The Timken Company
4500 Mt Pleasant St. NW
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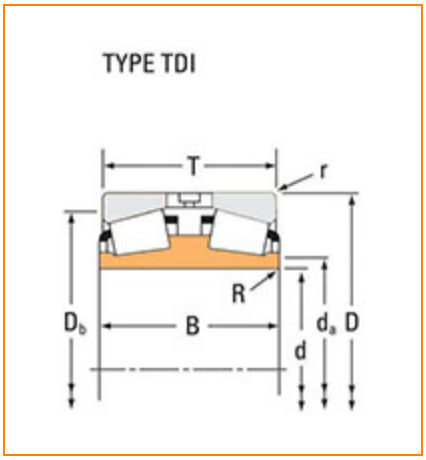
Part Number 48290DW, Tapered Roller Bearings - Double Tapered Cones - Imperial

TDI bearings have a one-piece double inner race and two single outer races and are typically supplied complete with an outer race spacer as a pre-set assembly. The bearing can be used at fixed positions on rotation shaft applications. For rotating housing application it can be used to float on the stationary shaft.



Specifications | Dimensions | Abutment and Fillet Dimensions | Basic Load Ratings | Factors

Specifications

Series	48200
Cone Part Number	48290DW
Design Units	Imperial
Cage Type	Stamped Steel
C1 - Dynamic Radial Rating (1 million revolutions)[1]	60200 lbf 268000 N
C0 - Static Radial Rating	111000 lbf 493000 N

Dimensions

5 in

d - Cone Bore	5 in 127 mm
B - Double Cone Width	3.0000 in 76.200 mm

Abutment and Fillet Dimensions

R - Cone Backface "To Clear" Radius[2]	0.06 in 1.5 mm
da - Cone Frontface Backing Diameter	5.39 in 137 mm
Ab - Cage-Cone Frontface Clearance	0.09 in 2.3 mm

Basic Load Ratings

C90 - Dynamic Radial Rating (90 million revolutions)[3]	15600 lbf 69400 N
C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions)[4]	105000 lbf 466000 N
C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions)[5]	27200 lbf 121000 N
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	8160 lbf 36300 N

Factors

K - Factor[7]	1.91
G1 - Heat Generation Factor (Roller-Raceway)	353
Cg - Geometry Factor[8]	0.114

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

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

[3] 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.

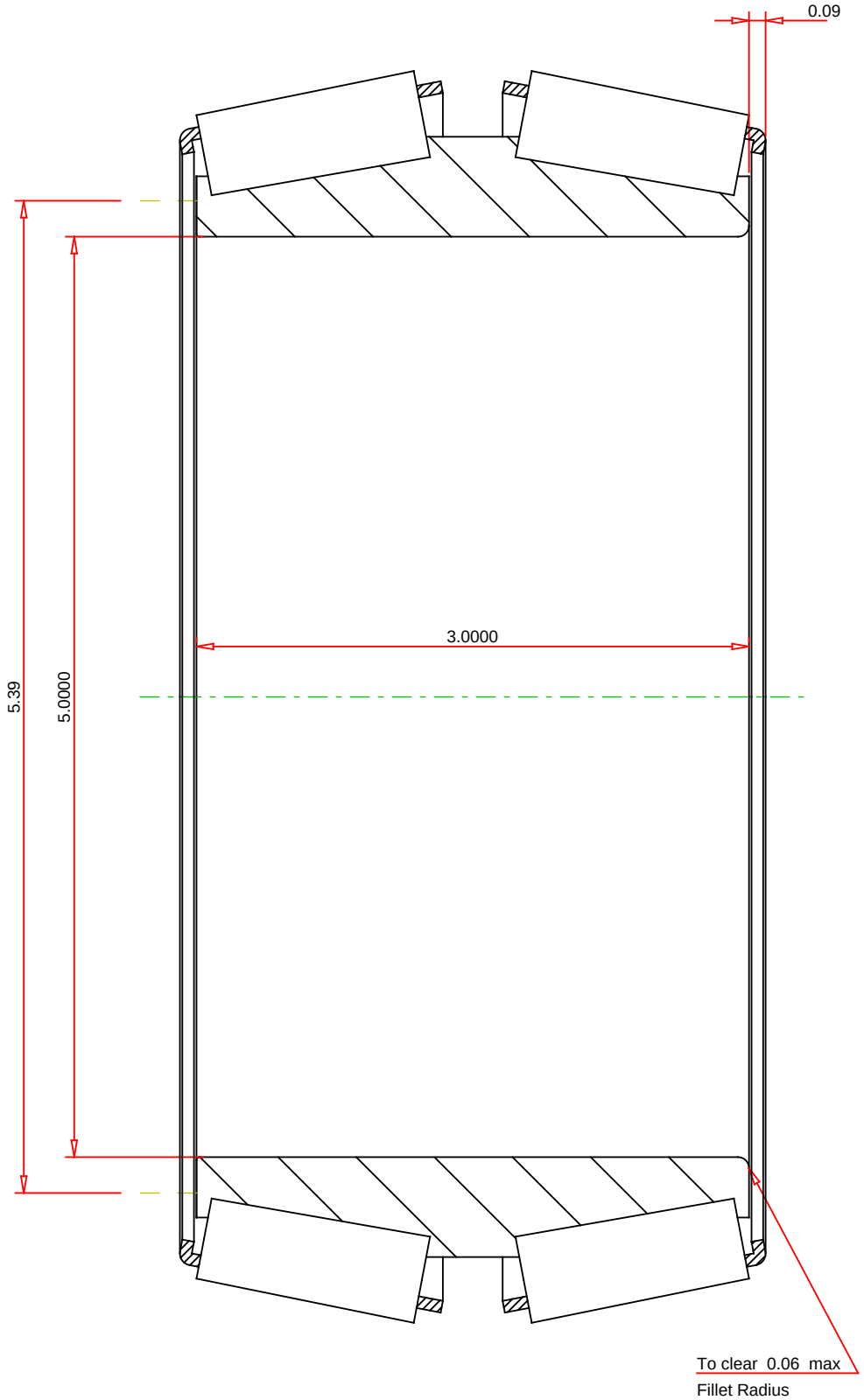
[4] Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.

[5] 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.

[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] Geometry constant for Lubrication Life Adjustment Factor a3l.



IMPERIAL UNITS

ISO Factor - e	
ISO Factor - Y1	
ISO Factor - Y2	
Number of Rollers Per Row	33

TIMKEN®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

48290DW
Tapered Roller Bearings - Double Tapered Cones - Imperial

K Factor	1.91	
Dynamic Radial Rating - C90	15600	lbf
Dynamic Thrust Rating - Ca90	8160	lbf
Dynamic Radial Rating - C90(2)	27200	lbf
Radial Rating - C1	105000	lbf

FOR DISCUSSION ONLY