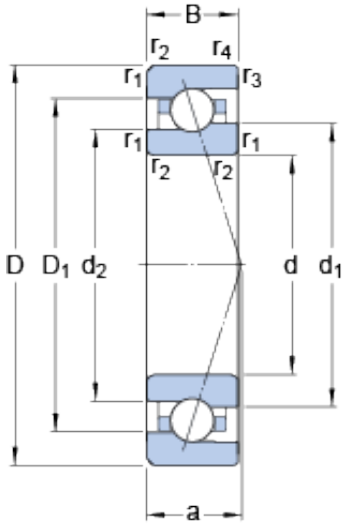
Loyal | 7009 ACE/HCP4A



Bearing No. 7009 ACE/HCP4A

D	75 mm
d	45 mm
B	16 mm
a	22.2 mm
Ball - z	21
Size (mm)	75x45x16
Width (mm)	16
Mass bearing	0.22 kg
d_n	57.6 mm
d_n	57.6 mm
D_1	64.25 mm
d_1	55.7 mm
d_2	53.6 mm
D_1	64.25 mm
d_2	53.6 mm
d_1	55.7 mm
Bearing number	7009 ACE/HCP4A
Preload class A	104 N/micron
G_{ref}	3.4 cm3
Preload class C	204 N/micron
Preload class B	156 N/micron
Number of balls z	21
Bore Diameter (mm)	75
r_b max.	0.6 mm
r_a max.	1 mm
D_b max.	70.8 mm
D_a max.	70.4 mm
d_a min.	49.6 mm
d_b min.	49.6 mm

Outer Diameter (mm)	45
D_b - max.	70.8 mm
d_a - min.	49.6 mm
Calculation factor e	0.68
Calculation factor f	1.06
r_b - max.	0.6 mm
D_a - max.	70.4 mm
r_a - max.	1 mm
$r_{3,4}$ min.	0.6 mm
$r_{1,2}$ min.	1 mm
Ball - D_w	7.144 mm
d_b - min.	49.6 mm
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.6 mm
Calculation factor - e	0.68
Calculation factor - f	1.06
Basic dynamic load rating C	12.1 kN
Ball diameter D_w	7.144 mm
Preload class B G_B	330 N
Preload class C G_C	660 N
Basic dynamic load rating - C	12.1 kN
Preload class A G_A	110 N
Preload class B - G_B	330 N
Preload class C - G_C	660 N
Preload class A - G_A	110 N
Fatigue load limit P_u	0.345 kN
Calculation factor f_1	0.99
Calculation factor f_{2C}	1.06
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1.01

Calculation factor f_{2B}	1.03
Limiting speed for oil lubrication	45000 mm/min
Fatigue load limit - P_u	0.345 kN
Calculation factor - f_1	0.99
Calculation factor - Y_2	1.41
Calculation factor - X_2	0.67
Calculation factor - Y_1	0.92
Calculation factor - Y_0	0.76
Calculation factor - f_{HC}	1.01
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.06
Calculation factor - f_{2B}	1.03
Limiting speed for grease lubrication	29000 r/min
Basic static load rating C_0	8.15 kN
Static axial stiffness, preload class B	156 N/µm
Static axial stiffness, preload class A	104 N/µm
Attainable speed for grease lubrication	29000 r/min
Static axial stiffness, preload class C	204 N/µm
Basic static load rating - C_0	8.2 kN
Attainable speed for oil-air lubrication	45000 r/min
Reference grease quantity G_{ref}	3.4 cm³
Calculation factor (single, tandem) Y_2	0.87
Calculation factor	0.38

(single, tandem) Y_0	
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