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## 25 mm x 52 mm x 15 mm SKF S7205 ACD/HCP4A angular contact ball bearings

Bearing No. S7205 ACD/HCP4A

S7205 ACD/HCP4A Bearing 2D drawings and 3D CAD models

Size	52x25x15 mm
Bore Diameter	52 mm
Outer Diameter	25 mm
Width	15 mm
d	25 mm
D	52 mm
B	15 mm
d <sub>1</sub>	34.1 mm
d <sub>2</sub>	34.1 mm
D <sub>2</sub>	45.9 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.3 mm
a	16.7 mm
d <sub>a</sub> - min.	30.6 mm
d <sub>a</sub> - max.	33.5 mm
d <sub>b</sub> - min.	30.6 mm
d <sub>b</sub> - max.	33.5 mm
D <sub>a</sub> - max.	46.4 mm
D <sub>b</sub> - max.	49.6 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.3 mm
Basic dynamic load rating - C	13 kN
Basic static load rating - C <sub>0</sub>	7 kN
Fatigue load limit - P <sub>u</sub>	0.29 kN



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Limiting speed for grease lubrication	32000 r/min
Ball - $D_w$	7.938 mm
Ball - $z$	13
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 - $G_A$	80 N
Preload class B - $G_B$	160 N
Preload class C - $G_C$	320 N
Preload class D - $G_D$	640 N
Calculation factor - $f$	1.03
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.03
Calculation factor - $f_{2D}$	1.06
Calculation factor - $f_{HC}$	1.01
Preload class A	79 N/micron
Preload class B	102 N/micron
Preload class C	133 N/micron
Preload class D	175 N/micron
$d_1$	34.1 mm
$d_2$	34.1 mm
$D_2$	45.9 mm



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$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	30.6 mm
$d_a$ max.	33.5 mm
$d_b$ min.	30.6 mm
$d_b$ max.	33.5 mm
$D_a$ max.	46.4 mm
$D_b$ max.	49.6 mm
$r_a$ max.	1 mm
$r_b$ max.	0.3 mm
Basic dynamic load rating C	13 kN
Basic static load rating $C_0$	6.95 kN
Fatigue load limit $P_u$	0.29 kN
Attainable speed for grease lubrication	32000 r/min
Ball diameter $D_w$	7.938 mm
Number of balls z	13
Preload class A $G_A$	80 N
Static axial stiffness, preload class A	79 N/ $\mu$ m
Preload class B $G_B$	160 N
Static axial stiffness, preload class B	102 N/ $\mu$ m
Preload class C $G_C$	320 N
Static axial stiffness, preload class C	133 N/ $\mu$ m
Preload class D $G_D$	640 N
Static axial stiffness, preload class D	175 N/ $\mu$ m
Calculation factor f	1.03
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.03



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Calculation factor $f_{2D}$	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
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	0.12 kg