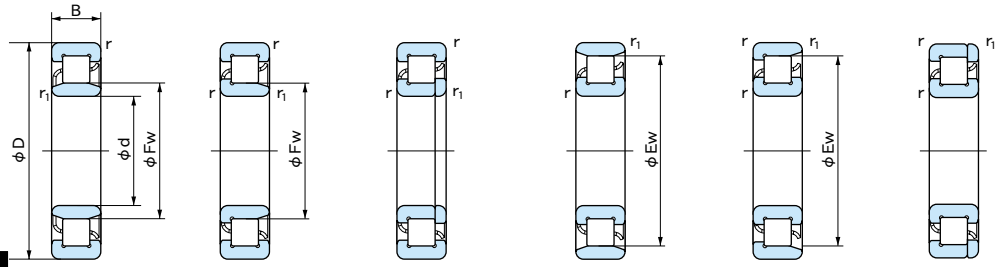
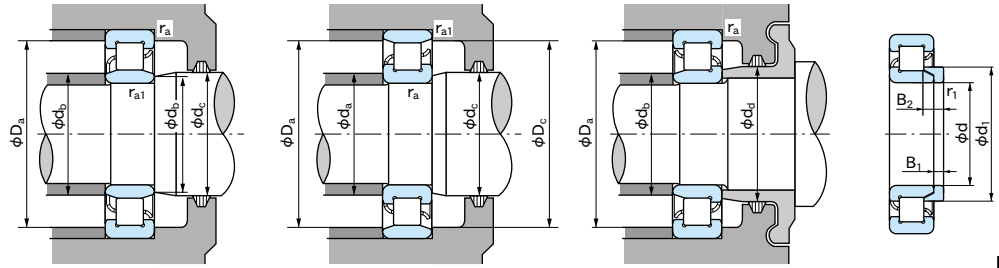
Cylindrical Roller Bearings

Bore Diameter : 17～40mm



NU NJ NUP N NF NP



L-shaped thrust collar

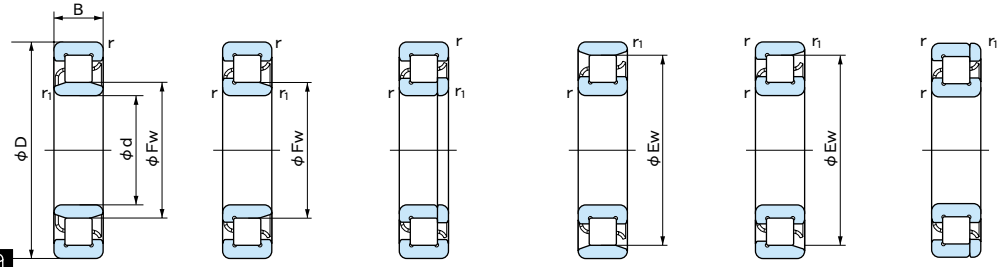
1N=0.102kgf

Boundary dimensions (mm)							Bearing No.						Basic dynamic load rating	Basic static load rating	Limiting speed (rpm)		Abutment and fillet dimensions (mm)										Mass (kg)		Dimensions of L-shaped thrust collar						
d	D	B	Ew	Fw	r (min)	r_1 (min)	NU	NJ	NUP	N	NF	NP	Cr(N)	Cor(N)	Grease lubrication	Oil lubrication	d_a (min)	d_b (min)	d_b (max)	d_c (min)	d_d (min)	D_a (max)	D_b (max)	D_b (min)	r_a (max)	r_{a1} (max)	NU	N	Bearing No.	d	d_1	B_1	B_2	r_1 (max)	Mass(kg) Reference
17	40	12	33.9	22.9	0.6	0.3	NU 203	NJ	NUP	N	NF	NP	12600	7950	16000	19000	22	19	22	24	25	35	34	34	0.6	0.3	0.082	0.080	—	—	—	—	—	—	—
20	47	14	40	27	1	0.6	NU 204	NJ	NUP	N	NF	NP	15400	12700	15000	18000	26	25	26	29	32	41	42	42	1	0.6	0.112	0.110	HJ 204	20	30	3	6.75	0.6	0.012
	47	14	—	26.5	1	0.6	NU 204 E	NJ	NUP	—	—	—	25700	22600	13000	16000	—	25	26	29	32	41	—	—	1	0.6	0.124	—	HJ 204 E	20	29.8	3	5.5	0.6	0.011
	47	18	—	27	1	0.6	NU 2204	NJ	NUP	—	—	—	20600	20700	14000	17000	—	25	26	29	32	41	—	—	1	0.6	0.144	—	HJ 2204	20	30	3	7.5	0.6	0.012
	47	18	—	26.5	1	0.6	NU 2204 E	NJ	NUP	—	—	—	30500	28300	13000	16000	—	25	26	29	32	41	—	—	1	0.6	0.162	—	HJ 2204 E	20	29.8	3	6.5	0.6	0.011
	52	15	44.5	28.5	1.1	0.6	NU 304	NJ	NUP	N	NF	NP	20700	19200	12000	14000	27	25	27	30	33	45	47	47	1	0.6	0.154	0.150	HJ 304	20	31.8	4	7.5	0.6	0.017
	52	15	—	27.5	1.1	0.6	NU 304 EG	NJ	NUP	—	—	—	31500	26900	10000	12000	—	25	27	30	33	45	—	—	1	0.6	0.150	—	HJ 304 E	20	31.4	4	6.5	0.6	0.016
	52	21	—	28.5	1.1	0.6	NU 2304	NJ	NUP	—	—	—	30500	27200	11000	13000	—	25	27	30	33	45	—	—	1	0.6	0.213	—	HJ 2304	20	31.8	4	8.5	0.6	0.018
	52	21	—	27.5	1.1	0.6	NU 2304 E	NJ	NUP	—	—	—	42000	38500	10000	12000	—	25	27	30	33	45	—	—	1	0.6	0.240	—	HJ 2304 E	20	31.4	4	7.5	0.6	0.017
25	47	12	41.5	30.5	0.6	0.3	NU 1005	—	—	N	—	—	14300	13100	15000	18000	29	27.5	30	32	—	42	45	41.8	0.6	0.3	0.086	0.084	—	—	—	—	—	—	—
	52	15	45	32	1	0.6	NU 205	NJ	NUP	N	NF	NP	17500	15700	12000	15000	31	30	31	34	37	46	47	47	1	0.6	0.133	0.130	HJ 205	25	35	3	7.25	0.6	0.015
	52	15	—	31.5	1	0.6	NU 205 EG	NJ	NUP	—	—	—	29300	27700	10000	12000	—	30	31	34	37	46	—	—	1	0.6	0.140	—	HJ 205 E	25	34.8	3	6	0.6	0.013
	52	18	—	32	1	0.6	NU 2205	NJ	NUP	—	—	—	24300	23500	11000	13000	—	30	31	34	37	46	—	—	1	0.6	0.163	—	HJ 2205	25	35	3	7.5	0.6	0.016
	52	18	—	31.5	1	0.6	NU 2205 EG	NJ	NUP	—	—	—	35000	34500	10000	12000	—	30	31	34	37	46	—	—	1	0.6	0.185	—	HJ 2205 E	25	34.8	3	6.5	0.6	0.015
	62	17	53	35	1.1	1.1	NU 305	NJ	NUP	N	NF	NP	29200	25200	9500	12000	32	32	33	37	40	55	55	55	1	1	0.238	0.230	HJ 305	25	39	4	8	1.1	0.027
	62	17	—	34	1.1	1.1	NU 305 EG	NJ	NUP	—	—	—	41500	37500	8500	10000	—	32	33	37	40	55	—	—	1	1	0.240	—	HJ 305 E	25	38.2	4	7	1.1	0.024
	62	24	—	35	1.1	1.1	NU 2305	NJ	NUP	—	—	—	42500	41000	9300	11000	—	32	33	37	40	55	—	—	1	1	0.340	—	HJ 2305	25	39	4	9	1.1	0.029
	62	24	—	34	1.1	1.1	NU 2305 E	NJ	NUP	—	—	—	57000	56000	8500	10000	—	32	33	37	40	55	—	—	1	1	0.390	—	HJ 2305 E	25	38.2	4	8	1.1	0.026
	80	21	62.8	38.8	1.5	1.5	NU 405	NJ	NUP	N	NF	NP	46500	40000	7500	9000	33.5	33.5	38	41	46	71.5	71.5	64	1.5	1.5	0.564	0.550	HJ 405	25	43.6	6	10.5	1.5	0.054
30	55	13	48.5	36.5	1	0.6	NU 1006	—	—	N	—	—	18700	18400	12000	15000	35	33.5	35	38	—	49	52	49	1	0.6	0.123	0.121	—	—	—	—	—	—	—
	62	16	53.5	38.5	1	0.6	NU 206	NJ	NUP	N	NF	NP	23500	21500	10000	13000	36	35	37	40	44	56	57	56	1	0.6	0.204	0.200	HJ 206	30	41.8	4	8.25	0.6	0.026
	62	16	—	37.5	1	0.6	NU 206 EG	NJ	NUP	—	—	—	39000	37500	8500	10000	—	35	37	40	44	56	—	—	1	0.6	0.210	—	HJ 206 E	30	41.4	4	7	0.6	0.024
