



Bearing No. 7019 CB/HCP4AL

b	2.2 mm
d	95 mm
a	28.2 mm
B	24 mm
D	145 mm
Ball - z	26
Size (mm)	145x95x24
Width (mm)	24
Mass bearing	1.23 kg
d <sub>2</sub>	111.15 mm
D <sub>2</sub>	130 mm
d <sub>n</sub>	115 mm
C <sub>1</sub>	13.4 mm
C <sub>2</sub>	5.2 mm
C <sub>3</sub>	4.2 mm
C <sub>2</sub>	5.2 mm
C <sub>1</sub>	13.4 mm
d <sub>n</sub>	115 mm
D <sub>2</sub>	130 mm
d <sub>2</sub>	111.15 mm
d <sub>1</sub>	113.7 mm
d <sub>1</sub>	113.7 mm
C <sub>3</sub>	4.2 mm
Bearing number	7019 CB/HCP4AL
Preload class B	82 N/micron
G <sub>ref</sub>	14.72 cm <sup>3</sup>
Preload class C	130 N/micron
Preload class A	63 N/micron
Number of balls z	26

$d_a$ min.	102 mm
$d_b$ min.	102 mm
$D_a$ max.	138 mm
$D_b$ max.	140.4 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
Bore Diameter (mm)	145
Outer Diameter (mm)	95
$r_{1,2}$ min.	1.5 mm
$d_a$ - min.	102 mm
$d_b$ - min.	102 mm
$D_a$ - max.	138 mm
Calculation factor f	1.07
$r_b$ - max.	1 mm
$r_{3,4}$ min.	1 mm
$r_a$ - max.	1.5 mm
$D_b$ - max.	140.4 mm
Ball - $D_w$	10.319 mm
$r_{3,4}$ - min.	1 mm
$r_{1,2}$ - min.	1.5 mm
Calculation factor - f	1.07
Ball diameter $D_w$	10.319 mm
Basic dynamic load rating C	37.7 kN
Preload class B $G_B$	190 N
Preload class C $G_C$	570 N
Preload class A $G_A$	94 N
Basic dynamic load rating - C	29.6 kN
Preload class A - $G_A$	94 N
Preload class B - $G_B$	190 N
Preload class C - $G_C$	570 N

Calculation factor $f_1$	1
Calculation factor $f_0$	9.7
Fatigue load limit $P_u$	1 kN
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2B}$	1.02
Calculation factor - $f$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{HC}$	1.01
Calculation factor - $f_0$	9.7
Limiting speed for oil lubrication	22000 mm/min
Fatigue load limit - $P_u$	1 kN
Calculation factor - $f_{HC}$	1.01
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.05
Limiting speed for grease lubrication	14000 r/min
Basic static load rating $C_0$	44 kN
Static axial stiffness, preload class A	63 N/ $\mu$ m
Static axial stiffness, preload class B	82 N/ $\mu$ m
Static axial stiffness, preload class C	130 N/ $\mu$ m
Attainable speed for grease lubrication	14000 r/min
Basic static load rating - $C_0$	26 kN
Attainable speed for oil-air lubrication	22000 r/min
Reference grease quantity $G_{ref}$	14.72 cm <sup>3</sup>

