

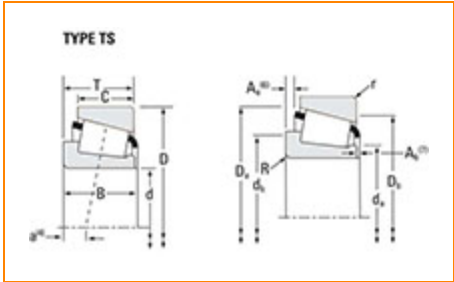


The Timken Company
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Part Number JLM710949C - JLM710910, Tapered Roller Bearings - TS (Tapered Single)

Metric

This is the most basic and most widely used type of tapered roller bearing. It consists of two main separable parts: the cone (inner ring) assembly and the cup (outer ring). It is typically mounted in opposing pairs on a shaft.



[Specifications](#) | [Dimensions](#) | [Abutment and Fillet Dimensions](#) | [Basic Load Ratings](#) | [Factors](#)

Specifications

Series	LM710900
Cone Part Number	JLM710949C
Cup Part Number	JLM710910
Design Unit	Metric
Cage Material	Stamped Steel
Related Assembly Number(s)	JLM710949C-90B03 JLM710949C-90NB3

Dimensions



d - Bore	65 mm 2.5591 in
D - Cup Outer Diameter	105 mm 4.1339 in
B - Cone Width	23.000 mm 0.9055 in
C - Cup Width	18.500 mm 0.7283 in
T - Bearing Width	24.000 mm 0.9449 in

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius¹	3.050 mm 0.12 in
r - Cup Backface "To Clear" Radius²	1.02 mm 0.04 in
da - Cone Frontface Backing Diameter	72 mm 2.83 in
db - Cone Backface Backing Diameter	78 mm 3.07 in
Da - Cup Frontface Backing Diameter	101.09 mm 3.98 in
Db - Cup Backface Backing Diameter	96.01 mm 3.78 in
Ab - Cage-Cone Frontface Clearance	3.6 mm 0.14 in
Aa - Cage-Cone Backface Clearance	1 mm 0.04 in

a - Effective Center Location³

-0.3 mm

-0.01 in

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)⁴

33200 N

7470 lbf

C1 - Dynamic Radial Rating (1 million revolutions)⁵

128000 N

28800 lbf

C0 - Static Radial Rating

139000 N

31300 lbf

C_{a90} - Dynamic Thrust Rating (90 million revolutions)⁶

25800 N

5810 lbf

Factors

K - Factor⁷

1.29

e - ISO Factor⁸

0.45

Y - ISO Factor⁹

1.32

G1 - Heat Generation Factor (Roller-Raceway)

55.5

G2 - Heat Generation Factor (Rib-Roller End)

22.4

C_g - Geometry Factor¹⁰

0.102

¹ These maximum fillet radii will be cleared by the bearing corners.

² These maximum fillet radii will be cleared by the bearing corners.

³ Negative value indicates effective center inside cone backface.

⁴ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values.

