

For New Technology Network

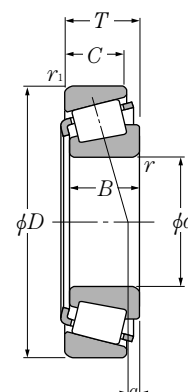


NTNcorporation

Auto Bearings



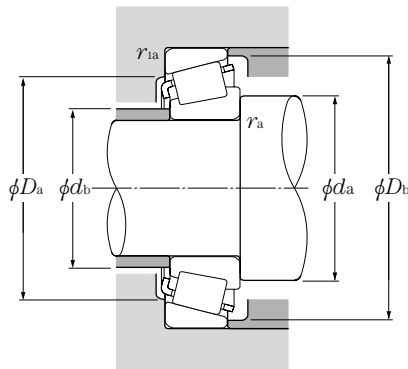
Inch series



d 12.700 ~ 22.225mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic kgf	static	min ⁻¹	
d	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
19.987	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_{as} and r_{las} .
 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

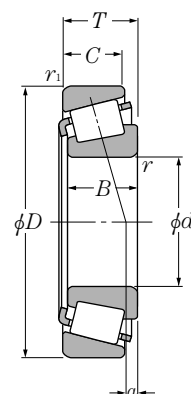
$$P_{or} = 0.5F_r + Y_o F_a$$

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						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			Y_2	Y_o	
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

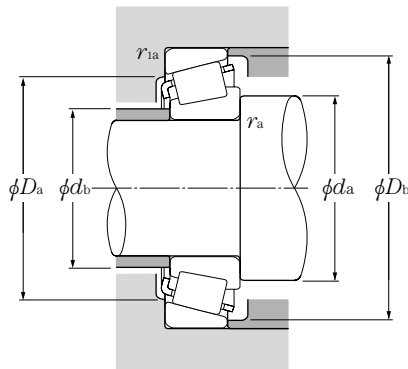
Inch series



d 22.225 ~ 28.575mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
22.225	56.896	19.368	19.837	15.875	42.5	46.5	4 350	4 750	7 200	9 600
	57.150	22.225	22.225	17.462	47.0	49.5	4 800	5 050	7 100	9 500
22.606	47.000	15.500	15.500	12.000	27.5	32.5	2 800	3 300	8 200	11 000
23.812	50.005	13.495	14.260	9.525	26.0	27.9	2 650	2 850	7 500	10 000
	50.292	14.224	14.732	10.668	28.8	34.0	2 940	3 450	7 400	9 900
	56.896	19.368	19.837	15.875	42.5	46.5	4 350	4 750	7 200	9 600
24.981	50.005	13.495	14.260	9.525	26.0	27.9	2 650	2 850	7 500	10 000
25.000	50.005	13.495	14.260	9.525	26.0	27.9	2 650	2 850	7 500	10 000
25.159	50.005	13.495	14.260	9.525	26.0	27.9	2 650	2 850	7 500	10 000
25.400	50.005	13.495	14.260	9.525	26.0	27.9	2 650	2 850	7 500	10 000
	50.005	13.495	14.260	9.525	26.0	27.9	2 650	2 850	7 500	10 000
	50.292	14.224	14.732	10.668	28.8	34.0	2 940	3 450	7 400	9 900
	51.994	15.011	14.260	12.700	26.0	27.9	2 650	2 850	7 500	10 000
	56.896	19.368	19.837	15.875	42.5	46.5	4 350	4 750	7 200	9 600
	57.150	19.431	19.431	14.732	42.0	48.5	4 300	4 950	6 900	9 200
	61.912	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	64.292	21.433	21.433	16.670	51.5	64.5	5 250	6 600	6 100	8 100
	65.088	22.225	21.463	15.875	47.0	50.5	4 800	5 150	5 700	7 600
	66.421	23.812	25.433	19.050	64.5	72.5	6 550	7 400	6 200	8 200
26.157	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
26.162	66.421	23.812	25.433	19.050	64.5	72.5	6 550	7 400	6 200	8 200
26.988	50.292	14.224	14.732	10.668	28.8	34.0	2 940	3 450	7 400	9 900
	60.325	19.842	17.462	15.875	39.5	45.5	4 050	4 650	6 700	8 900
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	66.421	23.812	25.433	19.050	64.5	72.5	6 550	7 400	6 200	8 200
28.575	56.896	19.845	19.355	15.875	40.5	44.5	4 150	4 550	6 700	8 900
	57.150	17.462	17.462	13.495	39.5	45.5	4 050	4 650	6 700	8 900

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_{as} and r_{las} .
 2. As for the maximum value for inner ring bore diameters of bearings whose bearing numbers are marked with "†" (inner 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

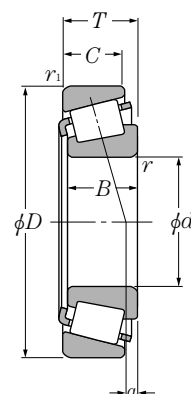
$$P_{or} = 0.5F_r + Y_o F_a$$

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						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			Y_2	Y_o	
4T-1755/1729	29	27.5	49	51	1.3	1.3	6.5	0.31	1.95	1.07	0.256
4T-1280/1220	29.5	29	49	52	0.8	1.5	7.1	0.35	1.73	0.95	0.286
4T-LM72849/LM72810	30	28	40.5	44	1.5	1	3.0	0.47	1.27	0.70	0.125
4T-07093/07196	30.5	28.5	44.5	47	1.5	1	3.0	0.40	1.49	0.82	0.123
4T-L44640/L44610	30.5	28.5	44.5	47	1.5	1.3	3.4	0.37	1.60	0.88	0.137
4T-1779/1729	29.5	28.5	49	51	0.8	1.3	6.5	0.31	1.95	1.07	0.247
4T-07098/07196	31	29	44.5	47	1.5	1	3.0	0.40	1.49	0.82	0.118
4T-07097/07196	31	29	44.5	47	1.5	1	3.0	0.40	1.49	0.82	0.118
4T-07096/07196	31.5	29.5	44.5	47	1.5	1	3.0	0.40	1.49	0.82	0.117
4T-07100/07196	30.5	29.5	44.5	47	1	1	3.0	0.40	1.49	0.82	0.117
4T-07100S/07196	31.5	29.5	44.5	47	1.5	1	3.0	0.40	1.49	0.82	0.116
4T-L44643/L44610	31.5	29.5	44.5	47	1.3	1.3	3.4	0.37	1.60	0.88	0.13
4T-07100/07204	30.5	29.5	45	48	1	1.3	3.0	0.40	1.49	0.82	0.144
4T-1780/1729	30.5	30	49	51	0.8	1.3	6.5	0.31	1.95	1.07	0.238
4T-M84548/M84510	36	33	48.5	54	1.5	1.5	3.4	0.55	1.10	0.60	0.241
4T-15101/15243	32.5	31.5	54	58	0.8	2	6.0	0.35	1.71	0.94	0.3
4T-15100/15245	38	31.5	55	58	3.5	1.3	6.0	0.35	1.71	0.94	0.299
4T-15102/15245	34	31.5	55	58	1.5	1.3	6.0	0.35	1.71	0.94	0.301
4T-M86643/M86610	38	36.5	54	61	1.5	1.5	3.3	0.55	1.10	0.60	0.371
4T-23100/23256	39	34.5	53	63	1.5	1.5	2.0	0.73	0.82	0.45	0.36
4T-2687/2631	33.5	31.5	58	60	1.3	1.3	9.3	0.25	2.36	1.30	0.442
4T-15103/15245	33	32.5	55	58	0.8	1.3	6.0	0.35	1.71	0.94	0.296
4T-2682/2631	34.5	32	58	60	1.5	1.3	9.3	0.25	2.36	1.30	0.436
4T-L44649†/L44610	37.5	31	44.5	47	3.5	1.3	3.4	0.37	1.60	0.88	0.12
4T-15580†/15523	38.5	32	51	54	3.5	1.5	5.0	0.35	1.73	0.95	0.26
4T-15106†/15245	33.5	33	55	58	0.8	1.3	6.0	0.35	1.71	0.94	0.291
4T-2688†/2631	35	33	58	60	1.5	1.3	9.3	0.25	2.36	1.30	0.429
4T-1985/1930	34	33.5	51	54	0.8	0.8	6.7	0.33	1.82	1.00	0.217
4T-15590/15520	39.5	33.5	51	53	3.5	1.5	5.0	0.35	1.73	0.95	0.196

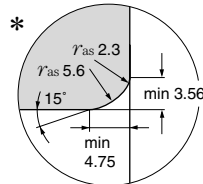
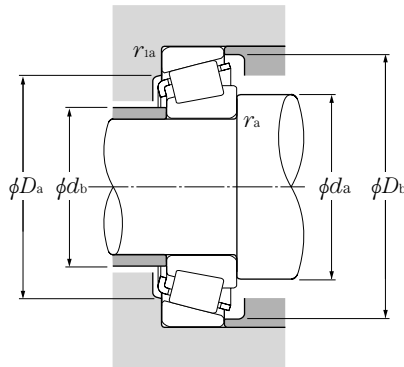
Inch series J series



d 28.575 ~ 31.750mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
28.575	58.738	19.050	19.355	15.080	40.5	44.5	4 150	4 550	6 700	8 900
	60.325	19.842	17.462	15.875	39.5	45.5	4 050	4 650	6 700	8 900
	60.325	19.845	19.355	15.875	40.5	44.5	4 150	4 550	6 700	8 900
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	64.292	21.433	21.433	16.670	51.5	64.5	5 250	6 600	6 100	8 100
	66.421	23.812	25.433	19.050	64.5	72.5	6 550	7 400	6 200	8 200
	68.262	22.225	22.225	17.462	57.0	67.0	5 800	6 850	5 800	7 700
	68.262	22.225	23.812	17.462	57.5	65.5	5 850	6 700	5 700	7 700
	69.850	23.812	25.357	19.050	69.0	81.5	7 050	8 300	5 700	7 600
	72.626	24.608	24.257	17.462	58.0	55.5	5 900	5 700	5 800	7 700
	73.025	22.225	22.225	17.462	56.5	68.0	5 750	6 900	5 300	7 000
29.000	50.292	14.224	14.732	10.668	28.0	35.5	2 860	3 600	7 200	9 600
29.367	66.421	23.812	25.433	19.050	64.5	72.5	6 550	7 400	6 200	8 200
29.987	62.000	16.002	16.566	14.288	39.0	42.0	3 950	4 300	6 300	8 400
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
30.000	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
	72.000	29.370	27.783	23.020	72.0	97.0	7 350	9 850	5 400	7 100
30.112	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
30.162	62.000	16.002	16.566	14.288	39.0	42.0	3 950	4 300	6 300	8 400
	64.292	21.433	21.433	16.670	51.5	64.5	5 250	6 600	6 100	8 100
	69.850	23.812	25.357	19.050	69.0	81.5	7 050	8 300	5 700	7 600
	72.626	30.162	29.997	23.812	84.5	98.0	8 600	9 950	5 500	7 300
30.213	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
30.226	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
31.750	59.131	15.875	16.764	11.811	34.5	41.0	3 500	4 150	6 300	8 400
	62.000	18.161	19.050	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200

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_{as} and r_{1as} .
 2. As for the maximum value for inner ring bore diameters of bearings whose bearing numbers are marked with "†" (inner 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 $P_{or} = F_r$

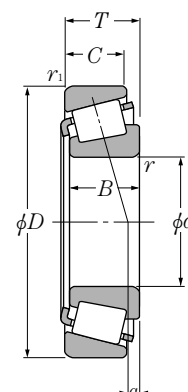
For values of e , Y_2 and Y_0 see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial load factors		Mass		
	mm								a	e	Y_2	Y_0	kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max							
4T-1985/1932	34	33.5	52	54	0.8	1.3	5.9	0.33	1.82	1.00	0.23		
4T-15590/15523	39.5	33.5	51	54	3.5	1.5	5.0	0.35	1.73	0.95	0.25		
4T-1985/1931	34	33.5	52	55	0.8	1.3	5.9	0.33	1.82	1.00	0.255		
4T-15112/15245	40	34	55	58	3.5	1.3	6.0	0.35	1.71	0.94	0.277		
4T-M86647/M86610	40	38	54	61	1.5	1.5	3.3	0.55	1.10	0.60	0.348		
4T-2689/2631	36	34	58	60	1.3	1.3	9.3	0.25	2.36	1.30	0.416		
4T-02474/02420	36.5	36	59	63	0.8	1.5	5.2	0.42	1.44	0.79	0.409		
4T-2474/2420	36	35	60	63	0.8	1.5	6.5	0.34	1.77	0.97	0.41		
4T-2578/2523	39	35	61	64	2.3	1.3	9.1	0.27	2.19	1.21	0.483		
4T-41125/41286	48	36.5	61	68	4.8	1.5	3.7	0.60	1.00	0.55	0.477		
4T-02872/02820	37.5	37	62	68	0.8	3.3	3.9	0.45	1.32	0.73	0.48		
4T-L45449/L45410	39.5	33	44.5	48	3.5	1.3	3.5	0.37	1.62	0.89	0.113		
4T-2690/2631	41	35	58	60	3.5	1.3	9.3	0.25	2.36	1.30	0.406		
4T-17118†/17244	37	34.5	54	57	1.5	1.5	3.3	0.38	1.57	0.86	0.228		
4T-15117†/15245	36.5	35	55	58	1.3	1.3	6.0	0.35	1.71	0.94	0.269		
4T-14117A/14276	42.5	39.5	60	63	3.5	1.3	4.1	0.38	1.57	0.86	0.369		
# 4T-JHM88540/JHM88513	44.5	42.5	58	69	1.3	3.3	6.0	0.55	1.10	0.60	0.619		
4T-15116/15245	36	35.5	55	58	0.8	1.3	6.0	0.35	1.71	0.94	0.268		
4T-17119/17244	37	34.5	54	57	1.5	1.5	3.3	0.38	1.57	0.86	0.226		
4T-M86649/M86610	41	38	54	61	1.5	1.5	3.3	0.55	1.10	0.60	0.336		
4T-2558/2523	40	36.5	61	64	2.3	1.3	9.1	0.27	2.19	1.21	0.468		
4T-3187/3120	39	38.5	61	67	0.8	3.3	9.9	0.33	1.80	0.99	0.621		
4T-15118/15245	41.5	35.5	55	58	3.5	1.3	6.0	0.35	1.71	0.94	0.265		
4T-15119/15245	37.5	35.5	55	58	1.5	1.3	6.0	0.35	1.71	0.94	0.267		
4T-15120/15245	36	35.5	55	58	0.8	1.3	6.0	0.35	1.71	0.94	0.267		
4T-14116/14274	37	36.5	59	63	0.8	3.3	4.1	0.38	1.57	0.86	0.366		
4T-14116/14276	37	36.5	60	63	0.8	1.3	4.1	0.38	1.57	0.86	0.37		
4T-LM67048/LM67010	42.5	36	52	56	*	1.3	2.8	0.41	1.46	0.80	0.182		
4T-15123/15245	42.5	36.5	55	58	*	1.3	5.1	0.35	1.71	0.94	0.244		
4T-15125/15245	42.5	36.5	55	58	3.5	1.3	6.0	0.35	1.71	0.94	0.253		

