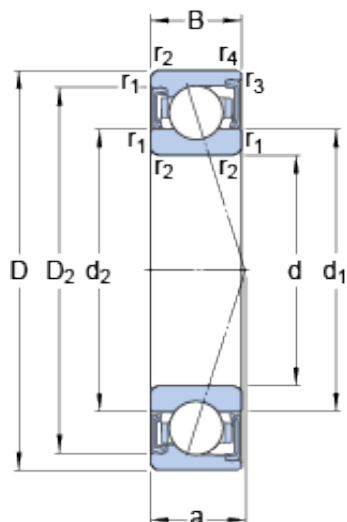




ISOSTATIC BEARING LIMITED

S7003 ACD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. S7003 ACD/P4A



S7003 ACD/P4A Bearing 2D drawings and 3D CAD models

Size	35x17x10 mm
Bore Diameter	35 mm
Outer Diameter	17 mm
Width	10 mm
d	17 mm
D	35 mm
B	10 mm
d ₁	22.6 mm
d ₂	22.6 mm
D ₂	32.4 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.2 mm
a	11.2 mm
d _a - min.	19 mm
d _a - max.	22.2 mm
d _b - min.	19 mm
d _b - max.	22.2 mm
D _a - max.	33 mm
D _b - max.	33.6 mm
r _a - max.	0.3 mm
r _b - max.	0.2 mm
Basic dynamic load rating - C	6.5 kN
Basic static load rating - C ₀	3.1 kN
Fatigue load limit - P _u	0.132 kN



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Limiting speed for grease lubrication	45000 r/min
Ball - D_w	5.556 mm
Ball - z	12
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	40 N
Preload class B - G_B	80 N
Preload class C - G_C	160 N
Preload class D - G_D	320 N
Calculation factor - f	1.04
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1
Preload class A	48 N/micron
Preload class B	62 N/micron
Preload class C	81 N/micron
Preload class D	107 N/micron
d_1	22.6 mm
d_2	22.6 mm
D_2	32.4 mm



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$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
d_a min.	19 mm
d_a max.	22.2 mm
d_b min.	19 mm
d_b max.	22.2 mm
D_a max.	33 mm
D_b max.	33.6 mm
r_a max.	0.3 mm
r_b max.	0.2 mm
Basic dynamic load rating C	6.5 kN
Basic static load rating C_0	3.1 kN
Fatigue load limit P_u	0.132 kN
Attainable speed for grease lubrication	45000 r/min
Ball diameter D_w	5.556 mm
Number of balls z	12
Preload class A G_A	40 N
Static axial stiffness, preload class A	48 N/ μ m
Preload class B G_B	80 N
Static axial stiffness, preload class B	62 N/ μ m
Preload class C G_C	160 N
Static axial stiffness, preload class C	81 N/ μ m
Preload class D G_D	320 N
Static axial stiffness, preload class D	107 N/ μ m
Calculation factor f	1.04
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05



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Calculation factor f_{2D}	1.08
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	0.038 kg