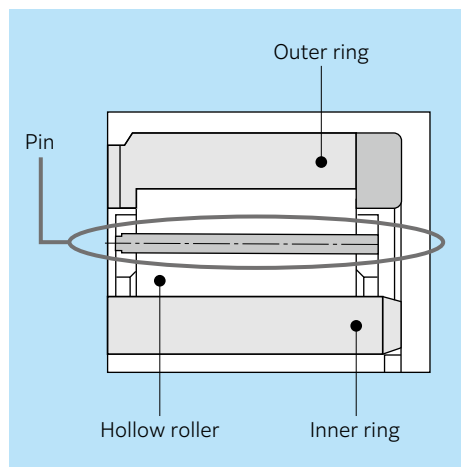




Four-row cylindrical roller bearings

## 1. Features

- 1) The bearings are mainly used in the roll necks of steel rolling mills and designed so that the load rating is maximized in the allowable space of the roll neck part.
- 2) The cage types include a comb type cage and a pin type cage (that uses hollow rollers). The pin type cage maximizes the number of rollers for high load capacity.
- 3) Carburizing steel is used in some cases to prevent inner ring cracks and to improve shock resistance.
- 4) Consult **NTN** Engineering for bearing internal clearance and fits to be used for back-up rolls of rolling mills.
- 5) There are many varieties of these bearings, including bearings which are sealed, have tapered bores, designed for high speed, have creep prevention, etc. Contact **NTN** Engineering for further details.



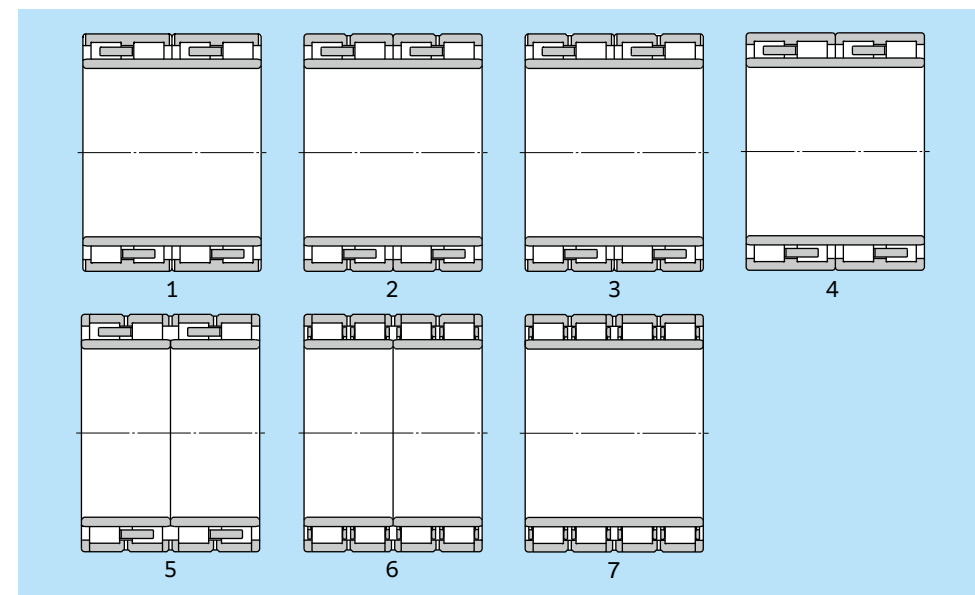
Pin type cage

## 2. Designs

Illustrations 1 to 7 show the several types of four-row cylindrical roller bearings that differ by the basic structure of inner rings, outer rings, and outer ring spacers.

The dimension table has the identification code (illustration + suffix code + oil groove code) specified in the illustration number column.

Example) In the case of illustration: 6, suffix code: M, oil groove code: ①, identification code "6M①" is specified in the illustration number column.



Design

### Identification code

See the above illustrations 1 to 7.

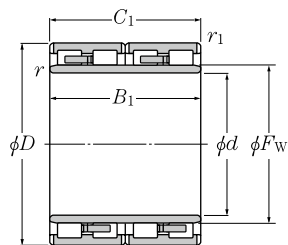
- \* Illustrations 1 to 5 use solid rollers + comb type machined cage.
- \* Illustrations 6 to 7 use hollow rollers + pin type cage.

### Suffix code

- M : The oil hole of the outer ring is provided with a fitting nozzle for oil mist.
- R : The inner diameter surface of the inner ring has a helical groove.
- S : Special specification

### Oil groove code

- ① : Oil groove on both side faces of inner ring
- ② : Oil groove on one width surface of inner ring
- ③ : Oil groove on one width surface of outer ring
- ④ : No oil hole or oil groove on outer ring spacer



