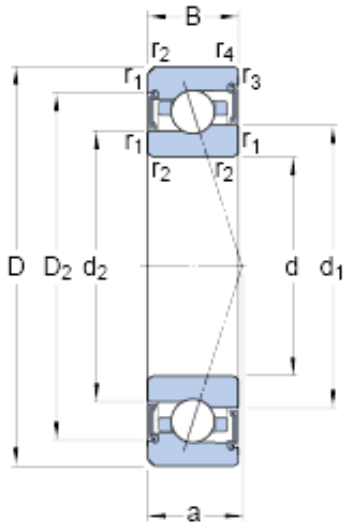




# Timken BEARINGS INDUSTRY



S7000 ACE/HCP4A Bearing 2D drawings and 3D CAD models

10 mm x 26 mm x 8 mm SKF S7000  
ACE/HCP4A angular contact ball bearings

Bearing No. S7000 ACE/HCP4A

Size	26x10x8 mm
Bore Diameter	26 mm
Outer Diameter	10 mm
Width	8 mm
d	10 mm
D	26 mm
B	8 mm
d <sub>1</sub>	15.6 mm
d <sub>2</sub>	14.5 mm
D <sub>2</sub>	22.35 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.3 mm
a	8.3 mm
d <sub>a</sub> - min.	12 mm
d <sub>a</sub> - max.	15.2 mm
d <sub>b</sub> - min.	12 mm
d <sub>b</sub> - max.	14.1 mm
D <sub>a</sub> - max.	24 mm
D <sub>b</sub> - max.	23.6 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.3 mm
Basic dynamic load rating - C	2.9 kN
Basic static load rating - C <sub>0</sub>	1.1 kN
Fatigue load limit - P <sub>u</sub>	0.048 kN



## Timken BEARINGS INDUSTRY

Limiting speed for grease lubrication	98000 r/min
Ball - $D_w$	3.969 mm
Ball - $z$	11
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 - $G_A$	26 N
Preload class B - $G_B$	80 N
Preload class C - $G_C$	160 N
Calculation factor - $f$	1.03
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.06
Calculation factor - $f_{HC}$	1.01
Preload class A	34 N/micron
Preload class B	52 N/micron
Preload class C	68 N/micron
$d_1$	15.6 mm
$d_2$	14.5 mm
$D_2$	22.35 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	12 mm



## Timken BEARINGS INDUSTRY

$d_a$ max.	15.2 mm
$d_b$ min.	12 mm
$d_b$ max.	14.1 mm
$D_a$ max.	24 mm
$D_b$ max.	23.6 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.3 mm
Basic dynamic load rating C	2.86 kN
Basic static load rating $C_0$	1.14 kN
Fatigue load limit $P_u$	0.048 kN
Attainable speed for grease lubrication	98000 r/min
Ball diameter $D_w$	3.969 mm
Number of balls z	11
Preload class A $G_A$	26 N
Static axial stiffness, preload class A	34 N/ $\mu$ m
Preload class B $G_B$	80 N
Static axial stiffness, preload class B	52 N/ $\mu$ m
Preload class C $G_C$	160 N
Static axial stiffness, preload class C	68 N/ $\mu$ m
Calculation factor f	1.03
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.06
Calculation factor $f_{HC}$	1.01
Calculation factor e	0.68
Calculation factor (single, tandem) $Y_2$	0.87
Calculation factor (single, tandem) $Y_0$	0.38



## Timken BEARINGS INDUSTRY

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	0.017 kg