⁵ Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

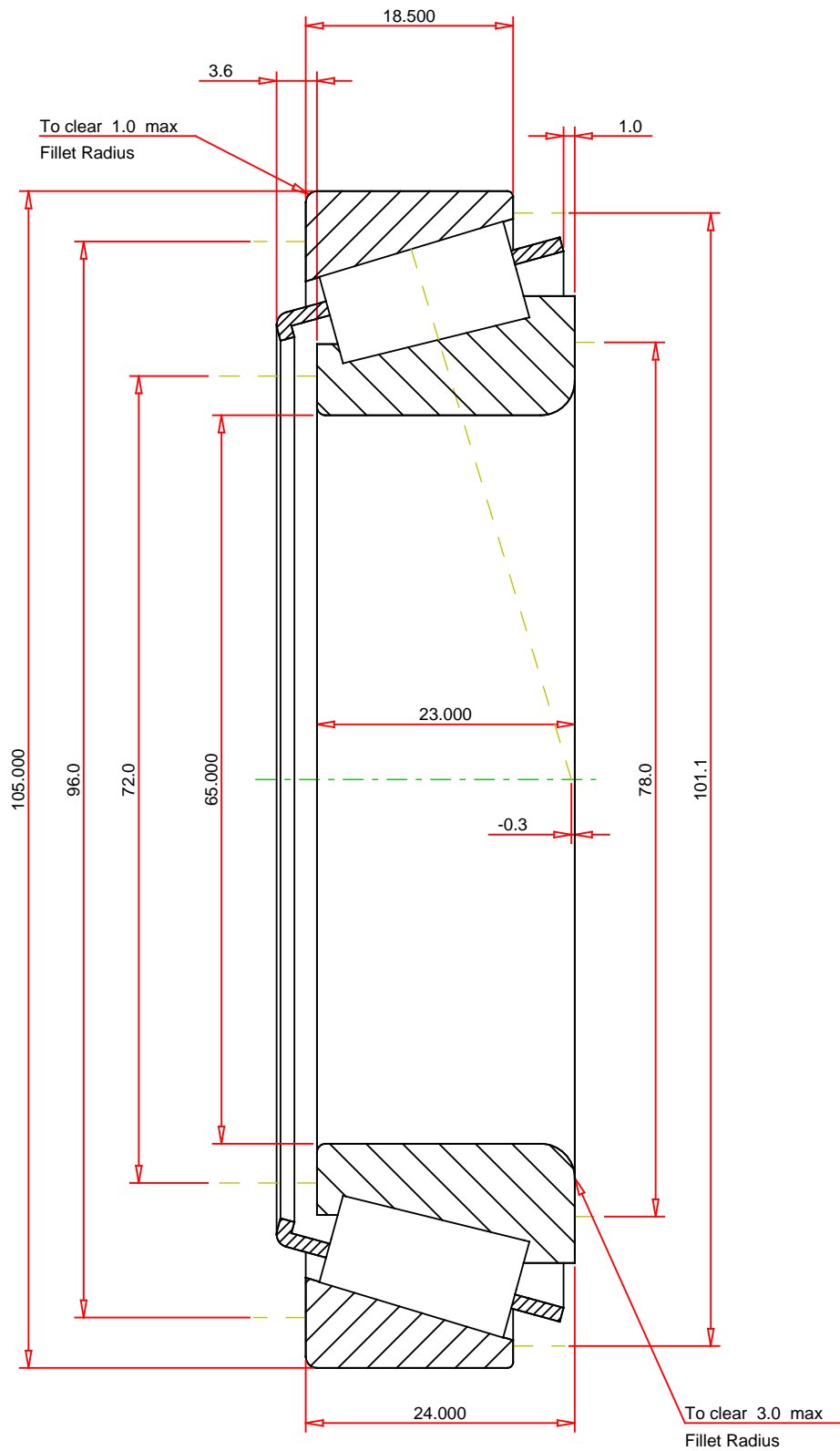
⁶ Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

⁷ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁸ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

⁹ These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

¹⁰ Geometry constant for Lubrication Life Adjustment Factor a_3 .



METRIC UNITS

<div>ISO Factor - e0.45</div> <div>ISO Factor - Y1.32</div> <div>Bearing Weight0.8 kg</div> <div>Number of Rollers Per Row21</div> <div>Effective Center Location-0.3 mm</div>		<div>TIMIKEN®</div> <div>THE TIMKEN COMPANY</div> <div>NORTH CANTON, OHIO USA</div>		<div>JLM710949C - JLM710910</div> <div>Tapered Roller Bearings - TS (Tapered Single)</div> <div>Metric</div>	
				<div>K Factor1.29</div> <div>Dynamic Radial Rating - C9033200 N</div> <div>Dynamic Thrust Rating - Ca9025800 N</div> <div>Static Radial Rating - C0139000 N</div> <div>Dynamic Radial Rating - C1128000 N</div>	