Drawings 1 to 5 <sup>2)</sup>

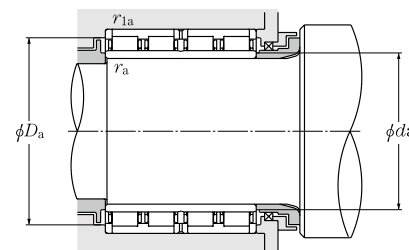
d 100 ~ 170mm

d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number <sup>2)</sup>	Drawing number <sup>3)</sup>
	D	B <sub>1</sub> mm	C <sub>1</sub>	r <sub>s min</sub> <sup>1)</sup>	r <sub>1s min</sub> <sup>1)</sup>	dynamic C <sub>r</sub> kN	static C <sub>0r</sub>			
100	150	74	74	2	2	291	510	58.5	4R2035	1
	180	92	92	2.5	2.5	445	785	84.5	4R2437	1
120	180	105	105	2.5	2.5	495	855	92.5	4R2438	1
	200	104	104	2.5	2.5	540	955	100	4R2628	1
140	190	119	119	1.5	1.5	550	1 190	125	4R2832	2 <sup>2)</sup>
	210	116	116	2.5	2.5	565	1 030	106	4R2823	1
145	210	155	155	2.5	2.5	780	1 640	168	4R2906	1
	225	156	156	2.5	2.5	900	1 750	177	4R2904	1
150	220	127	120	2.5	2.5	685	1 280	129	4R3036	1
	220	150	150	2.5	2.5	830	1 640	167	4R3031	1
	220	150	150	2.5	2.5	830	1 640	167	4R3056	1
	230	130	130	2.5	2.5	800	1 520	153	4R3029	1
	230	156	156	2.5	2.5	1 030	2 040	204	4R3040	1
	230	168	168	2	2	935	1 950	194	4R3042	1
	250	150	150	2.5	2.5	985	1 640	162	4R3039	1
151.5	230	168	168	1.5	2.5	945	2 060	205	4R3033K	1
160	220	180	180	2.5	2.5	1 020	2 490	250	4R3224	1
	230	130	130	2.5	2.5	740	1 340	133	4R3226	1
	230	168	168	2.5	2.5	1 020	2 170	217	4R3232	1
	230	168	168	2.5	2.5	995	2 200	220	4R3229	1
	230	168	168	2.5	2.5	990	2 210	219	4R3231	1
	230	180	180	2.5	2.5	1 020	2 490	250	4R3228	4 <sup>3)</sup>
170	240	170	170	2	2.5	1 090	2 290	227	4R3225	1
	230	120	120	2.5	2.5	685	1 520	151	4R3426	1
	230	120	120	2	2	685	1 520	151	4R3443	3
	240	156	156	2.5	2.5	1 000	2 170	213	4R3429	1
	240	160	160	2.5	2.5	1 000	2 180	213	4R3423	1
	250	168	168	2.5	2.5	1 080	2 220	216	4R3432	1
	250	168	168	2.5	2.5	1 140	2 390	232	4R3428	1
	255	180	180	2.5	2.5	1 220	2 430	236	4R3425	1
260	150	150	2.5	2.5	925	1 750	171	4R3433	1	

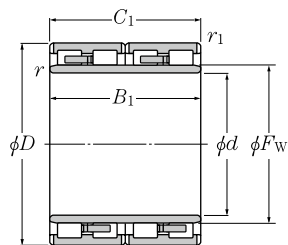
1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.

2) Bearings marked "K" have a tapered bore with a taper ratio of 1:12.

3) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.



Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
115	109	141	2	2	4.68	
137	131	169	2	2	8.2	
135	131	169	2	2	9.3	
150	141	189	2	2	12.1	
154	148	182	1.5	1.5	9.93	
160	151	199	2	2	13.9	
166	156	199	2	2	18	
169	156	214	2	2	23.3	
168	161	209	2	2	15.7	
168	161	209	2	2	19.4	
168	161	209	2	2	19.6	
174	161	219	2	2	20	
174	161	219	2	2	24.5	
178	159	221	2	2	25.8	
177	161	239	2	2	29.6	
179	159.5	219	1.5	2	25.4	
177	171	209	2	2	20.2	
180	171	219	2	2	16.6	
179	171	219	2	2	23.4	
180	171	219	2	2	23.2	
182	171	219	2	2	23.2	
177	171	219	2	2	24.8	
183	169	229	2	2	27.8	
187	181	219	2	2	14.2	
187	179	221	2	2	14.6	
189	181	229	2	2	22.2	
190	181	229	2	2	22.8	
193	181	239	2	2	28.2	
193	181	239	2	2	28.5	
193	181	244	2	2	19.3	
192	181	249	2	2	29.5	



