



Bearing No. 7022 ACD/HCP4AH1

K	0.5 mm
a	46.8 mm
d	110 mm
D	170 mm
B	28 mm
Ball - z	20
Size (mm)	170x110x28
Width (mm)	28
Mass bearing	1.63 kg
d_n	132.6 mm
D_1	151.5 mm
d_1	128.5 mm
C_1	7.41 mm
D_1	151.5 mm
d_2	128.5 mm
C_1	7.41 mm
d_1	128.5 mm
d_n	132.6 mm
d_2	128.5 mm
Bearing number	7022 ACD/HCP4AH1
Preload class B	421 N/micron
Preload class A	322 N/micron
Preload class D	755 N/micron
G_{ref}	25.5 cm ³
Preload class C	558 N/micron
Number of balls z	20
Bore Diameter (mm)	170
r_b max.	1 mm
r_a max.	2 mm

D_b max.	165 mm
D_a max.	161 mm
d_a min.	119 mm
d_b min.	119 mm
Outer Diameter (mm)	110
r_a - max.	2 mm
D_a - max.	161 mm
d_b - min.	119 mm
d_a - min.	119 mm
$r_{1,2}$ min.	2 mm
$r_{3,4}$ min.	1 mm
Ball - D_w	19.05 mm
r_b - max.	1 mm
D_b - max.	165 mm
Calculation factor f	1.14
Calculation factor e	0.68
Calculation factor - f	1.14
$r_{1,2}$ - min.	2 mm
$r_{3,4}$ - min.	1 mm
Calculation factor - e	0.68
Ball diameter D_w	19.05 mm
Basic dynamic load rating C	104 kN
Preload class A G_A	650 N
Preload class B G_B	1300 N
Preload class C G_C	2600 N
Basic dynamic load rating - C	104 kN
Preload class D G_D	5200 N
Preload class B - G_B	1300 N
Preload class A - G_A	650 N
Preload class D - G_D	5200 N

Preload class C - G_C	2600 N
Fatigue load limit P_u	3.75 kN
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1.02
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Calculation factor - f_1	0.99
Limiting speed for oil lubrication	13000 mm/min
Fatigue load limit - P_u	3.8 kN
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	8500 r/min
Basic static load rating C_0	104 kN
Static axial stiffness, preload class A	322 N/ μ m
Static axial stiffness, preload class D	755 N/ μ m
Static axial stiffness, preload class C	558 N/ μ m
Static axial stiffness,	421 N/ μ m

preload class B	
Attainable speed for grease lubrication	8500 r/min
Basic static load rating - C_0	104 kN
Attainable speed for oil-air lubrication	13000 r/min
Reference grease quantity G_{ref}	25.5 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