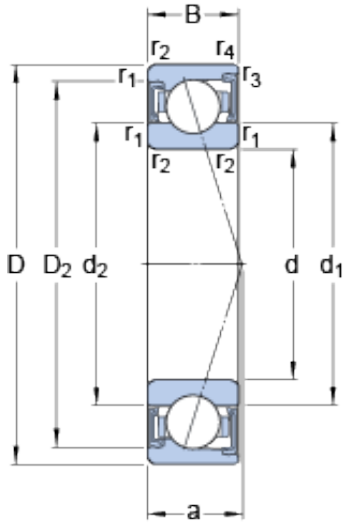




# BEARING PRECISION AXLE CORP.



## S7212 ACD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. S7212 ACD/P4A

S7212 ACD/P4A Bearing 2D drawings and 3D CAD models

Size	110x60x22 mm
Bore Diameter	110 mm
Outer Diameter	60 mm
Width	22 mm
d	60 mm
D	110 mm
B	22 mm
d <sub>1</sub>	76.4 mm
d <sub>2</sub>	76.4 mm
D <sub>2</sub>	96.8 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	0.6 mm
a	30.9 mm
d <sub>a</sub> - min.	69 mm
d <sub>a</sub> - max.	75.6 mm
d <sub>b</sub> - min.	69 mm
d <sub>b</sub> - max.	75.6 mm
D <sub>a</sub> - max.	101 mm
D <sub>b</sub> - max.	105.8 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	0.6 mm
Basic dynamic load rating - C	55.3 kN
Basic static load rating - C <sub>0</sub>	45 kN
Fatigue load limit - P <sub>u</sub>	1.9 kN



## BEARING PRECISION AXLE CORP.

Limiting speed for grease lubrication	11000 r/min
Ball - $D_w$	14.288 mm
Ball - $z$	16
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 - $G_A$	350 N
Preload class B - $G_B$	700 N
Preload class C - $G_C$	1400 N
Preload class D - $G_D$	2800 N
Calculation factor - $f$	1.07
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.02
Calculation factor - $f_{2D}$	1.05
Calculation factor - $f_{HC}$	1
Preload class A	182 N/micron
Preload class B	238 N/micron
Preload class C	315 N/micron
Preload class D	424 N/micron
$d_1$	76.4 mm
$d_2$	76.4 mm
$D_2$	96.8 mm



## BEARING PRECISION AXLE CORP.

$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	69 mm
$d_a$ max.	75.6 mm
$d_b$ min.	69 mm
$d_b$ max.	75.6 mm
$D_a$ max.	101 mm
$D_b$ max.	105.8 mm
$r_a$ max.	1.5 mm
$r_b$ max.	0.6 mm
Basic dynamic load rating C	55.3 kN
Basic static load rating $C_0$	45 kN
Fatigue load limit $P_u$	1.9 kN
Attainable speed for grease lubrication	11000 r/min
Ball diameter $D_w$	14.288 mm
Number of balls z	16
Preload class A $G_A$	350 N
Static axial stiffness, preload class A	182 N/ $\mu$ m
Preload class B $G_B$	700 N
Static axial stiffness, preload class B	238 N/ $\mu$ m
Preload class C $G_C$	1400 N
Static axial stiffness, preload class C	315 N/ $\mu$ m
Preload class D $G_D$	2800 N
Static axial stiffness, preload class D	424 N/ $\mu$ m
Calculation factor f	1.07
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.02



## BEARING PRECISION AXLE CORP.

Calculation factor $f_{2D}$	1.05
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	0.82 kg