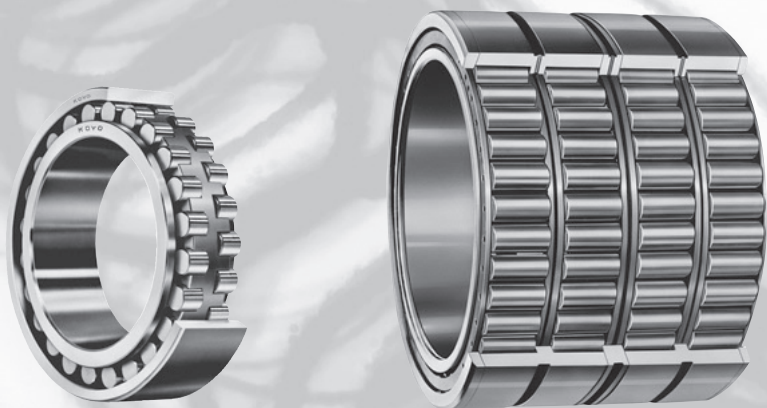


Cylindrical roller bearings

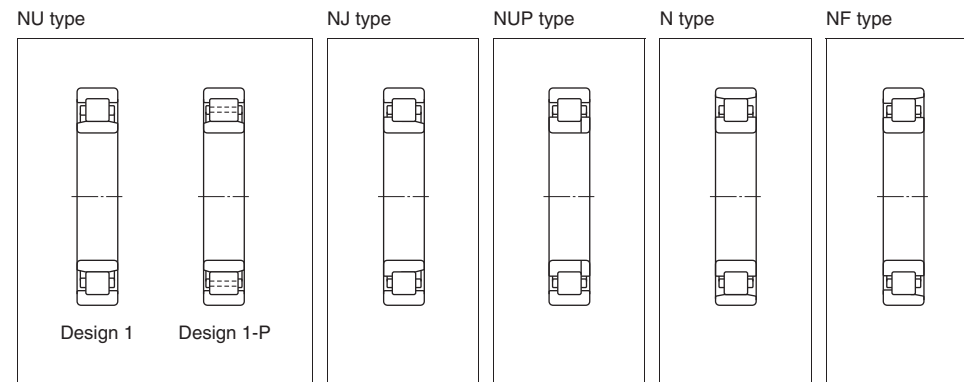


- Cylindrical roller bearings feature high radial load capacity because the rollers and raceway are in linear contact. These bearings are suitable for applications that involve heavy radial and impact loading.
- They are appropriate for high-speed applications in that they can be machined very accurately due to their structure.
- The NU and N types exhibit their best performance when used as free side bearings since they adjust to the shaft's axial movement, to a certain extent, relative to the housing position.
- The NJ and NF types carry axial load in one direction, while the NUP type can carry a certain degree of axial load in both directions.

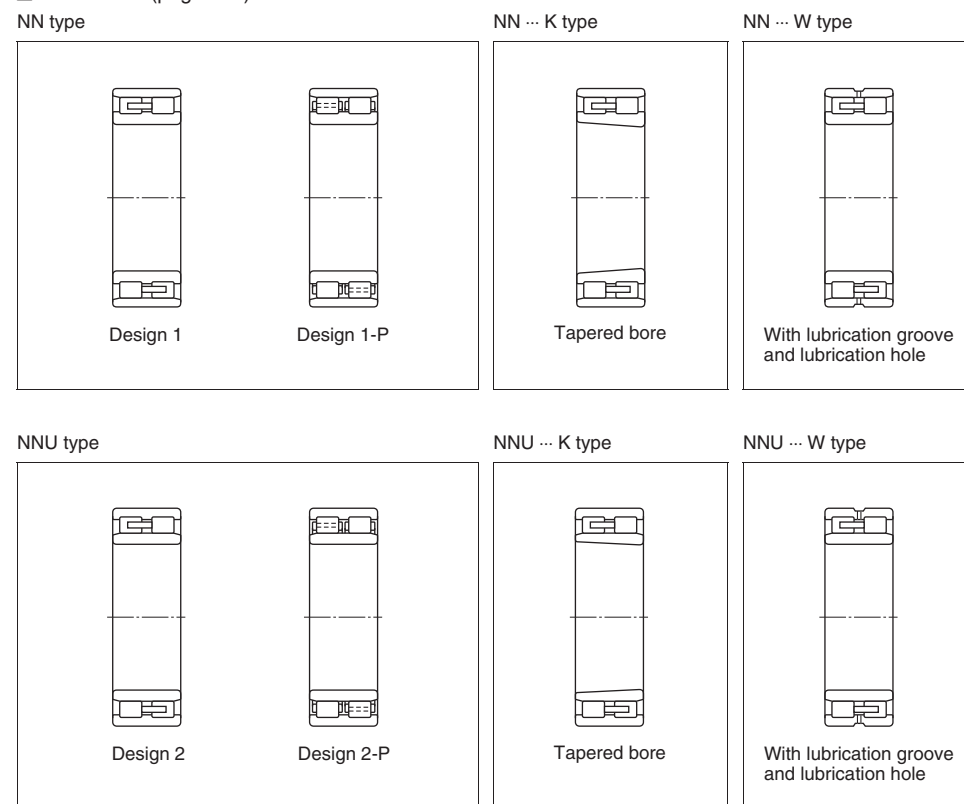


- Double-row cylindrical roller bearings come in two types : with a cylindrical bore, and with a tapered bore. As for those with a tapered bore, the specified amount of clearance can be obtained by adjusting the press-in distance. Some bearings have lubrication holes and lubrication grooves on the outer ring. They are identified by supplementary code "W".

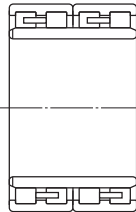
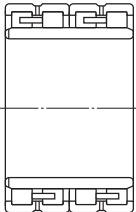
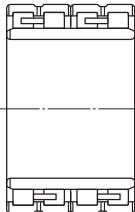
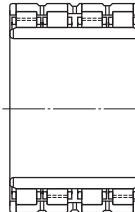
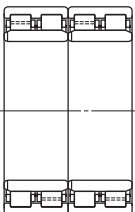
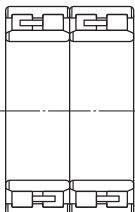
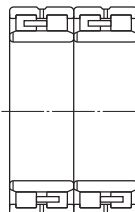
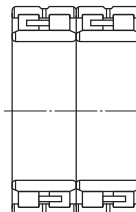
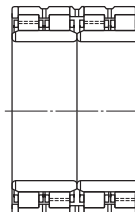
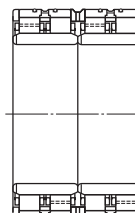
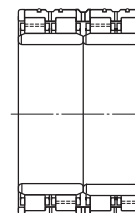
Single-row (page 124)



Double-row (page 138)

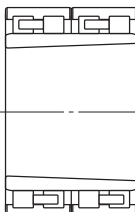
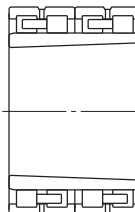
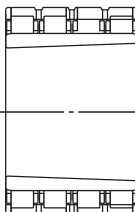
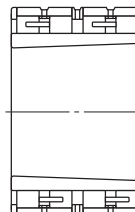
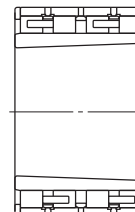
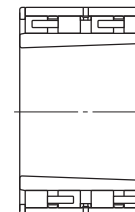


■ Four-row ... Cylindrical bore (page 146)

	Outer ring with rib		Outer ring with loose rib
One inner ring	 Design 1-1  Design 1-2  Design 1-3  Design 1-4		 Design 1-6P
Two inner rings	 Design 2-1P  Design 2-2  Design 2-2P  Design 2-3  Design 2-4		 Design 2-5P  Design 2-6P
Oil mist lubrication			 Design 3-1  Design 3-1P  Design 3-2P

- Four-row cylindrical roller bearings, having superior resistance to radial load, are suitable for use at a high-speed.
- Since the inner ring raceway surface and the roll can be finished simultaneously after the inner ring is mounted on the roll neck (the inner ring raceway surface is grounded by a roll grinding machine, and then, the roll barrel is finished based on the grounded surface), rolling accuracy is improved. Additionally, residual clearance of the bearing can be adjusted freely.
- Some four-row cylindrical roller bearings have nozzle holes and O-rings for oil mist lubrication.

■ Four-row ... Tapered bore (page 172)

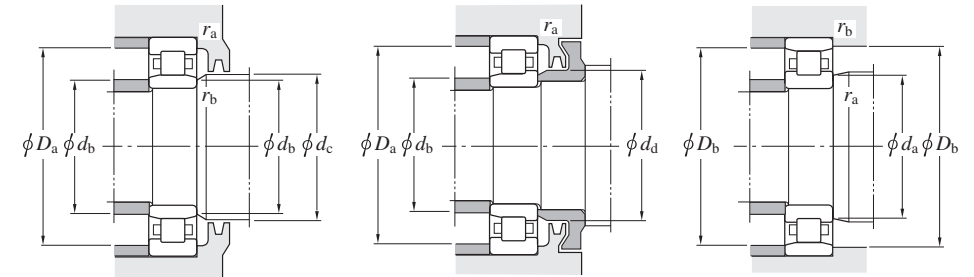
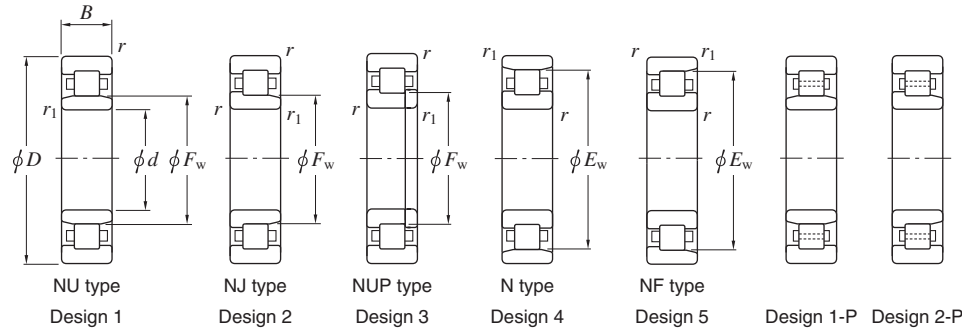
 Design 1-1  Design 1-2		 Design 1-3P  Design 1-4  Design 2-2  Design 2-3
---	--	--

Boundary dimensions	The dimensions of standard series are as specified in JIS B 1512.					
Tolerances	As specified in JIS B 1514.					
	• Single-row, double-row and four-row cylindrical bore bearings--Classes 0, 6 and 5					
	• Four-row tapered bore bearings--Classes 0 and 6 (refer to Table 2-2 on page 18)					
	Tolerances of roller set bore diameter F_w and roller set outside diameter E_w of interchangeable bearings					
	Unit : μm					
	Nominal bore diameter d (mm)		Roller set bore diameter deviation ΔF_w		Roller set outside diameter deviation ΔE_w	
	over	up to	upper	lower	upper	lower
	50	120	+ 20	0	0	- 20
	120	200	+ 25	0	0	- 25
	200	250	+ 30	0	0	- 30
	250	315	+ 35	0	0	- 35
	315	400	+ 40	0	0	- 40
	400	500	+ 45	0	0	- 45
500	600	+ 50	0	0	- 50	
600	700	+ 55	0	0	- 55	
700	800	+ 60	0	0	- 60	
800	900	+ 70	0	0	- 70	
900	1 000	+ 80	0	0	- 80	
1 000	1 250	+ 90	0	0	- 90	
1 250	1 600	+100	0	0	-100	
1 600	2 000	+120	0	0	-120	
2 000	2 500	+150	0	0	-150	
	[Remark] Interchangeable bearings have an inner ring with rollers that can be matched with the outer ring, or an outer ring with rollers that can be matched with the inner ring, without affecting performance in the bearing that has the same bearing number in one category.					
Allowable misalignment	Allowable misalignment of single-row cylindrical roller bearings depends on bearing type and specification. General values are as follows : 1) When P_r / C_r is approx. 10% under load of normal use0.000 6 rad (2') - 0.000 9 rad (3') 2) When P_r / C_r is approx. 6% under load lighter than 1)0.001 2 rad (4') When very large allowable misalignment is required, consult with JTEKT.					
Radial internal clearance	(refer to Table 4-4 on pages 51 and 52)					

Standard cages	Machined cage or pin type cage																												
Equivalent radial load	Dynamic equivalent radial load $P_r = F_r$ Static equivalent radial load $P_{0r} = F_r$																												
Allowable axial load	Cylindrical roller bearings with ribs, including loose rib, on both inner and outer rings accommodate axial load to a certain extent. In such cases, axial load capacity is controlled by the condition of roller end faces, forms of rib or loose rib, lubrication, rotational speed etc. For certain special uses, a design is available to accommodate very heavy axial loads. In general, axial loads allowable for cylindrical roller bearings can be calculated using the following equation, which are based on empirical data. $F_{ap} = 9.8 f_a \cdot f_b \cdot f_p \cdot d_m^2$ where : F_{ap} : maximum allowable axial load N f_a : coefficient determined from loading condition (see below) f_b : coefficient determined from bearing diameter series (see below) f_p : coefficient for rib surface pressure (see below) d_m : mean value of bore diameter d and outside diameter $D \dots \left(\frac{d + D}{2} \right)$ mm <table><tr><th>Loading condition</th><th>f_a</th><th>Diameter series</th><th>f_b</th></tr><tr><td>Continuous loading</td><td>1</td><td>8</td><td>0.4</td></tr><tr><td>Intermittent loading</td><td>2</td><td>9</td><td>0.6</td></tr><tr><td>Instantaneous loading</td><td>3</td><td>0</td><td>0.7</td></tr><tr><td></td><td></td><td>2</td><td>0.8</td></tr><tr><td></td><td></td><td>3</td><td>1.0</td></tr><tr><td></td><td></td><td>4</td><td>1.2</td></tr></table> Relationship between coefficient f_p and value $d_m n$ (n : rotational speed, min^{-1})	Loading condition	f_a	Diameter series	f_b	Continuous loading	1	8	0.4	Intermittent loading	2	9	0.6	Instantaneous loading	3	0	0.7			2	0.8			3	1.0			4	1.2
Loading condition	f_a	Diameter series	f_b																										
Continuous loading	1	8	0.4																										
Intermittent loading	2	9	0.6																										
Instantaneous loading	3	0	0.7																										
		2	0.8																										
		3	1.0																										
		4	1.2																										

Single-row cylindrical roller bearings

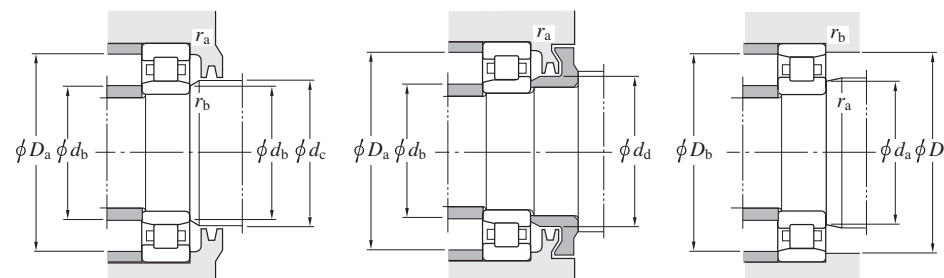
d 100 ~ (120) mm



Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No. ¹⁾	De- sign	Mounting dimensions (mm)										(Refer.) Mass NU (N) (kg)
d	D	B	r min.	r ₁ min.	F _w	E _w	C _r	C _{0r}				d _a min.	d _b min.	d _b max.	d _c min.	d _d min.	D _a max.	D _b max.	D _b min.	r _a max.	r _b max.	
100	150	24	1.5	1.1	113	—	114	120	15.8	NU1020	1, 3	108	106.5	111	116	—	142	—	—	1.5	1	1.46
	180	34	2.1	2.1	—	160	229	217	28.1	N220	4, 5	111	—	—	—	130	169	169	164	2	2	(3.38)
	180	34	2.1	2.1	119	—	312	306	43.0	NU220R	1-3	111	111	117	122	130	169	—	—	2	2	3.52
	180	46	2.1	2.1	120	—	322	338	47.3	NU2220	1-3	111	111	117	122	130	169	—	—	2	2	4.67
	180	46	2.1	2.1	119	—	417	444	60.7	NU2220R	1-3	111	111	117	122	130	169	—	—	2	2	4.82
	180	60.3	2.1	2.1	120	—	409	459	61.9	NU3220	1	111	111	117	122	—	169	—	—	2	2	6.62
	215	47	3	3	—	185.5	373	337	47.2	N320	4, 5	113	—	—	—	143	202	202	190	2.5	2.5	(7.59)
	215	47	3	3	127.5	—	474	424	58.7	NU320R	1-3	113	113	125	132	143	202	—	—	2.5	2.5	7.75
	215	73	3	3	129.5	—	544	548	74.1	NU2320	1-3	113	113	125	132	143	202	—	—	2.5	2.5	11.9
	215	73	3	3	127.5	—	713	717	94.7	NU2320R	1-3	113	113	125	132	143	202	—	—	2.5	2.5	12.1
	215	82.6	3	3	129.5	—	663	706	93.2	NU3320	1	113	113	125	132	—	202	—	—	2.5	2.5	15.0
105	160	26	2	1.1	119.5	—	136	149	19.6	NU1021	1, 3	114	111.5	118	122	—	151	—	—	2	1	1.85
	190	36	2.1	2.1	—	168.8	251	241	34.1	N221	4, 5	116	—	—	—	137	179	179	173	2	2	(4.44)
	225	49	3	3	—	195	451	417	57.2	N321	4, 5	118	—	—	—	149	212	212	199	2.5	2.5	(8.68)
	225	77	3	3	135	—	711	750	97.3	NU2321	1, 3	118	118	131	138	—	212	—	—	2.5	2.5	15.6
110	170	28	2	1.1	125	—	168	171	21.7	NU1022	1, 3	119	116.5	124	128	—	161	—	—	2	1	2.31
	200	38	2.1	2.1	—	178.5	300	290	40.1	N222	4, 5	121	—	—	—	144	189	189	182	2	2	(5.24)
	200	38	2.1	2.1	132.5	—	366	365	51.1	NU222R	1-3	121	121	130	135	144	189	—	—	2	2	4.90
	200	53	2.1	2.1	132.5	—	416	442	58.8	NU2222	1-3	121	121	130	135	144	189	—	—	2	2	6.93
	200	53	2.1	2.1	132.5	—	479	517	69.9	NU2222R	1-3	121	121	130	135	144	189	—	—	2	2	6.93
	200	69.8	2.1	2.1	132.5	—	533	607	80.6	NU3222	1	121	121	130	135	—	189	—	—	2	2	9.55
	240	50	3	3	—	207	502	467	62.9	N322	4, 5	123	—	—	—	158	227	227	211	2.5	2.5	(10.4)
	240	50	3	3	143	—	564	525	70.0	NU322R	1-3	123	123	140	145	158	227	—	—	2.5	2.5	10.7
	240	80	3	3	143	—	755	789	102	NU2322	1-3	123	123	140	145	158	227	—	—	2.5	2.5	18.8
	240	80	3	3	143	—	843	880	112	NU2322R	1-3	123	123	140	145	158	227	—	—	2.5	2.5	18.8
120	165	27	1.1	1.1	131.5	—	146	188	23.1	NU2924	1	126.5	126.5	130	134	—	158.5	—	—	1	1	1.72
	180	28	2	1.1	135	—	173	181	22.6	NU1024	1, 3	129	126.5	134	138	—	171	—	—	2	1	2.47

[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.

