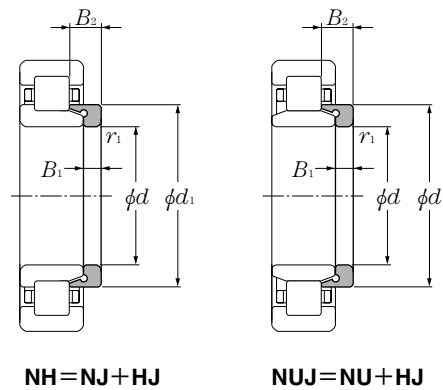


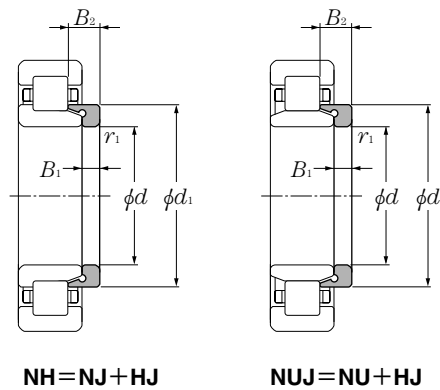
L type collar ring



d 20 ~ 60mm

Dimensions						Bearing numbers	Mass kg (approx.)	Dimensions					Bearing numbers	Mass kg (approx.)
d	d_1	B_1	B_2	$r_{1s \min}^{1)}$	mm									
20	29.9	3	6.75	0.6	HJ204	0.012	40	54.2	5	9	1.1	HJ208	0.046	
	29.5	3	5.5	0.6	HJ204E	0.009		53.9	5	8.5	1.1	HJ208E	0.042	
	29.9	3	7.5	0.6	HJ2204	0.013		54.2	5	9.5	1.1	HJ2208	0.047	
	29.5	3	6.5	0.6	HJ2204E	0.01		53.9	5	9	1.1	HJ2208E	0.045	
	31.8	4	7.5	0.6	HJ304	0.017		58.4	7	12.5	1.5	HJ308	0.083	
	31.1	4	6.5	0.6	HJ304E	0.014		57.6	7	11	1.5	HJ308E	0.07	
	31.8	4	8.5	0.6	HJ2304	0.018		58.4	7	14.5	1.5	HJ2308	0.09	
31.1	4	7.5	0.6	HJ2304E	0.015	57.6	7	12.5	1.5	HJ2308E	0.08			
25	34.8	3	7.25	0.6	HJ205	0.015	45	59	5	9.5	1.1	* HJ209	0.053	
	34.5	3	6	0.6	HJ205E	0.012		58.9	5	8.5	1.1	HJ209E	0.047	
	34.8	3	7.5	0.6	HJ2205	0.015		58.9	5	9	1.1	HJ2209E	0.05	
	34.5	3	6.5	0.6	HJ2205E	0.013		64	7	12.5	1.5	HJ309	0.099	
	39	4	8	1.1	HJ305	0.025		64.5	7	11.5	1.5	HJ309E	0.093	
	38	4	7	1.1	HJ305E	0.021		64	7	15	1.5	HJ2309	0.109	
	39	4	9	1.1	HJ2305	0.027		64.5	7	13	1.5	HJ2309E	0.103	
	38	4	8	1.1	HJ2305E	0.024		71.8	8	13.5	2	HJ409	0.175	
43.6	6	10.5	1.5	HJ405	0.057	50	64.6	5	10	1.1	HJ210	0.063		
41.7	4	8.25	0.6	HJ206	0.025		63.9	5	9	1.1	* HJ210E	0.055		
41.1	4	7	0.6	HJ206E	0.017		64.6	5	9.5	1.1	HJ2210	0.061		
41.7	4	8.5	0.6	HJ2206	0.025		71	8	14	2	HJ310	0.142		
41.1	4	7.5	0.6	HJ2206E	0.02		71.4	8	13	2	HJ310E	0.134		
45.9	5	9.5	1.1	HJ306	0.039		71	8	17	2	HJ2310	0.157		
44.9	5	8.5	1.1	HJ306E	0.035		71.4	8	14.5	2	HJ2310E	0.15		
45.9	5	11.5	1.1	HJ2306	0.043		78.8	9	14.5	2.1	HJ410	0.23		
44.9	5	9.5	1.1	HJ2306E	0.035	55	70.8	6	11	1.1	* HJ211	0.084		
50.5	7	11.5	1.5	HJ406	0.08		70.8	6	9.5	1.1	HJ211E	0.072		
30	41.7	4	8.25	0.6	HJ207		0.03	70.8	6	10	1.1	HJ2211E	0.076	
	41.1	4	7	0.6	HJ207E		0.027	77.2	9	15	2	HJ311	0.182	
	47.6	4	8.5	0.6	HJ2207		0.031	77.2	9	14	2	HJ311E	0.168	
	41.1	4	7.5	0.6	HJ2207E		0.031	77.7	9	14	2	HJ2311	0.203	
	45.9	5	9.5	1.1	HJ307		0.056	77.2	9	18.5	2	HJ2311E	0.185	
	44.9	5	8.5	1.1	HJ307E		0.048	77.7	9	15.5	2	HJ411	0.29	
	45.9	5	11.5	1.1	HJ2307	0.064	85.2	10	16.5	2.1	60	* HJ212	0.108	
44.9	5	9.5	1.1	HJ2307E	0.055	78.4	6	11	1.5	* HJ212E		0.094		
50.8	6	11	1.1	HJ2307E	0.055	77.6	6	10	1.5					
51	6	9.5	1.1	HJ307E	0.048									
50.8	6	14	1.1	HJ2307	0.064									
51	6	11	1.1	HJ2307E	0.055									
59	8	13	1.5	HJ407	0.12									

