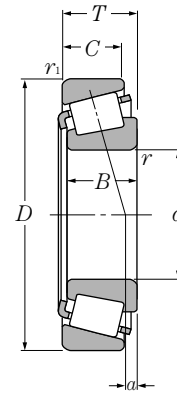


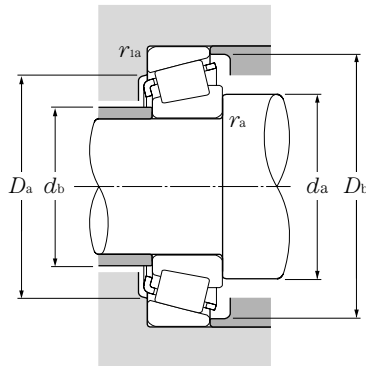
Inch system sizes



d 12.700 ~ 22.225mm

d	Boundary dimensions				Basic load ratings				Limiting speeds	
	D	T	B	C	dynamic static	dynamic static	dynamic static	dynamic static	grease	oil
	mm				kN		kgf		rpm	
	D	T	B	C	C_r	C_{or}	C_r	C_{or}	grease	oil
12.700	34.988	10.998	10.988	8.730	12.3	11.6	1,260	1,180	12,000	16,000
14.989	34.988	10.998	10.988	8.730	12.3	11.6	1,260	1,180	12,000	16,000
15.875	41.275	14.288	14.681	11.112	20.3	18.7	2,070	1,910	10,000	13,000
	42.862	14.288	14.288	9.525	17.6	17.5	1,800	1,790	8,700	12,000
	42.862	16.670	16.670	13.495	26.7	26.0	2,720	2,650	9,800	13,000
	47.000	14.381	14.381	11.112	24.0	24.2	2,440	2,460	8,600	11,000
	49.225	19.845	21.539	14.288	38.5	39.0	3,900	3,950	8,500	11,000
16.993	47.000	14.381	14.381	11.112	24.0	24.2	2,440	2,460	8,600	11,000
17.462	39.878	13.843	14.605	10.668	23.8	24.2	2,420	2,470	10,000	13,000
19.050	39.992	12.014	11.153	9.525	12.8	12.8	1,310	1,300	10,000	13,000
	45.237	15.494	16.637	12.065	28.3	28.6	2,880	2,920	8,900	12,000
	47.000	14.381	14.381	11.112	24.0	24.2	2,440	2,460	8,600	11,000
	49.225	18.034	19.050	14.288	38.5	39.0	3,900	3,950	8,500	11,000
	49.225	19.845	21.539	14.288	38.5	39.0	3,900	3,950	8,500	11,000
	49.225	21.209	19.050	17.462	38.5	39.0	3,900	3,950	8,500	11,000
	53.975	22.225	21.839	15.875	40.0	39.0	4,100	3,950	8,000	11,000
56.896	19.368	19.837	15.875	42.5	46.5	4,350	4,750	7,200	9,600	
19.987	47.000	14.381	14.381	11.112	24.0	24.2	2,440	2,460	8,600	11,000
20.000	50.005	13.495	14.260	9.525	26.0	27.9	2,650	2,850	7,500	10,000
20.625	49.225	19.845	21.539	14.288	38.5	39.0	3,900	3,950	8,500	11,000
20.638	49.225	19.845	19.845	15.875	37.5	39.0	3,800	3,950	8,200	11,000
21.430	50.005	17.526	18.288	13.970	38.0	39.0	3,850	3,950	8,000	11,000
21.986	45.974	15.494	16.637	12.065	29.6	34.0	3,000	3,450	8,400	11,000
22.225	50.005	13.495	14.260	9.525	26.0	27.9	2,650	2,850	7,500	10,000
	50.005	17.526	18.288	13.970	38.0	39.0	3,850	3,950	8,000	11,000
	52.388	19.368	20.168	14.288	40.5	43.0	4,150	4,350	7,600	10,000
	53.975	19.368	20.168	14.288	40.5	43.0	4,150	4,350	7,600	10,000

