



Bearing No. 7002 CD/HCP4AH

K	0.5 mm
a	7.7 mm
d	15 mm
D	32 mm
B	9 mm
Ball - z	12
Size (mm)	32x15x9
Width (mm)	9
Mass bearing	0.027 kg
$d_n$	21.5 mm
$D_1$	26.4 mm
$d_1$	20.6 mm
$C_1$	5.35 mm
$D_1$	26.4 mm
$d_2$	20.6 mm
$C_1$	5.35 mm
$d_1$	20.6 mm
$d_n$	21.5 mm
$d_2$	20.6 mm
Bearing number	7002 CD/HCP4AH
Preload class A	19 N/micron
Preload class D	49 N/micron
Preload class B	25 N/micron
Preload class C	35 N/micron
$G_{ref}$	0.39 cm <sup>3</sup>
Number of balls z	12
$r_b$ max.	0.2 mm
$r_a$ max.	0.3 mm
$D_b$ max.	30.6 mm

$D_a$ max.	30 mm
$d_b$ min.	17 mm
$d_a$ min.	17 mm
Bore Diameter (mm)	32
Outer Diameter (mm)	15
$d_b$ - min.	17 mm
$r_b$ - max.	0.2 mm
$r_{1,2}$ min.	0.3 mm
$d_a$ - min.	17 mm
Calculation factor f	1.03
$r_a$ - max.	0.3 mm
$r_{3,4}$ min.	0.2 mm
$D_a$ - max.	30 mm
Ball - $D_w$	4.762 mm
$D_b$ - max.	30.6 mm
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.2 mm
$r_{1,2}$ - min.	0.3 mm
Ball diameter $D_w$	4.762 mm
Basic dynamic load rating C	5.2 kN
Preload class D $G_D$	160 N
Preload class A $G_A$	20 N
Preload class C $G_C$	80 N
Preload class B $G_B$	40 N
Basic dynamic load rating - C	5.2 kN
Preload class A - $G_A$	20 N
Preload class B - $G_B$	40 N
Preload class C - $G_C$	80 N
Preload class D - $G_D$	160 N
Fatigue load limit $P_u$	0.104 kN

Calculation factor $f_1$	1
Calculation factor $f_0$	9.3
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	100000 mm/min
Fatigue load limit - $P_u$	0.104 kN
Calculation factor - $f_0$	9.3
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	67000 r/min
Basic static load rating $C_0$	2.45 kN
Static axial stiffness, preload class B	25 N/ $\mu$ m
Static axial stiffness, preload class C	35 N/ $\mu$ m
Static axial stiffness, preload class A	19 N/ $\mu$ m
Static axial stiffness, preload class D	49 N/ $\mu$ m
Attainable speed for grease lubrication	67000 r/min
Attainable speed for oil-air lubrication	100000 r/min

Basic static load rating - $C_0$	2.4 kN
Reference grease quantity $G_{ref}$	0.39 cm <sup>3</sup>