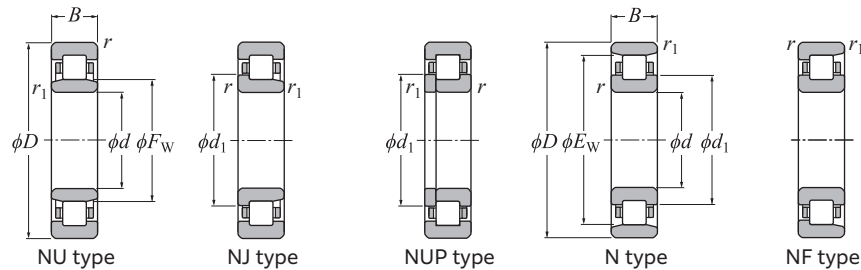


Cylindrical Roller Bearings

NTN



d 20–45 mm

Boundary dimensions					Basic load rating		Fatigue load limit kN C _u	Allowable speed ²⁾		Bearing number ^{3) 4) 5)}				
mm					dynamic	static		Grease lubrication	min ⁻¹ Oil lubrication	NU type	NJ type	NUP type	N type	NF type
d	D	B	r _{s min} ¹⁾	r _{1s min} ¹⁾	C _r	C _{0r}								
20	47	14	1	0.6	32.5	24.7	3.00	15 000	21 600	*NU204EA	NJ	NUP	N	NF
	47	18	1	0.6	38.5	31.0	3.75	14 000	19 200	*NU2204EA	NJ	NUP	N	NF
	52	15	1.1	0.6	37.5	26.9	3.25	13 000	18 000	*NU304EA	NJ	NUP	N	NF
	52	21	1.1	0.6	49.5	39.0	4.75	12 000	16 800	*NU2304EA	NJ	NUP	N	NF
25	47	12	0.6	0.3	16.7	14.1	1.72	16 000	19 000	NU1005	NJ	NUP	N	—
	52	15	1	0.6	34.5	27.7	3.40	13 000	18 000	*NU205EA	NJ	NUP	N	NF
	52	18	1	0.6	41.5	34.5	4.25	11 000	15 600	*NU2205EA	NJ	NUP	N	NF
	62	17	1.1	1.1	49.0	37.5	4.55	11 000	15 600	*NU305EA	NJ	NUP	N	NF
	62	24	1.1	1.1	67.5	56.0	6.85	9 700	13 200	*NU2305EA	NJ	NUP	N	NF
	80	21	1.5	1.5	51.5	40.0	4.85	8 500	10 000	NU405	NJ	NUP	N	NF
30	55	13	1	0.6	21.8	19.6	2.39	14 000	16 000	NU1006	NJ	NUP	N	—
	62	16	1	0.6	46.0	37.5	4.55	11 000	15 600	*NU206EA	NJ	NUP	N	NF
	62	20	1	0.6	58.0	50.0	6.10	9 700	13 200	*NU2206EA	NJ	NUP	N	NF
	72	19	1.1	1.1	63.0	50.0	6.15	9 300	13 200	*NU306EA	NJ	NUP	N	NF
	72	27	1.1	1.1	88.0	77.5	9.45	8 300	11 600	*NU2306EA	NJ	NUP	N	NF
	90	23	1.5	1.5	69.5	55.0	6.70	7 300	8 500	NU406	NJ	NUP	N	NF
35	62	14	1	0.6	25.1	23.2	2.82	12 000	15 000	NU1007	NJ	NUP	N	—
	72	17	1.1	0.6	59.5	50.0	6.10	9 500	13 200	*NU207EA	NJ	NUP	N	NF
	72	23	1.1	0.6	73.0	65.5	7.95	8 500	12 000	*NU2207EA	NJ	NUP	N	NF
	80	21	1.5	1.1	83.5	71.0	8.65	8 100	11 500	*NU307EA	NJ	NUP	N	NF
	80	31	1.5	1.1	117	109	13.3	7 200	10 200	*NU2307EA	NJ	NUP	N	NF
	100	25	1.5	1.5	83.5	69.0	8.40	6 400	7 500	NU407	NJ	NUP	N	NF
40	68	15	1	0.6	30.5	29.0	3.55	11 000	13 000	NU1008	NJ	NUP	N	—
	80	18	1.1	1.1	48.5	43.0	5.25	9 400	11 000	*NU208	NJ	NUP	N	NF
	80	18	1.1	1.1	66.0	55.5	6.75	8 500	12 000	*NU208EA	NJ	NUP	N	NF
	80	23	1.1	1.1	64.5	62.0	7.55	8 500	10 000	*NU2208	NJ	NUP	N	—
	80	23	1.1	1.1	85.5	77.5	9.45	7 600	10 700	*NU2208EA	NJ	NUP	N	NF
	90	23	1.5	1.5	65.0	57.0	6.95	8 000	9 400	*NU308	NJ	NUP	N	NF
	90	23	1.5	1.5	98.5	81.5	9.95	7 200	10 200	*NU308EA	NJ	NUP	N	NF
	90	33	1.5	1.5	91.5	88.0	10.7	7 000	8 200	*NU2308	NJ	NUP	N	—
	90	33	1.5	1.5	135	122	14.9	6 400	9 000	*NU2308EA	NJ	NUP	N	NF
	110	27	2	2	106	89.0	10.9	5 700	6 700	NU408	NJ	NUP	N	NF

1) Smallest allowable dimension for chamfer dimension r or r_1 .