1) Minimal allowable dimension for chamfer dimension r . Note: 1. This L type collar ring is used with **NU** type cylindrical roller bearings; in duplex arrangements with **NJ** or **NU** type bearing numbers, they become **NH** type and **NUJ** type respectively. For bearing dimensions, allowable rotations, and mass, please refer to pages **B-80** to **B-84**. 2. "*" indicates L type collar rings that can also be used with dimension series **22** bearings.



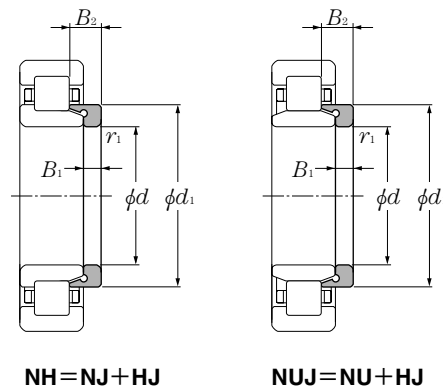
d 60 ~ 105mm

	Dimensions					Bearing numbers	Mass kg (approx.)
	mm						
d	d ₁	B ₁	B ₂	r _{1s min} ¹⁾			
60	84.2	9	15.5	2.1	HJ312	0.22	
	84.6	9	14.5	2.1	HJ312E	0.205	
	84.2	9	19	2.1	HJ2312	0.245	
	84.6	9	16	2.1	HJ2312E	0.23	
	91.8	10	16.5	2.1	HJ412	0.34	
65	84.8	6	11	1.5	HJ213	0.123	
	84.5	6	10	1.5	HJ213E	0.111	
	84.8	6	11.5	1.5	HJ2213	0.126	
	84.5	6	10.5	1.5	HJ2213E	0.118	
	91	10	17	2.1	HJ313	0.28	
	91	10	15.5	2.1	HJ313E	0.25	
	91	10	20	2.1	HJ2313	0.304	
	91	10	18	2.1	HJ2313E	0.29	
70	89.6	7	12.5	1.5	* HJ214	0.15	
	89.5	7	11	1.5	HJ214E	0.13	
	89.5	7	11.5	1.5	HJ2214E	0.138	
	98	10	17.5	2.1	HJ314	0.33	
	98	10	15.5	2.1	HJ314E	0.293	
	98	10	20.5	2.1	HJ2314	0.358	
	98	10	18.5	2.1	HJ2314E	0.35	
75	110.5	12	20	3	HJ414	0.605	
	94	7	12.5	1.5	* HJ215	0.156	
	94.5	7	11	1.5	HJ215E	0.141	
	94.5	7	11.5	1.5	HJ2215E	0.164	
	104.2	11	18.5	2.1	HJ315	0.4	
	104.6	11	16.5	2.1	HJ315E	0.35	
	104.2	11	21.5	2.1	HJ2315	0.432	
	104.6	11	19.5	2.1	HJ2315E	0.41	
80	116.0	13	21.5	3	HJ415	0.71	
	101.2	8	13.5	2	* HJ216	0.207	
	101.7	8	12.5	2	* HJ216E	0.193	
	111.8	11	19.5	2.1	HJ316	0.47	
	111	11	17	2.1	HJ316E	0.405	

