



Bearing No. 7205 CD/HCP4A

a	12.8 mm
d	25 mm
D	52 mm
B	15 mm
Bore	0.984 Inch 25 Millimeter
Noun	Bearing
Width	0.591 Inch 15 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	13
Category	Precision Ball Bearings
Size (mm)	52x25x15
Enclosure	Open
Inventory	0.0
Width (mm)	15
Weight / LBS	0.262
Flush Ground	No
Mass bearing	0.11 kg
d ₁	34.1 mm
d ₂	34.1 mm
D ₁	43.7 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d _n	36.1 mm
Product Group	B04270
Contact Angle	15 Degree
D ₁	43.7 mm
d	36.1 mm

n	
d ₂	34.1 mm
d ₁	34.1 mm
Bearing number	7205 CD/HCP4A
Keyword String	Ball Angular Contact
Other Features	Single Row Angular Contact High Capacity Basic Design
Preload class B	42 N/micron
Rolling Element	Ball Bearing
Material - Ball	Ceramic
Precision Class	ABEC 7 ISO P4
G _{ref}	1.872 cm ³
Preload class C	58 N/micron
Preload class D	80 N/micron
Preload class A	32 N/micron
Outside Diameter	2.047 Inch 52 Millimeter
Manufacturer URL	http://www.skf.com
Long Description	25MM Bore; 52MM Outside Diameter; 15MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Ra
Manufacturer Name	SKF
Number of balls z	13
Weight / Kilogram	0
d _a min.	30.6 mm
d _b min.	30.6 mm
Bore Diameter (mm)	52

Number of Bearings	1 (Single)
r_b max.	0.3 mm
r_a max.	1 mm
D_a max.	46.4 mm
D_b max.	49.6 mm
Outer Diameter (mm)	25
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
d_a - min.	30.6 mm
Calculation factor f	1.03
d_b - min.	30.6 mm
Ball - D_w	7.938 mm
D_a - max.	46.4 mm
r_a - max.	1 mm
r_b - max.	0.3 mm
D_b - max.	49.6 mm
Minimum Buy Quantity	N/A
$r_{1,2}$ - min.	1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.3 mm
Manufacturer Item Number	7205 CD/HCP4A
Basic dynamic load rating C	13.5 kN
Ball diameter D_w	7.938 mm
Preload class B G_B	100 N
Preload class A G_A	50 N
Preload class C G_C	200 N
Preload class D G_D	400 N
Basic dynamic load rating - C	13.5 kN
Preload class B - G_B	100 N

Preload class C - G_C	200 N
Preload class A - G_A	50 N
Preload class D - G_D	400 N
Calculation factor f_1	1
Fatigue load limit P_u	0.305 kN
Calculation factor f_0	9.1
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	9.1
Fatigue load limit - P_u	0.305 kN
Limiting speed for oil lubrication	53000 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	38000 r/min
Basic static load rating C_0	7.2 kN
Static axial stiffness, preload class A	32 N/ μ m
Static axial stiffness, preload class B	42 N/ μ m
Static axial stiffness, preload class C	58 N/ μ m
Static axial stiffness,	80 N/ μ m

preload class D	
Attainable speed for grease lubrication	38000 r/min
Attainable speed for oil-air lubrication	53000 r/min
Basic static load rating - C_0	7.2 kN
Reference grease quantity G_{ref}	1.872 cm ³