



## BEARING SUDAMERICANA, S.A.



71828 ACD/HCP4 Bearing 2D drawings and 3D CAD models

### 140 mm x 175 mm x 18 mm SKF 71828 ACD/HCP4 angular contact ball bearings

Bearing No. 71828 ACD/HCP4

Size	175x140x18 mm
Bore Diameter	175 mm
Outer Diameter	140 mm
Width	18 mm
d	140 mm
D	175 mm
B	18 mm
d <sub>1</sub>	151.3 mm
d <sub>2</sub>	151.3 mm
D <sub>1</sub>	163.71 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	45.8 mm
d <sub>a</sub> - min.	146 mm
d <sub>b</sub> - min.	146 mm
D <sub>a</sub> - max.	169 mm
D <sub>b</sub> - max.	171.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	153.2 mm
Basic dynamic load rating - C	42.3 kN
Basic static load rating - C <sub>0</sub>	58.5 kN
Fatigue load limit - P <sub>u</sub>	2 kN
Limiting speed for grease	7000 r/min



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Lubrication	
Limiting speed for oil lubrication	11000 mm/min
Ball - $D_w$	10.319 mm
Ball - $z$	35
$G_{ref}$	9.9 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 - $G_A$	380 N
Preload class B - $G_B$	1140 N
Preload class C - $G_C$	2280 N
Calculation factor - $f$	1.43
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	340 N/micron
Preload class B	543 N/micron
Preload class C	749 N/micron
$d_1$	151.3 mm
$d_2$	151.3 mm
$D_1$	163.71 mm
$r_{1,2}$ min.	1.1 mm



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$r_{3,4}$ min.	0.6 mm
$d_a$ min.	146 mm
$d_b$ min.	146 mm
$D_a$ max.	169 mm
$D_b$ max.	171.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	153.2 mm
Basic dynamic load rating C	42.3 kN
Basic static load rating $C_0$	58.5 kN
Fatigue load limit $P_u$	2 kN
Attainable speed for grease lubrication	7000 r/min
Attainable speed for oil-air lubrication	11000 r/min
Ball diameter $D_w$	10.319 mm
Number of balls z	35
Reference grease quantity $G_{ref}$	9.9 cm <sup>3</sup>
Preload class A $G_A$	380 N
Static axial stiffness, preload class A	340 N/ $\mu$ m
Preload class B $G_B$	1140 N
Static axial stiffness, preload class B	543 N/ $\mu$ m
Preload class C $G_C$	2280 N
Static axial stiffness, preload class C	749 N/ $\mu$ m
Calculation factor f	1.43
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	0.7 kg