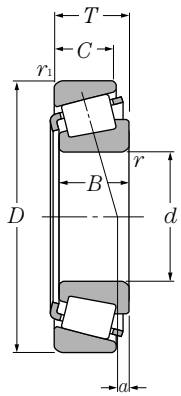
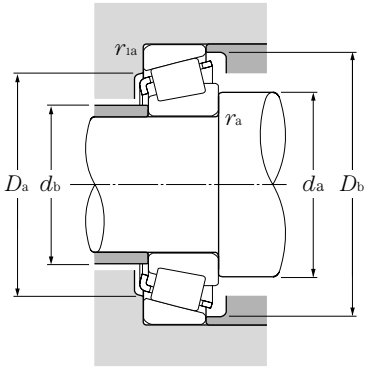
Inch system sizes
J system series



d 76.200～83.345mm

Boundary dimensions					Basic load ratings				Limiting speeds	
					dynamic	static	dynamic	static		
mm					kN		kgf		rpm	
d	D	T	B	C	C_r	C_{or}	C_r	C_{or}	grease	oil
76.200	149.225	53.975	54.229	44.450	287	410	29,300	41,500	2,500	3,400
	161.925	53.975	55.100	42.862	310	460	31,500	47,000	2,300	3,000
	180.975	53.975	53.183	35.720	325	415	33,000	42,500	1,900	2,600
	190.500	57.150	57.531	46.038	445	610	45,000	62,000	1,900	2,600
77.788	117.475	25.400	25.400	19.050	99.5	162	10,200	16,500	2,900	3,900
	121.442	24.608	23.012	17.462	91.0	127	9,300	13,000	2,900	3,800
	127.000	30.162	31.000	22.225	135	194	13,800	19,800	2,800	3,700
	136.525	30.162	29.769	22.225	129	189	13,200	19,300	2,600	3,500
	136.525	46.038	46.038	36.512	224	355	22,800	36,500	2,600	3,500
79.375	146.050	41.275	41.275	31.750	206	295	21,000	30,000	2,500	3,300
	161.925	47.625	48.260	38.100	270	385	27,500	39,000	2,300	3,100
	190.500	57.150	57.531	46.038	445	610	45,000	62,000	1,900	2,600
80.000	130.000	35.000	34.000	28.500	166	249	16,900	25,400	2,700	3,600
80.962	133.350	33.338	33.338	26.195	153	235	15,600	24,000	2,600	3,500
	136.525	30.162	29.769	22.225	129	189	13,200	19,300	2,600	3,500
	139.992	36.512	36.098	28.575	178	265	18,100	27,100	2,600	3,400
	150.089	44.450	46.672	36.512	261	360	26,600	37,000	2,400	3,200
82.550	125.412	25.400	25.400	19.845	102	163	10,400	16,600	2,700	3,600
	133.350	33.338	33.338	26.195	153	235	15,600	24,000	2,600	3,500
	133.350	39.688	39.688	32.545	177	305	18,000	31,000	2,600	3,500
	136.525	30.162	29.769	22.225	129	189	13,200	19,300	2,600	3,500
	139.992	36.512	36.098	28.575	178	265	18,100	27,100	2,600	3,400
	139.992	36.512	36.098	28.575	178	265	18,100	27,100	2,600	3,400
	146.050	41.275	41.275	31.750	206	295	21,000	30,000	2,500	3,300
	150.089	44.450	46.672	36.512	261	360	26,600	37,000	2,400	3,200
	152.400	39.688	36.322	30.162	180	279	18,300	28,400	2,300	3,100
	152.400	41.275	41.275	31.750	206	295	21,000	30,000	2,500	3,300
	161.925	47.625	48.260	38.100	270	385	27,500	39,000	2,300	3,100
	161.925	53.975	55.100	42.862	310	460	31,500	47,000	2,300	3,000
	168.275	53.975	56.363	41.275	340	460	34,500	46,500	2,200	3,000
83.345	125.412	25.400	25.400	19.845	102	163	10,400	16,600	2,700	3,600
	125.412	25.400	25.400	19.845	102	163	10,400	16,600	2,700	3,600
	125.412	25.400	25.400	19.845	102	163	10,400	16,600	2,700	3,600

Note: 1. With regard to the chamfer dimensions on the back face of the inner and outer rings, installation dimensions r_{as} and r_{las} are larger than the maximum value.
2. For the inner bore diameter of bearings with bearing numbers marked "†" (inner ring) or "††" (outer ring), this value applies only to high precision class types, Class 4 and 2.



