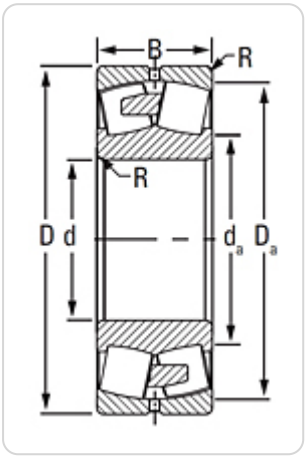
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Part Number 23984EMBW33, Spherical Roller Bearings - Brass Cage





Key Features

- Longer bearing life achieved from higher capacity (vs. competitors)
- Longer lubrication life achieved from lower operating temperatures due to reduced internal friction and running torque from cage guided rollers
- Better contaminant purging from slots on cage face helps extend bearing life

- Greater fatigue strength and increased wear resistance provide tougher protection against shock and acceleration loading from a brass cage

Key Dimensions

Bore (d)	420 mm
O.D. (D)	560 mm 22.0470 in
Width (B)	106 mm 4.1730 in
Dynamic Radial Load Rating - 1M Revs (C1)	2270000 N 511000 lbf
e Factor[1]	0.16

Other Dimensions

Max Shaft Fillet Radius[2]	3 mm 0.120 in
Shaft Backing Shoulder Diameter	454.000 mm 17.900 in
Housing Backing Shoulder Diameter	531.000 mm 20.9000 in
Design Unit	Metric

Ratings

Static Radial Load Rating (C0)	4240000 N 953000 lbf
Thermal Reference Speed - Grease	660 rpm
Thermal Reference Speed - Oil[3]	780 rpm

Factors

Y0 Factor[4]	4.05
Y1 Factor [5]	4.14
Y2 Factor [6]	6.17
Geometry Factor (Cg) [7]	0.1485

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

[2] Maximum housing fillet radius that bearing corners will clear.

[3] See thermal speed ratings in the engineering section.

[4] These factors apply for both inch and metric calculations. See engineering

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

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

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