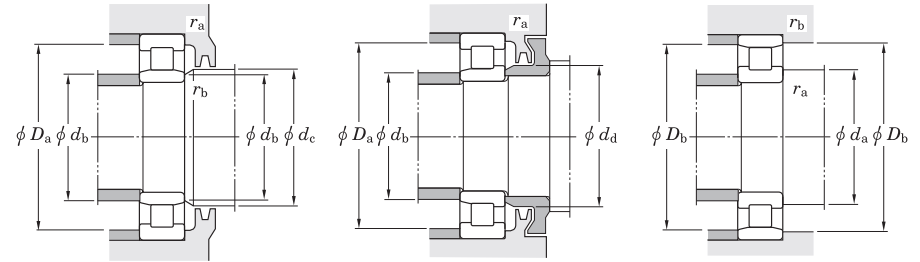
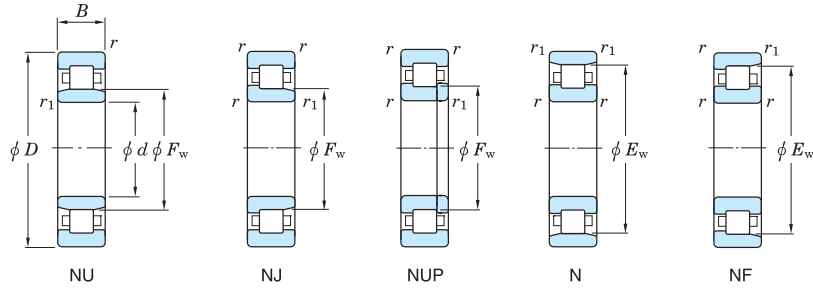


# Single-row cylindrical roller bearings

$d$  20 ~ (30) mm



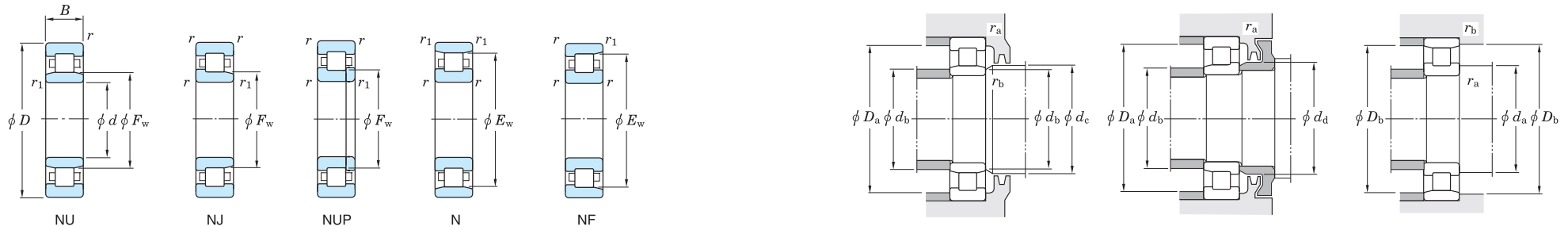
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN)	Limiting speeds (min <sup>-1</sup> )		Bearing No.					Mounting dimensions (mm)								(Refer.) Mass NU (N) (kg)			
$d$	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$	$C_u$	Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.	$r_b$ max.	$r_a$ max.	$r_b$ max.	
20	47	14	1	0.6	—	40	19.3	12.7	1.45	15 000	18 000	—	—	—	N204	NF204	25	—	—	—	32	42	43	42	1	0.6	(0.108)	
	47	14	1	0.6	26.5	—	32.2	22.6	3.05	15 000	18 000	NU204R	NJ204R	NUP204R	—	—	25	24	26	29	32	42	—	—	1	0.6	0.112	
	47	18	1	0.6	27	—	27.8	18.4	2.70	13 000	18 000	NU2204	NJ2204	NUP2204	—	—	25	24	26	29	32	42	—	—	1	0.6	0.146	
	47	18	1	0.6	26.5	—	38.3	28.3	3.60	13 000	18 000	NU2204R	NJ2204R	NUP2204R	—	—	25	24	26	29	32	42	—	—	1	0.6	0.146	
	52	15	1.1	0.6	—	44.5	28.9	19.2	2.50	12 000	16 000	—	—	—	N304	NF304	26.5	—	—	—	33	45.5	48	45.5	1	0.6	(0.147)	
	52	15	1.1	0.6	27.5	—	39.4	26.9	3.75	12 000	16 000	NU304R	NJ304R	NUP304R	—	—	26.5	24	27	30	33	45.5	—	—	1	0.6	0.153	
	52	21	1.1	0.6	28.5	—	38.0	30.2	3.60	11 000	16 000	NU2304	NJ2304	NUP2304	—	—	26.5	24	27	30	33	45.5	—	—	1	0.6	0.212	
	52	21	1.1	0.6	27.5	—	52.5	38.8	5.40	11 000	16 000	NU2304R	NJ2304R	NUP2304R	—	—	26.5	24	27	30	33	45.5	—	—	1	1	0.215	
25	47	12	0.6	0.3	30.5	—	17.8	13.1	2.25	15 000	18 000	NU1005	—	NUP1005	—	—	29	27	30	32	—	43	—	—	0.6	0.3	0.084	
	52	15	1	0.6	—	45	22.1	15.7	1.80	13 000	16 000	—	—	—	N205	NF205	30	—	—	—	37	47	48	47	1	0.6	(0.132)	
	52	15	1	0.6	31.5	—	36.7	27.7	3.75	13 000	15 000	NU205R	NJ205R	NUP205R	—	—	30	29	31	34	37	47	—	—	1	0.6	0.138	
	52	18	1	0.6	32	—	29.6	22.8	3.05	12 000	16 000	NU2205	NJ2205	NUP2205	—	—	30	29	31	34	37	47	—	—	1	0.6	0.163	
	52	18	1	0.6	31.5	—	43.6	34.6	4.40	12 000	15 000	NU2205R	NJ2205R	NUP2205R	—	—	30	29	31	34	37	47	—	—	1	0.6	0.166	
	62	17	1.1	1.1	—	53	36.6	25.2	3.45	10 000	14 000	—	—	—	N305	NF305	31.5	—	—	—	40	55.5	55.5	55	1	1	(0.235)	
	62	17	1.1	1.1	34	—	51.9	37.4	4.85	10 000	14 000	NU305R	NJ305R	NUP305R	—	—	31.5	31.5	33	37	40	55.5	—	—	1	1	0.243	
	62	24	1.1	1.1	35	—	53.4	40.9	5.70	9 100	14 000	NU2305	NJ2305	NUP2305	—	—	31.5	31.5	33	37	40	55.5	—	—	1	1	0.340	
62	24	1.1	1.1	34	—	71.2	56.1	7.50	9 100	14 000	NU2305R	NJ2305R	NUP2305R	—	—	31.5	31.5	33	37	40	55.5	—	—	1	1	0.350		
30	55	13	1	0.6	36.5	—	23.4	18.4	2.05	13 000	15 000	NU1006	—	NUP1006	—	—	35	34	35	38	—	50	—	—	1	0.6	0.121	
	62	16	1	0.6	—	53.5	31.1	21.5	2.95	11 000	13 000	—	—	—	N206	NF206	35	—	—	—	44	57	58	56	1	0.6	(0.206)	
	62	16	1	0.6	37.5	—	48.9	37.4	5.25	11 000	13 000	NU206R	NJ206R	NUP206R	—	—	35	34	37	40	44	57	—	—	1	0.6	0.209	
	62	20	1	0.6	38.5	—	41.0	33.1	4.20	9 800	13 000	NU2206	NJ2206	NUP2206	—	—	35	34	37	40	44	57	—	—	1	0.6	0.262	
	62	20	1	0.6	37.5	—	61.2	49.8	6.80	9 700	13 000	NU2206R	NJ2206R	NUP2206R	—	—	35	34	37	40	44	57	—	—	1	0.6	0.262	
	62	23.8	1	1	38.5	—	53.3	46.4	5.95	8 700	13 000	NU3206	—	—	—	—	35	35	37	40	—	57	—	—	1	0.6	0.343	
	72	19	1.1	1.1	—	62	48.3	35.2	5.00	8 700	12 000	—	—	—	N306	NF306	36.5	—	—	—	48	65.5	65.5	64	1	1	(0.353)	
	72	19	1.1	1.1	40.5	—	66.5	50.2	6.80	8 700	12 000	NU306R	NJ306R	NUP306R	—	—	36.5	36.5	40	44	48	65.5	—	—	1	1	0.361	
	72	27	1.1	1.1	42	—	64.3	50.8	7.15	7 700	12 000	NU2306	NJ2306	NUP2306	—	—	36.5	36.5	40	44	48	65.5	—	—	1	1	0.500	
	72	27	1.1	1.1	40.5	—	93.3	77.6	10.1	7 800	12 000	NU2306R	NJ2306R	NUP2306R	—	—	36.5	36.5	40	44	48	65.5	—	—	1	1	0.534	

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (30) ~ (45) mm



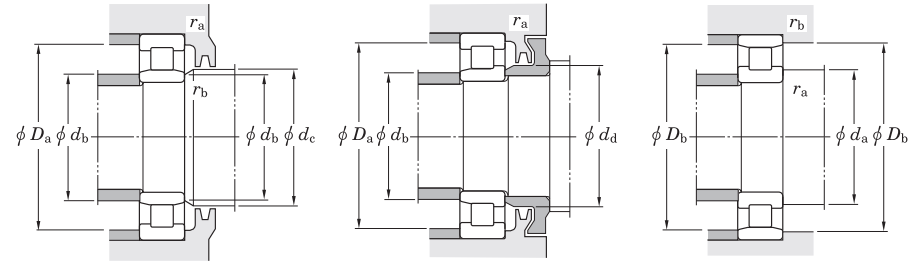
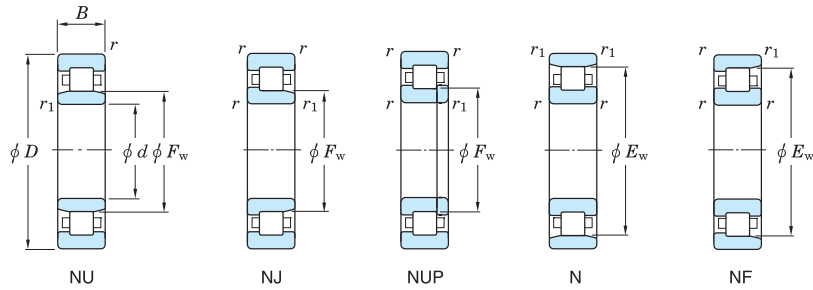
$d$	Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)										(Refer. Mass NU (N) (kg)
	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.	$r_b$ max.	$r_a$ max.	
30	72	30.2	1.1	1.1	42	—	86.4	74.3	9.95	7 700	12 000	NU3306	—	—	—	36.5	36.5	40	44	—	65.5	—	—	1	1	0.650	
	90	23	1.5	1.5	45	73	78.3	55.0	7.95	7 600	10 000	NU406	NJ406	NUP406	N406	NF406	38	38	44	47	52	82	82	74	1.5	1.5	0.753
35	62	14	1	0.6	42	—	28.3	23.2	2.65	11 000	13 000	NU1007	—	—	—	40	39	41	44	—	57	—	—	1	0.5	0.182	
	72	17	1.1	0.6	—	61.8	44.6	31.5	4.70	9 500	11 000	—	—	—	N207	NF207	41.5	—	—	—	50	65.5	68	64	1	0.6	(0.293)
	72	17	1.1	0.6	44	—	62.9	50.2	6.55	9 300	11 000	NU207R	NJ207R	NUP207R	—	—	41.5	39	43	46	50	65.5	—	—	1	0.6	0.306
	72	23	1.1	0.6	43.8	—	61.3	51.2	7.15	8 500	11 000	NU2207	NJ2207	NUP2207	—	—	41.5	39	43	46	50	65.5	—	—	1	0.6	0.402
	72	23	1.1	0.6	44	—	77.1	65.3	9.20	8 300	11 000	NU2207R	NJ2207R	NUP2207R	—	—	41.5	39	43	46	50	65.5	—	—	1	0.6	0.404
	72	27	1.1	1.1	43.8	—	68.5	59.1	7.90	7 600	11 000	NU3207	—	—	—	—	41.5	41.5	43	46	—	65.5	—	—	1	0.6	0.524
	80	21	1.5	1.1	—	68.2	62.0	46.9	6.20	7 900	10 000	—	—	—	N307	NF307	43	—	—	—	53	72	73.5	71	1.5	1	(0.477)
	80	21	1.5	1.1	46.2	—	83.3	65.4	9.35	7 700	10 000	NU307R	NJ307R	NUP307R	—	—	43	41.5	45	48	53	72	—	—	1.5	1	0.482
	80	31	1.5	1.1	46.2	—	75.5	65.7	7.95	7 000	10 000	NU2307	NJ2307	NUP2307	—	—	43	41.5	45	48	53	72	—	—	1.5	1	0.696
	80	31	1.5	1.1	46.2	—	116	101	15.0	6 900	10 000	NU2307R	NJ2307R	NUP2307R	—	—	43	41.5	45	48	53	72	—	—	1.5	1	0.729
	80	34.9	1.5	1.5	46.2	—	102	89.1	12.0	7 000	10 000	NU3307	—	—	—	—	43	43	45	48	—	72	—	—	1.5	1	0.908
	100	25	1.5	1.5	53	83	94.1	68.9	9.25	6 600	8 800	NU407	NJ407	NUP407	N407	NF407	43	43	52	55	61	92	92	84	1.5	1.5	1.02
	40	68	15	1	0.6	47	—	31.2	25.7	3.10	10 000	12 000	NU1008	—	—	—	45	44	46	49	—	63	—	—	1	0.6	0.223
80		18	1.1	1.1	—	70	54.7	42.9	6.15	8 300	10 000	—	—	—	N208	NF208	46.5	—	—	—	56	73.5	73.5	72	1	1	(0.374)
80		18	1.1	1.1	49.5	—	69.6	55.4	7.35	8 300	9 900	NU208R	NJ208R	NUP208R	—	—	46.5	46.5	49	52	56	73.5	—	—	1	1	0.384
80		23	1.1	1.1	50	—	72.8	62.0	8.75	7 500	10 000	NU2208	NJ2208	NUP2208	—	—	46.5	46.5	49	52	56	73.5	—	—	1	1	0.490
80		23	1.1	1.1	49.5	—	90.5	77.6	10.3	7 400	9 900	NU2208R	NJ2208R	NUP2208R	—	—	46.5	46.5	49	52	56	73.5	—	—	1	1	0.490
80		30.2	1.1	1.1	50	—	97.8	90.6	12.2	6 700	10 000	NU3208	—	—	—	—	46.5	46.5	49	52	—	73.5	—	—	1	1	0.711
90		23	1.5	1.5	—	77.5	73.4	56.9	7.85	6 900	9 100	—	—	—	N308	NF308	48	—	—	—	60	82	82	80	1.5	1.5	(0.646)
90		23	1.5	1.5	52	—	104	81.5	11.0	6 800	9 100	NU308R	NJ308R	NUP308R	—	—	48	48	51	55	60	82	—	—	1.5	1.5	0.664
90		33	1.5	1.5	53.5	—	103	88.0	11.6	6 100	9 100	NU2308	NJ2308	NUP2308	—	—	48	48	51	55	60	82	—	—	1.5	1.5	0.956
90		33	1.5	1.5	52	—	143	122	18.4	6 100	9 100	NU2308R	NJ2308R	NUP2308R	—	—	48	48	51	55	60	82	—	—	1.5	1.5	0.962
90		36.5	1.5	1.5	53.5	—	130	119	17.6	6 100	9 100	NU3308	—	—	—	—	48	48	51	55	—	82	—	—	1.5	1.5	1.19
110	27	2	2	58	92	120	89.1	12.6	6 000	8 000	NU408	NJ408	NUP408	N408	NF408	49	49	57	60	67	101	101	93	2	2	1.30	
45	75	16	1	0.6	52.5	—	38.9	33.8	4.30	9 200	11 000	NU1009	—	—	—	—	50	49	52	54	—	70	—	—	1	0.6	0.289

