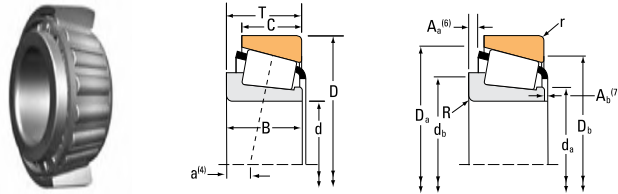


TAPERED ROLLER BEARINGS

SINGLE-ROW • TYPE TS

TYPE TS



Bearing Dimensions			Load Ratings						Part Number	
Bore d	O.D. D	Width T	Dynamic ⁽¹⁾		Factors ⁽²⁾		Static C ₀	Inner	Outer	
			C ₁	e	Y	C ₉₀				C _{a90}
mm in.	mm in.	mm in.	N lbf			N lbf	N lbf	N lbf		
38.100 1.5000	80.035 3.1510	24.608 0.9688	78000 17500	0.56	1.07	20200 4550	19400 4370	91100 20500	27881	27820
38.100 1.5000	80.035 3.1510	29.370 1.1563	115000 25800	0.27	2.20	29800 6700	13900 3130	129000 29100	3387	3339
38.100 1.5000	80.167 3.1562	25.400 1.0000	91100 20500	0.32	1.88	23600 5310	12900 2900	110000 24800	26878	26820
38.100 1.5000	80.167 3.1562	25.400 1.0000	91100 20500	0.32	1.88	23600 5310	12900 2900	110000 24800	26878	26830
38.100 1.5000	80.167 3.1562	26.988 1.0625	79500 17900	0.27	2.20	20600 4640	9640 2170	83400 18700	347	3320
38.100 1.5000	80.167 3.1562	29.370 1.1563	115000 25800	0.27	2.20	29800 6700	13900 3130	129000 29100	3381	3331
38.100 1.5000	80.167 3.1562	29.370 1.1563	115000 25800	0.27	2.20	29800 6700	13900 3130	129000 29100	3381	3320
38.100 1.5000	80.167 3.1562	29.370 1.1563	115000 25800	0.27	2.20	29800 6700	13900 3130	129000 29100	3387	3320
38.100 1.5000	81.755 3.2187	29.370 1.1563	115000 25800	0.27	2.20	29800 6700	13900 3130	129000 29100	3381	3329
38.100 1.5000	81.755 3.2187	29.370 1.1563	115000 25800	0.27	2.20	29800 6700	13900 3130	129000 29100	3387	3329
38.100 1.5000	82.550 3.2500	29.370 1.1563	103000 23100	0.55	1.10	26600 5980	24900 5590	130000 29300	HM801346	HM801310
38.100 1.5000	82.550 3.2500	29.370 1.1563	103000 23100	0.55	1.10	26600 5980	24900 5590	130000 29300	HM801346X	HM801310
38.100 1.5000	82.550 3.2500	29.370 1.1563	103000 23100	0.55	1.10	26600 5980	24900 5590	130000 29300	HM801346	HM801311
38.100 1.5000	82.931 3.2650	23.812 0.9375	90500 20300	0.33	1.79	23500 5270	13500 3020	111000 24900	25572	25520
38.100 1.5000	85.000 3.3465	23.812 0.9375	90500 20300	0.33	1.79	23500 5270	13500 3020	111000 24900	25572	25526
38.100 1.5000	85.725 3.3750	30.162 1.1875	124000 27900	0.40	1.49	32200 7240	22200 4980	148000 33200	3875	3820
38.100 1.5000	85.725 3.3750	30.162 1.1875	124000 27900	0.40	1.49	32200 7240	22200 4980	148000 33200	3876	3821

⁽¹⁾Based on 1 x 10⁶ revolutions L₁₀ life, for the ISO life-calculation method.

⁽²⁾Consult your Timken engineer for instructions on use or review the Timken Engineering Manual on timken.com/catalogs.

⁽³⁾Based on 30 x 10⁶ revolutions L₁₀ life, for The Timken Company life-calculation method. C₉₀ and C_{a90} are radial and thrust values.

