



Bearing No. 7001 CD/HCP4A

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	0.018 kg
d ₁	17.1 mm
d ₂	17.1 mm
d _n	18 mm
Inch - Metric	Metric
D ₁	22.9 mm
Cage Material	Phenolic
Raceway Style	1 Rib Outer Ring
d ₂	17.1 mm
Contact Angle	15 Degree
d ₁	17.1 mm
D ₁	22.9 mm
d _n	18 mm

Product Group	B04270
Other Features	Single Row Angular Contact High Capacity Basic Design
Keyword String	Ball Angular Contact
Bearing number	7001 CD/HCP4A
Material - Ball	Ceramic
Preload class A	15 N/micron
Precision Class	ABEC 7 ISO P4
Rolling Element	Ball Bearing
Preload class D	38 N/micron
G _{ref}	0.27 cm ³
Preload class B	20 N/micron
Preload class C	27 N/micron
Manufacturer URL	http://www.skf.com
Long Description	12MM Bore; 28MM Outside Diameter; 8MM 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 Rac
Outside Diameter	1.102 Inch 28 Millimeter
Manufacturer Name	SKF
Weight / Kilogram	0
Number of balls z	10
D _a max.	26 mm
D _b max.	26.6 mm
r _a max.	0.3 mm
r _b max.	0.2 mm
d _b min.	14 mm
d _a min.	14 mm

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

Fatigue load limit P_u	0.08 kN
Calculation factor f_1	1
Calculation factor f_{HC}	1.02
Calculation factor f_{2D}	1.09
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor - f	1
Calculation factor f_{2A}	1
Calculation factor - f_0	8.7
Limiting speed for oil lubrication	120000 mm/min
Fatigue load limit - P_u	0.08 kN
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2D}	1.09
Calculation factor - f_{2C}	1.05
Limiting speed for grease lubrication	80000 r/min
Basic static load rating C_0	1.9 kN
Static axial stiffness, preload class B	20 N/ μ m
Static axial stiffness, preload class C	27 N/ μ m
Static axial stiffness, preload class D	38 N/ μ m
Static axial stiffness, preload class A	15 N/ μ m
Attainable speed for grease lubrication	80000 r/min
Attainable speed for oil-air lubrication	120000 r/min

Basic static load rating - C_0	1.9 kN
Reference grease quantity G_{ref}	0.27 cm ³