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (45) ~ (55) mm



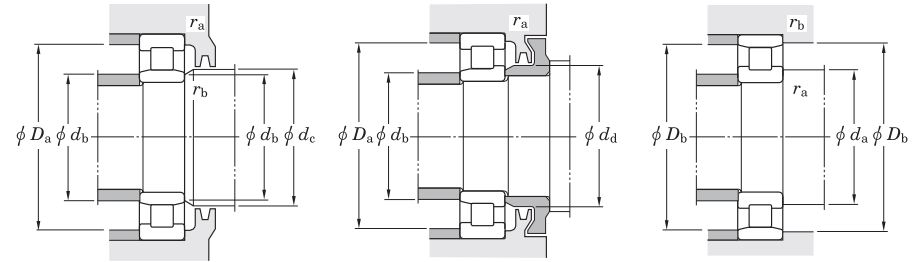
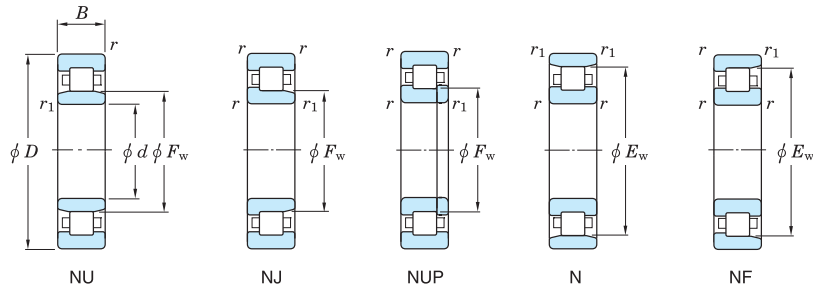
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN)	Limiting speeds (min <sup>-1</sup> )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg))				
$d$	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$	$C_u$	Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.	$r_a$ max.	$r_b$ min.	$r_b$ max.		
45	85	19	1.1	1.1	—	75	57.6	46.9	6.70	7 700	9 200	—	—	—	N209	NF209	51.5	—	—	—	61	78.5	78.5	77	1	1		(0.427)	
	85	19	1.1	1.1	54.5	—	78.9	66.4	9.05	7 600	9 200	NU209R	NJ209R	NUP209R	—	—	51.5	51.5	54	57	61	78.5	—	—	1	1		0.439	
	85	23	1.1	1.1	55	—	76.6	67.8	9.60	6 900	9 200	NU2209	NJ2209	NUP2209	—	—	51.5	51.5	54	57	61	78.5	—	—	1	1		0.536	
	85	23	1.1	1.1	54.5	—	95.1	84.6	11.2	6 900	9 200	NU2209R	NJ2209R	NUP2209R	—	—	51.5	51.5	54	57	61	78.5	—	—	1	1		0.536	
	85	30.2	1.1	1.1	55	—	103	99.0	13.3	6 100	9 200	NU3209	—	—	—	—	—	51.5	51.5	54	57	—	78.5	—	—	1	1		0.770
	100	25	1.5	1.5	—	86.5	98.5	77.5	11.3	6 200	8 300	—	—	—	N309	NF309	53	—	—	—	66	92	92	89	1.5	1.5		(0.865)	
	100	25	1.5	1.5	58.5	—	122	98.3	13.5	6 100	8 200	NU309R	NJ309R	NUP309R	—	—	53	53	57	60	66	92	—	—	1.5	1.5		0.909	
	100	36	1.5	1.5	58.5	—	124	113	14.3	5 500	8 300	NU2309	NJ2309	NUP2309	—	—	53	53	57	60	66	92	—	—	1.5	1.5		1.25	
	100	36	1.5	1.5	58.5	—	172	153	23.0	5 400	8 200	NU2309R	NJ2309R	NUP2309R	—	—	53	53	57	60	66	92	—	—	1.5	1.5		1.32	
	100	39.7	1.5	1.5	58.5	—	164	149	22.6	5 500	8 300	NU3309	—	—	—	—	—	53	53	57	60	—	92	—	—	1.5	1.5		1.59
	120	29	2	2	64.5	100.5	134	112	13.8	5 400	7 200	NU409	NJ409	NUP409	N409	NF409	54	54	63	66	74	111	111	102	2	2		1.64	
	50	80	16	1	0.6	57.5	—	42.2	36.8	4.80	8 400	9 900	NU1010	—	NUP1010	—	—	55	54	57	59	—	75	—	—	1	0.6		0.306
90		20	1.1	1.1	—	80.4	60.3	51.0	7.30	7 100	8 500	—	—	—	N210	NF210	56.5	—	—	—	67	83.5	83.5	82	1	1		(0.479)	
90		20	1.1	1.1	59.5	—	82.5	71.9	9.85	7 100	8 500	NU210R	NJ210R	NUP210R	—	—	56.5	56.5	58	62	67	83.5	—	—	1	1		0.497	
90		23	1.1	1.1	60.4	—	80.3	73.6	10.4	6 400	8 500	NU2210	NJ2210	NUP2210	—	—	56.5	56.5	58	62	67	83.5	—	—	1	1		0.580	
90		23	1.1	1.1	59.5	—	99.5	91.5	12.1	6 400	8 500	NU2210R	NJ2210R	NUP2210R	—	—	56.5	56.5	58	62	67	83.5	—	—	1	1		0.580	
90		30.2	1.1	1.1	60.4	—	108	108	14.5	5 700	8 500	NU3210	—	—	—	—	—	56.5	56.5	58	62	—	83.5	—	—	1	1		0.829
110		27	2	2	—	95	109	93.4	11.7	5 600	7 500	—	—	—	N310	NF310	59	—	—	—	73	101	101	98	2	2		(1.15)	
110		27	2	2	65	—	138	113	16.0	5 500	7 400	NU310R	NJ310R	NUP310R	—	—	59	59	63	67	73	101	—	—	2	2		1.15	
110		40	2	2	65	—	151	142	20.1	5 000	7 500	NU2310	NJ2310	NUP2310	—	—	59	59	63	67	73	101	—	—	2	2		1.69	
110		40	2	2	65	—	203	187	28.6	4 900	7 400	NU2310R	NJ2310R	NUP2310R	—	—	59	59	63	67	73	101	—	—	2	2		1.76	
110		44.4	2	2	65	—	195	183	27.3	5 000	7 500	NU3310	—	—	—	—	—	59	59	63	67	—	101	—	—	2	2		2.14
130		31	2.1	2.1	70.8	110.8	161	136	17.4	4 900	6 600	NU410	NJ410	NUP410	N410	NF410	61	61	69	73	81	119	119	112	2	2		2.01	
55	90	18	1.1	1	64.5	—	47.1	43.8	5.75	7 600	8 900	NU1011	—	NUP1011	—	—	61.5	60	63	66	—	83.5	—	—	1	1		0.445	
	100	21	1.5	1.1	—	88.5	72.5	62.3	8.30	6 400	7 700	—	—	—	N211	NF211	63	—	—	—	73	92	93.5	91	1.5	1		(0.633)	
	100	21	1.5	1.1	66	—	108	98.7	14.2	6 400	7 700	NU211R	NJ211R	NUP211R	—	—	63	61.5	65	68	73	92	—	—	1.5	1		0.650	
	100	25	1.5	1.1	66.5	—	94.2	87.2	11.6	5 800	7 700	NU2211	NJ2211	NUP2211	—	—	63	61.5	65	68	73	92	—	—	1.5	1		0.780	

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (55) ~ (65) mm



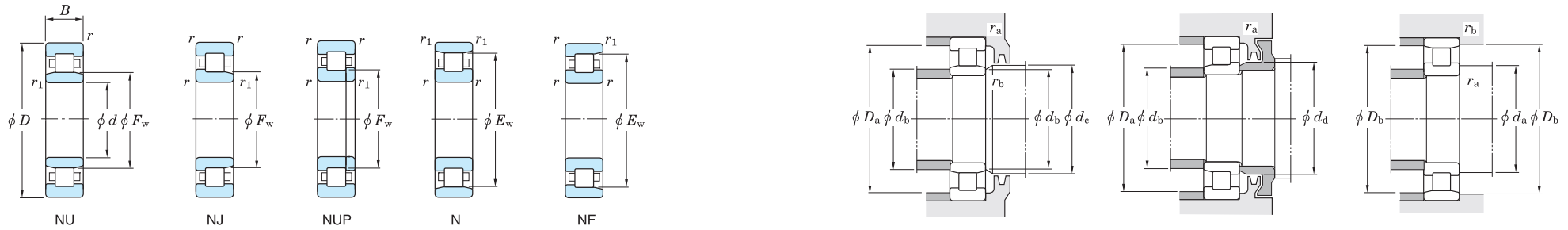
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg))			
$d$	$D$	$B$	$r_{\text{min}}$	$r_{1\text{min}}$	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.		$r_b$ max.	$r_a$ max.	$r_b$ max.
55	100	25	1.5	1.1	66	—	127	122	16.9	5 800	7 700	NU2211R	NJ2211R	NUP2211R	—	—	63	61.5	65	68	73	92	—	—	1.5	1	0.806	
	100	33.3	1.5	1.5	66.5	—	119	118	16.1	5 100	7 700	NU3211	—	—	—	—	63	63	65	68	—	92	—	—	1.5	1	1.14	
	120	29	2	2	—	104.5	138	111	15.8	5 100	6 800	—	—	—	N311	NF311	64	—	—	—	80	111	111	107	2	2	(1.44)	
	120	29	2	2	70.5	—	172	143	19.8	5 100	6 700	NU311R	NJ311R	NUP311R	—	—	64	64	69	72	80	111	—	—	2	2	1.50	
	120	43	2	2	70.5	—	185	162	24.6	4 500	6 800	NU2311	NJ2311	NUP2311	—	—	64	64	69	72	80	111	—	—	2	2	2.10	
	120	43	2	2	70.5	—	251	233	35.3	4 500	6 700	NU2311R	NJ2311R	NUP2311R	—	—	64	64	69	72	80	111	—	—	2	2	2.25	
	120	49.2	2	2	70.5	—	235	220	32.8	4 500	6 800	NU3311	—	—	—	—	64	64	69	72	—	111	—	—	2	2	2.81	
	140	33	2.1	2.1	77.2	117.2	—	174	138	19.6	4 600	6 100	NU411	NJ411	NUP411	N411	NF411	66	66	76	79	87	129	129	119	2	2	2.51
	60	95	18	1.1	1	69.5	—	53.0	50.0	6.75	7 000	8 300	NU1012	—	NUP1012	—	—	66.5	65	68	71	—	88.5	—	—	1	1	0.477
		110	22	1.5	1.5	—	97.5	85.7	79.9	10.4	5 800	7 000	—	—	—	N212	NF212	68	—	—	—	80	102	102	100	1.5	1.5	(0.823)
110		22	1.5	1.5	72	—	122	107	15.7	5 800	6 900	NU212R	NJ212R	NUP212R	—	—	68	68	71	75	80	102	—	—	1.5	1.5	0.830	
110		28	1.5	1.5	73.5	—	120	123	15.3	5 200	7 000	NU2212	NJ2212	NUP2212	—	—	68	68	71	75	80	102	—	—	1.5	1.5	1.07	
110		28	1.5	1.5	72	—	164	157	21.7	5 200	6 900	NU2212R	NJ2212R	NUP2212R	—	—	68	68	71	75	80	102	—	—	1.5	1.5	1.09	
110		36.5	1.5	1.5	73.5	—	160	167	24.7	4 700	7 000	NU3212	—	—	—	—	68	68	71	75	—	102	—	—	1.5	1.5	1.52	
130		31	2.1	2.1	—	113	—	155	126	17.3	4 700	6 300	—	—	—	N312	NF312	71	—	—	—	86	119	119	116	2	2	(1.83)
130		31	2.1	2.1	77	—	187	157	22.1	4 600	6 200	NU312R	NJ312R	NUP312R	—	—	71	71	75	79	86	119	—	—	2	2	1.87	
130		46	2.1	2.1	77	—	211	188	29.4	4 200	6 300	NU2312	NJ2312	NUP2312	—	—	71	71	75	79	86	119	—	—	2	2	2.69	
130		46	2.1	2.1	77	—	278	262	39.6	4 100	6 200	NU2312R	NJ2312R	NUP2312R	—	—	71	71	75	79	86	119	—	—	2	2	2.81	
130		54	2.1	2.1	77	—	275	265	39.9	4 200	6 300	NU3312	—	—	—	—	71	71	75	79	—	119	—	—	2	2	3.61	
150		35	2.1	2.1	83	127	—	209	184	26.1	4 200	5 700	NU412	NJ412	NUP412	N412	NF412	71	71	82	85	94	139	139	128	2	2	3.02
65	100	18	1.1	1	74.5	—	54.4	52.9	7.15	6 600	7 800	NU1013	—	NUP1013	—	—	71.5	70	73	76	—	93.5	—	—	1	1	0.506	
	120	23	1.5	1.5	—	105.6	105	94.4	13.5	5 400	6 400	—	—	—	N213	NF213	73	—	—	—	87	112	112	108	1.5	1.5	(1.05)	
	120	23	1.5	1.5	78.5	—	134	119	16.1	5 300	6 400	NU213R	NJ213R	NUP213R	—	—	73	73	77	81	87	112	—	—	1.5	1.5	1.05	
	120	31	1.5	1.5	79.6	—	150	149	20.6	4 800	6 400	NU2213	NJ2213	NUP2213	—	—	73	73	77	81	87	112	—	—	1.5	1.5	1.43	
	120	31	1.5	1.5	78.5	—	186	181	27.7	4 800	6 400	NU2213R	NJ2213R	NUP2213R	—	—	73	73	77	81	87	112	—	—	1.5	1.5	1.45	
	120	38.1	1.5	1.5	79.6	—	186	197	29.7	4 300	6 400	NU3213	—	—	—	—	73	73	77	81	—	112	—	—	1.5	1.5	1.90	
	140	33	2.1	2.1	—	121.5	—	169	139	19.2	4 300	5 800	—	—	—	N313	NF313	76	—	—	—	93	129	129	125	2	2	(2.19)

