



# Ligao Mechanical Bearing Co., Ltd



## 80 mm x 125 mm x 22 mm SKF 7016 ACD/HCP4AH1 angular contact ball bearings

Bearing No. 7016 ACD/HCP4AH1

7016 ACD/HCP4AH1 Bearing 2D drawings and 3D CAD models

Size	125x80x22 mm
Bore Diameter	125 mm
Outer Diameter	80 mm
Width	22 mm
d	80 mm
D	125 mm
B	22 mm
d <sub>1</sub>	93.9 mm
d <sub>2</sub>	93.9 mm
D <sub>1</sub>	111.1 mm
K	0.5 mm
C <sub>1</sub>	5.89 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	35 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.	121 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	96.9 mm
Basic dynamic load rating - C	62.4 kN
Basic static load rating - C <sub>0</sub>	58.5 kN



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Fatigue load limit - $P_u$	2.4 kN
Limiting speed for grease lubrication	12000 r/min
Limiting speed for oil lubrication	18000 mm/min
Ball - $D_w$	14.288 mm
Ball - $z$	20
$G_{ref}$	11.1 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 - $G_A$	390 N
Preload class B - $G_B$	780 N
Preload class C - $G_C$	1560 N
Preload class D - $G_D$	3120 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 - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.08
Calculation factor - $f_{HC}$	1.02
Preload class A	247 N/micron
Preload class B	323 N/micron
Preload class C	429 N/micron



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Preload class D	581 N/micron
$d_1$	93.9 mm
$d_2$	93.9 mm
$D_1$	111.1 mm
$C_1$	5.89 mm
$r_{1,2}$ 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.	121 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	96.9 mm
Basic dynamic load rating C	62.4 kN
Basic static load rating $C_0$	58.5 kN
Fatigue load limit $P_u$	2.45 kN
Attainable speed for grease lubrication	12000 r/min
Attainable speed for oil-air lubrication	18000 r/min
Ball diameter $D_w$	14.288 mm
Number of balls z	20
Reference grease quantity $G_{ref}$	11.1 cm <sup>3</sup>
Preload class A $G_A$	390 N
Static axial stiffness, preload class A	247 N/ $\mu$ m
Preload class B $G_B$	780 N
Static axial stiffness, preload class B	323 N/ $\mu$ m
Preload class C $G_C$	1560 N
Static axial stiffness, preload class C	429 N/ $\mu$ m



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Preload class D $G_D$	3120 N
Static axial stiffness, preload class D	581 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 $f_{2C}$	1.05
Calculation factor $f_{2D}$	1.08
Calculation factor $f_{HC}$	1.02
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	0.71 kg