



Toyana Bearing Manufacturing of Canada



7002 ACD/P4A Bearing 2D drawings and 3D CAD models

15 mm x 32 mm x 9 mm SKF 7002 ACD/P4A angular contact ball bearings

Bearing No. 7002 ACD/P4A

Size	32x15x9 mm
Bore Diameter	32 mm
Outer Diameter	15 mm
Width	9 mm
d	15 mm
D	32 mm
B	9 mm
d ₁	20.6 mm
d ₂	20.6 mm
D ₁	26.4 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.2 mm
a	10.1 mm
d _a - min.	17 mm
d _b - min.	17 mm
D _a - max.	30 mm
D _b - max.	30.6 mm
r _a - max.	0.3 mm
r _b - max.	0.2 mm
d _n	21.5 mm
Basic dynamic load rating - C	4.9 kN
Basic static load rating - C ₀	2.3 kN
Fatigue load limit - P _u	0.098 kN
Limiting speed for grease	50000 r/min



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Lubrication	
Limiting speed for oil lubrication	75000 mm/min
Ball - D_w	4.762 mm
Ball - z	12
G_{ref}	0.39 cm ³
Calculation factor - e	0.68
Calculation factor - Y_2	0.87
Calculation factor - Y_0	0.38
Calculation factor - X_2	0.41
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Preload class A - G_A	30 N
Preload class B - G_B	60 N
Preload class C - G_C	120 N
Preload class D - G_D	240 N
Calculation factor - f	1.03
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1
Preload class A	41 N/micron
Preload class B	53 N/micron
Preload class C	69 N/micron
Preload class D	92 N/micron



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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
Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	25 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	15MM Bore; 32MM Outside Diameter; 9MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearing; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Racew
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



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Bore	0.591 Inch 15 Millimeter
Width	0.354 Inch 9 Millimeter
Outside Diameter	1.26 Inch 32 Millimeter
d_1	20.6 mm
d_2	20.6 mm
D_1	26.4 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.2 mm
d_a min.	17 mm
d_b min.	17 mm
D_a max.	30 mm
D_b max.	30.6 mm
r_a max.	0.3 mm
r_b max.	0.2 mm
d_n	21.5 mm
Basic dynamic load rating C	4.94 kN
Basic static load rating C_0	2.32 kN
Fatigue load limit P_u	0.098 kN
Attainable speed for grease lubrication	50000 r/min
Attainable speed for oil-air lubrication	75000 r/min
Ball diameter D_w	4.762 mm
Number of balls z	12
Reference grease quantity G_{ref}	0.39 cm ³
Preload class A G_A	30 N
Static axial stiffness, preload class A	41 N/ μ m
Preload class B G_B	60 N
Static axial stiffness, preload class B	53 N/ μ m
Preload class C G_C	120 N
Static axial stiffness, preload	69 N/ μ m



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class C	
Preload class D G_D	240 N
Static axial stiffness, preload class D	92 N/ μ m
Calculation factor f	1.03
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1
Calculation factor e	0.68
Calculation factor (single, tandem) Y_2	0.87
Calculation factor (single, tandem) Y_0	0.38
Calculation factor (single, tandem) X_2	0.41
Calculation factor (back-to-back, face-to-face) Y_1	0.92
Calculation factor (back-to-back, face-to-face) Y_2	1.41
Calculation factor (back-to-back, face-to-face) Y_0	0.76
Calculation factor (back-to-back, face-to-face) X_2	0.67
Mass bearing	0.03 kg