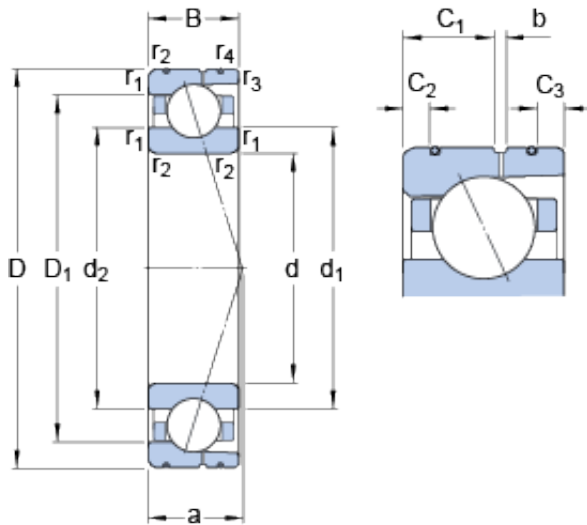




Bearing Rolamentos do Brasil Ltda.



90 mm x 140 mm x 24 mm SKF 7018
CD/HCP4AL angular contact ball bearings

Bearing No. 7018 CD/HCP4AL

7018 CD/HCP4AL 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	105.4 mm
d ₂	105.4 mm
D ₁	124.6 mm
b	2.2 mm
C ₁	13.4 mm
C ₂	5.2 mm
C ₃	4.3 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.	136 mm
r _a - max.	1.5 mm
r _b - max.	1 mm
d _n	108.7 mm



Bearing Rolamentos do Brasil Ltda.

Basic dynamic load rating - C	79.3 kN
Basic static load rating - C ₀	76.5 kN
Fatigue load limit - P _u	3 kN
Limiting speed for grease lubrication	11000 r/min
Limiting speed for oil lubrication	18000 mm/min
Ball - D _w	15.875 mm
Ball - z	20
G _{ref}	15 cm ³
Calculation factor - f ₀	15.6
Preload class A - G _A	300 N
Preload class B - G _B	600 N
Preload class C - G _C	1200 N
Preload class D - G _D	2400 N
Calculation factor - f	1.14
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	114 N/micron
Preload class B	156 N/micron
Preload class C	220 N/micron
Preload class D	319 N/micron
d ₁	105.4 mm
d ₂	105.4 mm
D ₁	124.6 mm
C ₁	13.4 mm



Bearing Rolamentos do Brasil Ltda.

C_2	5.2 mm
C_3	4.3 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.	136 mm
r_a max.	1.5 mm
r_b max.	1 mm
d_n	108.7 mm
Basic dynamic load rating C	79.3 kN
Basic static load rating C_0	76.5 kN
Fatigue load limit P_u	3 kN
Attainable speed for grease lubrication	11000 r/min
Attainable speed for oil-air lubrication	18000 r/min
Ball diameter D_w	15.875 mm
Number of balls z	20
Reference grease quantity G_{ref}	15 cm ³
Preload class A G_A	300 N
Static axial stiffness, preload class A	114 N/ μ m
Preload class B G_B	600 N
Static axial stiffness, preload class B	156 N/ μ m
Preload class C G_C	1200 N
Static axial stiffness, preload class C	220 N/ μ m
Preload class D G_D	2400 N
Static axial stiffness, preload class D	319 N/ μ m



Bearing Rolamentos do Brasil Ltda.

Calculation factor f	1.14
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	1.01 kg