



BEARING PRECISION AXLE CORP.



S7210 ACD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. S7210 ACD/P4A

S7210 ACD/P4A Bearing 2D drawings and 3D CAD models

Size	90x50x20 mm
Bore Diameter	90 mm
Outer Diameter	50 mm
Width	20 mm
d	50 mm
D	90 mm
B	20 mm
d ₁	62.3 mm
d ₂	62.3 mm
D ₂	80.7 mm
r _{1,2} - min.	1.1 mm
r _{3,4} - min.	0.6 mm
a	26.4 mm
d _a - min.	57 mm
d _a - max.	61.5 mm
d _b - min.	57 mm
d _b - max.	61.5 mm
D _a - max.	83 mm
D _b - max.	85.8 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
Basic dynamic load rating - C	42.3 kN
Basic static load rating - C ₀	32.5 kN
Fatigue load limit - P _u	1.4 kN



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Limiting speed for grease lubrication	14000 r/min
Ball - D_w	12.7 mm
Ball - z	15
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	265 N
Preload class B - G_B	530 N
Preload class C - G_C	1060 N
Preload class D - G_D	2120 N
Calculation factor - f	1.08
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.02
Calculation factor - f_{2D}	1.05
Calculation factor - f_{HC}	1
Preload class A	154 N/micron
Preload class B	201 N/micron
Preload class C	266 N/micron
Preload class D	359 N/micron
d_1	62.3 mm
d_2	62.3 mm
D_2	80.7 mm



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$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	57 mm
d_a max.	61.5 mm
d_b min.	57 mm
d_b max.	61.5 mm
D_a max.	83 mm
D_b max.	85.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
Basic dynamic load rating C	42.3 kN
Basic static load rating C_0	32.5 kN
Fatigue load limit P_u	1.37 kN
Attainable speed for grease lubrication	14000 r/min
Ball diameter D_w	12.7 mm
Number of balls z	15
Preload class A G_A	265 N
Static axial stiffness, preload class A	154 N/ μ m
Preload class B G_B	530 N
Static axial stiffness, preload class B	201 N/ μ m
Preload class C G_C	1060 N
Static axial stiffness, preload class C	266 N/ μ m
Preload class D G_D	2120 N
Static axial stiffness, preload class D	359 N/ μ m
Calculation factor f	1.08
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2C}	1.02



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Calculation factor f_{2D}	1.05
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	0.47 kg