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (65) ~ (75) mm



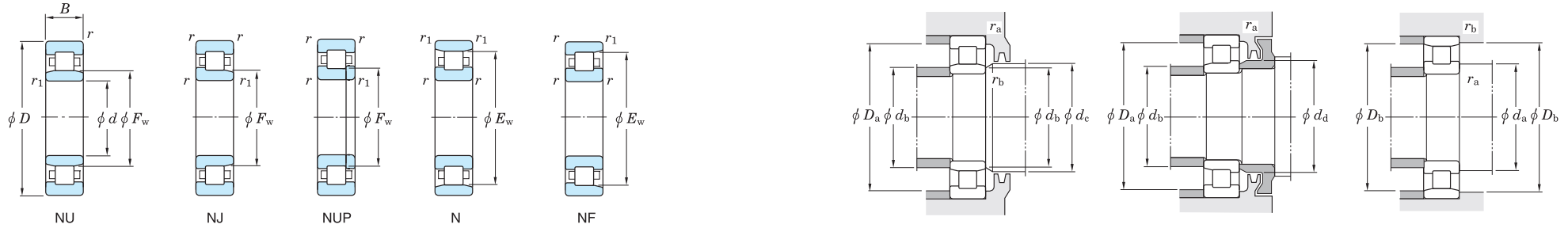
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg))		
$d$	$D$	$B$	$r_{\text{min}}$	$r_{1\text{min}}$	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.		$r_b$ max.	$r_a$ max.
65	140	33	2.1	2.1	82.5	—	226	191	29.8	4 300	5 700	NU313R	NJ313R	NUP313R	—	—	76	76	81	85	93	129	—	—	2	2	2.31
	140	48	2.1	2.1	83.5	—	235	212	32.9	3 900	5 800	NU2313	NJ2313	NUP2313	—	—	76	76	81	85	93	129	—	—	2	2	3.25
	140	48	2.1	2.1	82.5	—	310	287	43.3	3 800	5 700	NU2313R	NJ2313R	NUP2313R	—	—	76	76	81	85	93	129	—	—	2	2	3.36
	140	58.7	2.1	2.1	83.5	—	302	294	43.9	3 900	5 800	NU3313	—	—	—	—	76	76	81	85	—	129	—	—	2	2	4.53
	160	37	2.1	2.1	89.3	135.3	228	203	28.2	4 000	5 300	NU413	NJ413	NUP413	N413	NF413	76	76	88	91	100	149	149	137	2	2	3.58
70	110	20	1.1	1	80	—	72.9	70.4	10.1	6 100	7 200	NU1014	—	NUP1014	—	—	76.5	75	78	82	—	103.5	—	—	1	1	0.702
	125	24	1.5	1.5	—	110.5	104	95.2	13.6	5 100	6 100	—	—	—	N214	NF214	78	—	—	—	92	117	117	114	1.5	1.5	(1.15)
	125	24	1.5	1.5	83.5	—	148	137	19.0	5 000	6 000	NU214R	NJ214R	NUP214R	—	—	78	78	82	86	92	117	—	—	1.5	1.5	1.16
	125	31	1.5	1.5	84.5	—	149	151	20.8	4 600	6 100	NU2214	NJ2214	NUP2214	—	—	78	78	82	86	92	117	—	—	1.5	1.5	1.52
	125	31	1.5	1.5	83.5	—	194	194	29.8	4 500	6 000	NU2214R	NJ2214R	NUP2214R	—	—	78	78	82	86	92	117	—	—	1.5	1.5	1.53
	125	39.7	1.5	1.5	84.5	—	185	198	30.0	4 100	6 100	NU3214	—	—	—	—	78	78	82	86	—	117	—	—	1.5	1.5	2.09
	150	35	2.1	2.1	—	130	198	168	23.3	4 000	5 400	—	—	—	N314	NF314	81	—	—	—	100	139	139	134	2	2	(2.73)
	150	35	2.1	2.1	89	—	256	222	33.4	4 000	5 300	NU314R	NJ314R	NUP314R	—	—	81	81	87	92	100	139	—	—	2	2	2.81
	150	51	2.1	2.1	90	—	279	262	39.3	3 600	5 400	NU2314	NJ2314	NUP2314	—	—	81	81	87	92	100	139	—	—	2	2	3.97
	150	51	2.1	2.1	89	—	342	323	47.1	3 600	5 300	NU2314R	NJ2314R	NUP2314R	—	—	81	81	87	92	100	139	—	—	2	2	4.08
	150	63.5	2.1	2.1	90	—	354	356	51.5	3 600	5 400	NU3314	—	—	—	—	81	81	87	92	—	139	—	—	2	2	5.62
180	42	3	3	100	152	285	257	35.2	3 500	4 700	NU414	NJ414	NUP414	N414	NF414	83	83	99	102	112	167	167	153	2.5	2.5	5.26	
75	115	20	1.1	1	85	—	80.0	78.1	10.2	5 700	6 800	NU1015	—	NUP1015	—	—	81.5	80	83	87	—	108.5	—	—	1	1	0.735
	130	25	1.5	1.5	—	116.5	121	118	16.1	4 800	5 800	—	—	—	N215	NF215	83	—	—	—	96	122	122	120	1.5	1.5	(1.24)
	130	25	1.5	1.5	88.5	—	163	156	21.9	4 800	5 700	NU215R	NJ215R	NUP215R	—	—	83	83	87	90	96	122	—	—	1.5	1.5	1.29
	130	31	1.5	1.5	88.5	—	162	172	22.3	4 300	5 800	NU2215	NJ2215	NUP2215	—	—	83	83	87	90	96	122	—	—	1.5	1.5	1.57
	130	31	1.5	1.5	88.5	—	202	207	31.5	4 300	5 700	NU2215R	NJ2215R	NUP2215R	—	—	83	83	87	90	96	122	—	—	1.5	1.5	1.61
	130	41.3	1.5	1.5	88.5	—	210	226	34.1	3 900	5 800	NU3215	—	—	—	—	83	83	87	90	—	122	—	—	1.5	1.5	2.28
	160	37	2.1	2.1	—	139.5	224	205	28.4	3 800	5 000	—	—	—	N315	NF315	86	—	—	—	106	149	149	143	2	2	(3.19)
	160	37	2.1	2.1	95	—	300	263	39.9	3 700	5 000	NU315R	NJ315R	NUP315R	—	—	86	86	93	97	106	149	—	—	2	2	3.37
	160	55	2.1	2.1	95.5	—	323	327	43.4	3 400	5 000	NU2315	NJ2315	NUP2315	—	—	86	86	93	97	106	149	—	—	2	2	4.84
	160	55	2.1	2.1	95	—	412	395	57.3	3 300	5 000	NU2315R	NJ2315R	NUP2315R	—	—	86	86	93	97	106	149	—	—	2	2	5.00

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (75) ~ (90) mm



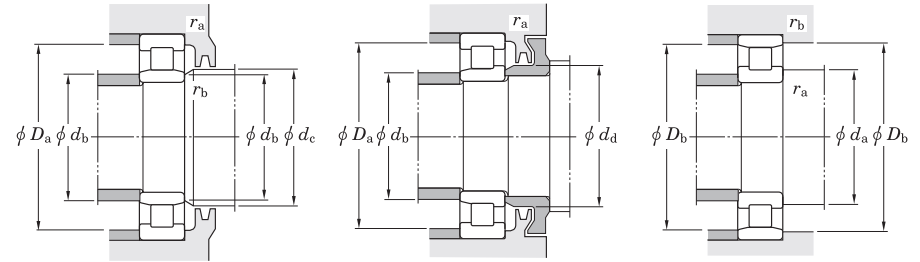
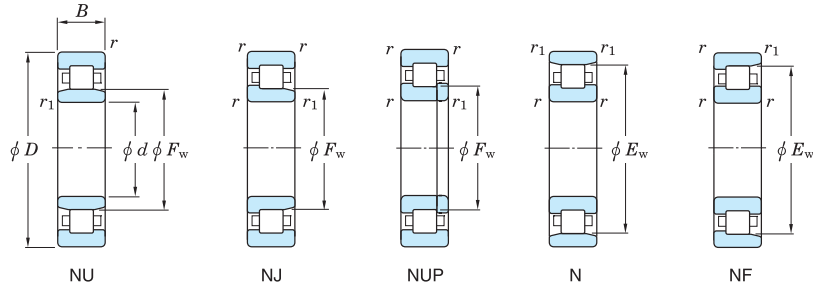
$d$	Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg))		
	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.		$r_b$ max.	$r_a$ max.
75	160	68.3	2.1	2.1	95.5	—	423	430	62.1	3 400	5 000	NU3315	—	—	—	86	86	93	97	—	149	—	—	2	2	6.86	
	190	45	3	3	104.5	160.5	328	274	40.2	3 300	4 400	NU415	NJ415	NUP415	N415	NF415	88	88	103	107	118	177	177	162	2.5	2.5	6.25
80	125	22	1.1	1	91.5	—	87.2	86.4	11.5	5 300	6 300	NU1016	—	—	—	86.5	85	90	94	—	118.5	—	—	1	1	0.994	
	140	26	2	2	—	125.3	133	122	16.2	4 500	5 400	—	—	—	N216	NF216	89	—	—	—	104	131	131	128	2	2	(1.51)
	140	26	2	2	95.3	—	174	167	23.0	4 400	5 300	NU216R	NJ216R	NUP216R	—	—	89	89	94	97	104	131	—	—	2	2	1.56
	140	33	2	2	95.3	—	184	186	27.8	4 000	5 400	NU2216	NJ2216	NUP2216	—	—	89	89	94	97	104	131	—	—	2	2	1.96
	140	33	2	2	95.3	—	233	243	35.8	4 000	5 300	NU2216R	NJ2216R	NUP2216R	—	—	89	89	94	97	104	131	—	—	2	2	2.03
	140	44.4	2	2	95.3	—	238	259	37.8	3 600	5 400	NU3216	—	—	—	—	89	89	94	97	—	131	—	—	2	2	2.87
	170	39	2.1	2.1	—	147	238	207	30.7	3 500	4 700	—	—	—	N316	NF316	91	—	—	—	114	159	159	151	2	2	(3.83)
	170	39	2.1	2.1	101	—	320	282	42.1	3 500	4 700	NU316R	NJ316R	NUP316R	—	—	91	91	99	105	114	159	—	—	2	2	4.00
	170	58	2.1	2.1	103	—	343	332	46.9	3 100	4 700	NU2316	NJ2316	NUP2316	—	—	91	91	99	105	114	159	—	—	2	2	5.83
	170	58	2.1	2.1	101	—	445	431	61.1	3 100	4 700	NU2316R	NJ2316R	NUP2316R	—	—	91	91	99	105	114	159	—	—	2	2	5.95
	170	68.3	2.1	2.1	103	—	423	436	61.9	3 100	4 700	NU3316	—	—	—	—	91	91	99	105	—	159	—	—	2	2	7.72
	200	48	3	3	110	170	374	315	45.2	3 100	4 200	NU416	NJ416	NUP416	N416	NF416	93	93	109	112	124	187	187	172	2.5	2.5	7.28
85	130	22	1.1	1	96.5	—	89.8	91.2	12.0	5 100	6 000	NU1017	—	—	—	91.5	90	95	99	—	123.5	—	—	1	1	1.04	
	150	28	2	2	—	133.8	151	140	18.7	4 200	5 000	—	—	—	N217	NF217	94	—	—	—	110	141	141	137	2	2	(1.90)
	150	28	2	2	100.5	—	209	199	26.3	4 200	5 000	NU217R	NJ217R	NUP217R	—	—	94	94	99	104	110	141	—	—	2	2	1.94
	150	36	2	2	101.8	—	212	218	31.6	3 800	5 000	NU2217	NJ2217	NUP2217	—	—	94	94	99	104	110	141	—	—	2	2	2.50
	150	36	2	2	100.5	—	272	279	41.6	3 700	5 000	NU2217R	NJ2217R	NUP2217R	—	—	94	94	99	104	110	141	—	—	2	2	2.53
	150	49.2	2	2	101.8	—	269	296	42.1	3 300	5 000	NU3217	—	—	—	—	94	94	99	104	—	141	—	—	2	2	3.67
	180	41	3	3	—	156	281	247	35.6	3 300	4 500	—	—	—	N317	NF317	98	—	—	—	119	167	167	160	2.5	2.5	(4.52)
	180	41	3	3	108	—	364	330	48.3	3 300	4 400	NU317R	NJ317R	NUP317R	—	—	98	98	106	110	119	167	—	—	2.5	2.5	4.80
	180	60	3	3	108	—	394	382	54.2	3 000	4 500	NU2317	NJ2317	NUP2317	—	—	98	98	106	110	119	167	—	—	2.5	2.5	6.62
	180	60	3	3	108	—	491	485	67.7	2 900	4 400	NU2317R	NJ2317R	NUP2317R	—	—	98	98	106	110	119	167	—	—	2.5	2.5	6.98
	180	73	3	3	108	—	499	517	71.5	3 000	4 500	NU3317	—	—	—	—	98	98	106	110	—	167	—	—	2.5	2.5	9.23
	210	52	4	4	113	177	416	350	49.7	3 000	4 000	NU417	NJ417	NUP417	N417	NF417	101	101	111	115	128	194	194	179	3	3	8.68
90	140	24	1.5	1.1	103	—	106	109	14.6	4 700	5 600	NU1018	—	—	—	—	98	96.5	101	106	—	132	—	—	1.5	1	1.34

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (90) ~ (100) mm



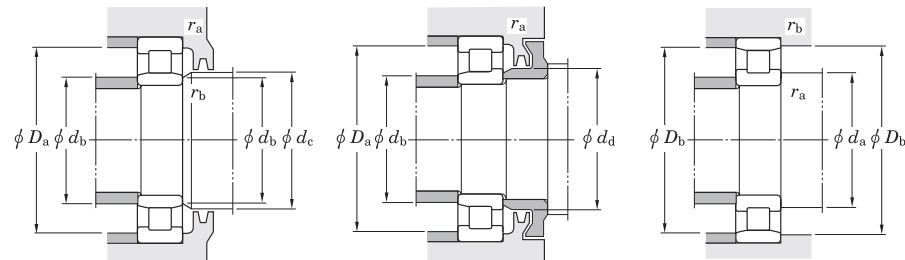
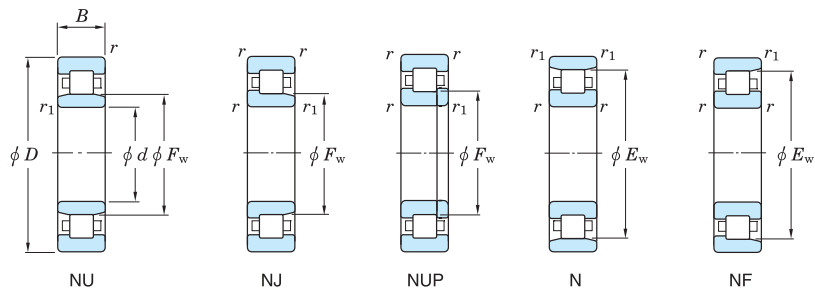
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer.) Mass NU (N) (kg)			
$d$	$D$	$B$	$r_{\text{min}}$	$r_{1\text{min}}$	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min. max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min. max.	$r_b$ min. max.				
90	160	30	2	2	—	143	190	178	22.9	3 900	4 700	—	—	—	<b>N218</b>	<b>NF218</b>	99	—	—	—	116	151	151	146	2	2	(2.32)	
	160	30	2	2	107	—	227	217	28.7	3 900	4 700	<b>NU218R</b>	<b>NJ218R</b>	<b>NUP218R</b>	—	—	99	99	105	109	116	151	—	—	2	2	2.38	
	160	40	2	2	107	—	259	265	38.9	3 500	4 700	<b>NU2218</b>	<b>NJ2218</b>	<b>NUP2218</b>	—	—	99	99	105	109	116	151	—	—	2	2	3.10	
	160	40	2	2	107	—	302	314	45.8	3 500	4 700	<b>NU2218R</b>	<b>NJ2218R</b>	<b>NUP2218R</b>	—	—	99	99	105	109	116	151	—	—	2	2	3.21	
	160	52.4	2	2	107	—	338	373	52.8	3 100	4 700	<b>NU3218</b>	—	—	—	—	99	99	105	109	—	151	—	—	2	2	4.49	
	190	43	3	3	—	165	—	300	265	38.7	3 100	4 200	—	—	—	<b>N318</b>	<b>NF318</b>	103	—	—	—	127	177	177	169	2.5	2.5	(5.27)
	190	43	3	3	113.5	—	—	395	355	50.6	3 100	4 100	<b>NU318R</b>	<b>NJ318R</b>	<b>NUP318R</b>	—	—	103	103	111	117	127	177	—	—	2.5	2.5	5.47
	190	64	3	3	115	—	—	408	395	55.5	2 800	4 200	<b>NU2318</b>	<b>NJ2318</b>	<b>NUP2318</b>	—	—	103	103	111	117	127	177	—	—	2.5	2.5	7.90
	190	64	3	3	113.5	—	—	544	534	74.5	2 800	4 100	<b>NU2318R</b>	<b>NJ2318R</b>	<b>NUP2318R</b>	—	—	103	103	111	117	127	177	—	—	2.5	2.5	8.12
	190	73	3	3	115	—	—	535	559	75.6	2 800	4 200	<b>NU3318</b>	—	—	—	—	103	103	111	117	—	177	—	—	2.5	2.5	10.3
	225	54	4	4	123.5	191.5	—	468	400	55.1	2 800	3 700	<b>NU418</b>	<b>NJ418</b>	<b>NUP418</b>	<b>N418</b>	<b>NF418</b>	106	106	122	125	139	209	209	194	3	3	10.3
	95	145	24	1.5	1.1	108	—	110	115	15.2	4 500	5 300	<b>NU1019</b>	—	—	<b>NUP1019</b>	—	—	103	101.5	106	111	—	137	—	—	1.5	1
170		32	2.1	2.1	—	151.5	207	195	25.1	3 700	4 400	—	—	—	<b>N219</b>	<b>NF219</b>	106	—	—	—	123	159	159	155	2	2	(2.80)	
170		32	2.1	2.1	112.5	—	275	265	38.3	3 700	4 400	<b>NU219R</b>	<b>NJ219R</b>	<b>NUP219R</b>	—	—	106	106	111	116	123	159	—	—	2	2	2.92	
170		43	2.1	2.1	113.5	—	288	298	42.9	3 300	4 400	<b>NU2219</b>	<b>NJ2219</b>	<b>NUP2219</b>	—	—	106	106	111	116	123	159	—	—	2	2	3.85	
170		43	2.1	2.1	112.5	—	358	371	52.8	3 300	4 400	<b>NU2219R</b>	<b>NJ2219R</b>	<b>NUP2219R</b>	—	—	106	106	111	116	123	159	—	—	2	2	3.93	
170		55.6	2.1	2.1	113.5	—	371	412	57.2	3 000	4 400	<b>NU3219</b>	—	—	—	—	106	106	111	116	—	159	—	—	2	2	5.42	
200		45	3	3	—	173.5	—	323	311	41.3	3 000	4 000	—	—	—	<b>N319</b>	<b>NF319</b>	108	—	—	—	134	187	187	178	2.5	2.5	(6.10)
200		45	3	3	121.5	—	—	418	387	54.3	2 900	3 900	<b>NU319R</b>	<b>NJ319R</b>	<b>NUP319R</b>	—	—	108	108	119	124	134	187	—	—	2.5	2.5	6.42
200		67	3	3	121.5	—	—	465	496	62.6	2 600	4 000	<b>NU2319</b>	<b>NJ2319</b>	<b>NUP2319</b>	—	—	108	108	119	124	134	187	—	—	2.5	2.5	9.39
200		77.8	3	3	121.5	—	—	609	654	86.8	2 600	4 000	<b>NU3319</b>	—	—	—	—	108	108	119	124	—	187	—	—	2.5	2.5	12.1
240	55	4	4	133.5	201.5	—	502	444	60.1	2 600	3 400	<b>NU419</b>	<b>NJ419</b>	<b>NUP419</b>	<b>N419</b>	<b>NF419</b>	111	111	132	136	149	224	224	204	3	3	13.6	
100	150	24	1.5	1.1	113	—	114	120	15.8	4 300	5 100	<b>NU1020</b>	—	—	<b>NUP1020</b>	—	—	108	106.5	111	116	—	142	—	—	1.5	1	1.46
	180	34	2.1	2.1	—	160	229	217	28.1	3 500	4 200	—	—	—	<b>N220</b>	<b>NF220</b>	111	—	—	—	130	169	169	164	2	2	(3.38)	
	180	34	2.1	2.1	119	—	312	306	43.0	3 500	4 200	<b>NU220R</b>	<b>NJ220R</b>	<b>NUP220R</b>	—	—	111	111	117	122	130	169	—	—	2	2	3.52	
	180	46	2.1	2.1	120	—	322	338	47.3	3 100	4 200	<b>NU2220</b>	<b>NJ2220</b>	<b>NUP2220</b>	—	—	111	111	117	122	130	169	—	—	2	2	4.67	
	180	46	2.1	2.1	119	—	417	444	60.7	3 100	4 200	<b>NU2220R</b>	<b>NJ2220R</b>	<b>NUP2220R</b>	—	—	111	111	117	122	130	169	—	—	2	2	4.82	

