

# 2314 SKF 150x70x51mm Basic dynamic load rating C 111 kN Self aligning ball bearings

Bearing number	2314
Size (mm)	150x70x51
Brand	SKF
Bore Diameter (mm)	150
Outer Diameter (mm)	70
Width (mm)	51
d	70 mm
D	150 mm
B	51 mm
d <sub>1</sub>	92 mm
D <sub>1</sub>	128.1 mm
r <sub>1,2</sub> – min.	2.1 mm
d <sub>a</sub> – min.	82 mm
D <sub>a</sub> – max.	138 mm
r <sub>a</sub> – max.	2 mm
Basic dynamic load rating – C	111 kN
Basic static load rating – C <sub>0</sub>	37.5 kN
Fatigue load limit – P <sub>u</sub>	1.9 kN
Reference speed	8000 r/min
Limiting speed	6000 r/min
Calculation factor – k <sub>r</sub>	0.05
Calculation factor – e	0.37

Calculation factor – Y <sub>0</sub>	1.8
Calculation factor – Y <sub>1</sub>	1.7
Calculation factor – Y <sub>2</sub>	2.6
Category	Self Aligning Ball Bearings
BDI Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	4.027
EAN	7316577055965
Product Group – BDI	B00152
Mounting Method	Shaft
Enclosure	Open
Rolling Element	Ball Bearing
Cage Material	Steel
Precision Class	ABEC 1   ISO P0
Internal Clearance	C0-Medium
Number of Rows of Balls	Double Row
Other Features	Allowable Misalignment 3 Deg
Long Description	70MM Bore; Shaft Mount; 150MM Outside Diameter; 51MM Inner Race Width; 51MM Outer Race Width; Open; Steel Cage; Double Row of Balls; ABEC 1   ISO P0; C0-Medium
Inch – Metric	Metric
Category – BDI	Self Aligning Ball Bearings
UNSPSC	31171532
Harmonized Tariff Code	8482.10.50.68
Noun	Bearing

Keyword String	Self Aligning
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Manufacturer Item Number	2314
Weight / LBS	8.869
Inner Race Width	2.008 Inch   51 Millimeter
Outer Race Width	2.008 Inch   51 Millimeter
Outside Diameter	5.906 Inch   150 Millimeter
Bore	2.756 Inch   70 Millimeter
bore diameter:	70 mm
precision rating:	Not Rated
outside diameter:	150 mm
maximum rpm:	6000 RPM
overall width:	51 mm
cage material:	Steel
bore type:	Straight
finish/coating:	Uncoated
closure type:	Open
outer ring width:	51 mm
internal clearance:	C0
fillet radius:	2 mm
dynamic load capacity:	111 kN
series:	2300
static load capacity:	37.5 kN
$d_1 \approx$	92 mm
$D_1 \approx$	128.1 mm
$r_{1,2} \text{ min.}$	2.1 mm
$d_a \text{ min.}$	82 mm
$D_a \text{ max.}$	138 mm

$r_a$ max.	2 mm
Basic dynamic load rating C	111 kN
Basic static load rating $C_0$	37.5 kN
Fatigue load limit $P_u$	1.86 kN
Permissible angular misalignment $\alpha$	3 °
Calculation factor $k_r$	0.05
Calculation factor e	0.37
Calculation factor $Y_0$	1.8
Calculation factor $Y_1$	1.7
Calculation factor $Y_2$	2.6
Mass bearing	3.9 kg