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

4. Chamfer dimensions of bearings marked " * " are shown in drawings.

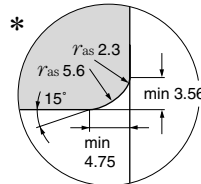
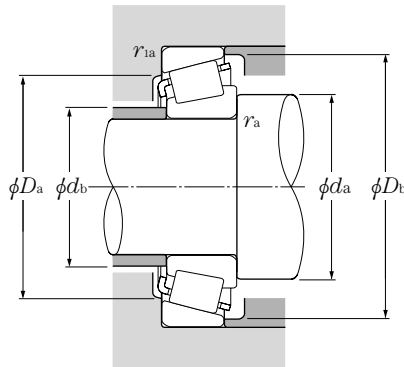
Inch series J series



d 31.750 ~ 34.925mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
31.750	62.000	19.050	20.638	14.288	46.5	54.0	4 750	5 500	6 100	8 200
	66.421	25.400	25.357	20.638	69.0	81.5	7 050	8 300	5 700	7 600
	68.262	22.225	22.225	17.462	57.0	67.0	5 800	6 850	5 800	7 700
	68.262	22.225	22.225	17.462	57.0	67.0	5 800	6 850	5 800	7 700
	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
	69.850	23.812	25.357	19.050	69.0	81.5	7 050	8 300	5 700	7 600
	69.850	23.812	25.357	19.050	69.0	81.5	7 050	8 300	5 700	7 600
	72.626	30.162	29.997	23.812	84.5	98.0	8 600	9 950	5 500	7 300
	72.626	30.162	29.997	23.812	84.5	98.0	8 600	9 950	5 500	7 300
	73.025	22.225	22.225	17.462	56.5	68.0	5 750	6 900	5 300	7 000
	73.025	22.225	23.812	17.462	62.5	75.5	6 400	7 700	5 200	7 000
	73.025	29.370	27.783	23.020	72.0	97.0	7 350	9 850	5 400	7 100
	73.812	29.370	27.783	23.020	72.0	97.0	7 350	9 850	5 400	7 100
	76.200	29.370	28.575	23.020	78.0	105	7 950	10 700	5 100	6 800
	79.375	29.370	29.771	23.812	93.0	114	9 450	11 600	4 900	6 600
33.338	68.262	22.225	22.225	17.462	56.5	71.0	5 750	7 250	5 700	7 500
	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
	69.850	23.812	25.357	19.050	69.0	81.5	7 050	8 300	5 700	7 600
	72.626	30.162	29.997	23.812	84.5	98.0	8 600	9 950	5 500	7 300
	73.025	29.370	27.783	23.020	72.0	97.0	7 350	9 850	5 400	7 100
	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
	76.200	29.370	28.575	23.020	78.0	105	7 950	10 700	5 100	6 800
	76.200	29.370	28.575	23.020	78.0	105	7 950	10 700	5 100	6 800
34.925	79.375	25.400	24.074	17.462	65.5	67.0	6 650	6 800	5 200	6 900
	65.088	18.034	18.288	13.970	46.5	56.0	4 750	5 700	5 700	7 600
	65.088	18.034	18.288	13.970	46.5	56.0	4 750	5 700	5 700	7 600
	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
	72.233	25.400	25.400	19.842	65.0	84.5	6 600	8 600	5 400	7 200
	72.238	20.638	20.638	15.875	48.0	58.5	4 900	5 950	5 300	7 000
	73.025	22.225	22.225	17.462	56.5	68.0	5 750	6 900	5 300	7 000
	73.025	22.225	22.225	17.462	56.5	68.0	5 750	6 900	5 300	7 000
	73.025	22.225	23.812	17.462	62.5	75.5	6 400	7 700	5 200	7 000
	73.025	23.812	24.608	19.050	71.0	85.0	7 200	8 700	5 300	7 100
	73.025	23.812	24.608	19.050	71.0	85.0	7 200	8 700	5 300	7 100
	73.025	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800

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_{as} and r_{ias} .
2. Chamfer dimensions of bearings marked " * " are shown in drawings.



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

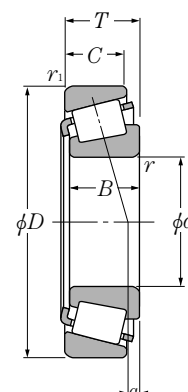
$$P_{or} = 0.5F_r + Y_o F_a$$

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						Load center mm	Constant	Axial		Mass
									load factors		
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			a	e	Y_2
4T-15126/15245	37	36.5	55	58	0.8	1.3	6.0	0.35	1.71	0.94	0.255
4T-2580/2520	38.5	37.5	57	62	0.8	3.3	9.1	0.27	2.19	1.21	0.409
4T-02475/02420	44.5	38.5	59	63	3.5	1.5	5.2	0.42	1.44	0.79	0.38
4T-02476/02420	39	38.5	59	63	0.8	1.5	5.2	0.42	1.44	0.79	0.383
4T-14124/14276	38.5	37.5	60	63	0.8	1.3	4.1	0.38	1.57	0.86	0.359
4T-14125A/14276	44	37.5	60	63	3.5	1.3	4.1	0.38	1.57	0.86	0.356
4T-2580/2523	38.5	37.5	61	64	0.8	1.3	9.1	0.27	2.19	1.21	0.454
4T-2582/2523	44	37.5	61	64	3.5	1.3	9.1	0.27	2.19	1.21	0.451
4T-3188/3120	40	39.5	61	67	0.8	3.3	9.9	0.33	1.80	0.99	0.603
4T-3193/3120	45.5	39.5	61	67	3.5	3.3	9.9	0.33	1.80	0.99	0.601
4T-02875/02820	45.5	39.5	62	68	3.5	3.3	3.9	0.45	1.32	0.73	0.451
4T-2879/2820	39.5	38.5	63	68	0.8	3.3	5.5	0.37	1.63	0.90	0.465
4T-HM88542/HM88510	45.5	42.5	59	70	1.3	3.3	6.0	0.55	1.10	0.60	0.622
4T-HM88542/HM88512	45.5	42.5	60	70	1.3	3.3	6.0	0.55	1.10	0.60	0.638
4T-HM89440/HM89410	45.5	44.5	62	73	0.8	3.3	5.8	0.55	1.10	0.60	0.686
4T-3476/3420	43	41	67	74	1.3	3.3	8.7	0.37	1.64	0.90	0.767
4T-M88048/M88010	42.5	41	58	65	0.8	1.5	2.9	0.55	1.10	0.60	0.378
4T-14130/14276	45	38.5	60	63	3.5	1.3	4.1	0.38	1.57	0.86	0.344
4T-2585/2523	45	39	61	64	3.5	1.3	9.1	0.27	2.19	1.21	0.435
4T-3196/3120	47	40.5	61	67	3.5	3.3	9.9	0.33	1.80	0.99	0.581
4T-HM88547/HM88510	45.5	42.5	59	70	0.8	3.3	6.0	0.55	1.10	0.60	0.604
4T-2785/2720	46	40	66	70	3.5	3.3	7.8	0.30	1.98	1.09	0.551
4T-HM89443/HM89410	46.5	44.5	62	73	0.8	3.3	5.8	0.55	1.10	0.60	0.668
4T-HM89444/HM89410	53	44.5	62	73	3.8	3.3	5.8	0.55	1.10	0.60	0.665
4T-43131/43312	51	42	67	74	3.5	1.5	1.4	0.67	0.90	0.49	0.568
4T-LM48548/LM48510	46	40	58	61	*	1.3	3.7	0.38	1.59	0.88	0.249
4T-LM48548A/LM48510	40.5	42	58	61	0.8	1.3	3.7	0.38	1.59	0.88	0.252
4T-14137A/14276	42	40	60	63	1.5	1.3	4.1	0.38	1.57	0.86	0.333
4T-HM88649/HM88610	48.5	42.5	60	69	2.3	2.3	4.6	0.55	1.10	0.60	0.489
4T-16137/16284	47	40.5	63	67	3.5	1.3	4.2	0.40	1.49	0.82	0.385
4T-02877/02820	48.5	42	62	68	3.5	3.3	3.9	0.45	1.32	0.73	0.422
4T-02878/02820	42.5	42	62	68	0.8	3.3	3.9	0.45	1.32	0.73	0.425
4T-2878/2820	42	41	63	68	0.8	3.3	5.5	0.37	1.63	0.90	0.434
4T-25877/25820	43	40.5	64	68	1.5	2.3	8.1	0.29	2.07	1.14	0.471
4T-25877/25821	43	40.5	65	68	1.5	0.8	8.1	0.29	2.07	1.14	0.474
4T-2793/2735X	42	41	66	69	0.8	0.8	7.8	0.30	1.98	1.09	0.485
4T-2793/2720	42	41	66	70	0.8	3.3	7.8	0.30	1.98	1.09	0.536

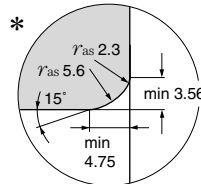
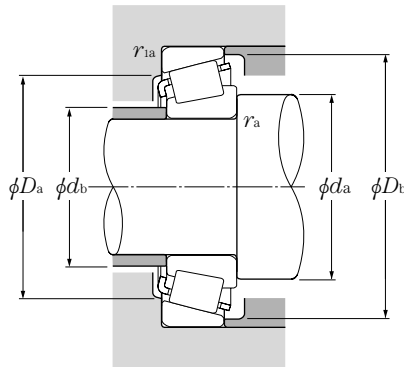
Inch series J series



d 34.925 ~ 38.100mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
34.925	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
	76.200	29.370	28.575	23.020	78.0	105	7 950	10 700	5 100	6 800
	76.200	29.370	28.575	23.812	80.5	97.0	8 200	9 900	5 100	6 800
	76.200	29.370	28.575	23.812	80.5	97.0	8 200	9 900	5 100	6 800
	79.375	29.370	29.771	23.812	93.0	114	9 450	11 600	4 900	6 600
	80.167	29.370	30.391	23.812	95.0	112	9 700	11 400	4 800	6 400
	85.725	30.162	30.162	23.812	105	132	10 700	13 400	4 500	6 000
34.976	69.012	19.845	19.583	15.875	48.5	58.0	4 900	5 900	5 600	7 400
34.988	59.974	15.875	16.764	11.938	35.5	47.5	3 600	4 850	6 100	8 100
	61.973	16.700	17.000	13.600	37.0	48.0	3 800	4 900	5 900	7 900
	61.973	18.000	17.000	15.000	37.0	48.0	3 800	4 900	5 900	7 900
35.000	70.000	24.000	23.500	19.000	62.0	78.0	6 350	7 950	5 500	7 300
	79.375	23.812	25.400	19.050	76.5	97.5	7 800	9 950	4 800	6 400
	80.000	21.000	22.403	17.826	68.0	75.0	6 950	7 650	4 700	6 300
35.717	72.233	25.400	25.400	19.842	65.0	84.5	6 600	8 600	5 400	7 200
	72.626	25.400	25.400	19.842	65.0	84.5	6 600	8 600	5 400	7 200
36.487	73.025	23.812	24.608	19.050	71.0	85.0	7 200	8 700	5 300	7 100
	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
36.512	76.200	29.370	28.575	23.020	78.0	105	7 950	10 700	5 100	6 800
	76.200	29.370	28.575	23.020	78.0	105	7 950	10 700	5 100	6 800
	76.200	29.370	28.575	23.812	80.5	97.0	8 200	9 900	5 100	6 800
	79.375	29.370	28.829	22.664	86.5	104	8 800	10 600	5 000	6 600
	79.375	29.370	29.771	23.812	93.0	114	9 450	11 600	4 900	6 600
	88.500	25.400	23.698	17.462	70.5	78.0	7 200	7 950	4 000	5 300
	88.500	25.400	23.698	17.462	70.5	78.0	7 200	7 950	4 000	5 300
38.000	63.000	17.000	17.000	13.500	38.5	52.5	3 950	5 350	5 700	7 600
38.100	63.500	12.700	11.908	9.525	25.9	33.5	2 640	3 400	5 500	7 300
	65.088	18.034	18.288	13.970	43.5	57.0	4 400	5 800	5 500	7 400
	69.012	19.050	19.050	15.083	47.5	59.5	4 850	6 050	5 300	7 100
	69.012	19.050	19.050	15.083	47.5	59.5	4 850	6 050	5 300	7 100
	71.438	15.875	16.520	11.908	43.5	51.0	4 400	5 200	5 400	7 200
	72.000	19.000	20.638	14.237	48.0	58.5	4 900	5 950	5 300	7 000

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_{is} and r_{ias} .
 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 $P_{or} = F_r$

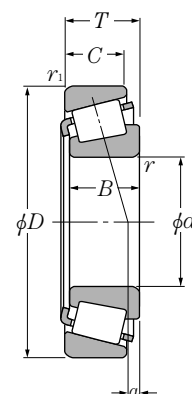
For values of e , Y_2 and Y_0 see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			e	Y_2	Y_0
4T-2793/2729	42	41	68	70	0.8	0.8	7.8	0.30	1.98	1.09	0.541
4T-HM89446/HM89410	53	44.5	62	73	3.5	3.3	5.8	0.55	1.10	0.60	0.646
4T-31593/31520	50	43.5	64	72	3.5	3.3	7.8	0.40	1.49	0.82	0.625
4T-31594/31520	46	43.5	64	72	1.5	3.3	7.8	0.40	1.49	0.82	0.627
4T-3478/3420	50	43.5	67	74	3.5	3.3	8.7	0.37	1.64	0.90	0.725
4T-3379/3320	48	41.5	70	75	3.5	3.3	11.2	0.27	2.20	1.21	0.732
4T-3872/3820	53	46	73	81	3.5	3.3	8.1	0.40	1.49	0.82	0.897
4T-14139/14276	41.5	40	60	63	1.3	1.3	4.1	0.38	1.57	0.86	0.333
4T-L68149†/L68111††	45.5	39	53	56	*	1.3	2.5	0.42	1.44	0.79	0.179
4T-LM78349A†/LM78310A††	42	39.5	54	59	1.5	1.5	2.4	0.44	1.35	0.74	0.209
4T-LM78349†/LM78310C††	46	40	56	59	*	1.5	2.4	0.44	1.35	0.74	0.218
# 4T-JS3549A/JS3510	47	42	60	67	2	1.5	3.6	0.55	1.10	0.60	0.42
4T-26883/26822	42.5	42	71	74	0.8	0.8	7.4	0.32	1.88	1.04	0.61
4T-339/332	42.5	41.5	73	75	0.8	1.3	6.6	0.27	2.20	1.21	0.534
4T-HM88648/HM88610	52	43	60	69	3.5	2.3	4.6	0.55	1.10	0.60	0.478
4T-HM88648/HM88611AS	52	43	59	69	3.5	3.3	3.0	0.55	1.10	0.60	0.482
4T-25880/25821	44	42	65	68	1.5	0.8	8.1	0.29	2.07	1.14	0.457
4T-2780/2720	44.5	42.5	66	70	1.5	3.3	7.8	0.30	1.98	1.09	0.518
4T-HM89448/HM89410	48.5	44.5	62	73	0.8	3.3	5.8	0.55	1.10	0.60	0.629
4T-HM89449/HM89411	54	44.5	65	73	3.5	0.8	5.8	0.55	1.10	0.60	0.631
4T-31597/31520	51	44.5	64	72	3.5	3.3	7.8	0.40	1.49	0.82	0.605
4T-HM89249/HM89210	55	44	66	75	3.5	3.3	5.8	0.55	1.10	0.60	0.686
4T-3479/3420	45.5	44.5	67	74	0.8	3.3	8.7	0.37	1.64	0.90	0.707
4T-44143/44348	54	50	75	84	2.3	1.5	-2.9	0.78	0.77	0.42	0.729
# 4T-JL69349/JL69310	49	42.5	56	60	*	1.3	2.3	0.42	1.44	0.79	0.198
4T-13889/13830	45	42.5	59	60	1.5	0.8	0.8	0.35	1.73	0.95	0.147
4T-LM29748/LM29710	49	42.5	59	62	*	1.3	4.3	0.33	1.80	0.99	0.233
4T-13685/13621	49.5	43	61	65	3.5	2.3	3.0	0.40	1.49	0.82	0.293
4T-13687/13621	46.5	43	61	65	2	2.3	3.0	0.40	1.49	0.82	0.296
4T-19150/19281	45	43	63	66	1.5	1	1.4	0.44	1.35	0.74	0.273
4T-16150/16282	49.5	43	63	67	3.5	1.5	4.2	0.40	1.49	0.82	0.331

