



**Bearing No. S7208 ACD/P4A**

D	80 mm
d	40 mm
B	18 mm
a	23.1 mm
Ball - z	14
Size (mm)	80x40x18
Width (mm)	18
Mass bearing	0.38 kg
$D_2$	69.7 mm
$d_2$	53.3 mm
$d_1$	53.3 mm
$d_2$	53.3 mm
$D_2$	69.7 mm
$d_1$	53.3 mm
Bearing number	S7208 ACD/P4A
Preload class B	165 N/micron
Preload class A	127 N/micron
Preload class D	294 N/micron
Preload class C	218 N/micron
Number of balls z	14
$r_b$ max.	0.6 mm
$r_a$ max.	1 mm
$D_b$ max.	75.8 mm
$D_a$ max.	73 mm
$d_b$ max.	52.5 mm
$d_b$ min.	47 mm
$d_a$ max.	52.5 mm
Bore Diameter (mm)	80
$d_a$ min.	47 mm
Outer Diameter (mm)	40

$d_a$ - max.	52.5 mm
$d_a$ - min.	47 mm
Calculation factor e	0.68
Calculation factor f	1.05
$d_b$ - max.	52.5 mm
$D_b$ - max.	75.8 mm
$r_a$ - max.	1 mm
$r_b$ - max.	0.6 mm
$d_b$ - min.	47 mm
$r_{3,4}$ min.	0.6 mm
$r_{1,2}$ min.	1.1 mm
Ball - $D_w$	11.112 mm
$D_a$ - max.	73 mm
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1.1 mm
Calculation factor - f	1.05
Calculation factor - e	0.68
Ball diameter $D_w$	11.112 mm
Basic dynamic load rating C	31.9 kN
Preload class A $G_A$	200 N
Basic dynamic load rating - C	31.9 kN
Preload class B $G_B$	400 N
Preload class C $G_C$	800 N
Preload class D $G_D$	1600 N
Preload class B - $G_B$	400 N
Preload class C - $G_C$	800 N
Preload class A - $G_A$	200 N
Preload class D - $G_D$	1600 N
Calculation factor $f_1$	0.99
Fatigue load limit $P_u$	0.98 kN

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
Calculation factor - $X_2$	0.67
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Fatigue load limit - $P_u$	0.98 kN
Calculation factor - $Y_0$	0.76
Calculation factor - $f_1$	0.99
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2D}$	1.05
Calculation factor - $f_{2C}$	1.02
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2A}$	1
Limiting speed for grease lubrication	16000 r/min
Basic static load rating $C_0$	22.8 kN
Static axial stiffness, preload class D	294 N/ $\mu$ m
Attainable speed for grease lubrication	16000 r/min
Static axial stiffness, preload class C	218 N/ $\mu$ m
Static axial stiffness, preload class B	165 N/ $\mu$ m
Static axial stiffness, preload class A	127 N/ $\mu$ m
Basic static load rating - $C_0$	22.8 kN

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