

## The Timken Company

4500 Mt Pleasant St. NW N. Canton, OH 44720

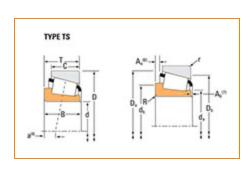
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## Part Number 41125, Tapered Roller Bearings - Single Cones - Imperial

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.





## <u>Specifications</u> | <u>Dimensions</u> | <u>Abutment and Fillet Dimensions</u> | <u>Basic Load Ratings</u> | <u>Factors</u>

Specifications -				
	Series	41000		
	Cone Part Number	41125		
	Design Units	Imperial		
	Cage Type	Stamped Steel		
	C1 - Dynamic Radial Rating (Two-Row, 1 million revolutions) <sup>1</sup>	32300 lbf 144000 N		
	C90(2) - Dynamic Radial Rating (Two-Row, 90 million revolutions) <sup>2</sup>	8390 lbf 37300 N		



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d - Cone Bore	1.1250 in 28.575 mm
B - Cone Width	0.9550 in 24.257 mm

Abutment and Fillet Dimensions –				
	R - Cone Backface "To Clear" Radius <sup>3</sup>	0.190 in 4.80 mm		
	da - Cone Frontface Backing Diameter	1.44 in 36.5 mm		
	db - Cone Backface Backing Diameter	1.89 in 48 mm		
	Ab - Cage-Cone Frontface Clearance	0.12 in 3 mm		
	Aa - Cage-Cone Backface Clearance	0.09 in 2.3 mm		
	a - Effective Center Location <sup>4</sup>	-0.16 in -4.1 mm		

Basic Load Ratings -				
	C90 - Dynamic Radial Rating (90 million revolutions) <sup>5</sup>	4820 lbf 21400 N		
	C1 - Dynamic Radial Rating (1 million revolutions) <sup>6</sup>	18600 lbf 82600 N		
	C0 - Static Radial Rating	14400 lbf 64100 N		
	C <sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions) <sup>7</sup>	4960 lbf 22100 N		

ac	actors		
	K - Factor <sup>8</sup>	0.97	
	G1 - Heat Generation Factor (Roller-Raceway)	13	
	G2 - Heat Generation Factor (Rib-Roller End)	5.83	
	Cg - Geometry Factor <sup>9</sup>	0.0686	

 $<sup>^{1}</sup>$  Based on 1 x  $10^{6}$  revolutions  $L_{10}$  life, for the ISO life calculation method.

 $<sup>^2</sup>$  Based on 90 x  $10^6$  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.

<sup>&</sup>lt;sup>3</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>&</sup>lt;sup>4</sup> Negative value indicates effective center inside cone backface.

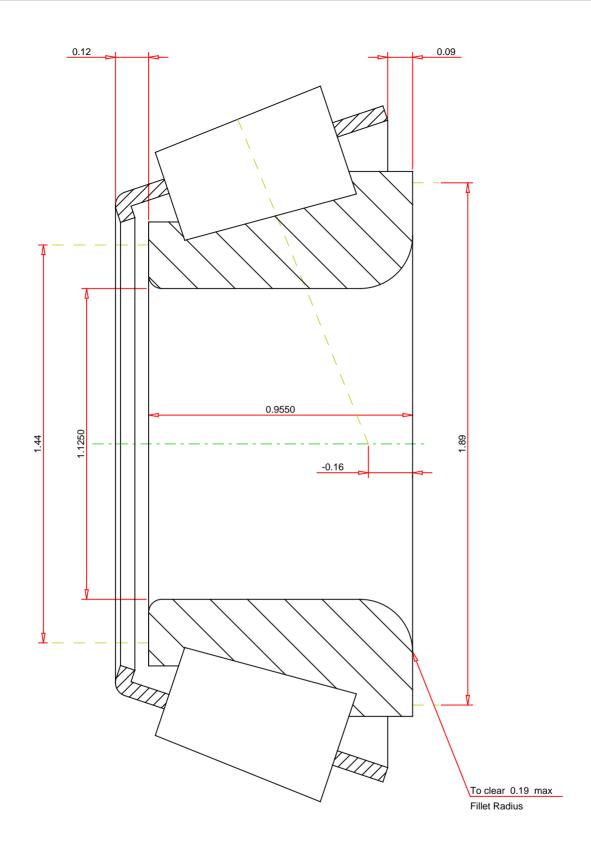
 $<sup>^{5}</sup>$  Based on 90 x 10 $^{6}$  revolutions L<sub>10</sub> life, for The Timken Company life calculation method. C<sub>90</sub> and C<sub>a90</sub> are radial and thrust values.

 $<sup>^6</sup>$  Based on 1 x  $10^6$  revolutions  $L_{10}$  life, for the ISO life calculation method.

 $<sup>^7</sup>$  Based on 90 x 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.

 $<sup>^8</sup>$  These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>&</sup>lt;sup>9</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



## **IMPERIAL UNITS**

Number of Rollers Per Row

11

THE TIMKEN COMPANY NORTH CANTON, OHIO USA

41125
Tapered Roller Bearings - Single Cones - Imperial

K Factor 0.97

Dynamic Radial Rating - C90 21400 lbf

Dynamic Thrust Rating - Ca90 22100 lbf

Dynamic Radial Rating - C1 82600 lbf

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

FOR DISCUSSION ONLY