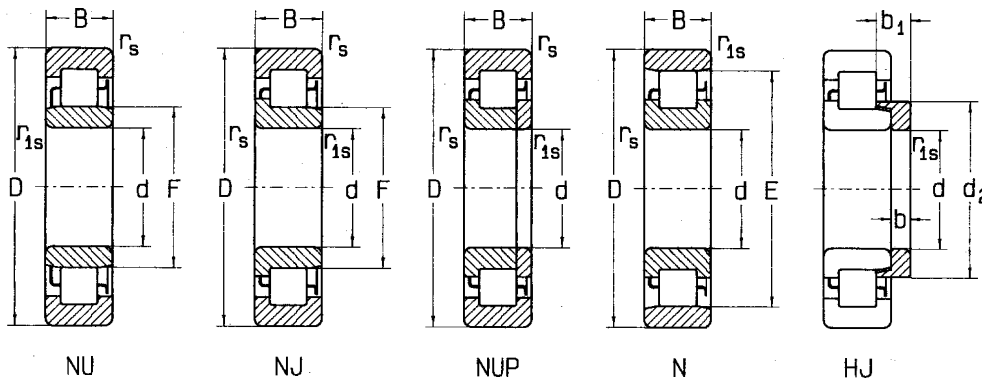


Single Row Cylindrical Roller Bearings

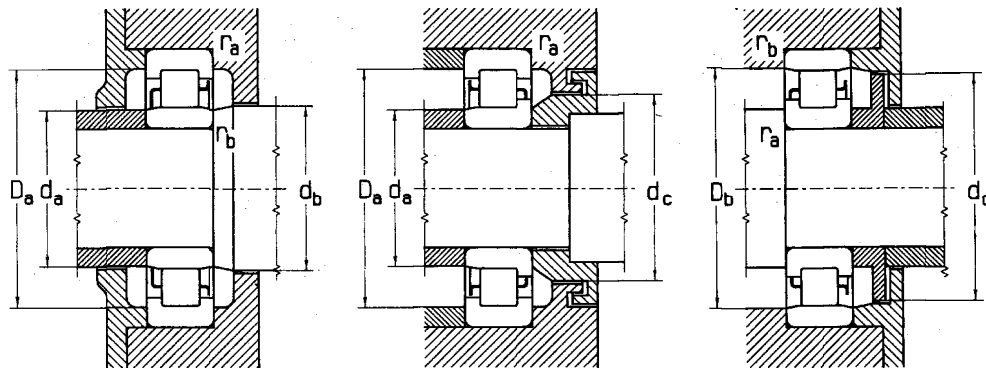
Sizes 20 mm – 30 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
20	47	14	1	0.6	26.5	41.5	29.9	3	5.5	1.4	NU204E	NJ204E	NUP204E	N204E	HJ204E
	47	18	1	0.6	26.5	–	–	–	–	1.6	NU2204E	NJ2204E	NUP2204E	–	–
	52	15	1.1	0.6	27.5	45.5	31.4	4	6.5	1.4	NU304E	NJ304E	NUP304E	N304E	HJ304E
	52	21	1.1	0.6	27.5	–	–	–	–	2.4	NU2304E	NJ2304E	NUP2304E	–	–
25	52	15	1	0.6	32	45	35	3	7.25	1.5	NU205	NJ205	NUP205	N205	HJ205
	52	15	1	0.6	31.5	46.5	34.9	3	6	1.4	NU205E	NJ205E	NUP205E	N205E	HJ205E
	52	18	1	0.6	32	–	–	–	–	1.6	NU2205	NJ2205	NUP2205	–	–
	52	18	1	0.6	31.5	–	–	–	–	1.6	NU2205E	NJ2205E	NUP2205E	–	–
	62	17	1.1	1.1	35	53	39.3	4	8	1.4	NU305	NJ305	NUP305	N305	HJ305
	62	17	1.1	1.1	34	54	38.3	4	7	1.4	NU305E	NJ305E	NUP305E	N305E	HJ305E
	62	24	1.1	1.1	34	–	–	–	–	2.4	NU2305E	NJ2305E	NUP2305E	–	–
30	62	16	1	0.6	38.5	53.5	42.2	4	8.25	1.5	NU206	NJ206	NUP206	N206	HJ206
	62	16	1	0.6	37.5	55.5	41.4	4	7	1.4	NU206E	NJ206E	NUP206E	N206E	HJ206E
	62	20	1	0.6	38.5	–	–	–	–	1.6	NU2206	NJ2206	NUP2206	–	–
	62	20	1	0.6	37.5	–	–	–	–	1.6	NU2206E	NJ2206E	NUP2206E	–	–
	72	19	1.1	1.1	42	62	46.6	5	9.5	1.4	NU306	NJ306	NUP306	N306	HJ306
	72	19	1.1	1.1	40.5	62.5	45.1	5	8.5	1.4	NU306E	NJ306E	NUP306E	N306E	HJ306E
	72	27	1.1	1.1	40.5	–	–	–	–	2.4	NU2306E	NJ2306E	NUP2306E	–	–
	90	23	1.5	1.5	45	–	51.4	7	11.5	1.5	NU406	NJ406	NUP406	–	HJ406

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

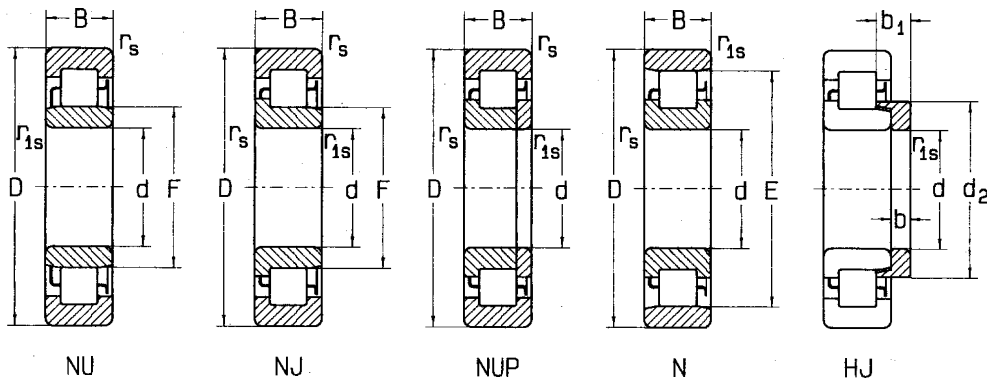


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kN lbf		min ⁻¹		mm										kg lbs	
25.6 5,730	21.1 4,730	14,000	17,000	20	25	25.5	29	32	39	42	42	1	0.6	0.106 0.233	0.01 0.022
31.6 7,080	27.6 6,190	13,000	16,000	25	25.5	29	32	-	42	-	1	0.6	0.135 0.297	-	
32.2 7,220	26.1 5,840	12,000	14,000	26	26.5	30	33	44	45	45	1	0.6	0.148 0.326	0.02 0.044	
44.7 10,000	39.1 8,740	12,000	14,000	26	26.5	30	33	-	45	-	1	0.6	0.207 0.456	-	
15.8 3,550	12.6 2,820	12,600	15,000	25	30	30.5	34	37	43	47	47	1	0.6	0.130 0.286	0.02 0.044
29.3 6,560	25.6 5,730	12,600	15,000	30	30	34	37	44	47	47	1	0.6	0.128 0.282	0.02 0.044	
22.4 5,010	19.6 4,380	12,600	15,000	30	30.5	34	37	-	47	-	1	0.6	0.160 0.352	-	
35.5 7,940	33.5 7,500	12,000	14,000	30	30	34	37	-	47	-	1	0.6	0.155 0.341	-	
27.6 6,190	21.5 4,820	10,000	12,000	31	33	37	40	51	55	55	1	1	0.240 0.582	0.03 0.066	
43 9,620	36.2 8,100	10,000	12,000	31	32	36	39	52	55	55	1	1	0.237 0.522	0.03 0.066	
60.7 13,600	56.2 12,600	10,000	12,000	31	32	36	39	-	55	-	1	1	0.338 0.744	-	
21.5 4,820	17.8 3,980	10,600	12,600	30	35	37	40	44	52	57	56	1	0.6	0.200 0.440	0.03 0.066
39.1 8,740	35.5 7,940	10,600	12,600	35	36	39	43	54	57	57	1	0.6	0.198 0.440	0.03 0.066	
31.6 7,080	29.3 6,560	10,600	12,600	35	37	40	44	-	57	-	1	0.6	0.260 0.573	-	
50.1 11,200	49.2 11,000	10,000	12,000	35	36	39	43	-	57	-	1	0.6	0.249 0.584	-	
36.2 8,100	31 6,940	8,900	10,600	36	39	44	48	60	65	64	1	1	0.360 0.793	0.04 0.088	
53.1 11,900	46.4 10,400	8,400	10,000	36	37.5	43	47	60	65	64	1	1	0.357 0.786	0.04 0.088	
77.9 17,400	76.4 17,100	8,400	10,000	36	37.5	43	47	-	65	-	1	1	0.509 1.121	-	
59.6 13,900	48.2 10,800	7,100	8,400	39	41	47	53	-	80	-	1.5	1.5	0.750 1.652	0.08 0.176	

