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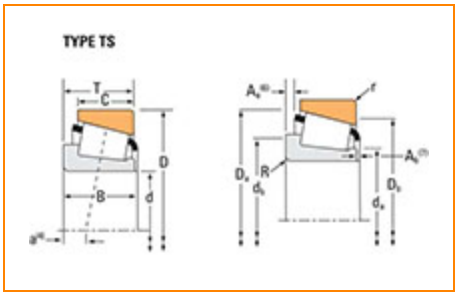
Part Number Y33024P, Tapered Roller Bearings - Single Cups - Metric

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.





Specifications | Dimensions | Abutment and Fillet Dimensions | Factors

Specifications

Series	33024
Cup Part Number	Y33024P
Design Units	METRIC

Dimensions

D - Cup Outer Diameter	180 mm 7.0866 in
C - Cup Width	38 mm 1.4961 in

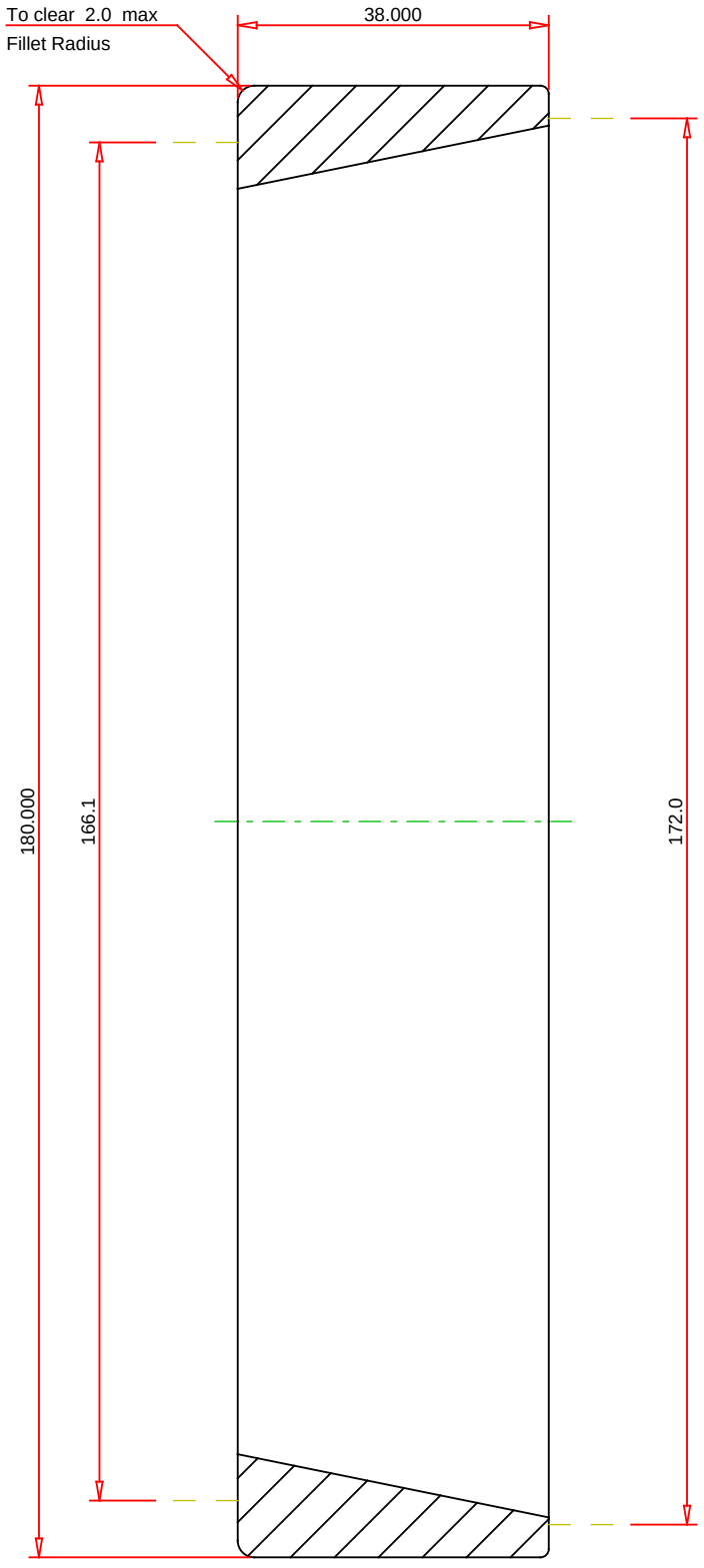
Abutment and Fillet Dimensions

r - Cup Backface "To Clear" Radius[1]	2.03 mm 0.08 in
Da - Cup Frontface Backing Diameter	172 mm 6.81 in
Db - Cup Backface Backing Diameter	166.12 mm 6.54 in

Factors

K - Factor[2]	1.91
e - ISO Factor[3]	0.31
Y - ISO Factor[4]	1.97
G1 - Heat Generation Factor (Roller-Raceway)	342
G2 - Heat Generation Factor (Rib-Roller End)	93.7
Cg - Geometry Factor[5]	0.113

[1] These maximum fillet radii will be cleared by the bearing corners.
[2] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
[3] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
[4] These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
[5] Geometry constant for Lubrication Life Adjustment Factor a3l.



METRIC UNITS

	TIMKEN®	Y33024P SINGLE TAPERED CUP
	THE TIMKEN COMPANY NORTH CANTON, OHIO USA	

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