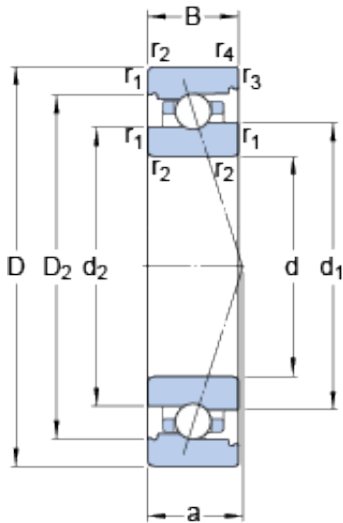




NTN Bearing Manufacturing



70 mm x 100 mm x 16 mm SKF 71914 ACB/HCP4A angular contact ball bearings

Bearing No. 71914 ACB/HCP4A

71914 ACB/HCP4A Bearing 2D drawings and 3D CAD models

Size	100x70x16 mm
Bore Diameter	100 mm
Outer Diameter	70 mm
Width	16 mm
d	70 mm
D	100 mm
B	16 mm
d ₁	80.94 mm
d ₂	79.55 mm
D ₂	91.66 mm
r _{1,2} - min.	1 mm
r _{3,4} - min.	0.3 mm
a	31.2 mm
d _a - min.	74.6 mm
d _b - min.	74.6 mm
D _a - max.	95.4 mm
D _b - max.	98 mm
r _a - max.	1 mm
r _b - max.	0.3 mm
d _n	81.9 mm
Basic dynamic load rating - C	12.7 kN
Basic static load rating - C ₀	11.6 kN
Fatigue load limit - P _u	0.49 kN
Limiting speed for grease	19000 r/min



NTN Bearing Manufacturing

Lubrication	
Limiting speed for oil lubrication	30000 mm/min
Ball - D_w	6.35 mm
Ball - z	32
G_{ref}	4.49 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	75 N
Preload class B - G_B	150 N
Preload class C - G_C	450 N
Calculation factor - f	1.1
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.08
Calculation factor - f_{HC}	1.01
Preload class A	125 N/micron
Preload class B	160 N/micron
Preload class C	244 N/micron
d_1	80.94 mm
d_2	79.55 mm
D_2	91.66 mm
$r_{1,2}$ min.	1 mm



NTN Bearing Manufacturing

$r_{3,4}$ min.	0.3 mm
d_a min.	74.6 mm
d_b min.	74.6 mm
D_a max.	95.4 mm
D_b max.	98 mm
r_a max.	1 mm
r_b max.	0.3 mm
d_n	81.9 mm
Basic dynamic load rating C	17.4 kN
Basic static load rating C_0	18.6 kN
Fatigue load limit P_u	0.49 kN
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min
Ball diameter D_w	6.35 mm
Number of balls z	32
Reference grease quantity G_{ref}	4.49 cm ³
Preload class A G_A	75 N
Static axial stiffness, preload class A	125 N/ μ m
Preload class B G_B	150 N
Static axial stiffness, preload class B	160 N/ μ m
Preload class C G_C	450 N
Static axial stiffness, preload class C	244 N/ μ m
Calculation factor f	1.1
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.08
Calculation factor f_{HC}	1.01



NTN Bearing Manufacturing

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	0.33 kg