



Bearing No. 7002 ACD/HCP4A

D	32 mm
d	15 mm
B	9 mm
a	10.1 mm
Ball - z	12
Size (mm)	32x15x9
Width (mm)	9
Mass bearing	0.027 kg
d _n	21.5 mm
d _n	21.5 mm
D ₁	26.4 mm
d ₁	20.6 mm
d ₂	20.6 mm
D ₁	26.4 mm
d ₂	20.6 mm
d ₁	20.6 mm
Bearing number	7002 ACD/HCP4A
Preload class B	59 N/micron
Preload class A	46 N/micron
Preload class D	102 N/micron
Preload class C	77 N/micron
G _{ref}	0.39 cm ³
Number of balls z	12
Bore Diameter (mm)	32
r _b max.	0.2 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
D_b - max.	30.6 mm
d_b - min.	17 mm
Ball - D_w	4.762 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
d_a - min.	17 mm
r_a - max.	0.3 mm
D_a - max.	30 mm
r_b - max.	0.2 mm
Calculation factor f	1.03
Calculation factor e	0.68
$r_{1,2}$ - min.	0.3 mm
$r_{3,4}$ - min.	0.2 mm
Calculation factor - e	0.68
Calculation factor - f	1.03
Ball diameter D_w	4.762 mm
Basic dynamic load rating C	4.94 kN
Preload class C G_C	120 N
Preload class B G_B	60 N
Preload class A G_A	30 N
Preload class D G_D	240 N
Basic dynamic load rating - C	4.9 kN
Preload class B - G_B	60 N
Preload class D - G_D	240 N
Preload class C - G_C	120 N
Preload class A - G_A	30 N
Fatigue load limit P_u	0.098 kN
Calculation factor f_1	0.99

Calculation factor f_{2A}	1
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1.02
Calculation factor - X_2	0.67
Calculation factor - f_1	0.99
Calculation factor - Y_1	0.92
Limiting speed for oil lubrication	95000 mm/min
Calculation factor - Y_0	0.76
Fatigue load limit - P_u	0.098 kN
Calculation factor - Y_2	1.41
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2D}	1.08
Limiting speed for grease lubrication	60000 r/min
Basic static load rating C_0	2.32 kN
Static axial stiffness, preload class B	59 N/ μ m
Attainable speed for grease lubrication	60000 r/min
Static axial stiffness, preload class D	102 N/ μ m
Static axial stiffness, preload class C	77 N/ μ m
Static axial stiffness, preload class A	46 N/ μ m
Basic static load rating -	2.3 kN

C_0	
Attainable speed for oil-air lubrication	95000 r/min
Reference grease quantity G_{ref}	0.39 cm ³
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