

## The Timken Company

4500 Mt Pleasant St. NW N. Canton, OH 44720

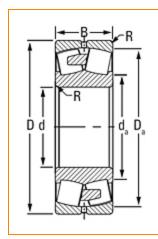
**Phone:** (234) 262-3000

E-Mail: <u>CustomerCAD@timken.com</u> • Web site: <u>www.timken.com</u>

## Part Number 24140EMBW33, Spherical Roller Bearings - Brass Cage

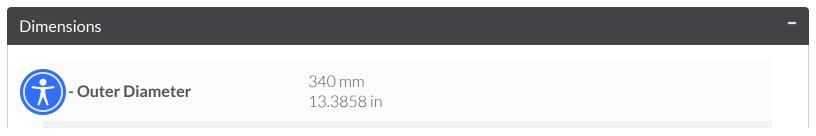
Spherical bearings are designed to manage high radial loads even when misalignment, poor lubrication, contamination, extreme speeds or critical application stresses are present.





## <u>Specifications</u> | <u>Dimensions</u> | <u>Abutment and Fillet Dimensions</u> | <u>Basic Load Ratings</u> | <u>Factors</u>

Spe	ecifications	-
	Design Unit	Metric
	d - Bore	200 mm
	Bearing Weight	52.10 Kg 114.65 lb
	Cage Type	EMB
	Cage Material	Brass
	Superseded Part	24140YMBW33



B' - Inner Ring Width	140 mm 5.5118 in
B - Outer Ring Width	140 mm 5.5118 in

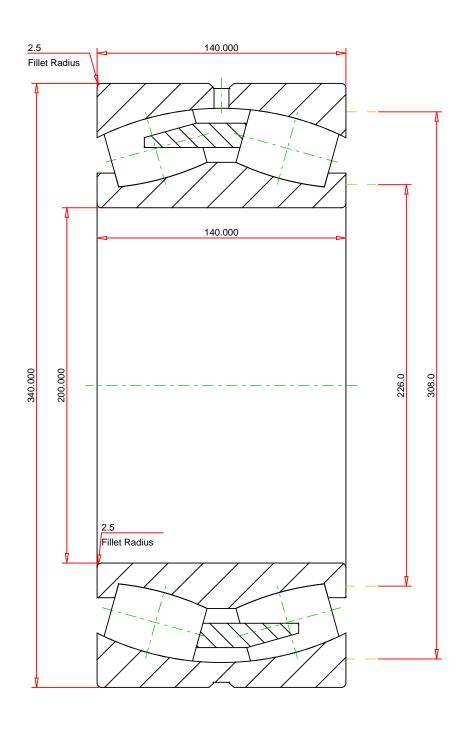
Abı	Abutment and Fillet Dimensions –		
	R - Inner Ring "To Clear" Radius <sup>1</sup>	2.5 mm 0.100 in	
	r - Outer Ring "To Clear" Radius <sup>2</sup>	2.5 mm 0.1 in	
	da - Inner Ring Backing Diameter	226.000 mm 8.900 in	
	Da - Outer Ring Backing Diameter	308 mm 12.1000 in	

Ba	sic Load Ratings		-
	C0 - Static Radial Rating	2930000 N 658000 lbf	
	C1(2) - Dynamic Radial Rating (Two-Rows)	2030000 N 456000 lbf	

e - ISO Factor <sup>3</sup> 0.39  Y0 - ISO Factor <sup>4</sup> 1.7  Y1 - ISO Factor <sup>5</sup> 1.74	Fa	Factors -			
Y0 - ISO Factor <sup>4</sup> 1.7		e - ISO Factor <sup>3</sup>	0.39		
			1.7		
		Y1 - ISO Factor <sup>5</sup>	1.74		
<b>Y2 - ISO Factor</b> <sup>6</sup> 2.59		Y2 - ISO Factor <sup>6</sup>	2.59		
Reference Thermal Speed Rating			700 (5)2 (2)		
(Grease) 790 rpm			/ 70 I pili		

Reference Thermal Speed Rating (Oil) <sup>7</sup>	850 rpm
Cg - Geometry Factor <sup>8</sup>	0.097

- $^{1}$  Maximum housing fillet radius that bearing corners will clear.
- $^{2}\,\mathrm{Maximum}\,\bar{\mathrm{shaft}}\,\bar{\mathrm{fillet}}\,\mathrm{radius}\,\mathrm{that}\,\mathrm{bearing}\,\mathrm{corners}\,\mathrm{will}\,\mathrm{clear}.$
- <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. See engineering
- <sup>5</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
- <sup>6</sup> These factors apply for both inch and metric calculations. Consult your Timken representative for instruction on use.
- <sup>7</sup> See thermal speed ratings in the engineering section.
- <sup>8</sup> Geometry constant for Lubrication Life Adjustment Factor a3l.



## **METRIC UNITS**

Number of Rollers Per Row	20		04440EMDW00		
ISO Factor e	0.39		24140EMBW33		
ISO Factor Y0	1.70	'J P') (').\/, (') (*/ ') F').\)( <b>*</b>	SRB ASSEMBLY		
ISO Factor Y1	1.74				
ISO Factor Y2	2.59				
Bearing Weight	52.1 k				
Cage Type	EMB				
Cage Material	Brass				
		THE TIMKEN COMPANY			
		NORTH CANTON, OHIO USA	Dynamic Radial Rating (Two Rows) 2	2030000	N
		NORTH OANTON, OTHOUGA	,		
			Static Radial Rating 2	2930000	N
Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no			FOR DISCUSSION ONLY		

liability is accepted for errors, omissions or for any other reason.

FOR DISCUSSION ONLY