



Bearing No. 7009 CD/P4A

D	75 mm
d	45 mm
B	16 mm
a	16.1 mm
Noun	Bearing
Bore	1.772 Inch 45 Millimeter
Width	0.63 Inch 16 Millimeter
UNSPSC	31171531
Preload	None
Category	Precision Ball Bearings
Ball - z	17
Inventory	0.0
Enclosure	Open
Size (mm)	75x45x16
Width (mm)	16
Flush Ground	No
Mass bearing	0.23 kg
d ₁	54.2 mm
d ₂	54.2 mm
d _n	56.2 mm
Inch - Metric	Metric
D ₁	65.8 mm
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d ₂	54.2 mm
Contact Angle	15 Degree
d ₁	54.2 mm
D ₁	65.8 mm
d _n	56.2 mm

Product Group	B04270
Other Features	Single Row Angular Contact High Capacity Basic Design
Keyword String	Ball Angular Contact
Bearing number	7009 CD/P4A
Material - Ball	Steel
Preload class A	56 N/micron
Precision Class	ABEC 7 ISO P4
Rolling Element	Ball Bearing
Preload class D	155 N/micron
G_{ref}	3.3 cm ³
Preload class B	76 N/micron
Preload class C	107 N/micron
Manufacturer URL	http://www.skf.com
Long Description	45MM Bore; 75MM Outside Diameter; 16MM 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
Outside Diameter	2.953 Inch 75 Millimeter
Manufacturer Name	SKF
Weight / Kilogram	0.232
Number of balls z	17
D_a max.	70.4 mm
D_b max.	73 mm
r_a max.	1 mm
r_b max.	0.3 mm
d_b min.	49.6 mm
d_a min.	49.6 mm

Bore Diameter (mm)	75
Number of Bearings	1 (Single)
Outer Diameter (mm)	45
Ball - D_w	9.525 mm
D_a - max.	70.4 mm
$r_{3,4}$ min.	0.3 mm
$r_{1,2}$ min.	1 mm
d_a - min.	49.6 mm
d_b - min.	49.6 mm
Minimum Buy Quantity	N/A
D_b - max.	73 mm
r_a - max.	1 mm
r_b - max.	0.3 mm
Calculation factor f	1.09
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.09
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	1 mm
Basic dynamic load rating C	28.6 kN
Ball diameter D_w	9.525 mm
Preload class A G_A	110 N
Basic dynamic load rating - C	28.6 kN
Preload class B G_B	220 N
Preload class C G_C	440 N
Preload class D G_D	880 N
Preload class D - G_D	880 N
Preload class B - G_B	220 N
Preload class C - G_C	440 N
Preload class A - G_A	110 N
Calculation factor f_0	15.1

Fatigue load limit P_u	0.95 kN
Calculation factor f_1	1
Calculation factor f_{HC}	1
Calculation factor f_{2D}	1.09
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor - f	1
Calculation factor f_{2A}	1
Calculation factor - f_0	15.1
Limiting speed for oil lubrication	30000 mm/min
Fatigue load limit - P_u	0.95 kN
Calculation factor - f_{HC}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2D}	1.09
Calculation factor - f_{2C}	1.05
Limiting speed for grease lubrication	19000 r/min
Basic static load rating C_0	22.4 kN
Static axial stiffness, preload class B	76 N/ μ m
Static axial stiffness, preload class C	107 N/ μ m
Static axial stiffness, preload class D	155 N/ μ m
Static axial stiffness, preload class A	56 N/ μ m
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min

Basic static load rating - C_0	22.4 kN
Reference grease quantity G_{ref}	3.3 cm ³