

CYLINDRICAL ROLLER BEARINGS

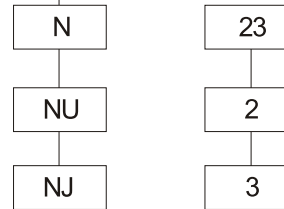


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CYLINDRICAL ROLLER BEARINGS

TYPE CODE:

N NJ NU NF NUP



SIZE DESIGNATION:

0: N 1000
2: N 200
2: N 2200
3: N 300
3: N 2300
4: N 400

TOLERANCE CLASS

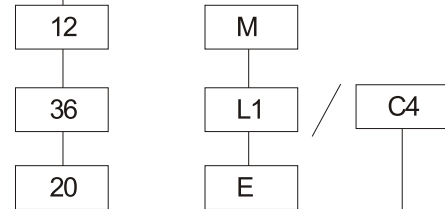
/P0: Equal tolerance class ABEC1
/P6: Equal tolerance class ABEC3
/P5: Equal tolerance class ABEC5
/P4: Equal tolerance class ABEC7
/P2: Equal tolerance class ABEC9

WORKING TEMPERATURE:

/S0: Working temperature is up to 150°C
/S1: Working temperature is up to 200°C
/S2: Working temperature is up to 250°C
/S3: Working temperature is up to 300°C
/S4: Working temperature is up to 350°C

I.D.

5 X -- = mm
5 X 12 = 60mm
5 X 20 = 100mm
5 X 36 = 180mm



DESIGNS, TYPES AND FEATURES

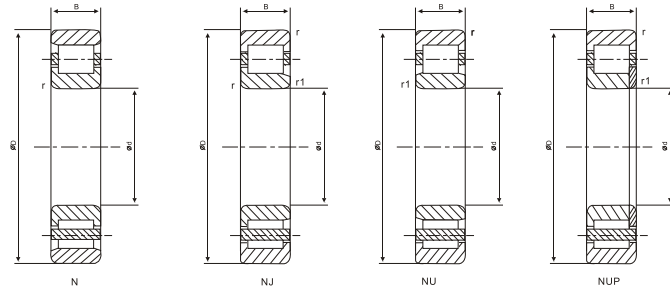
E: Reinforced structure
M: Brass solid retainer
L1: Aluminum alloy retainer
Q1: Al-Febronze retainer
N: With snap ring groove on outer ring
V: Full capacity rollers, without cage
P: Glass-fiber reinforced nylon cage, roller guidance
X: Dimensions according to ISO standard

CLEARANCE:

/C2: Less than normal clearance
/C0: Normal clearance, omissible
/C3: Larger clearance than C0
/C4: Larger clearance than C3
/C5: Larger clearance than C4

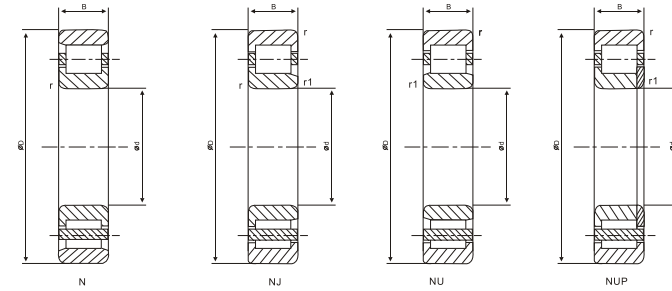
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CYLINDRICAL ROLLER BEARINGS