	62	20	—	38.5	1	0.6	NU 2206	NJ	NUP	—	—	—	33000	33000	9200	11000	—	35	37	40	44	56	—	—	1	0.6	0.262	—	HJ 2206	30	41.8	4	8.5	0.6	0.026
	62	20	—	37.5	1	0.6	NU 2206 EG	NJ	NUP	—	—	—	49000	50000	8500	10000	—	35	37	40	44	56	—	—	1	0.6	0.295	—	HJ 2206 E	30	41.4	4	7.5	0.6	0.025
	72	19	62	42	1.1	1.1	NU 306	NJ	NUP	N	NF	NP	38500	35000	8500	10000	37	37	40	44	48	65	65	64	1	1	0.357	0.350	HJ 306	30	45.9	5	9.5	1.1	0.044
	72	19	—	40.5	1.1	1.1	NU 306 EG	NJ	NUP	—	—	—	53000	50000	7800	9400	—	37	40	44	48	65	—	—	1	1	0.370	—	HJ 306 E	30	45.1	5	8.5	1.1	0.041
	72	27	—	42	1.1	1.1	NU 2306	NJ	NUP	—	—	—	51500	51000	8200	9800	—	37	40	44	48	65	—	—	1	1	0.500	—	HJ 2306	30	45.9	5	11.5	1.1	0.048
	72	27	—	40.5	1.1	1.1	NU 2306 E	NJ	NUP	—	—	—	74500	77500	7800	9400	—	37	40	44	48	65	—	—	1	1	0.585	—	HJ 2306 E	30	45.1	5	9.5	1.1	0.043
	90	23	73	45	1.5	1.5	NU 406	NJ	NUP	N	NF	NP	62500	55000	7500	9000	38.5	38.5	44	47	52	81.5	81.5	74	1.5	1.5	0.770	0.750	HJ 406	30	50.5	7	11.5	1.5	0.080
35	62	14	55	42	1	0.6	NU 1007	—	—	N	—	—	21600	21800	10000	13000	40	38.5	41	44	—	56	59	55.5	1	0.6	0.185	0.182	—	—	—	—	—	—	—
	72	17	61.8	43.8	1.1	0.6	NU 207	NJ	NUP	N	NF	NP	33500	31500	9000	11000	42	40	43	46	50	65	67	64	1	0.6	0.295	0.290	HJ 207	35	47.6	4	8	0.6	0.032
	72	17	—	44	1.1	0.6	NU 207 EG	NJ	NUP	—	—	—	50000	50000	8200	9800	—	40	43	46	50	65	—	—	1	0.6	0.300	—	HJ 207 E	35	48.2	4	7	0.6	0.032
	72	23	—	43.8	1.1	0.6	NU 2207	NJ	NUP	—	—	—	49000	51000	8500	10000	—	40	43	46	50	65	—	—	1	0.6	0.402	—	HJ 2207	35	47.6	4	8.5	0.6	0.033
	72	23	—	44	1.1	0.6	NU 2207 EG	NJ	NUP	—	—	—	61500	65000	8200	9800	—	40	43	46	50	65	—	—	1	0.6	0.446	—	HJ 2207 E	35	48.2	4	8.5	0.6	0.035
	80	21	68.2	46.2	1.5	1.1	NU 307	NJ	NUP	N	NF	NP	49500	47000	8000	9500	43.5	42	45	48	53	71.5	73	71	1.5	1	0.470	0.460	HJ 307	35	50.8	6	11	1.1	0.060
	80	21	—	46.2	1.5	1.1	NU 307 EG	NJ	NUP	—	—	—	66500	65500	6800	8200	—	42	45	48	53	71.5	—	—	1.5	1	0.490	—	HJ 307 E	35	51.1	6	9.5	1.1	0.058
	80	31	—	46.2	1.5	1.1	NU 2307	NJ	NUP	—	—	—	60500	60000	7200	8600	—	42	45	48	53	71.5	—	—	1.5	1	0.696	—	HJ 2307	35	50.8	6	14	1.1	0.067
	80	31	—	46.2	1.5	1.1	NU 2307 E	NJ	NUP	—	—	—	99000	109000	6800	8200	—	42	45	48	53	71.5	—	—	1.5	1	0.780	—	HJ 2307 E	35	51.1	6	11	1.1	0.062
	100	25	83	53	1.5	1.5	NU 407	NJ	NUP	N	NF	NP	75000	69000	6700	8000	43.5	43.5	52	55	61	91.5	91.5	84	1.5	1.5	1.05	1.02	HJ 407	35	59	8	13	1.5	0.120
40	68	15	61	47	1	0.6	NU 1008	—	—	N	—	—	25000	25700	9500	12000	45	45	46	49	—	62	64	61.5	1	0.6	0.226	0.223	—	—	—	—	—	—	—
	80	18	70	50	1.1	1.1	NU 208	NJ	NUP	N	NF	NP	43500	43000	8500	10000	47	47	49	52	56	73	73	72	1	1	0.369	0.360	HJ 208	40	54.2	5	9	1.1	0.049
	80	18	—	49.5	1.1	1.1	NU 208 EG	NJ	NUP	—	—	—	55500	55500	7200	8600	—	47	49	52	56	73	—	—	1	1	0.380	—	HJ 208 E	40	54.1	5	8.5	1.1	0.047
	80	23	—	50	1.1	1.1	NU 2208	NJ	NUP	—	—	—	58000	62000	7500	9000	—	47	49	52	56	73	—	—	1	1	0.490	—	HJ 2208	40	54.2	5	9.5	1.1	0.050
	80	23	—	49.5	1.1	1.1	NU 2208 EG	NJ	NUP	—	—	—	72000	77500	7200	8600	—	47	49	52	56	73	—	—	1	1	0.743	—	HJ 2208 E	40	54.1	5	9	1.1	0.049
	90	23	77.5	53.5	1.5	1.5	NU 308	NJ	NUP	N	NF	NP	58500	57000	6700	8000	48.5	48.5	51	55	60	81.5	81.5	80	1.5	1.5	0.665	0.650	HJ 308	40	58.4	7	12.5	1.5	0.090
	90	23	—	52	1.5	1.5	NU 308 EG	NJ	NUP	—	—	—	83000	81500	6400	7700	—	48.5	51	55	60	81.5	—	—	1.5	1.5	0.670	—	HJ 308 E	40	57.7	7	11	1.5	0.084
	90	33	—	53.5	1.5	1.5	NU 2308	NJ	NUP	—	—	—	82000	88000	6500	7800	—	48.5	51	55	60	81.5	—	—	1.5	1.5	0.956	—	HJ 2308	40	58.4	7	14.5	1.5	0.097
	90	33	—	52	1.5	1.5	NU 2308 E	NJ	NUP	—	—	—	114000	122000	6400	7700	—	48.5	51	55	60	81.5	—	—	1.5	1.5	1.05	—	HJ 2308 E	40	57.7	7	12.5	1.5	0.090
	110	27	92	58	2	2	NU 408	NJ	NUP	N	NF	NP	95500	89000	6000	7000	50	50	57	60	67	100	100	93	2	2	1.33	1.30	HJ 408	40	64.8	8	13	2	0.144

