



Bearing No. 7205 ACD/P4A

a	16.7 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	0.298
Flush Ground	No
Mass bearing	0.13 kg
d ₁	34.1 mm
d ₂	34.1 mm
D ₁	43.7 mm
Inch - Metric	Metric
Cage Material	Phenolic
d _n	36.1 mm
Contact Angle	25 Degree
Product Group	B04270
Raceway Style	1 Rib Outer Ring
d ₁	34.1 mm
d	36.1 mm

n	
D ₁	43.7 mm
d ₂	34.1 mm
Bearing number	7205 ACD/P4A
Other Features	Single Row Angular Contact Super Precision High Capacity
Keyword String	Angular Contact Ball
Material - Ball	Steel
Precision Class	ABEC 7 ISO P4
G _{ref}	1.872 cm ³
Preload class D	158 N/micron
Preload class C	119 N/micron
Preload class B	92 N/micron
Preload class A	71 N/micron
Rolling Element	Ball Bearing
Outside Diameter	2.047 Inch 52 Millimeter
Long Description	25MM Bore; 52MM Outside Diameter; 15MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Rac
Manufacturer URL	http://www.skf.com
Weight / Kilogram	0.14
Manufacturer Name	SKF
Number of balls z	13
r _b max.	0.3 mm
Bore Diameter (mm)	52
D _a max.	46.4 mm

D_b max.	49.6 mm
d_a min.	30.6 mm
r_a max.	1 mm
Number of Bearings	1 (Single)
d_b min.	30.6 mm
Outer Diameter (mm)	25
d_a - min.	30.6 mm
$r_{1,2}$ min.	1 mm
d_b - min.	30.6 mm
Calculation factor f	1.03
$r_{3,4}$ min.	0.3 mm
Calculation factor e	0.68
D_a - max.	46.4 mm
Ball - D_w	7.938 mm
D_b - max.	49.6 mm
Minimum Buy Quantity	N/A
r_b - max.	0.3 mm
r_a - max.	1 mm
Calculation factor - e	0.68
Calculation factor - f	1.03
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Harmonized Tariff Code	8482.10.50.28
Manufacturer Item Number	7205 ACD/P4A
Ball diameter D_w	7.938 mm
Basic dynamic load rating C	13 kN
Preload class A G_A	80 N
Preload class D G_D	640 N
Preload class C G_C	320 N
Basic dynamic load rating - C	13 kN

Preload class B G_B	160 N
Preload class C - G_C	320 N
Preload class A - G_A	80 N
Preload class D - G_D	640 N
Preload class B - G_B	160 N
Calculation factor f_1	0.99
Fatigue load limit P_u	0.29 kN
Calculation factor f_{2C}	1.02
Calculation factor f_{HC}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2D}	1.05
Calculation factor f_{2A}	1
Calculation factor - Y_0	0.76
Calculation factor - Y_2	1.41
Fatigue load limit - P_u	0.29 kN
Limiting speed for oil lubrication	40000 mm/min
Calculation factor - X_2	0.67
Calculation factor - Y_1	0.92
Calculation factor - f_1	0.99
Calculation factor - f_{2D}	1.05
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.02
Calculation factor - f_{HC}	1
Limiting speed for grease lubrication	26000 r/min
Basic static load rating C_0	6.95 kN
Attainable speed for grease lubrication	26000 r/min

Static axial stiffness, preload class D	158 N/ μ m
Static axial stiffness, preload class C	119 N/ μ m
Static axial stiffness, preload class B	92 N/ μ m
Static axial stiffness, preload class A	71 N/ μ m
Attainable speed for oil-air lubrication	40000 r/min
Basic static load rating - C_0	7 kN
Reference grease quantity G_{ref}	1.872 cm ³
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