



NTN BEARING CORP.



100 mm x 140 mm x 20 mm SKF 71920 ACD/P4AH1 angular contact ball bearings

Bearing No. 71920 ACD/P4AH1

71920 ACD/P4AH1 Bearing 2D drawings and 3D CAD models

Size	140x100x20 mm
Bore Diameter	140 mm
Outer Diameter	100 mm
Width	20 mm
d	100 mm
D	140 mm
B	20 mm
d ₁	112.3 mm
d ₂	112.3 mm
D ₁	127.7 mm
K	0.5 mm
C ₁	5.46 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	38.1 mm
d _a - min.	106 mm
d _b - min.	106 mm
D _a - max.	134 mm
D _b - max.	136 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	115.6 mm
Basic dynamic load rating - C	57.2 kN
Basic static load rating - C ₀	63 kN



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Fatigue load limit - P_u	2.4 kN
Limiting speed for grease lubrication	8000 r/min
Limiting speed for oil lubrication	13000 mm/min
Ball - D_w	12.7 mm
Ball - z	26
G_{ref}	10.5 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	360 N
Preload class B - G_B	720 N
Preload class C - G_C	1440 N
Preload class D - G_D	2880 N
Calculation factor - f	1.23
Calculation factor - f_1	0.98
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.04
Calculation factor - f_{2C}	1.08
Calculation factor - f_{2D}	1.14
Calculation factor - f_{HC}	1
Preload class A	255 N/micron
Preload class B	336 N/micron
Preload class C	449 N/micron



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Preload class D	613 N/micron
d_1	112.3 mm
d_2	112.3 mm
D_1	127.7 mm
C_1	5.46 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	106 mm
d_b min.	106 mm
D_a max.	134 mm
D_b max.	136 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	115.6 mm
Basic dynamic load rating C	57.2 kN
Basic static load rating C_0	63 kN
Fatigue load limit P_u	2.4 kN
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	13000 r/min
Ball diameter D_w	12.7 mm
Number of balls z	26
Reference grease quantity G_{ref}	10.5 cm ³
Preload class A G_A	360 N
Static axial stiffness, preload class A	255 N/ μ m
Preload class B G_B	720 N
Static axial stiffness, preload class B	336 N/ μ m
Preload class C G_C	1440 N
Static axial stiffness, preload class C	449 N/ μ m



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Preload class D G_D	2880 N
Static axial stiffness, preload class D	613 N/ μ m
Calculation factor f	1.23
Calculation factor f_1	0.98
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.04
Calculation factor f_{2C}	1.08
Calculation factor f_{2D}	1.14
Calculation factor f_{HC}	1
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	0.8 kg