



Bearing Manufacturing of America



90 mm x 125 mm x 18 mm 90 mm x 125 mm x 18 mm SKF 71918 ACD/HCP4AH1 angular contact ball bearings

Bearing No. 71918 ACD/HCP4AH1

71918 ACD/HCP4AH1 Bearing 2D drawings and 3D CAD models

Size	125x90x18 mm
Bore Diameter	125 mm
Outer Diameter	90 mm
Width	18 mm
d	90 mm
D	125 mm
B	18 mm
d ₁	100.8 mm
d ₂	100.8 mm
D ₁	114.2 mm
K	0.5 mm
C ₁	5.2 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	34.2 mm
d _a - min.	96 mm
d _b - min.	96 mm
D _a - max.	119 mm
D _b - max.	121 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	103.3 mm
Basic dynamic load rating - C	44.2 kN



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Basic static load rating - C_0	48 kN
Fatigue load limit - P_u	2 kN
Limiting speed for grease lubrication	10000 r/min
Limiting speed for oil lubrication	17000 mm/min
Ball - D_w	11.112 mm
Ball - z	26
G_{ref}	7.5 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	280 N
Preload class B - G_B	560 N
Preload class C - G_C	1120 N
Preload class D - G_D	2240 N
Calculation factor - f	1.23
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	249 N/micron



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Preload class B	325 N/micron
Preload class C	435 N/micron
Preload class D	595 N/micron
d_1	100.8 mm
d_2	100.8 mm
D_1	114.2 mm
C_1	5.2 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	96 mm
d_b min.	96 mm
D_a max.	119 mm
D_b max.	121 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	103.3 mm
Basic dynamic load rating C	44.2 kN
Basic static load rating C_0	48 kN
Fatigue load limit P_u	1.96 kN
Attainable speed for grease lubrication	10000 r/min
Attainable speed for oil-air lubrication	17000 r/min
Ball diameter D_w	11.112 mm
Number of balls z	26
Reference grease quantity G_{ref}	7.5 cm ³
Preload class A G_A	280 N
Static axial stiffness, preload class A	249 N/ μ m
Preload class B G_B	560 N
Static axial stiffness, preload class B	325 N/ μ m
Preload class C G_C	1120 N



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Static axial stiffness, preload class C	435 N/ μ m
Preload class D G_D	2240 N
Static axial stiffness, preload class D	595 N/ μ m
Calculation factor f	1.23
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	0.47 kg