



**Bearing No. 7019 CD/P4A**

D	145 mm
d	95 mm
B	24 mm
a	28.2 mm
Noun	Bearing
Bore	3.74 Inch   95 Millimeter
Width	0.945 Inch   24 Millimeter
UNSPSC	31171531
Preload	None
Category	Precision Ball Bearings
Ball - z	21
Inventory	0.0
Enclosure	Open
Size (mm)	145x95x24
Width (mm)	24
Flush Ground	No
Mass bearing	1.21 kg
$d_1$	110.4 mm
$d_2$	110.4 mm
$d_n$	113.7 mm
Inch - Metric	Metric
$D_1$	129.6 mm
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
$d_2$	110.4 mm
Contact Angle	15 Degree
$d_1$	110.4 mm
$D_1$	129.6 mm
$d_n$	113.7 mm

Product Group	B04270
Other Features	Single Row   Angular Contact   High Capacity Basic Design
Keyword String	Ball Angular Contact
Bearing number	7019 CD/P4A
Material - Ball	Steel
Preload class A	108 N/micron
Precision Class	ABEC 7   ISO P4
Rolling Element	Ball Bearing
Preload class D	302 N/micron
$G_{ref}$	15.6 cm <sup>3</sup>
Preload class B	148 N/micron
Preload class C	208 N/micron
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Long Description	95MM Bore; 145MM Outside Diameter; 24MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Rac
Outside Diameter	5.709 Inch   145 Millimeter
Manufacturer Name	SKF
Weight / Kilogram	0
Number of balls z	21
$D_a$ max.	138 mm
$D_b$ max.	141 mm
$r_a$ max.	1.5 mm
$r_b$ max.	1 mm
$d_b$ min.	102 mm
$d_a$ min.	102 mm

Bore Diameter (mm)	145
Number of Bearings	1 (Single)
Outer Diameter (mm)	95
Ball - $D_w$	15.875 mm
$D_a$ - max.	138 mm
$r_{3,4}$ min.	1 mm
$r_{1,2}$ min.	1.5 mm
$d_a$ - min.	102 mm
$d_b$ - min.	102 mm
Minimum Buy Quantity	N/A
$D_b$ - max.	141 mm
$r_a$ - max.	1.5 mm
$r_b$ - max.	1 mm
Calculation factor f	1.15
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.15
$r_{3,4}$ - min.	1 mm
$r_{1,2}$ - min.	1.5 mm
Basic dynamic load rating C	81.9 kN
Ball diameter $D_w$	15.875 mm
Preload class A $G_A$	310 N
Basic dynamic load rating - C	81.9 kN
Preload class B $G_B$	620 N
Preload class C $G_C$	1240 N
Preload class D $G_D$	2480 N
Preload class D - $G_D$	2480 N
Preload class B - $G_B$	620 N
Preload class C - $G_C$	1240 N
Preload class A - $G_A$	310 N
Calculation factor $f_0$	15.7

Fatigue load limit $P_u$	3.1 kN
Calculation factor $f_1$	1
Calculation factor $f_{HC}$	1
Calculation factor $f_{2D}$	1.09
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2B}$	1.02
Calculation factor - $f$	1
Calculation factor $f_{2A}$	1
Calculation factor - $f_0$	15.7
Limiting speed for oil lubrication	14000 mm/min
Fatigue load limit - $P_u$	3.1 kN
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{2C}$	1.05
Limiting speed for grease lubrication	8500 r/min
Basic static load rating $C_0$	80 kN
Static axial stiffness, preload class B	148 N/ $\mu$ m
Static axial stiffness, preload class C	208 N/ $\mu$ m
Static axial stiffness, preload class D	302 N/ $\mu$ m
Static axial stiffness, preload class A	108 N/ $\mu$ m
Attainable speed for grease lubrication	8500 r/min
Attainable speed for oil-air lubrication	14000 r/min

Basic static load rating - $C_0$	80 kN
Reference grease quantity $G_{ref}$	15.6 cm <sup>3</sup>