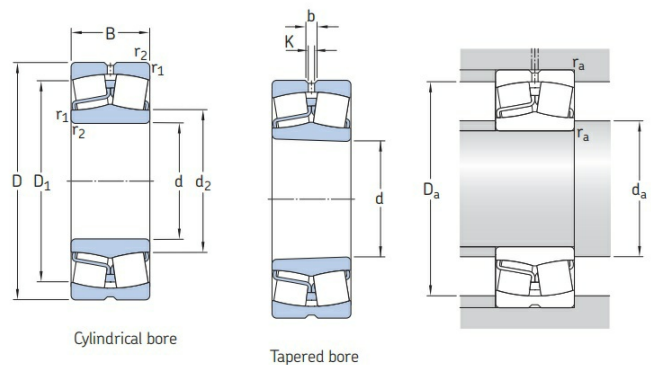


## 23144CCK/C5W33

Spherical roller bearings, double row



## Technical sheet of 23144CCK/C5W33

### What are the Benefits of choosing 23144CCK/C5W33 bearings?

- **Self-aligning:** Allows for significant angular errors or shaft deflection between the shaft and bearing housing, effectively compensating for installation errors and shaft deformation.
- **High load capacity:** Featuring a double-row roller structure, it boasts extremely high radial load capacity while also withstanding certain bidirectional axial loads.
- **Adaptable to vibration applications:** Performs excellently under impact and vibration loads, exhibiting good durability.
- **Easy installation:** Models with tapered bores are typically available, allowing for convenient installation at any position on different optical shafts using adapter sleeves or withdrawal sleeves.

Type :	Spherical Roller Bearings	
Model :	<a href="#">23144CCK/C5W33</a>	
Main demensions :	220 mm × 370 mm × 120 mm	Bore Dia × Outside Dia × Width Dia
M kg:	53.5	Mass
HS Code :	8482300000	Bearing customs code
d mm:	220	inner ring diameter
D mm:	370	Outer ring diameter
B(T) mm:	120	Overall Width

<b>Cr kN:</b>	1887.372	Radial dynamic load rating
<b>C<sub>0r</sub> kN:</b>	2749.739	Radial static load rating
<b>Grease r/min:</b>	1298	Reference speed
<b>Oil r/min:</b>	1689	Limiting speed

**Detailed parameters and installation dimensions:**

Part Number	23144CCK/C5W33
Internal design	CC = Flangeless inner ring, guide ring centred on the inner ring, two stamped steel cages
Bearing Type	Spherical roller bearings, double row
Bearing Mass - m	53.5 kg   117.946 lb
Seal	open
Series	231..-CCK/W33
Cage	CC = stamped steel cages
Lubrication	W33 = Annular groove and three lubrication holes in the outer ring
Bore Type	K = Tapered bore, taper 1:12
RIC	C5
Units	Metric
Rows NO.	2
Manufacturer Part Code	23144 CCK/C5W33
Ring Material	GCr15SiMn
Roller Material	GCr15SiMn
<b>Dimension</b>	
Inside - d $\phi$ (mm)	220 mm   8.661 inch
Outside - D $\Phi$ (mm)	370 mm   14.567 inch
Width - B (mm)	120 mm   4.724 inch
b	16.7 mm   0.657 inch
K	9 mm   0.354 inch
d <sub>2</sub>	255 mm   10.039 inch
D <sub>1</sub>	320 mm   12.598 inch
Fillet - r <sub>a</sub> (max.)	3 mm   0.118 inch
Fillet - r <sub>1</sub> ,r <sub>2</sub> (min.)	4 mm   0.157 inch
Angular misalignment	1.5 degrees
<b>Performance</b>	
Dynamic Radial Capacity - C <sub>r</sub>	1887372 N   424281 lbf
Static Radial Capacity - C <sub>0r</sub>	2749739 N   618141 lbf
Fatigue Radial Capacity - P <sub>u</sub>	231828 N   52114 lbf
Temperature - T(min)	-30
Temperature - T(max)	+200

Speed ratings (grease) - $n_B$	1298 rpm
Speed ratings (oil) - $n_G$	1689 rpm
Heat stabilization	392 °F (200 °C)
<b>Abutment dimensions</b>	
$d_a$ (min.)	237 mm   9.331 inch
$D_a$ (max.)	353 mm   13.898 inch
<b>Calculation factor</b>	
e	0.3
$Y_1$	2.3
$Y_2$	3.4
$Y_0$	2.2

### What are the applications of the 23144CCK/C5W33 bearing?

- **Mining/Metallurgy/Cement:** Used in crushers and vibrating screens. Impact resistant, withstands extreme heavy loads, and adaptable to harsh environments.
- **Paper/Steel:** Used in rolling mills and roller conveyors. Automatic self-aligning compensation effectively addresses shaft deflection or misalignment.
- **Industrial Transmission:** Used in speed reducers and fans. Smooth operation, long service life, and withstands complex composite loads.

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