6	1,0	19,0	23	26	37,0		1,0	0,6	HJ 302 EC	9	3	5,5
NJ 303 EC	27,7	37,0	24,2	1,0	0,6	1,0	21,0	23	26	42,0		1,0	0,6	HJ 303 EC	11	3	5,5
NJ 304 EC	31,2	42,4	27,5	1,1	0,6	0,9	24,0	39	33	45,5		1,0	0,6	HJ 304 EC	17	4	6,5
NJ 305 EC	38,1	50,7	34,0	1,1	1,1	1,3	31,5	32	40	55,5		1,0	1,0	HJ 305 EC	23	4	7,0
NJ 306 EC	45,0	58,9	40,5	1,1	1,1	1,4	36,5	44	47	65,5		1,0	1,0	HJ 306 EC	40	5	8,5
NJ 307 EC	51,0	66,3	46,2	1,5	1,1	1,2	41,5	50	53	72,0		1,5	1,0	HJ 307 EC	58	6	9,5
NJ 308 EC	57,5	75,6	52,0	1,5	1,5	1,4	48,0	78	60	82,0		1,5	1,5	HJ 308 EC	84	7	11,0
NJ 309 EC	64,4	83,8	58,5	1,5	1,5	1,7	53,0	63	61	92,0		1,5	1,5	HJ 309 EC	110	7	11,5
NJ 310 EC	71,2	92,1	65,0	2,0	2,0	1,9	59,0	68	73	101,0		2,0	2,0	HJ 310 EC	140	8	13,0
NJ 311 EC	77,5	101,0	70,5	2,0	2,0	2,0	64,0	74	80	111,0		2,0	2,0	HJ 311 EC	190	9	14,0
NJ 312 EC	84,3	110,0	77,0	2,1	2,1	2,1	71,0	80	87	119,0		2,0	2,0	HJ 312 EC	220	9	14,5
NJ 313 EC	90,5	119,0	82,5	2,1	2,1	2,2	76,0	86	93	129,0		2,0	2,0	HJ 313 EC	270	10	15,5
NJ 314 EC	97,3	127,0	89,0	2,1	2,1	1,8	81,0	92	100	139,0		2,0	2,0	HJ 314 EC	320	10	15,5
NJ 315 EC	104,0	136,0	95,0	2,1	2,1	1,8	86,0	98	107	149,0		2,0	2,0	HJ 315 EC	390	11	16,5
NJ 316 EC	110,0	144,0	101,0	2,1	2,1	2,1	91,0	105	113	159,0		2,0	2,0	HJ 316 EC	440	11	17,0
NJ 317 EC	117,0	153,0	108,0	3,0	3,0	2,3	98,0	110	120	167,0		2,5	2,5	HJ 317 EC	550	12	18,5
NJ 318 EC	124,0	162,0	113,5	3,0	3,0	2,5	103,0	118	127	177,0		2,5	2,5	HJ 318 EC	600	12	18,5
NJ 319 EC	132,0	170,0	121,5	3,0	3,0	2,9	108,0	124	135	187,0		2,5	2,5	HJ 319 EC	760	13	20,5
NJ 320 EC	139,0	182,0	127,5	3,0	3,0	2,9	113,0	130	142	202,0		2,5	2,5	HJ 320 EC	870	13	20,5
NJ 321 EC	145,0	190,0	133,0	3,0	3,0	3,4	118,0	139	148	212,0		2,5	2,5	HJ 321 EC	1.000	13	20,5
NJ 322 EC	155,0	201,0	143,0	3,0	3,0	3,0	123,0	150	159	227,0		2,5	2,5	HJ 322 EC	1.200	14	22,0
NJ 324 EC	168,0	219,0	154,0	3,0	3,0	3,7	133,0		171	247,0		2,5	2,5	HJ 324 EC	1.400	14	22,5
NJ 326 EC	181,0	236,0	167,0	4,0	4,0	3,7	146,0	163	185	264,0		3,0	3,0	HJ 326 EC	1.600	14	23,0
NJ 328 EC	195,0	252,0	180,0	4,0	4,0	3,7	156,0	176	199	284,0	82	3,0	3,0	HJ 328 EC	2.000	15	25,0
NJ 330 EC	209,0	270,0	193,0	4,0	4,0	4,0	166,0	189	213	304,0		3,0	3,0	HJ 330 EC	2.300	15	25,0
NJ 332 EC	221,0	286,0	204,0	4,0	4,0	4,0	176,0	200	225	324,0		3,0	3,0	HJ 332 EC	2.550	15	25,0

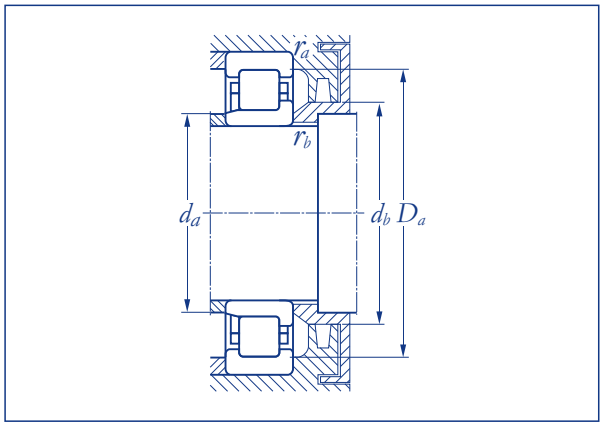
Cylindrical roller bearings single row
Series **NJ 4**

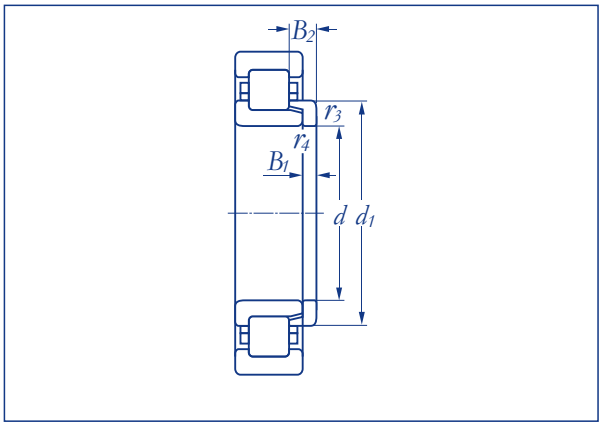


NJ 4..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NJ 406	770	30	90	23	48.400	42.400	5.200	6.300
NJ 407	1.050	35	100	25	61.200	55.600	4.600	5.600
NJ 408	1.300	40	110	27	77.400	72.000	4.200	4.900
NJ 409	1.650	45	120	29	84.800	81.600	3.900	4.600
NJ 410	2.050	50	130	31	104.000	101.600	3.500	4.200
NJ 411	2.550	55	140	33	113.600	112.000	3.300	3.900
NJ 412	3.100	60	150	35	134.400	138.400	3.000	3.500
NJ 413	3.650	65	160	37	146.400	152.000	2.800	3.300
NJ 414	5.350	70	180	42	183.200	192.000	2.500	3.000
NJ 415	6.400	75	190	45	211.200	224.000	2.300	2.800
NJ 416	7.450	80	200	48	242.400	256.000	2.200	2.600
NJ 417	8.900	85	210	52	255.200	268.000	2.100	2.500
NJ 418	10.500	90	225	54	304.000	332.000	1.900	2.300
NJ 419	13.500	95	240	55	330.400	360.000	1.800	2.200
NJ 420	14.000	100	250	58	343.200	380.000	1.600	2.100
NJ 422	20.000	110	280	65	418.400	468.000	1.400	1.800
NJ 424	28.500	120	310	72	515.200	588.000	1.300	1.600

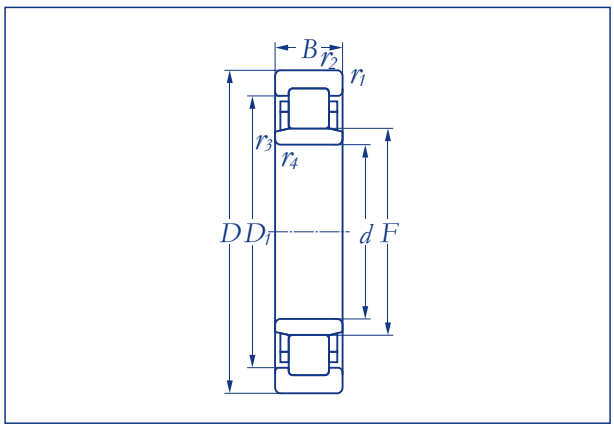
Cylindrical roller bearings single row
Series **NJ 4**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NJ 406	50,5	66,6	45,0	1,5	1,5	1,6	38	43	52	82	1,5	1,5	**HJ 406**	81	7	11,5
NJ 407	59,0	76,1	53,0	1,5	1,5	1,7	43	50	61	92	1,5	1,5	**HJ 407**	130	8	13,0
NJ 408	64,8	84,2	58,0	2,0	2,0	2,5	49	56	67	101	2,0	2,0	**HJ 408**	140	8	13,0
NJ 409	71,8	92,2	64,5	2,0	2,0	2,5	54	62	74	111	2,0	2,0	**HJ 409**	180	8	13,5
NJ 410	78,8	102,0	70,8	2,1	2,1	2,6	61	68	81	119	2,0	2,0	**HJ 410**	230	9	14,5
NJ 411	85,2	108,0	77,2	2,1	2,1	2,6	66	74	88	129	2,0	2,0	**HJ 411**	300	10	16,5
NJ 412	91,8	117,0	83,0	2,1	2,1	2,5	71	80	94	139	2,0	2,0	**HJ 412**	340	10	16,5
NJ 413	98,5	125,0	89,3	2,1	2,1	2,6	76	86	101	149	2,0	2,0	**HJ 413**	430	11	18,0
NJ 414	110,0	140,0	100,0	3,0	3,0	3,5	83	97	113	167	2,5	2,5	**HJ 414**	320	12	20,0
NJ 415	116,0	148,0	104,5	3,0	3,0	3,8	88	101	119	177	2,5	2,5	**HJ 415**	800	13	21,5
NJ 416	122,0	157,0	110,0	3,0	3,0	3,7	93	106	125	187	2,5	2,5	**HJ 416**	800	13	22,0
NJ 417	126,0	163,0	113,0	4,0	4,0	3,8	101	109	129	194	3,0	3,0	**HJ 417**	800	14	24,0
NJ 418	137,0	176,0	123,5	4,0	4,0	4,9	106	120	140	209	3,0	3,0	**HJ 418**	1.050	14	24,0
NJ 419	147,0	186,0	133,5	4,0	4,0	5,0	111	130	150	224	3,0	3,0	**HJ 419**	1.350	15	25,5
NJ 420	153,0	195,0	139,0	4,0	4,0	4,9	116	135	156	234	3,0	3,0	**HJ 420**	1.550	16	27,0
NJ 422	171,0	217,0	155,0	4,0	4,0	4,8	126	150	174	264	3,0	3,0	**HJ 422**	2.150	17	29,5
NJ 424	188,0	240,0	170,0	5,0	5,0	6,3	140	165	191	290	4,0	4,0	**HJ 424**	2.600	17	30,5

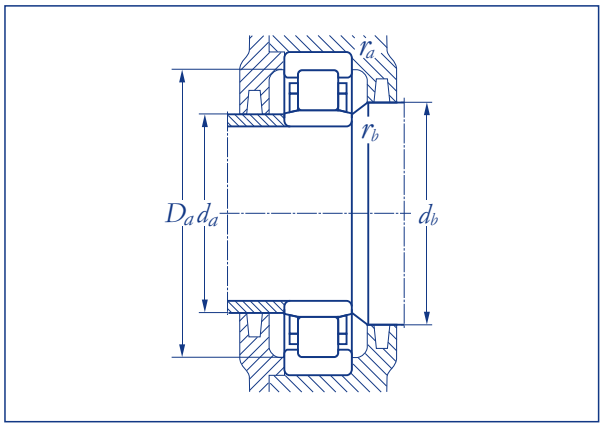
Cylindrical roller bearings single row
Series **NU 10**

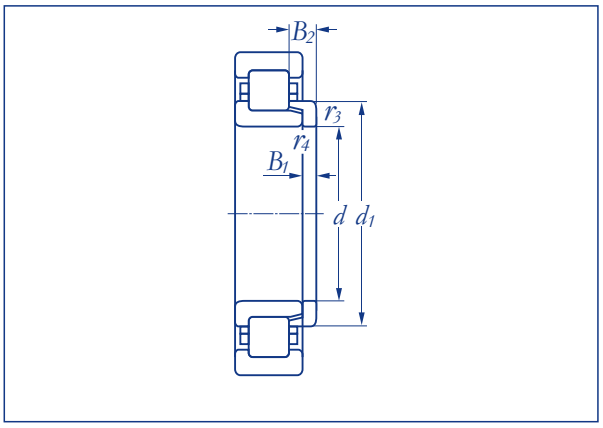


NU 10..

Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 1005	84	25	47	12	11.300	10.500	10.500	12.600
NU 1006	120	30	55	13	14.300	13.800	8.400	10.500
NU 1007 EC	160	35	62	14	28.600	30.400	7.000	9.100
NU 1008	220	40	68	15	20.000	20.800	6.600	8.400
NU 1009 EC	260	45	75	16	35.600	41.600	6.300	7.700
NU 1010	310	50	80	16	24.600	27.600	5.900	7.000
NU 1011 EC	400	55	90	18	45.700	55.600	4.900	5.900
NU 1012	480	60	95	18	299.200	35.200	4.600	5.600
NU 1012	510	65	100	18	30.400	37.200	4.400	5.200
NU 1014	700	70	110	20	44.800	53.760	4.200	4.900
NU 1015	740	75	115	20	46.600	56.800	3.900	4.600
NU 1016	990	80	125	22	52.800	65.200	3.700	4.400
NU 1017	1.050	80	130	22	54.500	69.200	3.500	4.200
NU 1018	1.350	90	140	24	64.700	83.200	3.300	3.900
NU 1019	1.400	95	145	24	67.300	88.000	3.100	3.700
NU 1020	1.450	100	150	24	68.600	91.200	30.100	3.500
NU 1021	1.850	105	160	26	80.800	109.600	2.800	3.300
NU 1022	2.300	110	170	28	102.400	132.800	2.600	3.100
NU 1024	2.450	120	180	28	107.200	146.400	2.300	2.800
NU 1026	3.750	130	200	33	132.000	179.200	2.200	2.600
NU 1028	4.000	140	210	33	137.600	196.000	2.100	2.500
NU 1030	4.850	150	225	35	155.200	220.000	1.800	2.200
NU 1032	5.950	160	240	38	183.200	260.000	1.600	2.100
NU 1034	4.900	170	260	42	220.000	320.000	1.500	1.900
NU 1036	10.500	180	280	46	268.800	380.000	1.400	1.800
NU 1038	10.000	190	290	46	277.600	400.000	1.400	1.800

