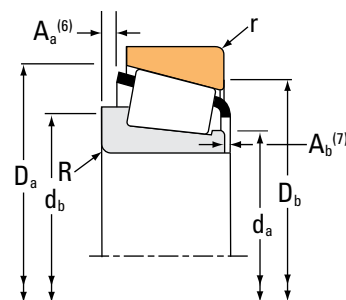
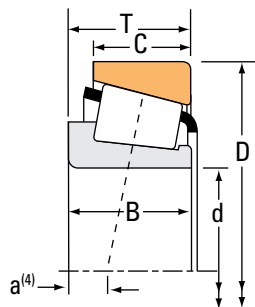


# TAPERED ROLLER BEARINGS

## SINGLE-ROW • TYPE TS

### TYPE TS



Bearing Dimensions			Load Ratings							Part Number	
Bore d	O.D. D	Width T								Inner	Outer
Dynamic <sup>(1)</sup> C <sub>1</sub>	Factors <sup>(2)</sup> e	Y	Dynamic <sup>(3)</sup> C <sub>90</sub>	Factors <sup>(2)</sup> K	Static C <sub>0</sub>						
N	N	N	N	N	N						
lbf	lbf	lbf	lbf	lbf	lbf						
45.242 1.7812	73.431 2.8910	19.558 0.7700	72900 16400	0.31 1.97	18900 4250	9870 2220	1.91	81800 18400	LM102949	LM102910	
45.242 1.7812	73.431 2.8910	21.430 0.8437	72900 16400	0.31 1.97	18900 4250	9870 2220	1.91	81800 18400	LM102949		
45.242 1.7812	77.788 3.0625	19.842 0.7812	76300 17200	0.43 1.41	19800 4450	14500 3250	1.37	77900 17500	LM603049	LM603011	
45.242 1.7812	77.788 3.0625	19.842 0.7812	76300 17200	0.43 1.41	19800 4450	14500 3250	1.37	77900 17500	LM603049AS	LM603011	
45.242 1.7812	77.788 3.0625	21.430 0.8437	76300 17200	0.43 1.41	19800 4450	14500 3250	1.37	77900 17500	LM603049	LM603012	
45.242 1.7812	79.975 3.1486	19.842 0.7812	76300 17200	0.43 1.41	19800 4450	14500 3250	1.37	77900 17500	LM603049	LM603014	
45.242 1.7812	79.975 3.1486	21.430 0.8437	76300 17200	0.43 1.41	19800 4450	14500 3250	1.37	77900 17500	LM603049	LM603015	
45.618 1.7960	82.931 3.2650	23.812 0.9375	90500 20300	0.33 1.79	23500 5270	13500 3020	1.74	111000 24900	25590	25520	
45.618 1.7960	82.931 3.2650	26.988 1.0625	90500 20300	0.33 1.79	23500 5270	13500 3020	1.74	111000 24900	25590	25523	
45.618 1.7960	83.058 3.2700	23.812 0.9375	90500 20300	0.33 1.79	23500 5270	13500 3020	1.74	111000 24900	25590	25521	
45.618 1.7960	83.058 3.2700	23.876 0.9400	90500 20300	0.33 1.79	23500 5270	13500 3020	1.74	111000 24900	25590	25522	
45.618 1.7960	85.000 3.3465	26.988 1.0625	90500 20300	0.33 1.79	23500 5270	13500 3020	1.74	111000 24900	25590	25527	
45.618 1.7960	92.075 3.6250	23.812 0.9375	90500 20300	0.33 1.79	23500 5270	13500 3020	1.74	111000 24900	25590	25528	
45.987 1.8105	74.975 2.9518	18.000 0.7087	67400 15100	0.40 1.49	17500 3930	12000 2700	1.45	75400 17000	LM503349	LM503310	
45.987 1.8105	74.975 2.9518	18.000 0.7087	67400 15100	0.40 1.49	17500 3930	12000 2700	1.45	75400 17000	LM503349A	LM503310	
45.987 1.8105	90.975 3.5817	32.000 1.2598	170000 38300	0.33 1.80	44200 9930	25200 5660	1.76	172000 38600	HM204049	HM204010	
46.037 1.8125	77.788 3.0625	12.700 0.5000	37300 8390	0.34 1.78	9680 2180	5570 1250	1.74	47200 10600	LL205442	LL205410	

Rear, outer, 80 series 2nd/3rd gen

<sup>(1)</sup>Based on 1 x 10<sup>6</sup> revolutions L<sub>10</sub> life, for the ISO life-calculation method.

<sup>(2)</sup>Consult your Timken engineer for instructions on use or review the Timken Engineering Manual on [timken.com/catalogs](http://timken.com/catalogs).

