



**Bearing No. 7001 CD/P4A**

D	28 mm
d	12 mm
B	8 mm
a	6.7 mm
Noun	Bearing
Bore	0.472 Inch   12 Millimeter
Width	0.315 Inch   8 Millimeter
UNSPSC	31171531
Preload	None
Category	Precision Ball Bearings
Ball - z	10
Inventory	0.0
Enclosure	Open
Size (mm)	28x12x8
Width (mm)	8
Flush Ground	No
Mass bearing	0.021 kg
d <sub>1</sub>	17.1 mm
d <sub>2</sub>	17.1 mm
d <sub>n</sub>	18 mm
Inch - Metric	Metric
D <sub>1</sub>	22.9 mm
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d <sub>2</sub>	17.1 mm
Contact Angle	15 Degree
d <sub>1</sub>	17.1 mm
D <sub>1</sub>	22.9 mm
d <sub>n</sub>	18 mm

Product Group	B04270
Other Features	Single Row   Angular Contact   High Capacity Basic Design
Keyword String	Ball Angular Contact
Bearing number	7001 CD/P4A
$G_{ref}$	0.27 cm3
Rolling Element	Ball Bearing
Material - Ball	Steel
Preload class A	14 N/micron
Preload class B	18 N/micron
Preload class C	25 N/micron
Preload class D	35 N/micron
Precision Class	ABEC 7   ISO P4
Long Description	12MM Bore; 28MM Outside Diameter; 8MM 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 Racew
Manufacturer URL	<a href="http://www.skf.com">http://www.skf.com</a>
Outside Diameter	1.102 Inch   28 Millimeter
Number of balls z	10
Weight / Kilogram	0.04
Manufacturer Name	SKF
Number of Bearings	1 (Single)
$d_a$ min.	14 mm
$d_b$ min.	14 mm
$D_a$ max.	26 mm
$D_b$ max.	26.6 mm
$r_a$ max.	0.3 mm

$r_b$ max.	0.2 mm
Bore Diameter (mm)	28
Outer Diameter (mm)	12
$r_{3,4}$ min.	0.2 mm
$r_{1,2}$ min.	0.3 mm
$d_b$ - min.	14 mm
Calculation factor f	1.03
$D_a$ - max.	26 mm
$D_b$ - max.	26.6 mm
$r_a$ - max.	0.3 mm
$d_a$ - min.	14 mm
Ball - $D_w$	4.762 mm
$r_b$ - max.	0.2 mm
Minimum Buy Quantity	N/A
Calculation factor - f	1.03
$r_{3,4}$ - min.	0.2 mm
$r_{1,2}$ - min.	0.3 mm
Harmonized Tariff Code	8482.10.50.28
Basic dynamic load rating C	4.49 kN
Ball diameter $D_w$	4.762 mm
Basic dynamic load rating - C	4.5 kN
Preload class D $G_D$	120 N
Preload class C $G_C$	60 N
Preload class B $G_B$	30 N
Preload class A $G_A$	15 N
Preload class D - $G_D$	120 N
Preload class C - $G_C$	60 N
Preload class B - $G_B$	30 N
Preload class A - $G_A$	15 N
Calculation factor $f_0$	8.7

Calculation factor $f_1$	1
Fatigue load limit $P_u$	0.08 kN
Calculation factor - $f$	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 $f_{2A}$	1
Calculation factor - $f_0$	8.7
Limiting speed for oil lubrication	100000 mm/min
Fatigue load limit - $P_u$	0.08 kN
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{HC}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Limiting speed for grease lubrication	67000 r/min
Basic static load rating $C_0$	1.9 kN
Static axial stiffness, preload class D	35 N/ $\mu$ m
Static axial stiffness, preload class B	18 N/ $\mu$ m
Static axial stiffness, preload class A	14 N/ $\mu$ m
Attainable speed for grease lubrication	67000 r/min
Static axial stiffness, preload class C	25 N/ $\mu$ m
Basic static load rating - $C_0$	1.9 kN

Attainable speed for oil-air lubrication	100000 r/min
Reference grease quantity $G_{ref}$	0.27 cm <sup>3</sup>