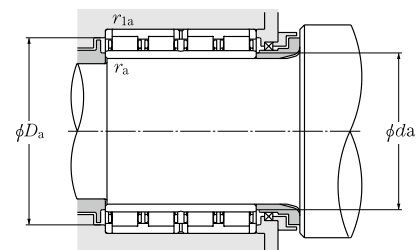
Drawings 1 to 5 <sup>2)</sup>

d 170 ~ 230mm

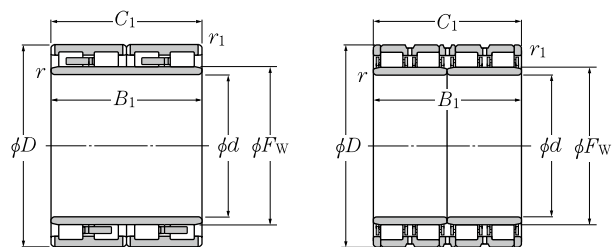
d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number	Drawing number <sup>2)</sup>
	D	B <sub>1</sub> <sup>mm</sup>	C <sub>1</sub>	r <sub>s min</sub> <sup>1)</sup>	r <sub>1s min</sub> <sup>1)</sup>	dynamic C <sub>r</sub> kN	static C <sub>0r</sub>			
<b>170</b>	260	225	225	2.5	2.5	1 450	3 150	305	<b>4R3431</b>	1
<b>180</b>	250	156	156	2.5	2.5	995	2 180	211	<b>4R3625</b>	1
	250	168	168	2	2	980	2 470	239	<b>4R3639</b>	1
	260	168	168	2.5	2.5	1 130	2 400	230	<b>4R3628</b>	1
	265	180	180	2.5	2.5	1 200	2 510	241	<b>4R3618</b>	1
<b>190</b>	260	168	168	2.5	2.5	1 080	2 600	248	<b>4R3820</b>	1
	270	170	170	2.5	2.5	1 210	2 660	252	<b>4R3818</b>	1
	270	200	200	2.5	2.5	1 400	3 100	292	<b>4R3821</b>	1
	270	200	200	2.5	2.5	1 360	3 200	305	<b>4R3817</b>	1
	280	200	200	2.5	2.5	1 370	2 910	274	<b>4R3823</b>	2
280	200	200	2.5	2.5	1 370	2 910	274	<b>4R3830</b>	3	
<b>200</b>	270	170	170	2.5	2.5	1 080	2 610	245	<b>4R4039</b>	1
	280	152	152	2.1	2.1	1 110	2 320	217	<b>4R4054</b>	2 <sup>2)</sup>
	280	170	170	2.5	2.5	1 150	2 430	228	<b>4R4048</b>	1
	280	190	190	2.5	2.5	1 320	3 150	294	<b>4R4026</b>	1
	280	200	200	2.5	2.5	1 460	3 300	310	<b>4R4037</b>	1
	280	200	200	2.5	2.5	1 380	3 350	310	<b>4R4027</b>	1
290	192	192	2.5	2.5	1 430	3 150	292	<b>4R4041</b>	1	
<b>210</b>	290	192	192	2.5	2.5	1 370	3 350	310	<b>4R4206</b>	1
<b>220</b>	290	192	192	2.5	2.5	1 320	3 350	310	<b>4R4413</b>	1
	300	160	160	2.5	2.5	1 110	2 590	237	<b>4R4419</b>	1
	300	160	160	2.1	2.1	1 110	2 590	237	<b>4R4445</b>	3
	310	192	192	2.5	2.5	1 500	3 550	320	<b>4R4410</b>	1
	310	192	192	2.5	2.5	1 540	3 400	310	<b>4R4426</b>	1
	310	204	204	2.5	2.5	1 570	3 750	340	<b>4R4425</b>	1
	310	215	215	2.5	2.5	1 690	3 750	340	<b>4R4420</b>	1
	310	225	225	2.5	2.5	1 640	3 950	360	<b>4R4416</b>	1
	310	225	225	2.5	2.5	1 760	3 950	360	<b>4R4449</b>	1
	320	160	160	3	3	1 320	2 550	231	<b>4R4428</b>	1
	320	210	210	2.5	2.5	1 720	3 650	325	<b>4R4429</b>	1
	320	210	210	2.5	2.5	1 720	3 600	330	<b>4R4444</b>	1
<b>230</b>	330	206	206	2.5	2.5	1 680	3 900	345	<b>4R4610</b>	1
	330	206	206	2.5	2.5	1 690	3 800	340	<b>4R4614</b>	1

1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.

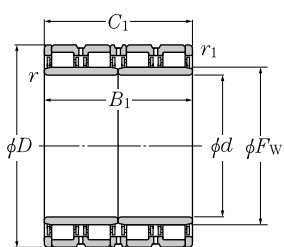
2) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.



Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
196	181	249	2	2	44	
200	191	239	2	2	23.2	
202	189	241	2	2	25.6	
202	191	249	2	2	29.4	
204	191	254	2	2	34.2	
212	201	249	2	2	26.9	
213	201	259	2	2	31.7	
212	201	259	2	2	37.5	
212	201	259	2	2	37.2	
214	201	269	2	2	41.5	
214	201	269	2	2	42.8	
222	211	259	2	2	28.5	
222	211	269	2	2	29.5	
222	211	269	2	2	33	
223	211	269	2	2	36.7	
222	211	269	2	2	40.5	
224	211	269	2	2	38.8	
226	211	279	2	2	42.5	
236	221	279	2	2	39.5	
239	231	279	2	2	33.8	
245	231	289	2	2	32.8	
245	231	289	2	2	33.7	
247	231	299	2	2	46.3	
246	231	299	2	2	46.9	
247	231	299	2	2	49.8	
242	231	299	2	2	51.5	
245	231	299	2	2	54.9	
244	231	299	2	2	54.3	
245	233	307	2.5	2.5	46.5	
248	231	309	2	2	60.5	
246	231	309	2	2	57.3	
260	241	319	2	2	58.3	
258	241	319	2	2	58.6	



