



ASAHI FORGE OF AMERICA BEARING CORP.



7200 ACD/HCP4A Bearing 2D drawings and 3D CAD models

10 mm x 30 mm x 9 mm SKF 7200
ACD/HCP4A angular contact ball bearings

Bearing No. 7200 ACD/HCP4A

Size	30x10x9 mm
Bore Diameter	30 mm
Outer Diameter	10 mm
Width	9 mm
d	10 mm
D	30 mm
B	9 mm
d ₁	17.3 mm
d ₂	17.3 mm
D ₁	23.1 mm
r _{1,2} - min.	0.6 mm
r _{3,4} - min.	0.3 mm
a	9.3 mm
d _a - min.	14.2 mm
d _b - min.	14.2 mm
D _a - max.	25.8 mm
D _b - max.	27.6 mm
r _a - max.	0.6 mm
r _b - max.	0.3 mm
d _n	18.3 mm
Basic dynamic load rating - C	4.4 kN
Basic static load rating - C ₀	1.9 kN
Fatigue load limit - P _u	0.078 kN
Limiting speed for grease	63000 r/min



ASAHI FORGE OF AMERICA BEARING CORP.

Lubrication	
Limiting speed for oil lubrication	95000 mm/min
Ball - D_w	4.762 mm
Ball - z	10
G_{ref}	0.357 cm ³
Calculation factor - e	0.68
Calculation factor - Y_2	0.87
Calculation factor - Y_0	0.38
Calculation factor - X_2	0.41
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Preload class A - G_A	27 N
Preload class B - G_B	54 N
Preload class C - G_C	108 N
Preload class D - G_D	216 N
Calculation factor - f	1.02
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.03
Calculation factor - f_{2D}	1.06
Calculation factor - f_{HC}	1.01
Preload class A	39 N/micron
Preload class B	50 N/micron
Preload class C	66 N/micron
Preload class D	87 N/micron



ASAHI FORGE OF AMERICA BEARING CORP.

d_1	17.3 mm
d_2	17.3 mm
D_1	23.1 mm
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
d_a min.	14.2 mm
d_b min.	14.2 mm
D_a max.	25.8 mm
D_b max.	27.6 mm
r_a max.	0.6 mm
r_b max.	0.3 mm
d_n	18.3 mm
Basic dynamic load rating C	4.36 kN
Basic static load rating C_0	1.86 kN
Fatigue load limit P_u	0.078 kN
Attainable speed for grease lubrication	63000 r/min
Attainable speed for oil-air lubrication	95000 r/min
Ball diameter D_w	4.762 mm
Number of balls z	10
Reference grease quantity G_{ref}	0.357 cm ³
Preload class A G_A	27 N
Static axial stiffness, preload class A	39 N/ μ m
Preload class B G_B	54 N
Static axial stiffness, preload class B	50 N/ μ m
Preload class C G_C	108 N
Static axial stiffness, preload class C	66 N/ μ m
Preload class D G_D	216 N
Static axial stiffness, preload class D	87 N/ μ m



ASAHI FORGE OF AMERICA BEARING CORP.

class D	
Calculation factor f	1.02
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2C}	1.03
Calculation factor f_{2D}	1.06
Calculation factor f_{HC}	1.01
Calculation factor e	0.68
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
Mass bearing	0.029 kg