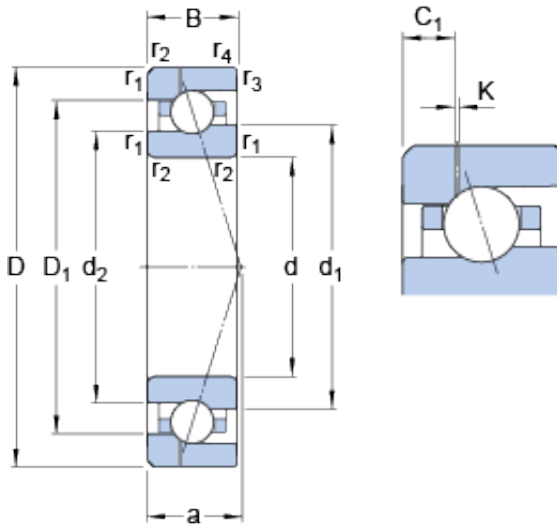




Lamar parts manufacturing company



35 mm x 62 mm x 14 mm SKF 7007 ACE/P4AH1 angular contact ball bearings

Bearing No. 7007 ACE/P4AH1

7007 ACE/P4AH1 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 ₁	43.7 mm
d ₂	41.6 mm
D ₁	52.25 mm
K	0.5 mm
C ₁	4.52 mm
r _{1,2} - min.	1 mm
r _{3,4} - min.	0.6 mm
a	18.4 mm
d _a - min.	39.6 mm
d _b - min.	39.6 mm
D _a - max.	57.4 mm
D _b - max.	57.8 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	45.6 mm
Basic dynamic load rating - C	11.1 kN
Basic static load rating - C ₀	6.3 kN



Lamar parts manufacturing company

Fatigue load limit - P_u	0.265 kN
Limiting speed for grease lubrication	31000 r/min
Limiting speed for oil lubrication	46000 mm/min
Ball - D_w	7.144 mm
Ball - z	17
G_{ref}	2.4 cm ³
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	100 N
Preload class B - G_B	300 N
Preload class C - G_C	590 N
Calculation factor - f	1.06
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	79 N/micron
Preload class B	119 N/micron
Preload class C	154 N/micron
d_1	43.7 mm
d_2	41.6 mm



Lamar parts manufacturing company

D_1	52.25 mm
C_1	4.52 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	39.6 mm
d_b min.	39.6 mm
D_a max.	57.4 mm
D_b max.	57.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	45.6 mm
Basic dynamic load rating C	11.1 kN
Basic static load rating C_0	6.3 kN
Fatigue load limit P_u	0.265 kN
Attainable speed for grease lubrication	31000 r/min
Attainable speed for oil-air lubrication	46000 r/min
Ball diameter D_w	7.144 mm
Number of balls z	17
Reference grease quantity G_{ref}	2.4 cm ³
Preload class A G_A	100 N
Static axial stiffness, preload class A	79 N/ μ m
Preload class B G_B	300 N
Static axial stiffness, preload class B	119 N/ μ m
Preload class C G_C	590 N
Static axial stiffness, preload class C	154 N/ μ m
Calculation factor f	1.06
Calculation factor f_1	0.99
Calculation factor f_{2A}	1



Lamar parts manufacturing company

Calculation factor f_{2B}	1.03
Calculation factor f_{2C}	1.06
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