



**15 mm x 32 mm x 9 mm SKF 7002 ACE/P4A  
angular contact ball bearings**

Bearing No. 7002 ACE/P4A

7002 ACE/P4A Bearing 2D drawings and 3D CAD models

Size	32x15x9 mm
Bore Diameter	32 mm
Outer Diameter	15 mm
Width	9 mm
d	15 mm
D	32 mm
B	9 mm
d <sub>1</sub>	20.65 mm
d <sub>2</sub>	19.5 mm
D <sub>1</sub>	26.9 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.15 mm
a	10.1 mm
d <sub>a</sub> - min.	17 mm
d <sub>b</sub> - min.	17 mm
D <sub>a</sub> - max.	30 mm
D <sub>b</sub> - max.	30.6 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.15 mm
d <sub>n</sub>	21.9 mm
Basic dynamic load rating - C	4.2 kN
Basic static load rating - C <sub>0</sub>	1.8 kN
Fatigue load limit - P <sub>u</sub>	0.078 kN
Limiting speed for grease	63000 r/min



## BEARING MANUFACTURING DE MEXICO,S.A.D...

Lubrication	
Limiting speed for oil lubrication	95000 mm/min
Ball - $D_w$	4.762 mm
Ball - $z$	12
$G_{ref}$	0.5 cm <sup>3</sup>
Calculation factor - $e$	0.68
Calculation factor - $Y_2$	0.87
Calculation factor - $Y_0$	0.38
Calculation factor - $X_2$	0.41
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_0$	0.76
Calculation factor - $X_2$	0.67
Preload class A - $G_A$	38 N
Preload class B - $G_B$	115 N
Preload class C - $G_C$	230 N
Calculation factor - $f$	1.03
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.06
Calculation factor - $f_{HC}$	1
Preload class A	40 N/micron
Preload class B	59 N/micron
Preload class C	66 N/micron
$d_1$	20.65 mm
$d_2$	19.5 mm
$D_1$	26.9 mm
$r_{1,2}$ min.	0.3 mm



## BEARING MANUFACTURING DE MEXICO, S.A.D...

$r_{3,4}$ min.	0.15 mm
$d_a$ min.	17 mm
$d_b$ min.	17 mm
$D_a$ max.	30 mm
$D_b$ max.	30.6 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.15 mm
$d_n$	21.9 mm
Basic dynamic load rating C	4.23 kN
Basic static load rating $C_0$	1.83 kN
Fatigue load limit $P_u$	0.078 kN
Attainable speed for grease lubrication	63000 r/min
Attainable speed for oil-air lubrication	95000 r/min
Ball diameter $D_w$	4.762 mm
Number of balls z	12
Reference grease quantity $G_{ref}$	0.5 cm <sup>3</sup>
Preload class A $G_A$	38 N
Static axial stiffness, preload class A	40 N/ $\mu$ m
Preload class B $G_B$	115 N
Static axial stiffness, preload class B	59 N/ $\mu$ m
Preload class C $G_C$	230 N
Static axial stiffness, preload class C	66 N/ $\mu$ m
Calculation factor f	1.03
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.06
Calculation factor $f_{HC}$	1



## BEARING MANUFACTURING DE MEXICO,S.A.D...

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	0.028 kg