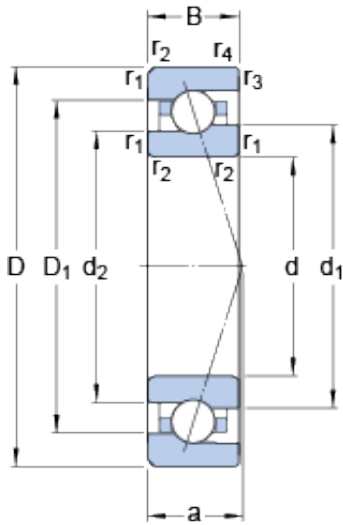




# NTL BEARINGS LTD.

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

Bearing No. 7013 CE/P4A



7013 CE/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>	77.26 mm
d <sub>2</sub>	74.9 mm
D <sub>1</sub>	87.72 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	20.2 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.	95.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	79.3 mm
Basic dynamic load rating - C	20.3 kN
Basic static load rating - C <sub>0</sub>	15.6 kN
Fatigue load limit - P <sub>u</sub>	0.655 kN
Limiting speed for grease	19000 r/min



## NTL BEARINGS LTD.

Lubrication	
Limiting speed for oil lubrication	30000 mm/min
Ball - $D_w$	8.731 mm
Ball - z	25
$G_{ref}$	6.2 cm3
Calculation factor - $f_0$	8.4
Preload class A - $G_A$	110 N
Preload class B - $G_B$	330 N
Preload class C - $G_C$	650 N
Calculation factor - f	1.09
Calculation factor - f	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1
Preload class A	53 N/micron
Preload class B	83 N/micron
Preload class C	112 N/micron
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7   ISO P4
Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	15 Degree
Preload	None



## NTL BEARINGS LTD.

Raceway Style	1 Rib Inner Ring and Outer Ring
Cage Material	Phenolic
Rolling Element	Ball Bearing
Flush Ground	No
Inch - Metric	Metric
Other Features	Single Row   Angular Contact   High Speed E Design
Long Description	65MM Bore; 100MM Outside Diameter; 18MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Inner Ring and
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Ball Angular Contact
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Bore	2.559 Inch   65 Millimeter
Width	0.709 Inch   18 Millimeter
Outside Diameter	3.937 Inch   100 Millimeter
d <sub>1</sub>	77.26 mm
d <sub>2</sub>	74.9 mm
D <sub>1</sub>	87.72 mm
r <sub>1,2</sub> min.	1.1 mm
r <sub>3,4</sub> min.	0.6 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.	95.8 mm



## NTL BEARINGS LTD.

$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	79.3 mm
Basic dynamic load rating C	20.3 kN
Basic static load rating $C_0$	15.6 kN
Fatigue load limit $P_u$	0.655 kN
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min
Ball diameter $D_w$	8.731 mm
Number of balls z	25
Reference grease quantity $G_{ref}$	6.2 cm <sup>3</sup>
Preload class A $G_A$	110 N
Static axial stiffness, preload class A	53 N/ $\mu$ m
Preload class B $G_B$	330 N
Static axial stiffness, preload class B	83 N/ $\mu$ m
Preload class C $G_C$	650 N
Static axial stiffness, preload class C	112 N/ $\mu$ m
Calculation factor f	1.09
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1
Calculation factor $f_0$	8.4
Mass bearing	0.43 kg