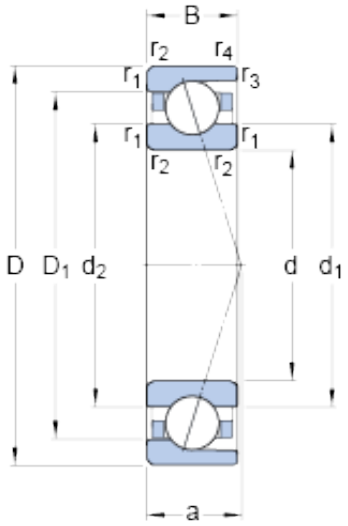

71905 ACD/HCP4A Bearing 2D drawings and 3D CAD models

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

Bearing No. 71905 ACD/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_1	30.6 mm
d_2	30.6 mm
D_1	36.4 mm
$r_{1,2}$ - min.	0.3 mm
$r_{3,4}$ - min.	0.2 mm
a	12.4 mm
d_a - min.	27 mm
d_b - min.	27 mm
D_a - max.	40 mm
D_b - max.	40.6 mm
r_a - max.	0.3 mm
r_b - max.	0.2 mm
d_n	31.8 mm
Basic dynamic load rating - C	6.4 kN
Basic static load rating - C_0	3.8 kN
Fatigue load limit - P_u	0.16 kN
Limiting speed for grease	38000 r/min

lubrication	
Limiting speed for oil lubrication	56000 mm/min
Ball - D_w	4.762 mm
Ball - z	18
G_{ref}	0.54 cm3
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	40 N
Preload class B - G_B	80 N
Preload class C - G_C	160 N
Preload class D - G_D	320 N
Calculation factor - f	1.07
Calculation factor - f_1	0.98
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.07
Calculation factor - f_{2C}	1.12
Calculation factor - f_{2D}	1.17
Calculation factor - f_{HC}	1.04
Preload class A	66 N/micron
Preload class B	86 N/micron
Preload class C	112 N/micron
Preload class D	149 N/micron

d_1	30.6 mm
d_2	30.6 mm
D_1	36.4 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
d_a min.	27 mm
d_b min.	27 mm
D_a max.	40 mm
D_b max.	40.6 mm
r_a max.	0.3 mm
r_b max.	0.2 mm
d_n	31.8 mm
Basic dynamic load rating C	6.37 kN
Basic static load rating C_0	3.8 kN
Fatigue load limit P_u	0.16 kN
Attainable speed for grease lubrication	38000 r/min
Attainable speed for oil-air lubrication	56000 r/min
Ball diameter D_w	4.762 mm
Number of balls z	18
Reference grease quantity G_{ref}	0.54 cm^3
Preload class A G_A	40 N
Static axial stiffness, preload class A	66 N/µm
Preload class B G_B	80 N
Static axial stiffness, preload class B	86 N/µm
Preload class C G_C	160 N
Static axial stiffness, preload class C	112 N/µm
Preload class D G_D	320 N
Static axial stiffness, preload	149 N/µm

class D	
Calculation factor f	1.07
Calculation factor f_1	0.98
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.07
Calculation factor f_{2C}	1.12
Calculation factor f_{2D}	1.17
Calculation factor f_{HC}	1.04
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	0.039 kg