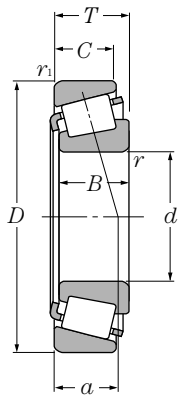
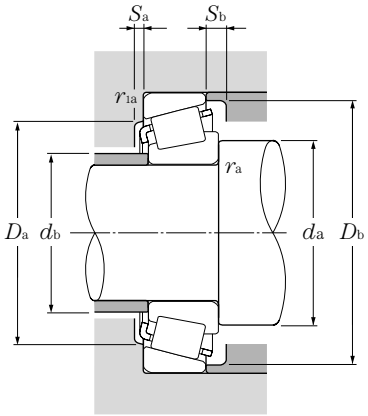
Metric system sizes



d 75～95mm

Boundary dimensions mm							Basic load ratings dynamic kN	Basic load ratings static kN	Basic load ratings dynamic kgf	Basic load ratings static kgf	Limiting speeds rpm		Bearing numbers
d	D	T	B	C	$r_{s\,min}$ ❶	$r_{ls\,min}$ ❶	C_r	C_{or}	C_r	C_{or}	grease	oil	
75	160	58	55	45	3	2.5	355	470	36,000	47,500	2,400	3,200	**32315U**
	110	20	20	16	1	1	72.0	121	7,350	12,400	3,000	4,000	**32916XU**
	125	29	29	22	1.5	1.5	139	216	14,200	22,000	2,800	3,700	**32016XU**
	125	36	36	29.5	1.5	1.5	173	284	17,600	29,000	2,800	3,700	**33016U**
	140	28.25	26	22	2.5	2	160	200	16,300	20,400	2,500	3,400	**30216U**
80	140	35.25	33	28	2.5	2	199	265	20,300	27,000	2,500	3,400	**32216U**
	140	46	46	35	2.5	2	250	365	25,500	37,500	2,500	3,400	**33216U**
	170	42.5	39	33	3	2.5	291	350	29,700	36,000	2,300	3,000	**30316U**
	170	42.5	39	27	3	2.5	236	283	24,100	28,900	2,000	2,700	**30316DU**
	170	61.5	58	48	3	2.5	395	525	40,500	53,500	2,300	3,000	**32316U**
	120	23	23	18	1.5	1.5	94.0	157	9,600	16,100	2,800	3,800	**32917XU**
	130	29	29	22	1.5	1.5	142	224	14,400	22,900	2,600	3,500	**32017XU**
	130	36	36	29.5	1.5	1.5	176	296	18,000	30,000	2,600	3,500	**33017U**
	150	30.5	28	24	2.5	2	183	232	18,600	23,600	2,400	3,200	**30217U**
85	150	38.5	36	30	2.5	2	224	300	22,900	30,500	2,400	3,200	**32217U**
	150	49	49	37	2.5	2	284	420	29,000	43,000	2,400	3,200	**33217U**
	180	44.5	41	34	4	3	305	365	31,000	37,000	2,100	2,900	**30317U**
	180	44.5	41	28	4	3	247	293	25,200	29,900	1,900	2,500	**30317DU**
	180	63.5	60	49	4	3	405	525	41,000	53,500	2,100	2,900	**32317U**
	125	23	23	18	1.5	1.5	97.5	168	9,950	17,100	2,700	3,600	**32918XU**
	140	32	32	24	2	1.5	168	270	17,200	27,600	2,500	3,300	**32018XU**
	140	39	39	32.5	2	1.5	215	360	21,900	36,500	2,500	3,300	**33018U**
90	160	32.5	30	26	2.5	2	208	267	21,200	27,200	2,200	3,000	**30218U**
	160	42.5	40	34	2.5	2	262	360	26,700	36,500	2,200	3,000	**32218U**
	190	46.5	43	36	4	3	335	405	34,500	41,500	2,000	2,700	**30318U**
	190	46.5	43	30	4	3	270	320	27,600	33,000	1,800	2,400	**30318DU**
	190	67.5	64	53	4	3	450	595	46,000	60,500	2,000	2,700	**32318U**
	130	23	23	18	1.5	1.5	101	178	10,300	18,200	2,500	3,400	**32919XU**
	145	32	32	24	2	1.5	171	280	17,500	28,600	2,300	3,100	**32019XU**
	145	39	39	32.5	2	1.5	219	375	22,400	38,000	2,300	3,100	**33019U**
95	170	34.5	32	27	3	2.5	226	290	23,000	29,600	2,100	2,800	**30219U**
	170	45.5	43	37	3	2.5	299	415	30,500	42,500	2,100	2,800	**32219U**
	200	49.5	45	38	4	3	365	445	37,500	45,500	1,900	2,500	∗**30319U**
	200	49.5	45	38	3	3	315	365	32,500	37,500	1,900	2,500	**30319** ❷
	200	49.5	45	32	4	3	296	355	30,000	36,500	1,700	2,200	**30319DU**

❶ Minimal allowable dimension for chamfer dimension r or r_1.
❷ This bearing does not incorporate the subunit dimensions.