F

Single Row Cylindrical Roller Bearings

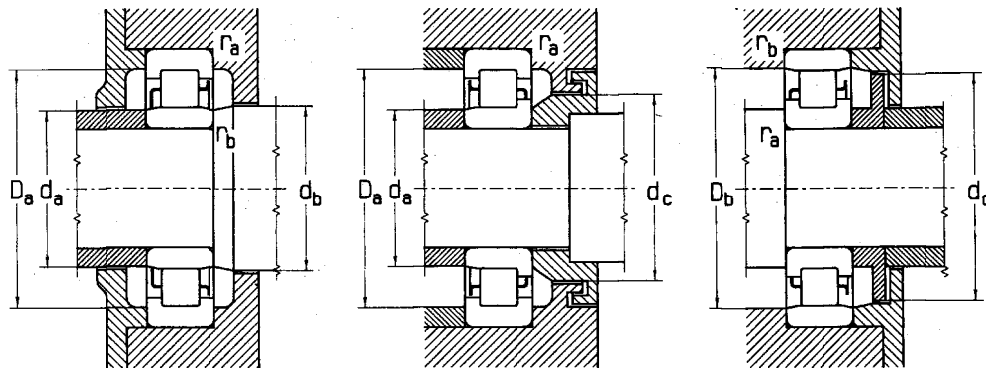
Sizes 35 mm – 40 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
35	72	17	1.1	0.6	43.8	61.8	48.1	4	8	1.5	NU207	NJ207	NUP207	N207	HJ207
	72	17	1.1	0.6	44	64	48.3	4	7	1.4	NU207E	NJ207E	NUP207E	N207E	HJ207E
	72	23	1.1	0.6	43.8	–	–	–	–	1.6	NU2207	NJ2207	NUP2207	–	–
	72	23	1.1	0.6	44	–	–	–	–	1.6	NU2207E	NJ2207E	NUP2207E	–	–
	80	21	1.5	1.1	46.2	68.2	51.2	6	11	1.4	NU307	NJ307	NUP307	N307	HJ307
	80	21	1.5	1.1	46.2	70.2	51.2	6	9.5	1.4	NU307E	NJ307E	NUP307E	N307E	HJ307E
	80	31	1.5	1.1	46.2	–	–	–	–	3.4	NU2307	NJ2307	NUP2307	–	–
	80	31	1.5	1.1	46.2	–	–	–	–	2.9	NU2307E	NJ2307E	NUP2307E	–	–
	100	25	1.5	1.5	53	83	59.9	8	13	1.5	NU407	NJ407	NUP407	N407	HJ407
40	68	15	1	0.6	47	–	–	–	–	1.2	NU1008	–	–	–	–
	80	18	1.1	1.1	50	70	54.6	5	9	1.5	NU208	NJ208	NUP208	N208	HJ208
	80	18	1.1	1.1	49.5	71.5	54.1	5	8.5	1.4	NU208E	NJ208E	NUP208E	N208E	H208E
	80	23	1.1	1.1	49.5	–	–	–	–	1.6	NU2208E	NJ2208E	NUP2208E	–	–
	80	30.16	1	1.5	49.930	–	–	–	–	3	NU5208	–	–	–	–
	90	23	1.5	1.5	53.5	77.5	59	7	12.5	1.4	NU308	NJ308	NUP308	N308	HJ308
	90	23	1.5	1.5	52	80	57.7	7	11	1.4	NU308E	NJ308E	NUP308E	N308E	HJ308E
	90	33	1.5	1.5	52	–	–	–	–	2.9	NU2308E	NJ2308E	NUP2308E	–	–
	110	27	2	2	58	92	65.8	8	13	1.5	NU408	NJ408	NUP408	N408	HJ408

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

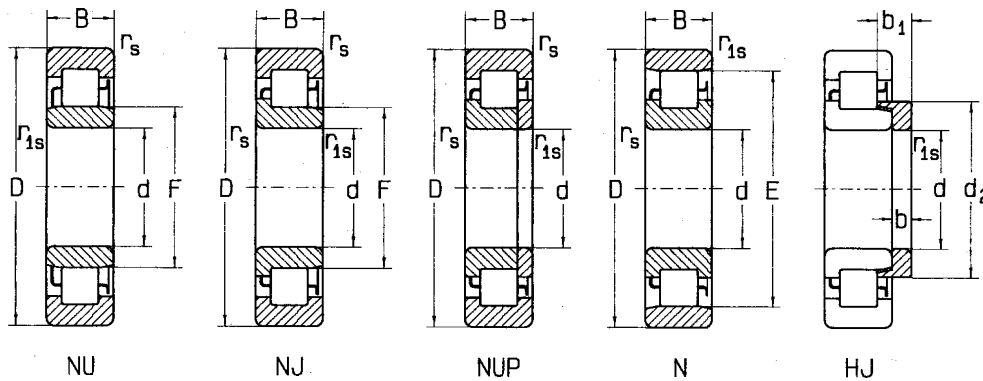


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Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kN lbf		min ⁻¹		mm										kg lbs	
31.6 7,080	27.1 6,070	9,400	11,000	35	42	42	46	50	60	65	64	1	0.6	0.290 0.639	0.04 0.088
51.1 11,400	48.2 10,800	8,900	10,600	42	42	46	50	62	65	65	1	0.6	0.292 0.643	0.04 0.088	
48.2 10,800	47.3 10,600	9,400	11,000	42	42	46	50	-	65	-	1	0.6	0.400 0.880	-	
64.3 14,400	64.3 14,400	8,400	10,000	42	42	46	50	-	65	-	1	0.6	0.385 0.848	-	
43 9,620	36.2 8,100	7,900	9,400	42	44	48	53	66	71	71	1.5	1	0.480 1.057	0.06 0.132	
66.8 15,000	61.9 13,900	7,500	8,900	42	44	48	53	68	71	71	1.5	1	0.466 1.026	0.06 0.132	
58.4 13,100	53.1 11,900	7,900	9,400	42	44	48	53	-	71	-	1.5	1	0.700 1.541	-	
92.6 20,700	92.3 20,700	7,100	8,400	42	44	48	53	-	71	-	1.5	1	0.751 1.654	-	
75 16,800	64.3 14,400	6,300	7,500	44	52	55	62	81	90	86	1.5	1.5	1.00 2.20	0.13 0.286	
22.4 5,010	21.1 4,730	9,400	11,000	40	44	46	49	-	-	63	-	1	0.6	0.220 0.484	-
42.2 9,440	37.6 8,410	7,900	9,400	47	48	52	56	68	73	72	1	1	0.370 0.815	0.05 0.110	
54.1 12,100	50.1 11,200	7,900	9,400	47	47	51	56	69	73	73	1	1	0.353 0.777	0.05 0.110	
73.6 16,500	73.6 16,500	7,500	8,900	47	47	51	56	-	73	-	1	1	0.464 1.022	-	
57.0 12,800	98.1 22,050	7,500	8,900	48	72	51.5	-	-	-	-	1.5	1	0.738 1.62	-	
55.2 12,300	48.2 10,800	7,100	8,400	47	51	55	61	75	81	81	1.5	1.5	0.660 1.453	0.09 0.198	
84.1 18,800	77.9 17,400	6,700	7,900	47	50	54	60	77	81	81	1.5	1.5	0.629 1.385	0.08 0.176	
119 26,600	123 27,600	6,300	7,500	47	50	54	60	-	81	-	1.5	1.5	0.911 2.006	-	
92.6 20,700	79.4 17,800	5,600	6,700	50	55	60	68	90	97	95	2	2	1.30 2.863	0.14 0.308	

Single Row Cylindrical Roller Bearings

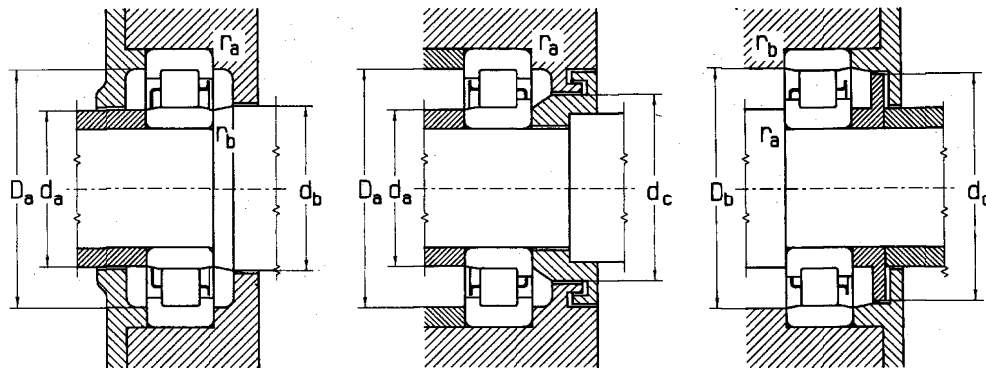
Sizes 45 mm – 50 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
45	75	16	1	0.6	52.5	–	–	–	–	1.2	NU1009	–	–	–	–
	85	19	1.1	1.1	54.5	76.5	59.1	5	8.5	1.4	NU209E	NJ209E	NUP209E	N209E	HJ209E
	85	23	1.1	1.1	54.5	–	–	–	–	1.6	NU2209E	NJ2209E	NUP2209E	–	–
	85	30.16	1	1.5	55.520	–	–	–	–	4	NU5209	–	–	–	–
	100	25	1.5	1.5	58.5	86.5	65	7	12.5	1.4	NU309	NJ309	NUP309	N309	HJ309
	100	25	1.5	1.5	58.5	88.5	64.6	7	11.5	1.4	NU309E	NJ309E	NUP309E	N309E	HJ309E
	100	36	1.5	1.5	58.5	–	–	–	–	2.9	NU2309E	NJ2309E	NUP2309E	–	–
	120	29	2	2	64.5	100.5	72.8	8	13.5	1.5	NU409	NJ409	NUP409	N409	HJ409
50	80	16	1	0.6	57.5	–	–	–	–	1.2	NU1010	–	–	–	–
	90	20	1.1	1.1	60.4	80.4	65	5	10	1.6	NU210	NJ210	NUP210	N210	HJ210
	90	20	1.1	1.1	59.5	81.5	64.6	5	9	1.6	NU210E	NJ210E	NUP210E	N210E	HJ210E
	90	23	1.1	1.1	60.4	–	–	–	–	1.6	NU2210	NJ2210	NUP2210	–	–
	90	23	1.1	1.1	59.5	–	–	–	–	1.6	NU2210E	NJ2210E	NUP2210E	–	–
	90	30.16	1	1.5	60.480	–	–	–	–	4.5	NU5210	–	–	–	–
	110	27	2	2	65	95	71.9	8	14	1.5	NU310	NJ310	NUP310	N310	HJ310
	110	27	2	2	65	97	71.4	8	13	1.5	NU310E	NJ310E	NUP310E	N310E	HJ310E
	110	40	2	2	65	–	–	–	–	3	NU2310E	NJ2310E	NUP2310E	–	–
	130	31	2.1	2.1	70.8	110.8	80	9	14.5	2	NU410	NJ410	NUP410	N410	HJ410