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.

Bearing numbers	Abutment and fillet dimensions mm						Load center mm	Constant	Axial load factors		Mass kg
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max	a	e	Y_2	Y_o	(approx.)
4T-6461/6420	96	89	129	140	3.5	3.3	14.8	0.36	1.66	0.91	4.26
4T-6576/6535	99	92	141	154	3.5	3.3	12.8	0.40	1.50	0.82	5.44
4T-H917840/H917810††	110	100	152	170	3.5	3.3	−0.5❶	0.73	0.82	0.45	6.57
4T-HH221430/HH221410	101	95	171	179	3.5	3.3	14.4	0.33	1.79	0.99	8.69
4T-LM814849/LM814810	91	85	105	113	3.5	3.3	−2.3❶	0.51	1.18	0.65	0.932
4T-34306/34478	90	84	110	116	3.5	2	−1.2❶	0.45	1.33	0.73	0.943
4T-42690/42620	91	85	114	121	3.5	3.3	2.8	0.42	1.43	0.79	1.41
4T-495AS/493	93	87	122	130	3.5	3.3	0.7	0.44	1.35	0.74	1.78
4T-H715348/H715311	98	88	118	132	3.5	3.3	8.7	0.47	1.27	0.70	2.84
4T-661/653	96	90	131	139	3.5	3.3	8.0	0.41	1.47	0.81	2.91
4T-756A/752	106	91	144	150	8	3.3	12.0	0.34	1.76	0.97	4.55
4T-HH221431/HH221410	103	97	171	179	3.5	3.3	14.4	0.33	1.79	0.99	8.52
#4T-JM515649/JM515610	94	88	117	125	3	2.5	4.9	0.39	1.54	0.85	1.73
4T-47681/47620	95	89	119	128	3.5	3.3	3.9	0.40	1.48	0.82	1.78
4T-496/493	95	89	122	130	3.5	3.3	0.7	0.44	1.35	0.74	1.69
4T-581/572	96	90	125	133	3.5	3.3	5.5	0.40	1.49	0.82	2.26
4T-740/742	101	91	134	142	5	3.3	12.0	0.33	1.84	1.01	3.43
4T-27687/27620	96	89	115	120	3.5	1.5	−0.6❶	0.42	1.44	0.79	1.07
4T-47686/47620	97	90	119	128	3.5	3.3	3.9	0.40	1.48	0.82	1.72
4T-HM516448/HM516410	105	92	118	128	6.8	3.3	7.5	0.40	1.49	0.82	2.16
4T-495/493	97	90	122	130	3.5	3.3	0.7	0.44	1.35	0.74	1.64
4T-580/572	98	91	125	133	3.5	3.3	5.5	0.40	1.49	0.82	2.2
4T-582/572	104	91	125	133	6.8	3.3	5.5	0.40	1.49	0.82	2.19
4T-663/653	99	92	131	139	3.5	3.3	8.0	0.41	1.47	0.81	2.78
4T-749A/742	99	93	134	142	3.5	3.3	12.0	0.33	1.84	1.01	3.37
4T-595/592A	100	93	135	144	3.5	3.3	2.6	0.44	1.36	0.75	3.02
4T-663/652	99	92	134	141	3.5	3.3	8.0	0.41	1.47	0.81	3.15
4T-757/752	100	94	144	150	3.5	3.3	12.0	0.34	1.76	0.97	4.42
4T-6559C/6535	104	98	141	154	3.5	3.3	12.8	0.40	1.50	0.82	5.09
4T-842/832	101	94	149	155	3.5	3.3	18.5	0.30	2.00	1.10	5.46
4T-27689/27620	90	90	115	120	0.8	1.5	−0.6❶	0.42	1.44	0.79	1.06
4T-27690/27620	96	90	115	120	3.5	1.5	−0.6❶	0.42	1.44	0.79	1.05
4T-27691/27620	102	90	115	120	6.4	1.5	−0.6❶	0.42	1.44	0.79	1.04

Note: 3. Bearing numbers marked "#" designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-40**.
❶ "−" means that load center at outside on end of inner ring.