



Bearing import and Export Co., Ltd



7018 ACB/HCP4A Bearing 2D drawings and 3D CAD models

90 mm x 140 mm x 24 mm SKF 7018 ACB/HCP4A angular contact ball bearings

Bearing No. 7018 ACB/HCP4A

Size	140x90x24 mm
Bore Diameter	140 mm
Outer Diameter	90 mm
Width	24 mm
d	90 mm
D	140 mm
B	24 mm
d ₁	108.7 mm
d ₂	106.13 mm
D ₂	125 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	1 mm
a	39 mm
d _a - min.	97 mm
d _b - min.	97 mm
D _a - max.	133 mm
D _b - max.	135.4 mm
r _a - max.	1.5 mm
r _b - max.	1 mm
d _n	110 mm
Basic dynamic load rating - C	27 kN
Basic static load rating - C ₀	23.6 kN
Fatigue load limit - P _u	0.93 kN
Limiting speed for grease	13000 r/min



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Lubrication	
Limiting speed for oil lubrication	20000 mm/min
Ball - D_w	10.319 mm
Ball - z	25
G_{ref}	14.1 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	160 N
Preload class B - G_B	320 N
Preload class C - G_C	960 N
Calculation factor - f	1.07
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{HC}	1.01
Preload class A	159 N/micron
Preload class B	203 N/micron
Preload class C	307 N/micron
d_1	108.7 mm
d_2	106.13 mm
D_2	125 mm
$r_{1,2}$ min.	1.5 mm



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$r_{3,4}$ min.	1 mm
d_a min.	97 mm
d_b min.	97 mm
D_a max.	133 mm
D_b max.	135.4 mm
r_a max.	1.5 mm
r_b max.	1 mm
d_n	110 mm
Basic dynamic load rating C	35.8 kN
Basic static load rating C_0	40 kN
Fatigue load limit P_u	0.93 kN
Attainable speed for grease lubrication	13000 r/min
Attainable speed for oil-air lubrication	20000 r/min
Ball diameter D_w	10.319 mm
Number of balls z	25
Reference grease quantity G_{ref}	14.1 cm ³
Preload class A G_A	160 N
Static axial stiffness, preload class A	159 N/ μ m
Preload class B G_B	320 N
Static axial stiffness, preload class B	203 N/ μ m
Preload class C G_C	960 N
Static axial stiffness, preload class C	307 N/ μ m
Calculation factor f	1.07
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{HC}	1.01



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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	1.18 kg