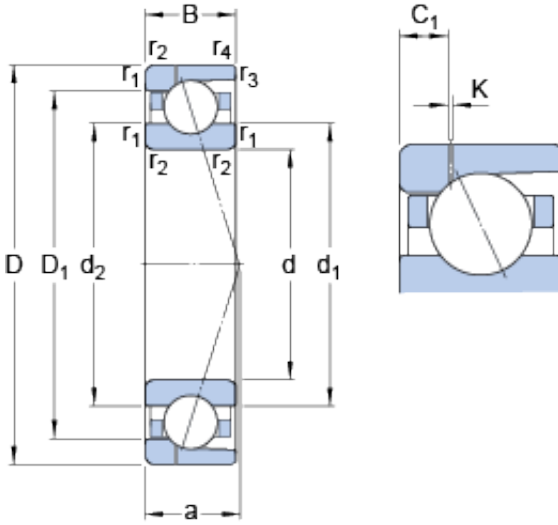




NTL BEARINGS LTD.



7013 ACD/HCP4AH1 SKF High Speed Angular Contact Ball Bearings

Bearing No. 7013 ACD/HCP4AH1

7013 ACD/HCP4AH1 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	75.8 mm
d ₂	75.8 mm
D ₁	89.2 mm
K	0.5 mm
C ₁	4.9 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	28.3 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	78.1 mm
Basic dynamic load rating - C	39 kN
Basic static load rating - C ₀	35.5 kN



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Fatigue load limit - P_u	1.5 kN
Limiting speed for grease lubrication	15000 r/min
Limiting speed for oil lubrication	22000 mm/min
Ball - D_w	11.112 mm
Ball - z	20
G_{ref}	5.7 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	240 N
Preload class B - G_B	480 N
Preload class C - G_C	960 N
Preload class D - G_D	1920 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	193 N/micron
Preload class B	253 N/micron
Preload class C	335 N/micron



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Preload class D	453 N/micron
d_1	75.8 mm
d_2	75.8 mm
D_1	89.2 mm
C_1	4.9 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	78.1 mm
Basic dynamic load rating C	39 kN
Basic static load rating C_0	35.5 kN
Fatigue load limit P_u	1.5 kN
Attainable speed for grease lubrication	15000 r/min
Attainable speed for oil-air lubrication	22000 r/min
Ball diameter D_w	11.112 mm
Number of balls z	20
Reference grease quantity G_{ref}	5.7 cm ³
Preload class A G_A	240 N
Static axial stiffness, preload class A	193 N/ μ m
Preload class B G_B	480 N
Static axial stiffness, preload class B	253 N/ μ m
Preload class C G_C	960 N
Static axial stiffness, preload class C	335 N/ μ m



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Preload class D G_D	1920 N
Static axial stiffness, preload class D	453 N/ μ m
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	0.36 kg