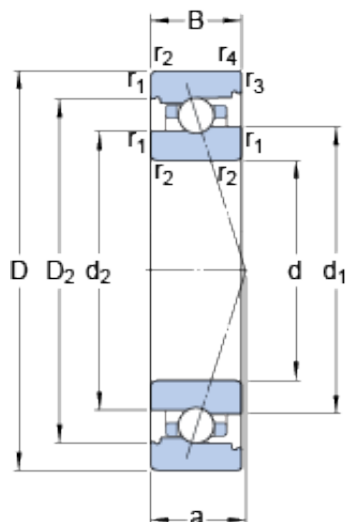




## New energy Bearing Manufacturing Co.,...



7012 ACB/HCP4A Bearing 2D drawings and 3D CAD models

60 mm x 95 mm x 18 mm SKF 7012  
ACB/HCP4A angular contact ball bearings

Bearing No. 7012 ACB/HCP4A

Size	95x60x18 mm
Bore Diameter	95 mm
Outer Diameter	60 mm
Width	18 mm
d	60 mm
D	95 mm
B	18 mm
d <sub>1</sub>	73.18 mm
d <sub>2</sub>	71.65 mm
D <sub>2</sub>	84.39 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	27.2 mm
d <sub>a</sub> - min.	66 mm
d <sub>b</sub> - min.	66 mm
D <sub>a</sub> - max.	89 mm
D <sub>b</sub> - max.	91.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	74.2 mm
Basic dynamic load rating - C	13.5 kN
Basic static load rating - C <sub>0</sub>	11.4 kN
Fatigue load limit - P <sub>u</sub>	0.48 kN
Limiting speed for grease	22000 r/min



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Lubrication	
Limiting speed for oil lubrication	32000 mm/min
Ball - $D_w$	6.747 mm
Ball - $z$	28
$G_{ref}$	5.03 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 - $G_A$	80 N
Preload class B - $G_B$	160 N
Preload class C - $G_C$	480 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 - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1.01
Preload class A	120 N/micron
Preload class B	152 N/micron
Preload class C	228 N/micron
$d_1$	73.18 mm
$d_2$	71.65 mm
$D_2$	84.39 mm
$r_{1,2}$ min.	1.1 mm



## New energy Bearing Manufacturing Co.,...

$r_{3,4}$ min.	0.6 mm
$d_a$ min.	66 mm
$d_b$ min.	66 mm
$D_a$ max.	89 mm
$D_b$ max.	91.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	74.2 mm
Basic dynamic load rating C	18.2 kN
Basic static load rating $C_0$	19 kN
Fatigue load limit $P_u$	0.48 kN
Attainable speed for grease lubrication	22000 r/min
Attainable speed for oil-air lubrication	32000 r/min
Ball diameter $D_w$	6.747 mm
Number of balls z	28
Reference grease quantity $G_{ref}$	5.03 cm <sup>3</sup>
Preload class A $G_A$	80 N
Static axial stiffness, preload class A	120 N/ $\mu$ m
Preload class B $G_B$	160 N
Static axial stiffness, preload class B	152 N/ $\mu$ m
Preload class C $G_C$	480 N
Static axial stiffness, preload class C	228 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 $f_{2C}$	1.05
Calculation factor $f_{HC}$	1.01



## New energy Bearing Manufacturing Co.,...

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	0.43 kg