



Bearing No. 7003 CD/HCP4AH

K	0.5 mm
a	8.5 mm
d	17 mm
D	35 mm
B	10 mm
Ball - z	12
Size (mm)	35x17x10
Width (mm)	10
Mass bearing	0.033 kg
d_n	23.7 mm
D_1	29.3 mm
d_1	22.6 mm
C_1	6.05 mm
D_1	29.3 mm
d_2	22.6 mm
C_1	6.05 mm
d_1	22.6 mm
d_n	23.7 mm
d_2	22.6 mm
Bearing number	7003 CD/HCP4AH
Preload class A	22 N/micron
Preload class D	55 N/micron
Preload class B	29 N/micron
Preload class C	39 N/micron
G_{ref}	0.54 cm ³
Number of balls z	12
r_b max.	0.2 mm
r_a max.	0.3 mm
D_b max.	33.6 mm

D_a max.	33 mm
d_b min.	19 mm
d_a min.	19 mm
Bore Diameter (mm)	35
Outer Diameter (mm)	17
d_b - min.	19 mm
r_b - max.	0.2 mm
$r_{1,2}$ min.	0.3 mm
d_a - min.	19 mm
Calculation factor f	1.04
r_a - max.	0.3 mm
$r_{3,4}$ min.	0.2 mm
D_a - max.	33 mm
Ball - D_w	5.556 mm
D_b - max.	33.6 mm
Calculation factor - f	1.04
$r_{3,4}$ - min.	0.2 mm
$r_{1,2}$ - min.	0.3 mm
Ball diameter D_w	5.556 mm
Basic dynamic load rating C	6.76 kN
Preload class D G_D	200 N
Preload class A G_A	25 N
Preload class C G_C	100 N
Preload class B G_B	50 N
Basic dynamic load rating - C	6.8 kN
Preload class A - G_A	25 N
Preload class B - G_B	50 N
Preload class C - G_C	100 N
Preload class D - G_D	200 N
Fatigue load limit P_u	0.137 kN

Calculation factor f_1	1
Calculation factor f_0	9.1
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	95000 mm/min
Fatigue load limit - P_u	0.137 kN
Calculation factor - f_0	9.1
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	60000 r/min
Basic static load rating C_0	3.25 kN
Static axial stiffness, preload class B	29 N/ μ m
Static axial stiffness, preload class C	39 N/ μ m
Static axial stiffness, preload class A	22 N/ μ m
Static axial stiffness, preload class D	55 N/ μ m
Attainable speed for grease lubrication	60000 r/min
Attainable speed for oil-air lubrication	95000 r/min

Basic static load rating - C_0	3.2 kN
Reference grease quantity G_{ref}	0.54 cm ³