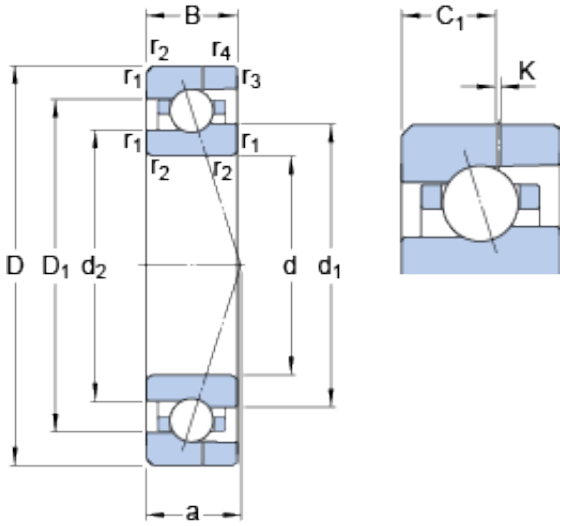
NTA PRECISION AXLE CORP.



709 ACE/HCP4AH Bearing 2D drawings and 3D CAD models

9 mm x 24 mm x 7 mm SKF 709 ACE/HCP4AH angular contact ball bearings

Bearing No. 709 ACE/HCP4AH

Size	24x9x7 mm
Bore Diameter	24 mm
Outer Diameter	9 mm
Width	7 mm
d	9 mm
D	24 mm
B	7 mm
d_1	13.6 mm
d_2	13 mm
D_1	19.4 mm
K	0.5 mm
C_1	4.25 mm
$r_{1,2}$ - min.	0.3 mm
$r_{3,4}$ - min.	0.15 mm
a	7.4 mm
d_a - min.	11 mm
d_b - min.	11 mm
D_a - max.	22 mm
D_b - max.	22.6 mm
r_a - max.	0.3 mm
r_b - max.	0.15 mm
d_n	14.8 mm
Basic dynamic load rating - C	2.5 kN
Basic static load rating - C_0	0.9 kN

Fatigue load limit - P_u	0.038 kN
Limiting speed for grease lubrication	106000 r/min
Limiting speed for oil lubrication	165000 mm/min
Ball - D_w	3.969 mm
Ball - z	9
G_{ref}	0.19 cm3
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	23 N
Preload class B - G_B	65 N
Preload class C - G_C	130 N
Calculation factor - f	1.02
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2C}	1.06
Calculation factor - f_{HC}	1.01
Preload class A	29 N/micron
Preload class B	42 N/micron
Preload class C	55 N/micron
d_1	13.6 mm
d_2	13 mm

D_1	19.4 mm
C_1	4.25 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.15 mm
d_a min.	11 mm
d_b min.	11 mm
D_a max.	22 mm
D_b max.	22.6 mm
r_a max.	0.3 mm
r_b max.	0.15 mm
d_n	14.8 mm
Basic dynamic load rating C	2.51 kN
Basic static load rating C_0	0.9 kN
Fatigue load limit P_u	0.038 kN
Attainable speed for grease lubrication	106000 r/min
Attainable speed for oil-air lubrication	165000 r/min
Ball diameter D_w	3.969 mm
Number of balls z	9
Reference grease quantity G_{ref}	0.19 cm^3
Preload class A G_A	23 N
Static axial stiffness, preload class A	29 N/ µ m
Preload class B G_B	65 N
Static axial stiffness, preload class B	42 N/ µ m
Preload class C G_C	130 N
Static axial stiffness, preload class C	55 N/ µ m
Calculation factor f	1.02
Calculation factor f_1	0.99
Calculation factor f_{2A}	1

Calculation factor f_{2B}	1.03
Calculation factor f_{2C}	1.06
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	0.013 kg