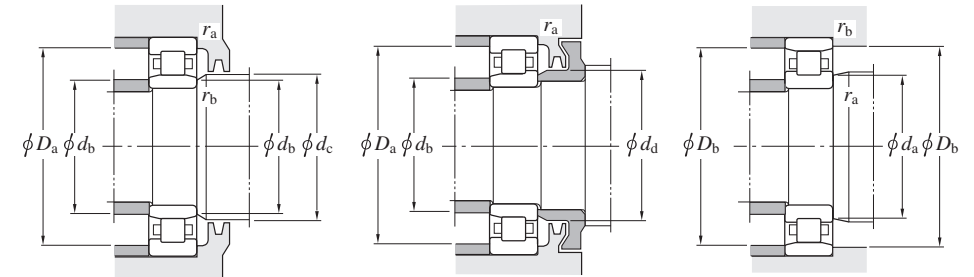
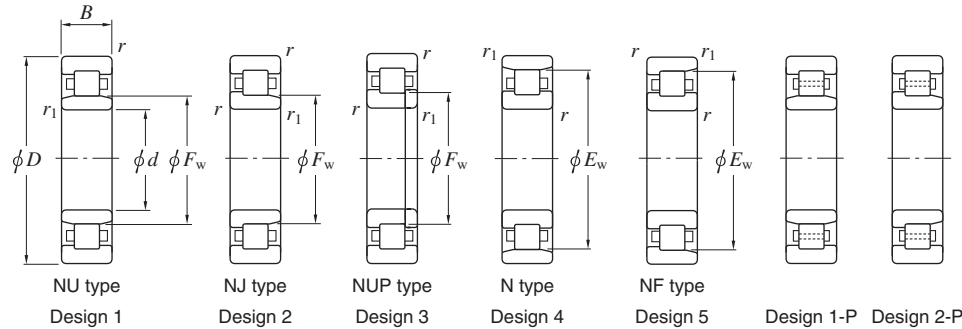
When "4, 5" is on "Design" column, refer to bearing numbers of N type bearings. When two or more numbers for bearings other than that are on "Design" columns, refer to bearing numbers of NU type bearings.



[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.

Single-row cylindrical roller bearings

d (140) ~ (170) mm



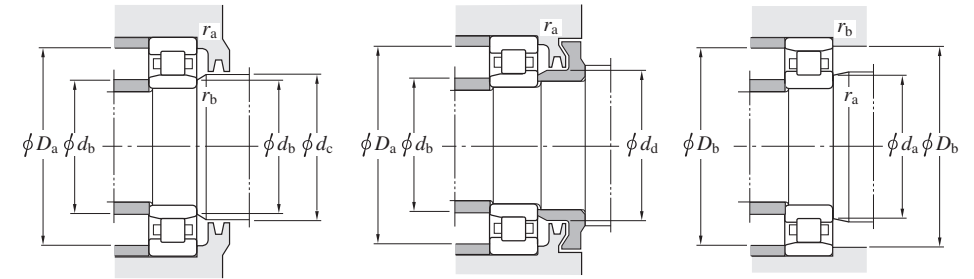
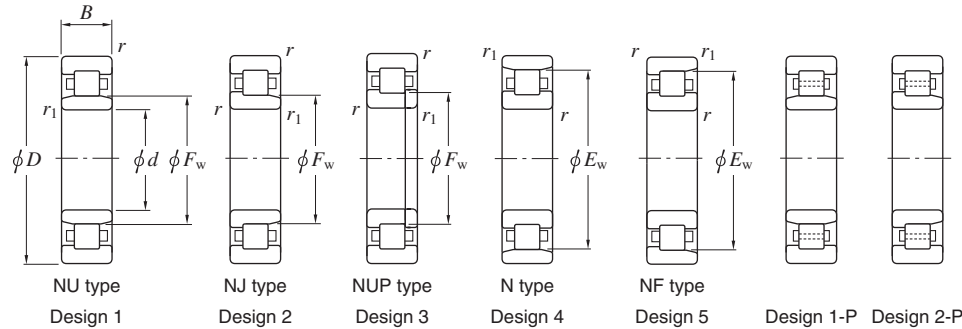
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No. ¹⁾	De- sign	Mounting dimensions (mm)										(Refer.) Mass NU (N) (kg)
d	D	B	$r_{min.}$	$r_{1min.}$	F_w	E_w	C_r	C_{0r}				d_a min.	d_b min.	d_b max.	d_c min.	d_d min.	D_a max.	D_b max.	r_a min.	r_b max.		
140	300	102	4	4	180	—	1 150	1 250	150	NU2328	1~3	156	156	176	182	198	284	—	—	3	3	36.8
	300	102	4	4	180	—	1 270	1 380	167	NU2328R	1~3	156	156	176	182	200	284	—	—	3	3	36.8
150	225	35	2.1	1.5	169.5	—	252	281	32.8	NU1030	1, 3	161	158	167	173	—	214	—	—	2	1.5	4.83
	270	45	3	3	—	238	468	492	63.4	N230	4, 5	163	—	—	—	196	257	257	245	2.5	2.5	(11.1)
	270	45	3	3	182	—	560	594	75.8	NU230R	1~3	163	163	179	184	196	257	—	—	2.5	2.5	10.7
	270	73	3	3	182	—	683	800	99.7	NU2230	1~3	163	163	179	184	196	257	—	—	2.5	2.5	18.7
	270	73	3	3	182	—	828	982	120	NU2230R	1~3	163	163	179	184	196	257	—	—	2.5	2.5	18.7
	320	65	4	4	—	277	829	807	99.1	N330	4, 5	166	—	—	—	213	304	304	281	3	3	(25.6)
	320	65	4	4	193	—	948	922	115	NU330R	1~3	166	166	190	195	213	304	—	—	3	3	27.0
	320	108	4	4	193	—	1 270	1 400	167	NU2330	1~3	166	166	190	195	213	304	—	—	3	3	44.7
	320	108	4	4	193	—	1 450	1 600	187	NU2330R	1~3	166	166	190	195	213	304	—	—	3	3	44.7
	320	128	4	4	193	—	1 610	1 890	217	NU3330	1	166	166	190	195	—	304	—	—	3	3	51.4
160	220	28	2	2	175	—	187	228	25.9	NU1932	2, 3	169	169	173	178	184	211	—	—	2	2	3.08
	220	36	2	2	175	—	249	330	42.5	NU2932	2	169	169	173	178	184	211	—	—	2	2	4.05
	240	38	2.1	1.5	180	—	297	330	42.8	NU1032	1, 3	171	168	178	184	—	229	—	—	2	1.5	5.93
	270	86	2.1	2.1	187	—	854	1 070	129	NU3132	3	171	171	183	190	—	259	—	—	2	2	20.6
	290	48	3	3	—	255	535	568	71.3	N232	4, 5	173	—	—	—	210	277	277	262	2.5	2.5	(13.9)
	290	48	3	3	195	—	624	666	83.3	NU232R	1~3	173	173	192	197	210	277	—	—	2.5	2.5	14.8
	290	80	3	3	195	—	790	939	113	NU2232	1~3	173	173	192	197	210	277	—	—	2.5	2.5	23.6
	290	80	3	3	193	—	1 010	1 190	141	NU2232R	1~3	173	173	192	197	210	277	—	—	2.5	2.5	23.6
	340	68	4	4	—	292	872	876	106	N332	4, 5	176	—	—	—	228	324	324	296	3	3	(30.2)
	340	68	4	4	204	—	1 070	1 050	128	NU332R	1~3	176	176	200	211	228	324	—	—	3	3	32.0
	340	114	4	4	208	—	1 340	1 520	178	NU2332	1~3	176	176	200	211	228	324	—	—	3	3	53.1
	340	114	4	4	204	—	1 640	1 820	212	NU2332R	1~3	176	176	200	211	228	324	—	—	3	3	53.1
340	136	4	4	208	—	1 590	1 890	216	NU3332	1	176	176	200	211	—	324	—	—	3	3	61.5	
170	260	42	2.1	2.1	193	—	347	400	50.5	NU1034	1, 3	181	181	190	197	—	249	—	—	2	2	7.90
	260	67	2.1	2.1	196	—	578	824	98.9	NU3034	1	181	181	193	199	—	249	—	—	2	2	13.0

[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.

When "4, 5" is on "Design" column, refer to bearing numbers of N type bearings. When two or more numbers for bearings other than that are on "Design" columns, refer to bearing numbers of NU type bearings.

Single-row cylindrical roller bearings

d (170) ~ (200) mm

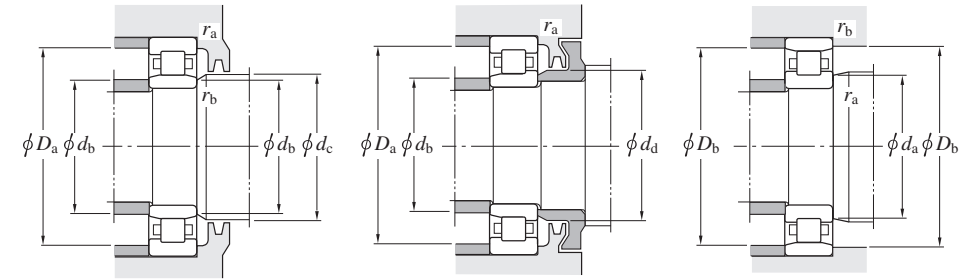
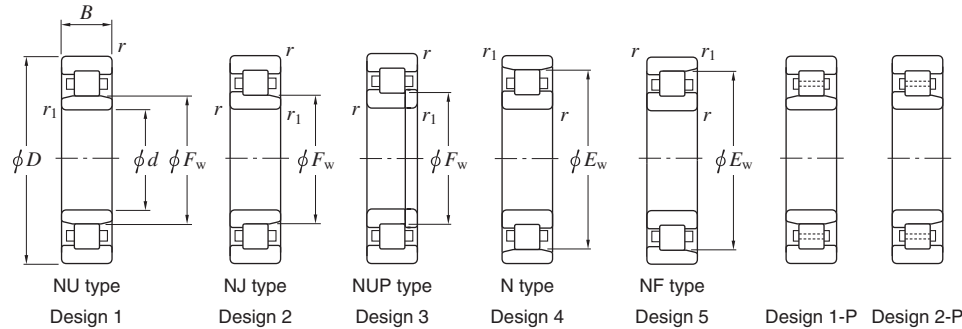


Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No. ¹⁾	De- sign	Mounting dimensions (mm)										(Refer.) Mass NU (N) (kg)
d	D	B	r min.	r ₁ min.	F _w	E _w	C _r	C _{0r}				d _a min.	d _b min.	d _b max.	d _c min.	d _d min.	D _a max.	D _b max.	D _b min.	r _a max.	r _b max.	
170	310	52	4	4	—	272	596	637	78.4	N234	4, 5	186	—	—	—	223	294	294	280	3	3	(17.2)
	310	86	4	4	208	—	896	1 080	127	NU2234	1~3	186	186	204	211	223	294	—	—	3	3	29.2
	310	86	4	4	205	—	1 210	1 410	166	NU2234R	1~3	186	186	204	211	223	294	—	—	3	3	29.2
	360	72	4	4	220	310	997	1 010	122	NU334	1~5	186	186	216	223	241	344	344	314	3	3	38.6
	360	120	4	4	220	—	1 530	1 750	199	NU2334	1~3	186	186	216	223	241	344	—	—	3	3	62.6
180	280	46	2.1	2.1	205	—	447	503	63.2	NU1036	1, 3	191	191	203	209	—	269	—	—	2	2	10.5
	320	52	4	4	—	282	618	677	82.2	N236	4, 5	196	—	—	—	233	304	304	290	3	3	(18.0)
	320	52	4	4	217	—	783	852	104	NU236R	1~3	196	196	214	221	233	304	—	—	3	3	19.3
	320	86	4	4	218	—	929	1 140	133	NU2236	1~3	196	196	214	221	233	304	—	—	3	3	30.4
	320	86	4	4	215	—	1 260	1 510	175	NU2236R	1~3	196	196	214	221	233	304	—	—	3	3	30.4
	320	112	4	4	218	—	1 250	1 680	190	NU3236	1	196	196	214	221	—	304	—	—	3	3	38.4
	380	75	4	4	232	328	1 130	1 150	136	NU336	1~5	196	196	227	235	255	364	364	332	3	3	42.6
	380	126	4	4	232	—	1 690	1 940	220	NU2336	1~3	196	196	227	235	255	364	—	—	3	3	73.0
	380	150	4	4	232	—	2 070	2 520	276	NU3336	1	196	196	227	235	—	364	—	—	3	3	84.4
	290	46	2.1	2.1	215	—	460	530	65.7	NU1038	1, 3	201	201	213	219	—	279	—	—	2	2	10.9
	340	55	4	4	—	299	694	768	91.3	N238	4, 5	206	—	—	—	247	324	324	310	3	3	(21.5)
190	340	55	4	4	230	—	869	954	114	NU238R	1~3	206	206	227	234	247	324	—	—	3	3	23.3
	340	92	4	4	231	—	1 040	1 290	146	NU2238	1~3	206	206	227	234	247	324	—	—	3	3	37.0
	340	120	4	4	231	—	1 420	1 930	216	NU3238	1	206	206	227	234	—	324	—	—	3	3	46.8
	400	78	5	5	245	345	1 220	1 260	146	NU338	1~5	210	210	240	248	268	380	380	349	4	4	49.9
	400	132	5	5	245	—	1 900	2 220	245	NU2338	1~3	210	210	240	248	268	380	—	—	4	4	84.7
	400	155	5	5	245	—	2 340	2 910	316	NU3338	1	210	210	240	248	—	380	—	—	4	4	96.5
	310	51	2.1	2.1	229	—	487	582	71.0	NU1040	1, 3	211	211	226	233	—	299	—	—	2	2	14.1
	360	58	4	4	—	316	775	865	102	N240	4, 5	216	—	—	—	261	344	344	328	3	3	(25.7)
200	360	58	4	4	243	—	958	1 060	124	NU240R	1~3	216	216	240	247	261	344	—	—	3	3	27.2
	360	98	4	4	244	—	1 190	1 490	169	NU2240	1~3	216	216	240	247	261	344	—	—	3	3	44.4
	360	98	4	4	241	—	1 530	1 870	211	NU2240R	1~3	216	216	240	247	261	344	—	—	3	3	44.4

[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.
When "4, 5" is on "Design" column, refer to bearing numbers of N type bearings. When two or more numbers for bearings other than that are on "Design" columns, refer to bearing numbers of NU type bearings.

