



## BEARING DRIVESHAFT, INC.



7044 ACD/HCP4A Bearing 2D drawings and 3D CAD models

220 mm x 340 mm x 56 mm SKF 7044  
ACD/HCP4A angular contact ball bearings

Bearing No. 7044 ACD/HCP4A

Size	340x220x56 mm
Bore Diameter	340 mm
Outer Diameter	220 mm
Width	56 mm
d	220 mm
D	340 mm
B	56 mm
d <sub>1</sub>	257 mm
d <sub>2</sub>	257 mm
D <sub>1</sub>	303 mm
r <sub>1,2</sub> - min.	3 mm
r <sub>3,4</sub> - min.	1.5 mm
a	93.6 mm
d <sub>a</sub> - min.	233 mm
d <sub>b</sub> - min.	233 mm
D <sub>a</sub> - max.	327 mm
D <sub>b</sub> - max.	334 mm
r <sub>a</sub> - max.	2.5 mm
r <sub>b</sub> - max.	1.5 mm
d <sub>n</sub>	267.1 mm
Basic dynamic load rating - C	319 kN
Basic static load rating - C <sub>0</sub>	440 kN
Fatigue load limit - P <sub>u</sub>	11 kN
Limiting speed for grease	4500 r/min



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Lubrication	
Limiting speed for oil lubrication	6700 mm/min
Ball - $D_w$	38.1 mm
Ball - $z$	21
$G_{ref}$	201 cm <sup>3</sup>
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 - $G_A$	2000 N
Preload class B - $G_B$	4000 N
Preload class C - $G_C$	8000 N
Preload class D - $G_D$	16000 N
Calculation factor - $f$	1.13
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	607 N/micron
Preload class B	789 N/micron
Preload class C	1037 N/micron
Preload class D	1392 N/micron



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$d_1$	257 mm
$d_2$	257 mm
$D_1$	303 mm
$r_{1,2}$ min.	3 mm
$r_{3,4}$ min.	1.5 mm
$d_a$ min.	233 mm
$d_b$ min.	233 mm
$D_a$ max.	327 mm
$D_b$ max.	334 mm
$r_a$ max.	2.5 mm
$r_b$ max.	1.5 mm
$d_n$	267.1 mm
Basic dynamic load rating C	319 kN
Basic static load rating $C_0$	440 kN
Fatigue load limit $P_u$	11 kN
Attainable speed for grease lubrication	4500 r/min
Attainable speed for oil-air lubrication	6700 r/min
Ball diameter $D_w$	38.1 mm
Number of balls z	21
Reference grease quantity $G_{ref}$	201 cm <sup>3</sup>
Preload class A $G_A$	2000 N
Static axial stiffness, preload class A	607 N/ $\mu$ m
Preload class B $G_B$	4000 N
Static axial stiffness, preload class B	789 N/ $\mu$ m
Preload class C $G_C$	8000 N
Static axial stiffness, preload class C	1037 N/ $\mu$ m
Preload class D $G_D$	16000 N
Static axial stiffness, preload class D	1392 N/ $\mu$ m



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class D	
Calculation factor f	1.13
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	13.2 kg