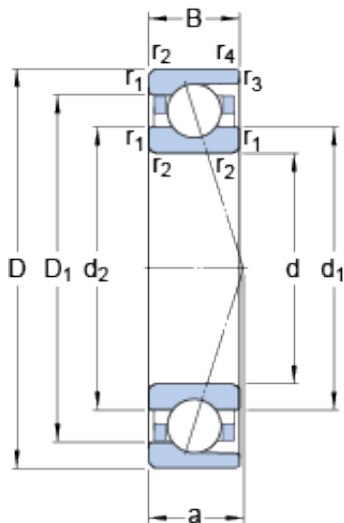




## New energy Bearing Manufacturing Co.,...



### 100 mm x 140 mm x 20 mm SKF 71920 CD/HCP4A angular contact ball bearings

Bearing No. 71920 CD/HCP4A

71920 CD/HCP4A Bearing 2D drawings and 3D CAD models

Size	140x100x20 mm
Bore Diameter	140 mm
Outer Diameter	100 mm
Width	20 mm
d	100 mm
D	140 mm
B	20 mm
d <sub>1</sub>	112.3 mm
d <sub>2</sub>	112.3 mm
D <sub>1</sub>	127.7 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	26.1 mm
d <sub>a</sub> - min.	106 mm
d <sub>b</sub> - min.	106 mm
D <sub>a</sub> - max.	134 mm
D <sub>b</sub> - max.	136 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	115.6 mm
Basic dynamic load rating - C	60.5 kN
Basic static load rating - C <sub>0</sub>	65.5 kN
Fatigue load limit - P <sub>u</sub>	2.6 kN
Limiting speed for grease	11000 r/min



## New energy Bearing Manufacturing Co.,...

Lubrication	
Limiting speed for oil lubrication	17000 mm/min
Ball - $D_w$	12.7 mm
Ball - $z$	26
$G_{ref}$	10.5 cm <sup>3</sup>
Calculation factor - $f_0$	16.3
Preload class A - $G_A$	230 N
Preload class B - $G_B$	460 N
Preload class C - $G_C$	920 N
Preload class D - $G_D$	1840 N
Calculation factor - $f$	1.23
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.07
Calculation factor - $f_{2C}$	1.12
Calculation factor - $f_{2D}$	1.18
Calculation factor - $f_{HC}$	1.04
Preload class A	119 N/micron
Preload class B	164 N/micron
Preload class C	232 N/micron
Preload class D	340 N/micron
$d_1$	112.3 mm
$d_2$	112.3 mm
$D_1$	127.7 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	106 mm
$d_b$ min.	106 mm
$D_a$ max.	134 mm



## New energy Bearing Manufacturing Co.,...

$D_b$ max.	136 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	115.6 mm
Basic dynamic load rating C	60.5 kN
Basic static load rating $C_0$	65.5 kN
Fatigue load limit $P_u$	2.55 kN
Attainable speed for grease lubrication	11000 r/min
Attainable speed for oil-air lubrication	17000 r/min
Ball diameter $D_w$	12.7 mm
Number of balls z	26
Reference grease quantity $G_{ref}$	10.5 cm <sup>3</sup>
Preload class A $G_A$	230 N
Static axial stiffness, preload class A	119 N/ $\mu$ m
Preload class B $G_B$	460 N
Static axial stiffness, preload class B	164 N/ $\mu$ m
Preload class C $G_C$	920 N
Static axial stiffness, preload class C	232 N/ $\mu$ m
Preload class D $G_D$	1840 N
Static axial stiffness, preload class D	340 N/ $\mu$ m
Calculation factor f	1.23
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.07
Calculation factor $f_{2C}$	1.12
Calculation factor $f_{2D}$	1.18
Calculation factor $f_{HC}$	1.04



## New energy Bearing Manufacturing Co.,...

Calculation factor $f_0$	16.3
Mass bearing	0.67 kg