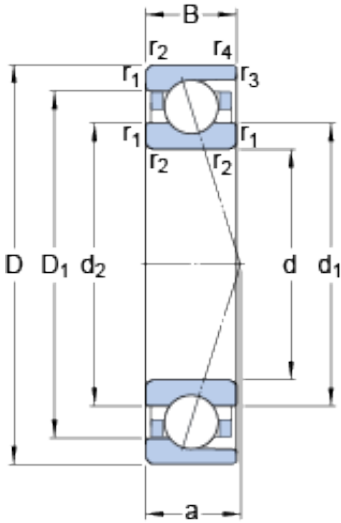




# Off-the-shelf SKF shaft Co., Ltd



71813 CD/HCP4 Bearing 2D drawings and 3D CAD models

## 65 mm x 85 mm x 10 mm SKF 71813 CD/HCP4 TAC series for ball screw support

Bearing No. 71813 CD/HCP4

Size	85x65x10 mm
Bore Diameter	85 mm
Outer Diameter	65 mm
Width	10 mm
d	65 mm
D	85 mm
B	10 mm
d <sub>1</sub>	71.7 mm
d <sub>2</sub>	71.7 mm
D <sub>1</sub>	78.5 mm
r <sub>1,2</sub> - min.	0.6 mm
r <sub>3,4</sub> - min.	0.3 mm
a	15.1 mm
d <sub>a</sub> - min.	68.2 mm
d <sub>b</sub> - min.	68.2 mm
D <sub>a</sub> - max.	81.8 mm
D <sub>b</sub> - max.	83 mm
r <sub>a</sub> - max.	0.6 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	72.4 mm
Basic dynamic load rating - C	13.5 kN
Basic static load rating - C <sub>0</sub>	14.6 kN
Fatigue load limit - P <sub>u</sub>	0.63 kN
Limiting speed for grease	18000 r/min



## Off-the-shelf SKF shaft Co., Ltd

Lubrication	
Limiting speed for oil lubrication	28000 mm/min
Ball - $D_w$	5.556 mm
Ball - $z$	29
$G_{ref}$	1.3 cm <sup>3</sup>
Calculation factor - $f_0$	17.1
Preload class A - $G_A$	71 N
Preload class B - $G_B$	215 N
Preload class C - $G_C$	430 N
Calculation factor - $f$	1.28
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.1
Calculation factor - $f_{2C}$	1.18
Calculation factor - $f_{HC}$	1.02
Preload class A	67 N/micron
Preload class B	116 N/micron
Preload class C	172 N/micron
$d_1$	71.7 mm
$d_2$	71.7 mm
$D_1$	78.5 mm
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	68.2 mm
$d_b$ min.	68.2 mm
$D_a$ max.	81.8 mm
$D_b$ max.	83 mm
$r_a$ max.	0.6 mm
$r_b$ max.	0.3 mm
$d_n$	72.4 mm



## Off-the-shelf SKF shaft Co., Ltd

Basic dynamic load rating C	13.5 kN
Basic static load rating $C_0$	14.6 kN
Fatigue load limit $P_u$	0.63 kN
Attainable speed for grease lubrication	18000 r/min
Attainable speed for oil-air lubrication	28000 r/min
Ball diameter $D_w$	5.556 mm
Number of balls z	29
Reference grease quantity $G_{ref}$	1.3 cm <sup>3</sup>
Preload class A $G_A$	71 N
Static axial stiffness, preload class A	67 N/ $\mu$ m
Preload class B $G_B$	215 N
Static axial stiffness, preload class B	116 N/ $\mu$ m
Preload class C $G_C$	430 N
Static axial stiffness, preload class C	172 N/ $\mu$ m
Calculation factor f	1.28
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.1
Calculation factor $f_{2C}$	1.18
Calculation factor $f_{HC}$	1.02
Calculation factor $f_0$	17.1
Mass bearing	0.11 kg