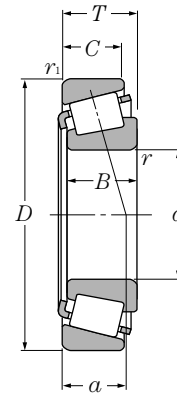


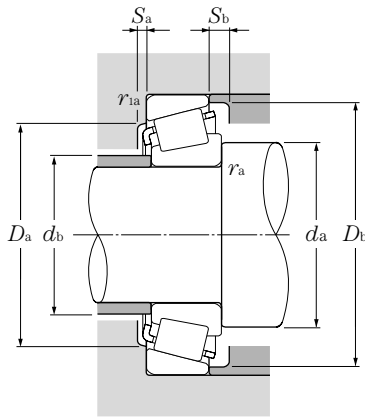
Metric system sizes



d 60 ~ 75mm

d	Boundary dimensions						Basic load ratings				Limiting speeds		Bearing numbers
	D	T	mm			dynamic	static	dynamic	static	rpm			
			B	C	$r_{s\ min}$ ①	$r_{ls\ min}$ ①	kN	kgf	grease	oil			
60	110	23.75	22	19	2	1.5	105	125	10,700	12,700	3,400	4,500	4T-30212
	110	29.75	28	24	2	1.5	130	164	13,200	16,800	3,400	4,500	32212U
	110	38	38	29	2	1.5	161	223	16,400	22,700	3,400	4,500	33212U
	115	40	39	33	2.5	2.5	188	249	19,200	25,400	3,200	4,300	4T-T2EE060
	125	37	33.5	26	3	3	145	186	14,800	18,900	2,800	3,700	4T-T7FC060
	130	33.5	31	26	3	2.5	180	210	18,300	21,400	3,000	4,000	30312U
	130	33.5	31	22	3	2.5	150	176	15,300	17,900	2,700	3,600	4T-30312D
	130	48.5	46	37	3	2.5	244	315	24,900	32,000	3,000	4,000	32312U
65	90	17	17	14	1	1	48.5	85.0	4,900	8,700	3,700	4,900	32913XU
	100	23	23	17.5	1.5	1.5	83.0	128	8,450	13,000	3,400	4,600	4T-32013X
	100	27	27	21	1.5	1.5	97.5	156	9,950	16,000	3,400	4,600	4T-33013
	110	34	34	26.5	1.5	1.5	144	211	14,700	21,500	3,300	4,400	4T-33113
	120	24.75	23	20	2	1.5	123	148	12,500	15,000	3,100	4,200	4T-30213
	120	32.75	31	27	2	1.5	159	206	16,200	21,000	3,100	4,200	32213U
	120	41	41	32	2	1.5	195	265	19,900	27,100	3,100	4,200	33213U
	140	36	33	28	3	2.5	203	238	20,700	24,300	2,800	3,700	30313U
	140	36	33	23	3	2.5	173	204	17,700	20,900	2,500	3,300	4T-30313D
	140	51	48	39	3	2.5	273	350	27,800	36,000	2,800	3,700	32313U
70	100	20	20	16	1	1	68.5	110	7,000	11,200	3,400	4,600	32914XU
	110	25	25	19	1.5	1.5	105	160	10,700	16,400	3,200	4,200	4T-32014X
	110	31	31	25.5	1.5	1.5	127	204	12,900	20,800	3,200	4,200	4T-33014
	125	26.25	24	21	2	1.5	131	162	13,400	16,500	2,900	3,900	4T-30214
	125	33.25	31	27	2	1.5	166	220	16,900	22,400	2,900	3,900	32214U
	125	41	41	32	2	1.5	201	282	20,500	28,700	2,900	3,900	33214U
	140	39	35.5	27	3	3	173	231	17,600	23,500	2,400	3,200	4T-T7FC070
	150	38	35	30	3	2.5	230	272	23,400	27,800	2,600	3,500	30314U
		150	38	35	25	3	2.5	193	229	19,600	23,300	2,300	3,000
	150	54	51	42	3	2.5	310	405	31,500	41,000	2,600	3,500	32314U
75	105	20	20	16	1	1	69.5	114	7,100	11,600	3,200	4,300	32915XU
	115	25	25	19	1.5	1.5	106	167	10,800	17,000	3,000	4,000	32015XU
	115	31	31	25.5	1.5	1.5	111	186	11,300	19,000	3,000	4,000	33015U
	130	27.25	25	22	2	1.5	139	175	14,200	17,900	2,700	3,600	4T-30215
	130	33.25	31	27	2	1.5	168	224	17,100	22,800	2,700	3,600	32215U
	130	41	41	31	2	1.5	208	298	21,200	30,500	2,700	3,600	33215U
	160	40	37	31	3	2.5	255	305	26,000	31,000	2,400	3,200	30315U
	160	40	37	26	3	2.5	215	256	21,900	26,100	2,100	2,800	30315DU

① Minimal allowable dimension for chamfer dimension r or r_1 .