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

Single-row cylindrical roller bearings

d (100) ~ (120) mm



d	Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer.) Mass NU (N) (kg)				
	D	B	r min.	r1 min.	Fw	Ew	Cr	C0r		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	da min.	db min.	db max.	dc min.	dd min.	Da max.	Ddb max.	Ddb min.		ra min.	ra max.	rb min.	rb max.
100	180	60.3	2.1	2.1	120	—	409	459	61.9	2 800	4 200	NU3220	—	—	—	111	111	117	122	—	169	—	—	2	2	—	—	6.62	
	215	47	3	3	—	185.5	373	337	47.2	2 800	3 700	—	—	N320	NF320	113	—	—	—	143	202	202	190	2.5	2.5	—	—	(7.59)	
	215	47	3	3	127.5	—	474	424	58.7	2 700	3 600	NU320R	NJ320R	—	—	113	113	125	132	143	202	—	—	2.5	2.5	—	—	7.75	
	215	73	3	3	129.5	—	513	548	68.4	2 500	3 700	NU2320	NJ2320	—	—	113	113	125	132	143	202	—	—	2.5	2.5	—	—	11.9	
	215	73	3	3	127.5	—	713	717	94.7	2 400	3 600	NU2320R	NJ2320R	—	—	113	113	125	132	143	202	—	—	2.5	2.5	—	—	12.1	
	215	82.6	3	3	129.5	—	663	706	93.2	2 500	3 700	NU3320	—	—	—	—	113	113	125	132	—	202	—	—	2.5	2.5	—	—	15.0
	250	58	4	4	139	211	—	560	498	67.3	2 500	3 300	NU420	NJ420	—	—	116	116	137	141	156	234	234	213	3	3	—	—	14.0
105	160	26	2	1.1	119.5	—	136	149	19.6	4 100	4 800	NU1021	—	—	—	114	111.5	118	122	—	151	—	—	2	1	—	—	1.85	
	190	36	2.1	2.1	—	168.8	251	241	34.1	3 300	3 900	—	—	N221	NF221	116	—	—	—	137	179	179	173	2	2	—	—	(4.44)	
	190	65.1	2.1	2.1	126.8	—	431	482	64.3	2 600	3 900	NU3221	—	—	—	116	116	124	129	—	179	—	—	2	2	—	—	8.00	
	225	49	3	3	—	195	426	417	53.1	2 600	3 500	—	—	N321	NF321	118	—	—	—	149	212	212	199	2.5	2.5	—	—	(8.68)	
	225	77	3	3	135	—	711	750	97.3	2 300	3 500	NU2321	—	—	—	118	118	131	138	—	212	—	—	2.5	2.5	—	—	15.6	
	225	87.3	3	3	135	—	799	871	113	2 300	3 500	NU3321	—	—	—	118	118	132	137	—	212	—	—	2.5	2.5	—	—	17.4	
	260	60	4	4	144.5	220.5	—	581	510	67.6	2 400	3 100	NU421	NJ421	—	—	121	121	143	147	162	244	244	223	3	3	—	—	19.1
110	170	28	2	1.1	125	—	168	171	21.7	3 800	4 500	NU1022	—	—	—	119	116.5	124	128	—	161	—	—	2	1	—	—	2.31	
	200	38	2.1	2.1	—	178.5	300	290	40.1	3 100	3 700	—	—	N222	NF222	121	—	—	—	144	189	189	182	2	2	—	—	(5.24)	
	200	38	2.1	2.1	132.5	—	366	365	51.1	3 100	3 700	NU222R	NJ222R	—	—	121	121	130	135	144	189	—	—	2	2	—	—	4.90	
	200	53	2.1	2.1	132.5	—	397	442	55.1	2 800	3 700	NU2222	NJ2222	—	—	121	121	130	135	144	189	—	—	2	2	—	—	6.93	
	200	53	2.1	2.1	132.5	—	479	517	69.9	2 800	3 700	NU2222R	NJ2222R	—	—	121	121	130	135	144	189	—	—	2	2	—	—	6.93	
	200	69.8	2.1	2.1	132.5	—	533	607	80.6	2 500	3 700	NU3222	—	—	—	121	121	130	135	—	189	—	—	2	2	—	—	9.55	
	240	50	3	3	—	207	475	467	58.4	2 500	3 300	—	—	N322	NF322	123	—	—	—	158	227	227	211	2.5	2.5	—	—	(10.4)	
	240	50	3	3	143	—	564	525	70.0	2 400	3 200	NU322R	NJ322R	—	—	123	123	140	145	158	227	—	—	2.5	2.5	—	—	10.7	
	240	80	3	3	143	—	755	789	102	2 200	3 300	NU2322	NJ2322	—	—	123	123	140	145	158	227	—	—	2.5	2.5	—	—	18.8	
	240	80	3	3	143	—	843	880	112	2 200	3 200	NU2322R	NJ2322R	—	—	123	123	140	145	158	227	—	—	2.5	2.5	—	—	18.8	
	240	92.1	3	3	143	—	849	918	118	2 200	3 300	NU3322	—	—	—	123	123	140	145	—	227	—	—	2.5	2.5	—	—	21.1	
280	65	4	4	155	235	—	685	621	80.8	2 200	2 900	NU422	NJ422	—	—	126	126	153	157	173	264	264	237	3	3	—	—	19.9	
120	180	28	2	1.1	135	—	173	181	22.6	3 500	4 200	NU1024	—	—	—	129	126.5	134	138	—	171	—	—	2	1	—	—	2.47	

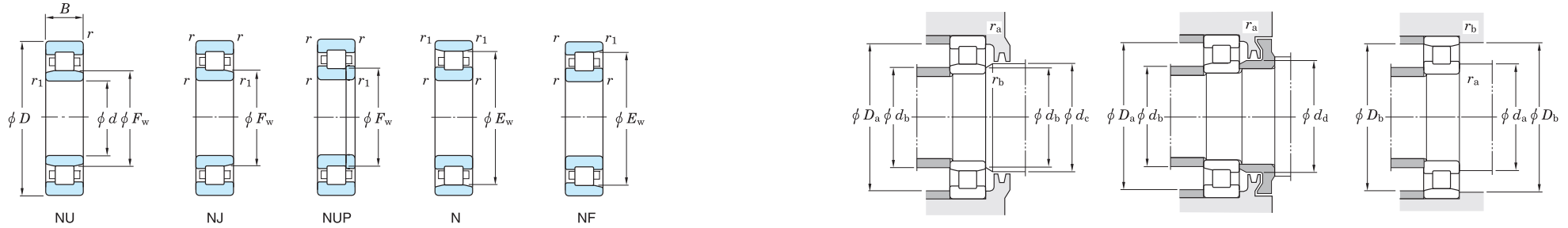
[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.



# Single-row cylindrical roller bearings

$d$  (120) ~ (140) mm



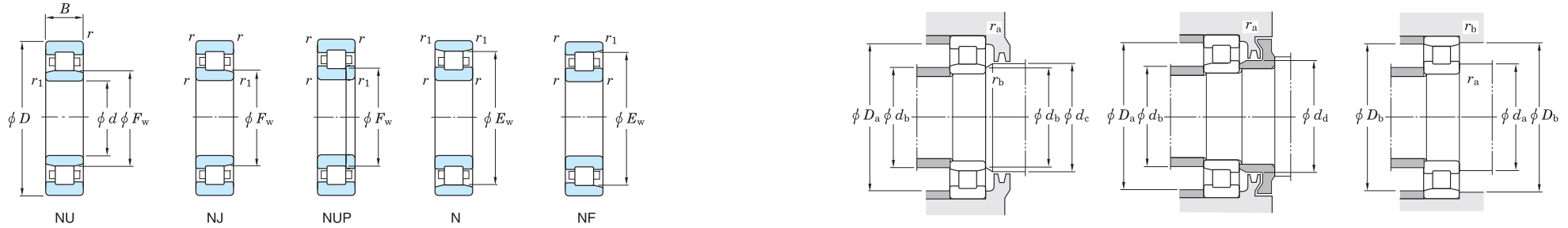
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg)		
$d$	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.		$r_b$ max.	$r_a$ max.
120	215	40	2.1	2.1	—	191.5	325	318	42.9	2 900	3 400	—	—	—	<b>N224</b>	<b>NF224</b>	131	—	—	—	156	204	204	196	2	2	(6.31)
	215	40	2.1	2.1	143.5	—	419	421	57.6	2 800	3 400	<b>NU224R</b>	<b>NJ224R</b>	<b>NUP224R</b>	—	—	131	131	141	146	156	204	—	—	2	2	5.85
	215	58	2.1	2.1	143.5	—	434	492	61.2	2 600	3 400	<b>NU224R</b>	<b>NJ224R</b>	<b>NUP224R</b>	—	—	131	131	141	146	156	204	—	—	2	2	8.56
	215	58	2.1	2.1	143.5	—	565	619	80.9	2 600	3 400	<b>NU2224R</b>	<b>NJ2224R</b>	<b>NUP2224R</b>	—	—	131	131	141	146	156	204	—	—	2	2	8.56
	215	76	2.1	2.1	143.5	—	596	695	89.2	2 300	3 400	<b>NU3224</b>	—	—	—	—	131	131	141	146	—	204	—	—	2	2	11.9
	260	55	3	3	—	226	561	551	67.1	2 200	3 000	—	—	—	<b>N324</b>	<b>NF324</b>	133	—	—	—	171	247	247	230	2.5	2.5	(13.1)
	260	55	3	3	154	—	660	610	79.8	2 200	3 000	<b>NU324R</b>	<b>NJ324R</b>	<b>NUP324R</b>	—	—	133	133	151	156	171	247	—	—	2.5	2.5	13.4
	260	86	3	3	154	—	886	918	116	2 000	3 000	<b>NU2324</b>	<b>NJ2324</b>	<b>NUP2324</b>	—	—	133	133	151	156	171	247	—	—	2.5	2.5	23.1
	260	86	3	3	154	—	991	1 030	129	2 000	3 000	<b>NU2324R</b>	<b>NJ2324R</b>	<b>NUP2324R</b>	—	—	133	133	151	156	172	247	—	—	2.5	2.5	23.1
	260	106	3	3	154	—	1 030	1 120	139	2 000	3 000	<b>NU3324</b>	—	—	—	—	133	133	151	156	—	247	—	—	2.5	2.5	28.3
310	72	5	5	170	260	841	770	98.7	1 900	2 600	<b>NU424</b>	<b>NJ424</b>	<b>NUP424</b>	<b>N424</b>	<b>NF424</b>	140	140	168	172	190	290	290	262	4	4	28.0	
130	200	33	2	1.1	148	—	215	238	29.5	3 200	3 800	<b>NU1026</b>	—	<b>NUP1026</b>	—	—	139	136.5	146	151	—	191	—	—	2	1	3.77
	230	40	3	3	—	204	338	362	45.2	2 700	3 200	—	—	—	<b>N226</b>	<b>NF226</b>	143	—	—	—	168	217	217	208	2.5	2.5	(7.21)
	230	40	3	3	153.5	—	454	453	61.0	2 600	3 200	<b>NU226R</b>	<b>NJ226R</b>	<b>NUP226R</b>	—	—	143	143	151	158	168	217	—	—	2.5	2.5	6.60
	230	64	3	3	156	—	474	560	68.7	2 400	3 200	<b>NU2226</b>	<b>NJ2226</b>	<b>NUP2226</b>	—	—	143	143	151	158	168	217	—	—	2.5	2.5	11.2
	230	64	3	3	153.5	—	662	737	95.8	2 400	3 200	<b>NU2226R</b>	<b>NJ2226R</b>	<b>NUP2226R</b>	—	—	143	143	151	158	168	217	—	—	2.5	2.5	11.2
	230	80	3	3	156	—	689	857	107	2 100	3 200	<b>NU3226</b>	—	—	—	—	143	143	151	158	—	217	—	—	2.5	2.5	14.1
	280	58	4	4	—	243	699	667	85.7	2 100	2 700	—	—	—	<b>N326</b>	<b>NF326</b>	146	—	—	—	184	264	264	247	3	3	(16.4)
	280	58	4	4	167	—	771	736	94.1	2 000	2 700	<b>NU326R</b>	<b>NJ326R</b>	<b>NUP326R</b>	—	—	146	146	164	169	184	264	—	—	3	3	16.7
	280	93	4	4	167	—	1 050	1 130	138	1 800	2 700	<b>NU2326</b>	<b>NJ2326</b>	<b>NUP2326</b>	—	—	146	146	164	169	184	264	—	—	3	3	29.1
	280	93	4	4	167	—	1 150	1 230	150	1 800	2 700	<b>NU2326R</b>	<b>NJ2326R</b>	<b>NUP2326R</b>	—	—	146	146	164	169	186	264	—	—	3	3	29.1
280	112	4	4	167	—	1 170	1 290	158	1 800	2 700	<b>NU3326</b>	—	—	—	—	146	146	164	169	—	264	—	—	3	3	34.6	
340	78	5	5	185	285	964	876	108	1 800	2 300	<b>NU426</b>	<b>NJ426</b>	<b>NUP426</b>	<b>N426</b>	<b>NF426</b>	150	150	183	187	208	320	320	287	4	4	36.1	
140	210	33	2	1.1	158	—	220	250	30.5	3 000	3 600	<b>NU1028</b>	—	<b>NUP1028</b>	—	—	149	146.5	156	161	—	201	—	—	2	1	4.00
	250	42	3	3	—	221	406	421	55.5	2 400	2 900	—	—	—	<b>N228</b>	<b>NF228</b>	153	—	—	—	182	237	237	228	2.5	2.5	(8.78)
	250	42	3	3	169	—	491	514	67.5	2 400	2 900	<b>NU228R</b>	<b>NJ228R</b>	<b>NUP228R</b>	—	—	153	153	166	171	182	237	—	—	2.5	2.5	8.50
	250	68	3	3	169	—	583	671	84.3	2 200	2 900	<b>NU2228</b>	<b>NJ2228</b>	<b>NUP2228</b>	—	—	153	153	166	171	182	237	—	—	2.5	2.5	14.3
	250	68	3	3	169	—	716	835	106	2 200	2 900	<b>NU2228R</b>	<b>NJ2228R</b>	<b>NUP2228R</b>	—	—	153	153	166	171	182	237	—	—	2.5	2.5	14.3