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

4. Chamfer dimensions of bearings marked " * " are shown in drawings.

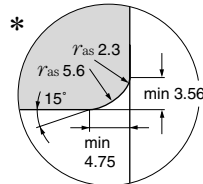
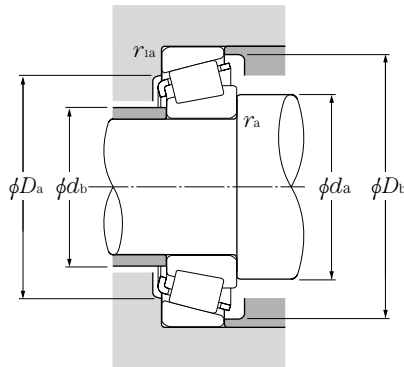
Inch series



d 38.100 ~ 41.275mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
38.100	76.200	20.638	20.940	15.507	55.5	63.0	5 650	6 450	5 000	6 700
	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
	79.375	23.812	25.400	19.050	76.5	97.5	7 800	9 950	4 800	6 400
	79.375	29.370	29.771	23.812	93.0	114	9 450	11 600	4 900	6 600
	80.000	21.006	20.940	15.875	55.5	63.0	5 650	6 450	5 000	6 700
	80.035	24.608	23.698	18.512	67.0	82.5	6 850	8 400	4 800	6 400
	82.550	29.370	28.575	23.020	87.0	117	8 850	11 900	4 700	6 200
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	85.725	30.162	30.162	23.812	105	132	10 700	13 400	4 500	6 000
	87.312	30.162	30.886	23.812	94.0	117	9 600	12 000	4 400	5 900
	88.500	25.400	23.698	17.462	70.5	78.0	7 200	7 950	4 000	5 300
	88.500	26.988	29.083	22.225	95.5	107	9 750	10 900	4 600	6 100
39.688	76.200	23.812	25.654	19.050	73.0	90.5	7 450	9 200	5 100	6 800
	77.534	29.370	30.391	23.812	95.0	112	9 700	11 400	4 800	6 400
	79.375	23.812	25.400	19.050	76.5	97.5	7 800	9 950	4 800	6 400
	80.035	29.370	30.391	23.812	95.0	112	9 700	11 400	4 800	6 400
	80.167	29.370	30.391	23.812	95.0	112	9 700	11 400	4 800	6 400
	88.500	25.400	23.698	17.462	70.5	78.0	7 200	7 950	4 000	5 300
40.000	76.200	20.638	20.940	15.507	55.5	63.0	5 650	6 450	5 000	6 700
	80.000	21.000	22.403	17.826	68.0	75.0	6 950	7 650	4 700	6 300
	85.000	20.638	21.692	17.462	69.5	79.5	7 100	8 100	4 400	5 800
	88.500	26.988	29.083	22.225	95.5	107	9 750	10 900	4 600	6 100
	107.950	36.512	36.957	28.575	141	177	14 400	18 100	3 600	4 800
40.483	82.550	29.370	28.575	23.020	87.0	117	8 850	11 900	4 700	6 200
40.988	67.975	17.500	18.000	13.500	46.0	62.5	4 700	6 400	5 300	7 000
41.275	73.025	16.667	17.462	12.700	46.0	55.5	4 700	5 700	5 000	6 600
	73.431	19.558	19.812	14.732	56.0	69.5	5 700	7 100	5 000	6 600
	73.431	21.430	19.812	16.604	56.0	69.5	5 700	7 100	5 000	6 600
	76.200	18.009	17.384	14.288	42.5	51.5	4 350	5 250	4 900	6 500
	76.200	22.225	23.020	17.462	65.0	80.5	6 600	8 200	4 900	6 500
	76.200	25.400	25.400	20.638	76.5	97.5	7 800	9 950	4 800	6 400
	79.375	23.812	25.400	19.050	76.5	97.5	7 800	9 950	4 800	6 400
	80.000	18.009	17.384	14.288	42.5	51.5	4 350	5 250	4 900	6 500

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_{is} and r_{ios} .
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 $P_{or} = F_r$

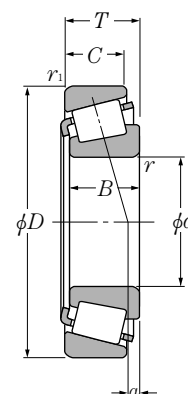
For values of e , Y_2 and Y_0 see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			e	Y_2	Y_0
4T-28150/28300	45.5	43.5	68	71	1.5	1.3	4.8	0.40	1.49	0.82	0.405
4T-2776/2720	52	43.5	66	70	4.3	3.3	7.8	0.30	1.98	1.09	0.495
4T-2788/2720	50	43.5	66	70	3.5	3.3	7.8	0.30	1.98	1.09	0.497
4T-26878/26822	45	44.5	71	74	0.8	0.8	7.4	0.32	1.88	1.04	0.574
4T-3490/3420	52	45.5	67	74	3.5	3.3	8.7	0.37	1.64	0.90	0.683
4T-28150/28315	45.5	43.5	69	73	1.5	1.5	4.8	0.40	1.49	0.82	0.467
4T-27880/27820	48	47	68	75	0.8	1.5	2.5	0.56	1.07	0.59	0.562
4T-HM801346/HM801310	51	49	68	78	0.8	3.3	4.7	0.55	1.10	0.60	0.767
4T-25572/25520	46	46	74	77	0.8	0.8	6.2	0.33	1.79	0.99	0.645
4T-3875/3820	49.5	48.5	73	81	0.8	3.3	8.1	0.40	1.49	0.82	0.857
4T-3580/3525	48	45.5	75	81	1.5	3.3	10.0	0.31	1.96	1.08	0.881
4T-44150/44348	55	51	75	84	2.3	1.5	-2.9 ¹⁾	0.78	0.77	0.42	0.711
4T-418/414	51	44.5	77	80	3.5	1.5	9.1	0.26	2.28	1.25	0.84
4T-2789/2720	52	45	66	70	3.5	3.3	7.8	0.30	1.98	1.09	0.477
4T-3382/3321	52	45.5	68	75	3.5	3.3	11.2	0.27	2.20	1.21	0.669
4T-26880/26822	48	45.5	71	74	1.5	0.8	7.4	0.32	1.88	1.04	0.554
4T-3382/3339	52	45.5	71	75	3.5	1.5	11.2	0.27	2.20	1.21	0.666
4T-3386/3320	46.5	45.5	70	75	0.8	3.3	11.2	0.27	2.20	1.21	0.668
4T-44158/44348	58	51	75	84	3.5	1.5	-2.9 ¹⁾	0.78	0.77	0.42	0.691
4T-28158/28300	47.5	45	68	71	1.5	1.3	4.8	0.40	1.49	0.82	0.386
4T-344/332	52	45.5	73	75	3.5	1.3	6.6	0.27	2.20	1.21	0.479
4T-350A/354A	47.5	46.5	77	80	0.8	1.3	5.1	0.31	1.96	1.08	0.562
4T-420/414	52	46	77	80	3.5	1.5	9.1	0.26	2.28	1.25	0.813
4T-543/532X	57	50	94	100	3.5	3.3	12.3	0.30	2.02	1.11	1.77
4T-HM801349/HM801310	58	49	68	78	3.5	3.3	4.7	0.55	1.10	0.60	0.731
4T-LM300849†/LM300811††	52	45	61	65	*	1.5	3.6	0.35	1.72	0.95	0.239
4T-18590/18520	53	46	66	69	3.5	1.5	2.9	0.35	1.71	0.94	0.281
4T-LM501349/LM501310	53	46.5	67	70	3.5	0.8	3.3	0.40	1.50	0.83	0.335
4T-LM501349/LM501314	53	46.5	66	70	3.5	0.8	3.3	0.40	1.50	0.83	0.355
4T-11162/11300	49	46.5	67	71	1.5	1.5	0.7	0.49	1.23	0.68	0.337
4T-24780/24720	54	47	68	72	3.5	0.8	4.5	0.39	1.53	0.84	0.432
4T-26882/26823	54	47	69	73	3.5	1.5	7.4	0.32	1.88	1.04	0.488
4T-26885/26822	48	47	71	74	0.8	0.8	7.4	0.32	1.88	1.04	0.535
4T-11162/11315	49	46.5	69	73	1.5	1.5	0.7	0.49	1.23	0.68	0.389

Note: 3. Chamfer dimensions of bearings marked " * " are shown in drawings.

1) " - " means that load center at outside on end of inner ring.

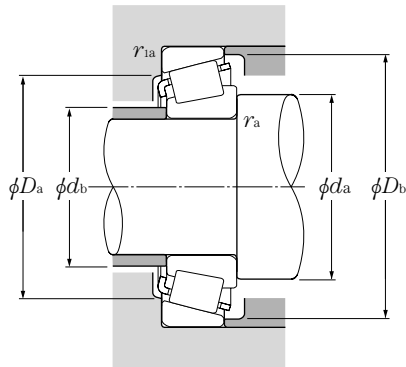
Inch series



d 41.275 ~ 44.450mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
41.275	80.000	21.000	22.403	17.826	68.0	75.0	6 950	7 650	4 700	6 300
	80.000	23.812	25.400	19.050	76.5	97.5	7 800	9 950	4 800	6 400
	82.550	26.543	25.654	20.193	80.5	104	8 200	10 600	4 600	6 100
	85.725	30.162	30.162	23.812	105	132	10 700	13 400	4 500	6 000
	87.312	30.162	30.886	23.812	94.0	117	9 600	12 000	4 400	5 900
	88.900	30.162	29.370	23.020	93.5	125	9 550	12 700	4 300	5 800
	90.488	39.688	40.386	33.338	136	175	13 900	17 900	4 300	5 800
	92.075	26.195	23.812	16.670	72.5	81.5	7 400	8 300	3 800	5 000
	93.662	31.750	31.750	26.195	104	131	10 600	13 400	4 100	5 500
	95.250	30.162	29.370	23.020	109	147	11 100	15 000	4 000	5 300
	95.250	30.958	28.300	20.638	82.5	92.0	8 400	9 350	3 700	5 000
	95.250	30.958	28.575	22.225	96.0	116	9 800	11 800	3 700	4 900
42.070	90.488	39.688	40.386	33.338	136	175	13 900	17 900	4 300	5 800
42.862	82.550	26.195	26.988	20.638	75.5	97.0	7 700	9 900	4 600	6 100
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	87.312	30.162	30.886	23.812	94.0	117	9 600	12 000	4 400	5 900
42.875	79.375	23.812	25.400	19.050	76.5	97.5	7 800	9 950	4 800	6 400
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
44.450	76.992	17.462	17.145	11.908	44.0	54.0	4 450	5 550	4 700	6 300
	79.375	17.462	17.462	13.495	45.5	56.0	4 600	5 700	4 600	6 200
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	84.138	30.162	30.886	23.812	94.0	117	9 600	12 000	4 400	5 900
	85.000	20.638	21.692	17.462	69.5	79.5	7 100	8 100	4 400	5 800
	87.312	30.162	30.886	23.812	94.0	117	9 600	12 000	4 400	5 900
	88.900	30.162	29.370	23.020	93.5	125	9 550	12 700	4 300	5 800
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	93.662	31.750	31.750	26.195	103	131	10 600	13 400	4 100	5 500
	95.250	27.783	28.575	22.225	107	139	10 900	14 200	3 900	5 200
	95.250	27.783	29.900	22.225	108	129	11 000	13 200	4 200	5 600
	95.250	30.162	29.370	23.020	109	147	11 100	15 000	4 000	5 300
	95.250	30.958	28.300	20.638	82.5	92.0	8 400	9 350	3 700	5 000
	95.250	30.958	28.575	22.225	96.0	116	9 800	11 800	3 700	4 900
	101.600	34.925	36.068	26.988	135	165	13 800	16 800	3 800	5 000
	104.775	30.162	29.317	24.605	115	148	11 700	15 000	3 500	4 700

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_{as} and r_{1as} .



Equivalent radial load dynamic

$$P_r = X F_r + Y F_a$$

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

static

$$P_{or} = 0.5 F_r + Y_o F_a$$

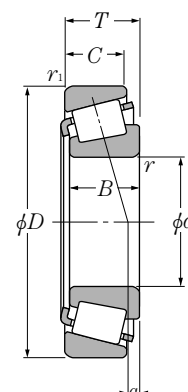
When $P_{or} < F_r$ use $P_{or} = F_r$

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

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial		Mass
	mm								load factors		
	d_a	d_b	D_a	D_b	r_{as} max	r'_{1as} max			a	e	Y_2
4T-336/332	47	46	73	75	0.8	1.3	6.6	0.27	2.20	1.21	0.468
4T-26882/26824	54	47	70	74	3.5	1.3	7.4	0.32	1.88	1.04	0.542
4T-M802048/M802011	57	51	70	79	3.5	3.3	3.2	0.55	1.10	0.60	0.642
4T-3880/3820	52	50	73	81	0.8	3.3	8.1	0.40	1.49	0.82	0.81
4T-3576/3525	49	48	75	81	0.8	3.3	10.0	0.31	1.96	1.08	0.834
4T-HM803145/HM803110	54	53	74	85	0.8	3.3	4.6	0.55	1.10	0.60	0.901
4T-4388/4335	57	51	77	85	3.5	3.3	15.0	0.28	2.11	1.16	1.25
4T-M903345/M903310	60	54	78	88	3.5	1.5	−3.6 ¹⁾	0.83	0.72	0.40	0.758
4T-46162/46368	52	51	79	87	0.8	3.3	7.1	0.40	1.49	0.82	1.09
4T-HM804840/HM804810	61	54	81	91	3.5	3.3	3.7	0.55	1.10	0.60	1.08
4T-53162/53375	57	53	81	89	1.5	0.8	0.5	0.74	0.81	0.45	0.975
4T-HM903245/HM903210	63	54	81	91	3.5	0.8	−0.4 ¹⁾	0.74	0.81	0.45	1.05
4T-4395/4335	58	51	77	85	3.5	3.3	15.0	0.28	2.11	1.16	1.24
4T-22780/22720	56	50	71	77	3.5	3.3	6.4	0.40	1.49	0.82	0.617
4T-25578/25520	53	49.5	74	77	2.3	0.8	6.2	0.33	1.79	0.99	0.584
4T-3579/3525	56	49.5	75	81	3.5	3.3	10.0	0.31	1.96	1.08	0.805
4T-26884/26822	55	48.5	71	74	3.5	0.8	7.4	0.32	1.88	1.04	0.51
4T-25577/25520	55	49	74	77	3.5	0.8	6.2	0.33	1.79	0.99	0.581
4T-12175/12303	52	49.5	68	73	1.5	1.5	−0.2 ¹⁾	0.51	1.19	0.65	0.308
4T-18685/18620	54	49.5	71	74	2.8	1.5	2.2	0.37	1.60	0.88	0.345
4T-25580/25520	57	50	74	77	3.5	0.8	6.2	0.33	1.79	0.99	0.56
4T-25582/25520	60	50	74	77	5	0.8	6.2	0.33	1.79	0.99	0.556
4T-3578/3520	57	51	74	80	3.5	3.3	10.0	0.31	1.96	1.08	0.699
4T-355/354A	54	50	77	80	2.3	1.3	5.1	0.31	1.96	1.08	0.511
4T-3578/3525	57	51	75	81	3.5	3.3	10.0	0.31	1.96	1.08	0.779
4T-HM803149/HM803110	62	53	74	85	3.5	3.3	4.6	0.55	1.10	0.60	0.849
4T-3782/3720	58	52	82	88	3.5	3.3	8.3	0.34	1.77	0.97	0.961
4T-46175/46368	55	54	79	87	0.8	3.3	7.1	0.40	1.49	0.82	1.04
4T-33885/33821	53	53	85	90	0.8	2.3	8.0	0.33	1.82	1.00	0.987
4T-438/432	57	51	83	87	3.5	2.3	9.2	0.28	2.11	1.16	0.953
4T-HM804842/HM804810	57	57	81	91	0.8	3.3	3.7	0.55	1.10	0.60	1.04
4T-53177/53375	63	53	81	89	3.5	0.8	0.5	0.74	0.81	0.45	0.925
4T-HM903249/HM903210	65	54	81	91	3.5	0.8	−0.4 ¹⁾	0.74	0.81	0.45	1
4T-527/522	59	53	89	95	3.5	3.3	12.9	0.29	2.10	1.16	1.37
4T-460/453X	60	54	92	98	3.5	3.3	7.1	0.34	1.79	0.98	1.29

1) " - " means that load center at outside on end of inner ring.

