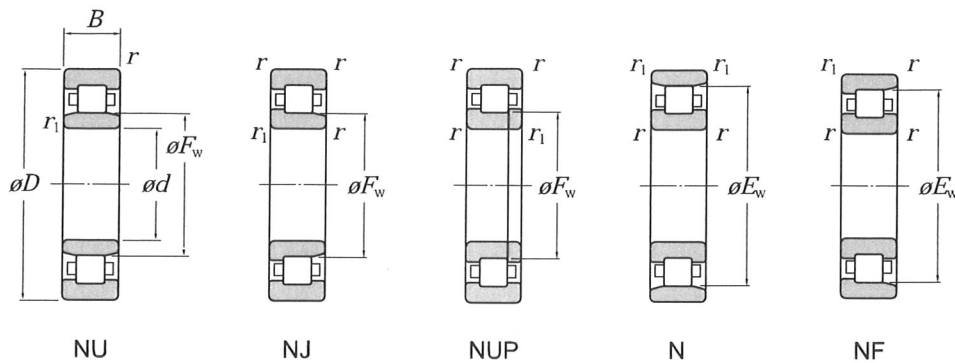


# Cylindrical roller bearings

$d$  20 – (45) mm



$d$	Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (min <sup>-1</sup> )		Bearing No.					(Refer.) Mass NU (kg)
	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$	Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	
20	47	14	1	0.6	27	40	15.4	12.7	15 000	18 000	<b>NU204</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.108
	47	18	1	0.6	27	—	20.7	18.4	13 000	18 000	<b>NU2204</b>	<b>NJ</b>	—	—	—	0.146
	52	15	1.1	0.6	28.5	44.5	23.1	19.2	12 000	16 000	<b>NU304</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.147
	52	21	1.1	0.6	28.5	—	32.9	30.2	11 000	16 000	<b>NU2304</b>	—	—	—	—	0.212
25	47	12	0.6	0.3	30.5	—	14.3	13.1	15 000	18 000	<b>NU1005</b>	—	—	—	—	0.084
	52	15	1	0.6	32	45	17.7	15.7	13 000	16 000	<b>NU205</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.132
	52	18	1	0.6	32	—	23.7	22.8	12 000	16 000	<b>NU2205</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.163
	62	17	1.1	1.1	35	53	29.3	25.2	10 000	14 000	<b>NU305</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.241
	62	24	1.1	1.1	35	—	42.7	40.9	9 100	14 000	<b>NU2305</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.340
30	55	13	1	0.6	36.5	—	18.7	18.4	13 000	15 000	<b>NU1006</b>	—	—	—	—	0.121
	62	16	1	0.6	38.5	53.5	23.5	21.5	11 000	13 000	<b>NU206</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.200
	62	20	1	0.6	38.5	—	32.9	33.1	9 800	13 000	<b>NU2206</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.262
	72	19	1.1	1.1	42	62	38.6	35.2	8 700	12 000	<b>NU306</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.358
	72	27	1.1	1.1	42	—	51.4	50.8	7 700	12 000	<b>NU2306</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.500
	90	23	1.5	1.5	45	73	62.8	55.0	7 600	10 000	<b>NU406</b>	<b>NJ</b>	—	—	<b>NF</b>	0.753
35	62	14	1	0.6	42	—	22.6	23.2	11 000	13 000	<b>NU1007</b>	—	—	—	—	0.182
	72	17	1.1	0.6	43.8	61.8	33.6	31.5	9 500	11 000	<b>NU207</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.293
	72	23	1.1	0.6	43.8	—	49.0	51.2	8 500	11 000	<b>NU2207</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.402
	80	21	1.5	1.1	46.2	68.2	49.6	46.9	7 900	10 000	<b>NU307</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.477
40	80	31	1.5	1.1	46.2	—	64.4	65.7	7 000	10 000	<b>NU2307</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.696
	100	25	1.5	1.5	53	83	75.2	68.9	6 600	8 800	<b>NU407</b>	<b>NJ</b>	—	—	<b>NF</b>	1.02
	68	15	1	0.6	47	—	24.9	25.7	10 000	12 000	<b>NU1008</b>	—	—	—	—	0.223
	80	18	1.1	1.1	50	70	43.8	42.9	8 300	10 000	<b>NU208</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.366
	80	23	1.1	1.1	50	—	58.3	62.0	7 500	10 000	<b>NU2208</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.490
	90	23	1.5	1.5	53.5	77.5	58.6	56.9	6 900	9 100	<b>NU308</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.657
	90	33	1.5	1.5	53.5	—	82.2	88.0	6 100	9 100	<b>NU2308</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.956
	110	27	2	2	58	92	97.1	89.1	6 000	8 000	<b>NU408</b>	<b>NJ</b>	—	<b>N</b>	<b>NF</b>	1.30
45	75	16	1	0.6	52.5	—	31.0	33.8	9 200	11 000	<b>NU1009</b>	—	—	—	—	0.289
	85	19	1.1	1.1	55	75	46.1	46.9	7 700	9 200	<b>NU209</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.427
	85	23	1.1	1.1	55	—	61.4	67.8	6 900	9 200	<b>NU2209</b>	<b>NJ</b>	<b>NUP</b>	—	—	0.536
	100	25	1.5	1.5	58.5	86.5	78.8	77.5	6 200	8 300	<b>NU309</b>	<b>NJ</b>	<b>NUP</b>	<b>N</b>	<b>NF</b>	0.870

Remarks) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and rotation speed limits shown above indicate the value applicable to machined cage. When bearings with pressed cage are used, consult Koyo.