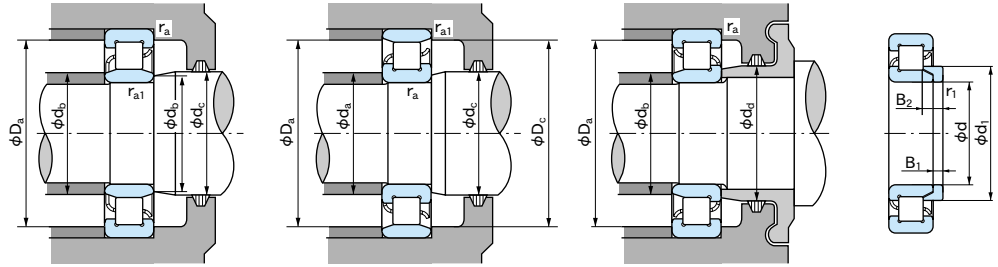
Note : The dimension table shows limiting speed for bearings made with machined cages. For bearings made with pressed steel cages, multiply the table limits by 0.8.

Cylindrical Roller Bearings

Bore Diameter : 45～65mm



NU NJ NUP N NF NP



L−shaped thrust collar

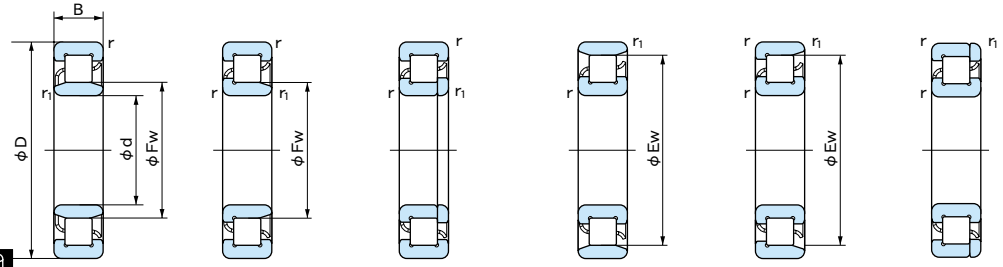
1N=0.102kgf

Boundary dimensions (mm)							Bearing No.						Basic dynamic load rating	Basic static load rating	Limiting speed (rpm)		Abutment and fillet dimensions (mm)										Mass (kg)		Dimensions of L-shaped thrust collar						
d	D	B	Ew	Fw	r (min)	r_1 (min)	NU	NJ	NUP	N	NF	NP	Cr (N)	Cor (N)	Grease lubrication	Oil lubrication	d_a (min)	d_b (min)	d_b (max)	d_c (min)	d_d (min)	D_a (max)	D_b (max)	D_b (min)	r_a (max)	r_{a1} (max)	NU	N	Bearing No.	d	d_1	B_1	B_2	r_1 (max)	Mass (kg) Reference
45	75	16	67.5	52.5	1	0.6	NU 1009	—	—	N	—	—	29700	32000	9000	11000	50	50	52	54	—	69	71	68	1	0.6	0.284	0.289	—	—	—	—	—	—	—
	85	19	75	55	1.1	1.1	NU 209	NJ	NUP	N	NF	NP	46000	47000	7500	9000	52	52	54	57	61	78	78	77	1	1	0.430	0.420	HJ 209	45	59	5	9.5	1.1	0.054
	85	19	—	54.5	1.1	1.1	NU 209 EG	NJ	NUP	—	—	—	63000	66500	7000	8500	—	52	54	57	61	78	—	—	1	1	0.440	—	HJ 209 E	45	59.1	5	8.5	1.1	0.053
	85	23	—	55	1.1	1.1	NU 2209	NJ	NUP	—	—	—	61500	67500	7400	8900	—	52	54	57	61	78	—	—	1	1	0.536	—	HJ 2209	45	59	5	9.5	1.1	0.054
	85	23	—	54.5	1.1	1.1	NU 2209 EG	NJ	NUP	—	—	—	76000	84500	7000	8500	—	52	54	57	61	78	—	—	1	1	0.593	—	HJ 2209 E	45	59.1	5	9	1.1	0.054
	100	25	86.5	58.5	1.5	1.5	NU 309	NJ	NUP	N	NF	NP	78500	77500	6300	7500	53.5	53.5	57	60	66	91.5	91.5	89	1.5	1.5	0.871	0.850	HJ 309	45	64	7	12.5	1.5	0.105
	100	25	—	58.5	1.5	1.5	NU 309 EG	NJ	NUP	—	—	—	97500	98500	6000	7200	—	53.5	57	60	66	91.5	—	—	1.5	1.5	0.910	—	HJ 309 E	45	64.5	7	11.5	1.5	0.103
	100	36	—	58.5	1.5	1.5	NU 2309	NJ	NUP	—	—	—	99000	104000	6100	7300	—	53.5	57	60	66	91.5	—	—	1.5	1.5	1.25	—	HJ 2309	45	64	7	15	1.5	0.115
	100	36	—	58.5	1.5	1.5	NU 2309 E	NJ	NUP	—	—	—	137000	153000	6000	7200	—	53.5	57	60	66	91.5	—	—	1.5	1.5	1.40	—	HJ 2309 E	45	64.5	7	13	1.5	0.112
	120	29	100.5	64.5	2	2	NU 409	NJ	NUP	N	NF	NP	107000	102000	5600	6700	55	55	63	66	74	110	110	102	2	2	1.67	1.64	HJ 409	45	71.8	8	13.5	2	0.176
50	80	16	72.5	57.5	1	0.6	NU 1010	—	—	N	—	—	32000	36000	8500	10000	53	55	57	59	—	74	76	73	1	0.6	0.310	0.306	—	—	—	—	—	—	—
	90	20	80.4	60.4	1.1	1.1	NU 210	NJ	NUP	N	NF	NP	48000	51000	7000	8500	57	57	58	62	67	83	83	83	1	1	0.481	0.470	HJ 210	50	64.6	5	10	1.1	0.063
	90	20	—	59.5	1.1	1.1	NU 210 EG	NJ	NUP	—	—	—	66000	72000	6400	7700	—	57	58	62	67	83	—	—	1	1	0.490	—	HJ 210 E	50	64.1	5	9	1.1	0.059
	90	23	—	60.4	1.1	1.1	NU 2210	NJ	NUP	—	—	—	64000	73500	6500	7800	—	57	58	62	67	83	—	—	1	1	0.580	—	HJ 2210	50	64.6	5	9.5	1.1	0.062
	90	23	—	59.5	1.1	1.1	NU 2210 EG	NJ	NUP	—	—	—	79500	91500	6400	7700	—	57	58	62	67	83	—	—	1	1	0.632	—	HJ 2210 E	50	64.1	5	9	1.1	0.059
	110	27	95	65	2	2	NU 310	NJ	NUP	N	NF	NP	86500	86000	5600	6700	60	60	63	67	73	100	100	98	2	2	1.17	1.14	HJ 310	50	71	8	14	2	0.145
	110	27	—	65	2	2	NU 310 EG	NJ	NUP	—	—	—	110000	113000	5400	6500	—	60	63	67	73	100	—	—	2	2	1.17	—	HJ 310 E	50	71.4	8	13	2	0.145
	110	40	—	65	2	2	NU 2310	NJ	NUP	—	—	—	120000	131000	5400	6500	—	60	63	67	73	100	—	—	2	2	1.69	—	HJ 2310	50	71	8	17	2	0.159
	110	40	—	65	2	2	NU 2310 E	NJ	NUP	—	—	—	162000	187000	5400	6500	—	60	63	67	73	100	—	—	2	2	1.85	—	HJ 2310 E	50	71.4	8	14.5	2	0.152
	130	31	110.8	70.8	2.1	2.1	NU 410	NJ	NUP	N	NF	NP	138000	136000	5000	6000	62	62	69	73	81	118	118	112	2	2	2.05	2.01	HJ 410	50	78.8	9	14.5	2.1	0.230
55	90	18	80.5	64.5	1.1	1	NU 1011	—	—	N	—	—	36000	41500	7500	9000	61.5	61	63	66	—	83	85	81.5	1	1	0.449	0.445	—	—	—	—	—	—	—
	100	21	88.5	66.5	1.5	1.1	NU 211	NJ	NUP	N	NF	NP	58000	62000	6300	7500	63.5	62	65	68	73	91.5	93	91	1.5	1	0.634	0.630	HJ 211	55	70.8	6	11	1.1	0.086
	100	21	—	66	1.5	1.1	NU 211 EG	NJ	NUP	—	—	—	82500	93000	5800	7000	—	62	65	68	73	91.5	—	—	1.5	1	0.670	—	HJ 211 E	55	70.9	6	9.5	1.1	0.083
	100	25	—	66.5	1.5	1.1	NU 2211	NJ	NUP	—	—	—	75000	87000	6200	7400	—	62	65	68	73	91.5	—	—	1.5	1	0.780	—	HJ 2211	55	70.8	6	11	1.1	0.086
	100	25	—	66	1.5	1.1	NU 2211 EG	NJ	NUP	—	—	—	97000	114000	5800	7000	—	62	65	68	73	91.5	—	—	1.5	1	0.870	—	HJ 2211 E	55	70.9	6	10	1.1	0.085
	120	29	104.5	70.5	2	2	NU 311	NJ	NUP	N	NF	NP	110000	111000	5000	6000	65	65	69	72	80	110	110	107	2	2	1.43	1.40	HJ 311	55	77.2	9	15	2	0.186
	120	29	—	70.5	2	2	NU 311 EG	NJ	NUP	—	—	—	137000	143000	4800	5600	—	65	69	72	80	110	—	—	2	2	1.50	—	HJ 311 E	55	77.6	9	14	2	0.186
	120	43	—	70.5	2	2	NU 2311	NJ	NUP	—	—	—	148000	162000	4800	5600	—	65	69	72	80	110	—	—	2	2	2.10	—	HJ 2311	55	77.2	9	18.5	2	0.206
	120	43	—	70.5	2	2	NU 2311 E	NJ	NUP	—	—	—	201000	233000	4800	5600	—	65	69	72	80	110	—	—	2	2	2.35	—	HJ 2311 E	55	77.6	9	15.5	2	0.195
	140	33	117.2	77.2	2.1	2.1	NU 411	NJ	NUP	N	NF	NP	139000	138000	4800	5600	67	67	76	79	87	128	128	119	2	2	2.54	2.51	HJ 411	55	85.2	10	16.5	2.1	0.292
60	95	18	85.5	69.5	1.1	1	NU 1012	—	—	N	—	—	37000	44000	6700	8000	66.5	66	68	71	—	88	90	86.5	1	1	0.484	0.477	—	—	—	—	—	—	—
	110	22	97.5	73.5	1.5	1.5	NU 212	NJ	NUP	N	NF	NP	68500	75000	5600	6700	68.5	68.5	71	75	80	101.5	101.5	100	1.5	1.5	0.835	0.820	HJ 212	60	78.4	6	11	1.5	0.109
	110	22	—	72	1.5	1.5	NU 212 E	NJ	NUP	—	—	—	97500	107000	5000	6000	—	68.5	71	75	80	101.5	—	—	1.5	1.5	0.921	—	HJ 212 E	60	77.7	6	10	1.5	0.104
	110	28	—	73.5	1.5	1.5	NU 2212	NJ	NUP	—	—	—	96000	116000	5300	6300	—	68.5	71	75	80	101.5	—	—	1.5	1.5	1.07	—	HJ 2212	60	78.4	6	11	1.5	0.109
	110	28	—	72	1.5	1.5	NU 2212 E	NJ	NUP	—	—	—	131000	157000	5000	6000	—	68.5	71	75	80	101.5	—	—	1.5	1.5	1.23	—	HJ 2212 E	60	77.7	6	10	1.5	0.104
	130	31	113	77	2.1	2.1	NU 312	NJ	NUP	N	NF	NP	123000	126000	4800	5600	72	72	75	79	86	118	118	116	2	2	1.82	1.78	HJ 312	60	84.2	9	15.5	2.1	0.224
	130	31	—	77	2.1	2.1	NU 312 EG	NJ	NUP	—	—	—	150000	157000	4200	4800	—	72	75	79	86	118	—	—	2	2	1.87	—	HJ 312 E	60	84.5	9	14.5	2.1	0.222
	130	46	—	77	2.1	2.1	NU 2312	NJ	NUP	—	—	—	168000	188000	4300	5000	—	72	75	79	86	118	—	—	2	2	2.69	—	HJ 2312	60	84.2	9	19	2.1	0.248
	130	46	—	77	2.1	2.1	NU 2312 E	NJ	NUP	—	—	—	222000	262000	4200	4800	—	72	75	79	86	118	—	—	2	2	3.01	—	HJ 2312 E	60	84.5	9	16	2.1	0.232
	150	35	127	83	2.1	2.1	NU 412	NJ	NUP	N	NF	NP	167000	168000	4300	5000	72	72	82	85	94	118	118	128	2	2	3.05	3.02	HJ 412	60	91.8	10	16.5	2.1	0.336
65	100	18	90.5	74.5	1.1	1	NU 1013	—	—	N	—	—	38000	46500	6300	7500	71.5	71	73	75	—	93	95	91.5	1	1	0.514	0.560	—	—	—	—	—	—	—
	120	23	105.6	79.6	1.5	1.5	NU 213	NJ	NUP	N	NF	NP	83500	94500	5300	6300	73.5	73.5	77	81	87	111.5	111.5	108	1.5	1.5	1.06	1.04	HJ 213	65	84.8	6	11	1.5	0.127
	120	23	—	78.5	1.5	1.5	NU 213 E	NJ	NUP	—	—	—	107000	119000	4800	5600	—	73.5	77	81	87	111.5	—	—	1.5	1.5	1.18	—	HJ 213 E	65	84.5	6	10	1.5	0.123
	120	31	—	79.6	1.5	1.5	NU 2213	NJ	NUP	—	—	—	120000	149000	4800	5600	—	73.5	77	81	87	111.5	—	—	1.5	1.5	1.43	—	HJ 2213	65	84.8	6	11.5	1.5	0.130
	120	31	—	78.5	1.5	1.5	NU 2213 E	NJ	NUP	—	—	—	149000	181000	4800	5600	—	73.5	77	81	87	111.5	—	—	1.5	1.5	1.65	—	HJ 2213 E	65	84.5	6	10.5	1.5	0.126
	140	33	121.5	83.5	2.1	2.1	NU 313	NJ	NUP	N	NF	NP	135000	139000	4500	5300	77	77	81	85	93	128	128	125	2	2	2.27	2.22	HJ 313	65	91	10	17	2.1	0.286
	140	33	—	82.5	2.1	2.1	NU 313 E	NJ	NUP	—	—	—	180000	191000	3800	4500	—	77	81	85	93	128	—	—	2	2	2.55	—	HJ 313 E	65	90.6	10	15.5	2.1	0.274
	140	48	—	83.5	2.1	2.1	NU 2313	NJ	NUP	—	—	—	187000	212000	4000	4800	—	77	81	85	93	128	—	—	2	2	3.25	—	HJ 2313	65	91	10	20	2.1	0.309
	140	48	—	82.5	2.1	2.1	NU 2313 E	NJ	NUP	—	—	—	247000	287000	3800	4500	—	77	81	85	93	128	—	—	2	2	3.56	—	HJ 2313 E	65	90.6	10	18	2.1	0.309
	160	37	135.3	89.3	2.1	2.1	NU 413	NJ	NUP	N	NF	NP	195000	203000	4000	4800	77	77	88	91	100	148	148	137	2	2	3.68	3.58	HJ 413	65	98.5	11	18	2.1	0.417

Note : The dimension table shows limiting speed for bearings made with machined cages. For bearings made with pressed steel cages, multiply the table limits by 0.8.