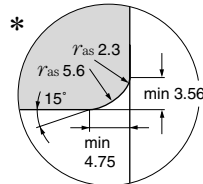
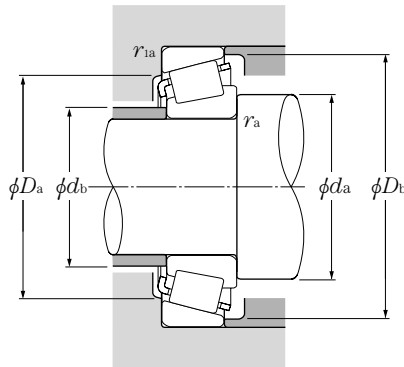
Inch series



d 44.450 ~ 47.625mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
44.450	104.775	30.162	30.958	23.812	130	169	13 200	17 300	3 500	4 700
	104.775	36.512	36.512	28.575	138	189	14 000	19 300	3 600	4 800
	111.125	30.162	26.909	20.638	104	136	10 600	13 900	3 200	4 200
	111.125	30.162	26.909	20.638	104	136	10 600	13 900	3 200	4 200
	127.000	50.800	52.388	41.275	250	320	25 500	33 000	3 200	4 300
44.983	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
45.000	85.000	20.638	21.692	17.462	69.5	79.5	7 100	8 100	4 400	5 800
	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
45.237	87.312	30.162	30.886	23.812	94.0	117	9 600	12 000	4 400	5 900
45.242	73.431	19.558	19.812	15.748	54.0	76.0	5 550	7 750	4 800	6 400
	77.788	19.842	19.842	15.080	57.5	73.5	5 850	7 500	4 600	6 200
45.618	82.550	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	83.058	23.876	25.400	19.114	76.0	98.0	7 750	10 000	4 500	6 000
	85.000	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
45.987	74.976	18.000	18.000	14.000	51.0	71.0	5 200	7 250	4 700	6 300
46.038	79.375	17.462	17.462	13.495	45.5	56.0	4 600	5 700	4 600	6 200
	82.931	23.812	25.400	19.050	76.0	98.0	7 750	10 000	4 500	6 000
	85.000	20.638	21.692	17.462	69.5	79.5	7 100	8 100	4 400	5 800
	85.000	25.400	25.608	20.638	79.0	104	8 050	10 600	4 400	5 800
	90.119	23.000	21.692	21.808	69.5	79.5	7 100	8 100	4 400	5 800
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	95.250	27.783	29.900	22.225	108	129	11 000	13 200	4 200	5 600
47.625	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
	88.900	25.400	25.400	19.050	82.0	101	8 350	10 300	4 200	5 600
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	95.250	30.162	29.370	23.020	109	147	11 100	15 000	4 000	5 300
	96.838	21.000	21.946	15.875	78.0	96.5	7 950	9 850	3 700	5 000
	101.600	34.925	36.068	26.988	135	165	13 800	16 800	3 800	5 000
	104.775	30.162	29.317	24.605	115	148	11 700	15 000	3 500	4 700

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_{is} and r_{os} .
 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 $P_{or} = F_r$

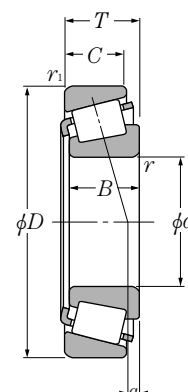
For values of e , Y_2 and Y_0 see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial load factors		Mass kg
	mm										
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max					
4T-45280/45220 4T-HM807040/HM807010 4T-55175C/55437 4T-55176C/55437 4T-6277/6220	55 66 70 65 67	54 59 64 65 60	93 89 92 92 108	99 100 105 105 117	0.8 3.5 3.5 0.8 3.5	3.3 3.3 3.3 3.3 3.3	7.9 7.4 −7.4 ¹⁾ −7.4 ¹⁾ 19.5	0.33 0.49 0.88 0.88 0.30	1.80 1.23 0.68 0.68 2.01	0.99 0.68 0.37 0.37 1.11	1.35 1.62 1.45 1.09 3.58
4T-25584/25520 4T-3776/3720	53 59	51 53	74 82	77 88	1.5 3.5	0.8 3.3	6.2 8.3	0.33 0.34	1.79 1.77	0.99 0.97	0.555 0.952
4T-358/354A 4T-367/362A	53 55	50 51	77 81	80 84	1.5 2	1.3 1.3	5.1 4.0	0.31 0.32	1.96 1.88	1.08 1.03	0.505 0.595
4T-3586/3525	58	52	75	81	3.5	3.3	10.0	0.31	1.96	1.08	0.765
4T-LM102949/LM102910 4T-LM603049/LM603011	56 57	50 50	68 71	70 74	3.5 3.5	0.8 0.8	4.7 2.2	0.31 0.43	1.97 1.41	1.08 0.77	0.307 0.372
4T-25590/25519 4T-25590/25520 4T-25590/25522 4T-25590/25526	58 58 58 58	51 51 51 51	73 74 73 74	77 77 77 78	3.5 3.5 3.5 3.5	2 0.8 2 2.3	6.2 6.2 6.2 6.2	0.33 0.33 0.33 0.33	1.79 1.79 1.79 1.79	0.99 0.99 0.99 0.99	0.534 0.543 0.545 0.581
4T-LM503349A†/LM503310††	57	51	67	71	*	1.5	1.9	0.40	1.49	0.82	0.296
4T-18690/18620 4T-25592/25520 4T-359A/354A 4T-2984/2924 4T-359S/352 4T-3777/3720 4T-436/432	56 58 57 58 55 60 59	51 52 51 52 51 53 52	71 74 77 76 78 82 83	74 77 80 80 82 88 87	2.8 3.5 3.5 3.5 2.3 3.5 3.5	1.5 0.8 1.3 1.3 2.3 3.3 2.3	2.2 6.2 5.1 6.4 5.1 8.3 9.2	0.37 0.33 0.31 0.35 0.31 0.34 0.28	1.60 1.79 1.96 1.73 1.96 1.77 2.11	0.88 0.99 1.08 0.95 1.08 0.97 1.16	0.329 0.538 0.489 0.615 0.651 0.934 0.927
4T-369A/362A 4T-M804048/M804010 4T-3778/3720 4T-HM804846/HM804810 4T-386A/382A 4T-528/522 4T-463/453X	60 57 67 66 56 62 65	53 56 55 57 55 55 56	81 77 82 81 89 89 92	84 85 88 91 92 95 98	3.5 0.8 6.4 3.5 0.8 3.5 4.8	1.3 3.3 3.3 3.3 0.8 3.3 3.3	4.0 1.7 8.3 3.7 3.1 12.9 7.1	0.32 0.55 0.34 0.55 0.35 0.29 0.34	1.88 1.10 1.77 1.10 1.69 2.10 1.79	1.03 0.60 0.97 0.60 0.93 1.16 0.98	0.559 0.662 0.898 0.978 0.72 1.3 1.24

Note: 3. Chamfer dimensions of bearings marked " * " are shown in drawings.

1) " — " means that load center at outside on end of inner ring.

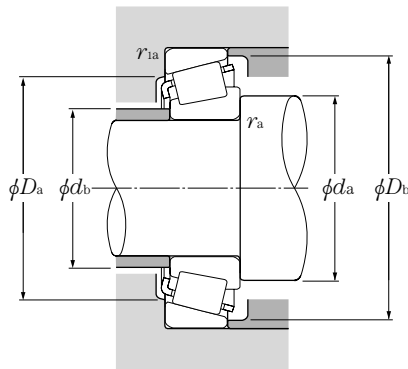
Inch series J series



d 47.625 ~ 50.800mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
47.625	104.775	30.162	30.958	23.812	130	169	13 200	17 300	3 500	4 700
	111.125	30.162	26.909	20.638	104	136	10 600	13 900	3 200	4 200
	123.825	36.512	32.791	25.400	154	188	15 700	19 200	2 900	3 900
48.412	95.250	30.162	29.370	23.020	109	147	11 100	15 000	4 000	5 300
	95.250	30.162	29.370	23.020	109	147	11 100	15 000	4 000	5 300
49.212	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	103.188	43.658	44.475	36.512	174	232	17 700	23 600	3 800	5 000
	104.775	36.512	36.512	28.575	138	189	14 000	19 300	3 600	4 800
	114.300	44.450	44.450	34.925	186	225	19 000	23 000	3 600	4 800
	114.300	44.450	44.450	36.068	203	261	20 700	26 600	3 500	4 700
49.987	82.550	21.590	22.225	16.510	69.5	94.0	7 100	9 600	4 300	5 700
	92.075	24.608	25.400	19.845	83.5	116	8 550	11 800	4 000	5 300
	114.300	44.450	44.450	36.068	203	261	20 700	26 600	3 500	4 700
50.000	82.000	21.500	21.500	17.000	69.5	94.0	7 100	9 600	4 300	5 700
	84.000	22.000	22.000	17.500	69.5	94.5	7 100	9 600	4 300	5 700
	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
	90.000	28.000	28.000	23.000	106	141	10 800	14 400	4 100	5 400
	105.000	37.000	36.000	29.000	138	189	14 000	19 300	3 600	4 800
	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
50.800	82.550	21.590	22.225	16.510	69.5	94.0	7 100	9 600	4 300	5 700
	85.000	17.462	17.462	13.495	49.5	65.0	5 050	6 600	4 200	5 600
	88.900	17.462	17.462	13.495	49.5	65.0	5 050	6 600	4 200	5 600
	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
	90.000	20.000	22.225	15.875	76.5	90.5	7 800	9 250	4 100	5 500
	92.075	24.608	25.400	19.845	83.5	116	8 550	11 800	4 000	5 300
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	95.250	27.783	28.575	22.225	107	139	10 900	14 200	3 900	5 200
	95.250	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	96.838	21.000	21.946	15.875	78.0	96.5	7 950	9 850	3 700	5 000
	97.630	24.608	24.608	19.446	88.5	128	9 000	13 000	3 700	4 900
	98.425	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300

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_{as} and r_{1as} .
 2. As for the maximum value for inner ring bore diameters of bearings whose bearing numbers are marked with "†" (inner 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

$$P_{or} = 0.5F_r + Y_o F_a$$

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

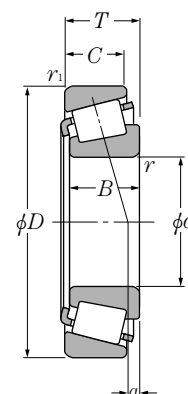
For values of e , Y_2 and Y_o see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm <i>a</i>	Constant <i>e</i>	Axial load factors		Mass kg (approx.)
	<i>d_a</i>	<i>d_b</i>	<i>D_a</i>	<i>D_b</i>	<i>r_{as}</i> max	<i>r_{las}</i> max			<i>Y₂</i>	<i>Y_o</i>	
4T-45282/45220	63	57	93	99	3.5	3.3	7.9	0.33	1.80	0.99	1.29
4T-55187C/55437	69	62	92	105	3.5	3.3	-7.4 ¹⁾	0.88	0.68	0.37	1.4
4T-72188C/72487	69	67	102	116	0.8	3.3	-1.5 ¹⁾	0.74	0.81	0.45	2.16
4T-HM804848/HM804810	63	57	81	91	2.3	3.3	3.7	0.55	1.10	0.60	0.967
4T-HM804849/HM804810	66	57	81	91	3.5	3.3	3.7	0.55	1.10	0.60	0.964
4T-3781/3720	62	56	82	88	3.5	3.3	8.3	0.34	1.77	0.97	0.877
4T-5395/5335	66	60	89	97	3.5	3.3	16.1	0.30	2.02	1.11	1.75
4T-HM807044/HM807010	69	63	89	100	3.5	3.3	7.4	0.49	1.23	0.68	1.52
4T-65390/65320	70	60	97	107	3.5	3.3	12.5	0.43	1.39	0.77	2.23
4T-HH506348/HH506310	71	61	97	107	3.5	3.3	13.3	0.40	1.49	0.82	2.33
4T-LM104947A†/LM104911	55	55	75	78	0.5	1.3	5.8	0.31	1.97	1.08	0.434
4T-28579†/28521	60	56	83	87	2.3	0.8	4.6	0.38	1.59	0.87	0.718
4T-HH506349†/HH506310	72	61	97	107	3.5	3.3	13.3	0.40	1.49	0.82	2.27
# 4T-JLM104948/JLM104910	60	55	76	78	3	0.5	5.4	0.31	1.97	1.08	0.42
# 4T-JLM704649/JLM704610	62	56	76	80	3.5	1.5	2.3	0.44	1.37	0.75	0.466
4T-365/362A	58	55	81	84	2	1.3	4.0	0.32	1.88	1.03	0.53
4T-366/362A	59	55	81	84	2.3	1.3	4.0	0.32	1.88	1.03	0.529
# 4T-JM205149/JM205110	62	57	80	85	3	2.5	7.4	0.33	1.82	1.00	0.752
# 4T-JHM807045/JHM807012	69	63	90	100	3	2.5	7.5	0.49	1.23	0.68	1.52
4T-396/394A	61	60	101	104	0.8	1.3	0.7	0.40	1.49	0.82	1.06
4T-LM104949/LM104911	62	55	75	78	3.5	1.3	5.8	0.31	1.97	1.08	0.419
4T-18790/18720	62	56	77	80	3.5	1.5	0.8	0.41	1.48	0.81	0.374
4T-18790/18724	62	56	78	82	3.5	1.3	0.8	0.41	1.48	0.81	0.431
4T-368/362A	58	56	81	84	1.5	1.3	4.0	0.32	1.88	1.03	0.519
4T-370A/362A	65	56	81	84	5	1.3	4.0	0.32	1.88	1.03	0.511
4T-368A/362	62	56	81	84	3.5	2	4.0	0.32	1.88	1.03	0.525
4T-28580/28521	63	57	83	87	3.5	0.8	4.6	0.38	1.59	0.87	0.703
4T-3775/3720	58	58	82	88	0.8	3.3	8.3	0.34	1.77	0.97	0.852
4T-3780/3720	64	58	82	88	3.5	3.3	8.3	0.34	1.77	0.97	0.848
4T-33889/33821	64	58	85	90	3.5	2.3	8.0	0.33	1.82	1.00	0.876
4T-3780/3726	64	58	83	89	3.5	3.3	8.3	0.34	1.77	0.97	0.903
4T-385A/382A	61	60	89	92	2.3	0.8	3.1	0.35	1.69	0.93	0.676
4T-28678/28622	65	58	88	92	3.5	0.8	3.3	0.40	1.49	0.82	0.852
4T-3780/3732	64	58	84	90	3.5	3.3	8.3	0.34	1.77	0.97	0.993

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

1) " — " means that load center at outside on end of inner ring.

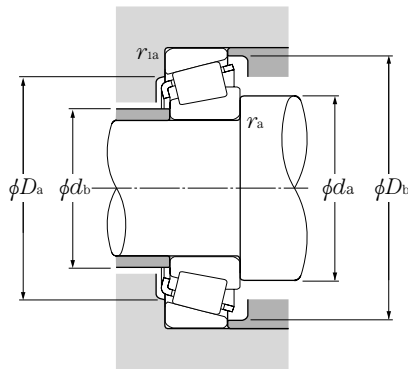
Inch series J series



d 50.800 ~ 55.000mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
50.800	101.600	31.750	31.750	25.400	110	136	11 200	13 900	3 700	5 000
	101.600	34.925	36.068	26.988	135	165	13 800	16 800	3 800	5 000
	104.775	30.162	29.317	24.605	115	148	11 700	15 000	3 500	4 700
	104.775	30.162	30.958	23.812	130	169	13 200	17 300	3 500	4 700
	104.775	36.512	36.512	28.575	138	189	14 000	19 300	3 600	4 800
	104.775	36.512	36.512	28.575	143	178	14 500	18 100	3 700	4 900
	107.950	36.512	36.957	28.575	141	177	14 400	18 100	3 600	4 800
	111.125	30.162	28.575	20.638	104	136	10 600	13 900	3 200	4 200
	112.712	30.162	26.909	20.638	104	136	10 600	13 900	3 200	4 200
	112.712	30.162	30.048	23.812	119	174	12 200	17 800	3 200	4 300
	112.712	30.162	30.162	23.812	138	195	14 100	19 800	3 200	4 200
	117.475	33.338	31.750	23.812	130	153	13 200	15 600	3 300	4 400
	120.650	41.275	41.275	31.750	172	213	17 500	21 700	3 300	4 400
	123.825	36.512	32.791	25.400	154	188	15 700	19 200	2 900	3 900
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
51.592	88.900	20.638	22.225	16.513	76.5	90.5	7 800	9 250	4 100	5 500
52.388	92.075	24.608	25.400	19.845	83.5	116	8 550	11 800	4 000	5 300
	93.264	30.162	30.302	23.812	102	134	10 400	13 700	4 000	5 300
	95.250	27.783	28.575	22.225	107	139	10 900	14 200	3 900	5 200
53.975	88.900	19.050	19.050	13.492	61.0	82.5	6 200	8 450	4 000	5 300
	95.250	27.783	28.575	22.225	107	139	10 900	14 200	3 900	5 200
	96.838	21.000	21.946	15.875	78.0	96.5	7 950	9 850	3 700	5 000
	104.775	30.162	30.958	23.812	130	169	13 200	17 300	3 500	4 700
	104.775	36.512	36.512	28.575	138	189	14 000	19 300	3 600	4 800
	107.950	36.512	36.957	28.575	141	177	14 400	18 100	3 600	4 800
	120.650	41.275	41.275	31.750	172	213	17 500	21 700	3 300	4 400
	122.238	33.338	31.750	23.812	134	163	13 700	16 600	3 100	4 200
	122.238	43.658	43.764	36.512	194	283	19 700	28 900	3 100	4 100
	123.825	36.512	32.791	25.400	154	188	15 700	19 200	2 900	3 900
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
	130.175	36.512	33.338	23.812	156	186	15 900	19 000	2 700	3 600
	140.030	36.512	33.236	23.520	171	212	17 400	21 600	2 600	3 400
54.488	104.775	36.512	36.512	28.575	138	189	14 000	19 300	3 600	4 800
55.000	90.000	23.000	23.000	18.500	77.5	109	7 900	11 100	3 900	5 300

Note: 1. With regard to the chamfer dimensions on the back face of the inner and outer rings, installation dimensions r_{is} and r_{1is} are larger than the maximum value.
2. Bearing numbers marked " # " designate J-series bearings. The accuracy of these bearings is listed in Table 6.6 on page A-42.



