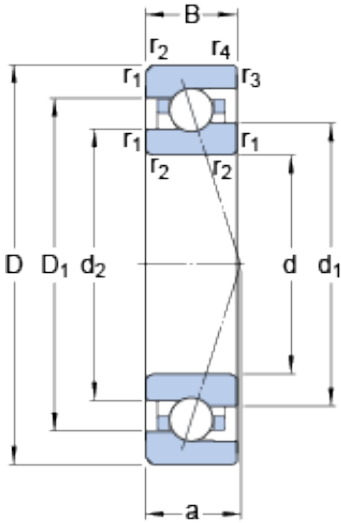




Off-the-shelf SKF shaft Co., Ltd



7019 ACE/P4A Bearing 2D drawings and 3D CAD models

95 mm x 145 mm x 24 mm SKF 7019 ACE/P4A Super Precision Sealed Angular Contact Ball Bearings

Bearing No. 7019 ACE/P4A

Size	145x95x24 mm
Bore Diameter	145 mm
Outer Diameter	95 mm
Width	24 mm
d	95 mm
D	145 mm
B	24 mm
d ₁	112.38 mm
d ₂	109.2 mm
D ₁	127.61 mm
r _{1,2} - min.	1.5 mm
r _{3,4} - min.	1 mm
a	40.2 mm
d _a - min.	102 mm
d _b - min.	102 mm
D _a - max.	138 mm
D _b - max.	139.4 mm
r _a - max.	1.5 mm
r _b - max.	1 mm
d _n	115.4 mm
Basic dynamic load rating - C	41.6 kN
Basic static load rating - C ₀	36 kN
Fatigue load limit - P _u	1.4 kN



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Limiting speed for grease lubrication	11500 r/min
Limiting speed for oil lubrication	18000 mm/min
Ball - D_w	12.7 mm
Ball - z	26
G_{ref}	17 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	380 N
Preload class B - G_B	1130 N
Preload class C - G_C	2270 N
Calculation factor - f	1.11
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2C}	1.06
Calculation factor - f_{HC}	1
Preload class A	212 N/micron
Preload class B	319 N/micron
Preload class C	420 N/micron
d_1	112.38 mm
d_2	109.2 mm
D_1	127.61 mm



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$r_{1,2}$ min.	1.5 mm
$r_{3,4}$ min.	1 mm
d_a min.	102 mm
d_b min.	102 mm
D_a max.	138 mm
D_b max.	139.4 mm
r_a max.	1.5 mm
r_b max.	1 mm
d_n	115.4 mm
Basic dynamic load rating C	41.6 kN
Basic static load rating C_0	36 kN
Fatigue load limit P_u	1.4 kN
Attainable speed for grease lubrication	11500 r/min
Attainable speed for oil-air lubrication	18000 r/min
Ball diameter D_w	12.7 mm
Number of balls z	26
Reference grease quantity G_{ref}	17 cm ³
Preload class A G_A	380 N
Static axial stiffness, preload class A	212 N/ μ m
Preload class B G_B	1130 N
Static axial stiffness, preload class B	319 N/ μ m
Preload class C G_C	2270 N
Static axial stiffness, preload class C	420 N/ μ m
Calculation factor f	1.11
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.03
Calculation factor f_{2C}	1.06



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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	1.21 kg