Cylindrical Roller Bearings

Bore Diameter : 70～90mm



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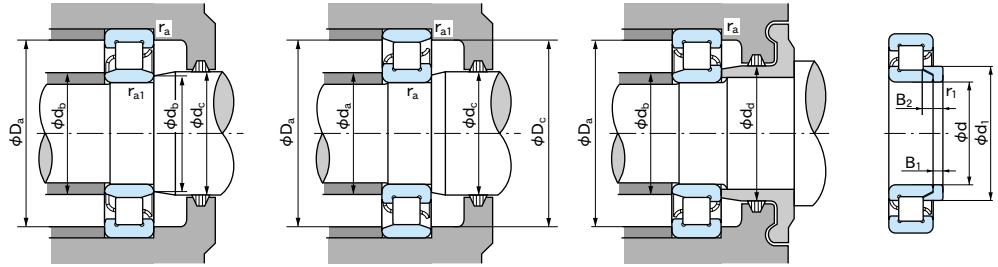


L−shaped thrust collar

1N=0.102kgf

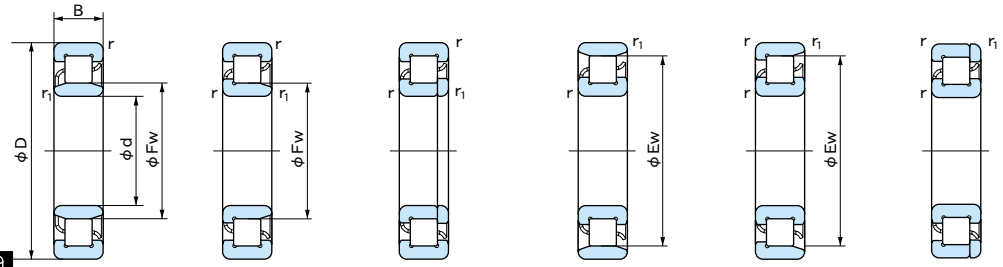
Boundary dimensions (mm)							Bearing No.						Basic dynamic load rating	Basic static load rating	Limiting speed (rpm)	
d	D	B	Ew	Fw	r (min)	r_1 (min)	NU	NJ	NUP	N	NF	NP	Cr (N)	Cor (N)	Grease lubrication	Oil lubrication
70	110	20	100	80	1.1	1	NU 1014	—	—	N	—	—	55500	67000	6000	7000
	125	24	110.5	84.5	1.5	1.5	NU 214	NJ	NUP	N	NF	NP	83000	95000	5000	6000
	125	24	—	83.5	1.5	1.5	NU 214 E	NJ	NUP	—	—	—	119000	137000	4600	5500
	125	31	—	84.5	1.5	1.5	NU 2214	NJ	NUP	—	—	—	119000	151000	4800	5600
	125	31	—	83.5	1.5	1.5	NU 2214 E	NJ	NUP	—	—	—	156000	194000	4600	5500
	150	35	130	90	2.1	2.1	NU 314	NJ	NUP	N	NF	NP	158000	220000	4000	4800
	150	35	—	89	2.1	2.1	NU 314 E	NJ	NUP	—	—	—	205000	222000	3600	4300
	150	51	—	90	2.1	2.1	NU 2314	NJ	NUP	—	—	—	223000	262000	3800	4500
	150	51	—	89	2.1	2.1	NU 2314 E	NJ	NUP	—	—	—	274000	320000	3600	4300
	180	42	152	100	3	3	NU 414	NJ	NUP	N	NF	NP	228000	235000	3600	4300
75	115	20	105	85	1.1	1	NU 1015	—	—	N	—	—	57500	71000	5600	6700
	130	25	116.5	88.5	1.5	1.5	NU 215	NJ	NUP	N	NF	NP	96000	111000	4800	5600
	130	25	—	88.5	1.5	1.5	NU 215 E	NJ	NUP	—	—	—	130000	156000	4300	5200
	130	31	—	88.5	1.5	1.5	NU 2215	NJ	NUP	—	—	—	129000	162000	4500	5300
	130	31	—	88.5	1.5	1.5	NU 2215 E	NJ	NUP	—	—	—	161000	207000	4300	5200
	160	37	139.5	95.5	2.1	2.1	NU 315	NJ	NUP	N	NF	NP	190000	205000	3800	4500
	160	37	—	95	2.1	2.1	NU 315 E	NJ	NUP	—	—	—	240000	263000	3400	4000
	160	55	—	95.5	2.1	2.1	NU 2315	NJ	NUP	—	—	—	258000	300000	3400	4000
	160	55	—	95	2.1	2.1	NU 2315 E	NJ	NUP	—	—	—	330000	395000	3400	4000
	190	45	160.5	104.5	3	3	NU 415	NJ	NUP	N	NF	NP	262000	274000	3400	4000
80	125	22	113.5	91.5	1.1	1	NU 1016	—	—	N	—	—	69000	86500	5300	6300
	140	26	125.3	95.3	2	2	NU 216	NJ	NUP	N	NF	NP	106000	122000	4500	5300
	140	26	—	95.3	2	2	NU 216 E	NJ	NUP	—	—	—	139000	167000	4000	4800
	140	33	—	95.3	2	2	NU 2216	NJ	NUP	—	—	—	147000	186000	4000	4800
	140	33	—	95.3	2	2	NU 2216 E	NJ	NUP	—	—	—	186000	243000	4000	4800
	170	39	147	103	2.1	2.1	NU 316	NJ	NUP	N	NF	NP	190000	207000	3600	4300
	170	39	—	101	2.1	2.1	NU 316 E	NJ	NUP	—	—	—	256000	282000	3200	3800
	170	58	—	103	2.1	2.1	NU 2316	NJ	NUP	—	—	—	274000	330000	3200	3800
	170	58	—	101	2.1	2.1	NU 2316 E	NJ	NUP	—	—	—	355000	430000	3200	3800
	200	48	170	110	3	3	NU 416	NJ	NUP	N	NF	NP	299000	315000	3200	3800
85	130	22	118.5	96.5	1.1	1	NU 1017	—	—	N	—	—	71500	91000	5000	6000
	150	28	133.8	101.8	2	2	NU 217	NJ	NUP	N	NF	NP	120000	140000	4300	5000
	150	28	—	100.5	2	2	NU 217 E	NJ	NUP	—	—	—	167000	199000	3800	4500
	150	36	—	101.8	2	2	NU 2217	NJ	NUP	—	—	—	169000	218000	3800	4500
	150	36	—	100.5	2	2	NU 2217 E	NJ	NUP	—	—	—	217000	279000	3800	4500
	180	41	156	108	3	3	NU 317	NJ	NUP	N	NF	NP	224000	247000	3400	4000
	180	41	—	108	3	3	NU 317 E	NJ	NUP	—	—	—	291000	330000	3000	3600
	180	60	—	108	3	3	NU 2317	NJ	NUP	—	—	—	315000	380000	3000	3600
	180	60	—	108	3	3	NU 2317 E	NJ	NUP	—	—	—	390000	485000	3000	3600
	210	52	177	113	4	4	NU 417	NJ	NUP	N	NF	NP	330000	350000	3000	3600
90	140	24	127	103	1.5	1.1	NU 1018	—	—	N	—	—	81500	104000	4800	5600
	160	30	143	107	2	2	NU 218	NJ	NUP	N	NF	NP	152000	178000	3800	4500
	160	30	—	107	2	2	NU 218 E	NJ	NUP	—	—	—	182000	217000	3400	4000
	160	40	—	107	2	2	NU 2218	NJ	NUP	—	—	—	207000	265000	3600	4300
	160	40	—	107	2	2	NU 2218 E	NJ	NUP	—	—	—	242000	315000	3400	4000
	190	43	165	115	3	3	NU 318	NJ	NUP	N	NF	NP	240000	265000	3200	3800
	190	43	—	113.5	3	3	NU 318 E	NJ	NUP	—	—	—	315000	355000	2500	3200
	190	64	—	115	3	3	NU 2318	NJ	NUP	—	—	—	325000	395000	2800	3400
	190	64	—	113.5	3	3	NU 2318 E	NJ	NUP	—	—	—	435000	535000	2600	3200
	225	54	191.5	123.5	4	4	NU 418	NJ	NUP	N	NF	NP	375000	400000	2800	3400

