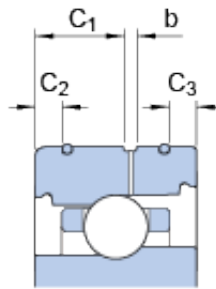
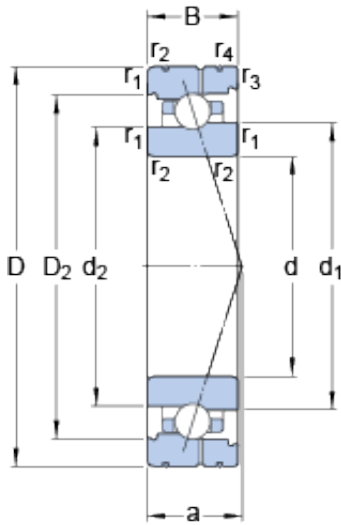




# NUP BEARING LTD



90 mm x 140 mm x 24 mm skf 7018 CB/P4AL  
Super-precision Angular contact ball bearings

Bearing No. 7018 CB/P4AL

7018 CB/P4AL Bearing 2D drawings and 3D CAD models

Size	140x90x24 mm
Bore Diameter	140 mm
Outer Diameter	90 mm
Width	24 mm
d	90 mm
D	140 mm
B	24 mm
d <sub>1</sub>	108.7 mm
d <sub>2</sub>	106.13 mm
D <sub>2</sub>	125 mm
b	2.2 mm
C <sub>1</sub>	13.4 mm
C <sub>2</sub>	5.2 mm
C <sub>3</sub>	4.2 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	1 mm
a	27.5 mm
d <sub>a</sub> - min.	97 mm
d <sub>b</sub> - min.	97 mm
D <sub>a</sub> - max.	133 mm
D <sub>b</sub> - max.	135.4 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	110 mm



## NUP BEARING LTD

Basic dynamic load rating - C	29.1 kN
Basic static load rating - C <sub>0</sub>	25 kN
Fatigue load limit - P <sub>u</sub>	0.98 kN
Limiting speed for grease lubrication	12000 r/min
Limiting speed for oil lubrication	19000 mm/min
Ball - D <sub>w</sub>	10.319 mm
Ball - z	25
G <sub>ref</sub>	14.1 cm <sup>3</sup>
Calculation factor - f <sub>0</sub>	9.7
Preload class A - G <sub>A</sub>	92 N
Preload class B - G <sub>B</sub>	185 N
Preload class C - G <sub>C</sub>	550 N
Calculation factor - f	1.07
Calculation factor - f	1
Calculation factor - f <sub>2A</sub>	1
Calculation factor - f <sub>2B</sub>	1.02
Calculation factor - f <sub>2C</sub>	1.05
Calculation factor - f <sub>HC</sub>	1
Preload class A	54 N/micron
Preload class B	71 N/micron
Preload class C	112 N/micron
d <sub>1</sub>	108.7 mm
d <sub>2</sub>	106.13 mm
D <sub>2</sub>	125 mm
C <sub>1</sub>	13.4 mm
C <sub>2</sub>	5.2 mm
C <sub>3</sub>	4.2 mm
r <sub>1,2</sub> min.	1.5 mm



## NUP BEARING LTD

$r_{3,4}$ min.	1 mm
$d_a$ min.	97 mm
$d_b$ min.	97 mm
$D_a$ max.	133 mm
$D_b$ max.	135.4 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
$d_n$	110 mm
Basic dynamic load rating C	37.7 kN
Basic static load rating $C_0$	43 kN
Fatigue load limit $P_u$	0.98 kN
Attainable speed for grease lubrication	12000 r/min
Attainable speed for oil-air lubrication	19000 r/min
Ball diameter $D_w$	10.319 mm
Number of balls z	25
Reference grease quantity $G_{ref}$	14.1 cm <sup>3</sup>
Preload class A $G_A$	92 N
Static axial stiffness, preload class A	54 N/ $\mu$ m
Preload class B $G_B$	185 N
Static axial stiffness, preload class B	71 N/ $\mu$ m
Preload class C $G_C$	550 N
Static axial stiffness, preload class C	112 N/ $\mu$ m
Calculation factor f	1.07
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1



## NUP BEARING LTD

Calculation factor $f_0$	9.7
Mass bearing	1.25 kg