



Bearing No. 7019 CD/HCP4AH1

K	0.5 mm
a	28.2 mm
d	95 mm
D	145 mm
B	24 mm
Ball - z	21
Size (mm)	145x95x24
Width (mm)	24
Mass bearing	1 kg
d_n	113.7 mm
D_1	129.6 mm
d_1	110.4 mm
C_1	6.41 mm
D_1	129.6 mm
d_2	110.4 mm
C_1	6.41 mm
d_1	110.4 mm
d_n	113.7 mm
d_2	110.4 mm
Bearing number	7019 CD/HCP4AH1
Preload class A	120 N/micron
Preload class D	335 N/micron
Preload class B	164 N/micron
Preload class C	231 N/micron
G_{ref}	15.6 cm ³
Number of balls z	21
r_b max.	1 mm
r_a max.	1.5 mm
D_b max.	141 mm

D_a max.	138 mm
d_b min.	102 mm
d_a min.	102 mm
Bore Diameter (mm)	145
Outer Diameter (mm)	95
d_b - min.	102 mm
r_b - max.	1 mm
$r_{1,2}$ min.	1.5 mm
d_a - min.	102 mm
Calculation factor f	1.15
r_a - max.	1.5 mm
$r_{3,4}$ min.	1 mm
D_a - max.	138 mm
Ball - D_w	15.875 mm
D_b - max.	141 mm
Calculation factor - f	1.15
$r_{3,4}$ - min.	1 mm
$r_{1,2}$ - min.	1.5 mm
Ball diameter D_w	15.875 mm
Basic dynamic load rating C	81.9 kN
Preload class D G_D	2480 N
Preload class A G_A	310 N
Preload class C G_C	1240 N
Preload class B G_B	620 N
Basic dynamic load rating - C	81.9 kN
Preload class A - G_A	310 N
Preload class B - G_B	620 N
Preload class C - G_C	1240 N
Preload class D - G_D	2480 N
Fatigue load limit P_u	3.1 kN

Calculation factor f_1	1
Calculation factor f_0	15.7
Calculation factor f_{2D}	1.09
Calculation factor - f	1
Calculation factor f_{2C}	1.05
Calculation factor f_{HC}	1.02
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Limiting speed for oil lubrication	17000 mm/min
Fatigue load limit - P_u	3.1 kN
Calculation factor - f_0	15.7
Calculation factor - f_{2D}	1.09
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Limiting speed for grease lubrication	11000 r/min
Basic static load rating C_0	80 kN
Static axial stiffness, preload class B	164 N/ μ m
Static axial stiffness, preload class C	231 N/ μ m
Static axial stiffness, preload class A	120 N/ μ m
Static axial stiffness, preload class D	335 N/ μ m
Attainable speed for grease lubrication	11000 r/min
Attainable speed for oil-air lubrication	17000 r/min

Basic static load rating - C_0	80 kN
Reference grease quantity G_{ref}	15.6 cm ³