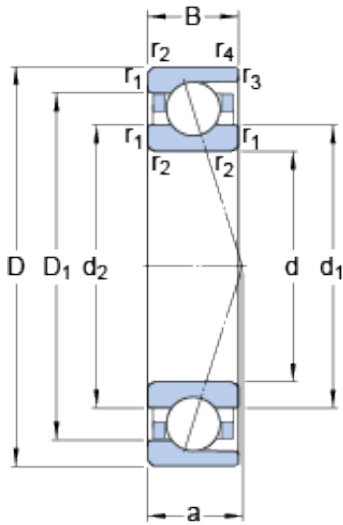




NTL BEARINGS LTD.

7013 ACD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 7013 ACD/P4A



7013 ACD/P4A 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 |
| r _{1,2} - min. | 1.1 mm |
| r _{3,4} - min. | 0.6 mm |
| a | 28.3 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 | 39 kN |
| Basic static load rating - C ₀ | 35.5 kN |
| Fatigue load limit - P _u | 1.5 kN |
| Limiting speed for grease | 12000 r/min |



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|------------------------------------|---------------------|
| Lubrication | |
| Limiting speed for oil lubrication | 19000 mm/min |
| Ball - D_w | 11.112 mm |
| Ball - z | 20 |
| G_{ref} | 5.7 cm ³ |
| 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 | 240 N |
| Preload class B - G_B | 480 N |
| Preload class C - G_C | 960 N |
| Preload class D - G_D | 1920 N |
| Calculation factor - f | 1.13 |
| 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 | 174 N/micron |
| Preload class B | 227 N/micron |
| Preload class C | 302 N/micron |
| Preload class D | 409 N/micron |
| | |



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|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category | Precision Ball Bearings |
| Inventory | 0.0 |
| Manufacturer Name | SKF |
| Minimum Buy Quantity | N/A |
| Weight / Kilogram | 0.44 |
| Product Group | B04270 |
| Enclosure | Open |
| Precision Class | ABEC 7 ISO P4 |
| Material - Ball | Steel |
| Number of Bearings | 1 (Single) |
| Contact Angle | 25 Degree |
| Preload | None |
| Raceway Style | 1 Rib Outer Ring |
| Cage Material | Phenolic |
| Rolling Element | Ball Bearing |
| Flush Ground | No |
| Inch - Metric | Metric |
| Other Features | Single Row Angular Contact High Precision |
| Long Description | 65MM Bore; 100MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Ra |
| Category | Precision Ball Bearings |
| UNSPSC | 31171531 |
| Harmonized Tariff Code | 8482.10.50.28 |
| Noun | Bearing |
| Keyword String | Angular Contact Ball |
| Manufacturer URL | http://www.skf.com |
| Manufacturer Item Number | 7013 ACD/P4A |



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|------------------------------------------|-----------------------------|
| Weight / LBS | 0.968 |
| Width | 0.709 Inch 18 Millimeter |
| Bore | 2.559 Inch 65 Millimeter |
| Outside Diameter | 3.937 Inch 100 Millimeter |
| d_1 | 75.8 mm |
| d_2 | 75.8 mm |
| D_1 | 89.2 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 | 39 kN |
| Basic static load rating C_0 | 35.5 kN |
| Fatigue load limit P_u | 1.5 kN |
| Attainable speed for grease lubrication | 12000 r/min |
| Attainable speed for oil-air lubrication | 19000 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 | 240 N |
| Static axial stiffness, preload class A | 174 N/ μ m |
| Preload class B G_B | 480 N |
| Static axial stiffness, preload class B | 227 N/ μ m |
| Preload class C G_C | 960 N |



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|-------------------------------------------------------|----------------|
| Static axial stiffness, preload class C | 302 N/ μ m |
| Preload class D G_D | 1920 N |
| Static axial stiffness, preload class D | 409 N/ μ m |
| Calculation factor f | 1.13 |
| 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 |
| 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 | 0.43 kg |