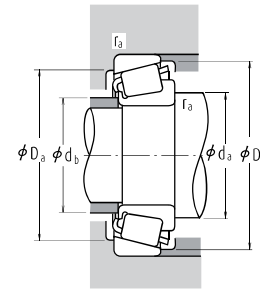
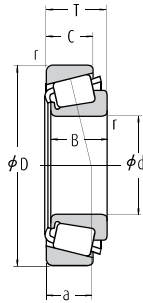


# Single-Row Tapered Roller Bearings (Inch Design)



Bore Diameter 29.000 - 32.000 mm



Dynamic Equivalent Load  $P = XF_r + YF_a$

$F_a/F_r \leq e$		$F_a/F_r > e$	
X	Y	X	Y
1	0	0.4	$Y_1$

Static Equivalent Load

$P_0 = 0.5F_r + Y_0 F_a$   
 When  $F_r > 0.5F_r + Y_0 F_a$ , use  $P_0 = F_r$   
 The values of e,  $Y_1$  and  $Y_0$  are given in the table below.

Boundary Dimensions (mm)						Basic Load Ratings (N)		Limiting Speeds (min <sup>-1</sup> )		
d	D	T	B	C	Cone		$C_r$	$C_{or}$	Grease	Oil
					r min.	Cup				
29.000	50.292	14.224	14.732	10.668	3.5	1.3	26 800	34 000	7 100	9 500
29.367	66.421	23.812	25.433	19.050	3.5	1.3	65 000	73 000	6 000	8 000
30.000	62.000	16.002	16.566	14.288	1.5	1.5	37 000	39 500	6 300	8 500
62.000	19.050	20.638	14.288	1.3	1.3	46 000	53 000	6 000	8 000	
63.500	20.638	20.638	15.875	1.3	1.3	46 000	53 000	6 000	8 000	
72.000	19.000	18.923	15.875	1.5	1.5	52 000	56 000	5 600	7 500	
30.112	62.000	19.050	20.638	14.288	0.8	1.3	46 000	53 000	6 000	8 000
30.162	58.738	14.684	15.080	10.716	3.5	1.0	28 800	33 500	6 000	8 000
64.292	21.433	21.433	16.670	1.5	1.5	51 000	64 500	5 600	8 000	
68.262	22.225	22.225	17.462	2.3	1.5	55 500	70 500	5 300	7 500	
69.850	23.812	25.357	19.050	2.3	1.3	71 000	84 000	5 600	7 500	
69.850	23.812	25.357	19.050	0.8	1.3	71 000	84 000	5 600	7 500	
76.200	24.608	24.074	16.670	1.5	C3.3	67 500	69 500	5 000	6 700	
30.213	62.000	19.050	20.638	14.288	3.5	1.3	46 000	53 000	6 000	8 000
62.000	19.050	20.638	14.288	0.8	1.3	46 000	53 000	6 000	8 000	
62.000	19.050	20.638	14.288	1.5	1.3	46 000	53 000	6 000	8 000	
30.955	64.292	21.433	21.433	16.670	1.5	1.5	51 000	64 500	5 600	8 000
31.750	58.738	14.684	15.080	10.716	1.0	1.0	28 800	33 500	6 000	8 000
59.131	15.875	16.764	11.811	spec.	1.3	34 500	41 500	6 300	8 500	
62.000	18.161	19.050	14.288	spec.	1.3	46 000	53 000	6 000	8 000	
62.000	19.050	20.638	14.288	0.8	1.3	46 000	53 000	6 000	8 000	
62.000	19.050	20.638	14.288	3.5	1.3	46 000	53 000	6 000	8 000	
63.500	20.638	20.638	15.875	0.8	1.3	46 000	53 000	6 000	8 000	
68.262	22.225	22.225	17.462	3.5	1.5	55 000	64 000	5 600	7 500	
68.262	22.225	22.225	17.462	1.5	1.5	55 500	70 500	5 300	7 500	
69.012	19.845	19.583	15.875	3.5	1.3	47 000	56 000	5 600	7 500	
69.012	26.982	26.721	15.875	4.3	3.3	47 000	56 000	5 600	7 500	
69.850	23.812	25.357	19.050	0.8	1.3	71 000	84 000	5 600	7 500	
69.850	23.812	25.357	19.050	3.5	1.3	71 000	84 000	5 600	7 500	
72.626	30.162	29.997	23.812	0.8	3.3	79 500	90 000	5 300	7 500	
73.025	29.370	27.763	23.020	1.3	3.3	74 000	100 000	5 000	7 100	
80.000	21.000	22.403	17.826	0.8	1.3	68 500	75 500	4 500	6 300	
32.000	72.233	25.400	25.400	19.842	3.3	2.3	63 500	83 500	5 000	7 100

