



Bearing No. 7022 ACE/HCP4A

D	170 mm
d	110 mm
B	28 mm
a	46.9 mm
Ball - z	30
Size (mm)	170x110x28
Width (mm)	28
Mass bearing	1.93 kg
d_n	135.4 mm
d_n	135.4 mm
D_1	147.61 mm
d_1	132.38 mm
d_2	129.2 mm
D_1	147.61 mm
d_2	129.2 mm
d_1	132.38 mm
Bearing number	7022 ACE/HCP4A
Preload class A	263 N/micron
G_{ref}	23 cm ³
Preload class C	518 N/micron
Preload class B	395 N/micron
Number of balls z	30
Bore Diameter (mm)	170
r_b max.	1 mm
r_a max.	2 mm
D_b max.	164.4 mm
D_a max.	161.2 mm
d_a min.	118.8 mm
d_b min.	118.8 mm

Outer Diameter (mm)	110
D_b - max.	164.4 mm
d_a - min.	118.8 mm
Calculation factor e	0.68
Calculation factor f	1.1
r_b - max.	1 mm
D_a - max.	161.2 mm
r_a - max.	2 mm
$r_{3,4}$ min.	1 mm
$r_{1,2}$ min.	2 mm
Ball - D_w	12.7 mm
d_b - min.	118.8 mm
$r_{1,2}$ - min.	2 mm
$r_{3,4}$ - min.	1 mm
Calculation factor - e	0.68
Calculation factor - f	1.1
Basic dynamic load rating C	44.9 kN
Ball diameter D_w	12.7 mm
Preload class B G_B	1210 N
Preload class C G_C	2420 N
Basic dynamic load rating - C	44.9 kN
Preload class A G_A	400 N
Preload class B - G_B	1210 N
Preload class C - G_C	2420 N
Preload class A - G_A	400 N
Fatigue load limit P_u	1.53 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	17500 mm/min
Fatigue load limit - P_u	1.5 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	11500 r/min
Basic static load rating C_0	42.5 kN
Static axial stiffness, preload class B	395 N/ μ m
Static axial stiffness, preload class A	263 N/ μ m
Attainable speed for grease lubrication	11500 r/min
Static axial stiffness, preload class C	518 N/ μ m
Basic static load rating - C_0	42.5 kN
Attainable speed for oil-air lubrication	17500 r/min
Reference grease quantity G_{ref}	23 cm ³
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