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

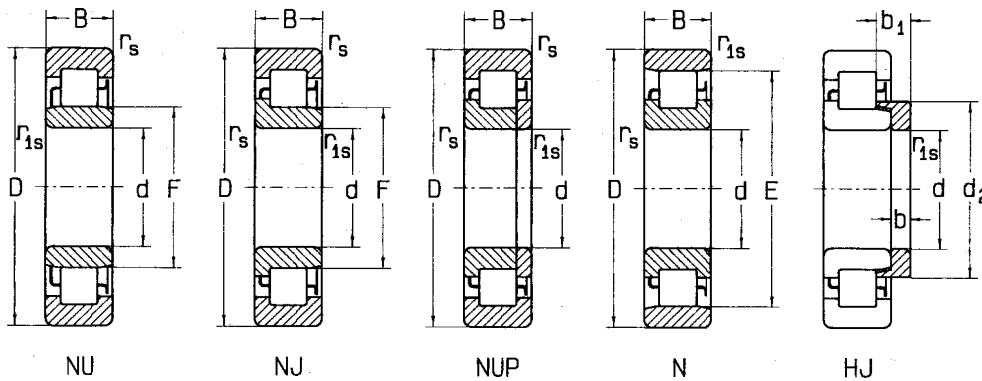


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kN lbf		min ⁻¹		mm										kg lbs	
27.1 6,070	26.6 5,960	8,400	10,000	45	49	51.5	54	–	–	70	–	1	0.6	0.290 0.639	–
61.9 13,900	60.7 13,600	7,500	8,900	52	53	57	61	74	78	78	1	1	1	0.425 0.936	0.05 0.110
76.4 17,100	79.4 17,800	7,100	8,400	52	53	57	61	–	–	78	–	1	1	0.520 1.145	–
89.1 20,030	171.0 26,300	6,700	7,900	53	76	57	–	–	–	–	–	1.5	1	0.797 1.75	–
70.8 15,800	61.9 13,900	6,300	7,500	52	56	60	66	84	91	90	1.5	1.5	1.5	0.870 1.916	0.11 0.242
102 22,800	98.1 22,000	6,000	7,100	52	56	60	66	86	91	91	1.5	1.5	1.5	0.860 1.894	0.10 0.220
139 31,000	147 32,900	5,600	6,700	52	56	60	66	–	–	91	–	1.5	1.5	1.36 2.99	–
104 23,300	90.9 20,300	5,300	6,300	55	62.7	66	75	99	107	103	2	2	2	1.65 3.63	0.18 0.396
28.2 6,310	28.2 6,310	7,900	9,400	50	54	56.5	59	–	–	75	–	1	0.6	0.310 0.683	–
46.4 10,400	44.7 10,000	7,100	8,400	57	58	62	67	78	83	83	1	1	1	0.480 1.056	0.06 0.132
72.2 16,200	76.4 17,100	6,700	7,900	57	57	61	66	79	83	83	1	1	1	0.471 1.037	0.06 0.132
63.1 14,100	66.8 15,000	7,100	8,400	57	58	62	66	–	–	83	–	1	1	0.580 1.277	–
84.1 18,800	90.9 20,300	6,700	7,900	57	57	61	66	–	–	83	–	1	1	0.542 1.193	–
92.6 20,800	128.0 28,800	6,300	7,500	58	81	62	–	–	–	–	–	1.5	1	0.877 2.15	–
87.4 19,600	79.4 17,800	5,600	6,700	60	63	67	74	93	100	99	2	2	2	1.15 2.53	0.15 0.330
117 26,100	114 25,600	5,300	6,300	60	63	67	74	95	100	100	2	2	2	1.13 2.49	0.14 0.308
168 37,600	178 39,800	5,000	6,000	60	63	67	74	–	–	100	–	2	2	1.83 4.03	–
139 31,300	114 25,600	4,700	5,600	63	68	73	82	109	116	114	2	2	2	2.00 4.40	0.23 0.506

F

Single Row Cylindrical Roller Bearings

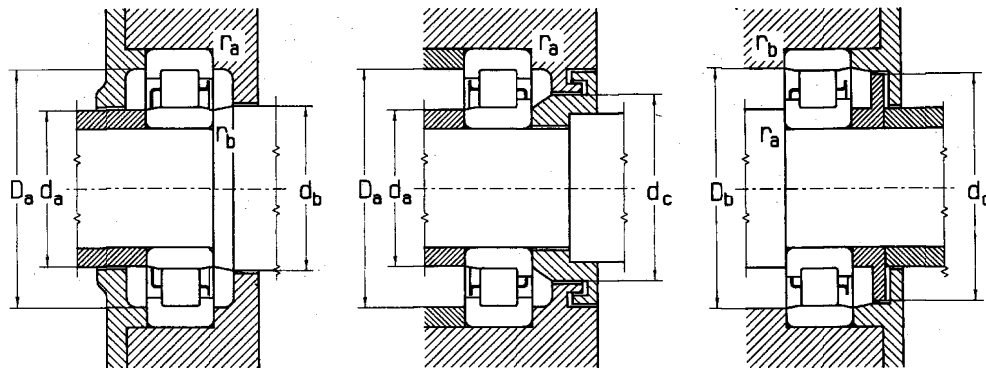
Sizes 55 mm – 60 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹⁾	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
55	90	18	1.1	1	64.5	–	–	–	–	1.2	NU1011	–	–	–	–
	100	21	1.5	1.1	66.5	88.5	71.5	6	11	1.6	NU211	NJ211	NUP211	N211	HJ211
	100	21	1.5	1.1	66	90	71	6	9.5	1.6	NU211E	NJ211E	NUP211E	N211E	HJ211E
	100	25	1.5	1.1	66.5	–	–	–	–	1.6	NU2211	NJ2211	NUP2211	–	–
	100	25	1.5	1.1	66	–	–	–	–	1.6	NU2211E	NJ2211E	NUP2211E	–	–
	100	33.34	1.5	2.1	66.900	–	–	–	–	4.5	NU5211	–	–	–	–
	120	29	2	2	70.5	104.5	78.4	9	15	1.5	NU311	NJ311	NUP311	N311	HJ311
	120	29	2	2	70.5	106.5	77.7	9	14	1.5	NU311E	NJ311E	NUP311E	N311E	HJ311E
	120	43	2	2	70.5	–	–	–	–	3	NU2311E	NJ2311E	NUP2311E	–	–
	140	33	2.1	2.1	77.2	117.2	86.4	10	16.5	2	NU411	NJ411	NUP411	N411	HJ411
60	95	18	1.1	1	69.5	–	–	–	–	1.2	NU1012	–	–	–	–
	110	22	1.5	1.5	73.5	97.5	79	6	11	1.6	NU212	NJ212	NUP212	N212	HJ212
	110	22	1.5	1.5	72	100	77.7	6	10	1.6	NU212E	NJ212E	NUP212E	N212E	HJ212E
	110	28	1.5	1.5	72	–	–	–	–	1.6	NU2212E	NJ2212E	NUP2212E	–	–
	110	36.51	1.5	2	72.380	–	–	–	–	4.5	NU5212	–	–	–	–
	130	31	2.1	2.1	77	113	85.3	9	15.5	1.5	NU312	NJ312	NUP312	N312	HJ312
	130	31	2.1	2.1	77	115	84.5	9	14.5	1.5	NU312E	NJ312E	NUP312E	N312E	HJ312E
	130	46	2.1	2.1	77	–	–	–	–	4.5	NU2312	NJ2312	NUP2312	–	–
	130	46	2.1	2.1	77	–	–	–	–	3.5	NU2312E	NJ2312E	NUP2312E	–	–
	150	35	2.1	2.1	83	127	93.1	10	16.5	2	NU412	NJ412	NUP412	N412	HJ412

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

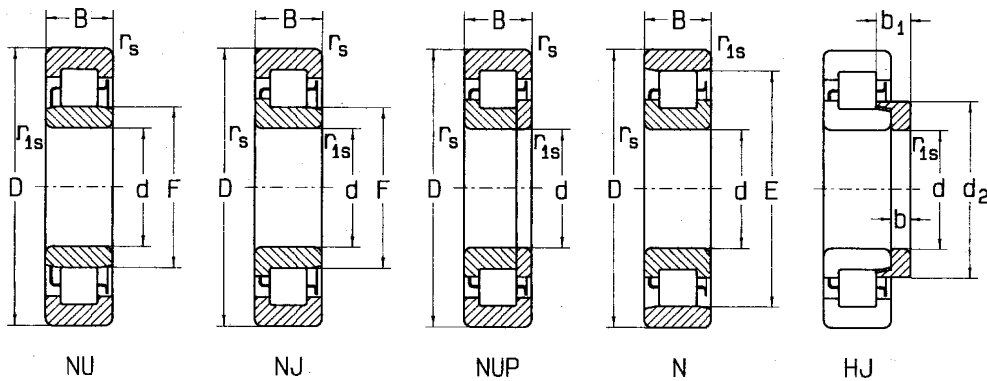


F

Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kN lbf		min^{-1}		mm										kg lbs	
32.9 7,360	34.8 7,790	7,100	8,400	55	60	62.5	66	-	-	84	-	1	1	0.450 0.990	-
56.2 12,600	56.2 12,600	6,300	7,500	62	65	68	73	86	91	91	1.5	1	0.640 1.409	0.08 0.176	
85.8 19,200	90.9 20,300	6,300	7,500	62	64.5	68	73	87	91	91	1.5	1	0.631 1.389	0.08 0.176	
76.4 17,100	82.5 18,500	6,300	7,500	62	65	68	73	-	91	-	1.5	1	0.780 1.718	-	
102 22,800	117 26,100	6,000	7,100	62	64.5	68	73	-	91	-	1.5	1	0.755 1.663	-	
119.0 26,750	171.0 38,500	5,600	6,700	64	90	69	-	-	-	-	2	1.5	1.200 2.64	-	
108 24,200	100 22,400	5,300	6,300	65	67	72	80	102	110	108	2	2	1.45 3.19	0.19 0.418	
133 29,900	128 28,700	4,700	5,600	65	67	72	80	104	110	110	2	2	1.38 3.04	0.18 0.396	
203 45,500	220 49,200	4,700	5,600	65	67	72	80	-	110	-	2	2	2.10 4.62	-	
139 31,000	128 28,700	4,500	5,300	68	71	79	88	115	126	120	2	2	2.50 5.51	0.30 0.661	
34.8 7,790	36.9 8,250	6,700	7,900	60	65	68	71	-	-	88	-	1	1	0.480 1.057	-
66.8 15,000	68.1 15,300	5,600	6,700	67	71	75	80	95	101	101	1.5	1.5	0.820 1.806	0.11 0.242	
104 23,300	108 24,200	5,600	6,700	67	69.5	74	79	97	101	101	1.5	1.5	0.798 1.757	0.10 0.220	
136 30,400	153 34,100	5,300	6,300	67	69.5	74	79	-	101	-	1.5	1.5	1.03 2.27	-	
150.0 33,720	211.0 47,400	5,300	6,300	69	99	74	-	-	-	-	2	1.5	1.590 3.50	-	
121 27,100	114 25,600	4,700	5,600	72	75	79	87	110	118	117	2	2	1.85 4.07	0.22 0.484	
158 35,500	153 34,100	4,500	5,300	72	75	79	87	112	118	118	2	2	1.70 3.74	0.20 0.44	
168 37,600	174 39,100	4,700	5,600	72	75	79	87	-	118	-	2	2	2.70 5.95	-	
237 53,100	271 60,700	4,500t	5,300	72	75	79	87	-	118	-	2	2	2.68 5.90	-	
168 37,600	158 35,500	4,200	5,000	73	77	85	95	124	136	130	2	2	3.00 6.61	0.34 0.749	

