



Bearing No. 7040 CD/P4A

a	59.8 mm
d	200 mm
D	310 mm
B	51 mm
Noun	Bearing
Bore	7.874 Inch 200 Millimeter
Width	2.008 Inch 51 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	21
Category	Precision Ball Bearings
Size (mm)	310x200x51
Enclosure	Open
Inventory	0.0
Width (mm)	51
Weight / LBS	29.035
Flush Ground	No
Mass bearing	12.3 kg
d ₁	233.9 mm
d ₂	233.9 mm
D ₁	276.1 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d _n	243.2 mm
Product Group	B04270
Contact Angle	15 Degree
D ₁	276.1 mm
d	243.2 mm

n	
d ₂	233.9 mm
d ₁	233.9 mm
Bearing number	7040 CD/P4A
Keyword String	Angular Contact Ball
Other Features	Single Row Angular Contact High Precision
Preload class B	280 N/micron
Rolling Element	Ball Bearing
Material - Ball	Steel
Precision Class	ABEC 7 ISO P4
G _{ref}	153 cm3
Preload class C	389 N/micron
Preload class D	556 N/micron
Preload class A	208 N/micron
Outside Diameter	12.205 Inch 310 Millimeter
Manufacturer URL	http://www.skf.com
Long Description	200MM Bore; 310MM Outside Diameter; 51MM 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	21
Weight / Kilogram	13.18
d _a min.	211 mm
d _b min.	211 mm
Bore Diameter (mm)	310
Number of Bearings	1 (Single)

r_b max.	1 mm
r_a max.	2 mm
D_a max.	299 mm
D_b max.	304 mm
Outer Diameter (mm)	200
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1.1 mm
d_a - min.	211 mm
Calculation factor f	1.14
d_b - min.	211 mm
Ball - D_w	34.925 mm
D_a - max.	299 mm
r_a - max.	2 mm
r_b - max.	1 mm
D_b - max.	304 mm
Minimum Buy Quantity	N/A
$r_{1,2}$ - min.	2.1 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.14
$r_{3,4}$ - min.	1.1 mm
Manufacturer Item Number	7040 CD/P4A
Basic dynamic load rating C	296 kN
Ball diameter D_w	34.925 mm
Preload class B G_B	2200 N
Preload class A G_A	1100 N
Preload class C G_C	4400 N
Preload class D G_D	8800 N
Basic dynamic load rating - C	296 kN
Preload class B - G_B	2200 N
Preload class C - G_C	4400 N

Preload class A - G_A	1100 N
Preload class D - G_D	8800 N
Calculation factor f_1	1
Fatigue load limit P_u	10.2 kN
Calculation factor f_0	15.6
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	15.6
Fatigue load limit - P_u	10.2 kN
Limiting speed for oil lubrication	6700 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	4500 r/min
Basic static load rating C_0	390 kN
Static axial stiffness, preload class A	208 N/ μ m
Static axial stiffness, preload class B	280 N/ μ m
Static axial stiffness, preload class C	389 N/ μ m
Static axial stiffness, preload class D	556 N/ μ m

Attainable speed for grease lubrication	4500 r/min
Attainable speed for oil-air lubrication	6700 r/min
Basic static load rating - C_0	390 kN
Reference grease quantity G_{ref}	153 cm ³