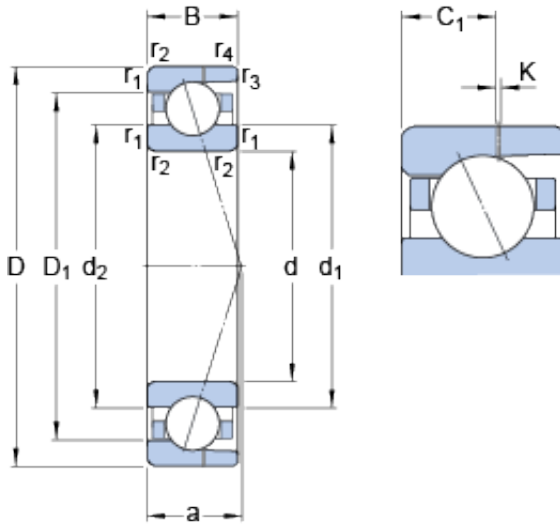




# GARLOCK BEARINGS LTD



## 7007 ACD/P4AH SKF High Speed Angular Contact Ball Bearings

Bearing No. 7007 ACD/P4AH

7007 ACD/P4AH Bearing 2D drawings and 3D CAD models

Size	62x35x14 mm
Bore Diameter	62 mm
Outer Diameter	35 mm
Width	14 mm
d	35 mm
D	62 mm
B	14 mm
d <sub>1</sub>	43.7 mm
d <sub>2</sub>	43.7 mm
D <sub>1</sub>	53.3 mm
K	0.5 mm
C <sub>1</sub>	8.4 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.3 mm
a	18.5 mm
d <sub>a</sub> - min.	39.6 mm
d <sub>b</sub> - min.	39.6 mm
D <sub>a</sub> - max.	57.4 mm
D <sub>b</sub> - max.	60 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	45.3 mm
Basic dynamic load rating - C	14.8 kN
Basic static load rating - C <sub>0</sub>	9 kN



## GARLOCK BEARINGS LTD

Fatigue load limit - $P_u$	0.38 kN
Limiting speed for grease lubrication	20000 r/min
Limiting speed for oil lubrication	32000 mm/min
Ball - $D_w$	7.938 mm
Ball - $z$	16
$G_{ref}$	1.98 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 - $G_A$	90 N
Preload class B - $G_B$	180 N
Preload class C - $G_C$	360 N
Preload class D - $G_D$	720 N
Calculation factor - $f$	1.06
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.08
Calculation factor - $f_{HC}$	1
Preload class A	86 N/micron
Preload class B	110 N/micron
Preload class C	144 N/micron



## GARLOCK BEARINGS LTD

Preload class D	190 N/micron
$d_1$	43.7 mm
$d_2$	43.7 mm
$D_1$	53.3 mm
$C_1$	8.4 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	39.6 mm
$d_b$ min.	39.6 mm
$D_a$ max.	57.4 mm
$D_b$ max.	60 mm
$r_a$ max.	1 mm
$r_b$ max.	0.3 mm
$d_n$	45.3 mm
Basic dynamic load rating C	14.8 kN
Basic static load rating $C_0$	9 kN
Fatigue load limit $P_u$	0.38 kN
Attainable speed for grease lubrication	20000 r/min
Attainable speed for oil-air lubrication	32000 r/min
Ball diameter $D_w$	7.938 mm
Number of balls z	16
Reference grease quantity $G_{ref}$	1.98 cm <sup>3</sup>
Preload class A $G_A$	90 N
Static axial stiffness, preload class A	86 N/ $\mu$ m
Preload class B $G_B$	180 N
Static axial stiffness, preload class B	110 N/ $\mu$ m
Preload class C $G_C$	360 N
Static axial stiffness, preload class C	144 N/ $\mu$ m



## GARLOCK BEARINGS LTD

Preload class D $G_D$	720 N
Static axial stiffness, preload class D	190 N/ $\mu$ m
Calculation factor f	1.06
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2D}$	1.08
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	0.15 kg