TAPERED ROLLER BEARINGS

SINGLE-ROW • TYPE TS

Bearing Dimensions										Geometry Factors			Bearing Weight	
Width B	Width C	Eff. Ctr. a ⁽⁴⁾	Shaft			Housing			Cage		G ₁	G ₂		C ₉
			Max Shaft Fillet Radius R ⁽⁵⁾	Backing Shoulder Dia. d _a	Shoulder Dia. d _b	Max Housing Fillet Radius r ⁽⁶⁾	Backing Shoulder Dia. D _a	Shoulder Dia. D _b	A _a ⁽⁶⁾	A _b ⁽⁷⁾				
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	kg lbs.
23.698 0.9330	18.512 0.7288	-2.5 -0.10	3.5 0.14	47.0 1.85	53.0 2.09	1.5 0.06	75.0 2.95	68.0 2.68	3.2 0.12	1.5 0.06	24.6	12.6	0.0839	0.55 1.22
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	1.5 0.06	74.8 2.94	71.0 2.80	1.8 0.07	1.1 0.05	34.6	12.1	0.0744	0.67 1.50
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	74.0 2.91	69.0 2.72	1.4 0.05	1.3 0.05	32.8	13.3	0.0770	0.59 1.32
25.400 1.0000	20.638 0.8125	-7.4 -0.29	0.8 0.03	44.5 1.75	45.0 1.77	0.8 0.03	74.0 2.91	71.0 2.80	1.4 0.05	1.3 0.05	32.8	13.3	0.0770	0.60 1.34
22.403 0.8820	23.812 0.9375	-6.4 -0.25	3.5 0.14	44.0 1.73	50.0 1.97	3.3 0.13	75.0 2.95	70.0 2.76	0.7 0.02	1.1 0.05	26.5	13.0	0.0676	0.55 1.23
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	44.5 1.75	51.0 2.01	0.8 0.03	74.8 2.94	72.0 2.83	1.8 0.07	1.1 0.05	34.6	12.1	0.0744	0.68 1.51
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	44.5 1.75	51.0 2.01	3.3 0.13	75.0 2.95	70.0 2.76	1.8 0.07	1.1 0.05	34.6	12.1	0.0744	0.67 1.49
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	75.0 2.95	70.0 2.76	1.8 0.07	1.1 0.05	34.6	12.1	0.0744	0.67 1.49
30.391 1.1965	23.812 0.9375	-10.9 -0.43	3.5 0.14	44.5 1.75	51.0 2.01	3.3 0.13	75.0 2.95	71.0 2.80	1.8 0.07	1.1 0.05	34.6	12.1	0.0744	0.71 1.57
30.391 1.1965	23.812 0.9375	-10.9 -0.43	0.8 0.03	44.5 1.75	45.0 1.77	3.3 0.13	75.0 2.95	71.0 2.80	1.8 0.07	1.1 0.05	34.6	12.1	0.0744	0.71 1.57
28.575 1.1250	23.020 0.9063	-4.8 -0.19	0.8 0.03	49.1 1.93	51.0 2.01	3.3 0.13	78.0 3.07	68.0 2.68	2.1 0.08	1.9 0.08	33.7	14.0	0.0928	0.76 1.68
28.575 1.1250	23.020 0.9063	-4.8 -0.19	2.3 0.09	49.1 1.93	54.0 2.13	3.3 0.13	78.0 3.07	68.0 2.68	2.1 0.08	1.9 0.08	33.7	14.0	0.0928	0.76 1.68
28.575 1.1250	23.020 0.9063	-4.8 -0.19	0.8 0.03	49.1 1.93	51.0 2.01	0.8 0.03	78.0 3.07	70.0 2.76	2.1 0.08	1.9 0.08	33.7	14.0	0.0928	0.77 1.71
25.400 1.0000	19.050 0.7500	-6.4 -0.25	0.8 0.03	46.0 1.81	46.0 1.81	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	0.65 1.42
25.400 1.0000	19.050 0.7500	-6.4 -0.25	0.8 0.03	46.0 1.81	46.0 1.81	2.3 0.09	78.0 3.07	74.0 2.91	1.0 0.04	0.7 0.03	35.2	14.3	0.0801	0.69 1.50
30.162 1.1875	23.812 0.9375	-8.1 -0.32	0.8 0.03	48.5 1.91	49.5 1.95	3.3 0.13	81.0 3.19	73.0 2.87	1.4 0.05	2.2 0.09	37.8	13.5	0.0873	0.85 1.87
30.162 1.1875	23.812 0.9375	-8.1 -0.32	3.5 0.14	48.5 1.91	55.0 2.17	1.3 0.05	81.0 3.19	75.0 2.95	1.4 0.05	2.2 0.09	37.8	13.5	0.0873	0.85 1.88

⁽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.