Single-row cylindrical roller bearings

d (200) ~ (280) mm



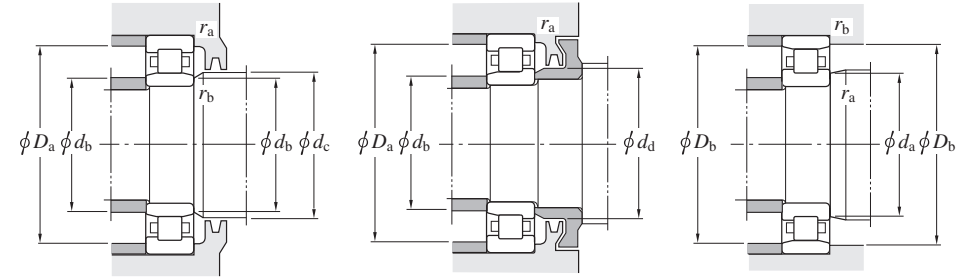
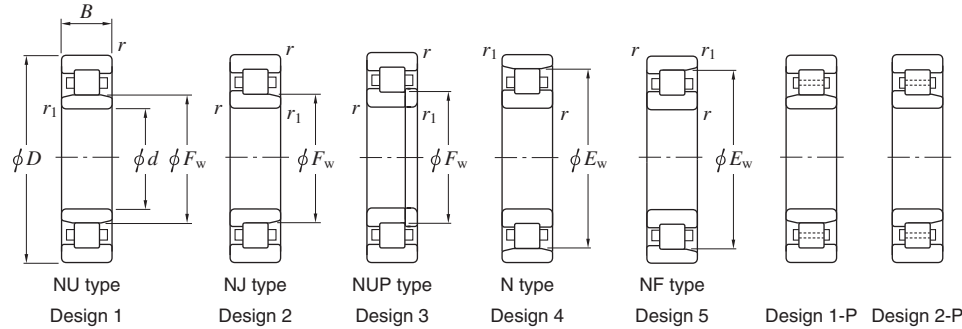
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No. ¹⁾	De- sign	Mounting dimensions (mm)										(Refer.) Mass NU (N) (kg)
d	D	B	r min.	r1 min.	Fw	Ew	Cr	C0r				da min.	db min.	db max.	dc min.	dd min.	Da max.	Db max.	Db min.	ra max.	rb max.	
200	420	80	5	5	260	360	1 220	1 270	145	NU340	1-5	220	220	254	263	283	400	400	364	4	4	56.2
	420	138	5	5	260	—	1 890	2 240	244	NU2340	1-3	220	220	254	263	283	400	—	—	4	4	97.4
	420	165	5	5	260	—	2 330	2 930	314	NU3340	1	220	220	250	258	—	400	—	—	4	4	113
220	340	56	3	3	250	—	637	748	88.1	NU1044	1, 3	233	233	248	254	—	327	—	—	2.5	2.5	18.5
	370	120	4	4	261	—	1 550	2 140	233	NU3144	1	236	236	255	264	—	354	354	—	3	3	53.2
	400	65	4	4	270	350	949	1 080	123	NU244	1-5	236	236	266	273	289	384	384	362	3	3	38.5
	400	108	4	4	270	—	1 420	1 810	196	NU2244	1, 2	236	236	266	273	289	384	—	—	3	3	60.9
	400	144	4	4	270	—	2 040	2 880	308	NU3244	1	236	236	266	273	—	384	—	—	3	3	78.8
	460	88	5	5	284	396	1 490	1 570	176	NU344	1-5	240	240	279	287	309	440	440	400	4	4	74.4
	460	145	5	5	284	—	2 260	2 690	287	NU2344	1, 3	240	240	276	287	—	440	—	—	4	4	119
	460	180	5	5	284	—	2 660	3 300	347	NU3344	1	240	240	279	287	—	440	—	—	4	4	148
240	360	56	3	3	270	—	673	822	95.0	NU1048	1, 3	253	253	268	275	—	347	—	—	2.5	2.5	20.1
	360	92	3	3	276	—	970	1 450	156	NU3048	1	253	253	270	279	—	347	347	—	2.5	2.5	33.0
	440	72	4	4	295	385	1 170	1 340	150	NU248	1-5	256	256	293	298	316	424	424	397	3	3	52.1
	440	120	4	4	295	—	1 790	2 320	246	NU2248	1, 2	256	256	293	298	316	424	—	—	3	3	82.5
	440	160	4	4	295	—	2 450	3 460	358	NU3248	1	256	256	293	298	—	424	—	—	3	3	107
	500	95	5	5	310	430	1 790	1 950	211	NU348	1-5	260	260	305	313	337	480	480	434	4	4	94.6
	500	155	5	5	310	—	2 710	3 320	346	NU2348	1, 3	260	260	303	313	—	480	—	—	4	4	152
260	360	46	2.1	2.1	285	—	566	777	88.8	NU1952	1	271	271	282	288	—	349	349	339	2	2	13.9
	360	60	2.1	2.1	285	—	700	1 020	114	NU2952	1	271	271	282	288	—	349	349	339	2	2	18.4
	400	65	4	4	296	—	819	979	110	NU1052	1, 3	276	276	292	300	—	384	—	—	3	3	29.2
	480	80	5	5	320	420	1 380	1 580	171	NU252	1-5	280	280	318	323	343	460	460	432	4	4	69.0
	480	130	5	5	320	—	2 240	2 950	305	NU2252	1, 2	280	280	318	323	343	460	—	—	4	4	107
	480	174	5	5	320	—	2 680	3 680	373	NU3252	1	280	280	318	323	—	460	—	—	4	4	139
280	350	52	2	2	298	—	536	968	104	NU3856	1	289	289	295	301	—	341	341	—	2	2	11.5
	380	46	2.1	2.1	305	—	508	689	78.2	NU1956	1	291	291	302	308	—	369	369	339	2	2	14.7
	420	65	4	4	316	—	841	1 030	114	NU1056	1, 3	296	296	313	320	—	404	—	—	3	3	35.2

[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.

When two or more numbers for bearings other than that are on "Design" columns, refer to bearing numbers of NU type bearings.

Single-row cylindrical roller bearings

d (280) ~ 480 mm

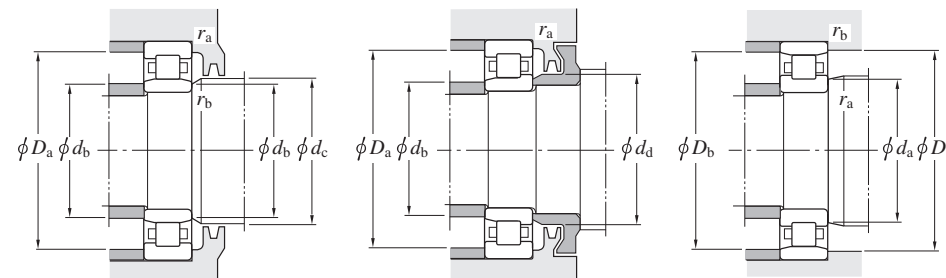
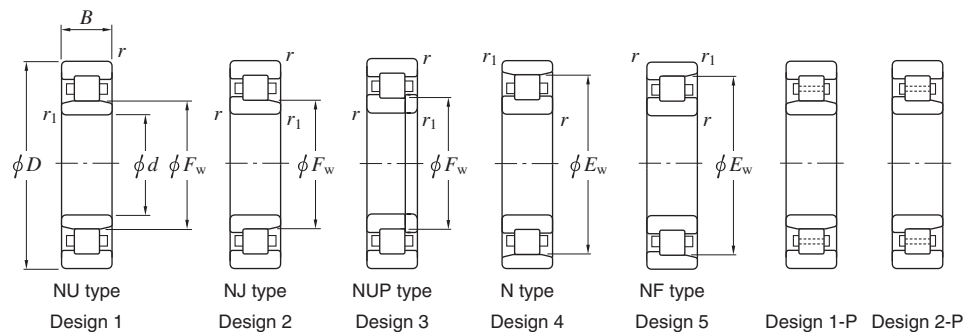


Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No. ¹⁾	De- sign	Mounting dimensions (mm)										(Refer.) Mass NU (N) (kg)
d	D	B	r min.	r ₁ min.	F _w	E _w	C _r	C _{0r}				d _a min.	d _b min.	d _b max.	d _c min.	d _d min.	D _a max.	D _b max.	D _b min.	r _a max.	r _b max.	
280	500	80	5	5	340	440	1 430	1 680	179	NU256	1-5	300	300	336	343	365	480	480	452	4	4	72.7
300	380	60	2.1	2.1	322	—	682	1 300	134	NU3860	1	311	311	319	325	—	369	369	—	2	2	16.6
	420	56	3	3	332	—	635	873	96.0	NU1960	1, 2	313	313	328	335	—	407	407	—	2.5	2.5	23.3
	460	74	4	4	340	—	1 120	1 380	147	NU1060	1, 3	316	316	337	344	—	444	—	—	3	3	44.1
	540	85	5	5	364	476	1 690	1 960	206	NU260	1-5	320	320	361	368	392	520	520	487	4	4	90.7
320	480	74	4	4	360	—	1 150	1 450	152	NU1064	1, 3	336	336	356	365	—	464	—	—	3	3	48.4
	580	92	5	5	390	510	1 920	2 270	232	NU264	1-5	340	340	386	393	419	560	560	522	4	4	114
	670	112	7.5	7.5	425	—	2 460	2 880	287	NU364	1	352	352	419	428	—	638	638	575	6	6	199
340	420	60	2.1	2.1	362	—	784	1 500	150	NU3868	1	351	351	359	365	—	409	409	—	2	2	18.1
	460	56	3	3	370	—	756	1 080	114	NU1968	1	353	353	366	373	—	447	447	434	2.5	2.5	25.7
	460	72	3	3	372	—	999	1 620	168	NU2968	1, 3	353	353	368	375	—	447	447	432	2.5	2.5	34.7
	520	82	5	5	385	—	1 370	1 750	183	NU1068	1-3	360	360	381	390	—	500	—	—	4	4	64.1
360	440	38	2.1	2.1	380	—	426	692	66.3	NU1872	1	371	371	378	383	—	429	429	424	2	2	11.7
	480	56	3	3	392	—	708	1 060	111	NU1972	1	373	373	388	395	—	467	467	—	2.5	2.5	27.3
	480	72	3	3	393	—	1 060	1 820	182	NU2972	1	373	373	390	396	—	467	467	451	2.5	2.5	37.2
	540	82	5	5	405	—	1 410	1 830	189	NU1072	1, 3	380	380	401	410	—	520	—	—	4	4	67.1
	540	134	5	5	413	—	2 470	4 180	396	NU3072	1	380	380	407	416	—	520	520	—	4	4	111
380	480	75	2.1	2.1	405	—	1 070	1 970	193	NU3876	1	391	391	401	408	—	469	469	—	2	2	32.3
	560	82	5	5	425	—	1 440	1 920	195	NU1076	1, 3	400	400	421	430	—	540	—	—	4	4	70.1
400	600	90	5	5	450	—	1 760	2 310	229	NU1080	1, 3	420	420	446	455	—	580	—	—	4	4	91.0
	600	148	5	5	450	—	2 830	4 370	407	NU3080	1	420	420	443	453	—	580	580	—	4	4	148
420	620	90	5	5	470	—	1 750	2 320	228	NU1084	1, 3	440	440	466	475	—	600	—	—	4	4	94.6
460	620	74	4	4	500	—	1 320	1 990	193	NU1992	1	476	476	495	503	—	604	604	585	3	3	60.8
480	650	78	5	5	525	—	1 410	2 200	211	NU1996	1	500	500	520	529	—	630	630	—	4	4	72.7

[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.
When two or more numbers for bearings other than that are on "Design" columns, refer to bearing numbers of NU type bearings.

Single-row cylindrical roller bearings

d 500 ~ 850 mm

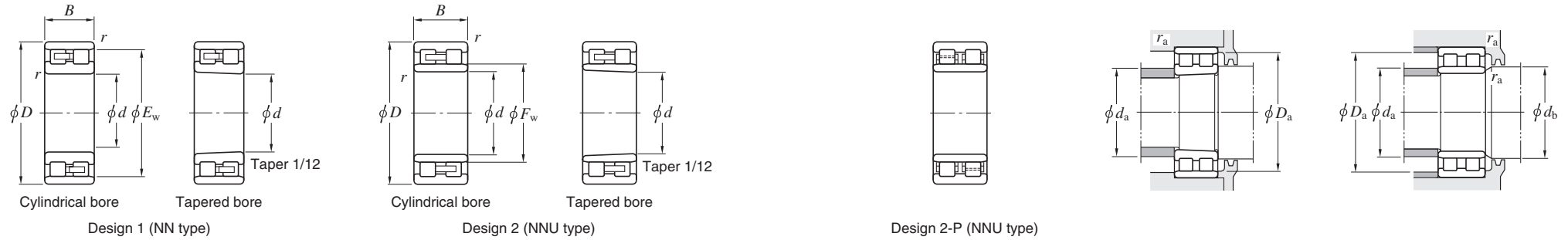


Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No. ¹⁾	De- sign	Mounting dimensions (mm)										(Refer.) Mass NU (N) (kg)
d	D	B	r min.	r ₁ min.	F _w	E _w	C _r	C _{0r}				d _a min.	d _b min.	d _b max.	d _c min.	d _d min.	D _a max.	D _b max.	D _b min.	r _a max.	r _b max.	
500	620	56	3	3	534	—	884	1 560	147	NU18/500	1	513	513	531	537	—	607	607	594	2.5	2.5	37.3
	620	90	3	3	534	—	1 520	3 140	281	NU38/500	1	513	513	530	537	—	607	607	—	2.5	2.5	61.8
	670	78	5	5	546	—	1 840	3 160	294	NU19/500	1-P	520	520	542	550	—	650	650	—	4	4	78.5
	670	100	5	5	546	—	2 430	4 500	408	NU29/500	1-P	520	520	542	550	—	650	650	—	4	4	101
	720	100	6	6	556	—	2 850	4 440	412	NU10/500	1-P	524	524	551	560	—	696	—	674	5	5	141
530	710	82	5	5	575	—	1 650	2 560	241	NU19/530	2	550	550	570	579	—	690	690	673	4	4	86.9
	710	106	5	5	577	—	2 710	4 850	438	NU29/530	1-P	550	550	572	561	—	690	690	—	4	4	118
560	750	85	5	5	613	—	1 990	3 260	293	NU19/560	1	580	580	609	617	—	730	730	—	4	4	105
	750	112	5	5	613	—	3 130	5 870	514	NU29/560	2-P	580	580	607	617	—	730	730	—	4	4	140
600	800	90	5	5	652	—	2 470	4 170	369	NU19/600	1-P	620	620	647	656	—	780	780	—	4	4	126
630	780	88	4	4	671	—	1 900	3 690	317	NU28/630	1	646	646	665	675	—	764	764	—	3	3	91.8
	850	100	6	6	689	—	3 070	5 240	457	NU19/630	1-P	654	654	684	693	—	826	826	—	5	5	165
670	820	69	4	4	708	—	1 920	3 750	329	NU18/670	1-P, 2-P	686	686	705	712	—	804	804	—	3	3	76.6
850	1 030	106	5	5	900	—	2 660	5 960	468	NU28/850	1	870	870	894	905	—	1 010	1 010	—	4	4	175
	1 120	118	6	6	917	—	4 540	8 190	659	NU19/850	1-P	874	874	911	921	—	1 096	1 096	1 061	5	5	310

[Note] 1) For bearings other than NU type bearings (NJ, NUP, N, and NF types), use NJ, NUP, N, and NF for bearing number instead of supplementary code NU. For example, bearing number of a N type bearing having the same dimensions as NU230 is N230.
When two or more numbers for bearings other than that are on "Design" columns, refer to bearing numbers of NU type bearings.

Double-row cylindrical roller bearings

d 100 ~ 200 mm

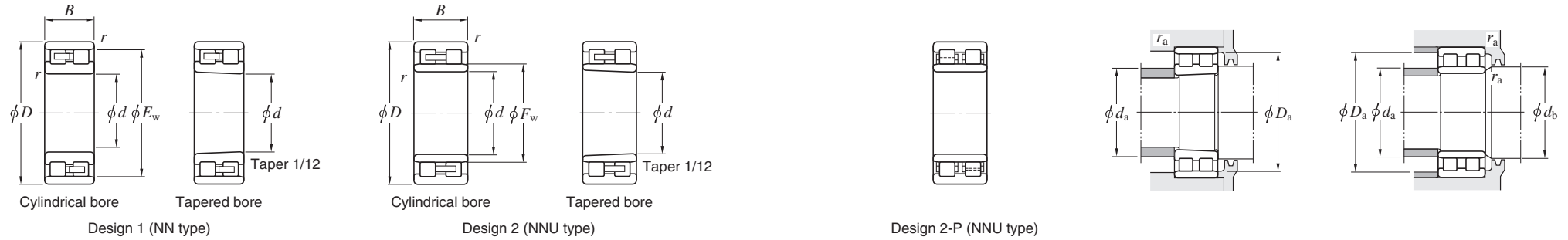


Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit	Bearing No.		De- sign		Mounting dimensions (mm)						(Refer.) Mass (kg)
<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i> min.	<i>F</i> _w	<i>E</i> _w	<i>C</i> _r	<i>C</i> _{0r}	(kN) <i>C</i> _u	NN Cylindrical bore	NNU Cylindrical bore			<i>d</i> _a min.	<i>d</i> _a max.	<i>d</i> _b min.	<i>D</i> _a max.	<i>d</i> _a min.	<i>r</i> _a max.	Cylindrical bore
100	140	40	1.1	113	—	139	258	32.9	—	NNU4920	2		106.5	111	115	133.5	—	1	1.95
	150	37	1.5	—	137	157	265	33.3	NN3020	—	1		108	—	—	142	139	1.5	2.28
105	160	41	2	—	146	197	322	42.5	NN3021	—	1		114	—	—	151	148	2	2.88
110	150	40	1.1	123	—	163	326	42.4	—	NNU4922	2		116.5	121	125	143.5	—	1	2.10
	170	45	2	—	155	221	361	47.9	NN3022	—	1		119	—	—	161	157	2	3.65
120	165	45	1.1	134.5	—	187	373	47.6	—	NNU4924	2		126.5	132	137	158.5	—	1	2.90
	180	46	2	—	165	232	392	51.1	NN3024	—	1		129	—	—	171	167	2	4.00
130	180	50	1.5	146	—	216	428	50.2	—	NNU4926	2		138	143.5	148	172	—	1.5	3.90
	200	52	2	—	182	283	476	57.7	NN3026	—	1		139	—	—	191	183	2	5.94
140	190	50	1.5	156	—	222	456	52.5	—	NNU4928	2		148	153.5	158	182	—	1.5	4.15
	210	53	2	—	192	297	516	61.5	NN3028	—	1		149	—	—	201	194	2	6.41
150	210	60	2	168.5	—	343	692	80.7	—	NNU4930	2		159	166	171	201	—	2	6.50
	225	56	2.1	—	206	334	587	70.1	NN3030	—	1		161	—	—	214	208	2	7.74
160	220	60	2	178.5	—	340	695	79.8	—	NNU4932	2		169	176	182	211	—	2	6.95
	240	60	2.1	—	219	398	695	79.6	NN3032	—	1		171	—	—	229	221	2	9.38
170	230	60	2	188.5	—	361	763	86.4	—	NNU4934	2		179	186	192	221	—	2	7.20
	260	67	2.1	—	236	471	824	105	NN3034	—	1		181	—	—	249	238	2	12.8
180	280	74	2.1	—	255	561	958	118	NN3036	—	1		191	—	—	269	257	2	16.8
190	260	69	2	210	—	465	996	119	—	NNU4938	2		199	207	215	251	—	2	11.0
	290	75	2.1	—	265	598	1 020	128	NN3038	—	1		201	—	—	279	267	2	17.6
200	280	80	2.1	223	—	509	1 050	125	—	NNU4940	2		211	219.5	228	269	—	2	15.4
	310	82	2.1	—	282	631	1 120	137	NN3040	—	1		211	—	—	299	285	2	22.5
	340	112	3	—	304	960	1 640	194	NN3140	—	1		213	—	—	327	307	2.5	41.3

[Remark] The bearing number of the tapered bore type bearing is suffixed by K.

