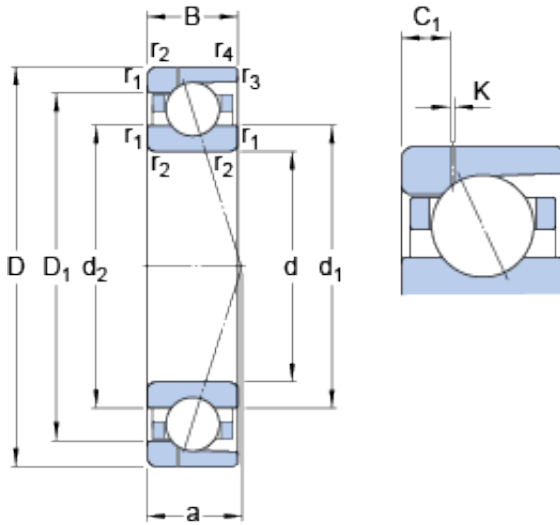




AMERICAN NTN BEARING LTD



95 mm x 145 mm x 24 mm SKF 7019 CD/HCP4AH1 angular contact ball bearings

Bearing No. 7019 CD/HCP4AH1

7019 CD/HCP4AH1 Bearing 2D drawings and 3D CAD models

Size	145x95x24 mm
Bore Diameter	145 mm
Outer Diameter	95 mm
Width	24 mm
d	95 mm
D	145 mm
B	24 mm
d ₁	110.4 mm
d ₂	110.4 mm
D ₁	129.6 mm
K	0.5 mm
C ₁	6.41 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	1 mm
a	28.2 mm
d _a - min.	102 mm
d _b - min.	102 mm
D _a - max.	138 mm
D _b - max.	141 mm
r _a - max.	1.5 mm
r _b - max.	1 mm
d _n	113.7 mm
Basic dynamic load rating - C	81.9 kN
Basic static load rating - C ₀	80 kN



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Fatigue load limit - P_u	3.1 kN
Limiting speed for grease lubrication	11000 r/min
Limiting speed for oil lubrication	17000 mm/min
Ball - D_w	15.875 mm
Ball - z	21
G_{ref}	15.6 cm ³
Calculation factor - f_0	15.7
Preload class A - G_A	310 N
Preload class B - G_B	620 N
Preload class C - G_C	1240 N
Preload class D - G_D	2480 N
Calculation factor - f	1.15
Calculation factor - f	1
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.09
Calculation factor - f_{HC}	1.02
Preload class A	120 N/micron
Preload class B	164 N/micron
Preload class C	231 N/micron
Preload class D	335 N/micron
d_1	110.4 mm
d_2	110.4 mm
D_1	129.6 mm
C_1	6.41 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
d_a min.	102 mm



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d_b min.	102 mm
D_a max.	138 mm
D_b max.	141 mm
r_a max.	1.5 mm
r_b max.	1 mm
d_n	113.7 mm
Basic dynamic load rating C	81.9 kN
Basic static load rating C_0	80 kN
Fatigue load limit P_u	3.1 kN
Attainable speed for grease lubrication	11000 r/min
Attainable speed for oil-air lubrication	17000 r/min
Ball diameter D_w	15.875 mm
Number of balls z	21
Reference grease quantity G_{ref}	15.6 cm ³
Preload class A G_A	310 N
Static axial stiffness, preload class A	120 N/ μ m
Preload class B G_B	620 N
Static axial stiffness, preload class B	164 N/ μ m
Preload class C G_C	1240 N
Static axial stiffness, preload class C	231 N/ μ m
Preload class D G_D	2480 N
Static axial stiffness, preload class D	335 N/ μ m
Calculation factor f	1.15
Calculation factor f_1	1
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05



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Calculation factor f_{2D}	1.09
Calculation factor f_{HC}	1.02
Calculation factor f_0	15.7
Mass bearing	1 kg