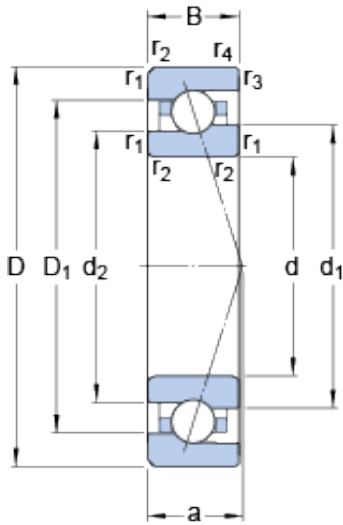




# NUP BEARING LTD



80 mm x 125 mm x 22 mm skf 7016  
ACE/HCP4A Super-precision Angular contact  
ball bearings

Bearing No. 7016 ACE/HCP4A

7016 ACE/HCP4A Bearing 2D drawings and 3D CAD models

Size	80x125x22 mm
Bore Diameter	80 mm
Outer Diameter	125 mm
Width	22 mm
d	80 mm
D	125 mm
B	22 mm
d <sub>1</sub>	95.83 mm
d <sub>2</sub>	93 mm
D <sub>1</sub>	109.17 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	35.1 mm
d <sub>a</sub> - min.	86 mm
d <sub>b</sub> - min.	86 mm
D <sub>a</sub> - max.	119 mm
D <sub>b</sub> - max.	120.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	98.5 mm
Basic dynamic load rating - C	32.5 kN
Basic static load rating - C <sub>0</sub>	26.5 kN
Fatigue load limit - P <sub>u</sub>	1.1 kN



## NUP BEARING LTD

Limiting speed for grease lubrication	15500 r/min
Limiting speed for oil lubrication	24000 mm/min
Ball - $D_w$	11.112 mm
Ball - z	25
$G_{ref}$	12 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 - $G_A$	280 N
Preload class B - $G_B$	850 N
Preload class C - $G_C$	1700 N
Calculation factor - f	1.1
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.06
Calculation factor - $f_{HC}$	1.01
Preload class A	198 N/micron
Preload class B	298 N/micron
Preload class C	391 N/micron
$d_1$	95.83 mm
$d_2$	93 mm
$D_1$	109.17 mm



## NUP BEARING LTD

$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	86 mm
$d_b$ min.	86 mm
$D_a$ max.	119 mm
$D_b$ max.	120.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	98.5 mm
Basic dynamic load rating C	32.5 kN
Basic static load rating $C_0$	26.5 kN
Fatigue load limit $P_u$	1.12 kN
Attainable speed for grease lubrication	15500 r/min
Attainable speed for oil-air lubrication	24000 r/min
Ball diameter $D_w$	11.112 mm
Number of balls z	25
Reference grease quantity $G_{ref}$	12 cm <sup>3</sup>
Preload class A $G_A$	280 N
Static axial stiffness, preload class A	198 N/ $\mu$ m
Preload class B $G_B$	850 N
Static axial stiffness, preload class B	298 N/ $\mu$ m
Preload class C $G_C$	1700 N
Static axial stiffness, preload class C	391 N/ $\mu$ m
Calculation factor f	1.1
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.06



## NUP BEARING LTD

Calculation factor $f_{HC}$	1.01
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	0.77 kg