Abutment and fillet dimensions (mm)										Mass (kg)		Dimensions of L-shaped thrust collar						
d_a (min)	d_b (min)	d_b (max)	d_c (min)	d_d (min)	D_a (max)	D_b (max)	D_b (min)	r_a (max)	r_{a1} (max)	NU	N	Bearing No.	d	d_1	B_1	B_2	r_1 (max)	Mass (kg) Reference
76.5	76	78	82	—	103	105	100.5	1	1	0.712	0.702	—	—	—	—	—	—	—
78.5	78.5	82	86	92	116.5	116.5	114	1.5	1.5	1.16	1.14	HJ 214	70	89.6	7	12.5	1.5	0.154
—	78.5	82	86	92	116.5	—	—	1.5	1.5	1.26	—	HJ 214 E	70	89.5	7	11	1.5	0.149
—	78.5	82	86	92	116.5	—	—	1.5	1.5	1.52	—	HJ 2214	70	89.6	7	12.5	1.5	0.154
—	78.5	82	86	92	116.5	—	—	1.5	1.5	1.68	—	HJ 2214 E	70	89.5	7	11.5	1.5	0.152
82	82	87	92	100	138	138	134	2	2	2.73	2.68	HJ 314	70	98	10	17.5	2.1	0.336
—	82	87	92	100	138	—	—	2	2	3.15	—	HJ 314 E	70	97.5	10	15.5	2.1	0.315
—	82	87	92	100	138	—	—	2	2	3.97	—	HJ 2314	70	98	10	20.5	2.1	0.362
—	82	87	92	100	138	—	—	2	2	4.30	—	HJ 2314 E	70	97.5	10	18.5	2.1	0.343
84	84	99	102	112	166	166	153	2.5	2.5	5.40	5.26	HJ 414	70	110.5	12	20	3	0.607
81.5	81	83	87	—	108	110	105.5	1	1	0.745	0.735	—	—	—	—	—	—	—
83.5	83.5	87	90	96	121.5	121.5	120	1.5	1.5	1.24	1.22	HJ 215	75	94	7	12.5	1.5	0.161
—	83.5	87	90	96	121.5	—	—	1.5	1.5	1.38	—	HJ 215 E	75	94.5	7	11	1.5	0.159
—	83.5	87	90	96	121.5	—	—	1.5	1.5	1.57	—	HJ 2215	75	94	7	12.5	1.5	0.161
—	83.5	87	90	96	121.5	—	—	1.5	1.5	1.80	—	HJ 2215 E	75	94.5	7	11.5	1.5	0.162
87	87	93	97	106	148	148	143	2	2	3.21	3.15	HJ 315	75	104.2	11	18.5	2.1	0.406
—	87	93	97	106	148	—	—	2	2	3.70	—	HJ 315 E	75	104.2	11	16.5	2.1	0.389
—	87	93	97	106	148	—	—	2	2	4.84	—	HJ 2315	75	104.2	11	21.5	2.1	0.437
—	87	93	97	106	148	—	—	2	2	5.30	—	HJ 2315 E	75	104.2	11	19.5	2.1	0.421
89	89	103	107	118	176	176	162	2.5	2.5	6.40	6.25	HJ 415	75	116	13	21.5	3	0.710
86.5	86	90	94	—	118	120	113.5	1	1	1.03	0.994	—	—	—	—	—	—	—
90	90	94	97	104	130	130	128	2	2	1.53	1.50	HJ 216	80	101.2	8	13.5	2	0.214
—	90	94	97	104	130	—	—	2	2	1.66	—	HJ 216 E	80	101.6	8	12.5	2	0.213
—	90	94	97	104	130	—	—	2	2	1.96	—	HJ 2216	80	101.2	8	13.5	2	0.214
—	90	94	97	104	130	—	—	2	2	2.15	—	HJ 2216 E	80	101.6	8	12.5	2	0.213
92	92	99	105	114	158	158	151	2	2	3.93	3.83	HJ 316	80	111.8	11	19.5	2.1	0.479
—	92	99	105	114	158	—	—	2	2	4.38	—	HJ 316 E	80	110.6	11	17	2.1	0.440
—	92	99	105	114	158	—	—	2	2	5.83	—	HJ 2316	80	111.8	11	23	2.1	0.517
—	92	99	105	114	158	—	—	2	2	6.35	—	HJ 2316 E	80	110.6	11	20	2.1	0.475
94	94	109	112	124	186	186	172	2.5	2.5	7.45	7.28	HJ 416	80	122	13	22	3	0.779
91.5	91	95	99	—	123	125	118.5	1	1	1.06	1.04	—	—	—	—	—	—	—
95	95	99	104	110	140	140	137	2	2	1.92	1.87	HJ 217	85	108.2	8	14	2	0.253
—	95	99	104	110	140	—	—	2	2	2.10	—	HJ 217 E	85	107.6	8	12.5	2	0.239
—	95	99	104	110	140	—	—	2	2	2.50	—	HJ 2217	85	108.2	8	14	2	0.253
—	95	99	104	110	140	—	—	2	2	2.75	—	HJ 2217 E	85	107.6	8	13	2	0.243
99	99	106	110	119	166	166	160	2.5	2.5	4.54	4.44	HJ 317	85	117.5	12	20.5	3	0.560
—	99	106	110	119	166	—	—	2.5	2.5	5.12	—	HJ 317 E	85	117.9	12	18.5	3	0.545
—	99	106	110	119	166	—	—	2.5	2.5	6.62	—	HJ 2317	85	117.5	12	24	3	0.603
—	99	106	110	119	166	—	—	2.5	2.5	7.35	—	HJ 2317 E	85	117.9	12	22	3	0.590
103	103	111	115	128	192	192	179	3	3	9.10	8.68	HJ 417	85	126	14	24	4	0.876
98	97	101	106	—	131.5	133.5	127.5	1.5	1	1.36	1.34	—	—	—	—	—	5	—
100	100	105	109	116	150	150	146	2	2	2.30	2.25	HJ 218	90	114.2	9	15	2	0.311
—	100	105	109	116	150	—	—	2	2	2.53	—	HJ 218 E	90	114.4	9	14	2	0.306
—	100	105	109	116	150	—	—	2	2	3.10	—	HJ 2218	90	114.2	9	16	2	0.320
—	100	105	109	116	150	—	—	2	2	3.48	—	HJ 2218 E	90	114.4	9	15	2	0.315
104	104	111	117	127	176	176	169	2.5	2.5	5.37	5.25	HJ 318	90	125	12	21	3	0.644
—	104	111	117	127	176	—	—	2.5	2.5	5.92	—	HJ 318 E	90	124.2	12	18.5	3	0.601
—	104	111	117	127	176	—	—	2.5	2.5	7.90	—	HJ 2318	90	125	12	26	3	0.713
—	104	111	117	127	176	—	—	2.5	2.5	8.72	—	HJ 2318 E	90	124.2	12	22	3	0.653
108	108	122	125	139	207	207	194	3	3	10.6	10.3	HJ 418	90	137	14	24	4	1.06

Note : The dimension table shows limiting speed for bearings made with machined cages. For bearings made with pressed steel cages, multiply the table limits by 0.8.

Cylindrical Roller Bearings

Bore Diameter : 95～120mm



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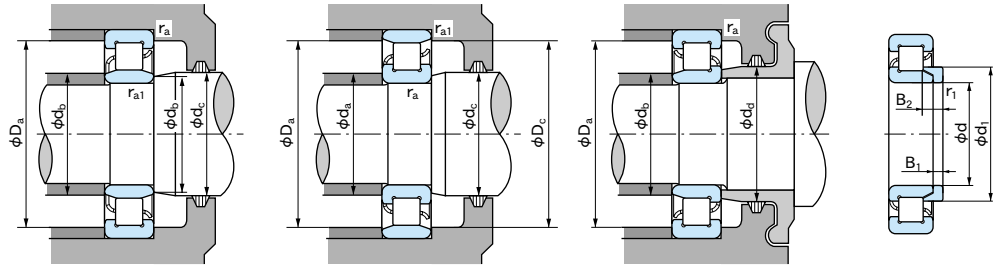


