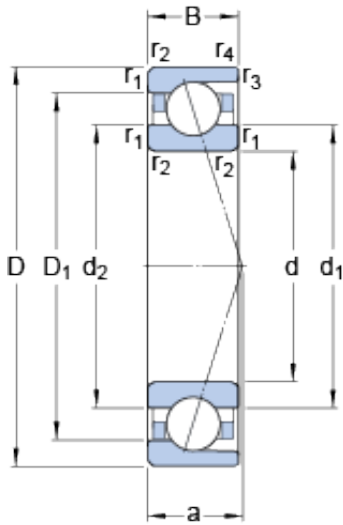




Off-the-shelf SKF shaft Co., Ltd



7001 CD/HCP4A Bearing 2D drawings and 3D CAD models

12 mm x 28 mm x 8 mm SKF 7001 CD/HCP4A Work Head Spindle bearing

Bearing No. 7001 CD/HCP4A

Size	28x12x8 mm
Bore Diameter	28 mm
Outer Diameter	12 mm
Width	8 mm
d	12 mm
D	28 mm
B	8 mm
d ₁	17.1 mm
d ₂	17.1 mm
D ₁	22.9 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.2 mm
a	6.7 mm
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
d _n	18 mm
Basic dynamic load rating - C	4.5 kN
Basic static load rating - C ₀	1.9 kN
Fatigue load limit - P _u	0.08 kN
Limiting speed for grease	80000 r/min



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Lubrication	
Limiting speed for oil lubrication	120000 mm/min
Ball - D_w	4.762 mm
Ball - z	10
G_{ref}	0.27 cm ³
Calculation factor - f_0	8.7
Preload class A - G_A	15 N
Preload class B - G_B	30 N
Preload class C - G_C	60 N
Preload class D - G_D	120 N
Calculation factor - f	1.03
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}	1.02
Preload class A	15 N/micron
Preload class B	20 N/micron
Preload class C	27 N/micron
Preload class D	38 N/micron
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7 ISO P4



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Material - Ball	Ceramic
Number of Bearings	1 (Single)
Contact Angle	15 Degree
Preload	None
Raceway Style	1 Rib Outer Ring
Cage Material	Phenolic
Rolling Element	Ball Bearing
Flush Ground	No
Inch - Metric	Metric
Other Features	Single Row Angular Contact High Capacity Basic Design
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
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Ball Angular Contact
Manufacturer URL	http://www.skf.com
Width	0.315 Inch 8 Millimeter
Bore	0.472 Inch 12 Millimeter
Outside Diameter	1.102 Inch 28 Millimeter
d ₁	17.1 mm
d ₂	17.1 mm
D ₁	22.9 mm
r _{1,2} min.	0.3 mm
r _{3,4} min.	0.2 mm



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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
d_n	18 mm
Basic dynamic load rating C	4.49 kN
Basic static load rating C_0	1.9 kN
Fatigue load limit P_u	0.08 kN
Attainable speed for grease lubrication	80000 r/min
Attainable speed for oil-air lubrication	120000 r/min
Ball diameter D_w	4.762 mm
Number of balls z	10
Reference grease quantity G_{ref}	0.27 cm ³
Preload class A G_A	15 N
Static axial stiffness, preload class A	15 N/ μ m
Preload class B G_B	30 N
Static axial stiffness, preload class B	20 N/ μ m
Preload class C G_C	60 N
Static axial stiffness, preload class C	27 N/ μ m
Preload class D G_D	120 N
Static axial stiffness, preload class D	38 N/ μ m
Calculation factor f	1.03
Calculation factor f_1	1
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02



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Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.09
Calculation factor f_{HC}	1.02
Calculation factor f_0	8.7
Mass bearing	0.018 kg