



# NUP BEARING LTD



71919 CD/HCP4A Bearing 2D drawings and 3D CAD models

95 mm x 130 mm x 18 mm skf 71919  
CD/HCP4A Super-precision Angular contact ball bearings

Bearing No. 71919 CD/HCP4A

Size	130x95x18 mm
Bore Diameter	130 mm
Outer Diameter	95 mm
Width	18 mm
d	95 mm
D	130 mm
B	18 mm
d <sub>1</sub>	105.8 mm
d <sub>2</sub>	105.8 mm
D <sub>1</sub>	119.2 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	24.1 mm
d <sub>a</sub> - min.	101 mm
d <sub>b</sub> - min.	101 mm
D <sub>a</sub> - max.	124 mm
D <sub>b</sub> - max.	126 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	108.6 mm
Basic dynamic load rating - C	49.4 kN
Basic static load rating - C <sub>0</sub>	55 kN
Fatigue load limit - P <sub>u</sub>	2.2 kN



## NUP BEARING LTD

Limiting speed for grease lubrication	12000 r/min
Limiting speed for oil lubrication	18000 mm/min
Ball - $D_w$	11.112 mm
Ball - $z$	28
$G_{ref}$	7.8 cm <sup>3</sup>
Calculation factor - $f_0$	16.4
Preload class A - $G_A$	190 N
Preload class B - $G_B$	380 N
Preload class C - $G_C$	760 N
Preload class D - $G_D$	1520 N
Calculation factor - $f$	1.26
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	112 N/micron
Preload class B	155 N/micron
Preload class C	220 N/micron
Preload class D	323 N/micron
$d_1$	105.8 mm
$d_2$	105.8 mm
$D_1$	119.2 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	101 mm
$d_b$ min.	101 mm
$D_a$ max.	124 mm



## NUP BEARING LTD

$D_b$ max.	126 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	108.6 mm
Basic dynamic load rating C	49.4 kN
Basic static load rating $C_0$	55 kN
Fatigue load limit $P_u$	2.2 kN
Attainable speed for grease lubrication	12000 r/min
Attainable speed for oil-air lubrication	18000 r/min
Ball diameter $D_w$	11.112 mm
Number of balls z	28
Reference grease quantity $G_{ref}$	7.8 cm <sup>3</sup>
Preload class A $G_A$	190 N
Static axial stiffness, preload class A	112 N/ $\mu$ m
Preload class B $G_B$	380 N
Static axial stiffness, preload class B	155 N/ $\mu$ m
Preload class C $G_C$	760 N
Static axial stiffness, preload class C	220 N/ $\mu$ m
Preload class D $G_D$	1520 N
Static axial stiffness, preload class D	323 N/ $\mu$ m
Calculation factor f	1.26
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



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Calculation factor $f_0$	16.4
Mass bearing	0.49 kg