



Bearing No. 7004 CD/P4A

a	10.2 mm
d	20 mm
D	42 mm
B	12 mm
Bore	0.787 Inch   20 Millimeter
Noun	Bearing
Width	0.472 Inch   12 Millimeter
UNSPSC	31171531
Preload	None
Ball - z	12
Category	Precision Ball Bearings
Size (mm)	42x20x12
Enclosure	Open
Inventory	0.0
Width (mm)	12
Weight / LBS	0.157
Flush Ground	No
Mass bearing	0.068 kg
d <sub>1</sub>	27.1 mm
d <sub>2</sub>	27.1 mm
D <sub>1</sub>	34.8 mm
Inch - Metric	Metric
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d <sub>n</sub>	28.4 mm
Product Group	B04270
Contact Angle	15 Degree
D <sub>1</sub>	34.8 mm
d	28.4 mm

n	
d <sub>2</sub>	27.1 mm
d <sub>1</sub>	27.1 mm
Bearing number	7004 CD/P4A
Keyword String	Angular Contact Ball
Other Features	Single Row   Angular Contact   High Precision
Preload class B	30 N/micron
Rolling Element	Ball Bearing
Material - Ball	Steel
Precision Class	ABEC 7   ISO P4
G <sub>ref</sub>	0.9 cm3
Preload class C	42 N/micron
Preload class D	59 N/micron
Preload class A	23 N/micron
Outside Diameter	1.654 Inch   42 Millimeter
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Long Description	20MM Bore; 42MM Outside Diameter; 12MM 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 Rac
Manufacturer Name	SKF
Number of balls z	12
Weight / Kilogram	0.072
d <sub>a</sub> min.	23.2 mm
d <sub>b</sub> min.	23.2 mm
Bore Diameter (mm)	42
Number of Bearings	1 (Single)

$r_b$ max.	0.3 mm
$r_a$ max.	0.6 mm
$D_a$ max.	38.8 mm
$D_b$ max.	40 mm
Outer Diameter (mm)	20
$r_{1,2}$ min.	0.6 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ - min.	23.2 mm
Calculation factor f	1.03
$d_b$ - min.	23.2 mm
Ball - $D_w$	6.35 mm
$D_a$ - max.	38.8 mm
$r_a$ - max.	0.6 mm
$r_b$ - max.	0.3 mm
$D_b$ - max.	40 mm
Minimum Buy Quantity	N/A
$r_{1,2}$ - min.	0.6 mm
Harmonized Tariff Code	8482.10.50.28
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.3 mm
Manufacturer Item Number	7004 CD/P4A
Basic dynamic load rating C	8.71 kN
Ball diameter $D_w$	6.35 mm
Preload class B $G_B$	70 N
Preload class A $G_A$	35 N
Preload class C $G_C$	140 N
Preload class D $G_D$	280 N
Basic dynamic load rating - C	8.7 kN
Preload class B - $G_B$	70 N
Preload class C - $G_C$	140 N

Preload class A - $G_A$	35 N
Preload class D - $G_D$	280 N
Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.18 kN
Calculation factor $f_0$	9.2
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 - $f_0$	9.2
Fatigue load limit - $P_u$	0.18 kN
Limiting speed for oil lubrication	63000 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	43000 r/min
Basic static load rating $C_0$	4.3 kN
Static axial stiffness, preload class A	23 N/ $\mu$ m
Static axial stiffness, preload class B	30 N/ $\mu$ m
Static axial stiffness, preload class C	42 N/ $\mu$ m
Static axial stiffness, preload class D	59 N/ $\mu$ m

Attainable speed for grease lubrication	43000 r/min
Attainable speed for oil-air lubrication	63000 r/min
Basic static load rating - $C_0$	4.3 kN
Reference grease quantity $G_{ref}$	0.9 cm <sup>3</sup>