Note: 1. With regard to the chamfer dimensions on the back face of the inner and outer rings, installation dimensions r_{is} and r_{os} 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

$$P_r = XF_r + YF_a$$

$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
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.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial load factors		Mass kg		
	mm								a	e		Y_2	Y_0
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max							
4T-A4050/A4138	18.5	17	29	32	1.3	1.3	2.5	0.45	1.32	0.73	0.053		
4T-A4059†/A4138	19.5	19	29	32	0.8	1.3	2.5	0.45	1.32	0.73	0.049		
4T-03062/03162	21.5	20	34	37.5	1.3	2	5.4	0.31	1.93	1.06	0.092		
4T-11590/11520	24.5	22.5	34.5	39.5	1.5	1.5	1.2	0.70	0.85	0.47	0.103		
4T-17580/17520	23	21	36.5	39	1.5	1.5	5.8	0.33	1.81	1.00	0.122		
4T-05062/05185	23.5	21	40.5	42.5	1.5	1.3	4.2	0.36	1.68	0.92	0.131		
4T-09062/09195	22	21.5	42	44.5	0.8	1.3	9.4	0.27	2.26	1.24	0.203		
4T-05066/05185	24.5	22	40.5	42.5	1.5	1.3	4.2	0.36	1.68	0.92	0.127		
4T-LM11749/LM11710	23	21.5	34	37	1.3	1.3	5.3	0.29	2.10	1.15	0.084		
4T-A6075/A6157	24	23	34	37	1	1.3	1.5	0.53	1.14	0.63	0.065		
4T-LM11949/LM11910	28	23.5	39.5	41.5	1.3	1.3	5.6	0.30	2.00	1.10	0.122		
4T-05075/05185	25	23.5	40.5	42.5	1.3	1.3	4.2	0.36	1.68	0.92	0.121		
4T-09067/09195	25.5	24	42	44.5	1.3	1.3	7.6	0.27	2.26	1.24	0.179		
4T-09078/09195	25.5	24	42	44.5	1.3	1.3	9.4	0.27	2.26	1.24	0.188		
4T-09067/09196	25.5	24	41.5	44.5	1.3	1.5	7.6	0.27	2.26	1.24	0.198		
4T-21075/21212††	31.5	26	43	50	1.5	2.3	5.6	0.59	1.02	0.56	0.248		
4T-1775/1729	27	25	49	51	1.5	1.3	6.5	0.31	1.95	1.07	0.272		
4T-05079†/05185	26.5	24	40.5	42.5	1.5	1.3	4.2	0.36	1.68	0.92	0.117		
4T-07079/07196	27.5	26	44.5	47	1.5	1	3.0	0.40	1.49	0.82	0.138		
4T-09081/09195	27.5	25.5	42	44.5	1.5	1.3	9.4	0.27	2.26	1.24	0.179		
4T-12580/12520	28.5	26	42.5	45.5	1.5	1.5	7.1	0.32	1.86	1.02	0.182		
4T-M12649/M12610	29	25.5	44	46	1.3	1.3	6.4	0.28	2.16	1.19	0.169		
4T-LM12749†/LM12711††	27.5	26	40	42.5	1.3	1.3	5.4	0.31	1.96	1.08	0.123		
4T-07087/07196	28.5	27	44.5	47	1.3	1	3.0	0.40	1.49	0.82	0.13		
4T-M12648/M12610	28.5	26.5	44	46	1.3	1.3	6.4	0.28	2.16	1.19	0.165		
4T-1380/1328	29.5	27	45	48.5	1.5	1.5	7.4	0.29	2.05	1.13	0.2		
4T-1380/1329††	29.5	27	46	49	1.5	1.5	7.4	0.29	2.05	1.13	0.215		