



Off-the-shelf SKF shaft Co., Ltd



7017 ACD/HCP4A Bearing 2D drawings and 3D CAD models

85 mm x 130 mm x 22 mm SKF 7017 ACD/HCP4A Super Precision Bearings

Bearing No. 7017 ACD/HCP4A

Size	130x85x22 mm
Bore Diameter	130 mm
Outer Diameter	85 mm
Width	22 mm
d	85 mm
D	130 mm
B	22 mm
d ₁	98.9 mm
d ₂	98.9 mm
D ₁	116.1 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	36.2 mm
d _a - min.	91 mm
d _b - min.	91 mm
D _a - max.	124 mm
D _b - max.	126 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	101.9 mm
Basic dynamic load rating - C	63.7 kN
Basic static load rating - C ₀	62 kN
Fatigue load limit - P _u	2.5 kN
Limiting speed for grease	11000 r/min



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Lubrication	
Limiting speed for oil lubrication	17000 mm/min
Ball - D_w	14.288 mm
Ball - z	21
G_{ref}	11.7 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	400 N
Preload class B - G_B	800 N
Preload class C - G_C	1600 N
Preload class D - G_D	3200 N
Calculation factor - f	1.15
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	258 N/micron
Preload class B	338 N/micron
Preload class C	450 N/micron
Preload class D	609 N/micron



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d_1	98.9 mm
d_2	98.9 mm
D_1	116.1 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	91 mm
d_b min.	91 mm
D_a max.	124 mm
D_b max.	126 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	101.9 mm
Basic dynamic load rating C	63.7 kN
Basic static load rating C_0	62 kN
Fatigue load limit P_u	2.5 kN
Attainable speed for grease lubrication	11000 r/min
Attainable speed for oil-air lubrication	17000 r/min
Ball diameter D_w	14.288 mm
Number of balls z	21
Reference grease quantity G_{ref}	11.7 cm ³
Preload class A G_A	400 N
Static axial stiffness, preload class A	258 N/ μ m
Preload class B G_B	800 N
Static axial stiffness, preload class B	338 N/ μ m
Preload class C G_C	1600 N
Static axial stiffness, preload class C	450 N/ μ m
Preload class D G_D	3200 N
Static axial stiffness, preload class D	609 N/ μ m



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class D	
Calculation factor f	1.15
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	0.74 kg