



Bearing No. S7209 ACD/P4A

a	24.8 mm
d	45 mm
D	85 mm
B	19 mm
Noun	Bearing
Bore	1.772 Inch 45 Millimeter
Width	0.748 Inch 19 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	14
Category	Precision Ball Bearings
Enclosure	2 Seals
Size (mm)	85x45x19
Inventory	0.0
Width (mm)	19
Weight / LBS	0.926
Flush Ground	No
Mass bearing	0.42 kg
d_1	57.3 mm
d_2	57.3 mm
Inch - Metric	Metric
Cage Material	Phenolic
D_2	75.7 mm
Contact Angle	25 Degree
Product Group	B04270
Raceway Style	1 Rib Outer Ring
D_2	75.7 mm
d_1	57.3 mm

d ₂	57.3 mm
Bearing number	S7209 ACD/P4A
Other Features	Single Row Angular Contact Super Precision
Keyword String	Ball Angular Contact
Enclosure Type	Non Contact Seal
Material - Ball	Steel
Precision Class	ABEC 7 ISO P4
Preload class D	341 N/micron
Preload class C	252 N/micron
Preload class B	190 N/micron
Preload class A	146 N/micron
Rolling Element	Ball Bearing
Outside Diameter	3.346 Inch 85 Millimeter
Long Description	45MM Bore; 85MM Outside Diameter; 19MM Width; 2 Seals; ISO P4; Single; Phenolic Cage
Manufacturer URL	http://www.skf.com
Number of balls z	14
Weight / Kilogram	0.46
Manufacturer Name	SKF
Number of Bearings	1 (Single)
r _b max.	0.6 mm
r _a max.	1 mm
D _b max.	80.8 mm
D _a max.	78 mm
d _b max.	56.5 mm
d _b min.	52 mm
d _a max.	56.5 mm
d _a min.	52 mm

Bore Diameter (mm)	85
Outer Diameter (mm)	45
$r_{1,2}$ min.	1.1 mm
Calculation factor f	1.07
d_a - min.	52 mm
Calculation factor e	0.68
d_a - max.	56.5 mm
$r_{3,4}$ min.	0.6 mm
Ball - D_w	12.7 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
d_b - max.	56.5 mm
Minimum Buy Quantity	N/A
Calculation factor - f	1.07
Harmonized Tariff Code	8482.10.50.28
$r_{3,4}$ - min.	0.6 mm
Calculation factor - e	0.68
$r_{1,2}$ - min.	1.1 mm
Manufacturer Item Number	S7209 ACD/P4A
Ball diameter D_w	12.7 mm
Basic dynamic load rating C	41 kN
Preload class A G_A	260 N
Preload class C G_C	1040 N
Preload class D G_D	2080 N
Preload class B G_B	520 N
Basic dynamic load rating - C	41 kN
Preload class D - G_D	2080 N

Preload class B - G_B	520 N
Preload class A - G_A	260 N
Preload class C - G_C	1040 N
Calculation factor f_1	0.99
Fatigue load limit P_u	1.25 kN
Calculation factor f_{2B}	1.01
Calculation factor f_{2A}	1
Calculation factor f_{2C}	1.02
Calculation factor f_{2D}	1.05
Calculation factor f_{HC}	1
Calculation factor - Y_2	1.41
Fatigue load limit - P_u	1.2 kN
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Calculation factor - f_1	0.99
Calculation factor - Y_1	0.92
Calculation factor - f_{2D}	1.05
Calculation factor - f_{2C}	1.02
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2A}	1
Calculation factor - f_{HC}	1
Limiting speed for grease lubrication	15000 r/min
Basic static load rating C_0	30 kN
Static axial stiffness, preload class D	341 N/ μ m
Static axial stiffness, preload class C	252 N/ μ m
Static axial stiffness, preload class A	146 N/ μ m

Attainable speed for grease lubrication	15000 r/min
Static axial stiffness, preload class B	190 N/μm
Basic static load rating - C_0	30 kN
Calculation factor (single, tandem) Y_2	0.87
Calculation factor (single, tandem) Y_0	0.38
Calculation factor (single, tandem) X_2	0.41
Calculation factor (back-to-back, face-to-face) Y_1	0.92
Calculation factor (back-to-back, face-to-face) Y_2	1.41
Calculation factor (back-to-back, face-to-face) Y_0	0.76
Calculation factor (back-to-back, face-to-face) X_2	0.67