



BEARING DRIVESHAFT, INC.



65 mm x 100 mm x 18 mm SKF 7013 CD/P4AH1 angular contact ball bearings

Bearing No. 7013 CD/P4AH1

7013 CD/P4AH1 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
K	0.5 mm
C ₁	4.9 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
Basic dynamic load rating - C	41.6 kN
Basic static load rating - C ₀	37.5 kN



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Fatigue load limit - P_u	1.6 kN
Limiting speed for grease lubrication	14000 r/min
Limiting speed for oil lubrication	22000 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
Preload class A	74 N/micron
Preload class B	101 N/micron
Preload class C	143 N/micron
Preload class D	207 N/micron
d_1	75.8 mm
d_2	75.8 mm
D_1	89.2 mm
C_1	4.9 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	71 mm



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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	14000 r/min
Attainable speed for oil-air lubrication	22000 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	74 N/ μ m
Preload class B G_B	320 N
Static axial stiffness, preload class B	101 N/ μ m
Preload class C G_C	640 N
Static axial stiffness, preload class C	143 N/ μ m
Preload class D G_D	1280 N
Static axial stiffness, preload class D	207 N/ μ m
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



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Calculation factor f_{2D}	1.09
Calculation factor f_{HC}	1
Calculation factor f_0	15.6
Mass bearing	0.43 kg