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (140) ~ (160) mm



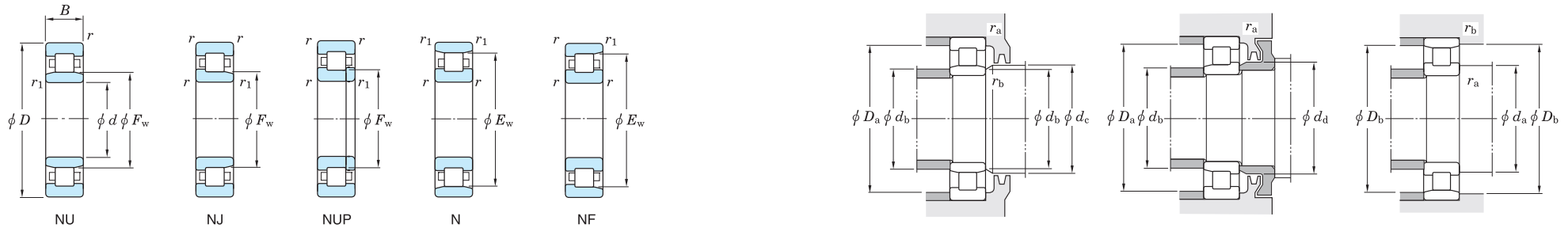
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds (min <sup>-1</sup> )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg))		
$d$	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.		$r_b$ max.	$r_a$ max.
140	250	88	3	3	169	—	757	939	114	1 900	2 900	NU3228	—	—	—	153	153	166	171	—	237	—	—	2.5	2.5	18.5	
	300	62	4	4	—	260	771	746	93.8	1 900	2 500	—	—	N328	NF328	156	—	—	—	198	284	284	264	3	3	(21.8)	
	300	62	4	4	180	—	829	797	99.4	1 900	2 500	NU328R	NJ328R	NUP328R	—	156	156	176	182	198	284	—	—	3	3	21.8	
	300	102	4	4	180	—	1 150	1 250	150	1 700	2 500	NU328R	NJ328R	NUP328R	—	156	156	176	182	198	284	—	—	3	3	36.8	
	300	102	4	4	180	—	1 270	1 380	167	1 700	2 500	NU2328R	NJ2328R	NUP2328R	—	156	156	176	182	200	284	—	—	3	3	36.8	
	300	118	4	4	180	—	1 360	1 550	185	1 700	2 500	NU3328	—	—	—	156	156	176	182	—	284	—	—	3	3	41.5	
	360	82	5	5	198	302	1 090	1 020	124	1 600	2 200	NU428	NJ428	NUP428	N428	NF428	160	160	195	200	222	340	340	304	4	4	46.8
150	225	35	2.1	1.5	169.5	—	252	281	32.8	2 800	3 300	NU1030	—	NUP1030	—	161	158	167	173	—	214	—	—	2	1.5	4.83	
	270	45	3	3	—	238	468	492	63.4	2 200	2 700	—	—	N230	NF230	163	—	—	—	196	257	257	245	2.5	2.5	(11.1)	
	270	45	3	3	182	—	560	594	75.8	2 200	2 600	NU230R	NJ230R	NUP230R	—	163	163	179	184	196	257	—	—	2.5	2.5	10.7	
	270	73	3	3	182	—	683	800	99.7	2 000	2 700	NU2230	NJ2230	NUP2230	—	163	163	179	184	196	257	—	—	2.5	2.5	18.7	
	270	73	3	3	182	—	828	982	120	2 000	2 600	NU2230R	NJ2230R	NUP2230R	—	163	163	179	184	196	257	—	—	2.5	2.5	18.7	
	270	96	3	3	182	—	939	1 200	143	1 800	2 700	NU3230	—	—	—	163	163	179	184	—	257	—	—	2.5	2.5	23.7	
	320	65	4	4	—	277	829	807	99.1	1 800	2 300	—	—	—	N330	NF330	166	—	—	—	213	304	304	281	3	3	(25.6)
	320	65	4	4	193	—	948	922	115	1 700	2 300	NU330R	NJ330R	NUP330R	—	166	166	190	195	213	304	—	—	3	3	27.0	
	320	108	4	4	193	—	1 270	1 400	167	1 600	2 300	NU2330	NJ2330	NUP2330	—	166	166	190	195	213	304	—	—	3	3	44.7	
	320	108	4	4	193	—	1 450	1 600	187	1 500	2 300	NU2330R	NJ2330R	NUP2330R	—	166	166	190	195	213	304	—	—	3	3	44.7	
	320	128	4	4	193	—	1 610	1 890	217	1 600	2 300	NU3330	—	—	—	166	166	190	195	—	304	—	—	3	3	51.4	
	380	85	5	5	213	317	1 160	1 120	134	1 500	2 000	NU430	NJ430	NUP430	N430	NF430	170	170	210	216	237	360	360	319	4	4	53.3
	160	240	38	2.1	1.5	180	—	297	330	42.8	2 600	3 000	NU1032	—	NUP1032	—	171	168	178	184	—	229	—	—	2	1.5	5.93
290		48	3	3	—	255	535	568	71.3	2 100	2 500	—	—	N232	NF232	173	—	—	—	210	277	277	262	2.5	2.5	(13.9)	
290		48	3	3	195	—	624	666	83.3	2 000	2 400	NU232R	NJ232R	NUP232R	—	173	173	192	197	210	277	—	—	2.5	2.5	14.8	
290		80	3	3	195	—	790	939	113	1 800	2 500	NU2232	NJ2232	NUP2232	—	173	173	192	197	210	277	—	—	2.5	2.5	23.6	
290		80	3	3	193	—	1 010	1 190	141	1 800	2 400	NU2232R	NJ2232R	NUP2232R	—	173	173	192	197	210	277	—	—	2.5	2.5	23.6	
290		104	3	3	195	—	1 070	1 390	163	1 600	2 500	NU3232	—	—	—	173	173	192	197	—	277	—	—	2.5	2.5	29.8	
340		68	4	4	—	292	872	876	106	1 600	2 200	—	—	—	N332	NF332	176	—	—	—	228	324	324	296	3	3	(30.2)
340		68	4	4	204	—	1 070	1 050	128	1 600	2 100	NU332R	NJ332R	NUP332R	—	176	176	200	211	228	324	—	—	3	3	32.0	

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (160) ~ (190) mm



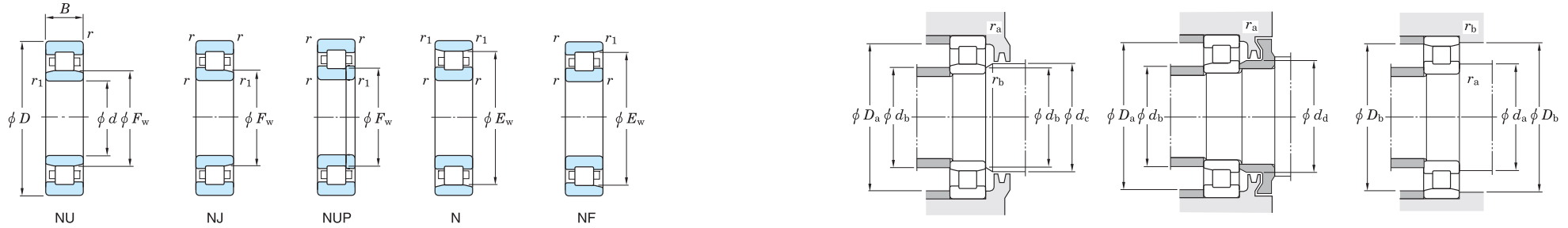
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN)	Limiting speeds (min <sup>-1</sup> )		Bearing No.					Mounting dimensions (mm)								(Refer.) Mass NU (N) (kg)			
$d$	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$	$C_u$	Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.	$r_b$ max.	$r_a$ max.	$r_b$ max.	
160	340	114	4	4	208	—	1 340	1 520	178	1 400	2 200	NU2332	NJ2332	NUP2332	—	—	176	176	200	211	228	324	—	—	3	3	53.1	
	340	114	4	4	204	—	1 640	1 820	212	1 400	2 100	NU2332R	NJ2332R	NUP2332R	—	—	176	176	200	211	228	324	—	—	3	3	53.1	
	340	136	4	4	208	—	1 590	1 890	216	1 400	2 200	NU3332	—	—	—	—	176	176	200	211	—	324	—	—	3	3	61.5	
170	260	42	2.1	2.1	193	—	347	400	50.5	2 400	2 800	NU1034	—	NUP1034	—	—	181	181	190	197	—	249	—	—	2	2	7.90	
	310	52	4	4	—	272	596	637	78.4	1 900	2 300	—	—	—	N234	NF234	186	—	—	—	223	294	294	280	3	3	(17.2)	
	310	52	4	4	207	—	754	802	98.7	1 900	2 200	NU234R	NJ234R	NUP234R	—	—	186	186	204	211	223	294	—	—	3	3	18.6	
	310	86	4	4	208	—	896	1 080	127	1 700	2 300	NU2234	NJ2234	NUP2234	—	—	186	186	204	211	223	294	—	—	3	3	29.2	
	310	86	4	4	205	—	1 210	1 410	166	1 700	2 200	NU2234R	NJ2234R	NUP2234R	—	—	186	186	204	211	223	294	—	—	3	3	29.2	
	310	110	4	4	208	—	1 210	1 580	181	1 500	2 300	NU3234	—	—	—	—	186	186	204	211	—	294	—	—	3	3	36.2	
	360	72	4	4	220	310	997	1 010	122	1 500	2 000	NU334	NJ334	NUP334	N334	NF334	186	186	216	223	241	344	344	314	3	3	38.6	
	360	120	4	4	220	—	1 530	1 750	199	1 300	2 000	NU2334	NJ2334	NUP2334	—	—	186	186	216	223	241	344	—	—	3	3	62.6	
360	140	4	4	220	—	1 770	2 120	240	1 300	2 000	NU3334	—	—	—	—	186	186	216	223	—	344	—	—	3	3	70.8		
180	280	46	2.1	2.1	205	—	447	503	63.2	2 200	2 600	NU1036	—	NUP1036	—	—	191	191	203	209	—	269	—	—	2	2	10.5	
	320	52	4	4	—	282	618	677	82.2	1 800	2 200	—	—	—	N236	NF236	196	—	—	—	233	304	304	290	3	3	(18.0)	
	320	52	4	4	217	—	783	852	104	1 800	2 100	NU236R	NJ236R	NUP236R	—	—	196	196	214	221	233	304	—	—	3	3	19.3	
	320	86	4	4	218	—	929	1 140	133	1 600	2 200	NU2236	NJ2236	NUP2236	—	—	196	196	214	221	233	304	—	—	3	3	30.4	
	320	86	4	4	215	—	1 260	1 510	175	1 600	2 100	NU2236R	NJ2236R	NUP2236R	—	—	196	196	214	221	233	304	—	—	3	3	30.4	
	320	112	4	4	218	—	1 250	1 680	190	1 400	2 200	NU3236	—	—	—	—	196	196	214	221	—	304	—	—	3	3	38.4	
	380	75	4	4	232	328	1 130	1 150	136	1 400	1 900	NU336	NJ336	NUP336	N336	NF336	196	196	227	235	255	364	364	332	3	3	42.6	
	380	126	4	4	232	—	1 690	1 940	220	1 300	1 900	NU2336	NJ2336	NUP2336	—	—	196	196	227	235	255	364	—	—	3	3	73.0	
380	150	4	4	232	—	2 070	2 520	276	1 300	1 900	NU3336	—	—	—	—	196	196	227	235	—	364	—	—	3	3	84.4		
190	290	46	2.1	2.1	215	—	460	530	65.7	2 100	2 500	NU1038	—	NUP1038	—	—	201	201	213	219	—	279	—	—	2	2	10.9	
	340	55	4	4	—	299	694	768	91.3	1 700	2 000	—	—	—	N238	NF238	206	—	—	—	247	324	324	310	3	3	(21.5)	
	340	55	4	4	230	—	869	954	114	1 700	2 000	NU238R	NJ238R	NUP238R	—	—	206	206	227	234	247	324	—	—	3	3	23.3	
	340	92	4	4	231	—	1 040	1 290	146	1 500	2 000	NU2238	NJ2238	NUP2238	—	—	206	206	227	234	247	324	—	—	3	3	37.0	
	340	92	4	4	228	—	1 380	1 670	189	1 500	2 000	NU2238R	NJ2238R	NUP2238R	—	—	206	206	227	234	247	324	—	—	3	3	37.0	
	340	120	4	4	231	—	1 420	1 930	226	1 300	2 000	NU3238	—	—	—	—	206	206	227	234	—	324	—	—	3	3	46.8	

