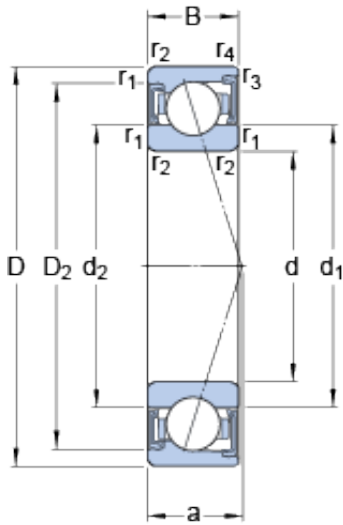




# AMERICAN BEARING MFG.CORP.



S7024 ACD/P4A Bearing 2D drawings and 3D CAD models

120 mm x 180 mm x 28 mm SKF S7024  
ACD/P4A angular contact ball bearings

Bearing No. S7024 ACD/P4A

Size	180x120x28 mm
Bore Diameter	180 mm
Outer Diameter	120 mm
Width	28 mm
d	120 mm
D	180 mm
B	28 mm
d <sub>1</sub>	138.5 mm
d <sub>2</sub>	138.5 mm
D <sub>2</sub>	165.05 mm
r <sub>1,2</sub> - min.	2 mm
r <sub>3,4</sub> - min.	1 mm
a	49.1 mm
d <sub>a</sub> - min.	129 mm
d <sub>a</sub> - max.	137.9 mm
d <sub>b</sub> - min.	129 mm
d <sub>b</sub> - max.	137.9 mm
D <sub>a</sub> - max.	171 mm
D <sub>b</sub> - max.	175 mm
r <sub>a</sub> - max.	2 mm
r <sub>b</sub> - max.	1 mm
Basic dynamic load rating - C	111 kN
Basic static load rating - C <sub>0</sub>	116 kN
Fatigue load limit - P <sub>u</sub>	4 kN



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Limiting speed for grease lubrication	6700 r/min
Ball - $D_w$	19.05 mm
Ball - z	22
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 - $G_A$	690 N
Preload class B - $G_B$	1380 N
Preload class C - $G_C$	2760 N
Preload class D - $G_D$	5520 N
Calculation factor - f	1.17
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
Preload class A	318 N/micron
Preload class B	416 N/micron
Preload class C	552 N/micron
Preload class D	749 N/micron
$d_1$	138.5 mm
$d_2$	138.5 mm
$D_2$	165.05 mm



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$r_{1,2}$ min.	2 mm
$r_{3,4}$ min.	1 mm
$d_a$ min.	129 mm
$d_a$ max.	137.9 mm
$d_b$ min.	129 mm
$d_b$ max.	137.9 mm
$D_a$ max.	171 mm
$D_b$ max.	175 mm
$r_a$ max.	2 mm
$r_b$ max.	1 mm
Basic dynamic load rating C	111 kN
Basic static load rating $C_0$	116 kN
Fatigue load limit $P_u$	4 kN
Attainable speed for grease lubrication	6700 r/min
Ball diameter $D_w$	19.05 mm
Number of balls z	22
Preload class A $G_A$	690 N
Static axial stiffness, preload class A	318 N/ $\mu$ m
Preload class B $G_B$	1380 N
Static axial stiffness, preload class B	416 N/ $\mu$ m
Preload class C $G_C$	2760 N
Static axial stiffness, preload class C	552 N/ $\mu$ m
Preload class D $G_D$	5520 N
Static axial stiffness, preload class D	749 N/ $\mu$ m
Calculation factor f	1.17
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05



## AMERICAN BEARING MFG.CORP.

Calculation factor $f_{2D}$	1.08
Calculation factor $f_{HC}$	1
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	2.15 kg