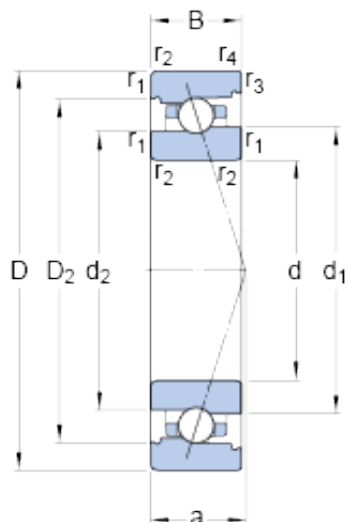




# NACHI BEARINGS TRAINING INDUSTRY



## 65 mm x 90 mm x 13 mm SKF 71913 ACB/HCP4A angular contact ball bearings

Bearing No. 71913 ACB/HCP4A

71913 ACB/HCP4A Bearing 2D drawings and 3D CAD models

Size	90x65x13 mm
Bore Diameter	90 mm
Outer Diameter	65 mm
Width	13 mm
d	65 mm
D	90 mm
B	13 mm
d <sub>1</sub>	73.94 mm
d <sub>2</sub>	72.72 mm
D <sub>2</sub>	83.46 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.3 mm
a	28.4 mm
d <sub>a</sub> - min.	69.6 mm
d <sub>b</sub> - min.	69.6 mm
D <sub>a</sub> - max.	85.4 mm
D <sub>b</sub> - max.	88 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	74.8 mm
Basic dynamic load rating - C	10 kN
Basic static load rating - C <sub>0</sub>	9 kN
Fatigue load limit - P <sub>u</sub>	0.38 kN
Limiting speed for grease	22000 r/min



## NACHI BEARINGS TRAINING INDUSTRY

Lubrication	
Limiting speed for oil lubrication	34000 mm/min
Ball - $D_w$	5.556 mm
Ball - $z$	32
$G_{ref}$	2.96 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 - $G_A$	60 N
Preload class B - $G_B$	120 N
Preload class C - $G_C$	360 N
Calculation factor - $f$	1.13
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	111 N/micron
Preload class B	144 N/micron
Preload class C	219 N/micron
$d_1$	73.94 mm
$d_2$	72.72 mm
$D_2$	83.46 mm
$r_{1,2}$ min.	1 mm



## NACHI BEARINGS TRAINING INDUSTRY

$r_{3,4}$ min.	0.3 mm
$d_a$ min.	69.6 mm
$d_b$ min.	69.6 mm
$D_a$ max.	85.4 mm
$D_b$ max.	88 mm
$r_a$ max.	1 mm
$r_b$ max.	0.3 mm
$d_n$	74.8 mm
Basic dynamic load rating C	13.5 kN
Basic static load rating $C_0$	14.3 kN
Fatigue load limit $P_u$	0.38 kN
Attainable speed for grease lubrication	22000 r/min
Attainable speed for oil-air lubrication	34000 r/min
Ball diameter $D_w$	5.556 mm
Number of balls z	32
Reference grease quantity $G_{ref}$	2.96 cm <sup>3</sup>
Preload class A $G_A$	60 N
Static axial stiffness, preload class A	111 N/ $\mu$ m
Preload class B $G_B$	120 N
Static axial stiffness, preload class B	144 N/ $\mu$ m
Preload class C $G_C$	360 N
Static axial stiffness, preload class C	219 N/ $\mu$ m
Calculation factor f	1.13
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



## NACHI BEARINGS TRAINING INDUSTRY

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	0.19 kg