L−shaped thrust collar

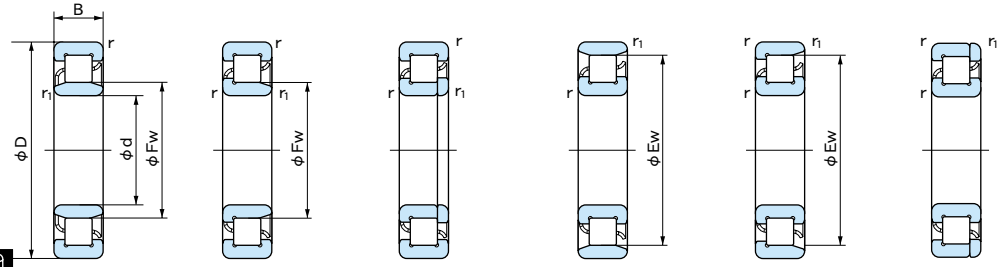
1N=0.102kgf

Boundary dimensions (mm)							Bearing No.						Basic dynamic load rating	Basic static load rating	Limiting speed (rpm)		Abutment and fillet dimensions (mm)											Mass (kg)		Dimensions of L-shaped thrust collar						
d	D	B	Ew	Fw	r (min)	r_1 (min)	NU	NJ	NUP	N	NF	NP	Cr (N)	Cor (N)	Grease lubrication	Oil lubrication	d_a (min)	d_b (min)	d_b (max)	d_c (min)	d_d (min)	D_a (max)	D_b (max)	D_b (min)	r_a (max)	r_{a1} (max)	NU	N	Bearing No.	d	d_1	B_1	B_2	r_1 (max)	Mass (kg) Reference
95	145	24	132	108	1.5	1.1	NU 1019	—	—	N	—	—	84000	110000	4500	5000	103	102	106	111	—	136.5	138.5	132.5	1.5	1	1.42	1.40	—	—	—	—	—	—	—
	170	32	151.5	113.5	2.1	2.1	NU 219	NJ	NUP	N	NF	NP	165000	195000	3600	4300	107	107	111	116	123	158	158	155	2	2	2.81	2.75	HJ 219	95	121	9	15.5	2.1	0.357
	170	32	—	112.5	2.1	2.1	NU 219 E	NJ	NUP	—	—	—	222000	259000	3200	4000	—	107	111	116	123	158	—	—	2	2	3.08	—	HJ 219 E	95	120.6	9	14	2.1	0.340
	170	43	—	113.5	2.1	2.1	NU 2219	NJ	NUP	—	—	—	230000	298000	3400	4000	—	107	111	116	123	158	—	—	2	2	3.85	—	HJ 2219	95	121	9	16.5	2.1	0.367
	170	43	—	112.5	2.1	2.1	NU 2219 E	NJ	NUP	—	—	—	286000	370000	3200	4000	—	107	111	116	123	158	—	—	2	2	4.23	—	HJ 2219 E	95	120.6	9	15.5	2.1	0.357
	200	45	173.5	121.5	3	3	NU 319	NJ	NUP	N	NF	NP	258000	289000	3000	3600	109	109	119	124	134	186	186	178	2.5	2.5	6.23	6.13	HJ 319	95	132	13	22.5	3	0.774
	200	45	—	121.5	3	3	NU 319 E	NJ	NUP	—	—	—	335000	385000	2400	3000	—	109	119	124	134	186	—	—	2.5	2.5	6.92	—	HJ 319 E	95	132.2	13	20.5	3	0.750
	200	67	—	121.5	3	3	NU 2319	NJ	NUP	—	—	—	370000	460000	2600	3200	—	109	119	124	134	186	—	—	2.5	2.5	9.39	—	HJ 2319	95	132	13	26.5	3	0.836
	200	67	—	121.5	3	3	NU 2319 E	NJ	NUP	—	—	—	460000	585000	2400	3000	—	109	119	124	134	186	—	—	2.5	2.5	10.3	—	HJ 2319 E	95	132.2	13	20.5	3	0.750
	240	55	201.5	133.5	4	4	NU 419	NJ	NUP	N	NF	NP	400000	445000	2600	3200	113	113	132	136	149	222	222	204	3	3	14.0	13.6	HJ 419	95	147	15	25.5	4	1.32
100	150	24	137	113	1.5	1.1	NU 1020	—	—	N	—	—	87000	116000	4300	5000	108	107	111	116	—	141.5	143.5	137.5	1.5	1	1.48	1.46	—	—	—	—	—	—	—
	180	34	160	120	2.1	2.1	NU 220	NJ	NUP	N	NF	NP	183000	217000	3400	4000	112	112	117	122	130	168	168	164	2	2	3.30	3.23	HJ 220	100	128	10	17	2.1	0.448
	180	34	—	119	2.1	2.1	NU 220 E	NJ	NUP	—	—	—	250000	305000	3200	3800	—	112	117	122	130	168	—	—	2	2	3.73	—	HJ 220 E	100	127.5	10	15	2.1	0.421
	180	46	—	120	2.1	2.1	NU 2220	NJ	NUP	—	—	—	257000	335000	3200	3800	—	112	117	122	130	168	—	—	2	2	4.67	—	HJ 2220	100	128	10	18	2.1	0.459
	180	46	—	119	2.1	2.1	NU 2220 E	NJ	NUP	—	—	—	335000	445000	3200	3800	—	112	117	122	130	168	—	—	2	2	5.13	—	HJ 2220 E	100	127.5	10	16	2.1	0.433
	215	47	185.5	129.5	3	3	NU 320	NJ	NUP	N	NF	NP	300000	335000	2800	3400	114	114	125	132	143	201	201	190	2.5	2.5	7.70	7.53	HJ 320	100	140.5	13	22.5	3	0.892
	215	47	—	127.5	3	3	NU 320 E	NJ	NUP	—	—	—	380000	425000	2200	2800	—	114	125	132	143	201	—	—	2.5	2.5	8.45	—	HJ 320 E	100	139.6	13	20.5	3	0.850
	215	73	—	129.5	3	3	NU 2320	NJ	NUP	—	—	—	435000	545000	2400	3000	—	114	125	132	143	201	—	—	2.5	2.5	11.9	—	HJ 2320	100	140.5	13	27.5	3	0.977
	215	73	—	127.5	3	3	NU 2320 E	NJ	NUP	—	—	—	570000	715000	2200	2800	—	114	125	132	143	201	—	—	2.5	2.5	12.9	—	HJ 2320 E	100	139.6	13	23.5	3	0.906
	250	58	211	139	4	4	NU 420	NJ	NUP	N	NF	NP	445000	500000	2400	3000	118	118	137	141	156	232	232	213	3	3	14.4	14.0	HJ 420	100	153.5	16	27	4	1.52
105	160	26	145.5	119.5	2	1.1	NU 1021	—	—	N	—	—	101000	136000	4000	4800	114	112	118	122	—	150	153.5	146.5	2	1	1.88	1.85	—	—	—	—	—	—	—
	190	36	168.8	126.8	2.1	2.1	NU 221	NJ	NUP	N	NF	NP	202000	241000	3200	3800	117	117	124	129	137	178	178	173	2	2	4.03	3.95	HJ 221	105	135	10	17.5	2.1	0.507
	225	49	195	135	3	3	NU 321	NJ	NUP	N	NF	NP	340000	385000	2600	3200	119	119	132	137	149	211	211	199	2.5	2.5	8.73	8.51	HJ 321	105	147	13	22.5	3	0.977
	260	60	220.5	144.5	4	4	NU 421	NJ	NUP	N	NF	NP	495000	555000	2200	2800	123	123	143	147	162	242	242	223	3	3	19.5	19.1	HJ 421	105	159.5	16	27	4	1.62
110	170	28	155	125	2	1.1	NU 1022	—	—	N	—	—	127000	166000	3800	4500	119	117	124	128	—	160	163.5	156	2	1	2.34	2.31	—	—	—	—	—	—	—
	200	38	178.5	132.5	2.1	2.1	NU 222	NJ	NUP	N	NF	NP	240000	290000	3000	3600	122	122	130	135	144	188	188	182	2	2	4.64	4.58	HJ 222	110	141.5	11	18.5	2.1	0.608
	200	38	—	132.5	2.1	2.1	NU 222 E	NJ	NUP	—	—	—	293000	365000	2600	3200	—	122	130	135	144	188	—	—	2	2	5.17	—	HJ 222 E	110	141.7	11	17	2.1	0.593
	200	53	—	132.5	2.1	2.1	NU 2222	NJ	NUP	—	—	—	320000	440000	2800	3400	—	122	130	135	144	188	—	—	2	2	6.93	—	HJ 2222	110	141.5	11	20.5	2.1	0.600
	200	53	—	132.5	2.1	2.1	NU 2222 E	NJ	NUP	—	—	—	385000	515000	2600	3200	—	122	130	135	144	188	—	—	2	2	7.32	—	HJ 2222 E	110	141.7	11	19.5	2.1	0.629
	240	50	207	143	3	3	NU 322	NJ	NUP	N	NF	NP	380000	435000	2400	3000	124	124	140	145	158	226	226	211	2.5	2.5	10.4	10.2	HJ 322	110	155.5	14	23	3	1.17
	240	50	—	143	3	3	NU 322 E	NJ	NUP	—	—	—	450000	525000	2200	2800	—	124	140	145	158	226	—	—	2.5	2.5	11.1	—	HJ 322 E	110	155.8	14	22	3	1.16
	240	80	—	143	3	3	NU 2322	NJ	NUP	—	—	—	570000	730000	2000	2600	—	124	140	145	158	226	—	—	2.5	2.5	18.8	—	HJ 2322	110	155.5	14	28	3	1.27
	240	80	—	143	3	3	NU 2322 E	NJ	NUP	—	—	—	670000	880000	2000	2600	—	124	140	145	158	226	—	—	2.5	2.5	18.5	—	HJ 2322 E	110	155.8	14	26.5	3	1.26
	280	65	235	155	4	4	NU 422	NJ	NUP	N	NF	NP	545000	620000	2000	2600	128	128	153	157	173	262	262	237	3	3	20.5	19.9	HJ 422	110	171	17	29.5	4	2.05
120	180	28	165	135	2	1.1	NU 1024	—	—	N	—	—	131000	175000	3400	4000	129	127	134	138	—	170	173.5	166	2	1	2.51	2.47	—	—	—	—	—	—	—
	215	40	191.5	143.5	2.1	2.1	NU 224	NJ	NUP	N	NF	NP	260000	320000	2800	3400	132	132	141	146	156	203	203	196	2	2	5.61	5.50	HJ 224	120	153	11	19	2.1	0.700
	215	40	—	143.5	2.1	2.1	NU 224 E	NJ	NUP	—	—	—	335000	420000	2400	3000	—	132	141	146	156	203	—	—	2	2	6.25	—	HJ 224 E	120	153.4	11	17	2.1	0.680
	215	58	—	143.5	2.1	2.1	NU 2224	NJ	NUP	—	—	—	365000	490000	2600	3200	—	132	141	146	156	203	—	—	2	2	8.56	—	HJ 2224	120	153	11	22	2.1	0.749
	215	58	—	143.5	2.1	2.1	NU 2224 E	NJ	NUP	—	—	—	450000	620000	2400	3000	—	132	141	146	156	203	—	—	2	2	9.35	—	HJ 2224 E	120	153.4	11	20	2.1	0.731
	260	55	226	154	3	3	NU 324	NJ	NUP	N	NF	NP	445000	510000	2200	2800	134	134	151	156	171	246	246	230	2.5	2.5	15.4	15.1	HJ 324	120	168.5	14	23.5	3	1.38
	260	55	—	154	3	3	NU 324 E	NJ	NUP	—	—	—	525000	610000	1900	2400	—	134	151	156	171	246	—	—	2.5	2.5	15.2	—	HJ 324 E	120	168.6	14	22.5	3	1.36
	260	86	—	154	3	3	NU 2324	NJ	NUP	—	—	—	710000	915000	1900	2400	—	134	151	156	171	246	—	—	2.5	2.5	23.1	—	HJ 2324	120	168.5	14	28	3	1.51
	260	86	—	154	3	3	NU 2324 E	NJ	NUP	—	—	—	790000	1030000	1900	2400	—	134	151	156	171	246	—	—	2.5	2.5	22.9	—	HJ 2324 E	120	168.6	14	26	3	1.46
	310	72	260	170	5	5	NU 424	NJ	NUP	N	NF	NP	670000	770000	1900	2400	142	142	168	172	190	288	288	262	4	4	28.7	28.0	HJ 424	120	188	17	30.5	5	2.55

Note : The dimension table shows limiting speed for bearings made with machined cages. For bearings made with pressed steel cages, multiply the table limits by 0.8.

Cylindrical Roller Bearings

Bore Diameter : 130～170mm



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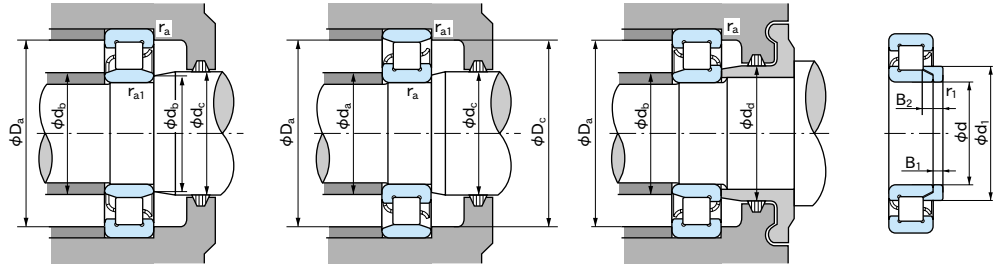


