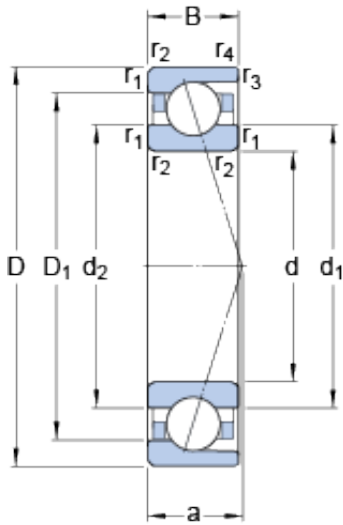




## Bearing equipment manufacturing Co., Ltd



7228 CD/P4A Bearing 2D drawings and 3D CAD models

140 mm x 250 mm x 42 mm SKF 7228 CD/P4A angular contact ball bearings

Bearing No. 7228 CD/P4A

Size	250x140x42 mm
Bore Diameter	250 mm
Outer Diameter	140 mm
Width	42 mm
d	140 mm
D	250 mm
B	42 mm
d <sub>1</sub>	176.8 mm
d <sub>2</sub>	176.8 mm
D <sub>1</sub>	213.2 mm
r <sub>1,2</sub> - min.	3 mm
r <sub>3,4</sub> - min.	1.5 mm
a	47.3 mm
d <sub>a</sub> - min.	154 mm
d <sub>b</sub> - min.	154 mm
D <sub>a</sub> - max.	236 mm
D <sub>b</sub> - max.	241 mm
r <sub>a</sub> - max.	2.5 mm
r <sub>b</sub> - max.	1.5 mm
d <sub>n</sub>	184.8 mm
Basic dynamic load rating - C	221 kN
Basic static load rating - C <sub>0</sub>	240 kN
Fatigue load limit - P <sub>u</sub>	7.4 kN
Limiting speed for grease	5600 r/min



## Bearing equipment manufacturing Co., Ltd

Lubrication	
Limiting speed for oil lubrication	8500 mm/min
Ball - $D_w$	30.162 mm
Ball - $z$	18
$G_{ref}$	83.931 cm <sup>3</sup>
Calculation factor - $f_0$	15.2
Preload class A - $G_A$	850 N
Preload class B - $G_B$	1700 N
Preload class C - $G_C$	3400 N
Preload class D - $G_D$	6800 N
Calculation factor - $f$	1.09
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.03
Calculation factor - $f_{2D}$	1.05
Calculation factor - $f_{HC}$	1
Preload class A	163 N/micron
Preload class B	220 N/micron
Preload class C	305 N/micron
Preload class D	437 N/micron
$d_1$	176.8 mm
$d_2$	176.8 mm
$D_1$	213.2 mm
$r_{1,2}$ min.	3 mm
$r_{3,4}$ min.	1.5 mm
$d_a$ min.	154 mm
$d_b$ min.	154 mm
$D_a$ max.	236 mm



## Bearing equipment manufacturing Co., Ltd

$D_b$ max.	241 mm
$r_a$ max.	2.5 mm
$r_b$ max.	1.5 mm
$d_n$	184.8 mm
Basic dynamic load rating C	221 kN
Basic static load rating $C_0$	240 kN
Fatigue load limit $P_u$	7.35 kN
Attainable speed for grease lubrication	5600 r/min
Attainable speed for oil-air lubrication	8500 r/min
Ball diameter $D_w$	30.162 mm
Number of balls z	18
Reference grease quantity $G_{ref}$	83.931 cm <sup>3</sup>
Preload class A $G_A$	850 N
Static axial stiffness, preload class A	163 N/ $\mu$ m
Preload class B $G_B$	1700 N
Static axial stiffness, preload class B	220 N/ $\mu$ m
Preload class C $G_C$	3400 N
Static axial stiffness, preload class C	305 N/ $\mu$ m
Preload class D $G_D$	6800 N
Static axial stiffness, preload class D	437 N/ $\mu$ m
Calculation factor f	1.09
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.03
Calculation factor $f_{2D}$	1.05
Calculation factor $f_{HC}$	1



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Calculation factor $f_0$	15.2
Mass bearing	8.14 kg