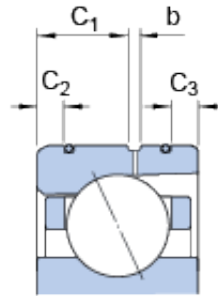
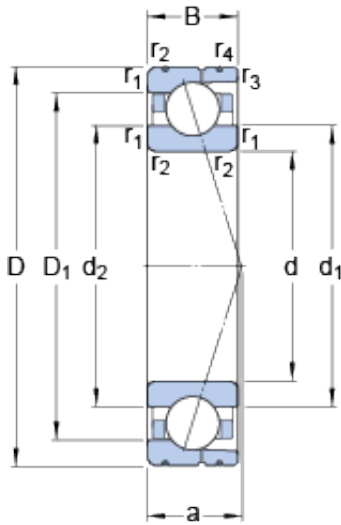




NTL BEARINGS LTD.



7013 CD/HCP4AL SKF High Speed Angular Contact Ball Bearings

Bearing No. 7013 CD/HCP4AL

7013 CD/HCP4AL Bearing 2D drawings and 3D CAD models

| | |
|-------------------------|--------------|
| Size | 100x65x18 mm |
| Bore Diameter | 100 mm |
| Outer Diameter | 65 mm |
| Width | 18 mm |
| d | 65 mm |
| D | 100 mm |
| B | 18 mm |
| d ₁ | 75.8 mm |
| d ₂ | 75.8 mm |
| D ₁ | 89.2 mm |
| b | 1.9 mm |
| C ₁ | 9.7 mm |
| C ₂ | 4.3 mm |
| C ₃ | 3.8 mm |
| r _{1,2} - min. | 1.1 mm |
| r _{3,4} - min. | 0.6 mm |
| a | 20.1 mm |
| d _a - min. | 71 mm |
| d _b - min. | 71 mm |
| D _a - max. | 94 mm |
| D _b - max. | 96.8 mm |
| r _a - max. | 1 mm |
| r _b - max. | 0.6 mm |
| d _n | 78.1 mm |
| | |



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| | |
|-------------------------------------------|---------------------|
| Basic dynamic load rating - C | 41.6 kN |
| Basic static load rating - C ₀ | 37.5 kN |
| Fatigue load limit - P _u | 1.6 kN |
| Limiting speed for grease lubrication | 16000 r/min |
| Limiting speed for oil lubrication | 24000 mm/min |
| Ball - D _w | 11.112 mm |
| Ball - z | 20 |
| G _{ref} | 5.7 cm ³ |
| Calculation factor - f ₀ | 15.6 |
| Preload class A - G _A | 160 N |
| Preload class B - G _B | 320 N |
| Preload class C - G _C | 640 N |
| Preload class D - G _D | 1280 N |
| Calculation factor - f | 1.13 |
| 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 | 82 N/micron |
| Preload class B | 112 N/micron |
| Preload class C | 158 N/micron |
| Preload class D | 230 N/micron |
| d ₁ | 75.8 mm |
| d ₂ | 75.8 mm |
| D ₁ | 89.2 mm |
| C ₁ | 9.7 mm |



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| | |
|------------------------------------------|---------------------|
| C_2 | 4.3 mm |
| C_3 | 3.8 mm |
| $r_{1,2}$ min. | 1.1 mm |
| $r_{3,4}$ min. | 0.6 mm |
| d_a min. | 71 mm |
| d_b min. | 71 mm |
| D_a max. | 94 mm |
| D_b max. | 96.8 mm |
| r_a max. | 1 mm |
| r_b max. | 0.6 mm |
| d_n | 78.1 mm |
| Basic dynamic load rating C | 41.6 kN |
| Basic static load rating C_0 | 37.5 kN |
| Fatigue load limit P_u | 1.6 kN |
| Attainable speed for grease lubrication | 16000 r/min |
| Attainable speed for oil-air lubrication | 24000 r/min |
| Ball diameter D_w | 11.112 mm |
| Number of balls z | 20 |
| Reference grease quantity G_{ref} | 5.7 cm ³ |
| Preload class A G_A | 160 N |
| Static axial stiffness, preload class A | 82 N/ μ m |
| Preload class B G_B | 320 N |
| Static axial stiffness, preload class B | 112 N/ μ m |
| Preload class C G_C | 640 N |
| Static axial stiffness, preload class C | 158 N/ μ m |
| Preload class D G_D | 1280 N |
| Static axial stiffness, preload class D | 230 N/ μ m |
| | |



NTL BEARINGS LTD.

| | |
|-----------------------------|---------|
| Calculation factor f | 1.13 |
| 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 | 15.6 |
| Mass bearing | 0.36 kg |