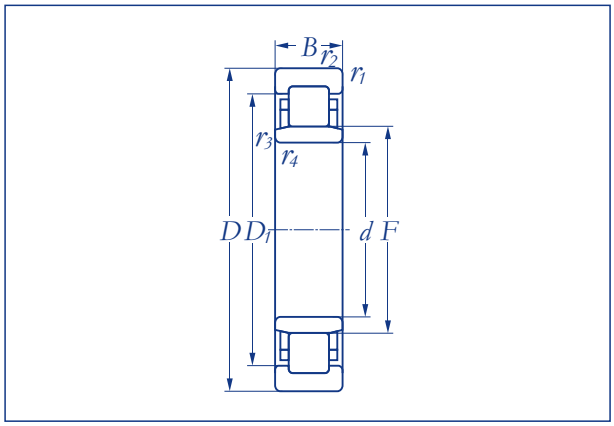
Cylindrical roller bearings single row
Series **NU 10**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 1005		38,8	30,5	0,6	0,3	2,0	27,0	29	32	43,0	0,6	0,3				
NU 1006		45,6	36,5	1,0	0,6	2,1	34,0	35	38	50,0	1,0	0,6				
NU 1007 EC		54,5	42,0	1,0	0,6	1,0	39,0	41	44	57,0	1,0	0,6				
NU 1008		57,6	47,0	1,0	0,6	2,4	44,0	45	49	63,0	1,0	0,6				
NU 1009 EC		65,3	52,5	1,0	0,6	0,9	49,0	51	54	70,0	1,0	0,6				
NU 1010		68,9	57,5	1,0	0,6	2,5	54,0	56	60	75,0	1,0	0,6				
NU 1011 EC		79,0	64,5	1,1	1,0	0,5	60,0	63	67	83,5	1,0	1,0				
NU 1012		81,6	69,5	1,1	1,0	2,9	65,0	68	72	88,5	1,0	1,0				
NU 1012		86,6	74,5	1,1	1,0	2,9	70,0	73	77	93,5	1,0	1,0				
NU 1014		95,4	80,0	1,1	1,0	3,0	75,0	78	82	103,5	1,0	1,0				
NU 1015		101,0	85,0	1,1	1,0	3,0	80,0	83	87	108,5	1,0	1,0				
NU 1016		109,0	91,5	1,1	1,0	3,3	85,0	90	94	118,5	1,0	1,0				
NU 1017		114,0	96,5	1,1	1,0	3,3	90,0	95	99	123,5	1,0	1,0				
NU 1018		122,0	103,0	1,5	1,1	3,5	96,5	101	106	132,0	1,5	1,0				
NU 1019		127,0	108,0	1,5	1,1	3,5	101,5	106	111	137,0	1,5	1,0				
NU 1020		132,0	113,0	1,5	1,1	3,5	106,5	111	116	142,0	1,5	1,0				
NU 1021		140,0	119,5	2,0	1,1	3,8	111,5	117	122	151,0	2,0	2,0				
NU 1022		149,0	125,0	2,0	1,1	3,8	116,5	123	128	161,0	2,0	1,0				
NU 1024		159,0	135,0	2,0	1,1	3,8	126,5	133	138	171,0	2,0	1,0				
NU 1026		175,0	148,0	2,0	1,1	4,7	136,5	145	151	191,0	2,0	1,0				
NU 1028		185,0	158,0	2,0	1,1	4,4	146,5	155	161	201,0	2,0	1,0				
NU 1030		198,0	169,5	2,1	1,5	4,9	158,0	167	173	214,0	2,0	1,5				
NU 1032		211,0	180,0	2,1	1,5	5,2	168,0	177	183	229,0	2,0	1,5				
NU 1034	201	227,0	193,0	2,1	2,1	5,8	181,0	190	196	249,0	2,0	2,0	**HJ 1034**	0,94	11	21,0
NU 1036	215	244,0	205,0	2,1	2,1	6,1	191.0	202	208	269,0	2,0	2,0	**HJ 1036**	1,20	12	22,5
NU 1038	225	254,0	215,0	2,1	2,1	6,1	201,0	212	218	279,0	2,0	2,0	**HJ 1038**	1,25	12	22,5

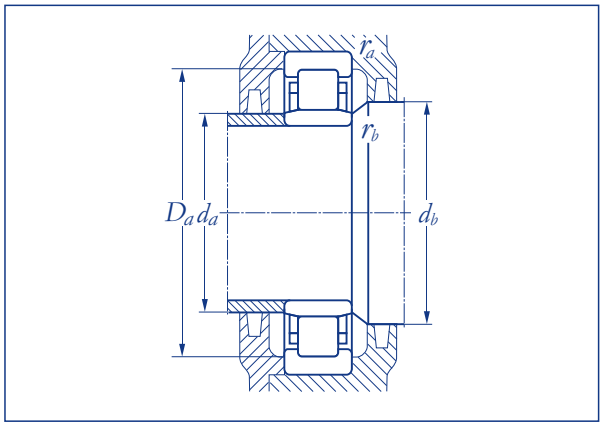
Cylindrical roller bearings single row
Series **NU 10**

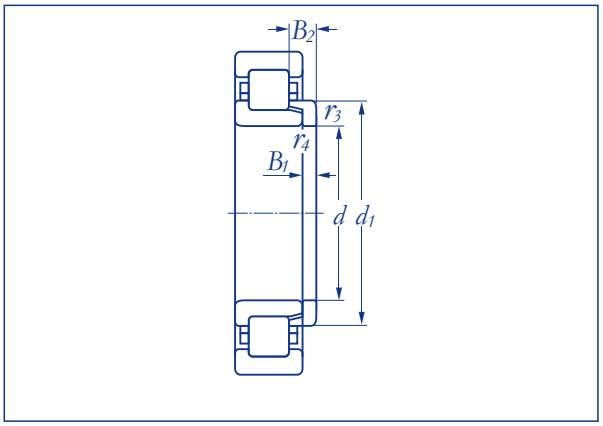


NU 10..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 1040	14.000	200	310	51	304.000	456.000	1.300	1.600
NU 1044	18.500	220	340	56	396.000	588.000	1.200	1.500
NU 1048	20.000	240	360	56	418.400	640.000	1.100	1.400
NU 1052	29.000	260	400	65	501.600	772.000	1.000	1.200
NU 1056	32.500	280	420	65	528.000	848.000	900	1.100
NU 1060	44.000	300	460	74	686.400	1.096.000	800	1.000
NU 1064	48.500	320	480	74	704.000	1.144.000	700	900
NU 1068	65.000	340	520	82	864.000	1.408.000	700	900
NU 1072	67.500	360	540	82	880.000	1.464.000	700	900
NU 1076	71.000	380	560	82	912.000	1.544.000	600	800
NU 1080	92.500	400	600	90	1.104.000	1.856.000	600	700
NU 1084	96.000	420	620	90	1.136.000	1.960.000	600	700
NU 1088	110.000	440	650	94	1.208.000	2.120.000	500	700
NU 1092	125.000	460	680	100	1.320.000	2.280.000	500	600
NU 1096	130.000	480	700	100	1.344.000	2.400.000	500	600
NU 10/500	135.000	500	720	100	1.376.000	2.480.000	500	600
NU 10/530	185.000	530	780	112	1.832.000	3.240.000	400	500
NU 10/560	210.000	560	820	115	1.864.000	3.400.000	400	500
NU 10/600	245.000	600	870	118	2.200.000	4.080.000	400	400
NU 10/710 EC	415.000	710	1030	140	3.744.000	6.800.000	200	300

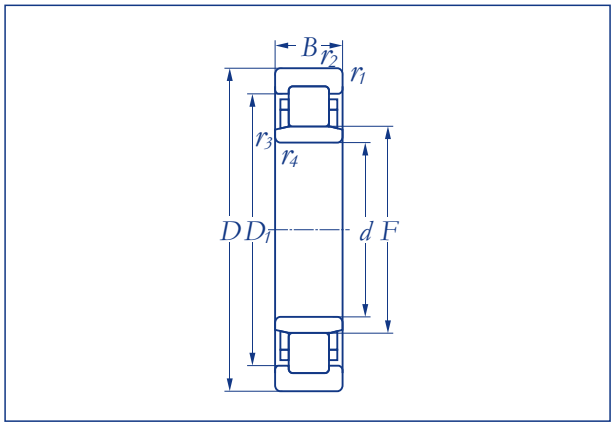
Cylindrical roller bearings single row
Series **NU 10**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 1040	239	269	229	2,1	2,1	7,0	211	225	233	299	2,0	2,0	**HJ 1040**	1.650	13	25,5
NU 1044	262	297	250	3,0	3,0	7,5	233	246	254	327	2,5	2,5	**HJ 1044**	2.100	14	27,0
NU 1048	282	317	270	3,0	3,0	7,5	253	266	274	347	2,5	2,5	**HJ 1048**	2.250	14	27,0
NU 1052	309	349	296	4,0	4,0	8,8	276	291	300	384	3,0	3,0	**HJ 1052**	3.300	16	31,5
NU 1056	329	369	316	4,0	4,0	8,8	296	311	320	404	3,0	3,0	**HJ 1056**	3.550	16	31,5
NU 1060	356	402	340	4,0	4,0	9,7	316	335	344	444	3,0	3,0	**HJ 1060**	5.150	19	36,0
NU 1064	376	422	360	4,0	4,0	9,7	336	355	364	464	3,0	3,0	**HJ 1064**	5.450	19	36,0
NU 1068	403	455	385	5,0	5,0	10,8	360	380	389	500	4,0	4,0	**HJ 1068**	7.200	21	39,5
NU 1072	423	475	405	5,0	5,0	10,8	380	400	410	520	4,0	4,0	**HJ 1072**	7.550	21	39,5
NU 1076	443	495	425	5,0	5,0	10,8	400	420	430	540	4,0	4,0	**HJ 1076**	7.980	21	39,5
NU 1080	376	527	450	5,0	5,0	14,0	420	446	455	580	4,0	4,0	**HJ 1080**	5.450	19	36,0
NU 1084	403	547	470	5,0	5,0	14,0	440	466	475	600	4,0	4,0	**HJ 1084**	7.200	21	39,5
NU 1088	423	574	493	6,0	6,0	14,7	466	488	498	624	5,0	5,0	**HJ 1088**	7.550	21	39,5
NU 1092	443	600	516	6,0	6,0	15,9	486	511	521	654	5,0	5,0	**HJ 1092**	7.980	21	39,5
NU 1096	470	620	536	6,0	6,0	15,9	506	531	541	674	5,0	5,0	**HJ 1096**	10.500	23	43,0
NU 10/500	490	640	556	6,0	6,0	11,2	526	550	561	694	5,0	5,0	**HJ 10/500**	11.000	23	43,0
NU 10/530	513	692	593	6,0	6,0	10,4	556	585	598	754	5,0	5,0		12.000	24	45,0
NU 10/560	537	726	625	6,0	6,0	12,3	586	617	630	794	5,0	5,0		14.000	25	48,0
NU 10/600	557	779	667	6,0	6,0	13,9	626	658	672	844	5,0	5,0		14.500	25	48,0
NU 10/710 EC	577	939	778	7,5	7,5	17,1	743	769	783	997	6,0	6,0		15.000	25	48,0

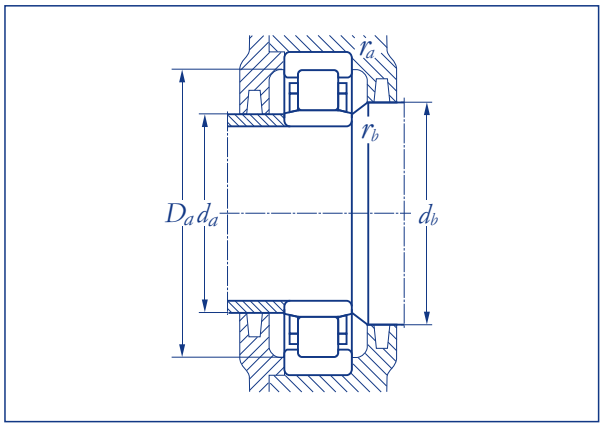
Cylindrical roller bearings single row
Series **NU 2**

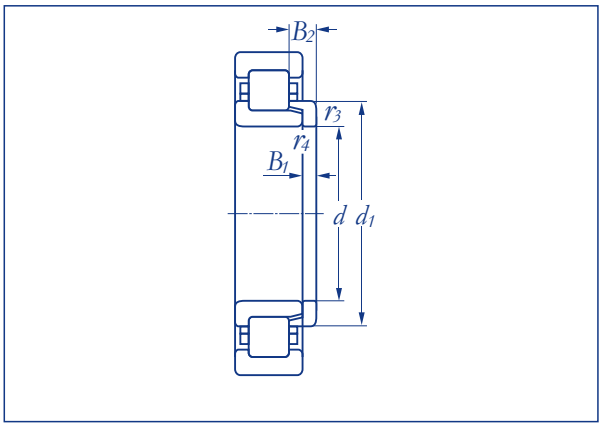


NU 2..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 202 EC	47	15	35	11	10.000	8.100	12.600	15.400
NU 203 EC	68	17	40	12	13.700	11.400	11.200	13.300
NU 204 EC	110	20	47	14	20.000	17.600	9.100	11.200
NU 205 EC	130	25	52	15	22.800	21.600	7.700	9.800
NU 206 EC	200	30	62	16	30.400	29.200	6.600	8.400
NU 207 EC	300	35	72	17	38.700	38.400	5.900	7.000
NU 208 EC	370	40	80	18	43.100	42.400	5.200	6.300
NU 209 EC	430	45	85	19	48.400	51.200	4.600	5.600
NU 210 EC	480	50	90	20	51.500	55.600	4.400	5.200
NU 211 EC	660	55	100	21	67.300	76.000	4.200	4.900
NU 212 EC	810	60	110	22	74.800	81.600	3.700	4.400
NU 213 EC	1.050	65	120	23	84.800	94.400	3.300	3.900
NU 214 EC	1.150	70	125	24	95.200	109.600	3.100	3.700
NU 215 EC	1.250	75	130	25	104.000	124.800	3.100	3.700
NU 216 EC	1.500	80	140	26	110.400	132.800	2.800	3.300
NU 217 EC	1.900	85	150	28	132.000	160.000	2.600	3.100
NU 218 EC	2.350	90	160	30	146.400	176.000	2.500	2.600
NU 219 EC	3.450	95	170	34	200.800	244.000	2.200	2.500
NU 220 EC	3.850	100	180	36	211.200	252.000	2.100	2.300
NU 221 EC	4.000	105	190	38	233.600	292.000	1.900	2.100
NU 222 EC	4.800	110	200	40	272.800	344.000	1.600	1.900
NU 224 EC	5.750	120	215	40	286.400	364.000	1.500	1.800
NU 226 EC	6.450	130	230	42	312.800	408.000	1.400	1.600
NU 228 EC	8.300	140	250	45	356.800	480.000	1.300	1.500
NU 230 EC	10.500	150	270	48	400.800	544.000	1.200	1.500
NU 232 EC	15.000	160	290	52	492.800	652.000	1.200	1.400

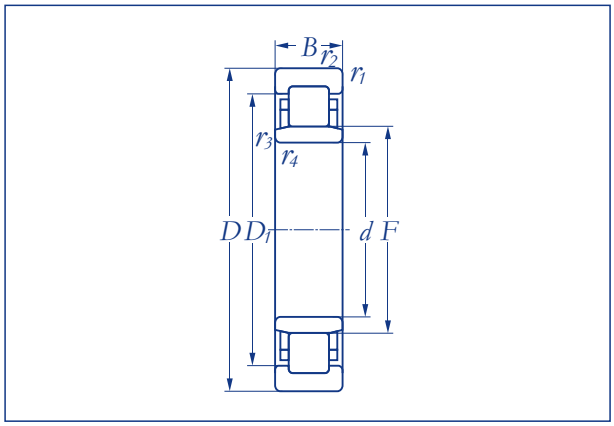
Cylindrical roller bearings single row
Series **NU 2**