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  (190) ~ 240 mm



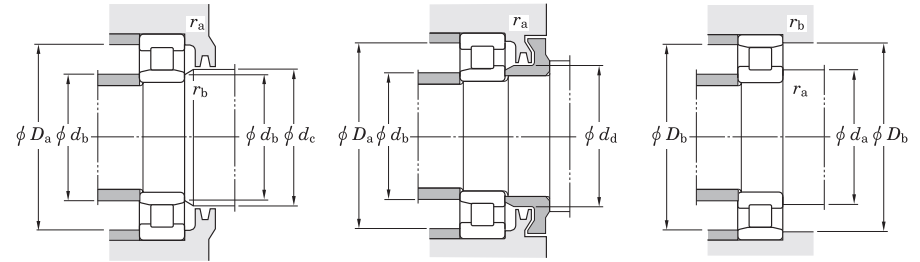
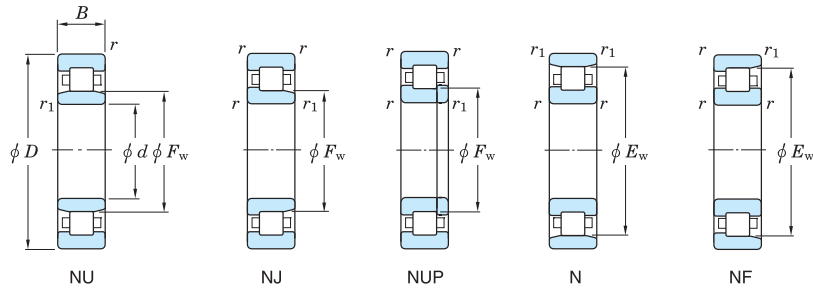
$d$	Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer. Mass NU (N) (kg)		
	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.		$r_b$ max.	
190	400	78	5	5	245	345	1 220	1 260	146	1 300	1 800	<b>NU338</b>	<b>NJ338</b>	<b>NUP338</b>	<b>N338</b>	<b>NF338</b>	210	210	240	248	268	380	380	349	4	4	49.9
	400	132	5	5	245	—	1 900	2 220	245	1 200	1 800	<b>NU2338</b>	<b>NJ2338</b>	<b>NUP2338</b>	—	—	210	210	240	248	268	380	—	—	4	4	84.7
	400	155	5	5	245	—	2 340	2 910	316	1 200	1 800	<b>NU3338</b>	—	—	—	—	210	210	240	248	—	380	—	—	4	4	96.5
200	310	51	2.1	2.1	229	—	487	582	71.0	1 900	2 300	<b>NU1040</b>	—	<b>NUP1040</b>	—	—	211	211	226	233	—	299	—	—	2	2	14.1
	360	58	4	4	—	316	775	865	102	1 600	1 900	—	—	—	<b>N240</b>	<b>NF240</b>	216	—	—	—	261	344	344	328	3	3	(25.7)
	360	58	4	4	243	—	958	1 060	124	1 600	1 900	<b>NU240R</b>	<b>NJ240R</b>	<b>NUP240R</b>	—	—	216	216	240	247	261	344	—	—	3	3	27.2
	360	98	4	4	244	—	1 190	1 490	169	1 400	1 900	<b>NU2240</b>	<b>NJ2240</b>	<b>NUP2240</b>	—	—	216	216	240	247	261	344	—	—	3	3	44.4
	360	98	4	4	241	—	1 530	1 870	211	1 400	1 900	<b>NU2240R</b>	<b>NJ2240R</b>	<b>NUP2240R</b>	—	—	216	216	240	247	261	344	—	—	3	3	44.4
	360	128	4	4	244	—	1 500	2 020	223	1 300	1 900	<b>NU3240</b>	—	—	—	—	216	216	240	247	—	344	—	—	3	3	56.2
	420	80	5	5	260	360	1 220	1 270	145	1 200	1 700	<b>NU340</b>	<b>NJ340</b>	<b>NUP340</b>	<b>N340</b>	<b>NF340</b>	220	220	254	263	283	400	400	364	4	4	56.2
420	138	5	5	260	—	1 890	2 240	244	1 100	1 700	<b>NU2340</b>	<b>NJ2340</b>	<b>NUP2340</b>	—	—	220	220	254	263	283	400	—	—	4	4	97.4	
420	165	5	5	260	—	2 330	2 930	314	1 100	1 700	<b>NU3340</b>	—	—	—	—	220	220	250	258	—	400	—	—	4	4	113	
220	340	56	3	3	250	—	637	748	88.1	1 700	2 000	<b>NU1044</b>	—	<b>NUP1044</b>	—	—	233	233	248	254	—	327	—	—	2.5	2.5	18.5
	400	65	4	4	270	350	949	1 080	123	1 400	1 700	<b>NU244</b>	<b>NJ244</b>	<b>NUP244</b>	<b>N244</b>	<b>NF244</b>	236	236	266	273	289	384	384	362	3	3	38.5
	400	108	4	4	270	—	1 420	1 810	196	1 200	1 700	<b>NU2244</b>	<b>NJ2244</b>	—	—	—	236	236	266	273	289	384	—	—	3	3	60.9
	400	144	4	4	270	—	2 040	2 880	319	1 100	1 700	<b>NU3244</b>	—	—	—	—	236	236	266	273	—	384	—	—	3	3	78.8
	460	88	5	5	284	396	1 490	1 570	176	1 100	1 500	<b>NU344</b>	<b>NJ344</b>	<b>NUP344</b>	<b>N344</b>	<b>NF344</b>	240	240	279	287	309	440	440	400	4	4	74.4
	460	145	5	5	284	—	2 260	2 690	287	990	1 500	<b>NU2344</b>	—	<b>NUP2344</b>	—	—	240	240	276	287	—	440	—	—	4	4	119
460	180	5	5	284	—	2 660	3 300	347	990	1 500	<b>NU3344</b>	—	—	—	—	240	240	279	287	—	440	—	—	4	4	148	
240	360	56	3	3	270	—	673	822	95.0	1 600	1 900	<b>NU1048</b>	—	<b>NUP1048</b>	—	—	253	253	268	275	—	347	—	—	2.5	2.5	20.1
	440	72	4	4	295	385	1 170	1 340	150	1 200	1 500	<b>NU248</b>	<b>NJ248</b>	<b>NUP248</b>	<b>N248</b>	<b>NF248</b>	256	256	293	298	316	424	424	397	3	3	52.1
	440	120	4	4	295	—	1 790	2 320	246	1 100	1 500	<b>NU2248</b>	<b>NJ2248</b>	—	—	—	256	256	293	298	316	424	—	—	3	3	82.5
	440	160	4	4	295	—	2 450	3 460	358	990	1 500	<b>NU3248</b>	—	—	—	—	256	256	293	298	—	424	—	—	3	3	107
	500	95	5	5	310	430	1 790	1 950	211	990	1 300	<b>NU348</b>	<b>NJ348</b>	<b>NUP348</b>	<b>N348</b>	<b>NF348</b>	260	260	305	313	337	480	480	434	4	4	94.6
	500	155	5	5	310	—	2 710	3 320	346	880	1 300	<b>NU2348</b>	—	<b>NUP2348</b>	—	—	260	260	303	313	—	480	—	—	4	4	152
	500	195	5	5	310	—	3 170	4 070	414	880	1 300	<b>NU3348</b>	—	—	—	—	260	260	305	313	—	480	—	—	4	4	189

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

# Single-row cylindrical roller bearings

$d$  260 ~ 460 mm



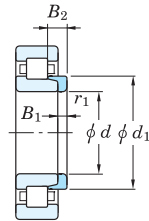
$d$	Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.					Mounting dimensions (mm)								(Refer.) Mass NU (N) (kg)	
	$D$	$B$	$r$ min.	$r_1$ min.	$F_w$	$E_w$	$C_r$	$C_{0r}$	Grease lub.		Oil lub.	NU	NJ	NUP	N	NF	$d_a$ min.	$d_b$ min.	$d_b$ max.	$d_c$ min.	$d_d$ min.	$D_a$ max.	$D_b$ max.	$r_a$ min.	$r_b$ max.		
260	400	65	4	4	296	—	819	979	110	1 400	1 700	<b>NU1052</b>	—	<b>NUP1052</b>	—	—	276	276	292	300	—	384	—	—	3	3	29.2
	480	80	5	5	320	420	1 380	1 580	171	1 100	1 300	<b>NU252</b>	<b>NJ252</b>	<b>NUP252</b>	<b>N252</b>	<b>NF252</b>	280	280	318	323	343	460	460	432	4	4	69.0
	480	130	5	5	320	—	2 240	2 950	305	990	1 300	<b>NU252</b>	<b>NJ2252</b>	—	—	—	280	280	318	323	343	460	—	—	4	4	107
	480	174	5	5	320	—	2 680	3 680	373	880	1 300	<b>NU3252</b>	—	—	—	—	280	280	318	323	—	460	—	—	4	4	139
	540	165	6	6	336	—	3 030	3 750	385	790	1 200	<b>NU2352</b>	—	<b>NUP2352</b>	—	—	284	284	327	339	—	516	—	—	5	5	185
	540	206	6	6	336	—	3 670	4 790	473	790	1 200	<b>NU3352</b>	—	—	—	—	284	284	330	339	—	516	—	—	5	5	232
280	420	65	4	4	316	—	841	1 030	114	1 300	1 500	<b>NU1056</b>	—	<b>NUP1056</b>	—	—	296	296	313	320	—	404	—	—	3	3	35.2
	500	80	5	5	340	440	1 430	1 680	179	1 000	1 200	<b>NU256</b>	<b>NJ256</b>	<b>NUP256</b>	<b>N256</b>	<b>NF256</b>	300	300	336	343	365	480	480	452	4	4	72.7
300	460	74	4	4	340	—	1 120	1 380	147	1 200	1 400	<b>NU1060</b>	—	<b>NUP1060</b>	—	—	316	316	337	344	—	444	—	—	3	3	44.1
	540	85	5	5	364	476	1 690	1 960	206	920	1 100	<b>NU260</b>	<b>NJ260</b>	<b>NUP260</b>	<b>N260</b>	<b>NF260</b>	320	320	361	368	392	520	520	487	4	4	90.7
320	480	74	4	4	360	—	1 150	1 450	152	1 100	1 300	<b>NU1064</b>	—	<b>NUP1064</b>	—	—	336	336	356	365	—	464	—	—	3	3	48.4
	580	92	5	5	390	510	1 920	2 270	232	840	1 000	<b>NU264</b>	<b>NJ264</b>	<b>NUP264</b>	<b>N264</b>	<b>NF264</b>	340	340	386	393	419	560	560	522	4	4	114
	670	112	7.5	7.5	425	—	2 460	2 880	287	650	870	<b>NU364</b>	—	—	—	—	352	352	419	428	—	638	638	575	6	6	199
340	520	82	5	5	385	—	1 370	1 750	183	980	1 200	<b>NU1068</b>	—	<b>NUP1068</b>	—	—	360	360	381	390	—	500	—	—	4	4	64.1
360	540	82	5	5	405	—	1 410	1 830	189	920	1 100	<b>NU1072</b>	—	<b>NUP1072</b>	—	—	380	380	401	410	—	520	—	—	4	4	67.1
380	560	82	5	5	425	—	1 440	1 920	195	860	1 000	<b>NU1076</b>	—	<b>NUP1076</b>	—	—	400	400	421	430	—	540	—	—	4	4	70.1
400	600	90	5	5	450	—	1 760	2 310	229	780	920	<b>NU1080</b>	—	<b>NUP1080</b>	—	—	420	420	446	455	—	580	—	—	4	4	91.0
420	620	90	5	5	470	—	1 750	2 320	228	730	860	<b>NU1084</b>	—	<b>NUP1084</b>	—	—	440	440	466	475	—	600	—	—	4	4	94.6
440	650	94	6	6	493	—	1 880	2 520	242	680	800	<b>NU1088</b>	—	<b>NUP1088</b>	—	—	464	464	489	498	—	626	—	—	5	5	109
460	680	100	6	6	516	—	2 000	2 730	259	630	750	<b>NU1092</b>	—	<b>NUP1092</b>	—	—	484	484	512	520	—	656	—	—	5	5	127

[Remarks] 1) Standard cage types used for the above bearings are shown in Table 1 earlier in this section. Please note that basic load ratings and limiting speeds shown above indicate the value applicable to machined cage. Consult JTEKT about bearings with pressed cage, since they may be different from bearings with machined cage in values above.

2) Bearing numbers of NU and NJ type bearings with mounted thrust collar (refer to specification table shown after this specification table) are NUJ and NH.

Thrust collars for cylindrical roller bearings

$d$  20 ~ (35) mm



Thrust collar

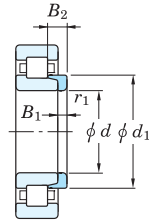
$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
20	29.7	3	6.75	0.6	HJ204	0.012	NJ204	NU204
	29.8	3	5.5	0.6	HJ204R	0.011	NJ204R	NU204R
	30	3	7.5	0.6	HJ2204	0.012	NJ2204	NU2204
	29.8	3	6.5	0.6	HJ2204R	0.012	NJ2204R	NU2204R
	31.8	4	7.5	0.6	HJ304	0.017	NJ304	NU304
	31.4	4	6.5	0.6	HJ304R	0.017	NJ304R	NU304R
	31.8	4	8.5	0.6	HJ2304	0.020	NJ2304	NU2304
	31.4	4	7.5	0.6	HJ2304R	0.018	NJ2304R	NU2304R
25	34.7	3	7.25	0.6	HJ205	0.015	NJ205	NU205
	34.8	3	6	0.6	HJ205R	0.014	NJ205R	NU205R
	34.7	3	7.5	0.6	HJ2205	0.015	NJ2205	NU2205
	34.8	3	6.5	0.6	HJ2205R	0.014	NJ2205R	NU2205R
	39	4	8	1.1	HJ305	0.025	NJ305	NU305
	38.2	4	7	1.1	HJ305R	0.025	NJ305R	NU305R
	39	4	9	1.1	HJ2305	0.025	NJ2305	NU2305
	38.2	4	8	1.1	HJ2305R	0.026	NJ2305R	NU2305R
30	41.8	4	8.25	0.6	HJ206	0.025	NJ206	NU206
	41.4	4	7	0.6	HJ206R	0.025	NJ206R	NU206R
	41.8	4	8.5	0.6	HJ2206	0.025	NJ2206	NU2206
	41.4	4	7.5	0.6	HJ2206R	0.025	NJ2206R	NU2206R
	45.9	5	9.5	1.1	HJ306	0.039	NJ306	NU306
	45.1	5	8.5	1.1	HJ306R	0.042	NJ306R	NU306R
	45.9	5	11.5	1.1	HJ2306	0.039	NJ2306	NU2306
	45.1	5	9.5	1.1	HJ2306R	0.043	NJ2306R	NU2306R
50.5	7	11.5	1.5	HJ406	0.080	NJ406	NU406	
35	47.6	4	8	0.6	HJ207	0.030	NJ207	NU207
	48.2	4	7	0.6	HJ207R	0.033	NJ207R	NU207R
	47.6	4	8.5	0.6	HJ2207	0.030	NJ2207	NU2207

$d$  (35) ~ (50) mm

$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
35	48.2	4	8.5	0.6	HJ2207R	0.035	NJ2207R	NU2207R
	50.8	6	11	1.1	HJ307	0.056	NJ307	NU307
	51.1	6	9.5	1.1	HJ307R	0.060	NJ307R	NU307R
	50.8	6	14	1.1	HJ2307	0.056	NJ2307	NU2307
	51.1	6	11	1.1	HJ2307R	0.062	NJ2307R	NU2307R
	59	8	13	1.5	HJ407	0.120	NJ407	NU407
40	54.2	5	9	1.1	HJ208	0.046	NJ208	NU208
	54.1	5	8.5	1.1	HJ208R	0.049	NJ208R	NU208R
	54.2	5	9.5	1.1	HJ2208	0.046	NJ2208	NU2208
	54.1	5	9	1.1	HJ2208R	0.050	NJ2208R	NU2208R
	58.4	7	12.5	1.5	HJ308	0.083	NJ308	NU308
	57.7	7	11	1.5	HJ308R	0.088	NJ308R	NU308R
	58.4	7	14.5	1.5	HJ2308	0.083	NJ2308	NU2308
	57.7	7	12.5	1.5	HJ2308R	0.091	NJ2308R	NU2308R
64.8	8	13	2	HJ408	0.140	NJ408	NU408	
45	59	5	9.5	1.1	HJ209	0.053	NJ209	NU209
	59.1	5	8.5	1.1	HJ209R	0.055	NJ209R	NU209R
	59	5	9.5	1.1	HJ2209	0.053	NJ2209	NU2209
	59.1	5	9	1.1	HJ2209R	0.055	NJ2209R	NU2209R
	64	7	12.5	1.5	HJ309	0.099	NJ309	NU309
	64.5	7	11.5	1.5	HJ309R	0.110	NJ309R	NU309R
	64	7	15	1.5	HJ2309	0.099	NJ2309	NU2309
	64.5	7	13	1.5	HJ2309R	0.113	NJ2309R	NU2309R
71.8	8	13.5	2	HJ409	0.175	NJ409	NU409	
50	64.6	5	10	1.1	HJ210	0.063	NJ210	NU210
	64.1	5	9	1.1	HJ210R	0.061	NJ210R	NU210R
	64.6	5	9.5	1.1	HJ2210	0.063	NJ2210	NU2210
	64.1	5	9	1.1	HJ2210R	0.061	NJ2210R	NU2210R
	71	8	14	2	HJ310	0.142	NJ310	NU310

# Thrust collars for cylindrical roller bearings

$d$  (50) ~ (65) mm



Thrust collar

$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
50	71.4	8	13	2	<b>HJ310R</b>	0.151	NJ310R	NU310R
	71	8	17	2	<b>HJ2310</b>	0.142	NJ2310	NU2310
	71.4	8	14.5	2	<b>HJ2310R</b>	0.155	NJ2310R	NU2310R
	78.8	9	14.5	2.1	<b>HJ410</b>	0.230	NJ410	NU410
55	70.8	6	11	1.1	<b>HJ211</b>	0.084	NJ211	NU211
	70.9	6	9.5	1.1	<b>HJ211R</b>	0.087	NJ211R	NU211R
	70.8	6	11	1.1	<b>HJ2211</b>	0.084	NJ2211	NU2211
	70.9	6	10	1.1	<b>HJ2211R</b>	0.088	NJ2211R	NU2211R
	77.2	9	15	2	<b>HJ311</b>	0.182	NJ311	NU311
	77.6	9	14	2	<b>HJ311R</b>	0.195	NJ311R	NU311R
	77.2	9	18.5	2	<b>HJ2311</b>	0.182	NJ2311	NU2311
	77.6	9	15.5	2	<b>HJ2311R</b>	0.200	NJ2311R	NU2311R
	85.2	10	16.5	2.1	<b>HJ411</b>	0.290	NJ411	NU411
	60	78.4	6	11	1.5	<b>HJ212</b>	0.108	NJ212
77.7		6	10	1.5	<b>HJ212R</b>	0.108	NJ212R	NU212R
78.4		6	11	1.5	<b>HJ2212</b>	0.108	NJ2212	NU2212
77.7		6	10	1.5	<b>HJ2212R</b>	0.108	NJ2212R	NU2212R
84.2		9	15.5	2.1	<b>HJ312</b>	0.220	NJ312	NU312
84.5		9	14.5	2.1	<b>HJ312R</b>	0.231	NJ312R	NU312R
84.2		9	19	2.1	<b>HJ2312</b>	0.220	NJ2312	NU2312
84.5		9	16	2.1	<b>HJ2312R</b>	0.237	NJ2312R	NU2312R
91.8		10	16.5	2.1	<b>HJ412</b>	0.340	NJ412	NU412
65		84.8	6	11	1.5	<b>HJ213</b>	0.123	NJ213
	84.5	6	10	1.5	<b>HJ213R</b>	0.129	NJ213R	NU213R
	84.8	6	11.5	1.5	<b>HJ2213</b>	0.123	NJ2213	NU2213
	84.5	6	10.5	1.5	<b>HJ2213R</b>	0.131	NJ2213R	NU2213R
	91	10	17	2.1	<b>HJ313</b>	0.280	NJ313	NU313
	90.6	10	15.5	2.1	<b>HJ313R</b>	0.288	NJ313R	NU313R