L-shaped thrust collar

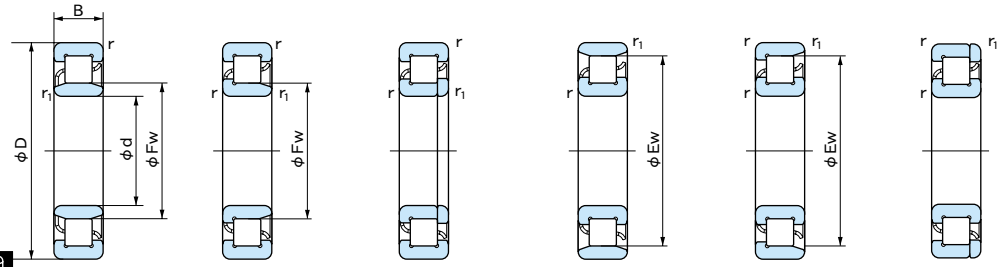
1N=0.102kgf

Boundary dimensions (mm)							Bearing No.						Basic dynamic load rating	Basic static load rating	Limiting speed (rpm)		Abutment and fillet dimensions (mm)											Mass (kg)		Dimensions of L-shaped thrust collar						
d	D	B	Ew	Fw	r (min)	r1 (min)	NU	NJ	NUP	N	NF	NP	Cr (N)	Cor (N)	Grease lubrication	Oil lubrication	da (min)	db (min)	db (max)	dc (min)	dd (min)	Da (max)	Db (max)	Db (min)	ra (max)	ra1 (max)	NU	N	Bearing No.	d	d1	B1	B2	r1 (max)	Mass (kg) Reference
130	200	33	182	148	2	1.1	NU 1026	—	—	N	—	—	160000	217000	3200	3800	139	137	146	151	—	190	193.5	183	2	1	3.83	3.77	—	—	—	—	—	—	—
	230	40	204	156	3	3	NU 226	NJ	NUP	N	NF	NP	270000	340000	2600	3200	144	144	151	158	168	216	216	208	2.5	2.5	7.60	7.39	HJ 226	130	165.5	11	19	3	0.805
	230	40	—	153.5	3	3	NU 226 E	NJ	NUP	—	—	—	365000	455000	2200	2800	—	144	151	158	168	216	—	—	2.5	2.5	7.50	—	HJ 226 E	130	164.2	11	17	3	0.775
	230	64	—	156	3	3	NU 2226	NJ	NUP	—	—	—	380000	530000	2200	2800	—	144	151	158	168	216	—	—	2.5	2.5	11.2	—	HJ 2226	130	165.5	11	25	3	0.911
	230	64	—	153.5	3	3	NU 2226 E	NJ	NUP	—	—	—	530000	735000	2200	2800	—	144	151	158	168	216	—	—	2.5	2.5	12.5	—	HJ 2226 E	130	164.2	11	21	3	0.833
	280	58	243	167	4	4	NU 326	NJ	NUP	N	NF	NP	555000	665000	2000	2600	148	148	164	169	184	262	262	247	3	3	18.2	17.8	HJ 326	130	182	14	24	4	1.61
	280	58	—	167	4	4	NU 326 E	NJ	NUP	—	—	—	615000	735000	1800	2200	—	148	164	169	184	262	—	—	3	3	18.5	—	HJ 326 E	130	182.3	14	23	4	1.59
	280	93	—	167	4	4	NU 2326	NJ	NUP	—	—	—	790000	1040000	1800	2200	—	148	164	169	184	262	—	—	3	3	29.1	—	HJ 2326	130	182	14	29.5	4	1.78
	280	93	—	167	4	4	NU 2326 E	NJ	NUP	—	—	—	920000	1230000	1800	2200	—	148	164	169	184	262	—	—	3	3	28.5	—	HJ 2326 E	130	182.3	14	28	4	1.75
	340	78	285	185	5	5	NU 426	NJ	NUP	N	NF	NP	820000	955000	1700	2200	152	152	183	187	208	318	318	287	4	4	36.9	36.1	HJ 426	130	205	18	32	5	3.23
140	210	33	192	158	2	1.1	NU 1028	—	—	N	—	—	170000	239000	3000	3600	149	147	156	161	—	200	203.5	193	2	1	4.07	4.00	—	—	—	—	—	—	—
	250	42	221	169	3	3	NU 228	NJ	NUP	N	NF	NP	310000	420000	2400	3000	154	154	166	171	182	236	236	228	2.5	2.5	9.49	9.26	HJ 228	140	179.5	11	19	3	0.968
	250	42	—	169	3	3	NU 228 E	NJ	NUP	—	—	—	390000	515000	2000	2600	—	154	166	171	182	236	—	—	2.5	2.5	8.90	—	HJ 228 E	140	180	11	18	3	0.966
	250	68	—	169	3	3	NU 2228	NJ	NUP	—	—	—	465000	670000	2000	2600	—	154	166	171	182	236	—	—	2.5	2.5	14.3	—	HJ 2228	140	179.5	11	25	3	1.09
	250	68	—	169	3	3	NU 2228 E	NJ	NUP	—	—	—	570000	835000	2000	2600	—	154	166	171	182	236	—	—	2.5	2.5	14.9	—	HJ 2228 E	140	180	11	23	3	1.08
	300	62	260	180	4	4	NU 328	NJ	NUP	N	NF	NP	595000	745000	1900	2400	158	158	176	182	198	282	282	268	3	3	22.4	21.8	HJ 328	140	196	15	26	4	2.01
	300	62	—	180	4	4	NU 328 E	NJ	NUP	—	—	—	660000	795000	1800	2200	—	158	176	182	198	282	—	—	3	3	21.8	—	HJ 328 E	140	196	15	25	4	1.97
	300	102	—	180	4	4	NU 2328	NJ	NUP	—	—	—	920000	1250000	1800	2200	—	158	176	182	198	282	—	—	3	3	36.8	—	HJ 2328	140	196	15	33.5	4	2.27
	300	102	—	180	4	4	NU 2328 E	NJ	NUP	—	—	—	1020000	1380000	1800	2200	—	158	176	182	198	282	—	—	3	3	35.9	—	HJ 2328 E	140	196	15	31	4	2.18
	360	82	302	198	5	5	NU 428	NJ	NUP	N	NF	NP	875000	1020000	1500	1900	162	162	195	200	222	338	338	304	4	4	48.0	46.8	HJ 428	140	219	18	33	5	3.70
150	225	35	205.5	169.5	2.1	1.5	NU 1030	—	—	N	—	—	189000	270000	2600	3200	161	158.5	167	173	—	213	217	207	2	1.5	4.90	4.83	—	—	—	—	—	—	—
	270	45	238	182	3	3	NU 230	NJ	NUP	N	NF	NP	375000	490000	2000	2600	164	164	179	184	196	256	256	245	2.5	2.5	11.9	11.7	HJ 230	150	193	12	20.5	3	1.22
	270	45	—	182	3	3	NU 230 E	NJ	NUP	—	—	—	445000	595000	1900	2400	—	164	179	184	196	256	—	—	2.5	2.5	11.5	—	HJ 230 E	150	193.7	12	19.5	3	1.23
	270	73	—	182	3	3	NU 2230	NJ	NUP	—	—	—	545000	800000	1900	2400	—	164	179	184	196	256	—	—	2.5	2.5	18.7	—	HJ 2230	150	193	12	26.5	3	1.36
	270	73	—	182	3	3	NU 2230 E	NJ	NUP	—	—	—	660000	990000	1900	2400	—	164	179	184	196	256	—	—	2.5	2.5	18.5	—	HJ 2230 E	150	193.7	12	24.5	3	1.35
	320	65	277	193	4	4	NU 330	NJ	NUP	N	NF	NP	660000	805000	1700	2000	168	168	190	195	213	302	302	287	3	3	26.5	25.9	HJ 330	150	210	15	26.5	4	2.32
	320	65	—	193	4	4	NU 330 E	NJ	NUP	—	—	—	755000	920000	1600	1900	—	168	190	195	213	302	—	—	3	3	28.8	—	HJ 330 E	150	210	15	25	4	2.26
	320	108	—	193	4	4	NU 2330	NJ	NUP	—	—	—	1020000	1400000	1700	2000	—	168	190	195	213	302	—	—	3	3	44.7	—	HJ 2330	150	210	15	34	4	2.62
	320	108	—	193	4	4	NU 2330 E	NJ	NUP	—	—	—	1160000	1600000	1600	1900	—	168	190	195	213	302	—	—	3	3	48.2	—	HJ 2330 E	150	210	15	31.5	4	2.52
	380	85	317	213	5	5	NU 430	NJ	NUP	N	NF	NP	930000	1120000	1300	1600	172	172	210	216	237	358	358	319	4	4	54.5	53.3	HJ 430	150	234	20	36.5	5	4.61
160	240	38	220	180	2.1	1.5	NU 1032	—	—	N	—	—	229000	325000	2400	3000	171	168.5	178	184	—	228	232	220	2	1.5	6.01	5.93	—	—	—	—	—	—	—
	290	48	255	195	3	3	NU 232	NJ	NUP	N	NF	NP	425000	570000	1800	2200	174	174	192	197	210	276	276	262	2.5	2.5	14.5	14.2	HJ 232	160	207	12	21	3	1.44
	290	48	—	195	3	3	NU 232 E	NJ	NUP	—	—	—	500000	665000	1700	2000	—	174	192	197	210	276	—	—	2.5	2.5	15.6	—	HJ 232 E	160	207.3	12	20	3	1.43
	290	80	—	195	3	3	NU 2232	NJ	NUP	—	—	—	630000	940000	1800	2200	—	174	192	197	210	276	—	—	2.5	2.5	24.1	—	HJ 2232	160	205	12	28	3	1.50
	290	80	—	195	3	3	NU 2232 E	NJ	NUP	—	—	—	810000	1190000	1700	2000	—	174	192	197	210	276	—	—	2.5	2.5	25.9	—	HJ 2232 E	160	206.1	12	24.5	3	1.54
	340	68	292	208	4	4	NU 332	NJ	NUP	N	NF	NP	695000	875000	1600	1900	178	178	200	211	228	322	322	304	3	3	31.2	30.6	HJ 332	160	225	15	28	4	2.71
	340	68	—	204	4	4	NU 332 E	NJ	NUP	—	—	—	855000	1050000	1700	2000	—	178	200	211	228	322	—	—	3	3	34.1	—	HJ 332 E	160	222.1	15	25	4	2.49
	340	114	—	208	4	4	NU 2332	NJ	NUP	—	—	—	1040000	1460000	1500	1800	—	178	200	211	228	322	—	—	3	3	52.5	—	HJ 2332	160	225	15	37	4	3.09
	340	114	—	204	4	4	NU 2332 E	NJ	NUP	—	—	—	1310000	1820000	1600	1900	—	178	200	211	228	322	—	—	3	3	57.2	—	HJ 2332 E	160	222.1	15	32	4	2.80
170	260	42	237	193	2.1	2.1	NU 1034	—	—	N	—	—	276000	400000	2200	2800	181	182	190	197	—	248	249	237	2	2	8.02	7.90	—	—	—	—	—	—	—
	310	52	272	208	4	4	NU 234	NJ	NUP	N	NF	NP	475000	635000	1800	2200	188	188	204	211	223	292	292	284	3	3	17.9	17.6	HJ 234	170	220.5	12	22	4	1.67
	310	52	—	207	4	4	NU 234 E	NJ	NUP	—	—	—	605000	800000	1900	2300	—	188	204	211	223	292	—	—	3	3	19.3	—	HJ 234 E	170	220.8	12	20	4	1.64
	310	86	—	208	4	4	NU 2234	NJ	NUP	—	—	—	725000	1100000	1800	2200	—	188	204	211	223	292	—	—	3	3	29.6	—	HJ 2234	170	219	12	29	4	1.78
	310	86	—	205	4	4	NU 2234 E	NJ	NUP	—	—	—	970000	1400000	1900	2300	—	188	204	211	223	292	—	—	3	3	31.9	—	HJ 2234 E	170	219.5	12	24	4	1.76
	360	72	310	220	4	4	NU 334	NJ	NUP	N	NF	NP	795000	1010000	1600	1800	188	188	216	223	241	342	342	314	3	3	37.1	36.1	HJ 334	170	238	16	29.5	4	3.20
	360	120	—	220	4	4	NU 2334	NJ	NUP	—	—	—	1170000	1630000	1400	1700	—	188	216	223	241	342	—	—	3	3	62.7	—	HJ 2334	170	238	16	38.5	4	3.62

Note : The dimension table shows limiting speed for bearings made with machined cages. For bearings made with pressed steel cages, multiply the table limits by 0.8.

Cylindrical Roller Bearings

Bore Diameter : 180～500mm



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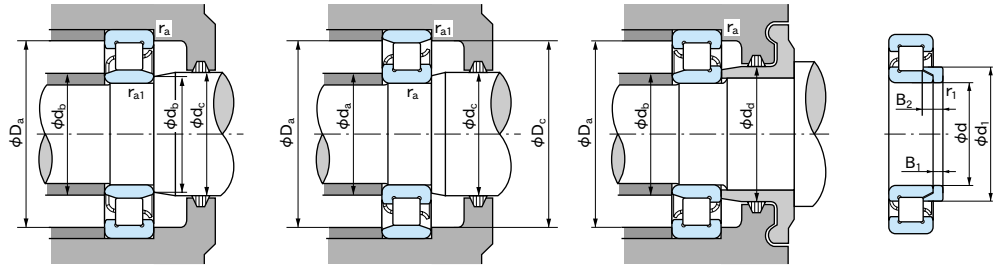

