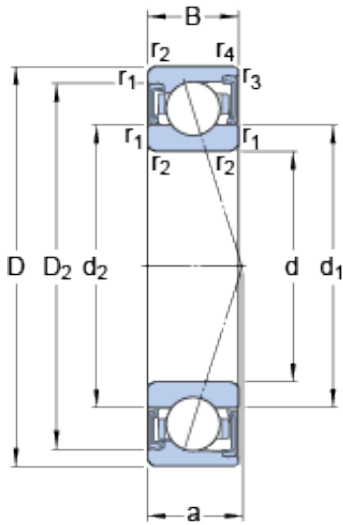




# SKF DRIVESHAFT CORP



S7030 ACD/P4A Bearing 2D drawings and 3D CAD models

150 mm x 225 mm x 35 mm skf S7030  
ACD/P4A Super-precision Angular contact ball  
bearings

Bearing No. S7030 ACD/P4A

Size	225x150x35 mm
Bore Diameter	225 mm
Outer Diameter	150 mm
Width	35 mm
d	150 mm
D	225 mm
B	35 mm
d <sub>1</sub>	173.1 mm
d <sub>2</sub>	173.1 mm
D <sub>2</sub>	206.6 mm
r <sub>1,2</sub> - min.	2.1 mm
r <sub>3,4</sub> - min.	1 mm
a	61.4 mm
d <sub>a</sub> - min.	161 mm
d <sub>a</sub> - max.	172.3 mm
d <sub>b</sub> - min.	161 mm
d <sub>b</sub> - max.	172.3 mm
D <sub>a</sub> - max.	214 mm
D <sub>b</sub> - max.	220 mm
r <sub>a</sub> - max.	2 mm
r <sub>b</sub> - max.	1 mm
Basic dynamic load rating - C	163 kN
Basic static load rating - C <sub>0</sub>	180 kN



## SKF DRIVESHAFT CORP

Fatigue load limit - $P_u$	5.6 kN
Limiting speed for grease lubrication	5300 r/min
Ball - $D_w$	23.812 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 - $G_A$	1000 N
Preload class B - $G_B$	2000 N
Preload class C - $G_C$	4000 N
Preload class D - $G_D$	8000 N
Calculation factor - $f$	1.16
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	388 N/micron
Preload class B	506 N/micron
Preload class C	671 N/micron
Preload class D	909 N/micron
$d_1$	173.1 mm



## SKF DRIVESHAFT CORP

$d_2$	173.1 mm
$D_2$	206.6 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1 mm
$d_a$ min.	161 mm
$d_a$ max.	172.3 mm
$d_b$ min.	161 mm
$d_b$ max.	172.3 mm
$D_a$ max.	214 mm
$D_b$ max.	220 mm
$r_a$ max.	2 mm
$r_b$ max.	1 mm
Basic dynamic load rating C	163 kN
Basic static load rating $C_0$	180 kN
Fatigue load limit $P_u$	5.6 kN
Attainable speed for grease lubrication	5300 r/min
Ball diameter $D_w$	23.812 mm
Number of balls z	22
Preload class A $G_A$	1000 N
Static axial stiffness, preload class A	388 N/ $\mu$ m
Preload class B $G_B$	2000 N
Static axial stiffness, preload class B	506 N/ $\mu$ m
Preload class C $G_C$	4000 N
Static axial stiffness, preload class C	671 N/ $\mu$ m
Preload class D $G_D$	8000 N
Static axial stiffness, preload class D	909 N/ $\mu$ m
Calculation factor f	1.16
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1



## SKF DRIVESHAFT CORP

Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
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	4.21 kg