Drawings 1 to 5<sup>2)</sup>



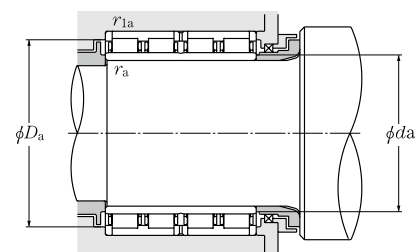
Drawings 6<sup>2)</sup>

d 230 ~ 300mm

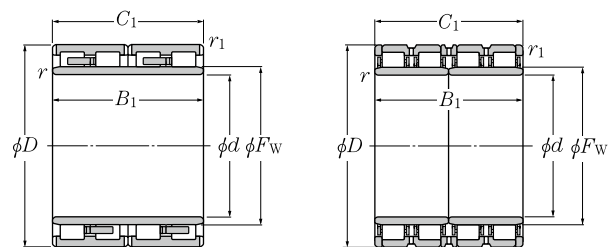
d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number	Drawing number <sup>2)</sup>
	D	B <sub>1</sub> mm	C <sub>1</sub>	r <sub>s</sub> min <sup>1)</sup>	r <sub>1s</sub> min <sup>1)</sup>	dynamic C <sub>r</sub> kN	static C <sub>0r</sub>			
<b>230</b>	340	260	260	3	3	2 270	5 100	455	<b>4R4611</b>	1
<b>240</b>	330	220	220	3	3	1 650	4 150	365	<b>4R4811</b>	3
	330	220	220	3	3	1 790	4 250	380	<b>4R4819</b>	1
	330	220	220	3	3	1 650	4 150	365	<b>4R4821</b>	3
	330	220	220	3	3	1 690	4 250	375	<b>4R4804</b>	1
	340	220	220	3	3	1 850	4 200	370	<b>4R4806</b>	1
<b>250</b>	360	220	220	2.5	2.5	1 950	4 050	355	<b>4R4807</b>	1
	360	220	220	2.5	2.5	1 950	4 050	355	<b>4R4813</b>	1
<b>260</b>	350	220	220	3	3	1 920	4 300	375	<b>4R5008</b>	1
	360	220	200	2.5	2.5	1 710	4 150	360	<b>4R5221</b>	4
	360	260	260	2.5	2.1	2 030	4 850	420	<b>4R5231</b>	3 <sup>①</sup>
	370	220	220	3	3	1 950	4 450	385	<b>4R5208</b>	1
	370	220	220	3	3	1 950	4 450	385	<b>4R5217</b>	1 <sup>①</sup>
<b>265</b>	380	280	280	3	3	2 680	6 250	535	<b>4R5213</b>	1
	400	290	290	4	2	3 400	7 150	610	<b>4R5218</b>	5 <sup>④</sup>
<b>270</b>	370	234	234	1.5	1.5	2 250	5 000	425	<b>4R5306</b>	1 <sup>①</sup>
	380	280	280	2.5	2.5	2 510	5 750	490	<b>4R5407</b>	1
<b>280</b>	380	280	280	2.5	2.5	2 860	6 850	585	<b>4R5405</b>	6 <sup>④</sup>
	350	208	208	2.5	2.5	1 430	3 950	345	<b>4R5614</b>	1
	390	220	220	3	3	1 970	4 650	395	<b>4R5611</b>	1
	390	220	220	3	3	2 020	4 800	405	<b>4R5604</b>	1
	390	275	275	2.5	2.5	2 540	6 250	525	<b>4R5612</b>	4 <sup>③</sup>
<b>290</b>	420	280	280	4	4	2 700	6 150	515	<b>4R5605</b>	1
	410	240	240	3	3	2 480	5 550	465	<b>4R5806</b>	1
<b>300</b>	420	300	300	3	3	3 150	7 500	625	<b>4R5805</b>	1
	400	300	300	3	3	2 750	7 500	—	<b>E-4R6014</b>	1
	420	240	240	3	3	2 240	5 450	—	<b>E-4R6017</b>	1 <sup>①</sup>
	420	240	240	3	3	2 240	5 450	—	<b>E-4R6012</b>	1
	420	240	240	3	3	2 230	5 450	—	<b>E-4R6023</b>	1 <sup>①</sup>
	420	240	240	3	3	2 530	5 750	—	<b>E-4R6027</b>	1
	420	300	300	3	3	3 300	8 150	—	<b>E-4R6030</b>	6 <sup>①</sup>

1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.

2) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.



Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
261	243	327	2.5	2.5	82.6	
270	253	317	2.5	2.5	56.8	
264	253	317	2.5	2.5	57.1	
268	253	317	2.5	2.5	57.1	
270	253	317	2.5	2.5	57.1	
268	253	327	2.5	2.5	63.6	
274	251	349	2	2	79.6	
274	251	349	2	2	80.1	
278	263	337	2.5	2.5	66	
292	271	349	2	2	62.7	
287	271	349	2	2	81.5	
292	273	357	2.5	2.5	77.1	
292	273	357	2.5	2.5	76.5	
294	273	367	2.5	2.5	109	
296	276	391	3	2	135	
300	273	362	1.5	1.5	78.9	
297	281	369	2	2	101	
299.7	281	369	2	2	105	
298	291	339	2	2	46.4	
312	293	377	2.5	2.5	81.3	
312	293	377	2.5	2.5	82	
312	291	379	2	2	105	
323	296	404	3	3	139	
320	303	397	2.5	2.5	103	
327	303	407	2.5	2.5	141	
328	313	387	2.5	2.5	104	
334	313	407	2.5	2.5	106	
334	313	407	2.5	2.5	105	
336	313	407	2.5	2.5	105	
332	313	407	2.5	2.5	105	
331	313	407	2.5	2.5	136	



