



**Bearing No. S7200 CD/HCP4A**

D	30 mm
d	10 mm
B	9 mm
a	7.3 mm
Ball - z	10
Size (mm)	30x10x9
Width (mm)	9
Mass bearing	0.029 kg
D <sub>2</sub>	24.3 mm
d <sub>2</sub>	17.3 mm
d <sub>1</sub>	17.3 mm
d <sub>2</sub>	17.3 mm
D <sub>2</sub>	24.3 mm
d <sub>1</sub>	17.3 mm
Bearing number	S7200 CD/HCP4A
Preload class A	16 N/micron
Preload class B	21 N/micron
Preload class D	41 N/micron
Preload class C	29 N/micron
Number of balls z	10
r <sub>b</sub> max.	0.3 mm
r <sub>a</sub> max.	0.6 mm
D <sub>b</sub> max.	27.6 mm
D <sub>a</sub> max.	25.8 mm
d <sub>b</sub> max.	16.7 mm
d <sub>a</sub> max.	16.7 mm
d <sub>a</sub> min.	14.2 mm
Bore Diameter (mm)	30
d <sub>b</sub> min.	14.2 mm
Outer Diameter (mm)	10

$r_{3,4}$ min.	0.3 mm
$d_b$ - min.	14.2 mm
Calculation factor f	1.02
$d_a$ - max.	16.7 mm
$r_{1,2}$ min.	0.6 mm
$d_a$ - min.	14.2 mm
$d_b$ - max.	16.7 mm
$D_a$ - max.	25.8 mm
$D_b$ - max.	27.6 mm
$r_a$ - max.	0.6 mm
$r_b$ - max.	0.3 mm
Ball - $D_w$	4.762 mm
$r_{3,4}$ - min.	0.3 mm
Calculation factor - f	1.02
$r_{1,2}$ - min.	0.6 mm
Ball diameter $D_w$	4.762 mm
Basic dynamic load rating C	4.49 kN
Preload class A $G_A$	17 N
Basic dynamic load rating - C	4.5 kN
Preload class C $G_C$	68 N
Preload class D $G_D$	136 N
Preload class B $G_B$	34 N
Preload class C - $G_C$	68 N
Preload class D - $G_D$	136 N
Preload class B - $G_B$	34 N
Preload class A - $G_A$	17 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.08 kN
Calculation factor $f_0$	8.8
Calculation factor $f_{2D}$	1.06

Calculation factor $f_{HC}$	1.01
Calculation factor $f_{2C}$	1.03
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2A}$	1
Calculation factor - $f$	1
Calculation factor - $f_0$	8.8
Fatigue load limit - $P_u$	0.08 kN
Calculation factor - $f_{2C}$	1.03
Calculation factor - $f_{2D}$	1.06
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{HC}$	1.01
Limiting speed for grease lubrication	70000 r/min
Basic static load rating $C_0$	1.93 kN
Static axial stiffness, preload class A	16 N/ $\mu$ m
Static axial stiffness, preload class B	21 N/ $\mu$ m
Static axial stiffness, preload class C	29 N/ $\mu$ m
Static axial stiffness, preload class D	41 N/ $\mu$ m
Attainable speed for grease lubrication	70000 r/min
Basic static load rating - $C_0$	1.9 kN