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

$$P_{or} = 0.5F_r + Y_o F_a$$

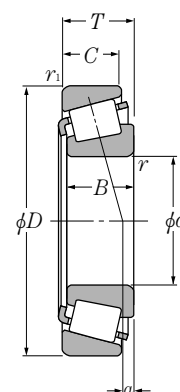
When $P_{or} < F_r$ use $P_{or} = F_r$

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

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{las} max			Y_2	Y_o	
4T-49585/49520	66	59	88	96	3.5	3.3	7.1	0.40	1.50	0.82	1.13
4T-529/522	59	58	89	95	0.8	3.3	12.9	0.29	2.10	1.16	1.24
4T-455/453X	60	59	92	98	0.8	3.3	7.1	0.34	1.79	0.98	1.19
4T-45284/45220	71	59	93	99	6.4	3.3	7.9	0.33	1.80	0.99	1.22
4T-HM807046/HM807010	70	63	89	100	3.5	3.3	7.4	0.49	1.23	0.68	1.49
4T-59200/59412	68	61	92	99	3.5	3.3	9.6	0.40	1.49	0.82	1.44
4T-537/532X	65	59	94	100	3.5	3.3	12.3	0.30	2.02	1.11	1.55
4T-HM907643/HM907614	74	65	91	105	3.5	3.3	-7.2 ¹⁾	0.88	0.68	0.37	1.36
4T-55200C/55443	71	65	92	106	3.5	3.3	-7.4 ¹⁾	0.88	0.68	0.37	1.34
4T-3975/3920	68	61	99	106	3.5	3.3	4.5	0.40	1.49	0.82	1.53
4T-39575/39520	68	61	101	107	3.5	3.3	6.6	0.34	1.77	0.97	1.54
4T-66200/66462	71	65	100	111	3.5	3.3	0.4	0.63	0.96	0.53	1.67
4T-619/612	67	61	105	110	3.5	3.3	14.4	0.31	1.91	1.05	2.3
4T-72200C/72487	77	67	102	116	3.5	3.3	-1.5 ¹⁾	0.74	0.81	0.45	2.1
4T-555/552A	66	62	109	116	2.3	3.3	9.4	0.35	1.73	0.95	2.34
4T-368S/362A	59	56	81	84	2	1.3	4.0	0.32	1.88	1.03	0.507
4T-28584/28521	65	58	83	87	3.5	0.8	4.6	0.38	1.59	0.87	0.677
4T-3767/3720	63	59	82	88	2.3	3.3	8.3	0.34	1.77	0.97	0.819
4T-33890/33821	61	59	85	90	1.5	2.3	8.0	0.33	1.82	1.00	0.851
4T-LM806649/LM806610	63	60	80	85	2.3	2	-2.2 ¹⁾	0.55	1.10	0.60	0.437
4T-33895/33822	63	60	86	90	1.5	0.8	8.0	0.33	1.82	1.00	0.824
4T-389A/382A	61	60	89	92	0.8	0.8	3.1	0.35	1.69	0.93	0.633
4T-45287/45220	62	62	93	99	0.8	3.3	7.9	0.33	1.80	0.99	1.17
4T-HM807049/HM807010	73	63	89	100	3.5	3.3	7.4	0.49	1.23	0.68	1.41
4T-539/532X	68	61	94	100	3.5	3.3	12.3	0.30	2.02	1.11	1.47
4T-621/612	70	63	105	110	3.5	3.3	14.4	0.31	1.91	1.05	2.21
4T-66584/66520	75	68	105	116	3.5	3.3	-1.8 ¹⁾	0.67	0.90	0.50	1.79
4T-5578/5535	73	67	106	116	3.5	3.3	13.3	0.36	1.67	0.92	2.64
4T-72212C/72487	79	67	102	116	3.5	3.3	-1.5 ¹⁾	0.74	0.81	0.45	2.03
4T-557S/552A	71	65	109	116	3.5	3.3	9.4	0.35	1.73	0.95	2.26
4T-HM911242/HM911210	79	74	109	124	3.5	3.3	-5.2 ¹⁾	0.82	0.73	0.40	2.27
4T-78214C/78551	79	77	117	132	0.8	2.3	-8.5 ¹⁾	0.87	0.69	0.38	2.77
4T-HM807048/HM807010	73	63	89	100	3.5	3.3	7.4	0.49	1.23	0.68	1.40
# 4T-JLM506849/JLM506810	63	61	82	86	1.5	0.5	2.8	0.40	1.49	0.82	0.558

1) " - " means that load center at outside on end of inner ring.

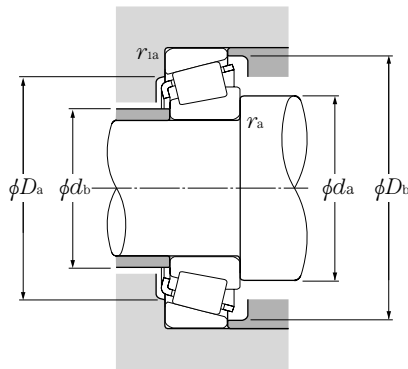
Inch series J series



d 55.000 ~ 60.000mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
55.000	95.000	29.000	29.000	23.500	107	144	10 900	14 700	3 800	5 100
	96.838	21.000	21.946	15.875	78.0	96.5	7 950	9 850	3 700	5 000
	110.000	39.000	39.000	32.000	173	219	17 600	22 400	3 500	4 600
55.562	97.630	24.608	24.608	19.446	88.5	128	9 000	13 000	3 700	4 900
	123.825	36.512	32.791	25.400	154	188	15 700	19 200	2 900	3 900
	127.000	36.512	36.512	26.988	163	228	16 600	23 300	2 900	3 800
55.575	96.838	21.000	21.946	15.875	78	96.5	7 950	9 850	3 700	5 000
57.150	96.838	21.000	21.946	15.875	78	96.5	7 950	9 850	3 700	5 000
	96.838	21.000	21.946	15.875	78	96.5	7 950	9 850	3 700	5 000
	96.838	21.000	21.946	15.875	78	96.5	7 950	9 850	3 700	5 000
	96.838	21.000	21.946	15.875	78	96.5	7 950	9 850	3 700	5 000
	97.630	24.608	24.608	19.446	88.5	128	9 000	13 000	3 700	4 900
	104.775	30.162	29.317	24.605	115	148	11 700	15 000	3 500	4 700
	104.775	30.162	29.317	24.605	115	148	11 700	15 000	3 500	4 700
	104.775	30.162	30.958	23.812	130	169	13 200	17 300	3 500	4 700
	107.950	27.783	29.317	22.225	115	148	11 700	15 000	3 500	4 700
	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
	110.000	27.795	29.317	27.000	115	148	11 700	15 000	3 500	4 700
	112.712	30.162	30.048	23.812	119	174	12 200	17 800	3 200	4 300
	112.712	30.162	30.162	23.812	138	195	14 100	19 800	3 200	4 200
	112.712	30.162	30.162	23.812	138	195	14 100	19 800	3 200	4 200
	117.475	30.162	30.162	23.812	117	175	11 900	17 900	3 000	4 000
	117.475	33.338	31.750	23.812	130	153	13 200	15 600	3 300	4 400
	120.650	41.275	41.275	31.750	172	213	17 500	21 700	3 300	4 400
	123.825	36.512	32.791	25.400	154	188	15 700	19 200	2 900	3 900
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
	140.030	36.512	33.236	23.520	171	212	17 400	21 600	2 600	3 400
57.531	96.838	21.000	21.946	15.875	78.0	96.5	7 950	9 850	3 700	5 000
59.972	122.238	33.338	31.750	23.812	134	163	13 700	16 600	3 100	4 200
59.987	146.050	41.275	39.688	25.400	199	234	20 300	23 900	2 400	3 200
60.000	95.000	24.000	24.000	19.000	83.0	122	8 500	12 400	3 700	4 900
	107.950	25.400	25.400	19.050	91.5	140	9 350	14 200	3 200	4 300

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_{is} and r_{1is} .
2. As for the maximum value for inner ring bore diameters of bearings whose bearing numbers are marked with "+" (inner 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

$$P_{or} = 0.5F_r + Y_o F_a$$

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

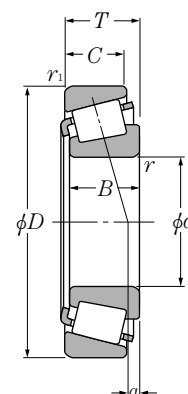
For values of e , Y_2 and Y_o see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			Y_2	Y_o	
# 4T-JM207049/JM207010	64	62	85	91	1.5	2.5	7.6	0.33	1.79	0.99	0.82
4T-385/382A	65	61	89	92	2.3	0.8	3.1	0.35	1.69	0.93	0.616
# 4T-JH307749/JH307710	71	64	97	104	3	2.5	11.7	0.35	1.73	0.95	1.71
4T-28680/28622	68	62	88	92	3.5	0.8	3.3	0.40	1.49	0.82	0.774
4T-72218C/72487	80	67	102	116	3.5	3.3	-1.5 ¹⁾	0.74	0.81	0.45	1.99
4T-HM813840/HM813810	76	70	111	121	3.5	3.3	3.7	0.50	1.20	0.66	2.34
4T-389/382A	65	61	89	92	2.3	0.8	3.1	0.35	1.69	0.93	0.608
4T-387/382A	66	62	89	92	2.3	0.8	3.1	0.35	1.69	0.93	0.583
4T-387A/382A	69	62	89	92	3.5	0.8	3.1	0.35	1.69	0.93	0.581
4T-387AS/382A	72	62	89	92	5	0.8	3.1	0.35	1.69	0.93	0.576
4T-387S/382A	63	62	89	92	0.8	0.8	3.1	0.35	1.69	0.93	0.585
4T-28682/28622	70	63	88	92	3.5	0.8	3.3	0.40	1.49	0.82	0.747
4T-462/453X	67	63	92	98	2.3	3.3	7.1	0.34	1.79	0.98	1.06
4T-469/453X	70	63	92	98	3.5	3.3	7.1	0.34	1.79	0.98	1.06
4T-45289/45220	65	65	93	99	0.8	3.3	7.9	0.33	1.80	0.99	1.1
4T-469/453A	70	63	97	100	3.5	0.8	7.1	0.34	1.79	0.98	1.11
4T-390/394A	70	66	101	104	2.3	1.3	0.7	0.40	1.49	0.82	0.954
4T-469/454	70	63	96	100	3.5	2	7.1	0.34	1.79	0.98	1.24
4T-3979/3920	72	66	99	106	3.5	3.3	4.5	0.40	1.49	0.82	1.4
4T-39580/39520	72	66	101	107	3.5	3.3	6.6	0.34	1.77	0.97	1.41
4T-39581/39520	81	66	101	107	8	3.3	6.6	0.34	1.77	0.97	1.4
4T-33225/33462	74	68	104	112	3.5	3.3	2.6	0.44	1.38	0.76	1.58
4T-66225/66462	76	69	100	111	3.5	3.3	0.4	0.63	0.96	0.53	1.54
4T-623/612	72	66	105	110	3.5	3.3	14.4	0.31	1.91	1.05	2.12
4T-72225C/72487	81	67	102	116	3.5	3.3	-1.5 ¹⁾	0.74	0.81	0.45	1.96
4T-555S/552A	73	67	109	116	3.5	3.3	9.4	0.35	1.73	0.95	2.18
4T-78225/78551	83	77	117	132	3.5	2.3	-8.5 ¹⁾	0.87	0.69	0.38	2.69
4T-388A/382A	69	63	89	92	3.5	0.8	3.1	0.35	1.69	0.93	0.575
4T-66589/66520	74	73	105	116	0.8	3.3	-1.8 ¹⁾	0.67	0.90	0.50	1.66
4T-H913840†/H913810	88	82	124	138	3.5	3.3	-4.3 ¹⁾	0.78	0.77	0.42	3.22
# 4T-JLM508748/JLM508710	75	66	85	91	5	2.5	3.0	0.40	1.49	0.82	0.606
4T-29580/29520	75	68	96	103	3.5	3.3	0.6	0.46	1.31	0.72	0.992

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

1) " - " means that load center at outside on end of inner ring.

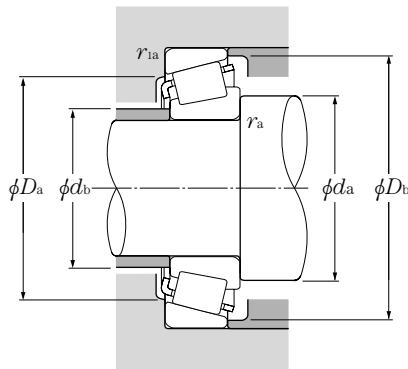
Inch series J series



d 60.000 ~ 65.000mm

Boundary dimensions					dynamic kN	Basic load ratings			Limiting speeds	
	mm			static		dynamic	static	dynamic	static	
<i>d</i>	<i>D</i>	<i>T</i>	<i>B</i>	<i>C</i>	<i>C_r</i>	<i>C_{0r}</i>	<i>C_r</i>	<i>C_{0r}</i>	grease	oil
60.000	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
	130.000	34.100	30.924	22.650	156.0	186	15 900	19 000	2 700	3 600
60.325	100.000	25.400	25.400	19.845	90.5	134	9 200	13 600	3 500	4 700
	112.712	30.162	30.048	23.812	119	174	12 200	17 800	3 200	4 300
	122.238	38.100	38.354	29.718	187	244	19 100	24 900	3 100	4 100
	122.238	43.658	43.764	36.512	194	283	19 700	28 900	3 100	4 100
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
	127.000	36.512	36.512	26.988	163	228	16 600	23 300	2 900	3 800
	127.000	44.450	44.450	34.925	203	263	20 700	26 800	3 100	4 200
	130.175	36.512	33.338	23.812	156	186	15 900	19 000	2 700	3 600
61.912	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
	136.525	46.038	46.038	36.512	224	355	22 800	36 500	2 600	3 500
	146.050	41.275	39.688	25.400	199	234	20 300	23 900	2 400	3 200
61.976	101.600	24.608	24.608	19.845	90.5	134	9 200	13 600	3 500	4 700
62.738	101.600	25.400	25.400	19.845	90.5	134	9 200	13 600	3 500	4 700
63.500	94.458	19.050	19.050	15.083	60.5	103	6 150	10 500	3 600	4 800
	107.950	25.400	25.400	19.050	91.5	140	9 350	14 200	3 200	4 300
	107.950	25.400	25.400	19.050	91.5	140	9 350	14 200	3 200	4 300
	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
	110.000	25.400	25.400	19.050	91.5	140	9 350	14 200	3 200	4 300
	112.712	30.162	30.048	23.812	119	174	12 200	17 800	3 200	4 300
	112.712	30.162	30.162	23.812	138	195	14 100	19 800	3 200	4 200
	120.000	29.794	29.007	24.237	128	177	13 000	18 100	3 000	4 000
	120.000	29.794	29.007	24.237	128	177	13 000	18 100	3 000	4 000
	122.238	38.100	38.354	29.718	187	244	19 100	24 900	3 100	4 100
	122.238	43.658	43.764	36.512	194	283	19 700	28 900	3 100	4 100
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
	127.000	36.512	36.170	28.575	163	229	16 600	23 300	2 900	3 800
	127.000	36.512	36.512	26.988	163	228	16 600	23 300	2 900	3 800
	136.525	41.275	41.275	31.750	194	262	19 800	26 700	2 800	3 800
	140.030	36.512	33.236	23.520	171	212	17 400	21 600	2 600	3 400
65.000	105.000	24.000	23.000	18.500	85.0	117	8 700	11 900	3 300	4 500
	110.000	28.000	28.000	22.500	119	174	12 200	17 800	3 200	4 300

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_{is} and r_{1is} .
2. Bearing numbers marked " # " designate J-series bearings. The accuracy of these bearings is listed in Table 6.6 on page A-42.



