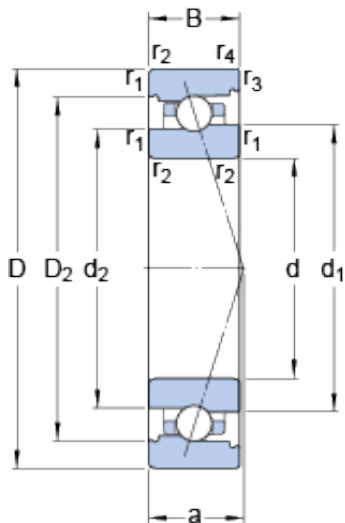




# BEARING CORP.OF AMERICA

## 35 mm x 55 mm x 10 mm SKF 71907 ACB/HCP4A angular contact ball bearings

Bearing No. 71907 ACB/HCP4A



71907 ACB/HCP4A Bearing 2D drawings and 3D CAD models

Size	55x35x10 mm
Bore Diameter	55 mm
Outer Diameter	35 mm
Width	10 mm
d	35 mm
D	55 mm
B	10 mm
d <sub>1</sub>	42.46 mm
d <sub>2</sub>	41.56 mm
D <sub>2</sub>	49.5 mm
r <sub>1,2</sub> - min.	0.6 mm
r <sub>3,4</sub> - min.	0.3 mm
a	18.4 mm
d <sub>a</sub> - min.	38.2 mm
d <sub>b</sub> - min.	38.2 mm
D <sub>a</sub> - max.	51.8 mm
D <sub>b</sub> - max.	53 mm
r <sub>a</sub> - max.	0.6 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	43 mm
Basic dynamic load rating - C	4.9 kN
Basic static load rating - C <sub>0</sub>	3.4 kN
Fatigue load limit - P <sub>u</sub>	0.146 kN
Limiting speed for grease	36000 r/min



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Lubrication	
Limiting speed for oil lubrication	56000 mm/min
Ball - $D_w$	3.969 mm
Ball - $z$	25
$G_{ref}$	0.96 cm <sup>3</sup>
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 - $G_A$	29 N
Preload class B - $G_B$	58 N
Preload class C - $G_C$	175 N
Calculation factor - $f$	1.06
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.08
Calculation factor - $f_{HC}$	1.01
Preload class A	66 N/micron
Preload class B	84 N/micron
Preload class C	127 N/micron
$d_1$	42.46 mm
$d_2$	41.56 mm
$D_2$	49.5 mm
$r_{1,2}$ min.	0.6 mm



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$r_{3,4}$ min.	0.3 mm
$d_a$ min.	38.2 mm
$d_b$ min.	38.2 mm
$D_a$ max.	51.8 mm
$D_b$ max.	53 mm
$r_a$ max.	0.6 mm
$r_b$ max.	0.3 mm
$d_n$	43 mm
Basic dynamic load rating C	6.5 kN
Basic static load rating $C_0$	5.85 kN
Fatigue load limit $P_u$	0.146 kN
Attainable speed for grease lubrication	36000 r/min
Attainable speed for oil-air lubrication	56000 r/min
Ball diameter $D_w$	3.969 mm
Number of balls z	25
Reference grease quantity $G_{ref}$	0.96 cm <sup>3</sup>
Preload class A $G_A$	29 N
Static axial stiffness, preload class A	66 N/ $\mu$ m
Preload class B $G_B$	58 N
Static axial stiffness, preload class B	84 N/ $\mu$ m
Preload class C $G_C$	175 N
Static axial stiffness, preload class C	127 N/ $\mu$ m
Calculation factor f	1.06
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.08
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	0.074 kg