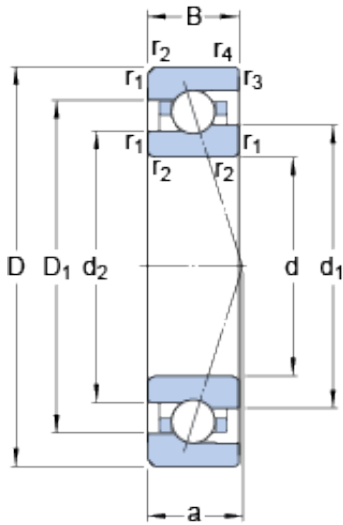




BEARING CORP. LTD.

90 mm x 140 mm x 24 mm SKF 7018 CE/HCP4A angular contact ball bearings

Bearing No. 7018 CE/HCP4A



7018 CE/HCP4A Bearing 2D drawings and 3D CAD models

| | |
|---|--------------|
| Size | 140x90x24 mm |
| Bore Diameter | 140 mm |
| Outer Diameter | 90 mm |
| Width | 24 mm |
| d | 90 mm |
| D | 140 mm |
| B | 24 mm |
| d ₁ | 108.33 mm |
| d ₂ | 105.5 mm |
| D ₁ | 121.66 mm |
| r _{1,2} - min. | 1.5 mm |
| r _{3,4} - min. | 1 mm |
| a | 27.5 mm |
| d _a - min. | 97 mm |
| d _b - min. | 97 mm |
| D _a - max. | 133 mm |
| D _b - max. | 134.4 mm |
| r _a - max. | 1.5 mm |
| r _b - max. | 1 mm |
| d _n | 111 mm |
| Basic dynamic load rating - C | 35.8 kN |
| Basic static load rating - C ₀ | 32 kN |
| Fatigue load limit - P _u | 1.3 kN |
| Limiting speed for grease | 15500 r/min |



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| | |
|------------------------------------|--------------------|
| Lubrication | |
| Limiting speed for oil lubrication | 24000 mm/min |
| Ball - D_w | 11.112 mm |
| Ball - z | 28 |
| G_{ref} | 14 cm ³ |
| Calculation factor - f_0 | 9.6 |
| Preload class A - G_A | 190 N |
| Preload class B - G_B | 580 N |
| Preload class C - G_C | 1150 N |
| Calculation factor - f | 1.1 |
| Calculation factor - f | 1 |
| Calculation factor - f_{2A} | 1 |
| Calculation factor - f_{2B} | 1.03 |
| Calculation factor - f_{2C} | 1.05 |
| Calculation factor - f_{HC} | 1.01 |
| Preload class A | 87 N/micron |
| Preload class B | 138 N/micron |
| Preload class C | 189 N/micron |
| d_1 | 108.33 mm |
| d_2 | 105.5 mm |
| D_1 | 121.66 mm |
| $r_{1,2}$ min. | 1.5 mm |
| $r_{3,4}$ min. | 1 mm |
| d_a min. | 97 mm |
| d_b min. | 97 mm |
| D_a max. | 133 mm |
| D_b max. | 134.4 mm |
| r_a max. | 1.5 mm |
| r_b max. | 1 mm |
| d_n | 111 mm |



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| | |
|--|--------------------|
| Basic dynamic load rating C | 35.8 kN |
| Basic static load rating C_0 | 32 kN |
| Fatigue load limit P_u | 1.27 kN |
| Attainable speed for grease lubrication | 15500 r/min |
| Attainable speed for oil-air lubrication | 24000 r/min |
| Ball diameter D_w | 11.112 mm |
| Number of balls z | 28 |
| Reference grease quantity G_{ref} | 14 cm ³ |
| Preload class A G_A | 190 N |
| Static axial stiffness, preload class A | 87 N/μm |
| Preload class B G_B | 580 N |
| Static axial stiffness, preload class B | 138 N/μm |
| Preload class C G_C | 1150 N |
| Static axial stiffness, preload class C | 189 N/μm |
| Calculation factor f | 1.1 |
| Calculation factor f_1 | 1 |
| Calculation factor f_{2A} | 1 |
| Calculation factor f_{2B} | 1.03 |
| Calculation factor f_{2C} | 1.05 |
| Calculation factor f_{HC} | 1.01 |
| Calculation factor f_0 | 9.6 |
| Mass bearing | 1.11 kg |