Bearing Numbers		Abutment and Fillet Dimensions (mm)					Eff. Load Centers (mm)	Constant	Axial Load Factors		Mass (kg)		
CONE	CUP	$d_a$	$d_b$	$D_a$	$D_b$	$f_a$ max.			e	$Y_1$	$Y_0$	approx.	
† L 45449	† L 45410	39.5	33	44.5	48	3.5	1.3	10.8	0.37	1.6	0.89	0.079	0.036
2690	2631	41	35	58	60	3.5	1.3	14.3	0.25	2.4	1.3	0.242	0.165
* 17118	17244	37	34.5	54	57	1.5	1.5	12.8	0.38	1.6	0.86	0.136	0.091
* 15117	15245	36.5	35	55	58	1.3	1.3	13.3	0.35	1.7	0.94	0.189	0.081
* 15117	15250	36.5	35	56	59	1.3	1.3	14.9	0.35	1.7	0.94	0.189	0.113
* 26118	26283	38	36	62	65	1.5	1.5	14.8	0.36	1.7	0.92	0.225	0.163
15116	15245	36	35.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.189	0.081
08118	08231	41.5	35	52	55	3.5	1	13.3	0.47	1.3	0.70	0.12	0.057
M 86649	M 86610	41	38	54	61	1.5	1.5	17.7	0.55	1.1	0.60	0.211	0.128
M 88043	M 88010	43.5	39.5	58	65	2.3	1.5	19.1	0.55	1.1	0.60	0.263	0.146
2558	2523	40	36.5	61	64	2.3	1.3	14.5	0.27	2.2	1.2	0.297	0.169
2559	2523	37	36.5	61	64	0.8	1.3	14.5	0.27	2.2	1.2	0.298	0.169
43118	43300	45	42	64	73	1.5	3.3	22.9	0.67	0.90	0.49	0.383	0.146
15118	15245	41.5	35.5	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.186	0.081
15120	15245	36	35.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.188	0.081
15119	15245	37.5	35.5	55	58	1.5	1.3	13.3	0.35	1.7	0.94	0.188	0.081
M 86648 A	M 86610	42	38	54	61	1.5	1.5	17.7	0.55	1.1	0.60	0.205	0.128
08125	08231	37.5	36	52	55	1	1	13.3	0.47	1.3	0.70	0.113	0.057
† LM 67048	† LM 67010	42.5	36	52	56	3.5	1.3	13.6	0.41	1.5	0.80	0.127	0.062
15123	15245	42.5	36.5	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.165	0.081
15126	15245	37	36.5	55	58	0.8	1.3	13.3	0.35	1.7	0.94	0.176	0.081
15125	15245	42.5	36.5	55	58	3.5	1.3	13.3	0.35	1.7	0.94	0.174	0.081
15126	15250	37	36.5	56	59	0.8	1.3	14.9	0.35	1.7	0.94	0.176	0.113
02475	02420	44.5	38.5	59	63	3.5	1.5	16.9	0.42	1.4	0.79	0.229	0.152
M 88046	M 88010	43	40.5	58	65	1.5	1.5	19.1	0.55	1.1	0.60	0.25	0.146
14125 A	14276	44	37.5	60	63	3.5	1.3	15.3	0.38	1.6	0.86	0.219	0.135
14123 A	14274	41.5	37.5	59	63	4.3	3.3	15.1	0.38	1.6	0.87	0.289	0.132
2580	2523	38.5	37.5	61	64	0.8	1.3	14.5	0.27	2.2	1.2	0.282	0.169
2582	2523	44	37.5	61	64	3.5	1.3	14.5	0.27	2.2	1.2	0.28	0.169
3188	3120	39.5	39.5	61	67	0.8	3.3	19.6	0.33	1.8	0.99	0.368	0.225
HM 88542	HM 88510	45.5	42.5	59	70	1.3	3.3	23.5	0.55	1.1	0.60	0.379	0.242
346	332	40	39.5	73	75	0.8	1.3	14.6	0.27	2.2	1.2	0.419	0.146
*HM 88638	HM 88610	48.5	42.5	60	69	3.3	2.3	20.7	0.55	1.1	0.60	0.337	0.188