Designation	Dimensions(mm)												Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max			B_1	B_2
NU 202 EC	21,9	27,9	19,3	0,6	0,3	1,0	17,0	18	21	31,0	0,6	0,3	**HJ 202 EC**	5	2,5	5,0
NU 203 EC	25,0	32,4	22,1	0,6	0,3	1,0	19,0	21	24	36,0	0,6	0,3	**HJ 203 EC**	8	3,0	5,5
NU 204 EC	29,7	38,8	26,5	1,0	0,6	1,0	24,0	25	28	42,0	1,0	0,6	**HJ 204 EC**	11	3,0	5,5
NU 205 EC	34,7	43,8	31,5	1,0	0,6	1,3	29,0	30	33	47,0	1,0	0,6	**HJ 205 EC**	14	3,0	6,0
NU 206 EC	41,2	52,5	37,5	1,0	0,6	1,3	34,0	36	39	57,0	1,0	0,6	**HJ 206 EC**	25	4,0	7,0
NU 207 EC	48,1	60,7	44,0	1,1	0,6	1,3	39,0	42	46	65,5	1,0	0,6	**HJ 207 EC**	33	4,0	7,0
NU 208 EC	54,0	67,9	49,5	1,1	1,1	1,4	46,5	48	51	73,5	1,0	1,0	**HJ 208 EC**	47	5,0	8,5
NU 209 EC	59,0	73,0	54,5	1,1	1,1	1,2	51,5	53	56	78,5	1,0	1,0	**HJ 209 EC**	52	5,0	8,5
NU 210 EC	64,0	78,0	59,5	1,1	1,1	1,5	56,5	57	62	83,5	1,0	1,0	**HJ 210 EC**	58	5,0	9,0
NU 211 EC	70,8	86,3	66,0	1,5	1,1	1,0	61,5	64	68	92,0	1,5	1,0	**HJ 211 EC**	83	6,0	9,5
NU 212 EC	77,5	95,7	72,0	1,5	1,5	1,4	68,0	70	74	102,0	1,5	1,5	**HJ 212 EC**	100	6,0	10,0
NU 213 EC	84,4	104,0	78,5	1,5	1,5	1,4	73,0	76	81	112,0	1,5	1,5	**HJ 213 EC**	120	6,0	10,0
NU 214 EC	89,4	109,0	83,5	1,5	1,5	1,2	78,0	81	86	117,0	1,5	1,5	**HJ 214 EC**	150	7,0	11,0
NU 215 EC	94,3	114,0	88,5	1,5	1,5	1,2	83,0	86	91	122,0	1,5	1,5	**HJ 215 EC**	160	7,0	11,0
NU 216 EC	101,0	123,0	95,3	2,0	2,0	1,4	89,0	93	98	131,0	2,0	2,0	**HJ 216 EC**	210	8,0	12,5
NU 217 EC	107,0	131,0	100,5	2,0	2,0	1,5	94,0	98	103	141,0	2,0	2,0	**HJ 217 EC**	240	8,0	12,5
NU 218 EC	114,0	140,0	107,0	2,0	2,0	1,8	99,0	104	110	151,0	2,0	2,0	**HJ 218 EC**	310	9,0	14,0
NU 219 EC	120,0	149,0	112,5	2,1	2,1	1,7	106,0	110	115	159,0	2,0	2,0	**HJ 219 EC**	330	9,0	14,0
NU 220 EC	127,0	157,0	119,0	2,1	2,1	1,7	111,0	116	122	169,0	2,0	2,0	**HJ 212 EC**	420	10,0	15,0
NU 221 EC	134,0	164,0	125,0	2,1	2,1	2,0	116,0	122	128	179,0	2,0	2,0	**HJ 221 EC**	510	10,0	16,0
NU 222 EC	141,0	174,0	132,5	2,1	2,1	2,1	121,0	130	135	189,0	2,0	2,0	**HJ 222 EC**	600	12,0	17,0
NU 224 EC	153,0	188,0	143,5	2,1	2,1	1,9	131,0	140	145	204,0	2,0	2,0	**HJ 224 EC**	690	18,0	17,0
NU 226 EC	164,0	202,0	153,5	3,0	3,0	2,1	143,0	150	156	217,0	2,5	2,5	**HJ 226 EC**	750		17,0
NU 228 EC	179,0	217,0	169,0	3,0	3,0	2,4	153,0	166	172	237,0	2,5	2,5	**HJ 228 EC**	960		18,0
NU 230 EC	193,0	234,0	182,0	3,0	3,0	2,5	163,0	178	185	257,0	2,5	2,5	**HJ 230 EC**	1.250	12,0	19,5
NU 232 EC	206,0	250,0	195,0	3,0	3,0	2,7	173,0	191	198	277,0	2,5	3,0	**HJ 232 EC**	1.450	12,0	20,0

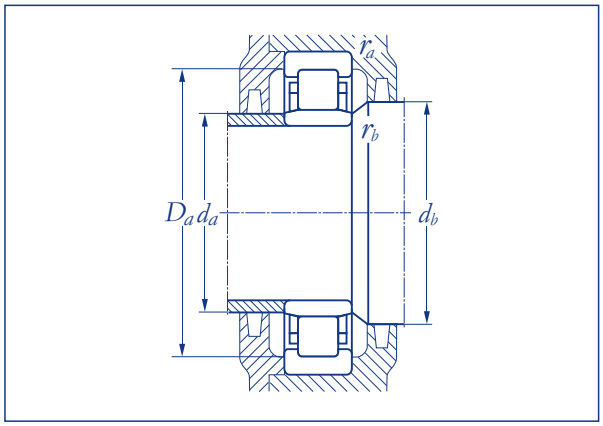
Cylindrical roller bearings single row
Series **NU 2**

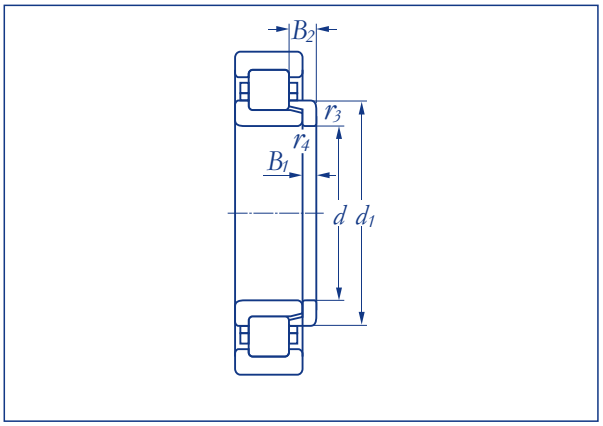


NU 2..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 234 EC	19.000	170	310	52	501.600	680.000	1.100	1.300
NU 236 EC	19.500	180	320	55	554.400	772.000	1.100	3.000
NU 238 EC	23.500	190	340	32	176.000	212.000	2.300	2.800
NU 240 EC	28.500	200	360	58	612.000	84.800	1.000	1.200
NU 244	38.500	200	400	65	612.000	86.400	1.000	1.200
NU 248	51.000	240	440	72	761.600	1.096.000	900	1.100
NU 252	68.500	260	480	80	936.000	1.360.000	700	900
NU 256	71.500	280	500	80	912.000	1.360.000	700	900
NU 264	115.000	320	580	92	1.288.000	1.960.000	600	800

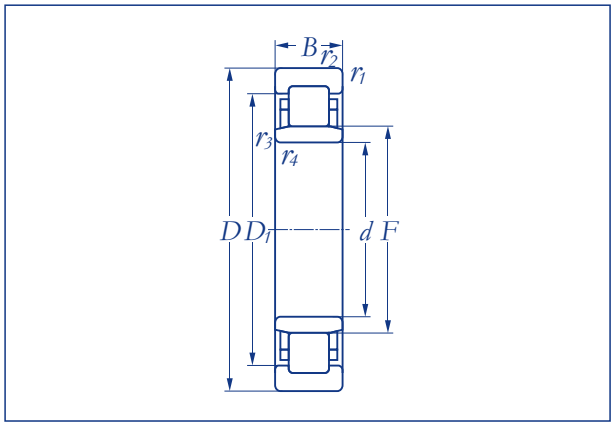
Cylindrical roller bearings single row
Series **NU 2**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 234 EC	220	269	207	4	4	2,9	186	203	210	210	3	3	**HJ 234 EC**	1.650	12	20,0
NU 236 EC	230	279	217	4	4	2,9	196	213	220	220	3	3	**HJ 236 EC**	1.700	12	20,0
NU 238 EC	244	295	230	4		3,0	206	226	234	234	3	3	**HJ 238 EC**	2.100	13	21,5
NU 240 EC	258	312	243	4	4	2,6	216	239	247	384	3	3	**HJ 240 EC**	2.550	14	23,0
NU 244	286	332	270	4	4	2,3	236	263	276	384	3	3	**HJ 244**	3.650	15	27,5
NU 248	313	365	295	4	4	3,4	256	288	299	424	3	3	**HJ 248**	4.700	16	29,5
NU 252	340	397	320	5	5	3,4	280	313	324	460	4	4	**HJ 252**	6.300	18	33,0
NU 256	360	417	340	5	5	3,8	300	333	344	480	4	4	**HJ 256**	6.700	18	33,0
NU 264	415	485	390	5	5	5,3	340	383	394	560	4	4	**HJ 264**	10.500	21	37,0

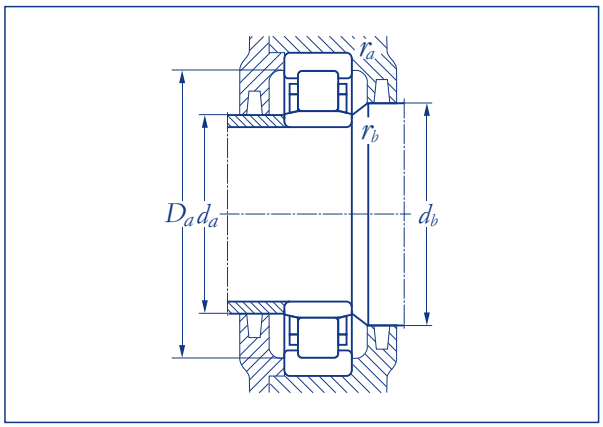
Cylindrical roller bearings single row
Series **NU 22**

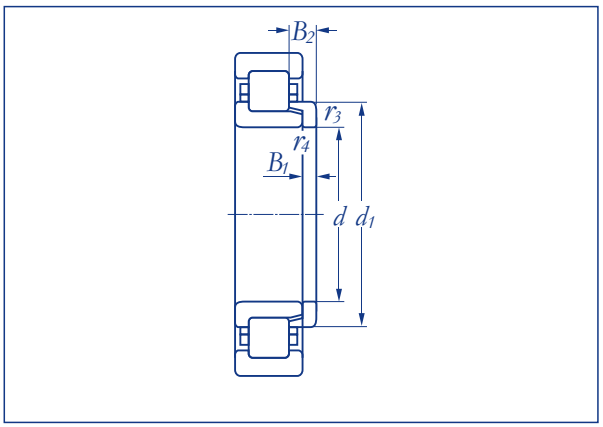


NU 22..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 2204 EC	140	20	47	18	23.700	22.000	9.100	11.200
NU 2205 EC	160	25	52	18	27.200	27.200	7.700	9.800
NU 2206 EC	260	30	62	20	38.700	39.200	6.600	8.400
NU 2207 EC	400	35	72	23	47.500	50.400	5.900	7.000
NU 2208 EC	490	40	80	23	56.300	60.000	5.200	6.300
NU 2209 EC	520	45	85	23	58.900	65.200	4.600	5.600
NU 2210 EC	560	50	90	23	62.400	70.400	4.400	5.200
NU 2211 EC	790	55	100	25	79.200	94.400	4.200	4.900
NU 2212 EC	1.100	60	110	28	102.400	122.400	3.700	4.400
NU 2213 EC	1.400	65	120	31	117.600	144.000	3.300	3.900
NU 2214 EC	1.500	70	125	31	123.200	154.400	3.100	3.700
NU 2215 EC	1.600	75	130	31	128.800	166.400	3.100	3.700
NU 2216 EC	2.000	80	140	33	149.600	196.000	2.800	3.300
NU 2217 EC	2.450	85	150	36	172.800	224.000	2.600	3.100
NU 2218 EC	3.150	90	160	40	193.600	252.000	2.500	3.000
NU 2219 EC	4.000	95	170	43	228.800	300.000	2.300	2.800
NU 2220 EC	4.750	100	180	46	268.800	360.000	2.200	2.600
NU 2222 EC	6.700	110	200	53	304.000	416.000	1.900	2.300
NU 2224 EC	8.300	120	215	58	365.600	504.000	1.600	2.100
NU 2226 EC	10.500	130	230	64	422.400	588.000	1.500	1.900
NU 2228 EC	13.500	140	250	68	457.600	664.000	1.400	1.800
NU 2230 EC	19.000	150	270	73	501.600	744.000	1.300	1.600
NU 2232 EC	24.000	160	290	80	647.200	960.000	1.200	1.500
NU 2234 EC	30.000	170	310	86	774.400	1.144.000	1.200	1.500
NU 2236 EC	31.500	180	320	86	808.000	1.200.000	1.100	1.400
NU 2238 EC	39.000	190	340	92	880.000	1.328.000	1.100	1.300

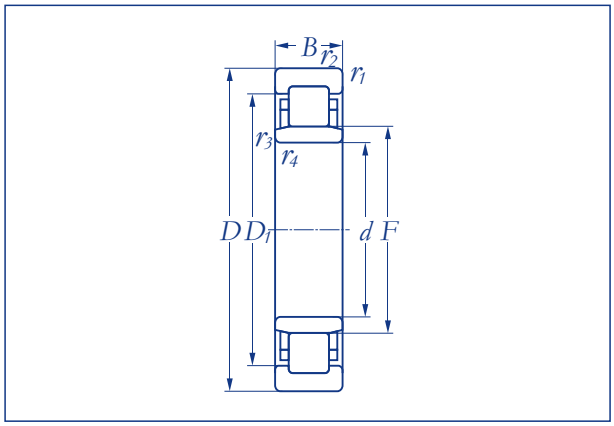
Cylindrical roller bearings single row
Series **NU 22**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 2204 EC	29,7	38,8	26,5	1,0	0,6	2,0	24,0	25	28	42,0	1,0	0,6	**HJ 2204 EC**	12	3	7,5
NU 2205 EC	34,7	43,8	31,5	1,0	0,6	1,8	29,0	30	33	47,0	1,0	0,6	**HJ 2205 EC**	14	3	6,5
NU 2206 EC	41,2	52,5	37,5	1,0	0,6	1,8	34,0	36	39	57,0	1,0	0,6	**HJ 2206 EC**	28	4	7,5
NU 2207 EC	48,1	60,7	44,0	1,1	0,6	2,8	39,0	42	46	65,5	1,0	0,6	**HJ 2207 EC**	36	4	8,5
NU 2208 EC	54,0	67,9	49,5	1,1	1,1	1,9	46,5	48	51	73,5	1,0	1,0	**HJ 2208 EC**	48	5	9,0
NU 2209 EC	59,0	73,0	54,5	1,1	1,1	1,7	51,5	53	56	78,5	1,0	1,0	**HJ 2209 EC**	53	5	9,0
NU 2210 EC	64,0	78,0	59,5	1,1	1,1	1,5	56,5	57	62	83,5	1,0	1,0	**HJ 2210 EC**	58	5	9,0
NU 2211 EC	70,8	86,3	66,0	1,5	1,1	1,5	61,5	64	68	92,0	1,5	1,0	**HJ 2211 EC**	85	6	10,0
NU 2212 EC	77,5	95,7	72,0	1,5	1,5	1,4	68,0	70	74	102,0	1,5	1,5	**HJ 2212 EC**	100	6	10,0
NU 2213 EC	84,4	104,0	78,5	1,5	1,5	1,9	73,0	76	81	112,0	1,5	1,5	**HJ 2213 EC**	120	7	10,5
NU 2214 EC	89,4	109,0	83,5	1,5	1,5	1,7	78,0	81	86	117,0	1,5	1,5	**HJ 2214 EC**	150	7	11,5
NU 2215 EC	94,3	114,0	88,5	1,5	1,5	1,7	83,0	86	91	122,0	1,5	1,5	**HJ 2215 EC**	160	8	11,5
NU 2216 EC	101,0	123,0	95,3	2,0	2,0	1,4	89,0	93	98	131,0	2,0	2,0	**HJ 2216 EC**	210	8	12,5
NU 2217 EC	107,0	131,0	100,5	2,0	2,0	2,0	94,0	98	103	141,0	2,0	2,0	**HJ 2217 EC**	240	9	12,5
NU 2218 EC	114,0	140,0	107,0	2,0	2,0	2,6	99,0	104	110	151,0	2,0	2,0	**HJ 2218 EC**	310	9	15,0
NU 2219 EC	120,0	149,0	112,5	2,1	2,1	3,0	106,0	110	115	159,0	2,0	2,0	**HJ 2219 EC**	350	10	15,5
NU 2220 EC	127,0	157,0	119,0	2,1	2,1	2,5	111,0	116	122	169,0	2,0	2,0	**HJ 2220 EC**	430	11	16,0
NU 2222 EC	141,0	174,0	132,5	2,1	2,1	3,7	121,0	129	135	189,0	2,0	2,0	**HJ 2222 EC**	630	11	19,5
NU 2224 EC	153,0	188,0	143,5	2,1	21	3,8	131,0	140	146	204,0	2,0	2,0	**HJ 2224 EC**	740	11	20,0
NU 2226 EC	164,0	202,0	153,5	3,0	3,0	4,3	143,0	149	156	217,0	2,5	2,5	**HJ 2226 EC**	830	11	21,0
NU 2228 EC	179,0	217,0	169,0	3,0	3,0	4,4	153,0	164	172	237,0	2,5	2,5	**HJ 2228 EC**	1.050	11	23,0
NU 2230 EC	194,0	234,0	182,0	3,0	3,0	4,9	163,0	179	185	257,0	2,5	2,5	**HJ 2230 EC**	1.350	12	24,5
NU 2232 EC	205,0	252,0	193,0	3,0	3,0	4,5	173,0	188	196	277,0	2,5	2,5	**HJ 2232 EC**	1.550	12	24,5
NU 2234 EC	219,0	270,0	205,0	4,0	4,0	4,2	186,0	200	208	294,0	3,0	3,0	**HJ 2234 EC**	1.750	12	24,0
NU 2236 EC	229,0	280,0	215,0	4,0	4,0	4,2	196,0	210	218	304,0	3,0	3,0	**HJ 2236 EC**	1.850	13	24,0
NU 2238 EC	242,0	297,0	228,0	4,0	4,0	5,0	206,0	222	232	324,0	3,0	3,0	**HJ 2238 EC**	2.300	14	26,5

