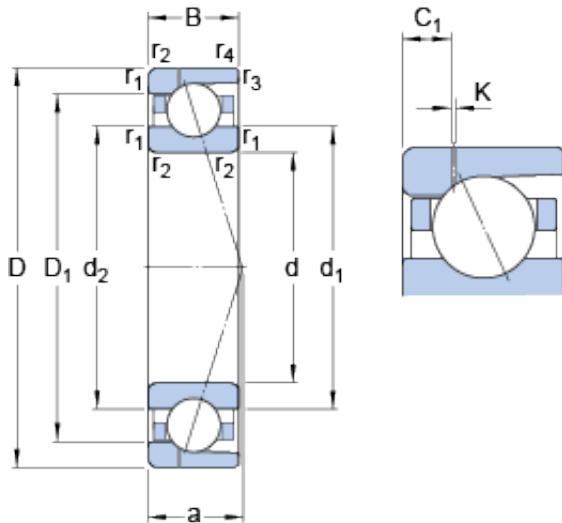




# Bearing Rolamentos do Brasil Ltda.



7038 ACD/HCP4AH1 Bearing 2D drawings and 3D CAD models

190 mm x 290 mm x 46 mm SKF 7038  
ACD/HCP4AH1 angular contact ball bearings

Bearing No. 7038 ACD/HCP4AH1

Size	290x190x46 mm
Bore Diameter	290 mm
Outer Diameter	190 mm
Width	46 mm
d	190 mm
D	290 mm
B	46 mm
d <sub>1</sub>	221.8 mm
d <sub>2</sub>	221.8 mm
D <sub>1</sub>	258.2 mm
K	0.6 mm
C <sub>1</sub>	13.4 mm
r <sub>1,2</sub> - min.	2.1 mm
r <sub>3,4</sub> - min.	1.1 mm
a	79.2 mm
d <sub>a</sub> - min.	201 mm
d <sub>b</sub> - min.	201 mm
D <sub>a</sub> - max.	279 mm
D <sub>b</sub> - max.	284 mm
r <sub>a</sub> - max.	2 mm
r <sub>b</sub> - max.	1 mm
d <sub>n</sub>	229.7 mm
Basic dynamic load rating - C	234 kN
Basic static load rating - C <sub>0</sub>	290 kN



# Bearing Rolamentos do Brasil Ltda.

Fatigue load limit - $P_u$	8 kN
Limiting speed for grease lubrication	5300 r/min
Limiting speed for oil lubrication	8000 mm/min
Ball - $D_w$	30.162 mm
Ball - $z$	22
$G_{ref}$	114 cm <sup>3</sup>
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 - $G_A$	1450 N
Preload class B - $G_B$	2900 N
Preload class C - $G_C$	5800 N
Preload class D - $G_D$	11600 N
Calculation factor - $f$	1.14
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 - $f_{HC}$	1.02
Preload class A	523 N/micron
Preload class B	681 N/micron
Preload class C	898 N/micron



# Bearing Rolamentos do Brasil Ltda.

Preload class D	1208 N/micron
$d_1$	221.8 mm
$d_2$	221.8 mm
$D_1$	258.2 mm
$C_1$	13.4 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1.1 mm
$d_a$ min.	201 mm
$d_b$ min.	201 mm
$D_a$ max.	279 mm
$D_b$ max.	284 mm
$r_a$ max.	2 mm
$r_b$ max.	1 mm
$d_n$	229.7 mm
Basic dynamic load rating C	234 kN
Basic static load rating $C_0$	290 kN
Fatigue load limit $P_u$	8 kN
Attainable speed for grease lubrication	5300 r/min
Attainable speed for oil-air lubrication	8000 r/min
Ball diameter $D_w$	30.162 mm
Number of balls z	22
Reference grease quantity $G_{ref}$	114 cm <sup>3</sup>
Preload class A $G_A$	1450 N
Static axial stiffness, preload class A	523 N/ $\mu$ m
Preload class B $G_B$	2900 N
Static axial stiffness, preload class B	681 N/ $\mu$ m
Preload class C $G_C$	5800 N
Static axial stiffness, preload class C	898 N/ $\mu$ m



# Bearing Rolamentos do Brasil Ltda.

Preload class D $G_D$	11600 N
Static axial stiffness, preload class D	1208 N/ $\mu$ m
Calculation factor $f$	1.14
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 $f_{HC}$	1.02
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	8.03 kg