



Bearing No. 7008 CD/HCP4A

a	14.8 mm
d	40 mm
D	68 mm
B	15 mm
Noun	Bearing
Bore	1.575 Inch   40 Millimeter
Width	0.591 Inch   15 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	18
Category	Precision Ball Bearings
Size (mm)	68x40x15
Enclosure	Open
Inventory	0.0
Width (mm)	15
Weight / LBS	0.399
Flush Ground	No
Mass bearing	0.17 kg
d <sub>1</sub>	49.2 mm
d <sub>2</sub>	49.2 mm
D <sub>1</sub>	58.8 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d <sub>n</sub>	50.8 mm
Product Group	B04270
Contact Angle	15 Degree
D <sub>1</sub>	58.8 mm
d	50.8 mm

n	
d <sub>2</sub>	49.2 mm
d <sub>1</sub>	49.2 mm
Bearing number	7008 CD/HCP4A
Keyword String	Angular Contact Ball
Other Features	Single Row   Angular Contact   High Precision   Hybrid   Corrosion Resistant Ball
Preload class B	56 N/micron
Rolling Element	Ball Bearing
Material - Ball	Ceramic
Precision Class	ABEC 7   ISO P4
G <sub>ref</sub>	2.4 cm <sup>3</sup>
Preload class C	76 N/micron
Preload class D	107 N/micron
Preload class A	42 N/micron
Outside Diameter	2.677 Inch   68 Millimeter
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Long Description	40MM Bore; 68MM Outside Diameter; 15MM 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 R
Manufacturer Name	SKF
Number of balls z	18
Weight / Kilogram	0.183
d <sub>a</sub> min.	44.6 mm
d <sub>b</sub> min.	44.6 mm
Bore Diameter (mm)	68

Number of Bearings	1 (Single)
$r_b$ max.	0.3 mm
$r_a$ max.	1 mm
$D_a$ max.	63.4 mm
$D_b$ max.	66 mm
Outer Diameter (mm)	40
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ - min.	44.6 mm
Calculation factor f	1.06
$d_b$ - min.	44.6 mm
Ball - $D_w$	7.938 mm
$D_a$ - max.	63.4 mm
Minimum Buy Quantity	N/A
$r_a$ - max.	1 mm
$r_b$ - max.	0.3 mm
$D_b$ - max.	66 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.06
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	1 mm
Manufacturer Item Number	7008 CD/HCP4A
Basic dynamic load rating C	16.8 kN
Ball diameter $D_w$	7.938 mm
Preload class B $G_B$	120 N
Preload class A $G_A$	60 N
Preload class C $G_C$	240 N
Preload class D $G_D$	480 N
Basic dynamic load rating - C	16.8 kN
Preload class B - $G_B$	120 N

Preload class C - $G_C$	240 N
Preload class A - $G_A$	60 N
Preload class D - $G_D$	480 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.465 kN
Calculation factor $f_0$	10
Calculation factor - f	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2D}$	1.09
Calculation factor $f_{HC}$	1.02
Calculation factor - $f_0$	10
Fatigue load limit - $P_u$	0.465 kN
Limiting speed for oil lubrication	38000 mm/min
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{HC}$	1.02
Limiting speed for grease lubrication	24000 r/min
Basic static load rating $C_0$	11 kN
Static axial stiffness, preload class A	42 N/ $\mu$ m
Static axial stiffness, preload class B	56 N/ $\mu$ m
Static axial stiffness, preload class C	76 N/ $\mu$ m
Static axial stiffness,	107 N/ $\mu$ m

preload class D	
Attainable speed for grease lubrication	24000 r/min
Attainable speed for oil-air lubrication	38000 r/min
Basic static load rating - $C_0$	11 kN
Reference grease quantity $G_{ref}$	2.4 cm <sup>3</sup>