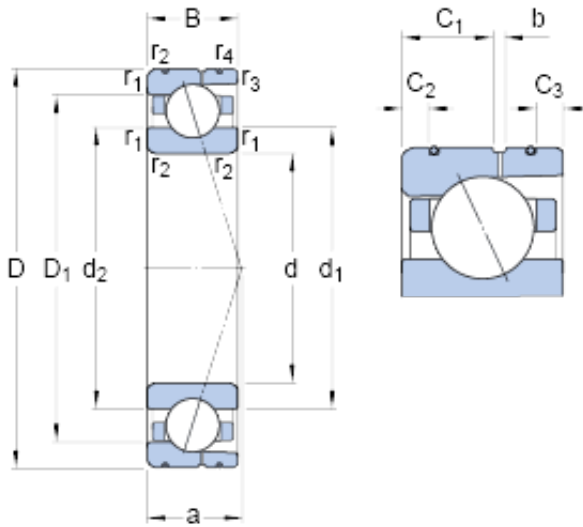




# NTN Bearing Rolamentos do Brasil Ltda.



105 mm x 145 mm x 20 mm skf 71921  
CD/P4AL Super-precision Angular contact ball bearings

Bearing No. 71921 CD/P4AL

71921 CD/P4AL Bearing 2D drawings and 3D CAD models

Size	145x105x20 mm
Bore Diameter	145 mm
Outer Diameter	105 mm
Width	20 mm
d	105 mm
D	145 mm
B	20 mm
d <sub>1</sub>	117.3 mm
d <sub>2</sub>	117.3 mm
D <sub>1</sub>	132.7 mm
b	2.3 mm
C <sub>1</sub>	10.9 mm
C <sub>2</sub>	3.9 mm
C <sub>3</sub>	3.2 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	26.8 mm
d <sub>a</sub> - min.	111 mm
d <sub>b</sub> - min.	111 mm
D <sub>a</sub> - max.	139 mm
D <sub>b</sub> - max.	141 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	120.6 mm



## NTN Bearing Rolamentos do Brasil Ltda.

Basic dynamic load rating - C	61.8 kN
Basic static load rating - C <sub>0</sub>	69.5 kN
Fatigue load limit - P <sub>u</sub>	2.6 kN
Limiting speed for grease lubrication	8500 r/min
Limiting speed for oil lubrication	14000 mm/min
Ball - D <sub>w</sub>	12.7 mm
Ball - z	27
G <sub>ref</sub>	11.1 cm <sup>3</sup>
Calculation factor - f <sub>0</sub>	16.4
Preload class A - G <sub>A</sub>	230 N
Preload class B - G <sub>B</sub>	460 N
Preload class C - G <sub>C</sub>	920 N
Preload class D - G <sub>D</sub>	1840 N
Calculation factor - f	1.25
Calculation factor - f	1
Calculation factor - f <sub>2A</sub>	1
Calculation factor - f <sub>2B</sub>	1.04
Calculation factor - f <sub>2C</sub>	1.09
Calculation factor - f <sub>2D</sub>	1.15
Calculation factor - f <sub>HC</sub>	1
Preload class A	110 N/micron
Preload class B	151 N/micron
Preload class C	215 N/micron
Preload class D	316 N/micron
d <sub>1</sub>	117.3 mm
d <sub>2</sub>	117.3 mm
D <sub>1</sub>	132.7 mm
C <sub>1</sub>	10.9 mm



## NTN Bearing Rolamentos do Brasil Ltda.

$C_2$	3.9 mm
$C_3$	3.2 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	111 mm
$d_b$ min.	111 mm
$D_a$ max.	139 mm
$D_b$ max.	141 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	120.6 mm
Basic dynamic load rating C	61.8 kN
Basic static load rating $C_0$	69.5 kN
Fatigue load limit $P_u$	2.6 kN
Attainable speed for grease lubrication	8500 r/min
Attainable speed for oil-air lubrication	14000 r/min
Ball diameter $D_w$	12.7 mm
Number of balls z	27
Reference grease quantity $G_{ref}$	11.1 cm <sup>3</sup>
Preload class A $G_A$	230 N
Static axial stiffness, preload class A	110 N/ $\mu$ m
Preload class B $G_B$	460 N
Static axial stiffness, preload class B	151 N/ $\mu$ m
Preload class C $G_C$	920 N
Static axial stiffness, preload class C	215 N/ $\mu$ m
Preload class D $G_D$	1840 N
Static axial stiffness, preload class D	316 N/ $\mu$ m



## NTN Bearing Rolamentos do Brasil Ltda.

Calculation factor $f$	1.25
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.04
Calculation factor $f_{2C}$	1.09
Calculation factor $f_{2D}$	1.15
Calculation factor $f_{HC}$	1
Calculation factor $f_0$	16.4
Mass bearing	0.82 kg