


**The Timken Company**

4500 Mt Pleasant St. NW

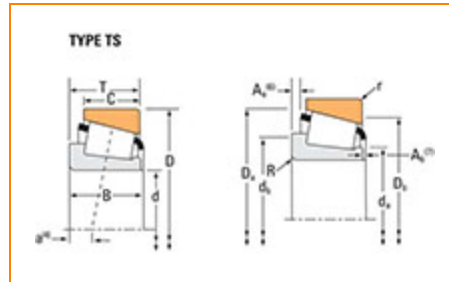
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## Part Number Y32311, Tapered Roller Bearings - Single Cups - Metric

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.



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### Specifications

<b>Series</b>	32311
<b>Cup Part Number</b>	Y32311
<b>Design Units</b>	METRIC
<b>Full Timken Part Number</b>	32311

### Dimensions

<b>D - Cup Outer Diameter</b>	120 mm 4.7244 in
<b>C - Cup Width</b>	35 mm 1.378 in



## Abutment and Fillet Dimensions

<b>r - Cup Backface "To Clear" Radius<sup>1</sup></b>	2.03 mm 0.08 in
<b>Da - Cup Frontface Backing Diameter</b>	113.00 mm 4.45 in
<b>Db - Cup Backface Backing Diameter</b>	104.90 mm 4.13 in

## Factors

<b>K - Factor<sup>2</sup></b>	1.69
<b>e - ISO Factor<sup>3</sup></b>	0.35
<b>Y - ISO Factor<sup>4</sup></b>	1.74
<b>G1 - Heat Generation Factor (Roller-Raceway)</b>	77.5
<b>G2 - Heat Generation Factor (Rib-Roller End)</b>	18.5
<b>Cg - Geometry Factor<sup>5</sup></b>	0.072

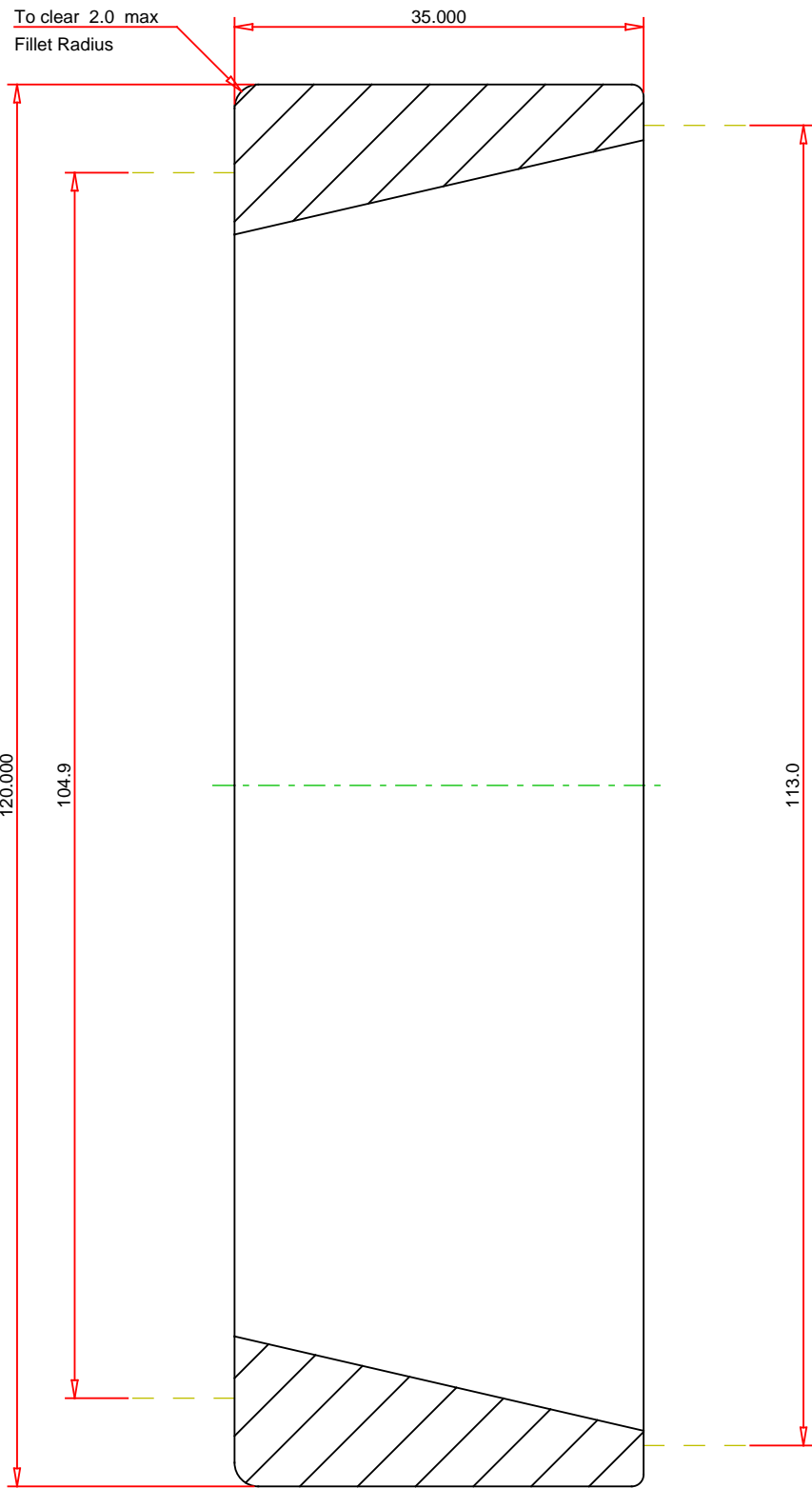
<sup>1</sup> These maximum fillet radii will be cleared by the bearing corners.

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

<sup>5</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

TIMKEN®

THE TIMKEN COMPANY  
NORTH CANTON, OHIO USA

Y32311  
Tapered Roller Bearings - Single Cups - Metric

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FOR DISCUSSION ONLY