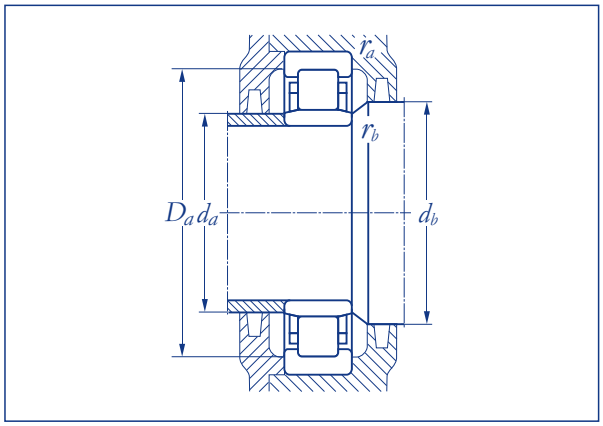
Cylindrical roller bearings single row
Series **NU 22**

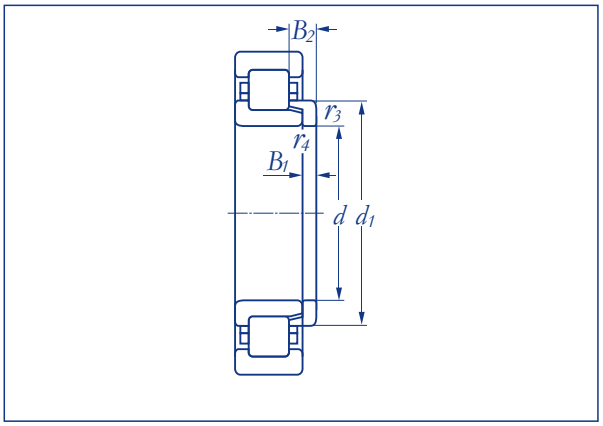


NU 22..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 2240 EC	46.000	200	360	98	984.000	1.520.000	1.000	1.200
NU 2244 EC	62.500	220	400	108	1.256.000	1.824.000	800	1.100
NU 2248	84.000	240	440	120	1.160.000	1.888.000	800	1.000
NU 2252	110.000	260	480	130	1.432.000	2.400.000	700	900
NU 2256 EC	115.000	280	500	130	1.760.000	2.600.000	600	800
NU 2260	145.000	300	540	140	1.672.000	2.760.000	600	800
NU 2264	180.000	320	580	150	1.904.000	3.200.000	600	700
NU 2268	225.000	340	620	165	2.112.000	3.600.000	500	700
NU 2272	255.000	360	650	170	2.336.000	3.920.000	500	500
NU 2276	285.000	380	680	175	2.512.000	4.400.000	500	500

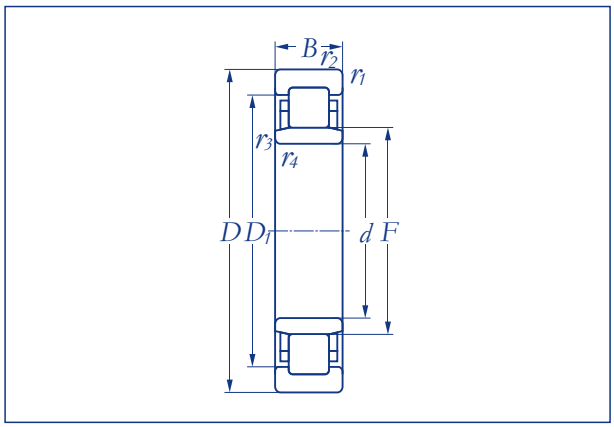
Cylindrical roller bearings single row
Series **NU 22**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 2240 EC	256	313	241	4	4	5,1	216	235	245	344	3	3	**HJ 2240 EC**	2.750	15	28,0
NU 2244 EC	279	349	259	4	4	7,9	236	255	264	384	3	3	**HJ 2244 EC**	3.500	16	29,0
NU 2248	313	365	295	4	4	4,3	256	284	299	424	3	3	**HJ 2248**	5.450	11	38,5
NU 2252	340	397	320	5	5	4,3	280	309	324	460	4	4	**HJ 2252**	7.050	20	38,0
NU 2256 EC	350	433	327	5	5	10,2	300	320	331	480	4	4	**HJ 2256 EC**	6.750	21	45,0
NU 2260	387	451	364	5	5	5,6	320	352	368	520	4	4	**HJ 2260**	9.900		48,5
NU 2264	415	485	390	5	5	5,9	340	377	394	560	4	4	**HJ 2264**	12.500	11	
NU 2268		515	416	6	6	8,0	366	401	421	594	5	5				
NU 2272		542	437	6	6	16,7	386	428	442	624	5	5				
NU 2276		567	462	6	6	8,3	406	447	467	654	5	5				

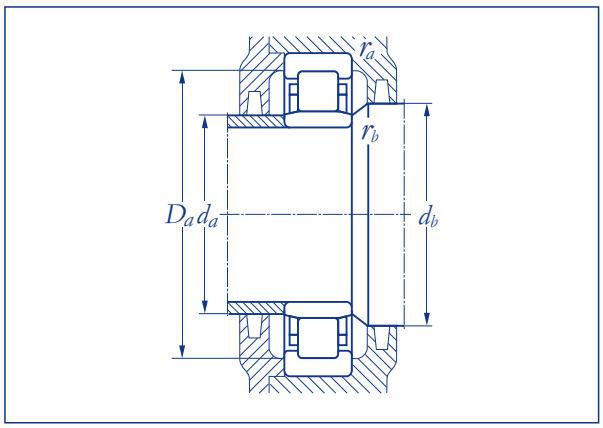
Cylindrical roller bearings single row
Series **NU 23**

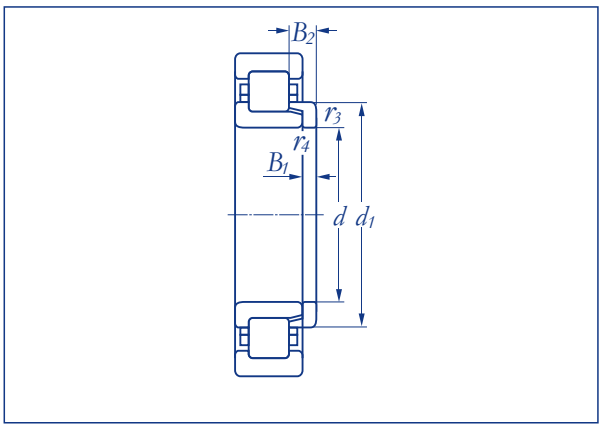


NU 23..

Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 2304 EC	210	20	52	21	33.000	30.400	7.700	9.800
NU 2305 EC	350	25	62	24	44.800	44.000	6.300	7.700
NU 2306 EC	530	30	72	27	58.900	60.000	5.600	6.600
NU 2307 EC	720	35	80	31	73.000	78.400	4.900	5.900
NU 2308 EC	940	40	90	33	89.600	96.000	4.400	5.200
NU 2309 EC	1.300	45	100	36	110.400	122.400	3.900	4.600
NU 2310 EC	1.700	50	110	40	128.800	148.800	3.500	4.200
NU 2311 EC	2.200	55	120	43	160.800	185.600	3.300	3.900
NU 2312 EC	2.500	60	130	46	179.200	212.000	3.000	3.500
NU 2313 EC	3.300	65	140	48	200.800	232.000	2.800	3.300
NU 2314 EC	4.000	70	150	51	220.000	260.000	2.500	3.000
NU 2315 EC	4.900	75	160	55	264.000	320.000	2.300	2.800
NU 2316 EC	5.850	80	170	58	286.400	352.000	2.200	2.600
NU 2317 EC	6.850	85	180	60	316.800	392.000	2.100	2.500
NU 2318 EC	8.000	90	190	64	352.000	432.000	1.900	2.300
NU 2319 EC	9.350	95	200	67	374.400	468.000	1.800	2.200
NU 2320 EC	12.000	100	215	73	466.400	588.000	1.600	2.100
NU 2322 EC	17.000	110	240	80	545.600	720.000	1.400	1.800
NU 2324 EC	24.000	120	260	86	633.600	832.000	1.300	1.600
NU 2326 EC	30.000	130	280	93	748.000	1.000.000	1.200	1.500
NU 2328 EC	37.000	140	300	102	840.000	1.144.000	1.200	1.500
NU 2330 EC	45.000	150	320	108	952.000	1.304.000	1.100	1.400
NU 2332 EC	53.000	160	340	114	1.056.000	1.488.000	1.000	1.200
NU 2334	63.000	170	360	120	984.000	1.440.000	900	1.100
NU 2336	73.000	180	380	126	1.120.000	1.632.000	900	1.100
NU 2338 EC	82.500	190	400	132	1.464.000	2.040.000	800	1.000

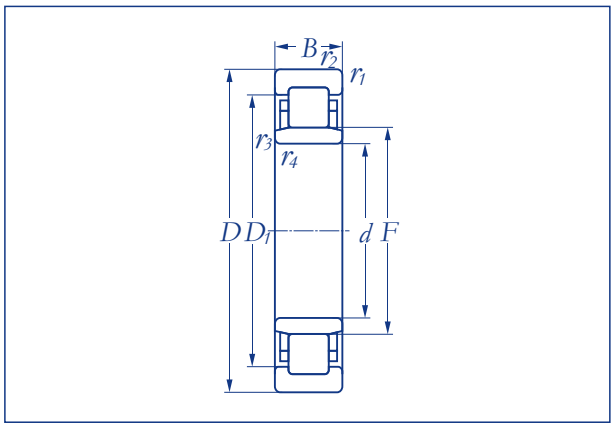
Cylindrical roller bearings single row
Series **NU 23**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 2304 EC	31,2	42,4	27,5	1,1	0,6	1,9	24,0	26	29		1,0	0,6	**HJ 2304 EC**	18	4	7,5
NU 2305 EC	38,1	50,7	34,0	1,1	1,1	2,3	31,5	32	36		1,0	1,0	**HJ 2305 EC**	25	4	98,0
NU 2306 EC	45,0	58,9	40,5	1,1	1,1	2,4	36,5	39	42	91	1,0	1,0	**HJ 2306 EC**	42	5	9,5
NU 2307 EC	51,0	66,3	46,2	1,5	1,1	2,7	41,5	44	48		1,5	1,0	**HJ 2307 EC**	62	6	11,0
NU 2308 EC	57,5	75,6	52,0	1,5	1,5	2,9	48,0	50	54		1,5	1,5	**HJ 2308 EC**	88	7	12,5
NU 2309 EC	64,4	83,8	58,5	1,5	1,5	3,2	53,0	56	61		1,5	1,5	**HJ 2309 EC**	10	7	13,0
NU 2310 EC	71,2	92,1	65,0	2,0	2,0	3,4	59,0	63	67		2,0	2,0	**HJ 2310 EC**	150	8	14,5
NU 2311 EC	77,5	101,0	70,5	2,0	2,0	3,5	64,0	68	73		2,0	2,0	**HJ 2311 EC**	190	9	15,5
NU 2312 EC	84,3	110,0	77,0	2,1	2,1	3,6	71,0	74	79		2,0	2,0	**HJ 2312 EC**	230	9	16,0
NU 2313 EC	90,5	119,0	82,5	2,1	2,1	4,7	76,0	80	85		2,0	2,0	**HJ 2313 EC**	290	10	18,0
NU 2314 EC	97,3	127,0	89,0	2,1	2,1	4,8	81,0	86	91		2,0	2,0	**HJ 2314 EC**	340	10	18,5
NU 2315 EC	104,0	136,0	95,0	2,1	2,1	4,8	86,0	92	97		2,0	2,0	**HJ 2315 EC**	420	11	19,5
NU 2316 EC	110,0	144,0	101,0	2,1	2,1	5,1	91,0	98	104		2,0	2,0	**HJ 2316 EC**	480	11	20,0
NU 2317 EC	117,0	153,0	108,0	3,0	3,0	5,8	98,0	105	111		2,5	2,5	**HJ 2317 EC**	590	12	22,0
NU 2318 EC	124,0	162,0	113,5	3,0	3,0	6,0	103,0	110	116		2,5	2,5	**HJ 2318 EC**	650	12	22,0
NU 2319 EC	132,0	170,0	121,5	3,0	3,0	6,9	108,0	118	124		2,5	2,5	**HJ 2319 EC**	810	13	24,5
NU 2320 EC	139,0	182,0	127,5	3,0	3,0	5,9	113,0	124	130		2,5	2,5	**HJ 2320 EC**	930	13	23,5
NU 2322 EC	155,0	201,0	143,0	3,0	3,0	7,5	123,0	139	146		2,5	2,5	**HJ 2322 EC**	1.250	14	26,5
NU 2324 EC	168,0	219,0	154,0	3,0	3,0	7,2	133,0	150	157		3,0	3,0	**HJ 2326 EC**	1.700	14	28,0
NU 2326 EC	181,0	236,0	167,0	4,0	4,0	8,7	146,0	163	170		3,0	3,0	**HJ 2328 EC**	2.150	15	31,0
NU 2328 EC	195,0	252,0	180,0	4,0	4,0	9,7	156,0	176	183		2,5	2,5	**HJ 2329 EC**	1.450	12	20,0
NU 2330 EC	209,0	270,0	193,0	4,0	4,0	10,5	166,0	189	196		3,0	3,0	**HJ 2330 EC**	2.500	15	31,5
NU 2332 EC	221,0	286,0	204,0	4,0	4,0	11,0	176,0	200	207		3,0	3,0	**HJ 2332 EC**	2.800	15	32,0
NU 2334	238,0	290,0	220,0	4,0	4,0	5,2	186,0	209	223		3,0	3,0	**HJ 2334**	3.850	16	38,5
NU 2336	252,0	306,0	232,0	4,0	4,0	5,1	196,0	221	236		3,0	3,0	**HJ 2336**	4.600	17	40,0
NU 2338 EC		341,0	240,0	5,0	5,0	9,5	210,0	235	249		4,0	4,0				

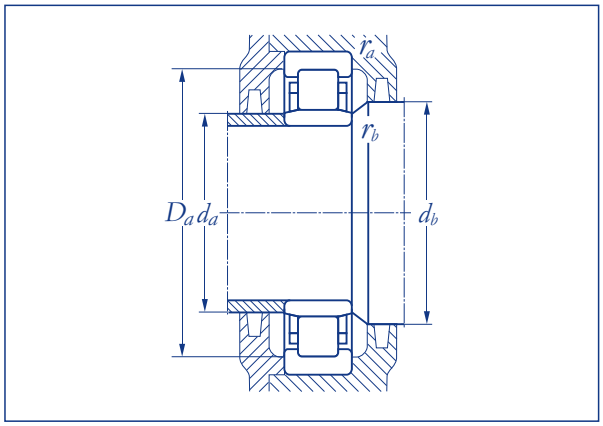
Cylindrical roller bearings single row
Series **NU 23**

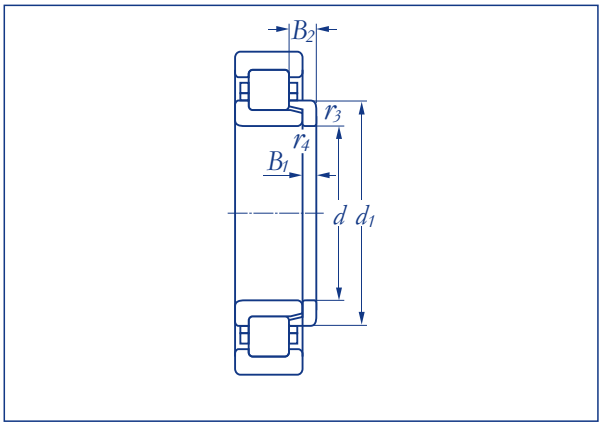


NU 23..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 2340 EC	96.000	200	420	138	1.640.000	2.280.000	800	1.000
NU 2344 EC	120.000	220	460	145	1.864.000	2.600.000	700	900
NU 2348	155.000	240	500	155	1.696.000	2.600.000	600	800
NU 2356	230.000	280	580	175	2.160.000	3.440.000	500	700

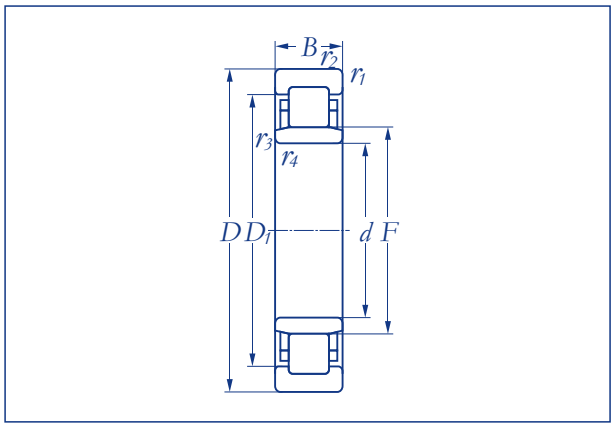
Cylindrical roller bearings single row
Series **NU 23**