Double-row cylindrical roller bearings

d 220 ~ 410 mm

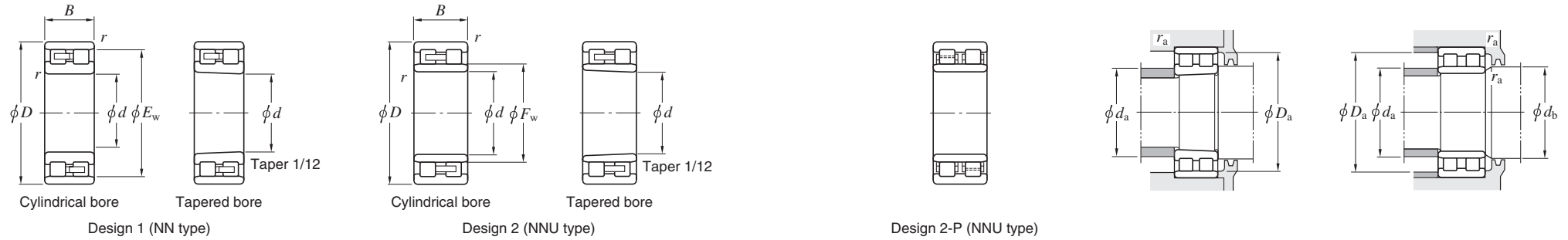


Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.		De- sign		Mounting dimensions (mm)						(Refer.) Mass (kg) Cylindrical bore
d	D	B	$r_{min.}$	F_w	E_w	C_r	C_{0r}		NN Cylindrical bore	NNU Cylindrical bore			d_a min.	d_a max.	d_b min.	d_b max.	D_a min.	r_a max.	
220	300	80	2.1	244	—	561	1 220	145	—	NNU4944	2		231	241	248	289	—	2	16.7
	370	120	4	263	—	1 110	1 950	223	—	NNU3144	2		236	260	268	354	—	3	52.5
240	320	80	2.1	263	—	588	1 340	155	—	NNU4948	2		251	260	269	309	—	2	18.0
	360	92	3	—	330	864	1 590	184	NN3048	—	1		253	—	—	347	333	2.5	32.8
	400	128	4	286	—	1 270	2 290	257	—	NNU3148	2		256	282	291	384	—	3	65.3
260	360	100	2.1	287	—	941	2 050	228	—	NNU4952	2		271	284	296	349	—	2	31.4
280	380	100	2.1	308	—	976	2 200	239	—	NNU4956	2		291	305	316	369	—	2	33.1
	420	106	4	—	384	1 090	2 010	220	NN3056	—	1		296	—	—	404	387	3	51.2
300	420	118	3	339	—	1 170	2 720	285	—	NNU4960	2		313	335	343	407	—	2.5	51.9
	460	118	4	—	418	1 290	2 460	266	NN3060	—	1		316	—	—	444	421	3	70.8
320	480	121	4	—	438	1 350	2 670	283	NN3064	—	1		336	—	—	464	442	3	76.4
	480	160	4	362	—	1 970	4 040	414	—	NNU4064	2		336	358	367	464	—	3	99.9
340	460	118	3	372	—	1 270	2 930	301	—	NNU4968	2		353	368	383	447	—	2.5	56.8
	520	180	5	387	—	2 370	4 810	486	—	NNU4068	2		360	383	393	500	—	4	136
360	480	118	3	390	—	1 340	3 050	314	—	NNU4972	2		373	387	394	467	—	2.5	58.2
	540	134	5	—	493	1 560	3 090	315	NN3072	—	1		380	—	—	520	497	4	107
	540	180	5	407	—	2 430	5 050	503	—	NNU4072	2		380	403	413	520	—	4	142
	540	266	5	407	—	3 930	9 410	903	—	72NNU54266	2-P		380	403	413	520	—	4	219
	600	192	5	—	538	2 820	5 400	534	NN3172	—	1		380	—	—	580	543	4	218
380	570	300	4	423	—	4 970	11 700	1 100	—	76NNU57300	2-P		396	417	425	554	—	3	271
400	600	148	5	—	548	2 030	4 140	414	NN3080	—	1		420	—	—	580	552	4	146
	600	170	5	452	—	2 930	6 200	611	—	80NNU60170	2-P		420	447	458	580	—	4	172
	600	200	5	453	—	2 970	6 280	608	—	NNU4080	2		420	448	459	580	—	4	195
410	600	220	5	470	—	3 700	9 060	856	—	82DC60220	2-P		430	465	476	580	—	4	214

[Remark] The bearing number of the tapered bore type bearing is suffixed by K.

Double-row cylindrical roller bearings

d 420 ~ (670) mm

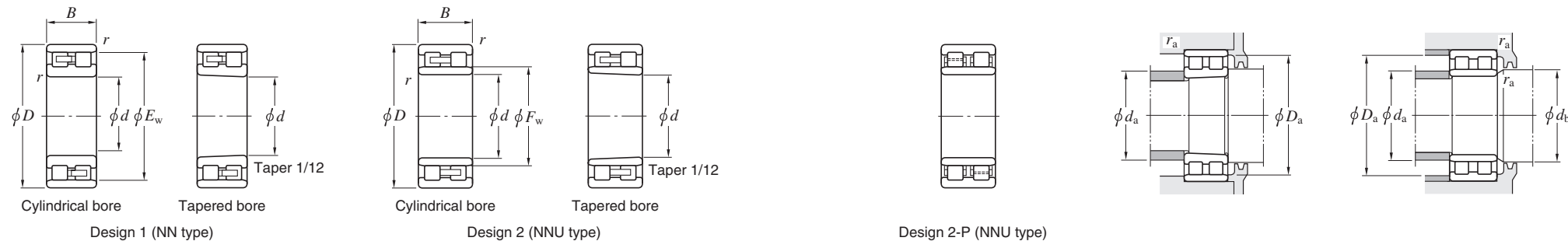


Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.		De- sign	Mounting dimensions (mm)						(Refer.) Mass (kg) Cylindrical bore
d	D	B	$r_{min.}$	F_w	E_w	C_r	C_{0r}		NN Cylindrical bore	NNU Cylindrical bore		d_a min.	d_a max.	d_b min.	d_b max.	D_a min.	r_a max.	
420	560	140	4	460	—	1 670	4 290	413	—	NNU4984	2	436	457	465	544	—	3	96.7
	600	220	5	470	—	3 700	9 060	856	—	84DC60220	2-P	440	465	476	580	—	4	204
	620	150	5	—	570	2 310	4 570	449	NN3084	—	1	440	—	—	600	574	4	154
	620	200	5	473	—	3 050	6 570	629	—	NNU4084-1	2	440	468	479	600	—	4	203
430	750	280	7.5	515	—	6 040	12 100	1 110	—	86DC75280	2-P	462	508	521	718	—	6	539
440	600	160	4	487	—	2 060	5 000	477	—	NNU4988	2	456	483	492	584	—	3	133
	620	225	4	487	—	3 950	9 980	921	—	88DC62225	2-P	456	483	492	604	—	3	220
	650	212	6	493	—	3 430	7 530	707	—	NNU4088A	2	464	488	501	—	—	5	240
	650	230	6	495	—	4 030	9 320	875	—	88NNU65230	2-P	464	489	502	626	—	5	265
460	620	160	4	502	—	2 250	5 440	516	—	NNU4992	2	476	498	507	604	—	3	136
480	680	280	6	527	—	5 160	12 900	1 150	—	96NNU68280	2-P	504	521	531	656	—	5	325
500	670	170	5	545	—	2 940	7 660	706	—	100DC67170A	2-P	520	541	551	650	—	4	171
	680	210	5	547	—	3 810	9 870	891	—	100NNU68210	2-P	520	542	552	660	—	4	225
	720	270	8	556	—	4 740	11 400	1 040	—	100DC72270A	2-P	532	551	565	688	—	6	353
	720	300	7	556	—	5 580	14 100	1 260	—	100DC72300B	2-P	532	551	561	688	—	5.5	405
508	749.3	355.6	6	566	—	7 350	18 300	1 600	—	102DC75356	2-P	532	560	573	725	—	5	540
560	735	170	5	604.6	—	3 040	7 730	694	—	112DC74170	2-P	580	598	609	715	—	4	194
	750	190	5	613	—	3 190	7 940	714	—	NNU49/560	2	580	608	619	730	—	4	233
600	800	200	5	652	—	3 500	8 630	762	—	NNU49/600	2	620	647	658	780	—	4	272
	870	200	6	—	801	3 940	8 450	746	NN30/600	—	1	624	—	—	846	807	5	388
630	780	150	4	671	—	2 430	6 800	591	—	NNU48/630	2	646	667	676	764	—	3	154
640	890	320	6	705	—	7 330	19 900	1 650	—	128DC89320	2-P	664	699	713	866	—	5	625
670	900	230	6	732	—	5 270	14 100	1 190	—	NNU49/670	2-P	694	726	740	876	—	5	420

[Remark] The bearing number of the tapered bore type bearing is suffixed by K.

Double-row cylindrical roller bearings

d (670) ~ 710 mm

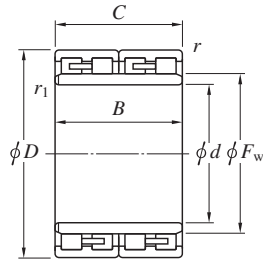


Boundary dimensions (mm)						Basic load ratings (kN)		Fatigue load limit (kN) Cu	Bearing No.		De- sign	Mounting dimensions (mm)						(Refer.) Mass (kg) Cylindrical bore
d	D	B	r min.	Fw	Ew	Cr	C0r		NN Cylindrical bore	NNU Cylindrical bore		da min.	da max.	db min.	Db max.	Da min.	ra max.	
670	920	330	6	738	—	7 370	20 800	1 700	—	134NNU92330	2-P	694	732	746	896	—	5	662
710	950	243	6	775	—	5 890	16 200	1 350	—	NNU49/710	2-P	734	769	783	926	—	5	491

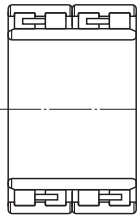
[Remark] The bearing number of the tapered bore type bearing is suffixed by K.

Four-row cylindrical roller bearings

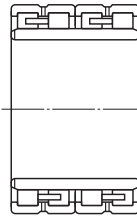
d 100 ~ (160) mm



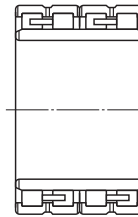
Design 1-1



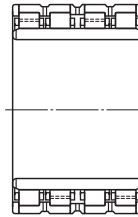
Design 1-2



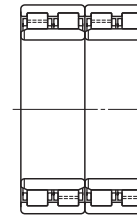
Design 1-3



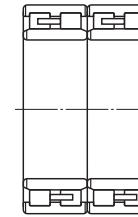
Design 1-4



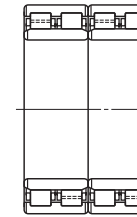
Design 1-6P



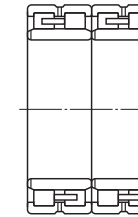
Design 2-1P



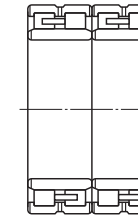
Design 2-2



Design 2-2P



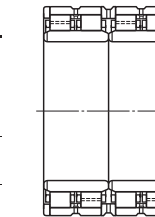
Design 2-3



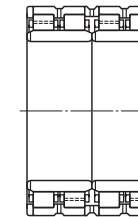
Design 2-4

Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C _u	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F _w	r _{min.}	r _{l min.}	C _r	C _{0r}					d _{a min.}	D _{a max.}	min.	r _a ¹⁾ max.	r _b ¹⁾ max.	
100	140	120	120	110	1.1	1.1	607	945	134	20FC14120		2-2	107	133	131	1	1	5.6
110	170	90	90	127	2	2	538	692	92.0	22FC1790		1-2	120	160	155	2	2	7.4
	180	120	120	128	2	2	798	971	123	22FC18120		2-2	119	170	164	2	1.5	12
115	165	90	90	132.5	1.1	1.1	498	751	90.3	23FC1690		1-1	122	158	154	1	1	6.5
120	165	87	87	134.5	1.1	1.1	468	745	95.2	24FC1787		1-2	127	158	154	1	1	5.6
	180	105	105	135	2	1.1	613	796	96.7	4CR120		1-2	127	170	165	2	1	9.3
127	174.65	150.812	150.812	139.5	1.1	1.1	789	1 300	170	25FC17150		2-2	134	167	163	1	1	10.5
	203.2	127	127	147	2	2	930	1 180	160	25FC20127		1-3	137	193	185	2	2	15.4
130	200	104	104	150	2	2	711	953	115	26FC20104		1-2	140	190	182	2	2	11.8
	200	125	125	149	2	2	946	1 310	176	26FC20125		1-2	140	190	183	2	2	14.4
140	190	119	119	154	1.5	1.5	707	1 160	136	28FC19119W		1-3	149	181	178	1.5	1.5	9.6
	210	116	116	158	2	2	848	1 120	131	28FC21116		1-2	150	200	194	2	2	13.5
145	210	155	155	166	1.1	1.1	1 060	1 710	223	29FC21155		1-2	152	203	196	1	1	17.8
	225	156	156	169	2	2	1 150	1 680	219	313924		1-2	155	215	205	2	2	22.9
150	200	120	120	162	2	2	840	1 400	180	30FC20120		1-2	160	190	188	2	2	10.1
	210	120	120	168.5	2	2	859	1 380	161	30FC21120		2-2	160	200	196	2	2	12.8
	210	150	150	165	2	2	1 090	1 780	231	30FC21150		1-2	160	200	195	2	2	15.9
	220	150	150	170	2	2	1 110	1 760	229	30FC22150		1-2	160	210	202	2	2	19.2
	220	150	150	168	2	2	1 110	1 760	229	30FC22150A		1-2	160	210	200	2	2	19.5
	230	156	156	174	2	2	1 210	1 810	238	313891-1		1-2	160	220	210	2	2	23.8
160	220	180	180	177	2	2	1 210	2 170	271	32FC22180		1-2	170	210	205	2	2	20.5
	230	130	130	180	2.1	2.1	1 090	1 740	217	314190		1-2	172	218	212	2	2	17.7
	230	168	168	182	1.1	1.1	1 300	2 210	273	32FC23170		1-2	167	223	214	1	1	22.8
	230	168	168	180	2	2	1 310	2 200	273	32FC23170A		1-2	170	220	212	2	2	23.1

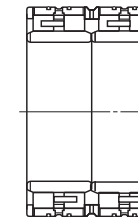
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r.
r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r₁.



