



AURORA Bearing Supply Co., Ltd.



120 mm x 165 mm x 22 mm SKF 71924 ACD/HCP4AH1 angular contact ball bearings

Bearing No. 71924 ACD/HCP4AH1

71924 ACD/HCP4AH1 Bearing 2D drawings and 3D
CAD models

Size	165x120x22 mm
Bore Diameter	120 mm
Outer Diameter	165 mm
Width	22 mm
d	120 mm
D	165 mm
B	22 mm
d ₁	133.9 mm
d ₂	133.9 mm
D ₁	151.1 mm
K	0.5 mm
C ₁	6.1 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	44.4 mm
d _a - min.	126 mm
d _b - min.	126 mm
D _a - max.	159 mm
D _b - max.	161 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	137.6 mm
Basic dynamic load rating - C	72.8 kN
Basic static load rating - C ₀	86.5 kN



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Fatigue load limit - P_u	3 kN
Limiting speed for grease lubrication	8000 r/min
Limiting speed for oil lubrication	13000 mm/min
Ball - D_w	14.288 mm
Ball - z	28
G_{ref}	15.3 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	450 N
Preload class B - G_B	900 N
Preload class C - G_C	1800 N
Preload class D - G_D	3600 N
Calculation factor - f	1.26
Calculation factor - f_1	0.98
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.07
Calculation factor - f_{2C}	1.12
Calculation factor - f_{2D}	1.17
Calculation factor - f_{HC}	1.04
Preload class A	335 N/micron
Preload class B	440 N/micron
Preload class C	588 N/micron



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Preload class D	804 N/micron
d_1	133.9 mm
d_2	133.9 mm
D_1	151.1 mm
C_1	6.1 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	126 mm
d_b min.	126 mm
D_a max.	159 mm
D_b max.	161 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	137.6 mm
Basic dynamic load rating C	72.8 kN
Basic static load rating C_0	86.5 kN
Fatigue load limit P_u	3.05 kN
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	13000 r/min
Ball diameter D_w	14.288 mm
Number of balls z	28
Reference grease quantity G_{ref}	15.3 cm ³
Preload class A G_A	450 N
Static axial stiffness, preload class A	335 N/ μ m
Preload class B G_B	900 N
Static axial stiffness, preload class B	440 N/ μ m
Preload class C G_C	1800 N
Static axial stiffness, preload class C	588 N/ μ m



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Preload class D G_D	3600 N
Static axial stiffness, preload class D	804 N/ μ m
Calculation factor f	1.26
Calculation factor f_1	0.98
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.07
Calculation factor f_{2C}	1.12
Calculation factor f_{2D}	1.17
Calculation factor f_{HC}	1.04
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	0.99 kg