



Bearing No. 7008 ACB/P4AL

b	1.5 mm
d	40 mm
a	20.2 mm
B	15 mm
D	68 mm
Ball - z	26
Size (mm)	68x40x15
Width (mm)	15
Mass bearing	0.21 kg
d <sub>2</sub>	49.87 mm
D <sub>2</sub>	58.88 mm
d <sub>n</sub>	51.6 mm
C <sub>1</sub>	7.8 mm
C <sub>2</sub>	3.6 mm
C <sub>3</sub>	2.6 mm
C <sub>2</sub>	3.6 mm
C <sub>1</sub>	7.8 mm
d <sub>n</sub>	51.6 mm
D <sub>2</sub>	58.88 mm
d <sub>2</sub>	49.87 mm
d <sub>1</sub>	50.95 mm
d <sub>1</sub>	50.95 mm
C <sub>3</sub>	2.6 mm
Bearing number	7008 ACB/P4AL
Preload class A	71 N/micron
Preload class B	92 N/micron
G <sub>ref</sub>	2.22 cm <sup>3</sup>
Preload class C	138 N/micron
Number of balls z	26

Bore Diameter (mm)	68
$r_b$ max.	0.6 mm
$r_a$ max.	1 mm
$D_b$ max.	64.8 mm
$D_a$ max.	63.4 mm
$d_a$ min.	44.6 mm
$d_b$ min.	44.6 mm
Outer Diameter (mm)	40
$r_b$ - max.	0.6 mm
$r_{3,4}$ min.	0.6 mm
$d_b$ - min.	44.6 mm
$D_a$ - max.	63.4 mm
$D_b$ - max.	64.8 mm
$r_{1,2}$ min.	1 mm
$d_a$ - min.	44.6 mm
$r_a$ - max.	1 mm
Ball - $D_w$	4.762 mm
Calculation factor f	1.04
Calculation factor e	0.68
$r_{3,4}$ - min.	0.6 mm
Calculation factor - f	1.04
$r_{1,2}$ - min.	1 mm
Calculation factor - e	0.68
Ball diameter $D_w$	4.762 mm
Basic dynamic load rating C	9.36 kN
Preload class C $G_C$	245 N
Basic dynamic load rating - C	6.9 kN
Preload class B $G_B$	82 N
Preload class A $G_A$	41 N
Preload class C - $G_C$	245 N

Preload class A - $G_A$	41 N
Preload class B - $G_B$	82 N
Calculation factor $f_1$	0.99
Fatigue load limit $P_u$	0.224 kN
Calculation factor $f_{HC}$	1
Calculation factor $f_{2C}$	1.04
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2A}$	1
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_0$	0.76
Calculation factor - $X_2$	0.67
Limiting speed for oil lubrication	40000 mm/min
Calculation factor - $Y_1$	0.92
Fatigue load limit - $P_u$	0.224 kN
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2C}$	1.04
Calculation factor - $f_{2B}$	1.01
Limiting speed for grease lubrication	26000 r/min
Basic static load rating $C_0$	8.65 kN
Static axial stiffness, preload class A	71 N/ $\mu$ m
Static axial stiffness, preload class C	138 N/ $\mu$ m
Static axial stiffness, preload class B	92 N/ $\mu$ m
Attainable speed for grease lubrication	26000 r/min

Basic static load rating - $C_0$	5.3 kN
Attainable speed for oil-air lubrication	40000 r/min
Reference grease quantity $G_{ref}$	2.22 cm <sup>3</sup>
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