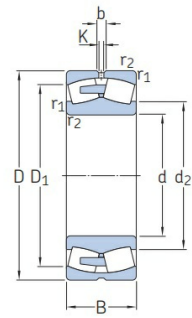


230/500 CAK/W33

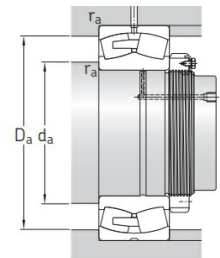
Spherical roller bearings, double row



Cylindrical bore



Tapered bore



Technical sheet of 230/500 CAK/W33

What are the Benefits of choosing 230/500 CAK/W33 bearings?

- **Low cross-section, high speed:** Featuring a thin-walled design, the outer diameter is smaller for the same inner diameter, resulting in lighter weight, saving installation space, and allowing for higher limiting speeds.
- **High load capacity, self-aligning:** Possesses high radial load capacity and automatically compensates for shaft deflection, misalignment, and installation errors, reducing equipment vibration.
- **Durable and optimized:** Utilizes high-quality steel and an optimized internal roller structure, resulting in a lower coefficient of friction and less heat generation, thus extending bearing life.

Type :	Spherical Roller Bearings	
Model :	230/500 CAK/W33	
Old Code :	230/500CAK/W33	
Main dimensions :	500 mm × 720 mm × 167 mm	Bore Dia × Outside Dia × Width Dia
M kg:	225	Mass
HS Code :	8482300000	Bearing customs code
d mm:	500	inner ring diameter
D mm:	720	Outer ring diameter

B(T) mm:	167	Overall Width
Cr kN:	4352.846	Radial dynamic load rating
C_{0r} kN:	7794.86	Radial static load rating
Grease r/min:	471	Reference speed
Oil r/min:	878	Limiting speed

Detailed parameters and installation dimensions:

Part Number	230/500 CAK/W33
Internal design	CA = Retaining flanges on the inner ring, guide ring centred on the inner ring, machined brass cage
Bearing Type	Spherical roller bearings, double row
Bearing Mass - m	225 kg 496.035 lb
Seal	open
Series	230..-CAK/W33
Cage	CA = brass cage
Lubrication	W33 = Annular groove and three lubrication holes in the outer ring
Bore Type	K = Tapered bore, taper 1:12
RIC	Normal
Units	Metric
Rows NO.	2
Manufacturer Part Code	230/500CAK/W33
Ring Material	GCr15SiMn
Roller Material	GCr15SiMn
Dimension	
Inside - d ϕ (mm)	500 mm 19.685 inch
Outside - D Φ (mm)	720 mm 28.346 inch
Width - B (mm)	167 mm 6.575 inch
b	22.3 mm 0.878 inch
K	12 mm 0.472 inch
d ₂	573 mm 22.559 inch
D ₁	658 mm 25.905 inch
Fillet - r _a (max.)	5 mm 0.197 inch
Fillet - r ₁ ,r ₂ (min.)	6 mm 0.236 inch
Angular misalignment	1.5 degrees
Performance	
Dynamic Radial Capacity - C _r	4352846 N 978519 lbf
Static Radial Capacity - C _{0r}	7794860 N 1752284 lbf
Fatigue Radial Capacity - P _u	504298 N 113366 lbf
Temperature - T(min)	-30
Temperature - T(max)	+200

Speed ratings (grease) - n_B	471 rpm
Speed ratings (oil) - n_G	878 rpm
Heat stabilization	392 °F (200 °C)
Abutment dimensions	
d_a (min.)	523 mm 20.591 inch
D_a (max.)	697 mm 27.441 inch
Calculation factor	
e	0.21
Y_1	3.2
Y_2	4.8
Y_0	3.2

What are the applications of the 230/500 CAK/W33 bearing?

- **Mining/Metallurgy:** Used in vibrating screens and rolling mills. The effect is to withstand heavy impacts, automatically compensate for errors caused by equipment deformation, and ensure stable operation under harsh conditions.
- **Papermaking/Drying:** Used in drying drums. The effect is high temperature resistance, high speed, and low cross-section to save space, ensuring reliable continuous operation.
- **General Machinery:** Used in fans and gearboxes. The effect is to reduce frictional heat and vibration noise, extending equipment maintenance cycles and service life.

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