Designation	Dimensions(mm)												Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max			B_1	B_2
NU 2340 EC		350	247	5	5	9,4	220	241	251		4	4				
NU 2344 EC	301	384	275	5	5	10,4	240	268	280		4	4	**HJ 2344 EC**	6.800	20	40,0
NU 2348	335	403	310	5	5	6,4	260	296	314		4	4	**HJ 2348**	10.500	22	52,0
NU 2356	390	467	362	6	6	6,6	306	347	366		5	5	**HJ 2356**	141.000	26	58,5

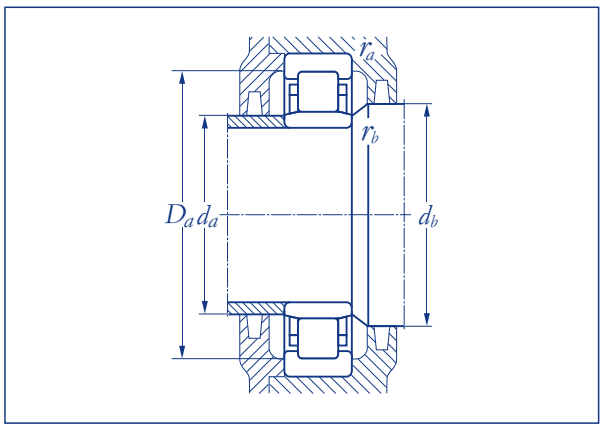
Cylindrical roller bearings single row
Series **NU 3**

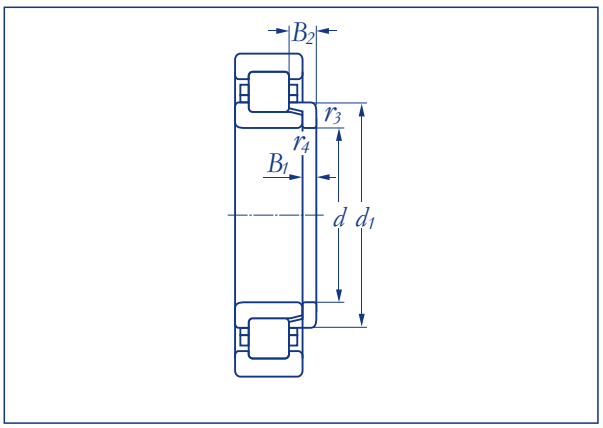


NU 3..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 302 EC	86	15	42	13	15.500	12.200	11.200	13.300
NU 304 EC	150	20	52	15	24.600	20.800	8.400	10.500
NU 305 EC	240	25	62	17	32.100	29.200	6.600	8.400
NU 306 EC	360	30	72	19	40.900	38.400	6.300	7.700
NU 307 EC	480	35	80	21	51.500	50.400	5.600	6.600
NU 308 EC	650	40	90	23	64.700	62.400	4.600	5.600
NU 309 EC	900	45	100	25	79.200	80.000	4.400	5.200
NU 310 EC	1.150	50	110	27	88.000	89.600	3.500	4.200
NU 311 EC	1.450	55	120	29	110.400	114.400	3.300	3.900
NU 312 EC	1.800	60	130	31	120.800	128.000	3.000	3.500
NU 313 EC	2.250	65	140	33	146.400	156.800	2.800	3.300
NU 314 EC	2.750	70	150	35	164.000	182.400	2.500	3.000
NU 315 EC	3.300	75	160	37	193.600	212.000	2.300	2.800
NU 316 EC	3.950	80	170	39	208.000	232.000	2.200	2.600
NU 317 EC	4.700	85	180	41	237.600	268.000	2.100	2.500
NU 318 EC	5.450	90	190	43	255.200	288.000	1.900	2.300
NU 319 EC	6.250	95	200	45	272.800	312.000	1.800	2.200
NU 320 EC	7.600	100	215	47	312.800	352.000	1.600	2.100
NU 321 EC	8.800	105	225	49	352.000	400.000	1.500	1.900
NU 322 EC	10.500	110	240	50	374.400	432.000	1.400	1.800
NU 324 EC	13.500	120	260	55	431.200	496.000	1.300	1.600
NU 326 EC	18.500	130	280	58	501.600	600.000	1.200	1.500
NU 328 EC	22.500	140	300	62	545.600	664.000	1.200	1.500
NU 330 EC	27.500	150	320	65	624.800	772.000	1.100	1.400
NU 332 EC	32.500	160	340	68	704.000	864.000	1.000	1.200
NU 334	38.500	170	360	72	647.200	832.000	1.100	1.300

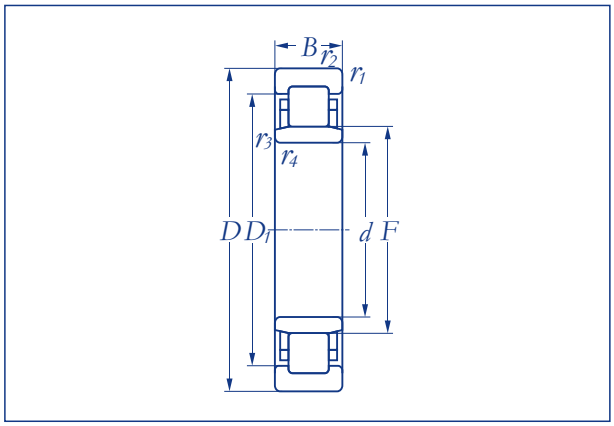
Cylindrical roller bearings single row
Series **NU 3**





Designation	Dimensions(mm)												Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max			B_1	B_2
NU 302 EC	24,3	33,0	21,0	1,0	0,6	1,0	19,0	20	22	37,0	1,0	0,6	**HJ 302 EC**	9	3	5,5
NU 304 EC	31,2	42,4	27,5	1,1	0,6	0,9	24,0	26	29	45,5	1,0	0,6	**HJ 304 EC**	17	4	6,5
NU 305 EC	38,1	50,7	34,0	1,1	1,1	1,3	31,5	32	36	55,5	1,0	1,0	**HJ 305 EC**	23	4	7,0
NU 306 EC	45,0	58,9	40,5	1,1	1,1	1,4	36,5	39	42	65,5	1,0	1,0	**HJ 306 EC**	40	5	8,5
NU 307 EC	51,0	66,3	46,2	1,5	1,1	1,2	41,5	44	48	72,0	1,5	1,0	**HJ 307 EC**	58	6	9,5
NU 308 EC	57,5	75,6	52,0	1,5	1,5	1,4	48,0	50	54	82,0	1,5	1,5	**HJ 308 EC**	84	7	11,0
NU 309 EC	64,4	83,8	58,5	1,5	1,5	1,7	53,0	56	61	92,0	1,5	1,5	**HJ 308 EC**	110	7	11,5
NU 310 EC	71,2	92,1	65,0	2,0	2,0	1,9	59,0	63	67	101,0	2,0	2,0	**HJ 310 EC**	140	8	13,0
NU 311 EC	77,5	101,0	70,5	2,0	2,0	2,0	64,0	68	73	111,0	2,0	2,0	**HJ 311 EC**	190	9	14,0
NU 312 EC	84,3	110,0	77,0	2,1	2,1	2,1	71,0	74	79	119,0	2,0	2,0	**HJ 312 EC**	220	9	14,5
NU 313 EC	90,5	119,0	82,5	2,1	2,1	2,2	76,0	80	85	129,0	2,0	2,0	**HJ 313 EC**	270	10	15,5
NU 314 EC	97,3	127,0	89,0	2,1	2,1	1,8	81,0	86	91	139,0	2,0	2,0	**HJ 314 EC**	320	10	15,5
NU 315 EC	104,0	136,0	95,0	2,1	2,1	1,8	86,0	92	97	149,0	2,0	2,0	**HJ 315 EC**	390	11	16,5
NU 316 EC	110,0	144,0	101,0	2,1	2,1	2,1	91,0	98	104	159,0	2,0	2,0	**HJ 316 EC**	440	11	17,0
NU 317 EC	117,0	153,0	108,0	3,0	3,0	2,3	98,0	105	111	167,0	2,5	2,5	**HJ 317 EC**	550	12	18,5
NU 318 EC	124,0	162,0	113,5	3,0	3,0	2,5	103,0	110	116	177,0	2,5	2,5	**HJ 318 EC**	600	12	18,5
NU 319 EC	132,0	170,0	121,5	3,0	3,0	2,9	108,0	118	124	187,0	2,5	2,5	**HJ 319 EC**	760	13	20,5
NU 320 EC	139,0	182,0	127,5	3,0	3,0	2,9	113,0	124	130	202,0	2,5	2,5	**HJ 320 EC**	870	13	20,5
NU 321 EC	145,0	190,0	133,0	3,0	3,0	3,4	118,0	130	136	212,0	2,5	2,5	**HJ 321 EC**	1.000	13	20,5
NU 322 EC	155,0	201,0	143,0	3,0	3,0	3,0	123,0	139	146	227,0	2,5	2,5	**HJ 322 EC**	1.200	14	22,0
NU 324 EC	168,0	219,0	154,0	3,0	3,0	3,7	133,0	150	157	247,0	2,5	2,5	**HJ 324 EC**	1.400	14	22,5
NU 326 EC	181,0	236,0	167,0	4,0	4,0	3,7	146,0	163	170	264,0	3,0	3,0	**HJ 326 EC**	1.600	14	23,0
NU 328 EC	195,0	252,0	180,0	4,0	4,0	3,7	156,0	176	183	284,0	3,0	3,0	**HJ 328 EC**	2.000	15	25,0
NU 330 EC	209,0	270,0	193,0	4,0	4,0	4,0	166,0	189	196	304,0	3,0	3,0	**HJ 330 EC**	2.300	15	25,0
NU 332 EC	221,0	286,0	204,0	4,0	4,0	4,0	176,0	200	207	324,0	3,0	3,0	**HJ 332 EC**	2.550	15	25,0
NU 334	238,0	290,0	220,0	4,0	4,0	4,6	186,0	214	223	344,0	3,0	3,0	**HJ 334**	3.300	16	29,5

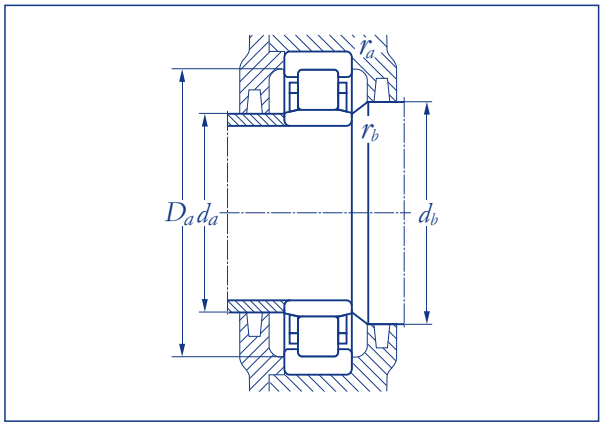
Cylindrical roller bearings single row
Series **NU 3**

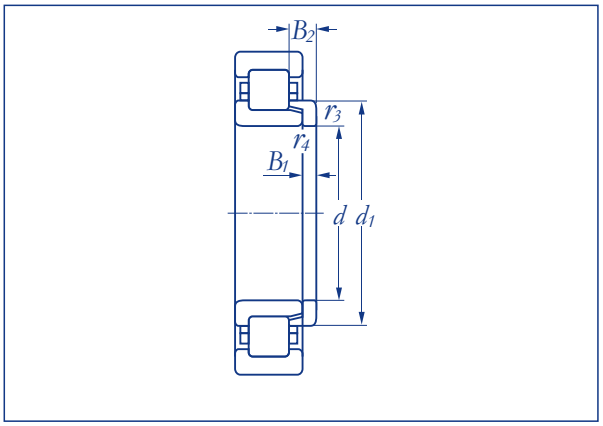


NU 3..

Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 336	42.500	180	380	75	730.400	944.000	1.000	1.200
NU 338 EC	50.000	190	400	79	912.000	1.200.000	800	1.000
NU 340	56.000	200	420	80	792.000	1.056.000	900	1.100
NU 344	72.500	220	460	88	968.000	1.304.000	800	1.000
NU 348	94.500	240	500	95	1.160.000	1.600.000	700	900

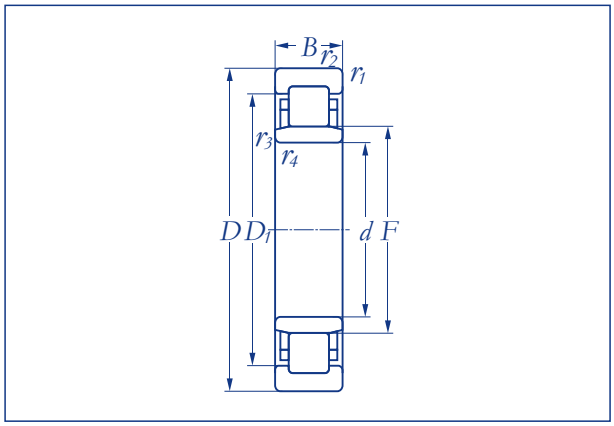
Cylindrical roller bearings single row
Series **NU 3**





Designation	Dimensions(mm)												Angle ring designation	Weight (g)	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max			B_1	B_2
NU 336	252	306	232	4	4	4,4	196	226	236	364	3	3	**HJ 336**	3.950	17	30,5
NU 338 EC	264	338	245	5	5	4,3	210	240	249	380	4	4	**HJ 338 EC**	4.300	18	29,0
NU 340	280	337	260	5	5	4,0	220	253	264	400	4	4	**HJ 340**	5.000	18	33,0
NU 344	307	371	284	5	5	5,2	240	277	288	440	4	4	**HJ 344**	6.750	20	36,0
NU 348	335	403	310	5	5	5,6	260	302	314	480	4	4	**HJ 348**	8.900	22	39,5

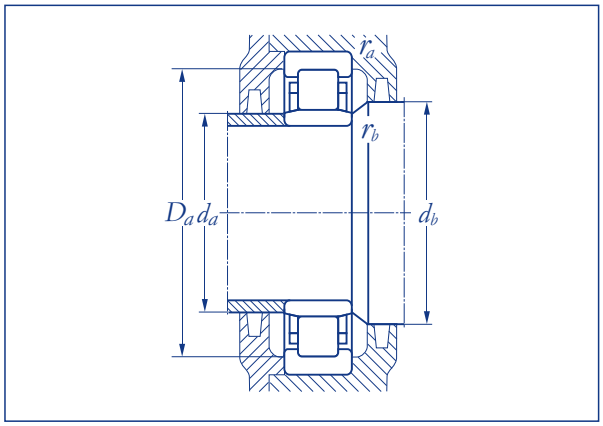
Cylindrical roller bearings single row
Series **NU 4**

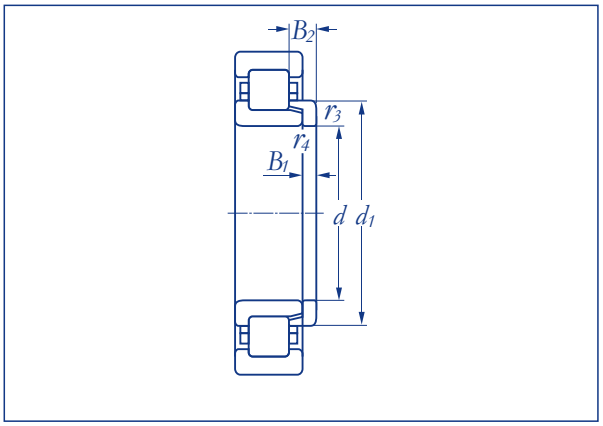


NU 4..

Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NU 406	750	30	90	23	48.400	42.400	5.200	6.300
NU 407	1.000	35	100	25	61.200	55.600	4.600	5.600
NU 408	1.300	40	110	27	77.400	72.000	4.200	4.900
NU 409	1.650	45	120	29	84.800	81.600	3.900	4.600
NU 410	2.000	50	130	31	104.000	101.600	3.500	4.200
NU 411	2.500	55	140	33	113.600	112.000	3.300	3.900
NU 412	3.000	60	150	35	134.400	138.400	3.000	3500
NU 413	3.600	65	160	37	146.400	152.000	2.800	3.300
NU 414	5.250	70	180	42	183.200	192.000	2.500	3.000
NU 415	6.250	75	190	45	211.200	224.000	2.300	2.800
NU 416	7.300	80	200	48	242.400	256.000	2.200	2.600
NU 417	8.700	85	210	52	255.200	268.000	2.100	2.500
NU 418	10.500	90	225	54	304.000	332.000	1.900	2.300
NU 419	13.500	95	240	55	330.400	364.000	1.800	2.200
NU 420	14.000	100	250	58	343.200	380.000	1.600	2.100
NU 421	19.000	105	260	60	400.800	456.000	1.500	1.900
NU 422	20.000	110	280	65	418.400	468.000	1.400	1.800
NU 424	28.000	120	310	72	515.200	588.000	1.300	1.600

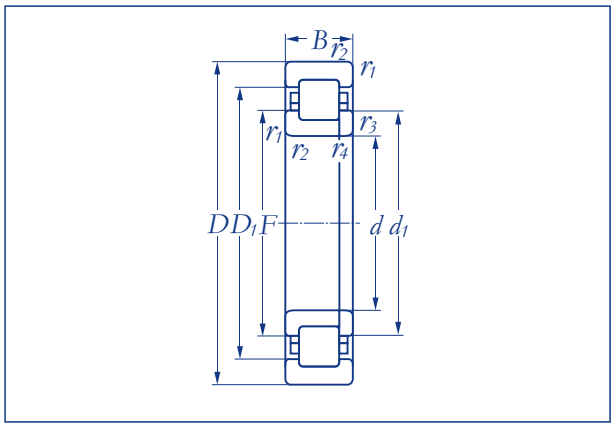
Cylindrical roller bearings single row
Series **NU 4**





Designation	Dimensions(mm)												Angle ring	Weight	Dimensions (mm)	
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	$s^{1)}$	d_a min	d_a max	d_b max	D_a max	r_a max	r_b max	designation	(g)	B_1	B_2
NU 406	50,5	66,6	45,0	1,5	1,5	1,6	38	43	47	82	1,5	1,5	**HJ 406**	81	7	11,5
NU 407	59,0	76,1	53,0	1,5	1,5	1,7	43	50	55	92	1,5	1,5	**HJ 407**	130	8	13,0
NU 408	64,8	84,2	58,0	2,0	2,0	2,5	49	56	60	101	2,0	2,0	**HJ 408**	140	8	13,0
NU 409	71,8	92,2	64,5	2,0	2,0	2,5	54	62	67	111	2,0	2,0	**HJ 409**	180	8	13,5
NU 410	78,8	102,0	70,8	2,1	2,1	2,6	61	68	73	119	2,0	2,0	**HJ 410**	230	9	14,5
NU 411	85,2	108,0	77,2	2,1	2,1	2,6	66	74	79	129	2,0	2,0	**HJ 411**	300	10	16,5
NU 412	91,8	117,0	83,0	2,1	2,1	2,5	71	80	85	139	2,0	2,0	**HJ 412**	340	10	16,5
NU 413	98,5	125,0	89,3	2,1	2,1	2,6	76	86	92	149	2,0	2,0	**HJ 413**	430	11	18,0
NU 414	110,0	140,0	100,0	3,0	3,0	3,5	83	97	102	167	2,5	2,5	**HJ 414**	320	12	20,0
NU 415	116,0	148,0	104,5	3,0	3,0	3,8	88	101	107	177	2,5	2,5	**HJ 415**	800	13	21,5
NU 416	122,0	157,0	110,0	3,0	3,0	3,7	93	106	113	187	2,5	2,5	**HJ 416**	800	13	22,0
NU 417	126,0	163,0	113,0	4,0	4,0	3,8	101	109	116	194	3,0	3,0	**HJ 417**	800	14	24,0
NU 418	137,0	176,0	123,5	4,0	4,0	4,9	106	120	126	209	3,0	3,0	**HJ 418**	1.050	14	24,0
NU 419	147,0	186,0	133,5	4,0	4,0	5,0	111	130	136	224	3,0	3,0	**HJ 419**	1.350	15	25,5
NU 420	153,0	195,0	139,0	4,0	4,0	4,9	116	135	142	234	3,0	3,0	**HJ 420**	1.550	16	27,0
NU 421	159,0	203,0	144,5	4,0	4,0	4,9	121	140	147	214	3,0	3,0	**HJ 421**	1.650	16	27,0
NU 422	171,0	217,0	155,0	4,0	4,0	4,8	126	150	158	264	3,0	3,0	**HJ 422**	2.150	17	29,5
NU 424	188,0	240,0	170,0	5,0	5,0	6,3	140	165	173	290	4,0	4,0	**HJ 424**	2.600	17	30,5

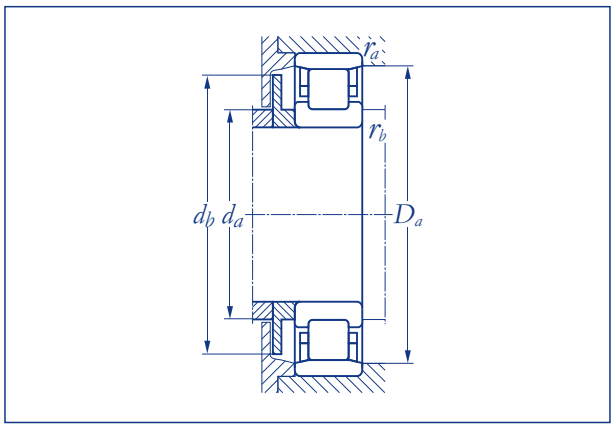
Cylindrical roller bearings single row
Series **NUP 2**



NUP 2..

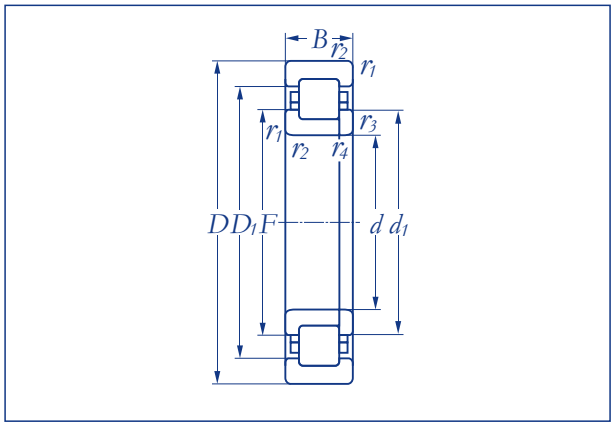
Designation	Weight (g)	Dimensions (mm)			Load ratings			
		d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NUP 203 EC	73	17	40	12	13.700	11.400	11.200	13.300
NUP 204 EC	120	20	47	14	20.000	17.600	9.100	11.200
NUP 205 EC	140	25	52	15	22.800	21.600	7.700	9.800
NUP 206 EC	220	30	62	16	30.400	29.200	6.600	8.400
NUP 207 EC	310	35	72	17	38.700	38.400	5.900	7.000
NUP 208 EC	400	40	80	18	43.100	42.400	5.200	6.300
NUP 209 EC	450	45	85	19	48.400	51.200	4.600	5.600
NUP 210 EC	510	50	90	20	51.500	55.600	4.400	5.200
NUP 211 EC	690	55	100	21	67.300	76.000	4.200	4.900
NUP 212 EC	860	60	110	22	74.800	81.600	3.700	4.400
NUP 213 EC	1.100	65	120	23	84.800	94.400	3.300	3.900
NUP 214 EC	1.200	70	125	24	95.200	109.600	3.100	3.700
NUP 215 EC	1.300	75	130	25	104.000	124.800	3.100	3.700
NUP 216 EC	1.600	80	140	26	110.400	132.800	2.800	3.300
NUP 217 EC	2.000	85	150	28	132.000	160.000	2.600	3.100
NUP 218 EC	2.450	90	160	30	146.400	176.000	2.500	3.000
NUP 219 EC	3.000	95	170	32	176.000	212.000	2.300	2.800
NUP 220 EC	3.600	100	180	34	200.800	244.000	2.600	2.200
NUP 221 EC	4.200	105	190	36	211.200	252.000	2.500	2.100
NUP 222 EC	5.000	110	200	38	233.600	292.000	2.300	1.900
NUP 224 EC	6.000	120	215	40	272.800	344.000	2.100	1.600
NUP 226 EC	6.700	130	230	40	286.400	364.000	1.900	1.500
NUP 228 EC	8.650	140	250	42	312.800	408.000	1.800	1.400
NUP 230 EC	10.500	150	270	45	356.800	480.000	1.600	1.300
NUP 232 EC	15.500	160	290	48	400.800	544.000	1.500	1.200
NUP 234 EC	20.000	170	310	52	492.800	652.000	1.500	1.200

Cylindrical roller bearings single row
Series **NUP 2**



Designation	Dimensions(mm)									
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	d_a min	d_b max	D_a max	r_a max	r_b max
NUP 203 EC	25,0	32,4	22,1	0,6	0,3	19,0	27	36,0	0,6	0,3
NUP 204 EC	29,7	38,8	26,5	1,0	0,6	24,0	31	42,0	1,0	0,6
NUP 205 EC	34,7	43,8	31,5	1,0	0,6	29,0	36	47,0	1,0	0,6
NUP 206 EC	41,2	52,5	37,5	1,0	0,6	34,0	43	57,0	1,0	0,6
NUP 207 EC	48,1	60,7	44,0	1,1	0,6	39,0	50	65,5	1,0	0,6
NUP 208 EC	54,0	67,9	49,5	1,1	1,1	46,5	56	73,5	1,0	1,0
NUP 209 EC	59,0	73,0	54,5	1,1	1,1	51,5	61	78,5	1,0	1,0
NUP 210 EC	64,0	78,0	59,5	1,1	1,1	56,5	66	83,5	1,0	1,0
NUP 211 EC	70,8	86,3	66,0	1,5	1,1	61,5	73	92,0	1,5	1,0
NUP 212 EC	77,5	95,7	72,0	1,5	1,5	68,0	80	102,0	1,5	1,5
NUP 213 EC	84,4	104,0	78,5	1,5	1,5	73,0	87	112,0	1,5	1,5
NUP 214 EC	89,4	109,0	83,5	1,5	1,5	78,0	92	117,0	1,5	1,5
NUP 215 EC	94,3	114,0	88,5	1,5	1,5	83,0	97	122,0	1,5	1,5
NUP 216 EC	101,0	123,0	95,3	2,0	2,0	89,0	104	131,0	2,0	2,0
NUP 217 EC	107,0	131,0	100,5	2,0	2,0	94,0	110	141,0	2,0	2,0
NUP 218 EC	114,0	140,0	107,0	2,0	2,0	99,0	117	151,0	2,0	2,0
NUP 219 EC	120,0	149,0	112,5	2,1	2,1	106,0	123	159,0	2,0	2,0
NUP 220 EC	127,0	157,0	119,0	2,1	2,1	111,0	130	169,0	2,0	2,0
NUP 221 EC	134,0	164,0	125,0	2,1	2,1	116,0	137	179,0	2,0	2,0
NUP 222 EC	141,0	174,0	132,5	2,1	2,1	121,0	145	189,0	2,0	2,0
NUP 224 EC	153,0	188,0	143,5	2,1	2,1	131,0	156	204,0	2,0	2,0
NUP 226 EC	164,0	202,0	153,5	3,0	3,0	143,0	167	217,0	2,5	2,5
NUP 228 EC	179,0	217,0	169,0	3,0	3,0	153,0	183	237,0	2,5	2,5
NUP 230 EC	193,0	234,0	182,0	4,0	4,0	163,0	197	257,0	2,5	2,5
NUP 232 EC	206,0	250,0	195,0	4,0	4,0	173,0	210	277,0	2,5	2,5
NUP 234 EC	220,0	269,0	207,0	4,0	4,0	186,0	224	294,0	3,0	3,0

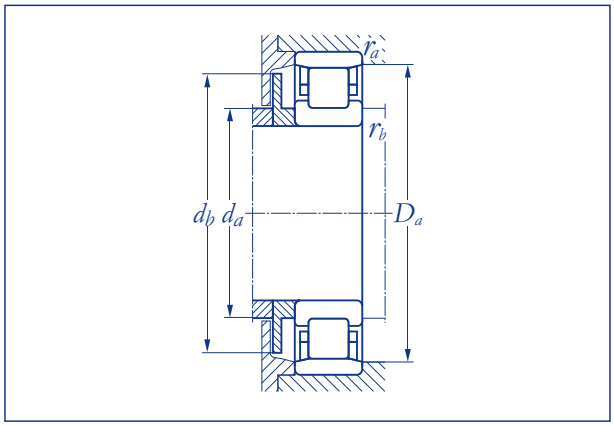
Cylindrical roller bearings single row
Series **NUP 2**



NUP 2..

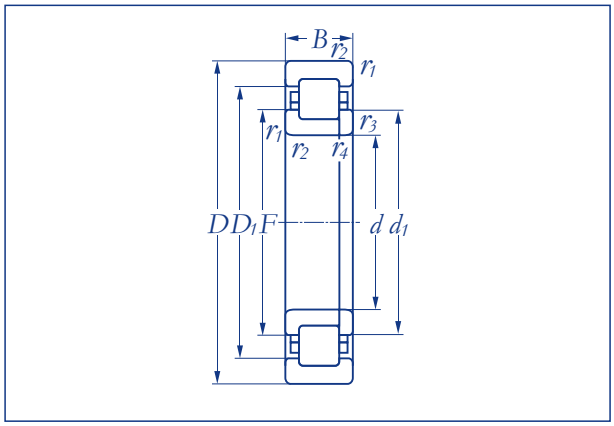
Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NUP 236 EC	21.000	180	320	52	501.600	680.000	1.400	1.200
NUP 238 EC	25.500	190	340	55	554.400	554.400	1.300	1.100
NUP 240 EC	27.500	200	360	58	612.000	84.800	1.200	1.100
NUP 244	39.500	220	400	65	612.000	86.400	1.200	1.000
NUP 248	53.500	240	440	72	761.600	109.600	1.100	900

Cylindrical roller bearings single row
Series **NUP 2**



Designation	Dimensions(mm)									
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	d_a min	d_b max	D_a max	r_a max	r_b max
NUP 236 EC	230	279	217	3	3	196	234	304	3	3
NUP 238 EC	240	295	230	3	3	206	248	324	3	3
NUP 240 EC	228	312	243	4	4	216	262	344	3	3
NUP 244	286	332	270	4	4	236	290	384	3	3
NUP 248	313	365	295	4	4	256	317	424	3	3

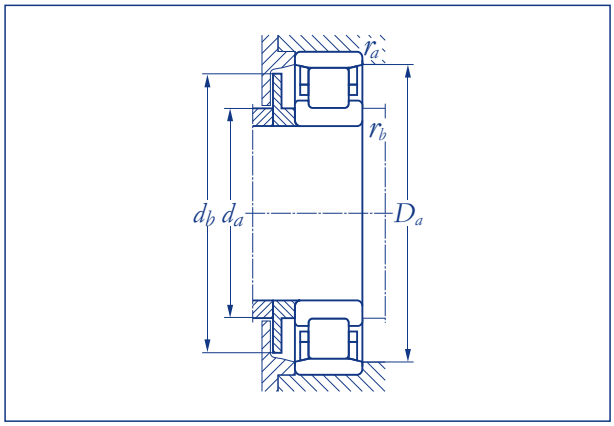
Cylindrical roller bearings single row
Series **NUP 22**



NUP 22..

