



Bearing No. 7002 CE/HCP4A

D	32 mm
d	15 mm
B	9 mm
a	7.7 mm
Ball - z	12
Size (mm)	32x15x9
Width (mm)	9
Mass bearing	0.025 kg
$d_n$	21.9 mm
$d_n$	21.9 mm
$D_1$	26.9 mm
$d_1$	20.65 mm
$d_2$	19.5 mm
$D_1$	26.9 mm
$d_2$	19.5 mm
$d_1$	20.65 mm
Bearing number	7002 CE/HCP4A
Preload class A	18 N/micron
Preload class B	27 N/micron
Preload class C	37 N/micron
$G_{ref}$	0.5 cm <sup>3</sup>
Number of balls z	12
$D_a$ max.	30 mm
$d_a$ min.	17 mm
$d_b$ min.	17 mm
$D_b$ max.	30.6 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.15 mm
Bore Diameter (mm)	32

Outer Diameter (mm)	15
$d_a$ - min.	17 mm
$r_a$ - max.	0.3 mm
$r_{1,2}$ min.	0.3 mm
Calculation factor f	1.03
$D_b$ - max.	30.6 mm
$r_{3,4}$ min.	0.15 mm
$r_b$ - max.	0.15 mm
$D_a$ - max.	30 mm
Ball - $D_w$	4.762 mm
$d_b$ - min.	17 mm
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.15 mm
$r_{1,2}$ - min.	0.3 mm
Basic dynamic load rating C	4.42 kN
Ball diameter $D_w$	4.762 mm
Preload class B $G_B$	70 N
Preload class A $G_A$	25 N
Basic dynamic load rating - C	4.4 kN
Preload class C $G_C$	140 N
Preload class A - $G_A$	25 N
Preload class C - $G_C$	140 N
Preload class B - $G_B$	70 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.08 kN
Calculation factor $f_0$	7.3
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2A}$	1
Calculation factor $f_{HC}$	1.01

Calculation factor - $f$	1
Fatigue load limit - $P_u$	0.08 kN
Calculation factor - $f_0$	7.3
Limiting speed for oil lubrication	127000 mm/min
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1.01
Limiting speed for grease lubrication	83000 r/min
Basic static load rating $C_0$	1.93 kN
Static axial stiffness, preload class A	18 N/ $\mu$ m
Static axial stiffness, preload class B	27 N/ $\mu$ m
Static axial stiffness, preload class C	37 N/ $\mu$ m
Attainable speed for grease lubrication	83000 r/min
Attainable speed for oil-air lubrication	127000 r/min
Basic static load rating - $C_0$	1.9 kN
Reference grease quantity $G_{ref}$	0.5 cm <sup>3</sup>