



Bearing Manufacturing of America



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

7 mm x 22 mm x 7 mm 7 mm x 22 mm x 7 mm
SKF 727 ACD/HCP4A angular contact ball bearings

Bearing No. 727 ACD/HCP4A

Size	22x7x7 mm
Bore Diameter	22 mm
Outer Diameter	7 mm
Width	7 mm
d	7 mm
D	22 mm
B	7 mm
d ₁	12.6 mm
d ₂	12.6 mm
D ₁	17.4 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.2 mm
a	7.1 mm
d _a - min.	9.4 mm
d _b - min.	9.4 mm
D _a - max.	19.6 mm
D _b - max.	20.2 mm
r _a - max.	0.3 mm
r _b - max.	0.2 mm
d _n	13.6 mm
Basic dynamic load rating - C	2.9 kN
Basic static load rating - C ₀	1.1 kN
Fatigue load limit - P _u	0.048 kN



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Limiting speed for grease lubrication	85000 r/min
Limiting speed for oil lubrication	130000 mm/min
Ball - D_w	3.969 mm
Ball - z	9
G_{ref}	0.162 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	18 N
Preload class B - G_B	36 N
Preload class C - G_C	72 N
Preload class D - G_D	144 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	30 N/micron
Preload class B	39 N/micron
Preload class C	51 N/micron
Preload class D	68 N/micron



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d_1	12.6 mm
d_2	12.6 mm
D_1	17.4 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
d_a min.	9.4 mm
d_b min.	9.4 mm
D_a max.	19.6 mm
D_b max.	20.2 mm
r_a max.	0.3 mm
r_b max.	0.2 mm
d_n	13.6 mm
Basic dynamic load rating C	2.91 kN
Basic static load rating C_0	1.12 kN
Fatigue load limit P_u	0.048 kN
Attainable speed for grease lubrication	85000 r/min
Attainable speed for oil-air lubrication	130000 r/min
Ball diameter D_w	3.969 mm
Number of balls z	9
Reference grease quantity G_{ref}	0.162 cm ³
Preload class A G_A	18 N
Static axial stiffness, preload class A	30 N/ μ m
Preload class B G_B	36 N
Static axial stiffness, preload class B	39 N/ μ m
Preload class C G_C	72 N
Static axial stiffness, preload class C	51 N/ μ m
Preload class D G_D	144 N
Static axial stiffness, preload	68 N/ μ m



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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	0.012 kg