Single Row Cylindrical Roller Bearings

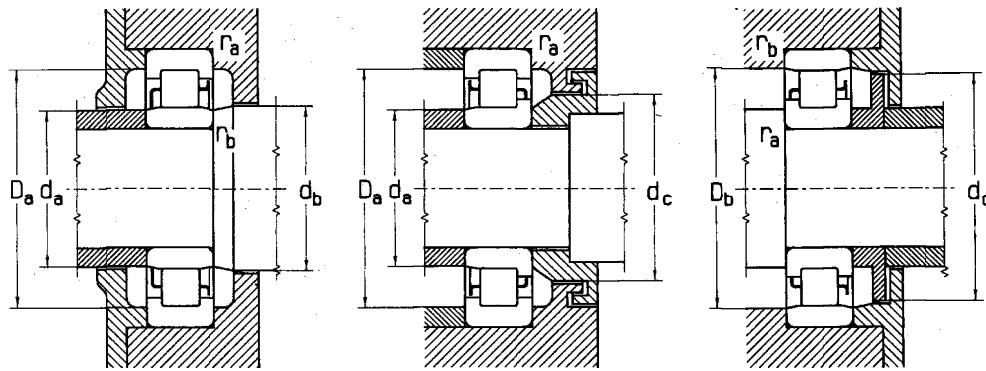
Sizes 65 mm – 70 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹⁾	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
65	100	18	1.1	1	74.5	–	–	–	–	1.2	NU1013	–	–	–	–
	120	23	1.5	1.5	79.6	105.6	85.6	6	11	1.6	NU213	NJ213	NUP213	N213	HJ213
	120	23	1.5	1.5	78.5	108.5	84.6	6	10	1.6	NU213E	NJ213E	NUP213E	N213E	HJ213E
	120	31	1.5	1.5	79.6	–	–	–	–	1.6	NU2213	NJ2213	NUP2213	–	–
	120	31	1.5	1.5	78.5	–	–	–	–	2.1	NU2213E	NJ2213E	NUP2213E	–	–
	120	38.10	1.7	1.7	80.420	–	–	–	–	4.5	NU5213	–	–	–	–
	140	33	2.1	2.1	83.5	121.5	92.2	10	17	1.5	NU313	NJ313	NUP313	N313	HJ313
	140	33	2.1	2.1	82.5	124.5	90.7	10	15.5	1.5	NU313E	NJ313E	NUP313E	N313E	HJ313E
	140	48	2.1	2.1	83.5	–	–	–	–	4.5	NU2313	NJ2313	NUP2313	–	–
	140	48	2.1	2.1	82.5	–	–	–	–	4	NU2313E	NJ2313E	NUP2313E	–	–
	160	37	2.1	2.1	89.3	135.3	99.9	11	18	2	NU413	NJ413	NUP413	N413	HJ413
70	110	20	1.1	1	80	–	–	–	–	1.2	NU1014	–	–	–	–
	125	24	1.5	1.5	84.5	110.5	90.5	7	12.5	1.6	NU214	NJ214	NUP214	N214	HJ214
	125	24	1.5	1.5	83.5	113.5	89.6	7	11.5	1.6	NU214E	NJ214E	NUP214E	N214E	HJ214E
	125	31	1.5	1.5	84.5	–	–	–	–	1.6	NU2214	NJ2214	NUP2214	–	–
	125	31	1.5	1.5	83.5	–	–	–	–	2.1	NU2214E	NJ2214E	NUP2214E	–	–
	125	39.69	1.5	2.5	84.840	–	–	–	–	4.5	NU5214	–	–	–	–
	150	35	2.1	2.1	90	130	99.2	10	17.5	1.5	NU314	NJ314	NUP314	N314	HJ314
	150	35	2.1	2.1	89	133	97.5	10	15.5	1.5	NU314E	NJ314E	NUP314E	N314E	HJ314E
	150	51	2.1	2.1	89	–	–	–	–	4.1	NU2314E	NJ2314E	NUP2314E	–	–
	180	42	3	3	100	152	112	12	20	2	NU414	NJ414	NUP414	N414	HJ414

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

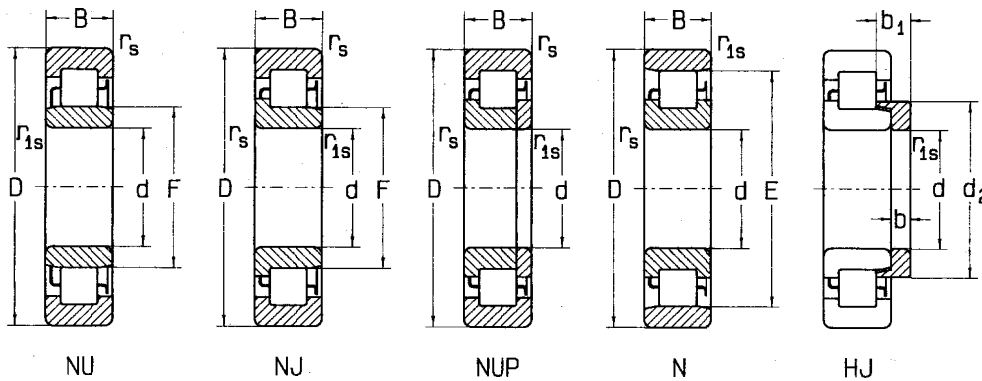


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kn lbf		min^{-1}		mm										kg lbs	
35.5 7,940	39.1 8,740	6,300	7,500	65	70	73	76	-	-	93	-	1	1	0.510 1.123	-
79.4 17,800	82.5 18,500	5,300	6,300	72	77	81	87	103	111	110	1.5	1.5	1.05 2.31	0.13 0.286	
112 25,100	117 26,100	5,000	6,000	72	76	80	86	106	111	111	1.5	1.5	0.987 2.173	0.12 0.264	
117 26,100	136 30,400	5,300	6,300	72	77	81	87	-	111	-	1.5	1.5	1.45 3.20	-	
158 35,500	181 40,600	5,000	6,000	72	76	80	86	-	111	-	1.5	1.5	1.37 3.02	-	
139.0 31,250	196.0 44,100	4,700	5,600	77	108	83	-	-	-	-	1.5	1.5	1.880 4.14	-	
131 29,300	128 28,700	4,500	5,300	76	78	85	94	119	128	126	2	2	2.25 4.95	0.29 0.639	
181 40,600	178 39,800	4,200	5,000	76	77	84	93	122	128	128	2	2	2.15 4.73	0.27 0.595	
192 43,000	203 45,500	4,500	5,300	76	78	85	94	-	128	-	2	2	3.25 7.16	-	
266 59,600	293 65,600	4,200	5,000	76	77	84	93	-	128	-	2	2	3.20 7.05	-	
181 40,600	174 39,100	3,800	4,500	78	83	91	101	133	146	139	2	2	3.60 7.93	0.43 0.947	
54.1 12,100	58.4 13,100	5,600	6,700	70	75	78	82	-	-	103	-	1	1	0.700 1.541	-
79.4 17,800	82.5 18,500	5,000	6,000	77	82	86	92	108	116	115	1.5	1.5	1.15 2.53	0.16 0.352	
123 27,600	136 30,400	4,700	5,600	77	81	85	91	111	116	116	1.5	1.5	1.09 2.40	0.15 0.331	
117 26,100	139 31,000	5,000	6,000	77	82	86	92	-	116	-	1.5	1.5	1.50 3.30	-	
165 36,900	196 43,800	4,700	5,600	77	81	85	91	-	116	-	1.5	1.5	1.45 3.19	-	
178.0 40,115	261.0 58,700	4,700	5,600	81.5	112	87	-	-	-	-	2	1.5	2.220 4.88	-	
147 32,900	144 32,200	4,200	5,000	81	85	92	101	127	138	135	2	2	2.75 6.06	0.34 0.749	
215 48,200	224 50,100	3,800	4,500	81	84	91	100	130	138	138	2	2	2.71 5.97	0.32 0.705	
282 63,100	310 69,400	3,800	4,500	81	84	91	100	-	138	-	2	2	4.21 9.27	-	
215 48,200	233 52,100	4,200	5,000	85	93	102	114	149	164	156	2.5	2.5	5.25 11.56	0.61 1.343	

