



Bearing No. 7002 ACE/HCP4AH

K	0.5 mm
a	10.1 mm
d	15 mm
D	32 mm
B	9 mm
Ball - z	12
Size (mm)	32x15x9
Width (mm)	9
Mass bearing	0.025 kg
d_n	21.9 mm
D_1	26.9 mm
d_1	20.65 mm
C_1	5.35 mm
D_1	26.9 mm
d_2	19.5 mm
C_1	5.35 mm
d_1	20.65 mm
d_n	21.9 mm
d_2	19.5 mm
Bearing number	7002 ACE/HCP4AH
Preload class A	44 N/micron
Preload class B	66 N/micron
Preload class C	73 N/micron
G_{ref}	0.5 cm ³
Number of balls z	12
Bore Diameter (mm)	32
r_b max.	0.15 mm
r_a max.	0.3 mm
D_b max.	30.6 mm

D _a max.	30 mm
d _a min.	17 mm
d _b min.	17 mm
Outer Diameter (mm)	15
r _a - max.	0.3 mm
r _{3,4} min.	0.15 mm
D _a - max.	30 mm
d _b - min.	17 mm
r _{1,2} min.	0.3 mm
Ball - D _w	4.762 mm
r _b - max.	0.15 mm
D _b - max.	30.6 mm
Calculation factor f	1.03
Calculation factor e	0.68
d _a - min.	17 mm
Calculation factor - f	1.03
r _{3,4} - min.	0.15 mm
r _{1,2} - min.	0.3 mm
Calculation factor - e	0.68
Ball diameter D _w	4.762 mm
Basic dynamic load rating C	4.23 kN
Preload class A G _A	38 N
Preload class B G _B	115 N
Preload class C G _C	230 N
Basic dynamic load rating - C	4.2 kN
Preload class B - G _B	115 N
Preload class C - G _C	230 N
Preload class A - G _A	38 N
Fatigue load limit P _u	0.078 kN
Calculation factor f ₁	0.99

Calculation factor f_{2C}	1.06
Calculation factor f_{2B}	1.03
Calculation factor f_{HC}	1.01
Calculation factor f_{2A}	1
Calculation factor - f_1	0.99
Limiting speed for oil lubrication	115000 mm/min
Fatigue load limit - P_u	0.078 kN
Calculation factor - Y_0	0.76
Calculation factor - Y_1	0.92
Calculation factor - X_2	0.67
Calculation factor - Y_2	1.41
Calculation factor - f_{HC}	1.01
Calculation factor - f_{2C}	1.06
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	75000 r/min
Basic static load rating C_0	1.83 kN
Static axial stiffness, preload class C	73 N/ μ m
Attainable speed for grease lubrication	75000 r/min
Static axial stiffness, preload class B	66 N/ μ m
Static axial stiffness, preload class A	44 N/ μ m
Attainable speed for oil-air lubrication	115000 r/min
Basic static load rating - C_0	1.8 kN
Reference grease	0.5 cm ³

quantity G_{ref}	
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