Drawings 1 to 5<sup>2)</sup>

Drawings 6 to 7<sup>2)</sup>

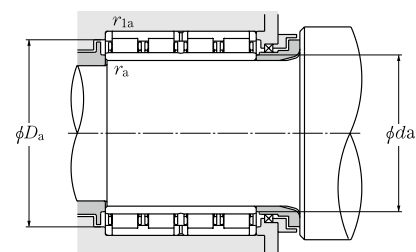
d 300 ~ 380mm

d	Boundary dimensions					Basic load rating		Fatigue load limit kN $C_u$	Bearing number <sup>2)</sup>	Drawing number <sup>3)</sup>
	D	$B_1$	$C_1$	$r_s$ min <sup>1)</sup>	$r_{1s}$ min <sup>1)</sup>	dynamic kN $C_r$	static kN $C_{0r}$			
300	420	300	300	3	3	3 000	7 600	—	E-4R6015	1
	420	300	300	3	3	3 200	7 850	—	E-4R6020	6 <sup>①</sup>
	420	320	300	3	3	3 200	7 850	—	E-4R6018	6 <sup>②</sup>
	430	240	240	3	3	2 400	5 150	—	E-4R6021	1
	460	270	270	3	3	2 780	5 350	—	E-4R6019	1
310	430	240	240	3	3	2 480	5 950	—	E-4R6202	1
320	440	240	230	3	3	2 540	6 050	—	E-4R6414	1
	450	240	240	3	3	2 630	6 150	—	E-4R6411	1
	460	340	340	3	3	3 750	9 450	—	E-4R6412	1
	470	350	350	3	3	4 600	10 900	—	E-4R6406	6 <sup>④</sup>
330	440	200	200	3	3	2 020	4 850	—	E-4R6603	2
	440	200	200	5	3	1 910	4 550	—	E-4R6608	2 <sup>①</sup>
	460	340	340	4	4	3 600	8 850	—	E-4R6605	1
	460	340	340	4	4	3 650	9 550	—	E-4R6602	1
340	480	350	350	4	4	4 400	10 900	—	E-4R6819	6M <sup>①</sup>
	480	370	350	5	5	3 800	9 650	—	E-4R6811	1
	490	300	300	4	4	3 700	8 300	—	E-4R6804	1
	490	300	300	5	5	3 450	7 950	—	E-4R6805	1
356.76	550	400	400	4	4	5 650	13 800	—	E-4R7105K	5
360	480	290	290	3	3	3 300	8 150	—	E-4R7207	1
	510	370	370	4	4	3 950	9 700	—	E-4R7212	3
	510	400	380	4	2	4 850	11 900	—	E-4R7205	5 <sup>①</sup>
	510	400	400	5	5	4 700	11 500	—	E-4R7203	2
370	480	230	230	5	5	2 330	6 250	—	E-4R7405	1
	480	250	250	3	3	2 440	6 450	—	E-4R7408	1
	520	380	380	5	5	4 350	10 800	—	E-4R7411	1
	520	400	400	5	5	5 150	13 500	—	E-4R7404	1
380	520	280	280	4	4	3 800	9 150	—	E-4R7605	1
	520	290	290	4	4	3 800	9 150	—	E-4R7617	1
	520	300	300	4	4	3 950	9 600	—	E-4R7607	7 <sup>①</sup>
	540	400	400	4	4	5 750	15 200	—	E-4R7604	7 <sup>②</sup>

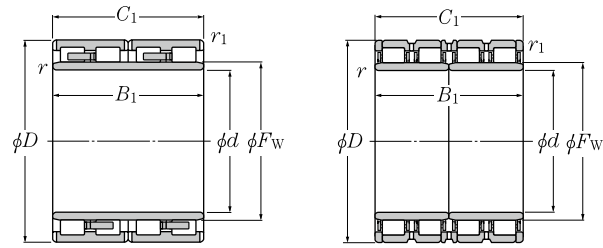
1) Smallest allowable dimension for chamfer dimension  $r$  or  $r_1$ .

2) Bearings marked "K" have a tapered bore with a taper ratio of 1:12.

3) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.



Dimensions	Installation-related dimensions					Mass kg (approx.)
	$F_w$	$d_a$	$D_a$	$r_{as}$	$r_{1as}$	
334	313	407	2.5	2.5	125	
332	313	407	2.5	2.5	130	
332	313	407	2.5	2.5	136	
338	313	417	2.5	2.5	115	
344	313	447	2.5	2.5	162	
344.5	323	417	2.5	2.5	108	
351	333	427	2.5	2.5	106	
358	333	437	2.5	2.5	125	
360	333	447	2.5	2.5	178	
361.7	333	457	2.5	2.5	212	
360	343	427	2.5	2.5	83.6	
360	350	427	4	2.5	85.6	
365	346	444	3	3	181	
368	346	444	3	3	177	
378	356	464	3	3	211	
378	360	460	4	4	198	
377	356	474	3	3	187	
380	360	470	4	4	189	
426	372.757	534	3	3	354	
388	373	467	2.5	2.5	148	
400	376	494	3	3	244	
399	376	509	3	2	251	
397	380	490	4	4	262	
400	390	460	4	4	106	
401	383	467	2.5	2.5	118	
409	390	500	4	4	256	
409	390	500	4	4	273	
417	396	504	3	3	174	
417	396	504	3	3	185	
416	396	504	3	3	210	
422	396	524	3	3	325	



