



DRIVESHAFT ANDERSON, INC.



17 mm x 35 mm x 10 mm SKF S7003 CD/HCP4A angular contact ball bearings

Bearing No. S7003 CD/HCP4A

S7003 CD/HCP4A Bearing 2D drawings and 3D CAD models

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|---|-------------|
| 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 | 8.5 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 | 6.8 kN |
| Basic static load rating - C ₀ | 3.2 kN |
| Fatigue load limit - P _u | 0.137 kN |



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| Limiting speed for grease lubrication | 60000 r/min |
| Ball - D_w | 5.556 mm |
| Ball - z | 12 |
| Calculation factor - f_0 | 9.1 |
| Preload class A - G_A | 25 N |
| Preload class B - G_B | 50 N |
| Preload class C - G_C | 100 N |
| Preload class D - G_D | 200 N |
| Calculation factor - f | 1.04 |
| Calculation factor - f | 1 |
| Calculation factor - f_{2A} | 1 |
| Calculation factor - f_{2B} | 1.02 |
| Calculation factor - f_{2C} | 1.05 |
| Calculation factor - f_{2D} | 1.09 |
| Calculation factor - f_{HC} | 1.02 |
| Preload class A | 22 N/micron |
| Preload class B | 29 N/micron |
| Preload class C | 39 N/micron |
| Preload class D | 55 N/micron |
| 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 |
| 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 |



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| r_a max. | 0.3 mm |
| r_b max. | 0.2 mm |
| Basic dynamic load rating C | 6.76 kN |
| Basic static load rating C_0 | 3.25 kN |
| Fatigue load limit P_u | 0.137 kN |
| Attainable speed for grease lubrication | 60000 r/min |
| Ball diameter D_w | 5.556 mm |
| Number of balls z | 12 |
| Preload class A G_A | 25 N |
| Static axial stiffness, preload class A | 22 N/ μ m |
| Preload class B G_B | 50 N |
| Static axial stiffness, preload class B | 29 N/ μ m |
| Preload class C G_C | 100 N |
| Static axial stiffness, preload class C | 39 N/ μ m |
| Preload class D G_D | 200 N |
| Static axial stiffness, preload class D | 55 N/ μ m |
| Calculation factor f | 1.04 |
| Calculation factor f_1 | 1 |
| Calculation factor f_{2A} | 1 |
| Calculation factor f_{2B} | 1.02 |
| Calculation factor f_{2C} | 1.05 |
| Calculation factor f_{2D} | 1.09 |
| Calculation factor f_{HC} | 1.02 |
| Calculation factor f_0 | 9.1 |
| Mass bearing | 0.033 kg |