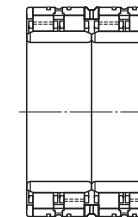
Design 2-5P



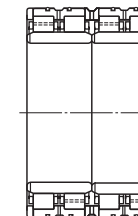
Design 2-6P



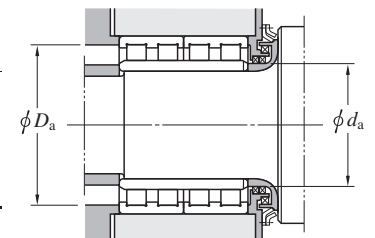
Design 3-1



Design 3-1P

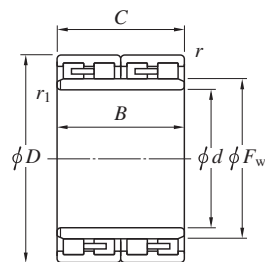


Design 3-2P

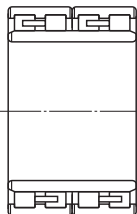


Four-row cylindrical roller bearings

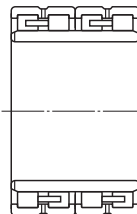
d (160) ~ (200) mm



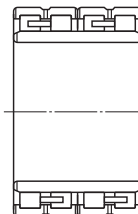
Design 1-1



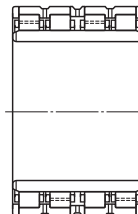
Design 1-2



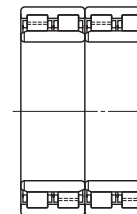
Design 1-3



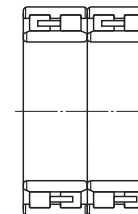
Design 1-4



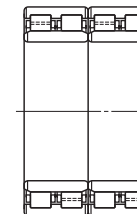
Design 1-6P



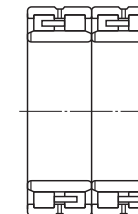
Design 2-1P



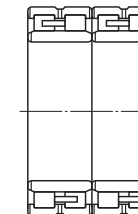
Design 2-2



Design 2-2P

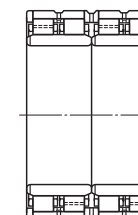


Design 2-3

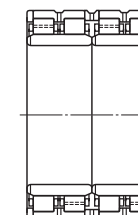


Design 2-4

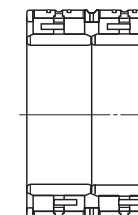
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.	Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	r min.	r_1 min.	C_r	C_{0r}				d_a min.	D_a max.	r_a ¹⁾ max.	r_b ¹⁾ max.		
160	230	168	168	179	2	2	1 400	2 210	276	32FC23170B	1-4	170	220	215	2	2	22.6
	230	180	180	177	2	2	1 430	2 270	282	32FC23180A	1-2	170	220	213	2	2	24.1
	240	120	120	183	2.1	2.1	831	1 140	128	32FC24120W	1-3	172	228	219	2	2	18.5
	240	170	170	183	2.1	2.1	1 480	2 220	279	32FC24170	1-2	172	228	223	2	2	26.8
170	230	120	120	187	2	2	976	1 680	208	34FC23120	1-2	180	220	215	2	2	14.4
	240	156	156	190	2	2	1 220	2 050	256	34FC24156A	1-2	180	230	222	2	2	22.4
	240	156	156	189	2	2	1 320	2 100	264	34FC24156B	1-2	180	230	225	2	2	21.8
	240	190	190	187	1.5	1.5	1 580	2 620	317	34FC24190	1-2	179	231	223	1.5	1.5	26.9
	250	168	168	192	2.1	2.1	1 470	2 230	277	34FC25168	1-2	182	238	232	2	2	27.6
	250	170	170	192	2.1	2.1	1 470	2 230	277	34FC25170	1-2	182	238	232	2	2	27.8
	260	150	150	195	2.1	2.1	1 380	2 000	253	34FC26150	1-2	182	248	237	2	2	28.8
178	258.75	150	150	199	1.5	1.5	1 370	2 070	261	36FC26150	1-2	187	250	239	1.5	1.5	25.8
180	250	156	156	200	2	2	1 310	1 980	271	36FC25156A	1-2	190	240	234	2	2	23.3
	260	168	168	202	2.1	2.1	1 440	2 390	291	313812W	1-4	192	248	238	2	2	29.7
	260	168	168	202	2.1	2.1	1 540	2 420	297	36FC26168	1-2	192	248	242	2	2	29.3
	265	180	180	203	2	2	1 630	2 600	313	36FC27180	1-2	190	255	243	2	2	33.6
190	260	168	168	212	2.1	2.1	1 430	2 600	309	38FC26168-1	1-2	202	248	244	2	2	26.5
	270	170	170	212	2	2	1 430	2 310	283	38FC27170	1-2	200	260	250	2	2	30.8
	270	170	170	213	2	2	1 430	2 310	283	38FC27170A	1-2	200	260	251	2	2	31.0
	270	200	200	212	2	2	1 840	3 080	368	314199	1-2	200	260	252	2	2	36.1
	280	200	200	214	2.1	2.1	1 940	3 100	370	38FC28200	1-2	202	268	258	2	2	42
	290	190	190	215	2.1	2.1	1 950	2 860	340	38FC29190	1-2	202	278	265	2	2	44.9
195	300	226	226	220	2.1	2.1	2 460	3 690	430	39FC30226	1-2	207	288	274	2	2	57.9
200	270	170	170	222	2	2.1	1 480	2 780	324	314553	1-2	212	260	254	2	2	28.0
	280	152	152	222	2.1	2.1	1 380	2 150	265	40FC28152BW	1-3	212	268	262	2	2	28.0



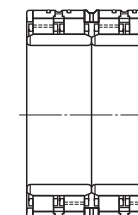
Design 2-5P



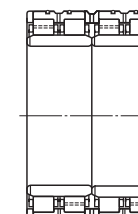
Design 2-6P



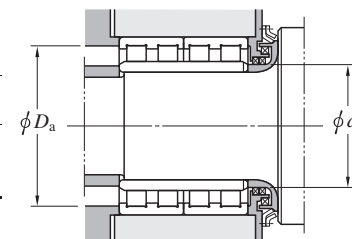
Design 3-1



Design 3-1P



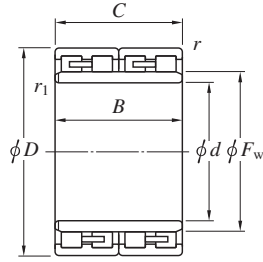
Design 3-2P



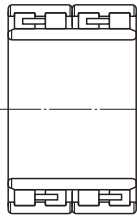
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

Four-row cylindrical roller bearings

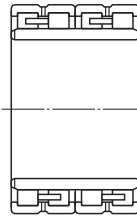
d (200) ~ (240) mm



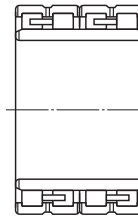
Design 1-1



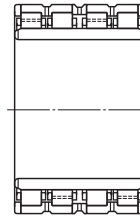
Design 1-2



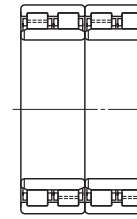
Design 1-3



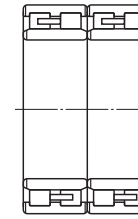
Design 1-4



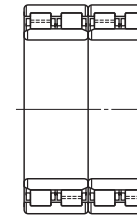
Design 1-6P



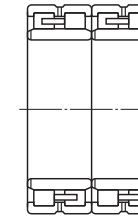
Design 2-1P



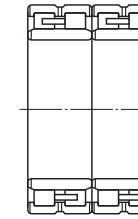
Design 2-2



Design 2-2P

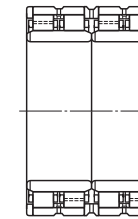


Design 2-3

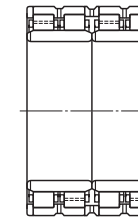


Design 2-4

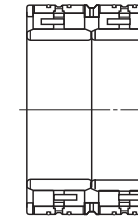
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.	Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	r min.	r_1 min.	C_r	C_{0r}				d_a min.	D_a max.	$r_a^{1)}$ max.	$r_b^{1)}$ max.		
200	280	170	170	222	2.1	2.1	1 600	2 620	313	40FC28170	1-2	212	268	262	2	2	31.7
	280	188	188	222	2.1	2.1	1 690	2 810	331	40FC28188	1-2	212	268	262	2	2	35.0
	280	190	190	223	3	3	1 820	3 100	359	40FC28190A	1-2	214	266	263	2.5	2.5	36.0
	280	200	200	222	2	2	1 820	3 090	365	313893-1	1-2	210	270	262	2	2	37.7
	280	200	200	224	2.1	2.1	1 820	3 330	388	40FC28200	1-2	212	268	260	2	2	38.7
	290	192	192	226	2.1	2.1	1 840	3 030	350	313811	1-2	212	278	268	2	2	42.0
	310	160	160	232	2.1	2.1	1 590	2 240	274	40FC31160	1-1	212	298	282	2	2	44.6
	310	206	206	227	2.1	2.1	2 260	3 240	387	40FC31206	1-2	212	298	283	2	2	56.6
206	299.97	170	170	229	2	2	1 840	2 780	333	41FC30170	1-2	216	289	277	2	2	39.2
210	290	192	192	236	2.1	2.1	1 820	3 270	372	42FC29192	1-2	222	278	274	2	2	38.1
	300	210	210	234	2.1	2.1	2 080	3 490	407	42FC30210	1-2	222	288	278	2	2	47.3
220	300	150	150	240	2.1	2.1	1 510	2 500	298	44FC30150W	1-3	232	288	280	2	2	30.7
	310	192	192	247	2.1	2.1	1 910	3 270	369	313837-1	1-2	232	298	289	2	2	45.5
	310	192	192	246	2	2	2 050	3 420	398	313837A	1-2	230	300	291	2	2	44.9
	310	192	192	245	3	2.1	1 820	2 980	349	44FC31192W	1-3	232	296	289	2.5	2	43.9
	310	225	225	244	2.1	2.1	2 360	4 160	467	44FC31225A	1-2	232	298	288	2	2	53.5
	320	210	210	246	2.1	2.1	2 200	3 490	406	44FC32210	1-2	232	308	296	2	2	55.4
	320	210	210	248	2.1	2.1	2 270	3 740	430	44FC32210-1	1-4	232	308	296	2	2	56.7
	340	180	180	256	3	3	1 890	2 750	326	44FC34180A	1-4	234	326	310	2.5	2.5	59.0
230	330	206	206	260	2.1	2.1	2 360	3 980	450	313824A	1-2	242	318	308	2	2	57.5
	340	260	260	261	3	3	2 890	4 900	549	46FC34260	1-2	244	326	313	2.5	2.5	81.2
237	339.67	200	200	264	2	2	2 310	3 780	432	47FC34200	1-2	247	329	314	2	2	58.0
240	330	220	220	270	3	3	2 220	4 250	471	312943/1YD	1-4	254	316	310	2.5	2.5	55.5
	330	220	220	264	2.1	2.1	2 300	4 120	462	48FC33220	1-2	252	318	308	2	2	54.3
	330	220	220	268	3	3	2 210	4 070	454	48FC33220BW	1-4	254	316	310	2.5	2.5	55.5
	330	250	250	263	2.1	2.1	2 700	4 910	546	48FC33250W	1-3	252	318	309	2	2	63.7



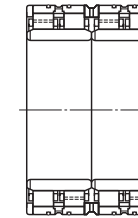
Design 2-5P



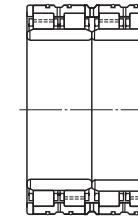
Design 2-6P



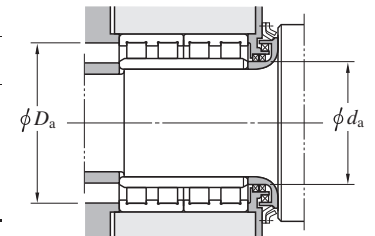
Design 3-1



Design 3-1P



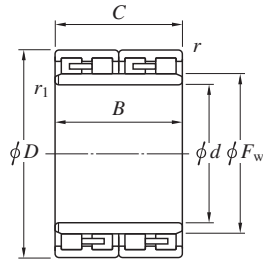
Design 3-2P



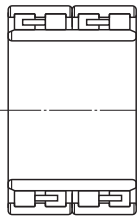
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

Four-row cylindrical roller bearings

d (240) ~ (290) mm



Design 1-1



Design 1-2



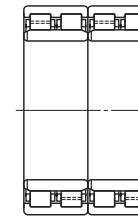
Design 1-3



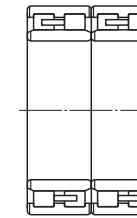
Design 1-4



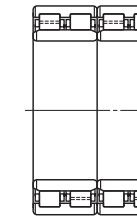
Design 1-6P



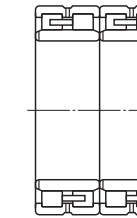
Design 2-1P



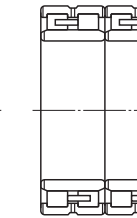
Design 2-2



Design 2-2P

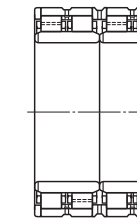


Design 2-3

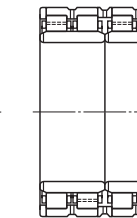


Design 2-4

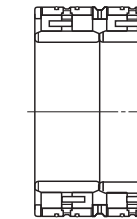
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	$r_{min.}$	$r_{lmin.}$	C_r	C_{0r}					d_a min.	D_a max.	$r_a^{1)}$ min.	$r_a^{1)}$ max.	$r_b^{1)}$ max.	
240	340	200	200	266	3	3	2 350	3 780	432	48FC34200		1-2	254	326	318	2.5	2.5	56.3
	340	220	220	268	3	3	2 510	4 240	472	48FC34220		1-2	254	326	318	2.5	2.5	63.4
250	350	220	220	278	3	3	2 420	4 200	467	50FC35220		1-2	264	336	326	2.5	2.5	64.6
260	355	260	260	286	2.1	2.1	2 860	5 440	591	52FC35260		2-2	272	343	332	2	2	75.0
	360	192	192	287	2.1	2.1	2 190	3 740	416	52FC36192W		1-3	272	348	335	2	2	59.8
	360	200	200	287	2.1	2.1	2 360	4 110	456	52FC36200		1-2	272	348	335	2	2	62.0
	360	230	230	292.5	2.1	2.1	2 680	4 900	528	52FC36230CW		1-4	272	348	340	2	2	69.7
	360	230	230	292	2.1	2.1	2 520	4 790	515	52FC36230D		1-2	272	348	336	2	2	72.6
	360	260	260	287	2.1	2.1	2 880	5 320	579	52FC36260		2-2	272	348	335	2	2	80.0
	368	268	268	288	2.1	2.1	3 430	5 990	645	52FC37268W		1-4	272	356	344	2	2	89.9
	370	220	220	292	3	3	2 500	4 330	476	313823		1-2	274	356	342	2.5	2.5	76.0
	370	220	220	290	3	3	2 730	4 480	497	313823A		1-2	274	356	346	2.5	2.5	75.0
	370	260	260	290	2.1	2.1	3 310	5 740	623	52FC37260		1-2	272	358	346	2	2	88.5
265	370	234	234	292	1.5	1.5	2 870	4 910	536	53FC37234A		1-2	274	361	346	1.5	1.5	76.3
	370	234	234	300	1.5	1.5	2 830	5 290	579	53FC37234B		2-2	274	361	348	1.5	1.5	78.5
270	380	230	230	298	2.1	2.1	2 910	4 910	535	54FC38230		1-2	282	368	354	2	2	80.0
280	380	170	170	306	2.1	2.1	2 130	3 590	398	56FC38170W		1-3	292	368	356	2	2	55.0
	390	220	220	312	3	3	2 590	4 640	501	313822		1-2	294	376	362	2.5	2.5	81.8
	390	220	220	308	3	3	2 730	4 670	508	313822A		1-2	294	376	362	2.5	2.5	79.7
	390	220	220	306	3	2.1	3 160	5 350	575	313822C		1-2	292	376	364	2.5	2	79.7
	390	220	220	312	3	3	2 910	5 100	547	313822D		1-2	294	376	366	2.5	2.5	80.1
	390	240	240	312	3	3	3 070	5 620	608	56FC39240		1-2	294	376	364	2.5	2.5	88.1
	390	275	275	309	2.1	2.1	3 360	6 110	647	56FC39275B		1-2	292	378	363	2	2	100
	390	275	275	308	3	2.1	3 810	6 850	719	56FC39275J		2-4	292	376	366	2.5	2	102
	410	300	300	314	3	3	4 680	8 400	895	56FC41300		2-6P	294	396	378	2.5	2.5	137
290	390	234	234	320	3	3	2 880	5 500	575	58FC39234		1-2	304	376	368	2.5	2.5	80.0



Design 2-5P



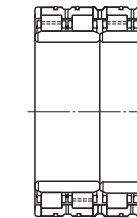
Design 2-6P



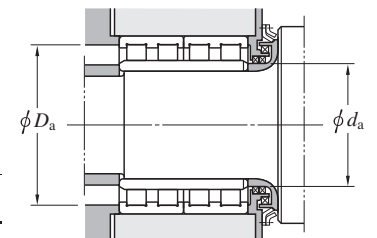
Design 3-1



Design 3-1P



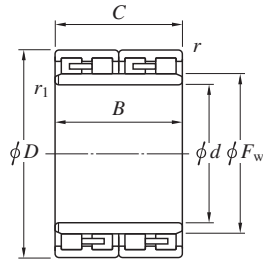
Design 3-2P



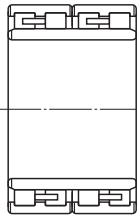
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

