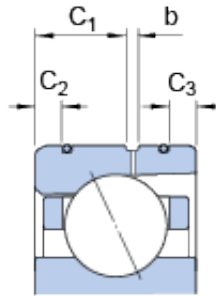
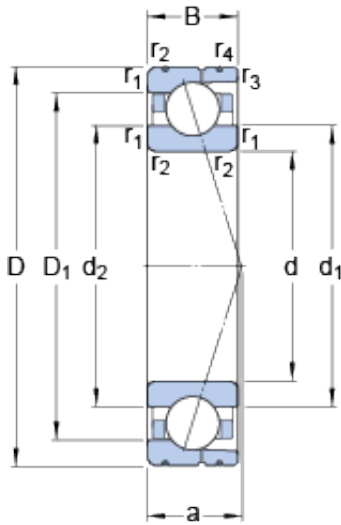




KOYO PRECISION AXLE CORP.



120 mm x 180 mm x 28 mm SKF 7024
ACD/HCP4AL angular contact ball bearings

Bearing No. 7024 ACD/HCP4AL

7024 ACD/HCP4AL Bearing 2D drawings and 3D CAD models

Size	180x120x28 mm
Bore Diameter	180 mm
Outer Diameter	120 mm
Width	28 mm
d	120 mm
D	180 mm
B	28 mm
d ₁	138.5 mm
d ₂	138.5 mm
D ₁	161.5 mm
b	2.8 mm
C ₁	15 mm
C ₂	6.2 mm
C ₃	5.4 mm
r _{1,2} - min.	2 mm
r _{3,4} - min.	1 mm
a	49.1 mm
d _a - min.	129 mm
d _b - min.	129 mm
D _a - max.	171 mm
D _b - max.	175 mm
r _a - max.	2 mm
r _b - max.	1 mm
d _n	142.6 mm



KOYO PRECISION AXLE CORP.

Basic dynamic load rating - C	111 kN
Basic static load rating - C ₀	116 kN
Fatigue load limit - P _u	4 kN
Limiting speed for grease lubrication	8000 r/min
Limiting speed for oil lubrication	12000 mm/min
Ball - D _w	19.05 mm
Ball - z	22
G _{ref}	27 cm ³
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}	1.02



KOYO PRECISION AXLE CORP.

Preload class A	353 N/micron
Preload class B	461 N/micron
Preload class C	613 N/micron
Preload class D	831 N/micron
d_1	138.5 mm
d_2	138.5 mm
D_1	161.5 mm
C_1	15 mm
C_2	6.2 mm
C_3	5.4 mm
$r_{1,2}$ min.	2 mm
$r_{3,4}$ min.	1 mm
d_a min.	129 mm
d_b min.	129 mm
D_a max.	171 mm
D_b max.	175 mm
r_a max.	2 mm
r_b max.	1 mm
d_n	142.6 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	8000 r/min
Attainable speed for oil-air lubrication	12000 r/min
Ball diameter D_w	19.05 mm
Number of balls z	22
Reference grease quantity G_{ref}	27 cm ³
Preload class A G_A	690 N
Static axial stiffness, preload class A	353 N/ μ m



KOYO PRECISION AXLE CORP.

Preload class B G_B	1380 N
Static axial stiffness, preload class B	461 N/ μ m
Preload class C G_C	2760 N
Static axial stiffness, preload class C	613 N/ μ m
Preload class D G_D	5520 N
Static axial stiffness, preload class D	831 N/ μ 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
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	1.76 kg