F

Single Row Cylindrical Roller Bearings

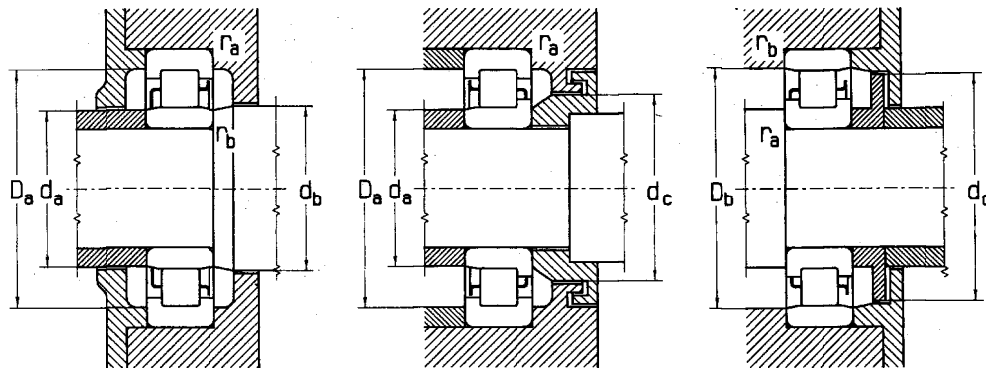
Sizes 75 mm – 80 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹⁾	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
75	115	20	1.1	1	85	–	–	–	–	1.2	NU1015	–	–	–	–
	130	25	1.5	1.5	88.5	116.5	94.9	7	12.5	1.6	NU215	NJ215	NUP215	N215	HJ215
	130	25	1.5	1.5	88.5	118.5	94.5	7	11	1.6	NU215E	NJ215E	NUP215E	N215E	HJ215E
	130	31	1.5	1.5	88.5	–	–	–	–	2.1	NU2215E	NJ2215E	NUP2215E	–	–
	130	41.28	1.5	2.5	89.014	–	–	–	–	4.5	NU5215	–	–	–	–
	160	37	2.1	2.1	95.5	139.5	105.6	11	18.5	1.5	NU315	NJ315	NUP315	N315	HJ315
	160	37	2.1	2.1	95	143	104.3	11	16.5	1.5	NU315E	NJ315E	NUP315E	N315E	HJ315E
	160	55	2.1	2.1	95.5	–	–	–	–	4.5	NU2315	NJ2315	NUP2315	–	–
	160	55	2.1	2.1	95	–	–	–	–	4.1	NU2315E	NJ2315E	NUP2315E	–	–
	190	45	3	3	104.5	160.5	117	13	21.5	2	NU415	NJ415	NUP415	N415	HJ415
80	125	22	1.1	1	91.5	–	–	–	–	1.2	NU1016	–	–	–	–
	140	26	2	2	95.3	125.3	102.2	8	13.5	2	NU216	NJ216	NUP216	N216	HJ216
	140	26	2	2	95.3	127.3	101.7	8	12.5	2	NU216E	NJ216E	NUP216E	N216E	HJ216E
	140	33	2	2	95.3	–	–	–	–	2.5	NU2216E	NJ2216E	NUP2216E	–	–
	140	44.45	2.1	2.1	95.280	–	–	–	–	5	NU5216	–	–	–	–
	170	39	2.1	2.1	103	147	113.1	11	19.5	1.5	NU316	NJ316	NUP316	N316	HJ316
	170	39	2.1	2.1	101	151	110.6	11	17	1.5	NU316E	NJ316E	NUP316E	N316E	HJ316E
	170	58	2.1	2.1	101	–	–	–	–	4.1	NU2316E	NJ2316E	NUP2316E	–	–
	200	48	3	3	110	–	123.8	13	22	2	NU416	NJ416	NUP416	–	HJ416

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

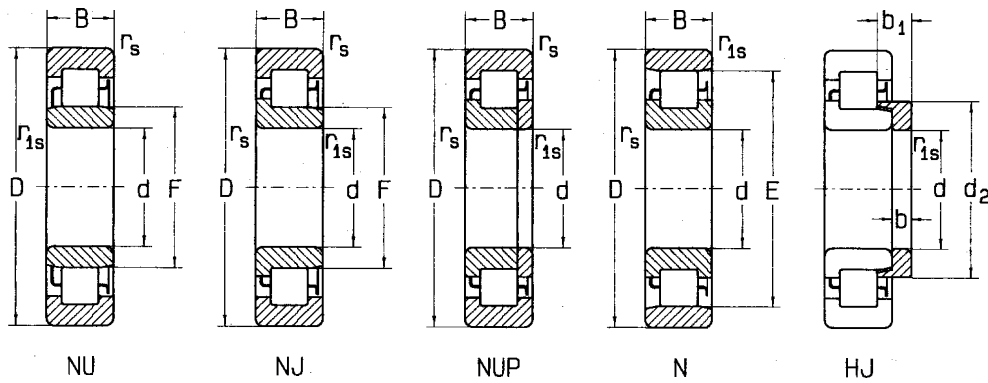


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kN lbf		min ⁻¹		mm										kg lbs	
55.2	61.9	5,300	6,300	75	80	83	87	-	-	108	-	1	1	0.740	-
12,300	13,900													1.629	-
96.2	96.2	4,700	5,600	82	85	90	96	114	121	120	1.5	1.5	1.25	0.17	
21,500	21,500												2.75	0.374	
131	147	4,500	5,300	82	85	90	96	116	121	121	1.5	1.5	1.30	0.16	
29,300	32,900												2.86	0.352	
162	196	4,500	5,300	82	85	90	96	-	121	-	1.5	1.5	1.65	-	
36,200	43,800												3.63	-	
196.0	299.0	4,500	5,300	85.5	117	91	-	-	-	-	2	1.5	2.410	-	
44,100	67,200												5.30	-	
178	178	3,880	4,500	86	93	97	107	137	148	145	2	2	3.25	0.49	
39,800	39,800												7.16	1.079	
256	266	3,500	4,200	86	92.5	97	107	140	148	148	2	2	3.27	0.41	
57,300	59,600												7.20	0.903	
266	287	3,800	4,500	86	93	97	107	-	148	-	2	2	4.85	-	
59,600	64,300												10.68	-	
355	406	3,500	4,200	86	92.5	97	107	-	148	-	2	2	4.82	-	
79,400	90,900												10.61	-	
261	251	3,200	3,800	90	98	107	119	158	174	164	2.5	2.5	6.25	0.80	
58,400	56,200												13.76	1.762	
66.8	76.4	5,000	6,000	80	85	90	94	-	-	118	-	1	1	0.990	-
15,000	17,100												2.180	-	
106	114	4,500	5,300	90	92	97	104	127	130	131	2	2	1.50	0.210	
23,800	25,600												3.30	0.463	
144	165	4,200	5,000	90	92	97	104	125	130	130	2	2	1.45	0.22	
32,000	36,900												3.19	0.484	
196	246	4,200	5,000	90	92	97	104	-	130	-	2	2	1.92	-	
43,800	55,200												4.22	-	
185.0	282.0	4,200	5,000	91.5	126	98	-	-	-	-	2	2	2.910	-	
41,600	63,400												6.40	-	
192	192	3,500	4,200	91	96.5	103	114	151	158	160	2	2	3.90	0.490	
43,200	43,200												8.60	1.080	
266	282	3,300	4,000	91	97	103	114	148	158	157	2	2	3.83	0.46	
59,600	63,100												8.43	1.013	
391	473	3,300	4,000	91	97	103	114	-	158	-	2	2	5.89	-	
87,400	106,000												12.97	-	
299	293	3,000	3,500	95	105	112	125	-	184	-	2.5	2.5	7.30	0.80	
66,800	65,600												16.07	1.762	

F

Single Row Cylindrical Roller Bearings

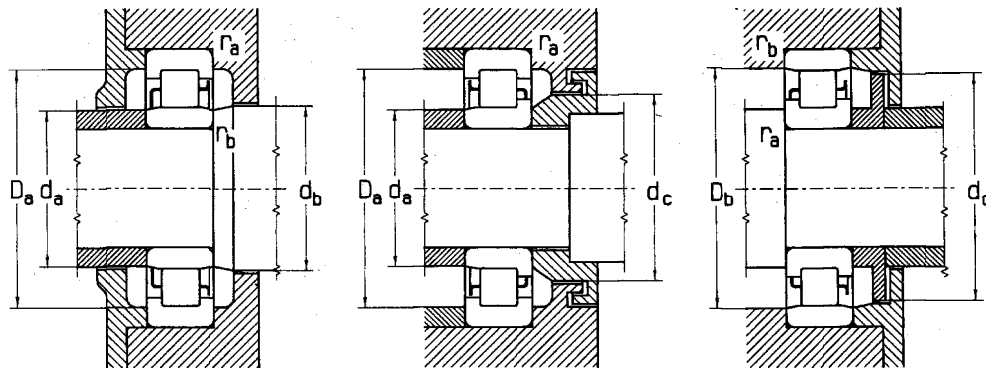
Sizes 85 mm – 90 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
85	130	22	1.1	1	96.5	–	–	–	–	2	NU1017	–	–	–	–
	150	28	2	2	101.8	133.8	109.2	8	14	2	NU217	NJ217	NUP217	N217	HJ217
	150	28	2	2	100.5	136.5	107.6	8	12.5	2	NU217E	NJ217E	NUP217E	N217E	HJ217E
	150	36	2	2	100.5	–	–	–	–	3	NU2217E	NJ2217E	NUP2217E	–	–
	150	49.21	2.1	2.1	102.000	–	–	–	–	5.5	NU5217	–	–	–	–
	180	41	3	3	108	156	119	12	20.5	2	NU317	NJ317	NUP317	N317	HJ317
	180	41	3	3	108	160	118	12	18.5	1.9	NU317E	NJ317E	NUP317E	N317E	HJ317E
	180	60	3	3	108	–	–	–	–	4.9	NU2317E	NJ2317E	NUP2317E	–	–
	210	52	4	4	113	–	127.7	14	24	2.5	NU417	NJ417	NUP417	–	HJ417
90	140	24	1.5	1.1	103	–	–	–	–	2	NU1018	–	–	–	–
	160	30	2	2	107	143	115.3	9	15	2	NU218	NJ218	NUP218	N218	HJ218
	160	30	2	2	107	145	114.5	9	14	2	NU218E	NJ218E	NUP218E	N218E	HJ218E
	160	40	2	2	107	–	–	–	–	3	NU2218E	NJ2218E	NUP2218E	–	–
	160	52.40	2.1	3	107.218	–	–	–	–	6	NU5218	–	–	–	–
	190	43	3	3	115	165	126.5	12	21	2	NU318	NJ318	NUP318	N318	HJ318
	190	43	3	3	113.5	169.5	124.2	12	18.5	1.9	NU318E	NJ318E	NUP318E	N318E	HJ318E
	190	64	3	3	113.5	–	–	–	–	4.9	NU2318E	NJ2318E	NUP2318E	–	–
	225	54	4	4	123.5	–	139.1	14	24	2.5	NU418	NJ418	NUP418	–	HJ418