Four-row cylindrical roller bearings

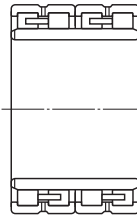
d (290) ~ (340) mm



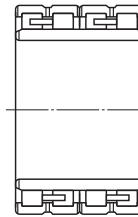
Design 1-1



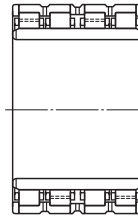
Design 1-2



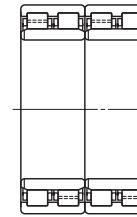
Design 1-3



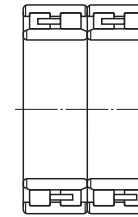
Design 1-4



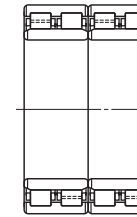
Design 1-6P



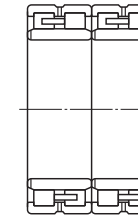
Design 2-1P



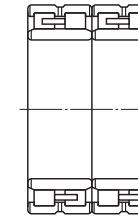
Design 2-2



Design 2-2P

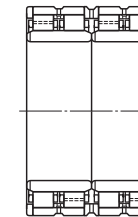


Design 2-3

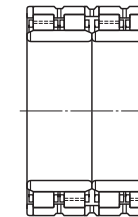


Design 2-4

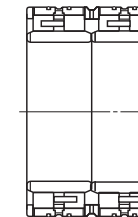
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.	Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	r min.	r_1 min.	C_r	C_{0r}				d_a min.	D_a max.	r_a ¹⁾ max.	r_b ¹⁾ max.		
290	400	180	180	320	3	3	2 350	4 010	434	58FC40180W	1-2	304	386	372	2.5	2.5	68.3
	410	240	240	320	3	3	3 270	5 540	589	58FC41240	1-2	304	396	380	2.5	2.5	99.0
	420	300	300	327	3	3	3 880	6 960	722	58FC42300	1-2	304	406	387	2.5	2.5	138
300	400	300	300	328	3	3	3 650	7 310	746	60FC40300A	1-2	314	386	378	2.5	2.5	103
	420	218	218	332	3	3	2 940	5 010	537	60FC42218	1-1	314	406	390	2.5	2.5	93.0
	420	240	240	332	3	3	3 330	5 750	606	60FC42240	1-1	314	406	392	2.5	2.5	102
	420	300	300	332	3	3	4 220	7 840	817	4CR300	3-2P	314	406	392	2.5	2.5	125
	420	300	300	331	1.5	1.5	4 280	7 750	805	60FC42300DW	2-4	309	411	395	1.5	1.5	127
	420	300	300	332	2	2	4 700	8 690	896	60FC42300L-2	2-6P	310	410	395	2	2	129
	420	300	300	332	3	3	4 070	7 270	749	60FC42300W	2-3	314	406	394	2.5	2.5	127
	420	300	300	332	3	3	4 070	7 270	749	60FC42300W	2-3	314	406	394	2.5	2.5	127
310	420	300	300	338	3	3	3 870	7 370	754	62FC42300	1-2	324	406	394	2.5	2.5	119
	430	240	240	344.5	3	3	3 310	5 770	602	62FC43240	1-2	324	416	404	2.5	2.5	105
	440	240	240	341	3	3	3 530	5 730	604	62FC44240	1-2	324	426	409	2.5	2.5	113
320	440	230	230	351	3	3	3 170	5 490	574	64FC44230/240	1-2	334	426	411	2.5	2.5	103
	450	240	240	358	3	3	3 380	5 740	603	4CR320	1-2	334	436	422	2.5	2.5	119
	450	240	240	355	3	3	3 390	5 730	604	64FC45240	1-2	334	436	419	2.5	2.5	117
	450	240	240	358	3	3	3 470	5 930	623	64FC45240CW	1-4	334	436	422	2.5	2.5	118
	460	340	340	360	3	3	4 840	8 730	890	64FC46340A	1-4	334	446	428	2.5	2.5	187
	480	290	290	361	4	4	5 120	8 450	883	64FC48290	2-6P	338	462	441	3	3	189
	480	350	350	364	2.1	2.1	6 290	11 000	1 120	314274A	2-6P	332	468	444	2	2	227
	480	350	350	364	2.1	2.1	6 290	11 000	1 120	314274A	2-6P	332	468	444	2	2	227
330	440	200	200	358	3	3	2 920	5 220	553	66FC44200AW	1-3	344	426	414	2.5	2.5	83.4
	440	200	200	360	3	5	2 570	4 670	490	66FC44200W	1-3	352	426	412	2.5	4	83.0
	460	340	340	364	2.1	2.1	4 840	9 150	926	66FC46340	1-2	342	448	428	2	2	172
	460	340	340	368	4	4	5 090	9 800	978	66FC46340B	1-2	348	442	432	3	3	176
	460	380	380	364	2.1	2.1	5 490	10 800	1 070	66FC46380W	1-4	342	448	428	2	2	195
340	445	250	250	367	2.1	4	3 140	6 110	626	68FC45250W	1-3	358	433	419	2	3	100
	450	250	250	368	2.1	2.1	3 430	6 480	672	68FC45250BW	1-3	352	438	424	2	2	106



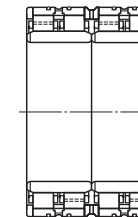
Design 2-5P



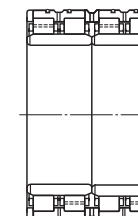
Design 2-6P



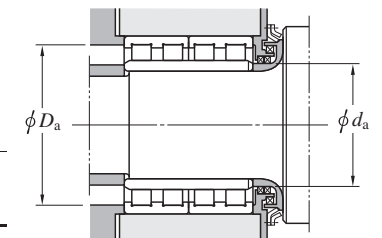
Design 3-1



Design 3-1P



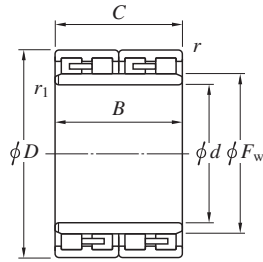
Design 3-2P



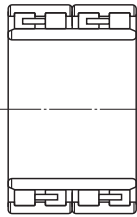
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

Four-row cylindrical roller bearings

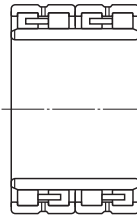
d (340) ~ 390 mm



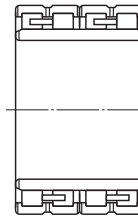
Design 1-1



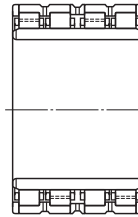
Design 1-2



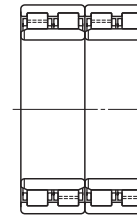
Design 1-3



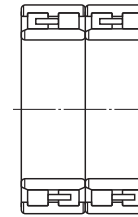
Design 1-4



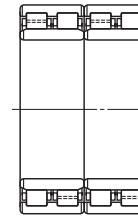
Design 1-6P



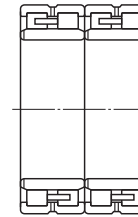
Design 2-1P



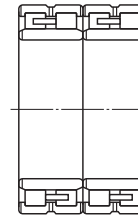
Design 2-2



Design 2-2P

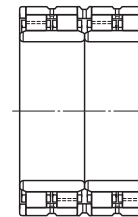


Design 2-3

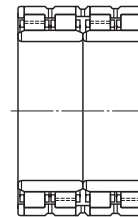


Design 2-4

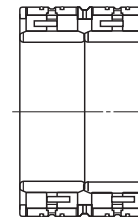
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN)	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
<i>d</i>	<i>D</i>	<i>B</i>	<i>C</i>	<i>F</i> _w	<i>r</i> min.	<i>r</i> ₁ ¹⁾ min.	<i>C</i> _r	<i>C</i> _{0r}	<i>C</i> _u				<i>d</i> _a min.	<i>D</i> _a max.	min.	<i>r</i> _a ²⁾ max.	<i>r</i> _b ²⁾ max.	
340	480	350	350	378	4	SP	5 740	11 100	1 100	68FC48350-2		2-4	354	462	446	3	2	211
	480	350	350	378	3	SP	5 990	11 500	1 150	68FC48350D		3-2P	354	466	448	2.5	2	201
	480	350	350	376	4	4	6 070	11 400	1 150	68FC48350L		3-2P	358	462	448	3	3	201
	480	385	350	378	2.1	SP	5 990	11 500	1 150	68FC48350N		2-6P	358	468	448	2	3	209
	490	300	300	380	5	5	4 390	7 690	784	68FC49300		1-2	362	468	450	4	4	187
	490	300	300	379	5	5	4 610	7 850	797	68FC49300A		1-2	362	468	453	4	4	182
343.052	457.098	254	254	374	3	3	3 300	6 190	632	69FC46254W		1-4	358	443	430	2.5	2.5	112
350	500	460	460	388	2	2	8 230	16 500	1 610	70FC50460		2-6P	360	490	464	2	2	296
360	480	290	290	392	3	3	4 330	8 510	842	72FC48290		1-2	374	466	452	2.5	2.5	145
	500	250	250	394	3	3	4 390	7 340	756	72FC50250		2-2	374	486	470	2.5	2.5	145
	510	370	370	400	4	4	5 750	11 000	1 090	72FC51370		1-2	378	492	470	3	3	241
	520	380	380	405	2	5	7 270	13 700	1 350	72FC52380		2-6P	382	510	485	2	4	270
370	520	380	380	409	5	5	6 660	13 200	1 300	74FC52380		2-6P	392	498	481	4	4	257
	520	400	400	413	5	5	5 930	11 900	1 150	74FC52400W		2-4	392	498	481	4	4	268
	540	400	400	415	4	4	6 500	11 500	1 130	74FC54400A		1-2	388	522	499	3	3	311
375	545	400	400	417	4	4	7 920	14 500	1 410	75FC55400		3-2P	393	527	505	3	3	315
380	520	280	280	417	4	4	4 660	8 550	850	76FC52280		1-2	398	502	487	3	3	173
	520	290	290	418	4	4	4 700	8 840	878	76FC52290		1-2	398	502	486	3	3	181
	540	300	300	421	3	3	5 820	10 100	1 010	76FC54300		2-6P	394	526	505	2.5	2.5	222
	540	340	340	422	4	4	5 760	10 300	1 010	76FC54340W		3-1	398	522	502	3	3	256
	540	360	360	422	4	4	6 870	12 900	1 260	76FC54360		2-6P	398	522	502	3	3	266
	540	400	380	422	4	4	7 530	14 300	1 400	76FC54380		2-6P	398	522	504	3	3	287
	540	400	400	422	4	4	7 560	14 600	1 410	76FC54400BW		2-6P	398	522	502	3	3	298
	540	400	400	422	4	4	7 560	14 600	1 410	76FC54400DW		3-2P	398	522	502	3	3	298
390	550	400	400	434	5	SP	6 430	12 400	1 190	78FC55400AW		2-3	410	528	510	4	4	296



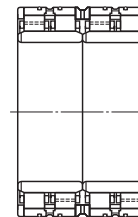
Design 2-5P



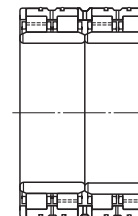
Design 2-6P



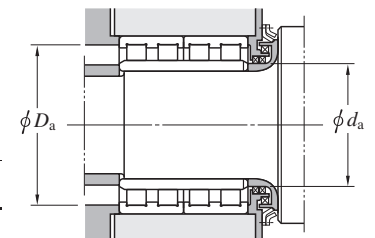
Design 3-1



Design 3-1P



Design 3-2P

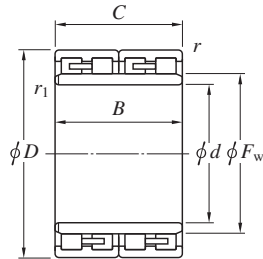


[Notes] 1) SP indicates the specially chamfered form.

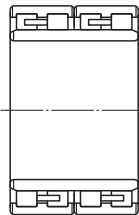
2) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r.
r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r₁.

Four-row cylindrical roller bearings

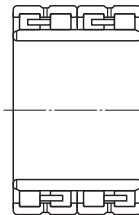
d 400 ~ 444.5 mm



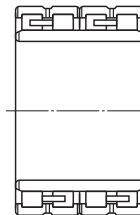
Design 1-1



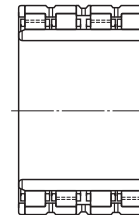
Design 1-2



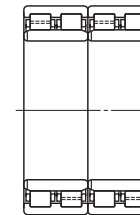
Design 1-3



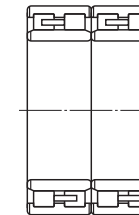
Design 1-4



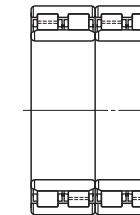
Design 1-6P



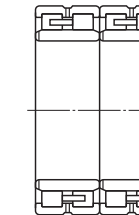
Design 2-1P



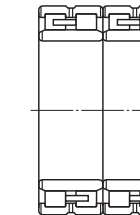
Design 2-2



Design 2-2P



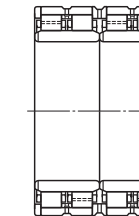
Design 2-3



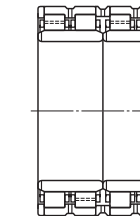
Design 2-4

Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit	Bearing No.	Design	Mounting dimensions (mm)					(Refer.) Mass
d	D	B	C	F_w	$r_{min.}$	$r_{lmin.}$	C_r	C_{0r}	(kN) C_u			d_a min.	D_a max.	$r_a^{1)}$ min.	$r_a^{1)}$ max.	$r_b^{1)}$ min.	$r_b^{1)}$ max.
400	520	250	250	432	4	4	3 650	7 050	698	80FC52250W	1-3	418	502	492	3	3	133
	560	360	360	441	5	5	6 980	13 400	1 290	80FC56360	2-6P	422	538	521	4	4	277
	560	410	410	445	5	5	7 930	15 800	1 500	4CR400	3-2P	422	538	525	4	4	310
	560	410	410	445	2	5	8 100	16 300	1 540	80FC56410	2-6P	422	550	525	2	4	315
	600	380	380	450	5	5	8 310	14 300	1 400	80FC60380	2-6P	422	578	552	4	4	388
406.4	609.6	304.8	304.8	460	5	5	5 500	8 750	868	81FC6130W	1-4	429	587	556	4	4	307
410	546	400	400	448	5	5	6 260	13 000	1 240	82FC55400	2-2	432	524	516	4	4	256
	600	440	440	460	5	5	10 100	18 800	1 780	82FC60440	2-6P	432	578	560	4	4	432
418.5	600	410	410	470	5	5	8 300	15 700	1 500	84FC60410A	2-6P	441	578	560	4	4	385
419	592	350	350	462	4	4	7 120	12 900	1 250	84FC59350	1-6P	437	574	552	3	3	304
420	560	280	280	457	4	4	4 900	9 410	913	84FC56280	1-1	438	542	527	3	3	189
	560	400	400	458	4	4	6 080	12 700	1 200	84FC56400	2-4	438	542	526	3	3	270
	580	320	320	463	4	4	5 960	11 000	1 070	84FC58320	2-4	438	562	543	3	3	249
	600	440	440	470	5	5	9 080	17 700	1 670	4CR420A	3-1P	442	578	560	4	4	420
430	591	420	420	472	5	5	8 200	16 800	1 570	86FC59420	2-2P	452	569	552	4	4	345
	591	420	420	476	4	4	8 150	17 400	1 610	86FC59420-2	2-6P	448	573	552	3	3	349
	591	420	420	476	4	4	7 390	14 700	1 380	86FC59420A-1	1-3	448	573	552	3	3	340
	600	450	450	475	5	5	9 350	19 300	1 800	86FC60450	2-6P	452	578	559	4	4	405
440	590	270	270	482	4	4	4 530	8 460	830	88FC59270W	1-3	458	572	554	3	3	207
	620	450	450	487	4	4	9 900	20 000	1 840	4CR440	3-1P	458	602	577	3	3	440
	620	450	450	487	4	4	9 900	20 000	1 840	88FC62450AW	2-6P	458	602	577	3	3	440
	640	420	420	492	5	5	9 810	18 400	1 740	88FC64420	2-6P	462	618	592	4	4	470
	720	452	452	512	6	6	10 800	16 600	1 590	88FC72452	1-6P	468	692	652	5	5	740
444.5	660.4	323.85	323.85	500	4	4	7 590	12 600	1 210	89FC66324	1-6P	463	642	608	3	3	400

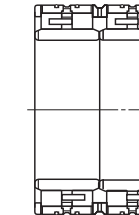
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .



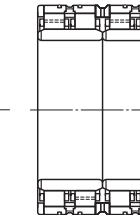
Design 2-5P



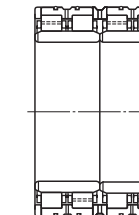
Design 2-6P



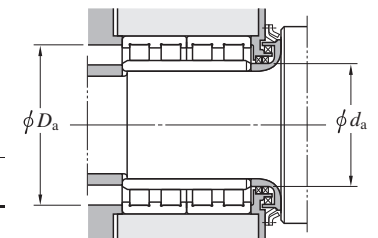
Design 3-1



Design 3-1P

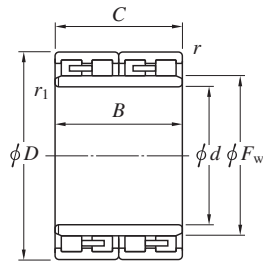


Design 3-2P

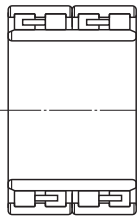


Four-row cylindrical roller bearings

d 445 ~ 500 mm



Design 1-1



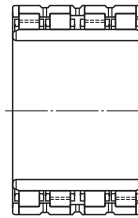
Design 1-2



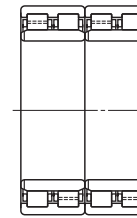
Design 1-3



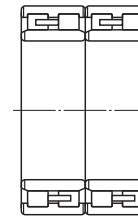
Design 1-4



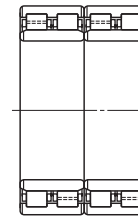
Design 1-6P



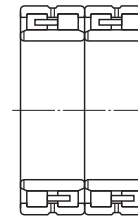
Design 2-1P



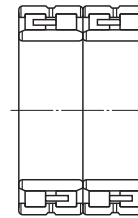
Design 2-2



Design 2-2P



Design 2-3



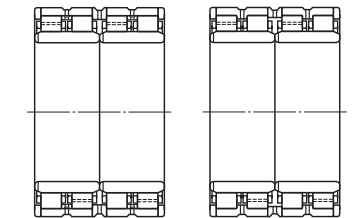
Design 2-4

Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN)	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
<i>d</i>	<i>D</i>	<i>B</i>	<i>C</i>	<i>F</i> _w	<i>r</i> ¹⁾ min.	<i>r</i> ₁ ¹⁾ min.	<i>C</i> _r	<i>C</i> _{0r}	<i>C</i> _u				<i>d</i> _a min.	<i>D</i> _a max.	<i>r</i> _a ²⁾ min.	<i>r</i> _a ²⁾ max.	<i>r</i> _b ²⁾ min.	<i>r</i> _b ²⁾ max.
445	635	375	375	496	4	4	7 820	14 600	1 390	4CR445		3-1P	463	617	588	3	3	385
450	630	450	450	500	4	4	8 540	16 600	1 540	90FC63450A		2-2	468	612	590	3	3	433
460	600	400	400	497	4	SP	6 630	14 300	1 320	92FC60400		2-4	478	582	567	3	3	287
	620	400	400	504	4	4	8 560	18 200	1 660	4CR460C		3-1P	478	602	584	3	3	350
	620	400	400	502	4	4	8 140	17 000	1 580	92FC62400BW		1-6P	478	602	582	3	3	350
	620	400	400	502	4	4	7 380	14 800	1 370	92FC62400D		1-4	478	602	583	3	3	340
	650	470	470	509	6	6	11 300	22 200	2 050	92FC65470W		1-6P	488	622	609	5	5	494
	660	500	500	512	4	4	11 700	23 300	2 130	4CR460		3-1P	478	642	612	3	3	590
	660	500	500	510	5	5	12 000	23 400	2 140	92FC66500		2-6P	482	638	614	4	4	573
	680	400	400	504	4	4	9 940	16 600	1 590	4CR460D		3-1P	478	662	624	3	3	510
480	650	450	450	525	5	5	10 600	22 400	2 040	96FC65450B		2-6P	502	628	615	4	4	440
	650	460	460	526	5	5	9 660	20 800	1 890	96FC65460		2-6P	502	628	610	4	4	443
	680	460	460	532	5	5	10 800	21 300	1 950	96FC68460		2-6P	502	658	632	4	4	545
	680	500	500	534	5	5	10 800	22 000	1 990	4CR480		3-1P	502	658	630	4	4	580
	680	500	500	534	5	5	10 800	22 000	1 990	4CR480B		3-2P	502	658	630	4	4	580
	680	500	500	532	5	5	12 000	24 300	2 190	96FC68500A		2-6P	502	658	632	4	4	595
495	615	360	360	530	SP	SP	5 060	12 000	1 100	99FC62360		2-4	511	597	586	3	3	235
500	670	450	450	540	5	SP	10 600	22 500	2 020	100FC67450A-3		2-6P	522	648	630	4	4	451
	680	420	405	550	5	5	8 380	17 600	1 610	100FC68405		2-6P	522	658	634	4	4	442
	680	450	450	542.5	4	4	11 300	23 100	2 110	100FC68450		2-6P	518	662	639	3	3	495
	690	510	510	550	5	5	11 700	24 600	2 200	100FC69510A		3-2P	522	668	646	4	4	562
	710	480	480	558	6	6	12 200	24 800	2 220	100FC71480		2-6P	528	682	662	5	5	631
	720	400	400	558	5	6	10 400	18 900	1 750	100FC72400		1-6P	528	698	672	4	5	549
	720	530	530	560	6	6	13 600	26 500	2 370	100FC72530		2-6P	528	692	674	5	5	725
	720	530	530	568	5	4	13 700	28 900	2 580	100FC72530C		2-6P	518	698	672	4	3	742
	720	530	530	560	6	6	13 600	26 500	2 370	100FC72530W		3-2P	528	692	674	5	5	725

[Notes] 1) SP indicates the specially chamfered form.