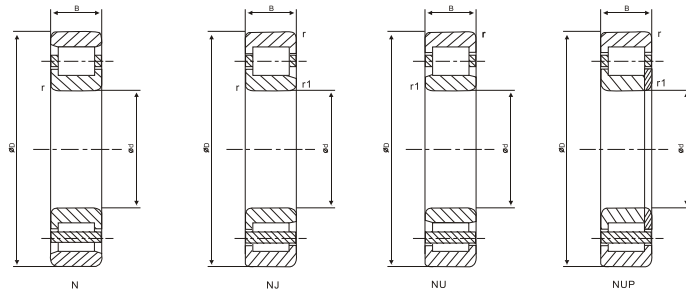
Principal dimensions(mm)					Weight Kg	Bearing Number	Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}	r _{max}			Dynamic Cr	Static Cor	Grease	Oil
15	35	11	0.6	0.3	0.050	N202	12.7	10.4	20000	22000
	35	11	0.6	0.3	0.050	NJ202	12.7	10.4	20000	22000
	35	11	0.6	0.3	0.050	NU202	12.7	10.4	20000	22000
17	40	12	0.6	0.3	0.060	N203	17.6	14.6	10000	18000
	40	12	0.6	0.3	0.060	NJ203	14.5	12.8	18000	18000
20	47	14	1.0	0.6	0.109	N204	16.6	13.9	17000	20000
	47	14	1.0	0.6	0.111	NJ204	16.6	13.9	17000	20000
	47	14	1.0	0.6	0.111	NU204	16.6	13.9	17000	20000
	52	15	1.1	0.6	0.149	N304	23.1	19.2	14000	17000
	52	15	1.1	0.6	0.153	NJ304	23.1	19.2	14000	17000
	52	15	1.1	0.6	0.153	NU304	23.1	19.2	14000	17000
25	52	15	1.0	0.6	0.134	N205	18.8	17.0	14000	16000
	52	15	1.0	0.6	0.137	NJ205	18.8	17.0	14000	17000
	52	18	1.1	0.6	0.170	NJ220 5V	35.3	29.4	12000	25000
	52	15	1.0	0.6	0.137	NU205	18.8	17.0	14000	16000
	62	17	1.1	1.1	0.235	N305	31.5	27.7	12000	14000
	62	17	1.1	1.1	0.241	NJ305	31.5	27.7	12000	14000
	62	17	1.1	1.1	0.241	NU305	31.5	27.7	12000	14000
	62	24	1.1	1.1	0.370	NJ230 5V	67.0	72.7	7200	10000
30	62	16	1.0	0.6	0.203	N206	24.9	23.3	12000	14000
	62	16	1.0	0.6	0.207	NJ206	24.9	23.3	12000	14000
	62	16	1.0	0.6	0.207	NU206	24.9	23.3	12000	14000
	72	19	1.1	1.1	0.350	N306	38.5	35.0	10000	12000
	72	19	1.1	1.1	0.358	NJ306	38.5	35.0	10000	12000
	72	19	1.1	1.1	0.358	NU306	38.5	35.0	10000	12000
35	72	17	1.1	0.6	0.289	N207	35.5	34.0	11000	12000
	72	17	1.1	0.6	0.295	NJ207	35.5	34.0	11000	12000
	72	17	1.1	0.6	0.295	NU207	35.5	34.0	11000	12000
	80	21	1.5	1.1	0.451	N307	49.5	47.0	9000	11000
	80	21	1.5	1.1	0.461	NJ307	49.5	47.0	9000	11000
	80	21	1.5	1.1	0.461	NU307	49.5	47.0	9000	11000
	80	21	1.5	1.5	0.536	NUP307V	77.2	78.6	10000	23000
40	80	18	1.1	1.1	0.370	N208	43.5	43.0	9400	11000
	80	18	1.1	1.1	0.378	NJ208	43.5	43.0	9400	11000
	80	18	1.1	1.1	0.378	NU208	43.5	43.0	9400	11000