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

$$P_{or} = 0.5F_r + Y_o F_a$$

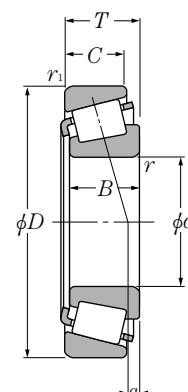
When $P_{or} < F_r$ use $P_{or} = F_r$

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

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			Y_2	Y_o	
4T-397/394A	69	68	101	104	0.8	1.3	0.7	0.40	1.49	0.82	0.91
# 4T-JHM911244/JHM911211	84	74	109	123	3.5	3.3	-7.6 ¹⁾	0.82	0.73	0.40	2.01
4T-28985/28921	73	67	89	96	3.5	3.3	2.5	0.43	1.41	0.78	0.772
4T-3980/3920	75	68	99	106	3.5	3.3	4.5	0.40	1.49	0.82	1.33
4T-HM212044/HM212011	85	70	108	116	8	3.3	11.1	0.34	1.78	0.98	2.02
4T-5583/5535	78	72	106	116	3.5	3.3	13.3	0.36	1.67	0.92	2.44
4T-558/552A	73	69	109	116	2.3	3.3	9.4	0.35	1.73	0.95	2.1
4T-HM813841/HM813810	80	73	111	121	3.5	3.3	3.7	0.50	1.20	0.66	2.21
4T-65237/65500	82	71	107	119	3.5	3.3	9.3	0.49	1.23	0.68	2.65
4T-HM911245/HM911210	87	74	109	124	5	3.3	-5.2 ¹⁾	0.82	0.73	0.40	2.12
4T-392/394A	70	69	101	104	0.8	1.3	0.7	0.40	1.49	0.82	0.879
4T-H715334/H715311	86	79	118	132	3.5	3.3	8.7	0.47	1.27	0.70	3.47
4T-H913842/H913810	90	82	124	138	3.5	3.3	-4.3 ¹⁾	0.78	0.77	0.42	3.17
4T-28990/28920	72	68	90	97	2	3.3	1.7	0.43	1.41	0.78	0.768
4T-28995/28920	75	69	90	97	3.5	3.3	2.5	0.43	1.41	0.78	0.764
4T-L610549/L610510	71	69	86	91	1.5	1.5	-0.6 ¹⁾	0.42	1.41	0.78	0.449
4T-29585/29520	77	71	96	103	3.5	3.3	0.6	0.46	1.31	0.72	0.924
4T-29586/29520	73	71	96	103	1.5	3.3	0.6	0.46	1.31	0.72	0.929
4T-390A/394A	73	70	101	104	1.5	1.3	0.7	0.40	1.49	0.82	0.851
4T-29585/29521	77	71	99	104	3.5	1.3	0.6	0.46	1.31	0.72	0.982
4T-3982/3920	77	71	99	106	3.5	3.3	4.5	0.40	1.49	0.82	1.26
4T-39585/39520	77	71	101	107	3.5	3.3	6.6	0.34	1.77	0.97	1.27
4T-477/472	73	72	107	114	0.8	2	3.9	0.38	1.56	0.86	1.49
4T-483/472	78	72	107	114	3.5	2	3.9	0.38	1.56	0.86	1.48
4T-HM212046/HM212011	80	73	108	116	3.5	3.3	11.1	0.34	1.78	0.98	1.95
4T-5584/5535	81	75	106	116	3.5	3.3	13.3	0.36	1.67	0.92	2.34
4T-559/552A	78	72	109	116	3.5	3.3	9.4	0.35	1.73	0.95	2.01
4T-565/563	80	73	112	120	3.5	3.3	8.3	0.36	1.65	0.91	2.11
4T-HM813842/HM813810	82	76	111	121	3.5	3.3	3.7	0.50	1.20	0.66	2.12
4T-639/632	81	74	118	125	3.5	3.3	11.4	0.36	1.66	0.91	2.85
4T-78250/78551	85	79	117	132	2.3	2.3	-8.5 ¹⁾	0.87	0.69	0.38	2.54
# 4T-JLM710949/JLM710910	77	71	96	101	3	1	0.3	0.45	1.32	0.73	0.742
# 4T-JM511946/JM511910	78	72	99	105	3	2.5	3.4	0.40	1.49	0.82	1.08

1) " - " means that load center at outside on end of inner ring.

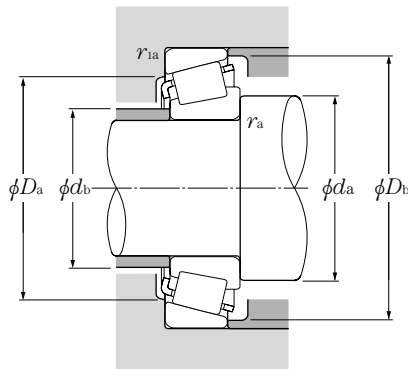
Inch series J series



d 65.000 ~ 70.000mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
65.000	120.000	39.000	38.500	32.000	185	248	18 800	25 300	3 100	4 100
65.088	135.755	53.975	56.007	44.450	278	380	28 300	38 500	2 900	3 800
66.675	103.213	17.602	17.602	11.989	60.0	78.0	6 100	8 000	3 300	4 400
	107.950	25.400	25.400	19.050	91.5	140	9 350	14 200	3 200	4 300
	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
	112.712	30.162	30.048	23.812	119	174	12 200	17 800	3 200	4 300
	112.712	30.162	30.048	23.812	119	174	12 200	17 800	3 200	4 300
	112.712	30.162	30.162	23.812	138	195	14 100	19 800	3 200	4 200
	122.238	38.100	38.354	29.718	187	244	19 100	24 900	3 100	4 100
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
	127.000	36.512	36.512	26.988	163	228	16 600	23 300	2 900	3 800
	130.175	41.275	41.275	31.750	194	262	19 800	26 700	2 800	3 800
	135.755	53.975	56.007	44.450	278	380	28 300	38 500	2 900	3 800
	136.525	41.275	41.275	31.750	194	262	19 800	26 700	2 800	3 800
	136.525	41.275	41.275	31.750	226	293	23 100	29 900	2 700	3 700
68.262	110.000	22.000	21.996	18.824	89.5	120	9 150	12 300	3 200	4 300
	120.000	29.794	29.007	24.237	128	177	13 000	18 100	3 000	4 000
	123.825	38.100	36.678	30.162	158	216	16 100	22 000	3 000	4 100
	136.525	41.275	41.275	31.750	226	293	23 100	29 900	2 700	3 700
	136.525	46.038	46.038	36.512	224	355	22 800	36 500	2 600	3 500
69.850	112.712	25.400	25.400	19.050	95.5	151	9 750	15 400	3 100	4 100
	117.475	30.162	30.162	23.812	117	175	11 900	17 900	3 000	4 000
	120.000	29.794	29.007	24.237	128	177	13 000	18 100	3 000	4 000
	120.000	32.545	32.545	26.195	147	214	15 000	21 800	3 000	4 000
	120.650	25.400	25.400	19.050	95.5	151	9 750	15 400	3 100	4 100
	127.000	36.512	36.170	28.575	163	229	16 600	23 300	2 900	3 800
	136.525	41.275	41.275	31.750	194	262	19 800	26 700	2 800	3 800
	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
	168.275	53.975	56.363	41.275	340	460	34 500	46 500	2 200	3 000
69.952	121.442	24.608	23.012	17.462	91.0	127	9 300	13 000	2 900	3 800
70.000	110.000	26.000	25.000	20.500	97.0	150	9 900	15 300	3 200	4 200
	115.000	29.000	29.000	23.000	124	171	12 700	17 500	3 100	4 100

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_{as} and r_{1as} .
2. Bearing numbers marked " # " designate J-series bearings. The accuracy of these bearings is listed in Table 6.6 on page A-42.



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

$$P_{or} = 0.5F_r + Y_o F_a$$

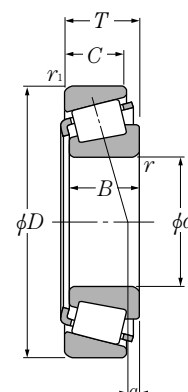
When $P_{or} < F_r$ use $P_{or} = F_r$

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

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant	Axial		Mass
	mm								load factors		
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			a	e	Y_2
# 4T-JH211749/JH211710	80	74	107	114	3	2.5	10.9	0.34	1.78	0.98	1.90
4T-6379/6320	84	77	117	126	3.5	3.3	18.8	0.32	1.85	1.02	3.71
4T-L812148/L812111 4T-29590/29520 4T-395A/394A 4T-3984/3925 4T-3994/3920 4T-39590/39520 4T-HM212049/HM212010 4T-560/552A 4T-HM813844/HM813810 4T-641/633 4T-6386/6320 4T-641/632 4T-H414242/H414210	74	72	96	99	1.5	0.8	−3.7 ¹⁾	0.49	1.23	0.68	0.48
	80	73	96	103	3.5	3.3	0.6	0.46	1.31	0.72	0.86
	73	73	101	104	0.8	1.3	0.7	0.40	1.49	0.82	0.796
	80	74	101	106	3.5	0.8	4.5	0.40	1.49	0.82	1.19
	84	74	99	106	5.5	3.3	4.5	0.40	1.49	0.82	1.18
	80	74	101	107	3.5	3.3	6.6	0.34	1.77	0.97	1.19
	82	75	110	116	3.5	1.5	11.1	0.34	1.78	0.98	1.86
	81	75	109	116	3.5	3.3	9.4	0.35	1.73	0.95	1.92
	85	78	111	121	3.5	3.3	3.7	0.50	1.20	0.66	2.03
	83	77	116	124	3.5	3.3	11.4	0.36	1.66	0.91	2.41
	87	77	117	126	4.3	3.3	18.8	0.32	1.85	1.02	3.64
	83	77	118	125	3.5	3.3	11.4	0.36	1.66	0.91	2.74
	85	81	121	129	3.5	3.3	11.0	0.36	1.67	0.92	2.75
	4T-399A/394A 4T-480/472 4T-560S/552A 4T-H414245/H414210 4T-H715343/H715311	78	74	101	104	2.3	1.3	0.7	0.40	1.49	0.82
82		75	107	114	3.5	2	3.9	0.38	1.56	0.86	1.37
83		76	109	116	3.5	3.3	9.4	0.35	1.73	0.95	1.87
86		82	121	129	3.5	3.3	11.0	0.36	1.67	0.92	2.7
90		84	118	132	3.5	3.3	8.7	0.47	1.27	0.70	3.24
4T-29675/29620 4T-33275/33462 4T-482/472 4T-47487/47420 4T-29675/29630 4T-566/563 4T-643/632 4T-655/653 4T-745A/742 4T-835/832	80	77	101	109	1.5	3.3	−0.9 ¹⁾	0.49	1.23	0.68	0.949
	84	77	104	112	3.5	3.3	2.6	0.44	1.38	0.76	1.28
	83	77	107	114	3.5	2	3.9	0.38	1.56	0.86	1.33
	84	78	107	114	3.5	3.3	6.1	0.36	1.67	0.92	1.47
	80	77	104	113	1.5	3.3	−0.9 ¹⁾	0.49	1.23	0.68	1.17
	85	78	112	120	3.5	3.3	8.3	0.36	1.65	0.91	1.92
	86	80	118	125	3.5	3.3	11.4	0.36	1.66	0.91	2.63
	88	82	131	139	3.5	3.3	8.0	0.41	1.47	0.81	3.28
	88	82	134	142	3.5	3.3	12.0	0.33	1.84	1.01	3.92
	91	84	149	155	3.5	3.3	18.5	0.30	2.00	1.10	6.13
	4T-34274/34478	81	78	110	116	2	2	−1.2 ¹⁾	0.45	1.33	0.73
# 4T-JLM813049/JLM813010 # 4T-JM612949/JM612910	78 83	77 77	98 103	105 110	1 3	2.5 2.5	−0.3 ¹⁾ 2.5	0.49 0.43	1.23 1.39	0.68 0.77	0.889 1.13

1) " - " means that load center at outside on end of inner ring.

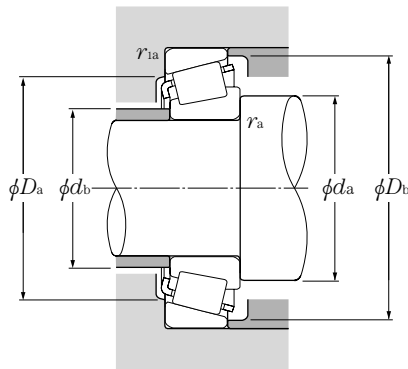
Inch series J series



d 70.000 ~ 76.200mm

Boundary dimensions					Basic load ratings				Limiting speeds	
	mm				dynamic kN	static	dynamic	static	min ⁻¹	
<i>d</i>	<i>D</i>	<i>T</i>	<i>B</i>	<i>C</i>	<i>C_r</i>	<i>C_{0r}</i>	<i>C_r</i>	<i>C_{0r}</i>	grease	oil
70.000	120.000	29.794	29.007	24.237	128	177	13 000	18 100	3 000	4 000
	150.000	41.275	39.688	25.400	199	234	20 300	23 900	2 400	3 200
71.438	117.475	30.162	30.162	23.812	117	175	11 900	17 900	3 000	4 000
	120.000	32.545	32.545	26.195	147	214	15 000	21 800	3 000	4 000
	127.000	36.512	36.170	28.575	163	229	16 600	23 300	2 900	3 800
	136.525	41.275	41.275	31.750	194	262	19 800	26 700	2 800	3 800
	136.525	41.275	41.275	31.750	226	293	23 100	29 900	2 700	3 700
	136.525	46.038	46.038	36.512	224	355	22 800	36 500	2 600	3 500
73.025	112.712	25.400	25.400	19.050	95.5	151	9 750	15 400	3 100	4 100
	117.475	30.162	30.162	23.812	117	175	11 900	17 900	3 000	4 000
	127.000	36.512	36.170	28.575	163	229	16 600	23 300	2 900	3 800
	139.992	36.512	36.098	28.575	178	265	18 100	27 100	2 600	3 400
	149.225	53.975	54.229	44.450	287	410	29 300	41 500	2 500	3 400
	150.089	44.450	46.672	36.512	261	360	26 600	37 000	2 400	3 200
73.817	112.712	25.400	25.400	19.050	95.5	151	9 750	15 400	3 100	4 100
	127.000	36.512	36.170	28.575	163	229	16 600	23 300	2 900	3 800
74.612	139.992	36.512	36.098	28.575	178	265	18 100	27 100	2 600	3 400
75.000	115.000	25.000	25.000	19.000	94.5	143	9 650	14 600	3 000	4 000
	120.000	31.000	29.500	25.000	131	197	13 300	20 100	2 900	3 900
	145.000	51.000	51.000	42.000	287	410	29 300	41 500	2 500	3 400
76.200	109.538	19.050	19.050	15.083	63.0	115	6 450	11 700	3 100	4 100
	121.442	24.608	23.012	17.462	91.0	127	9 300	13 000	2 900	3 800
	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
	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
	135.733	44.450	46.100	34.925	211	330	21 600	34 000	2 700	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
	149.225	53.975	54.229	44.450	287	410	29 300	41 500	2 500	3 400
	150.089	44.450	46.672	36.512	261	360	26 600	37 000	2 400	3 200

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_{as} and r_{1as} .
2. Bearing numbers marked " # " designate J-series bearings. The accuracy of these bearings is listed in Table 6.6 on page A-42.



