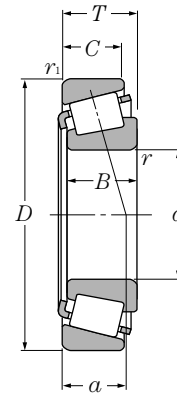


Metric system sizes

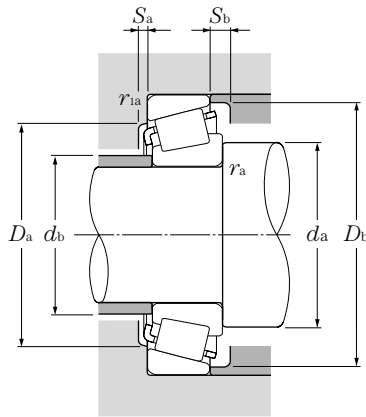


d 75 ~ 95mm

d	Boundary dimensions						Basic load ratings				Limiting speeds		Bearing numbers
	D	T	mm			dynamic	static	dynamic	static	rpm			
			B	C	$r_{s\ min}^{\text{①}}$	$r_{ls\ min}^{\text{①}}$	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
80	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
	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
85	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
	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
90	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
	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
95	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
	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	30319^②
	200	49.5	45	32	4	3	296	355	30,000	36,500	1,700	2,200	30319DU

① Minimal allowable dimension for chamfer dimension r or r_1 .

② This bearing does not incorporate the subunit dimensions.



Equivalent bearing load

dynamic
 $P_r = XF_r + YF_a$

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

static

$P_{or} = 0.5F_r + Y_0F_a$

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

For values of e , Y_2 and Y_0 see the table below.

Dimensions series to ISO	Abutment and fillet dimensions									Load center mm	Constant e	Axial load factors		Mass kg (approx.)		
	mm											a	e		Y_2	Y_0
	d_a min	d_b max	D_a max	D_b min	S_a min	S_b min	r_{as} max	r_{1as} max								
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.