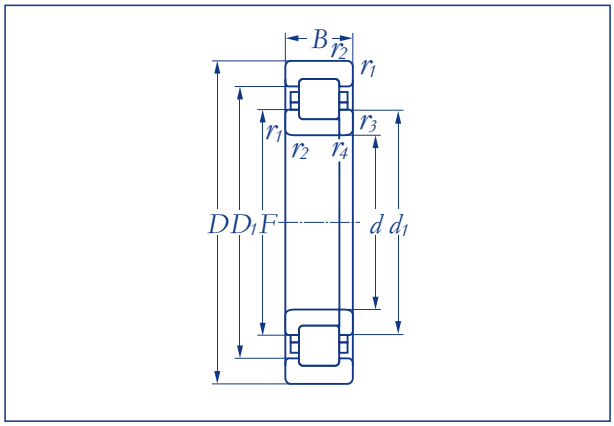
Designation	Weight	Dimensions (mm)			Load ratings			
		d	D	B	C_w	C_{ow}	$F_{r\ perm}$	$F_{or\ perm}$
	(g)				(N)	(N)	(N)	(N)
NUP 2203 EC	97	17	40	16	19.000	17.200	11.200	13.300
NUP 2205 EC	170	25	52	18	27.200	27.200	7.700	9.800
NUP 2206 EC	270	30	62	20	38.700	39.200	6.600	8.400
NUP 2207 EC	420	35	72	23	47.500	50.400	5.900	7.000
NUP 2208 EC	510	40	80	23	56.300	60.000	5.200	6.300
NUP 2209 EC	550	45	85	23	58.900	65.200	4.600	5.600
NUP 2210 EC	590	50	90	23	6.400	70.400	4.400	5.200
NUP 2211 EC	820	55	100	25	79.200	94.400	4.200	49.000
NUP 2212 EC	1.500	60	110	28	102.400	122.400	3.700	4.400
NUP 2213 EC	1.500	65	120	31	117.600	144.000	3.300	3.900
NUP 2214 EC	1.550	70	125	31	123.200	154.400	3.100	3.700
NUP 2215 EC	1.650	75	130	31	128.800	166.400	3.100	3.700
NUP 2216 EC	2.050	80	140	33	149.600	196.000	2.800	3.300
NUP 2217 EC	2.550	85	150	36	172.800	224.000	2.600	3.100
NUP 2218 EC	3.300	90	160	40	193.600	252.000	2.500	3.000
NUP 2219 EC	4.000	95	170	43	228.800	300.000	2.300	2.800
NUP 2220 EC	4.900	100	180	46	268.800	360.000	2.200	2.600
NUP 2222 EC	7.000	110	200	53	304.000	416.000	1.900	2.300
NUP 2224 EC	8.650	120	215	58	365.600	504.000	1.600	2.100
NUP 2226 EC	11.000	130	230	64	422.400	588.000	1.500	1.900
NUP 2228 EC	14.000	140	250	68	457.600	664.000	1.400	1.800

Cylindrical roller bearings single row
Series **NUP 22**



Designation	Dimensions(mm)									
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	d_a min	d_b max	D_a max	r_a max	r_b max
NUP 2203 EC	25,0	32,4	22,1	0,6	0,3	19,0	27	36,0	0,6	0,3
NUP 2205 EC	34,7	43,8	31,5	1,0	0,6	29,0	36	47,0	1,0	0,6
NUP 2206 EC	41,2	52,5	37,5	1,0	0,6	34,0	43	57,0	1,0	0,6
NUP 2207 EC	48,1	60,7	44,0	1,1	0,6	39,0	50	65,5	1,0	0,6
NUP 2208 EC	54,0	67,9	49,5	1,1	1,1	46,5	56	73,5	1,0	1,0
NUP 2209 EC	59,0	73,0	54,5	1,1	1,1	51,5	61	78,5	1,0	1,0
NUP 2210 EC	64,0	78,0	59,5	1,1	1,1	56,5	66	83,5	1,0	1,0
NUP 2211 EC	70,8	86,3	66,0	1,5	1,1	61,5	73	92,0	1,5	1,0
NUP 2212 EC	77,5	95,7	72,0	1,5	1,5	68,0	80	102,0	1,5	1,5
NUP 2213 EC	84,4	104,0	78,5	1,5	1,5	73,0	87	112,0	1,5	1,5
NUP 2214 EC	89,4	109,0	83,5	1,5	1,5	78,0	92	117,0	1,5	1,5
NUP 2215 EC	94,3	114,0	88,5	1,5	1,5	83,0	97	122,0	1,5	1,5
NUP 2216 EC	101,0	123,0	95,3	2,0	2,0	89,0	104	131,0	2,0	2,0
NUP 2217 EC	107,0	131,0	100,5	2,0	2,0	94,0	110	141,0	2,0	2,0
NUP 2218 EC	114,0	140,0	107,0	2,0	2,0	99,0	117	151,0	2,0	2,0
NUP 2219 EC	120,0	149,0	112,5	2,1	2,1	106,0	123	159,0	2,0	2,0
NUP 2220 EC	127,0	157,0	119,0	2,1	2,1	111,0	130	169,0	2,0	1,0
NUP 2222 EC	141,0	174,0	132,5	2,1	2,1	121,0	145	189,0	2,0	2,0
NUP 2224 EC	153,0	188,0	143,5	2,1	2,1	131,0	156	204,0	2.0	2,0
NUP 2226 EC	164,0	202,0	153,5	3,0	3,0	143,0	167	217,0	2,5	2,5
NUP 2228 EC	179,0	217,0	169,0	3,0	3,0	153,0	183	237,0	2,5	2,5

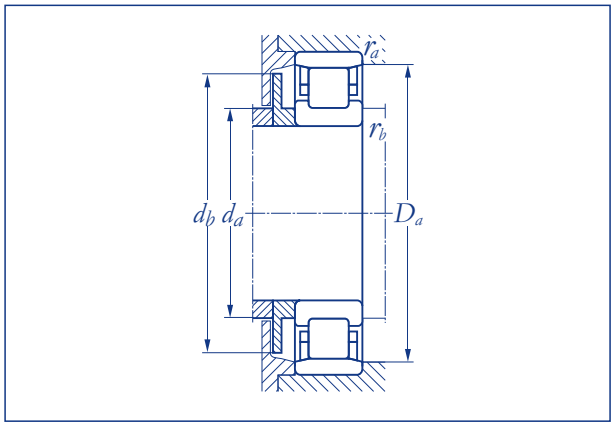
Cylindrical roller bearings single row
Series **NUP 23**



NUP 23..

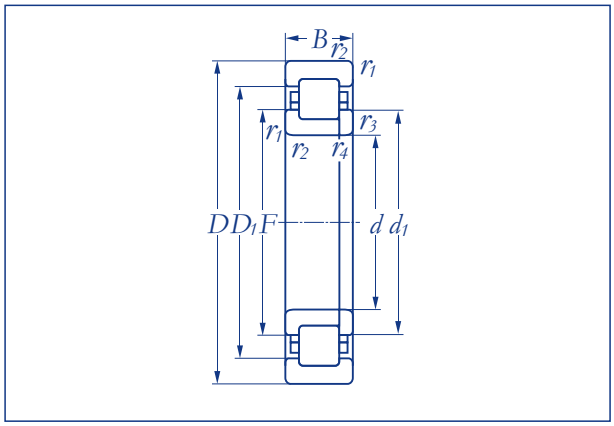
Designation	Weight (g)	Dimensions (mm) d	D	B	Load ratings C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NUP 2304 EC	220	20	52	21	33.000	30.400	7.700	9.800
NUP 2305 EC	380	25	62	24	44.800	44.000	6.300	7.700
NUP 2306 EC	550	30	72	27	58.900	60.000	5.600	6.600
NUP 2307 EC	750	35	80	31	73.000	78.400	4.900	5.900
NUP 2308 EC	980	40	90	33	89.600	96.000	4.400	5.200
NUP 2309 EC	1.350	45	100	36	110.400	122.400	3.900	4.600
NUP 2310 EC	1.800	50	110	40	128.800	148.800	3.500	4.200
NUP 2311 EC	2.300	55	120	43	160.800	185.600	3.300	3.900
NUP 2312 EC	2.850	60	130	46	179.200	212.000	3.000	3.500
NUP 2313 EC	3.450	65	140	48	200.800	232.000	2.800	3.300
NUP 2314 EC	4.150	70	150	51	220.000	260.000	2.500	3.000
NUP 2315 EC	5.100	75	160	55	264.000	320.000	2.300	2.800
NUP 2316 EC	6.100	80	170	58	286.400	352.000	2.200	2.600
NUP 2317 EC	7.150	85	180	60	316.800	392.000	2.100	2.500
NUP 2318 EC	8.300	90	190	64	352.000	432.000	1.900	2.300
NUP 2319 EC	9.750	95	200	67	374.400	468.000	1.800	2.200
NUP 2320 EC	12.500	100	215	73	466.400	588.000	1.600	2.100
NUP 2322 EC	17.500	110	240	80	545.600	720.000	1.400	1.800
NUP 2324 EC	25.000	120	260	86	633.600	832.000	1.300	1.600
NUP 2326 EC	31.000	130	280	93	748.000	1.000.000	1.200	1.500
NUP 2330 EC	46.500	150	320	108	952.000	1.304.000	1.100	1.400

Cylindrical roller bearings single row
Series **NUP 23**



Designation	Dimensions(mm)									
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	d_a min	d_b max	D_a max	r_a max	r_b max
NUP 2304 EC	31,2	42,4	27,5	1,1	0,6	24,0	33,0	45,5	1,0	0,6
NUP 2305 EC	38,1	50,7	34,0	1,1	1,1	31,5	40,0	55,5	1,0	1,0
NUP 2306 EC	45,0	58,9	40,5	1,1	1,1	36,5	47,0	65,5	1,0	1,0
NUP 2307 EC	51,0	66,3	46,2	1,5	1,1	41,5	53,0	72,0	1,5	1,0
NUP 2308 EC	57,5	75,6	52,0	1,5	1,5	48,0	60,0	82,0	1,5	1,5
NUP 2309 EC	64,4	83,8	58,5	1,5	1,5	53,0	67,0	92,0	1,5	1,5
NUP 2310 EC	71,2	92,1	65,0	2,0	2,0	59,0	73,0	101,0	2,0	2,0
NUP 2311 EC	77,5	101,0	70,5	2,0	2,0	64,0	80,0	111,0	2,0	2,0
NUP 2312 EC	84,3	110,0	77,0	2,1	2,1	71,0	87,0	119,0	2,0	2,0
NUP 2313 EC	90,5	119,0	82,5	2,1	2,1	76,0	93,0	129,0	2,0	2,0
NUP 2314 EC	97,3	127,0	89,0	2,1	2,1	81,0	100,0	139,0	2,0	2,0
NUP 2315 EC	104,0	136,0	95,0	2,1	2,1	86,0	107,0	149,0	2,0	2,0
NUP 2316 EC	110,0	144,0	101,0	2,1	2,1	91,0	113,0	159,0	2,0	2,0
NUP 2317 EC	117,0	153,0	108,0	3,0	3,0	98,0	120,0	167,0	2,5	2,5
NUP 2318 EC	124,0	162,0	113,5	3,0	3,0	103,0	127,0	177,0	2,5	2,5
NUP 2319 EC	132,0	170,0	121,5	3,0	3,0	108,0	135,0	187,0	2,5	2,5
NUP 2320 EC	139,0	182,0	127,5	3,0	3,0	113,0	142,0	202,0	2,5	2,5
NUP 2322 EC	155,0	201,0	143,0	3,0	3,0	123,0	159,0	227,0	2,5	2,5
NUP 2324 EC	168,0	219,0	154,0	3,0	3,0	133,0	171,0	247,0	2,5	2,5
NUP 2326 EC	181,0	236,0	167,0	4,0	4,0	146,0	185,0	264,0	3,0	3,0
NUP 2330 EC	209,0	270,0	193,0	4,0	4,0	166,0	213,0	304,0	3,0	3,0

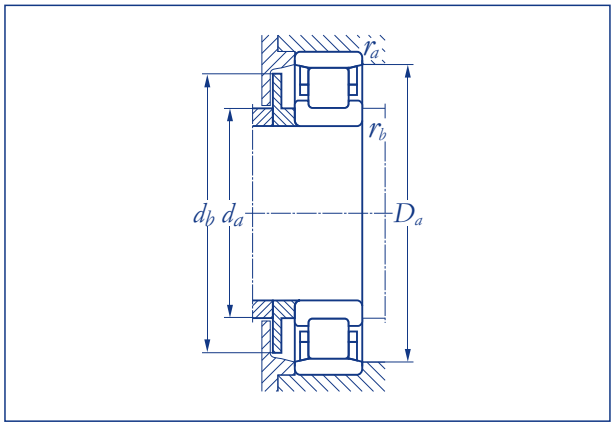
Cylindrical roller bearings single row
Series **NUP 3**



NUP 3..

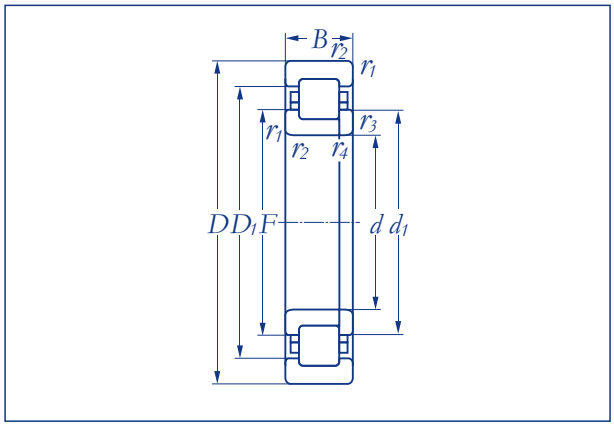
Designation	Weight	Dimensions (mm)			Load ratings			
	(g)	d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NUP 303 EC	130	17	47	14	19.600	16.300	9.800	11.900
NUP 304 EC	160	20	52	15	24.600	20.800	8.400	10.500
NUP 305 EC	250	25	62	17	32.100	29.200	6.600	8.400
NUP 306 EC	380	30	72	19	40.900	38.400	6.300	7.700
NUP 307 EC	510	35	80	21	51.500	50.400	5.600	6.600
NUP 308 EC	680	40	90	23	64.700	62.400	4.600	5.600
NUP 309 EC	950	45	100	25	79.200	80.000	4.400	5.200
NUP 310 EC	1.200	50	110	27	88.000	89.600	3.500	4.200
NUP 311 EC	1.550	55	120	29	110.400	114.400	3.300	3.900
NUP 312 EC	1.950	60	130	31	120.800	128.000	3.000	3.500
NUP 313 EC	2.350	65	140	33	146.400	156.800	2.800	3..300
NUP 315 EC	3.450	75	160	37	193.600	212.000	2.300	2.800
NUP 316 EC	4.100	80	170	39	208.000	232.000	2.200	2.600
NUP 317 EC	4.900	85	180	41	237.600	268.000	2.100	2.500
NUP 318 EC	5.650	90	190	43	255.200	288.000	1.900	2.300
NUP 320 EC	7.950	100	215	47	312.800	352.000	1.600	2.100
NUP 322 EC	11.000	110	240	50	374.400	432.000	1.400	1.800
NUP 324 EC	14.000	120	260	55	431.200	496.000	1.300	1.600
NUP 326 EC	19.500	130	280	58	501.600	600.000	1.200	1.500
NUP 328 EC	23.500	140	300	62	545.600	664.000	1.200	1.500

Cylindrical roller bearings single row
Series **NUP 3**



Designation	Dimensions(mm)										
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	s[1)]	d_a min	d_b max	D_a max	r_a max	r_b max
NUP 303 EC	27,7	37,0	24,2	1,0	0,6		21,0	29	42,0	1,0	0,6
NUP 304 EC	31,2	42,4	27,5	1,1	0,6		24,0	33	45,5	1,0	0,6
NUP 305 EC	38,1	50,7	34,0	1,1	1,1		31,5	40	55,5	1,0	1,0
NUP 306 EC	45,0	58,9	40,5	1,1	1,1		36,5	47	65,5	1,0	1,0
NUP 307 EC	51,0	66,3	46,2	1,5	1,1		41,5	53	72,0	1,5	1,0
NUP 308 EC	57,5	75,6	52,0	1,5	1,5		48,0	60	82,0	1,5	1,5
NUP 309 EC	64,4	83,8	58,5	1,5	1,5		53,0	67	92,0	1,5	1,5
NUP 310 EC	71,2	92,1	65,0	2,0	2,0		59,0	73	101,0	2,0	2,0
NUP 311 EC	77,5	101,0	70,5	2,0	2,0		64,0	80	111,0	2,0	2,0
NUP 312 EC	84,3	110,0	77,0	2,1	2,1	2	71,0	87	119,0	2,0	2,0
NUP 313 EC	90,5	119,0	82,5	2,1	2,1		76,0	93	129,0	2,0	2,0
NUP 315 EC	104,0	136,0	95,0	2,1	2,1		86,0	107	149,0	2,0	2,0
NUP 316 EC	110,0	144,0	101,0	2,1	2,1		91,0	113	159,0	2,0	2,0
NUP 317 EC	117,0	153,0	108,0	3,0	3,0		98,0	120	167,0	2,5	2,5
NUP 318 EC	124,0	162,0	113,5	3,0	3,0		103,0	127	177,0	2,5	2,5
NUP 320 EC	139,0	182,0	127,5	3,0	3,0		113,0	142	202,0	2,5	2,5
NUP 322 EC	155,0	201,0	143,0	3,0	3,0		123,0	159	227,0	2,5	2,5
NUP 324 EC	168,0	219,0	154,0	3,0	3,0		133,0	171	247,0	2,5	2,5
NUP 326 EC	181,0	236,0	167,0	4,0	4,0		146,0	185	264,0	3,0	3,0
NUP 328 EC	195,0	252,0	180,0	4,0	4,0		156,0	199	284,0	3,0	3,0

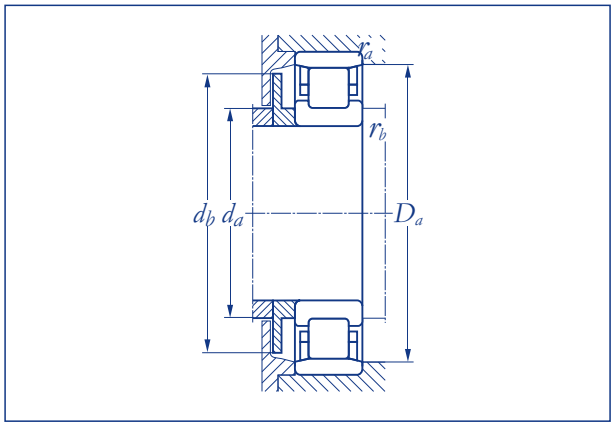
Cylindrical roller bearings single row
Series **NUP 4**



NUP 4..

