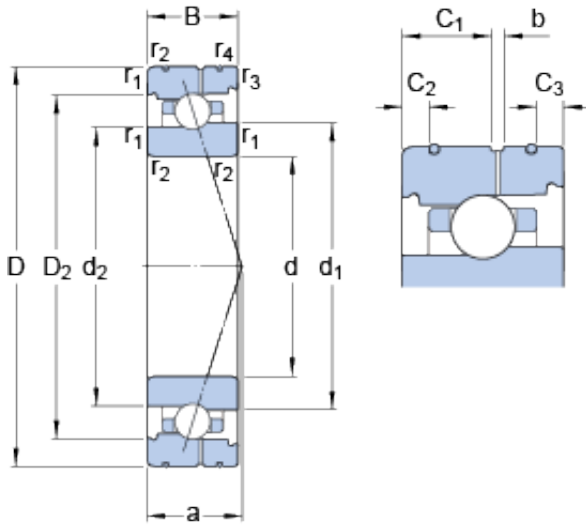




NTL BEARINGS LTD.



7013 ACB/HCP4AL SKF High Speed Angular Contact Ball Bearings

Bearing No. 7013 ACB/HCP4AL

7013 ACB/HCP4AL Bearing 2D drawings and 3D CAD models

Size	100x65x18 mm
Bore Diameter	100 mm
Outer Diameter	65 mm
Width	18 mm
d	65 mm
D	100 mm
B	18 mm
d ₁	78 mm
d ₂	76.36 mm
D ₂	89.69 mm
b	1.5 mm
C ₁	9.7 mm
C ₂	4.3 mm
C ₃	2.8 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	28.4 mm
d _a - min.	71 mm
d _b - min.	71 mm
D _a - max.	94 mm
D _b - max.	96.8 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	79 mm



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Basic dynamic load rating - C	14.6 kN
Basic static load rating - C ₀	12.2 kN
Fatigue load limit - P _u	0.52 kN
Limiting speed for grease lubrication	19000 r/min
Limiting speed for oil lubrication	30000 mm/min
Ball - D _w	7.144 mm
Ball - z	27
G _{ref}	5.49 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	85 N
Preload class B - G _B	170 N
Preload class C - G _C	510 N
Calculation factor - f	1.07
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 _{HC}	1.01
Preload class A	120 N/micron
Preload class B	153 N/micron



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Preload class C	230 N/micron
d_1	78 mm
d_2	76.36 mm
D_2	89.69 mm
C_1	9.7 mm
C_2	4.3 mm
C_3	2.8 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	71 mm
d_b min.	71 mm
D_a max.	94 mm
D_b max.	96.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	79 mm
Basic dynamic load rating C	19 kN
Basic static load rating C_0	20 kN
Fatigue load limit P_u	0.52 kN
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min
Ball diameter D_w	7.144 mm
Number of balls z	27
Reference grease quantity G_{ref}	5.49 cm ³
Preload class A G_A	85 N
Static axial stiffness, preload class A	120 N/ μ m
Preload class B G_B	170 N
Static axial stiffness, preload class B	153 N/ μ m
Preload class C G_C	510 N



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Static axial stiffness, preload class C	230 N/ μ m
Calculation factor f	1.07
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_{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	0.45 kg