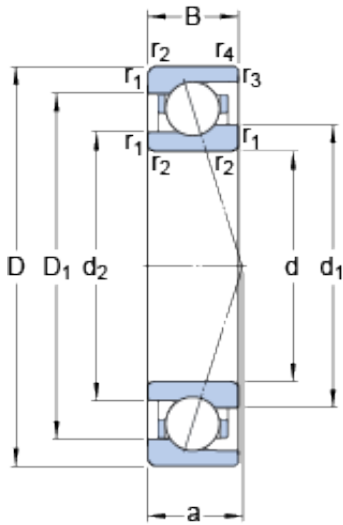




# JieFei Bearing Co., Ltd



71905 ACE/HCP4A Bearing 2D drawings and 3D CAD models

## 25 mm x 42 mm x 9 mm SKF 71905 ACE/HCP4A angular contact ball bearings

Bearing No. 71905 ACE/HCP4A

Size	42x25x9 mm
Bore Diameter	42 mm
Outer Diameter	25 mm
Width	9 mm
d	25 mm
D	42 mm
B	9 mm
d <sub>1</sub>	30.7 mm
d <sub>2</sub>	29.4 mm
D <sub>1</sub>	36.39 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.15 mm
a	12.8 mm
d <sub>a</sub> - min.	27 mm
d <sub>b</sub> - min.	27 mm
D <sub>a</sub> - max.	40 mm
D <sub>b</sub> - max.	41.2 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.15 mm
d <sub>n</sub>	31.8 mm
Basic dynamic load rating - C	4.9 kN
Basic static load rating - C <sub>0</sub>	2.7 kN
Fatigue load limit - P <sub>u</sub>	0.114 kN
Limiting speed for grease	52000 r/min



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Lubrication	
Limiting speed for oil lubrication	83000 mm/min
Ball - $D_w$	4.762 mm
Ball - $z$	16
$G_{ref}$	0.6 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 - $G_A$	45 N
Preload class B - $G_B$	140 N
Preload class C - $G_C$	270 N
Calculation factor - $f$	1.06
Calculation factor - $f_1$	0.98
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.04
Calculation factor - $f_{2C}$	1.08
Calculation factor - $f_{HC}$	1.01
Preload class A	57 N/micron
Preload class B	86 N/micron
Preload class C	111 N/micron
$d_1$	30.7 mm
$d_2$	29.4 mm
$D_1$	36.39 mm
$r_{1,2}$ min.	0.3 mm



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$r_{3,4}$ min.	0.15 mm
$d_a$ min.	27 mm
$d_b$ min.	27 mm
$D_a$ max.	40 mm
$D_b$ max.	41.2 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.15 mm
$d_n$	31.8 mm
Basic dynamic load rating C	4.94 kN
Basic static load rating $C_0$	2.7 kN
Fatigue load limit $P_u$	0.114 kN
Attainable speed for grease lubrication	52000 r/min
Attainable speed for oil-air lubrication	83000 r/min
Ball diameter $D_w$	4.762 mm
Number of balls z	16
Reference grease quantity $G_{ref}$	0.6 cm <sup>3</sup>
Preload class A $G_A$	45 N
Static axial stiffness, preload class A	57 N/ $\mu$ m
Preload class B $G_B$	140 N
Static axial stiffness, preload class B	86 N/ $\mu$ m
Preload class C $G_C$	270 N
Static axial stiffness, preload class C	111 N/ $\mu$ m
Calculation factor f	1.06
Calculation factor $f_1$	0.98
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.04
Calculation factor $f_{2C}$	1.08
Calculation factor $f_{HC}$	1.01



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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	0.036 kg