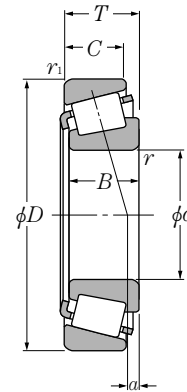


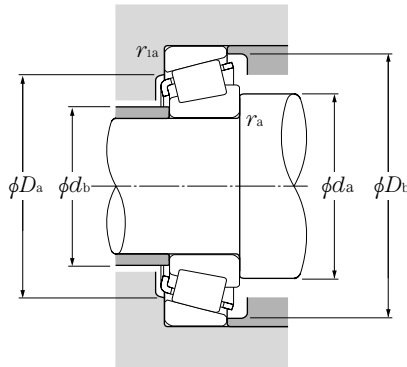
Inch series



d 12.700 ~ 22.225mm

d	Boundary dimensions				dynamic kN	Basic load ratings		dynamic kgf	static kgf	Limiting speeds	
	D	T	B	C		static	dynamic			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. Chamfer dimensions on the back face of the inner and outer rings of the bearing are larger than maximum values for installation dimensions r_{1as} and r_{2as} .
 2. As for the maximum value for inner and outer ring diameters of bearings whose bearing numbers are marked with "+" (inner ring) and "++" (outer ring), the precision class is an integer for class 4 and class 2 bearings only.



Equivalent radial 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	
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max					(approx.)
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