L-shaped thrust collar

1N=0.102kgf

Boundary dimensions (mm)							Bearing No.						Basic dynamic load rating	Basic static load rating	Limiting speed (rpm)	
d	D	B	Ew	Fw	r (min)	r_1 (min)	NU	NJ	NUP	N	NF	NP	Cr(N)	Cor(N)	Grease lubrication	Oil lubrication
180	280	46	255	205	2.1	2.1	NU 1036	—	—	N	—	—	340000	485000	2100	2600
	320	52	282	218	4	4	NU 236	NJ	NUP	N	NF	NP	490000	675000	1700	2000
	320	52	—	217	4	4	NU 236 E	NJ	NUP	—	—	—	625000	850000	1800	2200
	320	86	—	218	4	4	NU 2236	NJ	NUP	—	—	—	775000	1210000	1700	2000
	320	86	—	215	4	4	NU 2236 E	NJ	NUP	—	—	—	1010000	1510000	1800	2200
	380	75	328	232	4	4	NU 336	NJ	NUP	N	NF	NP	900000	1150000	1500	1800
	380	126	—	232	4	4	NU 2336	NJ	NUP	—	—	—	1310000	1860000	1300	1600
190	290	46	265	215	2.1	2.1	NU 1038	—	—	N	—	—	345000	510000	2000	2600
	340	55	299	231	4	4	NU 238	NJ	NUP	N	NF	NP	555000	770000	1600	1900
	340	55	—	230	4	4	NU 238 E	NJ	NUP	—	—	—	695000	955000	1700	2000
	340	92	—	231	4	4	NU 2238	NJ	NUP	—	—	—	825000	1290000	1600	1900
	340	92	—	228	4	4	NU 2238 E	NJ	NUP	—	—	—	1100000	1670000	1700	2000
	400	78	345	245	5	5	NU 338	NJ	NUP	N	NF	NP	975000	1260000	1400	1700
	400	132	—	245	5	5	NU 2338	NJ	NUP	—	—	—	1440000	2070000	1200	1500
200	310	51	281	229	2.1	2.1	NU 1040	—	—	N	—	—	375000	555000	1900	2400
	360	58	316	244	4	4	NU 240	NJ	NUP	N	NF	NP	615000	865000	1500	1800
	360	58	—	243	4	4	NU 240 E	NJ	NUP	—	—	—	765000	1060000	1600	1900
	360	98	—	244	4	4	NU 2240	NJ	NUP	—	—	—	920000	1440000	1500	1800
	360	98	—	241	4	4	NU 2240 E	NJ	NUP	—	—	—	1210000	1870000	1500	1700
	420	80	360	260	5	5	NU 340	NJ	NUP	N	NF	NP	975000	1270000	1300	1600
	420	138	—	260	5	5	NU 2340	NJ	NUP	—	—	—	1440000	2090000	1100	1400
220	340	56	310	250	3	3	NU 1044	—	—	N	—	—	480000	715000	1800	2300
	400	65	350	270	4	4	NU 244	NJ	NUP	N	NF	NP	760000	1080000	1500	1700
	400	108	—	270	4	4	NU 2244	NJ	NUP	—	—	—	1130000	1810000	1400	1700
	460	88	396	284	5	5	NU 344	NJ	NUP	N	NF	NP	1200000	1570000	1200	1500
240	360	56	330	270	3	3	NU 1048	—	—	N	—	—	500000	755000	1700	2100
	440	72	385	295	4	4	NU 248	NJ	NUP	N	NF	NP	935000	1340000	1400	1600
	440	120	—	295	4	4	NU 2248	NJ	NUP	—	—	—	1430000	2320000	1300	1600
	500	95	430	310	5	5	NU 348	NJ	NUP	N	NF	NP	1430000	1950000	1100	1300
260	400	65	364	296	4	4	NU 1052	—	—	N	—	—	620000	955000	1600	1800
	480	80	420	320	5	5	NU 252	NJ	NUP	N	NF	NP	1140000	1660000	1300	1500
	480	130	—	320	5	5	NU 2252	NJ	NUP	—	—	—	1780000	2930000	1100	1300
	540	102	464	336	6	6	NU 352	NJ	NUP	N	NF	NP	1620000	2230000	1000	1200
280	420	65	384	316	4	4	NU 1056	—	—	N	—	—	630000	1000000	1500	1700
	500	80	440	340	5	5	NU 256	NJ	NUP	N	NF	NP	1140000	1680000	1200	1400
300	460	74	420	340	4	4	NU 1060	—	—	N	—	—	845000	1340000	1400	1500
	540	85	476	364	5	5	NU 260	NJ	NUP	N	NF	NP	1400000	2070000	1100	1300
320	480	74	440	360	4	4	NU 1064	—	—	N	—	—	870000	1410000	1300	1400
	580	92	510	390	5	5	NU 264	NJ	NUP	N	NF	NP	1600000	2390000	1000	1200
340	520	82	475	385	5	5	NU 1068	—	—	N	—	—	1050000	1670000	1200	1300
360	540	82	495	405	5	5	NU 1072	—	—	N	—	—	1070000	1750000	1100	1250
380	560	82	515	425	5	5	NU 1076	—	—	N	—	—	1100000	1840000	1000	1200
400	600	90	550	450	5	5	NU 1080	—	—	N	—	—	1350000	2280000	950	1100
420	620	90	570	470	5	5	NU 1084	—	—	N	—	—	1390000	2380000	900	1100
440	650	94	597	493	6	6	NU 1088	—	—	N	—	—	1530000	2430000	850	1050
460	680	100	624	516	6	6	NU 1092	—	—	N	—	—	1630000	2630000	800	1000
480	700	100	644	536	6	6	NU 1096	—	—	N	—	—	1590000	2750000	780	950
500	720	100	664	556	6	6	NU 10/500	—	—	N	—	—	1700000	2870000	750	900

Abutment and fillet dimensions (mm)											Mass (kg)		Dimensions of L-shaped thrust collar						
d_a (min)	d_b (min)	d_b (max)	d_c (min)	d_d (min)	D_a (max)	D_b (max)	D_b (min)	r_a (max)	r_{a1} (max)		NU	N	Bearing No.	d	d_1	B_1	B_2	r_1 (max)	Mass(kg) Reference
191	192	203	209	—	268	269	256	2	2		10.8	10.5	—	—	—	—	—	—	—
198	198	214	221	233	302	302	294	3	3		19.3	18.3	HJ 236	180	230.5	12	22	4	1.76
—	198	214	221	233	302	—	—	3	3		20.5	—	HJ 236 E	180	230.8	12	20	4	1.73
—	198	214	221	233	302	—	—	3	3		30.4	—	HJ 2236	180	229	12	29	4	1.87
—	198	214	221	233	302	—	—	3	3		34.5	—	HJ 2236 E	180	229.5	12	24	4	1.85
198	198	227	235	255	362	362	332	3	3		42.8	41.9	HJ 336	180	252	17	30.5	4	3.80
—	198	227	235	255	362	—	—	3	3		73.1	—	HJ 2336	180	252	17	40	4	4.35
201	202	213	219	—	278	279	266	2	2		11.2	10.9	—	—	—	—	—	—	—
208	208	227	234	247	322	322	311	3	3		22.6	22.1	HJ 238	190	244.5	13	23.5	4	2.16
—	208	227	234	247	322	—	—	3	3		26.0	—	HJ 238 E	190	244.5	13	21.5	4	2.11
—	208	227	234	247	322	—	—	3	3		37.5	—	HJ 2238	190	243	13	31.5	4	2.32
—	208	227	234	247	322	—	—	3	3		45.2	—	HJ 2238 E	190	243.2	13	26.5	4	2.28
212	212	240	248	268	378	378	349	4	4		49.4	48.3	HJ 338	190	265	18	32	5	4.36
—	212	240	248	268	378	—	—	4	4		85.0	—	HJ 2338	190	265	18	41.5	5	4.92
211	212	226	233	—	298	299	283	2	2		14.4	14.1	—	—	—	—	—	—	—
218	218	240	247	261	342	342	328	3	3		26.8	26.2	HJ 240	200	258	14	25	4	2.59
—	218	240	247	261	342	—	—	3	3		29.5	—	HJ 240 E	200	258.2	14	23	4	2.54
—	218	240	247	261	342	—	—	3	3		45.4	—	HJ 2240	200	258	14	34	4	2.95
—	218	240	247	261	342	—	—	3	3		52.3	—	HJ 2240 E	200	256.9	14	28	4	2.73
222	222	254	263	283	398	398	364	4	4		55.8	54.5	HJ 340	200	280	18	33	5	4.91
—	222	254	263	283	398	—	—	4	4		96.8	—	HJ 2340	200	280	18	44.5	5	5.63
233	234	248	254	—	326	327	311	2.5	2.5		18.8	18.5	—	—	—	—	—	—	—
238	238	266	273	289	382	382	362	3	3		37.8	37.0	HJ 244	220	286	15	27.5	4	3.53
—	238	266	273	289	382	—	—	3	3		61.8	—	HJ 2244	220	286	15	36.5	4	3.99
242	242	279	287	307	438	438	400	4	4		73.6	71.7	HJ 344	220	307	20	36	5	6.53
253	254	268	275	—	346	347	331	2.5	2.5		20.4	20.1	—	—	—	—	—	—	—
258	258	293	298	316	422	422	397	3	3		51.1	50.0	HJ 248	240	313	16	29.5	4	4.57
—	258	293	298	316	422	—	—	3	3		83.5	—	HJ 2248	240	313	16	38.5	4	5.14
262	262	305	313	333	478	478	434	4	4		93.0	90.9	HJ 348	240	335	22	39.5	5	8.55
278	278	292	300	—	382	382	365	3	3		29.6	29.2	—	—	—	—	—	—	—
282	282	318	323	343	458	458	432	4	4		69.0	66.7	HJ 252	260	340	18	33	5	6.12
—	282	318	323	343	458	458	—	4	4		106	—	HJ 2252	260	340	18	40.5	5	6.69
288	288	331	339	359	512	512	468	5	5		117	114	HJ 352	260	362	24	43	6	8.77
298	298	313	320	—	402	402	385	3	3		33.0	32.5	—	—	—	—	—	—	—
302	302	336	343	365	478	478	452	4	4		71.5	70.0	HJ 256	280	360	18	33	5	6.52
318	318	337	344	—	442	442	421	3	3		44.7	44.1	—	—	—	—	—	—	—
322	322	361	368	392	518	518	487	4	4		88.9	87.0	HJ 260	300	387	20	34.5	5	8.33
338	338	356	365	—	462	462	441	3	3		49.3	48.4	—	—	—	—	—	—	—
342	342	386	393	419	558	558	522	4	4		113	111	HJ 264	320	415	21	37	5	10.3
362	362	381	390	—	498	498	476	4	4		65.9	64.8	—	—	—	—	—	—	—
382	382	401	410	—	518	518	496	4	4		68.8	67.7	—	—	—	—	—	—	—
402	402	421	430	—	538	538	516	4	4		72.3	71.1	—	—	—	—	—	—	—
422	422	446	455	—	578	578	551	4	4		92.5	92.4	—	—	—	—	—	—	—
442	442	466	475	—	598	598	571	4	4		97.6	95.8	—	—	—	—	—	—	—
468	468	489	498	—	622	622	598	5	5		112	110	—	—	—	—	—	—	—
488	488	512	520	—	652	652	625	5	5		130	128	—	—	—	—	—	—	—
508	508	532	541	—	672	672	645	5	5		135	132	—	—	—	—	—	—	—
528	528	552	561	—	692	692	665	5	5		140	137	—	—	—	—	—	—	—

Note: The dimension table shows limiting speed for bearings made with machined cages. For bearings made with pressed steel cages, multiply the table limits by 0.8.