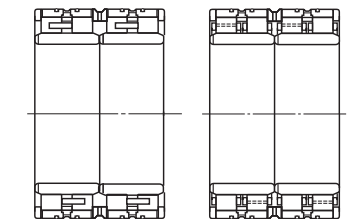
2) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r.

r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r₁.



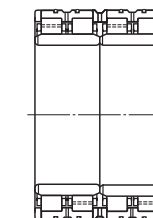
Design 2-5P

Design 2-6P

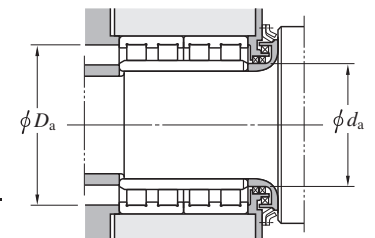


Design 3-1

Design 3-1P

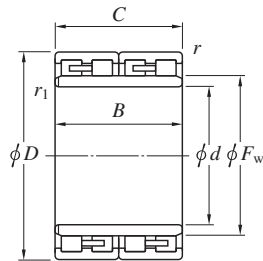


Design 3-2P

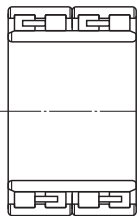


Four-row cylindrical roller bearings

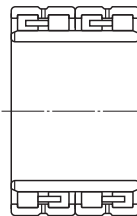
d 510 ~ (600) mm



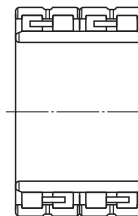
Design 1-1



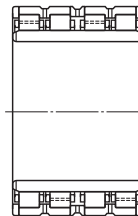
Design 1-2



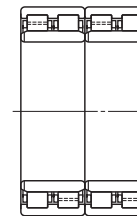
Design 1-3



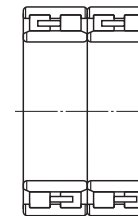
Design 1-4



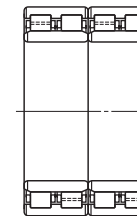
Design 1-6P



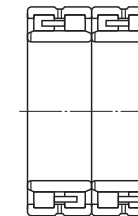
Design 2-1P



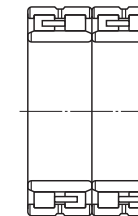
Design 2-2



Design 2-2P

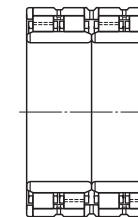


Design 2-3

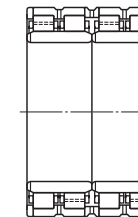


Design 2-4

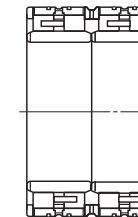
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.	Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	r min.	r_1 1) min.	C_r	C_{0r}				d_a min.	D_a max.	r_a 2) max.	r_b 2) max.		
510	670	320	320	554	5	5	6 950	14 300	1 310	102FC67320 102FC67450	1-6P	532	648	634	4	4	305
	670	450	450	550	5	5	10 400	23 400	2 100		2-6P	532	648	634	4	4	433
520	680	450	450	562	5	5	9 760	22 300	1 980	104FC68450W 104FC74535 104FC74535C	2-6P	542	658	642	4	4	435
	735	535	535	574.5	5	5	13 200	27 200	2 400		2-5P	542	713	680	4	4	738
	735	535	535	574.5	5	5	13 400	27 500	2 420		3-2P	542	713	682	4	4	735
530	760	520	520	589	6	SP	14 400	28 800	2 520	106FC76520A 106FC78570 106FC78570B	2-6P	548	732	705	5	2.5	810
	780	570	570	595	6	6	15 600	30 600	2 710		2-6P	558	752	719	5	5	957
	780	570	570	595	6	6	15 600	30 600	2 710		3-2P	558	752	719	5	5	960
536.17	762.03	558.8	558.8	598	5	SP	14 200	29 100	2 530	107FC76559AW	2-6P	559	740	710	4	4	825
545	810	580	580	614	6	6	16 500	32 100	2 820	4CR545	3-1P	573	782	744	5	5	1 090
550	740	510	510	600	6	6	13 000	28 100	2 440	110FC74510	2-6P	578	712	700	5	5	635
560	780	570	570	616	5	2.1	15 500	33 100	2 870	112FC78570 112FC80600 112FC82600	2-6P	572	758	727	4	2	865
	800	600	600	620	7.5	7.5	16 300	33 400	2 890		2-6P	596	764	740	6	6	1 010
	820	600	600	625	6	6	18 400	36 300	3 130		2-6P	588	792	759	5	5	1 120
570	800	514	514	626	6	6	14 600	29 200	2 550	114FC80514A 114FC81594	2-6P	598	772	746	5	5	829
	815	594	594	628	6	6	16 400	32 100	2 810		2-6P	598	787	758	5	5	1 010
571.1	812.97	594	594	636	6	6	16 800	35 100	3 010	114FC81594A	2-6P	600	784	756	5	5	1 030
590	820	590	590	649	6	SP	16 400	35 100	3 010	118FC82590	2-6P	621	792	765	5	5	990
600	820	575	575	660	5	5	16 300	36 000	3 060	120FC82575B 120FC82575C 120FC85600	2-6P	622	798	772	4	4	925
	820	575	575	660	5	5	16 300	36 000	3 060		3-2P	622	798	772	4	4	920
	850	600	600	664	4	4	18 300	38 100	3 230		3-2P	618	832	792	3	3	1 120
	870	578	540	672	6	SP	16 600	32 300	2 770	120FC87540A 120FC87640 4CR600	2-6P	628	842	808	5	5	1 120
	870	640	640	672	6	6	19 600	40 000	3 360		2-6P	628	842	808	5	5	1 320
	870	640	640	669	5	5	19 600	40 000	3 360		3-1P	622	848	805	4	4	1 310



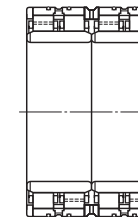
Design 2-5P



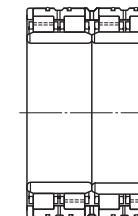
Design 2-6P



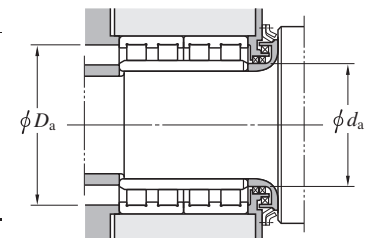
Design 3-1



Design 3-1P



Design 3-2P

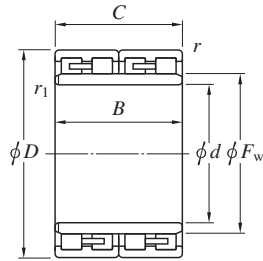


[Notes] 1) SP indicates the specially chamfered form.

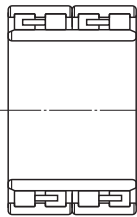
2) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

Four-row cylindrical roller bearings

d (600) ~ 730 mm



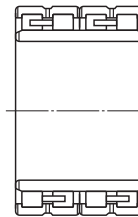
Design 1-1



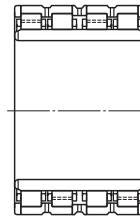
Design 1-2



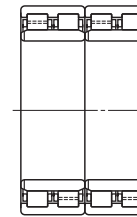
Design 1-3



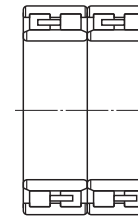
Design 1-4



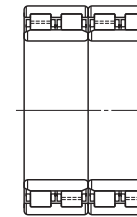
Design 1-6P



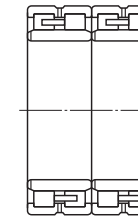
Design 2-1P



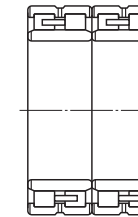
Design 2-2



Design 2-2P

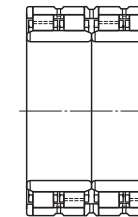


Design 2-3

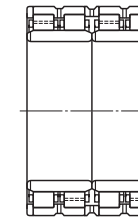


Design 2-4

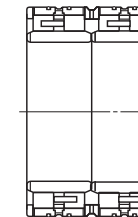
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	$r_{\min.}$	$r_1^{1)}$ min.	C_r	C_{0r}	d_a min.				D_a max.	$r_a^{2)}$ min.	$r_b^{2)}$ max.			
600	870	640	640	682	4	4	19 400	40 800	3 410	4CR600A		2-6P	618	852	812	3	3	1 330
	870	640	640	669	5	5	19 600	40 000	3 360	4CR600B		2-6P	622	848	805	4	4	1 310
610	850	570	570	670	6	6	16 500	34 900	2 990	122FC85570		2-6P	638	822	790	5	5	1 040
	870	660	660	680	6	6	19 000	40 300	3 360	122FC87660		2-6P	638	842	808	5	5	1 310
630	800	360	360	675	5	5	8 600	19 500	1 700	126FC80360		2-6P	652	778	759	4	4	440
640	880	600	600	700	6	6	18 800	40 800	3 400	128FC88600		2-5P	668	852	824	5	5	1 130
650	920	670	670	723	7.5	7.5	21 000	45 500	3 770	130FC92670		2-6P	686	884	855	6	6	1 450
	920	670	670	724	7.5	7.5	21 000	45 500	3 770	130FC92670A		2-6P	686	884	856	6	6	1 480
	920	690	690	724	7.5	7.5	21 000	45 500	3 770	130FC92690		2-6P	686	884	856	6	6	1 490
660	820	440	440	708	4	4	9 090	22 700	1 910	132FC82440W		2-4	678	802	784	3	3	513
	889.75	670	670	718	6	6	19 600	46 900	3 840	132FC89670		2-6P	688	861	830	5	5	1 240
665	968.6	732	732	734.5	6	SP	26 600	53 300	4 350	133FC97732		2-6P	693	940	899	5	5	1 870
680	1 020	680	680	775	5	SP	25 200	49 200	4 070	4CR680D		3-2P	719	998	946	4	8	2 040
690	980	715	715	767.5	7.5	7.5	22 900	48 800	3 990	138FC98715		2-6P	726	944	911	6	6	1 660
	980	750	750	766	6	7.5	24 100	52 300	4 240	138FC98750		3-2P	726	952	910	5	6	1 860
	980	750	750	766	6	7.5	24 100	52 300	4 240	138FC98750A		2-6P	726	952	910	5	6	1 860
700	980	700	700	774	6	6	22 300	48 200	3 940	140FC98700		2-6P	728	952	914	5	5	1 680
	980	700	700	774	6	6	22 300	48 200	3 940	140FC98700A		3-2P	728	952	914	5	5	1 680
	980	700	700	766	4	4	24 100	51 300	4 180	140FC98700C		2-6P	718	962	914	3	3	1 710
	1 000	710	710	770	4	4	23 700	47 400	3 920	140FC100710W		2-6P	718	982	930	3	3	1 810
710	929.9	645	635	767	5	5	19 400	47 000	3 810	142FC93635		2-6P	732	907	879	4	4	1 170
730	1 030	750	750	809	6	6	27 100	59 500	4 700	146FC103750		2-6P	758	1 002	961	5	5	2 060
	1 050	693	670	804	6	6	26 000	51 200	4 200	146FC105670		2-6P	758	1 022	978	5	5	1 980



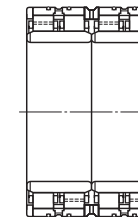
Design 2-5P



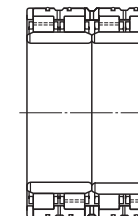
Design 2-6P



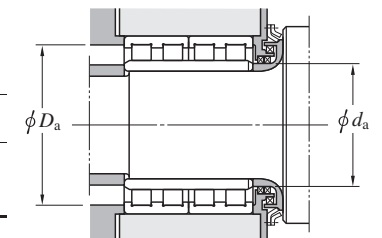
Design 3-1



Design 3-1P



Design 3-2P

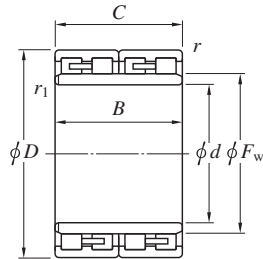


[Notes] 1) SP indicates the specially chamfered form.

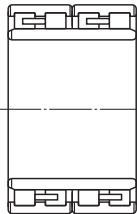
2) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

Four-row cylindrical roller bearings

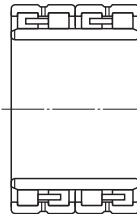
d 750 ~ (850) mm



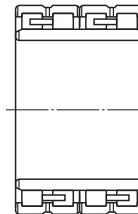
Design 1-1



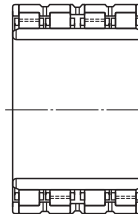
Design 1-2



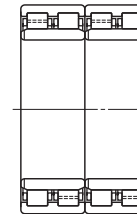
Design 1-3



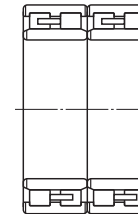
Design 1-4



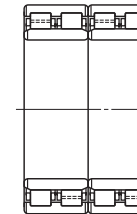
Design 1-6P



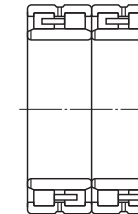
Design 2-1P



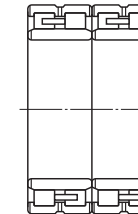
Design 2-2



Design 2-2P

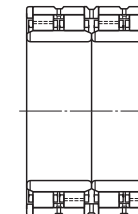


Design 2-3

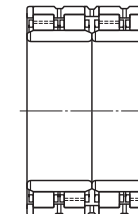


Design 2-4

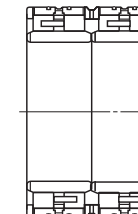
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit	Bearing No.	Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
<i>d</i>	<i>D</i>	<i>B</i>	<i>C</i>	<i>F</i> _w	<i>r</i> min.	<i>r</i> ₁ min.	<i>C</i> _r	<i>C</i> _{0r}	(kN) <i>C</i> _u			<i>d</i> _a min.	<i>D</i> _a max.	min.	<i>r</i> _a ¹⁾ max.	<i>r</i> _b ¹⁾ max.	
750	1 000	670	670	813	6	6	22 900	54 200	4 300	150FC100670	2-6P	778	972	941	5	5	1 520
	1 020	630	620	816	6	6	22 000	48 300	3 880	150FC102620	2-1P	778	992	956	5	5	1 550
755	1 070	750	750	837	7.5	7.5	28 000	60 300	4 740	151FC107750A	3-2P	791	1 034	997	6	6	2 240
760	1 015	700	700	832	7.5	7.5	22 400	54 200	4 270	152FC102700	2-5P	796	979	956	6	6	1 590
	1 030	750	750	828	7.5	7.5	25 700	61 100	4 760	152FC103750	2-6P	796	994	962	6	6	1 870
	1 079.5	787	787	846	7.5	7.5	28 400	61 700	4 810	152FC108787B	2-6P	796	1 043	1 006	6	6	2 380
	1 079.5	787	787	846	7.5	7.5	29 800	65 700	5 210	152FC108787D	3-2P	796	1 043	1 006	6	6	2 420
	1 080	805	790	847	6	6	28 400	61 700	4 810	4CR760	3-1P	788	1 052	1 007	5	5	2 440
761.425	1 079.602	787.4	787.4	846	7.5	7.5	29 800	65 700	5 210	152FC108787C	2-6P	798	1 043	1 006	6	6	2 420
765	1 010	718	708	827	6	6	23 900	58 000	4 540	153FC101708A	2-6P	793	982	953	5	5	1 610
	1 065	662	652	840	6	6	24 100	51 700	4 180	153FC107652	2-6P	793	1 037	992	5	5	1 870
770	1 075	770	770	847	7.5	6	29 000	63 500	4 950	154FC108770	3-2P	798	1 039	1 007	6	5	2 240
	1 075	770	770	847	7.5	6	29 000	63 500	4 950	154FC108770A	2-6P	798	1 039	1 007	6	5	2 250
	1 080	650	650	845	6	6	25 200	52 000	4 210	154FC108650	2-6P	798	1 052	1 010	5	5	1 930
780	1 070	780	780	852	6	6	28 500	65 100	5 140	156FC107780A	2-6P	808	1 042	1 002	5	5	2 140
790	1 015.9	610	610	850	6	6	19 400	48 800	3 830	158FC102610	2-6P	818	987	962	5	5	1 290
800	1 080	750	750	880	6	6	23 000	55 000	4 310	160FC108750	2-6P	828	1 052	1 010	5	5	2 020
820	1 130	650	650	891	6	6	25 800	53 700	4 310	164FC113650	2-6P	848	1 102	1 059	5	5	2 030
	1 130	800	800	903	7.5	7.5	29 300	66 900	5 110	164FC113800A	3-2P	856	1 094	1 059	6	6	2 510
	1 130	800	800	903	7.5	7.5	29 300	66 900	5 110	164FC113800D	2-6P	856	1 094	1 059	6	6	2 510
840	1 160	840	840	920	7.5	7.5	33 100	76 000	5 830	168FC116840B	2-6P	876	1 124	1 084	6	6	2 800
850	1 150	840	840	928	6	6	32 000	77 700	5 900	170FC115840	2-6P	878	1 122	1 078	5	5	2 620
	1 180	650	650	945	7.5	7.5	23 900	51 300	4 050	170FC118650	2-5P	886	1 144	1 105	6	6	2 190



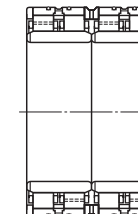
Design 2-5P



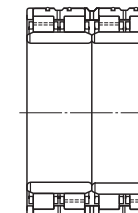
Design 2-6P



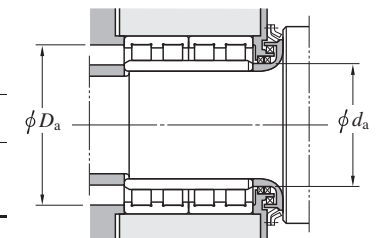
Design 3-1



Design 3-1P



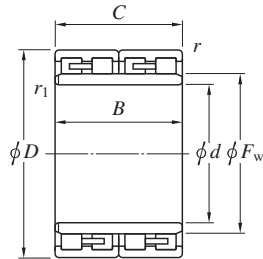
Design 3-2P



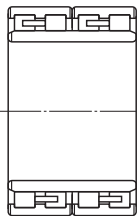
[Note] 1) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r.
r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r₁.

