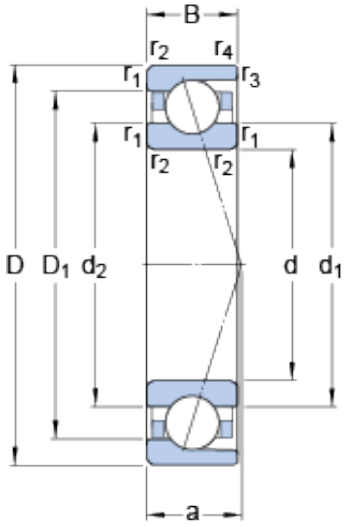
Loyal | 7007 ACD/P4A



Bearing No. 7007 ACD/P4A

a	18.5 mm
d	35 mm
D	62 mm
B	14 mm
Bore	1.378 Inch | 35 Millimeter
Noun	Bearing
Width	0.551 Inch | 14 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	16
Category	Precision Ball Bearings
Size (mm)	62x35x14
Enclosure	Open
Inventory	0.0
Width (mm)	14
Weight / LBS	0.355
Flush Ground	No
Mass bearing	0.15 kg
d_1	43.7 mm
d_2	43.7 mm
D_1	53.3 mm
Inch - Metric	Metric
Cage Material	Phenolic
d_n	45.3 mm
Contact Angle	25 Degree
Product Group	B04270
Raceway Style	1 Rib Outer Ring
d_1	43.7 mm
d	45.3 mm

$_n$	
D_1	53.3 mm
d_2	43.7 mm
Bearing number	7007 ACD/P4A
Other Features	Single Row | Angular Contact | High Precision
Keyword String	Angular Contact Ball
Material - Ball	Steel
Precision Class	ABEC 7 | ISO P4
G_{ref}	1.98 cm3
Preload class D	190 N/micron
Preload class C	144 N/micron
Preload class B	110 N/micron
Preload class A	86 N/micron
Rolling Element	Ball Bearing
Long Description	35MM Bore; 62MM Outside Diameter; 14MM 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
Outside Diameter	2.441 Inch | 62 Millimeter
Manufacturer Name	SKF
Number of balls z	16
Weight / Kilogram	0.162
Number of Bearings	1 (Single)
Bore Diameter (mm)	62
r_b max.	0.3 mm
r_a max.	1 mm

D_b max.	60 mm
D_a max.	57.4 mm
d_b min.	39.6 mm
d_a min.	39.6 mm
Outer Diameter (mm)	35
$r_{1,2}$ min.	1 mm
D_a - max.	57.4 mm
d_a - min.	39.6 mm
d_b - min.	39.6 mm
Calculation factor f	1.06
$r_{3,4}$ min.	0.3 mm
Calculation factor e	0.68
Ball - D_w	7.938 mm
D_b - max.	60 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	1.06
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Harmonized Tariff Code	8482.10.50.28
Manufacturer Item Number	7007 ACD/P4A
Ball diameter D_w	7.938 mm
Basic dynamic load rating C	14.8 kN
Preload class A G_A	90 N
Preload class D G_D	720 N
Preload class C G_C	360 N
Basic dynamic load rating - C	14.8 kN
Preload class B G_B	180 N

Preload class C - G_C	360 N
Preload class A - G_A	90 N
Preload class D - G_D	720 N
Preload class B - G_B	180 N
Calculation factor f_1	0.99
Fatigue load limit P_u	0.38 kN
Calculation factor f_{2C}	1.05
Calculation factor f_{HC}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2D}	1.08
Calculation factor f_{2A}	1
Calculation factor - Y_0	0.76
Calculation factor - Y_2	1.41
Fatigue load limit - P_u	0.38 kN
Limiting speed for oil lubrication	32000 mm/min
Calculation factor - X_2	0.67
Calculation factor - Y_1	0.92
Calculation factor - f_1	0.99
Calculation factor - f_{2D}	1.08
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{HC}	1
Limiting speed for grease lubrication	20000 r/min
Basic static load rating C_0	9 kN
Attainable speed for grease lubrication	20000 r/min
Static axial stiffness,	190 N/µm

preload class D	
Static axial stiffness, preload class C	144 N/µm
Static axial stiffness, preload class B	110 N/µm
Static axial stiffness, preload class A	86 N/µm
Attainable speed for oil-air lubrication	32000 r/min
Basic static load rating - C_0	9 kN
Reference grease quantity G_{ref}	1.98 cm³
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