	Dimensions					Bearing numbers	Mass kg (approx.)
	mm						
d	d ₁	B ₁	B ₂	r _{1s min} ¹⁾			
80	111	11	20	2.1	HJ2316E	0.45	
	122	13	22	3	HJ416	0.78	
85	108.2	8	14	2	* HJ217	0.25	
	107.7	8	12.5	2	HJ217E	0.21	
	107.7	8	13	2	HJ2217E	0.216	
	117.5	12	20.5	3	HJ317	0.56	
	118.4	12	18.5	3	HJ317E	0.505	
90	117.5	12	24	3	HJ2317	0.606	
	118.4	12	22	3	HJ2317E	0.55	
	114.2	9	15	2	HJ218	0.305	
	114.6	9	14	2	HJ218E	0.272	
	114.2	9	16	2	HJ2218	0.315	
	114.6	9	15	2	HJ2218E	0.308	
95	125	12	21	3	HJ318	0.63	
	124.7	12	18.5	3	HJ318E	0.548	
	125	12	26	3	HJ2318	0.704	
	124.7	12	22	3	HJ2318E	0.69	
	121	9	15.5	2.1	HJ219	0.352	
100	121	9	14.0	2.1	HJ219E	0.304	
	121	9	16.5	2.1	HJ2219	0.363	
	121	9	15.5	2.1	HJ2219E	0.335	
	132	13	22.5	3	HJ319	0.76	
	132.7	13	20.5	3	HJ319E	0.7	
	132	13	26.5	3	HJ2319	0.826	
	132.7	13	24.5	3	HJ2319E	0.8	
105	128	10	17	2.1	HJ220	0.444	
	128	10	15	2.1	HJ220E	0.38	
	128	10	18	2.1	HJ2220	0.456	
	128	10	16	2.1	HJ2220E	0.385	
	140.5	13	22.5	3	HJ320	0.895	
	140.3	13	20.5	3	HJ320E	0.8	
105	140.5	13	27.5	3	HJ2320	0.986	
	140.3	13	23.5	3	HJ2320E	0.92	

1) Minimal allowable dimension for chamfer dimension r. Note: 1. This L type collar ring is used with NU type cylindrical roller bearings; in duplex arrangements with NJ or NU type bearing numbers, they become NH type and NUJ type respectively. For bearing dimensions, allowable rotations, and mass, please refer to pages B-84 to B-88. 2. " * " indicates L type collar rings that can also be used with dimension series 22 bearings.

