



Bearing No. 7040 CD/HCP4A

D	310 mm
d	200 mm
B	51 mm
a	59.8 mm
Ball - z	21
Size (mm)	310x200x51
Width (mm)	51
Mass bearing	10.1 kg
d_n	243.2 mm
d_n	243.2 mm
D_1	276.1 mm
d_1	233.9 mm
d_2	233.9 mm
D_1	276.1 mm
d_2	233.9 mm
d_1	233.9 mm
Bearing number	7040 CD/HCP4A
Preload class A	230 N/micron
G_{ref}	153 cm ³
Preload class C	431 N/micron
Preload class D	617 N/micron
Preload class B	311 N/micron
Number of balls z	21
r_b max.	1 mm
r_a max.	2 mm
D_b max.	304 mm
D_a max.	299 mm
d_a min.	211 mm
Bore Diameter (mm)	310

d_b min.	211 mm
Outer Diameter (mm)	200
d_a - min.	211 mm
r_a - max.	2 mm
$r_{1,2}$ min.	2.1 mm
Calculation factor f	1.14
D_b - max.	304 mm
$r_{3,4}$ min.	1.1 mm
D_a - max.	299 mm
Ball - D_w	34.925 mm
r_b - max.	1 mm
d_b - min.	211 mm
$r_{3,4}$ - min.	1.1 mm
$r_{1,2}$ - min.	2.1 mm
Calculation factor - f	1.14
Basic dynamic load rating C	296 kN
Ball diameter D_w	34.925 mm
Preload class C G_C	4400 N
Preload class D G_D	8800 N
Preload class B G_B	2200 N
Preload class A G_A	1100 N
Basic dynamic load rating - C	296 kN
Preload class D - G_D	8800 N
Preload class C - G_C	4400 N
Preload class B - G_B	2200 N
Preload class A - G_A	1100 N
Calculation factor f_1	1
Calculation factor f_0	15.6
Fatigue load limit P_u	10.2 kN
Calculation factor f_{HC}	1.02

Calculation factor f_{2D}	1.09
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Calculation factor - f	1
Fatigue load limit - P_u	10.2 kN
Limiting speed for oil lubrication	8000 mm/min
Calculation factor - f_0	15.6
Calculation factor - f_{2A}	1
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2D}	1.09
Limiting speed for grease lubrication	5300 r/min
Basic static load rating C_0	390 kN
Static axial stiffness, preload class D	617 N/ μ m
Static axial stiffness, preload class B	311 N/ μ m
Static axial stiffness, preload class A	230 N/ μ m
Attainable speed for grease lubrication	5300 r/min
Static axial stiffness, preload class C	431 N/ μ m
Basic static load rating - C_0	390 kN
Attainable speed for oil-air lubrication	8000 r/min
Reference grease quantity G_{ref}	153 cm ³

