



Bearing No. 7203 CD/HCP4A

D	40 mm
d	17 mm
B	12 mm
a	9.9 mm
Noun	Bearing
Bore	0.669 Inch   17 Millimeter
Width	0.472 Inch   12 Millimeter
UNSPSC	31171531
Preload	None
Category	Precision Ball Bearings
Ball - z	10
Inventory	0.0
Enclosure	Open
Size (mm)	40x17x12
Width (mm)	12
Flush Ground	No
Mass bearing	0.054 kg
$d_1$	24.1 mm
$d_2$	24.1 mm
$d_n$	25.9 mm
Inch - Metric	Metric
$D_1$	32.8 mm
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
$d_2$	24.1 mm
Contact Angle	15 Degree
$d_1$	24.1 mm
$D_1$	32.8 mm

$d_n$	25.9 mm
Product Group	B04270
Other Features	Single Row   Angular Contact   High Capacity Basic Design
Keyword String	Ball Angular Contact
Bearing number	7203 CD/HCP4A
$G_{ref}$	1.005 cm <sup>3</sup>
Rolling Element	Ball Bearing
Material - Ball	Ceramic
Preload class A	23 N/micron
Preload class B	31 N/micron
Preload class C	42 N/micron
Preload class D	59 N/micron
Precision Class	ABEC 7   ISO P4
Long Description	17MM Bore; 40MM Outside Diameter; 12MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Ceramic Ball Material; 1 (Single) Bearing; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Ra
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Outside Diameter	1.575 Inch   40 Millimeter
Number of balls z	10
Weight / Kilogram	0
Manufacturer Name	SKF
Number of Bearings	1 (Single)
$d_a$ min.	21.2 mm
$d_b$ min.	21.2 mm
$D_a$ max.	35.8 mm
$D_b$ max.	37.6 mm

$r_a$ max.	0.6 mm
$r_b$ max.	0.3 mm
Bore Diameter (mm)	40
Outer Diameter (mm)	17
$r_{3,4}$ min.	0.3 mm
$r_{1,2}$ min.	0.6 mm
$d_b$ - min.	21.2 mm
Calculation factor f	1.03
$D_a$ - max.	35.8 mm
$D_b$ - max.	37.6 mm
$r_a$ - max.	0.6 mm
$d_a$ - min.	21.2 mm
Ball - $D_w$	7.144 mm
$r_b$ - max.	0.3 mm
Minimum Buy Quantity	N/A
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	0.6 mm
Harmonized Tariff Code	8482.10.50.28
Basic dynamic load rating C	9.23 kN
Ball diameter $D_w$	7.144 mm
Basic dynamic load rating - C	9.2 kN
Preload class D $G_D$	280 N
Preload class C $G_C$	140 N
Preload class B $G_B$	70 N
Preload class A $G_A$	35 N
Preload class D - $G_D$	280 N
Preload class C - $G_C$	140 N
Preload class B - $G_B$	70 N
Preload class A - $G_A$	35 N

Calculation factor $f_0$	8.5
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.176 kN
Calculation factor - f	1
Calculation factor $f_{HC}$	1.01
Calculation factor $f_{2D}$	1.06
Calculation factor $f_{2C}$	1.03
Calculation factor $f_{2B}$	1.01
Calculation factor $f_{2A}$	1
Calculation factor - $f_0$	8.5
Limiting speed for oil lubrication	75000 mm/min
Fatigue load limit - $P_u$	0.176 kN
Calculation factor - $f_{2D}$	1.06
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{HC}$	1.01
Calculation factor - $f_{2B}$	1.01
Calculation factor - $f_{2C}$	1.03
Limiting speed for grease lubrication	53000 r/min
Basic static load rating $C_0$	4.15 kN
Static axial stiffness, preload class D	59 N/ $\mu$ m
Static axial stiffness, preload class B	31 N/ $\mu$ m
Static axial stiffness, preload class A	23 N/ $\mu$ m
Attainable speed for grease lubrication	53000 r/min
Static axial stiffness, preload class C	42 N/ $\mu$ m
Basic static load rating -	4.2 kN

$C_0$	
Attainable speed for oil-air lubrication	75000 r/min
Reference grease quantity $G_{ref}$	1.005 cm <sup>3</sup>