Drawings 1 to 4<sup>2)</sup>

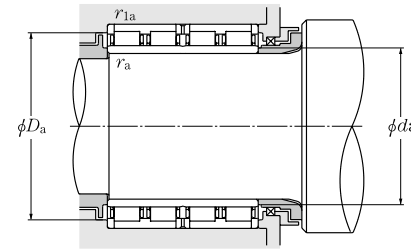
Drawings 6 to 7<sup>2)</sup>

d 380 ~ 500mm

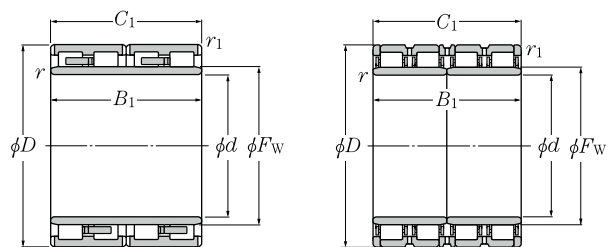
d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number	Drawing number <sup>2)</sup>
	D	B <sub>1</sub>	C <sub>1</sub>	r <sub>s</sub> min <sup>1)</sup>	r <sub>1s</sub> min <sup>1)</sup>	dynamic C <sub>r</sub>	static C <sub>0r</sub>			
380	540	400	400	4	4	5 500	14 400	—	<b>E-4R7618</b>	6M <sup>①</sup>
	540	400	400	5	5	5 050	12 700	—	<b>E-4R7613</b>	2 <sup>①③</sup>
400	560	400	400	5	5	4 700	11 800	—	<b>E-4R8007</b>	2
	560	410	410	4	4	6 350	17 000	—	<b>E-4R8010</b>	6
	590	420	420	4	4	5 750	13 000	—	<b>E-4R8011</b>	1
420	560	280	280	4	4	3 500	8 750	—	<b>E-4R8403</b>	1
	580	230	230	4	4	2 700	6 250	—	<b>E-4R8404</b>	1
	600	440	440	6	2.5	7 050	18 100	—	<b>E-4R8407</b>	6 <sup>①</sup>
	620	400	400	5	5	5 550	13 400	—	<b>E-4R8401</b>	4 <sup>③</sup>
430	591	420	420	5	5	6 100	17 400	—	<b>E-4R8605</b>	6M <sup>①④</sup>
440	600	450	450	1.5	5	6 700	17 900	—	<b>E-4R8806</b>	6R <sup>②</sup>
	600	450	450	1.5	5	7 050	19 100	—	<b>E-4R8805</b>	6R <sup>①</sup>
	620	450	450	5	5	7 150	18 700	—	<b>E-4R8803</b>	6 <sup>①</sup>
	620	450	450	5	5	7 150	18 700	—	<b>E-4R8801</b>	6
460	620	400	400	4	4	5 900	16 700	—	<b>E-4R9211</b>	7S
	620	400	400	4	4	5 450	15 000	—	<b>E-4R9209</b>	1
	620	460	460	4	4	6 600	19 100	—	<b>E-4R9223</b>	6M <sup>①</sup>
	650	470	470	5	5	7 900	20 600	—	<b>E-4R9216</b>	6 <sup>①</sup>
470	660	470	470	5	5	8 100	21 300	—	<b>E-4R9403</b>	6M <sup>①</sup>
480	600	236	236	3	3	2 900	7 850	—	<b>E-4R9610</b>	1
	650	420	420	5	5	6 350	17 200	—	<b>E-4R9613</b>	7 <sup>①</sup>
	650	420	420	5	5	6 600	18 100	—	<b>E-4R9607</b>	7
	680	500	500	6	6	8 800	24 000	—	<b>E-4R9604</b>	6
500	680	420	405	5	5	7 900	22 900	—	<b>E-4R10010</b>	6 <sup>②</sup>
	680	420	405	5	5	7 000	18 800	—	<b>E-4R10020</b>	6 <sup>②</sup>
	690	470	470	5	5	8 500	22 500	—	<b>E-4R10016</b>	6 <sup>①</sup>
	690	510	510	5	5	8 550	24 600	—	<b>E-4R10006</b>	6
	700	515	515	5	5	8 750	24 100	—	<b>E-4R10011</b>	6
	710	480	480	6	6	9 600	24 700	—	<b>E-4R10008</b>	6 <sup>①</sup>
	720	530	530	5	5	9 150	25 000	—	<b>E-4R10015</b>	6 <sup>①</sup>
	720	530	530	5	5	9 150	25 000	—	<b>E-4R10024</b>	6M <sup>①</sup>

1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.

2) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.



Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
422	396	524	3	3	309	
424	400	520	4	4	298	
446	420	540	4	4	303	
445	416	544	3	3	349	
450	416	574	3	3	399	
457	436	544	3	3	189	
466	436	564	3	3	181	
469.6	444	589	5	2	423	
478	440	600	4	4	410	
476	450	571	4	4	362	
480	448	580	1.5	4	392	
480	448	580	1.5	4	392	
487	460	600	4	4	450	
487	460	600	4	4	437	
502	476	604	3	3	383	
502	476	604	3	3	341	
502	476	604	3	3	417	
509	480	630	4	4	540	
517	490	640	4	4	529	
510	493	587	2.5	2.5	155	
523	500	630	4	4	423	
523	500	630	4	4	369	
532	504	656	5	5	640	
550	520	660	4	4	495	
550	520	660	4	4	451	
547	520	670	4	4	590	
552	520	670	4	4	640	
554	520	680	4	4	680	
556	524	686	5	5	675	
568	520	700	4	4	780	
568	520	700	4	4	745	



