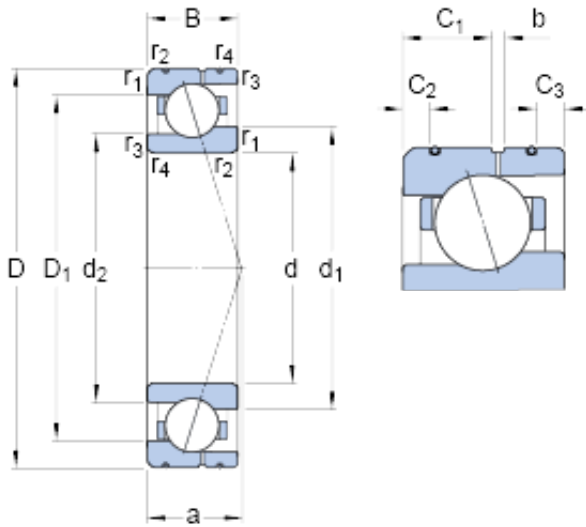




# NTN Bearing Rolamentos do Brasil Ltda.



85 mm x 120 mm x 18 mm skf 71917  
ACE/P4AL Super-precision Angular contact ball bearings

Bearing No. 71917 ACE/P4AL

71917 ACE/P4AL Bearing 2D drawings and 3D CAD models

Size	120x85x18 mm
Bore Diameter	120 mm
Outer Diameter	85 mm
Width	18 mm
d	85 mm
D	120 mm
B	18 mm
d <sub>1</sub>	96 mm
d <sub>2</sub>	92.9 mm
D <sub>1</sub>	109.22 mm
b	2.6 mm
C <sub>1</sub>	9.3 mm
C <sub>2</sub>	3 mm
C <sub>3</sub>	3 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	34.1 mm
d <sub>a</sub> - min.	91 mm
d <sub>b</sub> - min.	88.2 mm
D <sub>a</sub> - max.	114 mm
D <sub>b</sub> - max.	116.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	98.6 mm



## NTN Bearing Rolamentos do Brasil Ltda.

Basic dynamic load rating - C	28.1 kN
Basic static load rating - C <sub>0</sub>	22 kN
Fatigue load limit - P <sub>u</sub>	0.9 kN
Limiting speed for grease lubrication	13700 r/min
Limiting speed for oil lubrication	21000 mm/min
Ball - D <sub>w</sub>	11.112 mm
Ball - z	23
G <sub>ref</sub>	7 cm <sup>3</sup>
Calculation factor - e	0.68
Calculation factor - Y <sub>2</sub>	0.87
Calculation factor - Y <sub>0</sub>	0.38
Calculation factor - X <sub>2</sub>	0.41
Calculation factor - Y <sub>1</sub>	0.92
Calculation factor - Y <sub>2</sub>	1.41
Calculation factor - Y <sub>0</sub>	0.76
Calculation factor - X <sub>2</sub>	0.67
Preload class A - G <sub>A</sub>	255 N
Preload class B - G <sub>B</sub>	765 N
Preload class C - G <sub>C</sub>	1529 N
Calculation factor - f	1.16
Calculation factor - f <sub>1</sub>	0.99
Calculation factor - f <sub>2A</sub>	1
Calculation factor - f <sub>2B</sub>	1.04
Calculation factor - f <sub>2C</sub>	1.07
Calculation factor - f <sub>HC</sub>	1
Preload class A	157 N/micron
Preload class B	237 N/micron



## NTN Bearing Rolamentos do Brasil Ltda.

Preload class C	311 N/micron
$d_1$	96 mm
$d_2$	92.9 mm
$D_1$	109.22 mm
$C_1$	9.3 mm
$C_2$	3 mm
$C_3$	3 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	91 mm
$d_b$ min.	88.2 mm
$D_a$ max.	114 mm
$D_b$ max.	116.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	98.6 mm
Basic dynamic load rating C	28.1 kN
Basic static load rating $C_0$	22 kN
Fatigue load limit $P_u$	0.9 kN
Attainable speed for grease lubrication	13700 r/min
Attainable speed for oil-air lubrication	21000 r/min
Ball diameter $D_w$	11.112 mm
Number of balls z	23
Reference grease quantity $G_{ref}$	7 cm <sup>3</sup>
Preload class A $G_A$	255 N
Static axial stiffness, preload class A	157 N/ $\mu$ m
Preload class B $G_B$	765 N
Static axial stiffness, preload class B	237 N/ $\mu$ m
Preload class C $G_C$	1529 N



## NTN Bearing Rolamentos do Brasil Ltda.

Static axial stiffness, preload class C	311 N/ $\mu$ m
Calculation factor f	1.16
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.04
Calculation factor $f_{2C}$	1.07
Calculation factor $f_{HC}$	1
Calculation factor e	0.68
Calculation factor (single, tandem) $Y_2$	0.87
Calculation factor (single, tandem) $Y_0$	0.38
Calculation factor (single, tandem) $X_2$	0.41
Calculation factor (back-to-back, face-to-face) $Y_1$	0.92
Calculation factor (back-to-back, face-to-face) $Y_2$	1.41
Calculation factor (back-to-back, face-to-face) $Y_0$	0.76
Calculation factor (back-to-back, face-to-face) $X_2$	0.67
Mass bearing	0.5 kg