



**Bearing No. 7009 CE/P4A**

a	16.1 mm
d	45 mm
D	75 mm
B	16 mm
Noun	Bearing
Bore	1.772 Inch   45 Millimeter
Width	0.63 Inch   16 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	21
Category	Precision Ball Bearings
Size (mm)	75x45x16
Enclosure	Open
Inventory	0.0
Width (mm)	16
Weight / LBS	0.56
Flush Ground	No
Mass bearing	0.24 kg
d <sub>1</sub>	55.7 mm
d <sub>2</sub>	53.6 mm
D <sub>1</sub>	64.25 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Inner Ring and Outer Ring
d <sub>n</sub>	57.6 mm
Product Group	B04270
Contact Angle	15 Degree
d <sub>1</sub>	55.7 mm
d	57.6 mm

n	
D <sub>1</sub>	64.25 mm
d <sub>2</sub>	53.6 mm
Bearing number	7009 CE/P4A
Keyword String	Angular Contact Ball
Other Features	Single Row   Angular Contact   High Precision
Material - Ball	Steel
Rolling Element	Ball Bearing
G <sub>ref</sub>	3.4 cm <sup>3</sup>
Preload class A	38 N/micron
Preload class B	59 N/micron
Preload class C	79 N/micron
Precision Class	ABEC 7   ISO P4
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Long Description	45MM Bore; 75MM Outside Diameter; 16MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Inner Ring and
Outside Diameter	2.953 Inch   75 Millimeter
Number of balls z	21
Manufacturer Name	SKF
Weight / Kilogram	0.254
D <sub>b</sub> max.	70.8 mm
Bore Diameter (mm)	75
Number of Bearings	1 (Single)
r <sub>b</sub> max.	0.6 mm
D <sub>a</sub> max.	70.4 mm

$r_a$ max.	1 mm
$d_a$ min.	49.6 mm
$d_b$ min.	49.6 mm
Outer Diameter (mm)	45
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.6 mm
Calculation factor f	1.06
$d_a$ - min.	49.6 mm
Ball - $D_w$	7.144 mm
$d_b$ - min.	49.6 mm
Minimum Buy Quantity	N/A
$D_a$ - max.	70.4 mm
$D_b$ - max.	70.8 mm
$r_a$ - max.	1 mm
$r_b$ - max.	0.6 mm
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.06
Manufacturer Item Number	7009 CE/P4A
Basic dynamic load rating C	13 kN
Ball diameter $D_w$	7.144 mm
Preload class A $G_A$	70 N
Basic dynamic load rating - C	13 kN
Preload class C $G_C$	410 N
Preload class B $G_B$	210 N
Preload class A - $G_A$	70 N
Preload class C - $G_C$	410 N
Preload class B - $G_B$	210 N

Calculation factor $f_0$	8.2
Fatigue load limit $P_u$	0.36 kN
Calculation factor $f_1$	1
Calculation factor $f_{HC}$	1
Calculation factor $f_{2C}$	1.05
Calculation factor - $f$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2A}$	1
Calculation factor - $f_0$	8.2
Limiting speed for oil lubrication	41000 mm/min
Fatigue load limit - $P_u$	0.36 kN
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.05
Limiting speed for grease lubrication	27000 r/min
Basic static load rating $C_0$	8.5 kN
Static axial stiffness, preload class A	38 N/ $\mu$ m
Static axial stiffness, preload class B	59 N/ $\mu$ m
Static axial stiffness, preload class C	79 N/ $\mu$ m
Attainable speed for grease lubrication	27000 r/min
Attainable speed for oil-air lubrication	41000 r/min
Basic static load rating - $C_0$	8.5 kN
Reference grease quantity $G_{ref}$	3.4 cm <sup>3</sup>

