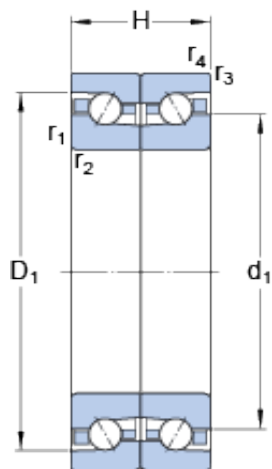




SUPER PRECISION BEARINGS MANUFACTURER



SKF BTM 90 ATN9/HCP4CDB Miniature Precision Bearings

Bearing No. BTM 90 ATN9/HCP4CDB

| | |
|---|--------------|
| Size | 90x140x45 mm |
| Bore Diameter | 90 mm |
| Outer Diameter | 140 mm |
| Width | 45 mm |
| d | 90 mm |
| D | 140 mm |
| H | 45 mm |
| d ₁ | 113 mm |
| D ₁ | 127.1 mm |
| r _{1,2} - min. | 1.5 mm |
| r _{3,4} - min. | 1 mm |
| d _a - min. | 97 mm |
| D _a - max. | 135 mm |
| r _a - max. | 1.5 mm |
| r _b - max. | 1 mm |
| d _n | 109.7 mm |
| Basic dynamic load rating - C | 39 kN |
| Basic static load rating - C ₀ | 91.5 kN |
| Fatigue load limit - P _u | 3.6 kN |
| Limiting speed for grease lubrication | 8500 r/min |
| Limiting speed for oil lubrication | 10100 mm/min |
| Preload class A | 400 N |
| Preload class B | 1200 N |

BTM 90 ATN9/HCP4CDB Bearing 2D drawings and 3D CAD models



SUPER PRECISION BEARINGS MANUFACTURER

| | |
|--|--------------------|
| Static Axial rigidity, Preload class A | 324 N/micron |
| Static Axial rigidity, Preload class B | 490 N/micron |
| G_{ref} | 22 cm |
| d_1 | 113 mm |
| D_1 | 127.1 mm |
| $r_{1,2}$ min. | 1.5 mm |
| $r_{3,4}$ min. | 1 mm |
| d_a min. | 97 mm |
| D_a max. | 135 mm |
| r_a max. | 1.5 mm |
| r_b max. | 1 mm |
| d_n | 109.7 mm |
| Basic dynamic load rating C | 39 kN |
| Basic static load rating C_0 | 91.5 kN |
| Fatigue load limit P_u | 3.55 kN |
| Attainable speed for grease lubrication | 8500 r/min |
| Attainable speed for oil-air lubrication | 10100 r/min |
| Static axial stiffness for preload A | 324 N/ μ m |
| Static axial stiffness for preload B | 490 N/ μ m |
| Reference grease quantity G_{ref} | 22 cm ³ |
| Mass bearing | 2.3 kg |