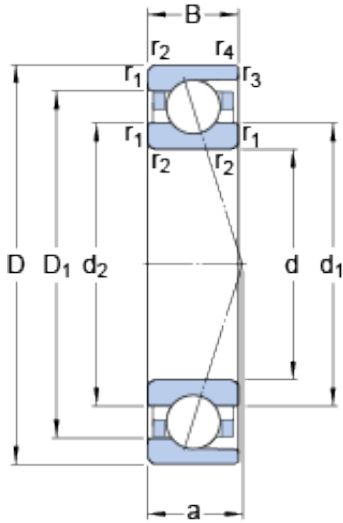




# NTL BEARINGS LTD.



7214 ACD/P4A Bearing 2D drawings and 3D CAD models

## 7214 ACD/P4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 7214 ACD/P4A

Size	125x70x24 mm
Bore Diameter	125 mm
Outer Diameter	70 mm
Width	24 mm
d	70 mm
D	125 mm
B	24 mm
d <sub>1</sub>	87.9 mm
d <sub>2</sub>	87.9 mm
D <sub>1</sub>	107.1 mm
r <sub>1,2</sub> - min.	1.5 mm
r <sub>3,4</sub> - min.	0.6 mm
a	34.9 mm
d <sub>a</sub> - min.	79 mm
d <sub>b</sub> - min.	79 mm
D <sub>a</sub> - max.	116 mm
D <sub>b</sub> - max.	120.8 mm
r <sub>a</sub> - max.	1.5 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	91.6 mm
Basic dynamic load rating - C	66.3 kN
Basic static load rating - C <sub>0</sub>	55 kN
Fatigue load limit - P <sub>u</sub>	2.4 kN
Limiting speed for grease	9500 r/min



## NTL BEARINGS LTD.

Lubrication	
Limiting speed for oil lubrication	16000 mm/min
Ball - $D_w$	15.875 mm
Ball - $z$	16
$G_{ref}$	13.701 cm <sup>3</sup>
Calculation factor - $e$	0.68
Calculation factor - $Y_2$	0.87
Calculation factor - $Y_0$	0.38
Calculation factor - $X_2$	0.41
Calculation factor - $Y_1$	0.92
Calculation factor - $Y_2$	1.41
Calculation factor - $Y_0$	0.76
Calculation factor - $X_2$	0.67
Preload class A - $G_A$	420 N
Preload class B - $G_B$	840 N
Preload class C - $G_C$	1680 N
Preload class D - $G_D$	3360 N
Calculation factor - $f$	1.08
Calculation factor - $f_1$	0.99
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.02
Calculation factor - $f_{2D}$	1.05
Calculation factor - $f_{HC}$	1
Preload class A	201 N/micron
Preload class B	261 N/micron
Preload class C	345 N/micron
Preload class D	464 N/micron



## NTL BEARINGS LTD.

Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	1.13
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7   ISO P4
Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	25 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   Super Precision   High Capacity
Long Description	70MM Bore; 125MM Outside Diameter; 24MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 25 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>



## NTL BEARINGS LTD.

Manufacturer Item Number	7214 ACD/P4A
Weight / LBS	2.498
Outside Diameter	4.921 Inch   125 Millimeter
Width	0.945 Inch   24 Millimeter
Bore	2.756 Inch   70 Millimeter
$d_1$	87.9 mm
$d_2$	87.9 mm
$D_1$	107.1 mm
$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	79 mm
$d_b$ min.	79 mm
$D_a$ max.	116 mm
$D_b$ max.	120.8 mm
$r_a$ max.	1.5 mm
$r_b$ max.	0.6 mm
$d_n$	91.6 mm
Basic dynamic load rating C	66.3 kN
Basic static load rating $C_0$	55 kN
Fatigue load limit $P_u$	2.36 kN
Attainable speed for grease lubrication	9500 r/min
Attainable speed for oil-air lubrication	16000 r/min
Ball diameter $D_w$	15.875 mm
Number of balls z	16
Reference grease quantity $G_{ref}$	13.701 cm <sup>3</sup>
Preload class A $G_A$	420 N
Static axial stiffness, preload class A	201 N/ $\mu$ m
Preload class B $G_B$	840 N
Static axial stiffness, preload class B	261 N/ $\mu$ m



## NTL BEARINGS LTD.

Preload class C $G_C$	1680 N
Static axial stiffness, preload class C	345 N/ $\mu$ m
Preload class D $G_D$	3360 N
Static axial stiffness, preload class D	464 N/ $\mu$ m
Calculation factor $f$	1.08
Calculation factor $f_1$	0.99
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2C}$	1.02
Calculation factor $f_{2D}$	1.05
Calculation factor $f_{HC}$	1
Calculation factor $e$	0.68
Calculation factor (single, tandem) $Y_2$	0.87
Calculation factor (single, tandem) $Y_0$	0.38
Calculation factor (single, tandem) $X_2$	0.41
Calculation factor (back-to-back, face-to-face) $Y_1$	0.92
Calculation factor (back-to-back, face-to-face) $Y_2$	1.41
Calculation factor (back-to-back, face-to-face) $Y_0$	0.76
Calculation factor (back-to-back, face-to-face) $X_2$	0.67
Mass bearing	1.11 kg