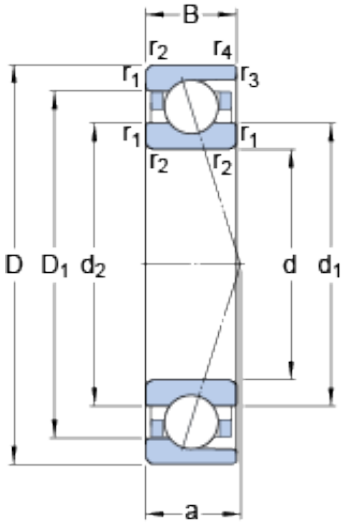




# NTL BEARINGS LTD.

## 7013 CD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 7013 CD/P4A



7013 CD/P4A 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
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
Fatigue load limit - P <sub>u</sub>	1.6 kN
Limiting speed for grease	14000 r/min



## NTL BEARINGS LTD.

Lubrication	
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
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0.44
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7   ISO P4



## NTL BEARINGS LTD.

Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	15 Degree
Preload	None
Raceway Style	1 Rib Outer Ring
Cage Material	Phenolic
Rolling Element	Ball Bearing
Flush Ground	No
Inch - Metric	Metric
Other Features	Single Row   Angular Contact   High Precision
Long Description	65MM Bore; 100MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Ra
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Angular Contact Ball
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Manufacturer Item Number	7013 CD/P4A
Weight / LBS	0.968
Outside Diameter	3.937 Inch   100 Millimeter
Bore	2.559 Inch   65 Millimeter
Width	0.709 Inch   18 Millimeter
bore diameter:	65 mm
radial static load capacity:	37.5 kN
outside diameter:	100 mm
maximum rpm (grease):	14000 rpm



## NTL BEARINGS LTD.

overall width:	18 mm
maximum rpm (oil):	22000 rpm
contact angle:	15 °
bearing material:	Steel
duplex type:	Duplex Universal
cage material:	Cotton Fabric Reinforced Phenolic
closure type:	Open
fillet radius:	1.1 mm
precision rating:	P4
series:	70
operating temperature range:	300 ° F
manufacturer product page:	<a href="#">Click here</a>
radial dynamic load capacity:	41.6 kN
manufacturer upc number:	7316570678505
$d_1$	75.8 mm
$d_2$	75.8 mm
$D_1$	89.2 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	71 mm
$d_b$ 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	14000 r/min



## NTL BEARINGS LTD.

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