



**The Timken Company**

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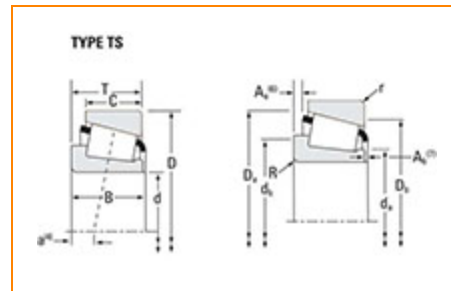
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## Part Number 32026X, Tapered Roller Bearings - TS (Tapered Single) Metric

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.



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### Specifications

Series	32026X
Cone Part Number	X32026XM
Cup Part Number	Y32026XM
Design Units	METRIC
Bearing Weight	0.000 Kg 0.00 lb
Cage Type	Stamped Steel

### Dimensions

d - Bore	130 mm 5.1181 in
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<b>D - Cup Outer Diameter</b>	200 mm 7.874 in
<b>B - Cone Width</b>	45 mm 1.7717 in
<b>C - Cup Width</b>	34 mm 1.3386 in
<b>T - Bearing Width</b>	45 mm 1.7717 in

## Abutment and Fillet Dimensions

<b>R - Cone Backface "To Clear" Radius<sup>1</sup></b>	2.540 mm 0.1 in
<b>r - Cup Backface "To Clear" Radius<sup>2</sup></b>	2.03 mm 0.08 in
<b>da - Cone Frontface Backing Diameter</b>	141.99 mm 5.59 in
<b>db - Cone Backface Backing Diameter</b>	148.08 mm 5.83 in
<b>Da - Cup Frontface Backing Diameter</b>	193.29 mm 7.61 in
<b>Db - Cup Backface Backing Diameter</b>	183.9 mm 7.24 in
<b>Ab - Cage-Cone Frontface Clearance</b>	2.8 mm 0.11 in
<b>Aa - Cage-Cone Backface Clearance</b>	3.3 mm 0.13 in
<b>a - Effective Center Location<sup>3</sup></b>	-1 mm -0.04 in

## Basic Load Ratings

<b>C90 - Dynamic Radial Rating (90 million revolutions)<sup>4</sup></b>	100000 N 22500 lbf
<b>C1 - Dynamic Radial Rating (1 million revolutions)<sup>5</sup></b>	386000 N 86900 lbf
<b>C0 - Static Radial Rating</b>	617000 N 139000 lbf
<b>C<sub>a90</sub> - Dynamic Thrust Rating (90 million revolutions)<sup>6</sup></b>	74600 N 16800 lbf

## Factors

<b>K - Factor<sup>7</sup></b>	1.34
<b>e - ISO Factor<sup>8</sup></b>	0.43
<b>Y - ISO Factor<sup>9</sup></b>	1.38
<b>G1 - Heat Generation Factor (Roller-Raceway)</b>	338.4
<b>G2 - Heat Generation Factor (Rib-Roller End)</b>	97.3
<b>C<sub>g</sub> - Geometry Factor<sup>10</sup></b>	0.119

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

<sup>2</sup> These maximum fillet radii will be cleared by the bearing corners.

<sup>3</sup> Negative value indicates effective center inside cone backface.

<sup>4</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values.

<sup>5</sup> Based on  $1 \times 10^6$  revolutions  $L_{10}$  life, for the ISO life calculation method.