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d	D	B	r _{min}	r _{max}			Dynamic Cr	Static Cor	Grease	Oil
40	90	23	1.5	1.5	0.643	N308	58.5	57.0	8000	9400
	90	23	1.5	1.5	0.658	NJ308	58.5	57.0	8000	9400
	90	23	1.5	1.5	0.658	NU308	58.5	57.0	8000	9400
45	85	19	1.1	1.1	0.423	N209	46.0	47.0	8400	9900
	85	19	1.1	1.1	0.432	NJ209	46.0	47.0	8400	9900
	85	19	1.1	1.1	0.432	NU209	46.0	47.0	8400	9900
	100	25	1.5	1.5	0.859	N309	79.0	77.5	7200	8400
	100	25	1.5	1.5	0.877	NJ309	79.0	77.5	7200	8400
	100	25	1.5	1.5	0.877	NU309	79.0	77.5	7200	8400
	100	25	2.5	2.5	1.019	NUP309NV	96.0	69.7	9000	14000
	100	25	1.5	1.5	1.000	NJ309V	117.0	125.0	4600	6000
50	90	20	1.1	1.1	0.460	N210	50.5	54.5	7600	9000
	90	20	1.1	1.1	0.470	NJ210	50.5	54.5	7600	9000
	90	20	1.1	1.1	0.470	NU210	50.5	54.5	7600	9000
	110	27	2.0	2.0	1.110	N310	87.0	86.0	6500	7700
	110	27	2.0	2.0	1.140	NJ310	87.0	86.0	6500	7700
	110	27	2.0	2.0	1.140	NU310	87.0	86.0	6500	7700
	110	27	2.0	2.0	1.280	NUP310NV	114.3	84.8	8500	14000
55	100	21	1.5	1.1	0.626	N211	61.0	66.5	6900	8200
	100	21	1.5	1.1	0.626	NJ211	61.0	66.5	6900	8200
	100	21	1.5	1.1	0.626	NU211	61.0	66.5	6900	8200
	120	29	2.0	2.0	1.420	N311	110.0	110.0	5900	7000
	120	29	2.0	2.0	1.450	NJ311	110.0	110.0	5900	7000
	120	29	3.0	3.0	1.670	NUP311NV	122.5	92.7	7500	11000
60	110	22	1.5	1.5	0.802	N212	72.0	80.0	6400	7600
	110	22	1.5	1.5	0.802	NJ212	72.0	80.0	6400	7600
	110	22	1.5	1.5	0.802	NU212	72.0	80.0	6400	7600
	130	31	2.1	2.1	1.760	N312	124.0	126.0	5500	6500
	130	31	2.1	2.1	1.800	NJ312	124.0	126.0	5500	6500
65	120	23	1.5	1.5	1.000	N213	84.0	94.5	5900	7000
	120	23	1.5	1.5	1.000	NJ213	84.0	94.5	5900	7000
	120	23	1.5	1.5	1.000	NU213	84.0	94.5	5900	7000
	140	33	2.1	2.1	2.180	N313	135.0	139.0	5100	6000
	140	33	2.1	2.1	2.230	NJ313	135.0	139.0	5100	6000
	140	33	2.1	2.1	2.230	NU313	135.0	139.0	5100	6000
	120	23	1.5	1.5	1.174	NUP213NV	115.3	110.2	6300	8900

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Principal dimensions (mm)					Weight Kg	Bearing Number	Basic Load Rating (kN)		Limiting Speed(rpm)	
d	D	B	r _{min}	r _{max}			Dynamic Cr	Static Cor	Grease	Oil
70	125	24	1.5	1.5	1.10	N214	87.5	101.0	5500	6500
	125	24	1.5	1.5	1.10	NJ214	87.5	101.0	5500	6500
	125	24	1.5	1.5	1.10	NU214	87.5	101.0	5500	6500
150	35	2.1	2.1	2.65	N314	158.0	168.0	4700	5500	
	150	35	2.1	2.1	2.71	NU314	158.0	168.0	4700	5500
75	130	25	1.5	1.5	1.21	N215	101.0	118.0	5100	6000
	130	25	1.5	1.5	1.21	NJ215	101.0	118.0	5100	6000
	130	25	1.5	1.5	1.21	NU215	101.0	118.0	5100	6000
80	140	26	2.0	2.0	1.47	N216	111.0	130.0	4800	5700
	140	26	2.0	2.0	1.47	NJ216	111.0	130.0	4800	5700
	140	26	2.0	2.0	1.47	NU216	111.0	130.0	4800	5700
170	39	2.1	2.1	3.77	N316	201.0	223.0	4100	4800	
	170	39	2.1	2.1	3.86	NU316	201.0	223.0	4100	4800
	85	150	28	2.0	2.0	1.83	N217	126.0	149.0	4500
150		28	2.0	2.0	1.83	NJ217	126.0	149.0	4500	5300
150		28	2.0	2.0	1.83	NU217	126.0	149.0	4500	5300
180	41	3.0	3.0	4.44	N317	225.0	247.0	3900	4600	
	180	41	3.0	3.0	4.44	NU317	225.0	247.0	3900	4600
	90	160	30	2.0	2.0	2.25	N218	152.0	178.0	4300
160		30	2.0	2.0	2.25	NJ218	152.0	178.0	4300	5000
160		30	2.0	2.0	2.25	NU218	152.0	178.0	4300	5000
190	43	3.0	3.0	5.18	N318	240.0	265.0	3700	4300	
	190	43	3.0	3.0	5.18	NU318	240.0	265.0	3700	4300
	95	170	32	2.1	2.1	2.72	N219	166.0	195.0	4000
170		32	2.1	2.1	2.72	NJ219	166.0	195.0	4000	4700
170		32	2.1	2.1	2.72	NU219	166.0	195.0	4000	4700
200	45	3.0	3.0	5.99	N319	274.0	310.0	3400	4000	
	200	45	3.0	3.0	5.99	NU319	274.0	310.0	3400	4000