



Bearing No. 7209 CD/P4A

D	85 mm
d	45 mm
B	19 mm
a	18.3 mm
Noun	Bearing
Bore	1.772 Inch 45 Millimeter
Width	0.748 Inch 19 Millimeter
UNSPSC	31171531
Preload	None
Category	Precision Ball Bearings
Ball - z	14
Inventory	0.0
Enclosure	Open
Size (mm)	85x45x19
Width (mm)	19
Flush Ground	No
Mass bearing	0.41 kg
d ₁	57.3 mm
d ₂	57.3 mm
d _n	60.6 mm
Inch - Metric	Metric
D ₁	72.7 mm
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d ₂	57.3 mm
Contact Angle	15 Degree
d ₁	57.3 mm
D ₁	72.7 mm

d_n	60.6 mm
Product Group	B04270
Other Features	Single Row Angular Contact Super Precision High Capacity Basic Design
Keyword String	Ball Angular Contact
Bearing number	7209 CD/P4A
G_{ref}	5.922 cm3
Rolling Element	Ball Bearing
Material - Ball	Steel
Preload class A	61 N/micron
Preload class B	82 N/micron
Preload class C	115 N/micron
Preload class D	166 N/micron
Precision Class	ABEC 7 ISO P4
Long Description	45MM Bore; 85MM Outside Diameter; 19MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Race
Manufacturer URL	http://www.skf.com
Outside Diameter	3.346 Inch 85 Millimeter
Number of balls z	14
Weight / Kilogram	0.407
Manufacturer Name	SKF
Number of Bearings	1 (Single)
d_a min.	52 mm
d_b min.	52 mm
D_a max.	78 mm

D_b max.	80.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
Bore Diameter (mm)	85
Outer Diameter (mm)	45
$r_{3,4}$ min.	0.6 mm
$r_{1,2}$ min.	1.1 mm
d_b - min.	52 mm
Calculation factor f	1.07
D_a - max.	78 mm
D_b - max.	80.8 mm
r_a - max.	1 mm
d_a - min.	52 mm
Ball - D_w	12.7 mm
r_b - max.	0.6 mm
Minimum Buy Quantity	N/A
Calculation factor - f	1.07
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1.1 mm
Harmonized Tariff Code	8482.10.50.28
Basic dynamic load rating C	42.3 kN
Ball diameter D_w	12.7 mm
Basic dynamic load rating - C	42.3 kN
Preload class D G_D	1280 N
Preload class C G_C	640 N
Preload class B G_B	320 N
Preload class A G_A	160 N
Preload class D - G_D	1280 N
Preload class C - G_C	640 N
Preload class B - G_B	320 N

Preload class A - G_A	160 N
Calculation factor f_0	14.2
Calculation factor f_1	1
Fatigue load limit P_u	1.32 kN
Calculation factor - f	1
Calculation factor f_{HC}	1
Calculation factor f_{2D}	1.05
Calculation factor f_{2C}	1.03
Calculation factor f_{2B}	1.01
Calculation factor f_{2A}	1
Calculation factor - f_0	14.2
Limiting speed for oil lubrication	28000 mm/min
Fatigue load limit - P_u	1.3 kN
Calculation factor - f_{2D}	1.05
Calculation factor - f_{2A}	1
Calculation factor - f_{HC}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.03
Limiting speed for grease lubrication	17000 r/min
Basic static load rating C_0	31 kN
Static axial stiffness, preload class D	166 N/ μ m
Static axial stiffness, preload class B	82 N/ μ m
Static axial stiffness, preload class A	61 N/ μ m
Attainable speed for grease lubrication	17000 r/min
Static axial stiffness, preload class C	115 N/ μ m

Basic static load rating - C_0	31 kN
Attainable speed for oil- air lubrication	28000 r/min
Reference grease quantity G_{ref}	5.922 cm ³