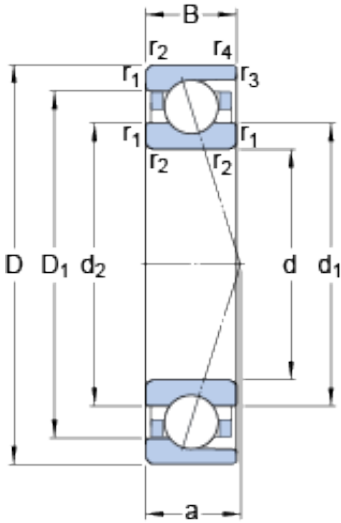




# NTN Bearing Driveshaft USA CORP.



7219 CD/HCP4A Bearing 2D drawings and 3D CAD models

## 95 mm x 170 mm x 32 mm SKF 7219 CD/HCP4A Angular contact ball bearings

Bearing No. 7219 CD/HCP4A

Size	170x95x32 mm
Bore Diameter	170 mm
Outer Diameter	95 mm
Width	32 mm
d	95 mm
D	170 mm
B	32 mm
d <sub>1</sub>	118.1 mm
d <sub>2</sub>	118.1 mm
D <sub>1</sub>	146.9 mm
r <sub>1,2</sub> - min.	2.1 mm
r <sub>3,4</sub> - min.	1.1 mm
a	33.9 mm
d <sub>a</sub> - min.	107 mm
d <sub>b</sub> - min.	107 mm
D <sub>a</sub> - max.	158 mm
D <sub>b</sub> - max.	163 mm
r <sub>a</sub> - max.	2 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	124.4 mm
Basic dynamic load rating - C	138 kN
Basic static load rating - C <sub>0</sub>	120 kN
Fatigue load limit - P <sub>u</sub>	4.4 kN
Limiting speed for grease	9500 r/min



## NTN Bearing Driveshaft USA CORP.

Lubrication	
Limiting speed for oil lubrication	15000 mm/min
Ball - $D_w$	23.812 mm
Ball - $z$	15
$G_{ref}$	34.314 cm <sup>3</sup>
Calculation factor - $f_0$	14.6
Preload class A - $G_A$	520 N
Preload class B - $G_B$	1040 N
Preload class C - $G_C$	2080 N
Preload class D - $G_D$	4160 N
Calculation factor - $f$	1.09
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.03
Calculation factor - $f_{2D}$	1.06
Calculation factor - $f_{HC}$	1.01
Preload class A	127 N/micron
Preload class B	173 N/micron
Preload class C	241 N/micron
Preload class D	347 N/micron
$d_1$	118.1 mm
$d_2$	118.1 mm
$D_1$	146.9 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1.1 mm
$d_a$ min.	107 mm
$d_b$ min.	107 mm
$D_a$ max.	158 mm



## NTN Bearing Driveshaft USA CORP.

$D_b$ max.	163 mm
$r_a$ max.	2 mm
$r_b$ max.	1 mm
$d_n$	124.4 mm
Basic dynamic load rating C	138 kN
Basic static load rating $C_0$	120 kN
Fatigue load limit $P_u$	4.4 kN
Attainable speed for grease lubrication	9500 r/min
Attainable speed for oil-air lubrication	15000 r/min
Ball diameter $D_w$	23.812 mm
Number of balls z	15
Reference grease quantity $G_{ref}$	34.314 cm <sup>3</sup>
Preload class A $G_A$	520 N
Static axial stiffness, preload class A	127 N/ $\mu$ m
Preload class B $G_B$	1040 N
Static axial stiffness, preload class B	173 N/ $\mu$ m
Preload class C $G_C$	2080 N
Static axial stiffness, preload class C	241 N/ $\mu$ m
Preload class D $G_D$	4160 N
Static axial stiffness, preload class D	347 N/ $\mu$ m
Calculation factor f	1.09
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.03
Calculation factor $f_{2D}$	1.06
Calculation factor $f_{HC}$	1.01



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Calculation factor $f_0$	14.6
Mass bearing	2.2 kg