Designation	Weight (g)	Dimensions (mm)			Load ratings			
		d	D	B	C_w (N)	C_{ow} (N)	$F_{r\ perm}$ (N)	$F_{or\ perm}$ (N)
NUP 407	1.050	35	100	25	61.200	55.600	4.600	5.600
NUP 408	1.350	40	110	27	77.440	72.000	4.200	4.900
NUP 409	1.700	45	120	29	84.800	81.600	3.900	4.600
NUP 411	2.600	55	140	33	113.600	112.000	3.300	3.900
NUP 412	3.150	60	150	35	134.400	138.400	3.000	3.500

Cylindrical roller bearings single row
Series **NUP 4**



Designation	Dimensions(mm)									
	d_1	D_1	F	$r_{1.2}$ min	$r_{3.4}$ min	d_a min	d_b max	D_a max	r_a max	r_b max
NUP 407	59,0	76,1	53,0	1,5	1,5	43	61	92	1,5	1,5
NUP 408	64,8	84,2	58,0	2,0	2,0	49	67	101	2,0	2,0
NUP 409	71,8	92,2	64,5	2,0	2,0	54	74	111	2,0	2,0
NUP 411	85,2	108,0	77,2	2,1	2,1	66	88	129	2,0	2,0
NUP 412	91,8	117,0	83,0	2,1	2,1	71	94	139	2,0	2,0

1. Materials for SLB cylind rical roller bearing's Outer ring, Inner ring & Rolling Elements

1.1) For **SLB** rolling bearings the through-hardening steel material GCr5 is the most commonly used, which contains approximately 1% carbon and 1.5% chromium. Please refer to Table 1.1, which shows chemical composition of material GCr15 and with its Interchangeable material in other nations.

Table 1.1

Name	Standard	Chemical Composition (%)					
		C	Mn	Si	Cr	S≤	P≤
G Cr15	SLB	0.95~1.05	0.20~0.40	0.15~0.35	1.30~1.65	0.020	0.027
SUJ 2	JIS G 4805	0.95~1.10	0.50≤	0.15~0.35	1.30~1.60	0.025	0.025
100Cr6	DIN	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -
E52100	AISI	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -
ISO	683/XVII	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -
SKF	-	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -	- ditto -

Note: **SLB** supplies all general bearings with material of G Cr15 as normal products, unless otherwise specified by customer for special usage before ordering. I.e. Pure carbon or Stainless Steel etc.

2. Material for Retainers of cylindrical roller bearings

The retainer is demanded to bear hitting load and have the lowest friction with the rolling elements when **SLB** bearing is working. So, low carbon steel & brass adopted. (Please refer to Table 2.1)

Table 2.1

Name	Standard	Chemical Composition (%)					
		C	Mn	Si	S≤	P≤	Cr
10F	Chinese GB	0.07~0.14	0.25~0.50	0.07≤	0.035	0.035	0.15
SPCC	JIS G 3141	0.12≤	0.50≤	-	0.045	0.040	-

Note: 1) **SLB** supply bearings with retainer material of 10F as normal products, unless otherwise specified by customers for other materials before ordering.

2) For single row cylindrical roller bearings when outer ring diameter D less than 400mm low carbon steel pressing cage is adopted. While for larger ones, machined brass cage is adopted.

3. Accuracy grade for cylindrical roller bearings

3.1) Generally, the tolerance for cylindrical roller bearing is in accuracy grade P0, P6 and P5 Please refer to Table 3.1

Table 3.1 Normal Tolerances for Radial Bearings Inner ring
(Unit: μm)

Nominal bore dimension d(mm)		Deviation of the mean bore diameter from the nominal △dmp										Deviation of the bore diameter Vdp Diameter series 9				
		P0		P6		P5		P4		P2		P0	P6	P5	P4	P2
over	incl.	high	low	high	low	high	low	high	low	high	low	max.				
0.6	2.5	0	-8	0	-7	0	-5	0	-4	0	-2.5	10	9	5	4	2.5
2.5	10	0	-8	0	-7	0	-5	0	-4	0	-2.5	10	9	5	4	2.5
10	18	0	-8	0	-7	0	-5	0	-4	0	-2.5	10	9	5	4	2.5
18	30	0	-10	0	-8	0	-6	0	-5	0	-2.5	13	10	6	5	2.5
30	50	0	-12	0	-10	0	-8	0	-6	0	-2.5	15	13	8	6	2.5
50	80	0	-15	0	-12	0	-9	0	-7	0	-4.0	19	15	9	7	4.0
80	120	0	-20	0	-15	0	-10	0	-8	0	-5.0	25	19	10	8	5.0
120	150	0	-25	0	-18	0	-13	0	-10	0	-7.0	31	23	13	10	7.0
150	180	0	-25	0	-18	0	-13	0	-10	0	-7.0	31	23	13	10	7.0
180	250	0	-30	0	-22	0	-15	0	-12	0	-8.0	38	28	15	12	8.0
250	315	1	-35	0	-25	0	-18	—	—	—	—	44	31	18	—	—
315	400	0	-40	0	-30	0	-23	—	—	—	—	50	38	23	—	—

Deviation of the bore diameter Vdp										Mean deviation of the bore diameter Vdmp					Radial run out Kia				
Diameter series 0, 1					Diameter series 2, 3, 4														
P0	P6	P5	P4	P2	P0	P6	P5	P4	P2	P0	P6	P5	P4	P2	P0	P6	P5	P4	P2
max.					max.					max.					max.				
8	7	4	3	2.5	6	5	4	3	2.5	6	5	3	2.0	1.5	10	5	4	2.5	1.5
8	7	4	3	2.5	6	5	4	3	2.5	6	5	3	2.0	1.5	10	6	4	2.5	1.5
8	7	4	3	2.5	6	5	4	3	2.5	6	5	3	2.0	1.5	10	7	4	2.5	1.5
10	8	5	4	2.5	8	6	5	4	2.5	8	6	3	2.5	1.5	13	8	4	3.0	2.5
12	10	6	5	2.5	9	8	6	5	2.5	9	8	4	3.0	1.5	15	10	5	4.0	2.5
19	15	7	6	4.0	11	9	7	6	4.0	11	9	5	3.5	2.0	20	10	5	4.0	2.5
25	19	8	6	5.0	15	11	8	6	5.0	15	11	5	4.0	2.5	25	13	6	5.0	2.5
31	23	10	8	7.0	19	14	10	8	7.0	19	14	7	5.0	3.5	30	18	8	6.0	2.5
31	23	10	8	7.0	19	14	10	8	7.0	19	14	7	5.0	3.5	30	18	8	6.0	5.0
38	28	12	9	8.0	23	17	12	9	8.0	23	17	8	6.0	4.0	40	20	10	8.0	5.0
44	31	14	—	—	26	19	14	—	—	26	19	9	—	—	50	25	13	—	—
50	38	18	—	—	30	23	18	—	—	30	23	12	—	—	60	30	15	—	—

Side run out Sd			Axial run out Sia △Bs			Deviation of the width								Parallel deviation between end surfaces VBs				
						For single bearing						For pair bearing						
P5	P4	P2	P5	P4	P2	P0, P6		P5, P4		P2		P0, P6		P5, P4		P0	P6	P5	P4	P2
max.			max.			high	low	high	low	high	low	high	low	high	low	max.				
7	3	1.5	7	3	1.5	0	-40	0	-40	0	-40	—	—	0	-7	12	12	5	2.5	1.5
7	3	1.5	7	3	1.5	0	-120	0	-40	0	-40	0	-8	0	-7	15	15	5	2.5	1.5
7	3	1.5	7	3	1.5	0	-120	0	-80	0	-80	0	-8	0	-7	20	20	5	2.5	1.5
8	4	1.5	8	4	2.5	0	-120	0	-120	0	-120	0	-10	0	-8	20	20	5	2.5	1.5
8	4	1.5	8	4	2.5	0	-120	0	-120	0	-120	0	-12	0	-10	20	20	5	3.0	1.5
8	5	1.5	8	5	2.5	0	-150	0	-150	0	-150	0	-15	0	-12	25	25	5	4.0	1.5
9	5	2.5	9	5	2.5	0	-200	0	-200	0	-200	0	-20	0	-15	25	25	7	4.0	2.5
10	6	2.5	10	7	2.5	0	-250	0	-250	0	-250	0	-25	0	-18	30	30	8	5.0	2.5
10	6	4.0	10	7	5.0	0	-250	0	-250	0	-300	0	-25	0	-18	30	30	8	5.0	4.0
11	7	5.0	13	8	5.0	0	-300	0	-300	0	-350	0	-30	0	-22	30	30	10	6.0	5.0
13	—	—	15	—	—	0	-350	0	-350	—	—	1	-35	0	-25	35	35	13	—	—
15	—	—	20	—	—	0	-400	0	-400	—	—	0	-40	0	-30	40	40	15	—	—

Note: Values for larger sizes on request

Out ring (Unit: μm)

Nominal bore dimension D(mm)		Deviation of the mean bore diameter from the nominal △Dmp										Deviation of the outer ring diameter (Open type) VDp Diameter series 9				
		P0		P6		P5		P4		P2		P0	P6	P5	P4	P2
over	incl.	high	low	high	low	high	low	high	low	high	low	max.				
2.5	6	0	-8	0	-7	0	-5	0	-4	0	-2.5	10	9	5	4	2.5
6.0	18	0	-8	0	-7	0	-5	0	-4	0	-2.5	10	9	5	4	2.5
18	30	0	-9	0	-8	0	-6	0	-5	0	-4.0	12	10	6	5	4.0
30	50	0	-11	0	-7	0	-6	0	-6	0	-4.0	14	11	7	6	4.0
50	80	0	-13	0	-9	0	-7	0	-7	0	-4.0	16	14	9	7	4.0
80	120	0	-15	0	-10	0	-8	0	-8	0	-5.0	19	16	10	8	5.0
120	150	0	-18	0	-15	0	-11	0	-9	0	-5.0	23	19	11	9	5.0
150	180	0	-25	0	-18	0	-13	0	-10	0	-7.0	31	23	13	10	7.0
180	250	0	-30	0	-20	0	-15	0	-11	0	-8.0	38	25	15	11	8.0
250	315	0	-35	0	-25	0	-18	0	-13	0	-8.0	44	31	18	13	8.0
315	400	1	-40	0	-28	0	-20	0	-15	0	-10	50	35	20	15	10.0
400	500	0	-45	0	-33	0	-23	—	—	—	—	56	41	23	—	—

Deviation of the bore diameter VDp										Deviation of the outer ring diameter (with seals & shields) VDp		Mean deviation of the out ring diameter VDmp				
Diameter series 0, 1					Diameter series 2, 3, 4					2, 3, 4	0, 1, 2, 3, 4					
P0	P6	P5	P4	P2	P0	P6	P5	P4	P2	P0	P6	P0	P6	P5	P4	P2
max.										max.		max.				
8	7	4	3	2.5	6	5	4	3	2.5	10	9	6	5	3	2.0	1.5
8	7	4	3	2.5	6	5	4	3	2.5	10	9	6	5	3	2.0	1.5
9	8	5	4	4.0	7	6	5	4	4.0	12	10	7	6	3	2.5	2.0
11	9	5	5	4.0	8	7	5	5	4.0	16	13	8	7	4	3.0	2.0
13	11	7	5	4.0	10	8	7	5	4.0	20	16	10	8	5	3.5	2.0
19	16	8	6	5.0	11	10	8	6	5.0	26	20	11	10	5	4.0	2.5
23	19	8	7	5.0	14	11	8	7	5.0	30	25	14	11	6	5.0	2.5
31	23	10	8	7.0	19	14	10	8	7.0	38	30	19	14	7	5.0	3.5
38	25	11	8	8.0	23	15	11	8	8.0	—	—	23	15	8	6.0	4.0
44	31	14	10	8.0	26	19	14	10	8.0	—	—	26	19	9	7.0	4.0
50	35	15	11	10	30	21	15	11	10	—	—	30	21	10	8.0	5.0
56	41	17	—	—	34	25	17	—	—	—	—	34	25	12	—	—

Radial run out Kea					Side run out SD			Axial run out Sea			Deviation of the width △Cs	Parallel deviation between end surfaces Vcs				
P0	P6	P5	P4	P2	P5	P4	P2	P5	P4	P2	For all class	P0	P6	P5	P4	P2
max.					max.			max.				max.				
15	8	5	3	1.5	8	4	1.5	8	5	1.5	With "d" of the same model bearing, and refer to relative value of △Bs	With "d" of the same model bearing, and refer to relative value of Vcs		5	2.5	1.5
15	8	5	3	1.5	8	4	1.5	8	5	1.5				5	2.5	1.5
15	9	6	4	2.5	8	4	1.5	8	5	2.5				5	2.5	1.5
20	10	7	5	2.5	8	4	1.5	8	5	2.5				5	2.5	1.5
25	13	8	5	4.0	8	4	1.5	10	5	4.0				6	3.0	1.5
35	18	10	6	5.0	9	5	2.5	11	6	5.0				8	4.0	2.5
40	20	11	7	5.0	10	5	2.5	13	7	5.0				8	5.0	2.5
45	23	13	8	5.0	10	5	2.5	14	8	5.0				8	5.0	2.5
50	25	15	10	7.0	11	7	4.0	15	10	7.0				10	7.0	4.0
60	30	18	11	7.0	13	8	5.0	18	10	7.0				11	7.0	5.0
70	35	20	13	8.0	13	10	7.0	20	13	8.0				13	8.0	7.0
80	40	23	—	—	15	—	—	23	—	—				15		

Note: **SLB** supply cylindrical roller bearings in P0 grade as normal products, unless other wise be clearly specified by end user before ordering.

4. Clearance

4.1) Cylindrical roller bearings with inner ring and outer ring (Exceptional drawn cup and heavy duty type) are available with the radial clearance the same as that adopted in cylindrical roller bearings. Please refer to Table 4.1

Table 4.1 Radial clearance for cylindrical roller bearings

Nominal bore diameter d (mm)		Radial Clearance									
		C2		CN		C3		C4		C5	
over	incl.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
	10	0	25	20	45	35	60	50	75		
10	24	0	25	20	45	35	60	50	75	65	90
24	30	0	25	20	45	35	60	50	75	70	95
30	40	5	30	25	50	45	70	60	85	80	105
40	50	5	35	30	60	50	80	70	100	95	125
50	65	10	40	40	70	60	90	80	110	110	140
65	80	10	45	40	75	65	100	90	125	130	165
80	100	15	50	50	85	75	110	105	140	155	190
100	120	15	55	50	90	85	125	125	165	180	220
120	140	15	60	60	105	100	145	145	190	200	245
140	160	20	70	70	120	115	165	165	215	225	275
160	180	25	75	75	125	120	175	170	220	250	300
180	200	35	90	90	145	140	195	195	250	275	330
200	225	45	105	105	165	160	220	220	280	305	365
225	250	45	110	110	175	170	235	235	300	330	395
250	280	55	125	125	195	190	260	260	330	370	440
280	315	55	130	130	205	200	275	275	350	410	485
315	355	65	145	145	225	225	305	305	385	455	535
355	400	100	190	190	280	280	370	370	460	510	600
400	450	110	210	210	310	310	410	410	510	565	665
450	500	110	220	220	330	330	440	440	550	625	735

Note: **SLB** supply cylindrical roller bearings with radial clearance of CN as normal products unless other wise clearly specified by the end user before ordering.