



Bearing No. 7224 CD/HCP4A

a	42.7 mm
d	120 mm
D	215 mm
B	40 mm
Noun	Bearing
Bore	4.724 Inch   120 Millimeter
Width	1.575 Inch   40 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	15
Category	Precision Ball Bearings
Size (mm)	215x120x40
Enclosure	Open
Inventory	0.0
Width (mm)	40
Weight / LBS	10.121
Flush Ground	No
Mass bearing	4.41 kg
$d_1$	150.3 mm
$d_2$	150.3 mm
$D_1$	186.7 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
$d_n$	158.2 mm
Product Group	B04270
Contact Angle	15 Degree
$D_1$	186.7 mm
d	158.2 mm

n	
d <sub>2</sub>	150.3 mm
d <sub>1</sub>	150.3 mm
Bearing number	7224 CD/HCP4A
Keyword String	Angular Contact Ball
Other Features	Single Row   Angular Contact   Super Precision   High Capacity   Hybrid   Corrosion Resistant Ball
Preload class B	209 N/micron
Rolling Element	Ball Bearing
Material - Ball	Ceramic
Precision Class	ABEC 7   ISO P4
G <sub>ref</sub>	69.084 cm3
Preload class C	289 N/micron
Preload class D	414 N/micron
Preload class A	154 N/micron
Outside Diameter	8.465 Inch   215 Millimeter
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Long Description	120MM Bore; 215MM Outside Diameter; 40MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearings; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring
Manufacturer Name	SKF
Number of balls z	15
Weight / Kilogram	4.6
d <sub>a</sub> min.	132 mm
d <sub>b</sub> min.	132 mm

Bore Diameter (mm)	215
Number of Bearings	1 (Single)
$r_b$ max.	1 mm
$r_a$ max.	2 mm
$D_a$ max.	203 mm
$D_b$ max.	208 mm
Outer Diameter (mm)	120
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1.1 mm
$d_a$ - min.	132 mm
Calculation factor f	1.08
$d_b$ - min.	132 mm
Ball - $D_w$	30.162 mm
$D_a$ - max.	203 mm
$r_a$ - max.	2 mm
$r_b$ - max.	1 mm
$D_b$ - max.	208 mm
Minimum Buy Quantity	N/A
$r_{1,2}$ - min.	2.1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.08
$r_{3,4}$ - min.	1.1 mm
Manufacturer Item Number	7224 CD/HCP4A
Basic dynamic load rating C	199 kN
Ball diameter $D_w$	30.162 mm
Preload class B $G_B$	1500 N
Preload class A $G_A$	750 N
Preload class C $G_C$	3000 N
Preload class D $G_D$	6000 N
Basic dynamic load rating - C	199 kN

Preload class B - $G_B$	1500 N
Preload class C - $G_C$	3000 N
Preload class A - $G_A$	750 N
Preload class D - $G_D$	6000 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	6.3 kN
Calculation factor $f_0$	14.6
Calculation factor - $f$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.03
Calculation factor $f_{2D}$	1.06
Calculation factor $f_{HC}$	1.01
Calculation factor - $f_0$	14.6
Fatigue load limit - $P_u$	6.3 kN
Limiting speed for oil lubrication	12000 mm/min
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.03
Calculation factor - $f_{2D}$	1.06
Calculation factor - $f_{HC}$	1.01
Limiting speed for grease lubrication	8000 r/min
Basic static load rating $C_0$	193 kN
Static axial stiffness, preload class A	154 N/ $\mu$ m
Static axial stiffness, preload class B	209 N/ $\mu$ m
Static axial stiffness, preload class C	289 N/ $\mu$ m

Static axial stiffness, preload class D	414 N/ $\mu$ m
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	12000 r/min
Basic static load rating - $C_0$	193 kN
Reference grease quantity $G_{ref}$	69.084 cm <sup>3</sup>