Four-row cylindrical roller bearings

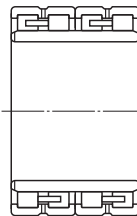
d (850) ~ 1 000 mm



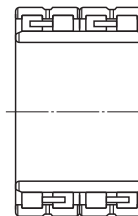
Design 1-1



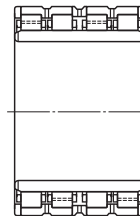
Design 1-2



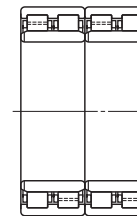
Design 1-3



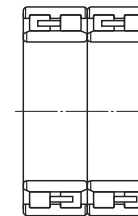
Design 1-4



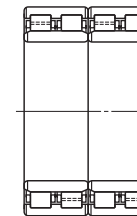
Design 1-6P



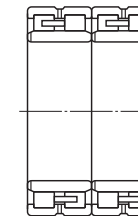
Design 2-1P



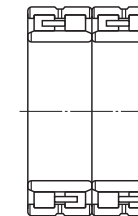
Design 2-2



Design 2-2P

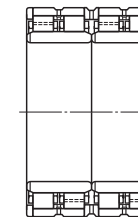


Design 2-3

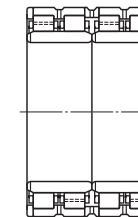


Design 2-4

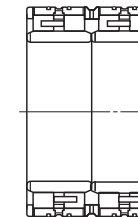
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C_u	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F_w	$r_{min.}$	$r_{1\ 1)^{1)}$ min.	C_r	C_{0r}	d_a min.				D_a max.	$r_a^{2)}$ min.	$r_b^{2)}$ max.	$r_a^{2)}$ max.	$r_b^{2)}$ max.	
850	1 180	850	850	940	7.5	7.5	31 800	72 700	5 610	170FC118850		3-2P	886	1 144	1 104	6	6	2 900
	1 180	850	850	940	7.5	7.5	31 800	72 700	5 610	170FC118850B		2-6P	886	1 144	1 104	6	6	2 900
	1 180	875	850	940	7.5	7.5	31 800	72 700	5 610	4CR850A		3-1P	886	1 144	1 104	6	6	2 930
855	1 094.9	665	655	918	6	6	22 600	58 000	4 480	171FC109655		2-6P	883	1 066	1 038	5	5	1 580
	1 178	714	704	928.5	6	6	29 600	62 900	4 920	171FC118704		2-6P	883	1 150	1 104	5	5	2 410
860	1 140	750	750	938	7.5	7.5	26 000	63 800	4 870	172FC114750		2-6P	896	1 104	1 074	6	6	2 080
	1 160	780	780	932	6	6	31 000	72 600	5 610	172FC116780		2-6P	888	1 132	1 088	5	5	2 470
862.98	1 219.302	876.3	889	956	7.5	7.5	37 500	84 600	6 370	173FC122889B		2-6P	899	1 183	1 136	6	6	3 450
	1 219.302	889	889	960	7.5	7.5	33 100	74 400	5 680	173FC122889		2-6P	899	1 183	1 132	6	6	3 360
870	1 145	705	685	940	6	6	26 800	63 700	4 900	174FC115685B		2-6P	898	1 117	1 085	5	5	1 980
	1 181.1	750	750	942	9.5	SP	30 800	68 600	5 250	174FC118750		3-2P	906	1 137	1 110	8	6	2 470
880	1 140	800	800	946	6	6	29 600	77 400	5 830	176FC114800		2-6P	908	1 112	1 078	5	5	2 210
	1 230	850	850	970	7.5	7.5	36 300	82 100	6 220	176FC123850A		2-6P	916	1 194	1 148	6	6	3 280
900	1 220	840	840	981	7.5	7.5	35 000	83 100	6 240	180FC122840		2-6P	936	1 184	1 146	6	6	2 980
	1 220	840	840	989	7.5	7.5	34 600	83 300	6 240	180FC122840A		2-6P	936	1 184	1 150	6	6	2 980
	1 230	895	870	990	7.5	7.5	33 000	77 500	5 850	180FC123870		2-6P	936	1 194	1 154	6	6	3 170
	1 230	895	870	990	7.5	7.5	33 000	77 500	5 850	180FC123870A		3-1P	936	1 194	1 154	6	6	3 160
	1 280	930	930	1 000	7.5	7.5	40 200	90 300	6 730	180FC128930		2-6P	936	1 244	1 190	6	6	4 050
	1 280	1 050	840	1 000	7.5	7.5	36 200	79 100	6 050	180FC128840		1-6P	936	1 244	1 190	6	6	3 890
920	1 280	815	800	1 010	7.5	7.5	36 000	79 900	6 090	184FC128800		3-2P	956	1 244	1 196	6	6	3 280
	1 280	865	850	1 015	7.5	7.5	34 600	77 500	5 890	4CR920		3-1P	956	1 244	1 195	6	6	3 460
	1 300	975	950	1 019	7.5	7.5	40 800	92 600	6 840	4CR920A		3-2P	956	1 264	1 209	6	6	4 180
950	1 300	965	950	1 036	7.5	7.5	40 900	96 900	7 090	4CR950A		3-1P	986	1 264	1 216	6	6	3 900
	1 330	950	950	1 053	9.5	9.5	41 800	97 200	7 110	190FC133950		2-6P	994	1 286	1 241	8	8	4 330
1 000	1 360	1 025	1 000	1 092	7.5	7.5	45 200	111 000	7 880	200FC136100		2-6P	1 036	1 324	1 276	6	6	4 480



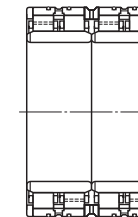
Design 2-5P



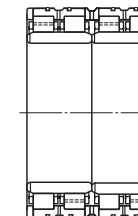
Design 2-6P



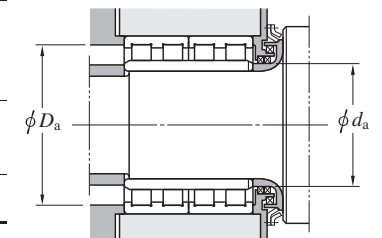
Design 3-1



Design 3-1P



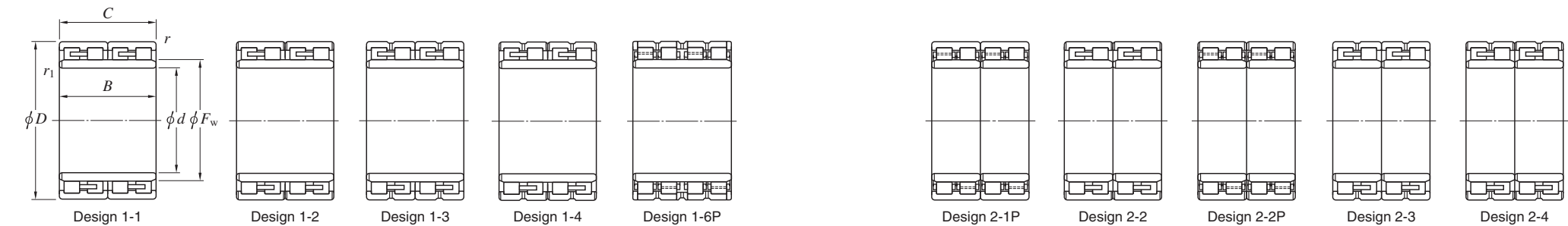
Design 3-2P



[Notes] 1) SP indicates the specially chamfered form.

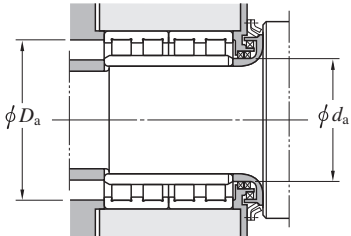
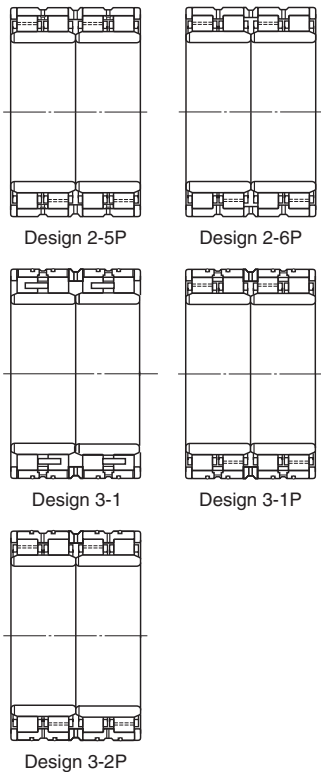
2) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r .
 r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r_1 .

d 1 200 ~ 1 480 mm



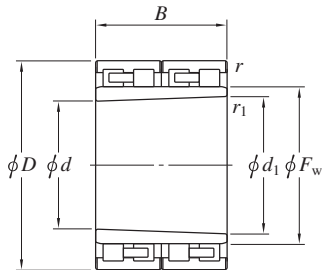
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C _u	Bearing No.		Design	Mounting dimensions (mm)					(Refer.) Mass (kg)
d	D	B	C	F _w	r _{min.}	r _{1 min.}	C _r	C _{0r}	d _{a min.}				D _{a max.}	r _a ¹⁾ min.	r _a ¹⁾ max.	r _b ¹⁾ max.		
1 200	1 509.85	1 027.5	1 005	1 278	7.5	7.5	45 900	131 000	8 870	240FC151101		2-6P	1 236	1 473	1 438	6	6	4 390
1 250	1 600	890	860	1 338	7.5	7.5	43 500	113 000	7 840	250FC160860A		2-6P	1 306	1 566	1 524	6	6	4 200
1 300	1 655	890	880	1 391	7.5	7.5	45 100	121 000	8 290	260FC165880		2-6P	1 336	1 619	1 571	6	6	4 830
1 349.04	1 745	1 010	1 000	1 446	7.5	7.5	55 300	146 000	9 680	270FC175110		2-6P	1 386	1 709	1 651	6	6	6 450
1 480	1 849.74	1 100	1 100	1 574	7.5	7.5	59 500	174 000	11 100	296FC185110		2-6P	1 516	1 813	1 764	6	6	7 170

[Note] 1) ra indicates housing chamfer dimension corresponding to outer ring chamfer dimension r.
rb indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r1.

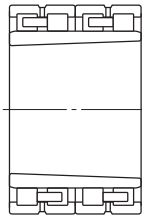


Four-row cylindrical roller bearings (tapered bore)

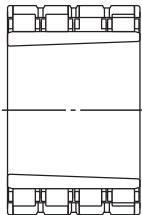
d 151.5 ~ 855 mm



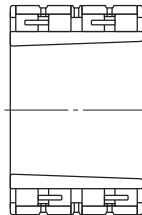
Design 1-1



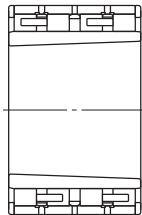
Design 1-2



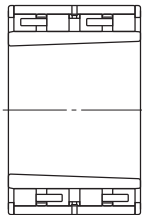
Design 1-3P



Design 1-4



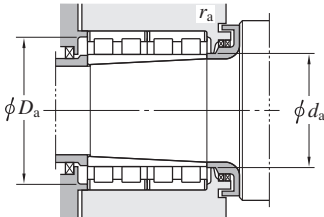
Design 2-2



Design 2-3

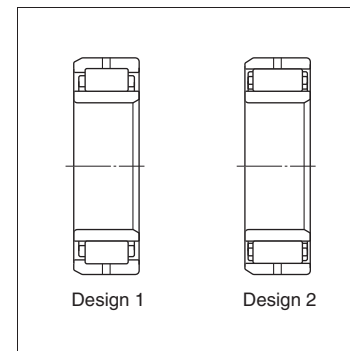
Boundary dimensions (mm)							Basic load ratings (kN)		Fatigue load limit (kN) C _u	Bearing No.		Design	Mounting dimensions (mm)					Mass (kg)
d	d ₁	D	B	F _w	r ¹⁾ min.	r ₁ min.	C _r	C _{0r}					d _a min.	D _a max.	D _a min.	r _a ²⁾ max.	r _b ²⁾ max.	
151.5	165.5	230	168	180	2	2	1 310	2 200	273	32FC23170AK		1-1	176	212	220	2	2	24
181.5	195.5	260	168	209	1.1	1.1	1 400	2 530	301	314023A		1-1	203	241	253	1	1	27.7
320.833	350	490	350	385	SP	2	5 910	11 100	1 100	70FC49350WK		1-2	360	457	480	2	2	226
356.666	389.999	550	400	431.902	2	2	7 530	14 700	1 420	71FC55400BK		1-4	400	511	540	2	2	336
358.83	388.83	520	360	422	5	3	5 330	10 900	1 040	467412		2-3	407.8	486	501	4	2.5	243
412.5	450	630	450	500	4	4	8 540	16 600	1 540	90FC63450KW		1-2	468	590	612	3	3	490
640.833	700	1 000	710	770	4	4	23 700	47 400	3 920	140FC100710K		1-3P	720	930	980	3	3	1 790
650.833	710	1 020	710	785	4	4	24 200	49 100	4 030	142FC102710K		1-3P	730	945	1 000	3	3	2 140
855	880	1 180	750	946	9.5	7.5	29 100	66 100	5 060	176FC118750AK		1-3P	911	1 106	1 145	8	6	2 480

[Notes] 1) SP indicates the specially chamfered form.
2) r_a indicates housing chamfer dimension corresponding to outer ring chamfer dimension r.
r_b indicates the shaft chamfer dimension corresponding to inner ring chamfer dimension r₁.

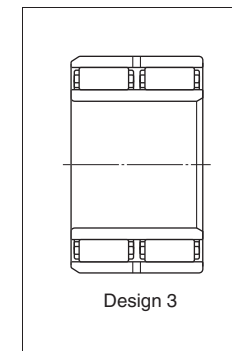


Wide series cylindrical roller bearings

■ 99, W99, SW99 series

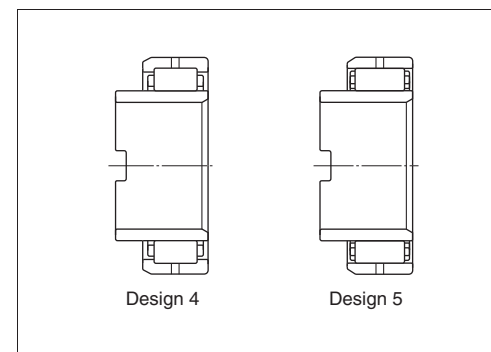


■ D99 series



- This type has high radial load capacity, and so, is suited to heavy duty applications or where shock loading is expected.
- Outer ring is available either with or without ribs, either of which is provided with two lubrication holes. Some bearings have four lubrication holes.

■ T99 series For line shaft



- This is a type equivalent to the above bearing except for extended inner ring provided with a key way.
- Applicable to such applications where large axial movement of the inner ring is involved, and mainly used for line shafts of rolling mill table rollers.

Tolerances	Consult with JTEKT, as bearings are manufactured at special tolerance corresponding to each application of bearing. Tolerances generally correspond to class 0 or class 6 specified in JIS B 1514 (See Table 2-2 given on page 18).
Radial internal clearance	(Refer to Table 4-4 on page 51 and 52)
Equivalent radial load	Dynamic equivalent radial load ... $P_r = F_r$ Static equivalent radial load $P_{0r} = F_r$

