



Bearing No. 7007 CD/HCP4A

a	13.6 mm
d	35 mm
D	62 mm
B	14 mm
Noun	Bearing
Bore	1.378 Inch 35 Millimeter
Width	0.551 Inch 14 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	16
Category	Precision Ball Bearings
Size (mm)	62x35x14
Enclosure	Open
Inventory	0.0
Width (mm)	14
Weight / LBS	0.313
Flush Ground	No
Mass bearing	0.13 kg
d ₁	43.7 mm
d ₂	43.7 mm
D ₁	53.3 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d _n	45.3 mm
Product Group	B04270
Contact Angle	15 Degree
D ₁	53.3 mm
d	45.3 mm

n	
d ₂	43.7 mm
d ₁	43.7 mm
Bearing number	7007 CD/HCP4A
Keyword String	Angular Contact Ball
Other Features	Single Row Angular Contact High Precision Hybrid Corrosion Resistant Ball
Preload class B	52 N/micron
Rolling Element	Ball Bearing
Material - Ball	Ceramic
Precision Class	ABEC 7 ISO P4
G _{ref}	1.98 cm ³
Preload class C	71 N/micron
Preload class D	100 N/micron
Preload class A	39 N/micron
Outside Diameter	2.441 Inch 62 Millimeter
Manufacturer URL	http://www.skf.com
Long Description	35MM Bore; 62MM Outside Diameter; 14MM 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	16
Weight / Kilogram	0.142
d _a min.	39.6 mm
d _b min.	39.6 mm
Bore Diameter (mm)	62

Number of Bearings	1 (Single)
r_b max.	0.3 mm
r_a max.	1 mm
D_a max.	57.4 mm
D_b max.	60 mm
Outer Diameter (mm)	35
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
d_a - min.	39.6 mm
Calculation factor f	1.06
d_b - min.	39.6 mm
Ball - D_w	7.938 mm
D_a - max.	57.4 mm
r_a - max.	1 mm
r_b - max.	0.3 mm
D_b - max.	60 mm
Minimum Buy Quantity	N/A
$r_{1,2}$ - min.	1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.06
$r_{3,4}$ - min.	0.3 mm
Manufacturer Item Number	7007 CD/HCP4A
Basic dynamic load rating C	15.6 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	15.6 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	0.4 kN
Calculation factor f_0	9.7
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	9.7
Fatigue load limit - P_u	0.4 kN
Limiting speed for oil lubrication	43000 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	28000 r/min
Basic static load rating C_0	9.5 kN
Static axial stiffness, preload class A	39 N/ μ m
Static axial stiffness, preload class B	52 N/ μ m
Static axial stiffness, preload class C	71 N/ μ m
Static axial stiffness,	100 N/ μ m

preload class D	
Attainable speed for grease lubrication	28000 r/min
Attainable speed for oil-air lubrication	43000 r/min
Basic static load rating - C_0	9.5 kN
Reference grease quantity G_{ref}	1.98 cm ³