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

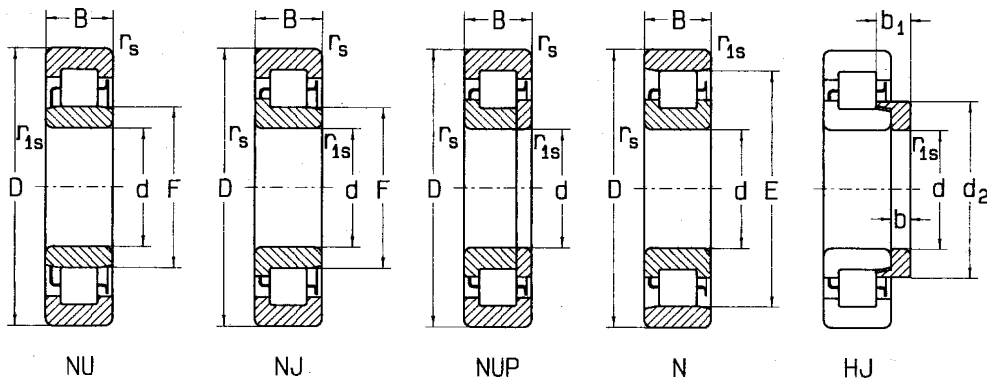


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kn lbf		min^{-1}		mm										kg lbs	
69.4 15,500	81 18,100	4,700	5,600	85	90	95	99	-	-	123	-	1	1	1.05 2.31	-
121 27,100	131 29,300	4,200	5,000	95	99	104	111	131	140	138	2	2	4.18 1.80	0.25 0.24	
171 38,300	188 42,200	4,000	4,700	95	98	103	110	133	140	140	2	2	3.96 2.52	0.551 -	
220 49,200	261 58,400	3,800	4,500	95	98	103	110	-	140	-	2	2	5.55 3.690	-	
211.0 47,440	316.0 71,000	3,800	4,500	98	135	105	-	-	-	-	2	2	8.12 4.50	-	
215 48,200	215 48,200	3,300	4,000	98	103	110	121	174	166	162	2.5	2.5	9.91 4.53	1.255 0.57	
304 68,100	329 73,600	3,200	3,800	98	103	110	121	178	166	166	2.5	2.5	9.98 6.58	1.189 -	
422 94,400	492 110,000	3,200	3,800	98	103	110	121	-	166	-	2.5	2.5	14.49 8.70	-	
362 81,000	362 81,000	3,000	3,500	105	108	115	129	-	190	-	3	3	19.16 8.70	0.89	
79.4 17,800	92.6 20,700	4,500	5,300	90	96	100	106	-	-	132	-	1.5	1	1.35 2.97	-
147 32,900	158 35,500	4,000	4,700	100	105	109	117	140	150	147	2	2	5.06 2.23	0.31 0.30	
188 42,200	215 48,200	3,800	4,500	100	105	109	117	142	150	149	2	2	4.91 3.02	0.661 -	
256 57,300	316 70,800	3,500	4,200	100	105	109	117	-	150	-	2	2	6.65 4.480	-	
237.0 53,300	355.0 79,800	3,500	4,200	103	144	110	-	-	-	-	2.5	2	9.86 5.40	-	
233 52,100	242 54,100	3,200	3,800	103	111	117	128	162	176	172	2.5	2.5	11.89 5.50	1.431 0.65	
316 70,800	329 73,600	3,000	3,500	103	110	116	127	166	176	176	2.5	2.5	12.11 8.20	1.321 -	
447 100,000	511 114,000	2,800	3,200	103	110	116	127	-	176	-	2.5	2.5	18.06 10.5	-	
391 87,400	406 90,900	2,700	3,200	110	117	125	140	-	205	-	3	3	23.1 23.1	1.05 2.31	



Single Row Cylindrical Roller Bearings

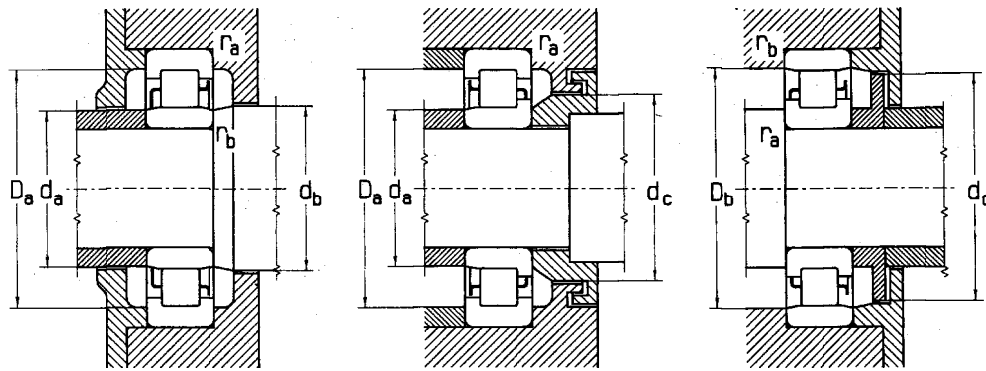
Sizes 95 mm – 105 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
95	170	32	2.1	2.1	113.5	151.5	122.2	9	15.5	2	NU219	NJ219	NUP219	N219	HJ219
	170	32	2.1	2.1	112.5	154.5	120.7	9	14	2	NU219E	NJ219E	NUP219E	N219E	HJ219E
	170	43	2.1	2.1	113.5	–	–	–	–	3	NU2219	NJ2219	NUP2219	–	–
	170	43	2.1	2.1	112.5	–	–	–	–	3	NU2219E	NJ2219E	NUP2219E	–	–
	170	55.56	2.5	3	113.520	–	–	–	–	6	NU5219	–	–	–	–
	200	45	3	3	121.5	–	–	–	–	2	NU319	NJ319	NUP319	–	–
	200	45	3	3	121.5	–	–	–	–	1.9	NU319E	NJ319E	NUP319E	–	–
	200	67	3	3	121.5	–	–	–	–	4.9	NU2319E	NJ2319E	NUP2319E	–	–
	240	55	4	4	133.5	–	–	–	–	2.5	NU419	NJ419	NUP419	–	–
100	150	24	1.5	1.1	113	–	–	–	–	2	NU1020	–	–	–	–
	180	34	2.1	2.1	120	160	129.2	10	17	2	NU220	NJ220	NUP220	N220	HJ220
	180	34	2.1	2.1	119	163	127.5	10	15	2	NU220E	NJ220E	NUP220E	N220E	HJ220E
	180	46	2.1	2.1	119	–	–	–	–	3	NU2220E	NJ2220E	NUP2220E	–	–
	180	60.32	2.1	2.1	121.005	–	–	–	–	7	NU5220	–	–	–	–
	215	47	3	3	129.5	185.5	142.4	13	22.5	2	NU320	NJ320	NUP320	N320	HJ320
	215	47	3	3	127.5	191.5	139.6	13	20.5	1.9	NU320E	NJ320E	NUP320E	N320E	HJ320E
	215	73	3	3	127.5	–	–	–	–	4.9	NU2320E	NJ2320E	NUP2320E	–	–
	250	58	4	4	139	–	155.9	16	27	2.5	NU420	NJ420	NUP420	–	HJ420
105	190	36	2.1	2.1	126.8	168.8	136.5	10	17.5	2	NU221	NJ221	NUP221	N221	HJ221
	190	65.10	2.1	2.1	126.520	–	–	–	–	7	NU5221	–	–	–	–
	225	49	3	3	135	195	148.8	13	22.5	4.5	NU321	NJ321	NUP321	N321	HJ321
	260	60	4	4	144.5	–	162	16	27	2.5	NU421	NJ421	NUP421	–	HJ421

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

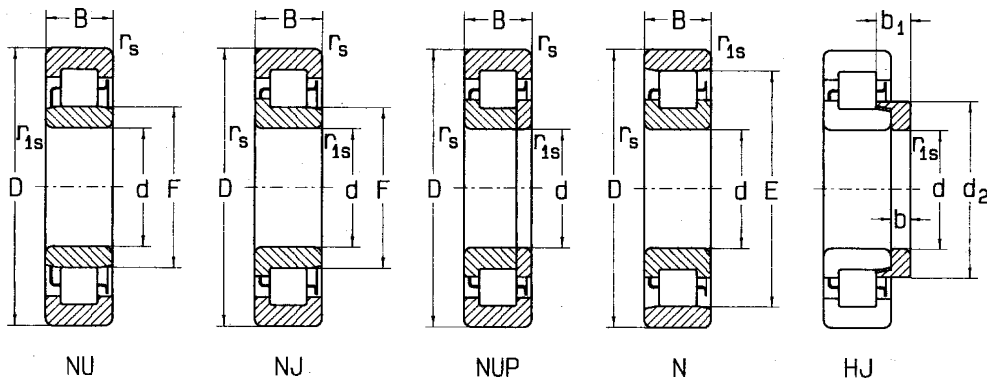


F

Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kn lbf		min^{-1}		mm										kg lbs	
162 36,200	181 40,600	3,800	4,500	95	107	111	116	124	149	158	155	2	2	2.80 6.17	0.35 0.771
220 49,200	246 55,200	3,500	4,200	107	110	115	123	152	158	158	2	2	2.69 5.92	0.33 0.727	
233 52,100	282 63,100	3,300	4,500	107	111	116	124	-	158	-	2	2	3.85 8.48	-	
293 65,600	355 79,400	3,800	4,000	107	110	115	123	-	158	-	2	2	3.63 7.99	-	
335.0 75,300	511.0 114,900	3,300	4,000	110	153	117	-	-	-	-	2.5	2	5.650 12.43	-	
256 57,300	266 59,600	3,200	3,800	109	119	124	135	-	186	-	2.5	2.5	6.20 13.65	-	
329 73,600	362 81,000	2,800	3,300	109	119	124	135	-	186	-	2.5	2.5	6.50 14.31	-	
492 110,000	584 131,000	2,700	3,200	109	119	124	135	-	186	-	2.5	2.5	9.70 21.36	-	
430 96,200	447 100,000	2,500	3,000	115	125	136	151	-	220	-	3	3	13.5 29.7	-	
84.1 18,800	104 23,300	4,200	5,000	100	106	110	116	-	142	-	1.5	1	1.45 3.19	-	
178 39,800	203 45,500	3,500	4,200	112	117	122	131	157	168	165	2	2	3.40 7.49	0.45 0.991	
261 58,400	304 68,100	3,300	4,000	112	116	121	130	160	168	168	2	2	3.38 7.44	0.43 0.947	
355 79,400	455 102,000	3,200	3,800	112	116	121	130	-	168	-	2	2	4.63 10.20	-	
304.0 68,350	473.0 106,300	3,200	3,800	116.5	162	124	-	-	-	-	2	2	6.490 14.28	-	
299 66,800	310 69,400	2,800	3,300	113	125	132	145	182	201	190	2.5	2.5	7.70 16.96	0.91 2.004	
391 87,400	406 90,900	2,700	3,200	113	123	130	144	188	201	196	2.5	2.5	7.90 17.40	0.89 1.960	
596 133,000	694 155,000	2,500	3,000	113	123	130	144	-	201	-	2.5	2.5	12.3 27.1	-	
473 106,000	501 112,000	2,400	2,800	120	130	141	158	-	230	-	3	3	14.0 30.8	1.55 3.41	
200 44,700	224 50,100	3,300	4,000	105	117	122	129	138	166	178	175	2	2	4.00 8.81	0.51 1.123
362.0 81,400	573.0 128,800	3,000	3,500	121.5	171	130	-	-	-	-	2	2	7.940 17.47	-	
341 76,400	362 81,000	2,700	3,200	119	132	137	150	192	211	199	2.5	2.5	8.75 19.27	1.00 2.20	
531 119,000	562 126,000	2,200	2,700	125	135	147	164	-	240	-	3	3	19.0 41.8	1.65 3.63	

