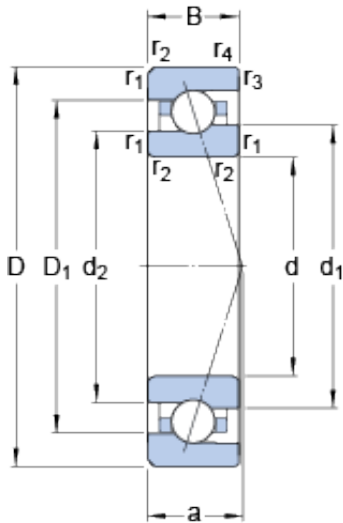




# UNF BRAINGS SALES JAPAN CO.,LTD.



7007 CE/HCP4A Bearing 2D drawings and 3D CAD models

35 mm x 62 mm x 14 mm SKF 7007 CE/HCP4A  
Interchangeable with open TAC serie Precision Bearings

Bearing No. 7007 CE/HCP4A

Size	62x35x14 mm
Bore Diameter	62 mm
Outer Diameter	35 mm
Width	14 mm
d	35 mm
D	62 mm
B	14 mm
d <sub>1</sub>	43.7 mm
d <sub>2</sub>	41.6 mm
D <sub>1</sub>	52.25 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	13.5 mm
d <sub>a</sub> - min.	39.6 mm
d <sub>b</sub> - min.	39.6 mm
D <sub>a</sub> - max.	57.4 mm
D <sub>b</sub> - max.	57.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	45.6 mm
Basic dynamic load rating - C	11.4 kN
Basic static load rating - C <sub>0</sub>	6.6 kN
Fatigue load limit - P <sub>u</sub>	0.28 kN



## UNF BRAINGS SALES JAPAN CO.,LTD.

Limiting speed for grease lubrication	40000 r/min
Limiting speed for oil lubrication	63000 mm/min
Ball - $D_w$	7.144 mm
Ball - z	17
$G_{ref}$	2.4 cm <sup>3</sup>
Calculation factor - $f_0$	7.9
Preload class A - $G_A$	60 N
Preload class B - $G_B$	180 N
Preload class C - $G_C$	370 N
Calculation factor - f	1.06
Calculation factor - f	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1.01
Preload class A	35 N/micron
Preload class B	54 N/micron
Preload class C	74 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	Ceramic
Number of Bearings	1 (Single)
Contact Angle	15 Degree



## UNF BRAINGS SALES JAPAN CO.,LTD.

Preload	None
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	35MM Bore; 62MM Outside Diameter; 14MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Inner Ring an
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	1.378 Inch   35 Millimeter
Width	0.551 Inch   14 Millimeter
Outside Diameter	2.441 Inch   62 Millimeter
$d_1$	43.7 mm
$d_2$	41.6 mm
$D_1$	52.25 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	39.6 mm
$d_b$ min.	39.6 mm
$D_a$ max.	57.4 mm



## UNF BRAINGS SALES JAPAN CO.,LTD.

$D_b$ max.	57.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	45.6 mm
Basic dynamic load rating C	11.4 kN
Basic static load rating $C_0$	6.55 kN
Fatigue load limit $P_u$	0.28 kN
Attainable speed for grease lubrication	40000 r/min
Attainable speed for oil-air lubrication	63000 r/min
Ball diameter $D_w$	7.144 mm
Number of balls z	17
Reference grease quantity $G_{ref}$	2.4 cm <sup>3</sup>
Preload class A $G_A$	60 N
Static axial stiffness, preload class A	35 N/ $\mu$ m
Preload class B $G_B$	180 N
Static axial stiffness, preload class B	54 N/ $\mu$ m
Preload class C $G_C$	370 N
Static axial stiffness, preload class C	74 N/ $\mu$ m
Calculation factor f	1.06
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1.01
Calculation factor $f_0$	7.9
Mass bearing	0.13 kg