Drawings 1<sup>2)</sup>

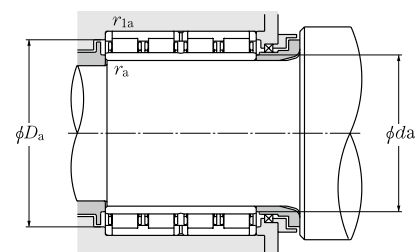
Drawings 6 to 7<sup>2)</sup>

d 510 ~ 680mm

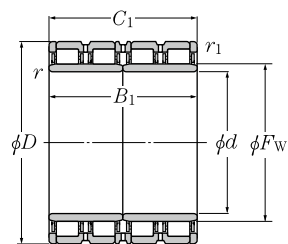
d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number	Drawing number <sup>2)</sup>
	D	B <sub>1</sub> mm	C <sub>1</sub>	r <sub>s min</sub> <sup>1)</sup>	r <sub>1s min</sub> <sup>1)</sup>	dynamic C <sub>r</sub> kN	static C <sub>0r</sub>			
510	670	320	320	5	5	5 050	13 500	—	E-4R10201	7 <sup>①</sup>
	700	540	540	6	6	9 200	25 000	—	E-4R10202	6 <sup>①</sup>
520	700	540	540	6	6	9 100	25 500	—	E-4R10403	6 <sup>①</sup>
	720	550	550	5	5	10 400	27 700	—	E-4R10406	6R <sup>①</sup>
	735	535	535	5	5	9 950	26 600	—	E-4R10402	6 <sup>②</sup>
530	700	540	540	6	6	8 700	25 400	—	E-4R10603	6 <sup>①</sup>
	760	520	520	6	6	10 200	26 700	—	E-4R10601	6 <sup>①</sup>
	780	570	570	6	6	11 400	29 100	—	E-4R10602	6 <sup>①</sup>
	780	570	570	7.5	6	11 400	29 100	—	E-4R10606	6M <sup>①</sup>
536.18	762.03	558.8	558.8	5	6	11 200	29 200	—	E-4R10704	6 <sup>②</sup>
550	800	520	520	6	6	10 500	27 000	—	E-4R11001	6 <sup>①</sup>
560	680	360	360	3	3	5 150	16 500	—	E-4R11202	1
570	800	514	514	2.5	6	11 300	29 200	—	E-4R11404	6R <sup>①</sup>
	815	594	594	6	6	13 100	34 500	—	E-4R11402	6
600	820	575	575	7.5	7.5	11 100	31 500	—	E-4R12006	6M <sup>①</sup>
	870	540	540	7.5	7.5	11 800	29 600	—	E-4R12002	6 <sup>①</sup>
	870	640	640	7.5	7.5	15 100	40 500	—	E-4R12001	6
610	870	660	660	9.5	7.5	14 000	40 000	—	E-4R12202	6 <sup>①④</sup>
628	922	600	600	3	6	15 100	38 500	—	E-4R12602	6 <sup>①</sup>
640	880	600	600	6	6	12 700	36 000	—	E-4R12802	6 <sup>②</sup>
650	920	670	670	7.5	4	16 200	46 000	—	E-4R13005	6 <sup>①</sup>
	920	680	680	7.5	7.5	16 600	47 000	—	E-4R13010	6R <sup>①</sup>
	920	690	690	7.5	7.5	15 900	46 500	—	E-4R13003	6
660	820	440	440	5	4	8 100	27 800	—	E-4R13201	6
	680	1 020	650	650	6	6	17 400	48 000	—	E-4R13603
		1 020	680	680	3	5	19 200	49 500	—	E-4R13604

1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.

2) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.



Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
554	530	650	4	4	335	
558	534	676	5	5	689	
564	544	676	5	5	658	
566	540	700	4	4	715	
574.5	540	715	4	4	740	
574	554	676	5	5	626	
590	554	736	5	5	800	
601	554	756	5	5	1 010	
595	562	756	6	5	978	
600	556.176	738.03	4	5	859	
622	574	776	5	5	965	
590	573	667	2.5	2.5	265	
626	581	776	2	5	849	
628	594	791	5	5	1 040	
660	632	788	6	6	941	
672	632	838	6	6	1 150	
672	632	838	6	6	1 330	
680	650	838	8	6	1 400	
702	641	898	2.5	5	1 430	
700	664	856	5	5	1 150	
723	682	904	6	3	1 500	
723	682	888	6	6	1 510	
723	682	888	6	6	1 550	
702	680	804	4	3	580	
803	704	996	5	5	1 970	
775	693	1 000	2.5	4	2 060	



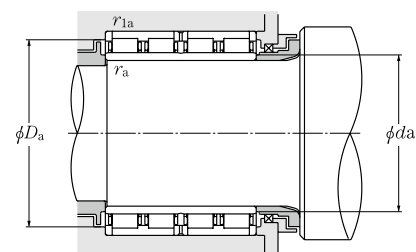
Drawings 6<sup>2)</sup>

d 690 ~ 860mm

d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number <sup>3)</sup>	Drawing number <sup>2)</sup>
	D	B <sub>1</sub> <sup>mm</sup>	C <sub>1</sub>	r <sub>s min</sub> <sup>1)</sup>	r <sub>1s min</sub> <sup>1)</sup>	C <sub>r</sub>	C <sub>0r</sub>			
690	980	715	715	7.5	7.5	18 700	54 500	—	<b>E-4R13802</b>	6 <sup>2)</sup>
	980	750	750	7.5	7.5	18 300	53 000	—	<b>E-4R13803</b>	6M <sup>2)</sup>
710	1 000	715	715	9.5	6	18 600	54 500	—	<b>E-4R14205</b>	6S <sup>4)</sup>
725	1 000	700	700	6	6	17 700	53 500	—	<b>E-4R14501</b>	6 <sup>1)</sup>
750	1 050	745	720	7.5	7.5	19 500	58 000	—	<b>E-4R15001</b>	6M <sup>2)</sup>
	1 090	745	720	7.5	7.5	21 200	60 500	—	<b>E-4R15002</b>	6M <sup>2)</sup>
755	1 070	750	750	7.5	7.5	20 800	58 500	—	<b>E-4R15101</b>	6 <sup>1)</sup>
760	1 030	750	750	7.5	7.5	19 200	59 500	—	<b>E-4R15204</b>	6M <sup>1)</sup>
	1 080	805	790	6	6	20 700	61 000	—	<b>E-4R15207</b>	6M <sup>2)</sup>
	1 100	745	720	7.5	7.5	21 200	60 500	—	<b>E-4R15203</b>	6M <sup>2)</sup>
761.43	1 079.6	787.4	787.4	9.5	7.5	21 900	63 000	—	<b>E-4R15201</b>	6 <sup>1)</sup>
800	1 080	700	700	7.5	7.5	18 300	55 000	—	<b>E-4R16004</b>	6 <sup>1)</sup>
	1 080	750	750	6	6	19 200	59 000	—	<b>E-4R16005</b>	6 <sup>1)</sup>
820	1 130	800	800	7.5	7.5	21 800	66 500	—	<b>E-4R16406</b>	6M <sup>1)</sup>
	1 130	800	800	7.5	7.5	23 900	72 000	—	<b>E-4R16413</b>	6MS <sup>2)</sup>
	1 130	800	800	7.5	7.5	21 800	66 500	—	<b>E-4R16415</b>	6 <sup>2)</sup>
	1 130	825	800	7.5	7.5	21 800	66 500	—	<b>E-4R16405</b>	6M <sup>1)</sup>
	1 160	840	840	7.5	7.5	24 000	71 000	—	<b>E-4R16403</b>	6 <sup>2)</sup>
830	1 080	710	710	6	6	18 000	59 500	—	<b>E-4R16601</b>	6 <sup>2)</sup>
840	1 160	840	840	5	7.5	23 900	71 000	—	<b>E-4R16801</b>	6 <sup>1)</sup>
850	1 150	650	650	9.5	9.5	17 500	51 000	—	<b>E-4R17001</b>	6 <sup>1)</sup>
	1 150	800	800	6	6	21 800	71 000	—	<b>E-4R17003</b>	6 <sup>1)</sup>
	1 150	840	840	6	6	24 400	77 500	—	<b>E-4R17009</b>	6 <sup>1)</sup>
	1 180	650	650	7.5	7.5	18 200	51 500	—	<b>E-4R17004</b>	6 <sup>1)</sup>
	1 180	850	850	9.5	9.5	26 700	78 500	—	<b>E-4R17002</b>	6
1 180	850	850	7.5	7.5	24 100	72 000	—	<b>E-4R17014</b>	6 <sup>2)</sup>	
860	1 140	750	750	7.5	7.5	19 100	61 000	—	<b>E-4R17202</b>	6 <sup>2)</sup>