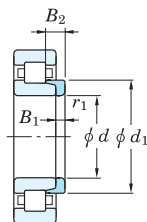
$d$  (65) ~ (80) mm

$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
65	91	10	20	2.1	<b>HJ2313</b>	0.280	NJ2313	NU2313
	90.6	10	18	2.1	<b>HJ2313R</b>	0.298	NJ2313R	NU2313R
	98.5	11	18	2.1	<b>HJ413</b>	0.420	NJ413	NU413
70	89.6	7	12.5	1.5	<b>HJ214</b>	0.150	NJ214	NU214
	89.5	7	11	1.5	<b>HJ214R</b>	0.157	NJ214R	NU214R
	89.6	7	12.5	1.5	<b>HJ2214</b>	0.150	NJ2214	NU2214
	89.5	7	11.5	1.5	<b>HJ2214R</b>	0.158	NJ2214R	NU2214R
	98	10	17.5	2.1	<b>HJ314</b>	0.330	NJ314	NU314
	97.5	10	15.5	2.1	<b>HJ314R</b>	0.330	NJ314R	NU314R
	98	10	20.5	2.1	<b>HJ2314</b>	0.330	NJ2314	NU2314
	97.5	10	18.5	2.1	<b>HJ2314R</b>	0.345	NJ2314R	NU2314R
75	110.5	12	20	3	<b>HJ414</b>	0.605	NJ414	NU414
	94	7	12.5	1.5	<b>HJ215</b>	0.156	NJ215	NU215
	94.5	7	11	1.5	<b>HJ215R</b>	0.166	NJ215R	NU215R
	94	7	12.5	1.5	<b>HJ2215</b>	0.156	NJ2215	NU2215
	94.5	7	11.5	1.5	<b>HJ2215R</b>	0.167	NJ2215R	NU2215R
	104.2	11	18.5	2.1	<b>HJ315</b>	0.400	NJ315	NU315
	104.2	11	16.5	2.1	<b>HJ315R</b>	0.410	NJ315R	NU315R
	104.2	11	21.5	2.1	<b>HJ2315</b>	0.400	NJ2315	NU2315
	104.2	11	19.5	2.1	<b>HJ2315R</b>	0.430	NJ2315R	NU2315R
	116	13	21.5	3	<b>HJ415</b>	0.710	NJ415	NU415
80	101.2	8	13.5	2	<b>HJ216</b>	0.207	NJ216	NU216
	101.6	8	12.5	2	<b>HJ216R</b>	0.222	NJ216R	NU216R
	101.2	8	13.5	2	<b>HJ2216</b>	0.207	NJ2216	NU2216
	101.6	8	12.5	2	<b>HJ2216R</b>	0.222	NJ2216R	NU2216R
	111.8	11	19.5	2.1	<b>HJ316</b>	0.470	NJ316	NU316
	110.6	11	17	2.1	<b>HJ316R</b>	0.460	NJ316R	NU316R
	111.8	11	23	2.1	<b>HJ2316</b>	0.470	NJ2316	NU2316
	110.6	11	20	2.1	<b>HJ2316R</b>	0.480	NJ2316R	NU2316R

Thrust collars for cylindrical roller bearings

$d$  (80) ~ (100) mm

$d$  (100) ~ 120 mm



Thrust collar

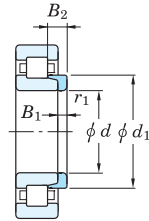
Boundary dimensions (mm)					Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
$d$	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
<b>80</b>	122	13	22	3	<b>HJ416</b>	0.780	NJ416	NU416
<b>85</b>	108.2	8	14	2	<b>HJ217</b>	0.250	NJ217	NU217
	107.6	8	12.5	2	<b>HJ217R</b>	0.250	NJ217R	NU217R
	108.2	8	14	2	<b>HJ2217</b>	0.250	NJ2217	NU2217
	107.6	8	13	2	<b>HJ2217R</b>	0.252	NJ2217R	NU2217R
	117.5	12	20.5	3	<b>HJ317</b>	0.560	NJ317	NU317
	117.9	12	18.5	3	<b>HJ317R</b>	0.575	NJ317R	NU317R
	117.5	12	24	3	<b>HJ2317</b>	0.560	NJ2317	NU2317
	117.9	12	22	3	<b>HJ2317R</b>	0.595	NJ2317R	NU2317R
	126	14	24	4	<b>HJ417</b>	0.880	NJ417	NU417
<b>90</b>	114.2	9	15	2	<b>HJ218</b>	0.305	NJ218	NU218
	114.4	9	14	2	<b>HJ218R</b>	0.320	NJ218R	NU218R
	114.2	9	16	2	<b>HJ2218</b>	0.305	NJ2218	NU2218
	114.4	9	15	2	<b>HJ2218R</b>	0.325	NJ2218R	NU2218R
	125	12	21	3	<b>HJ318</b>	0.630	NJ318	NU318
	124.2	12	18.5	3	<b>HJ318R</b>	0.630	NJ318R	NU318R
	125	12	26	3	<b>HJ2318</b>	0.630	NJ2318	NU2318
	124.2	12	22	3	<b>HJ2318R</b>	0.660	NJ2318R	NU2318R
	137	14	24	4	<b>HJ418</b>	1.05	NJ418	NU418
<b>95</b>	121	9	15.5	2.1	<b>HJ219</b>	0.352	NJ219	NU219
	120.6	9	14	2.1	<b>HJ219R</b>	0.355	NJ219R	NU219R
	121	9	16.5	2.1	<b>HJ2219</b>	0.352	NJ2219	NU2219
	120.6	9	15.5	2.1	<b>HJ2219R</b>	0.365	NJ2219R	NU2219R
	132	13	22.5	3	<b>HJ319</b>	0.760	NJ319	NU319
	132.2	13	20.5	3	<b>HJ319R</b>	0.785	NJ319R	NU319R
	132	13	26.5	3	<b>HJ2319</b>	0.760	NJ2319	NU2319
	147	15	25.5	4	<b>HJ419</b>	1.30	NJ419	NU419
	<b>100</b>	128	10	17	2.1	<b>HJ220</b>	0.444	NJ220

Boundary dimensions (mm)					Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.		
$d$	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU	
<b>100</b>	127.5	10	15	2.1	<b>HJ220R</b>	0.435	NJ220R	NU220R	
	128	10	18	2.1	<b>HJ2220</b>	0.444	NJ2220	NU2220	
	127.5	10	16	2.1	<b>HJ2220R</b>	0.450	NJ2220R	NU2220R	
	140.5	13	22.5	3	<b>HJ320</b>	0.895	NJ320	NU320	
	139.6	13	20.5	3	<b>HJ320R</b>	0.890	NJ320R	NU320R	
	140.5	13	27.5	3	<b>HJ2320</b>	0.895	NJ2320	NU2320	
	139.6	13	23.5	3	<b>HJ2320R</b>	0.920	NJ2320R	NU2320R	
	153.5	16	27	4	<b>HJ420</b>	1.50	NJ420	NU420	
	<b>105</b>	135	10	17.5	2.1	<b>HJ221</b>	0.505	NJ221	NU221
		147	13	22.5	3	<b>HJ321</b>	0.970	NJ321	NU321
159.5		16	27	4	<b>HJ421</b>	1.65	NJ421	NU421	
<b>110</b>	141.5	11	18.5	2.1	<b>HJ222</b>	0.615	NJ222	NU222	
	141.7	11	17	2.1	<b>HJ222R</b>	0.620	NJ222R	NU222R	
	141.5	11	20.5	2.1	<b>HJ2222</b>	0.615	NJ2222	NU2222	
	141.7	11	19.5	2.1	<b>HJ2222R</b>	0.645	NJ2222R	NU2222R	
	155.5	14	23	3	<b>HJ322</b>	1.17	NJ322	NU322	
	155.8	14	22	3	<b>HJ322R</b>	1.21	NJ322R	NU322R	
	155.5	14	28	3	<b>HJ2322</b>	1.17	NJ2322	NU2322	
	155.8	14	26.5	3	<b>HJ2322R</b>	1.27	NJ2322R	NU2322R	
	171	17	29.5	4	<b>HJ422</b>	2.10	NJ422	NU422	
	<b>120</b>	153	11	19	2.1	<b>HJ224</b>	0.715	NJ224	NU224
153.4		11	17	2.1	<b>HJ224R</b>	0.710	NJ224R	NU224R	
153		11	22	2.1	<b>HJ2224</b>	0.715	NJ2224	NU2224	
153.4		11	20	2.1	<b>HJ2224R</b>	0.745	NJ2224R	NU2224R	
168.5		14	23.5	3	<b>HJ324</b>	1.40	NJ324	NU324	
168.6		14	22.5	3	<b>HJ324R</b>	1.41	NJ324R	NU324R	
168.5		14	28	3	<b>HJ2324</b>	1.40	NJ2324	NU2324	
168.6		14	26	3	<b>HJ2324R</b>	1.46	NJ2324R	NU2324R	
188		17	30.5	5	<b>HJ424</b>	2.60	NJ424	NU424	



Thrust collars for cylindrical roller bearings

$d$  130 ~ (160) mm



Thrust collar

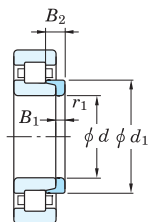
$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
130	165.5	11	19	3	<b>HJ226</b>	0.840	NJ226	NU226
	164.2	11	17	3	<b>HJ226R</b>	0.790	NJ226R	NU226R
	165.5	11	25	3	<b>HJ2226</b>	0.840	NJ2226	NU2226
	164.2	11	21	3	<b>HJ2226R</b>	0.840	NJ2226R	NU2226R
	182	14	24	4	<b>HJ326</b>	1.62	NJ326	NU326
	182.3	14	23	4	<b>HJ326R</b>	1.65	NJ326R	NU326R
	182	14	29.5	4	<b>HJ2326</b>	1.62	NJ2326	NU2326
	182.3	14	28	4	<b>HJ2326R</b>	1.73	NJ2326R	NU2326R
	205	18	32	5	<b>HJ426</b>	3.30	NJ426	NU426
	140	179.5	11	19	3	<b>HJ228</b>	1.00	NJ228
180		11	18	3	<b>HJ228R</b>	0.990	NJ228R	NU228R
179.5		11	25	3	<b>HJ2228</b>	1.00	NJ2228	NU2228
180		11	23	3	<b>HJ2228R</b>	1.07	NJ2228R	NU2228R
196		15	26	4	<b>HJ328</b>	1.93	NJ328	NU328
196		15	25	4	<b>HJ328R</b>	2.04	NJ328R	NU328R
196		15	33.5	4	<b>HJ2328</b>	1.98	NJ2328	NU2328
196		15	31	4	<b>HJ2328R</b>	2.14	NJ2328R	NU2328R
219		18	33	5	<b>HJ428</b>	3.75	NJ428	NU428
150		193	12	20.5	3	<b>HJ230</b>	1.24	NJ230
	193.7	12	19.5	3	<b>HJ230R</b>	1.26	NJ230R	NU230R
	193	12	26.5	3	<b>HJ2230</b>	1.24	NJ2230	NU2230
	193.7	12	24.5	3	<b>HJ2230R</b>	1.35	NJ2230R	NU2230R
	210	15	26.5	4	<b>HJ330</b>	2.37	NJ330	NU330
	210	15	25	4	<b>HJ330R</b>	2.35	NJ330R	NU330R
	210	15	34	4	<b>HJ2330</b>	2.37	NJ2330	NU2330
	210	15	31.5	4	<b>HJ2330R</b>	2.48	NJ2330R	NU2330R
	234	20	36.5	5	<b>HJ430</b>	4.70	NJ430	NU430
	160	207	12	21	3	<b>HJ232</b>	1.48	NJ232
207.3		12	20	3	<b>HJ232R</b>	1.48	NJ232R	NU232R

$d$  (160) ~ (200) mm

$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
160	205	12	28	3	<b>HJ2232</b>	1.48	NJ2232	NU2232
	206.1	12	24.5	3	<b>HJ2232R</b>	1.55	NJ2232R	NU2232R
	225	15	28	4	<b>HJ332</b>	2.75	NJ332	NU332
	222.1	15	25	4	<b>HJ332R</b>	2.59	NJ332R	NU332R
	225	15	37	4	<b>HJ2332</b>	2.75	NJ2332	NU2332
	222.1	15	32	4	<b>HJ2332R</b>	2.76	NJ2332R	NU2332R
170	220.5	12	22	4	<b>HJ234</b>	1.70	NJ234	NU234
	220.8	12	20	4	<b>HJ234R</b>	1.70	NJ234R	NU234R
	219	12	29	4	<b>HJ2234</b>	1.70	NJ2234	NU2234
	219.5	12	24	4	<b>HJ2234R</b>	1.79	NJ2234R	NU2234R
	238	16	29.5	4	<b>HJ334</b>	3.25	NJ334	NU334
	238	16	38.5	4	<b>HJ2334</b>	3.25	NJ2334	NU2334
180	230.5	12	22	4	<b>HJ236</b>	1.80	NJ236	NU236
	230.8	12	20	4	<b>HJ236R</b>	1.79	NJ236R	NU236R
	229	12	29	4	<b>HJ2236</b>	1.80	NJ2236	NU2236
	229.5	12	24	4	<b>HJ2236R</b>	1.88	NJ2236R	NU2236R
	252	17	30.5	4	<b>HJ336</b>	3.85	NJ336	NU336
	252	17	40	4	<b>HJ2336</b>	3.85	NJ2336	NU2336
190	244.5	13	23.5	4	<b>HJ238</b>	2.20	NJ238	NU238
	244.5	13	21.5	4	<b>HJ238R</b>	2.19	NJ238R	NU238R
	243	13	31.5	4	<b>HJ2238</b>	2.20	NJ2238	NU2238
	243.2	13	26.5	4	<b>HJ2238R</b>	2.31	NJ2238R	NU2238R
	265	18	32	5	<b>HJ338</b>	4.45	NJ338	NU338
	265	18	41.5	5	<b>HJ2338</b>	4.45	NJ2338	NU2338
200	258	14	25	4	<b>HJ240</b>	2.60	NJ240	NU240
	258.2	14	23	4	<b>HJ240R</b>	2.65	NJ240R	NU240R
	258	14	34	4	<b>HJ2240</b>	2.60	NJ2240	NU2240
	256.9	14	28	4	<b>HJ2240R</b>	2.78	NJ2240R	NU2240R
	280	18	33	5	<b>HJ340</b>	5.00	NJ340	NU340

