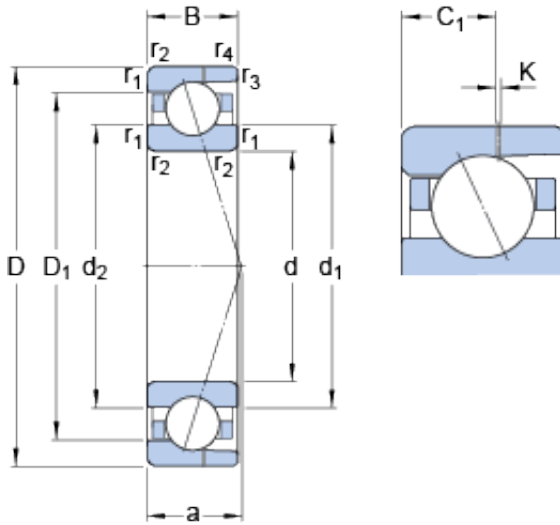




# CAR Bearing manufacturing Co.,Ltd



## SKF 7003 CD/HCP4AH angular contact ball bearings

Bearing No. 7003 CD/HCP4AH

7003 CD/HCP4AH Bearing 2D drawings and 3D CAD models

Size	35x17x10 mm
Bore Diameter	35 mm
Outer Diameter	17 mm
Width	10 mm
d	17 mm
D	35 mm
B	10 mm
d <sub>1</sub>	22.6 mm
d <sub>2</sub>	22.6 mm
D <sub>1</sub>	29.3 mm
K	0.5 mm
C <sub>1</sub>	6.05 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.2 mm
a	8.5 mm
d <sub>a</sub> - min.	19 mm
d <sub>b</sub> - min.	19 mm
D <sub>a</sub> - max.	33 mm
D <sub>b</sub> - max.	33.6 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.2 mm
d <sub>n</sub>	23.7 mm
Basic dynamic load rating - C	6.8 kN
Basic static load rating - C <sub>0</sub>	3.2 kN



## CAR Bearing manufacturing Co.,Ltd

Fatigue load limit - $P_u$	0.137 kN
Limiting speed for grease lubrication	60000 r/min
Limiting speed for oil lubrication	95000 mm/min
Ball - $D_w$	5.556 mm
Ball - $z$	12
$G_{ref}$	0.54 cm <sup>3</sup>
Calculation factor - $f_0$	9.1
Preload class A - $G_A$	25 N
Preload class B - $G_B$	50 N
Preload class C - $G_C$	100 N
Preload class D - $G_D$	200 N
Calculation factor - $f$	1.04
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{HC}$	1.02
Preload class A	22 N/micron
Preload class B	29 N/micron
Preload class C	39 N/micron
Preload class D	55 N/micron
$d_1$	22.6 mm
$d_2$	22.6 mm
$D_1$	29.3 mm
$C_1$	6.05 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
$d_a$ min.	19 mm



## CAR Bearing manufacturing Co.,Ltd

$d_b$ min.	19 mm
$D_a$ max.	33 mm
$D_b$ max.	33.6 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.2 mm
$d_n$	23.7 mm
Basic dynamic load rating C	6.76 kN
Basic static load rating $C_0$	3.25 kN
Fatigue load limit $P_u$	0.137 kN
Attainable speed for grease lubrication	60000 r/min
Attainable speed for oil-air lubrication	95000 r/min
Ball diameter $D_w$	5.556 mm
Number of balls z	12
Reference grease quantity $G_{ref}$	0.54 cm <sup>3</sup>
Preload class A $G_A$	25 N
Static axial stiffness, preload class A	22 N/ $\mu$ m
Preload class B $G_B$	50 N
Static axial stiffness, preload class B	29 N/ $\mu$ m
Preload class C $G_C$	100 N
Static axial stiffness, preload class C	39 N/ $\mu$ m
Preload class D $G_D$	200 N
Static axial stiffness, preload class D	55 N/ $\mu$ m
Calculation factor f	1.04
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05



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Calculation factor $f_{2D}$	1.09
Calculation factor $f_{HC}$	1.02
Calculation factor $f_0$	9.1
Mass bearing	0.033 kg