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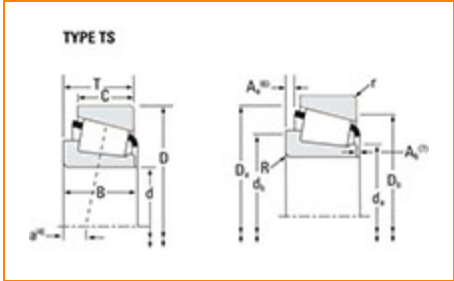
Specifications | Dimensions | Abutment and Fillet Dimensions | Basic Load Ratings | Factors

Specifications −

Series	32026XM
Cone Part Number	X32026XM
Cup Part Number	Y32026XM
Design Unit	Metric
Cage Material	Stamped Steel
Related Assembly Number(s)	32026XM-90KM9

Dimensions −

d - Bore	130 mm 5.1181 in

D - Cup Outer Diameter	200 mm 7.874 in
B - Cone Width	45 mm 1.7717 in
C - Cup Width	34 mm 1.3386 in
T - Bearing Width	45 mm 1.7717 in

Abutment and Fillet Dimensions −

R - Cone Backface "To Clear" Radius[1]	2.540 mm 0.1 in
r - Cup Backface "To Clear" Radius[2]	2.03 mm 0.08 in
da - Cone Frontface Backing Diameter	142 mm 5.59 in
db - Cone Backface Backing Diameter	148 mm 5.83 in
Da - Cup Frontface Backing Diameter	193.29 mm 7.61 in
Db - Cup Backface Backing Diameter	183.9 mm 7.24 in
Ab - Cage-Cone Frontface Clearance	3.6 mm 0.14 in
Aa - Cage-Cone Backface Clearance	3.6 mm 0.14 in
a - Effective Center Location[3]	-1 mm -0.04 in

Basic Load Ratings −

C90 - Dynamic Radial Rating (90 million revolutions)[4]	100000 N 22500 lbf
C1 - Dynamic Radial Rating (1 million revolutions)[5]	386000 N 86900 lbf
C0 - Static Radial Rating	617000 N 139000 lbf
C_{a90} - Dynamic Thrust Rating (90 million revolutions)[6]	74600 N 16800 lbf

Factors —

K - Factor[7]	1.34
e - ISO Factor[8]	0.43
Y - ISO Factor[9]	1.38
G1 - Heat Generation Factor (Roller-Raceway)	338.4
G2 - Heat Generation Factor (Rib-Roller End)	97.3
Cg - Geometry Factor[10]	0.119

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

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

[3] Negative value indicates effective center inside cone backface.

[4] 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.

[5] Based on 1×10^6 revolutions L_{10} life, for the ISO life calculation method.
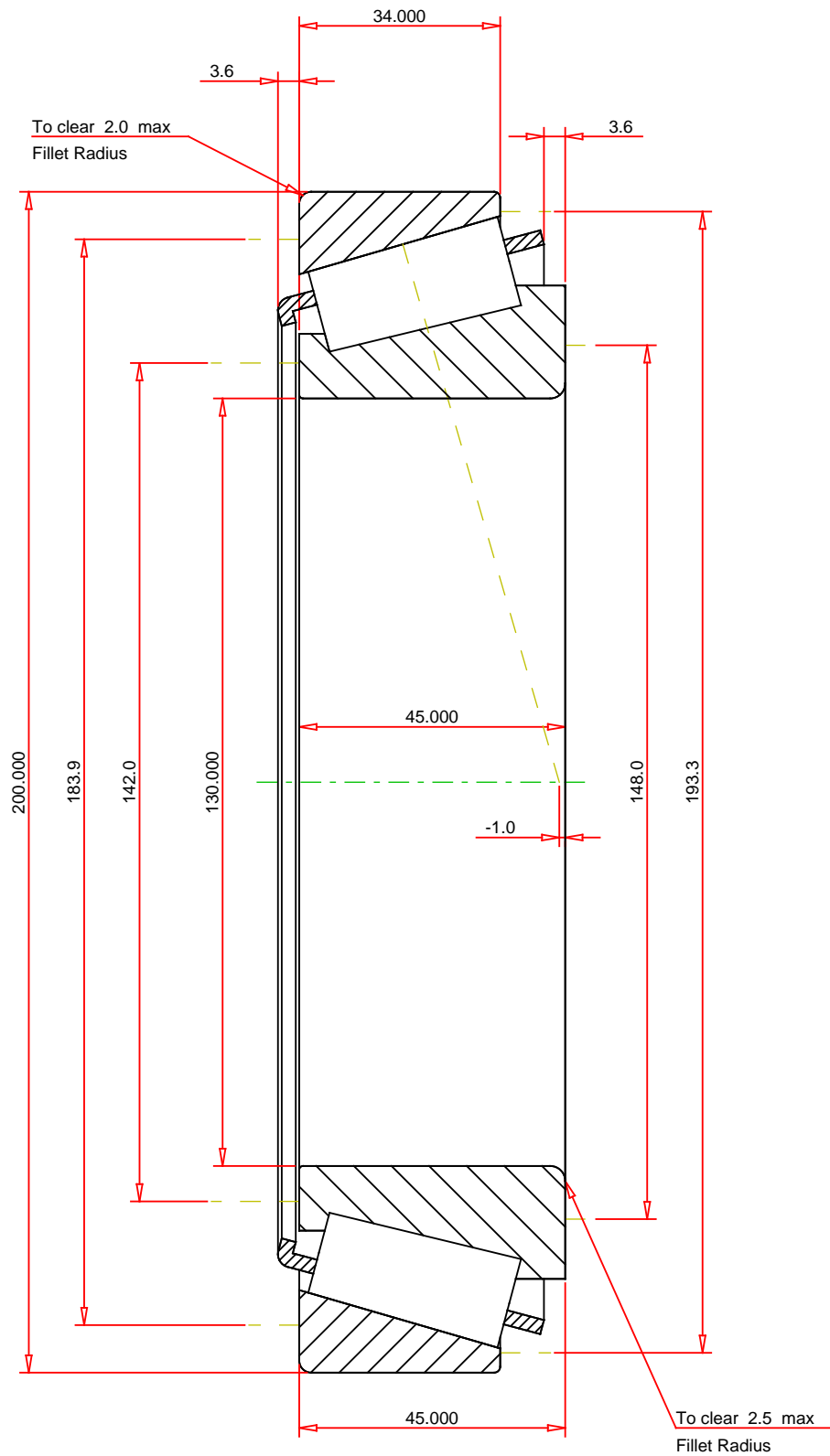
[6] Based on 90×10^6 revolutions L_{10} life, for The Timken Company life calculation method. C_{90} and C_{a90} are radial and thrust values for a single-row, $C_{90(2)}$ is the two-row radial value.

[7] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[8] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[9] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.

[10] Geometry constant for Lubrication Life Adjustment Factor a3l.

34.000

3.6

3.6

To clear 2.0 max
Fillet Radius

200.000
183.9
142.0
130.000

45.000

148.0
193.3

-1.0

45.000

To clear 2.5 max
Fillet Radius

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

TIMKEN ®

THE TIMKEN COMPANY
NORTH CANTON, OHIO USA

X32026XM - Y32026XM
Tapered Roller Bearings - TS (Tapered Single)
Metric

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