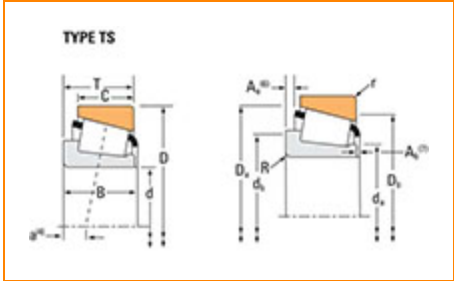




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## Part Number 522, Tapered Roller Bearings - Single Cups - Imperial

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.



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

### Specifications

Series	525
Cup Part Number	522
Design Units	Imperial

### Dimensions

D - Cup Outer Diameter	4 in 101.600 mm
C - Cup Width	1.0625 in 26.988 mm



### Abutment and Fillet Dimensions

<b>r - Cup Backface "To Clear" Radius<sup>1</sup></b>	0.130 in 3.30 mm
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<b>Da - Cup Frontface Backing Diameter</b>	3.76 in 95.5 mm
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<b>Db - Cup Backface Backing Diameter</b>	3.50 in 88.90 mm
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## Factors

<b>e - ISO Factor<sup>2</sup></b>	0.29
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<b>Y - ISO Factor<sup>3</sup></b>	2.1
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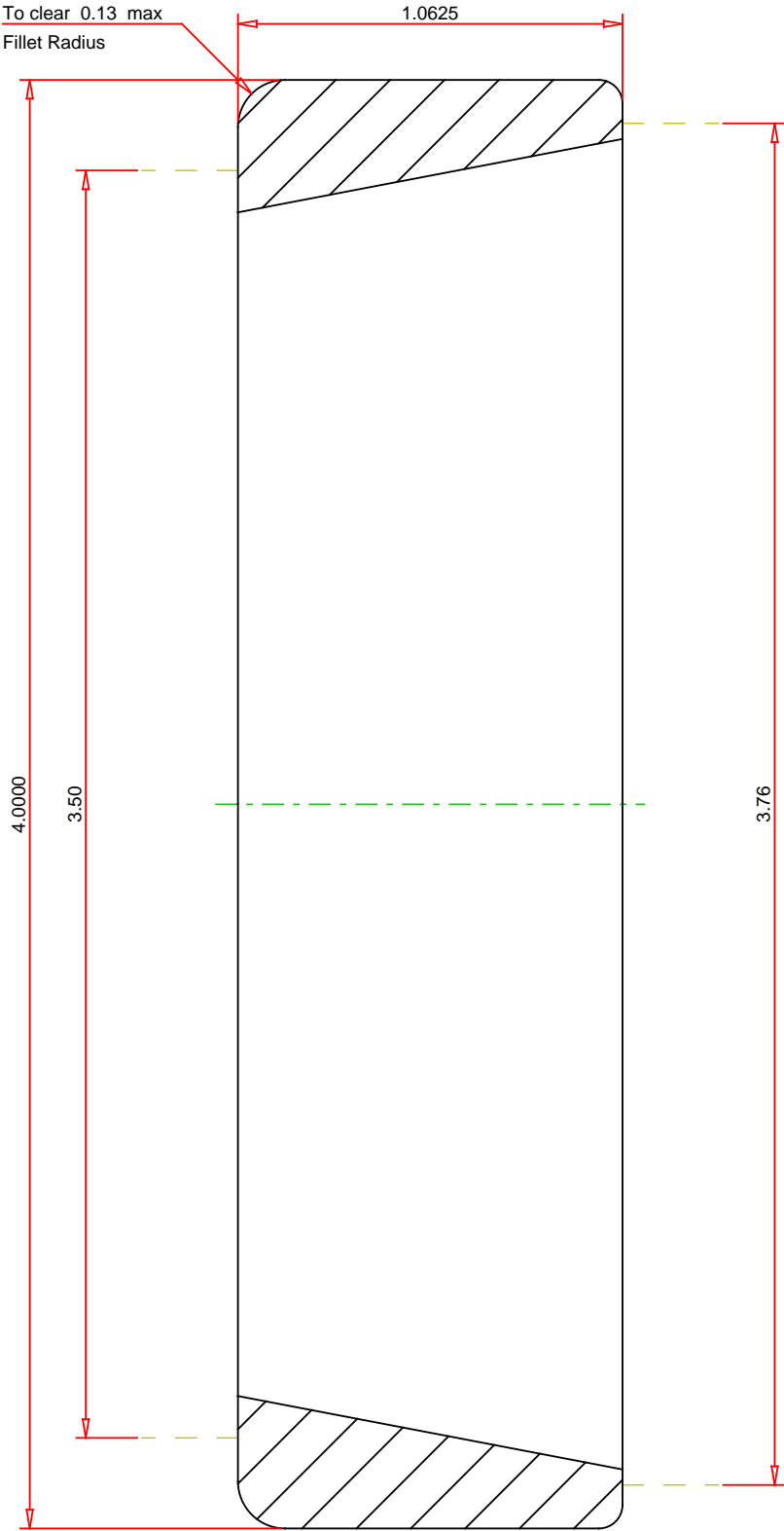
<b>Cg - Geometry Factor<sup>4</sup></b>	0.0894
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<sup>1</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>2</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>3</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>4</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



IMPERIAL UNITS

**TIMKEN®**

**THE TIMKEN COMPANY**  
NORTH CANTON, OHIO USA

**522**  
Tapered Roller Bearings - Single Cups - Imperial

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.