1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.

2) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.

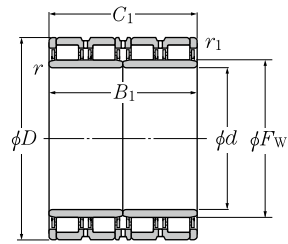


Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
767.5	722	948	6	6	1 850	
766	722	948	6	6	1 900	
787.5	750	976	8	5	1 900	
796	749	976	5	5	1 730	
830	782	1 018	6	6	2 180	
845	782	1 058	6	6	2 530	
837	787	1 038	6	6	2 260	
828	792	998	6	6	2 000	
845	784	1 056	5	5	2 550	
855	792	1 068	6	6	2 560	
846	801.425	1 047.6	8	6	2 420	
870	832	1 048	6	6	1 950	
880	824	1 056	5	5	2 090	
903	852	1 098	6	6	2 450	
903	852	1 098	6	6	2 530	
903	852	1 098	6	6	2 530	
903	852	1 098	6	6	2 520	
910	852	1 128	6	6	2 930	
896	854	1 056	5	5	1 780	
920	860	1 128	4	6	2 840	
941	890	1 110	8	8	1 980	
930	874	1 126	5	5	2 430	
928	874	1 126	5	5	2 640	
945	882	1 148	6	6	2 270	
928	890	1 140	8	8	2 970	
940	882	1 148	6	6	2 980	
938	892	1 108	6	6	2 200	



## Four-Row Cylindrical Roller Bearings

NTN



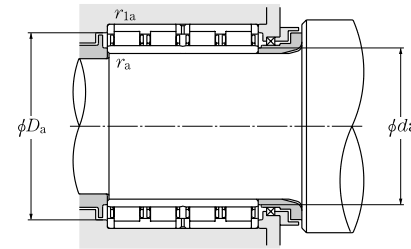
Drawings 6<sup>2)</sup>

d 860 ~ 1 030mm

d	Boundary dimensions					Basic load rating		Fatigue load limit kN C <sub>u</sub>	Bearing number	Drawing number <sup>2)</sup>
	D	B <sub>1</sub> <sup>mm</sup>	C <sub>1</sub>	r <sub>s min</sub> <sup>1)</sup>	r <sub>1s min</sub> <sup>1)</sup>	dynamic C <sub>r</sub> kN	static C <sub>0r</sub>			
<b>860</b>	1 160	735	710	6	6	19 700	62 500	—	<b>E-4R17201</b>	6 <sup>①</sup>
<b>900</b>	1 230	895	870	7.5	7.5	27 400	88 000	—	<b>E-4R18001</b>	6M <sup>②</sup>
<b>920</b>	1 280	865	850	7.5	7.5	29 100	88 500	—	<b>E-4R18401</b>	6
<b>1000</b>	1 310	880	880	9.5	9.5	25 900	88 500	—	<b>E-4R20001</b>	6 <sup>①</sup>
	1 360	800	800	7.5	7.5	27 700	85 000	—	<b>E-4R20002</b>	6 <sup>①</sup>
<b>1030</b>	1 380	850	850	7.5	7.5	27 100	89 000	—	<b>E-4R20601</b>	6 <sup>①</sup>

## Four-Row Cylindrical Roller Bearings

NTN



Dimensions	Installation-related dimensions					Mass kg (approx.)
	F <sub>w</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>as</sub>	r <sub>1as</sub>	
940	884	1 136	5	5	2 310	
985	932	1 198	6	6	3 250	
1 015	952	1 248	6	6	3 560	
1 080	1 040	1 270	8	8	3 260	
1 090	1 032	1 328	6	6	3 530	
1 124	1 062	1 348	6	6	3 800	

1) Smallest allowable dimension for chamfer dimension r or r<sub>1</sub>.  
2) Boundary dimension parts are shown in the above drawing. Refer to C-19 for the details of drawings.