



Bearing No. 7005 CD/P4AH

K	0.5 mm
a	10.9 mm
d	25 mm
D	47 mm
B	12 mm
Ball - z	14
Size (mm)	47x25x12
Width (mm)	12
Mass bearing	0.079 kg
$d_n$	33.4 mm
$D_1$	39.9 mm
$d_1$	32.1 mm
$C_1$	7.25 mm
$D_1$	39.9 mm
$d_2$	32.1 mm
$C_1$	7.25 mm
$d_1$	32.1 mm
$d_n$	33.4 mm
$d_2$	32.1 mm
Bearing number	7005 CD/P4AH
Preload class A	25 N/micron
Preload class D	64 N/micron
Preload class B	33 N/micron
Preload class C	46 N/micron
$G_{ref}$	1.02 cm <sup>3</sup>
Number of balls z	14
$r_b$ max.	0.3 mm
$r_a$ max.	0.6 mm
$D_b$ max.	45 mm

$D_a$ max.	43.8 mm
$d_b$ min.	28.2 mm
$d_a$ min.	28.2 mm
Bore Diameter (mm)	47
Outer Diameter (mm)	25
$d_b$ - min.	28.2 mm
$r_b$ - max.	0.3 mm
$r_{1,2}$ min.	0.6 mm
$d_a$ - min.	28.2 mm
Calculation factor f	1.05
$r_a$ - max.	0.6 mm
$r_{3,4}$ min.	0.3 mm
$D_a$ - max.	43.8 mm
Ball - $D_w$	6.35 mm
$D_b$ - max.	45 mm
Calculation factor - f	1.05
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	0.6 mm
Ball diameter $D_w$	6.35 mm
Basic dynamic load rating C	9.56 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	9.6 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 $P_u$	0.22 kN

Calculation factor $f_1$	1
Calculation factor $f_0$	9.6
Calculation factor $f_{2D}$	1.09
Calculation factor - $f$	1
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2A}$	1
Limiting speed for oil lubrication	56000 mm/min
Fatigue load limit - $P_u$	0.22 kN
Calculation factor - $f_0$	9.6
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2B}$	1.02
Limiting speed for grease lubrication	36000 r/min
Basic static load rating $C_0$	5.2 kN
Static axial stiffness, preload class B	33 N/ $\mu$ m
Static axial stiffness, preload class C	46 N/ $\mu$ m
Static axial stiffness, preload class A	25 N/ $\mu$ m
Static axial stiffness, preload class D	64 N/ $\mu$ m
Attainable speed for grease lubrication	36000 r/min
Attainable speed for oil-air lubrication	56000 r/min

Basic static load rating - $C_0$	5.2 kN
Reference grease quantity $G_{ref}$	1.02 cm <sup>3</sup>