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71817 ACD/HCP4 Bearing 2D drawings and 3D CAD models

SKF 71817 ACD/HCP4 angular contact ball bearings

Bearing No. 71817 ACD/HCP4

Size	110x85x13 mm
Bore Diameter	110 mm
Outer Diameter	85 mm
Width	13 mm
d	85 mm
D	110 mm
B	13 mm
d ₁	93.2 mm
d ₂	93.2 mm
D ₁	102.1 mm
r _{1,2} - min.	1 mm
r _{3,4} - min.	0.3 mm
a	29.3 mm
d _a - min.	89.6 mm
d _b - min.	89.6 mm
D _a - max.	105.4 mm
D _b - max.	108 mm
r _a - max.	1 mm
r _b - max.	0.3 mm
d _n	94.1 mm
Basic dynamic load rating - C	20.3 kN
Basic static load rating - C ₀	24 kN
Fatigue load limit - P _u	1 kN
Limiting speed for grease	12000 r/min



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Lubrication	
Limiting speed for oil lubrication	19000 mm/min
Ball - D_w	7.144 mm
Ball - z	30
G_{ref}	2.7 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	183 N
Preload class B - G_B	550 N
Preload class C - G_C	1100 N
Calculation factor - f	1.31
Calculation factor - f_1	0.97
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.09
Calculation factor - f_{2C}	1.17
Calculation factor - f_{HC}	1.02
Preload class A	209 N/micron
Preload class B	328 N/micron
Preload class C	451 N/micron
d_1	93.2 mm
d_2	93.2 mm
D_1	102.1 mm
$r_{1,2}$ min.	1 mm



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$r_{3,4}$ min.	0.3 mm
d_a min.	89.6 mm
d_b min.	89.6 mm
D_a max.	105.4 mm
D_b max.	108 mm
r_a max.	1 mm
r_b max.	0.3 mm
d_n	94.1 mm
Basic dynamic load rating C	20.3 kN
Basic static load rating C_0	24 kN
Fatigue load limit P_u	1.02 kN
Attainable speed for grease lubrication	12000 r/min
Attainable speed for oil-air lubrication	19000 r/min
Ball diameter D_w	7.144 mm
Number of balls z	30
Reference grease quantity G_{ref}	2.7 cm ³
Preload class A G_A	183 N
Static axial stiffness, preload class A	209 N/ μ m
Preload class B G_B	550 N
Static axial stiffness, preload class B	328 N/ μ m
Preload class C G_C	1100 N
Static axial stiffness, preload class C	451 N/ μ m
Calculation factor f	1.31
Calculation factor f_1	0.97
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.09
Calculation factor f_{2C}	1.17
Calculation factor f_{HC}	1.02



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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	0.24 kg