



Bearing No. 7019 ACD/HCP4AL

b	2.2 mm
d	95 mm
a	40.1 mm
B	24 mm
D	145 mm
Ball - z	21
Size (mm)	145x95x24
Width (mm)	24
Mass bearing	1 kg
d ₂	110.4 mm
D ₁	129.6 mm
d _n	113.7 mm
C ₁	13.4 mm
C ₂	5.2 mm
C ₃	4.3 mm
C ₂	5.2 mm
C ₁	13.4 mm
d _n	113.7 mm
D ₁	129.6 mm
d ₂	110.4 mm
d ₁	110.4 mm
d ₁	110.4 mm
C ₃	4.3 mm
Bearing number	7019 ACD/HCP4AL
Preload class B	374 N/micron
Preload class A	286 N/micron
G _{ref}	15.6 cm ³
Preload class D	673 N/micron
Preload class C	497 N/micron

Number of balls z	21
Bore Diameter (mm)	145
r_b max.	1 mm
r_a max.	1.5 mm
D_b max.	141 mm
D_a max.	138 mm
d_a min.	102 mm
d_b min.	102 mm
Outer Diameter (mm)	95
r_b - max.	1 mm
d_b - min.	102 mm
d_a - min.	102 mm
D_b - max.	141 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
D_a - max.	138 mm
r_a - max.	1.5 mm
Ball - D_w	15.875 mm
Calculation factor f	1.15
Calculation factor e	0.68
Calculation factor - f	1.15
$r_{1,2}$ - min.	1.5 mm
$r_{3,4}$ - min.	1 mm
Calculation factor - e	0.68
Ball diameter D_w	15.875 mm
Basic dynamic load rating C	76.1 kN
Preload class A G_A	480 N
Preload class B G_B	960 N
Preload class C G_C	1920 N
Basic dynamic load rating - C	76.1 kN
Preload class D G_D	3840 N

Preload class C - G_C	1920 N
Preload class B - G_B	960 N
Preload class A - G_A	480 N
Preload class D - G_D	3840 N
Fatigue load limit P_u	2.9 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_0	0.76
Calculation factor - Y_2	1.41
Calculation factor - Y_1	0.92
Calculation factor - f_1	0.99
Calculation factor - X_2	0.67
Fatigue load limit - P_u	2.9 kN
Limiting speed for oil lubrication	16000 mm/min
Calculation factor - f_{2B}	1.02
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2D}	1.08
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	10000 r/min
Basic static load rating C_0	76.5 kN
Static axial stiffness, preload class A	286 N/ μ m
Static axial stiffness,	673 N/ μ m

preload class D	
Static axial stiffness, preload class C	497 N/ μ m
Static axial stiffness, preload class B	374 N/ μ m
Attainable speed for grease lubrication	10000 r/min
Attainable speed for oil-air lubrication	16000 r/min
Basic static load rating - C_0	76.5 kN
Reference grease quantity G_{ref}	15.6 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