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

$$P_{or} = 0.5F_r + Y_o F_a$$

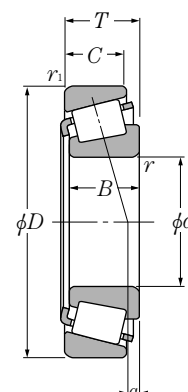
When $P_{or} < F_r$ use $P_{or} = F_r$

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

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{las} max			Y_2	Y_o	
4T-484/472	80	77	107	114	2	2	3.9	0.38	1.56	0.86	1.33
# 4T-JH913848/JH913811	92	82	126	146	2	3.3	-4.3 ¹⁾	0.78	0.77	0.42	3.08
4T-33281/33462	85	79	104	112	3.5	3.3	2.6	0.44	1.38	0.76	1.24
4T-47490/47420	86	79	107	114	3.5	3.3	6.1	0.36	1.67	0.92	1.42
4T-567A/563	86	80	112	120	3.5	3.3	8.3	0.36	1.65	0.91	1.87
4T-644/632	87	81	118	125	3.5	3.3	11.4	0.36	1.66	0.91	2.57
4T-H414249/H414210	89	83	121	129	3.5	3.3	11.0	0.36	1.67	0.92	2.58
4T-H715345/H715311	93	87	118	132	3.5	3.3	8.7	0.47	1.27	0.70	3.11
4T-29685/29620	86	80	101	109	3.5	3.3	-0.9 ¹⁾	0.49	1.23	0.68	0.873
4T-33287/33462	87	80	104	112	3.5	3.3	2.6	0.44	1.38	0.76	1.19
4T-567/563	88	81	112	120	3.5	3.3	8.3	0.36	1.65	0.91	1.82
4T-576/572	90	83	125	133	3.5	3.3	5.5	0.40	1.49	0.82	2.53
4T-6460/6420	93	87	129	140	3.5	3.3	14.8	0.36	1.66	0.91	4.42
4T-744/742	91	85	134	142	3.5	3.3	12.0	0.33	1.84	1.01	3.79
4T-29688/29620	83	80	101	109	1.5	3.3	-0.9 ¹⁾	0.49	1.23	0.68	0.86
4T-568/563	83	82	112	120	0.8	3.3	8.3	0.36	1.65	0.91	1.80
4T-577/572	91	85	125	133	3.5	3.3	5.5	0.40	1.49	0.82	2.48
# 4T-JLM714149/JLM714110	87	81	104	110	3	2.5	-0.3 ¹⁾	0.46	1.31	0.72	0.875
# 4T-JM714249/JM714210	88	83	108	115	3	2.5	1.9	0.44	1.35	0.74	1.29
# 4T-JH415647/JH415610	94	89	129	139	3	2.5	14.1	0.36	1.66	0.91	3.81
4T-L814749/L814710	84	82	100	105	1.5	1.5	-5.0 ¹⁾	0.50	1.20	0.66	0.579
4T-34300/34478	86	83	110	116	2	2	-1.2 ¹⁾	0.45	1.33	0.73	0.982
4T-34301/34478	89	83	110	116	3.5	2	-1.2 ¹⁾	0.45	1.33	0.73	0.977
4T-42687/42620	90	84	114	121	3.5	3.3	2.8	0.42	1.43	0.79	1.46
4T-47678/47620	97	85	119	128	6.4	3.3	3.9	0.40	1.48	0.82	1.92
4T-HM516442/HM516410	93	87	118	128	3.5	3.3	7.5	0.40	1.49	0.82	2.43
4T-5760/5735	94	88	119	130	3.5	3.3	11.0	0.41	1.48	0.81	2.75
4T-495A/493	92	86	122	130	3.5	3.3	0.7	0.44	1.35	0.74	1.83
4T-575/572	92	86	125	133	3.5	3.3	5.5	0.40	1.49	0.82	2.43
4T-575S/572	99	86	125	133	6.8	3.3	5.5	0.40	1.49	0.82	2.41
4T-659/653	93	87	131	139	3.5	3.3	8.0	0.41	1.47	0.81	3.04
4T-6461A/6420	108	89	129	140	9.7	3.3	14.8	0.36	1.66	0.91	4.23
4T-748S/742	93	87	134	142	3.5	3.3	12.0	0.33	1.84	1.01	3.66

1) " - " means that load center at outside on end of inner ring.

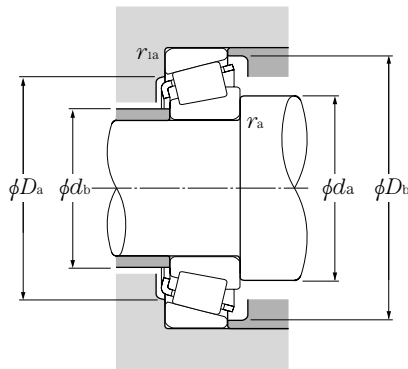
Inch series J series



d 76.200 ~ 83.345mm

Boundary dimensions					dynamic kN	Basic load ratings			Limiting speeds	
		mm				static	dynamic	static		
<i>d</i>	<i>D</i>	<i>T</i>	<i>B</i>	<i>C</i>	<i>C_r</i>	<i>C_{0r}</i>	<i>C_r</i>	<i>C_{0r}</i>	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. Chamfer dimensions on the back face of the inner and outer rings of the bearing are larger than maximum values for installation dimensions r_{is} and r_{ios} .
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

$$P_{or} = 0.5F_r + Y_o F_a$$

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

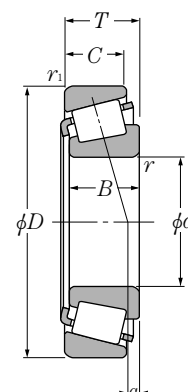
For values of e , Y_2 and Y_o see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm <i>a</i>	Constant <i>e</i>	Axial load factors		Mass kg (approx.)
	<i>d_a</i>	<i>d_b</i>	<i>D_a</i>	<i>D_b</i>	<i>r_{as}</i> max	<i>r_{las}</i> max			<i>Y₂</i>	<i>Y_o</i>	
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	-0.5 ¹⁾	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	-2.3 ¹⁾	0.51	1.18	0.65	0.932
4T-34306/34478	90	84	110	116	3.5	2	-1.2 ¹⁾	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	-0.6 ¹⁾	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	-0.6 ¹⁾	0.42	1.44	0.79	1.06
4T-27690/27620	96	90	115	120	3.5	1.5	-0.6 ¹⁾	0.42	1.44	0.79	1.05
4T-27691/27620	102	90	115	120	6.4	1.5	-0.6 ¹⁾	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-42**.

1) " - " means that load center at outside on end of inner ring.

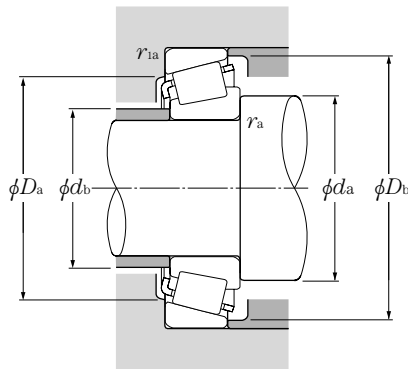
Inch series J series



d 84.138 ~ 95.000mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
<i>d</i>	<i>D</i>	<i>T</i>	<i>B</i>	<i>C</i>	<i>C_r</i>	<i>C_{0r}</i>	<i>C_r</i>	<i>C_{0r}</i>	grease	oil
84.138	136.525	30.162	29.769	22.225	129	189	13 200	19 300	2 600	3 500
85.000	130.000	30.000	29.000	24.000	135	214	13 700	21 900	2 600	3 500
	140.000	39.000	38.000	31.500	197	297	20 100	30 500	2 500	3 400
85.026	150.089	44.450	46.672	36.512	261	360	26 600	37 000	2 400	3 200
85.725	133.350	30.162	29.769	22.225	129	189	13 200	19 300	2 600	3 500
	142.138	42.862	42.862	34.133	216	350	22 000	35 500	2 500	3 300
	146.050	41.275	41.275	31.750	206	295	21 000	30 000	2 500	3 300
	152.400	39.688	36.322	30.162	180	279	18 300	28 400	2 300	3 100
	161.925	47.625	48.260	38.100	270	385	27 500	39 000	2 300	3 100
87.960	148.430	28.575	28.971	21.433	138	215	14 100	21 900	2 300	3 100
88.900	121.442	15.083	15.083	11.112	56.5	88.0	5 750	9 000	2 700	3 600
	123.825	20.638	20.638	16.670	80.0	141	8 150	14 400	2 700	3 500
	148.430	28.575	28.971	21.433	138	215	14 100	21 900	2 300	3 100
	152.400	39.688	36.322	30.162	180	279	18 300	28 400	2 300	3 100
	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
89.974	146.975	40.000	40.000	32.500	227	340	23 200	34 500	2 400	3 200
90.000	145.000	35.000	34.000	27.000	189	279	19 300	28 400	2 400	3 200
	155.000	44.000	44.000	35.500	270	385	27 500	39 000	2 300	3 100
	190.000	50.800	46.038	31.750	281	365	28 700	37 000	1 800	2 400
90.488	161.925	47.625	48.260	38.100	270	385	27 500	39 000	2 300	3 100
92.075	146.050	33.338	34.925	26.195	163	266	16 700	27 100	2 400	3 100
	152.400	39.688	36.322	30.162	180	279	18 300	28 400	2 300	3 100
	168.275	41.275	41.275	30.162	222	340	22 700	35 000	2 100	2 800
93.662	148.430	28.575	28.971	21.433	138	215	14 100	21 900	2 300	3 100
95.000	150.000	35.000	34.000	27.000	180	279	18 300	28 400	2 300	3 100

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_{is} and r_{ios} .
 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

$$P_{or} = 0.5F_r + Y_o F_a$$

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

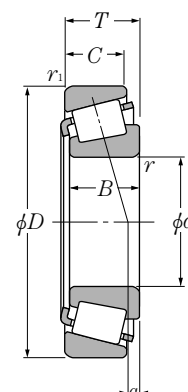
For values of e , Y_2 and Y_o see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{1as} max			Y_2	Y_o	
4T-498/493	98	91	122	130	3.5	3.3	0.7	0.44	1.35	0.74	1.6
# 4T-JM716648/JM716610	104	92	117	125	6	2.5	0.2	0.44	1.35	0.74	1.37
# 4T-JHM516849/JHM516810	100	94	125	134	3	2.5	5.9	0.41	1.47	0.81	2.3
4T-749/742	101	95	134	142	3.5	3.3	12.0	0.33	1.84	1.01	3.25
4T-497/492A	99	93	120	128	3.5	3.3	0.7	0.44	1.35	0.74	1.43
4T-HM617049/HM617010	106	95	125	137	4.8	3.3	6.9	0.43	1.39	0.76	2.69
4T-665/653	102	95	131	139	3.5	3.3	8.0	0.41	1.47	0.81	2.65
4T-596/592A	102	96	135	144	3.5	3.3	2.6	0.44	1.36	0.75	2.9
4T-758/752	103	97	144	150	3.5	3.3	12.0	0.34	1.76	0.97	4.26
4T-42346/42584	103	98	134	142	3	3	-3.0 ¹⁾	0.49	1.22	0.67	1.99
4T-LL217849/LL217810	97	94	115	117	1.5	1.5	-2.9 ¹⁾	0.33	1.81	1.00	0.452
4T-L217849/L217810	97	94	116	119	1.5	1.5	-0.7 ¹⁾	0.33	1.82	1.00	0.737
4T-42350/42584	104	98	134	142	3	3	-3.0 ¹⁾	0.49	1.22	0.67	1.96
4T-593/592A	104	98	135	144	3.5	3.3	2.6	0.44	1.36	0.75	2.78
4T-759/752	106	99	144	150	3.5	3.3	12.0	0.34	1.76	0.97	4.09
4T-6580/6535	109	102	141	154	3.5	3.3	12.8	0.40	1.50	0.82	4.73
4T-850/832	106	100	149	155	3.5	3.3	18.5	0.30	2.00	1.10	5.08
4T-HM218248†/HM218210††	112	99	133	141	7	3.5	8.6	0.33	1.80	0.99	2.55
# 4T-JM718149/JM718110	105	99	131	139	3	2.5	2.0	0.44	1.35	0.74	2.14
# 4T-JHM318448/JHM318410	106	100	140	148	3	2.5	10.1	0.34	1.76	0.97	3.32
# 4T-J90354/J90748	120	112	162	179	3.5	3.3	-12.9 ¹⁾	0.87	0.69	0.38	6.32
4T-760/752	107	101	144	150	3.5	3.3	12.0	0.34	1.76	0.97	4.01
4T-47890/47820	107	101	131	140	3.5	3.3	0.6	0.45	1.34	0.74	2.08
4T-598A/592A	113	101	135	144	6.4	3.3	2.6	0.44	1.36	0.75	2.63
4T-681/672	110	104	149	160	3.5	3.3	3.0	0.47	1.28	0.70	3.87
4T-42368/42584	107	102	134	142	3	3	-3.0 ¹⁾	0.49	1.22	0.67	1.8
# 4T-JM719149/JM719113	109	104	135	143	3	2.5	1.7	0.44	1.36	0.75	2.19

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

1) " - " means that load center at outside on end of inner ring.

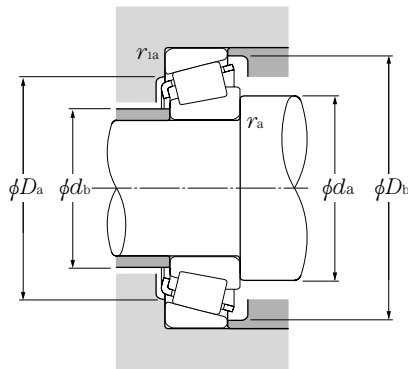
Inch series J series



d 95.250 ~ 109.538mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic kgf	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
95.250	130.175	20.638	21.433	16.670	81.0	147	8 300	15 000	2 500	3 300
	146.050	33.338	34.925	26.195	163	266	16 700	27 100	2 400	3 100
	147.638	35.717	36.322	26.192	180	279	18 300	28 400	2 300	3 100
	148.430	28.575	28.971	21.433	138	215	14 100	21 900	2 300	3 100
	152.400	39.688	36.322	30.162	180	279	18 300	28 400	2 300	3 100
	157.162	36.512	36.116	26.195	188	305	19 200	31 000	2 200	2 900
	168.275	41.275	41.275	30.162	222	340	22 700	35 000	2 100	2 800
	190.500	57.150	57.531	46.038	445	610	45 000	62 000	1 900	2 600
96.838	148.430	28.575	28.971	21.433	138	215	14 100	21 900	2 300	3 100
	188.912	50.800	46.038	31.750	281	365	28 700	37 000	1 800	2 400
98.425	157.162	36.512	36.116	26.195	188	305	19 200	31 000	2 200	2 900
	168.275	41.275	41.275	30.162	222	340	22 700	35 000	2 100	2 800
99.974	212.725	66.675	66.675	53.975	575	810	58 500	82 500	1 700	2 300
100.000	155.000	36.000	35.000	28.000	192	310	19 600	31 500	2 200	2 900
100.012	157.162	36.512	36.116	26.195	188	305	19 200	31 000	2 200	2 900
101.600	157.162	36.512	36.116	26.195	188	305	19 200	31 000	2 200	2 900
	168.275	41.275	41.275	30.162	222	340	22 700	35 000	2 100	2 800
	180.975	47.625	48.006	38.100	285	430	29 100	44 000	2 000	2 700
	190.500	57.150	57.531	44.450	380	555	38 500	56 500	2 000	2 600
	190.500	57.150	57.531	46.038	445	610	45 000	62 000	1 900	2 600
	190.500	57.150	57.531	46.038	445	610	45 000	62 000	1 900	2 600
	212.725	66.675	66.675	53.975	475	695	48 500	71 000	1 800	2 300
	212.725	66.675	66.675	53.975	575	810	58 500	82 500	1 700	2 300
104.775	180.975	47.625	48.006	38.100	285	430	29 100	44 000	2 000	2 700
107.950	158.750	23.020	21.438	15.875	102	166	10 400	17 000	2 100	2 800
	159.987	34.925	34.925	26.988	167	320	17 100	33 000	2 100	2 800
	165.100	36.512	36.512	26.988	191	315	19 500	32 000	2 100	2 700
	212.725	66.675	66.675	53.975	475	695	48 500	71 000	1 800	2 300
109.538	158.750	23.020	21.438	15.875	102	166	10 400	17 000	2 100	2 800

