



BEARING-MALAYSIA SDN.BHD.



7030 ACD/HCP4A Bearing 2D drawings and 3D CAD models

150 mm x 225 mm x 35 mm SKF 7030
ACD/HCP4A angular contact ball bearings

Bearing No. 7030 ACD/HCP4A

Size	225x150x35 mm
Bore Diameter	225 mm
Outer Diameter	150 mm
Width	35 mm
d	150 mm
D	225 mm
B	35 mm
d ₁	173.1 mm
d ₂	173.1 mm
D ₁	201.9 mm
r _{1,2} - min.	2.1 mm
r _{3,4} - min.	1 mm
a	61.4 mm
d _a - min.	161 mm
d _b - min.	161 mm
D _a - max.	214 mm
D _b - max.	220 mm
r _a - max.	2 mm
r _b - max.	1 mm
d _n	178.2 mm
Basic dynamic load rating - C	163 kN
Basic static load rating - C ₀	180 kN
Fatigue load limit - P _u	5.6 kN
Limiting speed for grease	6700 r/min



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Lubrication	
Limiting speed for oil lubrication	10000 mm/min
Ball - D_w	23.812 mm
Ball - z	22
G_{ref}	54 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	1000 N
Preload class B - G_B	2000 N
Preload class C - G_C	4000 N
Preload class D - G_D	8000 N
Calculation factor - f	1.16
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1.02
Preload class A	430 N/micron
Preload class B	562 N/micron
Preload class C	745 N/micron
Preload class D	1009 N/micron



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d_1	173.1 mm
d_2	173.1 mm
D_1	201.9 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1 mm
d_a min.	161 mm
d_b min.	161 mm
D_a max.	214 mm
D_b max.	220 mm
r_a max.	2 mm
r_b max.	1 mm
d_n	178.2 mm
Basic dynamic load rating C	163 kN
Basic static load rating C_0	180 kN
Fatigue load limit P_u	5.6 kN
Attainable speed for grease lubrication	6700 r/min
Attainable speed for oil-air lubrication	10000 r/min
Ball diameter D_w	23.812 mm
Number of balls z	22
Reference grease quantity G_{ref}	54 cm ³
Preload class A G_A	1000 N
Static axial stiffness, preload class A	430 N/ μ m
Preload class B G_B	2000 N
Static axial stiffness, preload class B	562 N/ μ m
Preload class C G_C	4000 N
Static axial stiffness, preload class C	745 N/ μ m
Preload class D G_D	8000 N
Static axial stiffness, preload class D	1009 N/ μ m



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class D	
Calculation factor f	1.16
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1.02
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	3.44 kg