Single Row Cylindrical Roller Bearings

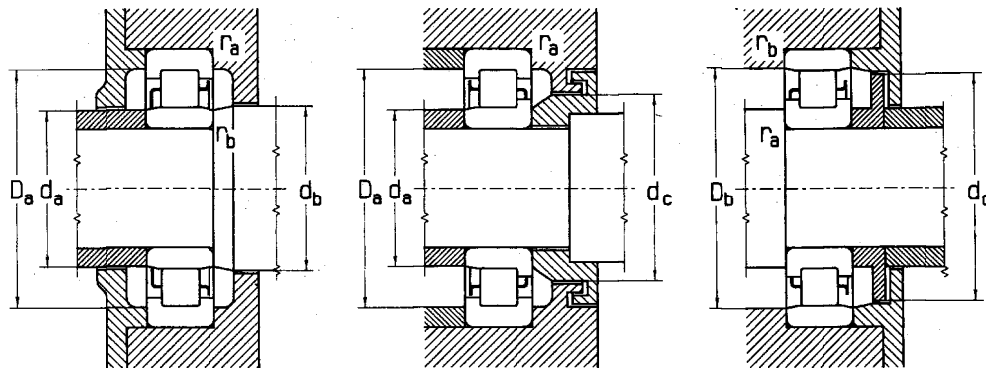
Sizes 110 mm – 120 mm



Dimensions											Bearing Designation				Angle Ring
d	D	B	r_s min	r_{1s} min	F	E	d_2 max	b	b^1	s^1	NU	NJ	NUP	N	HJ
mm															
110	170	28	2	1.1	125	–	–	–	–	2	NU1022	–	–	–	–
	200	38	2.1	2.1	132.5	178.5	143.1	11	18.5	2.5	NU2222	NJ2222	NUP2222	N2222	HJ2222
	200	38	2.1	2.1	132.5	–	141.8	11	17	2.4	NU2222E	NJ2222E	NUP2222E	–	HJ2222E
	200	53	2.1	2.1	132.5	–	–	–	–	5	NU2222E	NJ2222E	NUP2222E	–	–
	200	69.85	2.1	4	132.951	–	–	–	–	7	NU5222	–	–	–	–
	240	50	3	3	143	207	157.5	14	23	2.7	NU3222	NJ3222	NUP3222	N3222	HJ3222
	240	50	3	3	143	–	155.9	14	22	2.9	NU3222E	NJ3222E	NUP3222E	–	HJ3222E
	240	80	3	3	143	–	–	–	–	6.4	NU2322E	NJ2322E	NUP2322E	–	–
	280	65	4	4	155	–	173.4	17	29.5	2.7	NU4222	NJ4222	NUP4222	–	–
120	180	28	2	1.1	135	–	–	–	–	2	NU1024	–	–	–	–
	215	40	2.1	2.1	143.5	191.5	154.5	11	19	2.5	NU2242	NJ2242	NUP2242	N2242	HJ2242
	215	40	2.1	2.1	143.5	–	153.5	11	17	2.4	NU2242E	NJ2242E	NUP2242E	–	HJ2242E
	215	58	2.1	2.1	143.5	–	–	–	–	5.4	NU2224E	NJ2224E	NUP2224E	–	–
	215	76.20	2.1	2.1	145.140	–	–	–	–	7	NU5224	–	–	–	–
	260	55	3	3	154	–	170.5	14	23.5	2.7	NU3242	NJ3242	NUP3242	–	HJ3242
	260	55	3	3	154	–	168.7	14	22.5	2.9	NU3242E	NJ3242E	NUP3242E	–	HJ3242E
	260	86	3	3	154	–	–	–	–	6.4	NU2324E	NJ2324E	NUP2324E	–	–
	310	72	5	5	170	–	188	17	30.3	2.7	NU4242	NJ4242	NUP4242	–	HJ4242

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

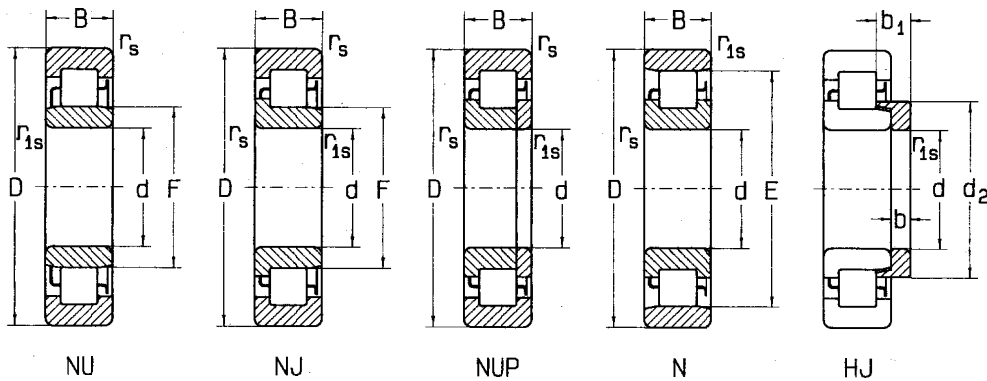


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	d_c max	D_a max	D_b min	r_a max	r_b max	Bearing	Angle Ring
kn	lbf	min ⁻¹		mm										kg	lbs
126	153	3,800	4,500	110	118	121	128	-	-	161	-	2	1	2.30	-
28,000	34,100													5.06	-
237	271	3,200	3,800		122	125	135	145	175	188	182	2	2	4.65	0.62
53,100	60,700													10.24	1.365
299	348	3,000	3,500		122	125	135	145	-	188	-	2	2	4.90	0.60
66,800	77,900													10.79	1.321
391	501	2,800	3,300		122	125	135	145	-	188	-	2	2	6.95	-
87,400	112,000													15.30	-
464.0	736.0	3,000	3,500		128	180	137	-	-	-	-	3	2	10.000	-
104,300	165,500													22.00	-
391	414	2,500	3,000		124	135	145	160	204	226	211	2.5	2.5	10.5	1.17
87,400	92,600													23.1	2.58
447	492	2,400	2,800		124	135	145	160	-	226	-	2.5	2.5	11.0	1.15
100,000	110,000													24.2	2.53
694	841	2,400	2,800		124	135	145	160	-	226	-	2.5	2.5	17.3	-
115,000	188,000													38.1	-
584	631	2,100	2,500		130	140	157	175	-	260	-	3	3	20.0	2.16
131,000	141,000													44.0	4.76
131	168	3,300	4,000	120	128	131	138	-	-	171	-	2	1	2.45	-
29,300	37,600													5.39	-
261	299	3,000	3,500		132	138	146	157	188	203	196	2	2	5.65	0.72
58,400	66,800													12.44	1.585
329	391	2,800	3,300		132	138	146	157	-	203	-	2	2	5.90	0.69
73,600	87,400													12.99	1.519
464	584	2,700	3,200		132	138	146	157	-	203	-	2	2	8.60	-
104,000	131,000													18.94	-
482.0	794.0	2,700	3,200		140	194	149	-	-	-	-	2	2	11.800	-
108,400	178,500													25.96	-
447	473	2,400	2,800		134	145	156	172	-	246	-	2.5	2.5	13.0	1.40
100,000	108,000													28.6	3.08
531	573	2,200	2,700		134	145	156	172	-	246	-	2.5	2.5	13.8	1.35
119,000	128,000													30.4	2.97
810	981	2,100	2,500		134	145	156	172	-	246	-	2.5	2.5	24.5	-
181,000	220,000													53.9	-
736	810	1,900	2,200		144	155	172	192	-	286	-	4	4	28.0	2.60
165,000	181,000													61.7	5.73

F

Single Row Cylindrical Roller Bearings

Sizes 130 mm – 150 mm

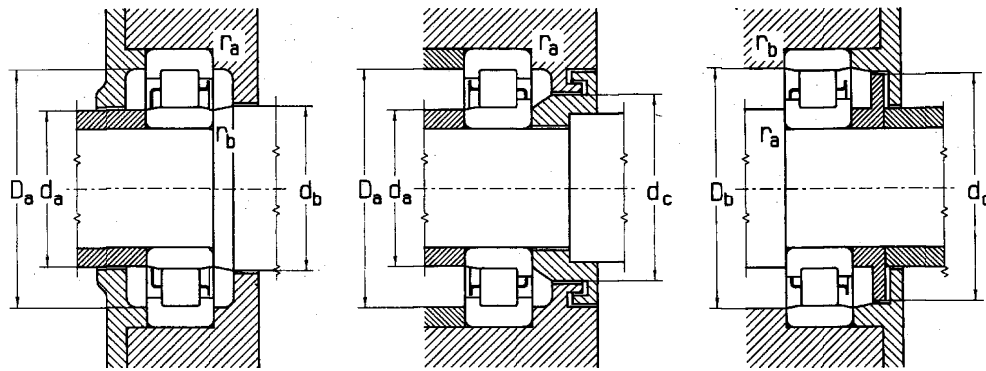


F

Dimensions											Bearing Designation				Angle Ring
d	D	B	r _s min	r _{1s} min	F	E	d ₂ max	b	b ¹⁾	s ¹⁾	NU	NJ	NUP	N	HJ
mm															
130	200	33	2	1.1	148	–	–	–	–	2	NU1026	–	–	–	–
	230	40	3	3	156	204	167	11	19	2.5	NU226	NJ226	NUP226	N226	HJ226
	230	40	3	3	153.5	–	164.2	11	17	2.4	NU226E	NJ226E	NUP226E	–	HJ226E
	230	64	3	3	153.5	–	–	–	–	6.4	NU2226E	NJ2226E	NUP2226E	–	–
	230	79.38	4	4	155.000	–	–	–	–	8	NU5226	–	–	–	–
	280	58	4	4	167	–	182.3	14	23	2.9	NU326E	NJ326E	NUP326E	–	HJ326E
	280	93	4	4	167	–	–	–	–	7.9	NU2326E	NJ2326E	NUP2326E	–	–
140	210	33	2	1.1	158	–	–	–	–	2.9	NU1028	–	–	–	–
	250	42	3	3	169	221	181	11	19	2.5	NU228	NJ228	NUP228	N228	HJ228
	250	42	3	3	169	–	180	11	18	2.4	NU228E	NJ228E	NUP228E	–	HJ228E
	250	68	3	3	169	–	–	–	–	6.9	NU2228E	NJ2228E	NUP2228E	–	–
	250	82.55	4	4	168.450	–	–	–	–	10	NU5228	–	–	–	–
	300	62	4	4	180	–	198.4	15	26	2.7	NU328	NJ328	NUP328	–	HJ328
	300	62	4	4	180	–	196	15	25	2.9	NU328E	NJ328E	NUP328E	–	HJ328E
	300	102	4	4	180	–	–	–	–	8.9	NU2328E	NJ2328E	NUP2328E	–	–
150	225	35	2.1	1.5	169.5	–	–	–	–	2	NU1030	–	–	–	–
	270	45	3	3	182	–	193.7	12	19.5	2.4	NU230E	NJ230E	NUP230E	–	HJ230E
	270	73	3	3	182	–	–	–	–	6.9	NU2230E	NJ2230E	NUP2230E	–	–
	270	88.90	2.5	6.3	181.544	–	–	–	–	10	NU5230	–	–	–	–
	320	65	4	4	193	–	212.3	15	26.5	2.7	NU330	NJ330	NUP330	–	HJ330
	320	65	4	4	193	–	210.1	15	25	2.9	NU330E	NJ330E	NUP330E	–	HJ330E
	320	108	4	4	193	–	–	–	–	9.9	NU2330E	NJ2330E	NUP2330E	–	–

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.

