



Sean-NTN Driveshaft CORP.



7004 CD/P4A Bearing 2D drawings and 3D CAD models

20 mm x 42 mm x 12 mm SKF 7004 CD/P4A
GERMANY Bearing 20*42*12

Bearing No. 7004 CD/P4A

Size	42x20x12 mm
Bore Diameter	42 mm
Outer Diameter	20 mm
Width	12 mm
d	20 mm
D	42 mm
B	12 mm
d ₁	27.1 mm
d ₂	27.1 mm
D ₁	34.8 mm
r _{1,2} - min.	0.6 mm
r _{3,4} - min.	0.3 mm
a	10.2 mm
d _a - min.	23.2 mm
d _b - min.	23.2 mm
D _a - max.	38.8 mm
D _b - max.	40 mm
r _a - max.	0.6 mm
r _b - max.	0.3 mm
d _n	28.4 mm
Basic dynamic load rating - C	8.7 kN
Basic static load rating - C ₀	4.3 kN
Fatigue load limit - P _u	0.18 kN
Limiting speed for grease	43000 r/min



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Lubrication	
Limiting speed for oil lubrication	63000 mm/min
Ball - D_w	6.35 mm
Ball - z	12
G_{ref}	0.9 cm3
Calculation factor - f_0	9.2
Preload class A - G_A	35 N
Preload class B - G_B	70 N
Preload class C - G_C	140 N
Preload class D - G_D	280 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
Preload class A	23 N/micron
Preload class B	30 N/micron
Preload class C	42 N/micron
Preload class D	59 N/micron
Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0.072
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7 ISO P4



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Material - Ball	Steel
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 Precision
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
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Angular Contact Ball
Manufacturer URL	http://www.skf.com
Manufacturer Item Number	7004 CD/P4A
Weight / LBS	0.157
Outside Diameter	1.654 Inch 42 Millimeter
Width	0.472 Inch 12 Millimeter
Bore	0.787 Inch 20 Millimeter
d ₁	27.1 mm
d ₂	27.1 mm
D ₁	34.8 mm
r _{1,2} min.	0.6 mm



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$r_{3,4}$ min.	0.3 mm
d_a min.	23.2 mm
d_b min.	23.2 mm
D_a max.	38.8 mm
D_b max.	40 mm
r_a max.	0.6 mm
r_b max.	0.3 mm
d_n	28.4 mm
Basic dynamic load rating C	8.71 kN
Basic static load rating C_0	4.3 kN
Fatigue load limit P_u	0.18 kN
Attainable speed for grease lubrication	43000 r/min
Attainable speed for oil-air lubrication	63000 r/min
Ball diameter D_w	6.35 mm
Number of balls z	12
Reference grease quantity G_{ref}	0.9 cm ³
Preload class A G_A	35 N
Static axial stiffness, preload class A	23 N/ μ m
Preload class B G_B	70 N
Static axial stiffness, preload class B	30 N/ μ m
Preload class C G_C	140 N
Static axial stiffness, preload class C	42 N/ μ m
Preload class D G_D	280 N
Static axial stiffness, preload class D	59 N/ μ m
Calculation factor f	1.03
Calculation factor f_1	1
Calculation factor f_{2A}	1



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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
Mass bearing	0.068 kg