



Bearing No. 7024 CD/P4A

a	34.2 mm
d	120 mm
D	180 mm
B	28 mm
Noun	Bearing
Bore	4.724 Inch 120 Millimeter
Width	1.102 Inch 28 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	22
Category	Precision Ball Bearings
Size (mm)	180x120x28
Enclosure	Open
Inventory	0.0
Width (mm)	28
Weight / LBS	4.938
Flush Ground	No
Mass bearing	2.13 kg
d ₁	138.5 mm
d ₂	138.5 mm
D ₁	161.5 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d _n	142.6 mm
Product Group	B04270
Contact Angle	15 Degree
D ₁	161.5 mm
d	142.6 mm

n	
d ₂	138.5 mm
d ₁	138.5 mm
Bearing number	7024 CD/P4A
Keyword String	Angular Contact Ball
Other Features	Single Row Angular Contact High Precision
Preload class B	179 N/micron
Rolling Element	Ball Bearing
Material - Ball	Steel
Precision Class	ABEC 7 ISO P4
G _{ref}	27 cm3
Preload class C	251 N/micron
Preload class D	364 N/micron
Preload class A	131 N/micron
Outside Diameter	7.087 Inch 180 Millimeter
Manufacturer URL	http://www.skf.com
Long Description	120MM Bore; 180MM Outside Diameter; 28MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring R
Manufacturer Name	SKF
Number of balls z	22
Weight / Kilogram	2.242
d _a min.	129 mm
d _b min.	129 mm
Bore Diameter (mm)	180
Number of Bearings	1 (Single)

r_b max.	1 mm
r_a max.	2 mm
D_a max.	171 mm
D_b max.	175 mm
Outer Diameter (mm)	120
$r_{1,2}$ min.	2 mm
$r_{3,4}$ min.	1 mm
d_a - min.	129 mm
Calculation factor f	1.17
d_b - min.	129 mm
Ball - D_w	19.05 mm
D_a - max.	171 mm
Minimum Buy Quantity	N/A
r_a - max.	2 mm
r_b - max.	1 mm
D_b - max.	175 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.17
$r_{3,4}$ - min.	1 mm
$r_{1,2}$ - min.	2 mm
Manufacturer Item Number	7024 CD/P4A
Basic dynamic load rating C	114 kN
Ball diameter D_w	19.05 mm
Preload class B G_B	860 N
Preload class A G_A	430 N
Preload class C G_C	1720 N
Preload class D G_D	3440 N
Basic dynamic load rating - C	114 kN
Preload class B - G_B	860 N
Preload class C - G_C	1720 N

Preload class A - G_A	430 N
Preload class D - G_D	3440 N
Calculation factor f_1	1
Fatigue load limit P_u	4.25 kN
Calculation factor f_0	15.7
Calculation factor - f	1
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.09
Calculation factor f_{HC}	1
Calculation factor - f_0	15.7
Fatigue load limit - P_u	4.2 kN
Limiting speed for oil lubrication	11000 mm/min
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.09
Calculation factor - f_{HC}	1
Limiting speed for grease lubrication	7000 r/min
Basic static load rating C_0	122 kN
Static axial stiffness, preload class A	131 N/ μ m
Static axial stiffness, preload class B	179 N/ μ m
Static axial stiffness, preload class C	251 N/ μ m
Static axial stiffness, preload class D	364 N/ μ m

Attainable speed for grease lubrication	7000 r/min
Attainable speed for oil-air lubrication	11000 r/min
Basic static load rating - C_0	122 kN
Reference grease quantity G_{ref}	27 cm ³