



**Bearing No. 7007 CB/HCP4A**

a	13.6 mm
d	35 mm
D	62 mm
B	14 mm
C	14 mm
dh	46,1 mm
D2	53,4 mm
d1	45,5 mm
d2	44,3 mm
D1	53,4 mm
Db max	58,8 mm
db min	39,6 mm
Weight	0,16 Kg
rb max.	0,6 mm
ra max.	1 mm
Da max.	57,4 mm
r3 min.	0,6 mm
da min.	39,6 mm
r4 min.	0,6 mm
r2 min.	1 mm
r1 min.	1 mm
Size (mm)	35x62x14
Width (mm)	14
Mass bearing	0.16 kg
d <sub>1</sub>	45.45 mm
d <sub>n</sub>	46.1 mm
d <sub>2</sub>	44.34 mm
D <sub>2</sub>	53.38 mm
Bearing number	7007 CB/HCP4A
Number of balls z	23

Bore Diameter (mm)	35
$d_a$ min.	39.6 mm
$d_b$ min.	39.6 mm
$D_a$ max.	57.4 mm
$D_b$ max.	58.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
Outer Diameter (mm)	62
Calculation factor $f$	1.04
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.6 mm
Fatigue load limit (Pu)	0,204
(Oil) Lubrication Speed	60 000 r/min
(Grease) Lubrication Speed	38 000 r/min
Basic dynamic load rating C	9.36 kN
Ball diameter $D_w$	4.762 mm
Basic dynamic load rating (C)	6,89 kN
Basic static load rating (C0)	4,8 kN
Preload class A $G_A$	23 N
Preload class B $G_B$	46 N
Preload class C $G_C$	140 N
Fatigue load limit $P_u$	0.204 kN
Calculation factor $f_0$	9.6
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{HC}$	1.01
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2B}$	1.02
Basic static load rating $C_0$	8.3 kN

Static axial stiffness, preload class B	36 N/ $\mu$ m
Static axial stiffness, preload class C	58 N/ $\mu$ m
Static axial stiffness, preload class A	28 N/ $\mu$ m
Attainable speed for grease lubrication	38000 r/min
Attainable speed for oil- air lubrication	60000 r/min
Reference grease quantity $G_{ref}$	1.81 cm <sup>3</sup>