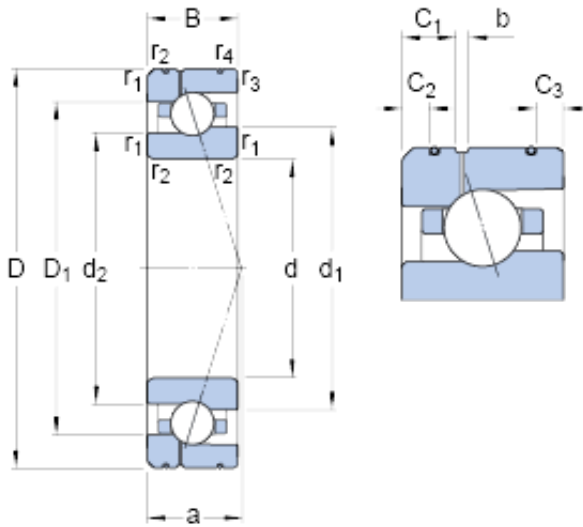




# NTN Bearing Rolamentos do Brasil Ltda.



## 100 mm x 150 mm x 24 mm skf 7020 CE/P4AL1 Super-precision Angular contact ball bearings

Bearing No. 7020 CE/P4AL1

7020 CE/P4AL1 Bearing 2D drawings and 3D CAD models

Size	150x100x24 mm
Bore Diameter	150 mm
Outer Diameter	100 mm
Width	24 mm
d	100 mm
D	150 mm
B	24 mm
d <sub>1</sub>	117.38 mm
d <sub>2</sub>	114.2 mm
D <sub>1</sub>	132.61 mm
b	1.8 mm
C <sub>1</sub>	7.1 mm
C <sub>2</sub>	4 mm
C <sub>3</sub>	4 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	1 mm
a	28.9 mm
d <sub>a</sub> - min.	107 mm
d <sub>b</sub> - min.	107 mm
D <sub>a</sub> - max.	143 mm
D <sub>b</sub> - max.	144.4 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	120.4 mm



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Basic dynamic load rating - C	44.9 kN
Basic static load rating - C <sub>0</sub>	40 kN
Fatigue load limit - P <sub>u</sub>	1.5 kN
Limiting speed for grease lubrication	12300 r/min
Limiting speed for oil lubrication	19000 mm/min
Ball - D <sub>w</sub>	12.7 mm
Ball - z	27
G <sub>ref</sub>	17 cm <sup>3</sup>
Calculation factor - f <sub>0</sub>	9.5
Preload class A - G <sub>A</sub>	240 N
Preload class B - G <sub>B</sub>	720 N
Preload class C - G <sub>C</sub>	1440 N
Calculation factor - f	1.12
Calculation factor - f	1
Calculation factor - f <sub>2A</sub>	1
Calculation factor - f <sub>2B</sub>	1.03
Calculation factor - f <sub>2C</sub>	1.05
Calculation factor - f <sub>HC</sub>	1
Preload class A	88 N/micron
Preload class B	138 N/micron
Preload class C	191 N/micron
d <sub>1</sub>	117.38 mm
d <sub>2</sub>	114.2 mm
D <sub>1</sub>	132.61 mm
C <sub>1</sub>	7.1 mm
C <sub>2</sub>	4 mm
C <sub>3</sub>	4 mm
r <sub>1,2</sub> min.	1.5 mm



## NTN Bearing Rolamentos do Brasil Ltda.

$r_{3,4}$ min.	1 mm
$d_a$ min.	107 mm
$d_b$ min.	107 mm
$D_a$ max.	143 mm
$D_b$ max.	144.4 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
$d_n$	120.4 mm
Basic dynamic load rating C	44.9 kN
Basic static load rating $C_0$	40 kN
Fatigue load limit $P_u$	1.5 kN
Attainable speed for grease lubrication	12300 r/min
Attainable speed for oil-air lubrication	19000 r/min
Ball diameter $D_w$	12.7 mm
Number of balls z	27
Reference grease quantity $G_{ref}$	17 cm <sup>3</sup>
Preload class A $G_A$	240 N
Static axial stiffness, preload class A	88 N/ $\mu$ m
Preload class B $G_B$	720 N
Static axial stiffness, preload class B	138 N/ $\mu$ m
Preload class C $G_C$	1440 N
Static axial stiffness, preload class C	191 N/ $\mu$ m
Calculation factor f	1.12
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1



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Calculation factor $f_0$	9.5
Mass bearing	1.26 kg