



Bearing No. 7004 CD/HCP4AH

K	0.5 mm
a	10.2 mm
d	20 mm
D	42 mm
B	12 mm
Ball - z	12
Size (mm)	42x20x12
Width (mm)	12
Mass bearing	0.06 kg
d_n	28.4 mm
D_1	34.8 mm
d_1	27.1 mm
C_1	7.15 mm
D_1	34.8 mm
d_2	27.1 mm
C_1	7.15 mm
d_1	27.1 mm
d_n	28.4 mm
d_2	27.1 mm
Bearing number	7004 CD/HCP4AH
Preload class A	25 N/micron
Preload class D	65 N/micron
Preload class B	34 N/micron
Preload class C	46 N/micron
G_{ref}	0.9 cm ³
Number of balls z	12
r_b max.	0.3 mm
r_a max.	0.6 mm
D_b max.	40 mm

D_a max.	38.8 mm
d_b min.	23.2 mm
d_a min.	23.2 mm
Bore Diameter (mm)	42
Outer Diameter (mm)	20
d_b - min.	23.2 mm
r_b - max.	0.3 mm
$r_{1,2}$ min.	0.6 mm
d_a - min.	23.2 mm
Calculation factor f	1.03
r_a - max.	0.6 mm
$r_{3,4}$ min.	0.3 mm
D_a - max.	38.8 mm
Ball - D_w	6.35 mm
D_b - max.	40 mm
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	0.6 mm
Ball diameter D_w	6.35 mm
Basic dynamic load rating C	8.71 kN
Preload class D G_D	280 N
Preload class A G_A	35 N
Preload class C G_C	140 N
Preload class B G_B	70 N
Basic dynamic load rating - C	8.7 kN
Preload class A - G_A	35 N
Preload class B - G_B	70 N
Preload class C - G_C	140 N
Preload class D - G_D	280 N
Fatigue load limit P_u	0.18 kN

Calculation factor f_1	1
Calculation factor f_0	9.2
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	80000 mm/min
Fatigue load limit - P_u	0.18 kN
Calculation factor - f_0	9.2
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	50000 r/min
Basic static load rating C_0	4.3 kN
Static axial stiffness, preload class B	34 N/ μ m
Static axial stiffness, preload class C	46 N/ μ m
Static axial stiffness, preload class A	25 N/ μ m
Static axial stiffness, preload class D	65 N/ μ m
Attainable speed for grease lubrication	50000 r/min
Attainable speed for oil-air lubrication	80000 r/min

Basic static load rating - C_0	4.3 kN
Reference grease quantity G_{ref}	0.9 cm ³