



# AMERICAN BEARING MFG.CORP.



## 20 mm x 32 mm x 7 mm SKF 71804 ACD/HCP4 angular contact ball bearings

Bearing No. 71804 ACD/HCP4

71804 ACD/HCP4 Bearing 2D drawings and 3D CAD models

Size	32x20x7 mm
Bore Diameter	32 mm
Outer Diameter	20 mm
Width	7 mm
d	20 mm
D	32 mm
B	7 mm
d <sub>1</sub>	24.1 mm
d <sub>2</sub>	24.1 mm
D <sub>1</sub>	28.1 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.15 mm
a	9.6 mm
d <sub>a</sub> - min.	22 mm
d <sub>b</sub> - min.	22 mm
D <sub>a</sub> - max.	30 mm
D <sub>b</sub> - max.	31.2 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.15 mm
d <sub>n</sub>	24.5 mm
Basic dynamic load rating - C	3.6 kN
Basic static load rating - C <sub>0</sub>	2.5 kN
Fatigue load limit - P <sub>u</sub>	0.106 kN
Limiting speed for grease	48000 r/min



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Lubrication	
Limiting speed for oil lubrication	75000 mm/min
Ball - $D_w$	3.175 mm
Ball - $z$	17
$G_{ref}$	0.18 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 - $G_A$	32 N
Preload class B - $G_B$	100 N
Preload class C - $G_C$	200 N
Calculation factor - $f$	1.08
Calculation factor - $f_1$	0.97
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.09
Calculation factor - $f_{2C}$	1.17
Calculation factor - $f_{HC}$	1.02
Preload class A	58 N/micron
Preload class B	92 N/micron
Preload class C	125 N/micron
$d_1$	24.1 mm
$d_2$	24.1 mm
$D_1$	28.1 mm
$r_{1,2}$ min.	0.3 mm



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$r_{3,4}$ min.	0.15 mm
$d_a$ min.	22 mm
$d_b$ min.	22 mm
$D_a$ max.	30 mm
$D_b$ max.	31.2 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.15 mm
$d_n$	24.5 mm
Basic dynamic load rating C	3.64 kN
Basic static load rating $C_0$	2.5 kN
Fatigue load limit $P_u$	0.106 kN
Attainable speed for grease lubrication	48000 r/min
Attainable speed for oil-air lubrication	75000 r/min
Ball diameter $D_w$	3.175 mm
Number of balls z	17
Reference grease quantity $G_{ref}$	0.18 cm <sup>3</sup>
Preload class A $G_A$	32 N
Static axial stiffness, preload class A	58 N/ $\mu$ m
Preload class B $G_B$	100 N
Static axial stiffness, preload class B	92 N/ $\mu$ m
Preload class C $G_C$	200 N
Static axial stiffness, preload class C	125 N/ $\mu$ m
Calculation factor f	1.08
Calculation factor $f_1$	0.97
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.09
Calculation factor $f_{2C}$	1.17
Calculation factor $f_{HC}$	1.02



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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	0.017 kg