



BEARING PRECISION AXLE CORP.



S7211 ACD/HCP4A SKF High Speed Angular Contact Ball Bearings

Bearing No. S7211 ACD/HCP4A

S7211 ACD/HCP4A Bearing 2D drawings and 3D CAD models

Size	100x55x21 mm
Bore Diameter	100 mm
Outer Diameter	55 mm
Width	21 mm
d	55 mm
D	100 mm
B	21 mm
d ₁	68.9 mm
d ₂	68.9 mm
D ₂	89.1 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	0.6 mm
a	28.7 mm
d _a - min.	64 mm
d _a - max.	68.1 mm
d _b - min.	64 mm
d _b - max.	68.1 mm
D _a - max.	91 mm
D _b - max.	95.8 mm
r _a - max.	1.5 mm
r _b - max.	0.6 mm
Basic dynamic load rating - C	52.7 kN
Basic static load rating - C ₀	40.5 kN
Fatigue load limit - P _u	1.7 kN



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Limiting speed for grease lubrication	15000 r/min
Ball - D_w	14.288 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	330 N
Preload class B - G_B	660 N
Preload class C - G_C	1320 N
Preload class D - G_D	2640 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}	1.03
Calculation factor - f_{2D}	1.06
Calculation factor - f_{HC}	1.01
Preload class A	191 N/micron
Preload class B	248 N/micron
Preload class C	329 N/micron
Preload class D	443 N/micron
d_1	68.9 mm
d_2	68.9 mm
D_2	89.1 mm



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$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	64 mm
d_a max.	68.1 mm
d_b min.	64 mm
d_b max.	68.1 mm
D_a max.	91 mm
D_b max.	95.8 mm
r_a max.	1.5 mm
r_b max.	0.6 mm
Basic dynamic load rating C	52.7 kN
Basic static load rating C_0	40.5 kN
Fatigue load limit P_u	1.73 kN
Attainable speed for grease lubrication	15000 r/min
Ball diameter D_w	14.288 mm
Number of balls z	15
Preload class A G_A	330 N
Static axial stiffness, preload class A	191 N/ μ m
Preload class B G_B	660 N
Static axial stiffness, preload class B	248 N/ μ m
Preload class C G_C	1320 N
Static axial stiffness, preload class C	329 N/ μ m
Preload class D G_D	2640 N
Static axial stiffness, preload class D	443 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}	1.03



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Calculation factor f_{2D}	1.06
Calculation factor f_{HC}	1.01
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	0.52 kg