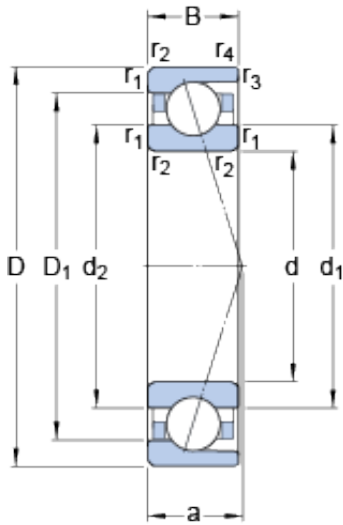




BEARING DRIVESHAFT, INC.



7212 ACD/HCP4A Bearing 2D drawings and 3D CAD models

60 mm x 110 mm x 22 mm SKF 7212
ACD/HCP4A angular contact ball bearings

Bearing No. 7212 ACD/HCP4A

Size	110x60x22 mm
Bore Diameter	110 mm
Outer Diameter	60 mm
Width	22 mm
d	60 mm
D	110 mm
B	22 mm
d ₁	76.4 mm
d ₂	76.4 mm
D ₁	93.6 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	0.6 mm
a	30.9 mm
d _a - min.	69 mm
d _b - min.	69 mm
D _a - max.	101 mm
D _b - max.	105.8 mm
r _a - max.	1.5 mm
r _b - max.	0.6 mm
d _n	80.1 mm
Basic dynamic load rating - C	55.3 kN
Basic static load rating - C ₀	45 kN
Fatigue load limit - P _u	1.9 kN
Limiting speed for grease	14000 r/min



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Lubrication	
Limiting speed for oil lubrication	22000 mm/min
Ball - D_w	14.288 mm
Ball - z	16
G_{ref}	10.08 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	350 N
Preload class B - G_B	700 N
Preload class C - G_C	1400 N
Preload class D - G_D	2800 N
Calculation factor - f	1.07
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	202 N/micron
Preload class B	264 N/micron
Preload class C	349 N/micron
Preload class D	470 N/micron



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d_1	76.4 mm
d_2	76.4 mm
D_1	93.6 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	69 mm
d_b min.	69 mm
D_a max.	101 mm
D_b max.	105.8 mm
r_a max.	1.5 mm
r_b max.	0.6 mm
d_n	80.1 mm
Basic dynamic load rating C	55.3 kN
Basic static load rating C_0	45 kN
Fatigue load limit P_u	1.9 kN
Attainable speed for grease lubrication	14000 r/min
Attainable speed for oil-air lubrication	22000 r/min
Ball diameter D_w	14.288 mm
Number of balls z	16
Reference grease quantity G_{ref}	10.08 cm ³
Preload class A G_A	350 N
Static axial stiffness, preload class A	202 N/ μ m
Preload class B G_B	700 N
Static axial stiffness, preload class B	264 N/ μ m
Preload class C G_C	1400 N
Static axial stiffness, preload class C	349 N/ μ m
Preload class D G_D	2800 N
Static axial stiffness, preload class D	470 N/ μ m



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class D	
Calculation factor f	1.07
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
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	0.69 kg