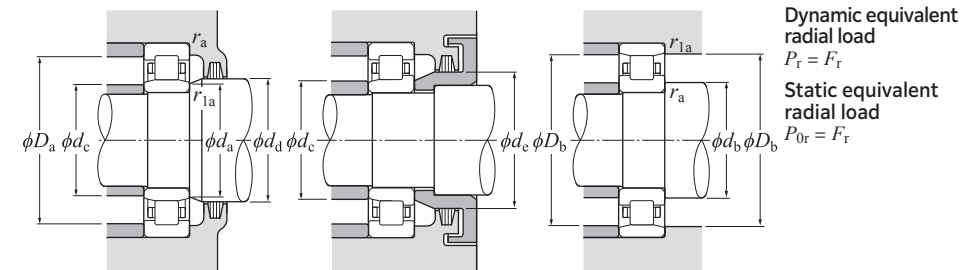
2) This value is for machined cages; when pressed cages are used, 80 % of this value is acceptable.

3) Bearing numbers marked "*" designate ULTAGE™ series bearings.

4) Bearing marked "**" are going to be integrated with ULTAGE™ series.

Cylindrical Roller Bearings

NTN



Dynamic equivalent radial load
 $P_r = F_r$

Static equivalent radial load
 $P_{0r} = F_r$

Dimension			Installation-related dimensions										Mass	
mm			mm										kg	
F_w	E_w	d_1	d_a Min.	d_b Min.	d_c Max.	d_d Min.	d_e Min.	D_a Max.	D_b Max.	r_{as} Min. ⁶⁾	r_{1as} Max.	NU type (approx.)	N type	
26.5	41.5	29.5	24	25	26	29	32	42	42	42	1	0.6	0.115	0.11
26.5	41.5	29.5	24	25	26	29	32	42	42	42	1	0.6	0.146	0.144
27.5	45.5	31.1	24	26.5	27	30	33	45.5	45.5	45.5	1	0.6	0.176	0.147
27.5	45.5	31.1	24	26.5	27	30	33	45.5	45.5	45.5	1	0.6	0.242	0.212
30.5	41.5	32.7	27	29	30	32	33	43	45	42.5	0.6	0.3	0.092	0.091
31.5	46.5	34.5	29	30	31	34	37	47	47	47	1	0.6	0.151	0.13
31.5	46.5	34.5	29	30	31	34	37	47	47	47	1	0.6	0.186	0.163
34	54	38	31.5	31.5	33	37	40	55.5	55.5	55	1	1	0.275	0.242
34	54	38	31.5	31.5	33	37	40	55.5	55.5	55	1	1	0.386	0.345
38.8	62.8	43.6	33	33	38	41	46	72	72	64	1.5	1.5	0.55	0.536
36.5	48.5	38.9	34	35	35	38	39.5	50	51	49.5	1	0.6	0.13	0.128
37.5	55.5	41.1	34	35	37	40	44	57	57	56.5	1	0.6	0.226	0.205
37.5	55.5	41.1	34	35	37	40	44	57	57	56.5	1	0.6	0.297	0.259
40.5	62.5	44.9	36.5	36.5	40	44	48	65.5	65.5	64	1	1	0.398	0.353
40.5	62.5	44.9	36.5	36.5	40	44	48	65.5	65.5	64	1	1	0.58	0.526
45	73	50.5	38	38	44	47	52	82	82	74	1.5	1.5	0.751	0.732
42	55	44.6	39	40	41	44	45	57	58	56	1	0.6	0.179	0.176
44	64	48	39	41.5	43	46	50	65.5	65.5	65.5	1	0.6	0.327	0.294
44	64	48	39	41.5	43	46	50	65.5	65.5	65.5	1	0.6	0.455	0.405
46.2	70.2	51	41.5	43	45	48	53	72	72	71.5	1.5	1	0.545	0.483
46.2	70.2	51	41.5	43	45	48	53	72	72	71.5	1.5	1	0.78	0.737
53	83	59	43	43	52	55	61	92	92	84	1.5	1.5	0.99	0.965
47	61	49.8	44	45	46	49	50.5	63	64	62	1	0.6	0.22	0.217
50	70	54.2	46.5	46.5	49	52	56	73.5	73.5	72	1	1	0.378	0.37
49.5	71.5	53.9	46.5	46.5	49	52	56	73.5	73.5	72.5	1	1	0.426	0.365
50	70	54.2	46.5	46.5	49	52	56	73.5	73.5	72	1	1	0.49	0.48
49.5	71.5	53.9	46.5	46.5	49	52	56	73.5	73.5	72.5	1	1	0.552	0.491
53.5	77.5	58.4	48	48	51	55	60	82	82	80	1.5	1.5	0.658	0.643
52	80	57.6	48	48	51	55	60	82	82	81.5	1.5	1.5	0.754	0.658
53.5	77.5	58.4	48	48	51	55	60	82	82	80	1.5	1.5	0.951	0.932
52	80	57.6	48	48	51	55	60	82	82	81.5	1.5	1.5	1.06	0.952
58	92	64.8	49	49	57	60	67	101	101	93	2	2	1.3	1.27

5) Bearing numbers having no standard form are switched to E type or ULTAGE™ series.

6) Does not apply to the sides of the outer ring rib of NF type bearings.