Equivalent bearing load

dynamic

$P_r = XF_r + YF_a$

$\frac{F_a}{F_r} \leqq e$		$\frac{F_a}{F_r} > e$	
X	Y	X	Y
1	0	0.4	Y_2

static

$P_{or} = 0.5F_r + Y_oF_a$

When $P_{or} < F_r$ use $P_{or} = F_r$

For values of e, Y_2 and Y_o see the table below.

Dimensions series to ISO	Abutment and fillet dimensions mm									Load center mm	Constant	Axial load factors		Mass kg
	d_a min	d_b max	D_a max	D_a min	D_b min	S_a min	S_b min	r_{as} max	r_{1as} max	a	e	Y_2	Y_o	(approx.)
2GD	89	91	148	133	149	4	13	2.5	2	39	0.35	1.74	0.96	5.35
2BC	85.5	85	104.5	99	106.5	4	4	1	1	20	0.35	1.71	0.94	0.54
3CC	88.5	89	116.5	112	120	6	7	1.5	1.5	27	0.42	1.42	0.78	1.28
2CE	88.5	89	116.5	112	119	6	6.5	1.5	1.5	25	0.28	2.16	1.19	1.6
3EB	92	91	130	124	132	4	6	2	2	27.5	0.42	1.43	0.79	1.72
3EC	92	90	130	122	134	4	7	2	2	31	0.42	1.43	0.79	2.18
3EE	92	89	130	119	135	7	11	2	2	35	0.43	1.41	0.78	2.92
2GB	94	102	158	148	159	4	9.5	2.5	2	34	0.35	1.74	0.96	4.41
7GB	94	97	158	134	159	6	15.5	2.5	2	53.5	0.83	0.73	0.40	4.11
2GD	94	98	158	142	159	4	13.5	2.5	2	41.5	0.35	1.74	0.96	6.41
2BC	93.5	92	111.5	111	115	4	5	1.5	1.5	21	0.33	1.83	1.01	0.773
4CC	93.5	94	121.5	117	125	6	7	1.5	1.5	28.5	0.44	1.36	0.75	1.35
2CE	93.5	94	121.5	118	125	6	6.5	1.5	1.5	26	0.29	2.06	1.13	1.7
3EB	97	97	140	132	141	5	6.5	2	2	30	0.42	1.43	0.79	2.14
3EC	97	96	140	130	142	5	8.5	2	2	33.5	0.42	1.43	0.79	2.75
3EE	97	95	140	128	144	7	12	2	2	37.5	0.42	1.43	0.79	3.58
2GB	103	107	166	156	167	5	10.5	3	2.5	35.5	0.35	1.74	0.96	5.2
7GB	103	103	166	143	169	6	16.5	3	2.5	56	0.83	0.73	0.40	4.85
2GD	103	102	166	150	167	5	14.5	3	2.5	43	0.35	1.74	0.96	7.15
2BC	98.5	96	116.5	112.5	120.5	4	5	1.5	1.5	22	0.34	1.75	0.96	0.817
3CC	100	100	131.5	125	134	6	8	2	1.5	30	0.42	1.42	0.78	1.79
2CE	100	100	131.5	127	135	7	6.5	2	1.5	28	0.27	2.23	1.23	2.18
3FB	102	103	150	140	150	5	6.5	2	2	32	0.42	1.43	0.79	2.66
3FC	102	102	150	138	152	5	8.5	2	2	36	0.42	1.43	0.79	3.49
2GB	108	113	176	165	177	5	10.5	3	2.5	37.5	0.35	1.74	0.96	6.03
7GB	108	109	176	151	179	6	16.5	3	2.5	59	0.83	0.73	0.40	5.66
2GD	108	108	176	157	177	5	14.5	3	2.5	45.5	0.35	1.74	0.96	8.57
2BC	103.5	101	121.5	117	125.5	4	5	1.5	1.5	23.5	0.36	1.68	0.92	0.851
4CC	105	105	136.5	130	140	6	8	2	1.5	31.5	0.44	1.36	0.75	1.83
2CE	105	104	136.5	131	139	7	6.5	2	1.5	28.5	0.28	2.16	1.19	2.27
3FB	109	110	158	149	159	5	7.5	2.5	2	34	0.42	1.43	0.79	3.07
3FC	109	108	158	145	161	5	8.5	2.5	2	39	0.42	1.43	0.79	4.3
2GB	113	118	186	172	186	5	11.5	3	2.5	40	0.35	1.74	0.96	6.98
	113	118	186	172	186	5	11.5	3	2.5	40	0.35	1.73	0.95	6.58
7GB	113	114	186	154	187	6	17.5	3	2.5	62.5	0.83	0.73	0.40	6.47

Note: When selecting bearings with bearing numbers marked with "∗", please consult **NTN** Engineering.