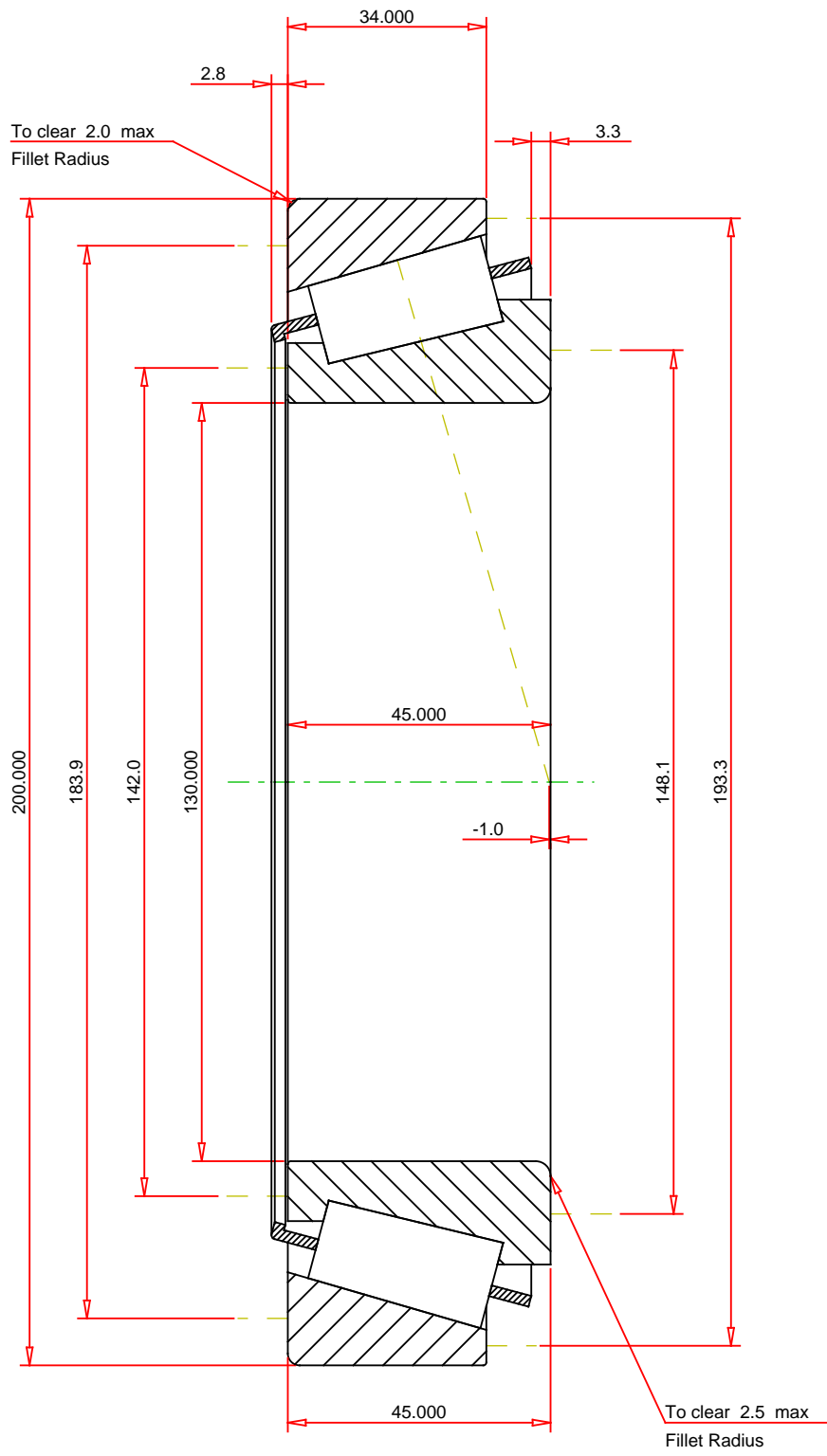
<sup>6</sup> Based on  $90 \times 10^6$  revolutions  $L_{10}$  life, for The Timken Company life calculation method.  $C_{90}$  and  $C_{a90}$  are radial and thrust values for a single-row,  $C_{90(2)}$  is the two-row radial value.

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

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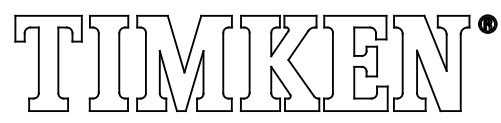
<sup>9</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

<sup>10</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

ISO Factor - e	0.43
ISO Factor - Y	1.38
Bearing Weight	0 kg
Number of Rollers Per Row	27
Effective Center Location	-1 mm



X32026XM - Y32026XM  
TS BEARING ASSEMBLY

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

K Factor	1.34
Dynamic Radial Rating - C90	100000 N
Dynamic Thrust Rating - Ca90	74600 N
Static Radial Rating - C0	617000 N
Dynamic Radial Rating - C1	386000 N

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**