Equivalent bearing load

dynamic
 $P_r = XF_r + YF_a$

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

static

$P_{or} = 0.5F_r + Y_0F_a$

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

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

Dimensions series to ISO	Abutment and fillet dimensions										Load center mm	Constant e	Axial load factors		Mass kg (approx.)		
	mm												a	e		Y_2	Y_0
	d_a min	d_b max	D_a max	D_b min	S_a min	S_b min	r_{as} max	r_{1as} max									
3EB	70	70	101.5	96	103	4	4.5	2	1.5	22	0.40	1.48	0.81	0.949			
3EC	70	69	101.5	95	104	4	5.5	2	1.5	25	0.40	1.48	0.81	1.18			
3EE	70	69	101.5	93	105	6	9	2	1.5	27.5	0.40	1.48	0.82	1.55			
2EE	72	70	103	98	109	6	7	2	2	28.5	0.33	1.80	0.99	1.86			
7FC	74	72	111	94	119	4	11	2.5	2.5	42	0.82	0.73	0.40	2			
2FB	74	77	118	112	120	4	7.5	2.5	2	26.5	0.35	1.74	0.96	2.06			
7FB	74	73	118	103	124	4	11.5	2.5	2	40.5	0.83	0.73	0.40	1.97			
2FD	74	74	118	107	120	4	11.5	2.5	2	32	0.35	1.74	0.96	3.02			
2BC	70.5	70	84.5	80	86.5	3	3	1	1	16.5	0.35	1.70	0.93	0.315			
4CC	73.5	72	91.5	90	97	4	5.5	1.5	1.5	22.5	0.46	1.31	0.72	0.63			
2CE	73.5	72	91.5	89	96	5	6	1.5	1.5	21.5	0.35	1.72	0.95	0.732			
3DE	73.5	73	101.5	96	106	6	7.5	1.5	1.5	26	0.39	1.55	0.85	1.28			
3EB	75	77	111.5	106	113	4	4.5	2	1.5	23.5	0.40	1.48	0.81	1.18			
3EC	75	75	111.5	104	115	4	5.5	2	1.5	27	0.40	1.48	0.81	1.58			
3EE	75	74	111.5	102	115	7	9	2	1.5	29.5	0.39	1.54	0.85	1.98			
2GB	79	83	128	122	130	4	8	2.5	2	28.5	0.35	1.74	0.96	2.55			
7GB	79	79	128	111	133	4	13	2.5	2	44	0.83	0.73	0.40	2.42			
2GD	79	80	128	117	130	4	12	2.5	2	34.5	0.35	1.74	0.96	3.66			
2BC	75.5	75	94.5	90	96	4	4	1	1	18	0.32	1.90	1.05	0.487			
4CC	78.5	78	101.5	98	105	5	6	1.5	1.5	24	0.43	1.38	0.76	0.848			
2CE	78.5	79	101.5	99	105	5	5.5	1.5	1.5	22.5	0.28	2.11	1.16	1.07			
3EB	80	81	116.5	110	118	4	5	2	1.5	25.5	0.42	1.43	0.79	1.26			
3EC	80	80	116.5	108	119	4	6	2	1.5	28.5	0.42	1.43	0.79	1.68			
3EE	80	79	116.5	107	120	7	9	2	1.5	31	0.41	1.47	0.81	2.1			
7FC	84	82	126	106	135	5	12	2.5	2.5	47.5	0.87	0.69	0.38	2.61			
2GB	84	89	138	130	140	4	8	2.5	2	30	0.35	1.74	0.96	3.06			
7GB	84	84	138	118	142	4	13	2.5	2	47	0.83	0.73	0.40	2.92			
2GD	84	86	138	125	140	4	12	2.5	2	36.5	0.35	1.74	0.96	4.46			
2BC	80.5	80	99.5	94	101.5	4	4	1	1	19	0.33	1.80	0.99	0.511			
4CC	83.5	83	106.5	103	110	5	6	1.5	1.5	25.5	0.46	1.31	0.72	0.909			
2CE	83.5	85	106.5	101	110.5	6	5.5	1.5	1.5	23	0.30	2.01	1.11	1.11			
4DB	85	85	121.5	115	124	4	5	2	1.5	27	0.44	1.38	0.76	1.41			
4DC	85	85	121.5	114	125	4	6	2	1.5	30	0.44	1.38	0.76	1.74			
3EE	85	83	121.5	111	125	7	10	2	1.5	32	0.43	1.40	0.77	2.2			
2GB	89	95	148	139	149	4	9	2.5	2	32	0.35	1.74	0.96	3.57			
7GB	89	91	148	127	151	6	14	2.5	2	50	0.83	0.73	0.40	3.47			