



San Driveshaft Co., Ltd.



7219 ACD/P4A Bearing 2D drawings and 3D CAD models

95 mm x 170 mm x 32 mm SKF 7219 ACD/P4A High Reliability Precision Bearings

Bearing No. 7219 ACD/P4A

Size	170x95x32 mm
Bore Diameter	170 mm
Outer Diameter	95 mm
Width	32 mm
d	95 mm
D	170 mm
B	32 mm
d ₁	118.1 mm
d ₂	118.1 mm
D ₁	146.9 mm
r _{1,2} - min.	2.1 mm
r _{3,4} - min.	1.1 mm
a	47.1 mm
d _a - min.	107 mm
d _b - min.	107 mm
D _a - max.	158 mm
D _b - max.	163 mm
r _a - max.	2 mm
r _b - max.	1 mm
d _n	124.4 mm
Basic dynamic load rating - C	133 kN
Basic static load rating - C ₀	114 kN
Fatigue load limit - P _u	4.2 kN
Limiting speed for grease	7500 r/min



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Lubrication	
Limiting speed for oil lubrication	12000 mm/min
Ball - D_w	23.812 mm
Ball - z	15
G_{ref}	34.314 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	850 N
Preload class B - G_B	1700 N
Preload class C - G_C	3400 N
Preload class D - G_D	6800 N
Calculation factor - f	1.09
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.01
Calculation factor - f_{2C}	1.02
Calculation factor - f_{2D}	1.05
Calculation factor - f_{HC}	1
Preload class A	280 N/micron
Preload class B	365 N/micron
Preload class C	482 N/micron
Preload class D	649 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 Super Precision High Capacity Basic Design
Long Description	95MM Bore; 170MM Outside Diameter; 32MM 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 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



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Bore	3.74 Inch 95 Millimeter
Width	1.26 Inch 32 Millimeter
Outside Diameter	6.693 Inch 170 Millimeter
d_1	118.1 mm
d_2	118.1 mm
D_1	146.9 mm
$r_{1,2}$ min.	2.1 mm
$r_{3,4}$ min.	1.1 mm
d_a min.	107 mm
d_b min.	107 mm
D_a max.	158 mm
D_b max.	163 mm
r_a max.	2 mm
r_b max.	1 mm
d_n	124.4 mm
Basic dynamic load rating C	133 kN
Basic static load rating C_0	114 kN
Fatigue load limit P_u	4.25 kN
Attainable speed for grease lubrication	7500 r/min
Attainable speed for oil-air lubrication	12000 r/min
Ball diameter D_w	23.812 mm
Number of balls z	15
Reference grease quantity G_{ref}	34.314 cm ³
Preload class A G_A	850 N
Static axial stiffness, preload class A	280 N/ μ m
Preload class B G_B	1700 N
Static axial stiffness, preload class B	365 N/ μ m
Preload class C G_C	3400 N
Static axial stiffness, preload	482 N/ μ m



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class C	
Preload class D G_D	6800 N
Static axial stiffness, preload class D	649 N/ μ m
Calculation factor f	1.09
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.01
Calculation factor f_{2C}	1.02
Calculation factor f_{2D}	1.05
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	2.7 kg