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_{is} and r_{ios} .
 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

$$P_{or} = 0.5F_r + Y_o F_a$$

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

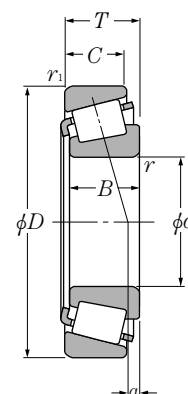
For values of e , Y_2 and Y_o see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm <i>a</i>	Constant <i>e</i>	Axial load factors		Mass kg (approx.)
	<i>d_a</i>	<i>d_b</i>	<i>D_a</i>	<i>D_b</i>	<i>r_{as}</i> max	<i>r_{las}</i> max			<i>Y₂</i>	<i>Y_o</i>	
4T-L319249/L319210	103	101	122	125	1.5	1.5	-1.0 ¹⁾	0.35	1.72	0.95	0.789
4T-47896/47820	110	103	131	140	3.5	3.3	0.6	0.45	1.34	0.74	1.95
4T-594A/592XE	113	104	135	142	5	0.8	2.6	0.44	1.36	0.75	2.09
4T-42375/42584	108	103	134	142	3	3	-3.0 ¹⁾	0.49	1.22	0.67	1.75
4T-594/592A	110	104	135	144	3.5	3.3	2.6	0.44	1.36	0.75	2.51
4T-52375/52618	112	105	142	152	3.5	3.3	0.6	0.47	1.26	0.69	2.76
4T-683/672	113	106	149	160	3.5	3.3	3.0	0.47	1.28	0.70	3.72
4T-HH221440/HH221410	125	110	171	179	8	3.3	14.4	0.33	1.79	0.99	7.5
4T-42381/42584	110	104	134	142	3.5	3	-3.0 ¹⁾	0.49	1.22	0.67	1.69
4T-90381/90744	125	113	161	179	3.5	3.3	-12.9 ¹⁾	0.87	0.69	0.38	5.67
4T-52387/52618	114	108	142	152	3.5	3.3	0.6	0.47	1.26	0.69	2.62
4T-685/672	116	109	149	160	3.5	3.3	3.0	0.47	1.28	0.70	3.56
4T-HH224334†/HH224310	124	120	192	202	3.5	3.3	18.9	0.33	1.84	1.01	11.5
# 4T-JM720249/JM720210	115	109	140	149	3	2.5	-0.3 ¹⁾	0.47	1.27	0.70	2.4
4T-52393/52618	116	109	142	152	3.5	3.3	0.6	0.47	1.26	0.69	2.55
4T-52400/52618	117	111	142	152	3.5	3.3	0.6	0.47	1.26	0.69	2.48
4T-687/672	118	112	149	160	3.5	3.3	3.0	0.47	1.28	0.70	3.4
4T-780/772††	119	113	161	168	3.5	3.3	8.1	0.39	1.56	0.86	5.11
4T-861/854	129	114	170	174	8	3.3	15.3	0.33	1.79	0.99	7
4T-HH221449/HH221410	131	116	171	179	8	3.3	14.4	0.33	1.79	0.99	7.06
4T-HH221449A/HH221410	122	116	171	179	3.5	3.3	14.4	0.33	1.79	0.99	7.06
4T-941/932	130	117	187	193	7	3.3	19.7	0.33	1.84	1.01	11.2
4T-HH224335/HH224310	132	121	192	202	7	3.3	18.9	0.33	1.84	1.01	11.3
4T-782/772††	122	116	161	168	3.5	3.3	8.1	0.39	1.56	0.86	4.92
4T-37425/37625	122	115	143	152	3.5	3.3	-14.0 ¹⁾	0.61	0.99	0.54	1.37
4T-LM522546/LM522510	122	116	146	154	3.5	3.3	1.4	0.40	1.49	0.82	2.37
4T-56425/56650	123	117	149	159	3.5	3.3	-2.0 ¹⁾	0.50	1.21	0.66	2.69
4T-936/932	137	122	187	193	8	3.3	19.7	0.33	1.84	1.01	10.7
4T-37431/37625	123	116	143	152	3.5	3.3	-14.0 ¹⁾	0.61	0.99	0.54	1.33

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

1) " - " means that load center at outside on end of inner ring.

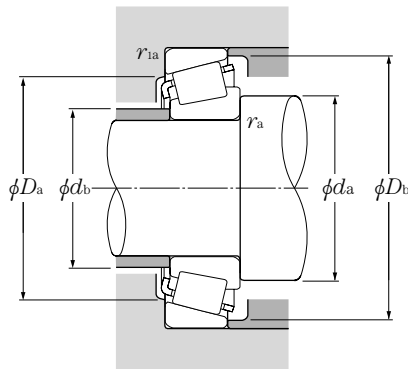
Inch series J series



d 109.987 ~ 133.350mm

Boundary dimensions					Basic load ratings				Limiting speeds	
mm					dynamic kN	static	dynamic	static	min ⁻¹	
d	D	T	B	C	C _r	C _{or}	C _r	C _{or}	grease	oil
109.987	159.987	34.925	34.925	26.988	167	320	17 100	33 000	2 100	2 800
109.992	177.800	41.275	41.275	30.162	232	375	23 600	38 000	1 900	2 600
110.000	165.000	35.000	35.000	26.500	191	315	19 500	32 000	2 100	2 700
	180.000	47.000	46.000	38.000	305	480	31 000	49 000	1 900	2 600
111.125	214.312	55.562	52.388	39.688	405	560	41 500	57 000	1 500	2 000
114.300	177.800	41.275	41.275	30.162	232	375	23 600	38 000	1 900	2 600
	180.975	34.925	31.750	25.400	169	245	17 200	25 000	1 900	2 500
	212.725	66.675	66.675	53.975	475	695	48 500	71 000	1 800	2 300
	212.725	66.675	66.675	53.975	575	810	58 500	82 500	1 700	2 300
	228.600	53.975	49.428	38.100	430	620	44 000	63 500	1 400	1 900
115.087	190.500	47.625	49.212	34.925	300	475	30 500	48 500	1 800	2 500
117.475	180.975	34.925	31.750	25.400	169	245	17 200	25 000	1 900	2 500
120.000	170.000	25.400	25.400	19.050	127	210	13 000	21 400	2 000	2 600
120.650	234.950	63.500	63.500	49.212	525	825	53 500	84 000	1 500	2 000
123.825	182.562	39.688	38.100	33.338	224	435	22 900	44 000	1 800	2 400
127.000	182.562	39.688	38.100	33.338	224	435	22 900	44 000	1 800	2 400
	196.850	46.038	46.038	38.100	310	550	31 500	56 500	1 700	2 200
	215.900	47.625	47.625	34.925	320	540	32 500	55 000	1 600	2 100
	228.600	53.975	49.428	38.100	320	445	32 500	45 000	1 400	1 900
	228.600	53.975	49.428	38.100	430	620	44 000	63 500	1 400	1 900
	230.000	63.500	63.500	49.212	525	825	53 500	84 000	1 500	2 000
	254.000	77.788	82.550	61.912	740	1 070	75 500	109 000	1 400	1 900
128.588	206.375	47.625	47.625	34.925	315	520	32 000	53 000	1 700	2 200
130.175	196.850	46.038	46.038	38.100	310	550	31 500	56 500	1 700	2 200
	206.375	47.625	47.625	34.925	315	520	32 000	53 000	1 700	2 200
133.350	177.008	25.400	26.195	20.638	126	259	12 900	26 400	1 800	2 400

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_{is} and r_{ios} .
 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

$$P_{or} = 0.5F_r + Y_o F_a$$

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

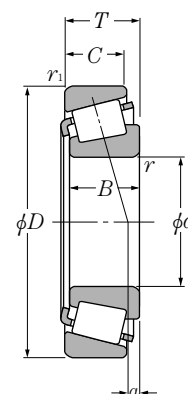
For values of e , Y_2 and Y_o see the table below.

Bearing numbers	Abutment and fillet dimensions						Load center mm	Constant mm	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{las} max			e	Y_2	Y_o
4T-LM522548/LM522510	133	118	146	154	8	3.3	1.4	0.40	1.49	0.82	2.24
4T-64433/64700	128	121	160	172	3.5	3.3	-1.1 ¹⁾	0.52	1.16	0.64	3.77
# 4T-JM822049/JM822010	124	119	149	159	3	2.5	-3.0 ¹⁾	0.50	1.21	0.66	2.52
# 4T-JHM522649/JHM522610	127	122	162	172	3	2.5	6.0	0.41	1.48	0.81	4.61
4T-H924045/H924010	139	131	186	205	3.5	3.3	-6.8 ¹⁾	0.67	0.89	0.49	8.18
4T-64450/64700	131	125	160	172	3.5	3.3	-1.1 ¹⁾	0.52	1.16	0.64	3.52
4T-68450/68712††	130	123	163	172	3.5	3.3	-5.4 ¹⁾	0.50	1.21	0.66	2.93
4T-938/932	141	128	187	193	7	3.3	19.7	0.33	1.84	1.01	10.1
4T-HH224346/HH224310	143	131	192	202	7	3.3	18.9	0.33	1.84	1.01	10.2
4T-HM926740/HM926710	146	142	200	219	3.5	3.3	-13.5 ¹⁾	0.74	0.81	0.45	9.76
4T-71453/71750	133	126	171	181	3.5	3.3	6.7	0.42	1.44	0.79	5.11
4T-68462/68712††	132	125	163	172	3.5	3.3	-5.4 ¹⁾	0.50	1.21	0.66	2.78
# 4T-JL724348/JL724314	132	127	156	163	3.3	3.3	-7.9 ¹⁾	0.46	1.31	0.72	1.67
4T-95475/95925	149	137	209	217	6.4	3.3	14.0	0.37	1.62	0.89	12.6
4T-48286/48220	139	133	168	176	3.5	3.3	5.7	0.31	1.97	1.08	3.52
4T-48290/48220	141	135	168	176	3.5	3.3	5.7	0.31	1.97	1.08	3.33
4T-67388/67322	144	138	180	189	3.5	3.3	6.3	0.34	1.74	0.96	5.1
4T-74500/74850	148	141	196	208	3.5	3.3	-2.2 ¹⁾	0.49	1.23	0.68	7.05
4T-97500/97900	151	144	197	213	3.5	3.3	-13.4 ¹⁾	0.74	0.81	0.45	8.43
4T-HM926747/HM926710	156	143	200	219	3.5	3.3	-13.5 ¹⁾	0.74	0.81	0.45	8.83
4T-95500/95905	154	142	207	217	6.4	3.3	14.0	0.37	1.62	0.89	12.9
4T-HH228349/HH228310	164	148	223	234	9.7	6.4	23.4	0.32	1.87	1.03	19.5
4T-799/792	146	140	186	198	3.3	3.3	1.9	0.46	1.31	0.72	5.77
4T-67389/67322	146	141	180	189	3.5	3.3	6.3	0.34	1.74	0.96	4.87
4T-799A/792	148	142	186	198	3.5	3.3	1.9	0.46	1.31	0.72	5.65
4T-L327249/L327210	142	140	167	171	1.5	1.5	-3.7 ¹⁾	0.35	1.72	0.95	1.7

Note: 3. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.

1) " - " means that load center at outside on end of inner ring.

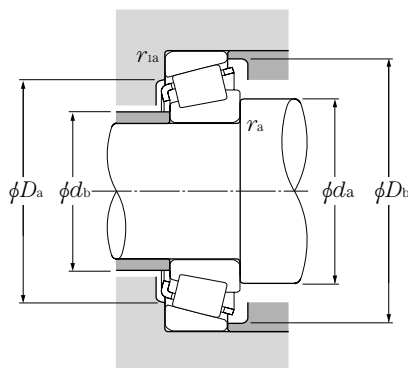
Inch series J series



d 133.350 ~ 196.850mm

Boundary dimensions					Basic load ratings				Limiting speeds	
	mm				dynamic kN	static	dynamic kgf	static	min ⁻¹	
<i>d</i>	<i>D</i>	<i>T</i>	<i>B</i>	<i>C</i>	<i>C_r</i>	<i>C_{0r}</i>	<i>C_r</i>	<i>C_{0r}</i>	grease	oil
133.350	190.500	39.688	39.688	33.338	236	475	24 100	48 500	1 700	2 300
	196.850	46.038	46.038	38.100	310	550	31 500	56 500	1 700	2 200
	196.850	46.038	46.038	38.100	310	550	31 500	56 500	1 700	2 200
	215.900	47.625	47.625	34.925	320	540	32 500	55 000	1 600	2 100
	234.950	63.500	63.500	49.212	525	825	53 500	84 000	1 500	2 000
136.525	190.500	39.688	39.688	33.338	236	475	24 100	48 500	1 700	2 300
	228.600	57.150	57.150	44.450	445	735	45 500	75 000	1 500	2 000
139.700	215.900	47.625	47.625	34.925	320	540	32 500	55 000	1 600	2 100
	228.600	57.150	57.150	44.450	445	735	45 500	75 000	1 500	2 000
	254.000	66.675	66.675	47.625	550	910	56 000	92 500	1 400	1 800
142.875	200.025	41.275	39.688	34.130	239	490	24 300	50 000	1 600	2 100
	200.025	41.275	39.688	34.130	239	490	24 300	50 000	1 600	2 100
146.050	193.675	28.575	28.575	23.020	165	340	16 800	35 000	1 600	2 200
	254.000	66.675	66.675	47.625	550	910	56 000	92 500	1 400	1 800
152.400	192.088	25.000	24.000	19.000	130	261	13 200	26 700	1 600	2 100
	222.250	46.830	46.830	34.925	315	585	32 000	60 000	1 500	2 000
158.750	205.583	23.812	23.812	18.258	126	247	12 900	25 200	1 500	2 000
	225.425	41.275	39.688	33.338	254	555	25 900	56 500	1 400	1 900
165.100	225.425	41.275	39.688	33.338	254	555	25 900	56 500	1 400	1 900
170.000	230.000	39.000	38.000	31.000	282	520	28 700	53 000	1 400	1 800
177.800	227.012	30.162	30.162	23.020	181	415	18 500	42 000	1 300	1 800
	247.650	47.625	47.625	38.100	340	690	35 000	70 500	1 300	1 700
180.000	250.000	47.000	45.000	37.000	370	710	37 500	72 500	1 300	1 700
190.000	260.000	46.000	44.000	36.500	365	720	37 000	73 500	1 200	1 600
196.850	241.300	23.812	23.017	17.462	160	330	16 300	33 500	1 200	1 600

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_{is} and r_{1is} .
2. Bearing numbers marked " # " designate **J-series** bearings. The tolerances of these bearings is listed in **Table 6.6** on **page A-42**.



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

$$P_{or} = 0.5F_r + Y_o F_a$$

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						Load center mm	Constant e	Axial load factors		Mass kg (approx.)
	d_a	d_b	D_a	D_b	r_{as} max	r_{las} max			Y_2	Y_o	
4T-48385/48320	148	142	177	184	3.5	3.3	4.0	0.32	1.87	1.03	3.64
4T-67390/67322	149	143	180	189	3.5	3.3	6.3	0.34	1.74	0.96	4.63
4T-67391/67322	157	143	180	189	8	3.3	6.3	0.34	1.74	0.96	4.59
4T-74525/74850	152	146	196	208	3.5	3.3	-2.2 ¹⁾	0.49	1.23	0.68	6.56
4T-95525/95925	166	148	209	217	9.7	3.3	14.0	0.37	1.62	0.89	11.3
4T-48393/48320	151	144	177	184	3.5	3.3	4.0	0.32	1.87	1.03	3.43
4T-896/892	156	150	205	216	3.5	3.3	6.0	0.42	1.43	0.78	9.07
4T-74550/74850	158	151	196	208	3.5	3.3	-2.2 ¹⁾	0.49	1.23	0.68	6.05
4T-898/892	160	153	205	216	3.5	3.3	6.0	0.42	1.43	0.78	8.76
4T-99550/99100	170	156	227	238	7	3.3	12.1	0.41	1.47	0.81	14.3
4T-48684/48620	166	151	185	193	8	3.3	3.1	0.34	1.78	0.98	3.85
4T-48685/48620	158	151	185	193	3.5	3.3	3.1	0.34	1.78	0.98	3.89
4T-36690/36620	155	153	182	188	1.5	1.5	-5.0 ¹⁾	0.37	1.63	0.90	2.27
4T-99575/99100	175	162	227	238	7	3.3	12.1	0.41	1.47	0.81	13.5
4T-L630349/L630310	162	158	183	187	2	2	-10.0 ¹⁾	0.42	1.44	0.79	1.53
4T-M231648/M231610	178	163	207	213	8	1.5	5.9	0.33	1.8	0.99	5.72
4T-L432349/L432310	168	166	195	199	1.5	1.5	-9.8 ¹⁾	0.37	1.61	0.88	1.89
4T-46780/46720	176	169	209	218	3.5	3.3	-2.6 ¹⁾	0.38	1.57	0.86	5.2
4T-46790/46720	181	174	209	218	3.5	3.3	-2.6 ¹⁾	0.38	1.57	0.86	4.69
# 4T-JHM534149/JHM534110	184	178	217	224	3	2.5	-4.7 ¹⁾	0.38	1.57	0.86	4.37
4T-36990/36920	188	186	214	221	1.5	1.5	-12.8 ¹⁾	0.44	1.36	0.75	2.92
4T-67790/67720	194	188	229	240	3.5	3.3	-4.8 ¹⁾	0.44	1.36	0.75	6.57
# 4T-JM736149/JM736110	196	190	232	243	3	2.5	-9.0 ¹⁾	0.48	1.25	0.69	6.76
# 4T-JM738249/JM738210	206	200	242	252	3	2.5	-10.9 ¹⁾	0.48	1.26	0.69	6.85
4T-LL639249/LL639210	205	203	232	236	1.5	1.5	-17.3 ¹⁾	0.42	1.44	0.79	2.07

1) " - " means that load center at outside on end of inner ring.