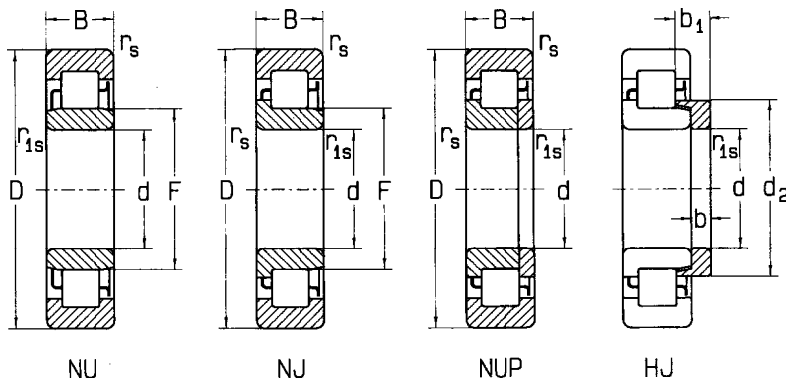


Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions										Weight	
Dynamic C _r	Static C _{0r}	Grease	Oil	d	d _a min	d _a max	d _b min	d _c min	d _c max	D _a max	D _b min	r _a max	r _b max	Bearing	Angle Ring
kn	lbf	min ⁻¹		mm										kg	lbs
162	203	3,200	3,800	130	138	143	151	-	-	191	-	2	1	3.75	-
36,200	45,500													8.26	-
271	322	2,700	3,200		144	150	158	169	201	216	208	2.5	2.5	6.50	0.84
60,700	72,200													14.31	1.850
362	422	2,500	3,000		144	148	156	168	-	216	-	2.5	2.5	6.60	0.79
81,000	94,400													14.53	1.740
541	708	2,500	3,000		144	148	156	168	-	216	-	2.5	2.5	10.6	-
121,000	158,000													23.3	-
511.0	841.0	2,500	3,000		149	207	159	-	-	-	-	3	2	13.800	-
114,900	189,100													30.36	-
619	694	2,000	2,400		148	155	169	186	-	262	-	3	3	17.0	1.65
139,000	155,000													34.7	3.63
944	1,190	2,000	2,400		148	155	169	186	-	262	-	3	3	30.5	-
211,000	266,000													67.2	-
162	211	3,000	3,500	140	148	152	161	-	-	200	-	2	1	4.00	-
36,200	47,300													8.81	-
310	369	2,500	3,000		154	160	171	182	218	236	255	2.5	2.5	8.25	1.00
69,400	89,000													18.17	2.20
391	473	2,400	2,800		154	160	171	182	-	236	-	2.5	2.5	8.50	0.95
87,400	106,000													18.72	2.092
584	794	2,400	2,800		154	160	171	182	-	236	-	2.5	2.5	13.9	-
131,000	178,000													30.61	-
596.0	981.0	2,200	2,700		162	225	173	-	-	-	-	3	3	17.100	-
134,000	220,500													37.62	-
619	708	2,000	2,400		158	166	182	198	-	282	-	3	3	20.0	2.05
139,000	158,000													44.0	4.51
681	779	1,900	2,200		158	166	182	198	-	282	-	3	3	22.5	2.00
153,000	174,000													49.5	4.40
1,060	1,360	1,900	2,200		158	166	182	198	-	282	-	3	3	37.5	-
237,000	304,000													82.6	-
192	251	2,700	3,200	150	159	165	173	-	-	213	-	2	1.5	4.85	-
43,000	56,200													10.68	-
447	522	2,200	2,700		164	170	184	196	-	256	-	2.5	2.5	11.0	1.30
100,000	123,000													24.2	2.86
681	944	2,100	2,500		164	170	184	196	-	256	-	2.5	2.5	19.2	-
153,000	211,000													42.3	-
736.0	1,260.0	2,000	2,400		174	243	187	-	-	-	-	5	2	22.900	-
165,500	283,200													50.38	-
681	779	1,900	2,200		168	185	195	213	-	302	-	3	3	27.0	2.37
153,000	174,000													59.5	5.21
779	891	1,700	2,000		168	185	195	213	-	302	-	3	3	28.0	2.30
171,000	200,000													61.7	5.06
1,210	1,580	1,700	2,000		168	185	195	213	-	302	-	3	3	46.0	-
271,000	355,000													101.3	-

F

Single Row Cylindrical Roller Bearings

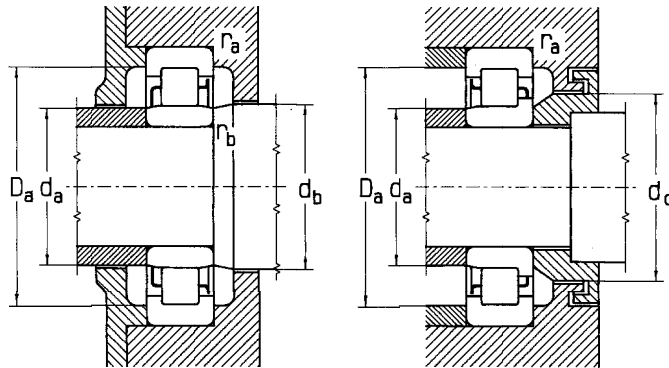
Sizes 160 mm – 240 mm



Dimensions										Bearing Designation			Angle Ring
d	D	B	r _s min	r _{1s} min	F	d ₂ max	b	b ¹⁾	s ¹⁾	NU	NJ	NUP	HJ
mm													
160	240	38	2.1	1.5	180	–	–	–	2	NU1032	–	–	–
	290	48	3	3	195	207.4	12	20	2.5	NU232E	NJ232E	NUP232E	HJ232E
	290	98.42	2.5	6.3	193.634	–	–	–	10	NU5232	–	–	–
170	260	42	2.1	2.1	193	–	–	–	3	NU1034	–	–	–
	310	52	4	4	207	228.8	12	20	2.9	NU234E	NJ234E	NUP234E	HJ234E
	310	104.77	3.2	6.3	205.483	–	–	–	10	NU5234	–	–	–
180	280	46	2.1	2.1	205	–	–	–	3.6	NU1036	–	–	–
	320	52	4	4	217	230.8	12	20	2.9	NU236E	NJ236E	NUP236E	HJ236E
	320	86	4	4	218	230.5	12	29	6.9	NU2236	NJ2236	NUP2236	HJ2236
200	310	51	2.1	2.1	229	–	–	–	–	NU1040	–	–	–
	360	58	4	4	243	258.2	14	23	2.9	NU240E	NJ240E	NUP240E	HJ240E
220	340	56	3	3	250	–	–	–	4.1	NU1044	–	–	–
240	360	56	3	3	270	–	–	–	4.1	NU1048	–	–	–
	440	72	4	4	295	–	–	–	4	NU248	NJ248	–	–

¹⁾ Permissible axial displacement out of the central position

Bearing designations printed in bold face type are currently in our manufacturing schedule. Those shown in normal face type are made to order.



Basic Load Rating		Limiting Speed for Lubricating by		Abutment and Fillet Dimensions								Weight	
Dynamic C_r	Static C_{or}	Grease	Oil	d	d_a min	d_a max	d_b min	d_c min	D_a max	r_a max	r_b max	Bearing	Angle Ring
kN lbf		min ⁻¹		mm								kg lbs	
228 51,100	304 68,100	2,500	3,000	160	169	178	184	–	228	2	1.5	5.95 13.10	– –
511 114,000	631 141,000	2,000	2,400	174	180	197	210	210	276	2.5	2.5	14.7 32.37	1.50 3.30
764.0 171,800	1,310.0 294,500	1,900	2,200	186	261	199	–	–	–	5	2	28.900 63.58	– –
276 61,900	376 84,100	2,200	2,700	170	179	190	197	–	248	2	2	7.90 17.40	– –
607 136,000	750 168,000	1,900	2,200	188	195	211	223	223	293	3	3	18.6 40.96	1.70 3.74
891.0 200,300	1,470.0 330,500	1,800	2,100	197	279	211	–	–	–	5	3	35.500 78.10	– –
329 73,600	447 100,000	2,100	2,500	180	189	196	209	–	268	2	2	10.5 23.12	– –
631 141,000	794 178,000	1,800	2,100	198	207	220	233	233	302	3	3	19.5 42.94	1.80 3.96
736 165,000	1,060 237,000	1,800	2,100	198	208	221	233	233	302	3	3	31.2 68.70	1.90 4.18
383 85,800	531 119,000	1,900	2,200	200	212	220	233	–	298	2	2	14.0 30.83	– –
779 174,000	1,000 224,000	1,500	1,800	218	227	246	261	261	342	3	3	28.4 62.54	2.70 5.95
501 112,000	694 155,000	1,700	2,000	220	234	240	254	–	326	2.5	2.5	18.5 40.74	– –
531 119,000	764 171,114	1,600	1,900	240	254	260	275	–	346	2.5	2.5	20.0 44.04	– –
944 211,000	1,280 287,000	1,300	1,600	258	293	298	316	316	422	3	3	52.0 114.50	– –

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