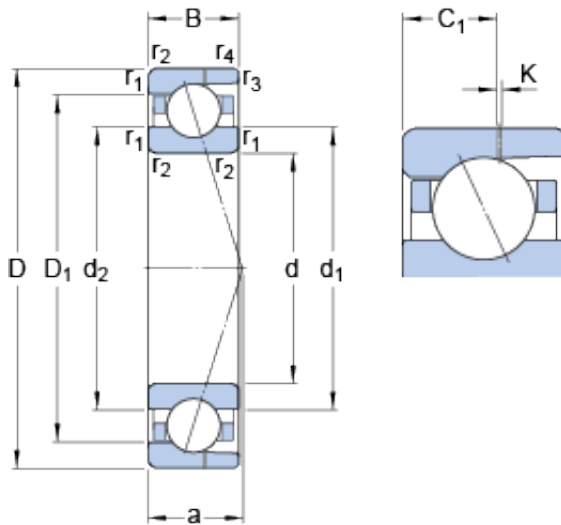




## BEARING-MALAYSIA SDN.BHD.



### 25 mm x 47 mm x 12 mm SKF 7005 ACD/HCP4AH angular contact ball bearings

Bearing No. 7005 ACD/HCP4AH

7005 ACD/HCP4AH Bearing 2D drawings and 3D  
CAD models

Size	47x25x12 mm
Bore Diameter	47 mm
Outer Diameter	25 mm
Width	12 mm
d	25 mm
D	47 mm
B	12 mm
d <sub>1</sub>	32.1 mm
d <sub>2</sub>	32.1 mm
D <sub>1</sub>	39.9 mm
K	0.5 mm
C <sub>1</sub>	7.25 mm
r <sub>1,2</sub> - min.	0.6 mm
r <sub>3,4</sub> - min.	0.3 mm
a	14.5 mm
d <sub>a</sub> - min.	28.2 mm
d <sub>b</sub> - min.	28.2 mm
D <sub>a</sub> - max.	43.8 mm
D <sub>b</sub> - max.	45 mm
r <sub>a</sub> - max.	0.6 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	33.4 mm
Basic dynamic load rating - C	9.2 kN
Basic static load rating - C <sub>0</sub>	5 kN



## BEARING-MALAYSIA SDN.BHD.

Fatigue load limit - $P_u$	0.212 kN
Limiting speed for grease lubrication	40000 r/min
Limiting speed for oil lubrication	60000 mm/min
Ball - $D_w$	6.35 mm
Ball - $z$	14
$G_{ref}$	1.02 cm <sup>3</sup>
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 - $G_A$	60 N
Preload class B - $G_B$	120 N
Preload class C - $G_C$	240 N
Preload class D - $G_D$	480 N
Calculation factor - $f$	1.05
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
Preload class A	71 N/micron
Preload class B	92 N/micron
Preload class C	119 N/micron



## BEARING-MALAYSIA SDN.BHD.

Preload class D	159 N/micron
$d_1$	32.1 mm
$d_2$	32.1 mm
$D_1$	39.9 mm
$C_1$	7.25 mm
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	28.2 mm
$d_b$ min.	28.2 mm
$D_a$ max.	43.8 mm
$D_b$ max.	45 mm
$r_a$ max.	0.6 mm
$r_b$ max.	0.3 mm
$d_n$	33.4 mm
Basic dynamic load rating C	9.23 kN
Basic static load rating $C_0$	5 kN
Fatigue load limit $P_u$	0.212 kN
Attainable speed for grease lubrication	40000 r/min
Attainable speed for oil-air lubrication	60000 r/min
Ball diameter $D_w$	6.35 mm
Number of balls z	14
Reference grease quantity $G_{ref}$	1.02 cm <sup>3</sup>
Preload class A $G_A$	60 N
Static axial stiffness, preload class A	71 N/ $\mu$ m
Preload class B $G_B$	120 N
Static axial stiffness, preload class B	92 N/ $\mu$ m
Preload class C $G_C$	240 N
Static axial stiffness, preload class C	119 N/ $\mu$ m



## BEARING-MALAYSIA SDN.BHD.

Preload class D $G_D$	480 N
Static axial stiffness, preload class D	159 N/ $\mu$ m
Calculation factor f	1.05
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	0.07 kg