Thrust collars for cylindrical roller bearings

$d$  (200) ~ 320 mm



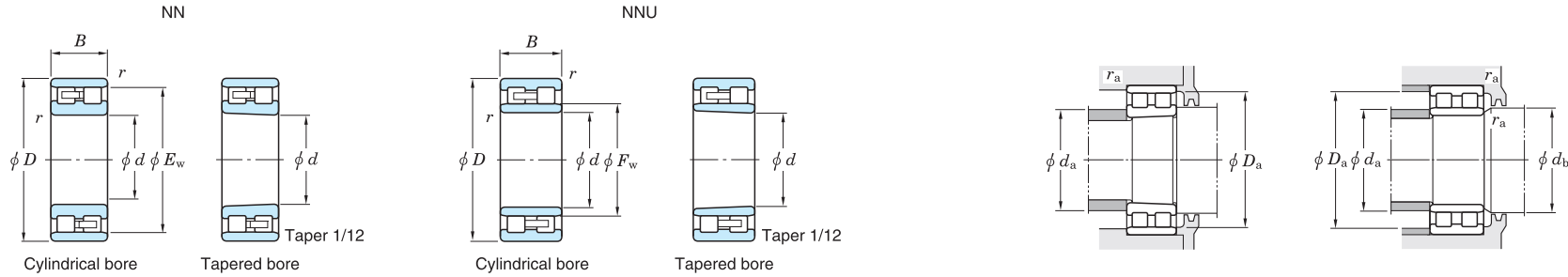
Thrust collar

$d$	Boundary dimensions (mm)				Thrust collar No.	(Refer.) Mass (kg)	Applicable bearing No.	
	$d_1$	$B_1$	$B_2$	$r_1$ min.			NJ	NU
<b>200</b>	280	18	44.5	5	<b>HJ2340</b>	5.00	NJ2340	NU2340
<b>220</b>	286	15	27.5	4	<b>HJ244</b>	3.55	NJ244	NU244
	286	15	36.5	4	<b>HJ2244</b>	3.55	NJ2244	NU2244
	307	20	36	5	<b>HJ344</b>	7.05	NJ344	NU344
<b>240</b>	313	16	29.5	4	<b>HJ248</b>	4.65	NJ248	NU248
	313	16	38.5	4	<b>HJ2248</b>	4.65	NJ2248	NU2248
	335	22	39.5	5	<b>HJ348</b>	8.20	NJ348	NU348
<b>260</b>	340	18	33	5	<b>HJ252</b>	6.20	NJ252	NU252
	340	18	40.5	5	<b>HJ2252</b>	6.20	NJ2252	NU2252
<b>280</b>	360	18	33	5	<b>HJ256</b>	7.15	NJ256	NU256
<b>300</b>	387	20	34.5	5	<b>HJ260</b>	7.40	NJ260	NU260
<b>320</b>	415	21	37	5	<b>HJ264</b>	11.3	NJ264	NU264

# Double-row cylindrical roller bearings



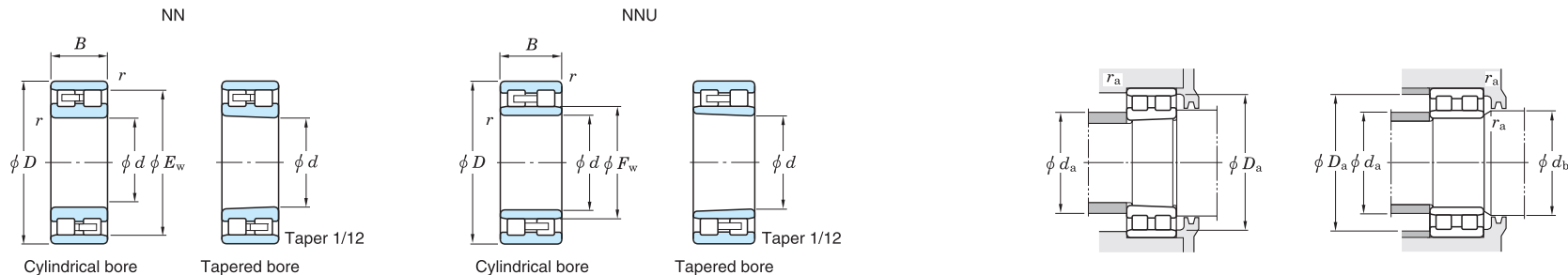
$d$  25 ~ (110) mm



Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No.		Mounting dimensions (mm)		(Refer.) Mass (kg)						
$d$	$D$	$B$	$r_{\text{min}}$	$F_w$	$E_w$	$C_r$	$C_{0r}$	Grease lub.		Oil lub.	Cylindrical bore	Tapered bore	$d_a$ min.	$d_a$ max.	$d_b$ min.	$d_b$ max.	$D_a$ min.	$r_a$ max.	Cylindrical bore	Tapered bore		
25	47	16	0.6	—	41.3	32.2	30.0	5.20	14 000	17 000	NN3005	NN3005K	—	—	29	—	—	43	42	0.6	0.127	0.123
30	55	19	1	—	48.5	46.0	44.1	4.95	12 000	14 000	NN3006	NN3006K	—	—	35	—	—	50	49	1	0.198	0.192
35	62	20	1	—	55	49.1	50.0	5.65	10 000	12 000	NN3007	NN3007K	—	—	40	—	—	57	56	1	0.253	0.246
40	68	21	1	—	61	52.0	55.9	6.35	9 100	11 000	NN3008	NN3008K	—	—	45	—	—	63	62	1	0.307	0.298
45	75	23	1	—	67.5	67.1	71.9	8.75	8 300	9 900	NN3009	NN3009K	—	—	50	—	—	70	69	1	0.404	0.382
50	80	23	1	—	72.5	66.4	72.6	8.85	7 600	9 100	NN3010	NN3010K	—	—	55	—	—	75	74	1	0.429	0.415
55	90	26	1.1	—	81	89.6	101	13.2	6 800	8 200	NN3011	NN3011K	—	—	61.5	—	—	83.5	82	1	0.637	0.618
60	95	26	1.1	—	86.1	91.6	106	13.9	6 400	7 700	NN3012	NN3012K	—	—	66.5	—	—	88.5	87	1	0.685	0.664
65	100	26	1.1	—	91	93.6	111	14.6	6 000	7 200	NN3013	NN3013K	—	—	71.5	—	—	93.5	92	1	0.728	0.705
70	110	30	1.1	—	100	122	148	20.6	5 500	6 500	NN3014	NN3014K	—	—	76.5	—	—	103.5	101	1	1.04	1.02
75	115	30	1.1	—	105	124	155	21.5	5 200	6 200	NN3015	NN3015K	—	—	81.5	—	—	108.5	106	1	1.11	1.08
80	125	34	1.1	—	113	149	186	26.6	4 800	5 800	NN3016	NN3016K	—	—	86.5	—	—	118.5	114	1	1.55	1.50
85	130	34	1.1	—	118	152	194	27.3	4 600	5 500	NN3017	NN3017K	—	—	91.5	—	—	123.5	119	1	1.63	1.58
90	140	37	1.5	—	127	179	228	29.3	4 200	5 100	NN3018	NN3018K	—	—	98	—	—	132	129	1.5	2.07	2.01
95	145	37	1.5	—	132	188	246	31.3	4 100	4 900	NN3019	NN3019K	—	—	103	—	—	137	134	1.5	2.17	2.10
100	140	40	1.1	113	—	173	258	32.9	4 000	4 800	—	—	—	—	106.5	111	115	133.5	—	1	1.95	1.87
	150	37	1.5	—	137	196	265	33.3	3 900	4 700	NN3020	NN3020K	—	—	108	—	—	142	139	1.5	2.28	2.21
105	145	40	1.1	118	—	196	306	40.2	3 900	4 600	—	—	—	—	111.5	116	120	138.5	—	1	2.00	1.91
	160	41	2	—	146	247	322	42.5	3 700	4 400	NN3021	NN3021K	—	—	114	—	—	151	148	2	2.88	2.81
110	150	40	1.1	123	—	204	326	42.4	3 700	4 500	—	—	—	—	116.5	121	125	143.5	—	1	2.10	2.01

Double-row cylindrical roller bearings

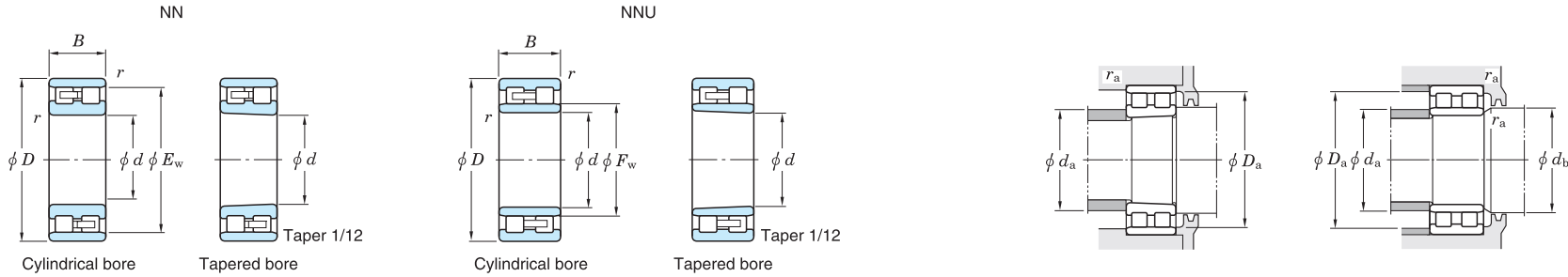
$d$  (110) ~ (260) mm



Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds (min <sup>-1</sup> )		Bearing No.		Mounting dimensions (mm)				(Refer.) Mass (kg)						
$d$	$D$	$B$	$r_{min.}$	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	Cylindrical bore	Tapered bore	$d_a$ min.	$d_a$ max.	$d_b$ min.	$d_b$ max.	$D_a$ min.	$D_a$ max.	$r_a$ min.	$r_a$ max.	Cylindrical bore
110	170	45	2	—	155	278	361	47.9	3 500	4 200	NN3022	NN3022K	—	—	119	—	—	161	157	2	—	3.65	3.56
120	165	45	1.1	134.5	—	234	373	47.6	3 400	4 000	—	—	NNU4924	NNU4924K	126.5	132	137	158.5	—	1	—	2.90	2.77
	180	46	2	—	165	291	392	51.1	3 200	3 900	NN3024	NN3024K	—	—	129	—	—	171	167	2	—	4.00	3.87
130	180	50	1.5	146	—	269	428	50.2	3 100	3 700	—	—	NNU4926	NNU4926K	138	143.5	148	172	—	1.5	—	3.90	3.73
	200	52	2	—	182	356	476	57.7	2 900	3 500	NN3026	NN3026K	—	—	139	—	—	191	183	2	—	5.94	5.76
140	190	50	1.5	156	—	277	456	52.5	2 900	3 500	—	—	NNU4928	NNU4928K	148	153.5	158	182	—	1.5	—	4.15	3.97
	210	53	2	—	192	372	516	61.5	2 700	3 300	NN3028	NN3028K	—	—	149	—	—	201	194	2	—	6.41	6.21
150	210	60	2	168.5	—	430	692	80.7	2 600	3 100	—	—	NNU4930	NNU4930K	159	166	171	201	—	2	—	6.50	6.22
	225	56	2.1	—	206	418	587	70.1	2 500	3 000	NN3030	NN3030K	—	—	161	—	—	214	208	2	—	7.74	7.50
160	220	60	2	178.5	—	425	695	79.8	2 500	3 000	—	—	NNU4932	NNU4932K	169	176	182	211	—	2	—	6.95	6.65
	240	60	2.1	—	219	499	695	79.6	2 400	2 800	NN3032	NN3032K	—	—	171	—	—	229	221	2	—	9.38	9.08
170	230	60	2	188.5	—	451	763	86.4	2 300	2 800	—	—	NNU4934	NNU4934K	179	186	192	221	—	2	—	7.20	6.88
	260	67	2.1	—	236	592	824	105	2 200	2 600	NN3034	NN3034K	—	—	181	—	—	249	238	2	—	12.8	12.4
180	250	69	2	202	—	572	964	117	2 100	2 600	—	—	NNU4936	NNU4936K	189	199.5	205	241	—	2	—	10.5	10.1
	280	74	2.1	—	255	705	958	118	2 000	2 400	NN3036	NN3036K	—	—	191	—	—	269	257	2	—	16.8	16.3
190	260	69	2	210	—	581	996	119	2 000	2 400	—	—	NNU4938	NNU4938K	199	207	215	251	—	2	—	11.0	10.5
	290	75	2.1	—	265	752	1 020	128	1 900	2 300	NN3038	NN3038K	—	—	201	—	—	279	267	2	—	17.6	17.1
200	280	80	2.1	223	—	636	1 050	125	1 900	2 300	—	—	NNU4940	NNU4940K	211	219.5	228	269	—	2	—	15.4	14.7
	310	82	2.1	—	282	793	1 120	137	1 700	2 100	NN3040	NN3040K	—	—	211	—	—	299	285	2	—	22.5	21.8
220	300	80	2.1	244	—	701	1 220	145	1 700	2 000	—	—	NNU4944	NNU4944K	231	241	248	289	—	2	—	16.7	16.0
	340	90	3	—	310	944	1 370	163	1 600	1 900	NN3044	NN3044K	—	—	233	—	—	327	313	2.5	—	29.3	28.4
240	320	80	2.1	263	—	736	1 340	155	1 600	1 900	—	—	NNU4948	NNU4948K	251	260	269	309	—	2	—	18.0	17.2
	360	92	3	—	330	1 090	1 590	184	1 400	1 700	NN3048	NN3048K	—	—	253	—	—	347	333	2.5	—	32.8	31.8
260	360	100	2.1	287	—	1 180	2 050	228	1 400	1 700	—	—	NNU4952	NNU4952K	271	284	296	349	—	2	—	31.4	30.0

# Double-row cylindrical roller bearings

$d$  (260) ~ 460 mm



Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) $C_u$	Limiting speeds ( $\text{min}^{-1}$ )		Bearing No. NN		Mounting dimensions (mm)		(Refer.) Mass (kg)							
$d$	$D$	$B$	$r_{\text{min}}$	$F_w$	$E_w$	$C_r$	$C_{0r}$		Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	$d_a$ min.	$d_a$ max.	$d_b$ min.	$d_b$ max.	$D_a$ min.	$D_a$ max.	$r_a$ min.	$r_a$ max.	Cylindrical bore	Tapered bore
<b>260</b>	400	104	4	—	364	1 290	1 830	204	1 300	1 500	<b>NN3052</b>	<b>NN3052K</b>	—	—	276	—	—	384	367	3	47.4	46.0
<b>280</b>	380	100	2.1	308	—	1 220	2 200	239	1 300	1 500	—	—	<b>NNU4956</b>	<b>NNU4956K</b>	291	305	316	369	—	2	33.1	31.6
	420	106	4	—	384	1 370	2 010	220	1 200	1 400	<b>NN3056</b>	<b>NN3056K</b>	—	—	296	—	—	404	387	3	51.2	49.6
<b>300</b>	420	118	3	339	—	1 470	2 720	285	1 100	1 300	—	—	<b>NNU4960</b>	<b>NNU4960K</b>	313	335	343	407	—	2.5	51.9	49.7
	460	118	4	—	418	1 610	2 460	266	1 100	1 300	<b>NN3060</b>	<b>NN3060K</b>	—	—	316	—	—	444	421	3	70.8	68.7
<b>320</b>	440	118	3	352	—	1 530	2 750	286	1 100	1 300	—	—	<b>NNU4964</b>	<b>NNU4964K</b>	333	348	363	427	—	2.5	53.7	51.4
	480	121	4	—	438	1 690	2 670	283	980	1 200	<b>NN3064</b>	<b>NN3064K</b>	—	—	336	—	—	464	442	3	76.4	74.0
<b>340</b>	460	118	3	372	—	1 580	2 930	301	990	1 200	—	—	<b>NNU4968</b>	<b>NNU4968K</b>	353	368	383	447	—	2.5	56.8	54.3
	520	133	5	—	473	2 090	3 090	345	880	1 100	<b>NN3068</b>	<b>NN3068K</b>	—	—	360	—	—	500	477	4	101	97.8
<b>360</b>	540	134	5	—	493	1 950	3 090	315	830	990	<b>NN3072</b>	<b>NN3072K</b>	—	—	380	—	—	520	497	4	107	104
<b>380</b>	560	135	5	—	510	2 050	3 350	337	780	940	<b>NN3076</b>	<b>NN3076K</b>	—	—	400	—	—	540	514	4	113	109
<b>400</b>	600	148	5	—	548	2 550	4 140	414	700	850	<b>NN3080</b>	<b>NN3080K</b>	—	—	420	—	—	580	552	4	146	141
<b>420</b>	620	150	5	—	570	2 900	4 570	449	670	800	<b>NN3084</b>	<b>NN3084K</b>	—	—	440	—	—	600	574	4	154	149
<b>440</b>	650	157	6	—	597	3 160	5 060	489	620	740	<b>NN3088</b>	<b>NN3088K</b>	—	—	464	—	—	626	602	5	177	171
<b>460</b>	680	163	6	—	627	3 390	5 480	521	570	690	<b>NN3092</b>	<b>NN3092K</b>	—	—	484	—	—	656	632	5	201	195