<sup>(3)</sup>Based on 90 x 10<sup>6</sup> revolutions L<sub>10</sub> life, for The Timken Company life-calculation method. C<sub>90</sub> and C<sub>a90</sub> are radial and thrust values.

Bearing Dimensions											Geometry Factors			Bearing Weight
Width B	Width C	Eff. Ctr. a <sup>(4)</sup>	Shaft			Housing			Cage					
			Max Shaft Fillet Radius R <sup>(5)</sup>	Backing Shoulder Dia. d <sub>a</sub> d <sub>b</sub>		Max Housing Fillet Radius r <sup>(5)</sup>	Backing Shoulder Dia. D <sub>a</sub> D <sub>b</sub>				G <sub>1</sub>	G <sub>2</sub>	C <sub>g</sub>	
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.				kg lbs.
19.812 0.7800	15.748 0.6200	-4.6 -0.18	3.5 0.14	50.0 1.97	56.0 2.20	0.8 0.03	70.0 2.76	68.0 2.68	0.7 0.02	1.1 0.05	31.1	18.8	0.0744	0.31 0.70
19.812 0.7800	17.620 0.6937	-4.6 -0.18	3.5 0.14	50.0 1.97	56.0 2.20	0.8 0.03	70.0 2.76	67.0 2.64	0.7 0.02	1.1 0.05	31.1	18.8	0.0744	0.33 0.74
19.842 0.7812	15.080 0.5937	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	74.0 2.91	71.0 2.80	1.3 0.05	1.4 0.06	26.4	14.4	0.0785	0.37 0.81
19.842 0.7812	15.080 0.5937	-2.3 -0.09	0.8 0.03	52.0 2.05	53.0 2.09	0.8 0.03	74.0 2.91	71.0 2.80	1.2 0.05	1.5 0.06	26.4	14.4	0.0785	0.37 0.81
19.842 0.7812	16.667 0.6562	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	74.0 2.91	70.0 2.76	1.3 0.05	1.4 0.06	26.4	14.4	0.0785	0.39 0.85
19.842 0.7812	15.080 0.5937	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	75.0 2.95	71.0 2.80	1.3 0.05	1.4 0.06	26.4	14.4	0.0785	0.40 0.88
19.842 0.7812	16.667 0.6562	-2.3 -0.09	3.5 0.14	52.0 2.05	58.0 2.28	0.8 0.03	75.0 2.95	71.0 2.80	1.3 0.05	1.4 0.06	26.4	14.4	0.0785	0.42 0.92
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	0.8 0.03	77.0 3.03	74.0 2.91	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.54 1.19
25.400 1.0000	22.225 0.8750	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	2.3 0.09	77.0 3.03	72.0 2.83	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.58 1.28
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	3.3 0.13	77.0 3.03	72.0 2.83	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.53 1.17
25.400 1.0000	19.114 0.7525	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	2.0 0.08	77.0 3.03	73.0 2.87	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.54 1.19
25.400 1.0000	22.225 0.8750	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	2.3 0.09	78.0 3.07	73.0 2.87	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.63 1.39
25.400 1.0000	19.050 0.7500	-6.4 -0.25	3.5 0.14	51.0 2.01	58.0 2.28	0.8 0.03	80.0 3.15	78.0 3.07	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.73 1.60
18.000 0.7087	14.000 0.5512	-2.0 -0.08	2.3 0.09	51.0 2.01	55.0 2.17	1.5 0.06	71.0 2.80	67.0 2.64	0.9 0.03	1.5 0.06	28.3	22.5	0.0789	0.30 0.67
18.000 0.7087	14.000 0.5512	-2.0 -0.08	0.0 0.00	51.0 2.01	57.0 2.24	1.5 0.06	71.0 2.80	67.0 2.64	0.9 0.03	1.5 0.06	28.3	22.5	0.0789	0.29 0.65
32.000 1.2598	26.500 1.0433	-9.7 -0.38	3.5 0.14	55.0 2.17	63.0 2.48	3.5 0.14	86.0 3.39	79.0 3.11	1.5 0.06	1.9 0.08	47.7	14.5	0.0885	0.91 2.02
12.700 0.5000	9.525 0.3750	0.0 0.00	1.5 0.06	52.0 2.05	54.0 2.13	1.5 0.06	74.0 2.91	71.0 2.80	0.2 0.00	1.7 0.07	24.2	29.1	0.0699	0.23 0.52

(4) Negative value indicates effective center inside cone (inner-ring) backface.

(5) These maximum fillet radii will be cleared by the bearing corners.

(6) Negative value indicates cage extends beyond cone (inner-ring) backface.

(7) Negative value indicates cage that does not extend beyond cone (inner-ring) front face.

Continued on next page.