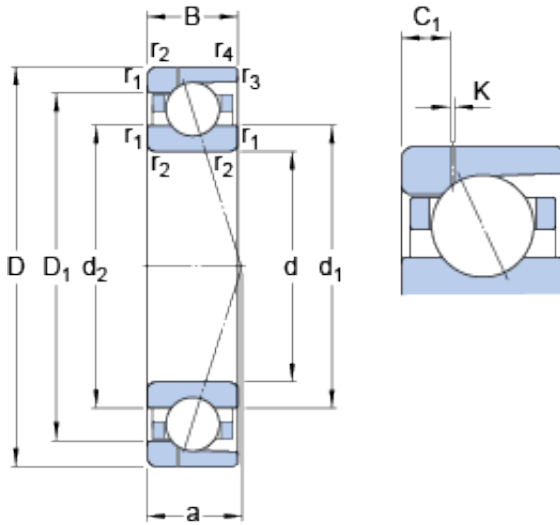




# BEARING DRIVESHAFT, INC.



## 65 mm x 100 mm x 18 mm SKF 7013 CD/P4AH1 angular contact ball bearings

Bearing No. 7013 CD/P4AH1

7013 CD/P4AH1 Bearing 2D drawings and 3D CAD models

Size	100x65x18 mm
Bore Diameter	100 mm
Outer Diameter	65 mm
Width	18 mm
d	65 mm
D	100 mm
B	18 mm
d <sub>1</sub>	75.8 mm
d <sub>2</sub>	75.8 mm
D <sub>1</sub>	89.2 mm
K	0.5 mm
C <sub>1</sub>	4.9 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	20.1 mm
d <sub>a</sub> - min.	71 mm
d <sub>b</sub> - min.	71 mm
D <sub>a</sub> - max.	94 mm
D <sub>b</sub> - max.	96.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	78.1 mm
Basic dynamic load rating - C	41.6 kN
Basic static load rating - C <sub>0</sub>	37.5 kN



## BEARING DRIVESHAFT, INC.

Fatigue load limit - $P_u$	1.6 kN
Limiting speed for grease lubrication	14000 r/min
Limiting speed for oil lubrication	22000 mm/min
Ball - $D_w$	11.112 mm
Ball - $z$	20
$G_{ref}$	5.7 cm <sup>3</sup>
Calculation factor - $f_0$	15.6
Preload class A - $G_A$	160 N
Preload class B - $G_B$	320 N
Preload class C - $G_C$	640 N
Preload class D - $G_D$	1280 N
Calculation factor - $f$	1.13
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{HC}$	1
Preload class A	74 N/micron
Preload class B	101 N/micron
Preload class C	143 N/micron
Preload class D	207 N/micron
$d_1$	75.8 mm
$d_2$	75.8 mm
$D_1$	89.2 mm
$C_1$	4.9 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	71 mm



## BEARING DRIVESHAFT, INC.

$d_b$ min.	71 mm
$D_a$ max.	94 mm
$D_b$ max.	96.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	78.1 mm
Basic dynamic load rating C	41.6 kN
Basic static load rating $C_0$	37.5 kN
Fatigue load limit $P_u$	1.6 kN
Attainable speed for grease lubrication	14000 r/min
Attainable speed for oil-air lubrication	22000 r/min
Ball diameter $D_w$	11.112 mm
Number of balls z	20
Reference grease quantity $G_{ref}$	5.7 cm <sup>3</sup>
Preload class A $G_A$	160 N
Static axial stiffness, preload class A	74 N/ $\mu$ m
Preload class B $G_B$	320 N
Static axial stiffness, preload class B	101 N/ $\mu$ m
Preload class C $G_C$	640 N
Static axial stiffness, preload class C	143 N/ $\mu$ m
Preload class D $G_D$	1280 N
Static axial stiffness, preload class D	207 N/ $\mu$ m
Calculation factor f	1.13
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05



## BEARING DRIVESHAFT, INC.

Calculation factor $f_{2D}$	1.09
Calculation factor $f_{HC}$	1
Calculation factor $f_0$	15.6
Mass bearing	0.43 kg