



Off-the-shelf SKF shaft Co., Ltd



71812 ACD/HCP4 Bearing 2D drawings and 3D CAD models

60 mm x 78 mm x 10 mm SKF 71812
ACD/HCP4 Super high-speed angular contact ball bearings

Bearing No. 71812 ACD/HCP4

Size	78x60x10 mm
Bore Diameter	78 mm
Outer Diameter	60 mm
Width	10 mm
d	60 mm
D	78 mm
B	10 mm
d ₁	65.7 mm
d ₂	65.7 mm
D ₁	72.5 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.15 mm
a	21.1 mm
d _a - min.	62 mm
d _b - min.	62 mm
D _a - max.	76 mm
D _b - max.	77.2 mm
r _a - max.	0.3 mm
r _b - max.	0.15 mm
d _n	66.4 mm
Basic dynamic load rating - C	12.7 kN
Basic static load rating - C ₀	13.4 kN
Fatigue load limit - P _u	0.57 kN



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Limiting speed for grease lubrication	18000 r/min
Limiting speed for oil lubrication	26000 mm/min
Ball - D_w	5.556 mm
Ball - z	28
G_{ref}	1.2 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	114 N
Preload class B - G_B	340 N
Preload class C - G_C	680 N
Calculation factor - f	1.3
Calculation factor - f_1	0.97
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.09
Calculation factor - f_{2C}	1.17
Calculation factor - f_{HC}	1.02
Preload class A	156 N/micron
Preload class B	247 N/micron
Preload class C	340 N/micron
d_1	65.7 mm
d_2	65.7 mm
D_1	72.5 mm



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$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.15 mm
d_a min.	62 mm
d_b min.	62 mm
D_a max.	76 mm
D_b max.	77.2 mm
r_a max.	0.3 mm
r_b max.	0.15 mm
d_n	66.4 mm
Basic dynamic load rating C	12.7 kN
Basic static load rating C_0	13.4 kN
Fatigue load limit P_u	0.57 kN
Attainable speed for grease lubrication	18000 r/min
Attainable speed for oil-air lubrication	26000 r/min
Ball diameter D_w	5.556 mm
Number of balls z	28
Reference grease quantity G_{ref}	1.2 cm ³
Preload class A G_A	114 N
Static axial stiffness, preload class A	156 N/ μ m
Preload class B G_B	340 N
Static axial stiffness, preload class B	247 N/ μ m
Preload class C G_C	680 N
Static axial stiffness, preload class C	340 N/ μ m
Calculation factor f	1.3
Calculation factor f_1	0.97
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.09
Calculation factor f_{2C}	1.17



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Calculation factor f_{HC}	1.02
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	0.088 kg