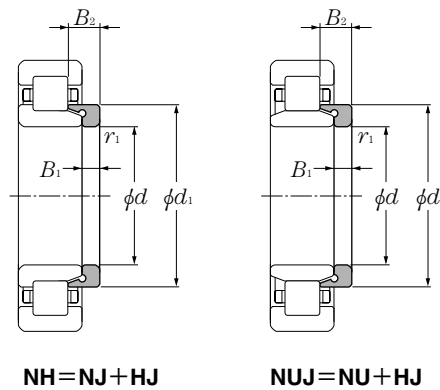
L type collar ring



d 105 ~ 200mm

Dimensions						Bearing numbers	Mass kg (approx.)	Dimensions					Bearing numbers	Mass kg (approx.)
d	d_1	B_1	B_2	$r_{1s \min}^{1)}$	mm									
105	147.0	13	22.5	3	HJ321	0.97	150	194	12	19.5	3	HJ230E	1.18	
	110	141.5	11	18.5	2.1	HJ222		0.615	193	12	26.5	3	HJ2230E	1.39
		142.1	11	17	2.1	HJ222E		0.553	194	12	24.5	3	HJ2230E	1.42
		141.5	11	20.5	2.1	HJ2222		0.645	210	15	26.5	4	HJ330	2.37
		142.1	11	19.5	2.1	HJ2222E		0.605	211	15	25	4	HJ330E	2.25
155.5		14	23	3	HJ322	1.17		210	15	34	4	HJ2330	2.69	
156.6		14	22	3	HJ322E	1.09		211	15	31.5	4	HJ2330E	2.6	
155.5		14	28	3	HJ2322	1.28		160	207	12	21	3	HJ232	1.48
156.6	14	26.5	3	HJ2322E	1.25	207.8			12	20	3	HJ232E	1.34	
120	153	11	19	2.1	HJ224	0.715			207	12	28	3	HJ2232	1.69
	153.9	11	17	2.1	HJ224E	0.634			206.6	12	24.5	3	HJ2232E	1.61
	153	11	22	2.1	HJ2224	0.767			225	15	28	4	HJ332	2.75
	153.9	11	20	2.1	HJ2224E	0.705			223.2	15	25	4	HJ332E	2.4
	168.5	14	23.5	3	HJ324	1.4			225	15	37	4	HJ2332	3.16
	169.2	14	22.5	3	HJ324E	1.28		223.2	15	32	4	HJ2332E	2.85	
	168.5	14	28	3	HJ2324	1.53	170	220.5	12	22	4	HJ234	1.7	
169.2	14	26	3	HJ2324E	1.42	221.4		12	20	4	HJ234E	1.51		
130	165.5	11	19	3	HJ226	0.84		220.5	12	29	4	HJ2234	1.93	
	164.7	11	17	3	HJ226E	0.684		220.2	12	24	4	HJ2234E	1.82	
	165.5	11	25	3	HJ2226	0.953		238	16	29.5	4	HJ334	3.25	
	164.7	11	21	3	HJ2226E	0.831		238	16	38.5	4	HJ2334	3.71	
	182	14	24	4	HJ326	1.62		180	230.5	12	22	4	HJ236	1.8
	183	14	23	4	HJ326E	1.53	231.4		12	20	4	HJ236E	1.7	
	182	14	29.5	4	HJ2326	1.8	230.5		12	29	4	HJ2236	2.04	
183	14	28	4	HJ2326E	1.75	230.2	12		24	4	HJ2236E	1.91		
140	179.5	11	19	3	HJ228	1	252		17	30.5	4	HJ336	3.85	
	180.2	11	18	3	HJ228E	0.929	252		17	40	4	HJ2336	4.42	
	179.5	11	25	3	HJ2228	1.14	190		244.5	13	23.5	4	HJ238	2.2
	180.2	11	23	3	HJ2228E	1.11		245.2	13	21.5	4	HJ238E	1.94	
	196	15	26	4	HJ328	1.93		244.5	13	31.5	4	HJ2238	2.52	
	196.8	15	25	4	HJ328E	1.91		244	13	26.5	4	HJ2238E	2.38	
	196	15	33.5	4	HJ2328	2.21		265	18	32	5	HJ338	4.45	
196.8	15	31	4	HJ2328E	2.3	265		18	41.5	5	HJ2338	5.05		
150	193	12	20.5	3	HJ230	1.24		200	258	14	25	4	HJ240	2.6

1) Minimal allowable dimension for chamfer dimension r . Note: 1. This L type collar ring is used with **NU** type cylindrical roller bearings; in duplex arrangements with **NJ** or **NU** type bearing numbers, they become **NH** type and **NUJ** type respectively. For bearing dimensions, allowable rotations, and mass, please refer to pages **B-88** to **B-94**. 2. " * " indicates L type collar rings that can also be used with dimension series **22** bearings.



d 200 ~ 320mm

	Dimensions					Bearing numbers	Mass kg (approx.)
	mm						
d	d ₁	B ₁	B ₂	r _{1s min} ¹⁾			
200	259	14	23	4	HJ240E	2.35	
	258	14	34	4	HJ2240	2.99	
	257.8	14	28	4	HJ2240E	2.86	
	280	18	33	5	HJ340	5	
	280	18	44.5	5	HJ2340	5.76	
220	286	15	27.5	4	HJ244	3.55	
	307	20	36	5	HJ344	7.05	
240	313	16	29.5	4	HJ248	4.65	
	335	22	39.5	5	HJ348	8.2	
260	340	18	33	5	HJ252	6.2	
	362	24	43	6	HJ352	11.4	
280	360	18	33	5	HJ256	7.39	
	390	26	46	6	HJ356	13.9	
300	387	20	34.5	5	HJ260	9.14	
320	415	21	37	5	HJ264	11.3	

1) Minimal allowable dimension for chamfer dimension r. Note: 1. This L type collar ring is used with **NU** type cylindrical roller bearings; in duplex arrangements with **NJ** or **NU** type bearing numbers, they become **NH** type and **NUJ** type respectively. For bearing dimensions, allowable rotations, and mass, please refer to pages **B-94** to **B-97**. 2. " * " indicates L type collar rings that can also be used with dimension series **22** bearings.