



## NTN Bearing Driveshaft do Brasil



110 mm x 170 mm x 28 mm 110 mm x 170 mm  
x 28 mm SKF 7022 ACD/HCP4AH1 angular  
contact ball bearings

Bearing No. 7022 ACD/HCP4AH1

7022 ACD/HCP4AH1 Bearing 2D drawings and 3D  
CAD models

Size	170x110x28 mm
Bore Diameter	170 mm
Outer Diameter	110 mm
Width	28 mm
d	110 mm
D	170 mm
B	28 mm
d <sub>1</sub>	128.5 mm
d <sub>2</sub>	128.5 mm
D <sub>1</sub>	151.5 mm
K	0.5 mm
C <sub>1</sub>	7.41 mm
r <sub>1,2</sub> - min.	2 mm
r <sub>3,4</sub> - min.	1 mm
a	46.8 mm
d <sub>a</sub> - min.	119 mm
d <sub>b</sub> - min.	119 mm
D <sub>a</sub> - max.	161 mm
D <sub>b</sub> - max.	165 mm
r <sub>a</sub> - max.	2 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	132.6 mm
Basic dynamic load rating - C	104 kN



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Basic static load rating - $C_0$	104 kN
Fatigue load limit - $P_u$	3.8 kN
Limiting speed for grease lubrication	8500 r/min
Limiting speed for oil lubrication	13000 mm/min
Ball - $D_w$	19.05 mm
Ball - $z$	20
$G_{ref}$	25.5 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 - $G_A$	650 N
Preload class B - $G_B$	1300 N
Preload class C - $G_C$	2600 N
Preload class D - $G_D$	5200 N
Calculation factor - $f$	1.14
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	322 N/micron



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Preload class B	421 N/micron
Preload class C	558 N/micron
Preload class D	755 N/micron
$d_1$	128.5 mm
$d_2$	128.5 mm
$D_1$	151.5 mm
$C_1$	7.41 mm
$r_{1,2}$ min.	2 mm
$r_{3,4}$ min.	1 mm
$d_a$ min.	119 mm
$d_b$ min.	119 mm
$D_a$ max.	161 mm
$D_b$ max.	165 mm
$r_a$ max.	2 mm
$r_b$ max.	1 mm
$d_n$	132.6 mm
Basic dynamic load rating C	104 kN
Basic static load rating $C_0$	104 kN
Fatigue load limit $P_u$	3.75 kN
Attainable speed for grease lubrication	8500 r/min
Attainable speed for oil-air lubrication	13000 r/min
Ball diameter $D_w$	19.05 mm
Number of balls z	20
Reference grease quantity $G_{ref}$	25.5 cm <sup>3</sup>
Preload class A $G_A$	650 N
Static axial stiffness, preload class A	322 N/ $\mu$ m
Preload class B $G_B$	1300 N
Static axial stiffness, preload class B	421 N/ $\mu$ m
Preload class C $G_C$	2600 N



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Static axial stiffness, preload class C	558 N/ $\mu$ m
Preload class D $G_D$	5200 N
Static axial stiffness, preload class D	755 N/ $\mu$ m
Calculation factor f	1.14
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	1.63 kg