



**SKF 707 ACD/HCP4A angular contact ball bearings**

Bearing No. 707 ACD/HCP4A

707 ACD/HCP4A Bearing 2D drawings and 3D CAD models

Size	7x19x6 mm
Bore Diameter	7 mm
Outer Diameter	19 mm
Width	6 mm
d	7 mm
D	19 mm
B	6 mm
C	6 mm
d1	10,8 mm
d2	10,8 mm
r1 min.	0,3 mm
r2 min.	0,3 mm
r3 min.	0,15 mm
r4 min.	0,15 mm
D1	15,2 mm
D2	– mm
da min.	9 mm
Da max.	17 mm
db min	9 mm
ra max.	0,3 mm
rb max.	0,15 mm
dh	11,7 mm
Db max	18,2 mm
Weight	0,007 Kg
Basic dynamic load rating (C)	2,42 kN



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Basic static load rating (C <sub>0</sub> )	0,95 kN
(Grease) Lubrication Speed	110 000 r/min
(Oil) Lubrication Speed	170 000 r/min
Fatigue load limit (P <sub>u</sub> )	0,04
d <sub>1</sub>	10.8 mm
d <sub>2</sub>	10.8 mm
D <sub>1</sub>	15.2 mm
r <sub>1,2</sub> min.	0.3 mm
r <sub>3,4</sub> min.	0.15 mm
a	6.1 mm
d <sub>a</sub> min.	9 mm
d <sub>b</sub> min.	9 mm
D <sub>a</sub> max.	17 mm
D <sub>b</sub> max.	18.2 mm
r <sub>a</sub> max.	0.3 mm
r <sub>b</sub> max.	0.15 mm
d <sub>n</sub>	11.7 mm
Basic dynamic load rating C	2.42 kN
Basic static load rating C <sub>0</sub>	0.95 kN
Fatigue load limit P <sub>u</sub>	0.04 kN
Attainable speed for grease lubrication	110000 r/min
Attainable speed for oil-air lubrication	170000 r/min
Ball diameter D <sub>w</sub>	3.572 mm
Number of balls z	8
Reference grease quantity G <sub>ref</sub>	0.12 cm <sup>3</sup>
Preload class A G <sub>A</sub>	15 N
Static axial stiffness, preload class A	25 N/ μ m
Preload class B G <sub>B</sub>	30 N
Static axial stiffness, preload class B	33 N/ μ m



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Preload class C $G_C$	60 N
Static axial stiffness, preload class C	43 N/ $\mu$ m
Preload class D $G_D$	120 N
Static axial stiffness, preload class D	57 N/ $\mu$ m
Calculation factor $f$	1.03
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	0.007 kg