



# SKF BEARING LTD



728 CD/HCP4A Bearing 2D drawings and 3D CAD models

## 8 mm x 24 mm x 8 mm SKF 728 CD/HCP4A angular contact ball bearings

Bearing No. 728 CD/HCP4A

Size	24x8x8 mm
Bore Diameter	24 mm
Outer Diameter	8 mm
Width	8 mm
d	8 mm
D	24 mm
B	8 mm
d <sub>1</sub>	13.1 mm
d <sub>2</sub>	13.1 mm
D <sub>1</sub>	18.9 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.2 mm
a	6.2 mm
d <sub>a</sub> - min.	10.4 mm
d <sub>b</sub> - min.	10.4 mm
D <sub>a</sub> - max.	21.6 mm
D <sub>b</sub> - max.	22.2 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.2 mm
d <sub>n</sub>	14.3 mm
Basic dynamic load rating - C	3.7 kN
Basic static load rating - C <sub>0</sub>	1.4 kN
Fatigue load limit - P <sub>u</sub>	0.057 kN
Limiting speed for grease	85000 r/min



## SKF BEARING LTD

Lubrication	
Limiting speed for oil lubrication	130000 mm/min
Ball - $D_w$	4.762 mm
Ball - $z$	8
$G_{ref}$	0.228 cm <sup>3</sup>
Calculation factor - $f_0$	7.9
Preload class A - $G_A$	14 N
Preload class B - $G_B$	28 N
Preload class C - $G_C$	56 N
Preload class D - $G_D$	112 N
Calculation factor - $f$	1.02
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.03
Calculation factor - $f_{2D}$	1.06
Calculation factor - $f_{HC}$	1.01
Preload class A	13 N/micron
Preload class B	17 N/micron
Preload class C	23 N/micron
Preload class D	33 N/micron
$d_1$	13.1 mm
$d_2$	13.1 mm
$D_1$	18.9 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
$d_a$ min.	10.4 mm
$d_b$ min.	10.4 mm
$D_a$ max.	21.6 mm



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$D_b$ max.	22.2 mm
$r_a$ max.	0.3 mm
$r_b$ max.	0.2 mm
$d_n$	14.3 mm
Basic dynamic load rating C	3.71 kN
Basic static load rating $C_0$	1.37 kN
Fatigue load limit $P_u$	0.057 kN
Attainable speed for grease lubrication	85000 r/min
Attainable speed for oil-air lubrication	130000 r/min
Ball diameter $D_w$	4.762 mm
Number of balls z	8
Reference grease quantity $G_{ref}$	0.228 cm <sup>3</sup>
Preload class A $G_A$	14 N
Static axial stiffness, preload class A	13 N/ $\mu$ m
Preload class B $G_B$	28 N
Static axial stiffness, preload class B	17 N/ $\mu$ m
Preload class C $G_C$	56 N
Static axial stiffness, preload class C	23 N/ $\mu$ m
Preload class D $G_D$	112 N
Static axial stiffness, preload class D	33 N/ $\mu$ m
Calculation factor f	1.02
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.03
Calculation factor $f_{2D}$	1.06
Calculation factor $f_{HC}$	1.01



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Calculation factor $f_0$	7.9
Mass bearing	0.015 kg